



North Dakota Department of Transportation

Grant Levi, P.E.
Director

Jack Dalrymple
Governor

July 14, 2015

Todd Sando
State Engineer
North Dakota State Water Commission
900 East Boulevard Avenue
Bismarck, ND 58505-0850

PROJECT: SS-BRS-2-011(035)083; PCN 20280
ROADBED STABILIZATION
DICKEY COUNTY

The NDDOT is requesting a Sovereign Lands Permit to place embankment and riprap within the James River on ND highway 11 in Dickey County. The current bid opening is October 9, 2015. The NDDOT requests an expedited review to be able to obtain a permit prior to the bid opening.

The project on ND highway 11 includes removing and replacing the bridge within the Maple River and deck replacement, bridge approach reconstruction, and slope protection within the James River.

The roadbed of ND highway 11 is held in place by sheet piling in the James River. The existing sheet piling is failing on the north side of the roadway within the James River. The project includes adding earthen embankment, and riprap to better protect Highway 11 roadbed within the river channel.

The NDDOT assumes that the ordinary high water mark (OHW) elevation of 1291', in the James River, is the high water stain on the sheet piling. Therefore work within Sovereign Lands (below the OHW) will include placing approximately 3,475 cubic yards of earthen fill and 1,070 cubic yards of riprap along the existing roadbed in the James River.

Temporary impacts in the James River are assumed for the staging area located on the south east side of the bridge near an existing boat ramp. The staging area may be needed for stockpiling riprap, staging equipment, and methods used by the contractor to place the riprap which may include utilizing a barge. No additional fill is anticipated at the staging area.

If you have any questions or need additional information, please contact Steve Kessler at (701) 328-3736.

A handwritten signature in blue ink, appearing to read "MSG".

MARK S. GAYDOS, P.E.
DIRECTOR, ENVIRONMENTAL & TRANSPORTATION SERVICES DIVISION

194:msg:sek
enclosures



APPLICATION FOR AUTHORIZATION TO CONSTRUCT A PROJECT WITHIN ISLANDS AND BEDS OF NAVIGABLE STREAMS AND WATERS

Office of the State Engineer
900 East Boulevard
Bismarck, ND 58505-0850

Permit No. _____
Project No. 1625

I, the undersigned, do hereby submit the following information to the Office of the State Engineer as an application to construct a project that may impact islands and beds of navigable streams and waters of North Dakota under NDCC Chapter 61-33.

GENERAL INFORMATION:

This Application must include a map from an actual survey, aerial photo or topographic map and plot map (if a development). The size of the map shall be 8½ by 11 inches. The map shall have a north arrow and approximate scale. Indicate the existing or proposed work on the drawing. Plans and specifications must be submitted if project includes construction work.

- (1) Project will be located in the: Dickey County Water Resource District
- (2) Legal description to the nearest 40 acre tract: SE;SW ¼ SE;SW ¼ Section 2,1 Township 129 Range 60
- (3) Is this application for modification of an existing project Yes No If so, what year was project constructed: _____
By whom: _____
- (4) Proposed project involves water crossing, type Roadway boat dock, boat ramp, water intake,
 dredge, volume _____ cu. yds. filling, volume 3475;1070 cu. yds., type Earthen Fill;Riprap
 other (explain) _____
- (5) Water body on which project will be located: James River
- (6) Purpose: Stabilize existing roadway.
- (7) Project Description: Placing embankment and riprap in the James River on the north side of highway 11 where the sheet piling is failing. NDDOT assumed OHW elevation is 1291'.
- (8) Contractor, if known: Unknown
- (9) Anticipated construction start date: Spring 2016 Completion date: Fall 2016

The filing of this application and its approval in no way relieves the applicant or landowner from any responsibility or liability resulting from the construction, operation or failure of the project.

Applicant: (Print) Mark S. Gaydos, PE

Land Owner or Legal Entity Sponsor: (Print) NDDOT

Address: 608 East Boulevard Avenue

Bismarck, ND 58505-0700

Phone: (H) _____

(W) 701-328-4417

Signature: MS Gaydos

(riparian owner or legal entity sponsoring the project)

Date Submitted: 7/14/15



North Dakota Department of Transportation

Grant Levi, P.E.
Director

Jack Dalrymple
Governor

June 25, 2015

Mr. Mick Erickson
Wildlife Refuge Manager
Kulm Wetland Management District
US Fish & Wildlife Service
1 First St SW – PO Box E
Kulm, ND 58456

PROJECT NO. SS-BRS-2-011(035)083, PCN 20280
STRUCTURAL REPLACEMENT/DECK REPLACEMENT
DICKEY COUNTY

The North Dakota Department of Transportation is finalizing its environmental review and preliminary design for a bridge project at ND Highway 11 at the James River at RP 96.356. The project consists of removing and replacing the existing bridge on ND Highway 11 at the Maple River at RP 83.957, and replacing the deck on the existing bridge on ND Highway 11 at the James River at RP 96.356. In addition, the proposed scope of work includes improvement options to address failing sheet pile retaining walls along the north approach embankments at the James River Bridge. The proposed project will also address the failing retaining walls at the James River. The NDDOT evaluated a no-build alternative, constructing a new anchored sheet pile retaining wall to the north of the existing wall (Option 1), or widening the highway embankment on the north side and constructing an inslope of borrow material armored with riprap for erosion protection (Option 2). NDDOT Engineering and Environmental staff have identified Option 2 as the preferred option during the NEPA review.

The preferred option's embankment will encroach on the Dakota Lake Easement National Wildlife Refuge and constitute a 'use' under Section 4(f) of the DOT Act of 1966. All of the proposed work is within NDDOT right-of-way. However, because the preferred option requires the placement of fill below the ordinary high water elevation at the wildlife refuge, the NDDOT is seeking your written approval to the proposed options described herein.

Option 1 is to install a new anchored sheet pile retaining wall approximately 5 feet north of the existing sheet piling walls. This option would result in approximately 0.08 acres of fill being placed within the channel, and thus would still constitute a 'use' under Section 4(f) of the DOT Act of 1966. This option is not preferred by the NDDOT due to the high cost of installation and continued maintenance which may be required with this option. The NDDOT views this option as having the potential for similar failures in the future and becoming a reoccurring issue.

Page 2

June 25, 2015

Option 2 is to construct a wider embankment along the north side of the highway with riprap placed along the inslopes to protect the slopes from erosion. This option would result in approximately 0.51 acres of fill being placed within the James River channel.

No permanent right-of-way will be needed for either option as all of the proposed work is within existing NDDOT right-of-way. A 2.42 acre temporary construction easement has been issued for the use of private land as a construction staging area and use of a boat ramp for access into the James River.

Please review the attached information regarding the proposed options to address the failing sheet pile retaining wall at the James River. To comply with Federal Highway Administration's Section 4(f) requirements a written response from your organization is required. Please sign and return an approval document, printed on your letterhead, if your organization approves of the proposed work options.

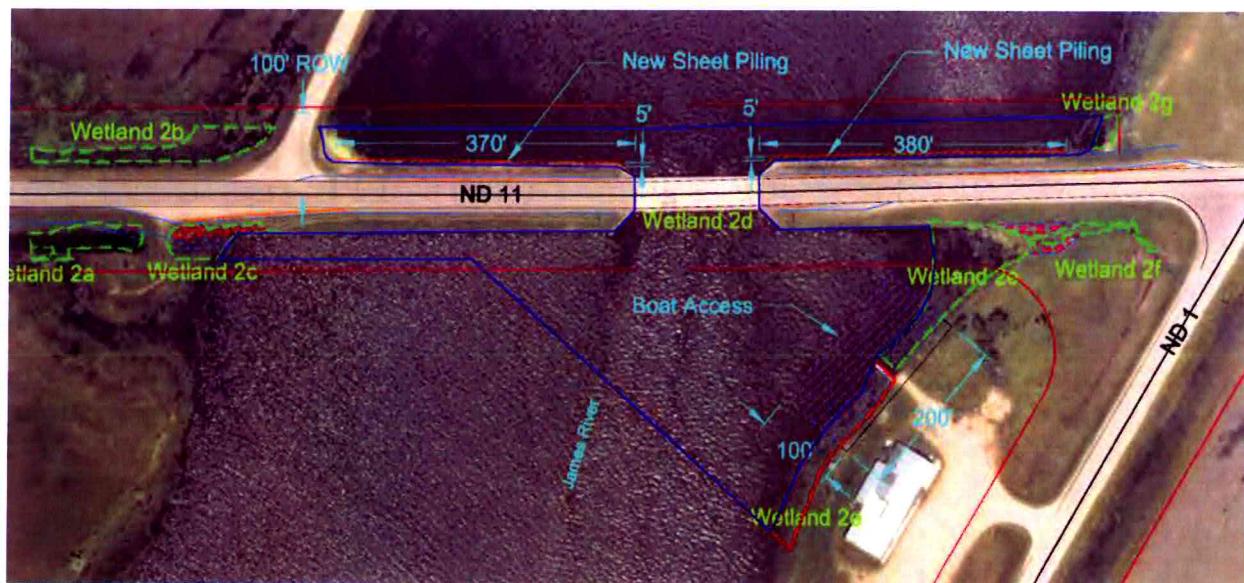
If further information is desired regarding the proposed roadway improvement, please contact Randall Sandvig at 701-328-3035 in Bismarck, North Dakota.



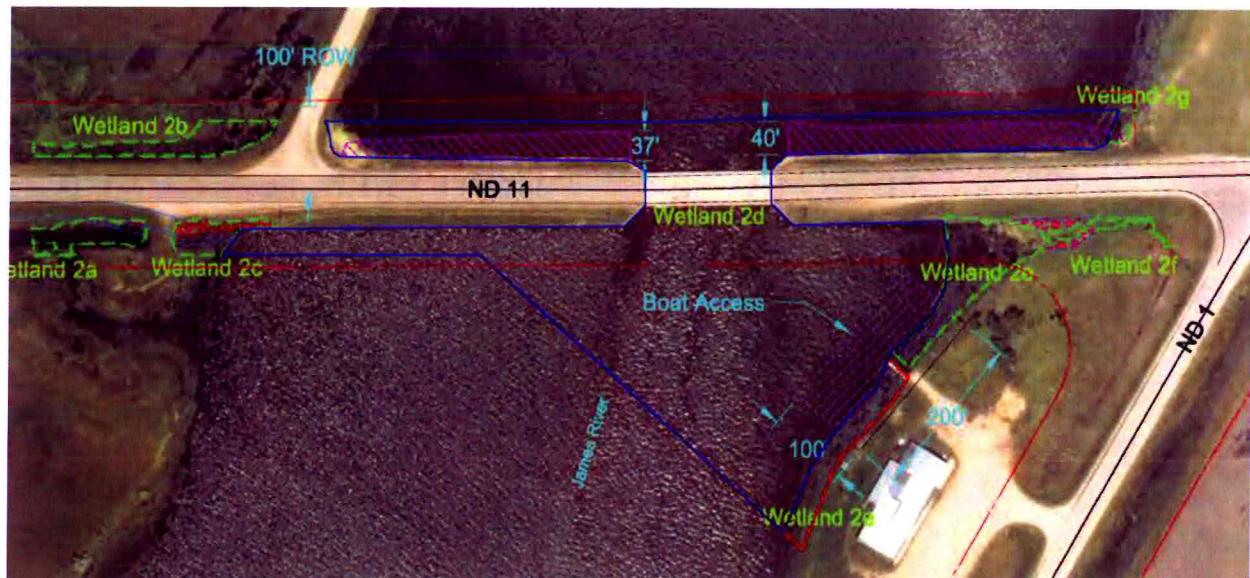
TERRENCE R. UDLAND, P.E., BRIDGE ENGINEER

25/tru/rds

Enclosure



Option 1 – Sheet Pile Retaining Wall



Option 2 – Embankment Widening



United States Department of the Interior

FISH AND WILDLIFE SERVICE



Kulm Wetland Management District
1 First Street SW, PO Box E
Kulm, North Dakota 58456

June 26, 2015

Mr. Randall Sandvig
ND Department of Transportation
608 East Boulevard Avenue
Bismarck, ND 58505

Dear Mr. Sandvig:

This letter is in response to the June 25, 2015 letter I received from Mr. Terrence Udland, Bridge Engineer, concerning the proposed project SS-BRS-2-011(035)083, PCN 20280; Structural Replacement/Deck Replacement project.

The letter explained that the ND DOT is investigating two options to address the failing retaining walls along the James River within the Dakota Lake Easement National Wildlife Refuge. The option selected consists of widening the highway embankment on the north side of the highway and constructing an in-slope of borrow material armored with riprap for erosion protection. This option results in approximately 0.51 acres of fill material will be placed within the James River channel.

The proposed work as described in the letter will not negatively impact our jurisdiction of the Dakota Lake Easement National Wildlife Refuge and therefore, have no objections to your proposed project. I would strongly suggest coordinating with our USFWS Ecological Services office (Mr. Terry Ellsworth) on this project to make sure all other possible impacts are considered. Thank you for the opportunity to review and comment on this project.

Sincerely,

A handwritten signature in blue ink that appears to read "Mick Erickson".

Mick Erickson
Refuge Manager



APPLICATION FOR AUTHORIZATION TO CONSTRUCT A PROJECT WITHIN ISLANDS AND BEDS OF NAVIGABLE STREAMS AND WATERS

Office of the State Engineer
900 East Boulevard
Bismarck, ND 58505-0850

Permit No. _____
Project No. 1625

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- (7) Project Description: Placing embankement and riprap in the James River on the north side of highway 11 where the sheet piling is failing. NDDOT assumed OHW elevation is 1291'.
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Applicant: (Print) Mark S. Gaydos, PE

Land Owner or Legal Entity Sponsor: (Print) NDDOT

Address: 608 East Boulevard Avenue

Bismarck, ND 58504-0700

Phone: (H) _____

(W) 701-328-4417

Signature: _____ Date Submitted: 7/13/15
(riparian owner or legal entity sponsoring the project)

DESIGN DATA			
Maple River			
Traffic	Average Daily		
Current 2014	Pass: 385	Trucks: 105	Total: 490
Forecast 2034	Pass: 470	Trucks: 145	Total: 615
Clear Zone Distance:	Design Speed: 65		
Minimum Sight Dist. for Stopping:	Bridges: HL-93 11-083,957		
Pavement Design Life (years)			
James River			
Traffic	Average Daily		
Current 2014	Pass: 470	Trucks: 110	Total: 580
Forecast 2034	Pass: 575	Trucks: 150	Total: 725
Clear Zone Distance:	Design Speed: 65		
Minimum Sight Dist. for Stopping:	Bridges: HS 25 11-096,356		
Pavement Design Life (years)			

JOB # ND SS-BRS-2-011(035)083
NORTH DAKOTA
DEPARTMENT OF TRANSPORTATION

23 U.S.C. 409
ND DOT Reserves All Objections

GOVERNING SPECIFICATIONS:

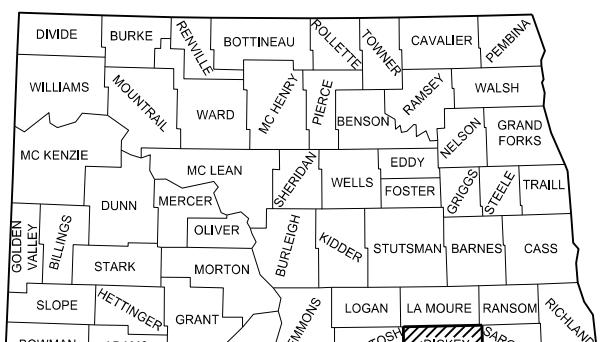
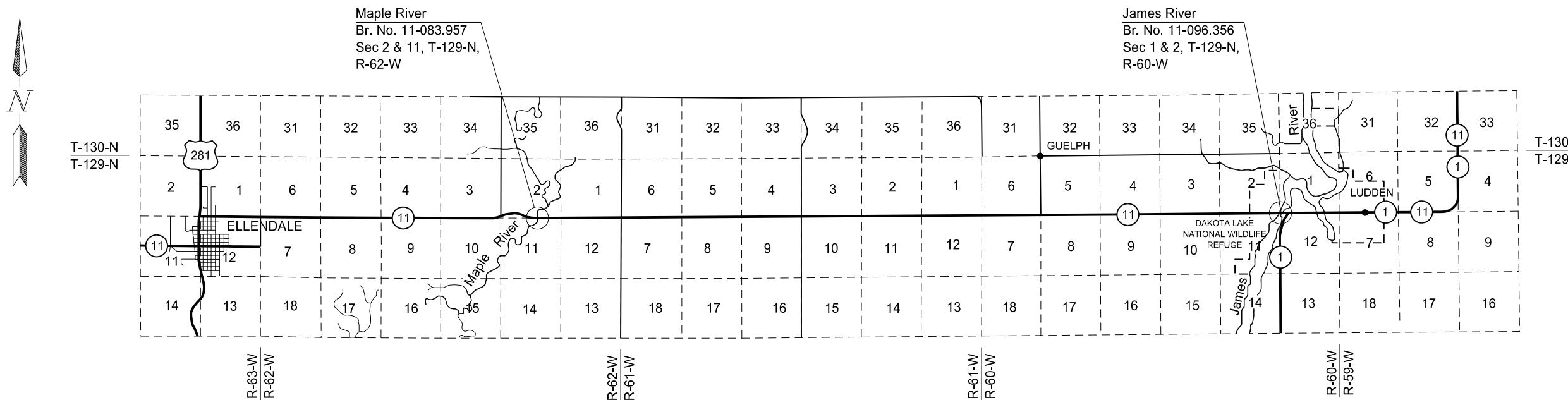
2014 Standard Specifications adopted by the North Dakota Department of Transportation and the Supplemental Specifications effective on the date the project is advertised.

SS-BRS-2-011(035)083

Dickey County
Maple River ~ 6 Miles East of Ellendale
Structural & Incidentals

James River ~ 1 Mile West of Ludden
Structural & Incidentals

PROJECT NUMBER \ DESCRIPTION	NET MILES	GROSS MILES
SS-BRS-2-011(035)083	0.0	0.0



STATE COUNTY MAP

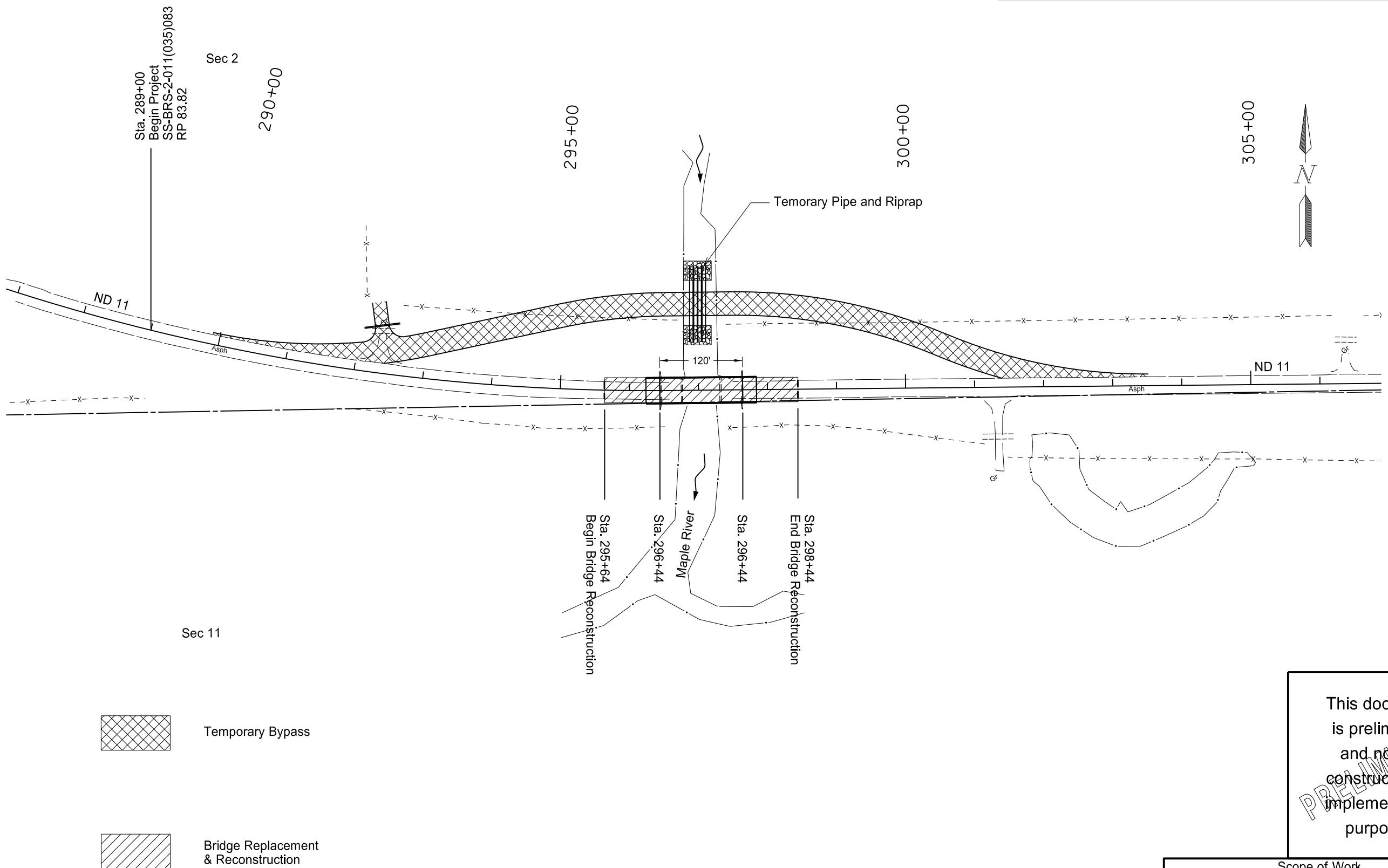
I hereby certify that the attached plans were prepared by me or under my direct supervision and that I am a duly registered professional engineer under the laws of the state of ND.

APPROVED DATE _____

BRIDGE DIVISION

This document is preliminary and not for construction or implementation purposes.

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	SS-BRS-2-011(035)083	4	1



This document
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Scope of Work

Bridge 0011-083.957

Structure Replacement

6 Mi East of Ellendale

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	SS-BRS-2-011(035)083	4	2

DICKEY
COUNTY

50800+00



107 Ave SE

Sec 2
T-129-N
R-60-W
50850+00

Rec Sec Cor

5300.33 N to

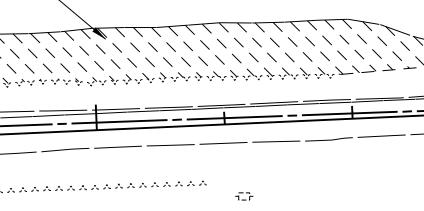
3.3' Brass cap BLM

Sec 1
T-129-N
R-60-W

50900+00

James River

Slope Protection



270+00

Begin Reconstruction

Bridge Deck Replacement

Sec 12

T-129-N

R-60-W

Rec 1/4 Cor
2692.18' S to

3' Brass cap BLM

Sec 11

T-129-N

R-60-W

5095+00

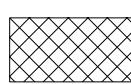
Sta. 5094+00
End Project
SS-BRS-2-011(035)083
RP 96.48

ND 11 *

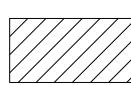


270+00

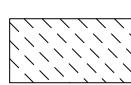
ND 1



Deck Replacement



Reconstruction



Slope Protection

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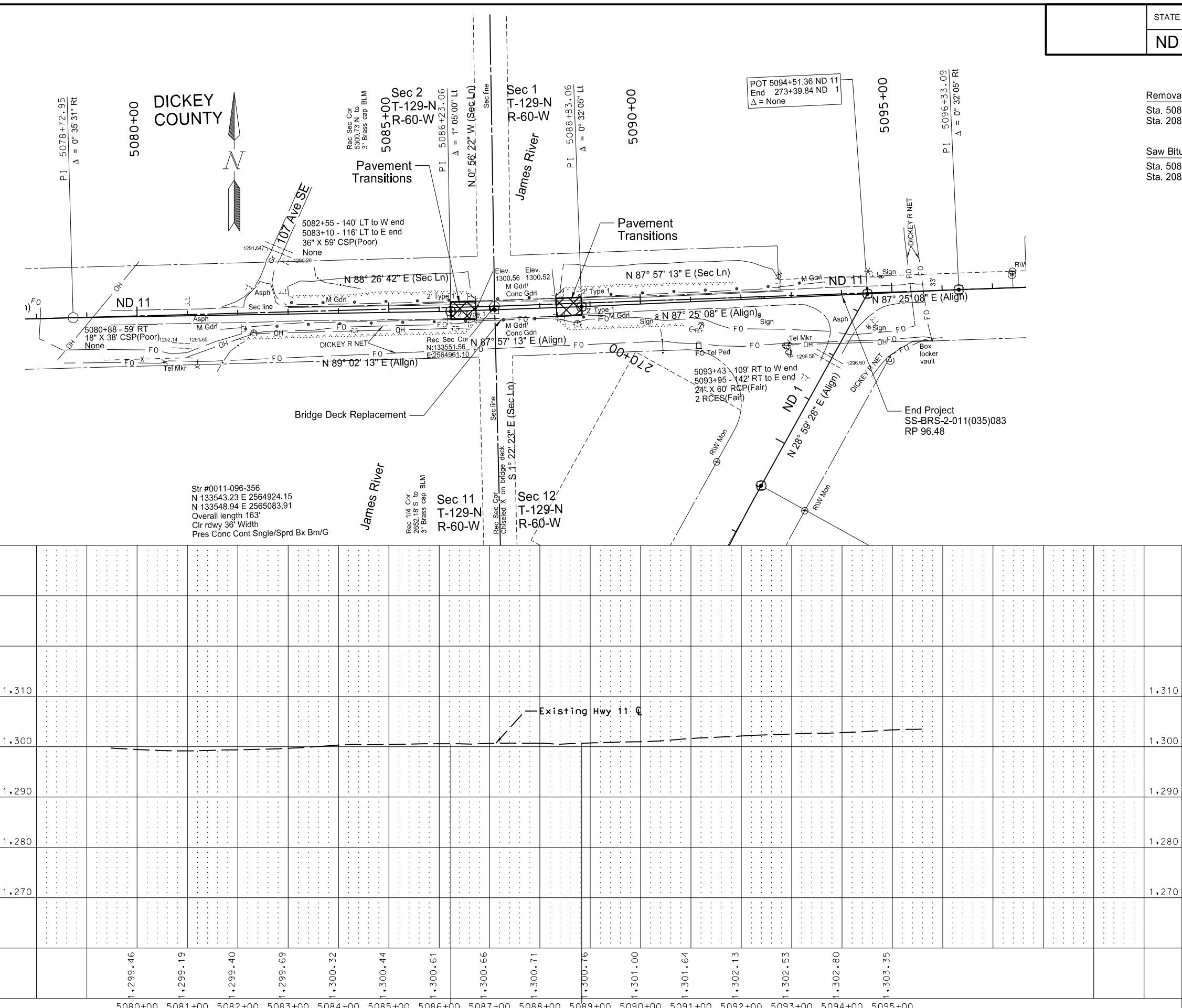
Scope of Work

Bridge 0011-096.356

Deck Replacement
Slope Protection

1 Mi West of Ludden

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
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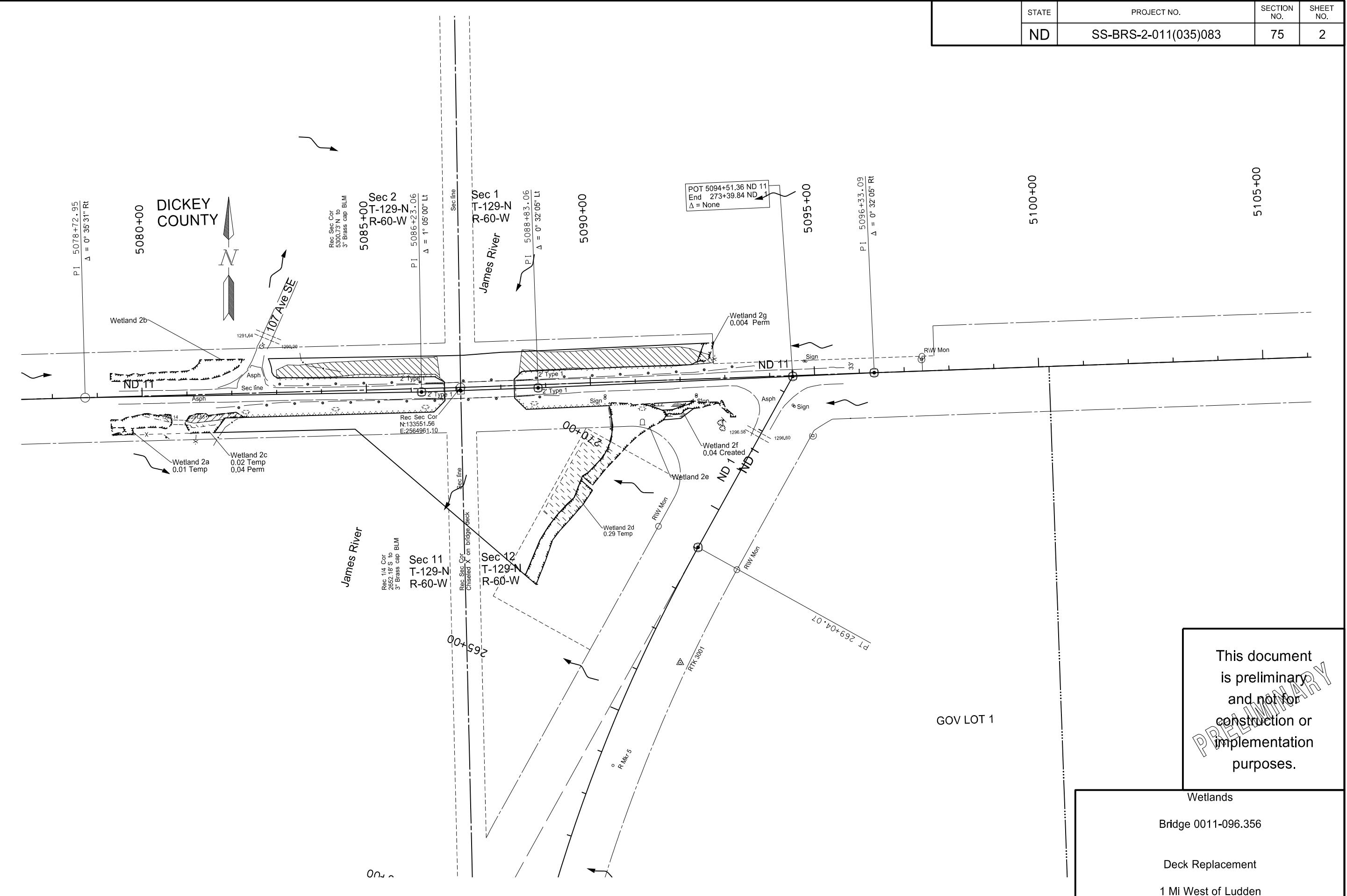
Plan & Profile

Bridge 0011-096.356

Deck Replacement

1 Mi West of Ludden

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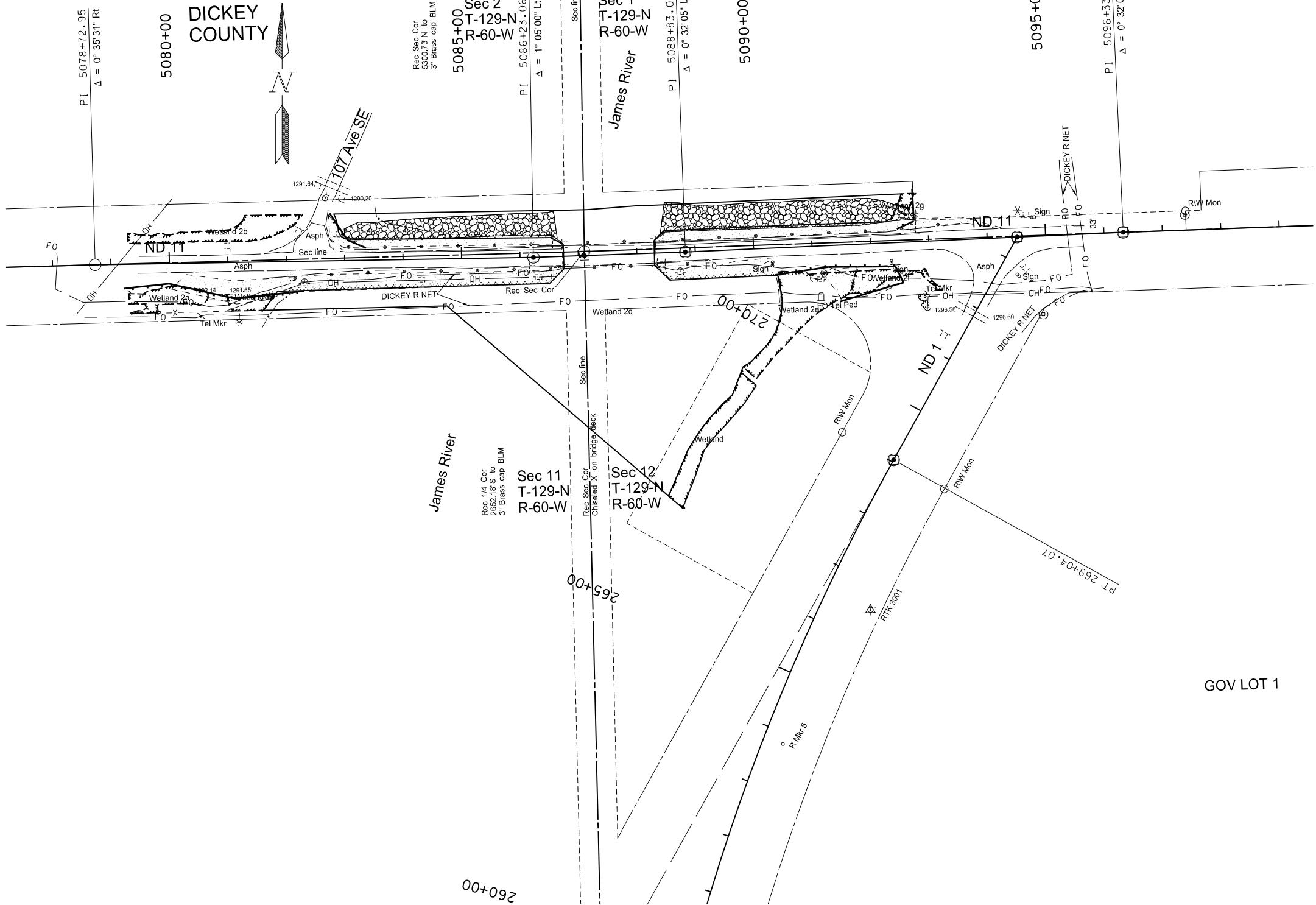


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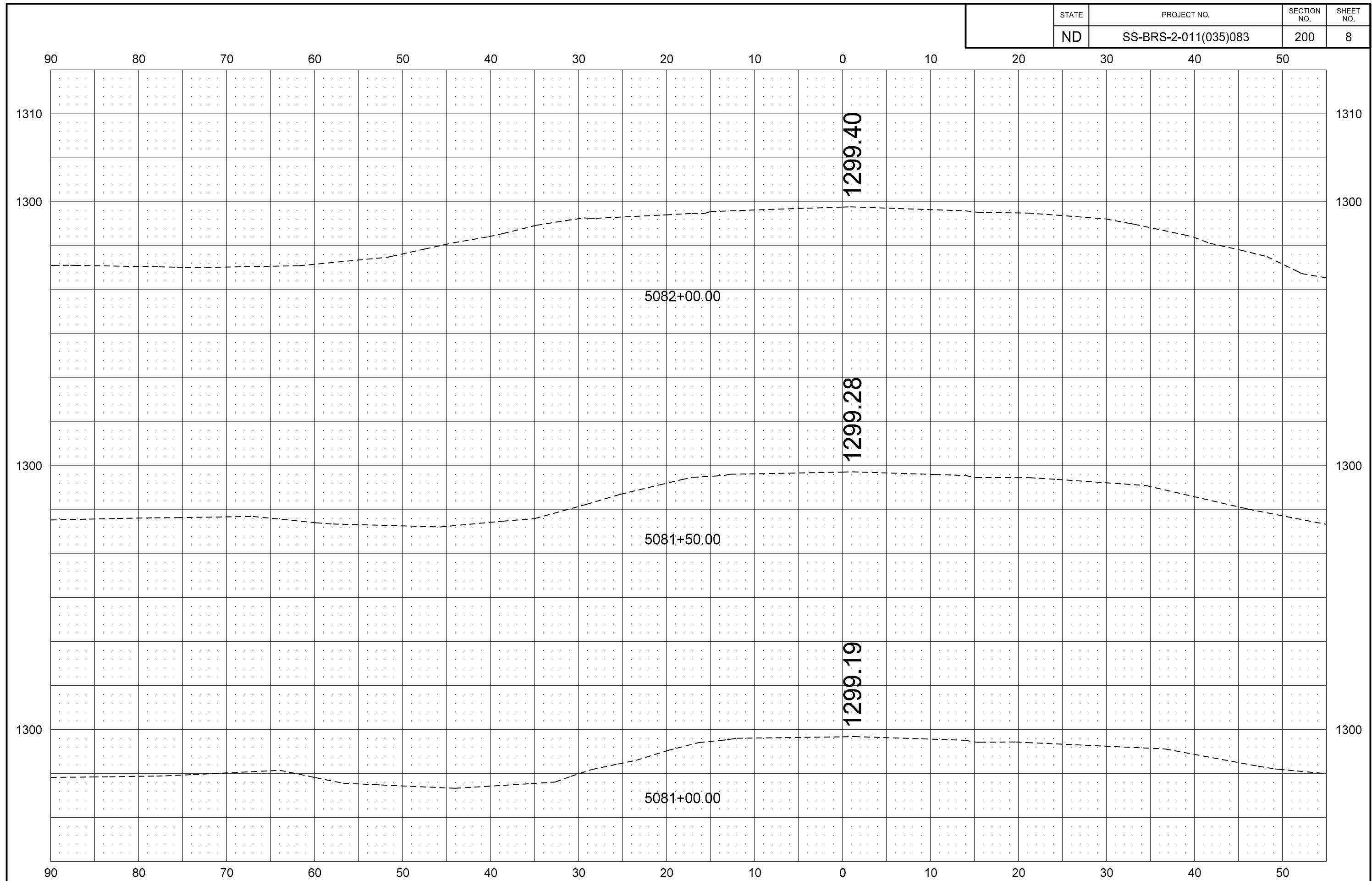
Fiber Rolls 12IN
5079+00 to 5095+00 Lt 525 LF
5079+00 to 5095+00 Rt 375 LF

RipRap Grade 2
5083+00 to 5087+00 Lt 1010 SY
5088+00 to 5093+00 Lt 1465 SY

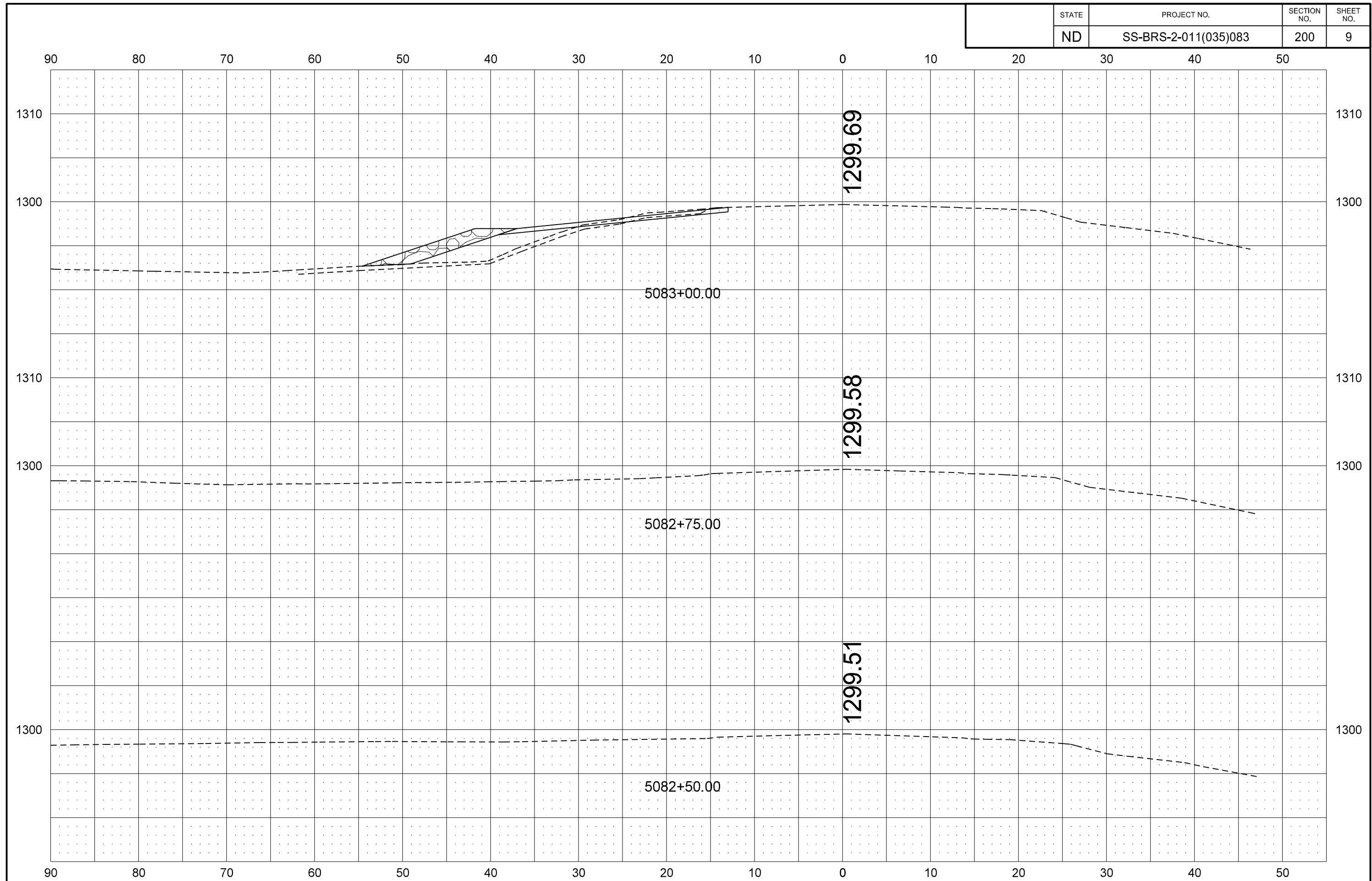
Seeding
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5088+00 to 5094+00 Lt 0.20 AC
5079+00 to 5087+00 Rt 0.14 AC
5088+00 to 5083+00 Rt 0.22 AC



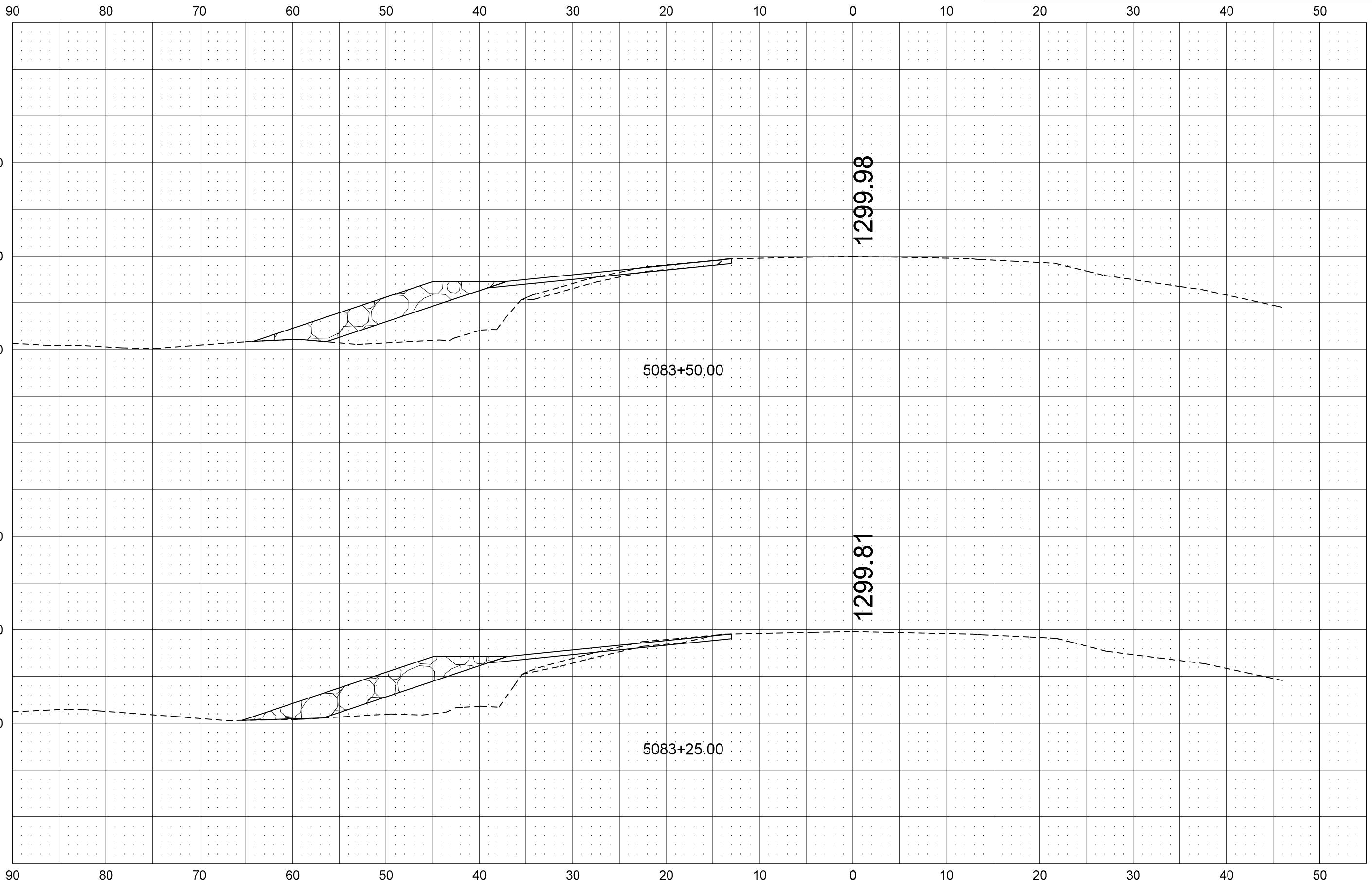
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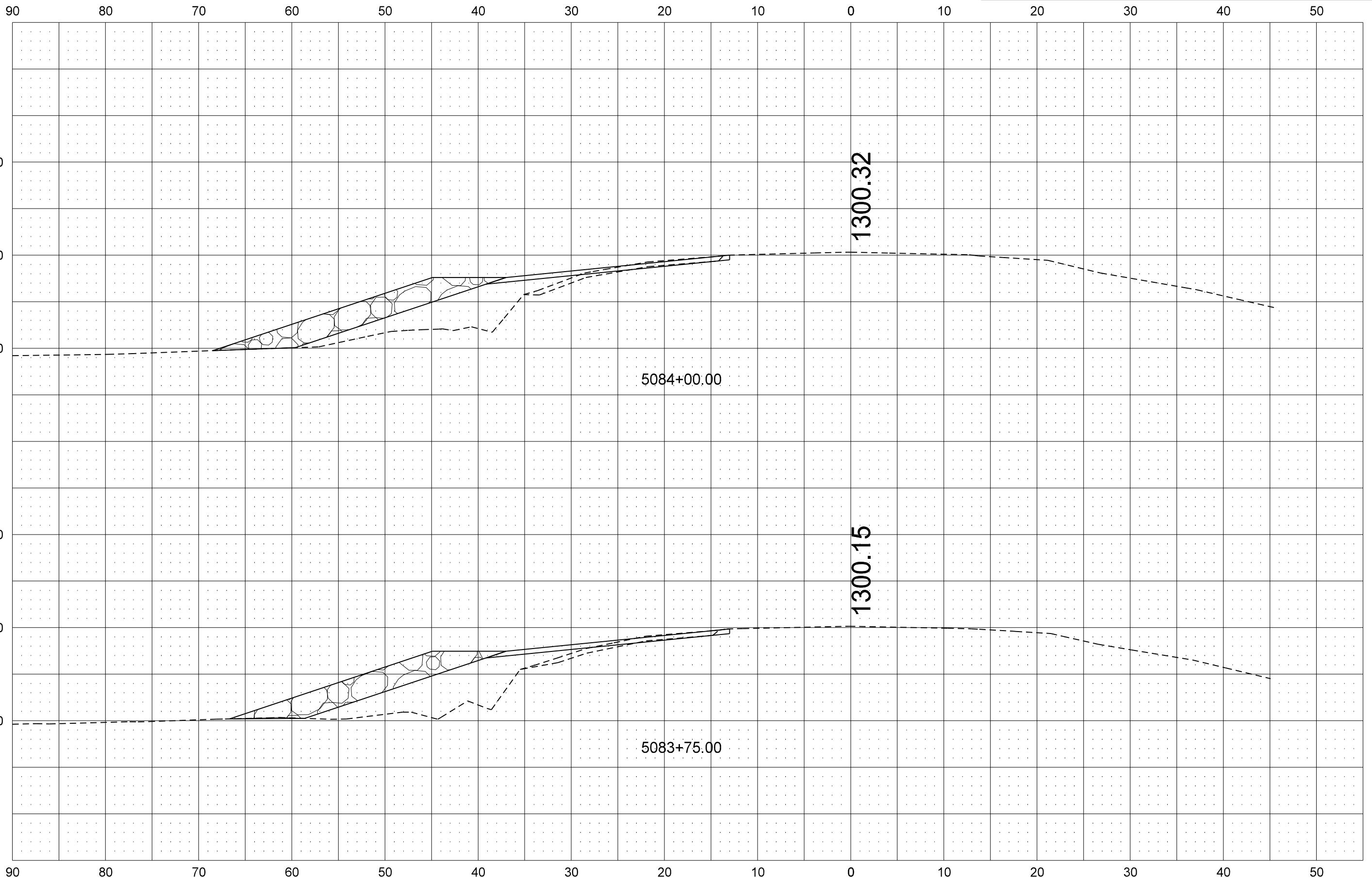
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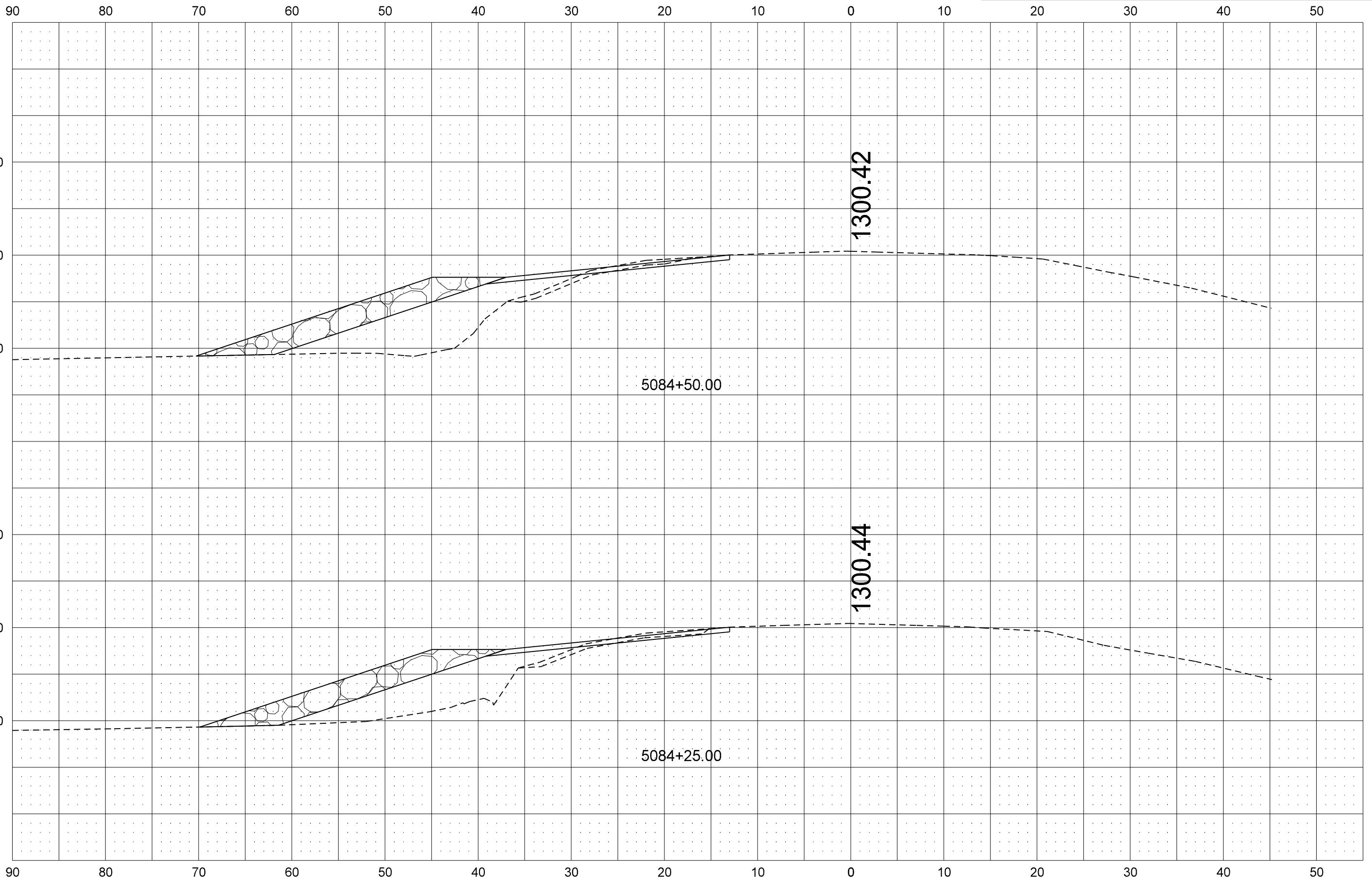
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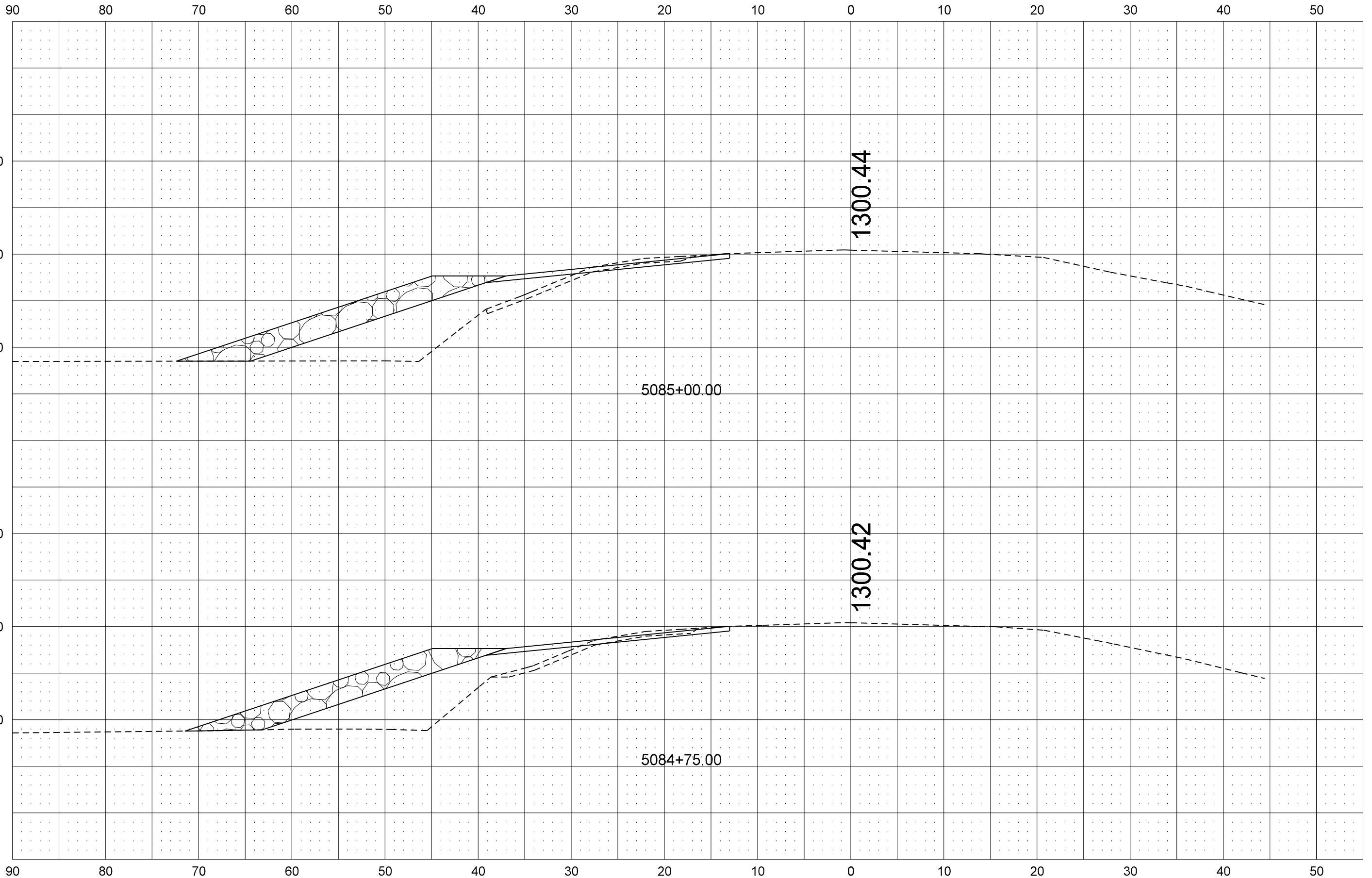
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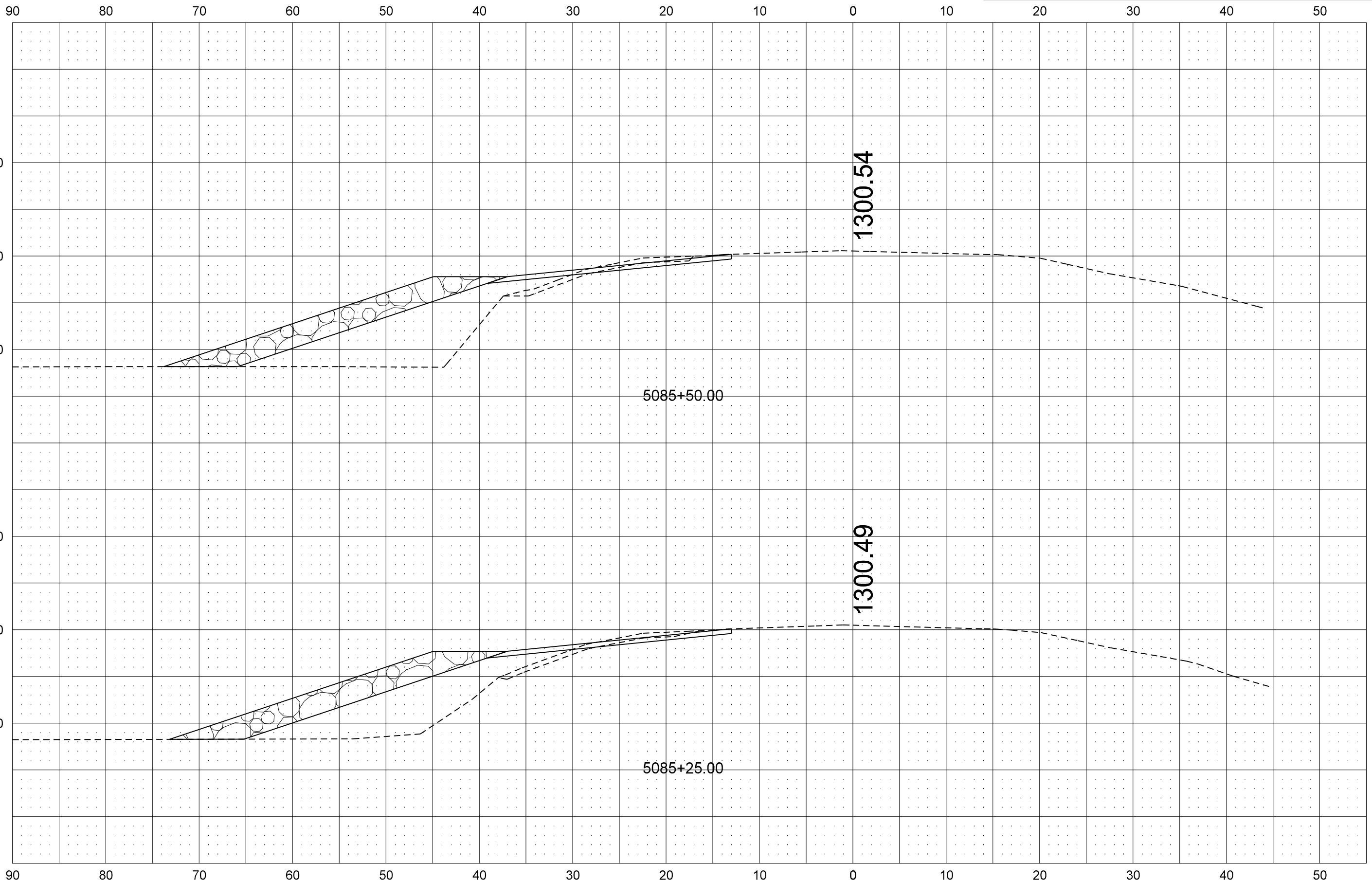
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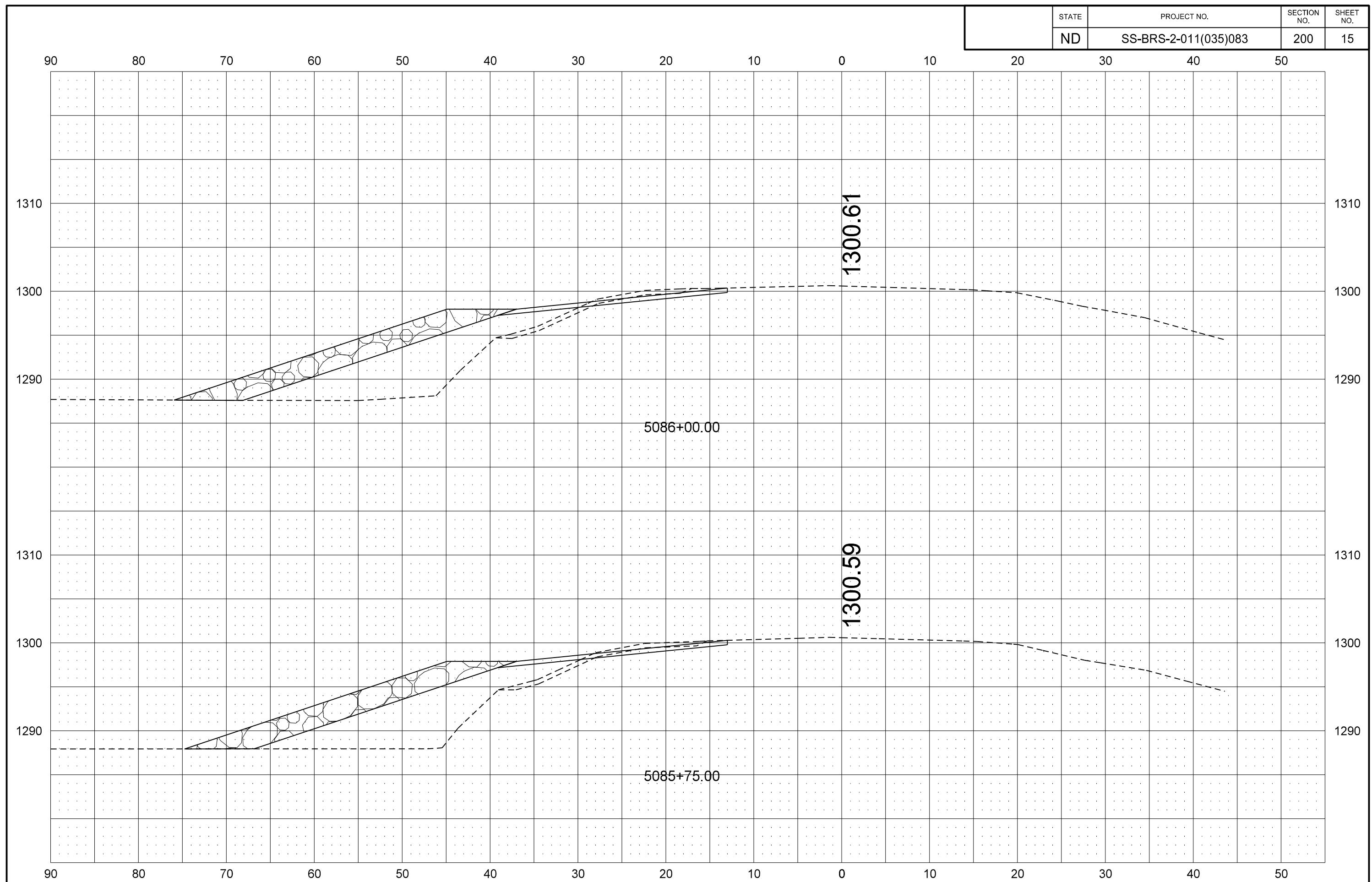
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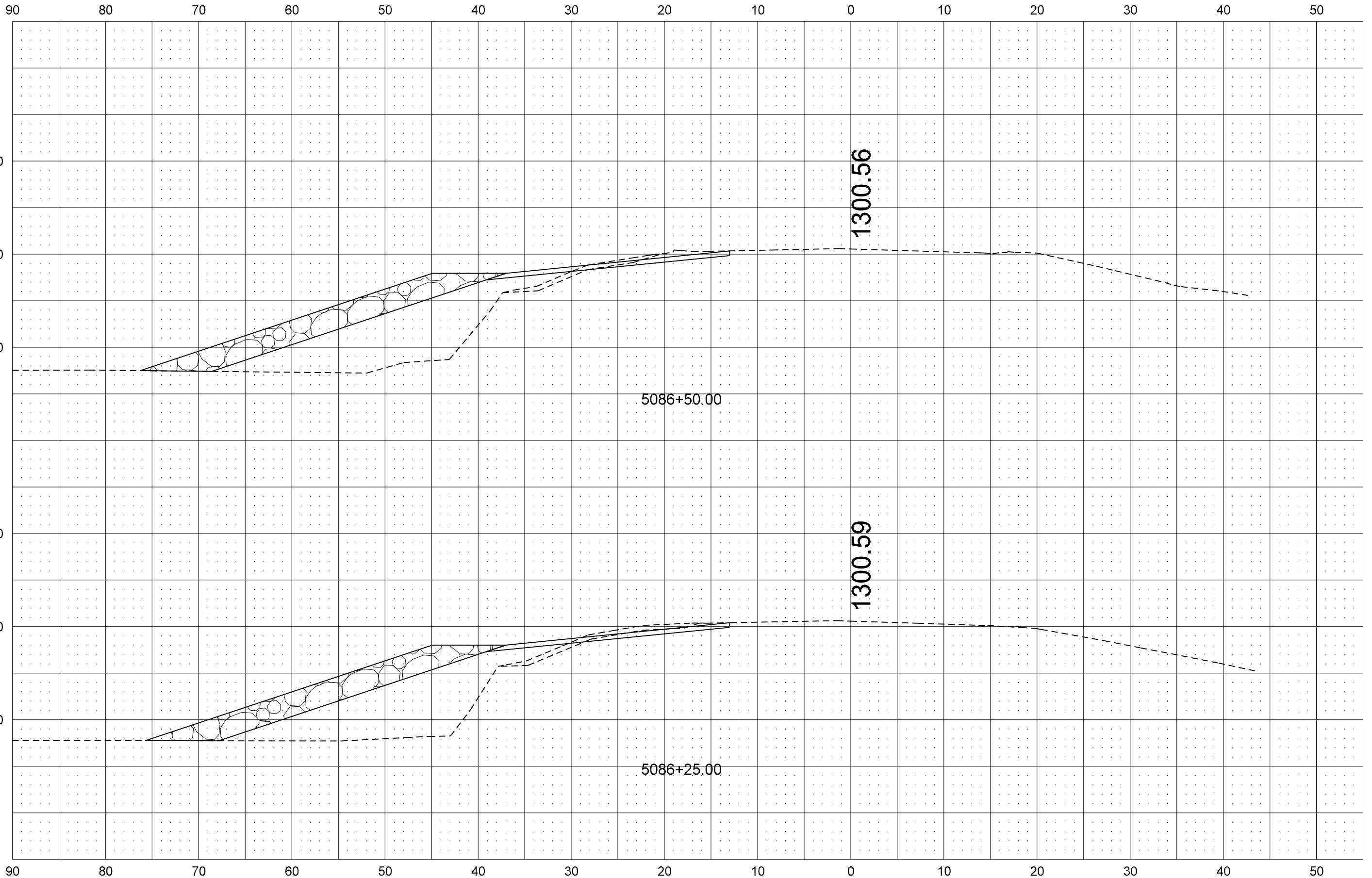
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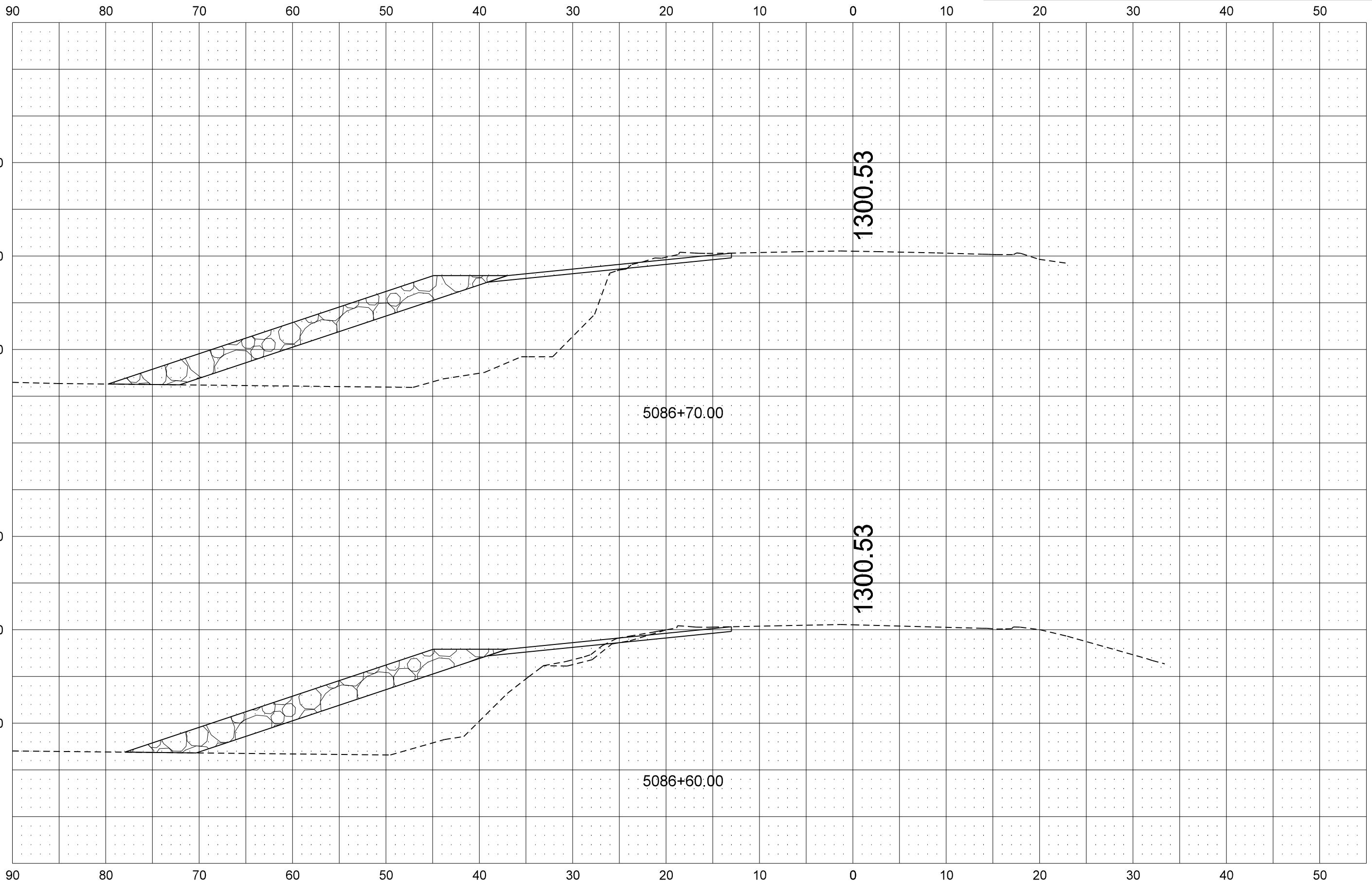
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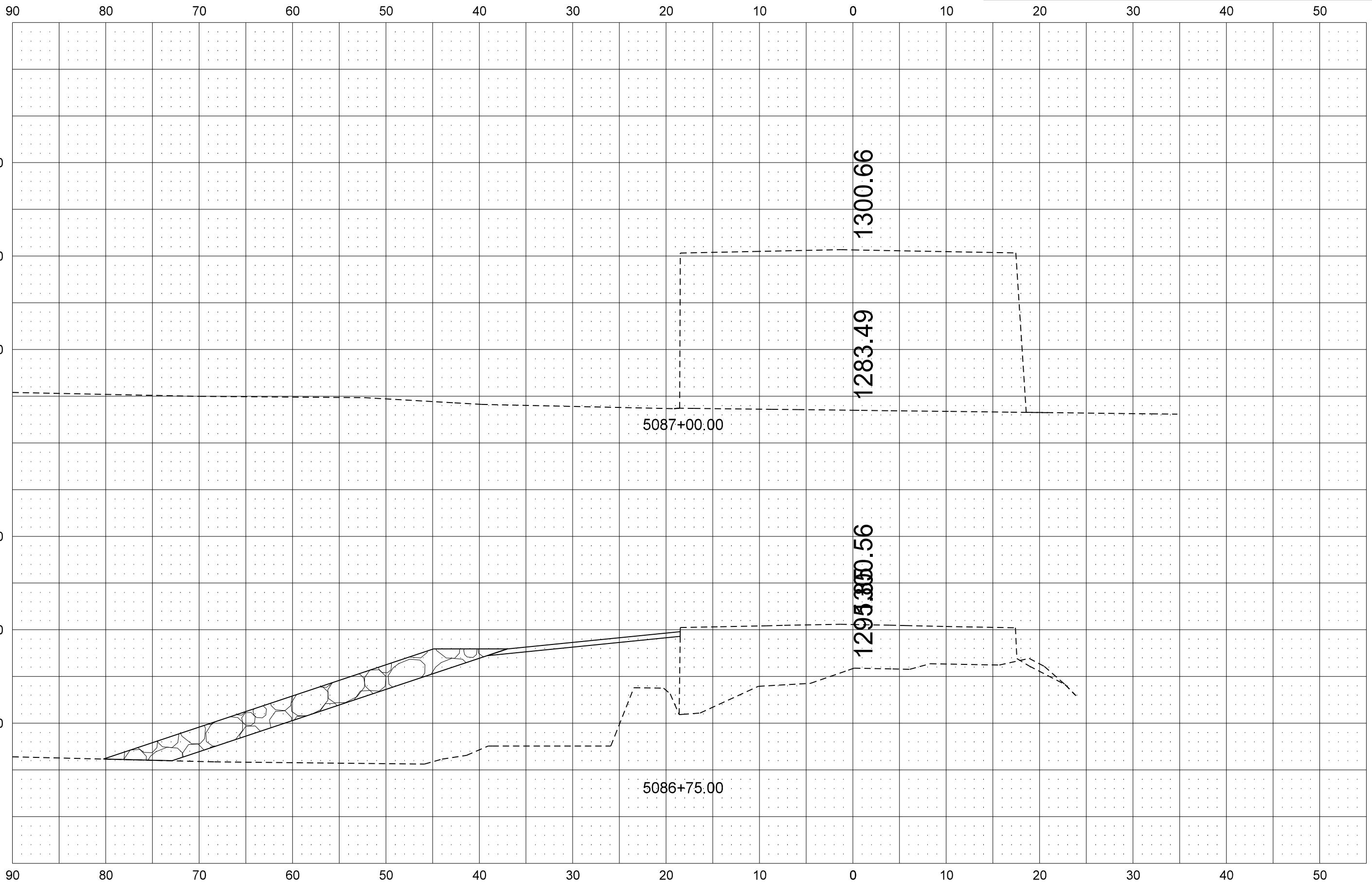
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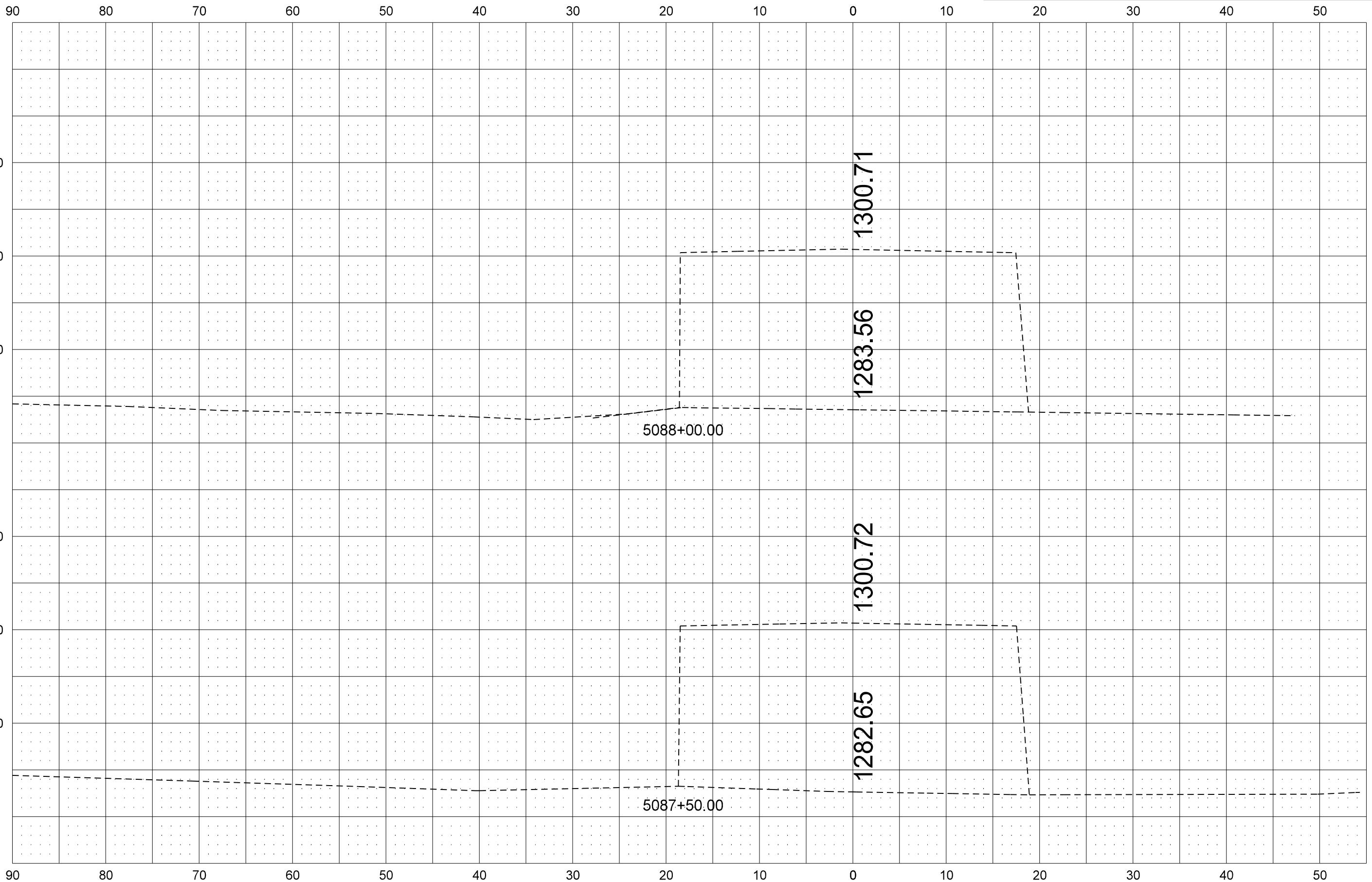
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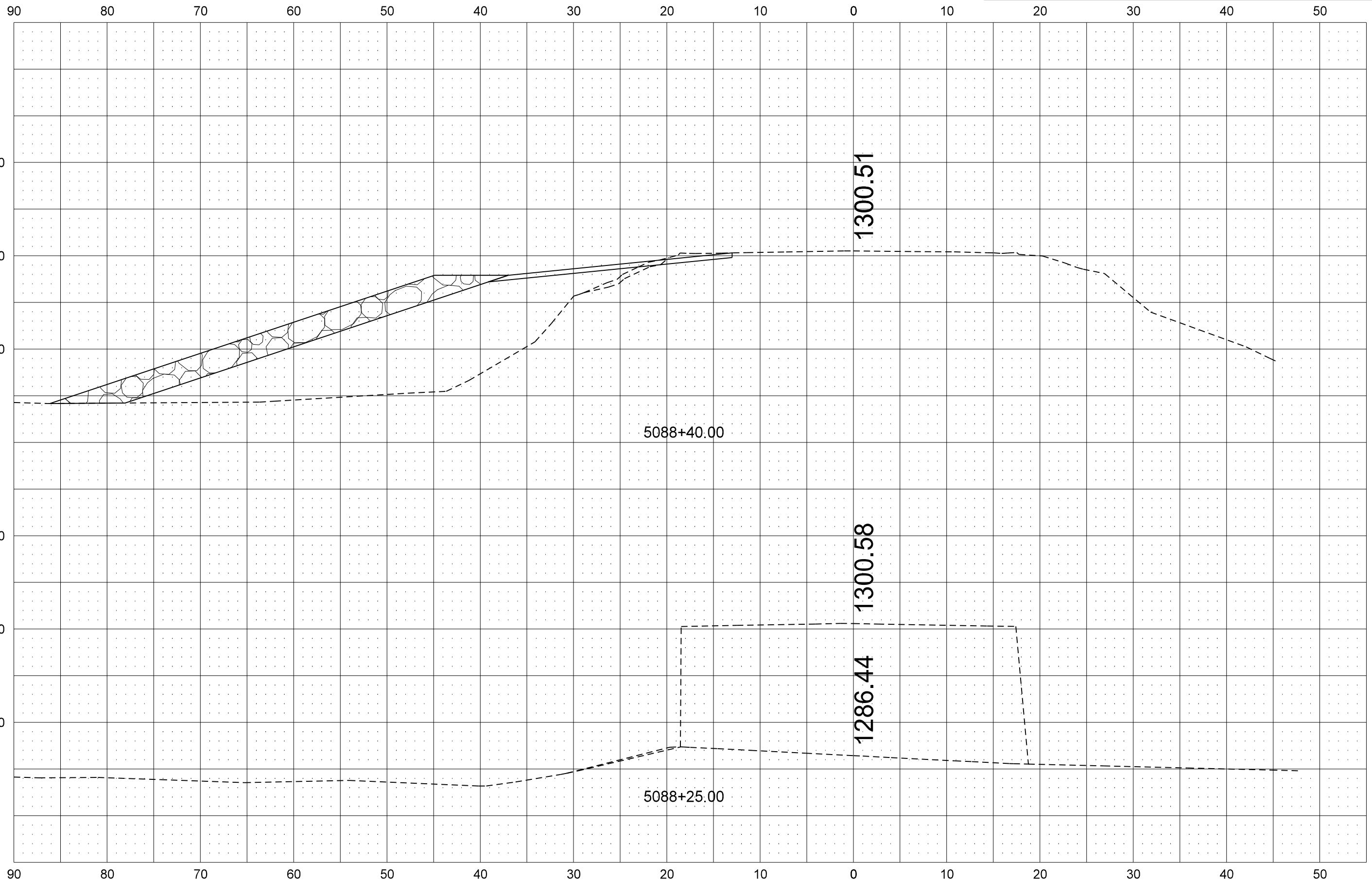
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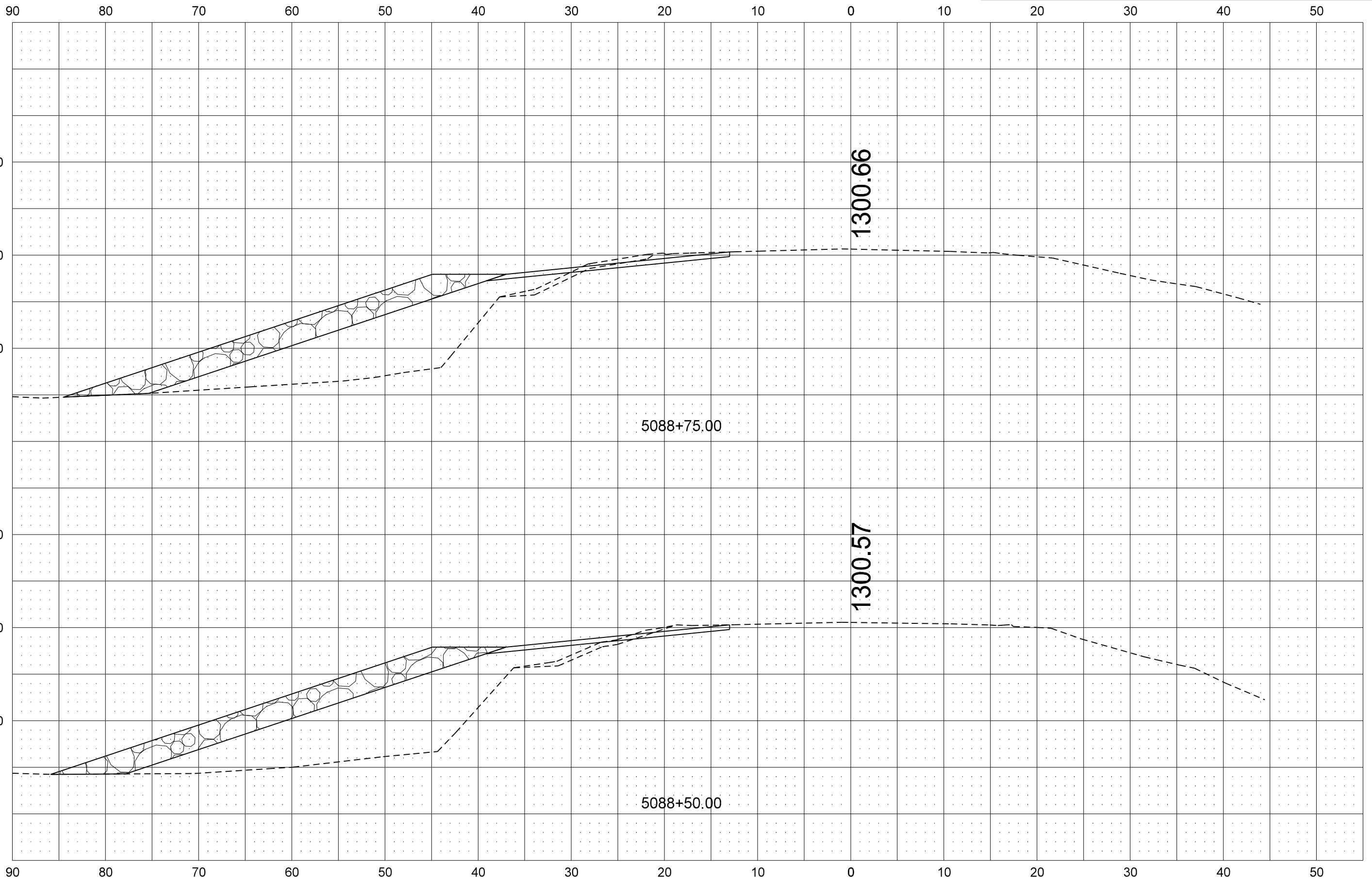
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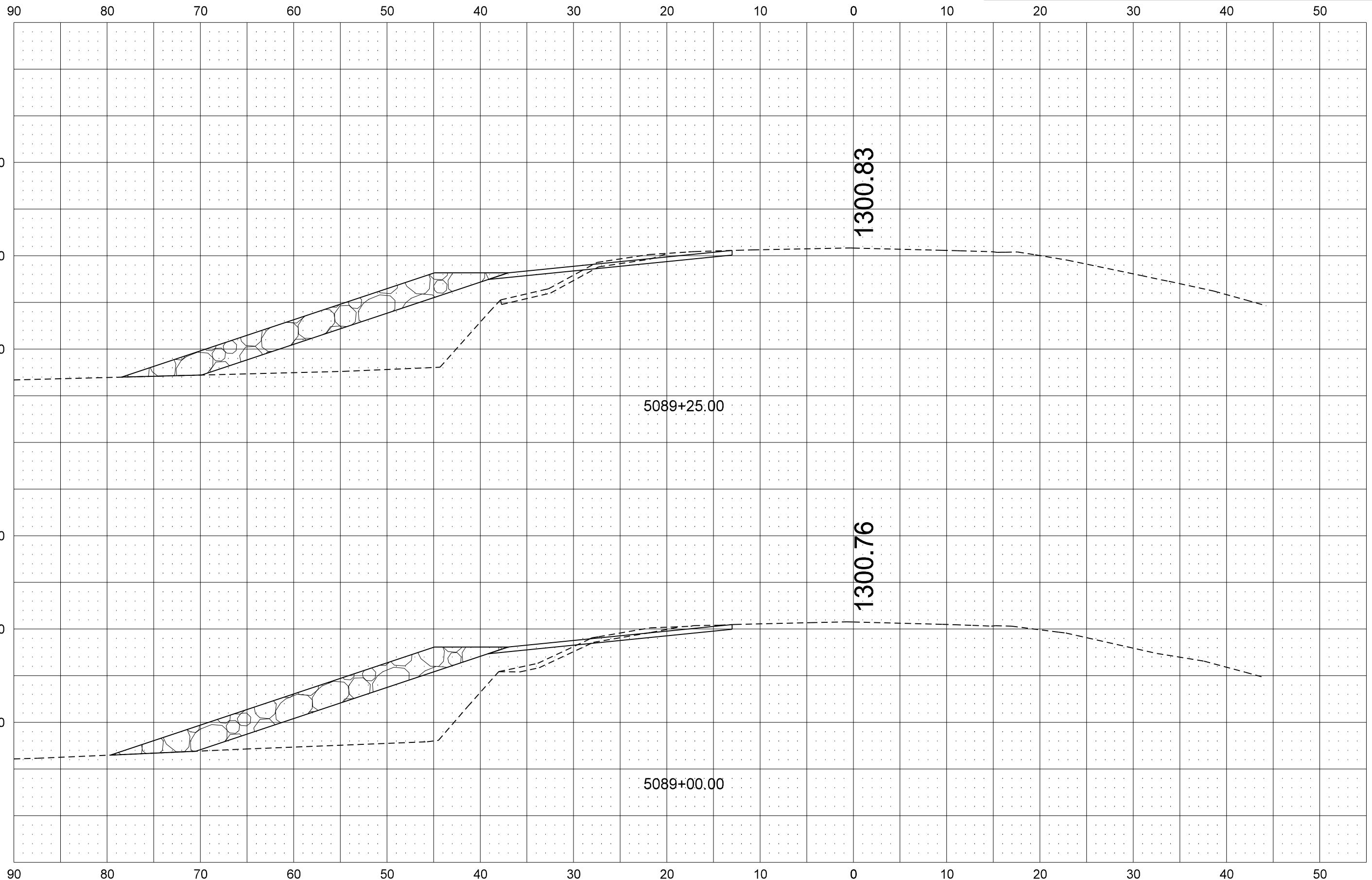
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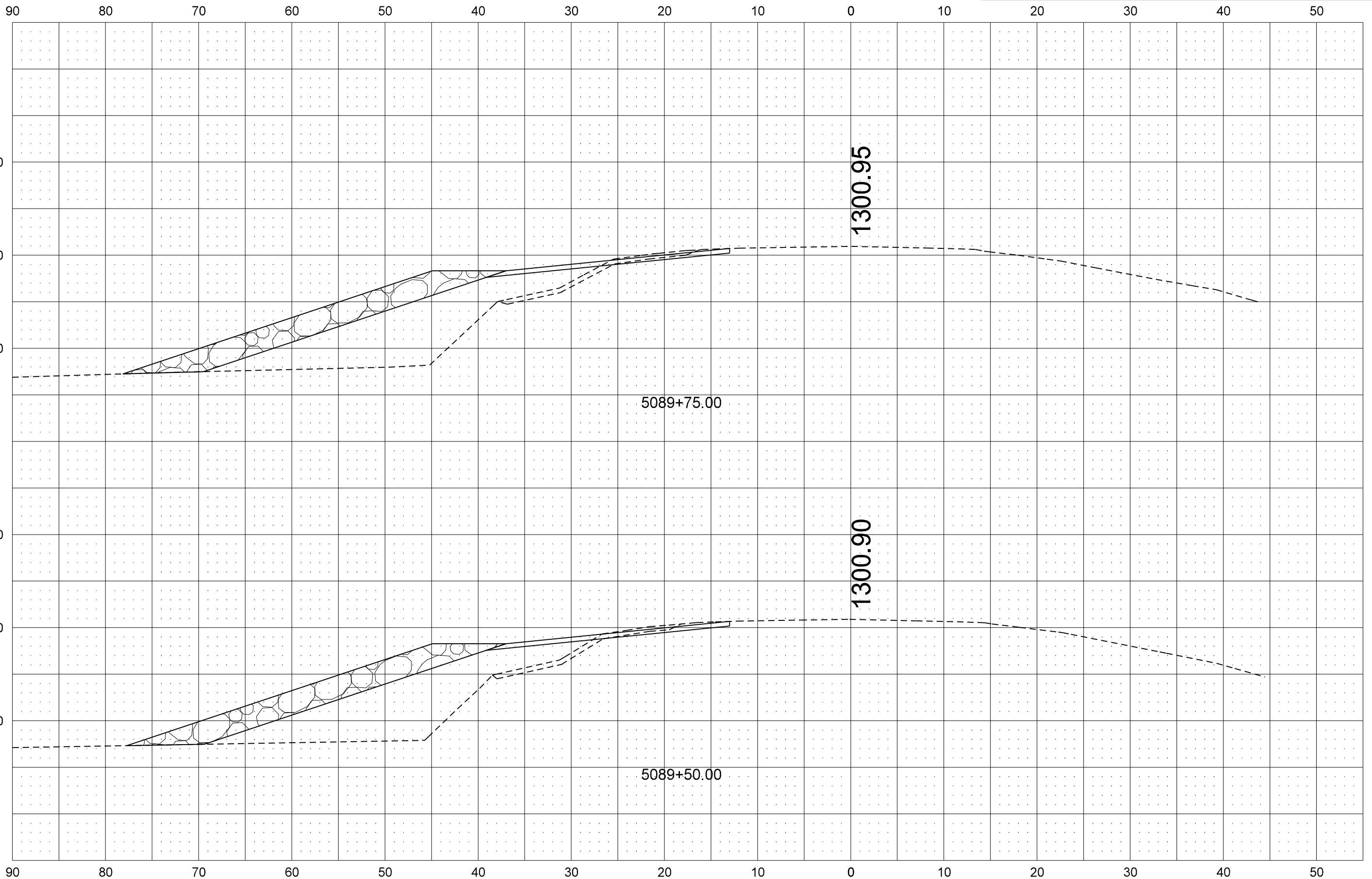
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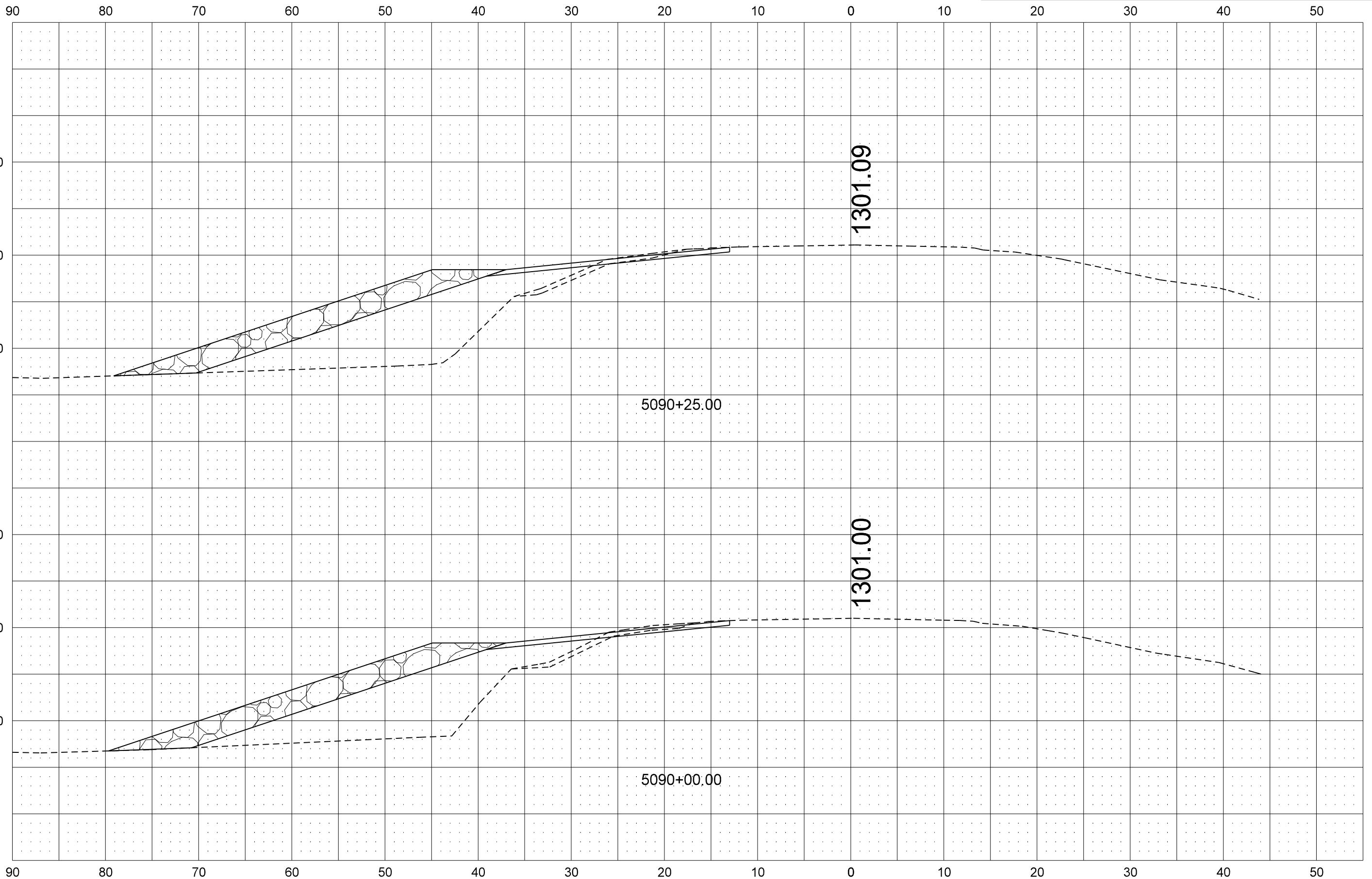
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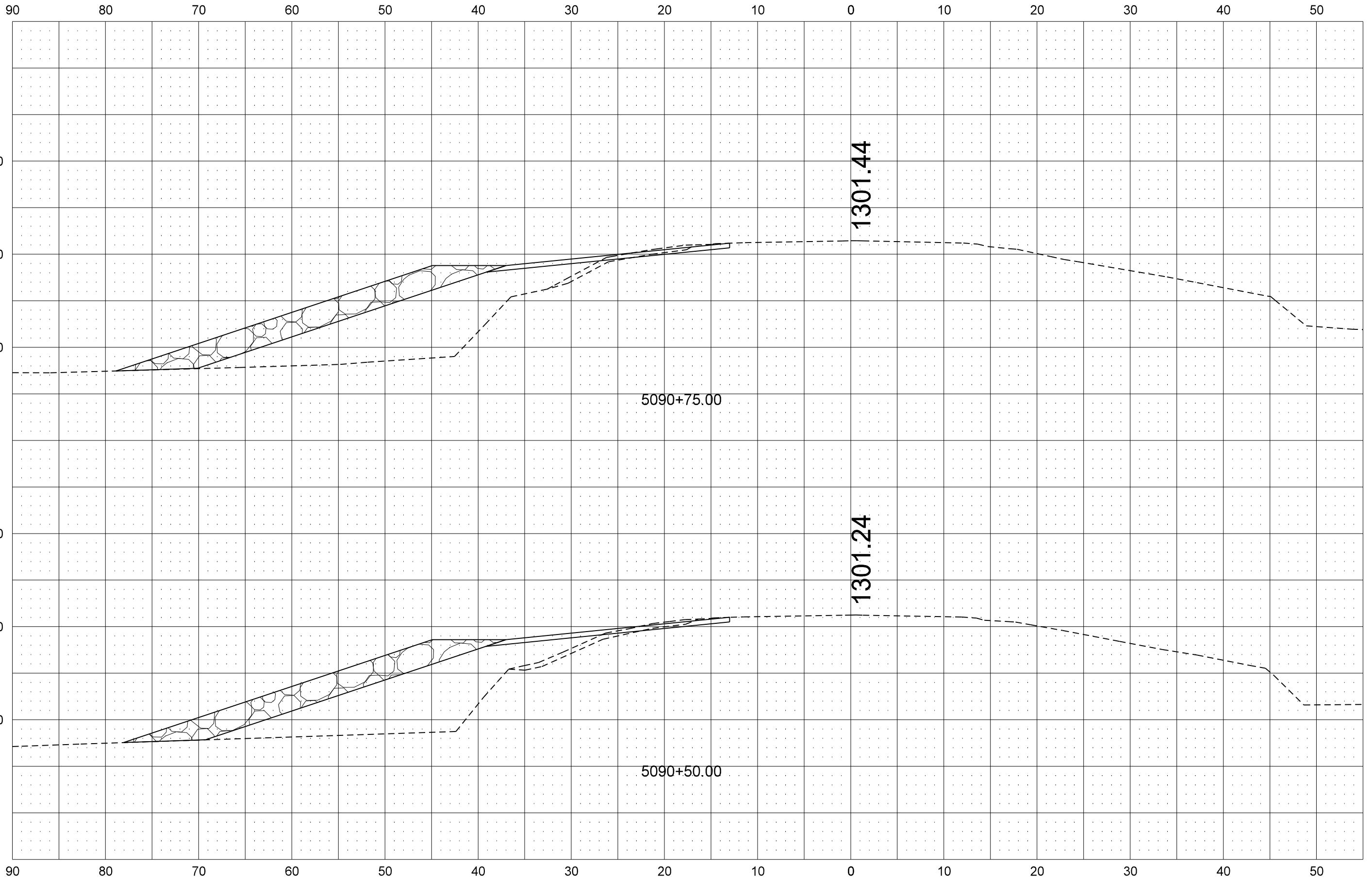
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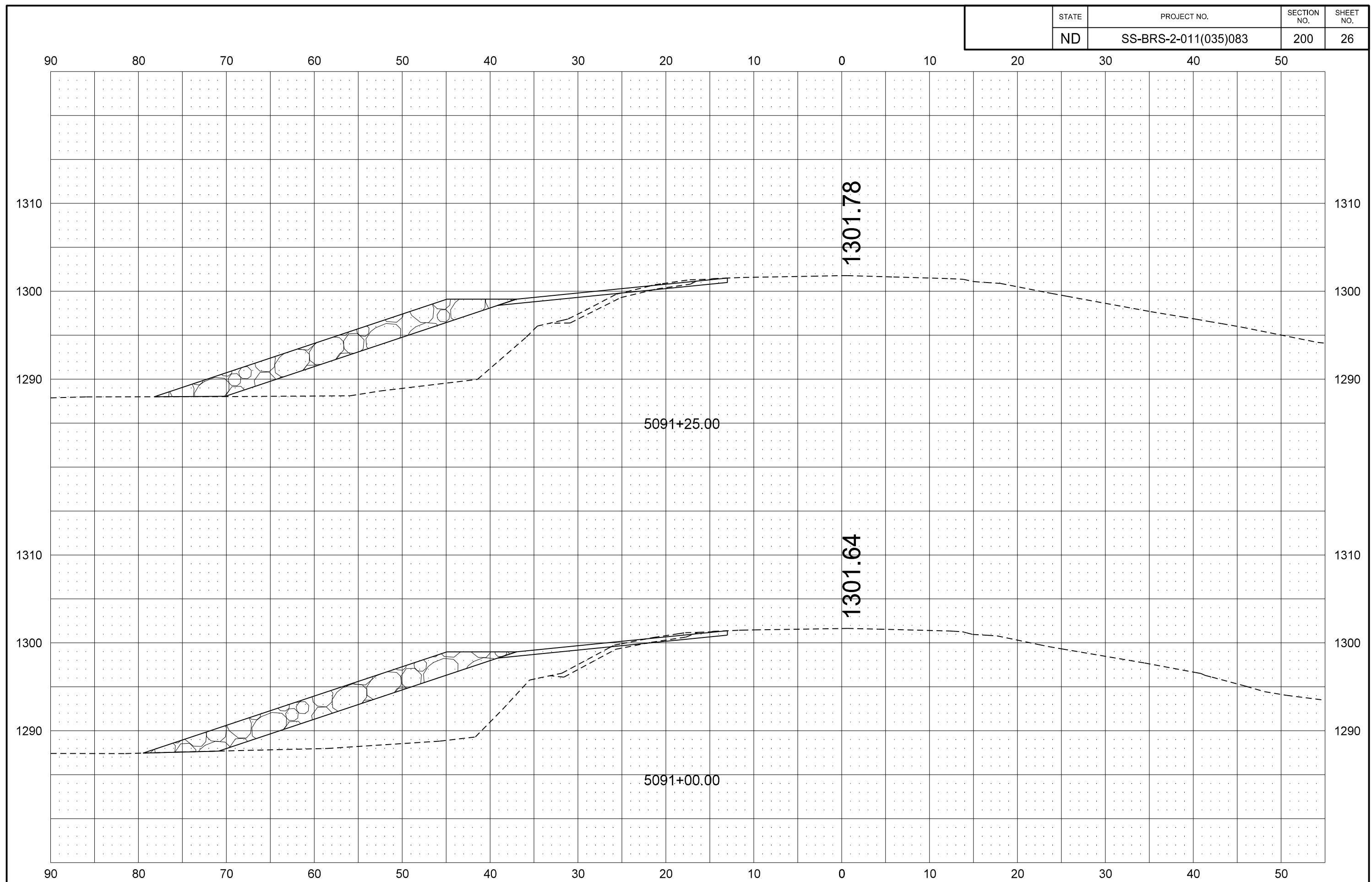
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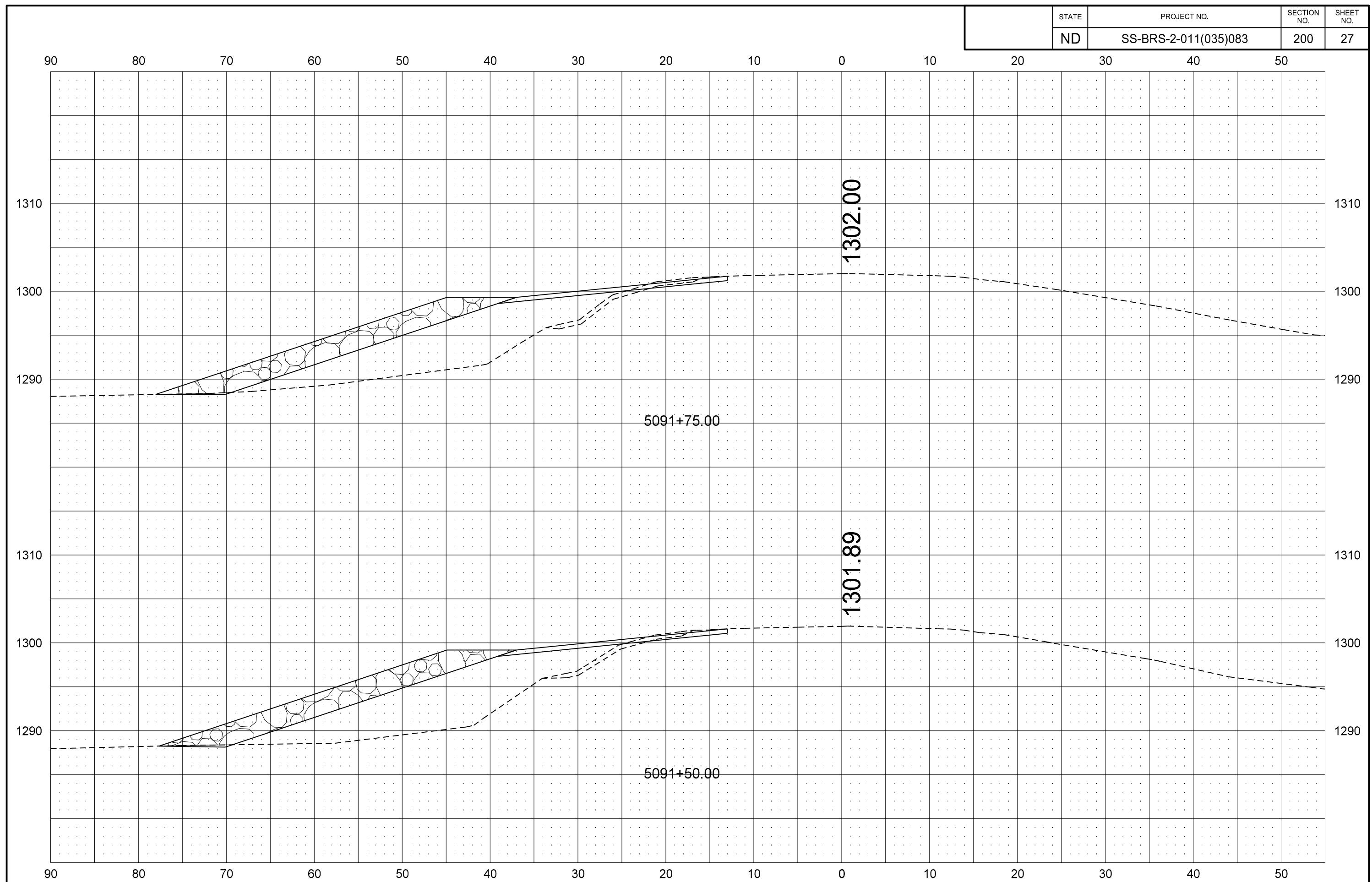
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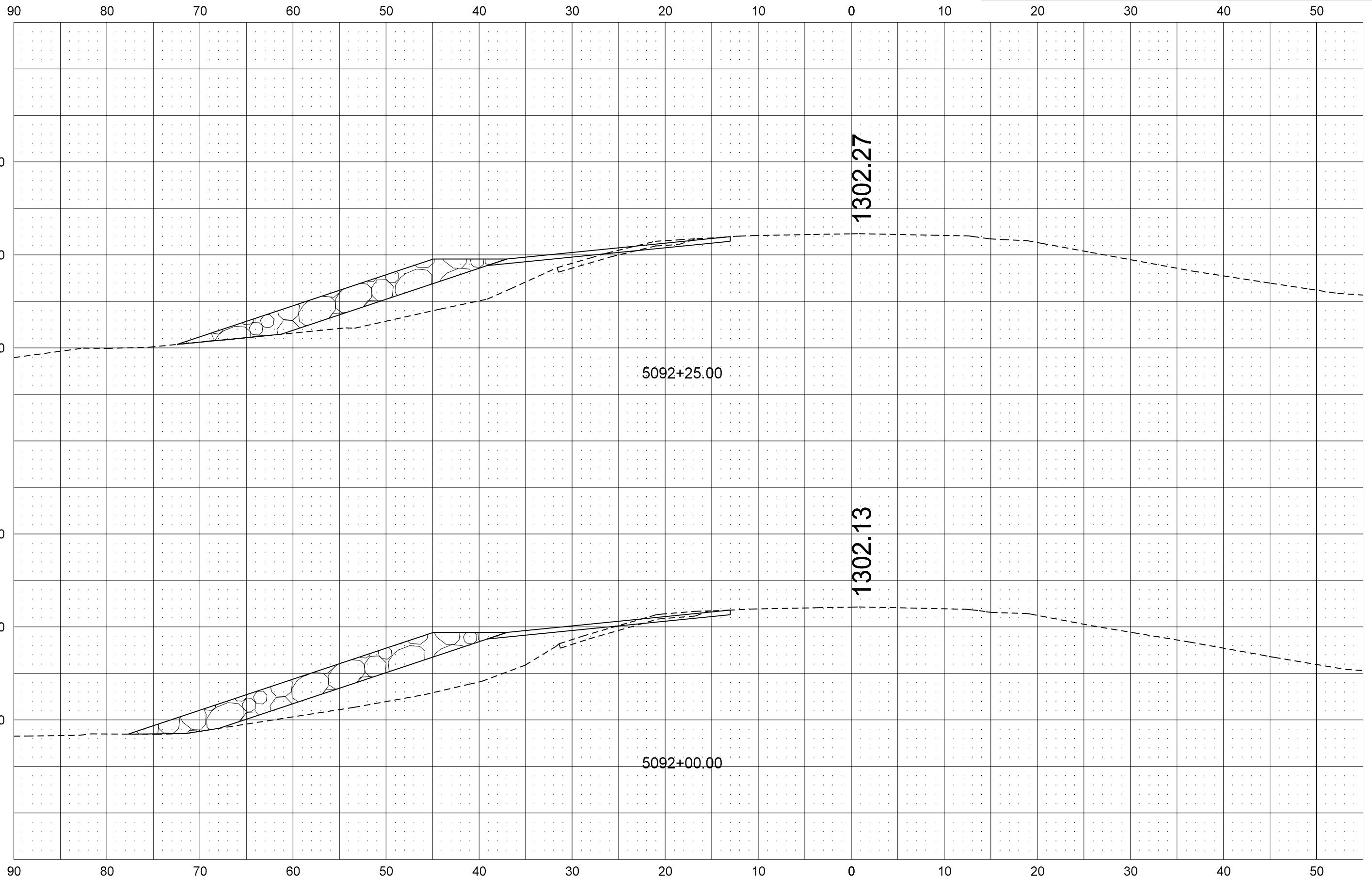
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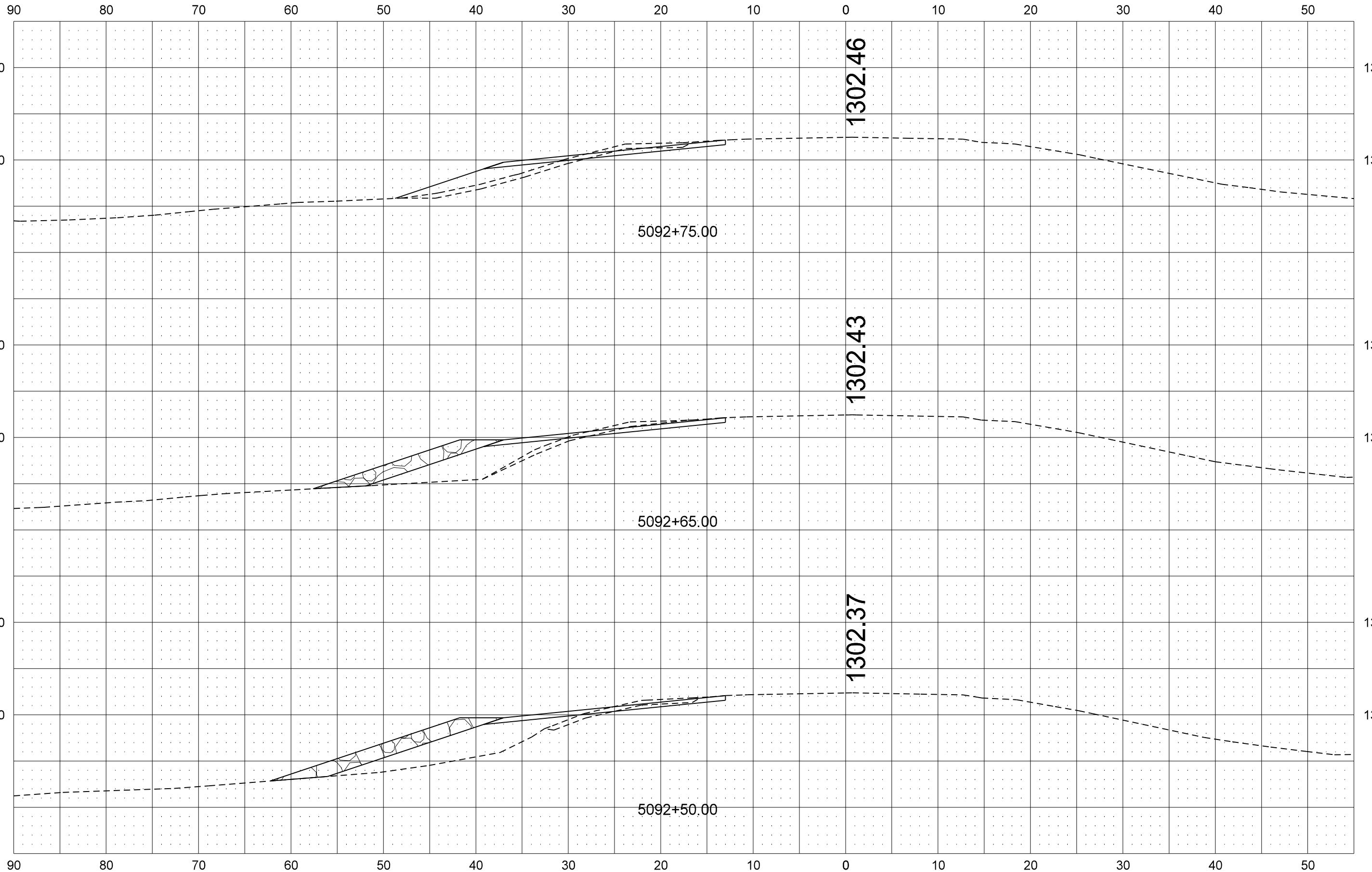
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STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	SS-BRS-2-011(035)083	200 29



STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	SS-BRS-2-011(035)083	200 30

