

Idejni projekt lokalne ceste

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Undergraduate thesis / Završni rad

2023

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SVEUČILIŠTE U SPLITU
FAKULTET GRAĐEVINARSTVA, ARHITEKTURE I GEODEZIJE

ZAVRŠNI RAD

Sara Vučko

Split, 2023.

SVEUČILIŠTE U SPLITU
FAKULTET GRAĐEVINARSTVA, ARHITEKTURE I GEODEZIJE

IDEJNI PROJEKT LOKALNE CESTE

Završni rad

Split 2023.

Idejni projekt lokalne ceste

Sažetak:

Idejni projekt lokalne ceste izrađen je na geodetskoj podlozi u mjerilu 1:1000 od točke A do točke B prema zadatku iz kolegija Ceste. Za izradu projekta je korišten program AutoCAD Civill 3D. Vrsta terena na kojem se polaže trasa je brdovit. Cesta je projektirana za godišnji dnevni promet (PGDP) od 950 vozila na dan. Predviđena projektna brzina je 40 km/h. Idejno rješenje izrađeno je prema Pravilniku i osnovnim uvjetima za projektiranje ceste s elementima koji zadovoljavaju važeće propise, kao i sigurnosne i estetske kriterije.

Ključne riječi:

Idejni projekt, lokalna cesta, projektna brzina, os ceste, niveleta, uzdužni presjek, poprečni presjek

Conceptual project of a local road

Abstract:

A conceptual project of a road was created at a scale of 1:1000 of a geodetic base. The AutoCAD Civil 3D software was used for the project desing. The roads route is marked by a hilly terrain. The road is designed for annual daily traffic 950 vehicles per day (AADT). Intended desing speed id 40 miles per hour. The preliminary desing was made according to the Regulation on basic requirements for the public road desing with elements that meet relevant regulations, as well as safety and aesthetic criteria.

Keywords:

Conceptual project, local road, design speed, the road axis, profile, cross-section

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1. PROGRAMSKI ZADATAK

Katedra za prometnice

Studij: Stručni

Nastavni predmet: CESTE

Student:*Sara Vučko*.....

ZADATAK

Treba izraditi idejni projekt dionice ceste između točaka A i B naznačenih na priloženoj geodetskoj podlozi u mjerilu 1:1000.

Zadano je:

- PGDP - prosječni godišnji dnevni promet: **950 voz/dan**,
- vrsta terena: **brdovit**.

Idejni projekt treba sadržavati:

1. Tehnički opis
2. Proračun horizontalne geometrije
3. Proračun proširenja kolnika u krivini
4. Proračun vertikalne geometrije i kota nivelete
5. Proračun vitoperenja kolnika
6. Građevinska situacija MJ. 1:1000
7. Uzdužni presjek MJ. 1:1000/100
8. Normalni poprečni presjek MJ. 1:50
9. Karakteristični poprečni presjeci MJ. 1:100

Predmetna asistentica:

Daniela Dumanić, mag.ing.aedif.

2. TEHNIČKI OPIS

1.1. OPĆENITO

Izrađen je idejni projekt dionice ceste između točke A i točke B koje su naznačene na priloženoj geodetskoj podlozi u mjerilu 1:1000. Točka A se nalazi na 177 metara nadmorske visine, a točka B na 154 metra nadmorske visine. Trasa kontinuirane ceste ima duljinu od 321,11 metara. Cesta je projektirana na brdovitom terenu za prosječni godišnji dnevni promet od 950 vozila na dan. Za ovu kategoriju ceste predviđena je projektna brzina $V_p = 40$ km/h.

1.2. HORIZONTALNI ELEMENTI

Projektirana trasa se sastoji od tri pravca i dvije krivine. Minimalni radijus horizontalne krivine je 55 m, a minimalna duljina prijelaznice je 30 m. Odnosno prva i druga krivina imaju radijus $R = 55$ m, a prijelaznicu $L = 30$ m.

1.3. VERTIKALNI ELEMENTI

Maksimalni dozvoljeni nagib nivelete je 12%, dok je minimalni radijus vertikalne krivine 355 m. Nagib prvo pravca je $S_1 = -8.62\%$, a drugog $S_2 = -4.01\%$. Tangenta je dužine 22.91 m, a radijus vertikalne krivine je 500 m.

1.4. POPREČNI PRESJEK

Cesta ove kategorije ima dva kolnička traka širine svakog po 3.00 m i rubni trak širine 0.2 m. U nasipu bankina širine 1.0 m nagiba 4% također u smjeru berme nagiba 4% i širine 1.0 m. U usjecima se izvode rigoli za odvodnju vode dimenzije 0.65 m i drenaža koja je postavljena u glinenu posteljinu sa minimalnom dubinom od 85 m te postavljanje cijevi $\varnothing 200$. Cesta se nalazi velikim dijelom u zasjeku te ponegdje u dubokom iskopu. Nagib usjeka je 2:1, a nasipa 1:1, te se u pojedinim dijelovima nasipa predviđaju potporni zidovi.

1.5. KOLNIČKA KONSTRUKCIJA

Projektom je predviđena sljedeća kolnička konstrukcija:

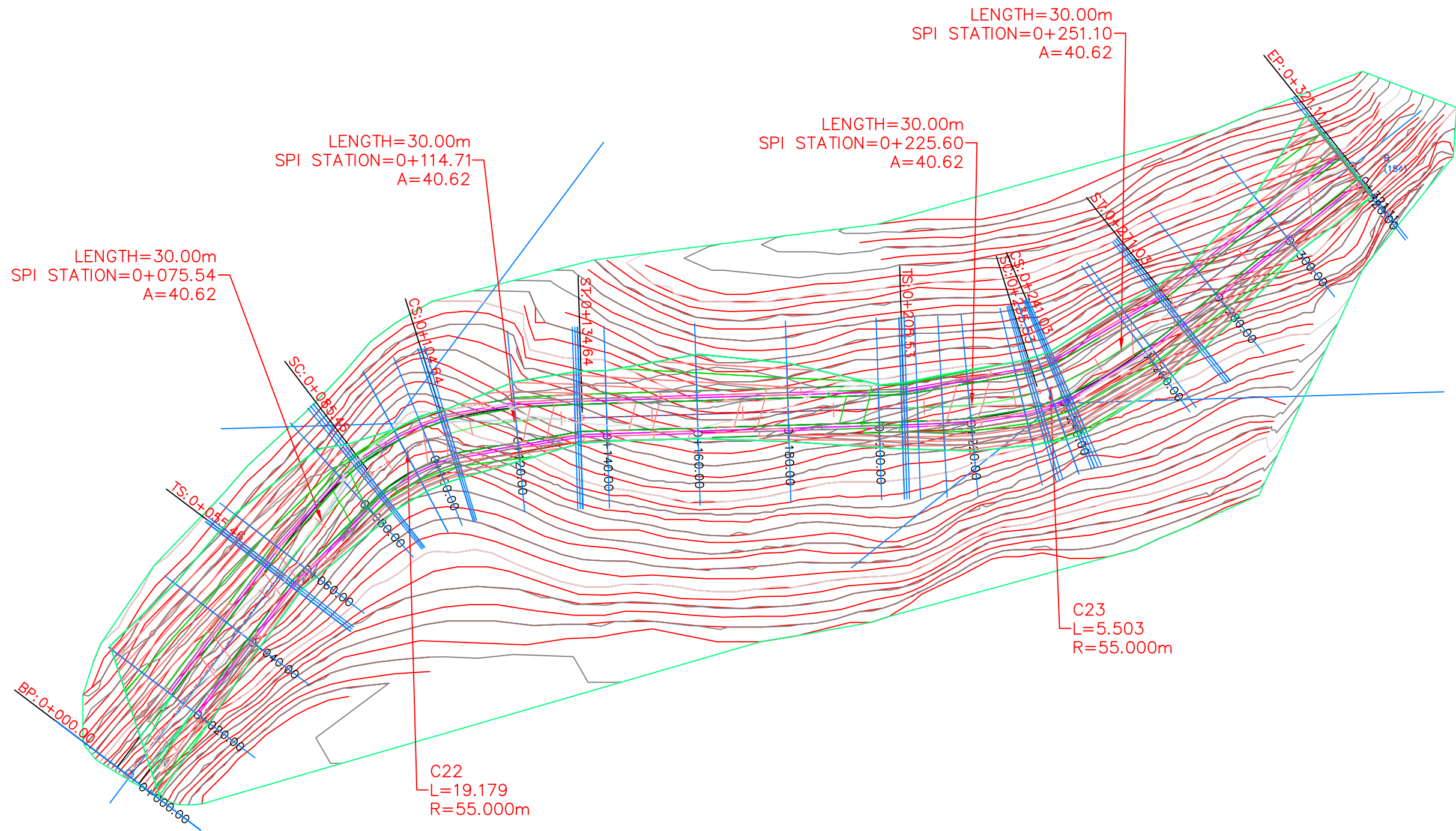
- Asfaltbeton habajući sloj AB11 4 cm
- Bitumenizirani nosivi sloj BNS 22 6 cm
- Mehanički stabilizirani nosivi sloj MZNS 30 cm

1.6. ODVODNJA

Odvodnja kolnika predviđa se otvorenim sustavom odvodnje prihvaćanjem kolničkih i pribrženih voda u zasjeku i usjeku u betonske rigole, te kontroliranim ispuštanjem u teren direktno ili betonskim cijevnim propustima kroz trup kolnika.

3. GRAFIČKI PRILOZI

3.1. GRAĐEVINSKA SITUACIJA M 1:1000

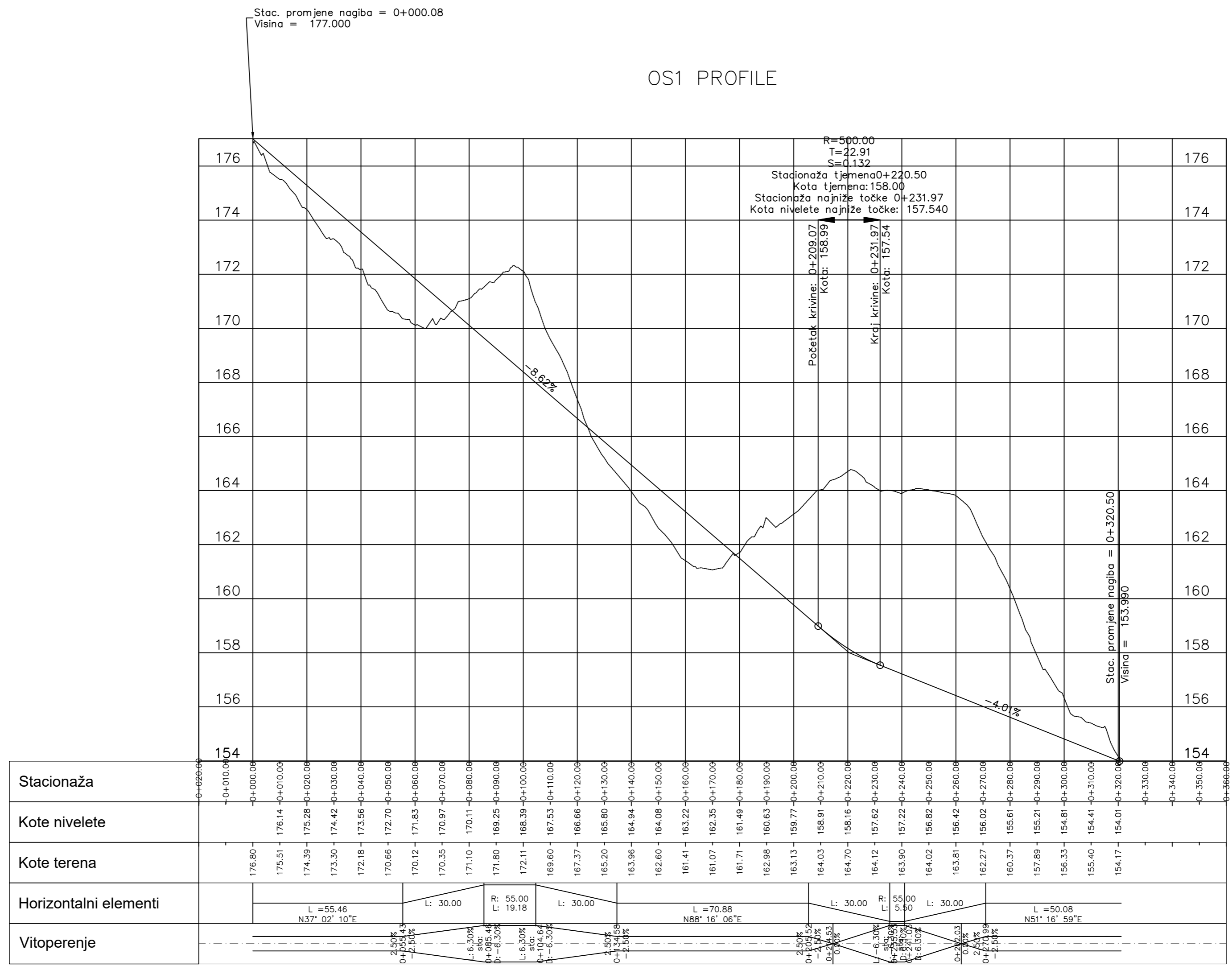


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PREDMET	ZAVRŠNI RAD – CESTE	GODINA 2022./2023.
ZADATAK	IDEJNI PROJEKT	
SADRŽAJ	GRAĐEVINSKA SITUACIJA	M 1:1000
STUDENT	SARA VUČKO	

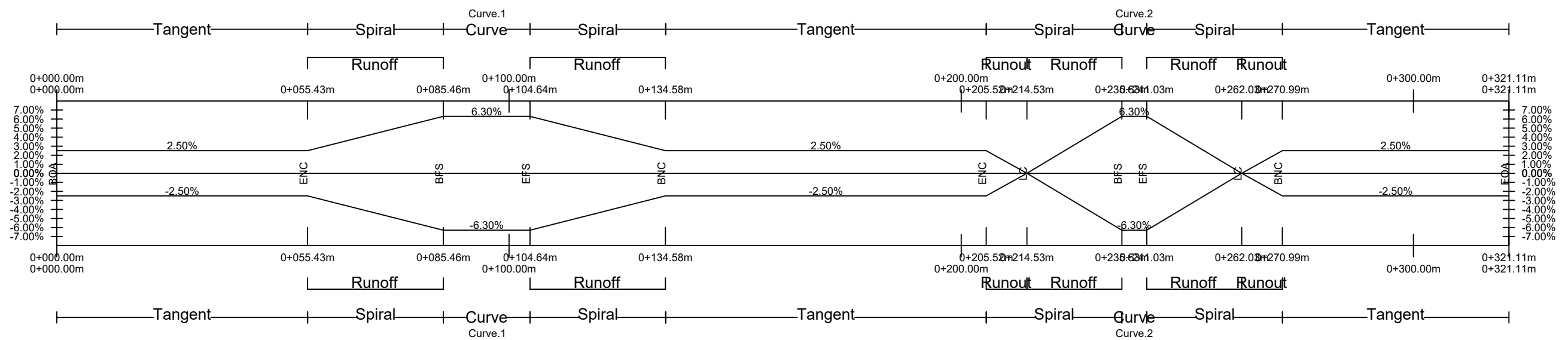
3.2. UZDUŽNI PRESJEK M 1:1000/100

OS1 PROFILE



Stacionaža	0+000.00	0+010.00	0+020.00	0+030.00	0+040.00	0+050.00	0+060.00	0+070.00	0+080.00	0+090.00	0+100.00	0+110.00	0+120.00	0+130.00	0+140.00	0+150.00	0+160.00	0+170.00	0+180.00	0+190.00	0+200.00	0+210.00	0+220.00	0+230.00	0+240.00	0+250.00	0+260.00	0+270.00	0+280.00	0+290.00	0+300.00	0+310.00	0+320.00	0+330.00	0+340.00	0+350.00	0+360.00
Kote nivelete	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Kote terena	-	176.80	175.51	174.39	173.30	172.18	170.66	170.12	170.35	171.10	171.80	172.11	169.60	167.37	165.20	163.96	162.60	161.41	161.07	161.71	162.98	160.63	159.77	164.70	164.12	163.90	164.02	163.81	162.27	160.37	157.89	156.33	155.40	154.17	-	-	-
Horizontalni elementi		L = 55.46 N37° 02' 10"E		L: 30.00		L: 55.00 R: 19.18		L: 30.00		L = 70.88 N88° 16' 06"E		L: 30.00		R: 55.00 L: 5.50		L: 30.00		L = 50.08 N51° 16' 59"E																			
Vitoperenje		-2.50%		-2.50%		-6.30%		-6.30%		-6.30%		-2.50%		-2.50%		-2.50%		-2.50%		-2.50%		-6.30%		-6.30%		-2.50%		-2.50%		-2.50%		-2.50%		-2.50%			

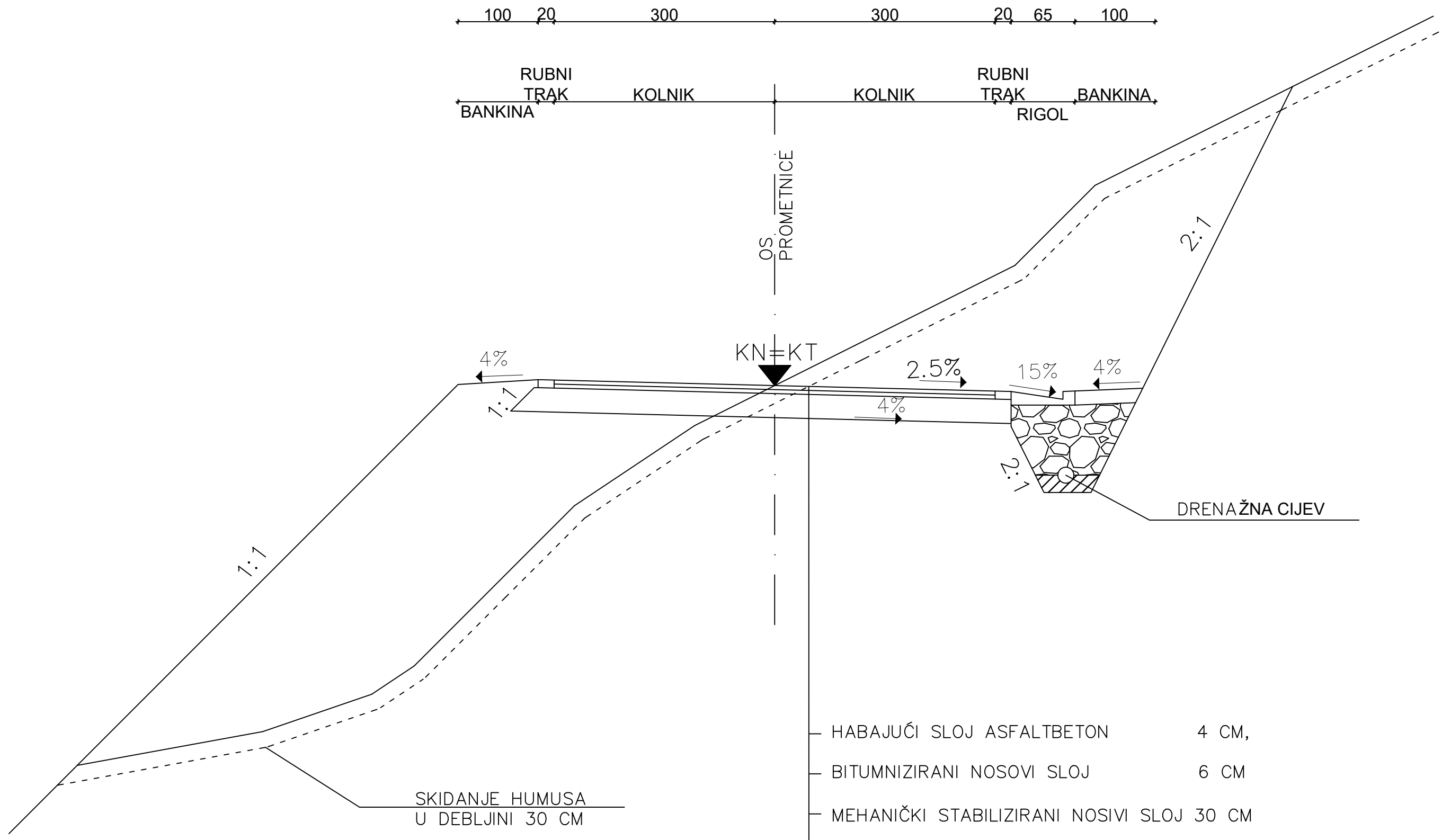
Superelevation



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ZADATAK	IDEJNI PROJEKT	
SADRŽAJ	DIJAGRAM VITOPERENJA	M 1:1000
STUDENT	SARA VUČKO	

3.3. NORMALNI POPREČNI PRESJEK M 1:50

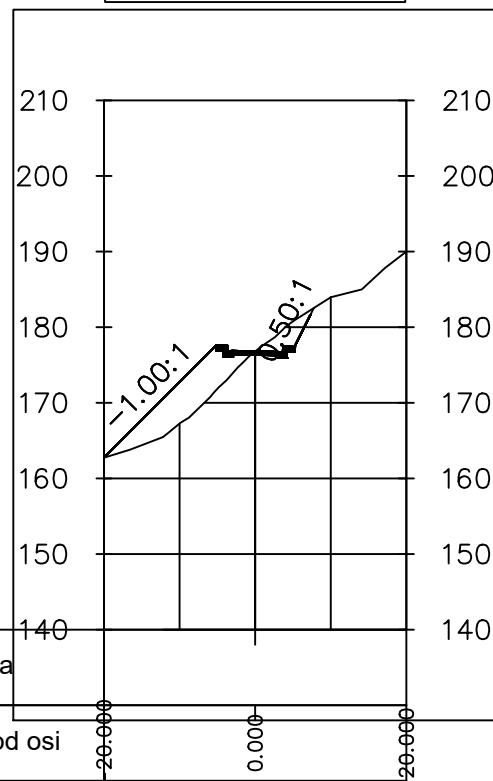


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ZADATAK	IDEJNI PROJEKT	
SADRŽAJ	KARAKT. POP. PRESJEK	M 1:50
STUDENT	SARA VUČKO	

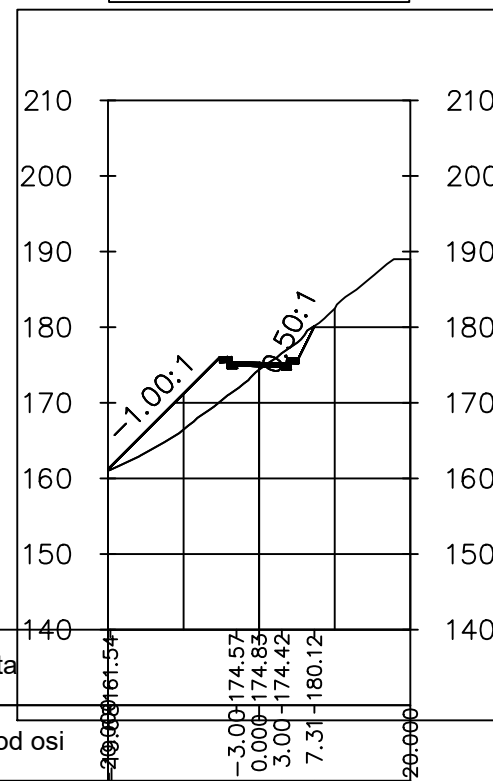
3.4. KARAKTERISTIČNI POPREČNI PRESJECI M 1:200

0+000.00



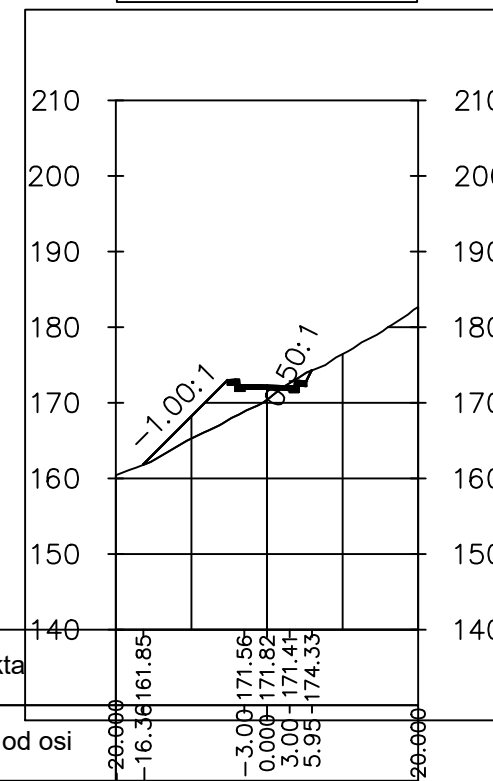
Kote projekta			
Udaljenost od osi	20.000	0.000	20.000
Kote terena			

0+020.00



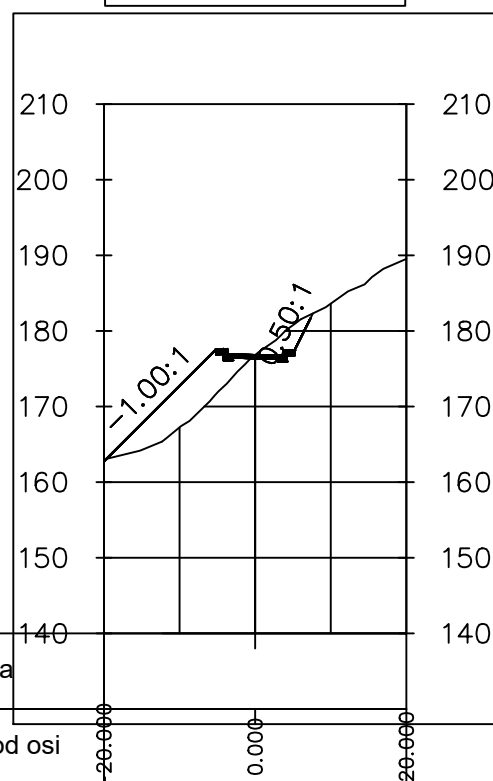
Kote projekta			
Udaljenost od osi	20.000	0.000	20.000
Kote terena	161.57	174.57	180.12

0+054.90



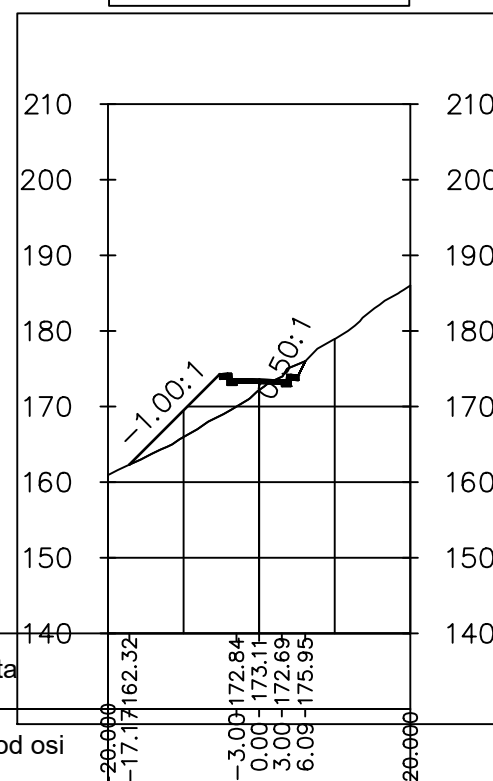
Kote projekta			
Udaljenost od osi	20.000	0.000	20.000
Kote terena	161.85	171.56	174.33

0+000.08



Kote projekta			
Udaljenost od osi	20.000	0.000	20.000
Kote terena			

0+040.00



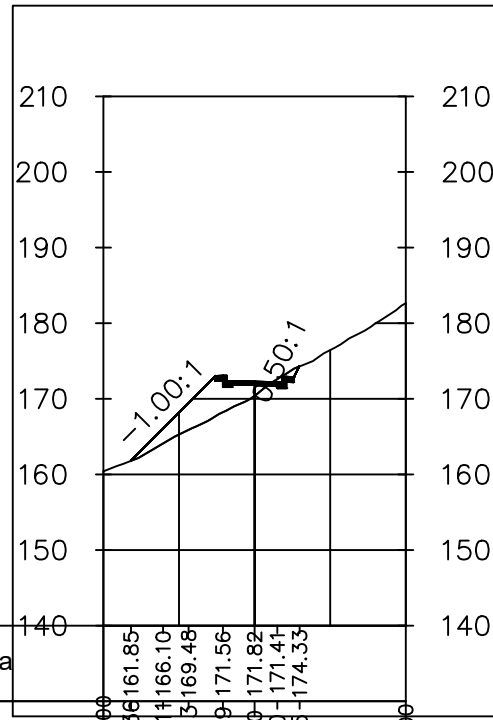
Kote projekta			
Udaljenost od osi	20.000	0.000	20.000
Kote terena	162.32	172.84	175.95



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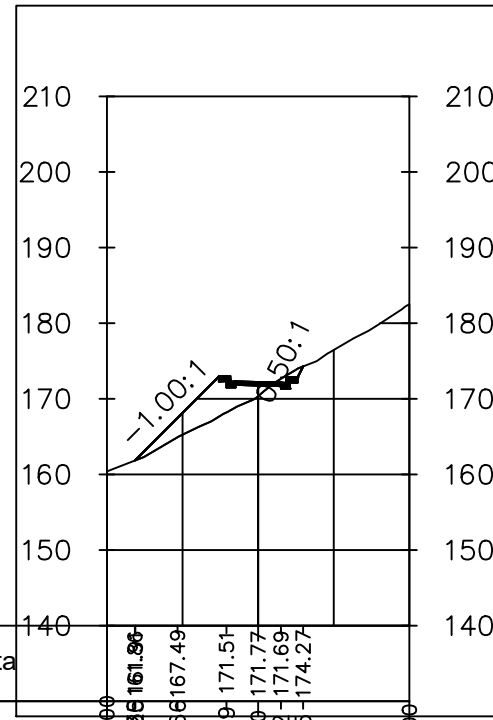
PREDMET	ZAVRŠNI RAD – CESTE	GODINA 2022./2023.
ZADATAK	IDEJNI PROJEKT	
SADRŽAJ	KARAKT. POP. PRESJECI	M 1:200
STUDENT	SARA VUČKO	

0+054.94



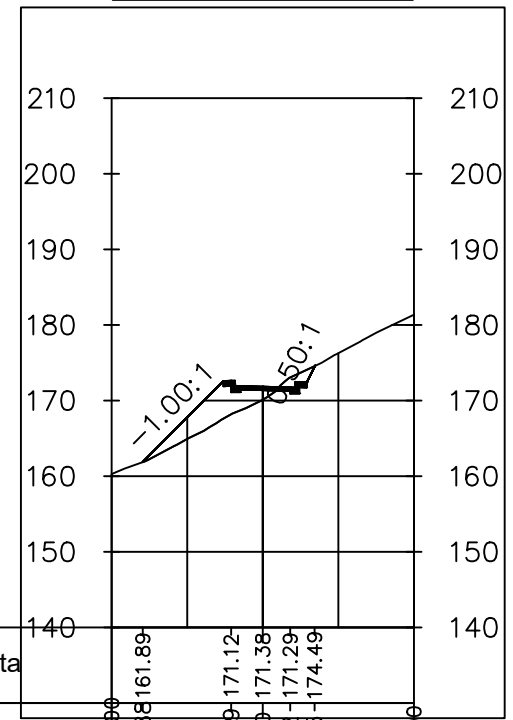
Kote projekta	161.85	16.36	161.85	166.10	12.14	166.10	169.48	8.73	169.48	171.56	4.19	171.56	171.82	0.00	171.82	171.41	3.00	171.41	174.33	5.95	174.33	
Udaljenost od osi	20+000	16.36	32.72	48.86	64.99	81.13	97.27	113.41	129.55	145.69	161.82	177.96	194.10	210.24	226.38	242.52	258.66	274.80	290.94	307.08	323.22	339.36
Kote terena	161.85	166.10	169.48	171.56	171.82	171.41	174.33															

0+055.53



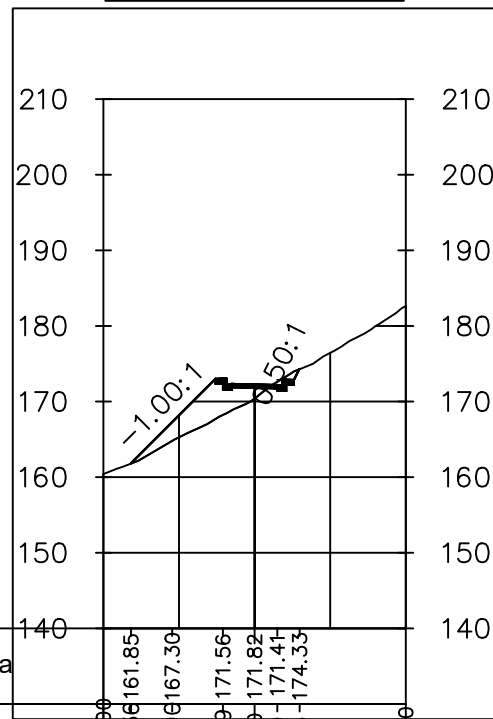
Kote projekta	161.85	16.26	161.85	167.49	10.66	167.49	171.51	4.19	171.51	171.77	0.00	171.77	171.69	3.02	171.69	174.27	5.95	174.27
Udaljenost od osi	20+000	16.26	32.52	48.78	65.04	81.30	97.56	113.82	130.08	146.34	162.60	178.86	195.12	211.38	227.64	243.90	260.16	276.42
Kote terena	161.85	167.49	171.51	171.77	171.69	174.27												

0+060.00



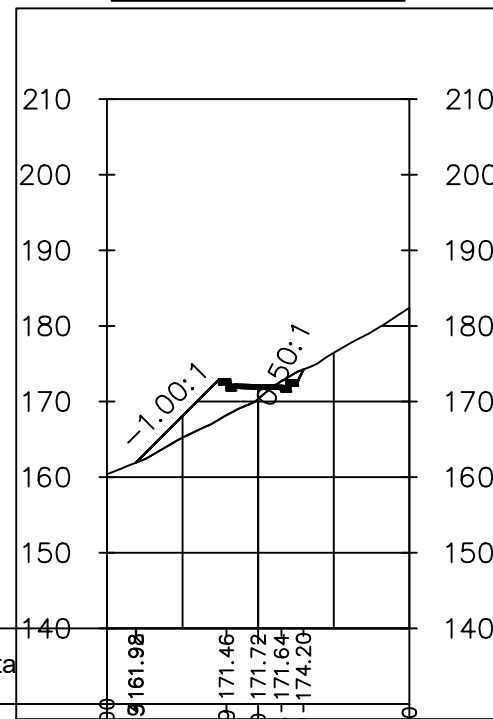
Kote projekta	161.85	15.88	161.85	171.12	4.19	171.12	171.38	0.00	171.38	171.29	3.62	171.29	174.49	6.85	174.49
Udaljenost od osi	20+000	15.88	31.76	47.64	63.52	79.40	95.28	111.16	127.04	142.92	158.80	174.68	190.56	206.44	222.32
Kote terena	161.85	171.12	171.38	171.29	174.49										

0+054.96



Kote projekta	161.85	16.36	161.85	167.30	10.96	167.30	171.56	4.19	171.56	171.82	0.00	171.82	171.41	3.00	171.41	174.33	5.95	174.33
Udaljenost od osi	20+000	16.36	32.72	49.08	65.44	81.80	98.16	114.52	130.88	147.24	163.60	180.00	196.36	212.72	229.08	245.44	261.80	278.16
Kote terena	161.85	167.30	171.56	171.82	171.41	174.33												

0+056.10



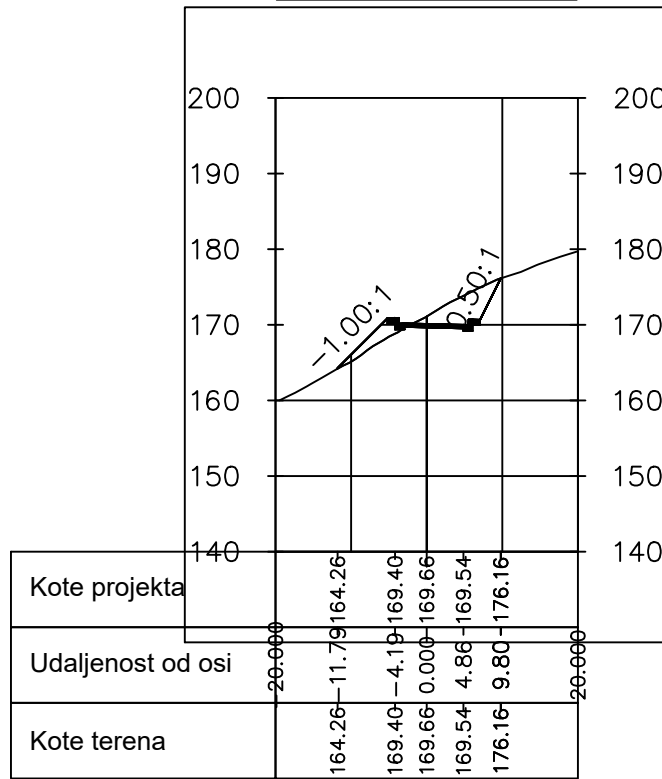
Kote projekta	161.98	16.19	161.98	171.46	4.19	171.46	171.72	0.00	171.72	171.64	3.08	171.64	174.20	5.99	174.20
Udaljenost od osi	20+000	16.19	32.38	48.57	64.76	80.95	97.14	113.33	129.52	145.71	161.90	178.09	194.28	210.47	226.66
Kote terena	161.98	171.46	171.72	171.64	174.20										



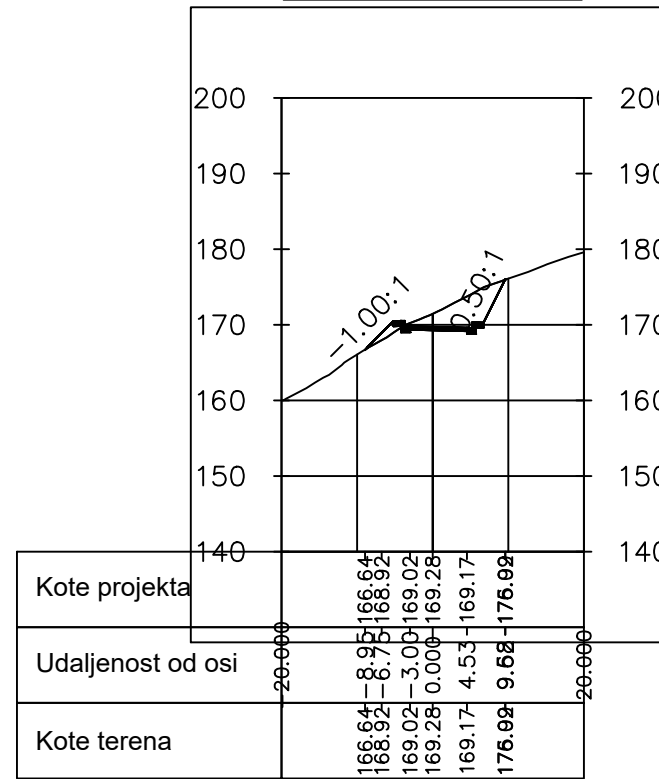
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ZADATAK	IDEJNI PROJEKT	
SADRŽAJ	KARAKT. POP. PRESJECI	M 1:200
STUDENT	SARA VUČKO	

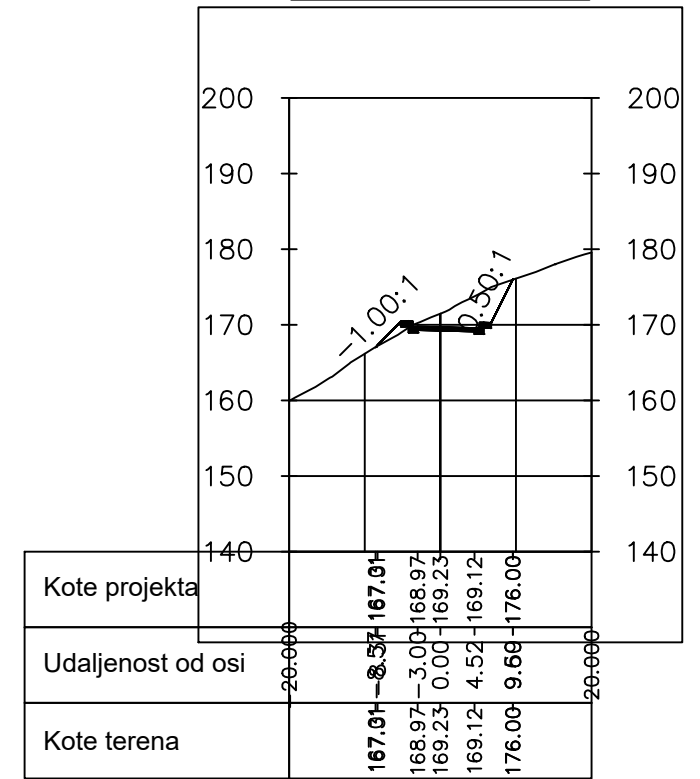
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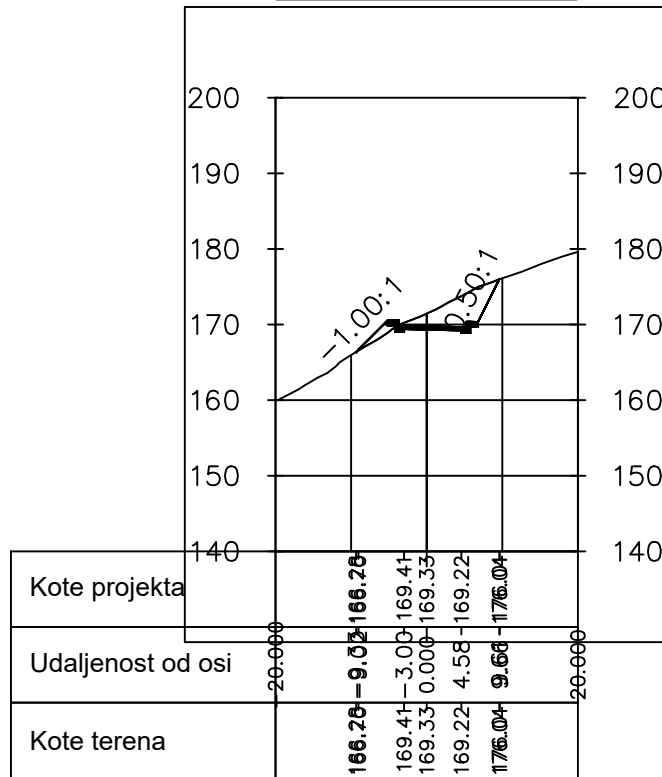
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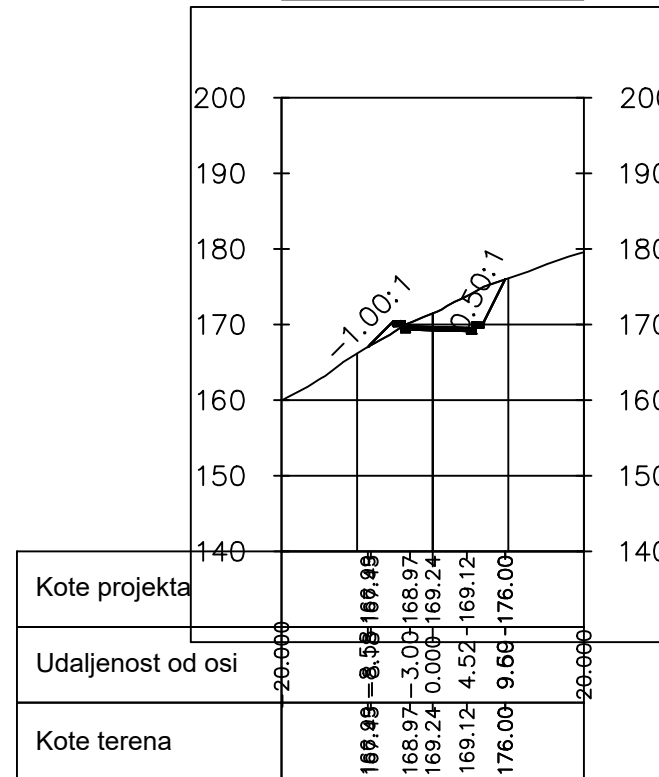
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0+083.82



0+084.94



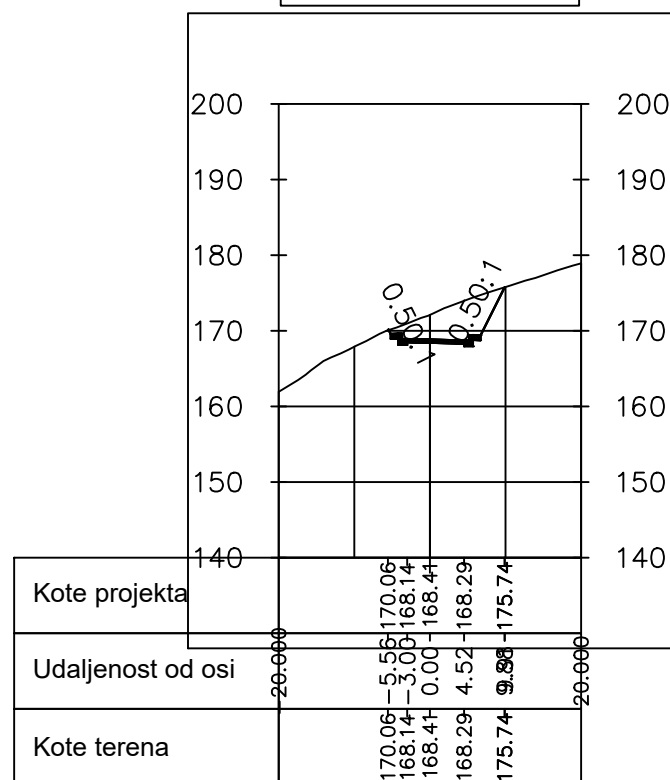
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PREDMET	ZAVRŠNI RAD – CESTE
ZADATAK	IDEJNI PROJEKT
SADRŽAJ	KARAKT. POP. PRESJECI
STUDENT	SARA VUČKO

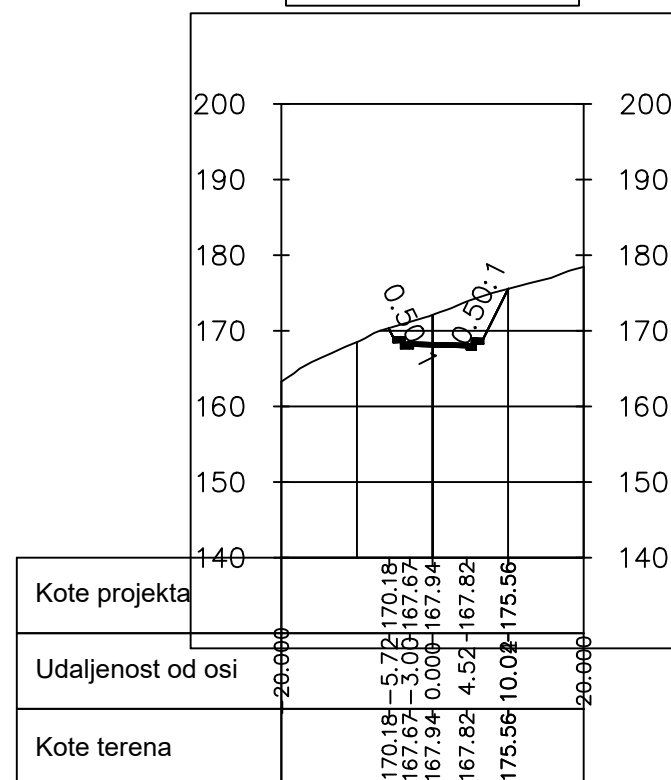
GODINA
2022./2023.

M 1:200

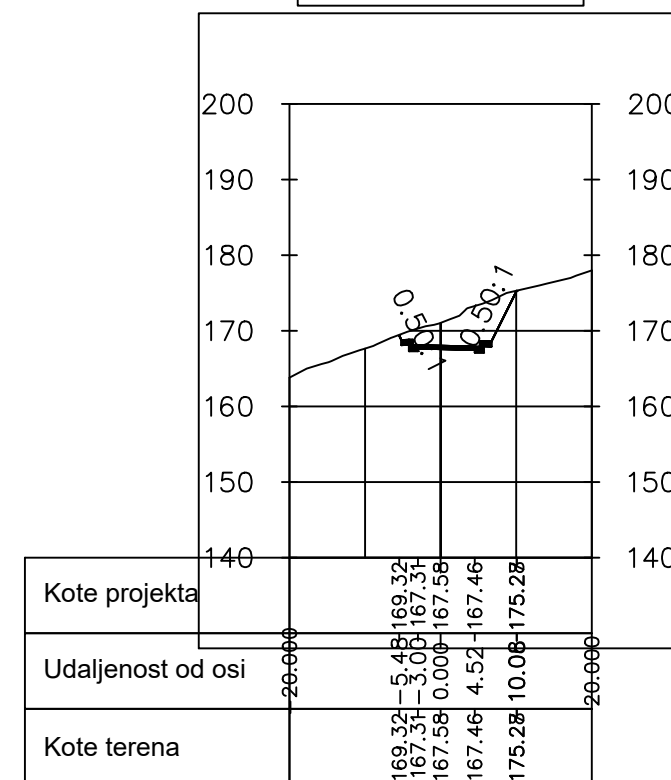
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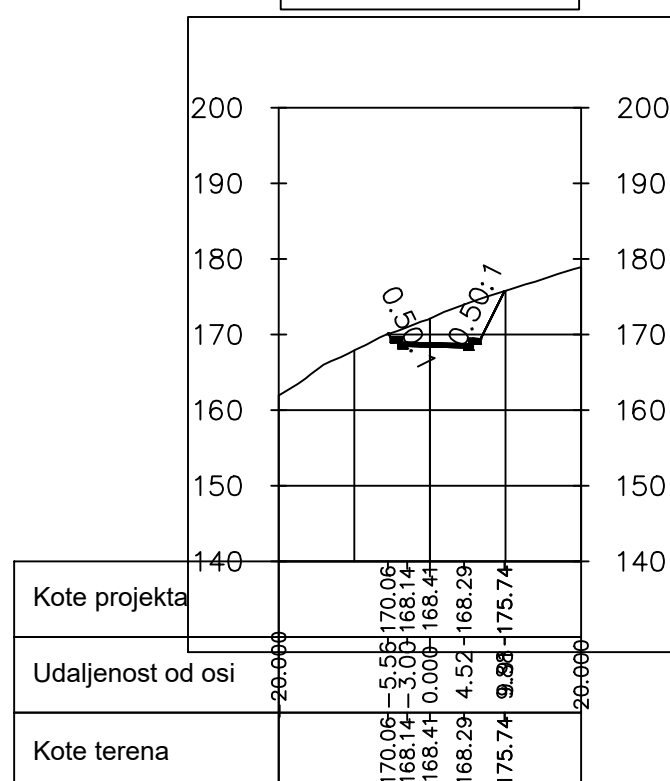
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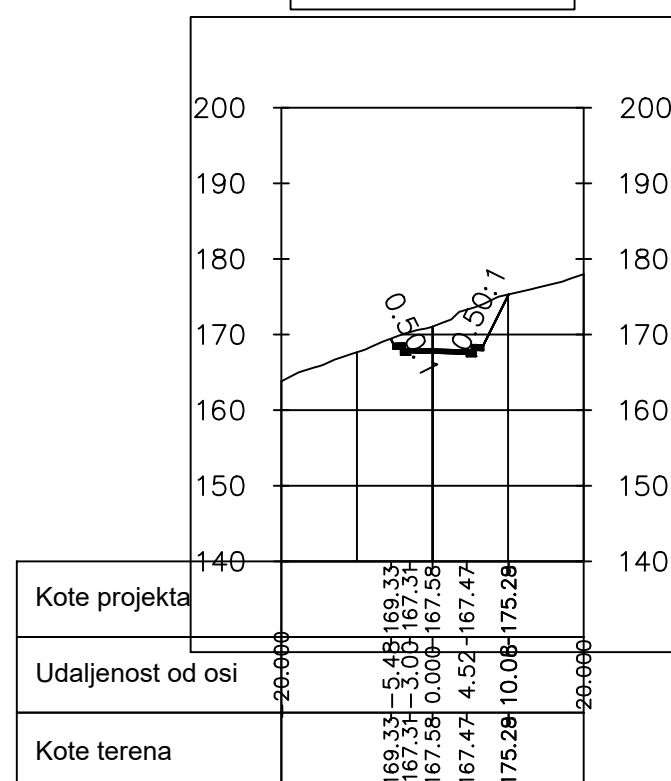
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0+094.56



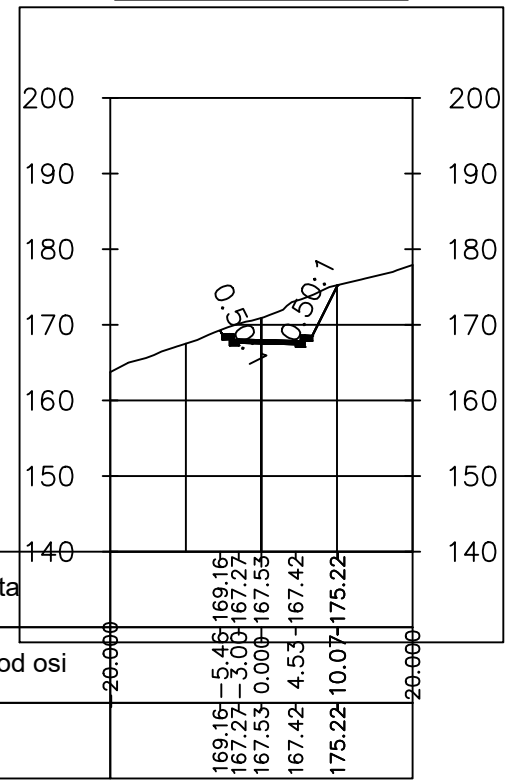
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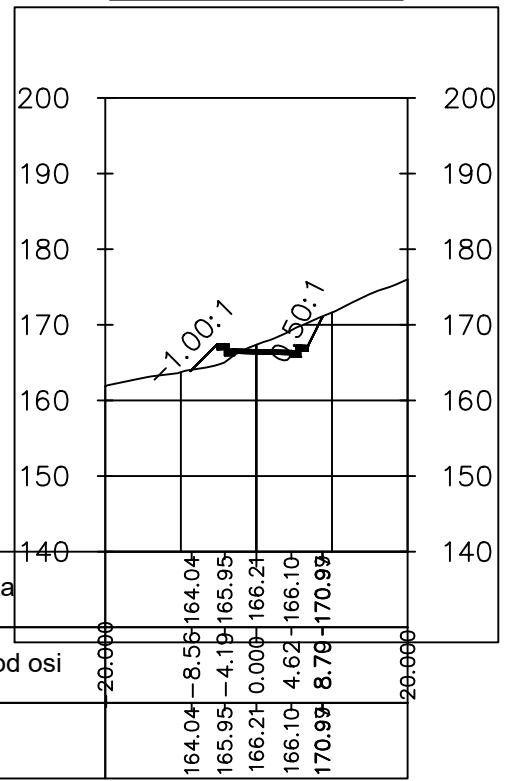
PREDMET	ZAVRŠNI RAD – CESTE	GODINA 2022./2023.
ZADATAK	IDEJNI PROJEKT	
SADRŽAJ	KARAKT. POP. PRESJECI	M 1:200
STUDENT	SARA VUČKO	

0+104.73



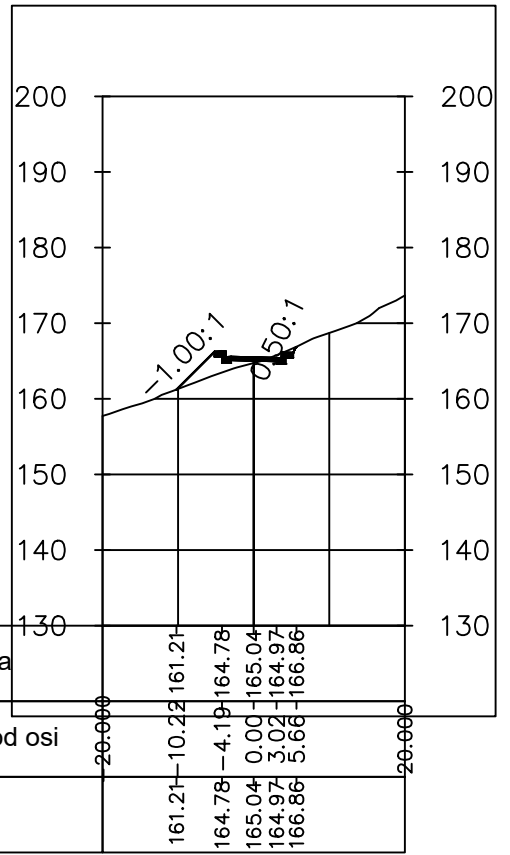
Kote projekta		169.16	-5.46	169.16
Udaljenost od osi	20.000			20.000
Kote terena		167.27	-3.00	167.27
		167.53	0.000	167.53
		167.42	4.53	167.42
		175.22	10.07	175.22

0+120.00



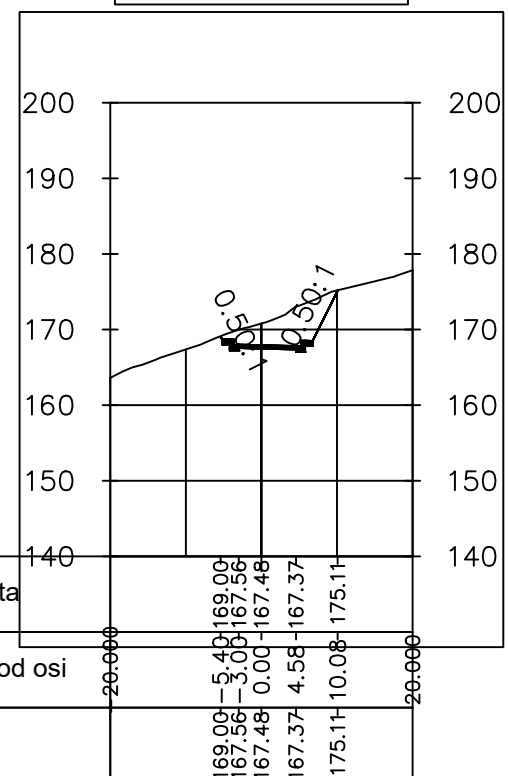
Kote projekta		165.95	-4.19	165.95
Udaljenost od osi	20.000			20.000
Kote terena		166.21	0.000	166.21
		166.10	4.62	166.10
		170.99	8.78	170.99

0+133.59



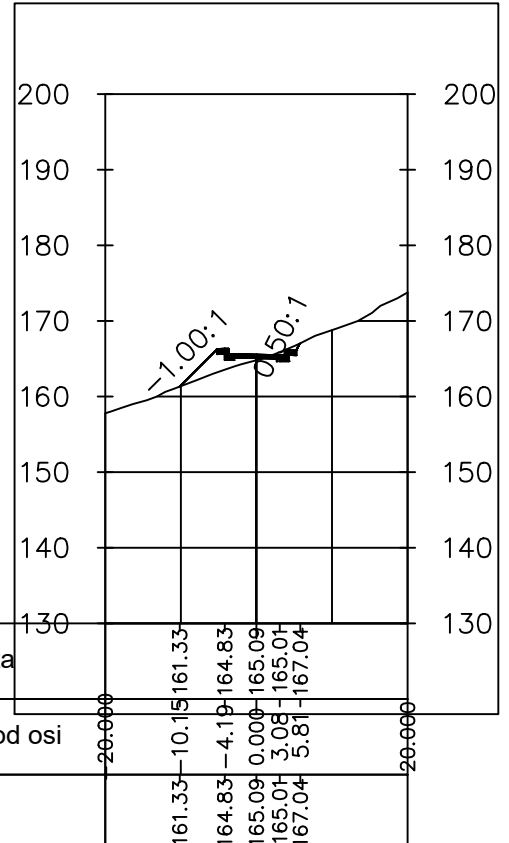
Kote projekta		164.78	-4.19	164.78
Udaljenost od osi	20.000			20.000
Kote terena		164.97	3.02	164.97
		166.86	5.66	166.86
		161.21	10.22	161.21

0+105.30

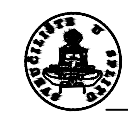


Kote projekta		169.00	-5.40	169.00
Udaljenost od osi	20.000			20.000
Kote terena		167.48	0.00	167.48
		167.37	4.58	167.37
		175.11	10.08	175.11

0+133.02



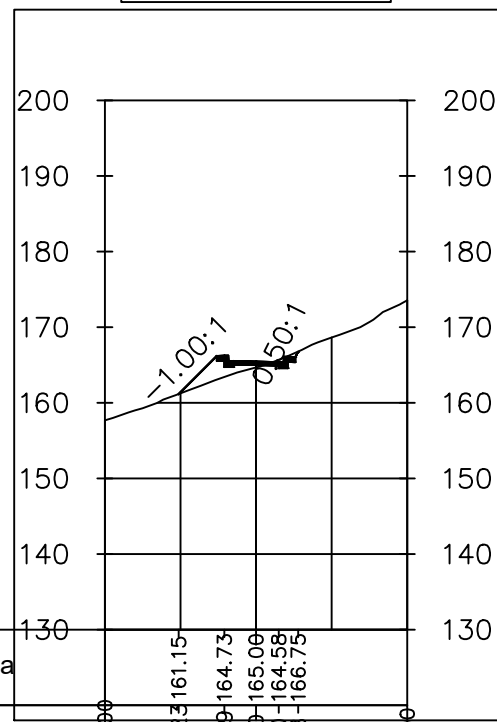
Kote projekta		164.83	-4.19	164.83
Udaljenost od osi	20.000			20.000
Kote terena		165.01	3.08	165.01
		167.04	5.81	167.04
		161.33	10.15	161.33



SVEUČILIŠTE U SPLITU, FAKULTET GRAĐEVINARSTVA, ARHITEKTURE I GEODEZIJE
21000 Split, Matice hrvatske 15, tel: 021/303-333

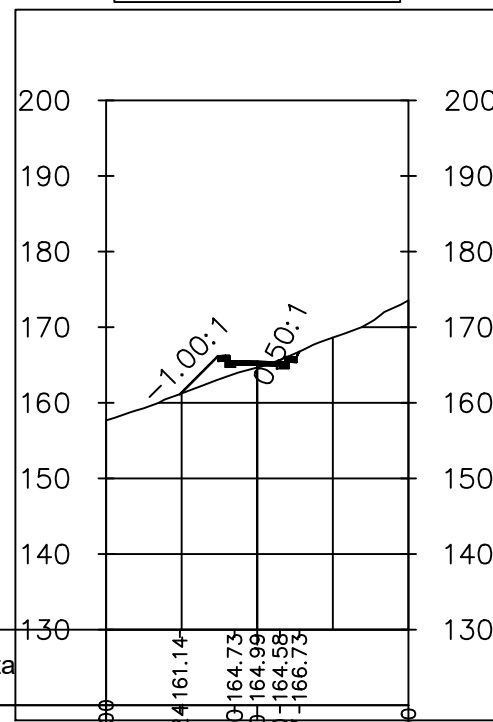
PREDMET	ZAVRŠNI RAD – CESTE	GODINA 2022./2023.
ZADATAK	IDEJNI PROJEKT	
SADRŽAJ	KARAKT. POP. PRESJECI	M 1:200
STUDENT	SARA VUČKO	

0+134.11



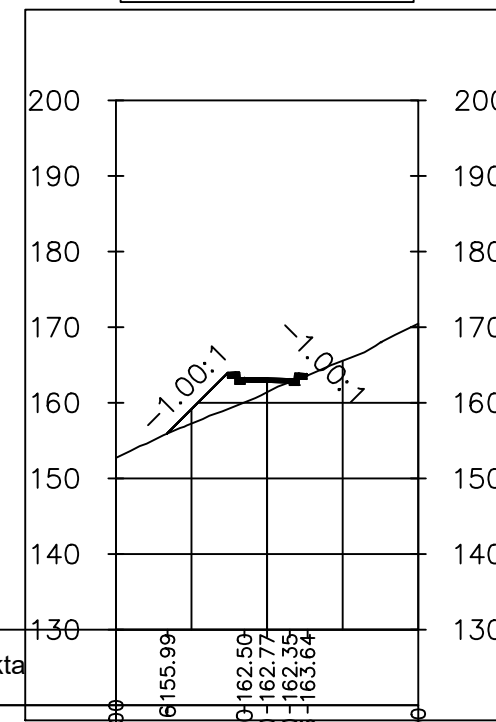
Kote projekta						
Udaljenost od osi	20+000	10.23	161.15			20+060
Kote terena		161.15	164.73	165.00	164.58	166.75

0+134.17



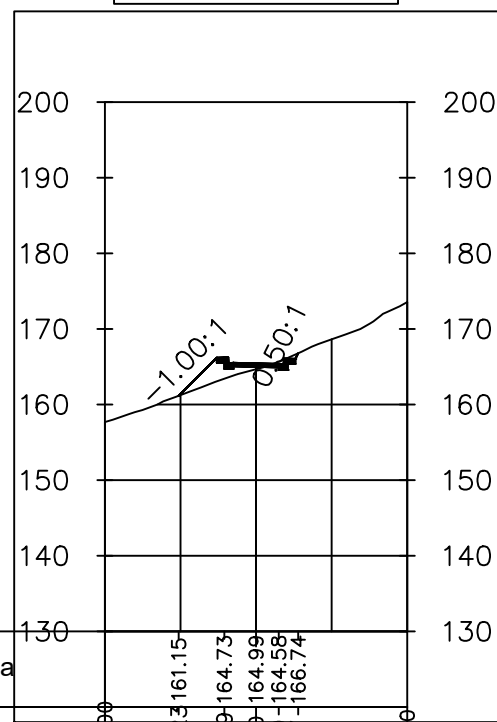
Kote projekta						
Udaljenost od osi	20+000	10.24	161.14			20+060
Kote terena		161.14	164.73	164.99	164.58	166.75

0+160.00



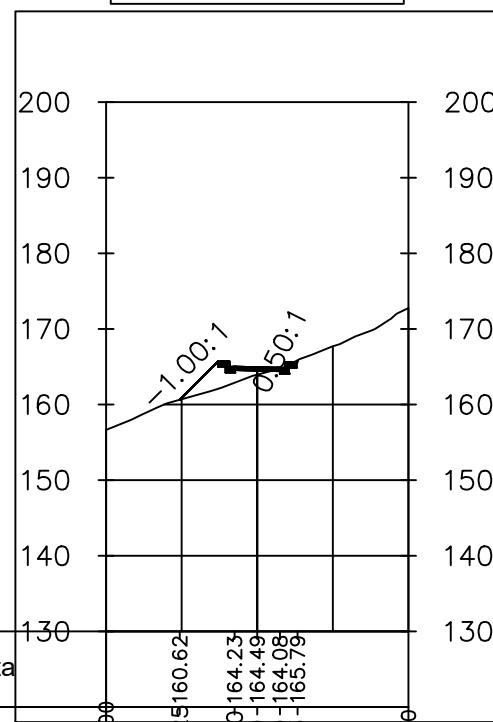
Kote projekta						
Udaljenost od osi	20+000	13.16	155.99			20+060
Kote terena		155.99	162.50	162.77	162.35	163.64

0+134.16



Kote projekta						
Udaljenost od osi	20+000	10.23	161.15			20+060
Kote terena		161.15	164.73	164.99	164.58	166.74

0+140.00



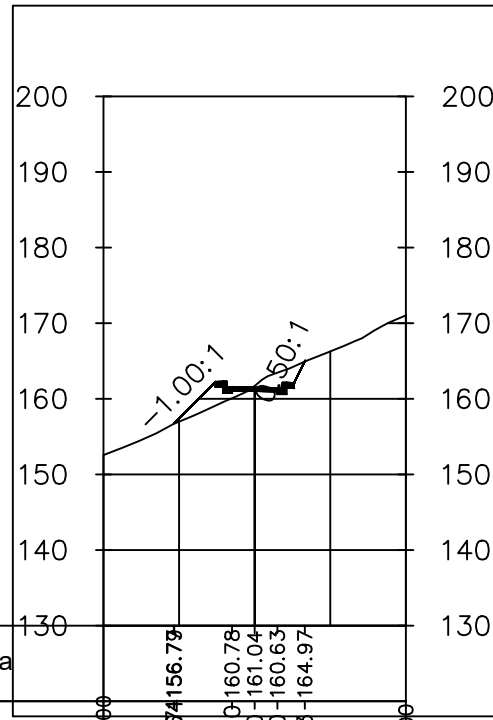
Kote projekta						
Udaljenost od osi	20+000	10.25	160.62			20+060
Kote terena		160.62	164.23	164.49	164.08	165.79



SVEUČILIŠTE U SPLITU, FAKULTET GRAĐEVINARSTVA, ARHITEKTURE I GEODEZIJE
21000 Split, Matice hrvatske 15, tel: 021/303-333

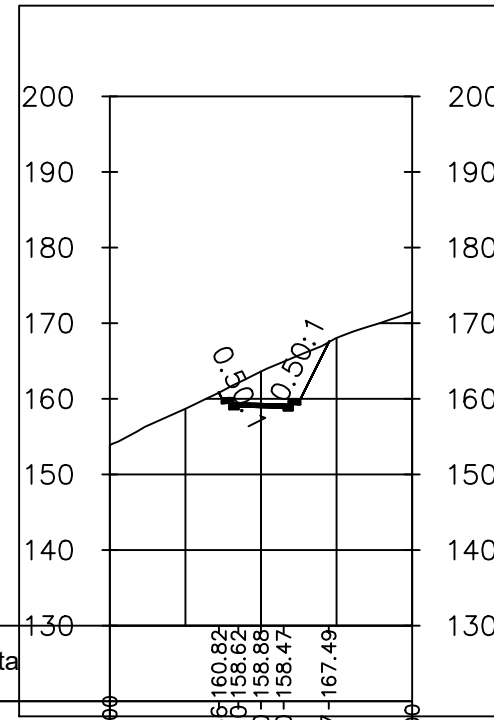
PREDMET	ZAVRŠNI RAD – CESTE	GODINA 2022./2023.
ZADATAK	IDEJNI PROJEKT	
SADRŽAJ	KARAKT. POP. PRESJECI	M 1:200
STUDENT	SARA VUČKO	

0+180.00



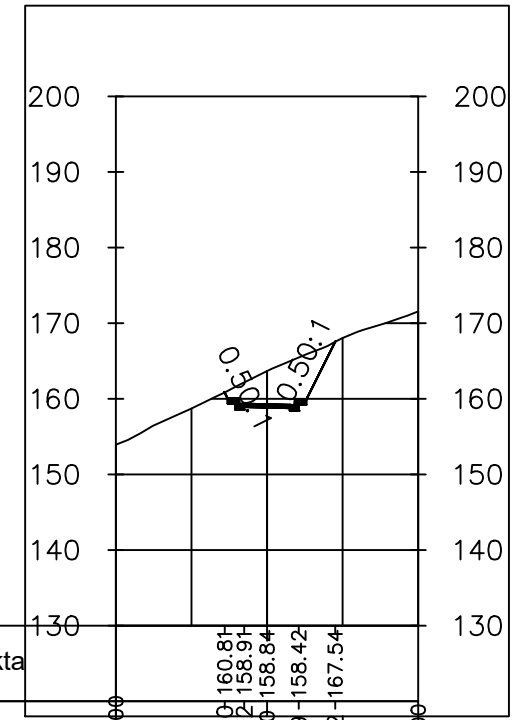
Kote projekta	156.79	160.64	156.79
Udaljenost od osi	0.00	3.00	6.00
Kote terena	156.79	160.78	164.97

0+205.02



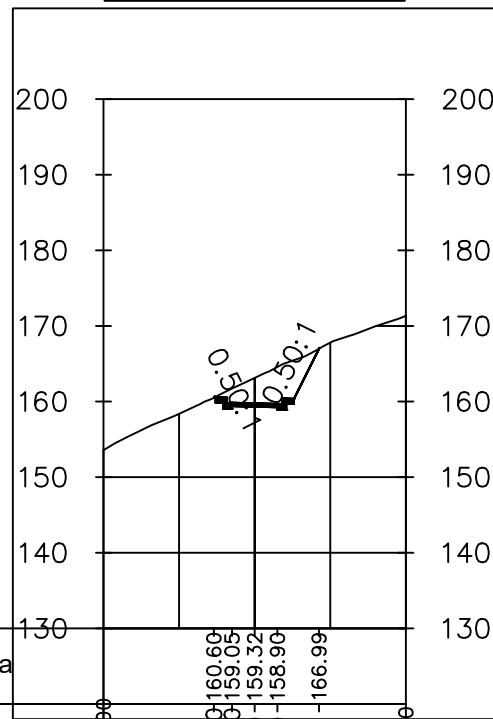
Kote projekta	160.82	158.62	158.88	158.47	167.49
Udaljenost od osi	0.00	3.00	0.00	3.00	8.97
Kote terena	160.82	158.62	158.88	158.47	167.49

0+205.59



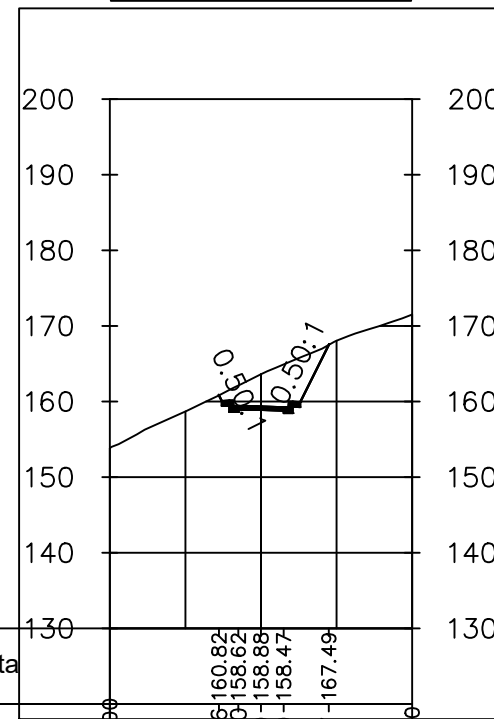
Kote projekta	160.81	158.91	158.84	158.42	167.54
Udaljenost od osi	0.00	3.00	0.00	4.19	9.02
Kote terena	160.81	158.91	158.84	158.42	167.54

0+200.00



Kote projekta	160.60	159.05	159.32	158.90	166.99
Udaljenost od osi	0.00	3.00	0.00	3.00	8.51
Kote terena	160.60	159.05	159.32	158.90	166.99

0+205.02



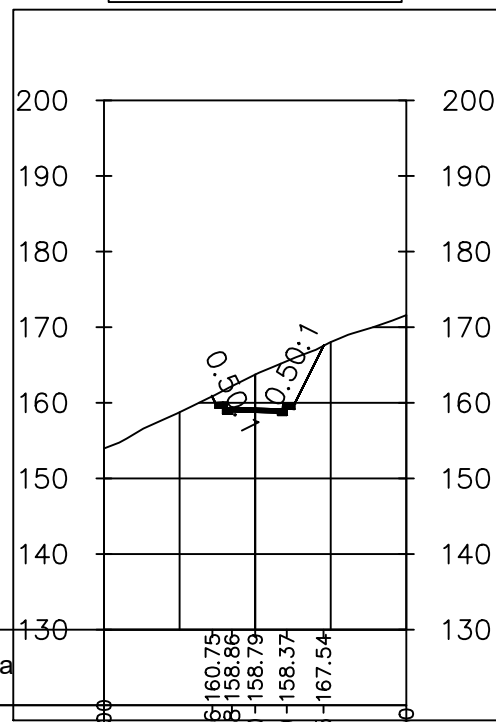
Kote projekta	160.82	158.62	158.88	158.47	167.49
Udaljenost od osi	0.00	3.00	0.00	3.00	8.97
Kote terena	160.82	158.62	158.88	158.47	167.49



SVEUČILIŠTE U SPLITU, FAKULTET GRAĐEVINARSTVA, ARHITEKTURE I GEODEZIJE
21000 Split, Matice hrvatske 15, tel: 021/303-333

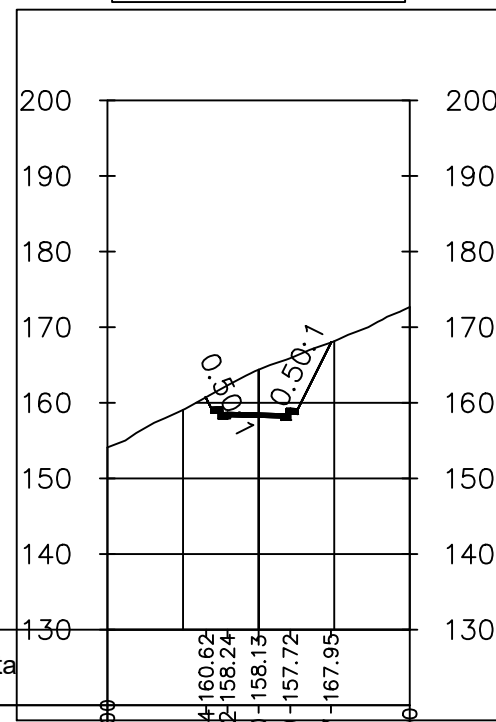
PREDMET	ZAVRŠNI RAD – CESTE	GODINA 2022./2023.
ZADATAK	IDEJNI PROJEKT	
SADRŽAJ	KARAKT. POP. PRESJECI	M 1:200
STUDENT	SARA VUČKO	

0+206.15



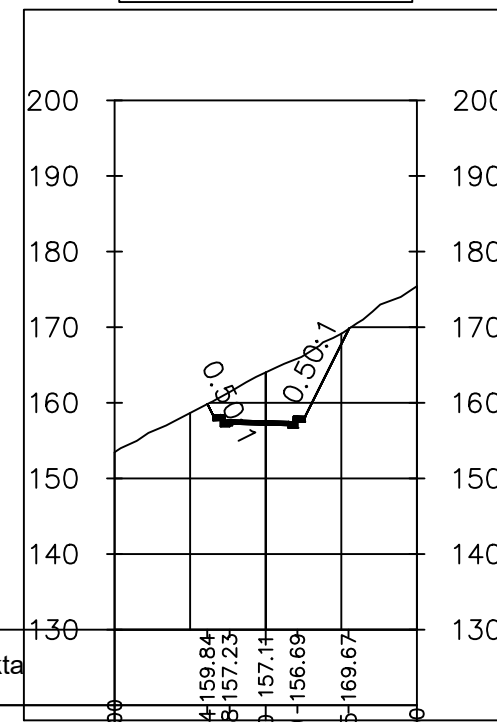
Kote projekta	160.75	160.75	160.75
Udaljenost od osi	-5.66	0.00	4.19
Kote terena	158.86	158.79	158.37

0+214.02



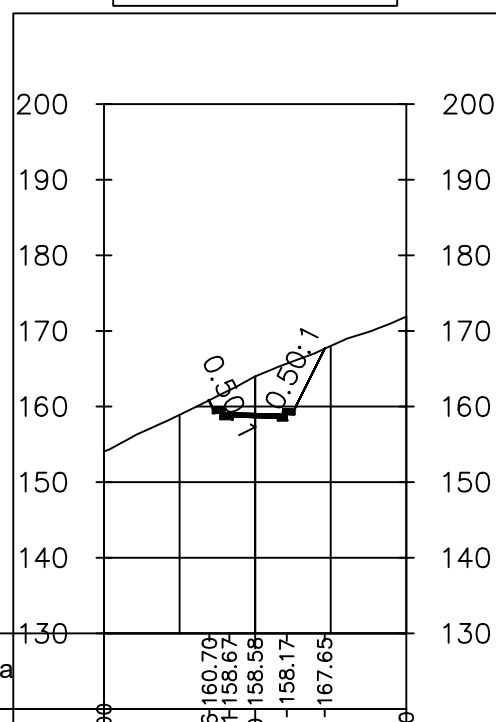
Kote projekta	160.62	160.62	160.62
Udaljenost od osi	-6.91	0.00	4.19
Kote terena	158.24	158.13	157.72

0+231.52



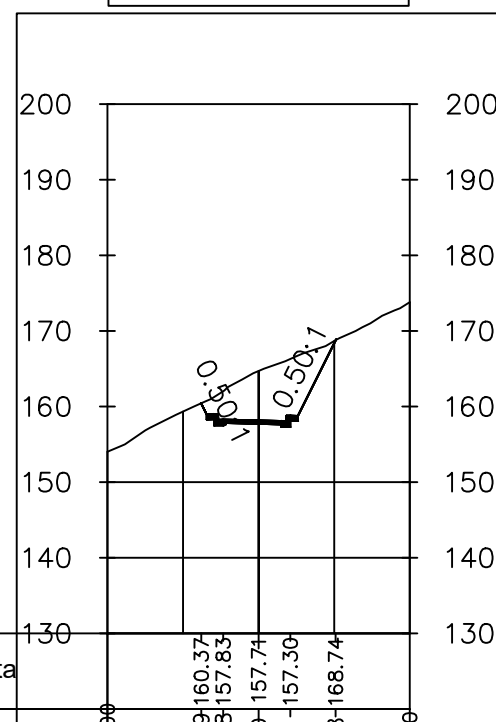
Kote projekta	159.84	159.84	159.84
Udaljenost od osi	-7.71	0.00	4.19
Kote terena	157.23	157.11	156.69

0+208.51



Kote projekta	160.70	160.70	160.70
Udaljenost od osi	-6.06	0.00	4.19
Kote terena	158.67	158.58	158.17

0+220.00



Kote projekta	160.37	160.37	160.37
Udaljenost od osi	-7.59	0.00	4.19
Kote terena	157.83	157.74	157.30



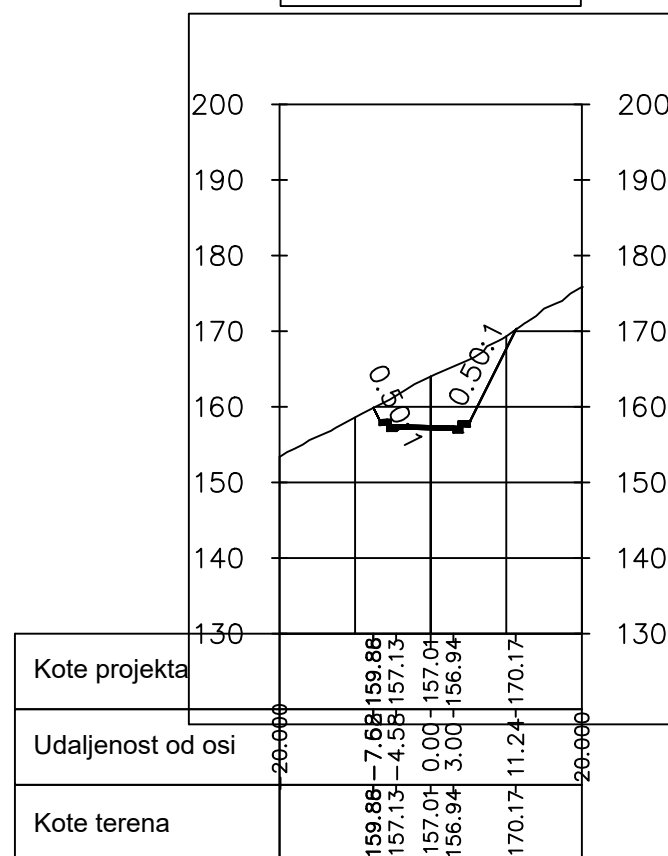
SVEUČILIŠTE U SPLITU, FAKULTET GRAĐEVINARSTVA, ARHITEKTURE I GEODEZIJE
21000 Split, Matice hrvatske 15, tel: 021/303-333

PREDMET	ZAVRŠNI RAD – CESTE
ZADATAK	IDEJNI PROJEKT
SADRŽAJ	KARAKT. POP. PRESJECI
STUDENT	SARA VUČKO

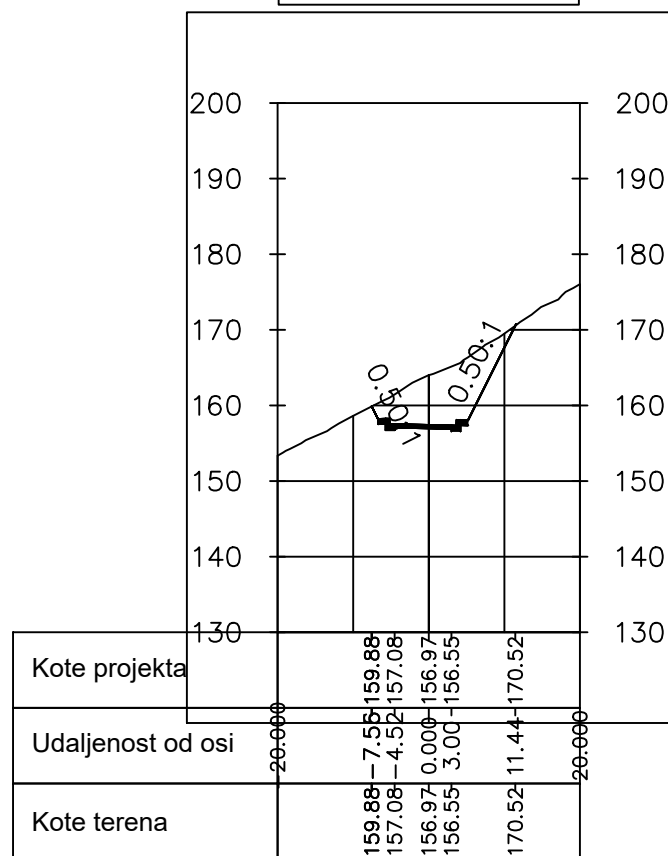
GODINA
2022./2023.

M 1:200

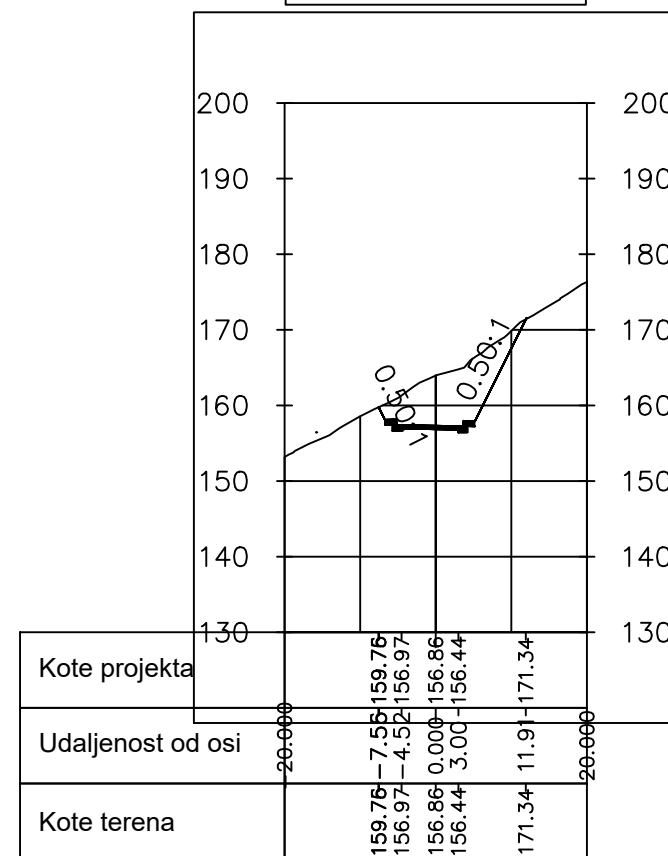
0+233.88



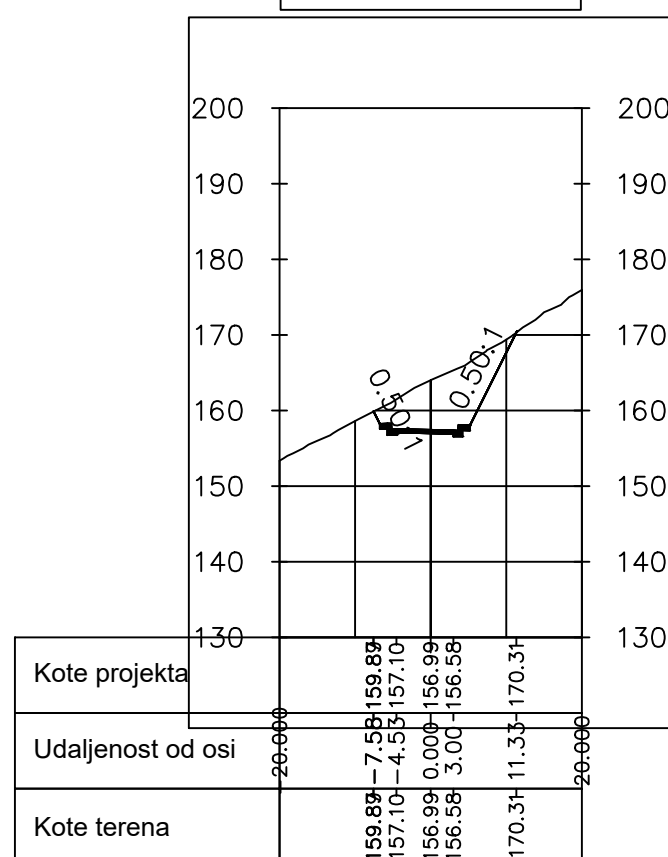
0+235.02



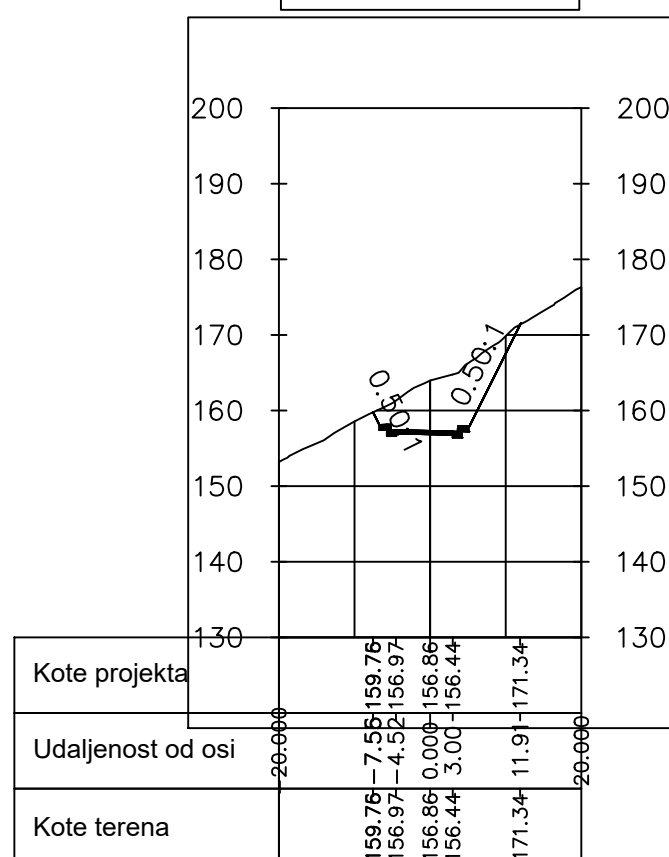
0+237.77



0+234.45



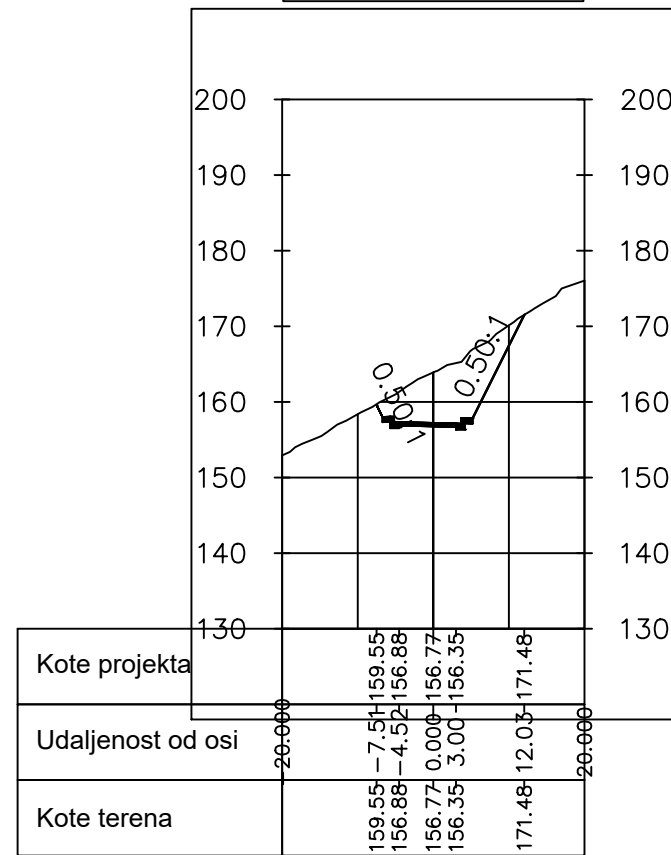
0+237.76



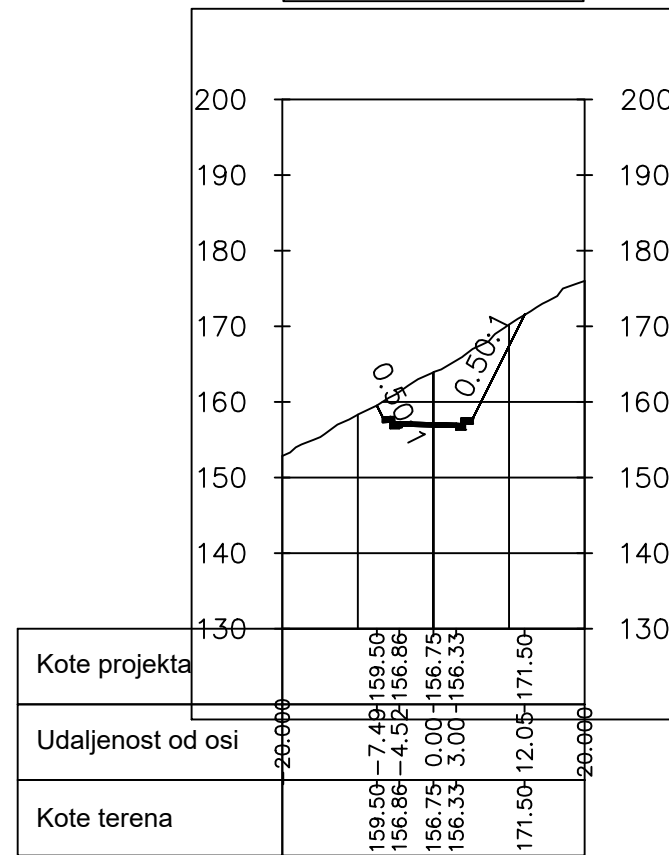
SVEUČILIŠTE U SPLITU, FAKULTET GRAĐEVINARSTVA, ARHITEKTURE I GEODEZIJE
21000 Split, Matice hrvatske 15, tel: 021/303-333

PREDMET	ZAVRŠNI RAD – CESTE	GODINA 2022./2023.
ZADATAK	IDEJNI PROJEKT	
SADRŽAJ	KARAKT. POP. PRESJECI	M 1:200
STUDENT	SARA VUČKO	

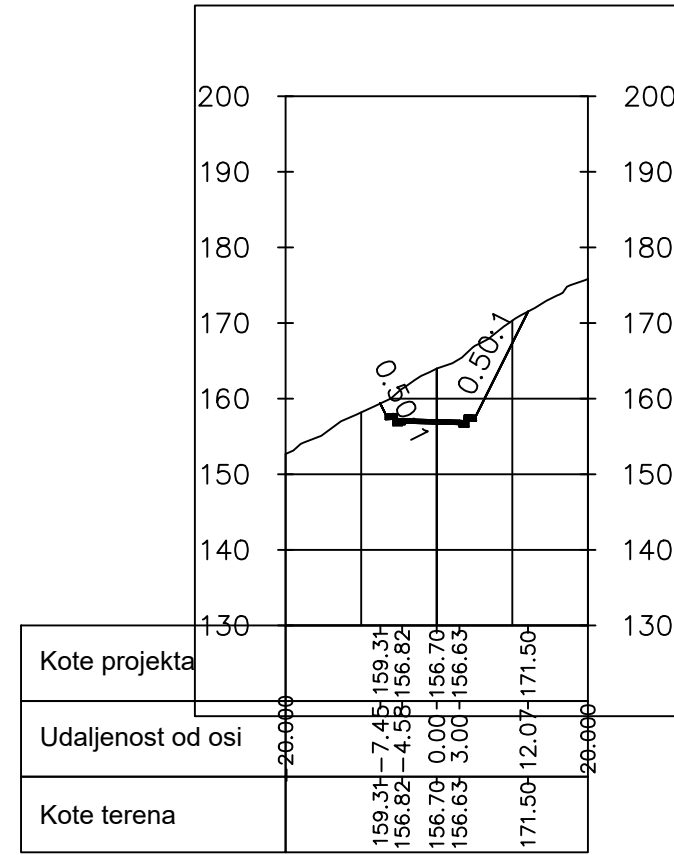
0+240.00



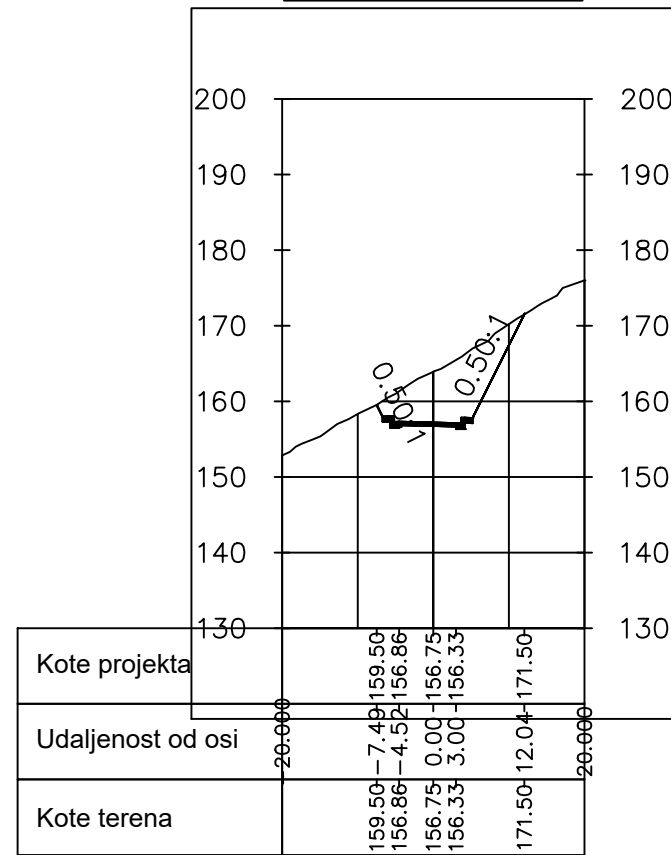
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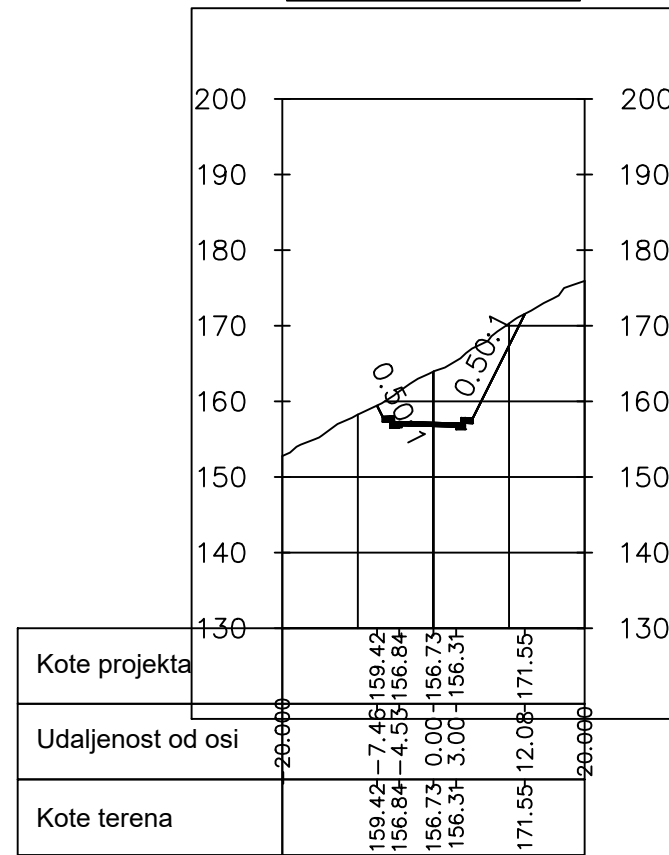
0+241.63



0+240.49



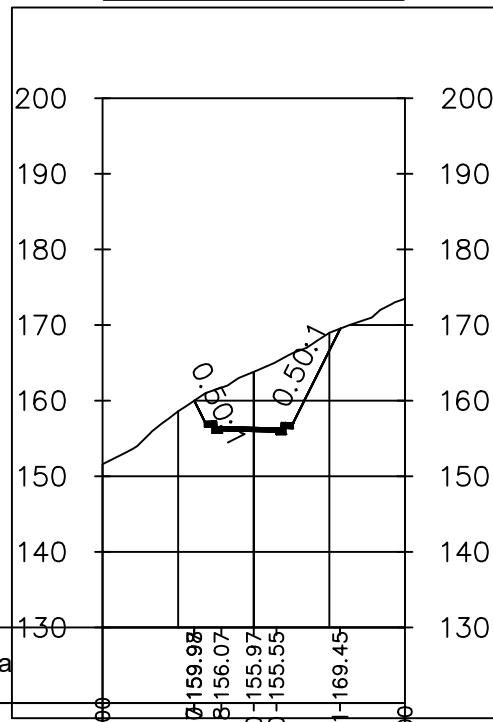
0+241.07



SVEUČILIŠTE U SPLITU, FAKULTET GRAĐEVINARSTVA, ARHITEKTURE I GEODEZIJE
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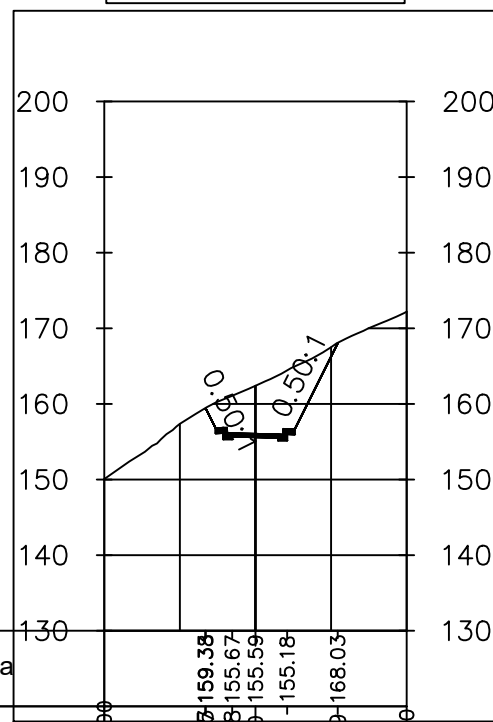
PREDMET	ZAVRŠNI RAD – CESTE	GODINA 2022./2023.
ZADATAK	IDEJNI PROJEKT	
SADRŽAJ	KARAKT. POP. PRESJECI	M 1:200
STUDENT	SARA VUČKO	

0+260.00



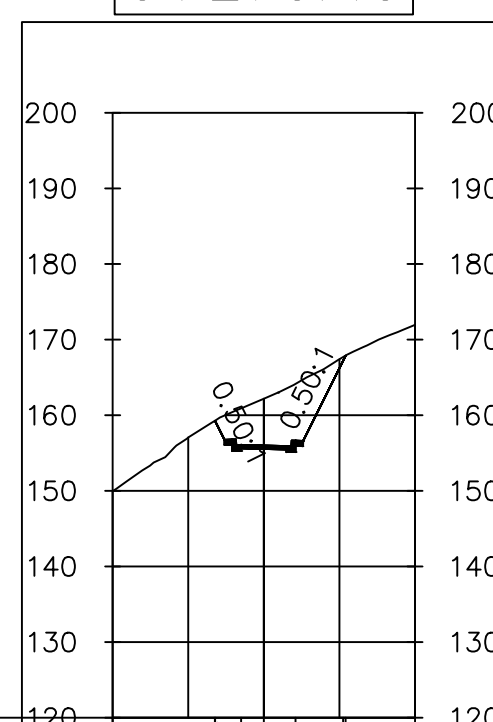
Kote projekta	20.000	159.98	156.07	155.97	155.55	169.45	20.000
Udaljenost od osi		-7.82	-4.28	0.00	3.00	11.41	
Kote terena		159.98	156.07	155.97	155.55	169.45	

0+269.36



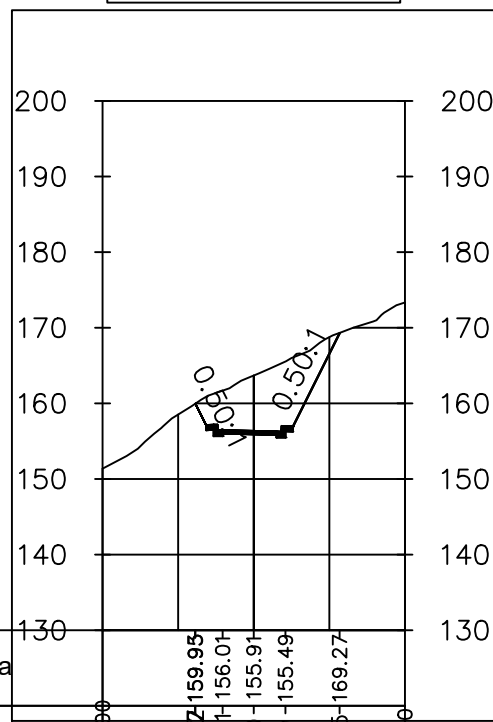
Kote projekta	20.000	159.38	155.67	155.59	155.18	168.03	20.000
Udaljenost od osi		-6.67	-3.08	0.00	4.19	10.89	
Kote terena		159.38	155.67	155.59	155.18	168.03	

0+270.49



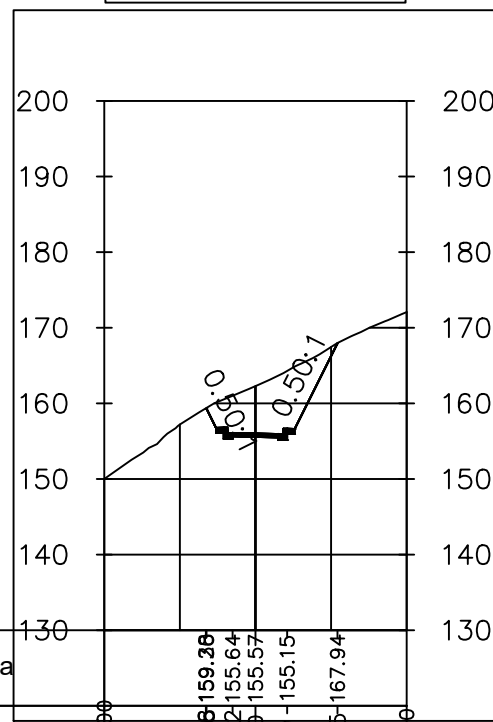
Kote projekta	20.000	159.28	155.28	155.55	155.13	167.89	20.000
Udaljenost od osi		-6.47	-3.00	0.00	4.19	10.89	
Kote terena		159.28	155.28	155.55	155.13	167.89	

0+261.52



Kote projekta	20.000	159.95	156.04	155.94	155.49	169.27	20.000
Udaljenost od osi		-7.77	-4.11	0.00	4.19	11.35	
Kote terena		159.95	156.04	155.94	155.49	169.27	

0+269.93



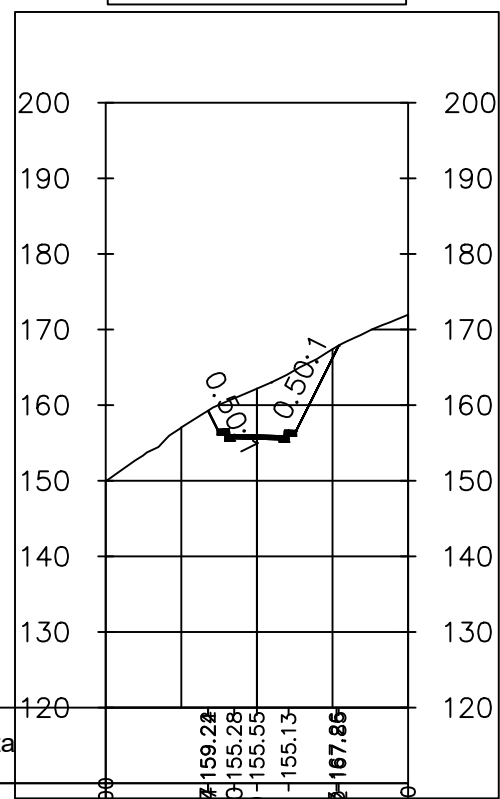
Kote projekta	20.000	159.36	155.64	155.57	155.15	167.94	20.000
Udaljenost od osi		-6.85	-3.02	0.00	4.19	10.85	
Kote terena		159.36	155.64	155.57	155.15	167.94	



SVEUČILIŠTE U SPLITU, FAKULTET GRAĐEVINARSTVA, ARHITEKTURE I GEODEZIJE
21000 Split, Matice hrvatske 15, tel: 021/303-333

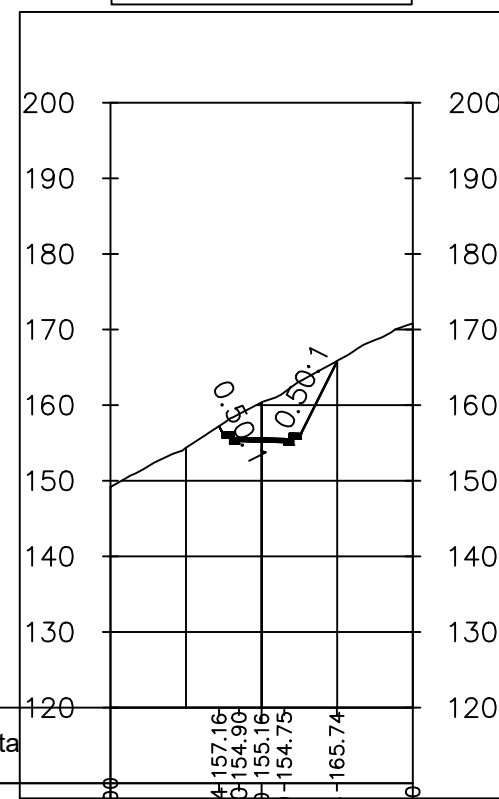
PREDMET	ZAVRŠNI RAD – CESTE	GODINA 2022./2023.
ZADATAK	IDEJNI PROJEKT	
SADRŽAJ	KARAKT. POP. PRESJECI	M 1:200
STUDENT	SARA VUČKO	

0+270.49



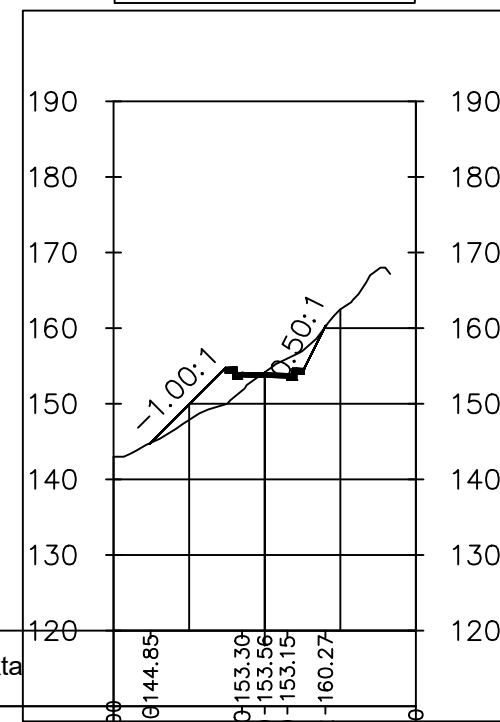
Kote projekta	20.000	159.22	159.22	167.86	20.000
Udaljenost od osi		-6.47	0.00	10.82	
Kote terena		155.28	155.54	167.84	

0+280.00



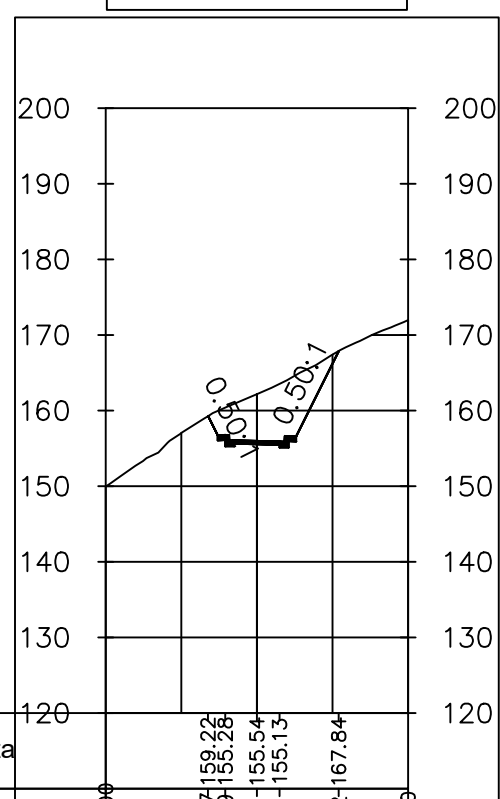
Kote projekta	20.000	157.16	154.90	155.16	154.75	165.74	20.000
Udaljenost od osi		-5.64	0.00	3.00	9.96		
Kote terena		154.90	154.90	154.75	165.74		

0+320.00



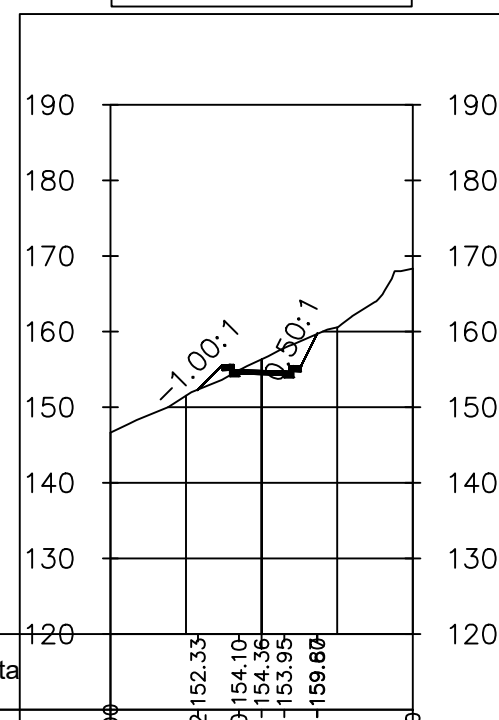
Kote projekta	20.000	144.85	153.30	153.56	153.15	160.27	20.000
Udaljenost od osi		-15.10	0.00	3.00	8.02		
Kote terena		144.85	153.30	153.56	160.27		

0+270.52



Kote projekta	20.000	159.22	155.28	155.54	155.13	167.84	20.000
Udaljenost od osi		-6.47	-4.19	0.00	3.00	10.82	
Kote terena		155.28	155.54	155.13	167.84		

0+300.00



Kote projekta	20.000	152.33	154.10	154.36	153.95	159.67	20.000
Udaljenost od osi		-8.42	-3.00	0.00	3.00	7.32	
Kote terena		152.33	154.10	154.36	153.95	159.67	



SVEUČILIŠTE U SPLITU, FAKULTET GRAĐEVINARSTVA, ARHITEKTURE I GEODEZIJE
21000 Split, Matice hrvatske 15, tel: 021/303-333

PREDMET	ZAVRŠNI RAD – CESTE	GODINA 2022./2023.
ZADATAK	IDEJNI PROJEKT	
SADRŽAJ	KARAKT. POP. PRESJECI	M 1:200
STUDENT	SARA VUČKO	

4. TABLICA VOLUMENA UKUPNIH ZEMLJANIH RADOVA

Alignment os 1

Sample Line Group: SL Collection – 5

Start Sta: 0+000.000

End Sta: 0+320.608

Station	Cut Area (Sq.m.)	Cut Volume (Cu.m.)	Reusable Volume (Cu.m.)	Fill Area (Sq.m.)	Fill Volume (Cu.m.)	Cum. Cut Vol. (Cu.m.)	Cum. Reusable Vol. (Cu.m.)	Cum. Fill Vol. (Cu.m.)	Cum. Net Vol. (Cu.m.)
0+000.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0+000.078	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0+020.000	10.25	102.14	102.14	66.83	665.69	102.14	102.14	665.69	-563.55
0+040.000	5.82	160.69	160.69	50.49	1173.19	262.84	262.84	1838.88	-1576.05
0+054.900	4.24	74.89	74.89	46.15	719.93	337.72	337.72	2558.81	-2221.09
0+054.938	4.25	0.16	0.16	46.11	1.77	337.89	337.89	2560.58	-2222.70
0+054.962	4.27	0.10	0.10	46.10	1.09	337.99	337.99	2561.67	-2223.68
0+055.530	4.55	2.50	2.50	45.56	26.03	340.49	340.49	2587.70	-2247.21
0+056.096	4.78	2.64	2.64	44.98	25.61	343.13	343.13	2613.30	-2270.17
0+060.000	7.38	23.73	23.73	42.40	170.58	366.86	366.86	2783.88	-2417.02
0+080.000	32.89	386.61	386.61	10.94	565.40	753.46	753.46	3349.28	-2595.81
0+083.823	38.60	127.59	127.59	4.04	31.77	881.05	881.05	3381.05	-2500.00
0+084.391	39.08	22.07	22.07	3.52	2.15	903.12	903.12	3383.20	-2480.08
0+084.938	39.80	21.58	21.58	3.04	1.79	924.71	924.71	3384.99	-2460.29
0+084.962	39.84	0.94	0.94	3.02	0.07	925.64	925.64	3385.07	-2459.42
0+094.556	57.17	438.49	438.49	0.00	16.10	1364.14	1364.14	3401.16	-2037.02
0+094.560	57.18	0.19	0.19	0.00	0.00	1364.33	1364.33	3401.16	-2036.83
0+100.000	63.94	313.24	313.24	0.00	0.01	1677.57	1677.57	3401.17	-1723.60
0+104.158	58.11	241.10	241.10	0.00	0.00	1918.67	1918.67	3401.17	-1482.50
0+104.175	58.06	0.98	0.98	0.00	0.00	1919.65	1919.65	3401.17	-1481.52
0+104.728	56.34	31.67	31.67	0.00	0.00	1951.32	1951.32	3401.17	-1449.85
0+105.296	54.82	31.57	31.57	0.00	0.00	1982.89	1982.89	3401.17	-1418.28
0+120.000	22.41	542.38	542.38	7.19	56.88	2525.27	2525.27	3458.05	-932.78
0+133.024	3.96	168.19	168.19	13.47	138.17	2693.47	2693.47	3596.22	-902.75
0+133.590	3.70	2.17	2.17	13.72	7.69	2695.64	2695.64	3603.91	-908.27
0+134.110	3.47	1.86	1.86	13.90	7.19	2697.50	2697.50	3611.09	-913.59
0+134.158	3.45	0.16	0.16	13.92	0.66	2697.67	2697.67	3611.76	-914.09
0+134.175	3.45	0.06	0.06	13.93	0.24	2697.72	2697.72	3611.99	-914.27
0+140.000	1.91	15.61	15.61	17.54	91.64	2713.34	2713.34	3703.63	-990.30
0+160.000	0.91	28.23	28.23	34.38	519.11	2741.57	2741.57	4222.74	-1481.18
0+180.000	13.33	142.36	142.36	13.50	478.71	2883.93	2883.93	4701.45	-1817.52
0+200.000	47.57	608.97	608.97	0.00	134.96	3492.90	3492.90	4836.41	-1343.51

0+105.296	54.82	31.57	31.57	0.00	0.00	1982.89	1982.89	3401.17	-1418.28
0+120.000	22.41	542.38	542.38	7.19	56.88	2525.27	2525.27	3458.05	-932.78
0+133.024	3.96	168.19	168.19	13.47	138.17	2693.47	2693.47	3596.22	-902.75
0+133.590	3.70	2.17	2.17	13.72	7.69	2695.64	2695.64	3603.91	-908.27
0+134.110	3.47	1.86	1.86	13.90	7.19	2697.50	2697.50	3611.09	-913.59
0+134.158	3.45	0.16	0.16	13.92	0.66	2697.67	2697.67	3611.76	-914.09
0+134.175	3.45	0.06	0.06	13.93	0.24	2697.72	2697.72	3611.99	-914.27
0+140.000	1.91	15.61	15.61	17.54	91.64	2713.34	2713.34	3703.63	-990.30
0+160.000	0.91	28.23	28.23	34.38	519.11	2741.57	2741.57	4222.74	-1481.18
0+180.000	13.33	142.36	142.36	13.50	478.71	2883.93	2883.93	4701.45	-1817.52
0+200.000	47.57	608.97	608.97	0.00	134.96	3492.90	3492.90	4836.41	-1343.51
0+205.020	59.24	268.09	268.09	0.00	0.00	3760.99	3760.99	4836.41	-1075.42
0+205.022	59.24	0.09	0.09	0.00	0.00	3761.08	3761.08	4836.41	-1075.33
0+205.589	60.66	34.00	34.00	0.00	0.00	3795.08	3795.08	4836.41	-1041.33
0+206.153	62.12	34.67	34.67	0.00	0.00	3829.75	3829.75	4836.41	-1006.66
0+208.515	68.21	153.88	153.88	0.00	0.00	3983.63	3983.63	4836.41	-852.78
0+214.022	82.81	418.16	418.16	0.00	0.00	4401.79	4401.79	4836.41	-434.62
0+220.000	96.08	540.27	540.27	0.00	0.00	4942.06	4942.06	4836.41	105.65
0+231.519	101.10	1157.71	1157.71	0.00	0.00	6099.76	6099.76	4836.41	1263.35
0+233.884	102.70	248.05	248.05	0.00	0.00	6347.82	6347.82	4836.41	1511.41
0+234.452	103.69	58.55	58.55	0.00	0.00	6406.37	6406.37	4836.41	1569.96
0+235.022	103.48	59.02	59.02	0.00	0.00	6465.39	6465.39	4836.41	1628.98
0+237.758	105.26	295.83	295.83	0.00	0.00	6761.22	6761.22	4836.41	1924.81
0+237.773	105.29	1.63	1.63	0.00	0.00	6762.85	6762.85	4836.41	1926.44
0+240.000	110.33	249.28	249.28	0.00	0.00	7012.13	7012.13	4836.41	2175.72
0+240.494	111.76	54.85	54.85	0.00	0.00	7066.99	7066.99	4836.41	2230.57
0+240.525	111.78	3.46	3.46	0.00	0.00	7070.45	7070.45	4836.41	2234.04
0+241.065	112.12	60.47	60.47	0.00	0.00	7130.92	7130.92	4836.41	2294.51
0+241.634	112.31	63.80	63.80	0.00	0.00	7194.72	7194.72	4836.41	2358.31
0+260.000	119.43	2179.71	2179.71	0.00	0.00	9374.43	9374.43	4836.41	4538.02
0+261.525	116.88	180.18	180.18	0.00	0.00	9554.61	9554.61	4836.41	4718.20
0+269.360	97.17	843.64	843.64	0.00	0.00	10398.25	10398.25	4836.41	5561.83
0+269.926	95.63	54.56	54.56	0.00	0.00	10452.81	10452.81	4836.41	5616.40
0+270.490	94.09	53.52	53.52	0.00	0.00	10506.33	10506.33	4836.41	5669.92
0+270.494	94.08	0.38	0.38	0.00	0.00	10506.72	10506.72	4836.41	5670.30
0+270.525	94.00	2.91	2.91	0.00	0.00	10509.62	10509.62	4836.41	5673.21
0+280.000	70.49	779.29	779.29	0.00	0.00	11288.91	11288.91	4836.41	6452.50
0+300.000	24.84	953.30	953.30	4.02	40.25	12242.21	12242.21	4876.66	7365.55
0+320.000	14.93	397.67	397.67	29.64	336.65	12639.88	12639.88	5213.31	7426.57
0+320.608	0.00	4.54	4.54	0.00	9.01	12644.42	12644.42	5222.32	7422.10

5. OBRADA NA RAČUNALU

Za izradu idejnog projekta lokalne ceste korišten je program AutoCAD Civil 3D koji znatno olakšava izradu programskog zadatka, zbog svoje jednostavnosti i preciznosti, brži je postupak crtanja te izračuna u odnosu na ručno rješavanje.

Skeniranje geodetske podloge i njezino iscrtavanje slojnica je prvi korak u izradi ovog idejnog rješenja. Slojnice se iscrtavaju 3D poligonalnim linijama pomoću kojih postupkom triangulacije se dobije trodimenzionalni model terena. Sljedeći korak je definiranje koordinate točaka tangenti na terenu, za svaku tangentu po dvije točke. Na sjecištima tangenti definiramo kružne lukove i prijelazne krivine te na taj način dobijemo horizontalni tok ceste.

Sljedeći korak projekta je izrada uzdužnog presjeka ceste, kojega definira niveleta. Niveleta se postavlja tako da se zadovolje geometrijski, sigurnosni elementi i odvodnja. Između tangenti se ubacuje kružna krivina određenog radijusa.

Definiranjem poprečnog presjeka profila prometnice su odabrani poprečno nagibi kolnika, njegova širina te pokosi usjeka i nasipa.

Nakon definiranih vertikalnih i horizontalnih elemenata osi ceste, izrađuje se njezin koridor. Koridor omogućuje uvid u poprečne presjeke u svim karakterističnim i zadanim točkama osi ceste. Na taj način smo definirali cijelu dionicu ceste

Izlazni podaci su računalni ispisi koordinatnih točaka osi, točaka svakog poprečnog presjeka te količina zemljanih radova po presjeku.

6. IZLAZNI PODACI IZ PROGRAMA
6.1. KOORDINATNI RAČUN GLAVNIH TOČKA

123 Main Street
Suite #321
City, State 01234

Alignment Station and Curve Report

Project Name: D:\Sara\ZAVRŠNI\Podloga.dwg

Report Date: 16.6.2023. 22:01:36

Client: Client Company

Project Description:

Prepared by: Preparer

Alignment: OS1

Description:

Tangent Data

Description	PT Station	Northing	Easting
Start:	0+00.000	12.896	36.050
End:	0+55.464	57.170	69.457

Tangent Data

Parameter	Value	Parameter	Value
Length:	55.464	Course:	N 37° 02' 10.3884" E

Spiral Point Data

Description	Station	Northing	Easting
TS:	0+55.464	57.170	69.457
SPI:		73.198	81.551
SC:	0+85.464	79.306	89.558

Spiral Curve Data: clothoid

Parameter	Value	Parameter	Value
Length:	30.000	L Tan:	20.078
Radius:	55.000	S Tan:	10.071
Theta:	15° 37' 34.0381"	P:	0.680
X:	29.778	K:	14.963
Y:	2.713	A:	40.620
Chord:	29.901	Course:	N 42° 14' 29.9058" E

Curve Point Data

Description	Station	Northing	Easting
SC:	0+85.464	79.306	89.558

RP: 35.577 122.916
 CS: 1+04.643 88.072 106.508

Circular Curve Data

Parameter	Value	Parameter	Value
Delta:	19° 58' 47.6963"	Type:	RIGHT
Radius:	55.000		
Length:	19.179	Tangent:	9.688
Mid-Ord:	0.834	External:	0.847
Chord:	19.082	Course:	N 62° 39' 08.2746" E

Spiral Point Data

Description	Station	Northing	Easting
CS:	1+04.643	88.072	106.508
SPI:		91.077	116.120
ST:	1+34.643	91.684	136.190

Spiral Curve Data: clothoid

Parameter	Value	Parameter	Value
Length:	30.000	L Tan:	20.078
Radius:	55.000	S Tan:	10.071
Theta:	15° 37' 34.0381"	P:	0.680
X:	29.778	K:	14.963
Y:	2.713	A:	40.620
Chord:	29.901	Course:	N 83° 03' 46.6434" E

Tangent Data

Description	PT Station	Northing	Easting
Start:	1+34.643	91.684	136.190
End:	2+05.531	93.826	207.045

Tangent Data

Parameter	Value	Parameter	Value
Length:	70.888	Course:	N 88° 16' 06.1609" E

Spiral Point Data

Description	Station	Northing	Easting
TS:	2+05.531	93.826	207.045
SPI:		94.433	227.114
SC:	2+35.531	97.437	236.727

Spiral Curve Data: clothoid

Parameter	Value	Parameter	Value
Length:	30.000	L Tan:	20.078
Radius:	55.000	S Tan:	10.071
Theta:	15° 37' 34.0381"	P:	0.680

X:	29.778	K:	14.963
Y:	2.713	A:	40.620
Chord:	29.901	Course:	N 83° 03' 46.6434" E

Curve Point Data

Description	Station	Northing	Easting
SC:	2+35.531	97.437	236.727
RP:		149.933	220.319
CS:	2+41.025	99.335	241.880

Circular Curve Data

Parameter	Value	Parameter	Value
Delta:	05° 43' 23.9244"	Type:	LEFT
Radius:	55.000		
Length:	5.494	Tangent:	2.749
Mid-Ord:	0.069	External:	0.069
Chord:	5.492	Course:	N 69° 46' 50.1606" E

Spiral Point Data

Description	Station	Northing	Easting
CS:	2+41.025	99.335	241.880
SPI:		103.284	251.146
ST:	2+71.025	115.840	266.814

Spiral Curve Data: clothoid

Parameter	Value	Parameter	Value
Length:	30.000	L Tan:	20.078
Radius:	55.000	S Tan:	10.071
Theta:	15° 37' 34.0381"	P:	0.680
X:	29.778	K:	14.963
Y:	2.713	A:	40.620
Chord:	29.901	Course:	N 56° 29' 53.6777" E

Tangent Data

Description	PT Station	Northing	Easting
Start:	2+71.025	115.840	266.814
End:	3+21.118	147.165	305.904

Tangent Data

Parameter	Value	Parameter	Value
Length:	50.093	Course:	N 51° 17' 34.1603" E

Alignment: OS1-Left-3.000

Description:

<u>Tangent Data</u>			
Description	PT Station	Northing	Easting
Start:	0+00.000	14.703	33.655
End:	0+55.464	58.977	67.062

<u>Tangent Data</u>			
Parameter	Value	Parameter	Value
Length:	55.464	Course:	N 37° 02' 10.3884" E

<u>Spiral Point Data</u>			
Description	Station	Northing	Easting
TS:	0+55.464	58.977	67.062
SPI:		75.333	79.404
SC:	0+86.282	81.691	87.739

<u>Spiral Curve Data: clothoid</u>			
Parameter	Value	Parameter	Value
Length:	30.818	L Tan:	20.622
Radius:	58.000	S Tan:	10.342
Theta:	15° 13' 19.1923"	P:	0.681
X:	30.601	K:	15.373
Y:	2.715	A:	42.278
Chord:	30.716	Course:	N 42° 18' 39.1023" E

<u>Curve Point Data</u>			
Description	Station	Northing	Easting
SC:	0+86.282	81.691	87.739
RP:		35.577	122.916
CS:	1+06.507	90.936	105.613

<u>Circular Curve Data</u>			
Parameter	Value	Parameter	Value
Delta:	19° 58' 47.6963"	Type:	RIGHT
Radius:	58.000		
Length:	20.225	Tangent:	10.216
Mid-Ord:	0.879	External:	0.893
Chord:	20.123	Course:	N 62° 39' 08.2746" E

<u>Spiral Point Data</u>			
Description	Station	Northing	Easting
CS:	1+06.507	90.936	105.613

SPI: 94.063 115.618
 ST: 1+37.325 94.682 136.099

Spiral Curve Data: clothoid

Parameter	Value	Parameter	Value
Length:	30.818	L Tan:	20.622
Radius:	58.000	S Tan:	10.342
Theta:	15° 13' 19.1923"	P:	0.681
X:	30.601	K:	15.373
Y:	2.715	A:	42.278
Chord:	30.716	Course:	N 82° 59' 37.4469" E

Tangent Data

Description	PT Station	Northing	Easting
Start:	1+37.325	94.682	136.099
End:	2+08.208	96.824	206.949

Tangent Data

Parameter	Value	Parameter	Value
Length:	70.882	Course:	N 88° 16' 06.1609" E

Curve Point Data

Description	Station	Northing	Easting
PC:	2+08.208	96.824	206.949
RP:		104.821	206.707
PT:	2+09.342	96.939	208.077

Circular Curve Data

Parameter	Value	Parameter	Value
Delta:	08° 07' 22.5164"	Type:	LEFT
Radius:	8.000		
Length:	1.134	Tangent:	0.568
Mid-Ord:	0.020	External:	0.020
Chord:	1.133	Course:	N 84° 12' 24.9026" E

Tangent Data

Description	PT Station	Northing	Easting
Start:	2+09.342	96.939	208.077
End:	2+36.016	101.504	234.357

Tangent Data

Parameter	Value	Parameter	Value
Length:	26.674	Course:	N 80° 08' 43.6444" E

Curve Point Data

Description	Station	Northing	Easting
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PC:	2+36.016	101.504	234.357
RP:		109.386	232.988
CS:	2+37.063	101.750	235.374

Circular Curve Data

Parameter	Value	Parameter	Value
Delta:	07° 29' 52.6391"	Type:	LEFT
Radius:	8.000		
Length:	1.047	Tangent:	0.524
Mid-Ord:	0.017	External:	0.017
Chord:	1.046	Course:	N 76° 23' 47.3249" E

Spiral Point Data

Description	Station	Northing	Easting
CS:	2+37.063	101.750	235.374
SPI:		101.751	235.376
SC:	2+37.068	101.751	235.379

Spiral Curve Data: clothoid

Parameter	Value	Parameter	Value
Length:	0.005	L Tan:	0.002
Radius:	50.480	S Tan:	0.002
Theta:	00° 00' 18.8825"	P:	0.000
X:	0.005	K:	0.000
Y:	0.000	A:	35.718
Chord:	0.005	Course:	N 72° 38' 41.5643" E

Curve Point Data

Description	Station	Northing	Easting
SC:	2+37.068	101.751	235.379
RP:		149.933	220.319
PCC:	2+42.086	103.484	240.086

Circular Curve Data

Parameter	Value	Parameter	Value
Delta:	05° 41' 44.6545"	Type:	LEFT
Radius:	50.480		
Length:	5.018	Tangent:	2.511
Mid-Ord:	0.062	External:	0.062
Chord:	5.016	Course:	N 69° 47' 39.7955" E

Curve Point Data

Description	Station	Northing	Easting
PCC:	2+42.086	103.484	240.086
RP:		110.845	236.953

PT: 2+43.135 103.957 241.022

Circular Curve Data

Parameter	Value	Parameter	Value
Delta:	07° 30' 52.3340"	Type:	LEFT
Radius:	8.000		
Length:	1.049	Tangent:	0.525
Mid-Ord:	0.017	External:	0.017
Chord:	1.048	Course:	N 63° 11' 21.3013" E

Tangent Data

Description	PT Station	Northing	Easting
Start:	2+43.135	103.957	241.022
End:	2+69.803	117.519	263.984

Tangent Data

Parameter	Value	Parameter	Value
Length:	26.668	Course:	N 59° 25' 55.1343" E

Curve Point Data

Description	Station	Northing	Easting
PC:	2+69.803	117.519	263.984
RP:		124.407	259.915
CS:	2+70.940	118.165	264.918

Circular Curve Data

Parameter	Value	Parameter	Value
Delta:	08° 08' 20.9329"	Type:	LEFT
Radius:	8.000		
Length:	1.136	Tangent:	0.569
Mid-Ord:	0.020	External:	0.020
Chord:	1.135	Course:	N 55° 21' 44.6678" E

Spiral Point Data

Description	Station	Northing	Easting
CS:	2+70.940	118.165	264.918
SPI:		118.165	264.918
ST:	2+70.965	118.181	264.938

Spiral Curve Data: clothoid

Parameter	Value	Parameter	Value
Length:	0.026	L Tan:	0.017
Radius:	64362.714	S Tan:	0.009
Theta:	00° 00' 00.0411"	P:	0.000
X:	0.026	K:	0.013
Y:	0.000	A:	40.619

Chord: 0.026 Course: N 51° 17' 34.1603" E

Tangent Data

Description	PT Station	Northing	Easting
Start:	2+70.965	118.181	264.938
End:	3+21.058	149.506	304.028

Tangent Data

Parameter	Value	Parameter	Value
Length:	50.093	Course:	N 51° 17' 34.1603" E

Alignment: OS1-Right-3.000

Description:

Tangent Data

Description	PT Station	Northing	Easting
Start:	0+00.000	11.089	38.445
End:	0+55.452	55.354	71.845

Tangent Data

Parameter	Value	Parameter	Value
Length:	55.452	Course:	N 37° 02' 10.3884" E

Curve Point Data

Description	Station	Northing	Easting
PC:	0+55.452	55.354	71.845
RP:		50.535	78.231
PT:	0+56.586	56.207	72.589

Circular Curve Data

Parameter	Value	Parameter	Value
Delta:	08° 07' 15.7815"	Type:	RIGHT
Radius:	8.000		
Length:	1.134	Tangent:	0.568
Mid-Ord:	0.020	External:	0.020
Chord:	1.133	Course:	N 41° 05' 48.2791" E

Tangent Data

Description	PT Station	Northing	Easting
Start:	0+56.586	56.207	72.589
End:	0+83.267	75.022	91.508

Tangent Data

Parameter	Value	Parameter	Value
Length:	26.681	Course:	N 45° 09' 26.1699" E

Curve Point Data

Description	Station	Northing	Easting
PC:	0+83.267	75.022	91.508
RP:		69.350	97.149
CS:	0+84.314	75.710	92.296

Circular Curve Data

Parameter	Value	Parameter	Value
Delta:	07° 30' 01.0905"	Type:	RIGHT
Radius:	8.000		
Length:	1.047	Tangent:	0.524
Mid-Ord:	0.017	External:	0.017
Chord:	1.046	Course:	N 48° 54' 26.7151" E

Spiral Point Data

Description	Station	Northing	Easting
CS:	0+84.314	75.710	92.296
SPI:		75.711	92.298
SC:	0+84.318	75.712	92.300

Spiral Curve Data: clothoid

Parameter	Value	Parameter	Value
Length:	0.004	L Tan:	0.002
Radius:	50.480	S Tan:	0.002
Theta:	00° 00' 17.1661"	P:	0.000
X:	0.004	K:	0.000
Y:	0.000	A:	35.718
Chord:	0.004	Course:	N 52° 39' 35.8432" E

Curve Point Data

Description	Station	Northing	Easting
SC:	0+84.318	75.712	92.300
RP:		35.577	122.916
CS:	1+01.922	83.758	107.856

Circular Curve Data

Parameter	Value	Parameter	Value
Delta:	19° 58' 47.6963"	Type:	RIGHT
Radius:	50.480		
Length:	17.603	Tangent:	8.892
Mid-Ord:	0.765	External:	0.777
Chord:	17.514	Course:	N 62° 39' 08.2746" E

Spiral Point Data

Description	Station
CS:	1+01.922
SPI:	
SC:	1+01.937

Spiral Curve Data: clothoid

Parameter	Value
Length:	0.016
Radius:	50.480
Theta:	00° 01' 04.3592"
X:	0.016
Y:	0.000
Chord:	0.016

Curve Point Data

Description	Station
SC:	1+01.937
RP:	
PT:	1+02.983

Circular Curve Data

Parameter	Value
Delta:	07° 29' 31.0039"
Radius:	8.000
Length:	1.046
Mid-Ord:	0.017
Chord:	1.045

Tangent Data

Description	PT Station
Start:	1+02.983
End:	1+29.662

Tangent Data

Parameter	Value
Length:	26.678

Curve Point Data

Description	Station
PC:	1+29.662
RP:	
PT:	1+30.795

Circular Curve Data

Parameter	Value	Parameter	Value
Delta:	08° 06' 58.6749"	Type:	RIGHT
Radius:	8.000		
Length:	1.133	Tangent:	0.568
Mid-Ord:	0.020	External:	0.020
Chord:	1.132	Course:	N 84° 12' 36.8234" E

Tangent Data

Description	PT Station	Northing	Easting
Start:	1+30.795	88.686	136.299
End:	2+01.664	90.827	207.136

Tangent Data

Parameter	Value	Parameter	Value
Length:	70.869	Course:	N 88° 16' 06.1609" E

Spiral Point Data

Description	Station	Northing	Easting
TS:	2+01.664	90.827	207.136
SPI:		91.446	227.617
SC:	2+32.482	94.574	237.622

Spiral Curve Data: clothoid

Parameter	Value	Parameter	Value
Length:	30.818	L Tan:	20.622
Radius:	58.000	S Tan:	10.342
Theta:	15° 13' 19.1923"	P:	0.681
X:	30.601	K:	15.373
Y:	2.715	A:	42.278
Chord:	30.716	Course:	N 82° 59' 37.4469" E

Curve Point Data

Description	Station	Northing	Easting
SC:	2+32.482	94.574	237.622
RP:		149.933	220.319
CS:	2+38.276	96.575	243.057

Circular Curve Data

Parameter	Value	Parameter	Value
Delta:	05° 43' 23.9244"	Type:	LEFT
Radius:	58.000		
Length:	5.794	Tangent:	2.899
Mid-Ord:	0.072	External:	0.072
Chord:	5.791	Course:	N 69° 46' 50.1606" E

Spiral Point Data

Description	Station	Northing	Easting
CS:	2+38.276	96.575	243.057
SPI:		100.685	252.700
ST:	2+69.094	113.498	268.690

Spiral Curve Data: clothoid

Parameter	Value	Parameter	Value
Length:	30.818	L Tan:	20.622
Radius:	58.000	S Tan:	10.342
Theta:	15° 13' 19.1923"	P:	0.681
X:	30.601	K:	15.373
Y:	2.715	A:	42.278
Chord:	30.716	Course:	N 56° 34' 02.8742" E

Tangent Data

Description	PT Station	Northing	Easting
Start:	2+69.094	113.498	268.690
End:	3+19.187	144.824	307.780

Tangent Data

Parameter	Value	Parameter	Value
Length:	50.093	Course:	N 51° 17' 34.1603" E

6.2. KOORDINATNI RAČUN DETALJNIH TOČKA OSI

Alignment Incremental Station Report

Client:

Client

Client Company

Address 1

Date: 16.6.2023. 22:52:17

Prepared by:

Preparer

Your Company Name

123 Main Street

Alignment Name: OS1

Description:

Station Range: Start: 0+000.00, End: 32+111.00

Station Increment: 20.00

Station	Northing	Easting	Tangential Direction
0+000.00	12.8959m	36.0502m	N37° 02' 10"E
0+020.00	28.8610m	48.0965m	N37° 02' 10"E
0+040.00	44.8261m	60.1429m	N37° 02' 10"E
0+060.00	60.7855m	72.1969m	N37° 23' 37"E
0+080.00	75.7947m	85.3749m	N47° 29' 20"E
0+100.00	86.5020m	102.1399m	N67° 48' 20"E
0+120.00	90.9246m	121.5693m	N84° 32' 44"E
0+140.00	91.8457m	141.5444m	N88° 16' 06"E
0+160.00	92.4501m	161.5352m	N88° 16' 06"E
0+180.00	93.0544m	181.5261m	N88° 16' 06"E
0+200.00	93.6588m	201.5170m	N88° 16' 06"E
0+220.00	94.5691m	221.4928m	N84° 37' 50"E
0+240.00	98.9443m	240.9338m	N67° 58' 51"E
0+260.00	109.0558m	258.1257m	N53° 23' 41"E
0+280.00	121.4586m	273.8142m	N51° 16' 59"E
0+300.00	133.9681m	289.4191m	N51° 16' 59"E
0+320.00	146.4776m	305.0240m	N51° 16' 59"E

6.3. RAČUN KOTA KOLNIKA

Client: Prepared by:

Client Preparer

Client Company Your Company Name

Address 1123 Main Street

Date: 22.6.2023. 19:09:33

Corridor Name: KORIDOR0

Description:

Base Alignment Name: OS1

Station Range: Start: 0+000.49, End: 0+321.11

CHAINAGE 0+000.49

CHAINAGE 0+020.49

Station	Offset	Northing	Easting	Elevation	Description
0+020.00	3.000	27.0541	50.4913	174.758	ETW_SubBase
0+020.00	3.000	27.0541	50.4913	175.208	Flange
0+020.00	3.000	27.0541	50.4913	175.208	ETW
0+020.00	3.650	26.6626	51.0102	175.169	Flowline_Gutter
0+020.00	3.692	26.6375	51.0435	175.919	Top_Curb
0+020.00	-20.434	41.1690	31.7848	160.786	Daylight
0+020.00	-20.434	41.1690	31.7848	160.786	Daylight_Fill
0+020.00	-5.192	31.9881	43.9522	176.029	EPS
0+020.00	-5.192	31.9881	43.9522	176.029	Hinge
0+020.00	-5.192	31.9881	43.9522	176.029	Hinge_Fill
0+020.00	-5.191	31.9875	43.9530	175.359	EPS_Sub
0+020.00	-4.192	31.3858	44.7505	176.069	Back_Curb

0+020.00	-3.692	31.0846	45.1496	176.069	Top_Curb
0+020.00	-3.650	31.0595	45.1829	175.319	Flowline_Gutter
0+020.00	-3.000	30.6680	45.7018	174.908	ETW_SubBase
0+020.00	-3.000	30.6680	45.7018	175.358	ETW
0+020.00	-3.000	30.6680	45.7018	175.358	Flange
0+020.00	4.192	26.3363	51.4426	175.919	Back_Curb
0+020.00	5.191	25.7346	52.2401	175.209	EPS_Sub
0+020.00	5.192	25.7340	52.2408	175.879	Ditch_In
0+020.00	5.192	25.7340	52.2408	175.879	EPS
0+020.00	5.192	25.7340	52.2408	175.879	Hinge_Cut
0+020.00	5.192	25.7340	52.2408	175.879	Ditch_Out
0+020.00	7.312	24.4569	53.9334	180.119	Daylight_Cut
0+020.00	7.312	24.4569	53.9334	180.119	Daylight

CHAINAGE 0+040.49

0+040.00	-17.175	55.1707	46.4333	162.322	Daylight
0+040.00	-17.175	55.1707	46.4333	162.322	Daylight_Fill
0+040.00	-5.192	47.9532	55.9986	174.305	EPS
0+040.00	-5.192	47.9532	55.9986	174.305	Hinge
0+040.00	-5.192	47.9532	55.9986	174.305	Hinge_Fill
0+040.00	-5.191	47.9526	55.9994	173.635	EPS_Sub
0+040.00	-4.192	47.3509	56.7969	174.345	Back_Curb
0+040.00	-3.692	47.0497	57.1960	174.345	Top_Curb
0+040.00	-3.650	47.0246	57.2293	173.595	Flowline_Gutter
0+040.00	-3.000	46.6331	57.7482	173.184	ETW_SubBase
0+040.00	-3.000	46.6331	57.7482	173.634	ETW
0+040.00	-3.000	46.6331	57.7482	173.634	Flange

0+040.00	3.000	43.0192	62.5377	173.034	ETW_SubBase
0+040.00	3.000	43.0192	62.5377	173.484	Flange
0+040.00	3.000	43.0192	62.5377	173.484	ETW
0+040.00	3.650	42.6277	63.0566	173.445	Flowline_Gutter
0+040.00	3.692	42.6026	63.0899	174.195	Top_Curb
0+040.00	4.192	42.3014	63.4890	174.195	Back_Curb
0+040.00	5.191	41.6997	64.2864	173.485	EPS_Sub
0+040.00	5.192	41.6991	64.2872	174.155	Hinge_Cut
0+040.00	5.192	41.6991	64.2872	174.155	Ditch_Out
0+040.00	5.192	41.6991	64.2872	174.155	Ditch_In
0+040.00	5.192	41.6991	64.2872	174.155	EPS
0+040.00	6.092	41.1570	65.0056	175.955	Daylight
0+040.00	6.092	41.1570	65.0056	175.955	Daylight_Cut

CHAINAGE 0+060.49

0+060.00	-15.893	70.4368	59.5705	161.880	Daylight_Fill
0+060.00	-15.893	70.4368	59.5705	161.880	Daylight
0+060.00	-5.192	63.9383	68.0722	172.581	Hinge_Fill
0+060.00	-5.192	63.9383	68.0722	172.581	Hinge
0+060.00	-5.192	63.9383	68.0722	172.581	EPS
0+060.00	-5.191	63.9377	68.0730	171.911	EPS_Sub
0+060.00	-4.192	63.3311	68.8667	172.621	Back_Curb
0+060.00	-3.692	63.0274	69.2639	172.621	Top_Curb
0+060.00	-3.650	63.0021	69.2971	171.871	Flowline_Gutter
0+060.00	-3.000	62.6074	69.8135	171.460	ETW_SubBase
0+060.00	-3.000	62.6074	69.8135	171.910	Flange
0+060.00	-3.000	62.6074	69.8135	171.910	ETW

0+060.00	3.622	58.5859	75.0745	171.294	ETW_SubBase
0+060.00	3.622	58.5859	75.0745	171.744	Flange
0+060.00	3.622	58.5859	75.0745	171.744	ETW
0+060.00	4.272	58.1912	75.5909	171.705	Flowline_Gutter
0+060.00	4.314	58.1659	75.6240	172.455	Top_Curb
0+060.00	4.814	57.8622	76.0213	172.455	Back_Curb
0+060.00	5.813	57.2556	76.8150	171.745	EPS_Sub
0+060.00	5.814	57.2550	76.8158	172.415	EPS
0+060.00	5.814	57.2550	76.8158	172.415	Ditch_Out
0+060.00	5.814	57.2550	76.8158	172.415	Ditch_In
0+060.00	5.814	57.2550	76.8158	172.415	Hinge_Cut
0+060.00	6.927	56.5786	77.7006	174.643	Daylight
0+060.00	6.927	56.5786	77.7006	174.643	Daylight_Cut

CHAINAGE 0+080.49

0+080.00	-11.786	84.4830	77.4103	164.262	Daylight
0+080.00	-11.786	84.4830	77.4103	164.262	Daylight_Fill
0+080.00	-5.191	79.6215	81.8668	170.857	EPS
0+080.00	-5.191	79.6215	81.8668	170.857	Hinge
0+080.00	-5.191	79.6215	81.8668	170.857	Hinge_Fill
0+080.00	-5.190	79.6208	81.8675	170.187	EPS_Sub
0+080.00	-4.191	78.8844	82.5426	170.897	Back_Curb
0+080.00	-3.691	78.5158	82.8804	170.897	Top_Curb
0+080.00	-3.650	78.4851	82.9086	170.147	Flowline_Gutter
0+080.00	-3.000	78.0059	83.3478	169.736	ETW_SubBase
0+080.00	-3.000	78.0059	83.3478	170.186	ETW
0+080.00	-3.000	78.0059	83.3478	170.186	Flange

0+080.00	4.856	72.2148	88.6565	169.540	ETW_SubBase
0+080.00	4.856	72.2148	88.6565	169.990	ETW
0+080.00	4.856	72.2148	88.6565	169.990	Flange
0+080.00	5.506	71.7356	89.0958	169.951	Flowline_Gutter
0+080.00	5.548	71.7049	89.1239	170.701	Top_Curb
0+080.00	6.048	71.3363	89.4618	170.701	Back_Curb
0+080.00	7.047	70.5999	90.1369	169.991	EPS_Sub
0+080.00	7.048	70.5991	90.1375	170.661	EPS
0+080.00	7.048	70.5991	90.1375	170.661	Hinge_Cut
0+080.00	7.048	70.5991	90.1375	170.661	Ditch_In
0+080.00	7.048	70.5991	90.1375	170.661	Ditch_Out
0+080.00	9.798	68.5721	91.9957	176.160	Daylight_Cut
0+080.00	9.798	68.5721	91.9957	176.160	Daylight

CHAINAGE 0+100.49

0+100.00	-5.783	91.8565	99.9554	170.316	Daylight
0+100.00	-5.783	91.8565	99.9554	170.316	Daylight_Cut
0+100.00	-5.192	91.3090	100.1787	169.133	Ditch_In
0+100.00	-5.192	91.3090	100.1787	169.133	EPS
0+100.00	-5.192	91.3090	100.1787	169.133	Hinge_Cut
0+100.00	-5.192	91.3090	100.1787	169.133	Ditch_Out
0+100.00	-5.191	91.3081	100.1791	168.463	EPS_Sub
0+100.00	-4.192	90.3831	100.5565	169.173	Back_Curb
0+100.00	-3.692	89.9201	100.7454	169.173	Top_Curb
0+100.00	-3.650	89.8815	100.7611	168.423	Flowline_Gutter
0+100.00	-3.000	89.2797	101.0067	168.012	ETW_SubBase
0+100.00	-3.000	89.2797	101.0067	168.462	Flange

0+100.00	-3.000	89.2797	101.0067	168.462	ETW
0+100.00	4.520	82.3169	103.8473	167.824	ETW_SubBase
0+100.00	4.520	82.3169	103.8473	168.274	ETW
0+100.00	4.520	82.3169	103.8473	168.274	Flange
0+100.00	5.170	81.7150	104.0929	168.235	Flowline_Gutter
0+100.00	5.212	81.6764	104.1086	168.985	Top_Curb
0+100.00	5.712	81.2135	104.2975	168.985	Back_Curb
0+100.00	6.711	80.2885	104.6749	168.275	EPS_Sub
0+100.00	6.712	80.2875	104.6753	168.945	Hinge_Cut
0+100.00	6.712	80.2875	104.6753	168.945	Ditch_Out
0+100.00	6.712	80.2875	104.6753	168.945	Ditch_In
0+100.00	6.712	80.2875	104.6753	168.945	EPS
0+100.00	10.019	77.2256	105.9245	175.559	Daylight_Cut
0+100.00	10.019	77.2256	105.9245	175.559	Daylight

CHAINAGE 0+120.49

0+120.00	-8.727	99.6125	120.7397	163.873	Daylight_Fill
0+120.00	-8.727	99.6125	120.7397	163.873	Daylight
0+120.00	-5.191	96.0922	121.0758	167.409	Hinge_Fill
0+120.00	-5.191	96.0922	121.0758	167.409	Hinge
0+120.00	-5.191	96.0922	121.0758	167.409	EPS
0+120.00	-5.190	96.0912	121.0759	166.739	EPS_Sub
0+120.00	-4.191	95.0968	121.1709	167.449	Back_Curb
0+120.00	-3.691	94.5990	121.2184	167.449	Top_Curb
0+120.00	-3.649	94.5575	121.2224	166.699	Flowline_Gutter
0+120.00	-2.999	93.9105	121.2842	166.288	ETW_SubBase
0+120.00	-2.999	93.9105	121.2842	166.738	ETW

0+120.00	-2.999	93.9105	121.2842	166.738	Flange
0+120.00	4.622	86.3232	122.0086	166.098	ETW_SubBase
0+120.00	4.622	86.3232	122.0086	166.548	Flange
0+120.00	4.622	86.3232	122.0086	166.548	ETW
0+120.00	5.272	85.6762	122.0704	166.509	Flowline_Gutter
0+120.00	5.314	85.6347	122.0744	167.259	Top_Curb
0+120.00	5.814	85.1369	122.1219	167.259	Back_Curb
0+120.00	6.813	84.1425	122.2169	166.549	EPS_Sub
0+120.00	6.814	84.1415	122.2170	167.219	EPS
0+120.00	6.814	84.1415	122.2170	167.219	Ditch_Out
0+120.00	6.814	84.1415	122.2170	167.219	Hinge_Cut
0+120.00	6.814	84.1415	122.2170	167.219	Ditch_In
0+120.00	8.699	82.2651	122.3961	170.988	Daylight
0+120.00	8.699	82.2651	122.3961	170.988	Daylight_Cut

CHAINAGE 0+140.49

0+140.00	-10.254	102.0946	141.2345	160.623	Daylight
0+140.00	-10.254	102.0946	141.2345	160.623	Daylight_Fill
0+140.00	-5.192	97.0350	141.3875	165.685	EPS
0+140.00	-5.192	97.0350	141.3875	165.685	Hinge
0+140.00	-5.192	97.0350	141.3875	165.685	Hinge_Fill
0+140.00	-5.191	97.0340	141.3875	165.015	EPS_Sub
0+140.00	-4.192	96.0355	141.4177	165.725	Back_Curb
0+140.00	-3.692	95.5357	141.4328	165.725	Top_Curb
0+140.00	-3.650	95.4940	141.4341	164.975	Flowline_Gutter
0+140.00	-3.000	94.8443	141.4537	164.564	ETW_SubBase
0+140.00	-3.000	94.8443	141.4537	165.014	Flange

0+140.00	-3.000	94.8443	141.4537	165.014	ETW
0+140.00	3.000	88.8471	141.6350	164.414	ETW_SubBase
0+140.00	3.000	88.8471	141.6350	164.864	ETW
0+140.00	3.000	88.8471	141.6350	164.864	Flange
0+140.00	3.650	88.1974	141.6547	164.825	Flowline_Gutter
0+140.00	3.692	88.1557	141.6559	165.575	Top_Curb
0+140.00	4.192	87.6559	141.6710	165.575	Back_Curb
0+140.00	5.191	86.6574	141.7012	164.865	EPS_Sub
0+140.00	5.192	86.6564	141.7013	165.535	Ditch_In
0+140.00	5.192	86.6564	141.7013	165.535	Hinge_Cut
0+140.00	5.192	86.6564	141.7013	165.535	Ditch_Out
0+140.00	5.192	86.6564	141.7013	165.535	EPS
0+140.00	5.309	86.5390	141.7048	165.770	Daylight
0+140.00	5.309	86.5390	141.7048	165.770	Daylight_Cut

CHAINAGE 0+160.49

0+160.00	-13.240	105.6839	161.1352	155.913	Daylight_Fill
0+160.00	-13.240	105.6839	161.1352	155.913	Daylight
0+160.00	-5.191	97.6384	161.3784	163.291	EPS_Sub
0+160.00	3.000	89.4514	161.6259	162.690	ETW_SubBase
0+160.00	3.000	89.4514	161.6259	163.140	ETW
0+160.00	3.000	89.4514	161.6259	163.140	Flange
0+160.00	4.192	88.2603	161.6619	163.851	Back_Curb
0+160.00	5.192	87.2607	161.6921	163.811	Hinge_Fill
0+160.00	5.192	87.2607	161.6921	163.811	EPS
0+160.00	5.192	87.2607	161.6921	163.811	Hinge
0+160.00	-5.192	97.6394	161.3784	163.961	EPS

0+160.00	-5.192	97.6394	161.3784	163.961	Hinge_Fill
0+160.00	-5.192	97.6394	161.3784	163.961	Hinge
0+160.00	-4.192	96.6398	161.4086	164.001	Back_Curb
0+160.00	-3.692	96.1401	161.4237	164.001	Top_Curb
0+160.00	-3.650	96.0984	161.4250	163.251	Flowline_Gutter
0+160.00	-3.000	95.4487	161.4446	162.840	ETW_SubBase
0+160.00	-3.000	95.4487	161.4446	163.290	ETW
0+160.00	-3.000	95.4487	161.4446	163.290	Flange
0+160.00	3.650	88.8017	161.6455	163.101	Flowline_Gutter
0+160.00	3.692	88.7600	161.6468	163.851	Top_Curb
0+160.00	5.191	87.2617	161.6921	163.141	EPS_Sub
0+160.00	5.362	87.0906	161.6973	163.641	Daylight_Fill
0+160.00	5.362	87.0906	161.6973	163.641	Daylight

CHAINAGE 0+180.49

0+180.00	-10.640	103.6900	181.2046	156.789	Daylight
0+180.00	-10.640	103.6900	181.2046	156.789	Daylight_Fill
0+180.00	-5.191	98.2427	181.3693	161.567	EPS_Sub
0+180.00	3.000	90.0558	181.6168	160.966	ETW_SubBase
0+180.00	3.000	90.0558	181.6168	161.416	ETW
0+180.00	3.000	90.0558	181.6168	161.416	Flange
0+180.00	3.650	89.4061	181.6364	161.377	Flowline_Gutter
0+180.00	3.692	89.3644	181.6377	162.127	Top_Curb
0+180.00	4.192	88.8646	181.6528	162.127	Back_Curb
0+180.00	5.192	87.8651	181.6830	162.087	EPS
0+180.00	5.192	87.8651	181.6830	162.087	Ditch_In
0+180.00	5.192	87.8651	181.6830	162.087	Ditch_Out

0+180.00	5.192	87.8651	181.6830	162.087	Hinge_Cut
0+180.00	-5.192	98.2437	181.3692	162.237	EPS
0+180.00	-5.192	98.2437	181.3692	162.237	Hinge_Fill
0+180.00	-5.192	98.2437	181.3692	162.237	Hinge
0+180.00	-4.192	97.2442	181.3995	162.277	Back_Curb
0+180.00	-3.692	96.7444	181.4146	162.277	Top_Curb
0+180.00	-3.650	96.7027	181.4158	161.527	Flowline_Gutter
0+180.00	-3.000	96.0530	181.4355	161.116	ETW_SubBase
0+180.00	-3.000	96.0530	181.4355	161.566	ETW
0+180.00	-3.000	96.0530	181.4355	161.566	Flange
0+180.00	5.191	87.8661	181.6830	161.417	EPS_Sub
0+180.00	6.665	86.3929	181.7275	165.033	Daylight_Cut
0+180.00	6.665	86.3929	181.7275	165.033	Daylight

CHAINAGE 0+200.49

0+200.00	-5.263	98.9197	201.3579	160.657	Daylight
0+200.00	-5.263	98.9197	201.3579	160.657	Daylight_Cut
0+200.00	-5.191	98.8471	201.3601	159.843	EPS_Sub
0+200.00	-4.192	97.8486	201.3903	160.553	Back_Curb
0+200.00	-3.692	97.3488	201.4054	160.553	Top_Curb
0+200.00	-3.650	97.3071	201.4067	159.803	Flowline_Gutter
0+200.00	3.000	90.6601	201.6076	159.242	ETW_SubBase
0+200.00	3.000	90.6601	201.6076	159.692	ETW
0+200.00	3.000	90.6601	201.6076	159.692	Flange
0+200.00	3.650	90.0104	201.6273	159.653	Flowline_Gutter
0+200.00	3.692	89.9688	201.6285	160.403	Top_Curb
0+200.00	4.192	89.4690	201.6436	160.403	Back_Curb

0+200.00	5.192	88.4694	201.6739	160.363	Hinge_Cut
0+200.00	5.192	88.4694	201.6739	160.363	Ditch_Out
0+200.00	5.192	88.4694	201.6739	160.363	Ditch_In
0+200.00	5.192	88.4694	201.6739	160.363	EPS
0+200.00	8.555	85.1078	201.7755	167.090	Daylight_Cut
0+200.00	8.555	85.1078	201.7755	167.090	Daylight
0+200.00	-5.192	98.8481	201.3601	160.513	Hinge_Cut
0+200.00	-5.192	98.8481	201.3601	160.513	Ditch_In
0+200.00	-5.192	98.8481	201.3601	160.513	Ditch_Out
0+200.00	-5.192	98.8481	201.3601	160.513	EPS
0+200.00	-3.000	96.6574	201.4263	159.392	ETW_SubBase
0+200.00	-3.000	96.6574	201.4263	159.842	ETW
0+200.00	-3.000	96.6574	201.4263	159.842	Flange
0+200.00	5.191	88.4704	201.6738	159.693	EPS_Sub

CHAINAGE 0+220.49

0+220.00	5.191	89.4005	221.9785	158.760	Ditch_Out
0+220.00	5.191	89.4005	221.9785	158.760	EPS
0+220.00	10.248	84.3658	222.4517	168.874	Daylight
0+220.00	10.248	84.3658	222.4517	168.874	Daylight_Cut

CHAINAGE 0+240.49

0+240.49	-5.712	104.4071	239.2020	158.022	Back_Curb
0+240.49	-5.212	103.9453	239.3936	158.022	Top_Curb
0+240.49	-5.170	103.9068	239.4096	157.272	Flowline_Gutter
0+240.49	-4.520	103.3064	239.6587	156.861	ETW_SubBase
0+240.49	-4.520	103.3064	239.6587	157.311	ETW

0+240.49	-4.520	103.3064	239.6587	157.311	Flange
0+240.49	3.000	96.3606	242.5406	156.673	ETW_SubBase
0+240.49	3.000	96.3606	242.5406	157.123	Flange
0+240.49	3.000	96.3606	242.5406	157.123	ETW
0+240.49	3.650	95.7602	242.7897	157.084	Flowline_Gutter
0+240.49	3.692	95.7217	242.8056	157.834	Top_Curb
0+240.49	4.192	95.2598	242.9972	157.834	Back_Curb
0+240.49	5.191	94.3371	243.3801	157.124	EPS_Sub
0+240.49	5.192	94.3362	243.3805	157.794	Hinge_Cut
0+240.49	5.192	94.3362	243.3805	157.794	EPS
0+240.49	5.192	94.3362	243.3805	157.794	Ditch_In
0+240.49	5.192	94.3362	243.3805	157.794	Ditch_Out
0+240.49	12.094	87.9609	246.0256	171.599	Daylight
0+240.49	12.094	87.9609	246.0256	171.599	Daylight_Cut
0+240.49	-7.463	106.0245	238.5310	159.484	Daylight
0+240.49	-7.463	106.0245	238.5310	159.484	Daylight_Cut
0+240.49	-6.712	105.3308	238.8188	157.982	Hinge_Cut
0+240.49	-6.712	105.3308	238.8188	157.982	Ditch_Out
0+240.49	-6.712	105.3308	238.8188	157.982	EPS
0+240.49	-6.712	105.3308	238.8188	157.982	Ditch_In
0+240.49	-6.711	105.3299	238.8191	157.312	EPS_Sub

CHAINAGE 0+260.49

0+260.00	-7.866	115.3705	253.4351	159.976	Daylight_Cut
0+260.00	-7.866	115.3705	253.4351	159.976	Daylight
0+260.00	-6.475	114.2541	254.2644	157.194	Hinge_Cut
0+260.00	-6.475	114.2541	254.2644	157.194	Ditch_Out

0+260.00	-6.475	114.2541	254.2644	157.194	Ditch_In
0+260.00	-6.475	114.2541	254.2644	157.194	EPS
0+260.00	-6.474	114.2533	254.2650	156.524	EPS_Sub
0+260.00	-5.475	113.4513	254.8607	157.234	Back_Curb
0+260.00	-4.975	113.0499	255.1589	157.234	Top_Curb
0+260.00	-4.934	113.0164	255.1837	156.484	Flowline_Gutter
0+260.00	-4.284	112.4947	255.5713	156.073	ETW_SubBase
0+260.00	-4.284	112.4947	255.5713	156.523	ETW
0+260.00	-4.284	112.4947	255.5713	156.523	Flange
0+260.00	3.000	106.6474	259.9147	155.891	ETW_SubBase
0+260.00	3.000	106.6474	259.9147	156.341	ETW
0+260.00	3.000	106.6474	259.9147	156.341	Flange
0+260.00	3.650	106.1256	260.3023	156.302	Flowline_Gutter
0+260.00	3.692	106.0921	260.3272	157.052	Top_Curb
0+260.00	4.192	105.6907	260.6253	157.052	Back_Curb
0+260.00	5.191	104.8887	261.2210	156.342	EPS_Sub
0+260.00	5.192	104.8879	261.2216	157.012	Hinge_Cut
0+260.00	5.192	104.8879	261.2216	157.012	Ditch_In
0+260.00	5.192	104.8879	261.2216	157.012	Ditch_Out
0+260.00	5.192	104.8879	261.2216	157.012	EPS
0+260.00	11.445	99.8685	264.9501	169.518	Daylight
0+260.00	11.445	99.8685	264.9501	169.518	Daylight_Cut

CHAINAGE 0+280.49

0+280.00	-5.592	125.8215	270.3167	157.160	Daylight
0+280.00	-5.592	125.8215	270.3167	157.160	Daylight_Cut
0+280.00	-5.192	125.5094	270.5669	156.360	Ditch_In

0+280.00	-5.192	125.5094	270.5669	156.360	EPS
0+280.00	-5.192	125.5094	270.5669	156.360	Hinge_Cut
0+280.00	-5.192	125.5094	270.5669	156.360	Ditch_Out
0+280.00	-5.191	125.5086	270.5675	155.690	EPS_Sub
0+280.00	-3.692	124.3391	271.5051	156.400	Top_Curb
0+280.00	-3.650	124.3065	271.5312	155.650	Flowline_Gutter
0+280.00	-3.000	123.7994	271.9378	155.239	ETW_SubBase
0+280.00	-3.000	123.7994	271.9378	155.689	ETW
0+280.00	-3.000	123.7994	271.9378	155.689	Flange
0+280.00	3.000	119.1179	275.6906	155.089	ETW_SubBase
0+280.00	3.000	119.1179	275.6906	155.539	Flange
0+280.00	3.000	119.1179	275.6906	155.539	ETW
0+280.00	3.692	118.5782	276.1233	156.250	Top_Curb
0+280.00	5.191	117.4086	277.0608	155.540	EPS_Sub
0+280.00	-4.192	124.7292	271.1924	156.400	Back_Curb
0+280.00	3.650	118.6107	276.0972	155.500	Flowline_Gutter
0+280.00	4.192	118.1881	276.4360	156.250	Back_Curb
0+280.00	5.192	117.4078	277.0615	156.210	EPS
0+280.00	5.192	117.4078	277.0615	156.210	Hinge_Cut
0+280.00	5.192	117.4078	277.0615	156.210	Ditch_In
0+280.00	5.192	117.4078	277.0615	156.210	Ditch_Out
0+280.00	9.959	113.6884	280.0431	165.744	Daylight_Cut
0+280.00	9.959	113.6884	280.0431	165.744	Daylight

CHAINAGE 0+300.49

0+300.00	-8.489	140.5915	284.1095	152.261	Daylight_Fill
0+300.00	-8.489	140.5915	284.1095	152.261	Daylight

0+300.00	-5.192	138.0189	286.1718	155.558	Hinge_Fill
0+300.00	-5.192	138.0189	286.1718	155.558	EPS
0+300.00	-5.192	138.0189	286.1718	155.558	Hinge
0+300.00	-5.191	138.0181	286.1724	154.888	EPS_Sub
0+300.00	-4.192	137.2387	286.7973	155.598	Back_Curb
0+300.00	-3.692	136.8486	287.1100	155.598	Top_Curb
0+300.00	-3.650	136.8160	287.1361	154.848	Flowline_Gutter
0+300.00	-3.000	136.3089	287.5427	154.437	ETW_SubBase
0+300.00	-3.000	136.3089	287.5427	154.887	ETW
0+300.00	-3.000	136.3089	287.5427	154.887	Flange
0+300.00	3.000	131.6274	291.2955	154.287	ETW_SubBase
0+300.00	3.000	131.6274	291.2955	154.737	Flange
0+300.00	3.000	131.6274	291.2955	154.737	ETW
0+300.00	3.650	131.1202	291.7021	154.698	Flowline_Gutter
0+300.00	3.692	131.0877	291.7281	155.448	Top_Curb
0+300.00	4.192	130.6976	292.0409	155.448	Back_Curb
0+300.00	5.191	129.9181	292.6657	154.738	EPS_Sub
0+300.00	5.192	129.9173	292.6664	155.408	Hinge_Cut
0+300.00	5.192	129.9173	292.6664	155.408	Ditch_In
0+300.00	5.192	129.9173	292.6664	155.408	Ditch_Out
0+300.00	5.192	129.9173	292.6664	155.408	EPS
0+300.00	7.321	128.2558	293.9983	159.667	Daylight
0+300.00	7.321	128.2558	293.9983	159.667	Daylight_Cut

CHAINAGE 0+320.49

0+320.00	-15.269	158.3915	295.4733	144.679	Daylight_Fill
0+320.00	-15.269	158.3915	295.4733	144.679	Daylight

0+320.00	-5.192	150.5284	301.7767	154.756	Hinge_Fill
0+320.00	-5.192	150.5284	301.7767	154.756	Hinge
0+320.00	-5.192	150.5284	301.7767	154.756	EPS
0+320.00	-5.191	150.5276	301.7773	154.086	EPS_Sub
0+320.00	-4.192	149.7482	302.4022	154.796	Back_Curb
0+320.00	-3.692	149.3581	302.7149	154.796	Top_Curb
0+320.00	-3.650	149.3255	302.7410	154.046	Flowline_Gutter
0+320.00	-3.000	148.8184	303.1475	153.635	ETW_SubBase
0+320.00	-3.000	148.8184	303.1475	154.085	Flange
0+320.00	-3.000	148.8184	303.1475	154.085	ETW
0+320.00	3.000	144.1369	306.9004	153.485	ETW_SubBase
0+320.00	3.000	144.1369	306.9004	153.935	ETW
0+320.00	3.000	144.1369	306.9004	153.935	Flange
0+320.00	3.650	143.6297	307.3070	153.896	Flowline_Gutter
0+320.00	3.692	143.5972	307.3330	154.646	Top_Curb
0+320.00	4.192	143.2071	307.6458	154.646	Back_Curb
0+320.00	5.191	142.4276	308.2706	153.936	EPS_Sub
0+320.00	5.192	142.4268	308.2712	154.606	Hinge_Cut
0+320.00	5.192	142.4268	308.2712	154.606	Ditch_Out
0+320.00	5.192	142.4268	308.2712	154.606	Ditch_In
0+320.00	5.192	142.4268	308.2712	154.606	EPS
0+320.00	8.043	140.2024	310.0545	160.308	Daylight
0+320.00	8.043	140.2024	310.0545	160.308	Daylight_Cut

6.4. VERTIKALNI TOK TRASE

Profile PVI Station & Curve Report

Client:

Prepared by:

Client

Preparer

Client Company

Your Company Name

Address 1

123 Main Street

Date: 16.6.2023. 22:55:29

Vertical Alignment: NIVELETA

Description:

Station Range: Start: 0+008.00, End: 32+050.00

PVI	Station	Grade Out	Curve Length
0.00	0+220.50	-4.01%	22.906m
Vertical Curve Information:(sag curve) <hr/> PVC Station: 0+209.07 Elevation: 158.986m PVI Station: 0+220.50 Elevation: 158.000m PVT Station: 0+231.97 Elevation: 157.540m Low Point: 0+231.97 Elevation: 157.540m Grade in: -8.62% Grade out: -4.01% Change: 4.61% K: Curve Length: 22.906m Headlight Distance:			
1.00	0+320.50		

7. LITERATURA

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