Idejni projekt dionice ceste

Pipunić, Ema

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SVEUČILIŠTE U SPLITU
FAKULTET GRAĐEVINARSTVA, ARHITEKTURE I GEODEZIJE

ZAVRŠNI RAD

EMA PIPUNIĆ

Split, 2016. godina

SVEUČILIŠTE U SPLITU
FAKULTET GRAĐEVINARSTVA, ARHITEKTURE I GEODEZIJE

IDEJNI PROJEKT DIONICE CESTE

ZAVRŠNI RAD

Split, 2016. godina

SVEUČILIŠTE U SPLITU
FAKULTET GRAĐEVINARSTVA, ARHITEKTURE I GEODEZIJE

Split, Matice hrvatske 15

STUDIJ: **PREDDIPLOMSKI SVEUČILIŠNI STUDIJ GRAĐEVINARSTVA**

KANDIDAT: **Ema Pipunić**

BROJ INDEKSA: **4070**

KATEDRA: **Katedra za prometnice**

PREDMET: **Ceste**

ZADATAK ZA ZAVRŠNI RAD

Tema: IDEJNI PROJEKT DIONICE CESTE

Opis zadatka: Uz pomoć programa za projektiranje cesta Autocad Civil 3D potrebno je izraditi idejni projekt ceste između točaka A i B. Situacija je preuzeta iz programa iz kolegija Ceste koje smo radili na trećoj godini preddiplomskog studija.

U Splitu, lipanj 2016. Voditelj Završnog rada: Dr.sc. Dražen Cvitanić

Idejno rješenje lokalne ceste

Sažetak:
Uz pomoć programa za projektiranje cesta AUTOCAD CIVIL 3D izrađeno je idejno rješenje dionice ceste na posebnoj geodetskoj podlozi prema zadatku iz kolegija Ceste. Cesta je projektirana za godišnji dnevni promet (PGDP) od 950 vozila na dan, na brdovitom terenu. Projektna brzina ceste iznosi 40km/h.

Ključne riječi:
idejno rješenje, projektna brzina, uzdužni presjek, poprečni presjek, duljina prijelazne krivine, radijus krivine, niveleta, os ceste

The task of finishing work

Abstract:

With the support of the softwer for designing roads, autocad civil 3D, is made preliminary design of the road on special geodetic base according to the task of college Roads. The road is designed for an annual daily traffic (ATD) of 950 vehicles per day on hilly terrain. The design speed of the road is 40 km/h.

Keywords:

Conceptual solution, design speed, longitudinal section, cross-section,
the length of the spiral, curve radius, vertical alignment, horizontal alignment

SADRŽAJ

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2. GRAĐEVINSKA SITUACIJA
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   - 5.2. KOORDINATNI RAČUN DETALJNIH TOČAKA OSI
   - 5.3. RAČUN KOTA KOLNIKA
   - 5.4. VERTIKALNI TOK TRASE

1. TEHNIČKI OPIS

1. OPĆENITO

Predmet projekta je dionica ceste od točke A(275 m.n.m.) do točke B(263 m.n.m.) koje su naznačene na datoj geodetskoj situaciji. PGDP ceste je 950 voz/dan, tj. cesta je V. kategorije. Projektna brzina je Vp = 40 km/h, a duljina trase je 409m. Zadatak je izrađen pomoću računalnog programa Autocad Civil 3D.

2. HORIZONTALNI ELEMENTI

Za projektnu brzinu Vp = 40 km/h prema pravilniku minimalni radijus horizontalne krivine iznosi Rmin = 45m.
Primijenjeni radijusi i prijelaznice su:
za lijevu krivinu R_1 = 130 m L = 40 m.
za desnu krivinu R_2 = 60 m L = 40 m
za lijevu krivinu R_3 = 75 m L = 40 m.

3. VERTIKALNI ELEMENTI

Prema kategoriji ceste maksimalni nagib nivelete iznosi 12 %.
Primijenjeni nagibi nivelete su 3.11 % i 2.77 %.
Niveleta je u padu od točke A do točke B s jednom konkavnom krivinom radijusa
R = 20000 m.

4. POPREČNI PRESJEK

Dionica ceste ima 2 prometna traka širine 3.00 m, rubni betonski trak širine 0.2m, a debljine 0.1m. Bankina je širine 1m s nagibom minimalno 4 %.
Trasa je kombinirano u usjeku, zasjeku i nasipu. Nagib pokosa je 1:1.5. Poprečni nagib u pravcu iznosi 2.5 %, u prvoj krivini 3.3%, u drugoj krivini 5.8 %, a u trećoj krivini 4.9%.

5. KOLNIČKA KONSTRUKCIJA

Projektom je predviđena slijedeća kolnička konstrukcija:

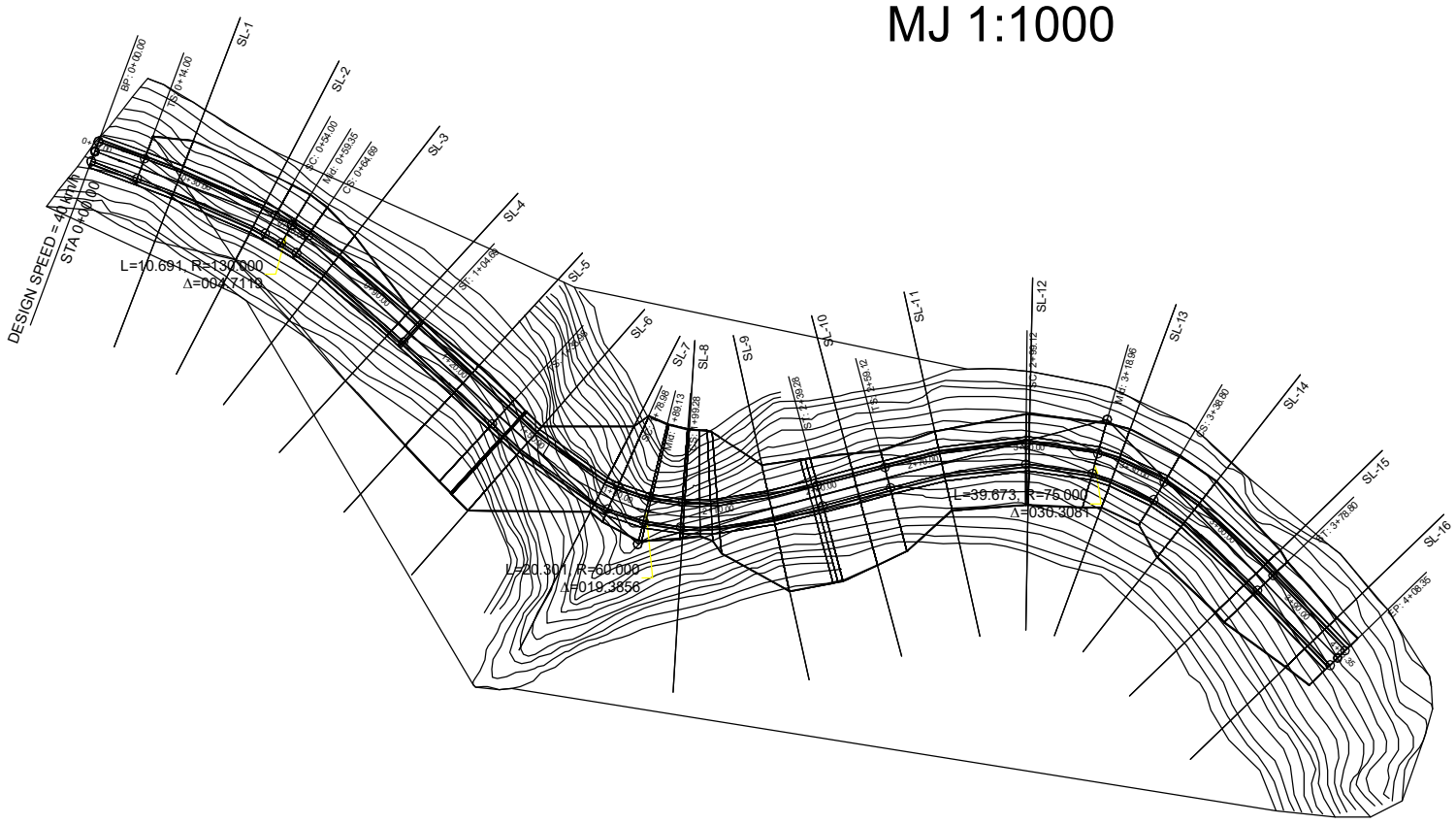
1. Asfalt-beton habajući sloj AB 11 debljine 4 cm,
2. Bitumenizirani nosivi sloj BNS 22 debljine 6 cm,
3. Nevezani nosivi sloj MZNS debljine 30 cm.

6. ODVODNJA

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

2. GRAĐEVINSKA SITUACIJA
MJ 1: 1000

GRAĐEVINSKA SITUACIJA
MJ 1:1000

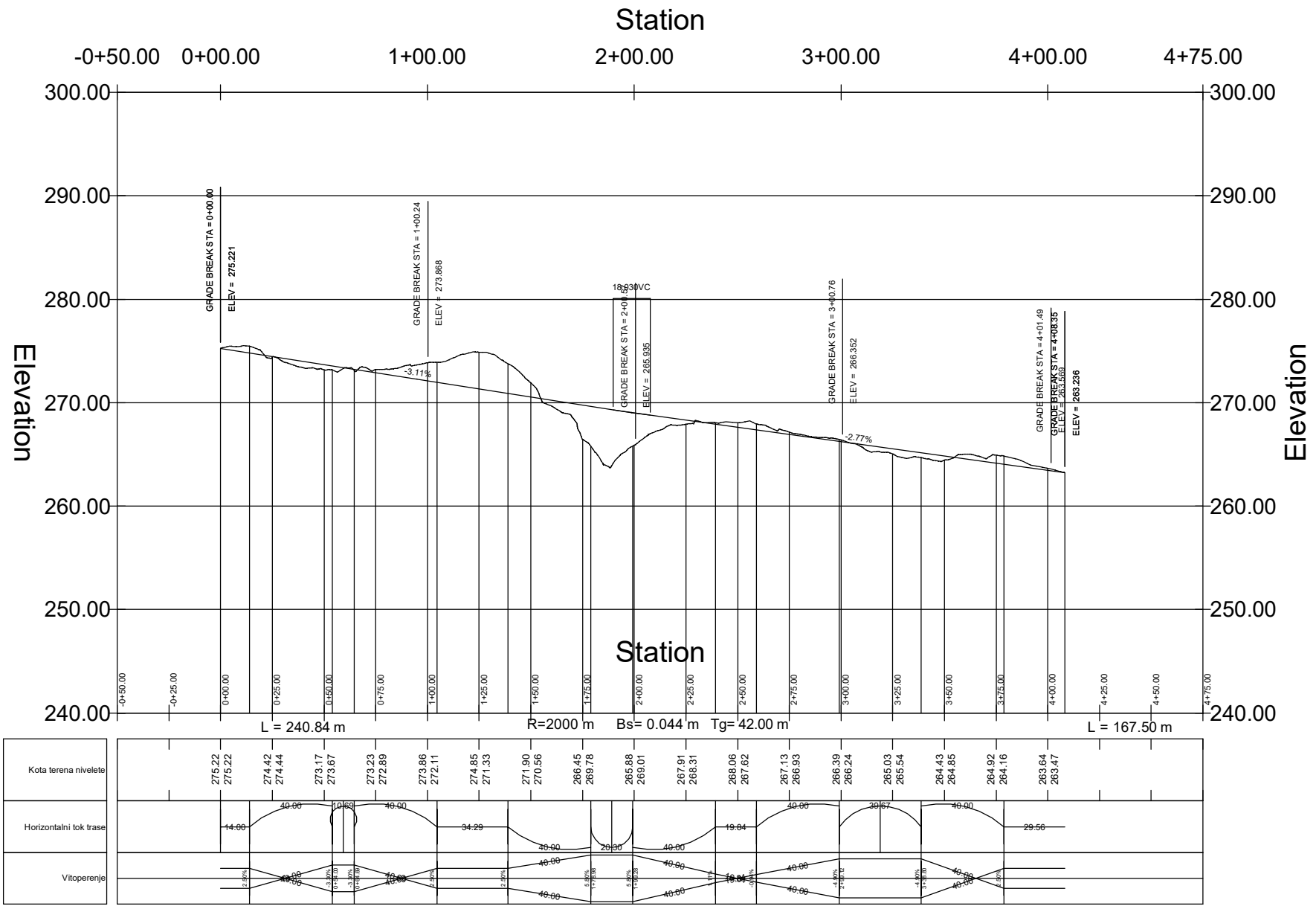


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3. UZDUŽNI PRESJEK
MJ 1:1000/100

Uzdužni presjek

MJ 1:1000 / 100



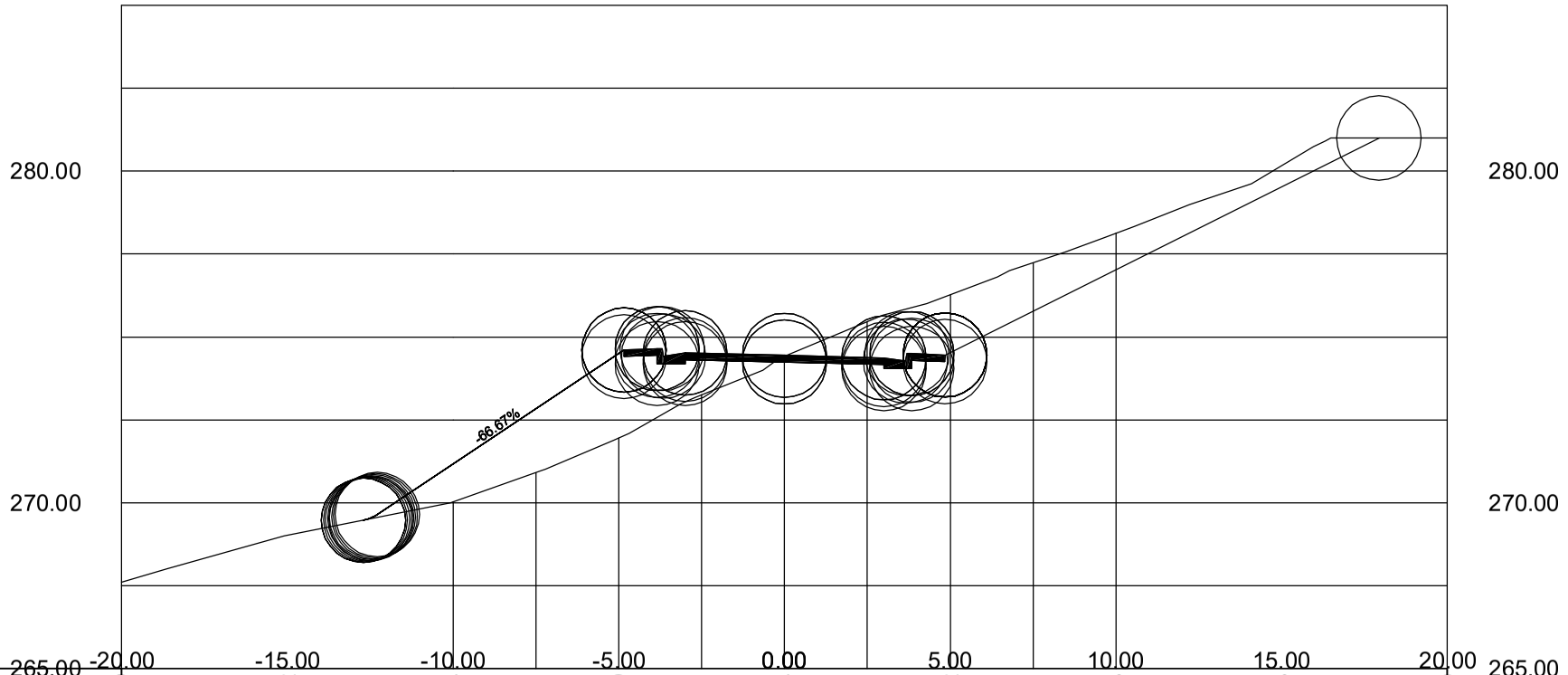
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4. KARAKTERISTIČNI POPREČNI PRESJECI MJ 1:100

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POPREČNI PRESJEK 1

0+25.00

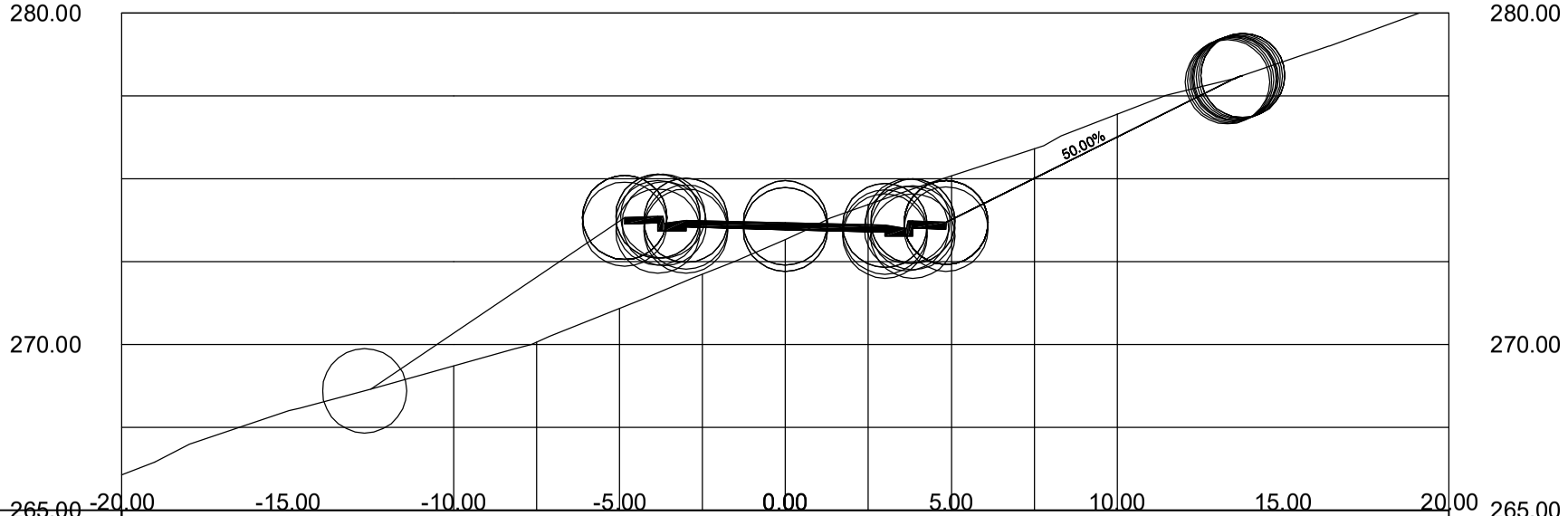


Udaljenost od osi	-20.00	-15.00	-10.00	-5.00	0.00	5.00	10.00	15.00	20.00
Kote terena	267.59	269.02	270.03	271.95	274.42	276.27	278.13	280.17	281.00
Kote projekta	267.59	269.02	271.14	274.50	274.44	274.52	277.03	279.53	281.00

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POPREČNI PRESJEK 2

0+50.00

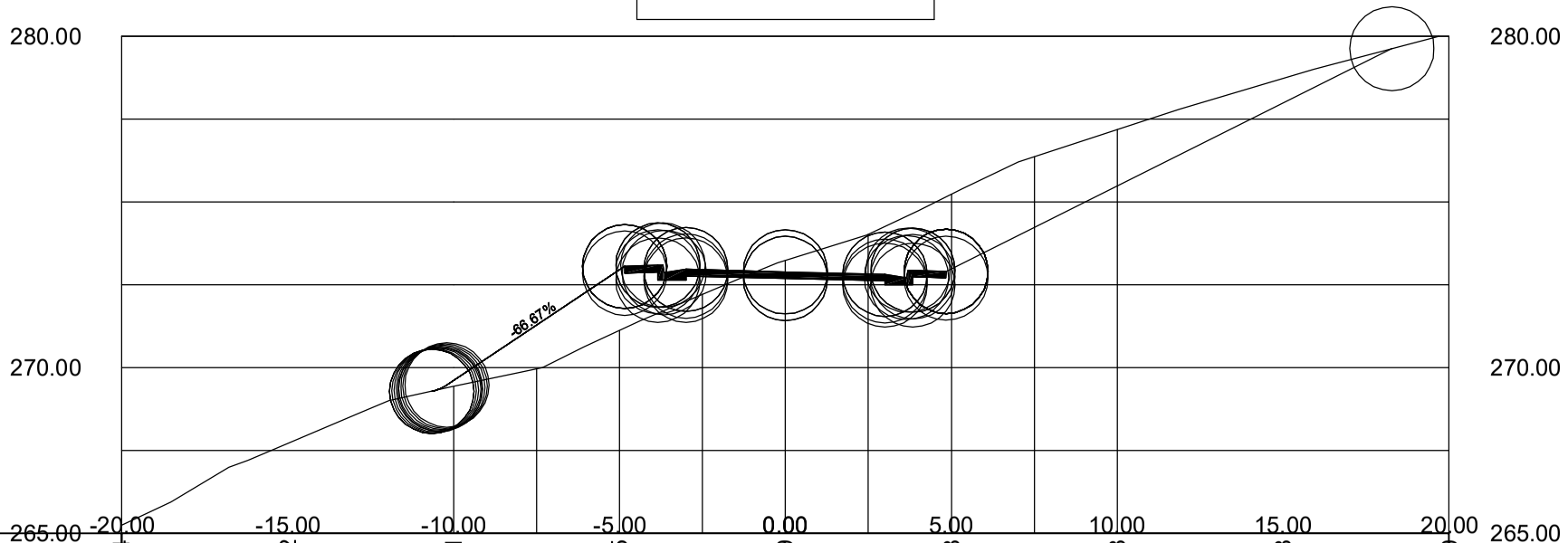


Udaljenost od osi	-20.00	-15.00	-10.00	-5.00	0.00	5.00	10.00	15.00	20.00
Kote terena	266.07	267.98	269.35	271.08	273.17	275.08	276.95	278.53	280.49
Kote projekta	266.07	267.98	270.34	273.72	273.67	273.76	276.26	278.53	280.49

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POPREČNI PRESJEK 3

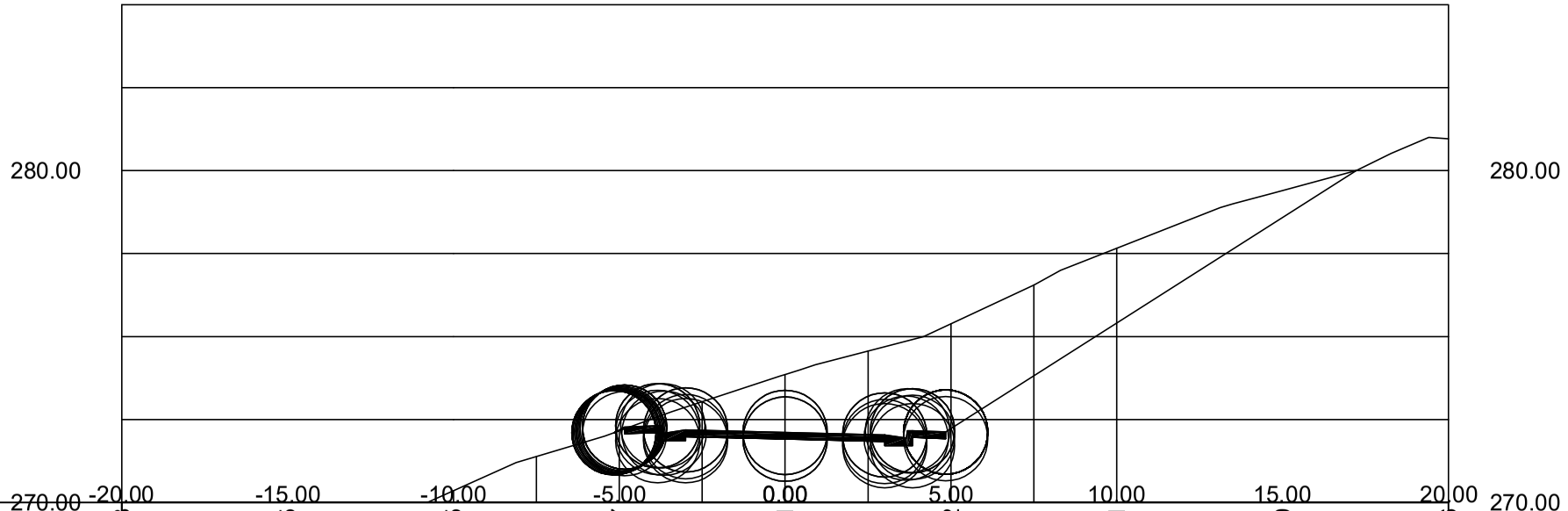
0+75.00



Udaljenost od osi	-20.00	-15.00	-10.00	-5.00	0.00	5.00	10.00	15.00	20.00
Kote terena	265.24	267.72	269.43	271.13	273.23	275.23	277.17	278.72	280.19
Kote projekta	265.24	267.72	269.61	272.95	272.89	272.98	275.48	277.98	280.19

POPREČNI PRESJEK 4

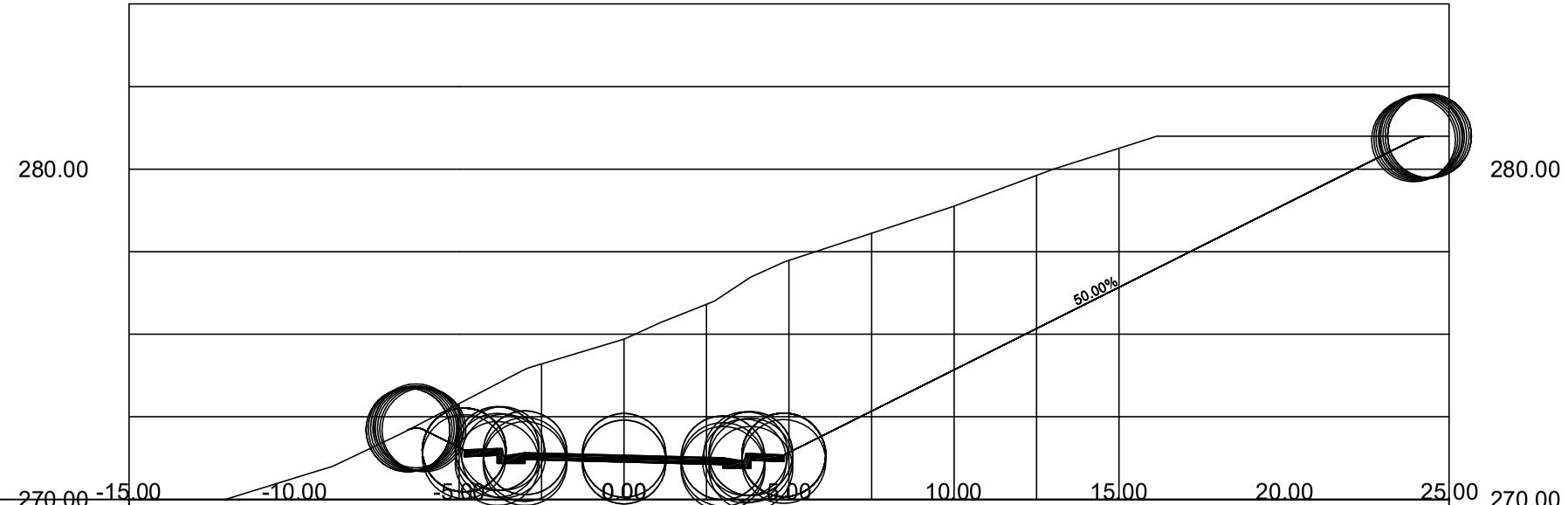
1+00.00



Kote projekta	267.13	268.75	270.35	272.17	272.11	272.22	275.41	278.59	280.96
Kote terena	267.13	268.75	270.35	272.16	273.86	275.39	277.66	279.40	280.96
Udaljenost od osi	-20.00	-15.00	-10.00	-5.00	0.00	5.00	10.00	15.00	20.00

POPREČNI PRESJEK 5

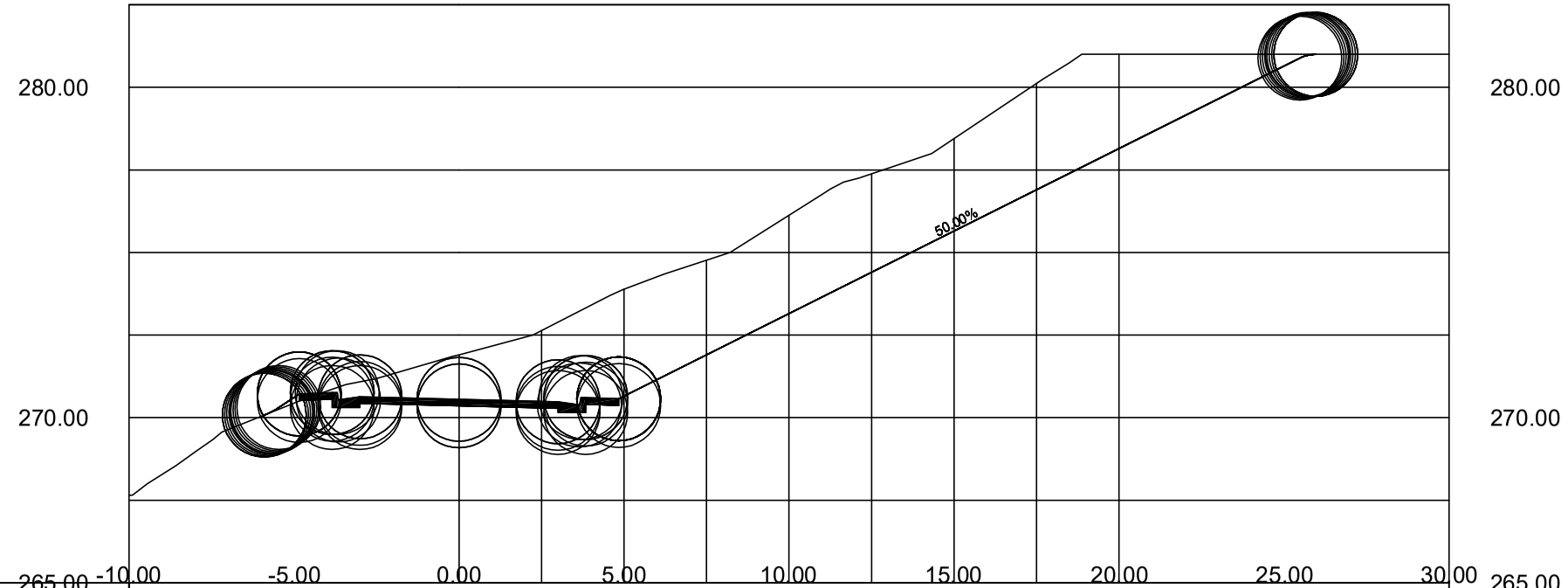
1+25.00



Udaljenost od osi	-15.00	-10.00	-5.00	0.00	5.00	10.00	15.00	20.00	25.00
Kote terena	269.01	270.64	272.90	274.85	277.24	278.88	280.64	281.00	281.00
Kote projekta	269.01	270.64	271.58	271.31	271.43	273.93	276.43	278.93	281.00

POPREČNI PRESJEK 6

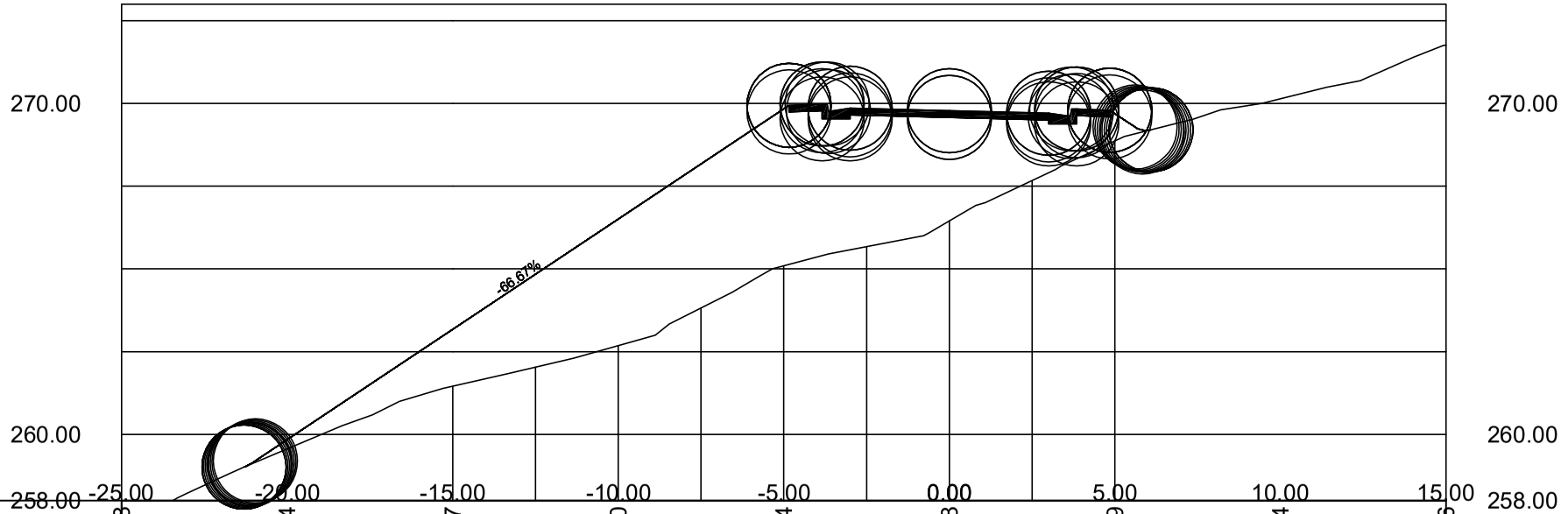
1+50.00



Udaljenost od osi	-10.00	-5.00	0.00	5.00	10.00	15.00	20.00	25.00	30.00
Kote terena	267.64	270.43	271.90	273.89	276.13	278.45	281.00	281.00	281.00
Kote projekta	267.64	270.61	270.56	270.65	273.15	275.65	278.15	280.65	281.00

POPREČNI PRESJEK 7

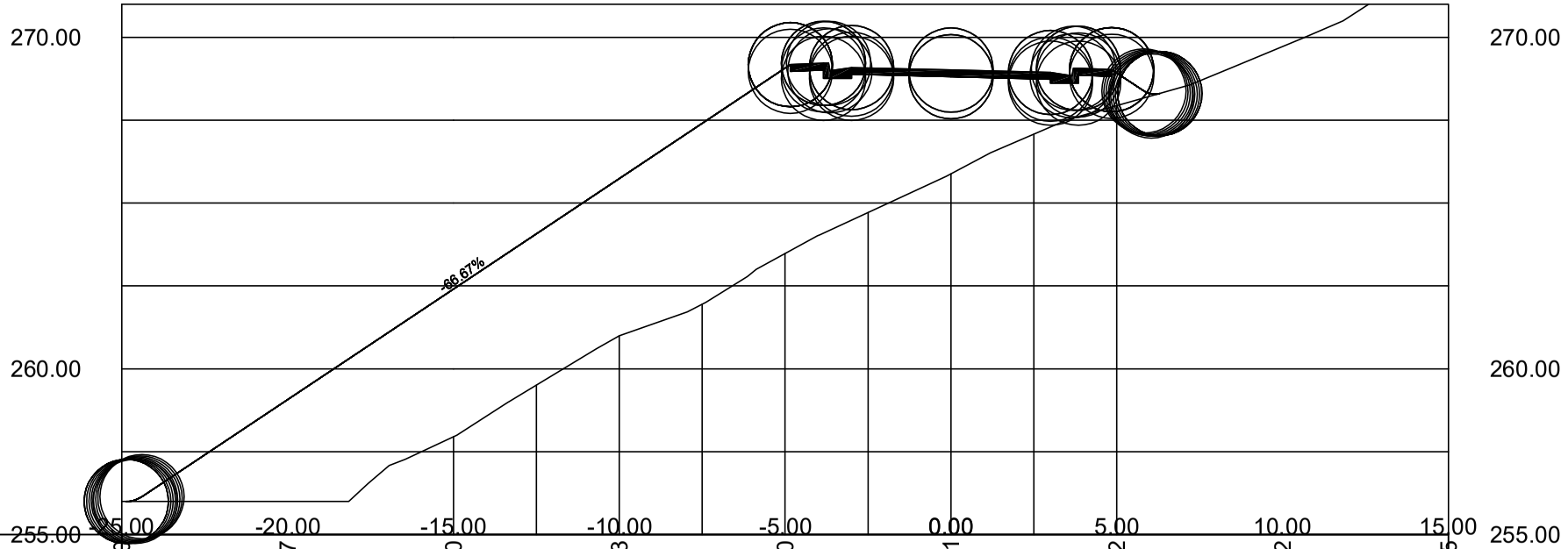
1+75.00



Udaljenost od osi	-25.00	-20.00	-15.00	-10.00	-5.00	0.00	5.00	10.00	15.00
Kote terena	257.08	259.56	261.46	262.68	265.09	266.45	268.87	270.14	271.76
Kote projekta	257.08	259.84	263.17	266.50	269.84	269.78	269.69	270.14	271.76

POPREČNI PRESJEK 8

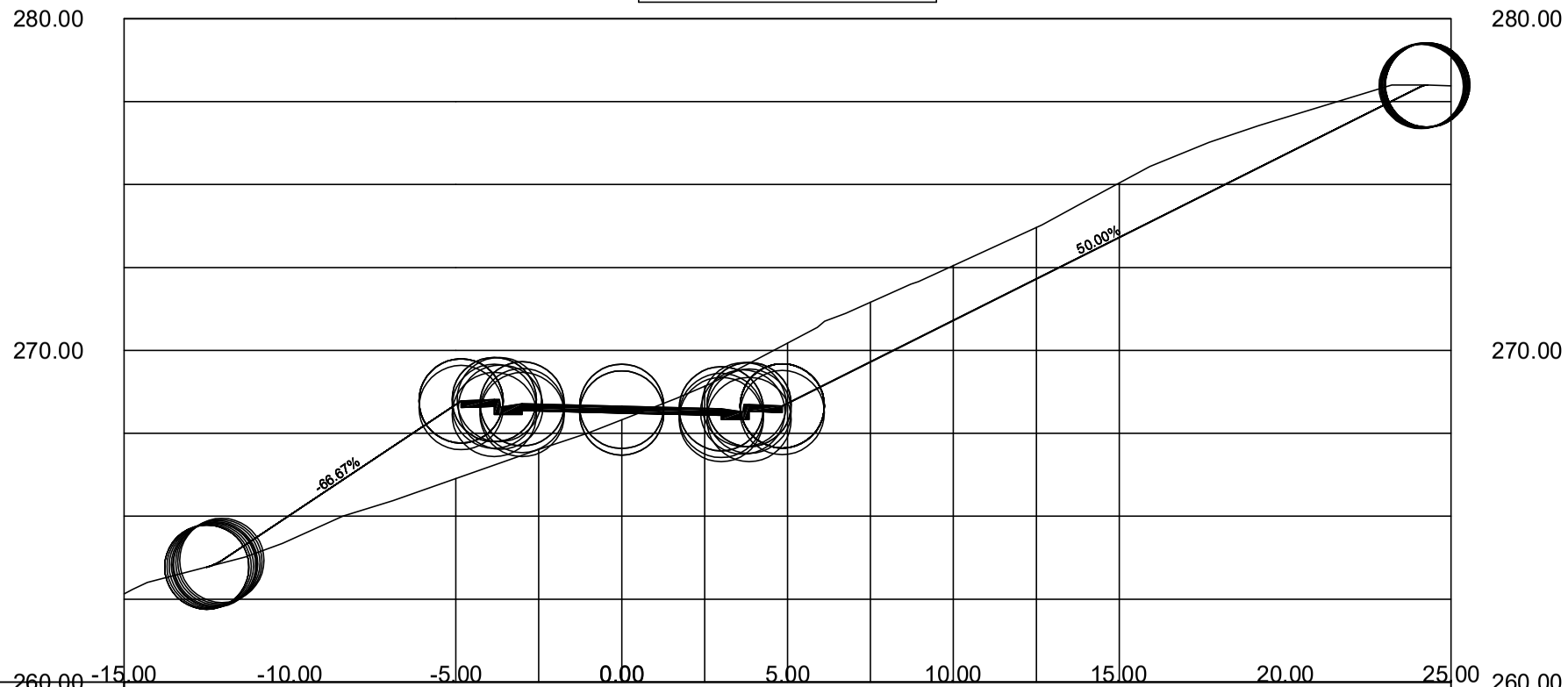
2+00.00



Udaljenost od osi	-25.00	-20.00	-15.00	-10.00	-5.00	0.00	5.00	10.00	15.00
Kote terena	256.00	256.00	257.95	261.00	263.48	265.88	267.94	269.72	272.25
Kote projekta	256.00	259.07	262.40	265.73	269.10	269.01	268.92	269.72	272.25

POPREČNI PRESJEK 9

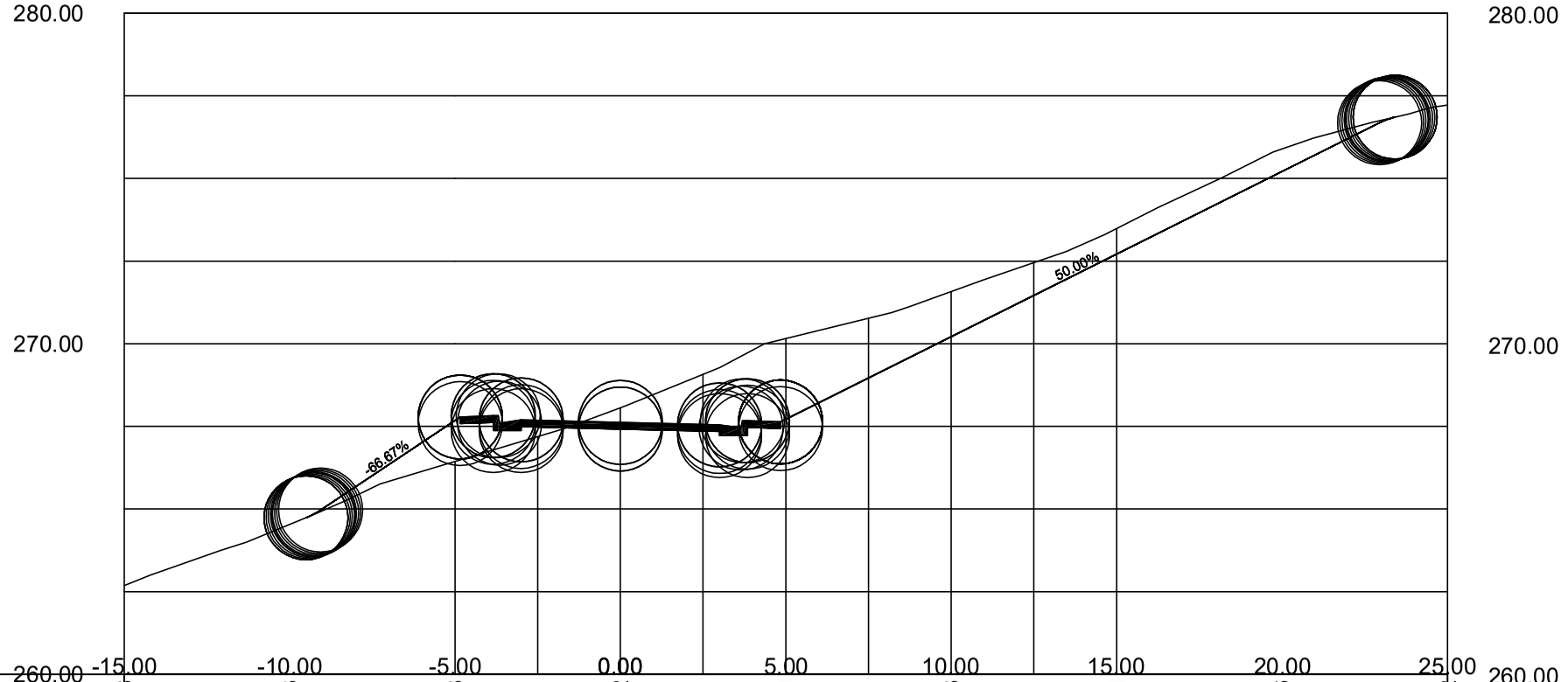
2+25.00



Kote projekta	262.66	265.04	268.37	268.31	268.40	270.90	273.40	257.90	277.98
Kote terena	262.66	264.28	266.13	267.91	270.22	272.56	275.05	277.02	277.98
Udaljenost od osi	-15.00	-10.00	-5.00	0.00	5.00	10.00	15.00	20.00	25.00

POPREČNI PRESJEK 10

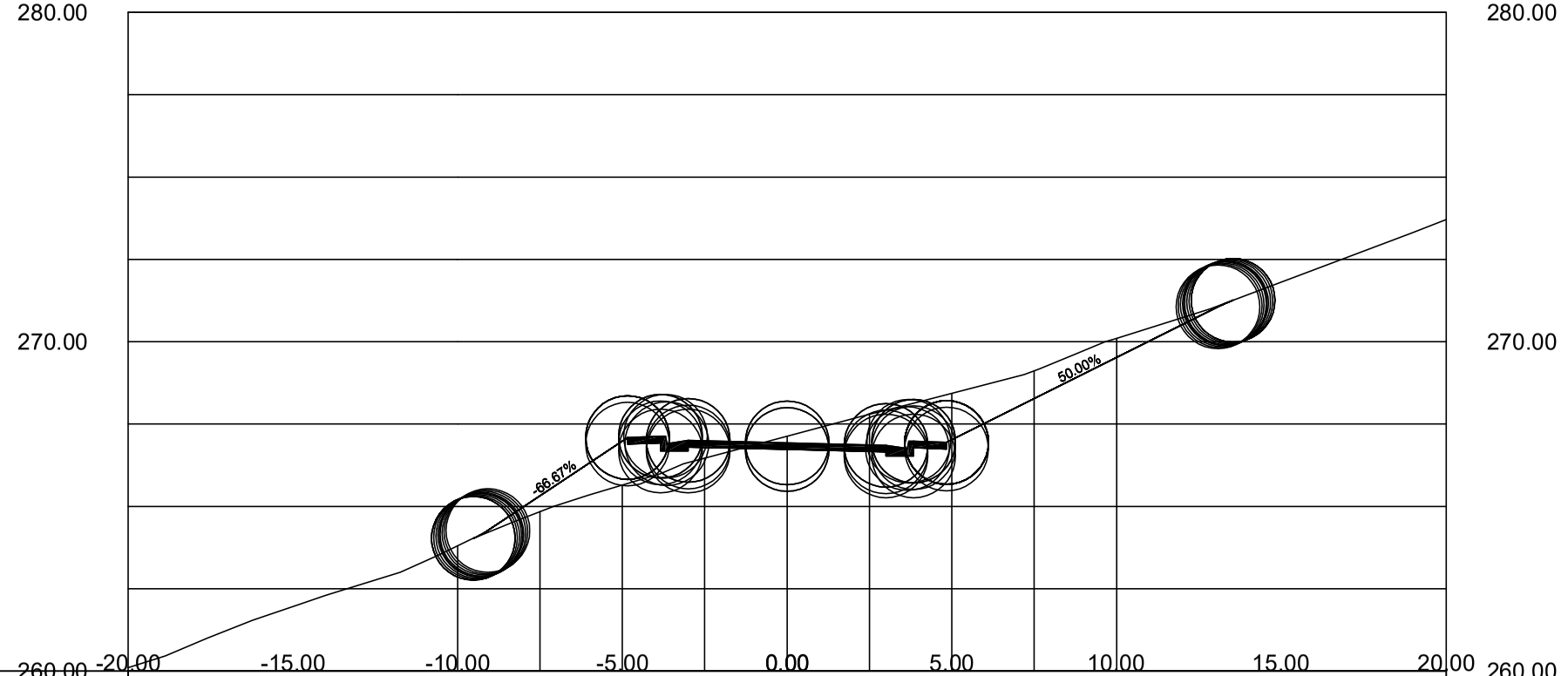
2+50.00



Kote projekta	262.68	264.53	267.68	267.62	267.71	271.58	272.71	275.26	277.22
Kote terena	262.68	264.53	266.44	268.06	270.16	271.58	273.48	275.89	277.22
Udaljenost od osi	-15.00	-10.00	-5.00	0.00	5.00	10.00	15.00	20.00	25.00

POPREČNI PRESJEK 11

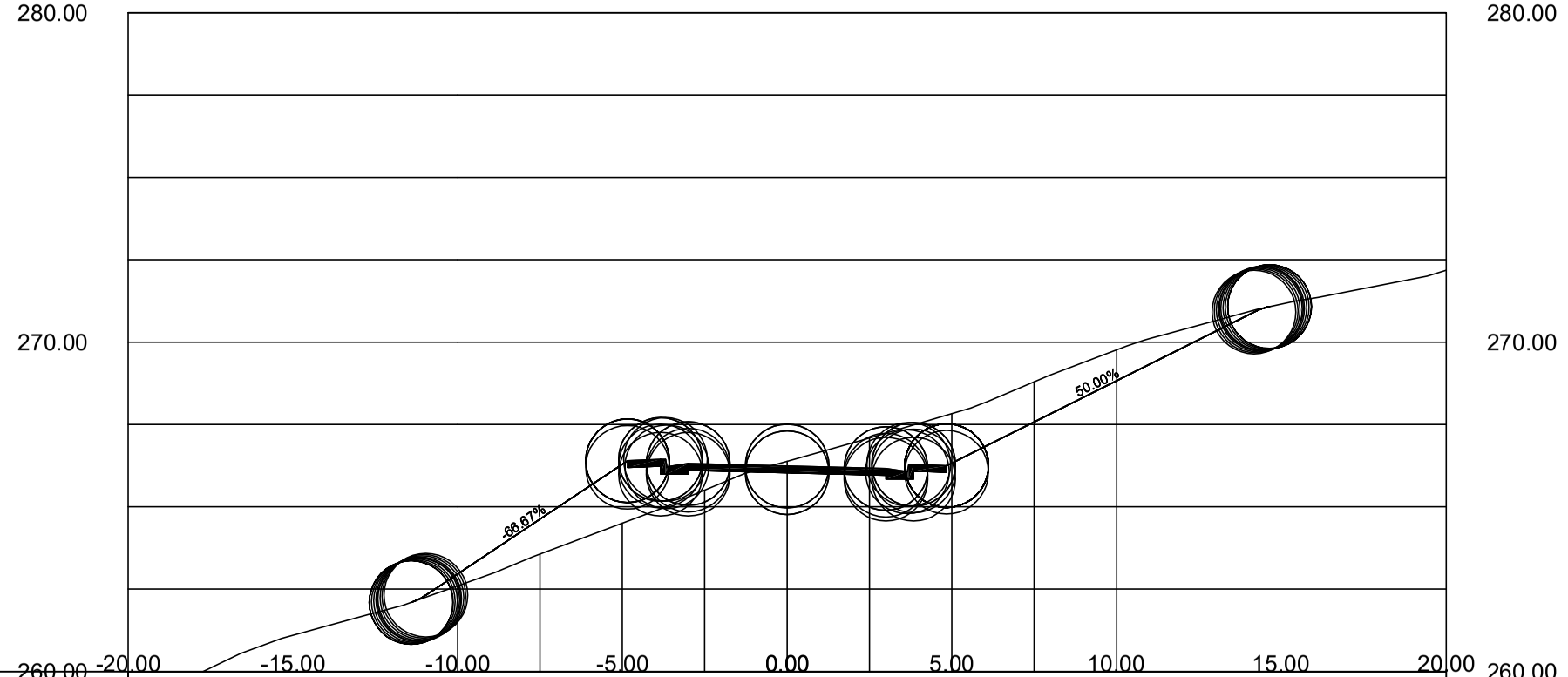
2+75.00



Udaljenost od osi	-20.00	-15.00	-10.00	-5.00	0.00	5.00	10.00	15.00	20.00
Kote terena	260.10	261.96	263.80	265.65	267.13	268.43	270.10	271.81	273.71
Kote projekta	260.10	261.96	263.80	267.00	266.93	267.02	269.52	271.81	273.71

POPREČNI PRESJEK 12

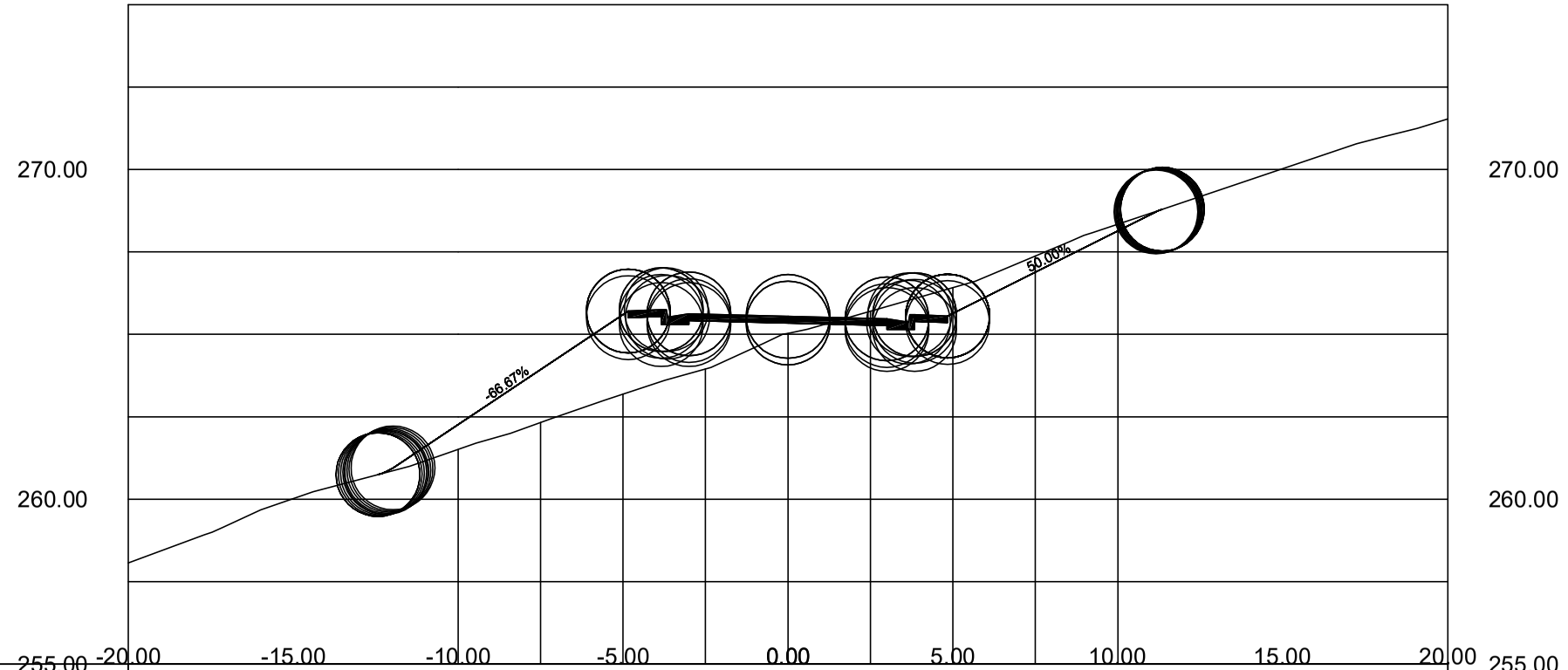
3+00.00



Udaljenost od osi	-20.00	-15.00	-10.00	-5.00	0.00	5.00	10.00	15.00	20.00
Kote terena	258.82	261.09	262.60	264.50	266.38	267.83	269.76	271.15	272.18
Kote projekta	258.82	261.09	262.96	266.30	266.24	266.33	268.83	271.15	272.18

POPREČNI PRESJEK 13

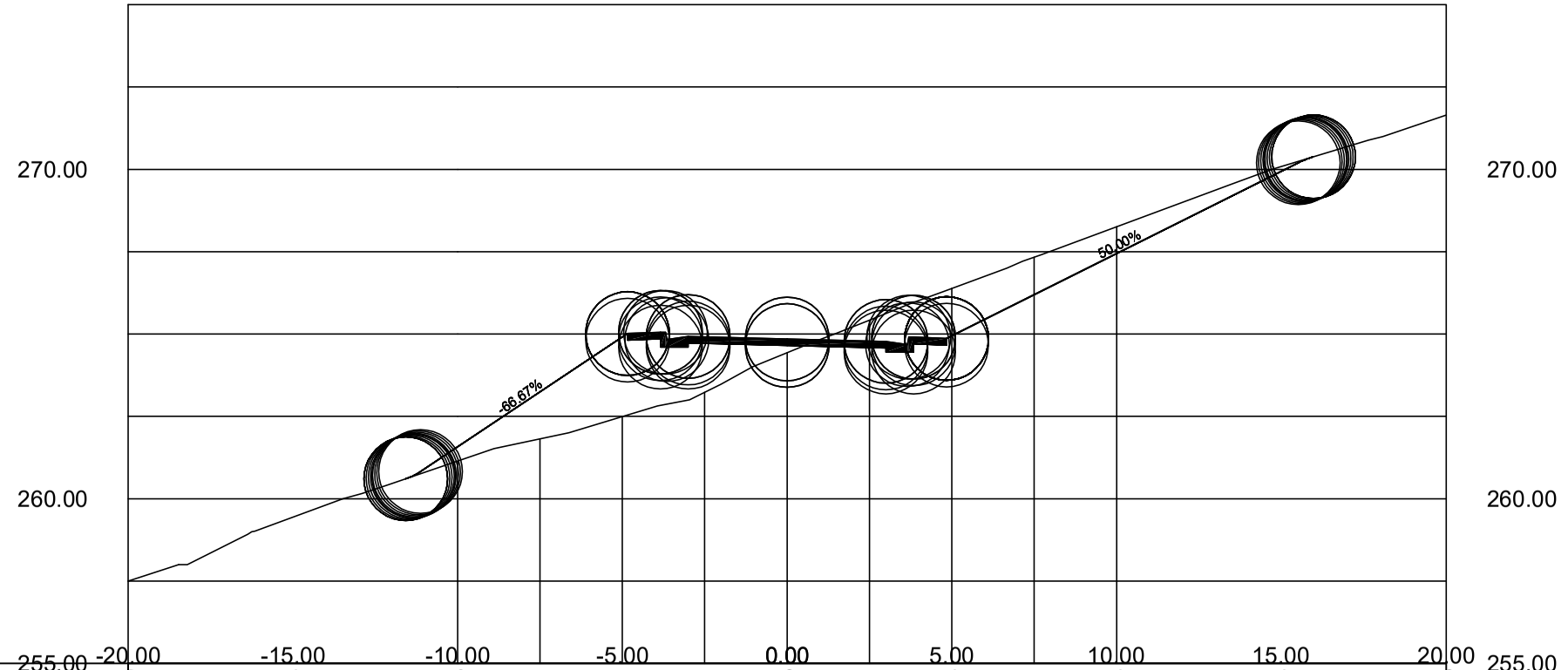
3+25.00



Udaljenost od osi	-20.00	-15.00	-10.00	-5.00	0.00	5.00	10.00	15.00	20.00
Kote terena	258.07	260.02	261.51	263.19	265.03	266.42	268.34	270.03	271.53
Kote projekta	258.07	260.02	262.27	265.60	265.54	265.64	268.14	270.03	271.53

POPREČNI PRESJEK 14

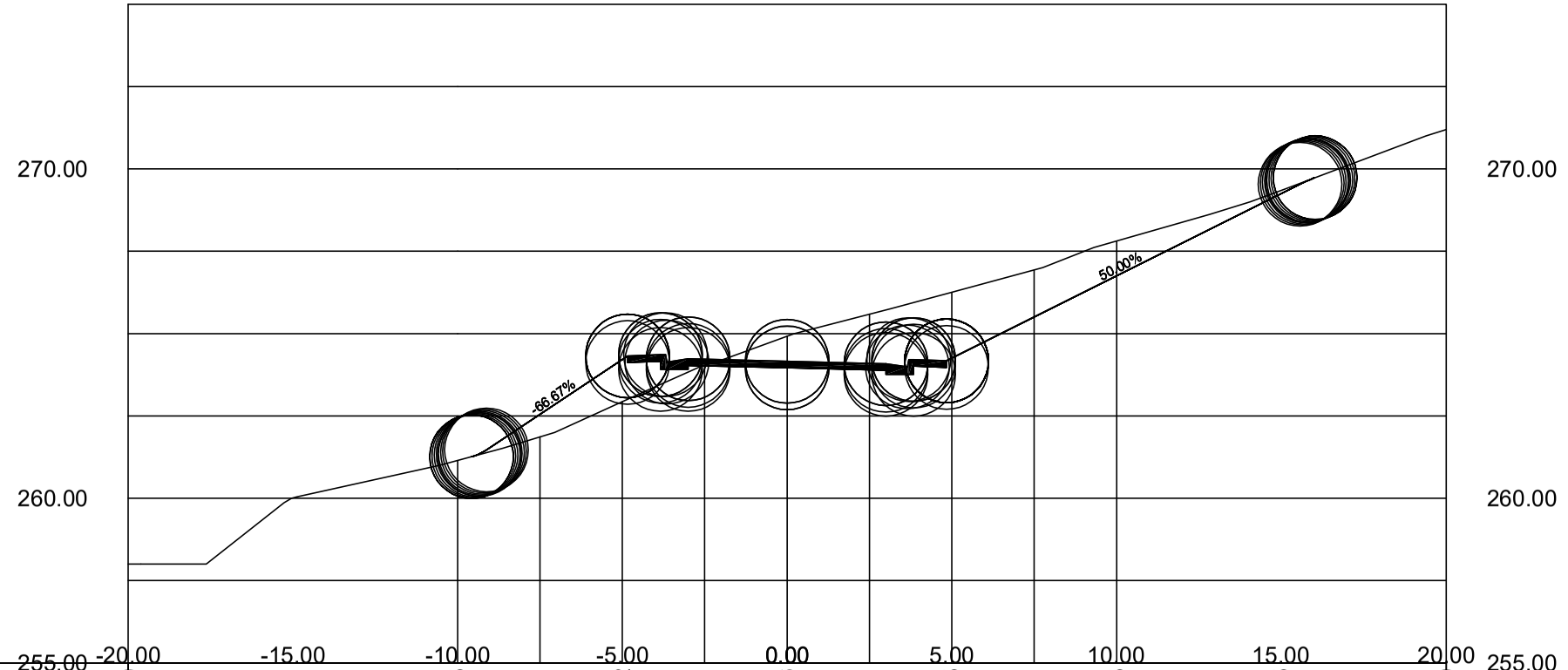
3+50.00



Udaljenost od osi	-20.00	-15.00	-10.00	-5.00	0.00	5.00	10.00	15.00	20.00
Kote terena	257.50	259.44	261.14	262.49	264.43	266.39	268.26	270.09	271.65
Kote projekta	257.50	259.44	261.58	264.91	264.85	264.94	267.44	269.94	271.65

POPREČNI PRESJEK 15

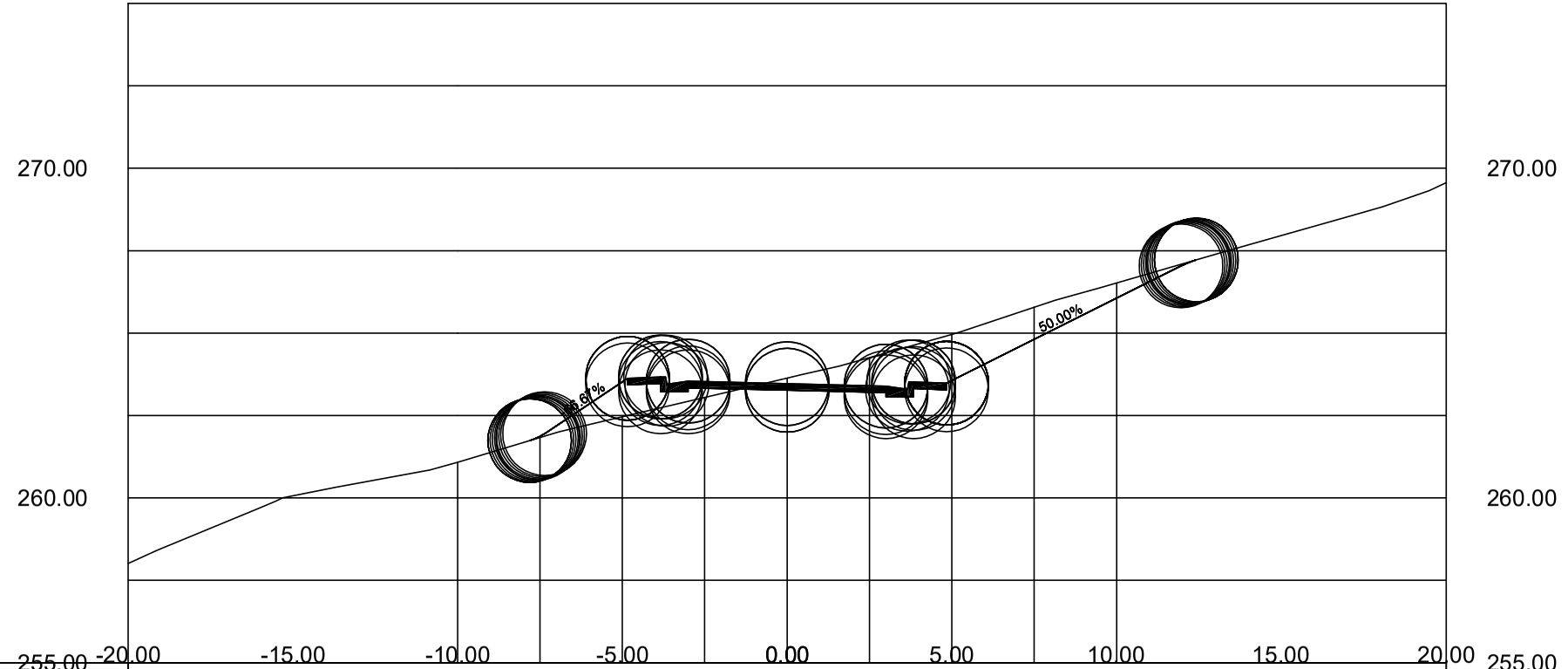
3+75.00



Kote projekta	258.00	260.01	261.15	264.22	264.16	264.25	266.75	269.25	271.19
Kote terena	258.00	260.01	261.15	262.93	264.92	266.25	267.81	269.35	271.19
Udaljenost od osi	-20.00	-15.00	-10.00	-5.00	0.00	5.00	10.00	15.00	20.00

POPREČNI PRESJEK 16

4+00.00



Udaljenost od osi	-20.00	-15.00	-10.00	-5.00	0.00	5.00	10.00	15.00	20.00
Kote terena	258.01	260.06	261.08	262.46	263.64	264.96	266.52	267.96	269.56
Kote projekta	258.01	260.06	261.08	263.52	263.47	263.56	266.06	267.96	269.56

5. ISPISI TOČAKA OSI

5.1. KOORDINATNI RAČUN GLAVIH TOČAKA OSI

Your Company Name

123 Main Street

Suite #321

City, State 01234

Alignment Station and Curve Report

Client: Client Company

Project Name: C:\Users\Sara\Desktop\Ema završni\za pregled s poprečnim presjekom1.dwg

Project Description:

Report Date: 30.6.2016. 12:40:28

Prepared by: Preparer

Alignment: Os

Description:

Tangent Data

Description	PT Station	Northing	Easting
Start:	0+00.000	196.467	37.845
End:	0+14.001	191.593	50.970

Tangent Data

Parameter	Value	Parameter	Value
Length:	14.001	Course:	S 69° 37' 40.7139" E

Spiral Point Data

Description	Station	Northing	Easting
TS:	0+14.001	191.593	50.970
SPI:		182.298	76.000
SC:	0+54.001	175.781	87.667

Spiral Curve Data: clothoid

Parameter	Value	Parameter	Value
Length:	40.000	L Tan:	26.700
Radius:	130.000	S Tan:	13.363
Theta:	08° 48' 53.0471"	P:	0.512
X:	39.905	K:	19.984
Y:	2.048	A:	72.111
Chord:	39.958	Course:	S 66° 41' 25.1522" E

Curve Point Data

Description	Station	Northing	Easting
SC:	0+54.001	175.781	87.667
RP:		62.287	24.271
CS:	0+64.692	170.190	96.776

Circular Curve Data

Parameter	Value	Parameter	Value
Delta:	04° 42' 42.9278"	Type:	RIGHT
Radius:	130.000		
Length:	10.691	Tangent:	5.349
Mid-Ord:	0.110	External:	0.110
Chord:	10.688	Course:	S 58° 27' 26.2029" E

Spiral Point Data

Description	Station	Northing	Easting
CS:	0+64.692	170.190	96.776
SPI:		162.737	107.868
ST:	1+04.692	144.626	127.486

Spiral Curve Data: clothoid

Parameter	Value	Parameter	Value
Length:	40.000	L Tan:	26.700
Radius:	130.000	S Tan:	13.363
Theta:	08° 48' 53.0471"	P:	0.512
X:	39.905	K:	19.984
Y:	2.048	A:	72.111
Chord:	39.958	Course:	S 50° 13' 27.2536" E

Tangent Data

Description	PT Station	Northing	Easting
Start:	1+04.692	144.626	127.486
End:	1+38.980	121.367	152.679

Tangent Data

Parameter	Value	Parameter	Value
Length:	34.287	Course:	S 47° 17' 11.6919" E

Spiral Point Data

Description	Station	Northing	Easting
TS:	1+38.980	121.367	152.679
SPI:		103.172	172.387
SC:	1+78.980	97.774	184.735

Spiral Curve Data: clothoid

Parameter	Value	Parameter	Value
Length:	40.000	L Tan:	26.824
Radius:	60.000	S Tan:	13.476
Theta:	19° 05' 54.9354"	P:	1.107
X:	39.558	K:	19.926
Y:	4.409	A:	48.990
Chord:	39.803	Course:	S 53° 38' 48.3880" E

Curve Point Data

Description	Station	Northing	Easting
SC:	1+78.980	97.774	184.735
RP:		152.749	208.770
CS:	1+99.280	92.913	204.345

Circular Curve Data

Parameter	Value	Parameter	Value
Delta:	19° 23' 08.2799"	Type:	LEFT
Radius:	60.000		
Length:	20.301	Tangent:	10.248
Mid-Ord:	0.857	External:	0.869
Chord:	20.204	Course:	S 76° 04' 40.7672" E

Spiral Point Data

Description	Station	Northing	Easting
CS:	1+99.280	92.913	204.345
SPI:		91.919	217.785
ST:	2+39.280	98.802	243.710

Spiral Curve Data: clothoid

Parameter	Value	Parameter	Value
Length:	40.000	L Tan:	26.824
Radius:	60.000	S Tan:	13.476
Theta:	19° 05' 54.9354"	P:	1.107
X:	39.558	K:	19.926
Y:	4.409	A:	48.990
Chord:	39.803	Course:	N 81° 29' 26.8535" E

Tangent Data

Description	PT Station	Northing	Easting
Start:	2+39.280	98.802	243.710
End:	2+59.124	103.894	262.889

Tangent Data

Parameter	Value	Parameter	Value
Length:	19.843	Course:	N 75° 07' 50.1574" E

Spiral Point Data

Description	Station	Northing	Easting
TS:	2+59.124	103.894	262.889
SPI:		110.763	288.759
SC:	2+99.124	110.667	302.183

Spiral Curve Data: clothoid

Parameter	Value	Parameter	Value
Length:	40.000	L Tan:	26.767
Radius:	75.000	S Tan:	13.424
Theta:	15° 16' 43.9483"	P:	0.887
X:	39.716	K:	19.953
Y:	3.538	A:	54.772
Chord:	39.874	Course:	N 80° 13' 13.7504" E

Curve Point Data

Description	Station	Northing	Easting
SC:	2+99.124	110.667	302.183
RP:		35.669	301.647
CS:	3+38.797	100.146	339.957

Circular Curve Data

Parameter	Value	Parameter	Value
Delta:	30° 18' 29.1927"	Type:	RIGHT
Radius:	75.000		
Length:	39.673	Tangent:	20.312
Mid-Ord:	2.608	External:	2.702
Chord:	39.212	Course:	S 74° 26' 11.2979" E

Spiral Point Data

Description	Station	Northing	Easting
CS:	3+38.797	100.146	339.957
SPI:		93.289	351.498
ST:	3+78.797	74.036	370.093

Spiral Curve Data: clothoid

Parameter	Value	Parameter	Value
Length:	40.000	L Tan:	26.767
Radius:	75.000	S Tan:	13.424
Theta:	15° 16' 43.9483"	P:	0.887
X:	39.716	K:	19.953
Y:	3.538	A:	54.772
Chord:	39.874	Course:	S 49° 05' 36.3462" E

Tangent Data

Description	PT Station	Northing	Easting
Start:	3+78.797	74.036	370.093
End:	4+08.353	52.776	390.626

Tangent Data

Parameter	Value	Parameter	Value
Length:	29.556	Course:	S 44° 00' 12.7532" E

Alignment: Os-Left-3.000

Description:

Tangent Data

Description	PT Station	Northing	Easting
Start:	0+00.000	199.279	38.889
End:	0+14.001	194.405	52.015

Tangent Data

Parameter	Value	Parameter	Value
Length:	14.001	Course:	S 69° 37' 40.7139" E

Spiral Point Data

Description	Station	Northing	Easting
TS:	0+14.001	194.405	52.015
SPI:		185.030	77.261
SC:	0+54.463	178.400	89.130

Spiral Curve Data: clothoid

Parameter	Value	Parameter	Value
Length:	40.462	L Tan:	27.007
Radius:	133.000	S Tan:	13.517
Theta:	08° 42' 55.1556"	P:	0.512
X:	40.368	K:	20.215
Y:	2.048	A:	73.358
Chord:	40.419	Course:	S 66° 40' 24.8015" E

Curve Point Data

Description	Station	Northing	Easting
SC:	0+54.463	178.400	89.130
RP:		62.287	24.271
CS:	0+65.400	172.680	98.449

Circular Curve Data

Parameter	Value	Parameter	Value
Delta:	04° 42' 42.9278"	Type:	RIGHT
Radius:	133.000		
Length:	10.938	Tangent:	5.472
Mid-Ord:	0.112	External:	0.113
Chord:	10.935	Course:	S 58° 27' 26.2029" E

Spiral Point Data

Description	Station	Northing	Easting
CS:	0+65.400	172.680	98.449
SPI:		165.103	109.726
SC:	1+05.149	147.313	128.997

Spiral Curve Data: clothoid

Parameter	Value	Parameter	Value
Length:	39.749	L Tan:	26.295
Radius:	133.000	S Tan:	13.516
Theta:	08° 43' 04.0125"	P:	0.512
X:	39.653	K:	19.497
Y:	2.081	A:	73.380
Chord:	39.707	Course:	S 50° 17' 38.3713" E

Curve Point Data

Description	Station	Northing	Easting
SC:	1+05.149	147.313	128.997
RP:		180.379	159.520
PT:	1+06.384	146.489	129.915

Circular Curve Data

Parameter	Value	Parameter	Value
Delta:	01° 34' 17.4118"	Type:	LEFT
Radius:	45.000		
Length:	1.234	Tangent:	0.617
Mid-Ord:	0.004	External:	0.004
Chord:	1.234	Course:	S 48° 04' 30.4686" E

Tangent Data

Description	PT Station	Northing	Easting
Start:	1+06.384	146.489	129.915
End:	1+44.586	121.355	158.686

Tangent Data

Parameter	Value	Parameter	Value
Length:	38.203	Course:	S 48° 51' 39.1745" E

Curve Point Data

Description	Station	Northing	Easting
PC:	1+44.586	121.355	158.686
RP:		102.528	142.239
CS:	1+45.143	120.985	159.101

Circular Curve Data

Parameter	Value	Parameter	Value
Delta:	01° 16' 33.1868"	Type:	RIGHT
Radius:	25.000		
Length:	0.557	Tangent:	0.278
Mid-Ord:	0.002	External:	0.002
Chord:	0.557	Course:	S 48° 13' 22.5811" E

Spiral Point Data

Description	Station	Northing	Easting
CS:	1+45.143	120.985	159.101
SPI:		106.477	174.981
SC:	1+78.809	101.500	186.364

Spiral Curve Data: clothoid

Parameter	Value	Parameter	Value
Length:	33.666	L Tan:	21.410
Radius:	55.933	S Tan:	12.536
Theta:	19° 16' 09.5224"	P:	1.004
X:	32.785	K:	14.786
Y:	6.932	A:	46.193
Chord:	33.510	Course:	S 54° 26' 48.6029" E

Curve Point Data

Description	Station	Northing	Easting
SC:	1+78.809	101.500	186.364
RP:		152.749	208.770
PCC:	1+97.733	96.969	204.645

Circular Curve Data

Parameter	Value	Parameter	Value
Delta:	19° 23' 08.2799"	Type:	LEFT
Radius:	55.933		
Length:	18.925	Tangent:	9.554
Mid-Ord:	0.798	External:	0.810
Chord:	18.834	Course:	S 76° 04' 40.7672" E

Curve Point Data

Description	Station	Northing	Easting
PCC:	1+97.733	96.969	204.645
RP:		141.846	207.964
PT:	2+07.683	97.333	214.568

Circular Curve Data

Parameter	Value	Parameter	Value
Delta:	12° 40' 06.1263"	Type:	LEFT
Radius:	45.000		
Length:	9.950	Tangent:	4.995
Mid-Ord:	0.275	External:	0.276
Chord:	9.929	Course:	N 87° 53' 42.0297" E

Tangent Data

Description	PT Station	Northing	Easting
Start:	2+07.683	97.333	214.568
End:	2+33.589	101.135	240.194

Tangent Data

Parameter	Value	Parameter	Value
Length:	25.906	Course:	N 81° 33' 38.9666" E

Curve Point Data

Description	Station	Northing	Easting
PC:	2+33.589	101.135	240.194
RP:		125.865	236.525
PT:	2+36.395	101.702	242.940

Circular Curve Data

Parameter	Value	Parameter	Value
Delta:	06° 25' 48.8091"	Type:	LEFT
Radius:	25.000		
Length:	2.806	Tangent:	1.404
Mid-Ord:	0.039	External:	0.039
Chord:	2.804	Course:	N 78° 20' 44.5620" E

Tangent Data

Description	PT Station	Northing	Easting
Start:	2+36.395	101.702	242.940
End:	2+56.238	106.794	262.119

Tangent Data

Parameter	Value	Parameter	Value
Length:	19.843	Course:	N 75° 07' 50.1574" E

Spiral Point Data

Description	Station	Northing	Easting
TS:	2+56.238	106.794	262.119
SPI:		113.766	288.378
SC:	2+97.038	113.667	302.204

Spiral Curve Data: clothoid

Parameter	Value	Parameter	Value
Length:	40.800	L Tan:	27.298
Radius:	78.000	S Tan:	13.689
Theta:	14° 59' 06.1801"	P:	0.887
X:	40.522	K:	20.354
Y:	3.540	A:	56.413
Chord:	40.671	Course:	N 80° 16' 13.6975" E

Curve Point Data

Description	Station	Northing	Easting
SC:	2+97.038	113.667	302.204
RP:		35.669	301.647
CS:	3+38.298	102.725	341.490

Circular Curve Data

Parameter	Value	Parameter	Value
Delta:	30° 18' 29.1927"	Type:	RIGHT
Radius:	78.000		
Length:	41.260	Tangent:	21.125
Mid-Ord:	2.712	External:	2.810
Chord:	40.781	Course:	S 74° 26' 11.2979" E

Spiral Point Data

Description	Station	Northing	Easting
CS:	3+38.298	102.725	341.490
SPI:		95.663	353.377
ST:	3+79.098	76.120	372.251

Spiral Curve Data: clothoid

Parameter	Value	Parameter	Value
Length:	40.800	L Tan:	27.298
Radius:	78.000	S Tan:	13.689
Theta:	14° 59' 06.1801"	P:	0.887
X:	40.522	K:	20.354
Y:	3.540	A:	56.413
Chord:	40.671	Course:	S 49° 08' 36.2933" E

Tangent Data

Description	PT Station	Northing	Easting
Start:	3+79.098	76.120	372.251
End:	4+08.654	54.860	392.784

Tangent Data

Parameter	Value	Parameter	Value
Length:	29.556	Course:	S 44° 00' 12.7532" E

Alignment: Os-Right-3.000

Description:

Tangent Data

Description	PT Station	Northing	Easting
Start:	0+00.000	193.654	36.801
End:	0+14.001	188.780	49.926

Tangent Data

Parameter	Value	Parameter	Value
Length:	14.001	Course:	S 69° 37' 40.7139" E

Spiral Point Data

Description	Station	Northing	Easting
TS:	0+14.001	188.780	49.926
SPI:		179.566	74.739
SC:	0+53.540	173.162	86.204

Spiral Curve Data: clothoid

Parameter	Value	Parameter	Value
Length:	39.538	L Tan:	26.393
Radius:	127.000	S Tan:	13.210
Theta:	08° 55' 07.8469"	P:	0.512
X:	39.443	K:	19.753
Y:	2.048	A:	70.862
Chord:	39.497	Course:	S 66° 42' 26.9115" E

Curve Point Data

Description	Station	Northing	Easting
SC:	0+53.540	173.162	86.204
RP:		62.287	24.271
CS:	0+63.984	167.700	95.103

Circular Curve Data

Parameter	Value	Parameter	Value
Delta:	04° 42' 42.9278"	Type:	RIGHT
Radius:	127.000		
Length:	10.444	Tangent:	5.225
Mid-Ord:	0.107	External:	0.107
Chord:	10.441	Course:	S 58° 27' 26.2029" E

Spiral Point Data

Description	Station	Northing	Easting
CS:	0+63.984	167.700	95.103
SPI:		160.376	106.003
ST:	1+03.522	142.421	125.451

Spiral Curve Data: clothoid

Parameter	Value	Parameter	Value
Length:	39.538	L Tan:	26.393
Radius:	127.000	S Tan:	13.210
Theta:	08° 55' 07.8469"	P:	0.512
X:	39.443	K:	19.753
Y:	2.048	A:	70.862
Chord:	39.497	Course:	S 50° 12' 25.4943" E

Tangent Data

Description	PT Station	Northing	Easting
Start:	1+03.522	142.421	125.451
End:	1+37.810	119.163	150.644

Tangent Data

Parameter	Value	Parameter	Value
Length:	34.287	Course:	S 47° 17' 11.6919" E

Spiral Point Data

Description	Station	Northing	Easting
TS:	1+37.810	119.163	150.644
SPI:		100.625	170.723
SC:	1+78.810	95.025	183.533

Spiral Curve Data: clothoid

Parameter	Value	Parameter	Value
Length:	41.000	L Tan:	27.486
Radius:	63.000	S Tan:	13.806
Theta:	18° 38' 37.9131"	P:	1.108
X:	40.568	K:	20.428
Y:	4.414	A:	50.823
Chord:	40.797	Course:	S 53° 43' 28.3567" E

Curve Point Data

Description	Station	Northing	Easting
SC:	1+78.810	95.025	183.533
RP:		152.749	208.770
CS:	2+00.126	89.921	204.124

Circular Curve Data

Parameter	Value	Parameter	Value
Delta:	19° 23' 08.2799"	Type:	LEFT
Radius:	63.000		
Length:	21.316	Tangent:	10.761
Mid-Ord:	0.899	External:	0.912
Chord:	21.214	Course:	S 76° 04' 40.7672" E

Spiral Point Data

Description	Station	Northing	Easting
CS:	2+00.126	89.921	204.124
SPI:		88.890	218.067
ST:	2+41.126	95.903	244.480

Spiral Curve Data: clothoid

Parameter	Value	Parameter	Value
Length:	41.000	L Tan:	27.486
Radius:	63.000	S Tan:	13.806
Theta:	18° 38' 37.9131"	P:	1.108
X:	40.568	K:	20.428
Y:	4.414	A:	50.823
Chord:	40.797	Course:	N 81° 34' 06.8222" E

Tangent Data

Description	PT Station	Northing	Easting
Start:	2+41.126	95.903	244.480
End:	2+60.969	100.995	263.659

Tangent Data

Parameter	Value	Parameter	Value
Length:	19.843	Course:	N 75° 07' 50.1574" E

Spiral Point Data

Description	Station	Northing	Easting
TS:	2+60.969	100.995	263.659
SPI:		107.760	289.140
SC:	3+00.169	107.667	302.162

Spiral Curve Data: clothoid

Parameter	Value	Parameter	Value
Length:	39.200	L Tan:	26.235
Radius:	72.000	S Tan:	13.160
Theta:	15° 35' 49.8639"	P:	0.887
X:	38.911	K:	19.552
Y:	3.538	A:	53.126
Chord:	39.077	Course:	N 80° 10' 06.4644" E

Curve Point Data

Description	Station	Northing	Easting
SC:	3+00.169	107.667	302.162
RP:		35.669	301.647
CS:	3+38.255	97.567	338.425

Circular Curve Data

Parameter	Value	Parameter	Value
Delta:	30° 18' 29.1927"	Type:	RIGHT
Radius:	72.000		
Length:	38.086	Tangent:	19.500
Mid-Ord:	2.504	External:	2.594
Chord:	37.644	Course:	S 74° 26' 11.2979" E

Spiral Point Data

Description	Station	Northing	Easting
CS:	3+38.255	97.567	338.425
SPI:		90.915	349.620
ST:	3+77.455	71.952	367.935

Spiral Curve Data: clothoid

Parameter	Value	Parameter	Value
Length:	39.200	L Tan:	26.235
Radius:	72.000	S Tan:	13.160
Theta:	15° 35' 49.8639"	P:	0.887
X:	38.911	K:	19.552
Y:	3.538	A:	53.126
Chord:	39.077	Course:	S 49° 02' 29.0602" E

Tangent Data

Description	PT Station	Northing	Easting
Start:	3+77.455	71.952	367.935
End:	4+07.011	50.692	388.468

Tangent Data

Parameter	Value	Parameter	Value
Length:	29.556	Course:	S 44° 00' 12.7532" E

5.2. KOORDINATNI RAČUN DETALJNIH TOČAKA OSI

Alignment Incremental Station Report

Client:	**Prepared by:**
Client	Preparer
Client Company	Your Company Name
Address 1	123 Main Street

Date: 30.6.2016. 12:46:00

Alignment Name: Os
Description:
Station Range: Start: 0+00.00, End: 408+35.00
Station Increment: 25.00

Station	**Northing**	**Easting**	**Tangential Direction**
0+00.00	196.4667m	37.8449m	S69° 37' 40.71"E
0+25.00	187.7239m	61.2663m	S68° 57' 41.43"E
0+50.00	177.6803m	84.1453m	S62° 29' 18.69"E
0+75.00	164.1361m	105.1160m	S52° 08' 37.18"E
1+00.00	147.8060m	124.0358m	S47° 24' 28.36"E
1+25.00	130.8502m	142.4069m	S47° 17' 11.69"E
1+50.00	113.9607m	160.8383m	S48° 44' 10.47"E
1+75.00	99.4837m	181.1420m	S62° 46' 25.93"E
2+00.00	92.8638m	205.0633m	S86° 27' 06.75"E
2+25.00	95.3337m	229.8585m	N77° 33' 53.29"E
2+50.00	101.5530m	254.0707m	N75° 07' 50.16"E
2+75.00	107.7529m	278.2879m	N77° 32' 15.45"E
3+00.00	110.6557m	303.0594m	S88° 55' 15.36"E
3+25.00	106.0661m	327.5169m	S69° 49' 20.42"E
3+50.00	93.7893m	349.1733m	S51° 55' 20.32"E
3+75.00	76.7647m	367.4534m	S44° 08' 28.31"E
4+00.00	58.7843m	384.8232m	S44° 00' 12.75"E

Alignment Name: Os-Left-3.000
Description:
Station Range: Start: 0+00.00, End: 408+65.00
Station Increment: 25.00

Station	**Northing**	**Easting**	**Tangential Direction**
0+00.00	199.2791m	38.8893m	S69° 37' 40.71"E
0+25.00	190.5693m	62.2254m	S68° 58' 35.86"E
0+50.00	180.5341m	85.1590m	S62° 39' 01.70"E
0+75.00	167.0150m	106.2974m	S52° 24' 55.91"E
1+00.00	150.7676m	125.2461m	S47° 28' 19.37"E
1+25.00	134.2411m	143.9356m	S48° 51' 39.17"E
1+50.00	117.6481m	162.8053m	S48° 29' 31.56"E
1+75.00	103.0914m	183.0196m	S62° 47' 28.67"E
2+00.00	96.8584m	206.9093m	S88° 39' 25.85"E
2+25.00	99.8747m	231.6977m	N81° 33' 38.97"E
2+50.00	105.1931m	256.0898m	N75° 07' 50.16"E
2+75.00	111.2173m	280.1448m	N78° 21' 41.70"E
3+00.00	113.5896m	305.1654m	S87° 24' 52.80"E
3+25.00	108.5130m	329.5353m	S69° 03' 02.28"E
3+50.00	95.9797m	351.2412m	S51° 46' 29.72"E
3+75.00	79.0131m	369.4518m	S44° 09' 27.66"E
4+00.00	61.0852m	386.7717m	S44° 00' 12.75"E

Alignment Name: Os-Right-3.000
Description:
Station Range: Start: 0+00.00, End: 407+01.00
Station Increment: 25.00

Station	**Northing**	**Easting**	**Tangential Direction**
0+00.00	193.6544m	36.8006m	S69° 37' 40.71"E
0+25.00	184.8781m	60.3083m	S68° 56' 45.09"E
0+50.00	174.8290m	83.1241m	S62° 19' 15.14"E
0+75.00	161.2611m	103.9233m	S51° 52' 25.44"E
1+00.00	144.8351m	122.8340m	S47° 21' 23.55"E
1+25.00	127.8524m	141.2314m	S47° 17' 11.69"E
1+50.00	111.1233m	159.5262m	S48° 58' 29.52"E
1+75.00	96.6910m	180.0139m	S63° 00' 02.20"E
2+00.00	89.9302m	203.9989m	S85° 39' 23.85"E
2+25.00	92.0920m	229.0586m	N78° 05' 05.84"E
2+50.00	98.1800m	253.0571m	N75° 07' 50.16"E
2+75.00	104.4863m	277.4374m	N77° 05' 17.33"E
3+00.00	107.6682m	301.9962m	S89° 43' 18.42"E
3+25.00	103.2537m	326.4726m	S69° 49' 49.58"E
3+50.00	90.9573m	347.9189m	S51° 29' 54.23"E
3+75.00	73.7508m	366.1965m	S44° 03' 48.50"E
4+00.00	55.7352m	383.5974m	S44° 00' 12.75"E

5.3. RAČUN KOTA KOLNIKA

Corridor Section Points Report

Client:	**Prepared by:**
Client	Preparer
Client Company	Your Company Name
Address 1	123 Main Street

Date: 30.6.2016. 12:47:38

Corridor Name: Koridor ceste
Description:
Base Alignment Name: Os
Station Range: Start: 0+00.00, End: 4+08.35

CHAINAGE 0+00.00

POINT	X	Y	Z	OFFSET	STRING CUT
1	39.5304	201.0056	275.3840	-4.842m	Ditch_In
2	39.5301	201.0047	275.1840	-4.841m	EPS_Sub
3	39.1823	200.0681	275.4240	-3.842m	Back_Curb
4	39.1301	199.9275	275.4240	-3.692m	Top_Curb
5	39.1156	199.8884	275.1990	-3.650m	Flowline_Gutter
6	38.8893	199.2791	275.2965	-3.000m	ETW
7	38.8893	199.2791	275.0965	-3.000m	ETW_SubBase
8	36.8006	193.6544	275.1465	3.000m	Flange
9	36.8006	193.6544	274.9465	3.000m	ETW_SubBase
10	36.5743	193.0450	275.0490	3.650m	Flowline_Gutter
11	36.5598	193.0059	275.2740	3.692m	Top_Curb
12	36.5076	192.8653	275.2740	3.842m	Back_Curb
13	36.1598	191.9288	275.0340	4.841m	EPS_Sub
14	36.1595	191.9279	275.2340	4.842m	Hinge_Cut
15	32.7681	182.7950	280.1051	14.584m	Before_Rounding

CHAINAGE 0+25.00

POINT	X	Y	Z	OFFSET	STRING CUT
1	65.8275	199.5827	269.4698	-12.706m	Daylight
2	65.7457	199.3698	269.5158	-12.478m	Before_Rounding
3	63.0044	192.2429	274.6065	-4.842m	EPS
4	63.0041	192.2420	274.4065	-4.841m	EPS_Sub
5	62.6454	191.3096	274.6465	-3.842m	Back_Curb
6	62.5916	191.1696	274.6465	-3.692m	Top_Curb
7	62.5766	191.1306	274.4215	-3.650m	Flowline_Gutter
8	62.3432	190.5240	274.3190	-3.000m	ETW_SubBase
9	62.3432	190.5240	274.5190	-3.000m	Flange
10	60.1893	184.9239	274.1690	3.000m	ETW_SubBase
11	60.1893	184.9239	274.3690	3.000m	Flange
12	59.9559	184.3173	274.2715	3.650m	Flowline_Gutter
13	59.9410	184.2783	274.4965	3.692m	Top_Curb
14	59.8871	184.1383	274.4965	3.842m	Back_Curb
15	59.5285	183.2059	274.2565	4.841m	EPS_Sub
16	59.5281	183.2050	274.4565	4.842m	EPS
17	54.8299	170.9903	281.0000	17.929m	Before_Rounding

CHAINAGE 0+50.00

POINT	X	Y	Z	OFFSET	STRING CUT
1	90.0027	188.9268	268.6032	-12.680m	Before_Rounding
2	86.3818	181.9745	273.8290	-4.842m	Hinge
3	86.3813	181.9736	273.6290	-4.841m	EPS_Sub
4	85.9198	181.0876	273.8690	-3.842m	Back_Curb
5	85.8505	180.9545	273.8690	-3.692m	Top_Curb
6	85.8313	180.9176	273.6440	-3.650m	Flowline_Gutter
7	85.5310	180.3411	273.7415	-3.000m	Flange
8	85.5310	180.3411	273.5415	-3.000m	ETW_SubBase
9	82.7595	175.0195	273.5915	3.000m	Flange
10	82.7595	175.0195	273.3915	3.000m	ETW_SubBase
11	82.4592	174.4431	273.4940	3.650m	Flowline_Gutter
12	82.4400	174.4061	273.7190	3.692m	Top_Curb
13	82.3707	174.2730	273.7190	3.842m	Back_Curb
14	81.9092	173.3870	273.4790	4.841m	EPS_Sub
15	81.9087	173.3861	273.6790	4.842m	Hinge_Cut
16	77.8883	165.6666	278.0308	13.545m	Before_Rounding
17	77.7788	165.4564	278.1116	13.782m	Daylight

CHAINAGE 0+75.00

POINT	X	Y	Z	OFFSET	STRING CUT
1	111.6560	172.5504	269.2849	-10.657m	Daylight
2	111.5044	172.3554	269.3393	-10.410m	Before_Rounding
3	108.0872	167.9589	273.0515	-4.842m	EPS
4	108.0866	167.9581	272.8515	-4.841m	EPS_Sub
5	107.4735	167.1694	273.0915	-3.842m	Back_Curb
6	107.3815	167.0509	273.0915	-3.692m	Top_Curb
7	107.3559	167.0180	272.8665	-3.650m	Flowline_Gutter
8	106.9570	166.5048	272.7640	-3.000m	ETW_SubBase
9	106.9570	166.5048	272.9640	-3.000m	Flange
10	103.2749	161.7675	272.6140	3.000m	ETW_SubBase
11	103.2749	161.7675	272.8140	3.000m	Flange
12	102.8760	161.2543	272.7165	3.650m	Flowline_Gutter
13	102.8504	161.2214	272.9415	3.692m	Top_Curb
14	102.7584	161.1029	272.9415	3.842m	Back_Curb
15	102.1453	160.3142	272.7015	4.841m	EPS_Sub
16	102.1447	160.3134	272.9015	4.842m	EPS
17	93.8994	149.7052	279.6193	18.277m	Before_Rounding

CHAINAGE 1+00.00

POINT	X	Y	Z	OFFSET	STRING CUT
1	127.5281	151.6050	272.1026	-5.160m	Daylight
2	127.4368	151.5056	272.1516	-5.025m	Before_Rounding
3	127.3125	151.3705	272.2740	-4.842m	EPS
4	127.3118	151.3697	272.0740	-4.841m	EPS_Sub
5	126.6357	150.6343	272.3140	-3.842m	Back_Curb
6	126.5342	150.5238	272.3140	-3.692m	Top_Curb
7	126.5060	150.4931	272.0890	-3.650m	Flowline_Gutter
8	126.0661	150.0146	271.9865	-3.000m	ETW_SubBase
9	126.0661	150.0146	272.1865	-3.000m	Flange
10	122.0055	145.5975	271.8365	3.000m	ETW_SubBase
11	122.0055	145.5975	272.0365	3.000m	Flange
12	121.5656	145.1190	271.9390	3.650m	Flowline_Gutter
13	121.5373	145.0883	272.1640	3.692m	Top_Curb
14	121.4358	144.9778	272.1640	3.842m	Back_Curb
15	120.7597	144.2424	271.9240	4.841m	EPS_Sub
16	120.7590	144.2416	272.1240	4.842m	EPS
17	108.9989	131.4490	280.8124	22.218m	Before_Rounding

CHAINAGE 1+25.00

POINT	X	Y	Z	OFFSET	STRING CUT
1	146.8461	135.6586	272.1035	-6.544m	Daylight
2	146.6833	135.4823	272.2278	-6.304m	Before_Rounding
3	145.6912	134.4077	271.4965	-4.842m	Ditch_Out
4	145.6905	134.4069	271.2965	-4.841m	EPS_Sub
5	145.0129	133.6729	271.5365	-3.842m	Back_Curb
6	144.9111	133.5627	271.5365	-3.692m	Top_Curb
7	144.8828	133.5320	271.3115	-3.650m	Flowline_Gutter
8	144.4419	133.0545	271.4090	-3.000m	ETW
9	144.4419	133.0545	271.2090	-3.000m	ETW_SubBase
10	140.3719	128.6459	271.2590	3.000m	ETW
11	140.3719	128.6459	271.0590	3.000m	ETW_SubBase
12	139.9310	128.1683	271.1615	3.650m	Flowline_Gutter
13	139.9027	128.1377	271.3865	3.692m	Top_Curb
14	139.8010	128.0275	271.3865	3.842m	Back_Curb
15	139.1233	127.2935	271.1465	4.841m	EPS_Sub
16	139.1226	127.2927	271.3465	4.842m	EPS
17	126.0261	113.1068	281.0000	24.149m	Before_Rounding
18	125.8534	112.9197	281.0000	24.403m	Daylight

CHAINAGE 1+50.00

POINT	X	Y	Z	OFFSET	STRING CUT
1	164.7287	118.3947	270.0771	-5.899m	Daylight
2	164.5749	118.2194	270.1697	-5.666m	Before_Rounding
3	164.0316	117.6001	270.7190	-4.842m	Hinge
4	164.0309	117.5993	270.5190	-4.841m	EPS_Sub
5	163.3720	116.8484	270.7590	-3.842m	Back_Curb
6	163.2731	116.7356	270.7590	-3.692m	Top_Curb
7	163.2456	116.7043	270.5340	-3.650m	Flowline_Gutter
8	162.8169	116.2157	270.6315	-3.000m	ETW
9	162.8169	116.2157	270.4315	-3.000m	ETW_SubBase
10	158.8598	111.7056	270.4815	3.000m	ETW
11	158.8598	111.7056	270.2815	3.000m	ETW_SubBase
12	158.4311	111.2170	270.3840	3.650m	Flowline_Gutter
13	158.4036	111.1857	270.6090	3.692m	Top_Curb
14	158.3046	111.0729	270.6090	3.842m	Back_Curb
15	157.6458	110.3220	270.3690	4.841m	EPS_Sub
16	157.6451	110.3212	270.5690	4.842m	EPS
17	143.8860	94.6396	281.0000	25.704m	Before_Rounding
18	143.7181	94.4483	281.0000	25.958m	Daylight

CHAINAGE 1+75.00

POINT	X	Y	Z	OFFSET	STRING CUT
1	190.8868	118.4237	259.0136	-21.300m	Daylight
2	190.8039	118.2627	259.0901	-21.119m	Before_Rounding
3	183.3571	103.7890	269.9415	-4.842m	EPS
4	183.3567	103.7881	269.7415	-4.841m	EPS_Sub
5	182.8996	102.8998	269.9815	-3.842m	Back_Curb
6	182.8310	102.7664	269.9815	-3.692m	Top_Curb
7	182.8119	102.7293	269.7565	-3.650m	Flowline_Gutter
8	182.5145	102.1514	269.6540	-3.000m	ETW_SubBase
9	182.5145	102.1514	269.8540	-3.000m	Flange
10	179.7695	96.8161	269.5040	3.000m	ETW_SubBase
11	179.7695	96.8161	269.7040	3.000m	Flange
12	179.4721	96.2381	269.6065	3.650m	Flowline_Gutter
13	179.4531	96.2010	269.8315	3.692m	Top_Curb
14	179.3844	96.0677	269.8315	3.842m	Back_Curb
15	178.9274	95.1793	269.5915	4.841m	EPS_Sub
16	178.9269	95.1785	269.7915	4.842m	Hinge
17	178.4754	94.3009	269.1379	5.829m	Before_Rounding
18	178.3577	94.0720	269.2035	6.086m	Daylight

CHAINAGE 2+00.00

POINT	X	Y	Z	OFFSET	STRING CUT
1	206.6018	117.6760	256.0000	-24.860m	Daylight
2	206.5859	117.4190	256.0000	-24.602m	Before_Rounding
3	205.3630	97.6963	269.1738	-4.842m	EPS
4	205.3629	97.6953	268.9738	-4.841m	EPS_Sub
5	205.3011	96.6982	269.2138	-3.842m	Back_Curb
6	205.2918	96.5485	269.2138	-3.692m	Top_Curb
7	205.2892	96.5068	268.9888	-3.650m	Flowline_Gutter
8	205.2490	95.8581	268.8863	-3.000m	ETW_SubBase
9	205.2490	95.8581	269.0863	-3.000m	Flange
10	204.8777	89.8696	268.7363	3.000m	ETW_SubBase
11	204.8777	89.8696	268.9363	3.000m	Flange
12	204.8374	89.2208	268.8388	3.650m	Flowline_Gutter
13	204.8349	89.1792	269.0638	3.692m	Top_Curb
14	204.8256	89.0295	269.0638	3.842m	Back_Curb
15	204.7638	88.0324	268.8238	4.841m	EPS_Sub
16	204.7637	88.0314	269.0238	4.842m	Hinge
17	204.6896	86.8371	268.2313	6.038m	Before_Rounding
18	204.6738	86.5810	268.3043	6.295m	Daylight

CHAINAGE 2+25.00

POINT	X	Y	Z	OFFSET	STRING CUT
1	227.1653	107.5471	263.4650	-12.507m	Daylight
2	227.2179	107.3086	263.5284	-12.263m	Before_Rounding
3	228.8159	100.0618	268.4757	-4.842m	Hinge
4	228.8161	100.0609	268.2757	-4.841m	EPS_Sub
5	229.0312	99.0853	268.5157	-3.842m	Back_Curb
6	229.0635	98.9388	268.5157	-3.692m	Top_Curb
7	229.0725	98.8981	268.2907	-3.650m	Flowline_Gutter
8	229.2125	98.2633	268.3882	-3.000m	ETW
9	229.2125	98.2633	268.1882	-3.000m	ETW_SubBase
10	230.5045	92.4041	268.2382	3.000m	ETW
11	230.5045	92.4041	268.0382	3.000m	ETW_SubBase
12	230.6444	91.7694	268.1407	3.650m	Flowline_Gutter
13	230.6534	91.7286	268.3657	3.692m	Top_Curb
14	230.6857	91.5822	268.3657	3.842m	Back_Curb
15	230.9008	90.6066	268.1257	4.841m	EPS_Sub
16	230.9011	90.6056	268.3257	4.842m	EPS
17	235.0675	71.7109	278.0000	24.190m	Before_Rounding
18	235.0894	71.6114	278.0000	24.292m	Daylight

CHAINAGE 2+50.00

POINT	X	Y	Z	OFFSET	STRING CUT
1	251.6320	110.7381	264.7359	-9.503m	Daylight
2	251.6916	110.5136	264.8306	-9.271m	Before_Rounding
3	252.8282	106.2326	267.7834	-4.842m	Hinge
4	252.8285	106.2316	267.5834	-4.841m	EPS_Sub
5	253.0848	105.2661	267.8234	-3.842m	Back_Curb
6	253.1233	105.1211	267.8234	-3.692m	Top_Curb
7	253.1340	105.0808	267.5984	-3.650m	Flowline_Gutter
8	253.3008	104.4526	267.6959	-3.000m	ETW
9	253.3008	104.4526	267.4959	-3.000m	ETW_SubBase
10	254.8405	98.6535	267.5459	3.000m	ETW
11	254.8405	98.6535	267.3459	3.000m	ETW_SubBase
12	255.0073	98.0253	267.4484	3.650m	Flowline_Gutter
13	255.0180	97.9850	267.6734	3.692m	Top_Curb
14	255.0565	97.8400	267.6734	3.842m	Back_Curb
15	255.3129	96.8744	267.4334	4.841m	EPS_Sub
16	255.3132	96.8735	267.6334	4.842m	EPS
17	260.0179	79.1536	276.8004	23.176m	Before_Rounding
18	260.0807	78.9171	276.8571	23.420m	Daylight

CHAINAGE 2+75.00

POINT	X	Y	Z	OFFSET	STRING CUT
1	276.2334	117.0486	264.0327	-9.520m	Daylight
2	276.2836	116.8218	264.1272	-9.288m	Before_Rounding
3	277.2430	112.4805	267.0912	-4.842m	Hinge
4	277.2432	112.4795	266.8912	-4.841m	EPS_Sub
5	277.4588	111.5041	267.1312	-3.842m	Back_Curb
6	277.4912	111.3576	267.1312	-3.692m	Top_Curb
7	277.5002	111.3169	266.9062	-3.650m	Flowline_Gutter
8	277.6405	110.6822	267.0037	-3.000m	ETW
9	277.6405	110.6822	266.8037	-3.000m	ETW_SubBase
10	278.9353	104.8236	266.8537	3.000m	ETW
11	278.9353	104.8236	266.6537	3.000m	ETW_SubBase
12	279.0755	104.1889	266.7562	3.650m	Flowline_Gutter
13	279.0845	104.1482	266.9812	3.692m	Top_Curb
14	279.1169	104.0017	266.9812	3.842m	Back_Curb
15	279.3325	103.0262	266.7412	4.841m	EPS_Sub
16	279.3327	103.0253	266.9412	4.842m	EPS
17	281.1582	94.7654	271.1708	13.301m	Before_Rounding
18	281.2087	94.5367	271.2590	13.535m	Daylight

CHAINAGE 3+00.00

POINT	X	Y	Z	OFFSET	STRING CUT
1	303.2742	122.0616	262.0946	-11.408m	Daylight
2	303.2698	121.8250	262.1792	-11.171m	Before_Rounding
3	303.1506	115.4966	266.3990	-4.842m	Hinge
4	303.1506	115.4956	266.1990	-4.841m	EPS_Sub
5	303.1318	114.4968	266.4390	-3.842m	Back_Curb
6	303.1289	114.3468	266.4390	-3.692m	Top_Curb
7	303.1281	114.3051	266.2140	-3.650m	Flowline_Gutter
8	303.1159	113.6552	266.3115	-3.000m	ETW
9	303.1159	113.6552	266.1115	-3.000m	ETW_SubBase
10	303.0029	107.6563	266.1615	3.000m	ETW
11	303.0029	107.6563	265.9615	3.000m	ETW_SubBase
12	302.9907	107.0064	266.0640	3.650m	Flowline_Gutter
13	302.9899	106.9647	266.2890	3.692m	Top_Curb
14	302.9871	106.8147	266.2890	3.842m	Back_Curb
15	302.9682	105.8159	266.0490	4.841m	EPS_Sub
16	302.9682	105.8149	266.2490	4.842m	EPS
17	302.7883	96.2642	271.0251	14.394m	Before_Rounding
18	302.7837	96.0183	271.0771	14.640m	Daylight

CHAINAGE 3+25.00

POINT	X	Y	Z	OFFSET	STRING CUT
1	331.8036	117.7309	260.7477	-12.428m	Daylight
2	331.7194	117.5019	260.8121	-12.184m	Before_Rounding
3	329.1870	110.6107	265.7067	-4.842m	Hinge
4	329.1866	110.6097	265.5067	-4.841m	EPS_Sub
5	328.8420	109.6720	265.7467	-3.842m	Back_Curb
6	328.7903	109.5312	265.7467	-3.692m	Top_Curb
7	328.7759	109.4921	265.5217	-3.650m	Flowline_Gutter
8	328.5517	108.8820	265.6192	-3.000m	ETW
9	328.5517	108.8820	265.4192	-3.000m	ETW_SubBase
10	326.4821	103.2502	265.4692	3.000m	ETW
11	326.4821	103.2502	265.2692	3.000m	ETW_SubBase
12	326.2579	102.6401	265.3717	3.650m	Flowline_Gutter
13	326.2435	102.6010	265.5967	3.692m	Top_Curb
14	326.1918	102.4602	265.5967	3.842m	Back_Curb
15	325.8472	101.5225	265.3567	4.841m	EPS_Sub
16	325.8469	101.5216	265.5567	4.842m	EPS
17	323.6364	95.5064	268.7609	11.250m	Before_Rounding
18	323.6015	95.4115	268.7948	11.351m	Daylight

CHAINAGE 3+50.00

POINT	X	Y	Z	OFFSET	STRING CUT
1	356.3095	102.8978	260.6057	-11.571m	Daylight
2	356.1627	102.7105	260.6868	-11.333m	Before_Rounding
3	352.1593	97.6006	265.0145	-4.842m	Hinge
4	352.1587	97.5998	264.8145	-4.841m	EPS_Sub
5	351.5425	96.8134	265.0545	-3.842m	Back_Curb
6	351.4500	96.6953	265.0545	-3.692m	Top_Curb
7	351.4243	96.6625	264.8295	-3.650m	Flowline_Gutter
8	351.0234	96.1508	264.9270	-3.000m	ETW
9	351.0234	96.1508	264.7270	-3.000m	ETW_SubBase
10	347.3231	91.4278	264.7770	3.000m	ETW
11	347.3231	91.4278	264.5770	3.000m	ETW_SubBase
12	346.9222	90.9161	264.6795	3.650m	Flowline_Gutter
13	346.8965	90.8833	264.9045	3.692m	Top_Curb
14	346.8040	90.7652	264.9045	3.842m	Back_Curb
15	346.1878	89.9788	264.6645	4.841m	EPS_Sub
16	346.1872	89.9780	264.8645	4.842m	EPS
17	339.4677	81.4014	270.3122	15.737m	Before_Rounding
18	339.3198	81.2126	270.3847	15.977m	Daylight

CHAINAGE 3+75.00

POINT	X	Y	Z	OFFSET	STRING CUT
1	374.3258	83.4341	261.2620	-9.577m	Daylight
2	374.1511	83.2645	261.3279	-9.333m	Before_Rounding
3	370.9279	80.1366	264.3222	-4.842m	Hinge
4	370.9272	80.1359	264.1222	-4.841m	EPS_Sub
5	370.2103	79.4401	264.3622	-3.842m	Back_Curb
6	370.1027	79.3357	264.3622	-3.692m	Top_Curb
7	370.0727	79.3066	264.1372	-3.650m	Flowline_Gutter
8	369.6063	78.8539	264.2347	-3.000m	ETW
9	369.6063	78.8539	264.0347	-3.000m	ETW_SubBase
10	365.3005	74.6754	264.0847	3.000m	ETW
11	365.3005	74.6754	263.8847	3.000m	ETW_SubBase
12	364.8341	74.2227	263.9872	3.650m	Flowline_Gutter
13	364.8042	74.1936	264.2122	3.692m	Top_Curb
14	364.6965	74.0892	264.2122	3.842m	Back_Curb
15	363.9796	73.3935	263.9722	4.841m	EPS_Sub
16	363.9789	73.3928	264.1722	4.842m	EPS
17	356.1210	65.7670	269.6471	15.791m	Before_Rounding
18	355.9530	65.6039	269.7353	16.026m	Daylight

CHAINAGE 4+00.00

POINT	X	Y	Z	OFFSET	STRING CUT
1	390.4411	64.2101	261.7395	-7.810m	Daylight
2	390.2675	64.0425	261.8118	-7.569m	Before_Rounding
3	388.3058	62.1479	263.6300	-4.842m	Hinge
4	388.3051	62.1472	263.4300	-4.841m	EPS_Sub
5	387.5865	61.4532	263.6700	-3.842m	Back_Curb
6	387.4786	61.3490	263.6700	-3.692m	Top_Curb
7	387.4486	61.3200	263.4450	-3.650m	Flowline_Gutter
8	386.9811	60.8685	263.5425	-3.000m	ETW
9	386.9811	60.8685	263.3425	-3.000m	ETW_SubBase
10	382.6653	56.7002	263.3925	3.000m	ETW
11	382.6653	56.7002	263.1925	3.000m	ETW_SubBase
12	382.1977	56.2487	263.2950	3.650m	Flowline_Gutter
13	382.1677	56.2197	263.5200	3.692m	Top_Curb
14	382.0598	56.1155	263.5200	3.842m	Back_Curb
15	381.3413	55.4215	263.2800	4.841m	EPS_Sub
16	381.3406	55.4208	263.4800	4.842m	EPS
17	376.0627	50.3234	267.1488	12.179m	Before_Rounding
18	375.8895	50.1561	267.2186	12.420m	Daylight

5.4. VERTIKALNI TOK TRASE

Profile PVI Station & Curve Report

Client:	**Prepared by:**
Client	Preparer
Client Company	Your Company Name
Address 1	123 Main Street

Date: 30.6.2016. 12:49:49

Vertical Alignment: Niveleta (1)
Description:
Station Range: Start: 0+00.00, End: 408+35.00

PVI	**Station**	**Grade Out**	**Curve Length**
0.00	0+00.00	-3.11%	
1.00	1+98.84	-2.77%	18.030m
	Vertical Curve Information:(sag curve) --- PVC Station: 1+89.83 Elevation: 269.318m PVI Station: 1+98.84 Elevation: 269.038m PVT Station: 2+07.86 Elevation: 268.788m Low Point: 2+07.86 Elevation: 268.788m Grade in: -3.11% Grade out: -2.77% Change: 0.34% K: Curve Length: 18.030m Headlight Distance:		
2.00	4+08.35		