

S.G.C. E78 GROSSETO - FANO

Tratto Selci Lama (E45) - S. Stefano di Gaifa.
Adeguamento a 2 corsie del tratto della Variante di Urbania

PROGETTO DEFINITIVO

ANAS - DIREZIONE PROGETTAZIONE E REALIZZAZIONE LAVORI

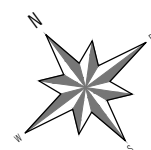
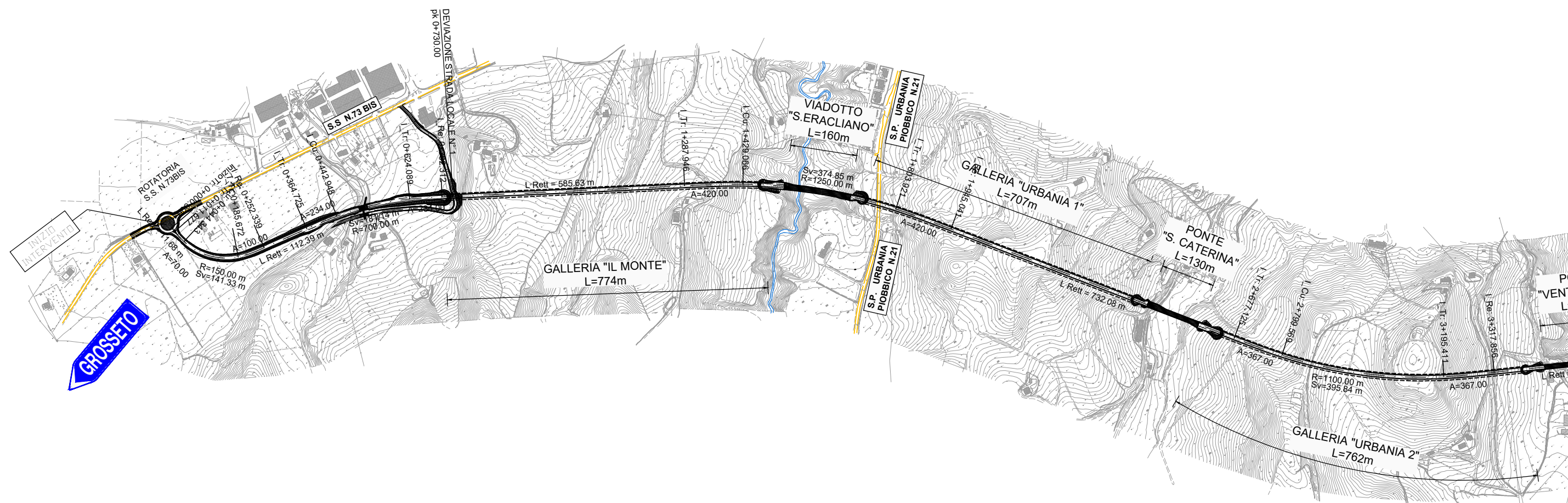
<p>COORDINATORE PER LA SICUREZZA IN FASE DI PROGETTAZIONE</p> <p><i>Ing. Giuseppe Resta</i> Ordine Ingegneri Provincia di Roma n. 20629</p>	<p>I PROGETTISTI SPECIALISTICI</p> <p><i>Ing. Ambrogio Signorelli</i> Ordine Ingegneri Provincia di Roma n. A35111</p>	<p>PROGETTAZIONE ATI: (Mandataria)</p> <p>GP INGENGERIA <i>GESTIONE PROGETTI INGENGERIA srl</i></p> <p>(Mandante)</p>
<p>IL GEOLOGO</p> <p><i>Dott. Geol. Salvatore Marino</i> Ordine dei geologi della Regione Lazio n. 1069</p>	<p><i>Ing. Moreno Panfili</i> Ordine Ingegneri Provincia di Perugia n. A2657</p>	<p>(Mandante)</p> <p>cooprogetti</p> <p>engeko</p> <p>(Mandante)</p>
<p>VISTO: IL RESP. DEL PROCEDIMENTO</p> <p><i>Ing. Vincenzo Catone</i></p>	<p><i>Ing. Claudio Muller</i> Ordine Ingegneri Provincia di Roma n. 17544</p>	<p>(Mandante)</p> <p>AIM <i>Studio di Architettura e Ingegneria Moderna</i></p>
<p>VISTO: IL RESP. DEL PROGETTO</p> <p><i>Arch. Pianif. Marco Colazza</i></p>	<p><i>Ing. Giuseppe Resta</i> Ordine Ingegneri Provincia di Roma n. 20629</p>	<p>IL PROGETTISTA E RESPONSABILE DELL'INTEGRAZIONE DELLE PRESTAZIONI SPECIALISTICHE. (DPR207/10 ART 15 COMMA 2):</p> <p><i>Dott. Ing. GIORGIO GUIDUCCI</i> Ordine Ingegneri Provincia di Roma n. 14035</p>

PROGETTO DELL'INFRASTRUTTURA

Parte generale

VISS – Relazione di risposta all'istruttoria

CODICE PROGETTO			NOME FILE	REVISIONE	SCALA
PROGETTO	LIV.PROG.	ANNO	T00PS00GENRE03_A		
DPAN247	D	22	T00PS00GENRE03	A	-
D					
C					
B					
A	Emissione	Maggio '21	Maggiore	Resta	Guiducci
REV.	DESCRIZIONE	DATA	REDATTO	VERIFICATO	APPROVATO



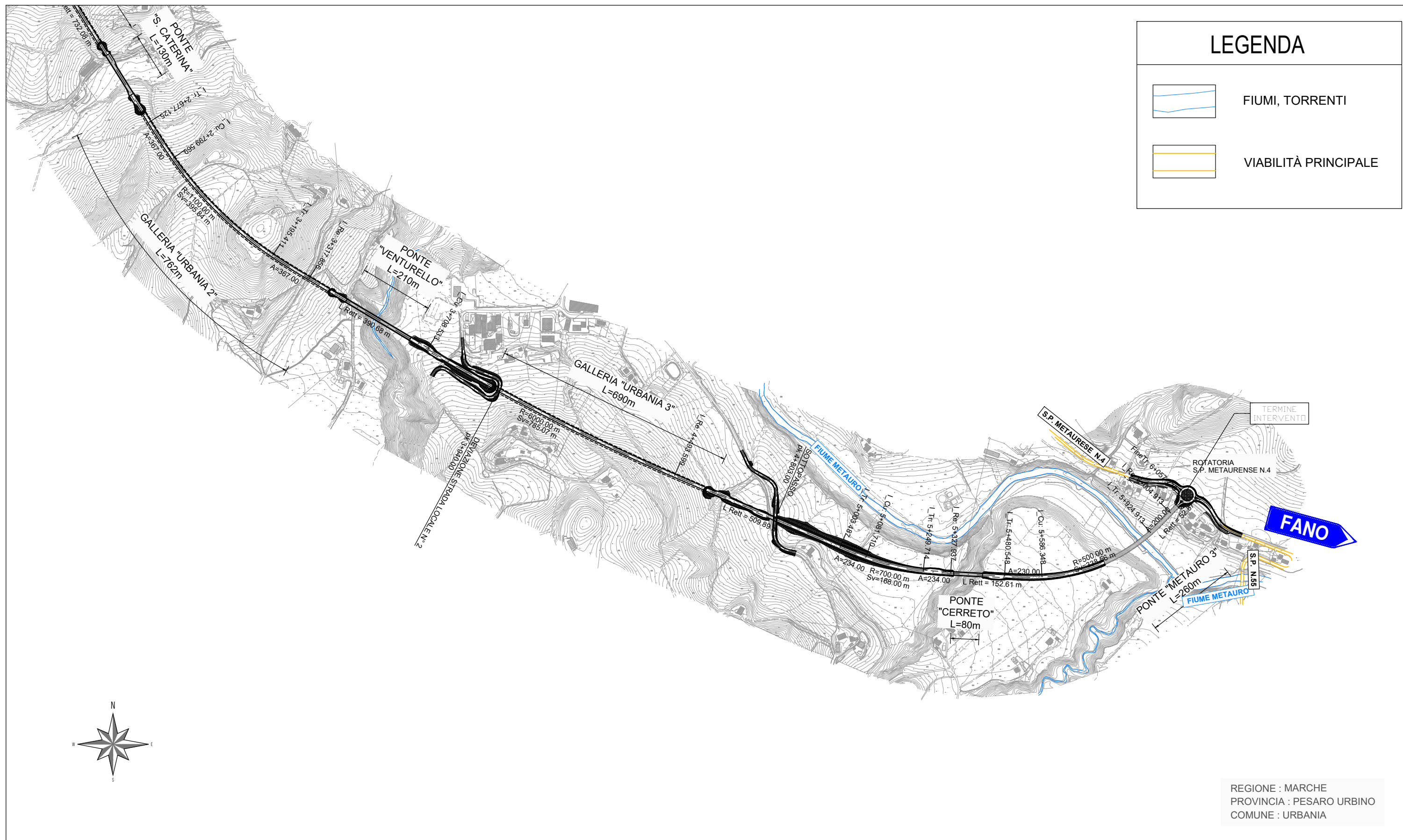
REGIONE : MARCHE
PROVINCIA : PESARO URBINO
COMUNE : URBANIA

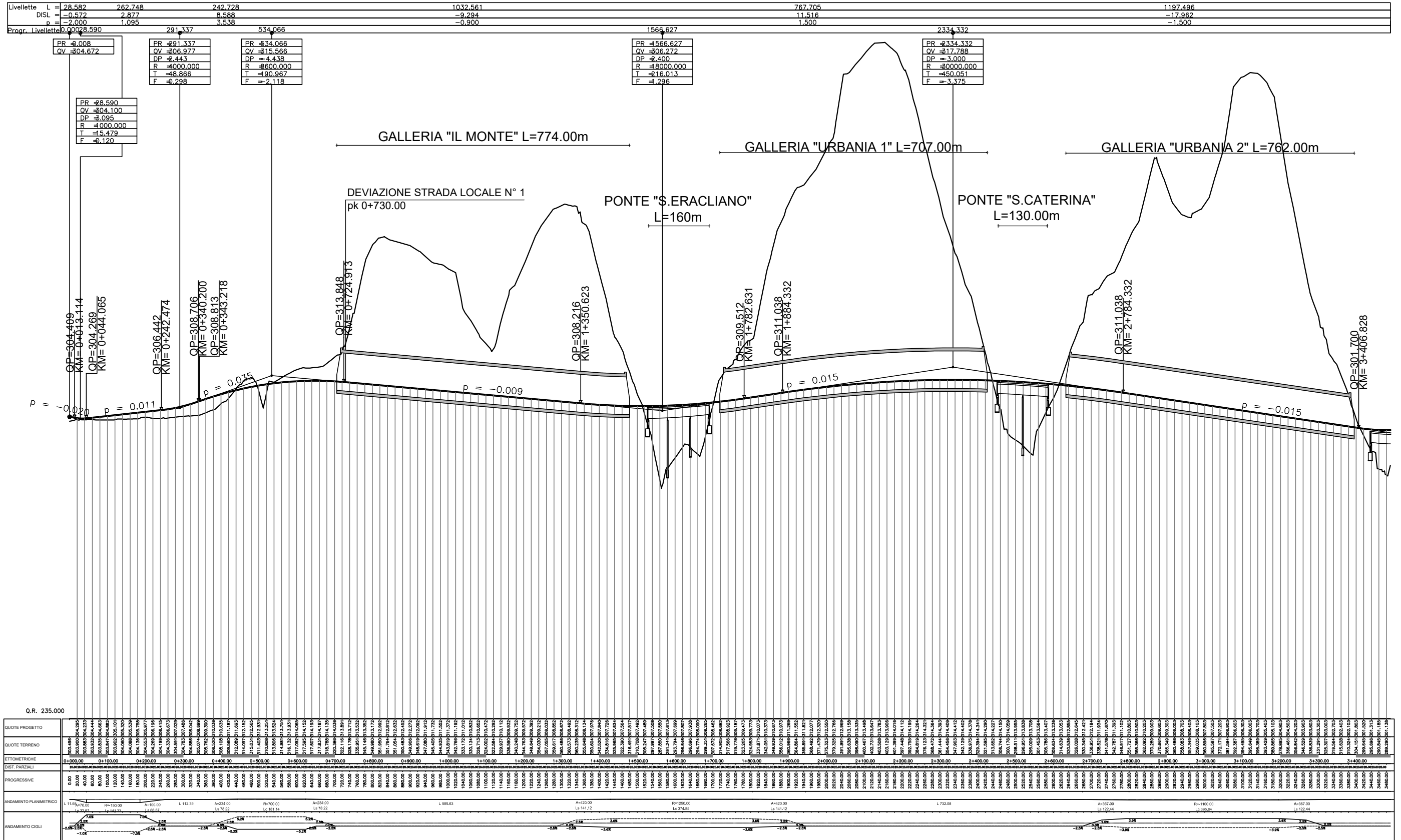
PROGETTO STRADALE

PLANIMETRIA DI PROGETTO DELL'ALTERNATIVA 1 (SOLUZIONE SCELTA) - TAV. 1

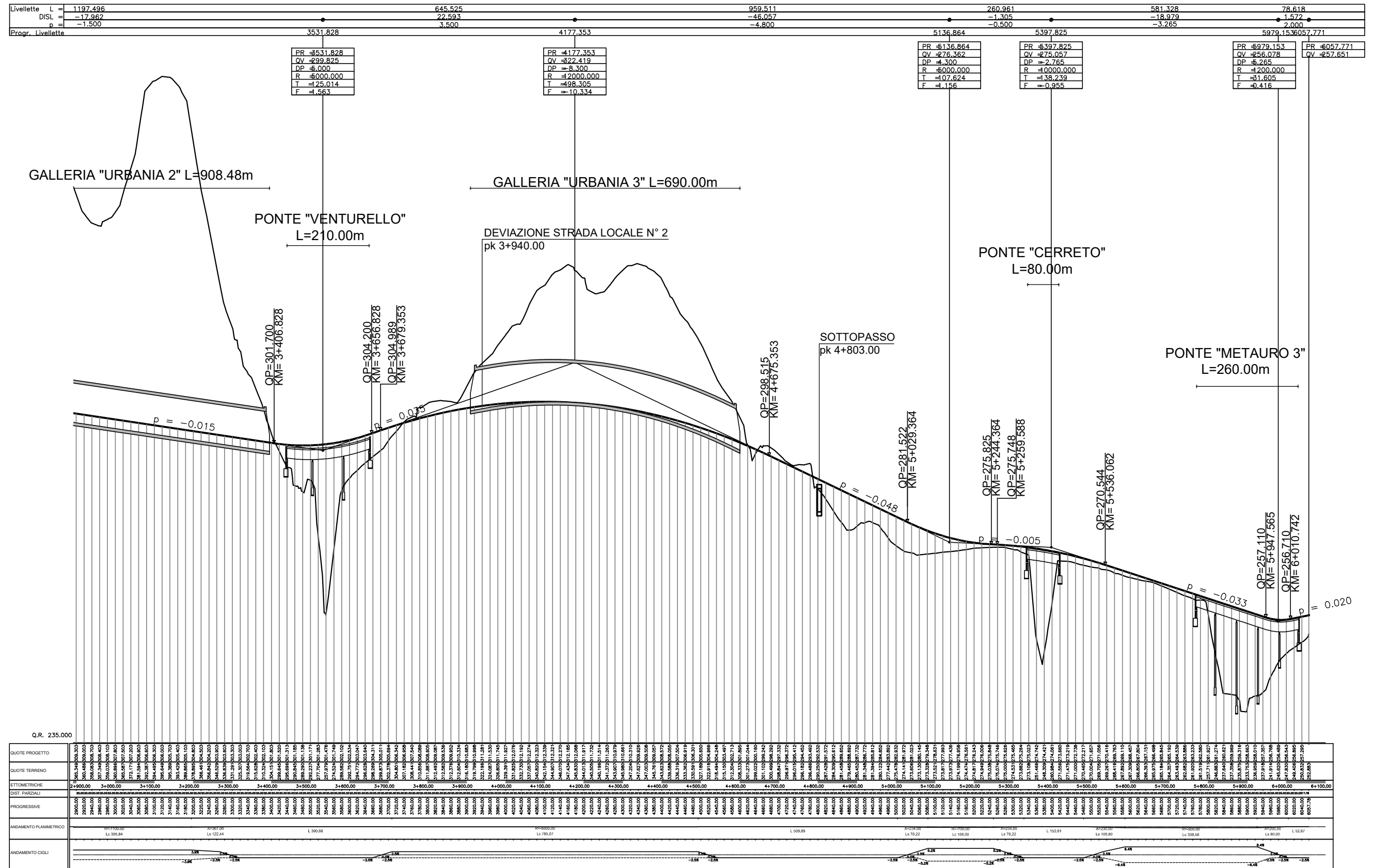
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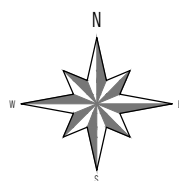
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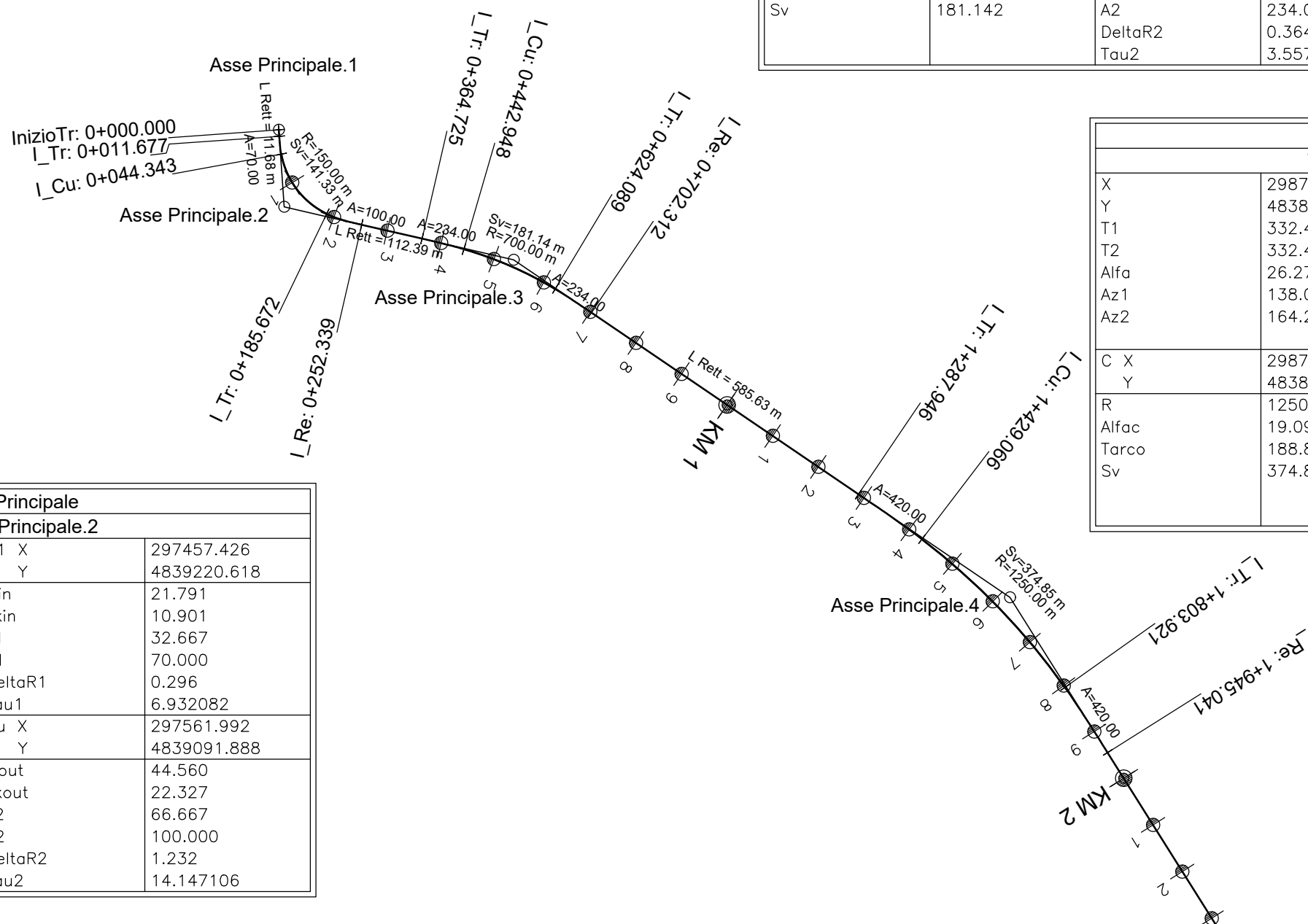
PROGETTO STRADALE
PROFILO DI PROGETTO DELL'ALTERNATIVA 1 (SOLUZIONE SCELTA) - TAV.1





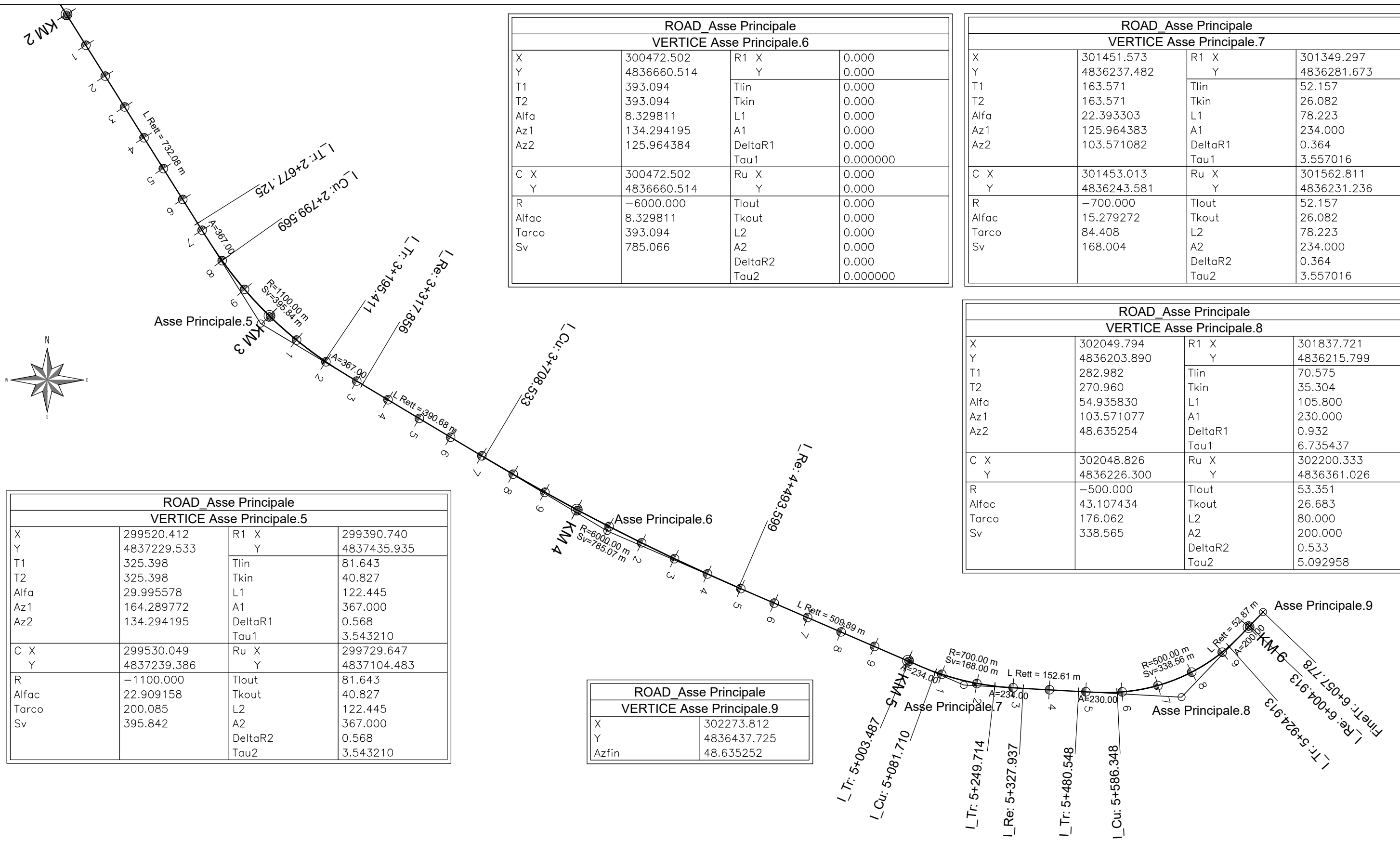
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VERTICE Asse Principale.3			
X	297880.936	R1 X	297765.752
Y	4839018.365	Y	4839044.917
T1	170.362	Tlin	52.157
T2	170.362	Tkin	26.082
Alfa	23.588083	L1	78.223
Az1	114.423317	A1	234.000
Az2	138.011398	DeltaR1	0.364
		Tau1	3.557016
C X	297878.272	Ru X	297978.689
Y	4839012.265	Y	4838951.907
R	700.000	Tlout	52.157
Alfac	16.474052	Tkout	26.082
Tarco	91.080	L2	78.223
Sv	181.142	A2	234.000
		DeltaR2	0.364
		Tau2	3.557016

ROAD_Asse Principale	
VERTICE Asse Principale.1	
X	297455.053
Y	4839254.002
Azin	195.484171



ROAD_Asse Principale			
VERTICE Asse Principale.4			
X	298781.023	R1 X	298583.945
Y	4838406.432	Y	4838540.417
T1	332.405	Tlin	94.096
T2	332.405	Tkin	47.054
Alfa	26.278374	L1	141.120
Az1	138.011399	A1	420.000
Az2	164.289772	DeltaR1	0.664
		Tau1	3.593591
C X	298771.235	Ru X	298907.798
Y	4838396.992	Y	4838204.641
R	1250.000	Tlout	94.096
Alfac	19.091191	Tkout	47.054
Tarco	188.845	L2	141.120
Sv	374.855	A2	420.000
		DeltaR2	0.664
		Tau2	3.593591

ROAD_Asse Principale			
VERTICE Asse Principale.2			
X	297464.983	R1 X	297457.426
Y	4839114.250	Y	4839220.618
T1	128.428	Tlin	21.791
T2	144.113	Tkin	10.901
Alfa	81.060855	L1	32.667
Az1	195.484166	A1	70.000
Az2	114.423316	DeltaR1	0.296
		Tau1	6.932082
C X	297473.040	Ru X	297561.992
Y	4839134.723	Y	4839091.888
R	-150.000	Tlout	44.560
Alfac	59.981667	Tkout	22.327
Tarco	76.402	L2	66.667
Sv	141.328	A2	100.000
		DeltaR2	1.232
		Tau2	14.147106



ROAD_Asse Principale			
VERTICE Asse Principale.6			
X	300472.502	R1 X	0.000
Y	4836660.514	Y	0.000
T1	393.094	Tlin	0.000
T2	393.094	Tkin	0.000
Alfa	8.329811	L1	0.000
Az1	134.294195	A1	0.000
Az2	125.964384	DeltaR1	0.000
		Tau1	0.000000
C X	300472.502	Ru X	0.000
Y	4836660.514	Y	0.000
R	-6000.000	Tlout	0.000
Alfac	8.329811	Tkout	0.000
Tarco	393.094	L2	0.000
Sv	785.066	A2	0.000
		DeltaR2	0.000
		Tau2	0.000000

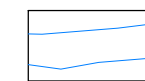
ROAD_Asse Principale			
VERTICE Asse Principale.7			
X	301451.573	R1 X	301349.297
Y	4836237.482	Y	4836281.673
T1	163.571	Tlin	52.157
T2	163.571	Tkin	26.082
Alfa	22.393303	L1	78.223
Az1	125.964383	A1	234.000
Az2	103.571082	DeltaR1	0.364
		Tau1	3.557016
C X	301453.013	Ru X	301562.811
Y	4836243.581	Y	4836231.236
R	-700.000	Tlout	52.157
Alfac	15.279272	Tkout	26.082
Tarco	84.408	L2	78.223
Sv	168.004	A2	234.000
		DeltaR2	0.364
		Tau2	3.557016

ROAD_Asse Principale			
VERTICE Asse Principale.5			
X	299520.412	R1 X	299390.740
Y	4837229.533	Y	4837435.935
T1	325.398	Tlin	81.643
T2	325.398	Tkin	40.827
Alfa	29.995578	L1	122.445
Az1	164.289772	A1	367.000
Az2	134.294195	DeltaR1	0.568
		Tau1	3.543210
C X	299530.049	Ru X	299729.647
Y	4837239.386	Y	4837104.483
R	-1100.000	Tlout	81.643
Alfac	22.909158	Tkout	40.827
Tarco	200.085	L2	122.445
Sv	395.842	A2	367.000
		DeltaR2	0.568
		Tau2	3.543210

ROAD_Asse Principale			
VERTICE Asse Principale.8			
X	302049.794	R1 X	301837.721
Y	4836203.890	Y	4836215.799
T1	282.982	Tlin	70.575
T2	270.960	Tkin	35.304
Alfa	54.935830	L1	105.800
Az1	103.571077	A1	230.000
Az2	48.635254	DeltaR1	0.932
		Tau1	6.735437
C X	302048.826	Ru X	302200.333
Y	4836226.300	Y	4836361.026
R	-500.000	Tlout	53.351
Alfac	43.107434	Tkout	26.683
Tarco	176.062	L2	80.000
Sv	338.565	A2	200.000
		DeltaR2	0.533
		Tau2	5.092958

ROAD_Asse Principale	
VERTICE Asse Principale.9	
X	302273.812
Y	4836437.725
Azfin	48.635252

LEGENDA



FIUMI, TORRENTI



VIABILITÀ PRINCIPALE



REGIONE : MARCHE
PROVINCIA : PESARO URBINO
COMUNE : URBANIA

PROGETTO STRADALE

PLANIMETRIA DI PROGETTO SOLUZIONE ALTERNATIVA 2 - TAV. 1

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VISSPFPL7_A
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tavola: **TAV.14**
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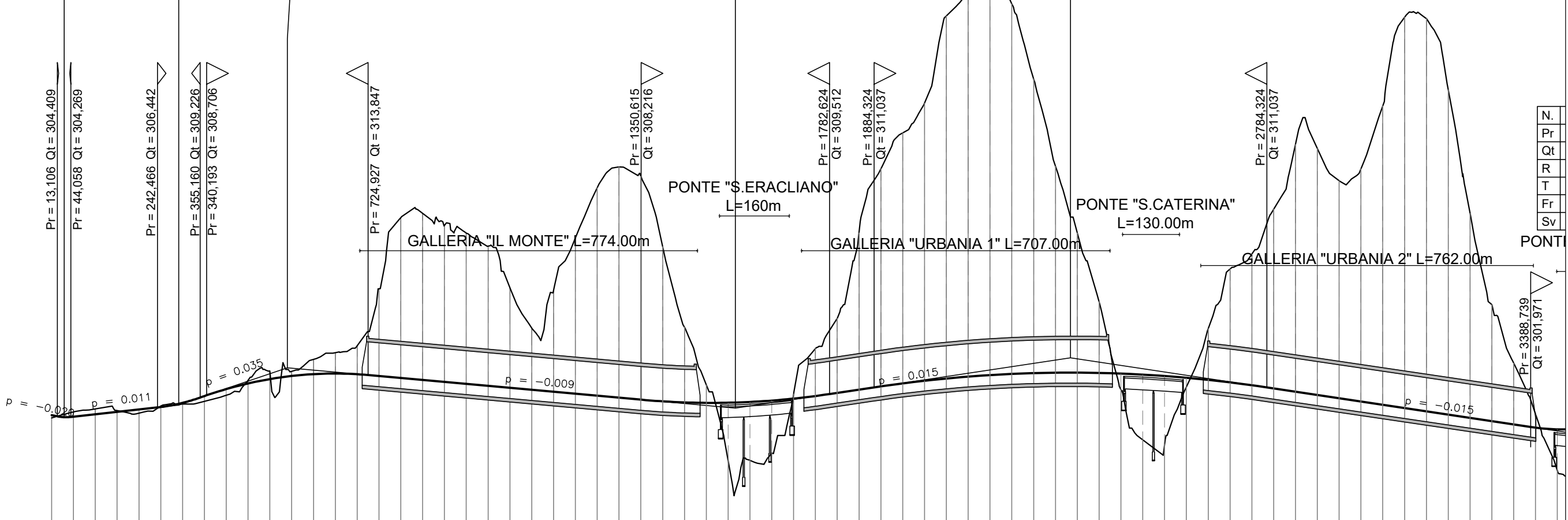


LIVELLETTA	DIFF. DI QUOTA DISTANZA PENDENZA	h = 2,877 L = 262,748 i = 0,011	h = 6,421 L = 188,881 i = 0,034	h = -9,240 L = 1026,576 i = -0,009	h = 11,516 L = 767,705 i = 0,015	h = -17,769 L = 1184,588 i = -0,015
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N.	1	N.	2	N.	3
Pr	28,582	Pr	291,330	Pr	540,043
Qt	304,099	Qt	306,977	Qt	315,511
R	1000,000	R	4000,000	R	8600,000
T	15,476	T	48,863	T	184,884
Fr	0,120	Fr	0,298	Fr	1,987
Sv	30,953	Sv	97,755	Sv	369,825

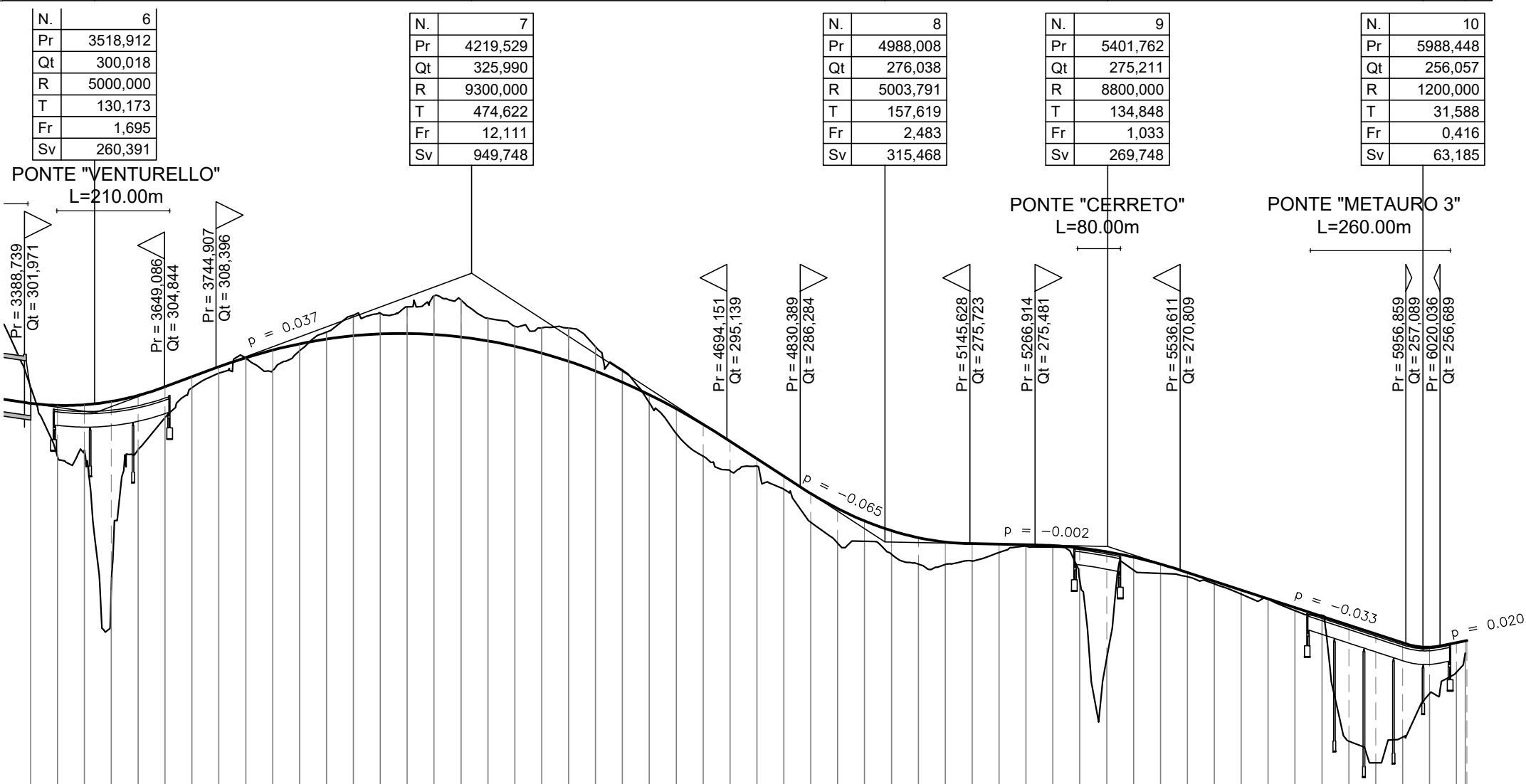
N.	4
Pr	1566,619
Qt	306,272
R	18000,000
T	216,004
Fr	1,296
Sv	432,021

N.	5
Pr	2334,324
Qt	317,787
R	30000,000
T	450,000
Fr	3,375
Sv	900,034



DISTANZE PROGRESSIVE	0,000	50,000	100,000	150,000	200,000	250,000	300,000	350,000	400,000	450,000	500,000	550,000	600,000	650,000	700,000	750,000	800,000	850,000	900,000	950,000	1000,000	1050,000	1100,000	1150,000	1200,000	1250,000	1300,000	1350,000	1400,000	1450,000	1500,000	1550,000	1600,000	1650,000	1700,000	1750,000	1800,000	1850,000	1900,000	1950,000	2000,000	2050,000	2100,000	2150,000	2200,000	2250,000	2300,000	2350,000	2400,000	2450,000	2500,000	2550,000	2600,000	2650,000	2700,000	2750,000	2800,000	2850,000	2900,000	2950,000	3000,000	3050,000	3100,000	3150,000	3200,000	3250,000	3300,000	3350,000	3400,000	3450,000
QUOTE TERRENO	304,057	305,426	306,110	305,711	305,117	306,766	307,208	307,829	309,236	312,659	314,534	314,685	317,416	318,958	320,549	333,609	349,872	350,864	348,102	346,375	343,367	333,818	324,591	333,253	345,212	356,700	361,451	359,320	343,213	324,810	311,590	294,279	294,305	295,982	309,482	319,895	326,793	346,377	361,047	369,264	376,086	396,015	401,256	403,167	398,810	381,668	361,620	346,354	330,643	310,522	299,018	298,033	311,125	324,437	338,099	341,514	351,808	366,609	365,670	358,304	361,043	375,427	395,732	395,411	379,103	350,819	329,994	316,570	304,932	291,989
QUOTE PROGETTO	304,671	304,334	304,881	305,429	305,977	306,531	307,485	309,050	310,633	311,927	312,930	313,643	314,064	314,195	314,035	313,622	313,171	312,721	312,271	311,821	311,371	310,921	310,471	310,021	309,571	309,121	308,671	308,221	307,839	307,596	307,491	307,525	307,699	308,011	308,462	309,052	309,772	310,522	311,268	311,950	312,549	313,065	313,497	313,846	314,111	314,294	314,392	314,408	314,340	314,189	313,955	313,637	313,236	312,751	312,183	311,532	310,802	310,052	309,302	308,552	307,802	307,052	306,302	305,552	304,802	304,052	303,302	302,552	301,815	301,427
ETTOMETRICHE	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34																																			
ANDAMENTO PLANIMETRICO	L 11,68 A=70,00 Ls 32,67 R=150,00 Lc 141,33 A=100,00 Ls 66,67 L 112,39 R=700,00 Lc 181,14 A=234,00 Ls 78,22 R=700,00 Lc 181,14 A=234,00 Ls 78,22 L 585,63 A=420,00 Ls 141,12 R=1250,00 Lc 374,85 A=420,00 Ls 141,12 L 732,08 A=367,00 Ls 122,44 R=1100,00 Lc 395,84 A=367,00 Ls 122,44																																																																					

LIVELLETTE	DIFF. DI QUOTA DISTANZA PENDENZA	h = 25,971 L = 700,617 i = 0,037	h = -49,951 L = 768,479 i = -0,065	h = -0,828 L = 413,754 i = -0,002	h = -19,154 L = 586,685 i = -0,033	h = 1,654 L = 82,685 i = 0,020
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SCALA QUOTE 1:1000
SCALA DISTANZE 1:10000

QT.RIF. 230,000

N.	6
Pr	3518,912
Qt	300,018
R	5000,000
T	130,173
Fr	1,695
Sv	260,391

N.	7
Pr	4219,529
Qt	325,990
R	9300,000
T	474,622
Fr	12,111
Sv	949,748

N.	8
Pr	4988,008
Qt	276,038
R	5003,791
T	157,619
Fr	2,483
Sv	315,468

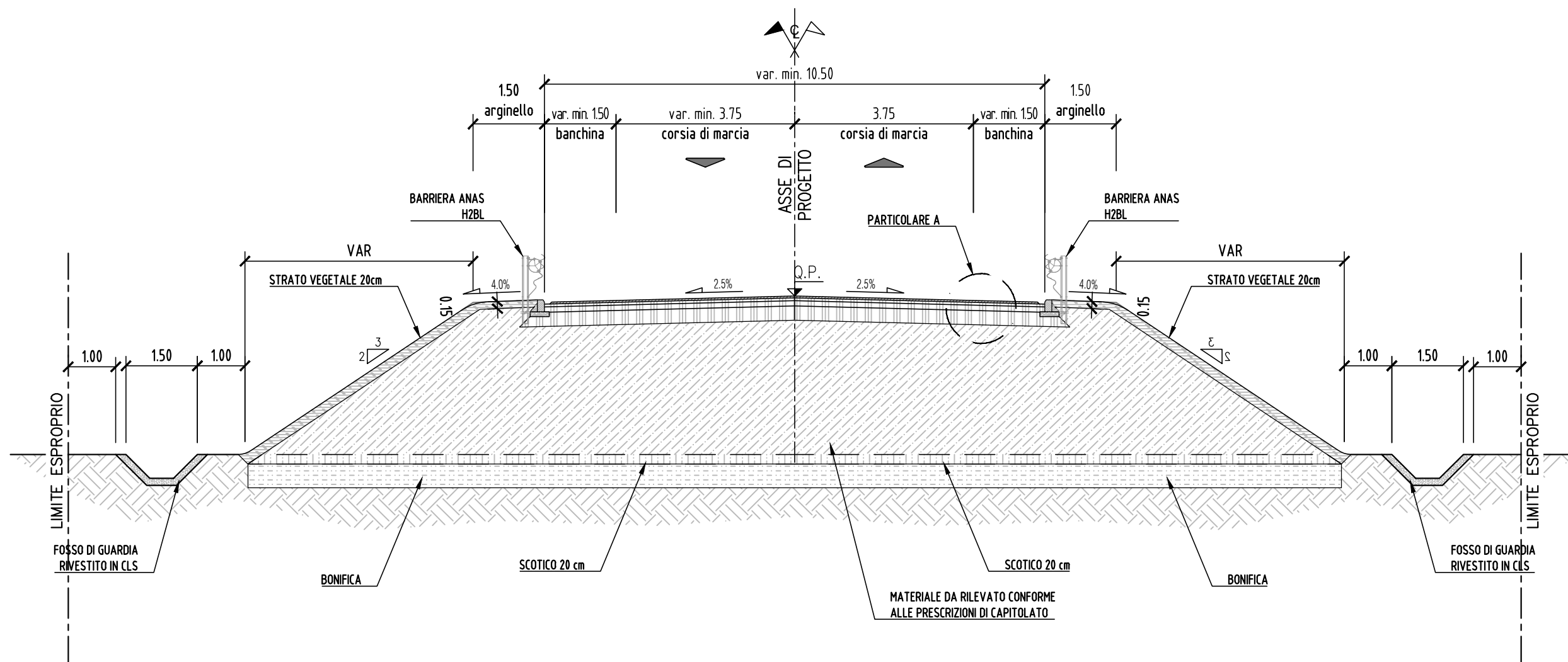
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Qt	275,211
R	8800,000
T	134,848
Fr	1,033
Sv	269,748

N.	10
Pr	5988,448
Qt	256,057
R	1200,000
T	31,588
Fr	0,416
Sv	63,185

DISTANZE PROGRESSIVE	3400,000	3400,000	3450,000	3500,000	3550,000	3600,000	3650,000	3700,000	3750,000	3800,000	3850,000	3900,000	3950,000	4000,000	4050,000	4100,000	4150,000	4200,000	4250,000	4300,000	4350,000	4400,000	4450,000	4500,000	4550,000	4600,000	4650,000	4700,000	4750,000	4800,000	4850,000	4900,000	4950,000	5000,000	5050,000	5100,000	5150,000	5200,000	5250,000	5300,000	5350,000	5400,000	5450,000	5500,000	5550,000	5600,000	5650,000	5700,000	5750,000	5800,000	5850,000	5900,000	5950,000	6000,000	6050,000	6088,112
QUOTE TERRENO	304,932	291,989	293,018	266,989	293,166	299,167	304,724	307,401	310,135	307,908	311,561	315,046	318,179	318,552	319,737	321,781	320,968	317,585	316,096	315,827	315,765	312,293	308,015	301,895	296,180	291,983	289,257	290,127	285,828	279,705	275,806	276,162	273,765	271,907	275,282	275,072	268,845	254,313	270,801	270,183	269,582	268,313	266,427	265,483	263,206	262,430	239,112	235,000	239,646	247,673	251,648	255,394				
QUOTE PROGETTO	301,815	301,427	301,540	302,152	303,265	304,878	306,731	308,583	310,275	311,698	312,852	313,737	314,353	314,701	314,780	314,590	314,131	313,403	312,407	311,141	309,607	307,804	305,732	303,392	300,782	297,904	294,759	291,509	288,259	285,047	282,243	279,939	278,134	276,828	276,023	275,715	275,615	275,515	275,352	274,922	274,208	273,210	271,928	270,371	268,739	267,107	265,474	263,842	262,210	260,577	258,945	257,312	256,456	257,288	257,651	
ETTOMETRICHE	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60																													
ANDAMENTO PLANIMETRICO	L 334,826		A=210,00 Ls 73,50		R=600,00 Lc 185,84		A=210,00 Ls 73,50		R=600,00 Lc 159,42		A=259,35 Ls 112,10		L 701,265		A=210,00 Ls 77,36		R=570,00 Lc 197,96		A=190,00 Ls 63,33		L 150,44		A=173,00 Ls 63,00		R=475,00 Lc 336,28		L 63,12																													

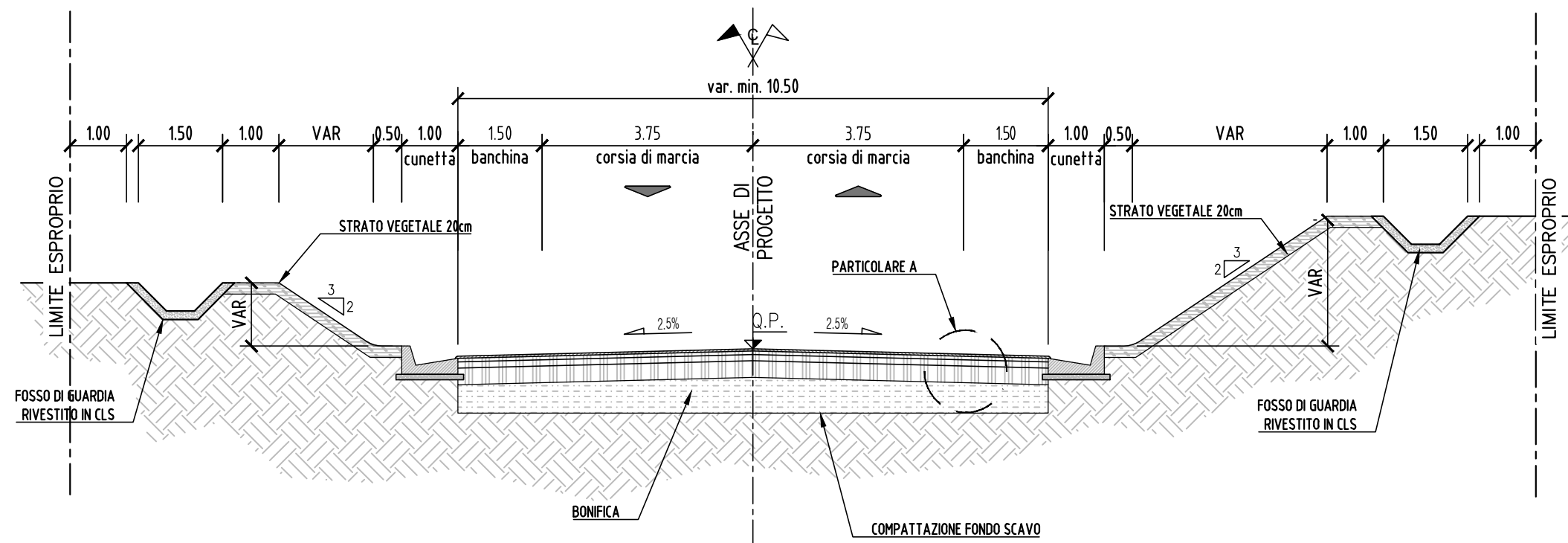
ASSE PRINCIPALE IN RILEVATO

SCALA 1:100



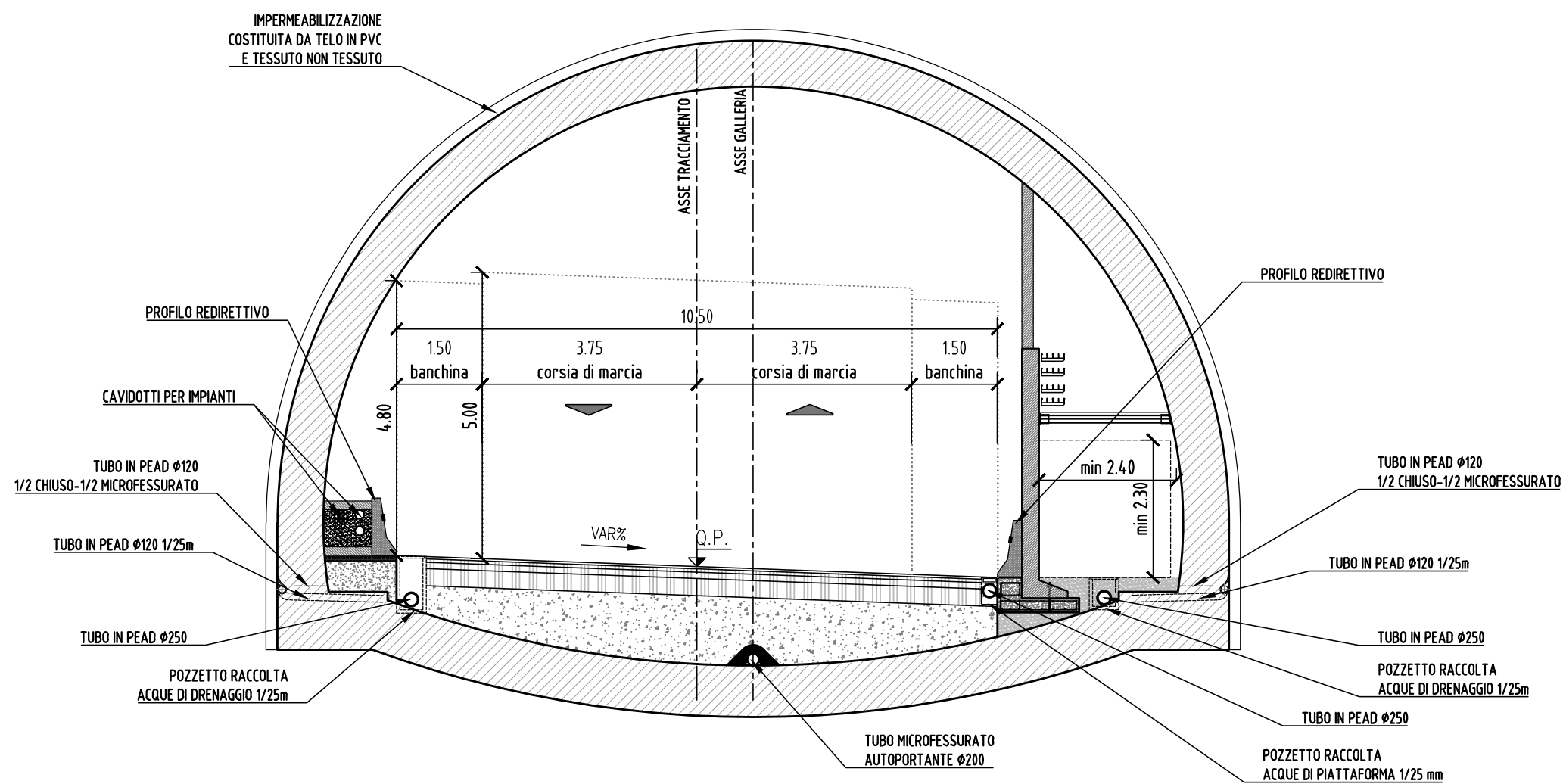
ASSE PRINCIPALE IN SCAVO

SCALA 1:100



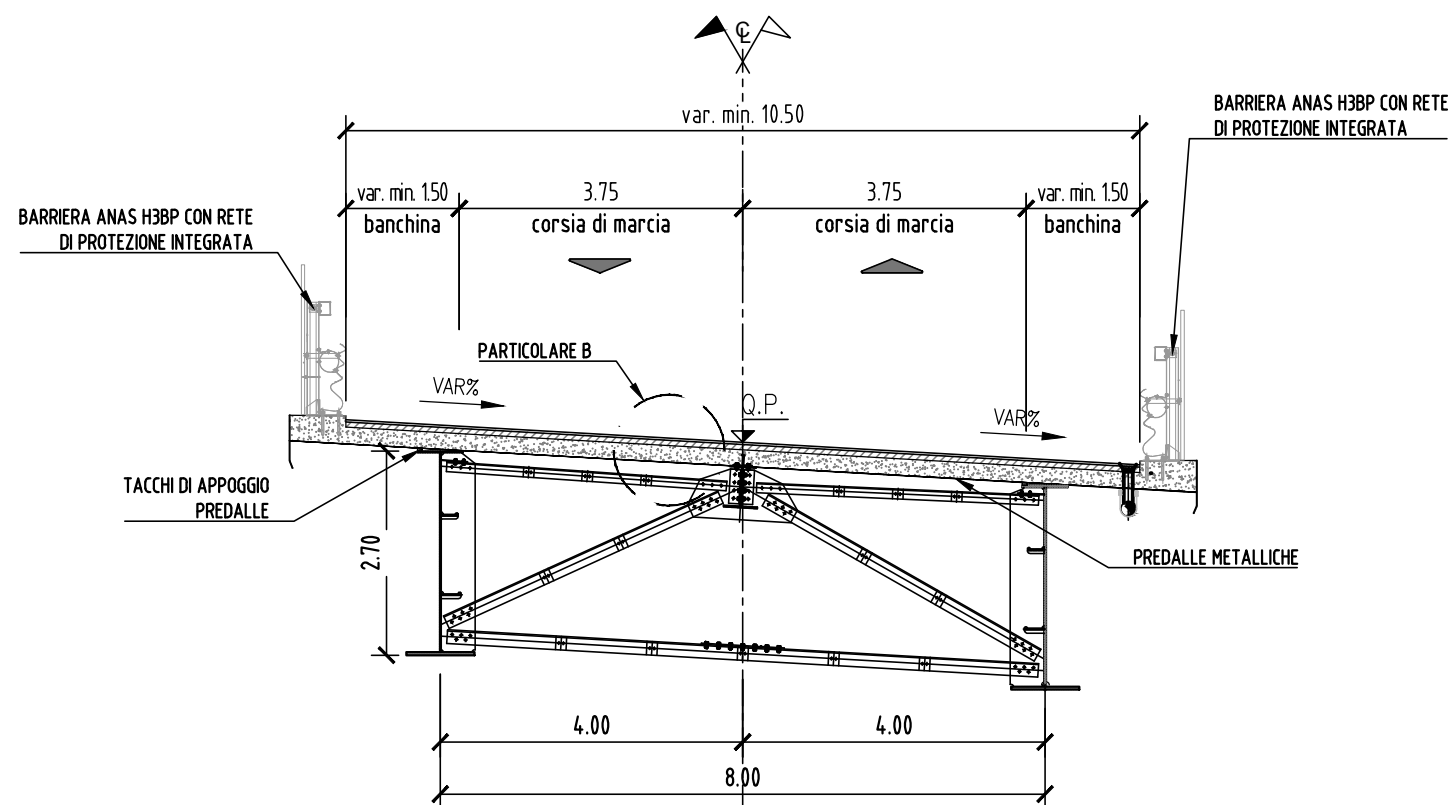
ASSE PRINCIPALE IN GALLERIA NATURALE

SCALA 1:100



ASSE PRINCIPALE SU VIADOTTO

SCALA 1:100

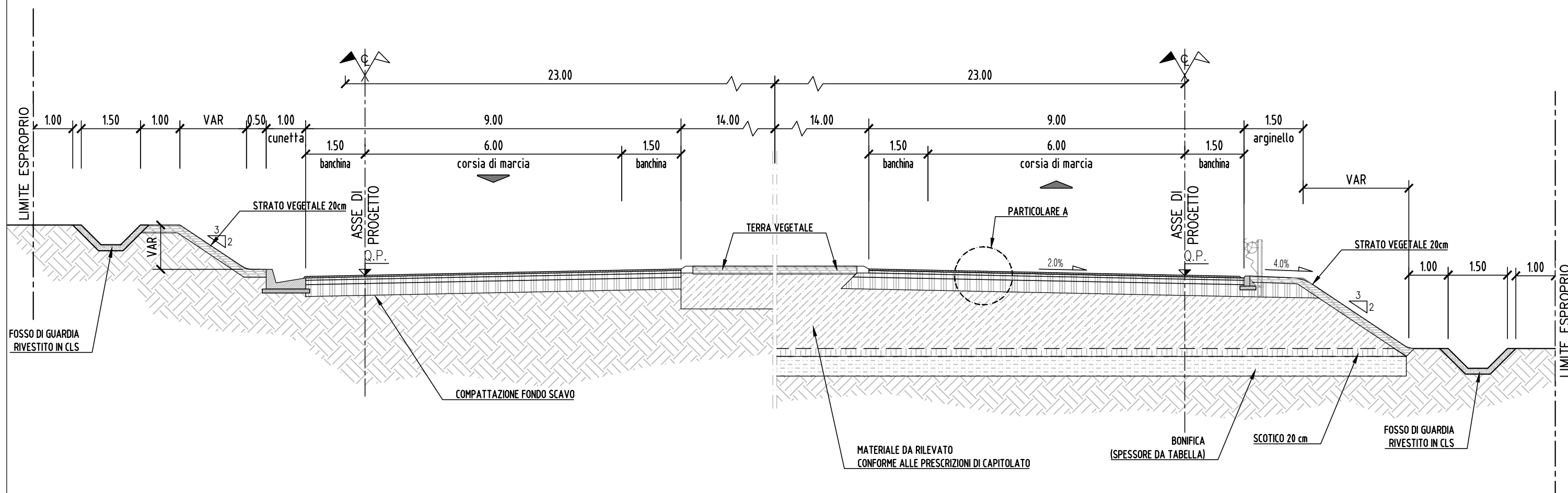


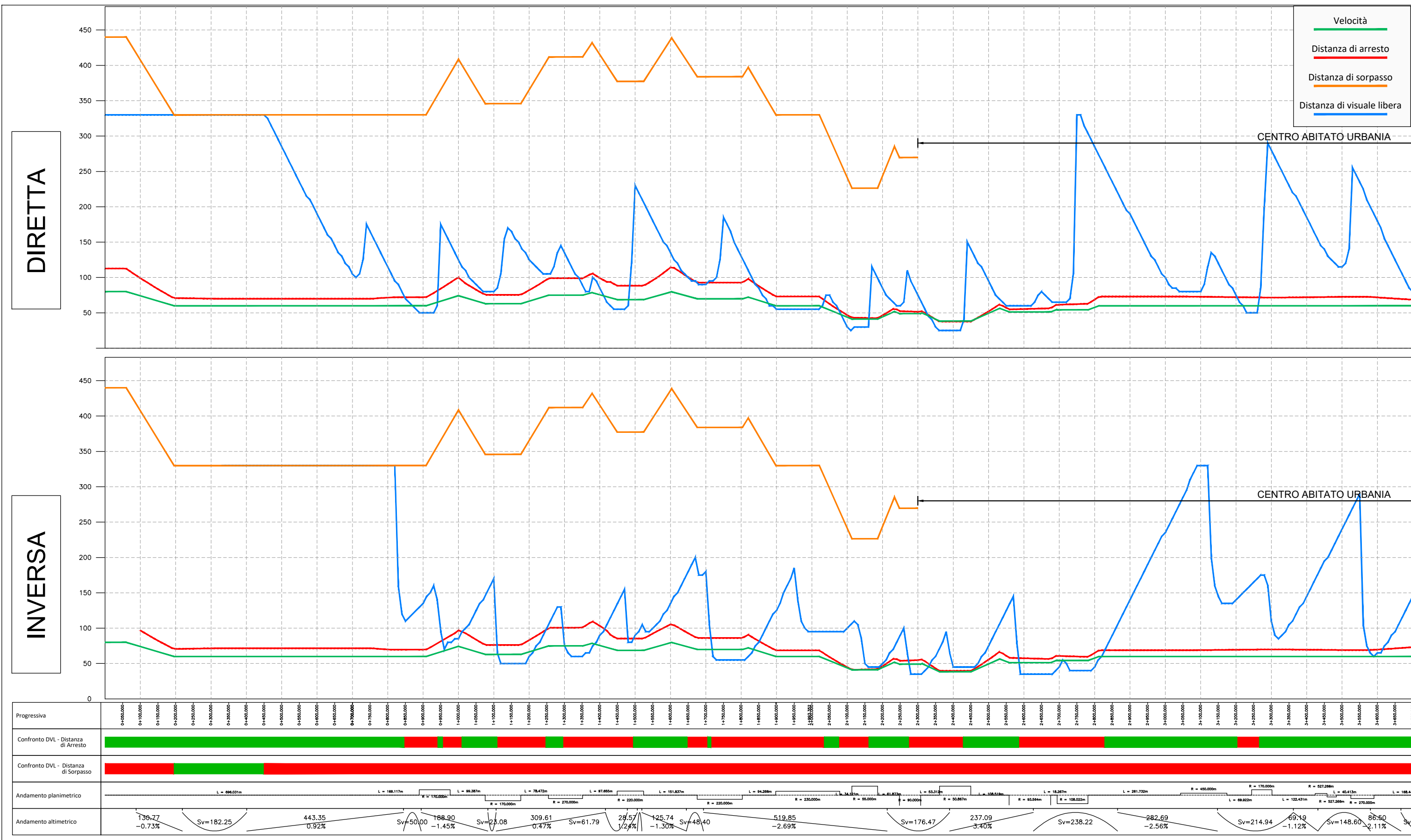
ROTATORIE SU ASSE PRINCIPALE

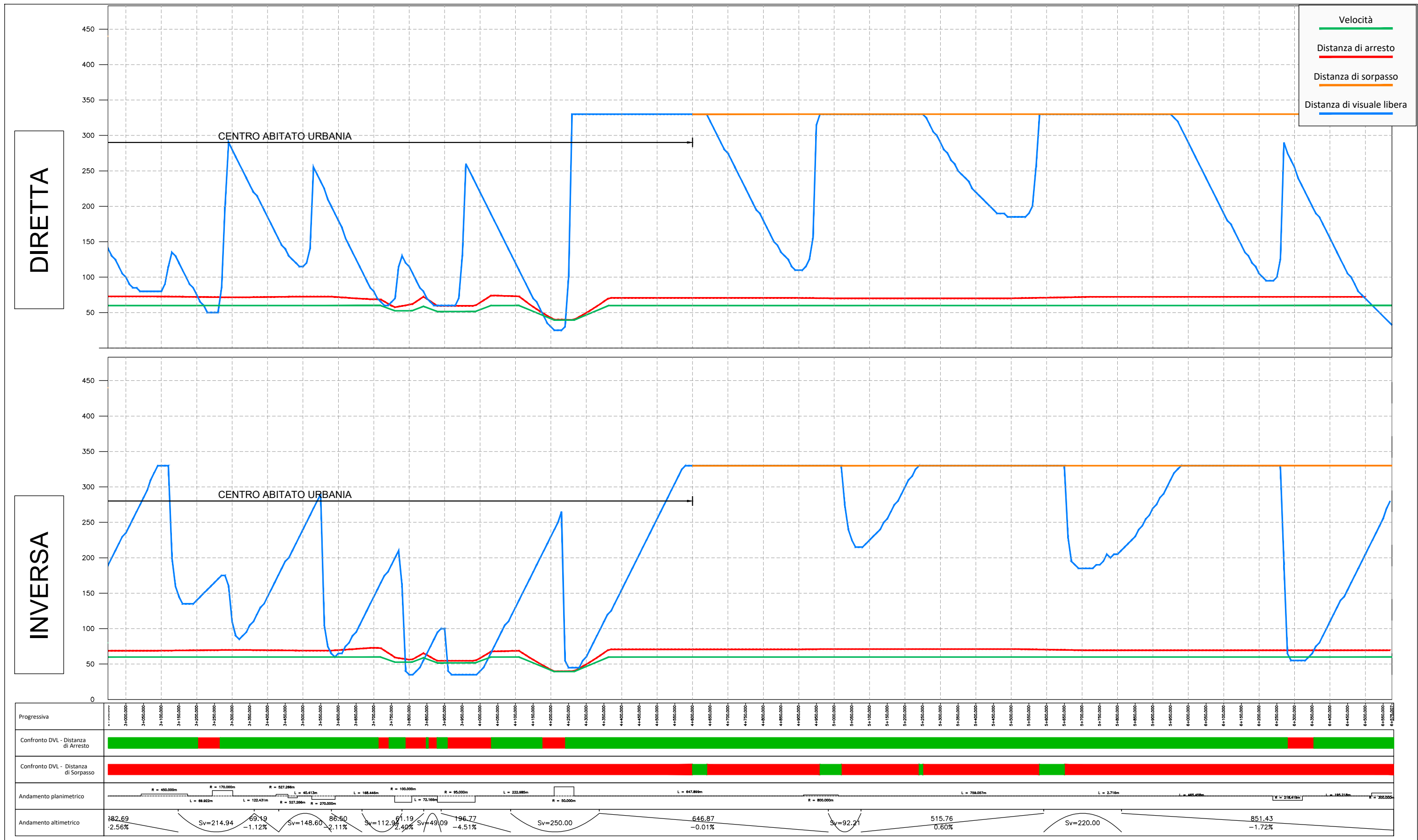
SCALA 1:100

1/2 SEZIONE IN TRINCEA

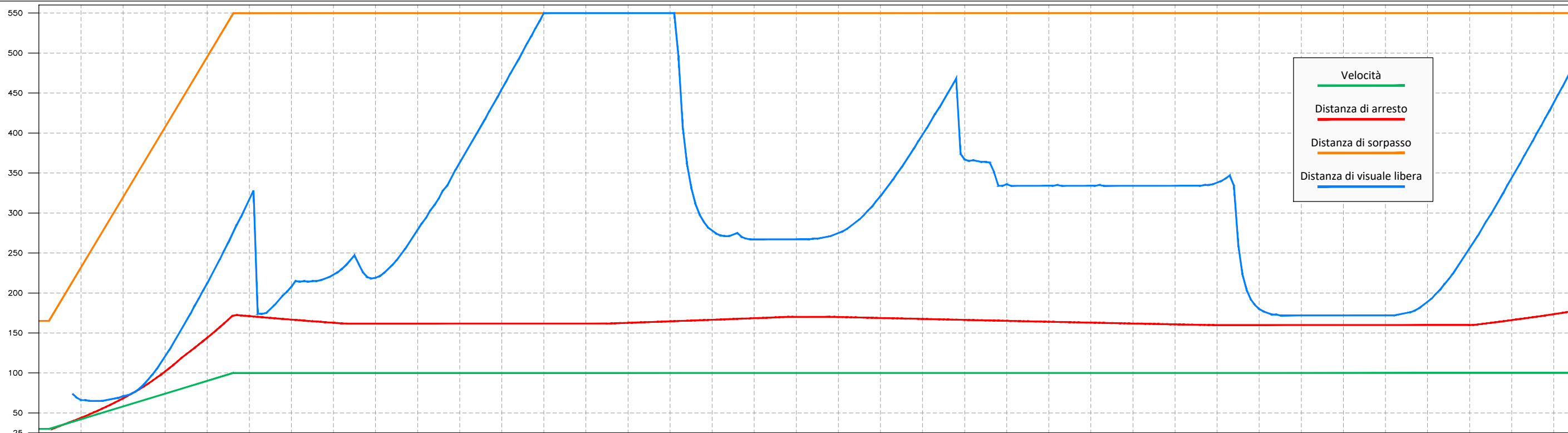
1/2 SEZIONE IN RILEVATO



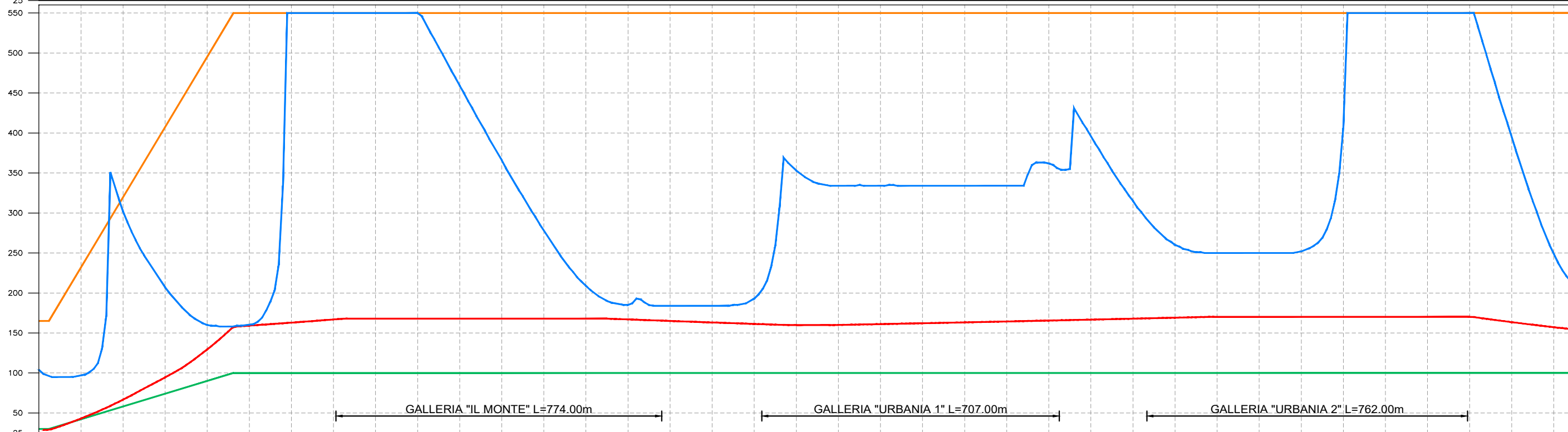




INVERSA



DIRETTA



GALLERIA "IL MONTE" L=774.00m

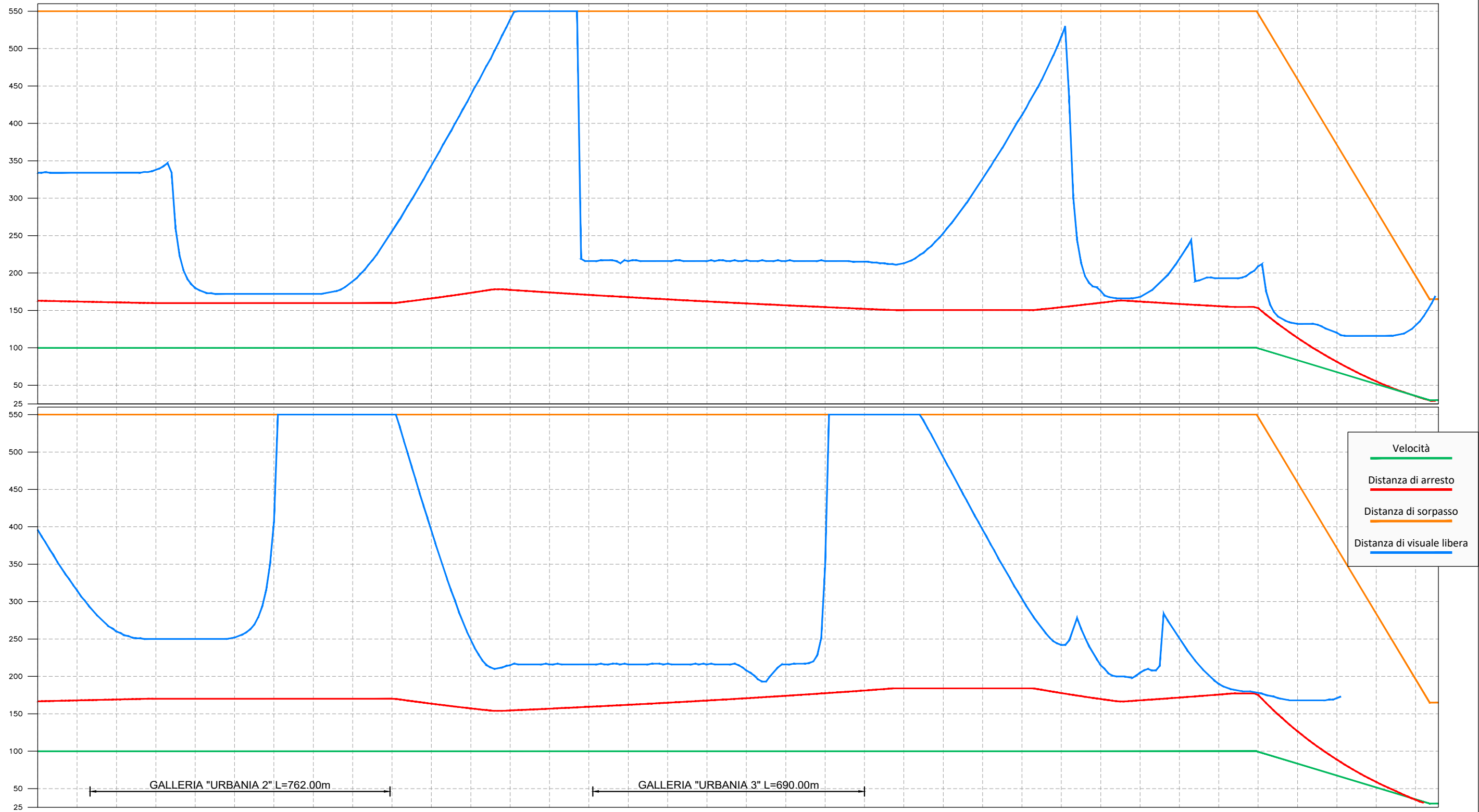
GALLERIA "URBANIA 1" L=707.00m

GALLERIA "URBANIA 2" L=762.00m

Confronto DVL-Dist. di Arresto	
Confronto DVL-Dist. di Sorpasso	
Andamento planimetrico	L 11.68 A=70.00 Lc 32.67 R=120.00 Lc 141.23 A=100.00 Lc 86.67 L 112.39 A=234.00 Lc 78.22 R=700.00 Lc 181.14 A=234.00 Lc 78.22 L 585.63 A=420.00 Lc 141.12 R=1250.00 Lc 374.85 A=420.00 Lc 141.12 L 732.08 A=367.00 Lc 122.44 R=1100.00 Lc 335.84 A=367.00 Lc 122.44 L 390.68
Andamento altimetrico	R=1000 p=-2.00% 198.41 p=1.10% R=4000 p=3.54% R=8600 625.71 p=-0.90% R=18000 101.70 p=1.50% R=30000 622.50 p=-1.50% R=5000
Allargamenti	0.60 1.10

INVERSA

DIRETTA



Confronto DVL-Dist. di Arresto	[Green bar]													
Confronto DVL-Dist. di Sorpasso	[Red bar]													
Andamento planimetrico	$\Delta=362.00$ $L_s=122.44$	$R=1100.00$ $L_c=395.84$	$\Delta=362.00$ $L_s=122.44$	$L=390.68$	$R=6000.00$ $L_c=785.07$	$L=509.89$	$\Delta=234.00$ $L_s=78.22$	$R=700.00$ $L_c=168.00$	$\Delta=234.00$ $L_s=78.22$	$L=152.61$	$\Delta=230.00$ $L_s=108.90$	$R=500.00$ $L_c=398.50$	$\Delta=200.00$ $L_s=80.00$	52.82
Andamento altimetrico	622.50 $p=-1.50\%$		$R=5000$ $p=3/50\%$	$R=12000$	354.01 $p=-4.80\%$	$R=5000$ 1.50 $p=-0.50\%$	$R=10000$	411.50 $p=-3.26\%$	$R=1200$ $47/03$ $p=2.00\%$					
Allargamenti	[Diagram showing lane widening with 1.50m and 1.00m increments]													