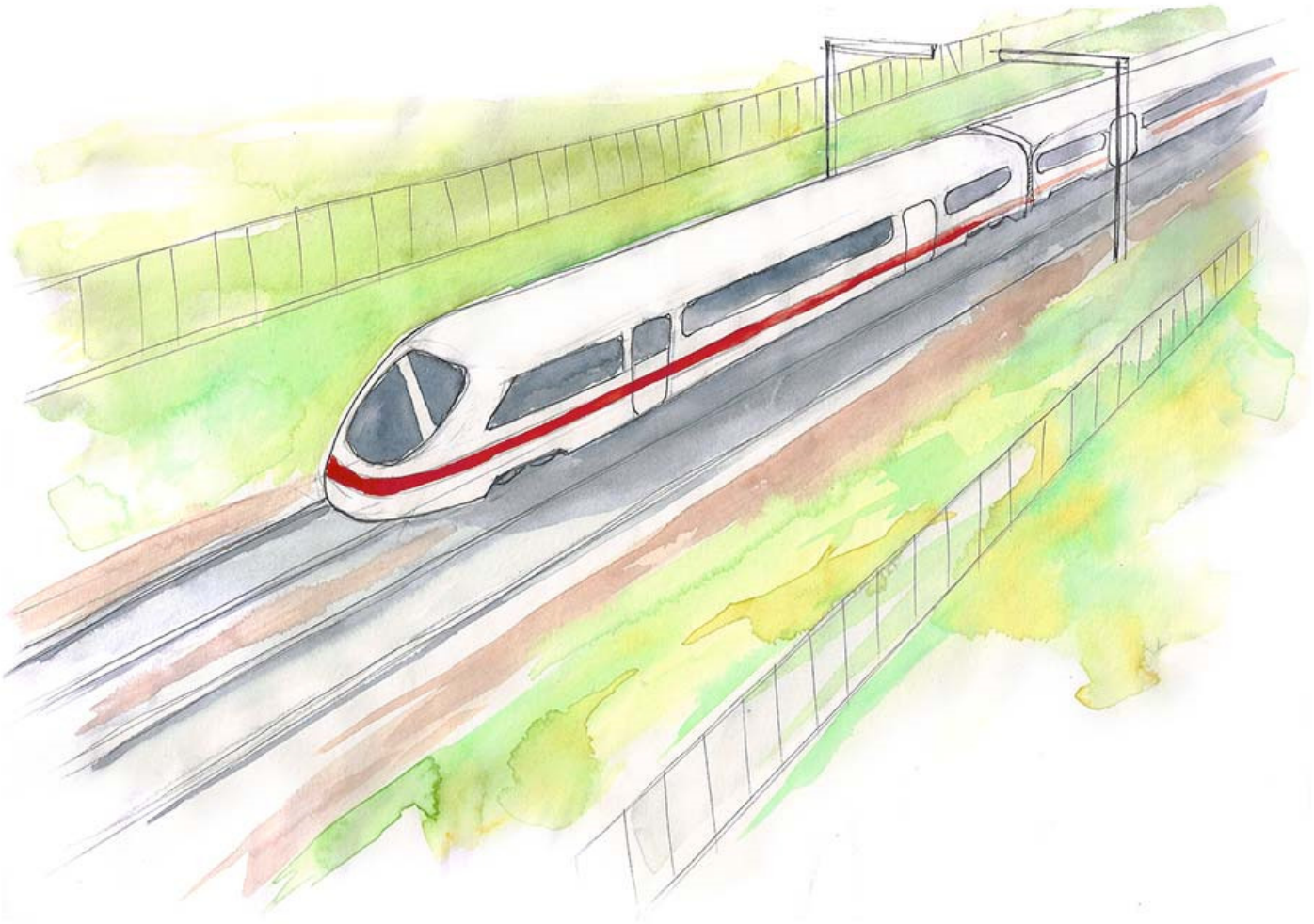
Kaasrahastatud Euroopa Liidu poolt
Üleeuroopaline transpordivõrk (TEN-T)



RAIL BALTIC ESTONIA

Trassivariantide maksumuste võrdlus

17. oktoober 2014

TEHNILISE JÄRELEVALVE AMET
ESTONIAN TECHNICAL SURVEILLANCE AUTHORITY

MAJANDUS- JA KOMMUNIKATSIOONI-MINISTEERIUM

Harju Maavalitsus

PÄRNU MAAVALITSUS

Rapla Maavalitsus
Rapla County Government

Rail Balticu 1435 mm trassi Harju, Rapla ja Pärnu maakonnaplaneeringute teemaplaneeringute tehniline koostamine, asjakohaste detailplaneeringute, keskkonnamõju strateegilise hindamise ja keskkonnamõju hindamise ning raudtee eelprojekti ja raudteega seotud ehitiste eelprojektide koostamine

Rail Baltic Estonia

Trassivariantide maksumuste võrdlus

Kuupäev: 17. oktoober 2014

Dok id/nr: RB-BG-00

Faili nimi: RB-BG-00_Budget 20141017.docx

Käesoleva väljaande autor on selle eest ainuisikuliselt vastutav. Euroopa Liit ei vastuta selles sisalduva teabe mis tahes kasutamise eest.

Reaalprojekt Hendrikson & Ko KELPROJEKTAS Reng WSP

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1. TRASSIVARIANTIDE EELARVESTUS PÕHIMÕTTED

Eelarvestuse aluseks on september 2014.a. seisuga koostatud maakonnaplaneeringute käigus välja töötatud võimalikud raudtee trassi variandid ning neile koostatud eskiisprojekti lahendid.

Esitatud eelarvestuse eesmärk on anda üldine hinnang erinevate trassikoridoride maksumusele, mis on ühtlasi aluseks trassivariantide omavahelisele võrdlusele planeeringus.

Eelarvestuse aluseks on kasutatud raudteede ja raudtee tehnovõrkude osas Tellija poolt Konsultandile edastatud indikatiivseid ühikhindasid. Teede, rajatiste ja muude tehnovõrkude osas on ühikhindadena kasutatud Maanteeameti projektide alusel tuletatud kogemuslike hindu.

Kuna koostatud eelarvestus baseerub üldistatud andmetel ning hinnangulised ehitusmahud on tuletatud maakonnaplaneeringu täpsusastmes on eelarve koostamisel lõppsummasse lisatud varutegur 20% - ettenägemata tööde näol. Varutegur on tinglik ning seda võib Tellija soovil vähendada või suurendada.

Trassivariantide eelarvestuses pole eelkalkulatsiooni täpsusastmes arvestatud järgmiste maksumustega (trassi koridoride omavahelises võrdluses lähtutakse eeldusest, et need on erinevate alternatiivide korral analoogsed):

- Ülemiste depoo rajamise maksumus
- Muuga kaubaterminali rajamise maksumus
- Ülemiste ja Pärnu reisijaama hoonete maksumus (ideekonkursse pole toimunud)

Rail Balticu trassi ehitusmaksumuse eelarve kujuneb järgmistest peamistest valdkondadest:

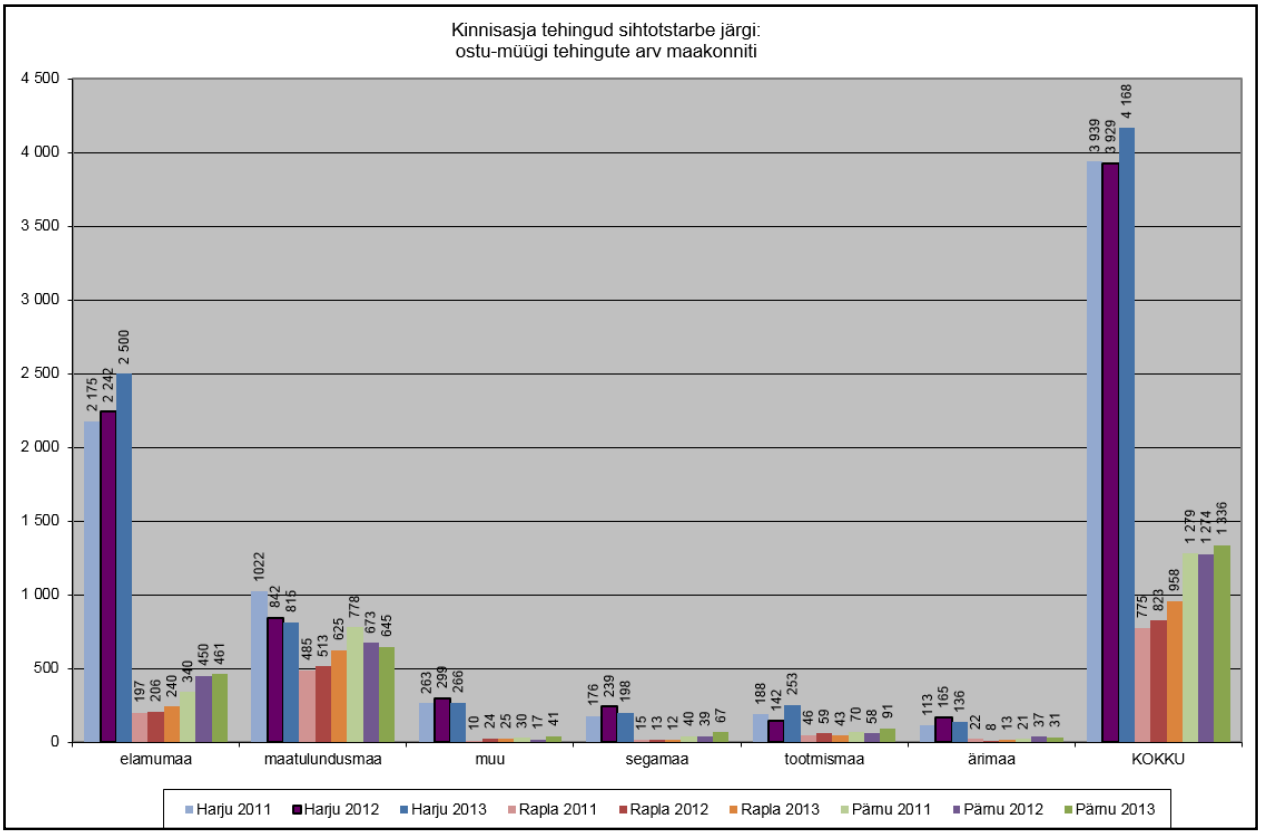
- raudtee taristu ja sellega seotu ehitusmaksumus
- teede võrk ja selle ümberehitus
- rajatised: sillad, viaduktid, ökoduktid jne.
- hoonete, ehitiste lammutamine/kompenseerimine, kehtestatud detailplaneeringute "väljaostmine", suuremahulised tehnorajatised (vajalikud ümberehitused toimimise tagamiseks)
- maavõõranduskulud

Maahinna tuletus ja kasutamine eelarvestuses

Hindade tuletamisel lähtuti eelkõige Maa-ameti portaalis olevast kinnisvara hinnastatistikast:

http://www.maaamet.ee/kinnisvara/htraru/Start.aspx

Päringud teostati 3 viimase aasta (2011-2013) kinnisasja ostu-müügi tehingute kohta maa sihtotstarbe järgi 2013 aasta 27. novembri seisuga. Päringud hõlmasid Harju, Rapla, ja Pärnu maakondade valdu, mida uus Rail Balticu trass on planeeritud läbima.



Maa-ameti statistika järgne ostu-müügi tehingute arv maakonniti 2011-2013.

1. elamumaaga toimunud tehingud
2. maatulundusmaaga toimunud tehingud
3. muu maaga toimunud tehingud
4. segamaaga toimunud tehingud
5. tootmismaaga toimunud tehingud
6. ärimaaga toimunud tehingud

Kuna hinnastatistikas ei kajastu tehingute hinnad, kui tehingute arv jääb alla 5 tehingu asusutsüksuse kohta, vaadeldi lisaks ka kinnisvaraportaalides detsembris 2013 müügis olevate maatükkide hindu hinnatasemest ettekujutuse saamiseks (näiteks http://www.kv.ee/).

Saadud tulemusi analüüsides jagati RB läbitav ala tinglikult 4'ks hinnatsooniks. Tsoonide määramisel analüüsiti keskmisi maa ostu-müügi hindu valdade ja maakondade kaupa. Samuti vaadeldi trasside lõikes piirkondi, kus ühe või teise otstarbega maa asub.

Hinnatsoonide kujundamise aluseks võeti maatulundusmaaga seotud võõrandused, kui suurima osakaaluga sihtotstarbega maa. Kokku moodustavad maatulundusmaad ja riigimaad ca 97% kõikide trassivariantide jaoks kalkuleeritud maaeralduste mahust. Maatulundusmaa keskmiste hindade alusel saadi 4 hinnatsooni, kus hinnavõrdluste tulemusel võeti hinnatsoonide piirideks orienteeruvalt maakonna piirid.

Hinnatsoonides keskmiste hindade leidmisel ei arvestatud üldiselt piirkonna madalaima hinnaga. Kõrgeima keskmise hinnaga ei arvestatud, kui trassialternatiivil puudus antud haldusüksuses maasihtotstarbeline eraldamise vajadus. Tehingute vähesuse või puudumise korral antud piirkonnas tuletati hind kinnisvaraportaalis müügis olevate trassialternatiivi lähipiirkonnas asuvate keskmiste hindade alusel.

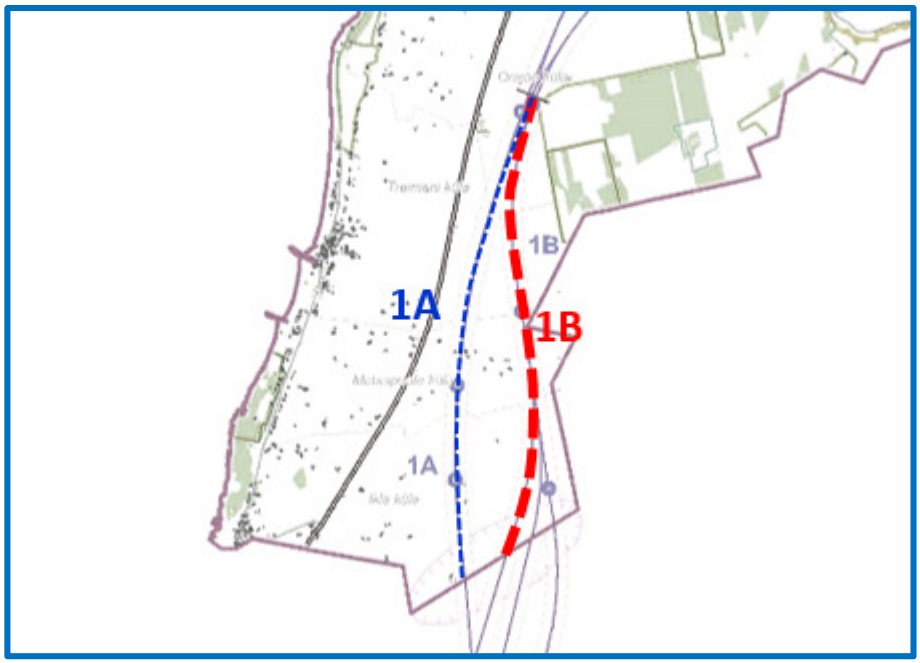
Kuna antud hindade ja eraldamist vajavate pindade arvestus on väga üldine ning ei arvesta paratamatult ka tekkiva „tükeldusefektiga", siis on eelarvelistes kuludes maatulundusmaa eraldamisel arvestatud 1,5 – 2 kordse varuteguriga.

2. TRASSIVARIANTIDE MAKSUMUSTE VÕRDLUS

2.1. VÕRDLUS 1 – 1A VS 1B

	ROUTE 1			VS	ROUTE 2		
	Selected sections for calculation	Length [km]	Cost [thousand EUR]		Selected sections for calculation	Length [km]	Cost [thousand EUR]
Start here:	1A	8.42	34 579		1B	7.89	31 213
TOTAL:		8.42 km	34 579	TOTAL:		7.89 km	31 213
Difference with shortest:		+0.53 km	aver. cost per km	Difference with shortest:		0.00 km	aver. cost per km
			4 109				3 956
Cost difference with highest [thousand EUR]			0	Cost difference with highest [thousand EUR]			-3 366
Percentage			0.0%	Percentage			-9.7%

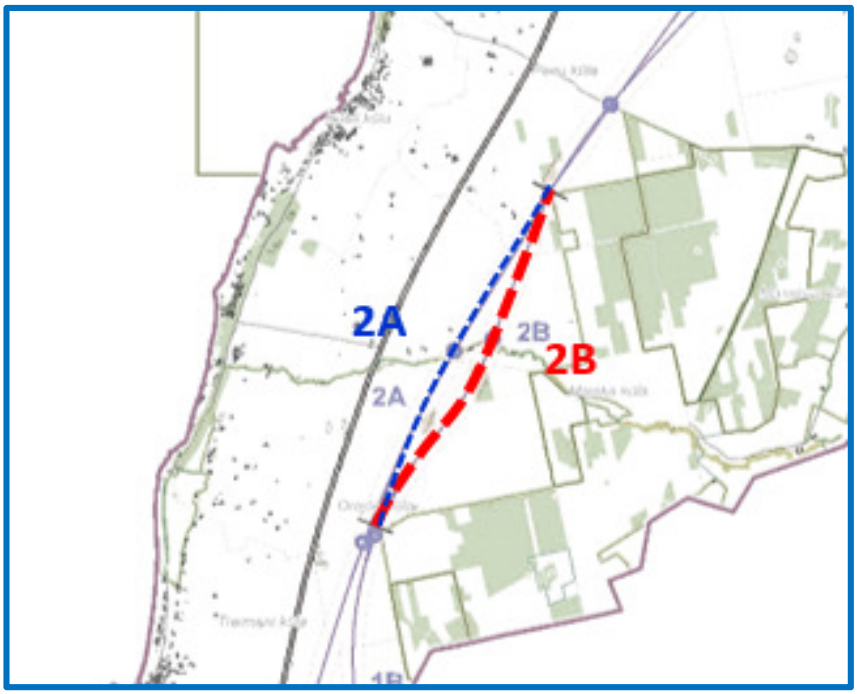
Võrreldavate trassivariantide skeem:



2.2. VÕRDLUS 2 - 2A VS 2B

	ROUTE 1			VS	ROUTE 2		
	Selected sections for calculation	Length [km]	Cost [thousand EUR]		Selected sections for calculation	Length [km]	Cost [thousand EUR]
Start here:	2A	6.09	26 411		2B	6.11	26 499
	TOTAL:	6.09 km	26 411		TOTAL:	6.11 km	26 499
	Difference with shortest:	0.00 km	aver. cost per km		Difference with shortest:	+0.02 km	aver. cost per km
			4 338				4 340
	Cost difference with highest [thousand EUR]		-88		Cost difference with highest [thousand EUR]		0
	Percentage		-0.3%		Percentage		0.0%

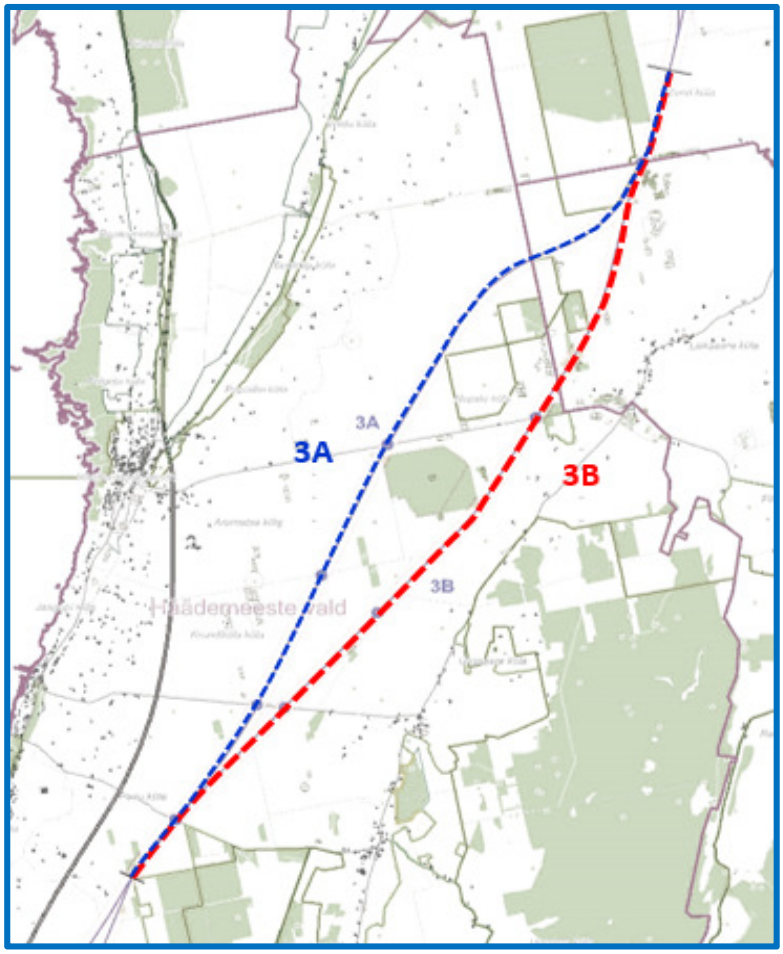
Võrreldavate trassivariantide skeem:



2.3. VÕRDLUS 3 – 3A VS 3B

	ROUTE 1			VS	ROUTE 2		
	Selected sections for calculation	Length [km]	Cost [thousand EUR]		Selected sections for calculation	Length [km]	Cost [thousand EUR]
Start here:	3A	23.27	96 306		3B	23.19	95 893
TOTAL:		23.27 km	96 306	TOTAL:		23.19 km	95 893
Difference with shortest:		+0.08 km	aver. cost per km	Difference with shortest:		0.00 km	aver. cost per km
			4 138				4 135
Cost difference with highest [thousand EUR]			0	Cost difference with highest [thousand EUR]			-413
Percentage			0.0%	Percentage			-0.4%

Võrreldavate trassivariantide skeem:

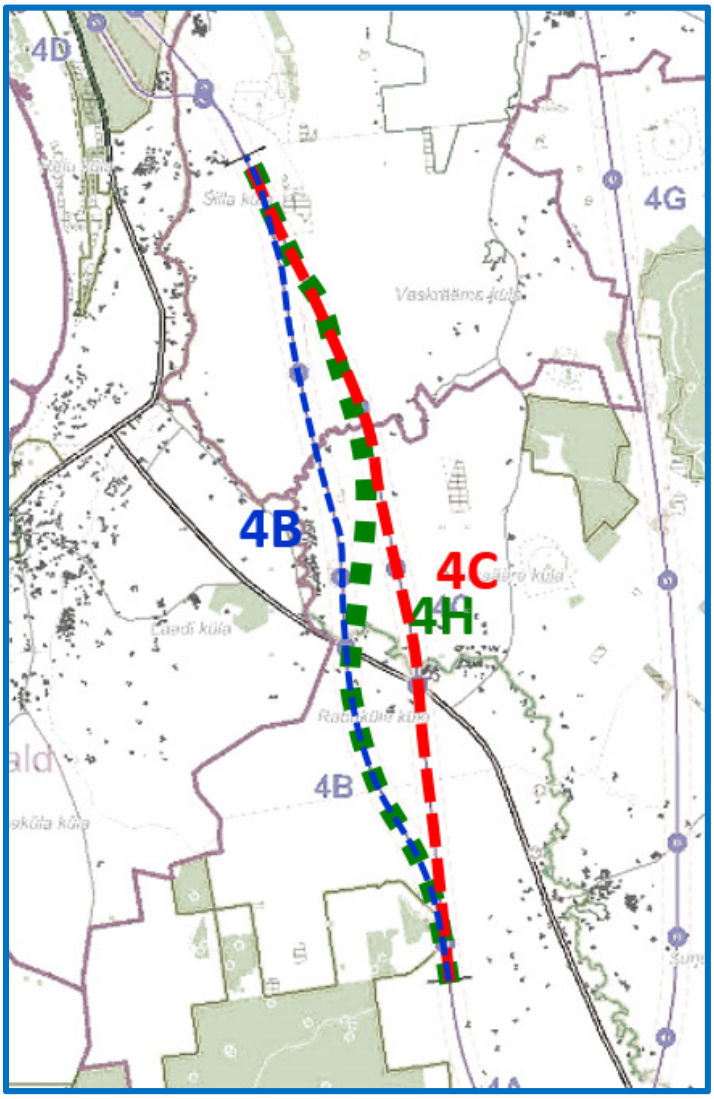


2.4. VÕRDLUSGRUPP 4

2.4.1. VÕRDLUS 4.1 – 4B VS 4C VS 4H

	ROUTE 1			VS	ROUTE 2			VS	ROUTE 3		
	Selected sections for calculation	Length [km]	Cost [thousand EUR]		Selected sections for calculation	Length [km]	Cost [thousand EUR]		Selected sections for calculation	Length [km]	Cost [thousand EUR]
Start here:	4B	11.28	53 861		4C	11.29	53 477		4H	11.44	54 212
TOTAL:		11.28 km	53 861	TOTAL:		11.29 km	53 477	TOTAL:		11.44 km	54 212
Difference with shortest:		0.00 km	aver. cost per km	Difference with shortest:		+0.01 km	aver. cost per km	Difference with shortest:		+0.17 km	aver. cost per km
			4 775				4 738				4 737
Cost difference with highest [thousand EUR]			-351	Cost difference with highest [thousand EUR]			-735	Cost difference with highest [thousand EUR]			0
Percentage			-0.6%	Percentage			-1.4%	Percentage			0.0%

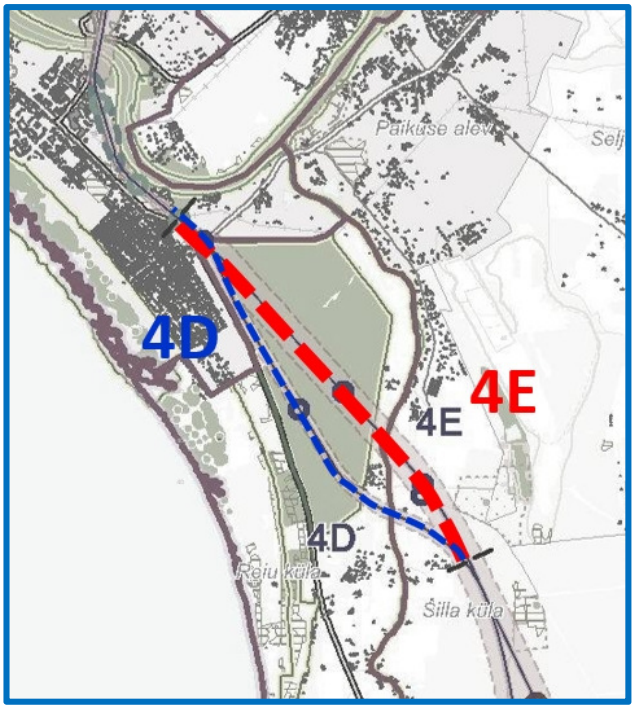
Võrreldavate trassivariantide skeem:



2.4.2. VÕRDLUS 4.2 – 4D VS 4E

	ROUTE 1			VS	ROUTE 2		
	Selected sections for calculation	Length [km]	Cost [thousand EUR]		Selected sections for calculation	Length [km]	Cost [thousand EUR]
Start here:	4D	5.34	29 743		4E	5.23	27 947
	TOTAL:	5.34 km	29 743		TOTAL:	5.23 km	27 947
	Difference with shortest:	+0.10 km	aver. cost per km		Difference with shortest:	0.00 km	aver. cost per km
			5 575				5 342
	Cost difference with highest [thousand EUR]		0		Cost difference with highest [thousand EUR]		-1 795
	Percentage		0.0%		Percentage		-6.0%

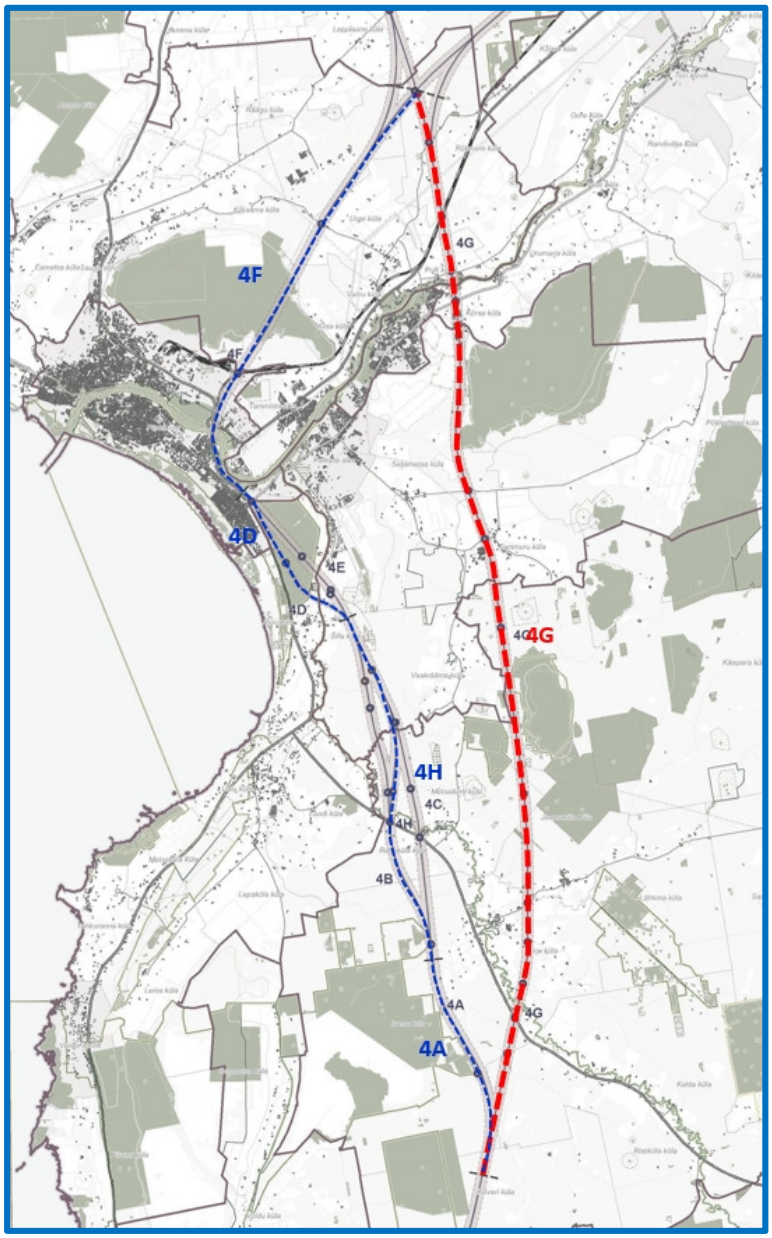
Võrreldavate trassivariantide skeem:



2.4.3. KOONDVÕRDLUS 4.3 – 4A+4C+4D+4F VS 4G

	ROUTE 1			VS	ROUTE 2		
	Selected sections for calculation	Length [km]	Cost [thousand EUR]		Selected sections for calculation	Length [km]	Cost [thousand EUR]
Start here:	4A	7.21	29 506		4G	34.98	186 389
	4H	11.44	54 212			-	-
	4D	5.34	29 743			-	-
	4F	15.02	90 983			-	-
	TOTAL:	39.00 km	204 443		TOTAL:	34.98 km	186 389
	Difference with shortest:	+4.02 km	aver. cost per km		Difference with shortest:	0.00 km	aver. cost per km
			5 242				5 328
	Cost difference with highest [thousand EUR]		0		Cost difference with highest [thousand EUR]		-18 054
	Percentage		0.0%		Percentage		-8.8%

Võrreldavate trassivariantide skeem:

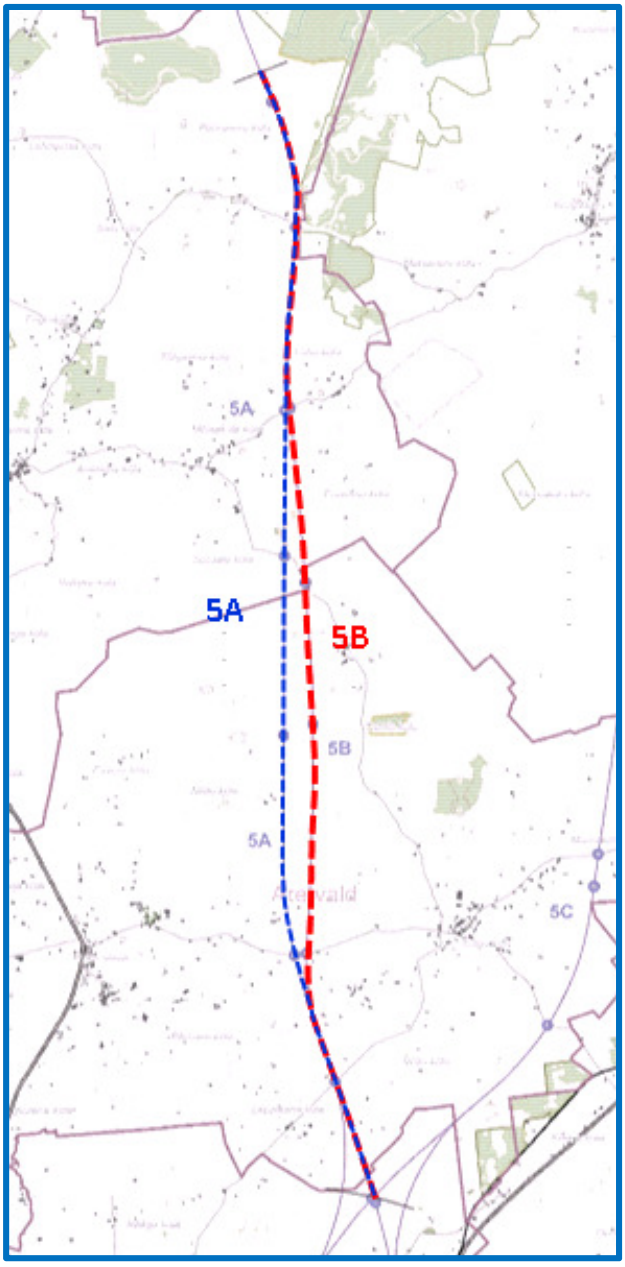


2.5. VÕRDLUSGRUPP 5

2.5.1. VÕRDLUS 5.1 – 5A VS 5B

	ROUTE 1			VS	ROUTE 2		
	Selected sections for calculation	Length [km]	Cost [thousand EUR]		Selected sections for calculation	Length [km]	Cost [thousand EUR]
Start here:	5A	25.39	109 098		5B	25.34	106 627
TOTAL:		25.39 km	109 098	TOTAL:		25.34 km	106 627
Difference with shortest:		+0.04 km	aver. cost per km	Difference with shortest:		0.00 km	aver. cost per km
			4 297				4 207
Cost difference with highest [thousand EUR]			0	Cost difference with highest [thousand EUR]			-2 471
Percentage			0.0%	Percentage			-2.3%

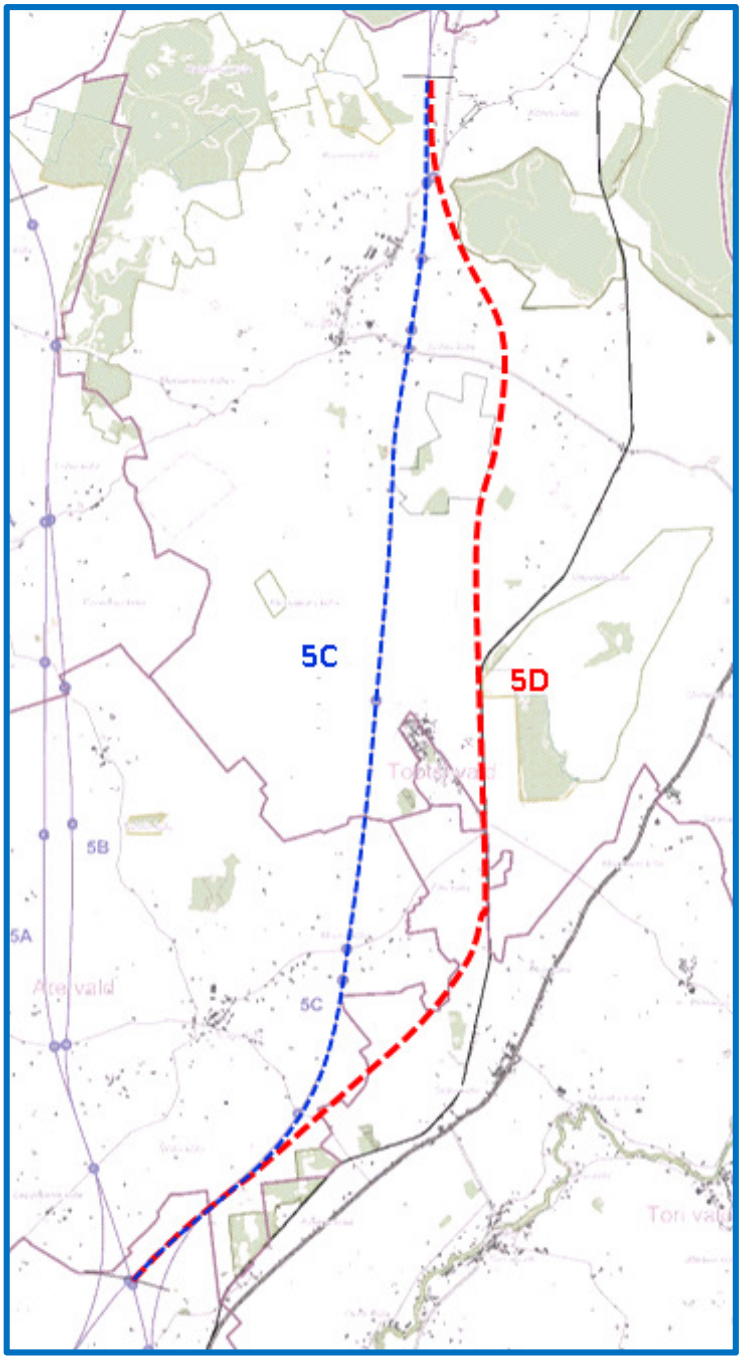
Võrreldavate trassivariantide skeem:



2.5.2. VÕRDLUS 5.2 – 5C VS 5D

	ROUTE 1			VS	ROUTE 2		
	Selected sections for calculation	Length [km]	Cost [thousand EUR]		Selected sections for calculation	Length [km]	Cost [thousand EUR]
Start here:	5C	29.68	127 756		5D	31.65	138 426
TOTAL:		29.68 km	127 756	TOTAL:		31.65 km	138 426
Difference with shortest:		0.00 km	aver. cost per km	Difference with shortest:		+1.98 km	aver. cost per km
			4 305				4 373
Cost difference with highest [thousand EUR]			-10 669	Cost difference with highest [thousand EUR]			0
Percentage			-7.7%	Percentage			0.0%

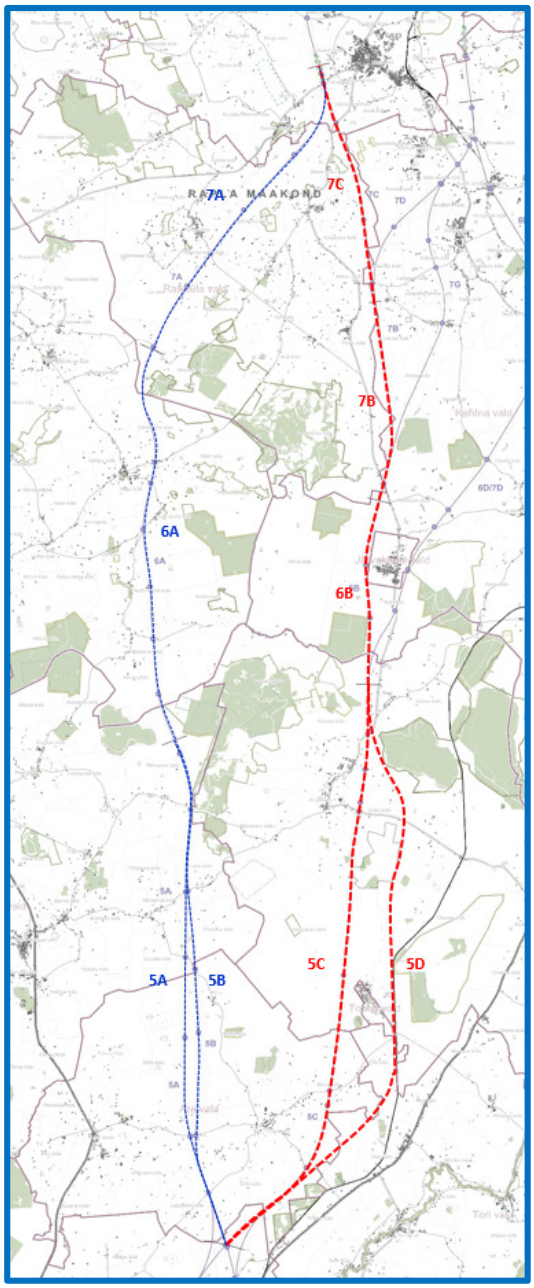
Võrreldavate trassivariantide skeem:



2.5.3. KOONDVÕRDLUS 5.3 – 5B+6A+7A VS 5C+6B+7B+7C

	ROUTE 1			VS	ROUTE 2		
	Selected sections for calculation	Length [km]	Cost [thousand EUR]		Selected sections for calculation	Length [km]	Cost [thousand EUR]
Start here:	5B	25.34	106 627		5C	29.68	127 756
	6A	19.76	98 507		6B	9.19	38 503
	7A	16.79	75 226		7B	9.97	44 653
		-	-		7C	12.06	58 030
TOTAL:		61.89 km	280 360	TOTAL:		60.89 km	268 942
Difference with shortest:		+1.00 km	aver. cost per km	Difference with shortest:		0.00 km	aver. cost per km
			4 530				4 417
Cost difference with highest [thousand EUR]			0	Cost difference with highest [thousand EUR]			-11 418
Percentage			0.0%	Percentage			-4.1%

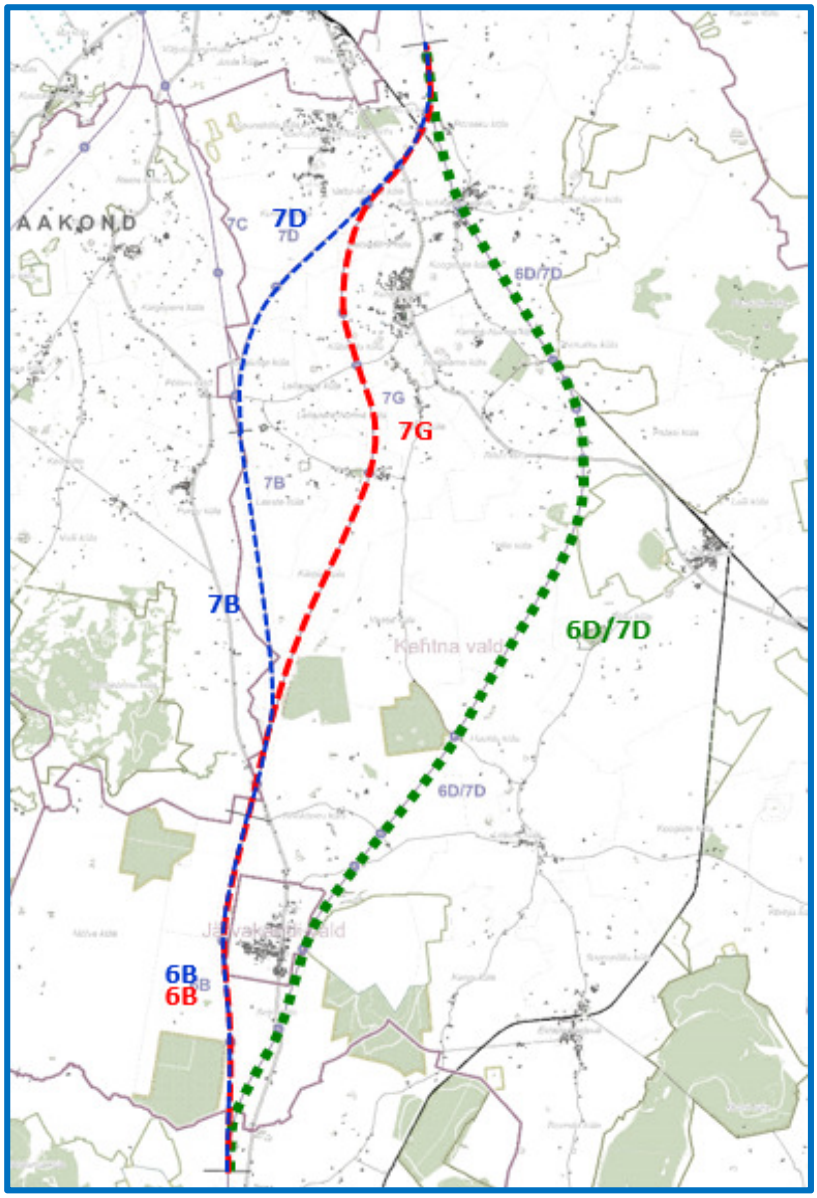
Võrreldavate trassivariantide skeem:



2.6. VÕRDLUS 6 - 6B+7B+7D VS 6B+7G VS 6D/7D

	ROUTE 1			VS	ROUTE 2			VS	ROUTE 3		
	Selected sections for calculation	Length [km]	Cost [thousand EUR]		Selected sections for calculation	Length [km]	Cost [thousand EUR]		Selected sections for calculation	Length [km]	Cost [thousand EUR]
Start here:	6B	9.19	38 503		6B	9.19	38 503		6D7D	32.24	168 610
	7B	9.97	44 653		7G	21.06	104 225			-	-
	7D	11.65	61 235			-	-			-	-
TOTAL:		30.81 km	144 391		TOTAL:	30.25 km	142 728		TOTAL:	32.24 km	168 610
Difference with shortest:		+0.57 km	aver. cost per km		Difference with shortest:	0.00 km	aver. cost per km		Difference with shortest:	+1.99 km	aver. cost per km
			4 687				4 719				5 230
Cost difference with highest [thousand EUR]			-24 219		Cost difference with highest [thousand EUR]		-25 882		Cost difference with highest [thousand EUR]		0
Percentage			-14.4%		Percentage		-15.4%		Percentage		0.0%

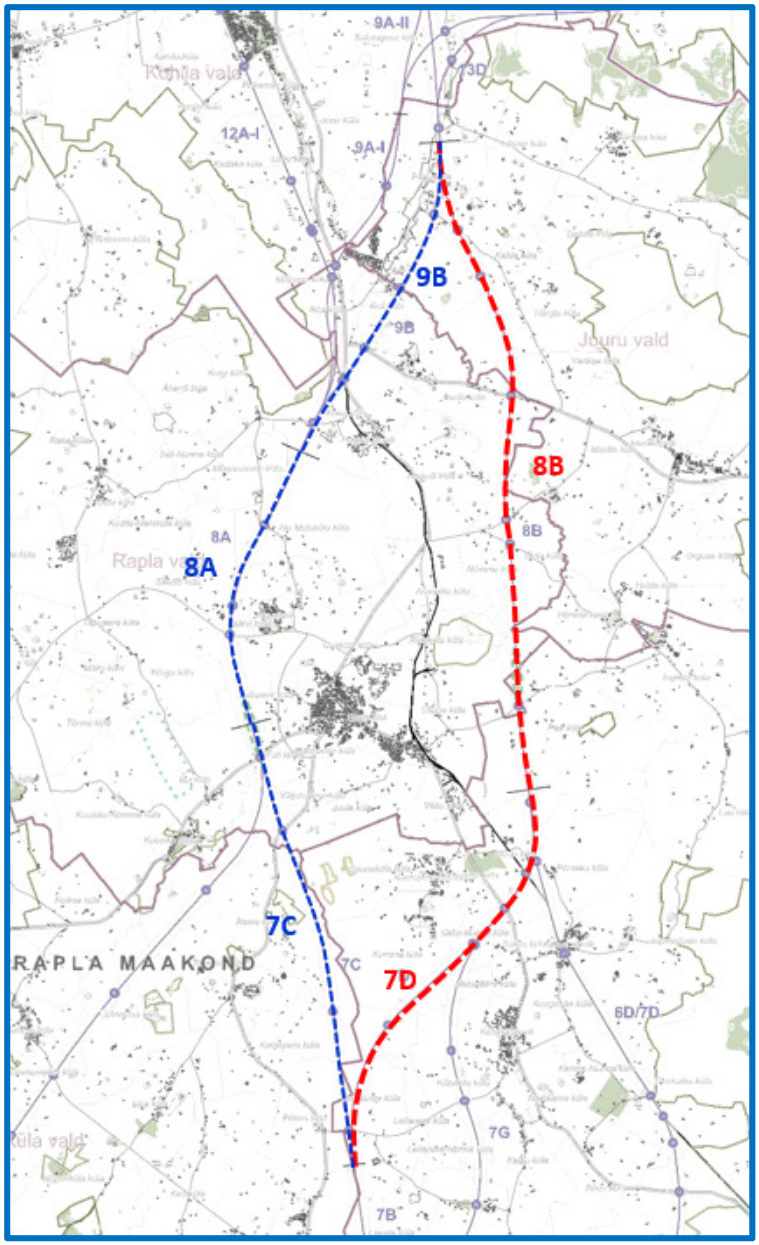
Võrreldavate trassivariantide skeem:



2.7. VÕRDLUS 7 - 7C+8A+9B VS 7D+8B

	ROUTE 1			VS	ROUTE 2		
	Selected sections for calculation	Length [km]	Cost [thousand EUR]		Selected sections for calculation	Length [km]	Cost [thousand EUR]
Start here:	7C	12.06	58 030		7D	11.65	61 235
	8A	7.69	39 633		8B	17.56	93 018
	9B	9.19	52 038			-	-
TOTAL:		28.94 km	149 701	TOTAL:		29.21 km	154 253
Difference with shortest:		0.00 km	aver. cost per km	Difference with shortest:		+0.27 km	aver. cost per km
			5 174				5 281
Cost difference with highest [thousand EUR]			-4 552	Cost difference with highest [thousand EUR]			0
Percentage			-3.0%	Percentage			0.0%

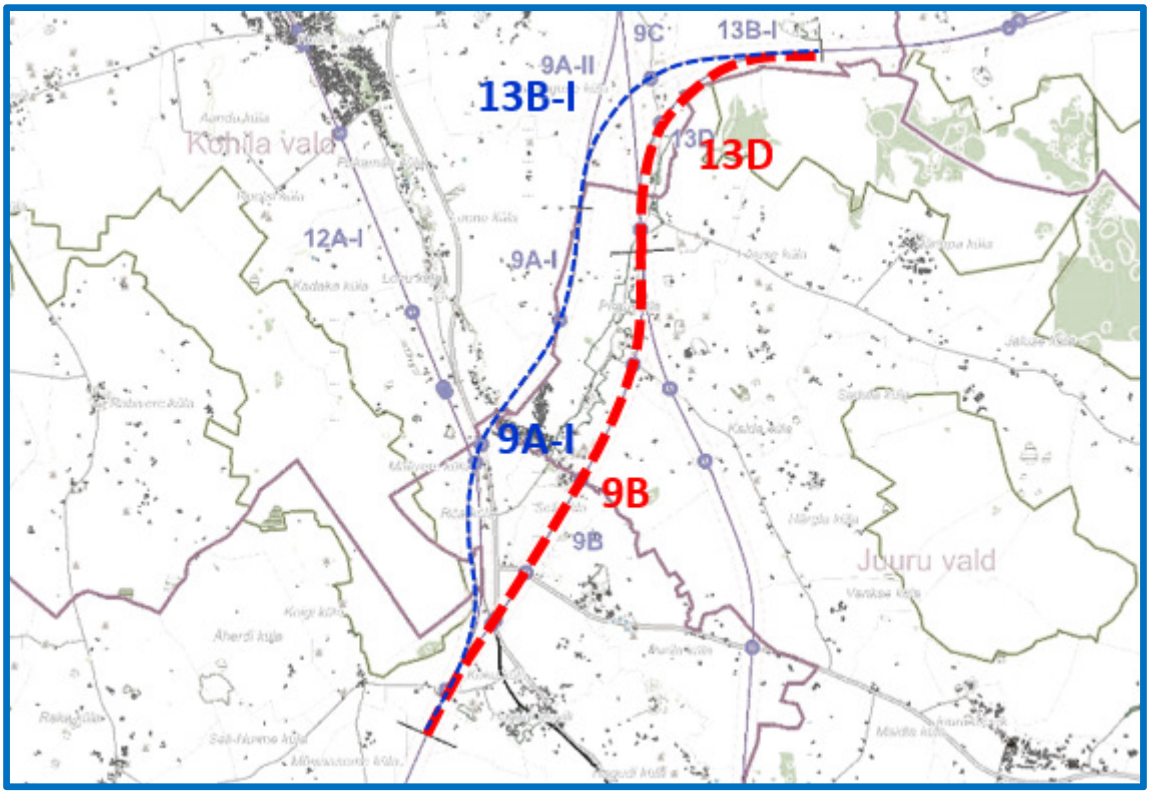
Võrreldavate trassivariantide skeem:



2.8. VÕRDLUS 8 – 9A-I+13B-I VS 9B+13D

	ROUTE 1			VS	ROUTE 2		
	Selected sections for calculation	Length [km]	Cost [thousand EUR]		Selected sections for calculation	Length [km]	Cost [thousand EUR]
Start here:	9A-I	9.60	55 587		9B	9.19	52 038
	13B-I	5.60	23 869		13D	5.42	26 403
	TOTAL:	15.20 km	79 456		TOTAL:	14.61 km	78 441
	Difference with shortest:	+0.59 km	aver. cost per km		Difference with shortest:	0.00 km	aver. cost per km
			5 227				5 370
	Cost difference with highest [thousand EUR]		0		Cost difference with highest [thousand EUR]		-1 015
	Percentage		0.0%		Percentage		-1.3%

Võrreldavate trassivariantide skeem:

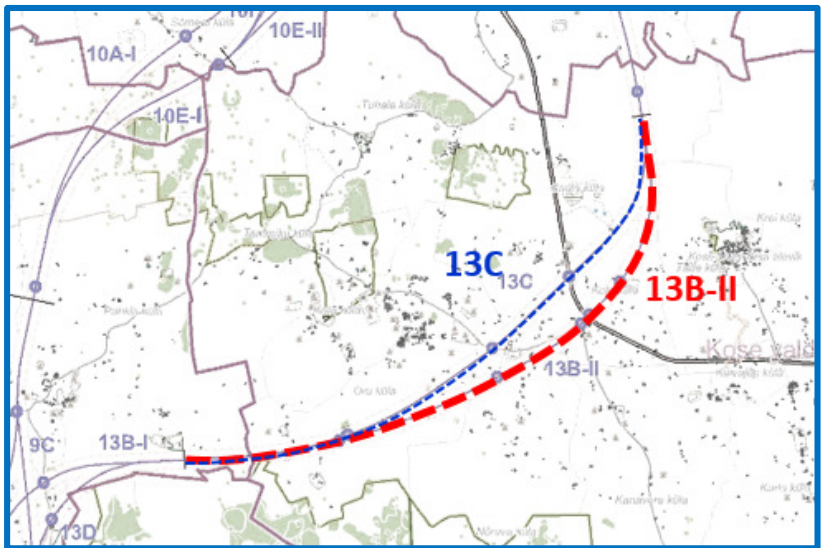


2.9. VÕRDLUSGRUPP 9

2.9.1. VÕRDLUS 9.1 – 13C VS 13B-II

	ROUTE 1			VS	ROUTE 2		
	Selected sections for calculation	Length [km]	Cost [thousand EUR]		Selected sections for calculation	Length [km]	Cost [thousand EUR]
Start here:	13C	12.98	68 412		13B-II	13.60	70 447
TOTAL:		12.98 km	68 412	TOTAL:		13.60 km	70 447
Difference with shortest:		0.00 km	aver. cost per km	Difference with shortest:		+0.62 km	aver. cost per km
			5 269				5 180
Cost difference with highest [thousand EUR]			-2 035	Cost difference with highest [thousand EUR]			0
Percentage			-2.9%	Percentage			0.0%

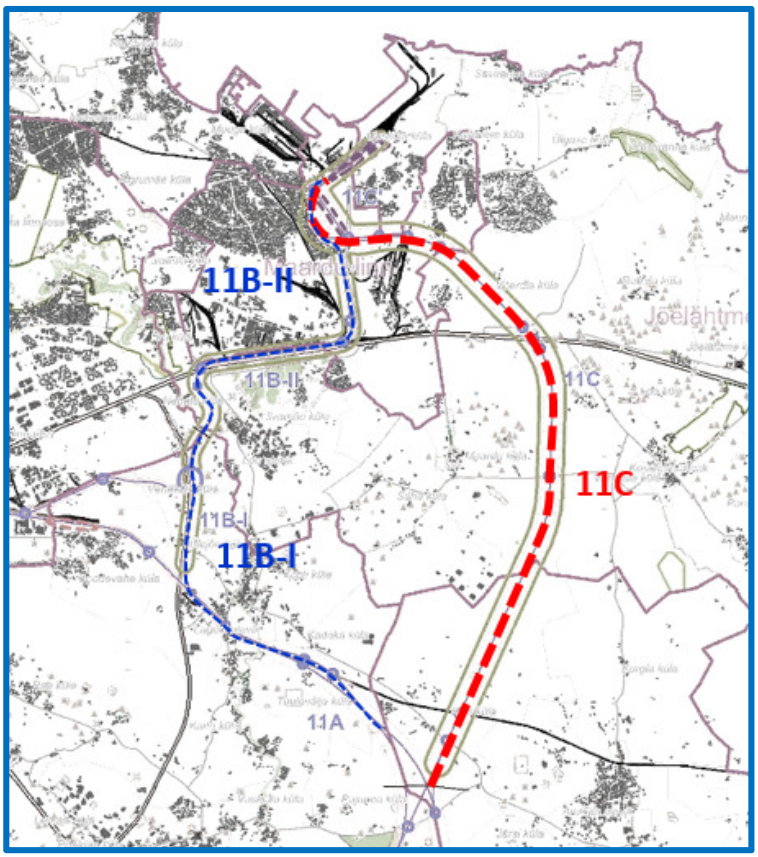
Võrreldavate trassivariantide skeem:



2.9.2. VÕRDLUS 9.2 – 11B-I+11B-II VS 11C

	ROUTE 1			VS	ROUTE 2		
	Selected sections for calculation	Length [km]	Cost [thousand EUR]		Selected sections for calculation	Length [km]	Cost [thousand EUR]
Start here:	11B-I	8.30	57 583		11C	16.39	95 634
	11B-II	8.30	66 092			-	-
	TOTAL:	16.60 km	123 675		TOTAL:	16.39 km	95 634
	Difference with shortest:	+0.21 km	aver. cost per km		Difference with shortest:	0.00 km	aver. cost per km
			7 450				5 836
	Cost difference with highest [thousand EUR]		0		Cost difference with highest [thousand EUR]		-28 041
	Percentage		0.0%		Percentage		-22.7%

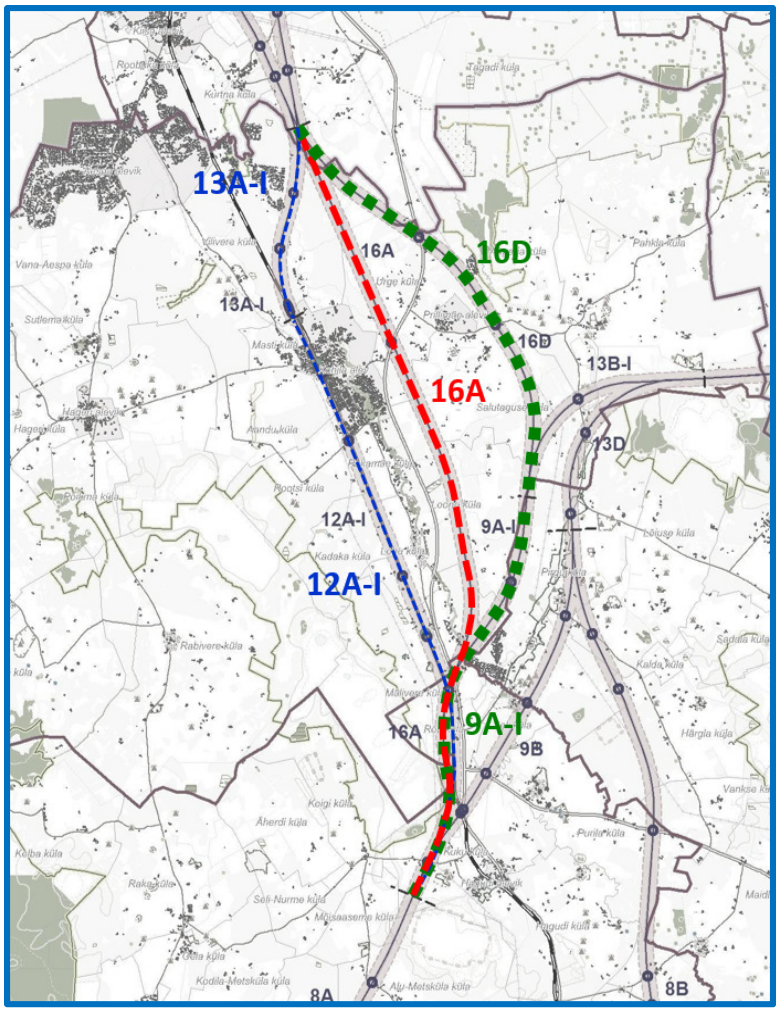
Võrreldavate trassivariantide skeem:



2.10. VÕRDLUS 10 – 12A-I + 13A-I VS 16A VS 9A-I + 16D

	ROUTE 1			VS	ROUTE 2			VS	ROUTE 3		
	Selected sections for calculation	Length [km]	Cost [thousand EUR]		Selected sections for calculation	Length [km]	Cost [thousand EUR]		Selected sections for calculation	Length [km]	Cost [thousand EUR]
Start here:	12A-I	13.90	75 572		16A	18.32	104 961		9A-I	9.60	55 587
	13A-I	4.38	36 771			-	-		16D	10.55	56 396
TOTAL:		18.28 km	112 344	TOTAL:		18.32 km	104 961	TOTAL:		20.15 km	111 983
Difference with shortest:		0.00 km	aver. cost per km	Difference with shortest:		+0.04 km	aver. cost per km	Difference with shortest:		+1.87 km	aver. cost per km
			6 145				5 729				5 556
Cost difference with highest [thousand EUR]			0	Cost difference with highest [thousand EUR]			-7 383	Cost difference with highest [thousand EUR]			-360
Percentage			0.0%	Percentage			-6.6%	Percentage			-0.3%

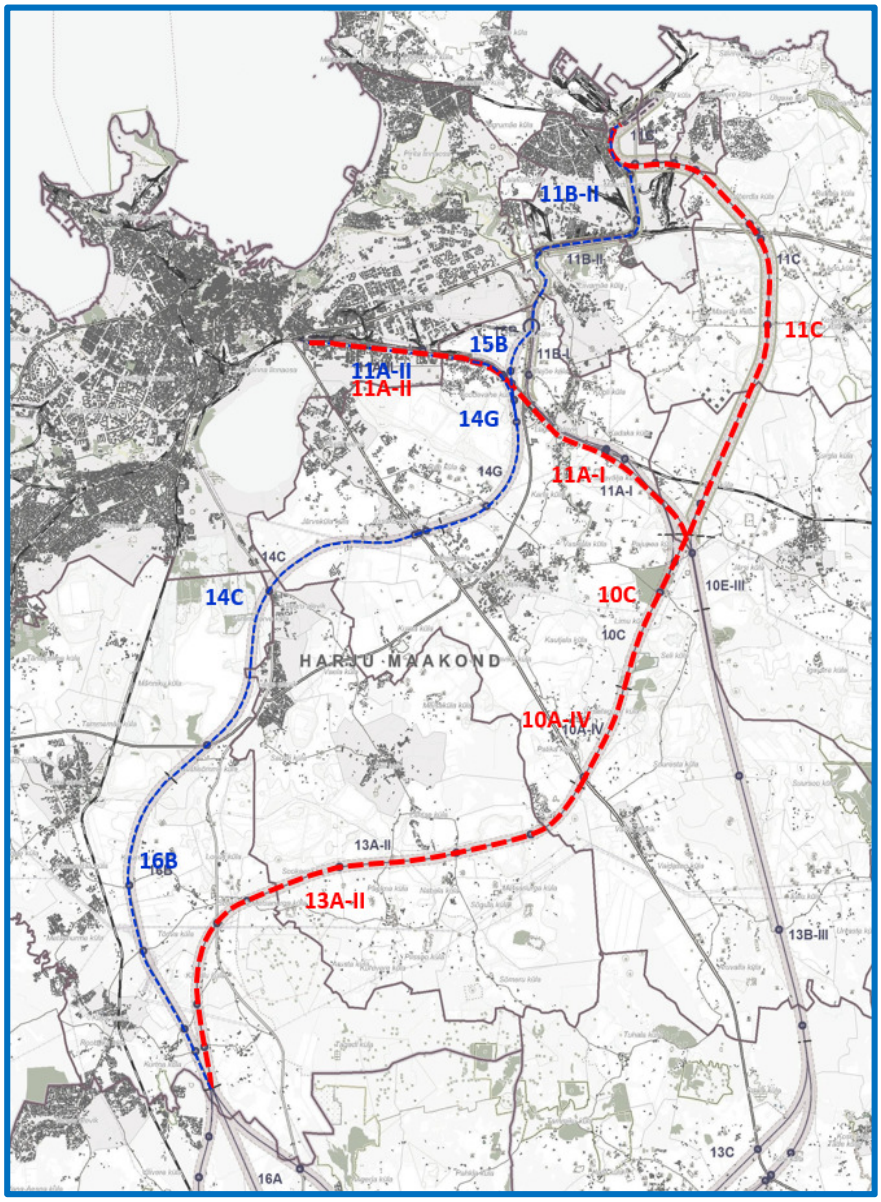
Võrreldavate trassivariantide skeem:



2.11. VÕRDLUS 11 - 16B + 14C + 14G + 11A-II + 15B + 11B-II VS 13A-II + 10A-IV + 10C + 11A-I + 11A-II + 11C

	ROUTE 1			VS	ROUTE 2		
	Selected sections for calculation	Length [km]	Cost [thousand EUR]		Selected sections for calculation	Length [km]	Cost [thousand EUR]
Start here:	16B	10.60	53 585		13A-II	17.98	99 856
	14C	12.85	87 223		10A-IV	3.35	19 403
	14G	7.43	42 712		10C	5.12	27 091
	11A-II	4.80	26 630		11A-I	9.20	46 449
	15B	4.25	41 617		11A-II	4.80	26 630
	11B-II	8.30	66 092		11C	16.39	95 634
TOTAL:		48.23 km	317 860	TOTAL:		56.83 km	315 064
Difference with shortest:		0.00 km	aver. cost per km	Difference with shortest:		+8.60 km	aver. cost per km
			6 590				5 544
Cost difference with highest [thousand EUR]			0	Cost difference with highest [thousand EUR]			-2 795
Percentage			0.0%	Percentage			-0.9%

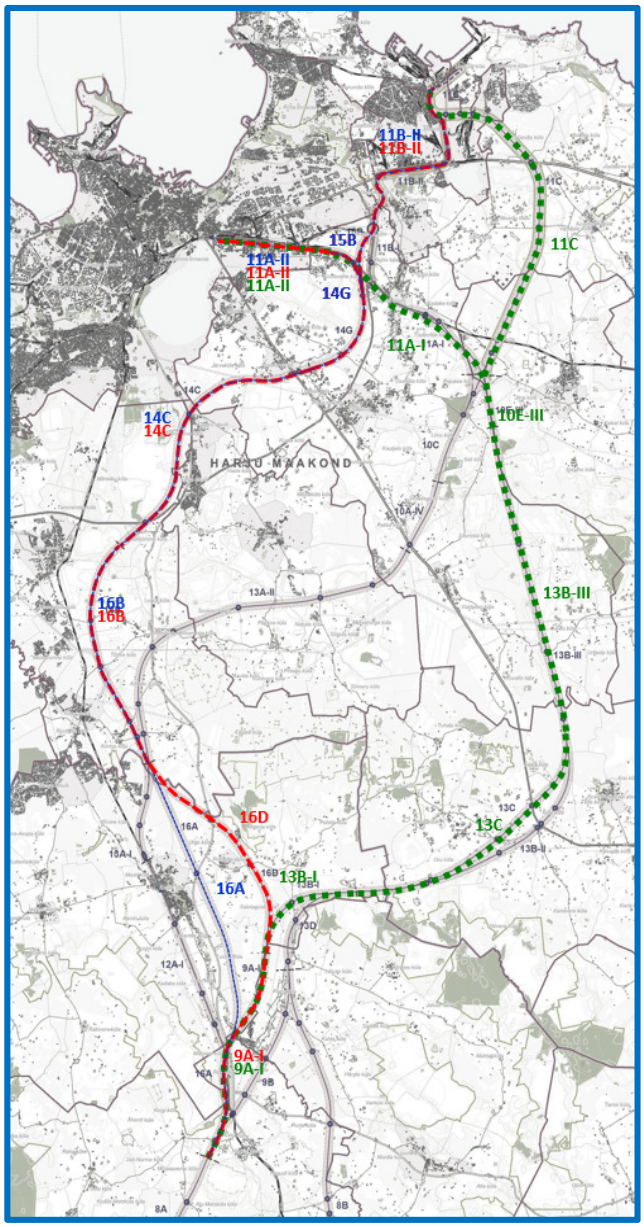
Võrreldavate trassivariantide skeem:



2.12. VÕRDLUS 12 - 16A + 16B + 14C + 14G + 11A-II + 15B + 11B-II VS 9A-I + 16D + 16B + 14C + 14G + 11A-II + 15B + 11B-II VS 9A-I + 13B-I + 13C + 13B-III + 10E-III + 11A-I + 11A-II + 11C

	ROUTE 1			VS	ROUTE 2			VS	ROUTE 3		
	Selected sections for calculation	Length [km]	Cost [thousand EUR]		Selected sections for calculation	Length [km]	Cost [thousand EUR]		Selected sections for calculation	Length [km]	Cost [thousand EUR]
Start here:	16A	18.32	104 961		9A-I	9.60	55 587		9A-I	9.60	55 587
	16B	10.60	53 585		16D	10.55	56 396		13B-I	5.60	23 869
	14C	12.85	87 223		16B	10.60	53 585		13C	12.98	68 412
	14G	7.43	42 712		14C	12.85	87 223		13B-III	13.64	64 128
	11A-II	4.80	26 630		14G	7.43	42 712		10E-III	2.36	11 849
	15B	4.25	41 617		11A-II	4.80	26 630		11A-I	9.20	46 449
	11B-II	8.30	66 092		15B	4.25	41 617		11A-II	4.80	26 630
		-	-		11B-II	8.30	66 092		11C	16.39	95 634
TOTAL:		66.55 km	422 821	TOTAL:		68.39 km	429 843	TOTAL:		74.57 km	392 558
Difference with shortest:		0.00 km	aver. cost per km	Difference with shortest:		+1.83 km	aver. cost per km	Difference with shortest:		+8.02 km	aver. cost per km
			6 353				6 286				5 264
Cost difference with highest [thousand EUR]			-7 022	Cost difference with highest [thousand EUR]			0	Cost difference with highest [thousand EUR]			-37 285
Percentage			-1.6%	Percentage			0.0%	Percentage			-8.7%

Võrreldavate trassivariantide skeem:

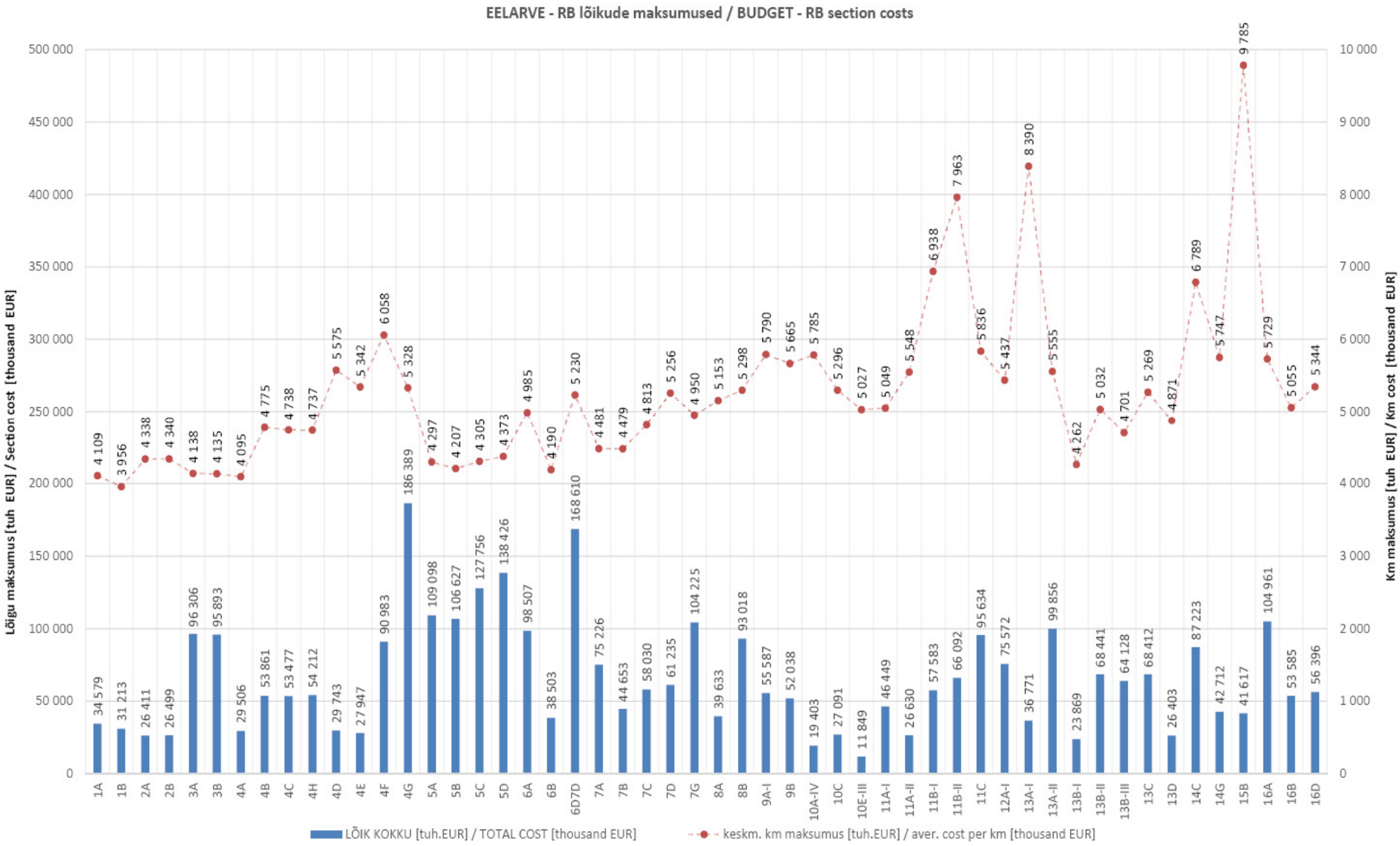


LISA 1. EELARVE - TRASSILÕIKUDE KOKKUVÕTE

EELARVE - LÕIKUDE KOKKUVÕTE /
BUDGET - SECTIONS SUMMARY OVERVIEW

Lõik / Section	Pikkus / Length [m]	Raudtee / Railway	Teedevõrk / Road network	Rajatised (viaduktid, ökoduktid jne) / Structures	Muu / Other	Maa hind / Land costs	Summa / Sum	ettenägemata kulu % / unforeseen costs %	KOKKU / TOTAL	kesk. km maksumus / aver. cost per km
		[tuhat EUR / thousand EUR]								
1A	8 415 m	25 666 *89.1%*	2 193 *7.6%*	901 *3.1%*	0 *0.0%*	56 *0.2%*	28 816	20%	**34 579**	**4 109**
1B	7 889 m	24 061 *92.5%*	1 188 *4.6%*	691 *2.7%*	0 *0.0%*	70 *0.3%*	26 011	20%	**31 213**	**3 956**
2A	6 088 m	18 568 *84.4%*	418 *1.9%*	3 006 *13.7%*	0 *0.0%*	17 *0.1%*	22 009	20%	**26 411**	**4 338**
2B	6 106 m	18 623 *84.3%*	593 *2.7%*	2 848 *12.9%*	0 *0.0%*	19 *0.1%*	22 083	20%	**26 499**	**4 340**
3A	23 273 m	70 983 *88.4%*	3 327 *4.1%*	5 946 *7.4%*	0 *0.0%*	0 *0.0%*	80 255	20%	**96 306**	**4 138**
3B	23 190 m	70 730 *88.5%*	2 787 *3.5%*	6 390 *8.0%*	0 *0.0%*	4 *0.0%*	79 911	20%	**95 893**	**4 135**
4A	7 206 m	21 978 *89.4%*	219 *0.9%*	2 366 *9.6%*	0 *0.0%*	25 *0.1%*	24 588	20%	**29 506**	**4 095**
4B	11 279 m	34 401 *76.6%*	3 324 *7.4%*	7 124 *15.9%*	0 *0.0%*	36 *0.1%*	44 884	20%	**53 861**	**4 775**
4C	11 286 m	34 742 *78.0%*	2 926 *6.6%*	6 550 *14.7%*	300 *0.7%*	47 *0.1%*	44 564	20%	**53 477**	**4 738**
4H	11 444 m	34 904 *77.3%*	3 194 *7.1%*	7 040 *15.6%*	0 *0.0%*	38 *0.1%*	45 177	20%	**54 212**	**4 737**
4D	5 335 m	18 172 *73.3%*	1 637 *6.6%*	4 631 *18.7%*	319 *1.3%*	28 *0.1%*	24 786	20%	**29 743**	**5 575**
4E	5 232 m	17 850 *76.6%*	1 989 *8.5%*	3 424 *14.7%*	0 *0.0%*	26 *0.1%*	23 289	20%	**27 947**	**5 342**
4F	15 019 m	57 610 *76.0%*	1 736 *2.3%*	16 402 *21.6%*	0 *0.0%*	71 *0.1%*	75 819	20%	**90 983**	**6 058**
4G	34 981 m	114 813 *73.9%*	11 826 *7.6%*	27 906 *18.0%*	250 *0.2%*	530 *0.3%*	155 325	20%	**186 389**	**5 328**
5A	25 387 m	77 688 *85.5%*	5 143 *5.7%*	7 760 *8.5%*	0 *0.0%*	323 *0.4%*	90 915	20%	**109 098**	**4 297**
5B	25 343 m	77 541 *87.3%*	3 206 *3.6%*	7 788 *8.8%*	0 *0.0%*	321 *0.4%*	88 856	20%	**106 627**	**4 207**

Lõik / Section	Pikkus / Length [m]	Raudtee / Railway	Teedevõrk / Road network	Rajatised (viaduktid, ökoduktid jne) / Structures	Muu / Other	Maa hind / Land costs	Summa / Sum	ettenägemata kulu % / unforeseen costs %	KOKKU / TOTAL	kesk. km maksumus / aver. cost per km
		[tuhat EUR / thousand EUR]								
5C	29 675 m	90 819 *85.3%*	4 588 *4.3%*	10 777 *10.1%*	0 *0.0%*	279 *0.3%*	106 464	20%	**127 756**	**4 305**
5D	31 652 m	97 608 *84.6%*	7 655 *6.6%*	9 414 *8.2%*	450 *0.4%*	228 *0.2%*	115 355	20%	**138 426**	**4 373**
6A	19 759 m	66 816 *81.4%*	4 301 *5.2%*	10 723 *13.1%*	0 *0.0%*	248 *0.3%*	82 089	20%	**98 507**	**4 985**
6B	9 190 m	28 030 *87.4%*	1 131 *3.5%*	2 879 *9.0%*	0 *0.0%*	47 *0.1%*	32 086	20%	**38 503**	**4 190**
6D7D	32 238 m	106 874 *76.1%*	7 087 *5.0%*	25 328 *18.0%*	600 *0.4%*	619 *0.4%*	140 508	20%	**168 610**	**5 230**
7A	16 786 m	51 197 *81.7%*	3 261 *5.2%*	7 500 *12.0%*	340 *0.5%*	390 *0.6%*	62 688	20%	**75 226**	**4 481**
7B	9 969 m	31 980 *85.9%*	1 510 *4.1%*	3 591 *9.7%*	0 *0.0%*	129 *0.3%*	37 211	20%	**44 653**	**4 479**
7C	12 057 m	40 937 *84.7%*	2 798 *5.8%*	3 857 *8.0%*	340 *0.7%*	426 *0.9%*	48 358	20%	**58 030**	**4 813**
7D	11 651 m	41 218 *80.8%*	4 098 *8.0%*	5 493 *10.8%*	0 *0.0%*	221 *0.4%*	51 030	20%	**61 235**	**5 256**
7G	21 055 m	68 748 *79.2%*	7 664 *8.8%*	10 099 *11.6%*	0 *0.0%*	342 *0.4%*	86 854	20%	**104 225**	**4 950**
8A	7 692 m	27 486 *83.2%*	1 190 *3.6%*	3 848 *11.7%*	0 *0.0%*	503 *1.5%*	33 028	20%	**39 633**	**5 153**
8B	17 558 m	56 952 *73.5%*	4 356 *5.6%*	15 536 *20.0%*	410 *0.5%*	261 *0.3%*	77 515	20%	**93 018**	**5 298**
9A-I	9 600 m	33 387 *72.1%*	2 474 *5.3%*	9 549 *20.6%*	737 *1.6%*	175 *0.4%*	46 322	20%	**55 587**	**5 790**
9B	9 186 m	30 651 *70.7%*	3 789 *8.7%*	8 741 *20.2%*	0 *0.0%*	183 *0.4%*	43 365	20%	**52 038**	**5 665**
10A-IV	3 354 m	12 556 *77.7%*	395 *2.4%*	3 139 *19.4%*	0 *0.0%*	80 *0.5%*	16 170	20%	**19 403**	**5 785**
10C	5 115 m	16 008 *70.9%*	2 219 *9.8%*	4 229 *18.7%*	0 *0.0%*	119 *0.5%*	22 576	20%	**27 091**	**5 296**
10E-III	2 357 m	8 250 *83.5%*	1 316 *13.3%*	250 *2.5%*	0 *0.0%*	59 *0.6%*	9 874	20%	**11 849**	**5 027**

Lõik / Section	Pikkus / Length [m]	Raudtee / Railway	Teedevõrk / Road network	Rajatised (viaduktid, ökoduktid jne) / Structures	Muu / Other	Maa hind / Land costs	Summa / Sum	ettenägemata kulu % / unforeseen costs %	KOKKU / TOTAL	kesk. km maksumus / aver. cost per km
		[tuhat EUR / thousand EUR]								
11A-I	9 200 m	29 935 *77.3%*	546 *1.4%*	6 817 *17.6%*	1 140 *2.9%*	271 *0.7%*	38 708	20%	**46 449**	**5 049**
11A-II	4 800 m	22 045 *99.3%*	0 *0.0%*	134 *0.6%*	0 *0.0%*	13 *0.1%*	22 192	20%	**26 630**	**5 548**
11B-I	8 300 m	35 728 *74.5%*	479 *1.0%*	10 404 *21.7%*	1 200 *2.5%*	175 *0.4%*	47 986	20%	**57 583**	**6 938**
11B-II	8 300 m	28 477 *51.7%*	1 176 *2.1%*	22 473 *40.8%*	521 *0.9%*	2 430 *4.4%*	55 077	20%	**66 092**	**7 963**
11C	16 387 m	56 875 *71.4%*	7 029 *8.8%*	7 085 *8.9%*	2 451 *3.1%*	6 255 *7.8%*	79 695	20%	**95 634**	**5 836**
12A-I	13 900 m	42 629 *67.7%*	2 702 *4.3%*	14 441 *22.9%*	3 000 *4.8%*	205 *0.3%*	62 977	20%	**75 572**	**5 437**
13A-I	4 383 m	15 918 *51.9%*	524 *1.7%*	14 082 *46.0%*	0 *0.0%*	118 *0.4%*	30 643	20%	**36 771**	**8 390**
13A-II	17 977 m	62 635 *75.3%*	4 585 *5.5%*	14 091 *16.9%*	746 *0.9%*	1 155 *1.4%*	83 213	20%	**99 856**	**5 555**
13B-I	5 600 m	17 080 *85.9%*	1 799 *9.0%*	939 *4.7%*	0 *0.0%*	73 *0.4%*	19 891	20%	**23 869**	**4 262**
13B-II	13 600 m	41 480 *72.7%*	2 692 *4.7%*	11 776 *20.6%*	533 *0.9%*	554 *1.0%*	57 034	20%	**68 441**	**5 032**
13B-III	13 642 m	46 136 *86.3%*	1 417 *2.7%*	5 392 *10.1%*	0 *0.0%*	495 *0.9%*	53 440	20%	**64 128**	**4 701**
13C	12 984 m	42 457 *74.5%*	2 159 *3.8%*	11 802 *20.7%*	300 *0.5%*	292 *0.5%*	57 010	20%	**68 412**	**5 269**
13D	5 420 m	16 531 *75.1%*	1 849 *8.4%*	2 248 *10.2%*	1 200 *5.5%*	174 *0.8%*	22 002	20%	**26 403**	**4 871**
14C	12 847 m	49 973 *68.8%*	4 715 *6.5%*	10 350 *14.2%*	5 590 *7.7%*	2 058 *2.8%*	72 686	20%	**87 223**	**6 789**
14G	7 432 m	24 679 *69.3%*	2 768 *7.8%*	4 523 *12.7%*	2 532 *7.1%*	1 090 *3.1%*	35 593	20%	**42 712**	**5 747**
15B	4 253 m	22 850 *65.9%*	198 *0.6%*	9 864 *28.4%*	1 225 *3.5%*	544 *1.6%*	34 681	20%	**41 617**	**9 785**
16A	18 322 m	59 989 *68.6%*	6 117 *7.0%*	17 816 *20.4%*	2 348 *2.7%*	1 197 *1.4%*	87 467	20%	**104 961**	**5 729**
16B	10 600 m	33 347 *74.7%*	3 125 *7.0%*	4 196 *9.4%*	3 225 *7.2%*	761 *1.7%*	44 654	20%	**53 585**	**5 055**
16D	10 554 m	32 577 *69.3%*	3 022 *6.4%*	9 492 *20.2%*	1 550 *3.3%*	357 *0.8%*	46 997	20%	**56 396**	**5 344**

LISA 2. TRASSILÕIKUDE MAKSUMUSTE JA KESKMISTE KM HINDADE GRAAFIK