

# Repair of the road in Severnii district, Bender town

(Project title)

Form no.7  
WinCmeta

## LOCAL BILL OF QUANTITIES No. 2-1-1

### Repairs and development of road infrastructure

№ crt.	Standard code and Resource code	Works and costs	M.U.	Design quantity	Estimated cost, \$	
					Unit cost incl. wages	Total incl. wages
1	2	3	4	5	6	7
		<b>1. The Return Circle (Peacekeepers' Post)</b>				
1	TsC21B1	Mechanical excavation with moto grader of up to 175 HP, including scattering of the soil at 10 m, in the field of cat. II (40% of the area)	100 m3	0,793		
2	TsC22B1	Accrual machine-hours at art. TsC18B1, for transportation of land for every 10 m in addition, to the stipulated distance, land cat. II	100 m3	0,793		
3	TsC03F1	Mechanical excavation of 0.40-0.70 cm with an excavator, with internal combustion engine and hydraulic control, in soil with natural humidity, unloading in vehicles, land cat. II	100 m3	0,793		
4	TsI51A5	Transportation of soil with a 5 ton dump truck to a distance of 13 km	t	131, 000		
5	TsC51B	Unloading of soil to the warehouse, land cat. II	100 m3	0,790		
6	DH02B	Easy scarification of the stoning up to 5 cm deep with moto-grader, including reprofiling	100m2	2,650		
7	DA12B	Foundation layer or re-profiling of crushed stone, for roads with mechanical laying, executed with wedging without mudification h= 20cm	m3	52, 800		
8	DI155A	Cutting the layer of used asphalt concrete with a milling having a drum width of 1000 mm, depth of layer: 5 cm	m2	661, 000		
9	TsI51A5	Transportation of the milled material to the processing hub with 10 t dumper truck at a distance of: 5 km	t	76, 000		
10	TsC51B	Unloading of soil to the warehouse, land cat. II	100 m3	0.330		

1	2	3	4	5	6	7
11	DI141A	Cleaning the pits from bituminous asphalt coating by blowing with manual compressor	m2	661 000		
12	DI107	Priming the surfaces of the base layers to apply a layer of asphalt concrete of 0,63kg/m2 (40% of the stoning surface)	t	0.168		
13	DB19G	Mechanically laid hot, large aggregate asphalt concrete, SKPg-II coating, 6.0 cm thick	m2	264,400		
14	DI107	Priming the surfaces of the base layers to apply a layer of asphalt concrete of 0.31 kg/m2	t	0,205		
15	DB16H	Mechanically laid hot asphalt concrete coating with small aggregates, 4.0 cm thick,	m2	661 000		
16	TsC54B	Broken stone foundation layer	m3	4.000		
17	DE10A	Precast concrete kerbs, 30x15 cm, on concrete foundation	m	100,000		
18	DF18A	Planting industrially manufactured poles for road traffic signs made of metal	BUC	6.000		
19	DF19A	Installation of road traffic signs made of steel or aluminum sheet on already planted poles	BUC	15,000		
20	DF17A	Longitudinal, transversal and miscellaneous markings, mechanically executed, with paint, on road surfaces	m2	24,500		
21	TsC03F1	Mechanical excavation of 0.40-0.70 cm, with an excavator with internal combustion engine and hydraulic control, in soil with natural humidity, unloading in vehicles, land cat. II embankment	100 m3	0,200		
22	TsI51A5	Transportation of soil by 10 t dumper at a distance of: 5 km of embankment	t	32,600		
23	DI96	Compaction of the cat.II earth embankment, with a compactor on 25 t tires, 8 routes on an embankment trace	100 m3	0,190		
24	TsE05B	Leveling with motor grader up to 175 HP of the surface of the natural land and of the earthworks platforms, by cutting the bumps and moving the excavated soil into the voids in the field cat. II embankment	100m2	1,000		
25	DI115	Strengthening the embankments with a 10 cm crushed stone layer	m2	100,000		
		<i>Total</i>	\$			

1	2	3	4	5	6	7
		<b>Total Return Circle (Peacekeeper Station) Including wages</b>				
		<b>2. Repaired road sector (PC0+29 -- -- PC4+ 35)</b>				
26	TsG03A	Manual deforestation of forested areas with bushes and shrubs with a diameter of up to 10 cm, including transportation of wood in piles, outside or within the works area, without removing the roots (2 m from the edge of the road)	100m2	24,360		
27	DI98	Mechanized profiling of the embankment slope at earthworks, soil of category II	100m2	24,360		
28	DF18A	Planting industrially manufactured poles for road traffic signs made of metal	BUC	5,000		
29	DF19A	Installation of road traffic signs made of steel or aluminum sheet on already planted poles	BUC	5,000		
30	DF17A	Longitudinal, transversal and miscellaneous markings, mechanically executed, with paint, on road surfaces	m2	65,000		
		<i>Total</i>	\$			
		<b>Total Road Sector repaired (PC0+29 ---- PC4+ 35) Including wages</b>				
		<b>3. Sector PC 4+85 ----PC 13+33</b>				
31	TsC21B1	Mechanical excavation with motor grader of up to 175 HP, including the spreading of the soil at 10 m, in the field cat. II cleaning the embankment and the road	100 m3	19.700		
32	TsC22B1	Accrual machine-hours at art. TsC18B1, for transportation of land for every 10 m in addition, to the stipulated distance, land cat. II	100 m3	19.700		
33	TsC03F1	Mechanical excavation of 0.40-0.70 cm, with an excavator with internal combustion engine and hydraulic control, in soil with natural humidity, unloading in vehicles, land cat. II	100 m3	19.700		
34	TsI51A5	Transportation of soil with a 5 ton dump truck to a distance of 13 km	t	3 250,500		
35	TsC51B	Unloading of soil to the warehouse, land cat. II	100 m3	19.700		
36	TsG05A	Manual felling of resinous trees having a diameter of 10...30 cm,	BUC	13,000		

1	2	3	4	5	6	7
		including manual transportation of timber in piles, outside or within the works area				
37	TsG08A	The mechanical felling of the resinous essence trees having a diameter of 10...30 cm, including manual transportation of timber in the warehouses, outside or within the works area	BUC	100,000		
38	DI155A	Milling of the old asphalt concrete layer, with a 1000 mm width drum, layer depth of: 5 cm	m2	6 090,000		
39	TsI51A5	Transportation of the milled material to the processing hub with a 10 t dumper at a distance of: 5 km	t	639,000		
40	TsC51B	Unloading of soil to the warehouse, land cat. II	100 m3	3,040		
41	DI107	Priming the surfaces of the base layers to apply a layer of asphalt concrete of 0,63kg/m2	t	3.836		
42	DI133	Laying the levelling layer of SMBG-II 2/3 asphalt concrete, selectively using the asphalt mixes spreader	t	85,000		
43	DB19G	Mechanically laid hot asphalt concrete coating with large aggregate, 6.0 cm thick,	m2	3 524,000		
44	DI107	Priming the surfaces of the base layers to apply a layer of asphalt concrete of 0,31kg/m2	t	1,890		
45	DB16H	Mechanically laid hot asphalt concrete coating with small aggregates SMBg-II/2.3, 4.0 cm thick	m2	6 090,000		
46	DF18A	Planting of industrially manufactured poles for road traffic signs made of metal	BUC	5,000		
47	DF19A	Installation of road traffic signs made of steel or aluminum sheet on already planted poles	BUC	5,000		
48	DF17A	Longitudinal, transversal and miscellaneous markings, mechanically executed, with paint, on road surfaces	m2	130,000		
49	TsC03F1	Mechanical excavation of 0.40-0.70 cm with an excavator, with internal combustion engine and hydraulic control, in soil with natural humidity, unloading in vehicles, land cat. II Embankment	100 m3	1,740		

1	2	3	4	5	6	7
50	TsI51A5	Transportation of soil material by 10 t dumper at a distance of: 5 km of embankment	t	287,000		
51	DI96	Compaction of the cat. II earth embankment, with a compactor on 25 t tires, 8 tracks on an embankment trace	100 m3	1,740		
52	TsE05B	Leveling with motor grader up to 175 HP of the surface of the natural soil and of the earthworks platforms, by cutting the bumps and moving the excavated soil into the voids in the field cat. II embankment	100m2	17,400		
53	DI115	Strengthening the embankments with a 10 cm crushed stone layer	m2	1 740,000		
		<i>Total</i>	\$			
		<b>Total Sector PC 4+85 ----PC 13+33 Including wages</b>				
		<b>4. Sector PC 13+33 ----PC 20+90</b>				
54	TsC21B1	Mechanical excavation with motor grader up to 175 HP, including the spreading of the soil at 10 m, in the field cat. II cleaning of embankments	100 m3	11.355		
55	TsC22B1	Accrual machine-hours at art. TsC18B1, for transportation of land for every 10 m in addition to the stipulated distance, land cat. II	100 m3	11.355		
56	TsC03F1	Mechanical excavation of 0.40-0.70 cm with an excavator, with internal combustion engine and hydraulic control, in soil with natural humidity, unloading in vehicles, land cat. II	100 m3	11.355		
57	TsI51A5	Transportation of soil with a 5 ton dump truck to a distance of 13 km	t	1 873,500		
58	TsC51B	Unloading of soil to the warehouse, land cat. II	100 m3	11.355		
59	TsG03A	Manual deforestation of forested areas with bushes and shrubs with a diameter of up to 10 cm, including transportation of wood in piles, outside or within the works area, without removing the roots (2 m from the edge of the road)	100m2	29,200		
60	DI155A	Milling the layer of old asphalt concrete, with a 1000 mm width drum, layer depth of: 5 cm	m2	5 299,000		
61	TsI51A5	Transportation of the milled material to the processing hub	t	551,800		

1	2	3	4	5	6	7
		with 10 t dumper at a distance of: 5 km				
62	TsC51B	Unloading of soil to the warehouse, land cat. II	100 m3	2.650		
63	DI107	Priming the surfaces of the base layers to apply a layer of asphalt concrete 0.31 kg/m2	t	1.642		
64	DI133	Laying the levelling layer of SMBG-II 2/3 asphalt concrete, selectively using the asphalt mixes spreader	t	85,000		
65	DB16H	Mechanically laid hot asphalt concrete coating with small aggregates SMBg-II/2.3, 4.0 cm thick	m2	5 299,000		
66	DF18A	Planting industrially manufactured poles for road traffic signs made of metal	BUC	5,000		
67	DF19A	Installation of road traffic signs made of steel or aluminum sheet on already planted poles	BUC	8,000		
68	DF17A	Longitudinal, transversal and miscellaneous markings, mechanically executed, with paint, on road surfaces	m2	73,000		
69	TsC03F1	Mechanical excavation of 0.40-0.70 cm with an excavator, with internal combustion engine and hydraulic control, in soil with natural humidity, unloading in vehicles, land cat. II embankment	100 m3	1,514		
70	TsI51A5	Transportation of soil by 10 t dumper at a distance of: 5 km of embankment	t	249,800		
71	DI96	Compaction of the cat. II earth embankment, with a compactor on 25 t tires, 8 tracks on an embankment trace	100 m3	1,514		
72	TsE05B	Leveling with motor grader up to 175 HP of the surface of the natural land and of the earthworks platforms, by cutting the bumps and moving the excavated soil into the voids in the field cat. II embankment	100m2	15,140		
73	DI115	Strengthening the embankments with a 10 cm crushed stone layer	m2	1 514,000		
		<i>Total</i>	\$			
		<b>Total Sector PC 13+33 ----PC 20+90 Including wages</b>				
		<b>5. PC Sector 20+90 ----PC 32+21 (Residential District Severnii)</b>				

1	2	3	4	5	6	7
74	TsC21B1	Mechanical excavation with motor grader up to 175 HP, including the spreading of the soil at 10 m, in the field cat. II cleaning of the embankment	100 m3	22.620		
75	TsC22B1	Accrual of machine-hours from art. TsC18B1, for the transportation of the land for every 10 m in addition, over the stipulated distance, land cat. II	100 m3	22.620		
76	TsC03F1	Mechanical excavation of 0.40-0.70 cm with an excavator, with internal combustion engine and hydraulic control, in soil with natural humidity, unloading in vehicles, land cat. II	100 m3	22.620		
77	TsI51A5	Transportation of soil with a 5 ton dump truck to a distance of 13 km	t	3 732,000		
78	TsC51B	Unloading of soil to the warehouse, land cat. II	100 m3	22.620		
79	TsG03A	Manual deforestation of forested areas with bushes and shrubs with a diameter of up to 10 cm, including the transport of wood in piles, outside or in the area of works without removing roots (2 m from the edge of the road)	100m2	33,900		
80	DI155A	Milling the layer of old asphalt concrete, with a 1000 mm width drum, layer depth of: 5 cm	m2	7 917,000		
81	TsI51A5	Transportation of the milled material to the processing hub with 10 t dumper at a distance of: 5 km	t	867,300		
82	TsC51B	Unloading of soil to the warehouse, land cat. II	100 m3	4,130		
83	DI107	Priming the surfaces of the base layers to apply a layer of asphalt concrete 0.31 kg/m2	t	2,560		
84	DI133	Laying the levelling layer of SMBG-II 2/3 asphalt concrete, selectively using the asphalt mixes spreader	t	85,000		
85	DI04A	Repairing the degradations and filling of pits in asphalt coating with stockable mixture with a high degree of dispersion, poured halftime, on small surfaces,	t	98,870		
86	DB16H	Mechanically laid hot asphalt concrete coating with small aggregates SMBg-II/2.3, 4.0 cm thick,	m2	7 917,000		

1	2	3	4	5	6	7
87	DF18A	Planting industrially manufactured poles for road traffic signs made of metal	BUC	9.000		
88	DF19A	Installation of road traffic signs made of steel or aluminum sheet on already planted poles	BUC	18.000		
89	DF17A	Longitudinal, transversal and miscellaneous markings, mechanically executed, with paint, on road surfaces	m2	215,000		
90	TsC03F1	Mechanical excavation of 0.40-0.70 cm with an excavator with internal combustion engine and hydraulic control, in soil with natural humidity, unloading in vehicles, land cat. II embankment	100 m3	2,260		
91	TsI51A5	Transportation of soil material by 10 t dumper at a distance of: 5 km of embankment	t	372,900		
92	DI96	Compaction of the cat. II earth embankment, with a compactor on 25 t tires, 8 tracks on embankment	100 m3	3,729		
93	TsE05B	Leveling with motor grader up to 175 HP of the surface of the natural land and of the earthworks platforms, by cutting the bumps and moving the excavated soil into the voids in the field cat. II embankment	100m2	22,620		
94	DI115	Strengthening the embankments with a 10 cm crushed stone layer	m2	2 262,000		
95	TsC54B	Broken stone foundation layer	m3	108,000		
96	DE10A	Precast concrete kerbs, 30x15 cm, on concrete foundation	m	1 325,000		
		<i>Total</i>	\$			
		<b>Total PC Sector 20+90 ----PC 32+21 (Residential District Severnii)</b> <b>Including wages</b>				
		<b>6. Construction of trolley stations platforms (5 stations)</b>				
97	TsC03F1	Mechanical excavation of 0.40-0.70 cm with an excavator with internal combustion engine and hydraulic control, in soil with natural humidity, unloading in vehicles, land cat. II embankment	100 m3	1,570		
98	TsI50A5	Transportation of soil with a 5 ton dump truck to a distance of 13 km	t	297,750		
99	TsC51B	Unloading of soil to the warehouse, land cat. II	100 m3	1,570		



1	2	3	4	5	6	7
100	DI98	Mechanized profiling of the embankment slope at earthworks, soil of category II	100m2	4,400		
101	DI96	Compaction of the cat. II earth embankment, with a compactor on 25 t tires, 8 tracks on a trace	100 m3	0,450		
102	DA06B2	Mechanically laid layer of cylindrical natural aggregates, having the function of filtering resistance, insulators, ventilation, anti-gel and anti-capillary, with sand layer of h=10cm	m3	43,850		
103	DA12B	Mechanically laid foundation layer or re-profiling of crushed stone, for roads, executed with panning without mudification h=15cm	m3	65,800		
104	DI107	Priming the surfaces of the base layers to apply a layer of asphalt concrete 0.75 kg/m2	t	0.320		
105	DB19G	Mechanically laid hot asphalt concrete coating with large aggregates, 6.0 cm thick,	m2	450,000		
106	DI107	Priming the surfaces of the base layers to apply a layer of asphalt concrete 0.35 kg/m2	t	0.150		
107	DB16H	Mechanically laid hot asphalt concrete coating with small aggregates, 4.0 cm thick	m2	450,000		
108	TsC54B	Broken stone foundation layer	m3	85,000		
109	DE10A	Precast concrete kerbs, for sidewalks 30x15 cm, on concrete foundation	m	225,000		
110	DA12A	Foundation layer or re-profiling of broken stone, for roads with mechanical layers, executed with stamping and mudification h=20cm	m3	45,000		
111	DI110	Ballast levelling	m3	22,500		
112	DE11A	Small prefabricated concrete kerbs with a section of 100x20x10 cm, for framing green spaces, sidewalks, alleys, etc., placed on a concrete foundation of 10x20 cm	m	105,000		
113	DE18A	Pavements made of precast concrete pavements placed on a layer of dry mixture of cement and sand, in a ratio of 1:6, joined with dry mixture of cement and sand, layer thickness of 5 cm (concrete pavements h= 5 cm)	m2	225,000		
114	CL17A	Various metal structures, apparently mounted: parapets and	kg	1,500,000		

1	2	3	4	5	6	7
		partitions for the balcony. Ready-made waiting stations according to the model.				
		<i>Total</i>	\$			
		<b>Total Construction of trolleybus stations platforms (5 stations) Including wages</b>				
		<b>7. Spatial development of adjacent access ways</b>				
115	RpDC06C	Mechanical cleaning for the application of coatings or bituminous treatments of support layers consisting of bituminous surfaces of cement concrete or bituminous stone pavements, executed with the mechanical broom fixed on the tractor	m2	1 668,000		
116	DI107	Priming the surfaces of the base layers to apply a layer of asphalt concrete 0.61 kg/m2	t	1.017		
117	DB19G	Mechanically laid hot asphalt concrete coating with large aggregate, 6.0 cm thick	m2	1 668,000		
118	DB16H	Mechanically laid hot asphalt concrete coating with small aggregates SMBg-II/2.3, 4.0 cm thick	m2	1 668,000		
		<i>Total</i>	\$			
		<b>Total spatial development of adjacent access roads Including wages</b>				
		<b>8. Severnii pedestrian alleys</b>				
119	TsC03F1	Mechanical excavation of 0.40-0.70 cm, with an excavator with internal combustion engine and hydraulic control, in soil with natural humidity, unloading in vehicles, land cat. II	100 m3	7,080		
120	TsI50A5	Transportation of soil with a 5 ton dump truck to a distance of 13 km	t	865,000		
121	TsC51B	Unloading of soil to the warehouse, land cat. II	100 m3	7,080		
122	DI98	Mechanized profiling of the embankment slope at earthworks, soil of category II	100m2	23,600		
123	DI96	Compaction of the cat. II earth embankment, with a compactor on 25 t tires, 8 tracks on a trace	100 m3	7,080		
124	DA12A	Foundation layer or re-profiling of broken stone, for roads with mechanical layers, executed with stamping and mudification h=20cm	m3	236,000		

1	2	3	4	5	6	7
125	DE11A	Small prefabricated concrete kerbs with a section of 100x20x10 cm, for framing green spaces, sidewalks, alleys, etc., placed on a concrete foundation of 10x20 cm	m	1 325,000		
126	DI110	Ballast levelling	m3	236,000		
127	DE18A	Pavements made of precast concrete pavements placed on a layer of dry mixture of cement and sand, in a ratio of 1:6, joined with dry mixture of cement and sand, layer thickness of 5 cm (concrete pavements h= 5 cm)	m2	2 360,000		
		<i>Total</i>	\$			
		<b>Total Severnii Pedestrian Alleys Including wages</b>				

		Total	\$	
		Social and health insurances	24 %	
		Total		
		Overhead	%	
		Total		
		Budgeted return	%	
		<b>Total estimated cost: Including wages</b>		

Drafted by:

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(position, signature, first name, last name)

Verified by

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(position, signature, first name, last name)