

**Reconstruction and modernisation of the Emil
Nicula Theoretical High School, land plot no.
1034320.065, with the addition of auxiliary
buildings, located in Mereni village, 104
Stefan cel Mare si Sfint Street**

Form No. 7
WinCmeta

(name of the objective)

LOCAL ESTIMATE № 5-1-1

External telephone and signalling communications (2506 - TSE)

No No	Symbol standards and resource code	Works and expenses	U.M	Quantity according to project data	Estimated value, lei	
					Per unit of measurement incl. salary	Total incl. salary
1	2	3	4	5	6	7
		1. Construction works				
1	CA03C2	Concrete poured into foundations, plinths, retaining walls, below-ground walls, prepared with a concrete mixer on site and poured using conventional methods, reinforced concrete class C 10/8 (Bc 10/B 150) Small materials (softwood chips, nails, staples) = 1.0150	m3	0.78		
2	CL26A	Ready-made metal frames made of 40*40*3 mm profiled pipe, including anti-corrosion protection with 1GF-021+2PF-115	kg	39.96		
3	TsC58B k=1.2	Cable trenches T1 L=400 m. Mechanical excavation of soil in the warehouse with an excavator with a bucket volume of 0.15 m3: category 2 terrain (trench excavation) Coefficient for machines=1.2000 Labour coefficient=1.2000 Coefficient for materials = 1.2000	100 m3	0.48		
4	TsC59B k=1.2	Mechanical excavation of soil with discharge into a dump truck with an excavator bucket volume of 0.15 m3: category 2 terrain (trench excavation) Labour coefficient=1.2000 Material coefficient = 1.2000 Machinery coefficient = 1.2000	100 m3	0.25		
5	TsI51A3	Transportation of soil with a 10-tonne dump truck over a distance of: 3 km	t	41.25		
6	TsC51A	Work on unloading soil into storage, category I land	100 m3	0.25		
7	AcF03A	Cable trenches. Filling in trenches as substrate, protective layer, executed with sand.	m3	24.00		
8	34-02-004	Execution of pipes from PE100, PN10, SDR17 pipe D=32 x 2.0 mm for technical use.	1 km	0.40		
9	34-02-004-1	Installation of pipes made of PE100, PN10, SDR17 D=63 x 3.8 mm for technical use	1 km	0.06		

1	2	3	4	5	6	7
1	TsD18B	Cable trenches. Filling compacted in trenches, for buried cables of high voltage power lines, executed with soil from the middle layer of the ground.	m3	48.00		
		<i>Total</i>	lei			
		<i>Social insurance</i>	24%			
		<i>Transport expenses</i>	10%			
		<i>Supply and storage expenses</i>	2%			
		<i>Total</i>				
		<i>Overhead costs</i>	14.5%			
		<i>Total</i>				
		<i>Estimated profit</i>	6%			
		Total Construction works Including wages				
		2. Installation works				
11	08-03-572-3	Cabinet-type control unit or distribution point (cabinet), wall-mounted, height and width, mm, up to 600x600	pcs	3.00		
12	08-03-602-1	Fan set with thermostat	pc	3.00		
13	08-03-594-1	Lighting fixture with LED modules	100 pcs	0.03		
14	08-03-575-1	Device - automatic switches, load breakers	pcs	3.00		
15	08-01-080-2	Surge protection device	pc	3.00		
16	08-03-575-1	Device - Grounding block with adapters	pc	3.00		
17	08-03-523-1	Modular terminal block for fuses with fuses	pc	6.00		
18	08-03-575-1	Device - Terminal block	pc	6.00		
19	08-03-575-1	Device - Connection bridge	pc	10.00		
20	10-02-050-03	Installation Quick mounting bracket	100 pcs	0.15		
21	08-03-591-8	Electrical socket for mounting on omega rail	100 pcs	0.03		
22	10-02-016-04	Industrial switch	pcs	3.00		
23	10-04-066-04	Transceiver	pcs	8.00		
24	08-03-575-1	Device - Power supply	pc	3.00		
25	08-01-080-2	LAN surge protector	pc	20.00		
26	10-04-066-04	Fibre Optic Patch Panel	pcs	3.00		
27	10-04-100-04	Shaping and connecting cables (conductors) in wired broadcasting equipment, cable section: up to 6 mm2 - Fibre pigtail	10 pcs	3.60		
28	10-02-051-01	Cable connection bridges, length: up to 6 m	100 pcs	0.20		
29	08-02-390-2	Perforated PVC cable duct, with cover, section 60x60 mm	100 m	0.06		

1	2	3	4	5	6	7
30	08-02-398-2	Conductor in cable trays, section up to 35 mm2	100 m	0.12		
31	supplier price	VVG-FRLS cable 3x2.5 mm2	m.l.	12.00		
32	08-02-398-1	Conductor in cable trays, cross-section up to 6 mm2	100 m	0.12		
33	supplier price	PV type electrical conductor 1x6.0 mm2 g/v	m.l.	12.00		
34	10-04-067-23 applied	Video control device - Video camera	pc	12.00		
35	10-08-002-06 applied	Structure for installing a video camera	pc	12.00		
36	10-04-100-04	Shaping and connecting cables (conductors) in wired broadcasting equipment, cable section: up to 6 mm2 - RJ-45 FTP connector cat. 5e	10 pcs	2.00		
37	10-04-030-02 applied	Installation of memory card	pcs	12.00		
38	10-08-019-01	Miscellaneous equipment - Cable connection box, IP54	pc	12.00		
39	10-04-101-07	Subscriber equipment - External microphone	pc	2.00		
40	10-08-003-07	Devices - Access control and time recording terminal	set	4.00		
4	10-08-003-05	Devices - Intercom installation at the security post	pcs	1.00		
42	10-08-003-03	Devices - power supply and control unit	pcs	1.00		
43	08-03-575-1	Device - Encapsulated battery 12 V, 7 Ah	pc	1.00		
44	11-04-003-04	Installation of automation and electromechanical drive set for technical access gate management	piece	1.00		
45	08-02-409-1	Vinyl plastic pipe on installed structures, on walls and columns, fastened with clamps, diameter up to 25 mm	100 m	8.00		
46	supplier price	Corrugated PVC pipe with probe, crush resistance 750N, d=20 mm	m.l.	800.00		
47	08-02-412-2	Insertion of conductors into metal pipes and hoses: first single-core or multi-core conductor in common braiding, cross-section up to 6 mm2	100 m	17.00		
48	supplier price	Fibre optic cable with min. 4 fibres, armoured, SM (9/125 ITU-T G.652.D), min. 3.5 kN, -40 °C - +60 °C, for installation in soils of all corrosion categories, including those infested with rodents, as well as in marshy areas	m.l.	50.00		
49	supplier price	Outdoor cable, resistant to adverse weather conditions, cat. 5e with 4x2 copper conductors, double shielded, 24 AWG, solid, n(A)-LSLTx according to STAS 31565-2012	m.l.	1,220.00		
		<i>Total</i>	lei			
		<i>Social insurance</i>	24%			
		<i>Transport expenses</i>	%			
		<i>Supply and storage expenses</i>	%			

1	2	3	4	5	6	7
		<i>Total</i>				
		<i>Overhead expenses</i>	%			
		<i>Total</i>				
		<i>Estimated profit</i>	%			
		Total Installation work Including salary				
		3. Equipment				
50	Supplier price	IP66, IK10 telecommunications cabinet made of 1.5 mm thick metal with a 2.5 mm thick metal mounting panel, for outdoor installation, with two cam locks, external dimensions 600(h)x600x350 mm, mounting panel dimensions 575x550 mm, for installation on special support included in the set with DIN mounting rail L=1.0 m; 6 mm ² electrical cable (L=5 m); copper grounding bar (12 x 4 AWG); perforated PE cable duct (L=5 m); elements for fixing the equipment in the cabinet	assembly	3.00		
51	supplier price	Fan with thermostat set: 48V DC, 0.15A, 7.2W; 120x120x40 mm type F-15-48T or similar according to characteristics	assembly	3.00		
52	supplier price	Lighting fixture, LED, 9W, 230V AC, 600 Lm; with motion sensor; 47.5x46x310.5 mm type 7L4302302100 or similar according to characteristics	assembly	3.00		
53	supplier price	Circuit breaker 1P+N, 16A, 230Vac; Type AC	assembly	3.00		
54	supplier price	Surge protection device, 275V AC; type 2	assembly	3.00		
55	supplier price	Grounding block with adapters, section 3 - 16 m ² , with 14 adapters in set	assembly	3.00		
56	supplier price	Modular terminal block for fuses, 250V DC, up to 6.3 A; up to 6 mm ² with 5 fuses 20x5mm Ifuz=5A	assembly	6.00		
57	supplier price	Through terminal block, 1000V, 32 A; up to 4 mm ²	assembly	6.00		
58	supplier price	Connection bridge, 32 A	assembly	10.00		
59	supplier price	Quick mounting bracket 35(h)x48.5x5.5 mm	assembly	15.00		
60	supplier price	Electrical socket for mounting on omega rail, 250V / 16A	pc	3.00		
61	supplier price	Industrial switch with 8 POE+ 802.3af/at 1 Gbps + 2 Combo 1 Gbps; 48V DC, 5.4A, 240W DC; 135(h)x80x105 mm; MSTP, RSTP, LLDP, LACP, GMRP, GVRP, IGMP v1/v2, Port-based VLAN, EtherNet/IP, Modbus TCP, DHCP Option 66/67/82, DHCP Server/Client, Fibre check, Flow control, IPv4/IPv6, Port Mirror,	pcs	3.00		

1	2	3	4	5	6	7
		RARP, RMON, SMTP, SNMP Inform, SNMPv1/v2c/v3, Telnet, TFTP; -40+60°C operating temperature, DIN-rail mount type EDS-P510A-8PoE-2GTXSFP or similar according to characteristics				
62	supplier price	SFP module SM 2xLC 1310 nm (transceiver), min. 1 Gbps; compatible with industrial switches	pc	8.00		
63	supplier price	Power supply input - 230V AC, 2.42A, 500W; output - 48V DC, 10A, 480W; 125(h)x85x129 mm., from NDR-480-48 type rail mount or similar according to characteristics	pc	3.00		
64	supplier price	LAN surge protector: RJ45 Cat5e POE+ shielded 1 Gbps; 94x35x27 mm, type TU8001 or similar according to specifications	pc	20.00		
65	supplier price	Fibre Optic Patch Panel: 6 LC duplex connectors SM, with LC duplex adapters for connecting 4-fibre cable, dimensions 153(h)x70x124 mm, type SNAP-12LC-SM or similar according to specifications	pc	3.00		
66	supplier price	Fibre pigtail, FOC-PT9:LC-OSP/2.5 type 1208113 or similar according to characteristics with 1019676 type shrink wrap protection or similar according to characteristics	assembly	36.00		
67	supplier price	Fibre optic patch cable, OS2, duplex LC to SC, LSZH and OFNR 1.8 mm, 1 m	pc	10.00		
68	supplier price	FTP category 5e connection cable, RJ45 to RJ45, 4 pairs, LSZH, 1 m	pc	10.00		
69	supplier price	Video camera, outdoor, min. 2688 x 1520, 1/1.8" CMOS, IR = 40 m, 2.8/4.0/6.0 mm, 802.3 af Class 3, max. 7.5 W, with built-in microphone, with the possibility of data storage on NAS, with micro SD slot type DS-2CD2047G2-L(U) with fasteners type DS-1275-ZJ-SUS or similar according to characteristics	assembly	14.00		
70	supplier price	64 GB Micro SD memory card, Class 10 UHS-I, R/W 100/20 MB/s	pc	14.00		
71	supplier price	RJ-45 FTP connector cat. 5e	pc	20.00		
72	supplier price	Cable connection box, IP54 type DS-1280ZJ-S or similar according to specifications	pc	14.00		
73	supplier price	External microphone for installation in the bathroom, POE 2.4 W, 16 kHz, omnidirectional type DS-UAC-M1P or similar according to characteristics	piece	2.00		
74	supplier price	Access control and time and attendance terminal, IP, multimodal with facial recognition , RFID or QR codes, 1.5Ghz quad core processor, 5.5" touch screen, 2MP camera and Dual RFID reader (125kHz EM, HID	assembly	4.00		

1	2	3	4	5	6	7
		Prox & 13.56Mhz MIFARE, DESFire/EV1/EV2, HID iClass, SE, Seos, FeliCa, NFC, ISO14443A, BLE), WiFi, PoE, IP65 protection class, IK06 vandal resistance, RTSP (real time streaming protocol), Video intercom (SIP). NFC/BLE smartphone compatible with Suprema Mobile Credential and BioStar 2 Starter access control and time and attendance WEB software (free licence) with Suprema BioStation 3 or similar installation box from the manufacturer				
75	supplier price	Intercom installation at the security post, with the possibility of remotely controlling access gates, RTSP, VoIP for wall installation, Fanvil i53W type or similar according to specifications	ansma blu	1.00		
76	supplier price	Switching power supply 12 V, 3 A, 30 W	assembly	1.00		
77	supplier price	Sealed battery 12 V, 7 Ah	pc	1.00		
78	supplier price	Electromechanical automation and drive set for technical access gate management (the gate consists of two parts, with each leaf weighing up to 200 kg), complete with 10 remote controls for remote opening and safety sensors, type HYPER 400 + BIOS2 or similar according to characteristics	assembly	1.00		
		<i>Total</i>	Lei			
		<i>Supply and storage expenses</i>	%			
		Total Equipment Including salary				
		4. Adjustment and start-up work				
79	10-06-068-14	Adjustment of the control and management system, installation of the operating system, provision of software	pcs	1.00		
80	10-06-068-16	Adjustment of synchronous digital transmission systems. Adjustment of the control and command system: Programming of the network element and adjustment of its operation (Access switch)	pcs	3.00		
81	1-10-001	Collection and processing of information signals from protection devices, electrical and technological automation systems	signal	19.00		
		<i>Total</i>	lei			
		<i>Social insurance</i>	%			
		<i>Total</i>				
		<i>Overhead expenses</i>	%			
		<i>Total</i>				
		<i>Estimated profit</i>	%			

1	2	3	4	5	6	7
		Total Adjustment and start-up works Including salary				
		Total	lei			
		Total estimate: Including salary				