CORRIGENDUM no. 2

to the

TENDER DOSSIER

Publication Reference: NEAR/BEG/2023/EA-OP/0148

Subject: Construction of municipal wastewater collection and treatment system in Čačak

Location: Republic of Serbia

The tender dossier is corrected or modified as follows:

<u>VOLUME 2, Section 3, PARTICULAR CONDITIONS OF CONTRACT (Vol 2 Particular Conditions), page 23 of 43</u>

Art. 10.1

Instead of:

Delete all text after second paragraph and replace with following:

"The Contractor shall apply by notice to the Engineer for a Taking-Over Certificate at the latest 28 days before the works will, in the Contractor's opinion, be complete and ready for taking over.

The Engineer shall, within 28 days after receiving the Contractor's application:

- (a) notify the Employer who will report to the relevant authority that the Works are complete and ready for technical acceptance; or
- (b) reject the application, giving reasons and specifying the work required to be done by the Contractor to enable the application for technical acceptance. The Contractor shall then complete this work before issuing a further notice under this sub-clause.

Technical acceptance of Works and Sections shall comply with applicable Law and legislation and upon establishment of the technical acceptance committee by the relevant authority.

If any deficiencies are identified in the course of the technical acceptance procedure, the Contractor shall remedy such deficiencies within the period proposed by the technical acceptance committee during the Defect Notification Period. If the Contractor fails to remedy the deficiencies, the Employer shall be entitled to engage a third party to remedy such deficiencies at the cost of the Contractor.

Read:

Delete all text after second paragraph and replace with following:

The Contractor shall apply by notice to the Engineer for a Taking-Over Certificate at the latest 28 days before the works will, in the Contractor's opinion, be complete and ready for taking over.

The Engineer shall, within 28 days after receiving the Contractor's application:

(a) issue the Taking-Over Certificate to the Contractor, stating the date on which the Works or Section were completed in accordance with the Contract, except for any minor outstanding work and defects which will not substantially affect the use of the Works or Section for their intended purpose (either until or whilst this

- work is completed and these defects are remedied) and notify the Employer who will report to the relevant authority that the Works are complete and ready for technical acceptance; or
- (b) reject the application, giving reasons and specifying the work required to be done by the Contractor to enable the Taking-Over Certificate to be issued. The Contractor shall then complete this work before issuing a further notice under this Sub-Clause.

If the Engineer fails either to issue the Taking-Over Certificate or to reject the Contractor's application with the period of 28 days, and if the Works or Section (as the case may be) are substantially in accordance with the Contract, the Taking-Over Certificate shall be deemed to have been issued on the last day of that period.

Technical acceptance of Works and Sections shall comply with applicable Law and legislation and upon establishment of the technical acceptance committee by the relevant authority.

Notwithstanding any minor outstanding work and defects noted by the Engineer, if any deficiencies are identified in the course of the technical acceptance procedure, the Contractor shall remedy such deficiencies within the period proposed by the technical acceptance committee during the Defect Notification Period. If the Contractor fails to remedy the deficiencies, the Employer shall be entitled to engage a third party to remedy such deficiencies at the cost of the Contractor.

<u>VOLUME 3, Section 1, EMPLOYER'S REQUIREMENTS - General Provisions (d4u_techspec_en Vol.3.1 Cacak), pages 26-27 of 109</u>

Section No: 3.1.9.1

Instead of:

The following time schedule shall be considered for the completion of the Works:

Table 3.1.7-1 Overall Time Schedule

Activity	Duration
Part 1: Preparation of designs for the construction of the WWTP Prelicii (update/adjustments of Employer's designs, obtaining updated Location Conditions and approval on adjusted Preliminary Design, Design for Construction Permit, Design for Construction)	12 months from commencement date
Part 3: Completion of CCTV investigations in preparation for sewer rehabilitation	6 months from commencement date
Part 4: Supply of Sewer Cleaning and Investigation Equipment	6 months from commencement date
Concept design, preliminary design and other design for rehabilitation of sewers	12 months from commencement date
Time for Completion	1095 days from commencement date
Defects notification period	365 calendar days from Issue of Taking-Over Certificate
Assisted operation during DNP	3 months from Issue of Taking-Over Certificate

The following time schedule shall be considered for the completion of the Works:

Table 3.1.7-1 Overall Time Schedule

Activity	Duration
Part 1: Preparation of designs for the construction of the WWTP Prelici (update/adjustments of Employer's designs, obtaining updated Location Conditions and approval on adjusted Preliminary Design, Design for Construction Permit)	12 months from commencement date
Part 3: Completion of CCTV investigations in preparation for sewer rehabilitation	6 months from commencement date
Part 4.1: Supply of Combination jetting and vacuum truck including accessories	12 months from commencement date
Part 4.2: Supply of CCTV inspection truck, fully equipped including accessories	6 months from commencement date
Concept design, preliminary design and other design for rehabilitation of sewers	12 months from commencement date
Time for Completion	1,095 days from commencement date
Defects notification period	365 calendar days from Issue of Taking-Over Certificate
Assisted operation during DNP	3 months from Issue of Taking-Over Certificate

<u>VOLUME 3, Section 2, EMPLOYER'S REQUIREMENTS - Particular Design & Process Requirements</u> (d4u_techspec_en Vol.3.2 Cacak), page 7 of 71

Section No: 3.2.2.3

Instead of:

Traffic access to the WWTP Prelići is provided from the city's local public road shown on the General Regulation Plan and particularly from the interchange with southern by-pass around Čačak. An existing road already exists provides access to the Waste transfer station about 300m to the West of the WWTP Prelići. Access to the waste transfer station shall be maintained at all time. About 100m of this road will be widened and then extended over a distance of about 700m to reach the gate of the WWTP. The new construction includes a new bridge over the Atenica river.

The extension of the access road is already identified in the General Regulation Plan and a separate design for Construction Permit has been prepared and the Construction Permit has already been obtained. The Contractor shall prepare the Design for Construction (Projekat za izvođenje) for the Access Road bearing in mind its use for construction traffic. The construction of the new access road shall be completed in phases with the first phase completed as early as possible for use by construction

traffic. Use of other public roads by construction traffic shall be avoided.

The existing section of the access road shall be used as the main construction works access to the site and the Contractor shall be responsible for maintaining this public road as well as the new access road and bridge until completion of construction. The existing and new road shall be rehabilitated and completed as per the design at the end of the construction works.

Read:

Traffic access to the WWTP Prelići is provided from the city's local public road shown on the General Regulation Plan and particularly from the interchange with southern by-pass around Čačak. An existing road already exists provides access to the Waste transfer station about 300m to the West of the WWTP Prelići. Access to the waste transfer station shall be maintained at all time. About 100m of this road will be widened and then extended over a distance of about 700m to reach the gate of the WWTP. The new construction includes a new bridge over the Atenica river.

The extension of the access road is already identified in the General Regulation Plan and a separate design for Construction Permit has been prepared and the Construction Permit has already been obtained. The Contractor shall prepare the Design for Construction (Projekat za izvođenje) for the Access Road bearing in mind its use for construction traffic. The construction of the new access road shall be completed in phases with the first phase completed as early as possible for use by construction traffic. Use of other public roads by construction traffic shall be avoided.

The existing section of the access road shall be used as the main construction works access to the site and the Contractor shall be responsible for maintaining this public road as well as the new access road and bridge until completion of construction. The existing and new road shall be rehabilitated and completed as per the design at the end of the construction works.

3.2.2.3.1 Temporary access road chainage 0+240 to 0+575

Provisions within this sub-section specifically apply to the section of the temporary access road that runs through closed solid waste landfill area, from chainage 0+240 to 0+575 (chainage according to the Layout provided in the Design for Construction Permit for the Access Road). Works on this section of the temporary access road shall be separately charged in the price breakdown and do not include works on other sections of the temporary access road.

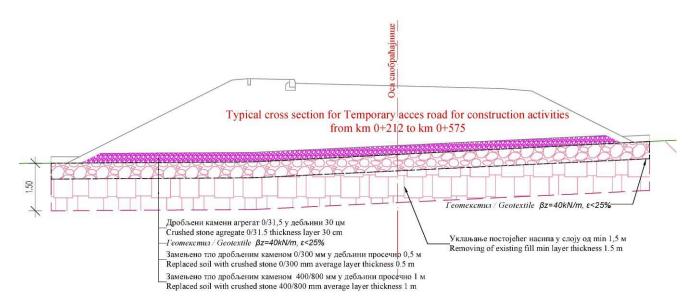
Before commencement of any construction activities, the Contractor is obliged to conduct detailed geotechnical and topographical survey. Minimum number of boreholes in this section shall be 3, and with total length of 40 m, at locations and scope proposed by the Contractor and approved by the Engineer. Topographical and geotechnical reports shall be submitted to the Engineer no later than 45 days after the Commencement date.

In order to enable access to heavy construction machinery to the WWTP site, the Contractor shall excavate existing fill in thickness of minimum 1.5 m. Excavated material shall be deposited as construction waste according to the Law of the Republic of Serbia.

After excavation, the first layer of crushed stone 400/800 mm, average layer thickness 1 m shall be laid. Geotextile $\beta z=40kN/m$, $\epsilon<25\%$ shall be laid, followed by crushed stone material (CSM) 0/300 mm, average thickness 50 cm. Geotextile shall wrap layer of CSM 0/300 mm. Crushed stone aggregate (CSA) 0/31.5 mm layer shall be laid over the top surface of geotextile wrapped CSM 0/300 mm layer.

- Compaction criteria for Crush Stone $0/300 Ms \ge 50$ MPa
- Compaction criteria for Crush Stone Aggregate $0/31.5 \text{Ms} \ge 90 \text{ MPa}$

Typical cross section for this section of the temporary access road:



Indicative quantities:

- Excavation 10,050 m³
- Crush Stone $400/800 7,000 \text{ m}^3$
- Crush Stone $0/300 3.500 \text{ m}^3$
- Crush Stone Aggregate 0/31.5 2,500 m³
- Geotextile $\beta z=40$ kN/m, $\epsilon<25\%$ 16,500 m²

Upon approval of the Contractor's method statement for execution of works by the Engineer a trial section of 50 m in length shall be executed. The Contractor may proceed with construction of the temporary access road after written approval of the Engineer.

Upon completion of the temporary access road, during execution of construction activities, the Contractor shall perform topographical monitoring of temporary access road. Monitoring shall last not less than 12 months. In the first three months after completion of the temporary access road, at least two survey reports per month shall be produced. In the following period, until commencement of permanent works on the Access Road, at least one survey report per month shall be produced. Monitoring Programme shall be proposed by the Contractor and approved by the Engineer. Obtained data shall be used in drafting of the Design for Construction (PZI) for the Access Road to WWTP Prelići.

Unless specifically noted otherwise in the text above, all provisions of the Employer's Requirements apply to works within this section.

<u>VOLUME 3, Section 4, EMPLOYER'S REQUIREMENTS - Mechanical Works Requirements</u> (d4u_techspec_en Vol.3.4 Cacak), pages 135-137 of 142

Section No: 3.4.29

Instead of:

Power supply for operation of jetting, vacuum and other pumps and motors shall have its own engine independent from the motor vehicle.

The vehicle shall be equipped with safety accessories such as cones and barriers as well as storage space on the vehicle.

Real life on the job training as well as theoretical training shall also be provided for at least three operators. Training shall also include all necessary health and safety precautions and procedures related to the operation, maintenance and use of all the provided equipment.

Motor Vehicle			
Characteristics	Unit	Requirement	
Cab capacity	persons	3	
Air-conditioning – cab only		yes	
Fuel		Diesel	
Engine	kW	>=200	
Torque	Nm	>=1100	
Emissions	1 1111	Euro VI	
External flashing amber hazard LED light		Front, rear, and roof	
High visibility markings and reflectors		Front, rear and sides	
Accessories		Fire extinguisher, first aid kit, safety cones	
Accessories		and barriers, lockable toolbox with all	
		necessary accessories, adapters and tools	
Auxiliary engine		necessary accessories, adapters and toors	
Fuel		Diesel	
	kW	>80	
Engine Eval to the correction			
Fuel tank capacity	litres	>200 or 4 hours operation	
Vacuum removal system	1.	0000	
Water tank with level indicator capacity	litres	2000	
Debris tank capacity	litres	8000	
Debris tank material		Stainless steel	
Debris tank characteristics		Tipping, full section door, fill level indicator	
Water recycling system (Debris separation,	microns	<50 or lower if required by hose and nozzle	
filtration, cyclone and sedimentation) -		supplier	
maximum solids in recycled water			
Telescopic boom		360° slew and telescopic extension up to	
		4m; local and remote control	
Vacuum pump compressor with automatic	m3/hour	600	
safety vacuum break			
Vacuum hose diameter	mm	200	
Accessories and tools		DN200 suction hose in sections total 10m,	
		manhole hooks, hand operated clam for	
		manhole cleaning	
Pipe jetting system			
Close coupled water pump system – variable	1/minute	Up to 200	
flow			
Close coupled water pump system -variable	bars	150 - 250	
pressure	Cars	150 250	
High pressure sewer cleaning hose (1") on	m	>100	
reel with manual swivelling hose rewind and	111	7100	
guide			
Hose accessories		Manhole top and bottom hose guide	
Nozzles in carry case		Suitable for recycled water, self-propelling,	
TVOZZICS III Carry Case		with front jet for drilling as necessary,	
		produce rapid vibrations with rotating and	
		continuous/ pulsating jets	
Salastian of nazzlas for ramaving different		For removing limescale, fat/grease, roots	
Selection of nozzles for removing different materials		For removing innescate, rat/grease, roots	
		DN 50mm to 1000mm in plantic calcast	
Selection of nozzles for different flows, pipe		DN 50mm to 1000mm in plastic, asbestos	
diameters and material		cement, ceramic, concrete	

Jet nozzle material		Selection of stainless steel, carbide steel and
		ceramic for different pressures and water
		quality
No jets per nozzle		3 or greater suitable for pressure range
Jet angle on each nozzle		Combination between 15° – 45°
Nozzle efficiency		Tier 3 as per NASSCO Jetter Code of
		Practice
Minimum number of nozzles		5, at least one with forward and rotating jets
		and one on skids
Wash down system of 1/2" hose on reel with	m	50
guide, hand-held with spray nozzle - length		
Wash-down system pump with regulating	litres/minute	20
valve - flow		
Wash-down system pump - pressure	bars	40
Wash-down tank	litres	200
Other accessories		Nozzle adapters for different nozzle sizes,
		pressure gauges, level indicator in tanks
Accessories		Minimum three (3) inflatable sewer pipe
		plugs/ stoppers covering diameters DN100-
		1000 with an inflator, traffic management
		barriers, cones, signs
Training		
Duration	days	2
Minimum nperators to be trained	No	6
Hardware use		Demonstration and real in-sewer use of all
		equipment provided including fault
		diagnostic and health and safety precautions

Power supply for operation of jetting, vacuum and other pumps and motors shall have its own engine independent from the motor vehicle or shall be driven from PTO mounted with built-in pneumatic clutch in order to engage and disengage the water pump from rear control panel independent of the vacuum pump.

The vehicle shall be equipped with safety accessories such as cones and barriers as well as storage space on the vehicle.

Real life on the job training as well as theoretical training shall also be provided for at least three operators. Training shall also include all necessary health and safety precautions and procedures related to the operation, maintenance and use of all the provided equipment.

Characteristics	Unit	Requirement
Motor Vehicle		
Cab capacity	persons	3
Air-conditioning – cab only		Yes, automatic
Fuel		Diesel
Engine	kW	≥220
Torque	Nm	≥1,100
Emissions		Euro VI

Characteristics	Unit	Requirement
Brakes		Pneumatic service braking system, emergency, parking and engine brake, ABS, ASR
Steering wheel		Hydraulic power steering system with left hand drive
Gross weight	kg	min 18,000
Payload weight	kg	min 12,000
External flashing amber hazard LED light		Front, rear, and roof
High visibility markings and reflectors		Front, rear and sides
Accessories		Fire extinguisher, first aid kit, safety cones and barriers, lockable toolbox with all necessary accessories, adapters and tools
Auxiliary engine (optional)		
Fuel		Diesel
Engine	kW	≥80
Fuel tank capacity	litres	≥200 or 4 hours operation
Vacuum removal system		
Water tank with level indicator capacity	litres	≥ 2,000
Water tank material		Stainless steel AISI 304
Debris tank capacity	litres	≥ 6,000
Debris tank material		Stainless steel AISI 304, min thickness 5 mm
Debris tank characteristics		Tipping, rear tailgate opening, hydraulic locking, fill level indicator, vacuum resistant
Water recycling system (Debris separation, filtration, cyclone and sedimentation) - maximum solids in recycled water	microns	<50 or lower if required by hose and nozzle supplier
Telescopic boom		360° slew and telescopic extension up to
Vacuum pump, water cooled, air filter at the suction side		4m; local and remote control ≥ 1,500 m³/hour, @95% vacuum, @1000 rpm
Vacuum hose diameter	mm	125
Accessories and tools		DN125 suction hose in sections total min 16 m, side compartments for vacuum hoses (made of SS AISI 304), manhole hooks, hand operated clam for manhole cleaning
Pipe jetting system		
Close coupled water pump system – variable flow	l/minute	Up to 200
Close coupled water pump system -variable pressure	bars	150 - 250
High pressure sewer cleaning hose (1") on reel with manual swivelling hose rewind and guide	m	≥100
Hose accessories		Manhole top and bottom hose guide

Characteristics	Unit	Requirement
Nozzles in carry case		Suitable for recycled water, self-propelling, with front jet for drilling as necessary, produce rapid vibrations with rotating and continuous/ pulsating jets
Selection of nozzles for removing different materials		For removing limescale, fat/grease, roots
Selection of nozzles for different flows, pipe diameters and material		DN 50mm to 1000mm in plastic, asbestos cement, ceramic, concrete
Jet nozzle material		Selection of stainless steel, carbide steel and ceramic for different pressures and water quality
No jets per nozzle		3 or greater suitable for pressure range
Jet angle on each nozzle		Combination between 15° – 45°
Nozzle efficiency		Tier 3 as per NASSCO Jetter Code of Practice
Minimum number of nozzles		5, at least one with forward and rotating jets and one on skids
Wash down system of 1/2" hose on reel with guide, hand-held with spray nozzle - length	m	≥50
Wash-down system pump with regulating valve - flow	litres/minute	≥20
Wash-down system pump - pressure	bars	≥40
Wash-down tank	litres	≥200
Control system		Enclosed type, made of stainless steel AISI 304, light-indicated operating positions, controls and alarms for all systems
Other accessories		Nozzle adapters for different nozzle sizes, pressure gauges, level indicator in tanks
Accessories		Minimum three (3) inflatable sewer pipe plugs/ stoppers covering diameters DN100-1,000 with an inflator, traffic management barriers, cones, signs
Training		
Duration	days	2
Minimum operators to be trained	No	6
Hardware use		Demonstration and real in-sewer use of all equipment provided including fault diagnostic and health and safety precautions

VOLUME 4, Section 2, FINANCIAL OFFER TEMPLATES - LUMP SUM CONTRACTS (d4w finoffer 4dot2 en), pages 5-6 of 27

Section No: 4.2.3 – Schedule 1 – General Items

Instead of:

Item	Description	Unit	Amount EUR
1.01	Contractual Requirements	LS	

Item	Description	Unit	Amount EUR
	(Performance Security, Guarantees, Insurances, etc.)		
1.02	Setting up of Contractor's site offices, compound, temporary fencing, etc, maintenance during Contract period, etc WWTP Prelici	LS	
1.03.1	Setting up of Engineer's site office, provision of Engineer's facilities, vehicles for the Engineer WWTP Prelici	LS	
1.03.2	Maintenance, cleaning of the Engineer's site office, transportation, running costs, and maintenance of the vehicles during Contract period, etcWWTP Prelici	LS	
1.04	Provision of signboards, 2 units - WWTP Prelići	LS	
1.05	Provision of signboards, 3 units - Sewage Pumping Stations	LS	
1.06	Provision of signboards, 4 units – Rehabilitation of sewers	LS	
1.07	Additional Surveys (Topographical, Geotechnical) - WWTP Prelici	LS	
1.08	Additional Surveys (Topographical, Geotechnical) – Sewage Pumping Stations	LS	
1.09	Preparation of design documentation as required by the Law on Planning and Construction (conceptual design, design for construction permit, design for construction) for construction of the influent diversion chamber, main to the WWTP Prelići sewer and overflow structure	LS	
1.10	Preparation of the Conceptual Design (Idejno Rešenje) of the WWTP Prelici	LS	
1.10.1	Preparation of the Preliminary Design (Idejni Projekat) of the WWTP Prelići	LS	
1.10.2	Preparation of the Design for Construction Permit (Projekat za građevinsku dozvolu) - WWTP Prelići	LS	
1.10.3	Preparation of the Design for Construction (PZI) of the WWTP Prelici, including access road	LS	
1.11	Preparation of design documentation for rehabilitation of sewers (conceptual design, design for construction permit, design for construction, as-built drawings) in accordance with the Law on Planning and Construction	LS	
1.12	Operation and Maintenance Manuals in English and Serbian Language- WWTP Prelici	LS	
1.13	Operation and Maintenance Manuals in English and Serbian Language – Sewage Pumping Stations	LS	
1.14	As-Built Drawings bi-lingual English-Serbian - Diversion chamber, collector and overflow upstream WWTP Prelići	LS	
1.15	As-Built Drawings bi-lingual English-Serbian- WWTP Prelići	LS	
1.16	As-Built Drawings bi-lingual English-Serbian – Sewage Pumping Stations	LS	

Item	Description	Unit	Amount EUR
1.17	Training - WWTP Prelići	LS	
1.18	Start up, Commissioning, and Trial Operation - WWTP Prelici	LS	
1.19	Start up, Commissioning, and Trial Operation – Sewage Pumping Stations	LS	
1.24	Reinstatement of public roads used by construction traffic - WWTP Prelici	LS	
1.25	Assisted operation during Defects Notification Period for a total cumulative on-site presence of 3 months and remote support - WWTP Prelici	LS	
1.26	Assisted operation during Defects Notification Period for a total cumulative on-site presence of 3 months and distance support – Sewage Pumping Stations	LS	
1.27	Quality Assurance, Health, Safety and Environmental Protection	LS	
1.28	Dismantling of site offices at end of Contract, etc WWTP Prelići	LS	
1.29	Other general items (to be entered by the Tenderer)	LS	
	Total Schedule 1 to –the Summary		

Item	Description	Unit	Amount EUR
1.01	Contractual Requirements (Performance Security, Guarantees, Insurances, etc.)	LS	
1.02	Setting up of Contractor's site offices, compound, temporary fencing, etc, maintenance during Contract period, etc WWTP Prelici	LS	
1.03.1	Setting up of Engineer's site office, provision of Engineer's facilities, vehicles for the Engineer WWTP Prelići	LS	
1.03.2	Maintenance, cleaning of the Engineer's site office, transportation, running costs, and maintenance of the vehicles during Contract period, etcWWTP Prelicii	LS	
1.04	Provision of signboards, 2 units - WWTP Prelici	LS	
1.05	Provision of signboards, 3 units - Sewage Pumping Stations	LS	
1.06	Provision of signboards, 4 units – Rehabilitation of sewers	LS	
1.07.1	Additional Surveys (Topographical, Geotechnical) - WWTP Prelici	LS	
1.07.2	Additional Surveys (Topographical, Geotechnical) – Access Road to WWTP Prelici	LS	
1.08	Additional Surveys (Topographical, Geotechnical) – Sewage Pumping Stations	LS	

Item	Description	Unit	Amount EUR
1.09	Preparation of design documentation as required by the Law on Planning and Construction (conceptual design, design for construction permit, design for construction) for construction of the influent diversion chamber, main to the WWTP Prelići sewer and overflow structure	LS	
1.10	Preparation of the Conceptual Design (Idejno Rešenje) of the WWTP Prelici	LS	
1.10.1	Preparation of the Preliminary Design (Idejni Projekat) of the WWTP Prelići	LS	
1.10.2	Preparation of the Design for Construction Permit (Projekat za građevinsku dozvolu) - WWTP Prelići	LS	
1.10.3	Preparation of the Design for Construction (PZI) - WWTP Prelici	LS	
1.10.4	Preparation of the Design for Construction (PZI) - Access Road to WWTP Prelici	LS	
1.11	Preparation of design documentation for rehabilitation of sewers (conceptual design, design for construction permit, design for construction, as-built drawings) in accordance with the Law on Planning and Construction	LS	
1.12	Operation and Maintenance Manuals in English and Serbian Language- WWTP Prelići	LS	
1.13	Operation and Maintenance Manuals in English and Serbian Language – Sewage Pumping Stations	LS	
1.14	As-Built Drawings bi-lingual English-Serbian - Diversion chamber, collector and overflow upstream WWTP Prelići	LS	
1.15.1	As-Built Drawings bi-lingual English-Serbian- WWTP Prelići	LS	
1.15.2	As-Built Drawings bi-lingual English-Serbian-Access Road to WWTP Prelici	LS	
1.16	As-Built Drawings bi-lingual English-Serbian – Sewage Pumping Stations	LS	
1.17	Training - WWTP Prelići	LS	
1.18	Start up, Commissioning, and Trial Operation - WWTP Prelići	LS	
1.19	Start up, Commissioning, and Trial Operation – Sewage Pumping Stations	LS	
1.24	Reinstatement of public roads used by construction traffic - WWTP Prelici	LS	
1.25	Assisted operation during Defects Notification Period for a total cumulative on-site presence of 3 months and remote support - WWTP Prelici	LS	
1.26	Assisted operation during Defects Notification Period for a total cumulative on-site presence of 3 months and distance support – Sewage Pumping Stations	LS	
1.27	Quality Assurance, Health, Safety and Environmental Protection	LS	

Item	Description	Unit	Amount EUR
1.28	Dismantling of site offices at end of Contract, etc WWTP Prelići	LS	
1.29	Other general items (to be entered by the Tenderer)	LS	
	Total Schedule 1 to -the Summary		

<u>VOLUME 4, Section 2, FINANCIAL OFFER TEMPLATES - LUMP SUM CONTRACTS</u> (d4w_finoffer_4dot2_en), pages 7-10 of 27

Section No: 4.2.3 – Schedule 2 –Breakdown of the lump-sum price for Section 1: WWTP Prelići

Instead of:

Item	Summary Description	Civil Works (Lump Sum) EUR	MEICA Works (Lump Sum) EUR	Total Amount ¹ (Lump Sum) EUR
2.01	General site clearance on all work sites including demolition of existing structures and disposal of all undesirable materials			
2.02	Flood protection works			
2.02.1	General earthworks			
2.03	Widening of road to the waste transfer station including drainage, street lighting, utilities, protection of existing utilities, curbs, markings and traffic signs			
2.04	New access road between the waste transfer station and the WWTP including bridge, drainage, street lighting, utilities, protection of existing utilities, kerbs, markings and traffic signs			
2.05	10 kV /0.4 kV electricity substation inc. transformers, breakers, contactors, control panels excluding the 10 kV transmission cable			
2.06	All 0.4kV local distribution panels inc. breakers, contactors, controllers, safety equipment			
2.07	Diesel tank and pipework			

¹ Calculated as sum of Civil and MEICA works for each item. In case of discrepancy this value shall prevail.

Item	Summary Description	Civil Works (Lump Sum) EUR	MEICA Works (Lump Sum) EUR	Total Amount ¹ (Lump Sum) EUR
2.08	Diversion chamber on existing collectors, emergency overflow, connection pipe to the inlet chamber of the WWTP			
2.09	Inlet chamber, coarse screens, septic tank sludge reception, bypass, compactors, disposal bins			
2.10	Inlet pumping station and all control system			
2.11	Fine Screens inc. bypass, compactors, disposal bins			
2.12	Grit and grease removal inc. grit washer, grease separator, disposal bins			
2.13	Flow division to primary tanks inc. bypass, flow metering and automatic sampling unit.			
2.14	Primary settling tanks inc. all scrapers, bypass			
2.15	Flow division to activated sludge tank inc. bypass			
2.16	Activated sludge tanks inc. aeration system			
2.17	Blower house with control centre, fully equipped			
2.18	Flow division to the final settlement tanks inc. bypass			
2.19	Final settlement tanks inc. all scrapers, flow meters			
2.20	Effluent discharge, flow measurement, UV disinfection, autosampler & continuous quality monitoring			
2.21	Return activated sludge pumping station			
2.22	Waste activated sludge pumping station			_
2.23	Primary sludge gravity thickener, inc. picket fence			
2.24	Waste activated sludge storage, mixers and transfer pumping station			

Item	Summary Description	Civil Works (Lump Sum) EUR	MEICA Works (Lump Sum) EUR	Total Amount ¹ (Lump Sum) EUR
2.25	Supernatant storage & pumping station			
2.26	Waste activated sludge mechanical thickener, polymer preparation and dosing system and transfer pumping station			
2.27	Blended sludge buffer tank inc. mixers and transfer pumping station			
2.28	Water heating system inc. boilers, circulators, heat exchanger, safety instruments			
2.29	Anaerobic digestion tanks inc. mixers, recirculation pumps and all attached equipment			
2.30	Digested sludge thickener inc. mixers and transfer pumping station			
2.31	Sludge heating system inc. circulation pumps			
2.32	Biogas treatment facility for foam, moisture, hydrogen sulphide, siloxane			
2.33	Biogas storage and flare including compressors, safety equipment			
2.34	Co-generation and all necessary accessories including additional biogas treatment			
2.35	Digested sludge dewatering inc. polymer preparation and dosing system, conveyors and containers			
2.36	Covered dewatered sludge storage area			
2.37	Supernatant tank and pumping station			
2.38	Site Drainage pumping station			
2.39	Technical water and firefighting system			
2.40	Interprocess pipework including manholes, chambers			
2.41	LV electrical distribution system including civil works, drawpits, ducts			

Item	Summary Description	Civil Works (Lump Sum) EUR	MEICA Works (Lump Sum) EUR	Total Amount ¹ (Lump Sum) EUR
2.42	Instrumentation and SCADA system including civil works, draw pits, ducts, connection to existing SCADA components, upgrade the existing SCADA system according to new requirements			-
2.43	Lightning protection system			
2.44	Administration building and laboratory			
2.45	Workshops and storage buildings			
2.46	Internal roads, parking areas and footpaths inc. lighting			
2.47	Fence, gates and gate building			
2.48	Green landscaping			
2.49	Furniture for all offices and laboratory			
2.50	Workshop equipment inc. benches - mechanical			
2.51	Workshop equipment inc. benches - electrical			
2.52	Laboratory equipment inc. benches and consumables			
2.53	Spare parts and consumables – mechanical and process equipment			
2.54	Spare parts and consumables – electrical equipment and panels			
2.55	Diesel standby generator			
2.56	Supply of agricultural tractor with all attachments and accessories			
2.57	Supply of skip truck with all attachments and accessories			
2.58	Other items (to be entered by Tenderer and list to be provided)			

Item Summary Description		(Lump Sum) (Lump Sum) EUR EUR		(Lump Sum) EUR

Item	Summary Description	Civil Works (Lump Sum) EUR	MEICA Works (Lump Sum) EUR	Total Amount ² (Lump Sum) EUR
2.01	General site clearance on all work sites including demolition of existing structures and disposal of all undesirable materials			
2.02	Flood protection works			
2.02.1	General earthworks			
2.03	Temporary access road from km 0+240 to 0+575, as described in Section 3.2.2.3.1 of the Employer's Requirements.			
2.04.1	Widening of road to the waste transfer station including drainage, street lighting, utilities, protection of existing utilities, curbs, markings and traffic signs			
2.04.2	New access road between the waste transfer station and the WWTP including bridge, drainage, street lighting, utilities, protection of existing utilities, kerbs, markings and traffic signs			
2.05	10 kV /0.4 kV electricity substation inc. transformers, breakers, contactors, control panels excluding the 10 kV transmission cable			
2.06	All 0.4kV local distribution panels inc. breakers, contactors, controllers, safety equipment			
2.07	Diesel tank and pipework			
2.08	Diversion chamber on existing collectors, emergency overflow, connection pipe to the inlet chamber of the WWTP			
2.09	Inlet chamber, coarse screens, septic tank sludge reception, bypass, compactors, disposal bins			

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² Calculated as sum of Civil and MEICA works for each item. In case of discrepancy this value shall prevail.

Item	Summary Description	Civil Works (Lump Sum) EUR	MEICA Works (Lump Sum) EUR	Total Amount ² (Lump Sum) EUR
2.10	Inlet pumping station and all control system			
2.11	Fine Screens inc. bypass, compactors, disposal bins			
2.12	Grit and grease removal inc. grit washer, grease separator, disposal bins			
2.13	Flow division to primary tanks inc. bypass, flow metering and automatic sampling unit.			
2.14	Primary settling tanks inc. all scrapers, bypass			
2.15	Flow division to activated sludge tank inc. bypass			
2.16	Activated sludge tanks inc. aeration system			
2.17	Blower house with control centre, fully equipped			
2.18	Flow division to the final settlement tanks inc. bypass			
2.19	Final settlement tanks inc. all scrapers, flow meters			
2.20	Effluent discharge, flow measurement, UV disinfection, autosampler & continuous quality monitoring			
2.21	Return activated sludge pumping station			
2.22	Waste activated sludge pumping station			
2.23	Primary sludge gravity thickener, inc. picket fence			
2.24	Waste activated sludge storage, mixers and transfer pumping station			
2.25	Supernatant storage & pumping station			
2.26	Waste activated sludge mechanical thickener, polymer preparation and dosing system and transfer pumping station			

Item	Summary Description	Civil Works (Lump Sum) EUR	MEICA Works (Lump Sum) EUR	Total Amount ² (Lump Sum) EUR
2.27	Blended sludge buffer tank inc. mixers and transfer pumping station			
2.28	Water heating system inc. boilers, circulators, heat exchanger, safety instruments			
2.29	Anaerobic digestion tanks inc. mixers, recirculation pumps and all attached equipment			
2.30	Digested sludge thickener inc. mixers and transfer pumping station			
2.31	Sludge heating system inc. circulation pumps			
2.32	Biogas treatment facility for foam, moisture, hydrogen sulphide, siloxane			
2.33	Biogas storage and flare including compressors, safety equipment			
2.34	Co-generation and all necessary accessories including additional biogas treatment			
2.35	Digested sludge dewatering inc. polymer preparation and dosing system, conveyors and containers			
2.36	Covered dewatered sludge storage area			
2.37	Supernatant tank and pumping station			
2.38	Site Drainage pumping station			
2.39	Technical water and firefighting system			
2.40	Interprocess pipework including manholes, chambers			
2.41	LV electrical distribution system including civil works, drawpits, ducts			
2.42	Instrumentation and SCADA system including civil works, draw pits, ducts, connection to existing SCADA components, upgrade the existing SCADA system according to new requirements			

Item	Summary Description	Civil Works (Lump Sum) EUR	MEICA Works (Lump Sum) EUR	Total Amount ² (Lump Sum) EUR		
2.43	Lightning protection system					
2.44	Administration building and laboratory					
2.45	Workshops and storage buildings					
2.46	Internal roads, parking areas and footpaths inc. lighting					
2.47	Fence, gates and gate building					
2.48	Green landscaping					
2.49	Furniture for all offices and laboratory					
2.50	Workshop equipment inc. benches - mechanical					
2.51	Workshop equipment inc. benches - electrical					
2.52	Laboratory equipment inc. benches and consumables					
2.53	Spare parts and consumables – mechanical and process equipment					
2.54	Spare parts and consumables – electrical equipment and panels					
2.55	Diesel standby generator					
2.56	Supply of agricultural tractor with all attachments and accessories					
2.57	Supply of skip truck with all attachments and accessories					
2.58	Other items (to be entered by Tenderer and list to be provided)					
	Total Schedule 2 to the Summary					

<u>VOLUME 4, Section 2, FINANCIAL OFFER TEMPLATES - LUMP SUM CONTRACTS</u> (d4w finoffer 4dot2 en), pages 16-20 of 27

Section No: 4.2.4 — DAYWORK SCHEDULE

Instead of:

Item	Description	Unit	Unit price	Estimated quantities	Total amount [EUR]
A1	Labourer	wd		300	
A2	Skilled worker – 2 years experience	wd		300	
A3	Skilled worker – 5 years experience	wd		300	
A4	Foreman	wd		300	
A5	Site manager	wd		300	
A6	HGV driver	wd		300	
A7	Heavy plant driver	wd		300	
A8	Clerk of works	wd		300	
A9	Mechanic	wd		300	
A9	Land surveyor	wd		300	
A10	Planning draughtsman	wd		300	
A11	Licensed engineer	wd		300	
C1	Gasoil	L		1,000	
C2	Aggregates for concrete	m3		1,000	
C3	Sand for concrete 2/4	m3		1,000	
C4	Cement	t		100	
C5	Steel for reinforced concrete	Kg		10,000	
C6	Annealed wire	Kg		1,000	
C7	Timber formwork	m2		300	
C8	Plywood	m2		300	
C9	Plasticisers	kg		150	
C10	Concrete coating	kg		150	
C11	Asphalt concrete	T		100	
C13	Inspection ladders	pcs		100	
C14	Fencing	m		100	
C15	Traffic signs	pcs		50	
B1	D8N bulldozer or similar	wd		100	
B2	14G grader or similar	wd		100	
В3	CAT-type crawler excavator – 50kW	wd		100	
B4	CAT wheeled excavator – 50kW	wd		100	
B5	Trencher type – 50 kW	wd		100	
B5	Pump – 4kW	wd		100	
В6	Concrete vibrating poker	wd		30	
В7	Mobile crane – 40T	wd		100	
B8	Concrete pump	wd		100	
CIP 1	Mobilisation, Setting up and installation of Cured in- place pipe lining, Full structural support between manholes DN 200	m		50	

Item	Description	Unit	Unit price	Estimated quantities	Total amount [EUR]
CIP 2	Mobilisation and Setting up, installation of Cured in-place pipe lining, full structural support between manholes DN 250	m		50	
CIP 3	Mobilisation and Setting up, installation of Cured in-place pipe lining, full structural support between manholes DN 300	m		50	
CIP 4	Mobilisation and Setting up, installation of Cured in-place pipe lining, full structural support between manholes DN 400	m		50	
CIP 5	Mobilisation, Setting up and installation of Cured in-place pipe lining, partial structural support between manholes DN 200	m		50	
CIP 6	Mobilisation, Setting up and installation of Cured in-place pipe lining, partial structural support between manholes DN 250	m		50	
CIP 7	Mobilisation, Setting up and installation of Cured in-place pipe lining, partial structural support between manholes DN 300	m		50	
CIP 8	Mobilisation, Setting up and installation of Cured in-place pipe lining, partial structural support between manholes DN 400	m		50	
CIP 9	Mobilisation, Setting up and installation of sectional cured in-place pipe lining DN 200	m		50	
CIP 10	Mobilisation, Setting up, installation of sectional cured in-place pipe lining DN 250	m		50	
CIP 11	Mobilisation, Setting up and installation of sectional cured in-place pipe lining DN 300	m		50	
CIP 12	Mobilisation, Setting up and installation of sectional cured in-place pipe lining DN 400	m		50	
CIP 13	Internal reinstatement of lateral DN<=100	pcs		50	
CIP 14	Internal reinstatement of lateral DN>100	pcs		50	

Item	Description	Unit	Unit price	Estimated quantities	Total amount [EUR]
CIP 15	External reinstatement of lateral DN<=100	pcs		50	
CIP 16	External reinstatement of lateral DN>100	pcs		50	
CIP 17	External reinstatement of lateral extra for depth greater than 4m	pcs		50	
CIP 18	Re-rounding of pipe DN200	m		50	
CIP 19	Re-rounding of pipe DN250	m		50	
CIP 20	Re-rounding of pipe DN300	m		50	
CIP 21	Re-rounding of pipe DN400	m		50	
PB 1	Mobilisation, Setting up and pipe replacement by bursting of existing pipe and installation of replacement pipe at manhole DN200	m		50	
PB 2	Mobilisation, Setting up and pipe replacement by bursting of existing pipe and installation of replacement pipe at manhole DN250	m		50	
PB 3	Mobilisation, Setting up and pipe replacement by bursting of existing pipe and installation of replacement pipe at manhole DN300	m		50	
PB 4	Mobilisation, Setting up and pipe replacement by bursting of existing pipe and installation of replacement pipe at manhole DN400	m		50	
PB 5	Bursting and upsizing of sewer DN 200 to DN250	m		50	
PB 6	Pipe Bursting: External reinstatement of lateral DN<=100	pcs		10	
PB 7	Pipe Bursting: External reinstatement of lateral DN>100	pcs		10	
PB 8	Pipe Bursting: : External reinstatement of lateral extra for depth greater than 4m	pcs		10	
FFL 1	Mobilisation and setting up for installation of pipe lining by fold and form at manhole and pipe rehabilitation DN 200	m		200	
FFL 2	Mobilisation and setting up for installation of pipe lining by fold and form at manhole and pipe rehabilitation DN 250	m		200	
FFL 3	Mobilisation and setting up for installation of pipe lining by	m		200	

Item	Description	Unit	Unit price	Estimated quantities	Total amount [EUR]
	fold and form at manhole and				
	pipe rehabilitation DN 300				
FFL 4	Mobilisation and setting up for installation of pipe lining by fold and form at manhole and pipe rehabilitation DN 400	m		200	
FFL 5	External reinstatement of lateral DN<=100	pcs		10	
FFL 6	External reinstatement of lateral DN>100	pcs		10	
FFL 7	External reinstatement of lateral extra for depth greater than 4m	pcs		10	
RMH 1	Breaking of road surface (asphalt/ concrete) to uncover manhole, cleaning, repairing of benching, internal wall repairs, raising of cover, replacement of cover	pcs		50	
RMH 1	Replacement of steps and ladders in manhole - <=4m	pcs		10	
RMH 2	Replacement of steps and ladders in manhole - >4m	pcs		10	
RMH 3	Replacement of Reinforced Concrete Wall and Roof Slabs	m3		30	
RMH 4	Installation of internal manhole liner	m2		30	
PR 1	Trenching – site clearance, correction of alignment for pipe DN200 and pipe replacement at depth <=4.0 m	m		100	
PR 2	Trenching – site clearance, correction of alignment for pipe DN250 and pipe replacement at depth <=4.0 m	m		100	
PR 3	Trenching – site clearance, correction of alignment for pipe DN300 and pipe replacement at depth <=4.0 m	m		100	
PR 4	Trenching – site clearance, correction of alignment for pipe DN400 and pipe replacement at depth <=4.0 m	m		100	
PR 5	Extra-over for Pipe replacement with depth greater than 4m	m		100	
PR 6	Trenching: External reinstatement of lateral DN<=100	m		100	
PR 7	Trenching: External reinstatement of lateral DN>100	m		100	
PR 8	Trenching: External reinstatement of lateral extra for depth greater than 4m	m		100	

Item	Description	Unit	Unit price	Estimated quantities	Total amount [EUR]
PR 9	Dewatering in Excavation	day		120	
RE 1	Excavation and Reinstatement of Existing Asphalt Road	m2		500	
RE 2	Excavation and Reinstatement of Existing Concrete Slabs or Paviours	m2		500	
RE 3	Removal and reinstatement of grassed areas	m2		500	
	Total Schedule 4.2.4				

Item	Description	Unit	Unit price	Estimated quantities	Total amount [EUR]
		Perso	nnel		
A1	Labourer	wd		300	
	Skilled worker – 2 years	wd		300	
A2	experience	wu		300	
	Skilled worker – 5 years	wd		300	
A3	experience	wa			
A4	Foreman	wd		300	
A5	Site manager	wd		300	
A6	HGV driver	wd		300	
A7	Heavy plant driver	wd		300	
A8	Clerk of works	wd		300	
A9	Mechanic	wd		300	
A9	Land surveyor	wd		300	
A10	Planning draughtsman	wd		300	
A11	Licensed engineer	wd		300	
		s (including t	ransport to t	he site)	
C1	Gasoil	L		1,000	
C2	Aggregates for concrete	m3		1,000	
C3	Sand for concrete 2/4	m3		1,000	
C4	Cement	t		100	
C5	Steel for reinforced concrete	Kg		10,000	
C6	Annealed wire	Kg		1,000	
C7	Timber formwork	m2		300	
C8	Plywood	m2		300	
C9	Plasticisers	kg		150	
C10	Concrete coating	kg		150	
C11	Asphalt concrete	T		100	
C13	Inspection ladders	pcs		100	
C14	Fencing	m		100	
C15	Traffic signs	pcs		50	
C16	Crushed stone 32-63	m3		500	
C17	Crushed stone 63-125	m3		500	
C18	Geotextile $\beta z=40$ kN/m, $\epsilon<25\%$	m2		1,000	
		Plant (includin	ng operators)	
B1	D8N bulldozer or similar	wd		100	
B2	14G grader or similar	wd		100	

Item	Description	Unit	Unit price	Estimated quantities	Total amount [EUR]
В3	CAT-type crawler excavator – 50kW	wd		100	
B4	CAT wheeled excavator – 50kW	wd		100	
B5	Trencher type – 50 kW	wd		100	
B5	Pump – 4kW	wd		100	
B6	Concrete vibrating poker	wd		300	
B7	Mobile crane – 40T	wd		100	
В8	Concrete pump	wd		100	
B9	Tipper truck 12 m3	wd		100	
B10	Tipper truck 18 m3	wd		100	
B11	Roller 4 t	wd		50	
B12	Roller 11 t	wd		50	
		Miscellaneo	ous works		T
D1	Geotechnical terrain survey (borehole) by accredited company with delivery of the report	m		50	
D2	Transport and disposal of inert construction waste according to the Law of the Republic of Serbia	m3		1,000	
D3	Transport and disposal of non- hazardous construction waste according to the Law of the Republic of Serbia	m3		1,000	
	Cured in place pipe lining	(including a	ll auxiliary e	equipment and n	naterials)
CIP 1	Mobilisation, Setting up and installation of Cured in- place pipe lining, Full structural support between manholes DN 200	m		50	
CIP 2	Mobilisation and Setting up, installation of Cured in-place pipe lining, full structural support between manholes DN 250	m		50	
CIP 3	Mobilisation and Setting up, installation of Cured in-place pipe lining, full structural support between manholes DN 300	m		50	
CIP 4	Mobilisation and Setting up, installation of Cured in-place pipe lining, full structural support between manholes DN 400	m		50	
CIP 5	Mobilisation, Setting up and installation of Cured in-place pipe lining, partial structural support between manholes DN 200	m		50	

Item	Description	Unit	Unit price	Estimated quantities	Total amount [EUR]
CIP 6	Mobilisation, Setting up and installation of Cured in-place pipe lining, partial structural support between manholes DN 250	m		50	
CIP 7	Mobilisation, Setting up and installation of Cured in-place pipe lining, partial structural support between manholes DN 300	m		50	
CIP 8	Mobilisation, Setting up and installation of Cured in-place pipe lining, partial structural support between manholes DN 400	m		50	
CIP 9	Mobilisation, Setting up and installation of sectional cured in-place pipe lining DN 200	m		50	
CIP 10	Mobilisation, Setting up, installation of sectional cured in-place pipe lining DN 250	m		50	
CIP 11	Mobilisation, Setting up and installation of sectional cured in-place pipe lining DN 300	m		50	
CIP 12	Mobilisation, Setting up and installation of sectional cured in-place pipe lining DN 400	m		50	
CIP 13	Internal reinstatement of lateral DN<=100	pcs		50	
CIP 14	Internal reinstatement of lateral DN>100	pcs		50	
CIP 15	External reinstatement of lateral DN<=100	pcs		50	
CIP 16	External reinstatement of lateral DN>100	pcs		50	
CIP 17	External reinstatement of lateral extra for depth greater than 4m	pcs		50	
CIP 18	Re-rounding of pipe DN200	m		50	
CIP 19	Re-rounding of pipe DN250	m		50	
CIP 20	Re-rounding of pipe DN300	m		50	
CIP 21	Re-rounding of pipe DN400	m	11	50	
DD 1	Pipe replacement by burstin	ng (including	aii auxiliary	equipment and	materials)
PB 1	Mobilisation, Setting up and pipe replacement by bursting of existing pipe and installation of replacement pipe at manhole DN200	m		50	
PB 2	Mobilisation, Setting up and pipe replacement by bursting of existing pipe and installation	m		50	

Item	Description	Unit	Unit price	Estimated quantities	Total amount [EUR]
	of replacement pipe at manhole DN250				
PB 3	Mobilisation, Setting up and pipe replacement by bursting of existing pipe and installation of replacement pipe at manhole DN300	m		50	
PB 4	Mobilisation, Setting up and pipe replacement by bursting of existing pipe and installation of replacement pipe at manhole DN400	m		50	
PB 5	Bursting and upsizing of sewer DN 200 to DN250	m		50	
PB 6	Pipe Bursting: External reinstatement of lateral DN<=100	pcs		10	
PB 7	Pipe Bursting: External reinstatement of lateral DN>100	pcs		10	
PB 8	Pipe Bursting: : External reinstatement of lateral extra for depth greater than 4m	pcs		10	
	Pipe lining by fold and for	n (including	all auxiliary	equipment and	materials)
FFL 1	Mobilisation and setting up for installation of pipe lining by fold and form at manhole and pipe rehabilitation DN 200	m		200	
FFL 2	Mobilisation and setting up for installation of pipe lining by fold and form at manhole and pipe rehabilitation DN 250	m		200	
FFL 3	Mobilisation and setting up for installation of pipe lining by fold and form at manhole and pipe rehabilitation DN 300	m		200	
FFL 4	Mobilisation and setting up for installation of pipe lining by fold and form at manhole and pipe rehabilitation DN 400	m		200	
FFL 5	External reinstatement of lateral DN<=100	pcs		10	
FFL 6	External reinstatement of lateral DN>100	pcs		10	
FFL 7	External reinstatement of lateral extra for depth greater than 4m	pcs		10	
	Manhole replacement (i	ncluding all a	auxiliary eq	uipment and ma	terials)
RMH 1	Breaking of road surface (asphalt/ concrete) to uncover manhole, cleaning, repairing of benching, internal wall repairs,	pcs		50	

Item	Description	Unit	Unit price	Estimated quantities	Total amount [EUR]
	raising of cover, replacement of cover				
RMH 1	Replacement of steps and ladders in manhole - <=4m	pcs		10	
RMH 2	Replacement of steps and ladders in manhole - >4m	pcs		10	
RMH 3	Concrete Wall and Roof Slabs	m3		30	
RMH 4	liner	m2		30	
	Pipe replacement (inc	luding all aux	kiliary equip	ment and mater	rials)
PR 1	Trenching – site clearance, correction of alignment for pipe DN200 and pipe replacement at depth <=4.0 m	m		100	
PR 2	Trenching – site clearance, correction of alignment for pipe DN250 and pipe replacement at depth <=4.0 m	m		100	
PR 3	Trenching – site clearance, correction of alignment for pipe DN300 and pipe replacement at depth <=4.0 m	m		100	
PR 4	Trenching – site clearance, correction of alignment for pipe DN400 and pipe replacement at depth <=4.0 m	m		100	
PR 5	Extra-over for Pipe replacement with depth greater than 4m	m		100	
PR 6	Trenching: External reinstatement of lateral DN<=100	m		100	
PR 7	Trenching: External reinstatement of lateral DN>100	m		100	
PR 8	Trenching: External reinstatement of lateral extra for depth greater than 4m	m		100	
PR 9	Dewatering in Excavation	day		120	
	Reinstatement works (i	ncluding all a	uxiliary equ	ipment and mat	erials)
RE 1	Excavation and Reinstatement of Existing Asphalt Road	m2		500	
RE 2	Excavation and Reinstatement of Existing Concrete Slabs or Paviours	m2		500	
RE 3	Removal and reinstatement of grassed areas	m2		500	
Total Schedule 4.2.4 to the Summary					