Project Title: Municipal Water Infrastructure Project Chernivtsi, Phase 2 and 3, Ukraine

(BMZ-No.: 201365899)

**ICB No.:** 510487

# Annex 1 to ADDENDUM No 4 Dated 13 March 2024

# To the Bidding Document for

"Rehabilitation of emergency sections of the WPS "Shubranets" - CWR "Popova" pressure water main DN = 900 mm with a total length of  $\sim$  7 km in Chernivtsi city, Chernivtsi region"

Employer: Municipal Enterprise "Chernivtsivodokanal"

Country: Ukraine

## **SCHEDULES**

Rehabilitation of emergency sections of the WPS "Shubranets" - CWR "Popova" pressure water main DN = 900 mm with a total length of ~ 7 km in Chernivtsi city, Chernivtsi region.

Lot 1 and / or only Lot 2

Information on applicable tax exemptions is provided in Sub-Clause 14.1 (b) of the Particular Conditions of Contract. The Schedules must be prepared in accordance with the currency alternative retained in OBDS – ITB 15.1.

### **Schedules**

Requirements for completion of the Schedules:

- 1. The Schedules provided in here shall be used without exception.
- 2. The Schedules must be completed without any alterations to the text, and no substitutes shall be accepted unless otherwise stated in the respective Bidding Form.
- 3. All blank spaces shall be filled in with the information requested.
- 4. Additional sheets may be attached as necessary.
- 5. If an item or question does not apply, "Not applicable" shall be written against it, with a brief explanation of why it does not apply.
- 6. Each page of every individual Schedule shall be numbered consecutively in the lower right corner.
- 7. Accuracy in the filling in of the Schedules, completeness of Schedules and attached documentation will be considered during Bid evaluation. The attention of the Bidder is also drawn to the fact that the failure of providing particular data / information may cause the "non-compliance" in the related item of evaluation.
- 8. The Requirements in the Bid Documents define the legal and operating requirements that must be met to achieve the Project Objectives and describe the relationship to other components of the Project and particular requirements. It also provides the design concept that has been developed by the Employer and further developed by the Bidder/the Contractor to meet these requirements.

# **Schedules of Prices**

# LOT 1 and LOT 2

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# A. PREAMBLE TO PRICE SCHEDULE

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#### INTRODUCTION TO PRICE SCHEDULES

#### General

This document specifies scope of work included in the Price Schedules. Details of the method of measurement are provided below and cover the method to be used in developing individual unit rates as well as inclusions for components identified in the Price Schedules prepared by the Employer from the Drawings provided in this document.

The items in Price Schedules and description do not generally provide all details and shall not be considered an explanation about all activities and Works to be designed or constructed, incl. services to be performed under item(s) specified in the document. Nevertheless the Contractor shall prepare and submit his price inclusive of all activities, materials, equipment, etc. as required to perform requested and specified work in full compliance with the requirements stipulated in the Requirements and Contract Conditions.

The Contractor, signing the Contract confirms that he examined all parts (volumes) of the Tender Documents; General Technical Specifications, Particular Requirements, Drawings and other supplementary documents e.g. Ukrainian Legislation and Local Procedures, etc. and the full scope of the requirements necessary to perform works are included in each item in the Price Schedules. In no sense shall such quantities be considered as limiting or extending the amount of the work to be done by the Contractor and of the materials to be supplied by him. The Contractor shall be responsible for checking quantities and for making any necessary site investigations prior to placing his order for materials.

The Contractor's rates and prices shall include for the full scope of work and related costs as previously mentioned, including the Contractor's overheads and profit. The unit rates entered are deemed to be appropriate and reasonable unit prices, reflecting the cost of the works or deliveries / installations or services (plus reasonable overhead, margin, risk, and profit) and are not deemed to be speculative (unit prices calculated unduly by offsetting between profitable and less profitable positions with the intention to achieve the lowest Tender Price and/or to take undue financial advantage from expected changes in quantities of positions in the Price Schedules.

Contractor is not entitled to add any items to the Price Schedules unless specifically asked for. The full prices for carrying out the Works shall be entered in the items existing in the Price Schedules.

In this the Price Schedules sub-headings and item descriptions address the materials/equipment and works covered by the respective items. The exact characteristics of materials/equipment to be supplied and exact nature and extent of the work to be performed is to be ascertained by reference to the Drawings, Specification and Conditions of Contract and requirements for completion of the Works etc. as the case may be.

The unit prices and lump sums shall be valid in any time of the year whether the works are executed in winter period or in summer period.

All items in the Price Schedules are given a unique item number for reference.

A rate or price shall be entered against each item in the priced Price Schedules, whether quantities are stated or not. The cost of Items against which the Contractor has failed to enter a rate or price shall be deemed to be covered by other rates and prices entered in the Price Schedules.

Payment for items with lump sum prices shall be paid according to an assessment of the percentage completion of the work included in each item, proportionally split for each Segment/Section.

#### **Accuracy of measurement**

Measured quantities shall be expressed in whole numbers.

#### **Units of Measurement**

All units in the project are SI units (System International), and no other units shall be introduced.

Abbreviations are used in the Price Schedules as follows:

set means set, which includes the materials/equipment amount of which shall be determined by the design Stage R

#### **Expenditures Included in Unit Prices and Lump Sums**

Unless otherwise mentioned herein, the following expenditures, irrespective of whether or not they are separately referred to in the unit rates, shall not be subject to any additional payment. Such expenditures as noted below shall be considered to have been included under the items in the Priced Price Schedules submitted by the Contractor.

- Construction and maintenance of temporary service roads required for the works, or exploiting sand, gravel and stone guarries.
- All burial, medical treatment costs and compensation in relation to injuries or loss of life in a work accident which the Contractor's staff or Third Parties may be exposed to during Contractors performance on the site.
- Costs to be incurred in taking necessary and as requested in the insurance policies, precautions against
  work accidents and concerning the construction safety measures during the Works not included under
  General Items:
- All costs related to surveys (e.g. topographic, geological etc.) and authorisations required for a successful preparation and completion of detailed designs and commencement of works not included under General Items
- All costs that may be incurred by the Contractor in setting up the construction site, mobilization and demobilization.
- All costs of equipment, tools, materials, labour and workmanship required for to perform Works, quality
  control, setting out in the field, quantity surveys and measurements thereof not included under General
  items.
- Cost of such tests and analyses as tests in the field and in the laboratory, loading tests, concrete compression and pressure tests, corrosion tests, water chemical and biological analyses etc. as specified in General Technical Specifications and that are not included under General Items.
- Costs to be incurred in tests and trials during commissioning of the completed works, as may be required by the Taking-Over Committee members.
- Costs of equipment, labour and materials to be used in assisting the Engineer in testing of used materials (such as compaction tests, soil compound and sieve tests, etc.) as instructed and required additionally by the Engineer.
- All taxes and duties, customs clearance and transport expenses, insurance fees and contractual special
  insurance fees and charges, further to all taxes, duties, charges, notarization fees etc. for execution of
  the Contract and as specified under the Conditions of the Contract.
- All costs to be incurred in building, depreciation, maintenance, operation and shutting down all facilities
  which are required for manufacturing and constructing all items used in Works including plant,
  equipment, instruments etc. necessary for carrying out and completing the Works.
- All costs to be incurred in the preparation of all detail design drawings, as-built drawings, work variation drawings, engineering, structures, location maps, survey drawings, strip-wise maps, land acquisition plans, final accounting files; in brief, all designs, mapping, calculations, setting out in the field etc. not included under General Items.
- All salaries of the staff and workers and all associated taxes, premiums and insurances (the Employer's share inclusive) etc.
- Payments needed to obtain guarantees, securities and costs related to the payments made to the subcontractors.
- All costs of materials supply, loading on trucks, transportation, unloading, stacking, repeated loading/unloading both within and outside the worksite, handling in both directions on the site, extracting from quarry, screening, washing, piling in front of screen etc. of all materials needed for Works, expenditure of plant and including wastage, which are required for the work and for incorporation in the work or for use as auxiliary material not specified in the Price Schedule.
- All costs of electricity, heating and water supply (including costs of water and electricity incorporated in the Works) not included under General Items.
- All costs of construction, erection, operation and maintenance of benches and other type of excavations, pumping facilities, similar structures, workmanship and materials to keep the surface of

the site and the excavations free of surface water and keeping excavations free of ground water, temporary diversion as necessary of ditches, field drains and other waterways encountered during excavation so that the worksite can be kept dry (to prevent impacts on the work progress of groundwater and surface water).

- All costs of construction, operation and maintenance of all crossings, roads, temporary deviations etc. required for carrying out the work not included in the items listed in Bills of Quantities.
- The Contractor's overheads (indirect), risks and profit.
- All costs associated with scaffolding, including extras for height, excavation supports and all safety measures not included under General items.
- · Extra costs arising from working in water and mud.
- Additional costs related to environmental protection issues arising before commencement of the works or/and during the construction works (Cutting, surgery of existing or damaged trees, evacuation of excessive soil and/or facilities, removal of additional construction waste etc.) not included under General Items.
- Additional costs incurred in obtaining necessary permission from relevant authorities for construction works (Costs including right-of-the-way and protocol signing; manhole construction etc.) not included in General Items.

#### **Provisional Sums**

The "Grand Summary" schedule includes items «Provisional sum».

Amount per "Provisional sum" calculated as the percentage from the Total Price including VAT and shall cover additional expenses that may arise during execution of this contract. This sum shall be used only after preliminary written approval by the Employer.

«Provisional sum» shall not be used for expenses of increase in the volume of works, materials/equipment provided for in this Bidding document.

In case if use of this sum is not approved by the Employer, this sum shall not be paid to the Contractor after completing of this Contract.

#### **GENERAL ITEMS AND DETAILED DESIGN**

#### **Description for Lump Sums specified under General Items**

Below is provided the description for the General Item unit prices or lump sum prices per Section, including a description of the cost to be included, but not limited under each item. The numbers refer to the unit price code in the Price Schedules.

- 1.1 All costs for erection and operation of all Contractor's temporary installations, facilities, including receipt of necessary permit(s) from local authority (ies) for site organization offices as necessary to perform works in Sections, accommodation for Contractors staff, workshops, storages, etc.
- 1.2 All costs related to the Quality Assurance system establishment and implementation during design and works performance. Cost shall include preparation of the Quality Assurance Plan, Project Area Environmental and Social Management Plan with suitable sub-plans if applicable, Environmental and Social Action Plan following the requirements stipulated in the Contract documents. Costs include preparation, printing, receipt of necessary coordination's for named documents and also for Construction Method Statement(s) CMS. Submission of all documents as specified in the Contract documents in the format agreed with the Engineer. Cost shall include establishment and maintenance of Construction Book(s), preparation, printing and daily submission of the Site Diaries for every site as requested by the Engineer, etc.).

- 1.3 Costs related to establishment of facilities, provision of transport and equipment for the Engineer and / or his Assistants as specified in the Requirements / General Technical Specifications.
- 1.4 Cost related to provision of the temporary water supply to the consumers during the works performance including materials, water, workmanship, information campaign and information boards, water tanks or bottled water provision, etc. Temporary water supply provision costs related to the Contractor facilities and for works (cleaning of the site, watering site to avoid dust, washing streets and vehicles, etc.), all other maintenance cost of the Contractors facilities (incl. site offices) such as power, water, phone, internet, etc.
- 1.5 Cost related to the Environmental Protection, Health and Safety activities. Costs shall include but not be limited to establishment of Construction site signboards (boards) to be installed for every Site following visibility rules and Local regulations, information and warning boards and signs as agreed with the Engineer, traffic signs and other traffic diversion securing and informing elements, temporary protection fences, protection tapes, protection lights, cleaning places for the site machinery and vehicles, temporary materials and equipment storage places, safety helmets and jackets for the Contractors staff, etc. as specified in the Requirements/General Technical Specifications. Regular communication with stakeholders using mass media according to the agreed procedures shall also be covered.
- 1.6 Cost related to sampling, testing of all materials (pipes, backfill, bedding materials, asphalt, concrete, concrete elements, etc.) and performed works on site including all tests to be performed by the Certified Laboratory(ies). Lump Sum shall include all costs needed to test all materials to be used in Works for construction of all structures and pipelines that the Contractor shall perform under current Contract. Costs shall include preparation and submission proposed materials specifications to the Engineer for approval, cost of all supplementary site investigations that the Contractor or the Engineer finds necessary for securing requested quality for construction of pipelines and structures. Costs include preparation of necessary drawings and reports to prove that materials proposed by the Contractor are in accordance with the Contract conditions and Technical specifications.
- 1.7 Cost of completion and removal of all Contractor's temporary installations and facilities after issuance of the Taking Over Certificate of the performed works on site(s). Cost includes also works prior and after issuance of the Taking Over certificate such as conducting meetings with households and consumers, preparing provision access to the ACC staff to connect constructed water pipes to the existing water meters and other activities
- 1.8 Cost for equipment, materials and workmanship needed for cleaning of pipes, sampling and water quality laboratory tests and tests on site, preparation and submission of the documents for Taking Over, conducting site meetings with all relevant organisations and consumers, documents filing and registration as specified in the Requirements/ General Technical Specifications.
- 1.9 Cost for preparation and submission of "As Built" Drawings during the Works and for issuance of the Taking Over documents. The lump sum shall include preparation of as-built drawings (for all disciplines and all structures and pipelines) including calculations, technical justifications, approvals and related documents together with Taking Over documents as specified in the Contract conditions and General Technical Specifications.

Payment for these items shall be made per full Sections completed.

#### DESCRIPTION FOR LUMP SUMS SPECIFIED UNDER DETAILED DESIGN DOCUMENT ITEMS

Below is provided the description for the Detailed Design Document Item lump sum prices per Section, including description of the cost to be included, but not limited under each item. The numbers refer to the unit price code in the Price Schedules.

1.10 All costs related to preparation of the Detailed Design including topographical and geological surveys, preparation of sections budgets, submission of documents for selected materials

approval, technical specifications, brochures, trial pits excavation and backfilling, monitoring chambers, etc. as specified and requested in the Contract documents.

Costs shall include also Construction Method Statement (CMS), requested translations, printing and submittal of the agreed documents in the format agreed with the Engineer. Binding and delivery expenditures of agreed number of paper and soft copies on a CD or memory stick shall also be included.

1.11 The price shall include all costs related to coordination of the Detailed Design with the State and Local Authorities, Utilities and receipt of all needed approvals. Costs shall include all necessary expertize if so requested by the State Authorities, permits to close roads and related costs, surgery of trees, demolition of facilities or galleries, receipt of the Construction Permit(s), receipt of written necessary authorizations from other Utilities, approval documents and permits to perform work from house and land owners, etc. as needed to perform Works specified in the Contract documents. Design(s) coordination costs estimation is described in the General and Particular Technical Specifications.

#### MATERIALS/EQUIPMENT SUPPLIED FROM ABROAD (PRICE SCHEDULE PART 2)

#### General Description for items 2.1-2.22

When calculating the cost of materials/equipment, the following is taken into account:

- this Preamble, General Technical Specifications, Particular Requirements, Drawings with Annexes, unless otherwise is indicated;
- the set contents of materials/equipment are provided in Annex 6 and is informative for drawing up a price offer. The final set contents of materials/equipment shall be determined by the Contractor during design Stage R
- materials/equipment must be of the specified quality, unless otherwise is indicated;
- all materials/equipment must be transported, handled and stored in accordance with the instructions and recommendations of their manufacturers or suppliers and relevant rules and regulations;
- the unit prices of materials/equipment shall include the cost of materials, materials shipping and transport to the Site, unloading at the Site, temporary storage and protection during temporary storage at the Site, all joint types, including force transmitting joint systems, etc.

#### **WORKS (PRICE SCHEDULE PART 3)**

# Description of Unit Prices and Methods of Measurement Items 3.1 Pipework – Pipes in Trenches Installation

The unit prices if not specified separately under this description shall include all supplies (excluding materials/equipment specified in the Price Schedule Part 2 MATERIALS/EQUIPMENT SUPPLIED FROM ABROAD) and works required for the complete installation of the pipes of the specified materials and sizes in compliance with the Requirements, drawings and other documents provided.

All excavation and backfilling works (incl. sheeting etc.), except reinstatement of surfaces, shall be included for pipes installation works. Pipe protective casings shall be included as stated in the Works Requirements.

The price is deemed to include all survey of levels, grades, dimensions before starting, during progress and after completion of any kind of excavation, obtaining excavation permits from the relevant Authorities, method of excavating and working, commencing excavating at any level and excavating to any depth, any width of trench and any number of pits, excavating in "soft material" or any material whatsoever encountered including "hard material", except where excavation of "hard material" is stated in separate items in the Price Schedules, trial excavation to locate existing services and utilities, identification of existing utilities using pipe/cable (metal) locator along the alignment of the pipe trench plus a strip of 2 m left and right the pipe trench, removal, storage (temporary and final) and replacement / re-instatement of top soil and soil as directed by the Engineer, excavation volumes due to bulking, excavating below ground water level, excavating next to existing services and around existing services

crossing excavations including temporary support, temporarily re-routing, sealing and removing services as required, extra excavation for working space more than the min. work space specified in the Contract, and/or to accommodate earthwork support (bracing, formwork, sheeting / shoring and the like) including additional disposal, backfilling, work below ground water level, breaking out and earthwork support, extra excavation for bedding (as specified in the Contract and drawings) below the pipe invert level, provision of any extra working space required for installing joints and fittings, and for backfilling as specified, as well as for up transportation of the material, if proves to be needed, breaking out existing materials and hard paving including concrete, reinforced concrete, brick-work, blockwork, stonework, drains, and coated macadam or asphalt and the like, trimming of excavation to correct lines, levels and profiles, including preparation of stepped plana for laying of pipes with different invert level, and preparation and maintenance of planum for foundations as needed, making good of all slips and falls of materials, surface treatments including compacting surface of ground and bottoms of excavations, levelling and grading to falls, trimming slopping surfaces and trimming vertical surfaces to sides of cuttings (including trimming in rock) and applying herbicides and pesticides, earthwork supports (including interlocking steel piling) including support below ground water level, to unstable ground, next to roadways, next to existing buildings and support left in, removal and disposal of ground water and surface water, disposal of excavated material off site, including spreading and levelling or depositing in spoil heaps, providing tip and paying fees and multiple handling, setting all barriers, lighting, warning signs, traffic controls and any other measures necessary to ensure complete safety around the area of the works.

Pipe laying shall include any survey works, cost for testing of pipeline material, making joints of pipes (of any joint type) including provision of jointing material, bolts, nuts, washers, gaskets, welding material, electrical energy, welding apparatus, tools, curing of connections, including making good any defects in pipe laying and jointing workmanship or defects to lines or levels, cutting and isolating, posttreatment of cut pipe faces, re-connection to already laid pipes (existing or newly procured pipes) including provision and execution of any temporary measure for connecting of pipes, be it additional pipe support, measures to deal remove water (for buried pipes), lining and coating (of liners and coats damaged, or of liners and coats to be applied separately), including provision of liner and coating material, water and/or air pressure testing (if not stated separately in the Price Schedules) including provision of water/ air (transport to Site, including provision of tankers, pumps, and operating cost for tankers and pumps) and applying pressure and temporary closing of pipe sections to be tested, making good any defects unveiled during testing, cleaning / flushing, disinfection (if not stated separately in the Price Schedules) including provision of water (transport to Site, including provision of tankers, pumps, and operating cost for tankers and pumps), removal of used flushing water, and of disinfectant, temporary closing (plugging) of pipeline ends and their removal, final connection of pipeline ends to existing or other pipelines or facilities.

The backfilling if not specified separately shall include procurement, transport, temporary storage at Site of approved selected material for use in the backfilling of trenches and other excavations, provision and maintenance of (temporary) storage areas of any material required for backfilling which cannot be stored alongside the excavation for any reason, transport to temporary storage, sieving, further treating, temporary storage, back- transport to Site of previously excavated material approved for backfill (without treatment or including treatment, re-fill any thickness in layers and compacting layer by layer, including levelling and grading to falls and slopes filling, including trimming sloping and vertical sides of filling and embankments, in accordance with requirements set in the Contract, as well between pipelines in trenches with more than one pipeline laid in parallel – even on different pipe invert level, testing of filling material and testing of compacted refill at the Site or external laboratory, filling below ground water level, blinding surfaces by filling with sand, gravel, ash or other fine material, providing protective filling and removing on completion, bedding (as specified in the Contract and Drawings) below the pipe invert level, for water pipes and for sewer pipes, partial backfilling to create abutment for the purpose of pipe pressure testing, backfilling of and around (crossing) re-laid existing services, backfilling to over-excavations to reach the required level with imported filling material including depositing and compacting in layers and multiple handling, provision of any extra backfilling required for installing joints and fittings, as well as for down transportation of backfilling material, if proves to be needed removing from site unsuitable and surplus filling materials including transport and disposal costs.

Lengths of pipes shall be measured along their centre lines, regardless of the type of joint required, without deduction for the length of valves and fittings. Lengths of pipes entering manholes and other chambers shall be measured to the inside surfaces of the chambers not including the length occupied by manholes and other chambers.

Payment for these items (various diameters) shall be made per linear meter (m), and shall include works required to complete installation of pipes, of the material and joint types, as specified in the Requirements, in such a way that the pipe installed shall be ready for operation.

#### Item 3.2 Pipework - Trenchless Installation

The unit prices under this description shall include approved inspection and testing methods submission, evaluating the condition of the host pipe, inspection with CCTV and selection of further cleaning method, cleaning of the host pipe, removal of dirt, cutting any sedimentation and debris needed a liner to be installed against the pipeline's wall, heavy high pressure cleaning for the existing pipeline, making additional pits and chambers as necessary needed for material installation, setting up a bypass/flow management, waste material removal and disposal drying a pipe inside prior installation works, introducing UV light or heat to prepare the pipeline to cure the resin and form a rigid pipe if liner method is used, first and additional liner material delivery and installation when relining pipeline to meet operation pressure 20 bar, heated water supply and utilisation needed liner installation and curing, reinstatement lateral connections that were previously disconnected to be reinstated, quality check to ensure the rehabilitated pipe (cleaning, CCTV, pressure and water quality testing) and includes all other tasks as specified under the Works Requirements related to the trenchless methods to be used in the Works.

Payment for these items shall be made per linear meter (m), and shall include supply and works required to complete relining or installation of pipes, of the material and joint types, as specified in the Requirements, in such a way that the relined or pipe installed shall be ready for operation.

#### Item 3.3 Pipework - Fittings and Valves

The unit prices under this description shall include all supplies (excluding materials/equipment specified in the Price Schedule Part 2 MATERIALS/EQUIPMENT SUPPLIED FROM ABROAD) and works required for the complete supply and installation of tees, crosses, bends, reducers and other relevant fittings in compliance with the Works Requirements, drawings and other documents provided.

Measurement for these items shall be made per number of tees, crosses, bends, reducers and other relevant fittings, satisfactorily furnished and installed. Pipe fittings on pipes of different nominal diameters shall be classified according to the nominal diameter of the largest pipe. Payment for these items (various type and diameter) shall include all supplies and works required to complete installation of the fittings.

#### Item 3.4 Pipework - Manholes and Pipework Ancillaries

The unit price under this description shall include all supplies (excluding materials/equipment specified in the Price Schedule Part 2 MATERIALS/EQUIPMENT SUPPLIED FROM ABROAD) and works required for the complete supply and installation of a new reinforced concrete manhole/chamber, in compliance with the Works Requirements and drawings in such a way that they will be waterproof and be ready for operation. Excavation, backfilling and greenery works costs shall be included.

Measurement for these item if not separately listed shall be made per actual number of valve manholes/chambers of each type satisfactorily furnished and installed. Payment for these items (various sizes) shall include all supplies and works required to complete.

#### Item 3.4.4 Crossings Through the Walls of Chambers or Buildings

The unit prices under this description shall include all supplies and works required for the complete establishment of pipe crossing through the chambers or building's walls.

Measurement for these items shall be made per number of crossings made (drilled if needed) through walls, satisfactorily protected, insulated with specific equipment/materials and installed. Payment for these items shall be made per number (pcs) of crossings through walls implemented.

#### Items 3.5. Hydraulic pressure tests and Items 3.6 Demolition and Site Clearance

The unit prices shall include all supplies and works required for the section pressure testing and flushing and disinfection of pipelines not listed under other items in the Price Schedules, demolition and removal of natural and artificial articles, objects and obstructions. The price is deemed to include removing site features (including fences, gates, walls, roads, paved areas and the like; but excluding demolition of structures), including breaking out foundations, removing trees and tree stumps, including grubbing up roots if applicable, clearing site vegetation (including hedges, bushes, scrub and undergrowth, including grubbing up roots, if applicable, protecting site features, trees and site vegetation which are to remain, removing general debris and rubbish, filling voids, disposal of materials, temporarily, diverting ditches, field drains and other waterways including reinstating on completion or cleaning and filling, clearance outside the plot limits.

Cost of the water used by the Contractor for the hydraulic pressure tests and the cost of chlorine solution for disinfection shall be included into the unit price. The tariff for the potable water (for economic agents) to be applicable is 14,93 Ukrainian Hryvna per 1 m<sup>3</sup> (excl. VAT). Water consumption shall be metered by the Contractor and payment shall be made based on the water meter reading(s).

Tariff remains unchanged for the Contractor until Completion Date.

#### OTHER INSTRUCTIONS

Items 3.8 and 3.9 are describing Works to be priced in order to make connection between the Phase 1 and Phase 2 pipelines. Details are provided under Works Requirements, Particular Technical Specifications.

Payment under those items will be made only if so instructed by the Engineer/ the Employer.

All possible ambiguities in the description of items of expenditure, the Tenderer is required to solve at the tender clarification stage in compliance with the ITB. Subsequent references to the lack of clarity in the Price Schedules will not be recognized or appreciated as the reason for the change in prices, terms, quality or any other concessions in terms.

If the description of the works in the Price Schedules is not detailed enough and does not describe all the preliminary-final works, auxiliary works and other work operations, which need to be performed to obtain the final product, all works must be calculated and included by the Contractor in unit prices in accordance with the rules of the profession.

At the tendering stage, the Tenderer is required to study the Works Requirements and preliminary design drawings documentation, review the location of the future construction site, become familiar with the possible organisation of the construction site, the use of temporary facilities, construction disposal site and temporary connections for water supply and electricity for the site, local conditions including possibilities of access route to the building site and all the other elements that influence the pricing of the Tenderer and the deadline for the completion of works.

#### **DAYWORKS**

#### Measurement

All items are measured by units as in listed in the Price Schedules. Operating time and working hours shall be measured net, without break or rest time, time, idle time, down time, standing still time, whether on or off the Site, nor time needed for transport to and from Site;

A "day" is considered to be a normal working day of 8 hours. Fractions of a day will be paid for "pro rata".

Overtime of labour – if instructed by the Engineer - shall be measured at the rates entered in the Schedule of Dayworks, however, increasing the work time proportional to the increase of gross staff cost to the Contractor when paying overtime to his workers. For example: If a labour worked 1.0

working hour overtime for which the rate of gross staff cost is 50% higher, payment to the Contractor shall be made for 1.5 working hours at the rate entered in the Daywork Schedule.

If any material / equipment / personnel to be paid by using the Daywork Schedule does not readily belong to any classification included in the Daywork Schedule, the Engineer shall determine the equivalent classification to be adopted for such material / equipment / personnel, and payment for such will be made accordingly.

If – in the Engineer's opinion – an equivalent classification is not possible, payment for material / equipment / personnel to be paid by using the Daywork Schedule shall be at rates and prices to be agreed upon between the Engineer and the Contractor.

#### Rates to be inclusive

The rate shall include unit rates for materials, plant and labour shall include all overhead, margin and profits, and shall not be subjected to the percentage addition as stipulated in Clause 13.5 of the GCC.

The unit rates for imported materials, plant, and goods shall include insurance, freight, dock, and customs charges and all other charges. In the case of imported materials, plant, and goods, obtained through a manufacturer's agent, the sum shall be deemed to include the agents fees and charges.

The unit rates for materials, plant and labour shall include all the Contractor's obligations whatsoever in purchasing, providing, transporting to Site, storing / handling / stockpiling at Site, removal of surplus material, maintenance and cleaning of temporary storage sites.

The unit rates for equipment in the Daywork Schedule shall apply to all equipment whether belonging to the Contractor or hired by him and shall cover all the Contractor's obligations whatsoever in purchasing, providing, renting, transporting to Site, operating, maintaining, repairing, overhauling, replacing such equipment at the Site, including all fuels, lubricants, coolants, and other consumables, spare and replacement parts, and all auxiliary/ancillary equipment necessary for efficient operation and use of the equipment, but excluding the cost for operator or driver (who shall be paid separately as labour).

All labour, whether on the Contractor's own payroll or self-employed or provided under any form of sub-contract;

All the Contractor's obligations whatsoever in employing, providing, hiring such labour at home office or at Site, including wages, payment for conditions and for skill, bonuses, paid holidays, paid sick leave, end of term gratuities, allowances for travelling, for accommodation, for subsistence, for expenses, for guaranteed time, and any other fringe benefit, insurance of all kinds, pensions, transport from and to Site, accommodation at Site;

The cost of all supervisory staff, including the Contractor's representative, project manager, engineers, foremen, gangers, clerks, store-men, timekeepers, watchmen etc.

Provision, use, and maintenance of protective clothing, of small tools, temporary tracks, ladders, scaffolding, light, and all items of a similar nature unless these are listed separately ion the Daywork Schedule. All incidental expenses.

### **B. WORK ITEMS**

### **PART 1.1 GENERAL ITEMS**

# LOT 1

# WATER MAIN REHABILITATION SECTIONS/SEGMENTS 1 AND 2

(1st and 2nd segment of the water main near the Ocheret village to the gravel road)

ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE (EUR) excluding VAT	VAT (EUR)	TOTAL PRICE (EUR) including VAT
1.1	Erection and operation of all Contractor's temporary installations and facilities, including permit from local authority for site organization offices, accommodation, workshops, storages, etc.	L.S.	1			
1.2	Quality assurance system establishment and implementation during design and works performance (incl. CMS, Site Diaries, etc.).	L.S.	1			
1.3	Facilities, transport and equipment for the Engineer and his Assistants as specified in the Requirements	L.S.	1			
1.4	Temporary water supply, maintenance cost of the Contractors facilities (incl. site offices) such as power, water, phone, internet, etc.	L.S.	1			
1.5	Environmental Protection, Health and Safety activities incl. signboards, traffic signs, temporary protection fences, cleaning of the site and vehicles, etc. as specified in the Requirements	L.S.	1			
1.6	Sampling, testing of all materials and works on site and all tests to be performed by the Certified Laboratory (ies).	L.S.	1			
1.7	Removal of all Contractor's temporary installations and facilities after issuance of the Taking Over Certificate of the performed works on site(s)	L.S.	1			
1.8	Cleaning of pipes, water quality laboratory tests, preparation and submission of the documents for Taking Over as specified in the Requirements not included into permanent works	L.S.	1			
1.9	Preparation and submission of "As Built" Drawings together with Taking Over documents as specified in the Requirements	L.S.	1			
	TOTAL CARRIED FORWARD TO GRAND SUMMARY					

Name:
In capacity of
Signed
Duly authorized to sign the bidder for and on behalf of (bidder name)
Dated onday of

# **PART 1.2 DETAILED DESIGN**

# LOT 1

### WATER MAIN REHABILITATION SECTIONS/SEGMENTS 1 AND 2

ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE (EUR) excluding VAT	VAT (EUR)	TOTAL PRICE (EUR) including VAT
1.10	Preparation of Detailed Design Documentation (Stage R), including coordination and approvals of the Detailed Design in accordance with Ukrainian legislation for potable water networks for Segment 1	L.S.	1			
1.11	Preparation of Detailed Design Documentation (Stage R), including coordination and approvals of the Detailed Design in accordance with Ukrainian legislation for potable water networks for Segment 2	L.S.	1			
	TOTAL CARRIED FORWARD TO GRAND SUMMARY					

Name:	
In capacity o	f
Signed	
Duly authoriz	red to sign the bidder for and on behalf of (bidder name)
Dated on	day of

#### PART 2 MATERIALS/EQUIPMENT SUPPLIED FROM ABROAD

#### LOT 1

#### WATER MAIN REHABILITATION SECTIONS/SEGMENTS 1 AND 2

Part 2.1 Segment A1. Rehabilitation of emergency sections of the WPS "Shubranets" - CWR "Popova" pressure water main DN = 900 mm with a total length of ~ 7 km in Chernivtsi city, Chernivtsi region.

Rehabilitation of the water main sections with an estimated length of 3.5 km that are not included in Phase 1 (the 1st segment of the water main near Ocheret village from the gravel road).

ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE (EUR)	TOTAL PRICE (EUR)
2.1	Socket pipes made of spheroidal graphite ductile iron DN800 PN25 with anchored joint with locking ring	set	1		
2.2	Bell reducer made of spheroidal graphite ductile iron DN800	set	1		
2.3	Joint gasket DN800	set	1		
2.4	Hub elbow made of spheroidal graphite ductile iron 45° DN800 PN25	set	1		
2.5	Hub elbow made of spheroidal graphite ductile iron 22° DN800 PN25	set	1		
2.6	Hub elbow made of spheroidal graphite ductile iron 11° DN800 PN25	set	1		
2.7	Flexible coupling for pipes made of ductile iron DN800 PN25	set	1		
2.8	Ductile iron flange adapter PN25 DN900x800	set	1		
2.9	Ductile iron branch, flange hub DN800 PN25	set	1		
	TOTAL CARRIED FORWARD TO GRAND SUMMARY				

Name:
In capacity of
Signed
Duly authorized to sign the bidder for and on behalf of (bidder name)
Dated onday of

Part 2.2 Segment A2. Rehabilitation of emergency sections of the WPS "Shubranets" - CWR "Popova" pressure water main DN = 900 mm with a total length of ~ 7 km in Chernivtsi city, Chernivtsi region.

Rehabilitation of the water main sections with an estimated length of 3.5 km that are not included in Phase 1 (the 2<sup>nd</sup> segment of the water main near Ocheret village to the gravel road)

ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE (EUR)	TOTAL PRICE (EUR)
2.1	Socket pipes made of spheroidal graphite ductile iron DN800 PN25 with anchored joint with locking ring	set	1		
2.2	Bell reducer made of spheroidal graphite ductile iron DN800	set	1		
2.3	Joint gasket DN800	set	1		
2.4	Hub elbow made of spheroidal graphite ductile iron 45° DN800 PN25	set	1		
2.5	Hub elbow made of spheroidal graphite ductile iron 22° DN800 PN25	set	1		
2.6	Hub elbow made of spheroidal graphite ductile iron 11° DN800 PN25	set	1		
2.7	Flexible coupling for pipes made of ductile iron DN800 PN25	set	1		
2.8	Smooth flanged branch with ductile iron end DN800 L=0.6 m PN25	set	1		
2.9	Ductile iron flange T-bend DN800x800x800 PN25	set	1		
2.10	Dismantling joint DN800 PN25	set	1		
2.11	Ductile iron branch, flange hub DN800 PN25	set	1		
2.12	Ductile iron flange adapter PN25 DN900x800	set	1		
2.13	Two-stage air valve DN150 PN25	set	1		
2.14	Short flange ductile iron gate valve PN25 DN150	set	1		
2.15	Flywheel for gate valve DN150	set	1		
2.16	CIPP Liner including the curing materials or other material to be used fro no-dig method	set	1		
	TOTAL CARRIED FORWARD TO GRAND SUMMARY				

Name:
In capacity of
Signed
Duly authorized to sign the bidder for and on behalf of (bidder name)
Dated on day of

#### **PART 3 WORKS**

#### LOT 1

#### WATER MAIN REHABILITATION SECTIONS/SEGMENTS 1 AND 2

Part 3.1 Segment A1. Rehabilitation of emergency sections of the WPS "Shubranets" - CWR "Popova" pressure water main DN = 900 mm with a total length of ~ 7 km in Chernivtsi city, Chernivtsi region.

Rehabilitation of the water main sections with an estimated length of 3.5 km that are not included in Phase 1 (the 1st segment of the water main near Ocheret village from the gravel road).

ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE (EUR) excluding VAT	VAT (EUR)	TOTAL PRICE (EUR) including VAT
3.1	PIPEWORK - PIPES IN TRENCHES					
3.1.1	Laying of Socket pipes made of spheroidal graphite ductile iron DN800 PN25	ls	1			
3.1.2	Excavation into a disposal area with the excavators of soils, loading, with further transportation for up to 40 km	Is	1			
3.1.3	Finishing manually, hand stripping of the bottom and walls with the soil displacement in the excavation pits and tranches developed by mechanical means	Is	1			
3.1.4	Arrangement of a sand foundation under the pipelines Sand dusting, h=500 mm	ls	1			
3.1.5	Backfilling of trenches and its further compaction with air rammers the soil	ls	1			
3.1.6	Installation of concrete stops on the network	ls	1			
3.3	PIPEWORK - FITTINGS AND VALVES					
3.3.1	Installation of anchored joint DN 800 PN25 with locking ring with a set of mount hardware	ls	1			
3.3.2	Installation of bell reducer made of spheroidal graphite ductile iron DN800 PN25	ls	1			
3.3.3	Installation of joint gasket DN800	ls	1			
3.3.4	Installation of hub elbow made of spheroidal graphite ductile iron 45° DN800 PN25	ls	1			
3.3.5	Installation of hub elbow made of spheroidal graphite ductile iron 22° DN800 PN25	ls	1			
3.3.6	Installation of hub elbow made of spheroidal graphite ductile iron 11° DN800 PN25	ls	1			
3.3.7	Installation of flexible coupling for pipes made of ductile iron DN800 PN25	ls	1			
3.4	PIPEWORK - MANHOLES AND PIPEWORK ANCILLARIES					
3.4.1	Chamber, which incl the next works:					•
3.4.1.1	Excavation loading the soil with the excavators, with further transportation for up to 40 km	ls	1			
3.4.1.2	Arrangement of concrete structure of the chamber	ls	1			
3.4.1.3	Installation of ductile iron hatch for the well	ls	1			
3.4.1.4	Installation of wall bracket for ladder	ls	1			
3.4.1.5	Installation of emergency stairs with a fence	ls	1			
3.4.1.6	Priming of metal surfaces at a time with zinc protective primer	ls	1			
3.4.1.7	Arrangement of pits 400x400x200	ls	1			
3.4.1.8	Installation of cast-in place reinforcing belt ΠΜ-1	ls	1			
3.4.1.9	Arrangement of waterproofing of walls and foundations	ls	1			
3.4.1.10	Welding of flanges to steel pipelines DN900 PN25	ls	1			

ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE (EUR) excluding VAT	VAT (EUR)	TOTAL PRICE (EUR) including VAT
3.4.1.11	Installation of ductile iron flange adapter PN25 DN 900x800	ls	1			
3.4.1.12	Installation of ductile iron branch, with flange hub DN 800 PN25	ls	1			
3.4.1.13	Installation of anchored joint DN 800 PN25 with locking ring	ls	1			
3.4.2	Arrangement of concrete pavement around the wells	ls	1			
3.4.3	Reinstatement of surfaces of different types along pipe routes	Is	1			
3.4.4	Crossings Through the Walls of Chambers or Buildings					
3.4.4.1	Arrangement of hole in the reinforced concrete well with installation of the sealing as specified under the Sub-Chapter 2.1.1 in the Chapter 2 Particular Technical Specifications	<u>s</u>	1			
3.5	HYDRAULIC PRESSURE TESTS					
3.5.1	Hydraulic pressure tests, flushing and disinfection of pipelines DN800	ls	1			
3.6	DEMOLITION AND SITE CLEARANCE					
3.6.1	Dismantling of existing steel water supply pipes DN900	ls	1			
3.6.2	Transportation of waste material up to 15 km	ls	1			
3.6.3	Dismantling of a metal fence made of welded mesh panels on reinforced concrete pillars without a base, up to 2.2 m high	ls	1			
	TOTAL CARRIED FORWARD TO GRAND SUMMARY					
	L WORKS TO CONNECT PHASE 1 AND PHASE		ORKS IN CHAM	BERS (Detai	ls are prov	rided in the
	Particular Technical Specifications Sub-Chapter	2.1.1)	1	, ,		T
3.8	CONNECTION CHAMBER BETWEEN TWO DI DN800 MM PIPES AND EXISTING DN1000 MM PIPE (PK0) including following works					
3.8.1	Redesign of the chamber as shown on Figure 3 Sub-Chapter 2.1.1, Chapter 2 Particular Technical Specifications	ls	1			
3.8.2	Construction of the Chamber following requirements set under Chapter 2 and under 3.4 in the Price Schedule	ls	1			
3.8.3	Installation of the DI DN800 Tee and clamps	ls	1			
3.8.4	Installation of Valve DN800 and needed fittings	ls	1			
3.8.5	Connection with the DN1000 steel pipe	ls	1			
3.9	CONNECTION CHAMBER TO CONNEC PHASE 1 AND PHASE 2 DI DN800 MM PIPES as specified under Chapter 2 Particular Technical	ls	1			
	Specifications Sub-Chapter 2.1.1 Figure 5 and under items 3.3 and 3.4 in the Price Schedule					

Name:
In capacity of
Signed
Duly authorized to sign the bidder for and on behalf of (bidder name)
Dated onday of

**Part 3.2 Segment A2.** Rehabilitation of emergency sections of the WPS "Shubranets" - CWR "Popova" pressure water main DN = 900 mm with a total length of ~ 7 km in Chernivtsi city, Chernivtsi region.

Rehabilitation of the water main sections with an estimated length of 3.5 km that are not included in Phase 1 (the 2<sup>nd</sup> segment of the water main near Ocheret village to the gravel road)

ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE (EUR) excluding VAT	VAT (EUR)	TOTAL PRICE (EUR) including VAT
3.1	PIPEWORK - PIPES IN TRENCHES					
3.1.1	Laying of Socket pipes made of spheroidal graphite ductile iron DN800 PN25	ls	1			
3.1.2	Excavation into a disposal area with the excavators of soils, loading, with further transportation for up to 40 km	ls	1			
3.1.3	Finishing manually, hand stripping of the bottom and walls with the soil displacement in the excavation pits and tranches developed by mechanical means	ls	1			
3.1.4	Arrangement of a sand foundation under the pipelines Sand dusting, h=500 mm	ls	1			
3.1.5	Backfilling of trenches and its further compaction with air rammers the soil	ls	1			
3.1.6	Installation of concrete stops on the network	ls	1			
3.2	PIPEWORK - TRENCHLESS		<u> </u>			
3.2.1	Replacement/rehabilitation of pipeline using No-Dig Method, Set up a bypass/flow management, Reinstate lateral connections and Check the quality	ls	1			
3.2.2	Arrangement of waterproofing	ls	1			
3.2.3	Excavation into a disposal area with the excavators of soils, loading, with further transportation for up to 40 km	ls	1			
3.2.4	Finishing manually, hand stripping of the bottom and walls with the soil displacement in the excavation pits and tranches developed by mechanical means	ls	1			
3.2.5	Backfilling of trenches and its further compaction with air rammers the soil	ls	1			
3.3	PIPEWORK - FITTINGS AND VALVES					
3.3.1	Welding of flanges to steel pipelines DN900 PN25	ls	1			
3.3.2	Installation of anchored joint DN 800 PN25 with locking ring with a set of mount hardware	ls	1			
3.3.3	Installation of bell reducer made of spheroidal graphite ductile iron DN800 PN25	ls	1			
3.3.4	Installation of joint gasket DN800	ls	1			
3.3.5	Installation of hub elbow made of spheroidal graphite ductile iron 45° DN800 PN25	ls	1			
3.3.6	Installation of hub elbow made of spheroidal graphite ductile iron 22° DN800 PN25	ls	1			
3.3.7	Installation of hub elbow made of spheroidal graphite ductile iron 11° DN800, PN25	ls	1			
3.3.8	Installation of flexible coupling for pipes made of ductile iron DN800 PN25	ls	1			
3.4	PIPEWORK - MANHOLES AND PIPEWORK ANCILLARIES					
3.4.1	Chamber 1*, which includes the following works					
3.4.1.1	Excavation loading the soil with the excavators, with further transportation for up to 40 km	ls	1			
3.4.1.2	Arrangement of concrete structure of the chamber	ls	1			
3.4.1.3	Installation of a metal ladder МД-1 (MD-1)	ls	1			
3.4.1.4	Installation of ductile iron hatch for the well	ls	1			

ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE (EUR) excluding VAT	VAT (EUR)	TOTAL PRICE (EUR) including VAT
3.4.1.5	Priming of metal surfaces at a time with zinc protective primer	ls	1			
3.4.1.6	Installation of pits 400x400x200	ls	1			
3.4.1.7	Installation of cast-in place reinforcing belt ΠM-1	ls	1			
3.4.1.8	Arrangement of waterproofing of walls and foundations	ls	1			
3.4.1.9	Installation of smooth flanged branch with ductile iron end adapter DN800 L=0.6 m PN25	ls	1			
3.4.1.10	Installation of ductile iron flange T-bend DN800x800x800 PN25	ls	1			
3.4.1.11	Installation of dismantling joint DN800 PN25	ls	1			
3.4.1.12	Installation of anchored joint DN 800 PN25 with locking ring	ls	1			
3.4.1.13 3.4.1.14	Welding of flanges to steel pipelines DN900	ls Is	1			
	Installation of short flange ductile iron gate valve PN25 DN150 with flywheel DN150		1			
3.4.1.15	Installation of ductile iron flange adapter PN25 DN900x800	ls	1			
3.4.1.16	Welding of flat steel flanges ВСт9сп2, ВСт9сп3 PN25 DN150	ls	1			
3.4.1.17	Welding of the steel blind flange DN150	<u>ls</u>	1			
3.4.1.18	Installation of steel nipple DN150	ls la	1			
3.4.1.19 3.4.1.20	Welding of flanges to steel pipelines DN800 Installation of a two-stage air valve DN 150	ls Is	1 1			
3.4.1.20	Chamber 2 and 3 including the following works:	15	'			
3.4.2.1	Installation of steel structures remaining in the body of concrete (running staples)	ls	1			
3.4.2.2	Arrangement of concrete structure of the chambers	ls	1			
3.4.2.3	Installation of ductile iron hatch for the well	ls	1			
3.4.2.4	Installation of a metal ladder МД-1	ls	1			
3.4.2.5	Priming of metal surfaces at a time with zinc protective primer	ls	1			
3.4.2.6	Installation of pits 400x400x200	ls	1			
3.4.2.7	Installation of cast-in place reinforcing belt ΠM-2	ls	1			
3.4.2.8	Arrangement of waterproofing of walls and foundations	ls	1			
3.4.2.9	Welding of flanges to steel pipelines DN900	ls	1			
3.4.2.10	Installation of ductile iron flange adapter PN25 DN900x800	ls	1			
3.4.2.11	Installation of ductile iron branch, flange hub DN800 PN25	ls	1			
3.4.2.12	Installation of smooth flanged branch with ductile iron end DN800 L=0.6 m PN25	ls	1			
3.4.2.13	Installation of anchored joint DN 800 PN25 with locking ring	ls	1			
3.4.3	Arrangement of concrete pavement around the wells	ls	1			
3.4.4	Crossings Through the Walls of Chambers or Buildings					
3.4.4.1	Arrangement of hole in the reinforced concrete well with installation of the sealing as specified under the Sub-Chapter 2.1.1 in the Chapter 2 Particular	ls	1			
3.4.5	Technical Specifications Reinstatement of surfaces of different types along	ls	1			
0.5	pipe routes		ļ			
3.5	HYDRAULIC PRESSURE TESTS	1_				
3.5.1	Hydraulic pressure tests, flushing and disinfection of pipelines DN800-900	ls	1			
3.6	DEMOLITION AND SITE CLEARANCE		ļ .			
3.6.1	Dismantling of existing steel water supply pipes DN900	ls	1			
3.6.2	Transportation of waste up to 15 km	ls	1			

ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE (EUR) excluding VAT	VAT (EUR)	TOTAL PRICE (EUR) including VAT
3.7	WATER MAIN RENOVATION AND ANCILLARY					
	<u>WORKS</u>					
3.7.1	Laying pipelines with polyethylene pipes DN300,	ls	1			
	hydraulic test					
3.7.2	Laying of polyethylene water supply pipes using	ls	1			
	hydraulic-pressure test, the pipes diameter is 160 mm					
3.7.3	Installation of a filter box for round channel DN100	ls	1			
3.7.4	Installation of polyethylene shaped parts DN160	ls	1			
3.7.5	Installation of ventilation fungus DN160	ls	1			
	TOTAL CARRIED FORWARD TO GRAND					
	SUMMARY					

Name:
In capacity of
Signed
Duly authorized to sign the bidder for and on behalf of (bidder name)
Dated on day of

### **GRAND SUMMARY**

# LOT 1

# WATER MAIN REHABILITATION SECTIONS/SEGMENTS 1 AND 2 GRAND SUMMARY

PART	DESCRIPTION	PRICE (EUR) excluding VAT	TOTAL (EUR) including VAT
1.1	General Items		
1.2	Detailed Design		
2.1	Materials/Equipment supplied from abroad for Segment 1		
2.2	Materials/Equipment supplied from abroad for Segment 2		
3.1	Works for Segment 1		
3.2	Works for Segment 2		
	TOTAL Part 1,2 and 3 excluding VAT		
	VAT Part 1 and 3 (20%)		
	TOTAL		
4	Provisional Sum (10% of Total)		
	G	RAND TOTAL	

Name:	
In capacity of	
Signed	
Duly authorized to sign the bidder for and	I on behalf of (bidder name)
Dated on day of	

### **DAYWORKS SCHEDULE**

# (AS REQUIRED UNDER THE CONTRACT)

#### LOT 1

## WATER MAIN REHABILITATION SECTIONS/SEGMENTS 1 AND 2

Item No	Item Description	Unit	Price /Unit Euro
1	Schedule of Dayworks (Civil Labour)		
1.1	Foreman	Hour	
1.2	Skilled labourer	Hour	
1.3	Unskilled labourer	Hour	
	Additional staff as proposed by contractor	Hour	
2	Schedule of Dayworks (Mechanical Labour)		
2.1	Supervisor	Hour	
2.2	Craftsman	Hour	
2 3	Unskilled labourer	Hour	
	Additional staff as proposed by contractor	Hour	
3	Schedule of Dayworks (Contractor's Equipment)		
3.1	Bulldozer	Hour	
3.2	Excavator	Hour	
3.3	Truck > 20 tons	Hour	
3.4	Truck < 20 tons	Hour	
3.5	Mobile crane	Hour	
3.6	Compressor	Hour	
3.7	Compactor	Hour	
	Additional equipment as proposed by contractor	Hour	

Name:
In capacity of
Signed
Duly authorized to sign the bidder for and on behalf of (bidder name)
Dated onday of

#### **WORK ITEMS**

#### **PART 1.1 GENERAL ITEMS**

#### LOT 2

# WATER MAIN REHABILITATION SECTIONS/SEGMENTS 3, 4 AND 5

(3<sup>rd</sup> - the segment of the water main from Halytskyi Shliakh Street to the Prut River)";

4<sup>th</sup> - the segment of the water main near Lenkivtsi village to Halytskyi Shliakh Street)" and

5<sup>th</sup> - "Water main segment with an estimated length of 1.5 km between Zolochivska and Stryiska Streets")

ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE (EUR) excluding VAT	VAT (EUR)	TOTAL PRICE (EUR) including VAT
1.1	Erection and operation of all Contractor's temporary installations and facilities, including permit from local authority for site organization offices, accommodation, workshops, storages, etc.	L.S.	1			
1.2	Quality assurance system establishment and implementation during design and works performance (incl. CMS, Site Diaries, etc.).	L.S.	1			
1.3	Facilities, transport and equipment for the Engineer and his Assistants as specified in the Requirements	L.S.	1			
1.4	Temporary water supply, maintenance cost of the Contractors facilities (incl. site offices) such as power, water, phone, internet, etc.	L.S.	1			
1.5	Environmental Protection, Health and Safety activities incl. signboards, traffic signs, temporary protection fences, cleaning of the site and vehicles, etc. as specified in the Requirements	L.S.	1			
1.6	Sampling, testing of all materials and works on site and all tests to be performed by the Certified Laboratory (ies).	L.S.	1			
1.7	Removal of all Contractor's temporary installations and facilities after issuance of the Taking Over Certificate of the performed works on site(s)	L.S.	1			
1.8	Cleaning of pipes, water quality laboratory tests, preparation and submission of the documents for Taking Over as specified in the Requirements not included into permanent works	L.S.	1			
1.9	Preparation and submission of "As Built" Drawings together with Taking Over documents as specified in the Requirements	L.S.	1			
	TOTAL CARRIED FORWARD TO GRAND SUMMARY					

Name:	
In capacity of	
Signed	
Duly authorize	d to sign the bidder for and on behalf of (bidder name)
Dated on	day of

# **PART 1.2 DETAILED DESIGN**

# LOT 2

# WATER MAIN REHABILITATION SECTIONS/SEGMENTS 3, 4 AND 5

ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE (EUR) excluding VAT	VAT (EUR)	TOTAL PRICE (EUR) including VAT
1.10	Preparation of Detailed Design Documentation (Stage R), including coordination and approvals of the Detailed Design in accordance with Ukrainian legislation for potable water networks for Segment 3	L.S.	1			
1.11	Preparation of Detailed Design Documentation (Stage R), including coordination and approvals of the Detailed Design in accordance with Ukrainian legislation for potable water networks for Segment 4	L.S.	1			
1.12	Preparation of Detailed Design Documentation (Stage R), including coordination and approvals of the Detailed Design in accordance with Ukrainian legislation for potable water networks for Segment 5	L.S.	1			
	TOTAL CARRIED FORWARD TO GRAND SUMMARY					

Name:
In capacity of
Signed
Duly authorized to sign the bidder for and on behalf of (bidder name)
Dated on day of

# Part 2 MATERIALS/EQUIPMENT SUPPLIED FROM ABROAD LOT 2

# WATER MAIN REHABILITATION SECTIONS/SEGMENTS 3, 4 AND 5

Part 2.1 Segment A3. Rehabilitation of emergency sections of the WPS "Shubranets" - CWR "Popova" pressure water main DN900 with a total length of ~ 7 km in Chernivtsi city, Chernivtsi region.

Rehabilitation of the water main section with an estimated length of 2 km (the segment of the water main from Halytskyi Shliakh Street to the Prut River).

ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE (EUR)	TOTAL PRICE (EUR)
2.1	Rotary butterfly valve DN900 PN25	set	1		
2.2	Ductile iron flange T-bend DN900x900x900 PN25	set	1		
2.3	Dismantling joint DN900 PN25	set	1		
2.4	Two-stage air valve DN150 PN25	set	1		
2.5	Short flange ductile iron gate valve PN25 DN150	set	1		
2.6	Flywheel for gate valve DN150	set	1		
2.7	CIPP Liner including the curing materials	set	1		
	TOTAL CARRIED FORWARD TO GRAND SUMMARY				

Name:	
In capacity o	of
Signed	
Duly authori	zed to sign the bidder for and on behalf of (bidder name)
Dated on	day of

Part 2.2 Segment A4. Rehabilitation of emergency sections of the WPS "Shubranets" - CWR "Popova" pressure water main DN = 900 mm with a total length of ~ 7 km in Chernivtsi city, Chernivtsi region.

Rehabilitation of the water main section with an estimated length of 2 km (Water main segment in the area of Lenkivtsi village to Halytskyi Shliakh Street)

ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE (EUR)	TOTAL PRICE (EUR)
2.1	Socket pipes made of spheroidal graphite ductile iron DN800 PN25 with anchored joint with locking ring	set	1		
2.2	Bell reducer made of spheroidal graphite ductile iron DN800	set	1		
2.3	Joint gasket DN800	set	1		
2.4	Hub elbow made of spheroidal graphite ductile iron 45° DN800 PN25	set	1		
2.5	Hub elbow made of spheroidal graphite ductile iron 22° DN800 PN25	set	1		
2.6	Hub elbow made of spheroidal graphite ductile iron 11° DN800 PN25	set	1		
2.7	Flexible coupling for pipes made of ductile iron DN800 PN25	set	1		
2.8	Ductile iron flange adapter PN25 DN900x800	set	1		
2.9	Smooth flanged branch with ductile iron end DN800 L=0.6 m PN25	set	1		
2.10	Ductile iron flange T-bend DN800x300x800 PN25	set	1		
2.11	Ductile iron branch, flange hub DN800 PN25	set	1		
2.12	Rotary butterfly valve DN800 PN25	set	1		
2.13	Dismantling joint DN800 PN25	set	1		
2.14	Rotary butterfly valve DN300 PN25	set	1		
2.15	Flywheel for gate valve DN300	set	1	-	
	TOTAL CARRIED FORWARD TO GRAND SUMMARY				

Name:	
In capacity of	of
Signed	
Duly authori	zed to sign the bidder for and on behalf of (bidder name
Dated on	day of

**Part 2.3 Segment A5.** Rehabilitation of emergency sections of the WPS "Shubranets" - CWR "Popova" pressure water main DN = 900 mm with a total length of ~ 7 km in Chernivtsi city, Chernivtsi region.

# Rehabilitation of the water main segment with an estimated length of 1.5 km between Zolochivska and Stryiska Streets

ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE (EUR)	TOTAL PRICE (EUR)
2.1	Socket pipes made of spheroidal graphite ductile iron DN800 PN25 with anchored joint with locking ring	set	1		
2.2	Bell reducer made of spheroidal graphite ductile iron DN800	set	1		
2.3	Joint gasket DN800	set	1		
2.4	Hub elbow made of spheroidal graphite ductile iron 45° DN800 PN25	set	1		
2.5	Hub elbow made of spheroidal graphite ductile iron 22° DN800 PN25	set	1		
2.6	Hub elbow made of spheroidal graphite ductile iron 11° DN800 PN25	set	1		
2.7	Flexible coupling for pipes made of ductile iron DN800 PN25	set	1		
2.8	Ductile iron flange adapter PN25 DN900x800	set	1		
2.9	Ductile iron branch, flange hub DN800 PN25	set	1		
2.10	Smooth flanged branch with ductile iron end DN800 L=0.6 m PN25	set	1		
2.11	Ductile iron flange T-bend DN800x800x800 PN25	set	1		
2.12	Ductile iron flange T-bend DN800x300x800 PN25	set	1		
2.13	Dismantling joint DN800 PN25	set	1		
2.14	Short flange ductile iron gate valve PN25 DN150	set	1		
2.15	Flywheel for gate valve DN150	set	1		
2.16	Two-stage air valve DN150 PN25	set	1		
2.17	Rotary butterfly valve DN300 PN25	set	1		
2.18	Flywheel for gate valve DN300	set	1		
2.19	Ductile iron flange T-bend DN900x900x900 PN25	set	1		
2.20	Dismantling joint DN900 PN25	set	1		
2.21	Coupling with short split bolts DN900 PN25	set	1		
2.22	CIPP Liner including the curing materials	set	1		
	TOTAL CARRIED FORWARD TO GRAND SUMMARY				

Name:	
In capacity of	
Signed	
Duly authorize	ed to sign the bidder for and on behalf of (bidder name)
Dated on	day of

#### Part 3 WORKS

#### LOT 2

# WATER MAIN REHABILITATION SECTIONS/SEGMENTS 3, 4 AND 5

Part 3.1 Segment A3. Rehabilitation of emergency sections of the WPS "Shubranets" - CWR "Popova" pressure water main DN900 with a total length of ~ 7 km in Chernivtsi city, Chernivtsi region.

Rehabilitation of the water main section with an estimated length of 2 km (the segment of the water main from Halytskyi Shliakh Street to the Prut River).

ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE (EUR) excluding VAT	VAT (EUR)	TOTAL PRICE (EUR) including VAT
3.2	PIPEWORK - TRENCHLESS		4			
3.2.1	Rehabilitation of pipelines using No-Dig Method by the installation of a resin-impregnated flexible tube with CIPP (cured-in-place-pipe) method, including Clean the host pipe, Set up a bypass/flow management, Install the CIPP liner, UV light or heat, Reinstate lateral connections and Check the quality	ls	1			
3.2.2	Arrangement of waterproofing	ls	1			
3.2.3	Excavation into a disposal area with the excavators of soils, loading, with further transportation for up to 40 km	ls	1			
3.2.4	Finishing manually, hand stripping of the bottom and walls with the soil displacement in the excavation pits and tranches developed by mechanical means	ls	1			
3.2.5	Backfilling of trenches and its further compaction with air rammers the soil	ls	1			
3.3	PIPEWORK - FITTINGS AND VALVES					
3.3.1	Welding of flanges to steel pipelines DN900 PN25	ls	1			
3.4	PIPEWORK - MANHOLES AND PIPEWORK ANCILLARIES					
3.4.1	Chamber 1, which includes the following works					
3.4.1.1	Arrangement of concrete structure of the chamber	ls	1			
3.4.1.2	Installation of a metal ladder МД-1 (MD-1)	ls	1			
3.4.1.3	Installation of ductile iron hatch for the well	ls	1			
3.4.1.4	Priming of metal surfaces at a time with zinc protective primer	ls	1			
3.4.1.5	Installation of pits 400x400x200	ls	1			
3.4.1.6	Installation of cast-in place reinforcing belt ПМ-1	ls	1			
3.4.1.7	Arrangement of waterproofing of walls and foundations	ls	1			
3.4.1.8	Installation of running staples remaining in the body of concrete	ls	1			
3.4.1.9	Installation rotary butterfly valve DN900 PN25	ls	1			
3.4.1.10	Installation of ductile iron flange T-bend DN900x900x900 PN25	ls	1			
3.4.1.11	Installation of dismantling joint DN900 PN25	ls	1			
3.4.1.12	Welding of steel flange to steel pipelines DN900 PN25	ls	1		_	
3.4.1.13	Welding of steel blind flange to steel pipelines DN900 PN25	ls	1			
3.4.1.14	Installation of a two-stage air valve DN150 PN25	ls	1			

ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE (EUR) excluding VAT	VAT (EUR)	TOTAL PRICE (EUR) including VAT
3.4.1.15	Welding of flat steel flanges BСт9сп2, ВСт9сп3 PN25 DN150	ls	1			
3.4.1.16	Welding of the steel blind flange DN150	ls	1			
3.4.1.17	Installation of steel nipple DN150	ls	1			
3.4.1.18	Installation of short flange ductile iron gate valve PN25 DN150 with flywheel DN150	ls	1			
3.4.2.1	Chamber 2 including the following works:  Excavation loading the soil with the	ls	1			
3.4.2.1	excavation loading the soil with the excavators, with further transportation for up to 40 km	IS	'			
3.4.2.2	Arrangement of concrete structure of the chamber	ls	1			
3.4.2.3	Installation of a metal ladder MД-1 (MD-1)	<u>ls</u>	1			
3.4.2.4	Installation of ductile iron hatch Installation of running staples remaining in the	ls Is	1 1			
	body of concrete		_			
3.4.2.6	Priming of metal surfaces at a time with zinc protective primer	ls	1			
3.4.2.7	Installation of pits 400x400x200 Installation of cast-in place reinforcing belt	ls Is	1 1			
	ПМ-2					
3.4.2.9	Arrangement of waterproofing of walls and foundations	ls	1			
3.4.2.10	Installation rotary butterfly valve DN900 PN25	ls Is	1 1			
3.4.2.11	Installation of ductile iron flange T-bend DN900x900x900 PN25					
3.4.2.12	Installation of dismantling joint DN900 PN25	<u>ls</u>	1			
3.4.2.13	Welding of steel welded flange to pipelines DN900 PN25	ls 	1			
3.4.3	Arrangement of concrete pavement around the wells	ls	1			
3.4.4	Crossings Through the Walls of Chambers or Buildings					
3.4.4.1	Arrangement of hole in the reinforced concrete well with installation of the sealing as specified under the Sub-Chapter 2.1.1 in the Chapter 2 Particular Technical Specifications	ls	1			
3.4.5	Mechanized soil preparation for arranging parterre and ordinary lawn without introduction of plant soil with further sowing parterre, moorish and ordinary lawns in manual	ls	1			
3.5 3.5.1	HYDRAULIC PRESSURE TESTS  Hydraulic pressure tests, flushing and disinfection of pipelines DN900	ls	1			
3.6	DEMOLITION AND SITE CLEARANCE					
3.6.1	Dismantling of rectangular water supply concrete wells with monolithic walls and a precast reinforced concrete coating in wet soils	ls	1			
3.6.2	Dismantling of steel gate latches or reverse valves DN900	ls	1			
3.6.3	Dismantling of steel gate latches or reverse valves DN150	ls	1			
3.6.4	Transportation of waste material up to 15 km	ls	1			
3.7	WATER MAIN RENOVATION AND ANCILLARY WORKS					
3.7.1	Laying of polyethylene water supply pipes DN160 using hydraulic-pressure test	ls	1			
3.7.2	Installation of a filter box for round channel DN100	ls	1			
3.7.3	Installation of polyethylene shaped parts DN160	ls	1		-	
3.7.4	Installation of ventilation fungus DN160	ls	1			

ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE (EUR) excluding VAT	VAT (EUR)	TOTAL PRICE (EUR) including VAT
	TOTAL CARRIED FORWARD TO GRAND SUMMARY					
	L WORKS TO CONNECT PHASE 1 AND PHAS re provided in the Chapter 2 Particular Techni					
3.8	CONNECTION CHAMBER BETWEEN TWO DI DN800 MM PIPES AND EXISTING DN1000 MM PIPE (PK0) including following works					
3.8.1	Redesign of the chamber as shown on Figure 3 Sub-Chapter 2.1.1, Chapter 2 Particular Technical Specifications	ls	1			
3.8.2	Construction of the Chamber following requirements set under Chapter 2 and under 3.4 in the Price Schedule	ls	1			
3.8.3	Installation of the DI DN800 Tee and clamps	ls	1			
3.8.4	Installation of Valve DN800 and needed fittings	ls	1			
3.8.5	Connection with the DN1000 steel pipe	ls	1			
3.9	CONNECTION CHAMBER TO CONNEC PHASE 1 AND PHASE 2 DI DN 800 MM PIPES as specified under Chapter 2 Particular Technical Specifications Sub-Chapter 2.1.1 Figure 5 and under items 3.3 and 3.4 in the Price Schedule	ls	1			

Name:
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Duly authorized to sign the bidder for and on behalf of (bidder name)
Dated on day of

**Part 3.2 Segment A4.** Rehabilitation of emergency sections of the WPS "Shubranets" - CWR "Popova" pressure water main DN = 900 mm with a total length of ~ 7 km in Chernivtsi city, Chernivtsi region.

Rehabilitation of the water main section with an estimated length of 2 km (Water main segment in the area of Lenkivtsi village to Halytskyi Shliakh Street)

ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE (EUR) excluding VAT	VAT (EUR)	TOTAL PRICE (EUR) including VAT
3.1	PIPEWORK- PIPES IN TRENCHES					
3.1.1	Laying of Socket pipes made of spheroidal graphite ductile iron DN800 PN25	ls	1			
3.1.2	Excavation into a disposal area with the excavators of soils, loading, with further transportation for up to 40 km	<u>ls</u>	1			
3.1.3	Finishing manually, hand stripping of the bottom and walls with the soil displacement in the excavation pits and tranches developed by mechanical means	ls	1			
3.1.4	Arrangement of a sand foundation under the pipelines Sand dusting, h=500 mm	ls	1			
3.1.5	Backfilling of trenches and its further compaction with air rammers the soil	ls	1			
3.1.6	Installation of concrete stops on the network	ls	1			
3.3	PIPEWORK - FITTINGS AND VALVES	-			-	
3.3.1	Installation of anchored joint DN 800 PN25 with locking ring with a set of mount hardware	ls	1			
3.3.2	Installation of bell reducer made of spheroidal graphite ductile iron DN800	ls	1			
3.3.3	Installation of joint gasket DN800	ls	1			
3.3.4	Installation of hub elbow made of spheroidal graphite ductile iron 45° DN800 PN25	ls	1			
3.3.5	Installation of hub elbow made of spheroidal graphite ductile iron 22° DN800 PN25	ls	1			
3.3.6	Installation of hub elbow made of spheroidal graphite ductile iron 11° DN800 PN25	ls	1			
3.3.7	Installation of flexible coupling for pipes made of ductile iron DN800 PN25	ls	1			
3.4	PIPEWORK - MANHOLES AND PIPEWORK ANCILLARIES					
3.4.1	Chamber 1, which includes the following works					
3.4.1.1	Excavation loading the soil with the excavators, with further transportation for up to 40 km	ls	1			
3.4.1.2	Arrangement of concrete structure of the chamber	ls	1			
3.4.1.3	Installation of a metal ladder МД-1 (MD-1)	ls	1			
3.4.1.4	Installation of ductile iron hatch	ls	1			
3.4.1.5	Priming of metal surfaces at a time with zinc protective primer	ls	1			
3.4.1.6	Installation of pits 400x400x200	ls	1			
3.4.1.7	Installation of cast-in place reinforcing belt ΠM-1	ls	1			
3.4.1.8	Arrangement of waterproofing of walls and foundations	ls	1			
3.4.1.9	Installation of running staples remaining in the body of concrete	ls	1			
3.4.1.10	Welding of flanges to steel pipelines DN900	ls	1			
3.4.1.11	Installation of ductile iron flange adapter PN25 DN900x800	ls	1			
3.4.1.12	Installation of smooth flanged branch with ductile iron end DN800 L=0.6 m PN25	ls	1			

ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE (EUR) excluding VAT	VAT (EUR)	TOTAL PRICE (EUR) including VAT
3.4.1.13	Installation of anchored joint DN 800 PN25 with locking ring	ls	1			
3.4.2	Chamber 2 including the following works:					
3.4.2.1	Excavation loading the soil with the excavators, with further transportation for up to 40 km	ls	1			
3.4.2.2	Arrangement of concrete structure of the chamber	ls	1			
3.4.2.3	Installation of a metal ladder МД-1 (MD-1)	ls	1			
3.4.2.4	Installation of ductile iron hatch	ls	1			
3.4.2.5	Priming of metal surfaces at a time with zinc protective primer	ls	1			
3.4.2.6	Installation the metal grille of pits 400x400x200	ls	1			
3.4.2.7	Installation of cast-in place reinforcing belt ΠM-2	ls	1			
3.4.2.8	Arrangement of waterproofing of walls and foundations	ls	1			
3.4.2.9	Installation of running staples remaining in the body of concrete	ls	1			
3.4.2.10	Installation of ductile iron flange adapter PN25 DN900x800	ls	1			
3.4.2.11	Installation of ductile iron flange T-bend DN800x300x800 PN25	ls	1			
3.4.2.12	Installation of anchored joint DN 800 PN25 with locking ring with a set of mount hardware	ls	1			
3.4.2.13	Installation of ductile iron branch, flange hub DN800 PN25	ls	1			
3.4.2.14	Installation rotary butterfly valve DN800 PN25	ls	1			
3.4.2.15	Laying pipelines with polyethylene pipes «MultiPipe II RC» DN300 with hydraulic testing	ls	1			
3.4.2.16	Installation of welded flange bushing DN300	ls	1			
3.4.2.17	Installation of steel flange for PE pipes DN300	ls	1			
3.4.2.18	Installation of heat-resistant coupling GF DN300	ls	1			
3.4.2.19	Installation of dismantling joint DN800 PN25	ls	1			
3.4.2.20	Installation rotary butterfly valve DN300 PN25 with flywheel DN300	ls	1			
3.4.2.21	Welding of flanges to steel pipelines DN900	ls	1			
3.4.2.22 3.4.2.22.1	Drainage well including the following works:  Excavation loading the soil with the excavators,	ls	1			
2 4 2 22 2	with further transportation for up to 40 km  Arrangement of concrete structure of the well	lo	1			
3.4.2.22.2 3.4.2.22.3	Installation of ductile iron hatch for the well	ls Is	1 1			
3.4.3	Arrangement of concrete pavement around the wells	ls	1			
3.4.4	Crossings Through the Walls of Chambers or Buildings					
3.4.4.1	Arrangement of hole in the reinforced concrete well with installation of the sealing as specified under the Sub-Chapter 2.1.1 in the Chapter 2 Particular Technical Specifications	ls	1			
3.4.5	Reinstatement of surfaces of different types along pipe routes	ls	1			
3.5	HYDRAULIC PRESSURE TESTS					
3.5.1	Hydraulic pressure tests, flushing and disinfection of pipelines DN800	ls	1			
3.5.2 3.6	Flushing and disinfection of pipelines DN300  DEMOLITION AND SITE CLEARANCE	ls	1		_	
3.6.1	Dismantling of existing steel water supply pipes DN900	ls	1			
3.6.2	Rooting of trees with trolling up to 100 m, tree diameter over 32 cm	ls	1			
3.6.3	Transportation of waste material up to 15 km	ls	1			

ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE (EUR) excluding VAT	VAT (EUR)	TOTAL PRICE (EUR) including VAT
3.7	WATER MAIN RENOVATION AND ANCILLARY WORKS					
3.7.1	Laying pipelines with polyethylene pipes DN300, hydraulic test	ls	1			
	TOTAL CARRIED FORWARD TO GRAND SUMMARY					

Name:
In capacity of
Signed
Duly authorized to sign the bidder for and on behalf of (bidder name)
Dated onday of

**Part 3.3 Segment A5.** Rehabilitation of emergency sections of the WPS "Shubranets" - CWR "Popova" pressure water main DN = 900 mm with a total length of ~ 7 km in Chernivtsi city, Chernivtsi region.

Rehabilitation of the water main segment with an estimated length of 1.5 km between Zolochivska and Stryiska Streets

ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE (EUR) excluding VAT	VAT (EUR)	TOTAL PRICE (EUR) including VAT
3.1	PIPEWORK- PIPES IN TRENCHES					
3.1.1	Laying of Socket pipes made of spheroidal graphite ductile iron DN800 PN25	ls	1			
3.1.2	Excavation into a disposal area with the excavators of soils, loading, with further transportation for up to 40 km	ls	1			
3.1.3	Finishing manually, hand stripping of the bottom and walls with the soil displacement in the excavation pits and tranches developed by mechanical means	ls	1			
3.1.4	Arrangement of a sand foundation under the pipelines Sand dusting, h=500 mm	ls	1			
3.1.5	Backfilling of trenches and its further compaction with air rammers the soil	ls	1			
3.1.6	Installation of concrete stops on the network	ls	1			
3.2	PIPEWORK - TRENCHLESS				•	
3.2.1	Rehabilitation of pipelines using No-Dig Method by the installation of a resin-impregnated flexible tube with CIPP (cured-in-place-pipe) method, including Clean the host pipe, Set up a bypass/flow management, Install the CIPP liner, UV light or heat, Reinstate lateral connections and Check the quality	ls	1			
3.2.2	Arrangement of waterproofing	ls	1			
3.2.3	Excavation into a disposal area with the excavators of soils, loading, with further transportation for up to 40 km	ls	1			
3.2.4	Finishing manually, hand stripping of the bottom and walls with the soil displacement in the excavation pits and tranches developed by mechanical means	ls	1			
3.2.5	Backfilling of trenches and its further compaction with air rammers the soil	ls	1			
3.3	PIPEWORK - FITTINGS AND VALVES					
3.3.1	Installation of anchored joint DN 800 PN25 with locking ring with a set of mount hardware	ls	1			
3.3.2	Installation of bell reducer made of spheroidal graphite ductile iron DN800	ls	1			
3.3.3	Installation of joint gasket DN800	ls	1			
3.3.4	Installation of hub elbow made of spheroidal graphite ductile iron 45° DN800 PN25	ls	1			
3.3.5	Installation of hub elbow made of spheroidal graphite ductile iron 22° DN800 PN25	ls	1			
3.3.6	Installation of hub elbow made of spheroidal graphite ductile iron 11° DN800 PN25	ls	1			
3.3.7	Installation of flexible coupling for pipes made of ductile iron DN800 PN25	ls	1			
3.3.8	Welding of flanges to steel pipelines DN900 PN25	ls	1			
3.4	PIPEWORK - MANHOLES AND PIPEWORK ANCILLARIES					
3.4.1	Chamber 1, 2, 3 and 5 includes the following works					
3.4.1.1	Excavation loading the soil with the excavators, with further transportation for up to 40 km	ls	1			

ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE (EUR) excluding VAT	VAT (EUR)	TOTAL PRICE (EUR) including VAT
3.4.1.2	Arrangement of concrete structure of the chambers	ls	1			
3.4.1.3	Installation of a metal ladder МД-1 (MD-1)	ls	1			
3.4.1.4	Installation of ductile iron hatch	ls	1			
3.4.1.5	Priming of metal surfaces at a time with zinc protective primer	ls	1			
3.4.1.6	Installation of metal grille of pits 400x400x200	ls	1			
3.4.1.7	Installation of cast-in place reinforcing belts	ls	1			
3.4.1.8	Arrangement of waterproofing of walls and foundations	ls	1			
3.4.1.9	Installation of running staples remaining in the body of concrete	ls	1			
3.4.1.10	Welding of flanges to steel pipelines DN900	ls	1			
3.4.1.11	Installation of ductile iron flange adapter PN25 DN900x800	ls	1			
3.4.1.12	Installation of ductile iron branch, flange hub DN800 PN25	ls	1			
3.4.1.13	Installation of smooth flanged branch with ductile iron end DN800 L=0.6 m PN25	ls	1			
3.4.1.14	Installation of anchored joint DN 800 PN25 with locking ring	ls	1			
3.4.2	Chamber 3.1 and 4, which includes the following works					
3.4.2.1	Excavation loading the soil with the excavators, with further transportation for up to 40 km	ls	1			
3.4.2.2	Arrangement of concrete structure of the chambers	ls	1			
3.4.2.3	Installation of a metal ladder MД-1 (MD-1)	ls	1			
3.4.2.4	Installation of ductile iron hatch	ls	1			
3.4.2.5	Priming of metal surfaces at a time with zinc protective primer	ls	1			
3.4.2.6	Installation of pits 400x400x200	ls	1			
3.4.2.7	Installation of cast-in place reinforcing belts	ls	1			
3.4.2.8	Arrangement of waterproofing of walls and foundations	ls	1			
3.4.2.9	Installation of running staples remaining in the body of concrete	ls	1			
3.4.2.10	Installation of smooth flanged branch with ductile iron end DN800 L=0.6 m PN25	ls	1			
3.4.2.11	Installation of ductile iron flange T-bend DN800x800x800 PN25	ls	1			
3.4.2.12	Installation of ductile iron flange T-bend DN800x300x800 PN25	ls	1			
3.4.2.13	Installation of dismantling joint DN800 PN25	ls	1			
3.4.2.14	Installation of anchored joint DN 800 PN25 with locking ring	ls	1			
3.4.2.15	Installation of ductile iron branch, flange hub DN800 PN25	ls	1			
3.4.2.16	Installation of short flange ductile iron gate valve PN25 DN150 with flywheel DN150	ls	1			
3.4.2.17	Welding of flat steel flanges BСт9сп2, BСт9сп3 PN25 DN150	ls	1			
3.4.2.18	Welding of the steel welded blind flange DN150	ls	1			
3.4.2.19	Installation of steel brunch DN150	ls	1			
3.4.2.20	Welding of steel welded blind flange DN800	ls	1	<u> </u>		
3.4.2.21	Installation of a two-stage air valve DN150 PN25	ls	1			
3.4.2.22	Laying pipelines with polyethylene pipes «MultiPipe II RC» DN300 with hydraulic testing					
3.4.2.23	Installation of welded flange bushing DN300	ls	1			_
3.4.2.24	Installation of steel flange for PE pipes DN300	ls	1			
3.4.2.25	Installation of heat-resistant coupling GF DN300	ls	1			

ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE (EUR) excluding VAT	VAT (EUR)	TOTAL PRICE (EUR) including VAT
3.4.2.26	Installation of rotary butterfly valve DN300 PN25 with a flywheel DN300	ls	1	5711		5711
3.4.2.27	Drainage well including the following works:					
3.4.2.28	Excavation loading the soil with the excavators,	ls	1			
	with further transportation for up to 40 km					
3.4.2.29	Arrangement of concrete structure of the well	ls	1			
3.4.2.30 3.4.3	Installation of ductile iron hatch for the well	ls	1			
	Chamber 6 and 7 including the following works:	la.	1			
3.4.3.1	Excavation loading the soil with the excavators, with further transportation for up to 40 km	ls .	1			
3.4.3.2	Arrangement of concrete structure of the chambers	ls .	1			
3.4.3.3	Installation of a metal ladder MД-1 (MD-1)	<u>ls</u>	1			1
3.4.3.4 3.4.3.5	Installation of ductile iron hatch for the well Priming of metal surfaces at a time with zinc	ls Is	1 1			+
	protective primer					
3.4.3.6	Installation of pits 400x400x200 Installation of cast-in place reinforcing belt	ls la	1			
3.4.3.7 3.4.3.8	Arrangement of waterproofing of walls and foundations	ls Is	1			
3.4.3.9	Installation of running staples remaining in the body of concrete	ls	1			
3.4.3.10	Installation of ductile iron flange T-bend DN900x900x900 PN25	ls	1			
3.4.3.11	Installation of dismantling joint DN900 PN25	ls	1			
3.4.3.12	Welding of steel welded flange DN900 PN25	ls	1			
3.4.3.13	Welding of steel welded blind flange DN900 PN25	ls	1			
3.4.3.14	Installation of a two-stage air valve DN150 PN25	ls	1			
3.4.3.15	Welding of flat steel flanges BСт9сп2, BСт9сп3 PN25 DN150	ls	1			
3.4.3.16	Welding of the steel blind flange DN150	ls	1			
3.4.3.17	Installation of steel nipple DN150	ls	1			
3.4.3.18	Installation of short flange ductile iron gate valve PN25 DN150 with flywheel DN150	ls	1			
3.4.3.19	Installation of coupling with short split bolts DN900 PN25	ls	1			
3.4.4	Crossings Through the Walls of Chambers or Buildings					
3.4.4.1	Arrangement of hole in the reinforced concrete well with installation of the sealing as specified under the Sub-Chapter 2.1.1 in the Chapter 2 Particular Technical Specifications	ls	1			
3.4.5	Arrangement of concrete pavement around the wells	ls	1			
3.4.6	Reinstatement of surfaces of different types along pipe routes	ls	1			
3.4.7	Soil preparation for lawn arrangement with subsequent sowing of the lawn manually	ls	1			
3.5	HYDRAULIC PRESSURE TESTS					
3.5.1	Hydraulic pressure tests, flushing and disinfection of pipelines DN800-900	ls	1			
3.5.2	Flushing and disinfection of pipelines DN300	ls	1			
3.6	DEMOLITION AND SITE CLEARANCE					1
3.6.1	Dismantling of existing steel water supply pipes DN900	ls	1			
3.6.2	Dismantling of round manholes in wet soils	ls	1			1
3.6.3	Dismantling of steel valves DN150	<u>ls</u>	1			1
3.6.4	Rooting of trees diameter over 32 cm	ls la	1			
3.6.5	Transportation of waste material up to 15 km  WATER MAIN RENOVATION AND ANCILLARY	ls	1			+
J.1	WATER MAIN RENOVATION AND ANCILLARY WORKS					

ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE (EUR) excluding VAT	VAT (EUR)	TOTAL PRICE (EUR) including VAT
3.7.1	Laying pipelines with polyethylene pipes DN300, hydraulic test	ls	1			
3.7.2	Manual backfilling of a concrete well, soil group 1	ls	1			
3.7.3	Dismantling of reinforced concrete non-pressure flared pipes DN500	ls	1			
3.7.4	Laying of non-pressure reinforced concrete flared pipes DN500	ls	1			
3.7.5	Laying of polyethylene water supply pipes using hydraulic-pressure test, the pipes DN160	ls	1			
3.7.6	Installation of a filter box for round channel DN100	ls	1			
3.7.7	Installation of polyethylene fittings DN160	ls	1			
3.7.8	Installation of ventilation fungus DN160	ls	1			
3.7.9	Installation and dismantling up a profiled fence letters	ls	1			
3.7.10	Installation and dismantling of a metal fence made of welded mesh panels on reinforced concrete pillars without a base, up to 2.2 m high	ls	1			
	TOTAL CARRIED FORWARD TO GRAND SUMMARY					

Name:
In capacity of
Signed
Duly authorized to sign the bidder for and on behalf of (bidder name
Dated on day of

### **GRAND SUMMARY**

# LOT 2

# WATER MAIN REHABILITATION SECTIONS/SEGMENTS 3, 4 AND 5 GRAND SUMMARY

PART	DESCRIPTION	PRICE (EUR) excluding VAT	TOTAL (EUR) including VAT	
1.1	General Items			
1.2	Detailed Design			
2.1	Materials/Equipment supplied from abroad for Segment 3			
2.2	Materials/Equipment supplied from abroad for Segment 4			
2.3	Materials/Equipment supplied from abroad for Segment 5			
3.1	Works for Segment 3			
3.2	Works for Segment 4			
3.3	Works for Segment 5			
	TOTAL Part 1,2 and 3 excluding VAT			
	VAT Part 1 and 3 (20%)			
	TOTAL			
4	Provisional Sum (10% of Total)			
	GRAND TOTAL			

Name:
In capacity of
Signed
Duly authorized to sign the bidder for and on behalf of (bidder name)
Dated on day of

# DAYWORKS SCHEDULE

# (AS REQUIRED UNDER THE CONTRACT)

# LOT 2

# WATER MAIN REHABILITATION SECTIONS/SEGMENTS 3, 4 AND 5

Item No	Item Description	Unit	Price /Unit Euro
1	Schedule of Dayworks (Civil Labour)		
1.1	Foreman	Hour	
1.2	Skilled labourer	Hour	
1.3	Unskilled labourer	Hour	
	Additional staff as proposed by contractor	Hour	
2	Schedule of Dayworks (Mechanical Labour)		
2.1	Supervisor	Hour	
2.2	Craftsman	Hour	
2 3	Unskilled labourer	Hour	
	Additional staff as proposed by contractor	Hour	
3	Schedule of Dayworks (Contractor's Equipment)		
3.1	Bulldozer	Hour	
3.2	Excavator	Hour	
3.3	Truck > 20 tons	Hour	
3.4	Truck < 20 tons	Hour	
3.5	Mobile crane	Hour	
3.6	Compressor	Hour	
3.7	Compactor	Hour	
	Additional equipment as proposed by contractor	Hour	

Name:
In capacity of
Signed
Duly authorized to sign the bidder for and on behalf of (bidder name
Dated onday of

# Environmental, Social, Health and Safety (ESHS) Cost Schedule

The ESHS Cost Schedule is integrated in the Price Schedules under the "General Items".