



## REQUEST FOR QUOTATION (RFQ)

RFQ Reference: 21/02227 Construction company for building one firefighting station in Pirlita (Ungheni district) and one firefighting station in Baimaclia (Cantemir district).	Date: 05 March 2021
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### SECTION 1: REQUEST FOR QUOTATION (RFQ)

UNDP kindly requests your quotation for the provision of goods, works and/or services as detailed in Annex 1 of this RFQ.

This Request for Quotation comprises the following documents:

Section 1: This request letter

Section 2: RFQ Instructions and Data

Annex 1: Schedule of Requirements

Annex 2: Quotation Submission Form

Annex 3: Technical and Financial Offer

Annex 4-5: Bill of Quantities

Annex 6: Bid Security Form

When preparing your quotation, please be guided by the RFQ Instructions and Data. Please note that quotations must be submitted using Annex 2: Quotation Submission Form and Annex 3 Technical and Financial Offer, by the method and by the date and time indicated in Section 2. It is your responsibility to ensure that your quotation is submitted on or before the deadline. Quotations received after the submission deadline, for whatever reason, will not be considered for evaluation.

Thank you and we look forward to receiving your quotations.

Issued by:

Signature: Corina Oprea

Name: Corina Oprea

Title: Operations Manager

Date: 05 March 2021

## SECTION 2: RFQ INSTRUCTIONS AND DATA

<b>Introduction</b>	<p>Bidders shall adhere to all the requirements of this RFQ, including any amendments made in writing by UNDP. This RFQ is conducted in accordance with the <a href="#">UNDP Programme and Operations Policies and Procedures (POPP) on Contracts and Procurement</a></p> <p>Any Bid submitted will be regarded as an offer by the Bidder and does not constitute or imply the acceptance of the Bid by UNDP. UNDP is under no obligation to award a contract to any Bidder as a result of this RFQ.</p> <p>UNDP reserves the right to cancel the procurement process at any stage without any liability of any kind for UNDP, upon notice to the bidders or publication of cancellation notice on UNDP website.</p>
<b>Deadline for the Submission of Quotation</b>	<p>18.03.2021, 16.30 (Moldova local time GMT+2)</p> <p>If any doubt exists as to the time zone in which the quotation should be submitted, refer to <a href="http://www.timeanddate.com/worldclock/">http://www.timeanddate.com/worldclock/</a>.</p> <p>For eTendering submission - as indicated in eTendering system. Note that system time zone is in EST/EDT (New York) time zone.</p>
<b>Method of Submission</b>	<p>Quotations must be submitted as follows:</p> <p><input checked="" type="checkbox"/> E-tendering</p> <p>For eTendering method, click the link <a href="https://etendering.partneragencies.org">https://etendering.partneragencies.org</a> and insert Event ID information</p> <ul style="list-style-type: none"> <li>Insert BU Code and Event ID number – <b>0000008702</b>  <b>Username: event.guest</b>  <b>Password: why2change</b></li> </ul> <p>Detailed instructions on how to submit, modify or cancel a bid in the eTendering system are provided in the eTendering system Bidder User Guide and Instructional videos available on this link: <a href="http://www.undp.org/content/undp/en/home/operations/procurement/business/procurement-notices/resources/">http://www.undp.org/content/undp/en/home/operations/procurement/business/procurement-notices/resources/</a></p>
<b>Cost of preparation of quotation</b>	<p>UNDP shall not be responsible for any costs associated with a Supplier's preparation and submission of a quotation, regardless of the outcome or the manner of conducting the selection process.</p>
<b>Supplier Code of Conduct, Fraud, Corruption,</b>	<p>All prospective suppliers must read the United Nations Supplier Code of Conduct and acknowledge that it provides the minimum standards expected of suppliers to the UN. The Code of Conduct, which includes <b>principles on labour, human rights, environment and ethical conduct</b> may be found at: <a href="https://www.un.org/Depts/ptd/about-us/un-supplier-code-conduct">https://www.un.org/Depts/ptd/about-us/un-supplier-code-conduct</a></p> <p>Moreover, UNDP strictly enforces a policy of zero tolerance on proscribed practices, including fraud, corruption, collusion, unethical or unprofessional practices, and obstruction of UNDP vendors and requires all bidders/vendors to observe the highest standard of ethics during the procurement process and contract implementation. UNDP's Anti-Fraud Policy can be found at <a href="http://www.undp.org/content/undp/en/home/operations/accountability/audit/office_of_audit_andinvestigation.html#anti">http://www.undp.org/content/undp/en/home/operations/accountability/audit/office_of_audit_andinvestigation.html#anti</a></p>
<b>Gifts and Hospitality</b>	<p>Bidders/vendors shall not offer gifts or hospitality of any kind to UNDP staff members including recreational trips to sporting or cultural events, theme parks or offers of holidays, transportation, or invitations to extravagant lunches, dinners or similar. In pursuance of this policy, UNDP: (a) Shall reject a bid if it determines that the selected bidder has engaged in any corrupt or fraudulent practices in competing for the contract in question; (b) Shall declare a vendor ineligible, either indefinitely or for a stated period, to be awarded a contract if at any time it determines that the vendor has engaged in any corrupt or fraudulent practices in competing for, or in executing a UNDP contract.</p>
<b>Conflict of Interest</b>	<p>UNDP requires every prospective Supplier to avoid and prevent conflicts of interest, by disclosing to UNDP if you, or any of your affiliates or personnel, were involved in the preparation of the requirements, design, specifications, cost estimates, and other information used in this RFQ. Bidders shall strictly avoid conflicts with other assignments or their own interests, and act without consideration for future work. Bidders found to have a conflict of interest shall be disqualified.</p> <p>Bidders must disclose in their Bid their knowledge of the following: a) If the owners, part-owners,</p>

	<p>officers, directors, controlling shareholders, of the bidding entity or key personnel who are family members of UNDP staff involved in the procurement functions and/or the Government of the country or any Implementing Partner receiving goods and/or services under this RFQ.</p> <p>The eligibility of Bidders that are wholly or partly owned by the Government shall be subject to UNDP's further evaluation and review of various factors such as being registered, operated and managed as an independent business entity, the extent of Government ownership/share, receipt of subsidies, mandate and access to information in relation to this RFQ, among others. Conditions that may lead to undue advantage against other Bidders may result in the eventual rejection of the Bid.</p>
<b>General Conditions of Contract</b>	<p>Any Purchase Order or contract that will be issued as a result of this RFQ shall be subject to the General Conditions of Contract</p> <p>Select the applicable GTC:</p> <p><input checked="" type="checkbox"/> <a href="#">General Terms and Conditions for Works</a></p> <p>Applicable Terms and Conditions and other provisions are available at <a href="#">UNDP/How-we-buy</a></p>
<b>Special Conditions of Contract</b>	<p><input checked="" type="checkbox"/> Cancellation of PO/Contract if the delivery/completion is delayed by [20 (twenty) days].</p> <p><input checked="" type="checkbox"/> Performance Security</p> <p>As guarantee for his proper and efficient performance of the Contract, the Contractor shall on signature of the Contract furnish the Employer with a Performance Security issued for the benefit of the Employer. Required in the amount of 5% of the contract amount (see Appendix I to the <a href="#">General Terms and Conditions for Works</a>, Performance Security section).</p> <p>Performance Security shall be provided by the selected bidder within (7) days upon issuance of letter of intent/contract and before issuance of the notice to proceed and must be valid up to twenty-eight days after issuance by the Engineer of the Certificate of Final Completion. The Performance Bond or Bank Guarantee/Retention Money shall be returned to the Contractor within twenty-eight days after the issuance by the Engineer of the Certificate of Final Completion.</p>
<b>Eligibility</b>	<p>A vendor who will be engaged by UNDP may not be suspended, debarred, or otherwise identified as ineligible by any UN Organization or the World Bank Group or any other international Organization. Vendors are therefore required to disclose to UNDP whether they are subject to any sanction or temporary suspension imposed by these organizations. Failure to do so may result in termination of any contract or PO subsequently issued to the vendor by UNDP.</p> <p>It is the Bidder's responsibility to ensure that its employees, joint venture members, sub-contractors, service providers, suppliers and/or their employees meet the eligibility requirements as established by UNDP.</p> <p>Bidders must have the legal capacity to enter a binding contract with UNDP and to deliver in the country, or through an authorized representative.</p>
<b>Currency of Quotation</b>	<p>Quotations shall be quoted in <b>US dollars</b></p>
<b>Joint Venture, Consortium or Association</b>	<p>If the Bidder is a group of legal entities that will form or have formed a Joint Venture (JV), Consortium or Association for the Bid, they shall confirm in their Bid that : (i) they have designated one party to act as a lead entity, duly vested with authority to legally bind the members of the JV, Consortium or Association jointly and severally, which shall be evidenced by a duly notarized Agreement among the legal entities, and submitted with the Bid; and (ii) if they are awarded the contract, the contract shall be entered into, by and between UNDP and the designated lead entity, who shall be acting for and on behalf of all the member entities comprising the joint venture, Consortium or Association.</p> <p>Refer to Clauses 19 – 24 under <a href="#">Solicitation policy</a> for details on the applicable provisions on Joint Ventures, Consortium or Association.</p>
<b>Only one Bid</b>	<p>The Bidder (including the Lead Entity on behalf of the individual members of any Joint Venture, Consortium or Association) shall submit only one Bid, either in its own name or, if a joint venture, Consortium or Association, as the lead entity of such Joint Venture, Consortium or Association.</p> <p>Bids submitted by two (2) or more Bidders shall all be rejected if they are found to have any of the following:</p> <ul style="list-style-type: none"> <li>a) they have at least one controlling partner, director or shareholder in common; or b) any one of them receive or have received any direct or indirect subsidy from the other/s; or</li> <li>b) they have the same legal representative for purposes of this RFQ; or</li> <li>c) they have a relationship with each other, directly or through common third parties, that puts them in a position to have access to information about, or influence on the Bid of, another Bidder regarding this RFQ process;</li> </ul>

	<p>d) they are subcontractors to each other's Bid, or a subcontractor to one Bid also submits another Bid under its name as lead Bidder; or</p> <p>e) some key personnel proposed to be in the team of one Bidder participates in more than one Bid received for this RFQ process. This condition relating to the personnel, does not apply to subcontractors being included in more than one Bid.</p>
<b>Duties and taxes</b>	<p>Article II, Section 7, of the Convention on the Privileges and Immunities provides, inter alia, that the United Nations, including UNDP as a subsidiary organ of the General Assembly of the United Nations, is exempt from all direct taxes, except charges for public utility services, and is exempt from customs restrictions, duties, and charges of a similar nature in respect of articles imported or exported for its official use. All quotations shall be submitted net of any direct taxes and any other taxes and duties, unless otherwise specified below:</p> <p>All prices must:</p> <p><input checked="" type="checkbox"/> be exclusive of VAT and other applicable indirect taxes</p>
<b>Language of quotation</b>	<p>English, Russian and Romanian</p> <p>Including documentation, catalogues, instructions and operating manuals.</p>
<b>Documents to be submitted</b>	<p>Bidders shall include the following documents in their quotation:</p> <p><input checked="" type="checkbox"/> Annex 2: Quotation Submission Form duly completed and signed</p> <p><input checked="" type="checkbox"/> Annex 3: Technical and Financial Offer duly completed and signed</p> <p><input checked="" type="checkbox"/> Annex 6: Bid Security: Required in the amount of: USD 2500</p> <p><input checked="" type="checkbox"/> Company Profile</p> <p><input checked="" type="checkbox"/> Registration certificate</p> <p><input checked="" type="checkbox"/> List and value of projects performed for the last 3 years plus client's contact details who may be contacted for further information on those contracts</p> <p><input checked="" type="checkbox"/> List and value of ongoing Projects with UNDP and other national/multi-national organization with contact details of clients and current completion ratio of each ongoing project</p> <p><input checked="" type="checkbox"/> Statement of satisfactory Performance (Certificates) from the top 3 clients in terms of Contract value in similar field</p> <p><input checked="" type="checkbox"/> Completed and signed CVs for the proposed key Personnel</p> <p><input checked="" type="checkbox"/> The list of equipment, construction machinery and transportation vehicles to be used for construction works</p>
<b>Quotation validity period</b>	<p>Quotations shall remain valid for 90 days from the deadline for the Submission of Quotation.</p>
<b>Price variation</b>	<p>No price variation due to escalation, inflation, fluctuation in exchange rates, or any other market factors shall be accepted at any time during the validity of the quotation after the quotation has been received.</p>
<b>Partial Quotes</b>	<p><input checked="" type="checkbox"/> Permitted – By Lot</p>
<b>Alternative Quotes</b>	<p><input checked="" type="checkbox"/> Not permitted</p>
<b>Liquidated Damages</b>	
<b>Payment Terms</b>	<p><input checked="" type="checkbox"/> 100% within 30 days after receipt of goods, works and/or services and submission of payment documentation.</p> <p><input checked="" type="checkbox"/> Other Instalments, as per executed contract works, upon delivery and acceptance of work items;</p>
<b>Conditions for Release of Payment</b>	<p><input checked="" type="checkbox"/> Written Acceptance of Goods, Services and Works, based on full compliance with RFQ requirements</p>
<b>Contact Person for correspondence, notifications and clarifications</b>	<p>E-mail address: maria.tarigradean@undp.org</p> <p><b>Attention: Quotations shall not be submitted to this address but to the address for quotation submission above. Otherwise, offer shall be disqualified.</b></p> <p><b>Any delay in UNDP's response shall be not used as a reason for extending the deadline for submission, unless UNDP determines that such an extension is necessary and communicates a new deadline to the Proposers.</b></p>
<b>Clarifications</b>	<p>Requests for clarification from bidders will not be accepted any later than 3 days before the submission deadline. Responses to request for clarification will be communicated by email .</p>
<b>Evaluation</b>	<p><input checked="" type="checkbox"/> The Contract or Purchase Order will be awarded to the lowest price substantially compliant offer</p>

<b>method</b>	
<b>Evaluation criteria</b>	<input checked="" type="checkbox"/> Technical responsiveness/Full compliance with all requirements and lowest price; <input checked="" type="checkbox"/> Minimum 5 years of experience in the construction field; <input checked="" type="checkbox"/> Warranty on Works and labour for a minimum period of 3 years and Warranty on installed equipment for a minimum period of 1 year; <input checked="" type="checkbox"/> Bid Security submitted as per RFQ requirements with compliant validity period ( <i>issued by an acceptable insurance company or accredited bank, in the format included in Annex 6, that shall be valid up to thirty (30) days after the final date of validity of the Offer.</i> ) <input checked="" type="checkbox"/> Warranty on Works and labour for a minimum period of 3 years and Warranty on installed equipment for a minimum period of 1 year; <input checked="" type="checkbox"/> Maximum delivery period not to exceed 150 days upon signature of the contract; <input checked="" type="checkbox"/> Key engineering staff available: one civil engineer, one electrical engineer and one heat and ventilation engineer, with (CVs with relevant experience during last three years, valid Qualification Certificates per each engineer), presented in bid documentation); <input checked="" type="checkbox"/> Full acceptance of the Contract General Terms and Conditions.
<b>Right not to accept any quotation</b>	UNDP is not bound to accept any quotation, nor award a contract or Purchase Order
<b>Right to vary requirement at time of award</b>	At the time of award of Contract or Purchase Order, UNDP reserves the right to vary (increase or decrease) the quantity of services and/or goods, by up to a maximum twenty-five per cent (25% ) of the total offer, without any change in the unit price or other terms and conditions.
<b>Type of Contract to be awarded</b>	<input checked="" type="checkbox"/> <u>Contract for Works</u>
<b>Expected date for contract award.</b>	31 March 2021
<b>Publication of Contract Award</b>	UNDP will publish the contract awards valued at USD 100,000 and more on the websites of the CO and the corporate UNDP Web site.
<b>Policies and procedures</b>	This RFQ is conducted in accordance with <a href="#">UNDP Programme and Operations Policies and Procedures</a>
<b>UNGM registration</b>	Any Contract resulting from this RFQ exercise will be subject to the supplier being registered at the appropriate level on the United Nations Global Marketplace (UNGM) website at <a href="http://www.ungm.org">www.ungm.org</a> . The Bidder may still submit a quotation even if not registered with the UNGM, however, if the Bidder is selected for Contract award, the Bidder must register on the UNGM prior to contract signature.

## ANNEX 1: SCHEDULE OF REQUIREMENTS

### 1. Introduction and objectives

Climate related disasters take place more and more frequently and repeatedly in Moldova, causing economic damage of approximately USD 4 million annually. Such risk exposure is explained by the dependence of the agriculture on the amount of precipitations at a country level, this being the most vulnerable sector of the national economy. The main reason is the deficit of water for agricultural needs, as well as the limited resources and capacities to plan and use the irrigation water storage infrastructure in the rural communities of Moldova.

In this context, the „Climate Change and Disaster Risk Reduction” project aims at strengthening the capacity of rural communities to adapt to climate change and disaster by improving the water storage infrastructure and the climate related disaster risk reduction measures, and the main goal of the project is to facilitate the implementation of intelligent solutions for water management in agriculture, flood management, fire prevention and extension of the community teams of rescuers/firefighters in the rural area of Moldova. The project implementation period is 2019-2021, and the geographical areas of activity and intervention are limited to 5 districts - Cantemir, Criuleni, Hîncești, Leova and Ungheni. The project is financed by the Austrian Development Agency and implemented by the United Nations Development Program.

One of the project activities envisages the construction of 5 rescue/fire stations in the rural communities: Pirlita, Sărăteni, Baimaclia, Drăslăeni, and Sărata-Galbenă, which shall be an integral part of the national network of rescue/fire stations. Those 5 rescue/fire stations shall be built and provided with the necessary equipment by mutual agreement and with co-financing from the Local Public Authorities (LPAs). They shall have a coverage area from 6 to 17 neighboring communities, thus rendering rescue and/or firefighting services for appr. 58,714 people, appr. 50 % of which shall be women.

### 2. Content of works and beneficiaries

2.1 These Terms of Reference provide for the construction of two fire stations on plots of land – property of the village administrations of Pirlita village, Ungheni district, cadastral no. 9261000864.p and Baimaclia village, Cantemir district, cadastral no. 2112114084. Each station represents a new construction of metallic frame, enveloped with modern, precast, easy to assemble and ecologically pure materials. The building with the dimensions of 12.0x12.0m, shall have a total height of 6.0m and shall host a fire truck in the compartment of 6.2x12.0m, which has the height against the light of H=4.5m. The terms of reference include the following types of works: earthworks; foundation of monolithic concrete; metal frame mounting; enveloping the building and mounting the “sandwich” panel roof; construction of partition walls of plasterboard panels; installation of carpentry items (windows and doors); flooring construction; construction and putting into operation of internal and external engineering networks; works on territorial organization and planning, and access ways to the building. All these types of works shall fully ensure the standard conditions of activity of the voluntary rescuers/firefighters’ teams of Pirlita village, Ungheni district and Baimaclia village, Cantemir district.

2.2 The construction works for which this invitation to bid is launched refer to the following lots, as follows in the table below:

Lot	Community	Name of the Project proposal
Lot 1	Pirlita village, Ungheni district	“Construction of the community rescue/fire station”
Lot 2	Baimaclia village, Cantemir district	“Construction of the community rescue/fire station”

2.3 Particularly, during the projects in Pirlita and Baimaclia villages, the following construction and assembly works shall be performed:

- Site preparation works, including site fencing, site WC, etc.;
- Land leveling and earth digging for foundation;
- Construction of the foundation in form of monolithic concrete strips, building of 12x12 (m);
- Metal frame mounting works;
- Mounting the roof of sandwich panels for roofing;
- Enveloping the building with sandwich panels for walls;
- Construction of ceramic tiles flooring;
- Construction of industrial concrete flooring;
- Construction of partition walls of plasterboard panels;
- Mounting the carpentry items (doors and windows);
- Interior finishing works;
- Mounting and putting into operation the internal engineering networks: electricity, automation engineering, surveillance, fire alarm, security, telephone, internet, heating, ventilation/conditioning, water supply and sewage;
- Construction of external engineering systems: electricity, water supply and sewage;

- Organization and improvement of the land and access ways to the building;

2.4 The Contractor should ensure everything necessary for the successful fulfilment of the contract: works, engineering, materials, equipment, auxiliary materials, transport, machines, tools, and necessary travelling to perform all the works provided in this contract.

*Usually, the proposed Contract provides the following activities:*

- ***purchase and supply*** of materials and equipment;
- ***preparation of the construction site*** both for the storage of materials and equipment and for the safe performance of works;
- ***performance of the construction and assembly works*** – mentioned in the Terms of Reference;
- ***putting into operation and placing in service*** of the object and engineering systems completed according to the local legislation;

2.5 The contractor should also make sure that all the materials, goods and equipment, before being purchased and used in the interests of the contract, are coordinated with the representatives of the Beneficiary and of the CCDRR Project/UNDP Moldova, empowered accordingly: for the daily supervision and for periodical monitoring of the works at the object.

***Note for bidders:***

***Anytime when the technical specifications require a particular product, specific brand, name/model, the bidders may propose for coordination any other products equal in all the aspects to the specified products and fulfilling the requirements of origin, all the physical, functional and performance parameters.***

### **3. Construction site**

The works notified in this bid shall be performed according to the above-mentioned lots of the objects.

### **4. Organizational arrangements**

The project implementation and performance of the works on site shall be monitored by the Consultant – Engineer appointed by UNDP Moldova, who shall make systematic monitoring visits to the construction site. Additionally, the Technically Responsible Engineer authorized by the Project Beneficiary shall ensure the daily supervision of the construction activities provided in the contract.

### **5. Expected results**

The Contractor is expected to deliver the following *results*:

**Result 1:** Completion of all the construction works land improvement, etc. provided in the contract documents, within a period of not more than **150 calendar days** from the date of signing the Contract.

**Result 2:** Final placement in service of the object within a period of: **up to 3 months** from the date of acceptance of the object at the completion of works.

### **6. Main Requirements and Technical Specifications**

6.1. Technical design: The construction works included in the terms of reference issued for this tender shall be performed in accordance with the Technical Designs No. 04/2020.1.1.1, and No. 04/2020.4.1.1, developed by SRL „Bim Tech Solution”, License Series A MMII, no. 045303 of 31.07.2014, on the basis of the Urbanism Certificates: No.1 of 06.03.2020 - for Pirlita and No. 36 of 14.07.2020 - for Baimaclia. The Technical Requirements comprised in the terms of reference are extracted from the technical prescriptions of the technical design.

#### ***Constructive solutions and architecture***

***Attention!*** It is important to mention that the Terms of Reference envisage the construction of two identical buildings – stations for voluntary firefighters/rescuers, with equal volumes and technical parameters, and with constructive solutions and architecture of the same type. Only the technical parameters and volumes of the external engineering networks and territorial planning will vary.

#### ***6.2. Organization and documentation of the construction works:***

Preparation of the construction site. Any work for the preparation of the construction site shall be initiated only after the Contractor obtains the Permit for construction and site transmission. Before starting the construction works, (i) the authorized plot of land for construction shall be fenced with a temporary fence, which shall be dismantled only after all the construction and assembly works provided in the contract are finished; (ii) all the networks / existing communications that intersect the foundation pit or are located in its immediate vicinity shall be also displaced. (iii) In the case of Pirlita, as



the foundation is placed on compactable ground, a (clay-sand) soil cushion shall be made, with the thickness  $h=1000\text{mm}$ , which will serve as a foundation land and will have the following characteristics:  $p=2.00\text{g/cm}^2$ ,  $\varphi=2.5^\circ$ ,  $C=24.0\text{ kPa}$ ,  $E=20\text{ Mpa}$ ,  $e=0.750$ . The construction works shall be performed in accordance with the section of the technical design "Organization of Construction Works" – OCW and with the provisions of the normative documents NCM A.08.02:2014 "Labor health and safety in constructions"; NRS 35-03-96-2008 "Industrial safety requirements in the construction, mounting, putting into operation, use, repair and technical verification of cranes". During the verification, acceptance of the construction works and related installations the norms in force shall be observed in order to ensure the application of the system of quality in constructions instituted by means of Law no. 721 of 02.02.1996 on the quality in constructions, and by means of other related normative acts.

**Attention!** All the performed works shall be recorded daily in the *Technical File* of the object. The works that become hidden shall be accepted using minutes of verification in accordance with the provisions of CP A.08.01-96. The minutes shall be a part of the technical file of the object/construction.

The purpose of the *Technical File* is to documentary reflect the course of performance of the construction. It gives the possibility to follow and to know the quality of construction works, the main characteristics and parameters of the object, as well as their evolution after its placing in service and, directly, during its operation. The technical file of the construction (TFC) comprises all the technical documentation on the performance of the construction, starting with the design stage and up to the placing of the object and engineering systems in service, and mirrors at the same time the subsequent operation of the object, including all the modifications that may be made in the process of its operation.

6.3. **Foundation of the building:** The foundation of the building, with the depth of 1.6 m, of a continuous form, shall be built of monolithic reinforced concrete, of C.15 mark; the leveling layer with the thickness  $\delta=100\text{ mm}$  shall be of monolithic concrete, of C.7.5 mark. The foundation shall be hydro-insulated with bituminous materials. **Attention!** No penetration of atmospheric water in the foundation pit shall be allowed for the Pirlita station. For this purpose, a knoll of earth with the height of 500 - 600 mm shall be made on the entire perimeter of the foundation pit. During the performance of digging works in wintertime, the freezing of soil under the foundation shall not be allowed. The soil used to fill the pit of sandy clay shall be compacted in layers until it reaches the value of  $\lambda=1.65\text{kg/cm}^2$ . After compaction, a protection drywall shall be made to ensure that surface water does not penetrate to the footing of the foundation, which drywall shall be made on the entire perimeter of the construction. The foundations shall be reinforced with AIII and AI rebars, of various diameters, GOST 5781-82. Anchors of the M20 type with the length of  $l=900\text{mm}$  shall be used to fix the building frame to the foundation.

6.4. **Constructive scheme:** Metal frame, of load-bearing elements made of 200x200 mm, 200x100mm, 100x100mm "□" profile, gr.  $\delta=4.0\div 6.0\text{mm}$ , of steel C235, GOST 30245-2003, other conjunction metal elements GOST 19903-74. The metal constructions have been designed in accordance with the requirements of SNiP-2.01.07-85 "Loads and effects" and SNiP II-23-81\* "Steel constructions". The welding of metal elements shall be done in strict conformity with the requirements of GOST 5264-80\* "Manual arc welding. Welded junctions". The welding of metal elements shall be done with Э-42A electrodes, GOST 9467-75\*. The height of the weld seam shall be equal to the lowest thickness of the elements joined by welding. The protection of metal constructions shall be performed according to the requirements of SNiP-3.04.03-85\* "Protection of construction structures and frames from corrosion". All metal constructions shall be painted, in a paint room, with a layer of ГФ-021 primer, GOST 25129-82 and two layers of ПФ-115 enamel paint, GOST 6465-76, before being transported to the construction site. The mounting of metal constructions shall be performed in accordance with the requirements of SNiP -3.03.01-87\* "Load-bearing and fencing constructions".

6.5. **Roof:** The roof shall consist of two slopes of roofing "sandwich" panels, mounted on bracing and beams of type U metal profile, with the inclination  $i=20^\circ$ . The panels shall be of two dimensions: 6.1x1.0 (m) and 6.4x1.0 (m), with the thickness  $d=120\text{mm}$  and insulation of mineral wool with FIRE safe certification, density  $\rho=40\text{kg/m}^3$ . In both cases the galvanized external tin shall have the thickness  $\delta=0.5\text{mm}$ , and shall be painted in electrostatic field with 60 $\mu\text{m}$  polyester paint, RAL 9006. The inferior tin shall also be galvanized, with the thickness  $\delta=0.5\text{mm}$ , painted in electrostatic field with 60 $\mu\text{m}$  polyester paint, RAL 9006. For the collection and removal of rainwater from the building foundation, the roof shall be provided with a system of drainpipes and gutters made of cold profiled tin with the thickness  $\delta\geq 0.5\text{mm}$  and dimensions, accordingly: drainpipes -  $\varnothing=100\text{mm}$  and gutters -  $\varnothing=120\text{mm}$ . The lower level of the drainpipes shall not be higher than 200mm from the drywall level.

6.6. **Envelope of the building:** The enveloping of the building shall be done with insulated wall sandwich panels, of various dimensions, with the thickness  $d=100\text{mm}$ , mounted on the metal frame of the building. The galvanized external and inferior tin shall have the thickness  $\delta=0.5\text{mm}$ , painted in electrostatic field with 60 $\mu\text{m}$  polyester paint, RAL 9006.

**Attention!** The dimensions of the wall panels and apertures for windows and doors shall be specified on the construction site.

All the closure elements, roof valleys, gutters and drainpipes shall be ordered of cold profiled tin with the thickness  $\delta=0.5\text{mm}$ , of the RAL 7016 (anthracite) color. All the closure elements shall be fixed with self-tapping screws. The fixing



elements shall be specified by the general contractor on the basis of the requirements of the sandwich panel manufacturer.

The door aperture bordering profile shall be fixed to the sandwich panels with pop rivets. Polyurethane foam shall be used as insulation applied on the construction site.

**Attention!** *The optimization, replacement or change of the profiles of the tin closure elements shall be coordinated with the design author.*

The red decorative strips on the façade shall be made of aluminum composite material RAL 3002 or 3003. The door and window casing on the outside shall be made after all the carpentry items are mounted, taking into consideration the thermal bridge breaking technology.

**6.7. Plinth wall of the building:** The plinth wall of the building shall have thermal insulation up to 1.0 m in depth, with an extruded polystyrene layer  $\lambda=0.035$  W/mK, thickness  $\delta=80$ mm, and shall be covered with GREY color clinker on the visible portion. The extruded polystyrene plates (XPS plates) shall have a resistance to compression of 10 %, linear deformation not less than 300 kPa; C3 fire safety class; steam permeability coefficient shall be 0.01 mg (m-hour-Pa); minimal density  $\geq 28$  kg/m<sup>3</sup>; thickness tolerance T5, according to EN 13162; closed porosity is allowed; threshold temperatures of use from -50°C to +70°C; long term water absorption by total immersion:  $\leq 0.7\%$ ; Fixing with adhesive mortar and additionally with the use of dowels in accordance with the technical requirements, SA section.

**6.8. Partition walls:** The partition walls shall have the thickness  $d=120$ mm, shall be insulated on the inside with mineral wool,  $\delta=60$ mm, with FIRE safe certification, density  $\rho=40$ kg/m<sup>3</sup>. Humidity resistant plasterboard sheets shall be mounted on both sides, fixed on the load-bearing metal frame of U type galvanized profile ( $d=64$ mm), in two sheets. The inferior plasterboard sheet shall have the thickness  $\delta=12$ mm, the exterior sheet – thickness of  $\delta=10$ mm. The plaster layer under the paint shall be of 6.0mm. the partition walls shall be fixed with self-tapping screws to the floor and to the metal frame of the roof. At the level of junction with the ceiling, a decorative plinth shall be mounted on the walls.

**6.9. Floorings:** The fire station shall have two types of flooring: ceramic tiles (in the auxiliary premises) and polished industrial concrete of the „SuperConcrete” type from KLINDEX (in the firetruck compartment).

**Ceramic tile flooring,** the ceramic tiles shall have the dimensions not less than 300x300 mm, thickness of  $\delta=15$  mm, they shall be of light color, placed on a layer of glue of the Supraten class, with the thickness  $\delta=10$  mm; the leveling layer with the thickness  $\delta=40$ mm, of cement-sand mortar, M150 mark, shall allow to make the incline towards the siphon pipes  $i=1.5-2\%$ , placed on the separator layer,  $\delta=2$ mm, of technical polyethylene foil; the thermal insulation of the floorings shall be ensured with one layer,  $\delta=50$ mm, of extruded polystyrene (XPS plates),  $\lambda=0.038$ ,  $\rho=40$ kg/m<sup>3</sup>; placed on a bed of reinforced concrete of B12.5 mark, A1 Ø 6 mm rebars, 200x2000 pace, with the thickness  $\delta=100$  mm, and a bed of gravel of the M300 mark, 20-40 fraction, compacted in ground, with the thickness  $\delta=100$ mm.

**Attention!**

1. *The flooring mounting works shall start after the mounting, acceptance and documentation of the engineering networks.*

2. *The hydro-insulation of the flooring in the wet regime premises shall be done with a layer of technical polyethylene foil, mentioned above, with overlapping and bending on the areas of the walls  $h=150$ mm.*

**Industrial concrete floorings,** with hardener, with the thickness  $\delta=5$ mm, applied by means of plastering; placed on a blanket/screed of monolithic reinforced concrete of B20 mark, reinforced with two AIII Ø 8mm rebar meshes with the thickness  $\delta=150$ mm, pace 200x200; on the separator layer,  $\delta=2$ mm, of technical polyethylene foil; the thermal insulation of the flooring shall be ensured with one layer,  $\delta=50$ mm, of extruded polystyrene (XPS plates),  $\lambda=0.038$ ,  $\rho=40$ kg/m<sup>3</sup>; placed on a bed of B12.5 concrete, with the thickness  $\delta=100$  mm and a bed of gravel of M300 mark, fraction 20-40, with the thickness of  $\delta=100$ mm.

**6.10. Carpentry items:**

**Windows,** double-glazed, with PVC profile frame, the metal case core with the thickness  $\delta \geq 1.5$ mm, frames with not less than 5 chambers. The PVC profile shall be white. The thickness of the double-glazed profile: - for windows  $\delta \geq 60.0$ mm, thickness of the external walls of the profile  $\delta \geq 3.0$ mm, double glazed glass units with the thickness  $\delta \geq 24.0$ mm, in 2 window glasses, glass  $\delta=4.0$ mm; profile warranty – not less than 30 years; double glazed glass unit warranty – not less than 10 years; the ironwork should resist up to 20000 openings (or 30 years) and stand a weight up to 135kg; heat transmission resistance  $R^o \geq 0.4$ m<sup>2</sup>°C/Bt, noise resistance  $\geq 40$ dB; U value  $< 1.3$ W/m<sup>2</sup>K; should be equipped with micro-ventilation (Vents); All the interior window units shall be complemented with plastic sills (PVC jambs) with the dimensions depending on the location and thickness  $\delta=20$  mm; with lateral protective PVC caps of the same system as the jamb; high UV resistance; resistance to intensive use; resistance to humidity; not flexed and not distorted under the influence of mechanical and/or thermal factors; warranty – minimum 10 years; on the outside the windows shall be complemented with sills (jambs) of zinc-coated tin with the thickness  $\delta=0.7$ mm, varnished with RAL 7016 (anthracite) polymeric paint.

**Doors** – the interior doors framed in the partition walls should be of the same material (PVC); the doors that come into contact with the external environment should have the total value of the thermal conductivity coefficient per item less or equal to 1.7 [W/m<sup>2</sup>\*K].

All the outside carpentry items of the building (doors and windows) shall be made of the same system of profiles, with the same color and thermal-physical properties; All the sizes of door or window frames stated in the design should be specified on site by the contractor before ordering them.

The closure elements for the frames (*windows and doors*) are mentioned in the AS – architectural solutions album and should comply with GOST 31173-2003.

6.11. *Finishing*: Type of finishing for walls and ceiling – plasterboard in all auxiliary rooms, this shall include deep penetration primer, smoothing with dry mix on fiber-glass mesh with the mass  $P=80\text{gr/m}^2$ , mesh dimensions: 6.0 mm; roll width: 1.0 – 1.1m; roll length: 50 - 100m; composition: glass fibers impregnated with styrene-butadiene without PVC; with tensile strength after 28 days in normal conditions  $>1750\text{ N/50mm}$ ; tensile strength after 28 days in chemical conditions  $>1000\text{ N/50mm}$ ; durability of 30 years, losing the tensile strength up to 50%; resistance to alkaline substances, the window and door frames shall be additionally reinforced in the corners with a 20x40 cm wide strip, according to CP E.04.02-2013; width of the dry mix layer with mesh -  $\delta=3.0\text{mm}$ ; puttying with plaster for inner works with the thickness  $\delta=1.0\text{mm}$ ; high quality plaster for inner works  $\delta=0.5\text{mm}$ , primer; painting with RAL 9010 high-resistance acryl-polymeric emulsion (2 layers).

6.12. *Coloristic specification file*: The coloristic specification file of the fire station facades should be observed – according to the technical designs No. 04/2020.1.1.1, and No. 04/2020.4.1.1, section – CSF.

### ***Internal engineering networks***

#### ***6.13. Heating and ventilation:***

The design of the heating and ventilation systems has been developed in accordance with the normative requirements: NCM E.04.01:2017 – «Thermal protection of buildings»; SNiP 2.04.05-91 – «Heating, ventilation and air conditioning»; NCM C.01.04-2005 – «Administrative buildings»; NCM E.03.02-2014 – «Fire protection of buildings and installations».

The external walls and roof and of designed building contain high-efficiency thermal insulation material. The thermal resistance of the external walls is equal to –  $3.14\text{M}^2\text{x}^\circ\text{C/wt}$ ; and the roof has a thermal resistance of –  $3.18\text{M}^2\text{x}^\circ\text{C/wt}$ . The heating and ventilation systems are calculated for a total loss of heat of the building equal to 14.0kWt; the total capacity of the electrical equipment is  $N=15\text{ kWt}$ . 220 V electrical power shall serve as power source for heating and ventilation.

*Heating*: the service and utilities premises shall be heated with electrical convectors of the BALLU type: three with the capacity  $N=2.0\text{kWt}$ , 220v, - BEC/EZMR-2000 and one with the capacity  $N=1.0\text{kWt}$ , 220v, - BEC/EZMR-1000. The electrical convectors shall be mounted on the walls. Their weight is of 5.6kg and 3.1kg, accordingly. The firetruck compartment shall be heated with infrared heaters of the BALLU type, two with the capacity  $N=3\text{kWt}$ . ~220v, with the dimensions 1.36m X 0.25m, and one with the capacity  $N=1\text{kWt}$  ~220v, with the dimensions 1.36m X 0.13m. The infrared convectors shall be fixed to the constructions of the roof/ceiling. Their weight shall be of 7.8kg and 3.4kg, accordingly. The maintaining of the heating parameters of the premises shall be done with an automatic sensor.

*Ventilation*: The mixed ventilation system – incoming and outgoing, shall be with both mechanical and natural impulse. In the service and utilities premises the ventilation will be with natural impulse, and mechanical impulse ventilation shall be installed from the electric stove in the kitchen. The firetruck compartment shall be provided with both forced ventilation system with a zinc-coated metal pipe,  $\delta=0.5\text{mm}$ , diam.  $\varnothing=315\text{mm}$ , and with a system to remove the smoke from the exhaust pipe, diam.  $\varnothing=100\text{mm}$ . The ventilation system shall be provided with the following equipment: a pipe ventilator of mixed type, for the round pipe, with the diameter  $\varnothing=315\text{mm}$ ,  $G=1500\text{M}^3/\text{hour}$ ,  $H=200\text{Pa}$ , electrical engine  $N=0.32\text{ kWt}$ ,  $n=2433\text{ rot/min}$ . ~220v, of the “Systemair” type; smoke removal system DP-100-6, in set with: zinc-coated metal pipe,  $\delta=0.5\text{mm}$ , hosepipe, chimney damper, remote control, capacity of  $370\text{m}^3/\text{hour}$ , of the «Сов.Плим» type, Saint-Petersburg. Metal ventilation grills with installation on the outside shall be used in the ventilation system, accordingly: 2 pcs.- 400x400mm, 2 pcs. - 400x200mm, 2 pcs.-  $\varnothing=400\text{mm}$ .

#### ***6.14. Water supply and sewerage.***

The design provides for the supply of cold drinking water, hot water and household sewage. The cold drinking water and hot water supply networks shall be made of polyethylene pipes – PE, SDR 17, PN 10, diameter:  $\varnothing=25,20,15\text{ mm}$ . The internal household sewage networks shall be of PVC pipes with the diameter  $\varnothing 100\div 63\text{ mm}$ . The incline of the sewage networks with free wastewater drain shall be equal to  $i=0.02\div 0.03$ . In the chimney for connection to the existing public cold water supply networks, (connection shall be done according to the technical conditions), a water-meter node with the diameter  $\varnothing 15\text{ mm}$ , „C” class, shall be installed, in set with spherical bronze faucets, liquid filter, reversive valve. The supply of hot water shall be one from the electric boiler of the fire station,  $V=50\text{L}$ ,  $N=1.8\text{kWt}$ . All the diameters stated for the pipes of the cold and hot water networks correspond to the inner diameter of the pipe. In the places of intersection with the walls, the pipes shall be mounted in protective tubes with the diameter  $\varnothing 63\text{ mm}$ . All the cold and hot water networks (main pipelines, columns and pipes located in protective tubes) shall be insulated with thermal insulation hose of the „ПЭП” type. The water consumption norms, flowrate of cold and hot water, sewage and wastewater are calculated

according to SNiP 2.04.01-85. The installation and acceptance of the plumbing equipment shall be done according to CH 478-80.

#### **6.15. Power electrical equipment and inner lighting:**

The power electrical equipment and inner lighting has been developed in accordance with the local normative requirements: NCM G.01.02:2015 - "Design and mounting of electrical installation in residential and social buildings"; NCM C.04.02-2017 - "Functional requirements. Electrical installation. Natural and artificial lighting" and "Power equipment installation rules".

The technical design provides for operational electrical lighting distributed in several groups and a separate service group for rooms 1 (communication point), 2 (break room), 8 (firetruck compartment), connected to the main distribution cabinet. The inner networks shall be made of cable - BBГн-LS, of 5 and 3 wires (as the case may be), including the earthing wire, mounted in PVC tubes with  $\varnothing$  14-32mm, fixed on the walls and ceiling constructions. The sockets shall be mounted at the height of 0.3 m from the floor. Switches shall be installed at the height of 1.0 m from the floor. The design also provides for the installation of the III category thunder protection system, with full, uninterrupted electric circuit. At the depth of 0.5 m from the ground level, the vertical electrodes with  $\varnothing$  20mm shall be connected by welding to the metal pieces of the building frame (columns) with a metal strip of 25x4mm.

*Main specifications and technical parameters* of the electrical equipment units and materials: electrical counter at the entrance, in set – of the BZUM-TF type; automatic switches – of the BA47-29/3/C32A, BA47-29/1/B10, BA47-29/1/C4-25 type, cable, copper electric conductor - 3x1.5mm<sup>2</sup> and 3x2.5 mm<sup>2</sup> - of the BBГн-FRLS type; luminaires 35W, IP 20 - OPL/S ECO - LED; 18W, IP 54 – CD LED; 70W, IP 54 – ALS.PRS UNI LED; 70W, IP65 – NBU 70;

#### **6.16. Automatic fire alarm system:**

The automatic fire alarm system has been developed in accordance with the requirements of the local normative documents: ПД 78,145-93; NCM E. 03.03-2018; NCM E. 03.05-2004; NCM G.02.01:2017 and "Power equipment installation rules".

For the organization of the fire alarm system, the MAG 4P receipt and control device is used, as well as sensors connected in ribbon: smoke sensor of the *SensoMAG S30* type, heat sensor of the *SensoMAG R20* type, fixed on the ceiling, and a manual sensor of the *SensoIRIS MCP150* type, if the fire is noticed visually. The manual sensor shall be fixed on the wall at a height of h=1.5 m from the floor level. The sound signaling device shall be installed at a height of h=2.5 m from the floor level. The signaling conductor shall be mounted in embossed tubes of PVC fixed on the constructions of the walls and ceiling. The alarm system shall be supplied with electrical power through a separate group from the cabinet ЩО1. For the safe electrical power supply to the signaling system, a reserve power source is provided, of the RIP type, -220/=12V. The alarm system should be earthed.

#### **6.17. Security alarm system:**

The security alarm system has been developed in accordance with the requirements of the local normative documents: ПД 78,145-93; NCM 2.08.02-89 and "Power equipment installation rules".

The PC-1832 security alarm device shall be installed at a height of 1.8 m from the floor level. The place of installation shall be coordinated with the Beneficiary. Combined detectors ИК + glass structure breakage – SRPG, infra-red detectors – ИК + electromagnetic detectors – CMK shall be installed in the guarded rooms. The system networks shall be built of CQR-6 cable and BBГ-3x1.5 conductors, hidden inside the dropped ceiling, only on the sectors for the connection of detectors the cable shall be mounted in flexible PVC tubes with  $\varnothing$ =16-25mm. The power supply of the security system shall be of I category, a reserve power source of the RIP type, -220/=12V, shall be provided for that. The security alarm system should be earthed in accordance with "Power equipment installation rules".

### **External engineering systems**

#### **6.18. Electrical power supply:**

The provision of the fire/rescue stations with electrical power shall be done through the low voltage lines AEE – 0.4kV, in accordance with the technical conditions / CT Nr. P30202020090001, of 17.09.20, issued by Î.C.S. "Premier Energy Distribution", from the Transformation Station PT-394N for Baimaclia village and Nr. 2332, of 09.09.2020, issued by Î.C.S. "Red Nord", from the Transformation Station PT-609, for Pirlita village. The fire/rescue stations belong to the II Category electricity consumers. Given the fact that the local electrical power networks may ensure only the III Category of power supply source reliability, the technical design (Album EEI/IEI), envisages, for both fire/rescue stations, one reserve power supply source, from mobile diesel generators. The main technical parameters of the designed generic object are: voltage – 0.38/0.22 kV; estimated consumption N=15 kWt and current – 25 A. In accordance with the Technical Conditions (CT), electrical counter nodes of the "BZUM-TF" type shall be installed on the objects, with three-phase electronic counter 5-60, 380B connected directly.

From the transformation stations (PT) the supply networks of 0.4kV shall be mounted, of self-bearing conductors of the SIP-2 type, 3x35+1x54.6 mm<sup>2</sup>, on the existing reinforced concrete pillars (as the case may be). On the pillars where the

PEN earthing is made, a protective device against overvoltage shall be installed, of the (УЗИП), ОПН СПВ\*/10 (А35\*\*) type. On the walls of the building, up to the height of 3 m, the electrical cables/conductors shall be mounted in metal tubes. All the electrical works should be performed in accordance with the normative requirements of the *Power equipment installation rules and SNiP 3.05.06-86*. Before starting the mounting of electrical equipment, the representative of Î.C.S. "Premier Energy Distribution" should be invited to the object.

#### **6.19. Cold drinking water supply and sewage networks.**

The fire station shall be connected to the existing public cold-water supply networks, from the connection chimney according to the technical conditions, with polyethylene pipes - PE100, SDR 17, PN 10, diameter  $\varnothing=25$  mm. The external household sewage networks shall be mounted of PVC pipes, SN 4, diameter  $\varnothing=110\div 160$  mm. The sewage pipe with the diameter of  $\varnothing=160$  mm shall be mounted in a protective metal tube with the diameter  $\varnothing=315$  mm, GOST 10704-91. The sewage sector for free wastewater drainage to the drainage pit from the firetruck compartment shall be mounted of PVC pipes with the diameter  $\varnothing=110$  mm, and the forced sewage sector shall be of polyethylene pipes - PE100, SDR 21, SN 6, diameter  $\varnothing=63$  mm. This sewage shall be provided with hydrocarbon separator,  $q=0.5$  l/sec, pressure extinction pipe mounted in the septic tank, and drainage pump of the "Willo Drain" TM-32 type,  $G=1.5\text{m}^3/\text{hour}$ ,  $H=10$  m,  $N=0.55\text{kW}$ .

**Sewerage tank.** The household water shall be accumulated in an underground tank – septic tank, impermeable, standard, with the volume  $V=3000\text{L}$ . The septic tank shall be mounted on the territory of the fire station, near the building, at a distance of 5-6m.

The chimneys designed for the water supply and sewage networks shall be made of precast reinforced concrete items - B15, КЦД-10, КЦП-10, КЦ-10, КД-10, КЦО-1, with the diameter  $\varnothing=1000$  mm, cording to p.t. 902-09-022.84.

Before starting the earthworks, the representatives of the organizations operating the engineer networks should be invited to mark the places of intersection with the designed water supply and sewage networks.

#### **Territorial organization and planning**

6.20 The area of the plots of land allocated by the LPA from the public lands for the designed fire stations is, accordingly: for Pirlita village - 0.18 ha and for Baimaclia village – 0.113 ha. The area distributed to the project is, accordingly: 765 m<sup>2</sup> and 890 m<sup>2</sup>; but the areas occupied by the building - 153 m<sup>2</sup>; green space area – 462 m<sup>2</sup>; and pavement area – 149.5 m<sup>2</sup>, are equal for both objects. The LCI (land cover index) is reported to the area designated to the project - 765 m<sup>2</sup> and 890 m<sup>2</sup> and equal to 20% and 16.2%, accordingly.

6.21 The design for the location of the building, vertical planning and organization of the territory of the fire/rescue stations in both villages was developed on the basis of the technical-geodesic prospections at a scale of 1:500.

6.22 **Sidewalks.** The access ways to the building of the fire station (sidewalks) shall be paved with sidewalk tiles and curbstone. The curbstone shall be of concrete of the B.100.20.8 type, GOST 6665-91 The vibro-pressed sidewalk tiles, with the thickness  $h=5.0$  cm, GOST 17608-91, of the Iacobas type or of an equivalent one, shall be placed on a layer of cement-sand dry mix, with the thickness  $\delta=50$  mm, in proportion of 1:3, on a sand foundation, GOST 8736-93, with the thickness  $\delta=100$  mm, on the ground compacted up to the value of  $\lambda=1.6\text{ t/m}^3$ .

6.23 **Firetruck parking.** The access way / parking for the firetruck shall be paved with a layer of cement-monolithic concrete, mark - B25, F-200, W-6, with the thickness  $\delta=180$  mm, GOST 26633-91, on a leveling layer of black sand with the thickness  $\delta=30$  mm, placed on a foundation layer of sand-gravel mix, with the thickness  $\delta=150$  mm. The curbstone for this sector shall be of the curbstone type used for roads, B.100.30.15, GOST 6665-91, placed on a fixing layer of concrete of B15 mark, GOST 26633-91, with the thickness  $\delta=100$  mm. **Attention!** In the place of junction with the sidewalks, the road type curbstone shall be mounted horizontally. The monolithic concrete coverage shall have, at each distance of 3.0 m, compensation joints filled with round rubber profile, diameter  $\varnothing 5.0\text{mm}$ , and flexible bituminous mastic resistant to frost. Before starting the pavement works, the ground under the access way and sidewalks shall be compacted up to the value  $\lambda=1.6\text{ t/m}^3$ . The removal of rainwater from the paved areas shall be organized on the relief with the help of an incline  $i=0.02$  and curbstones. The access way to the building for the firetruck shall be provided with an automatic barrier.

### **7. Equipment marking**

The entire equipment should be marked with original manufacturer's plates, which should contain at least the year of manufacture, main technical parameters and type/ID of the equipment. The installed cables should be marked at the start-point and endpoint of the networks. All the textual markings necessary for system operation should be in Romanian and Russian.

### **8. Acceptance at the completion of works**

After the construction works are finished, the equipment provided in the contract is installed and tested in the corresponding way, the staff training is performed and the technical documents are transmitted, the procedure of putting into operation of the object after the completion of works shall be performed. All the costs relating to the organization of the testing of installed systems and staff training shall be incurred by the contractor.

#### **9. Warranty period**

The warranty period for the works shall start on the day of acceptance of the object at the completion of works and shall be of 12 months for the equipment, tools, and 36 months for works and materials.

## ANNEX 2: QUOTATION SUBMISSION FORM

*Bidders are requested to complete this form, including the Company Profile and Bidder's Declaration, sign it and return it as part of their quotation along with Annex 3: Technical and Financial Offer. The Bidder shall fill in this form in accordance with the instructions indicated. No alterations to its format shall be permitted and no substitutions shall be accepted.*

Name of Bidder:	Click or tap here to enter text.	
RFQ reference:	Click or tap here to enter text.	Date: Click or tap to enter a date.

### Company Profile

Item Description	Detail
Legal name of bidder or Lead entity for JVs	Click or tap here to enter text.
Legal Address, City, Country	Click or tap here to enter text.
Website	Click or tap here to enter text.
Year of Registration	Click or tap here to enter text.
Legal structure	Choose an item.
Are you a UNGM registered vendor?	<input type="checkbox"/> Yes <input type="checkbox"/> No      If yes, insert UNGM Vendor Number
Quality Assurance Certification (e.g. ISO 9000 or Equivalent) (If yes, provide a Copy of the valid Certificate):	<input type="checkbox"/> Yes <input type="checkbox"/> No
Does your Company hold any accreditation such as ISO 14001 or ISO 14064 or equivalent related to the environment? (If yes, provide a Copy of the valid Certificate):	<input type="checkbox"/> Yes <input type="checkbox"/> No
Does your Company have a written Statement of its Environmental Policy? (If yes, provide a Copy)	<input type="checkbox"/> Yes <input type="checkbox"/> No
Does your organization demonstrate significant commitment to sustainability through some other means, for example internal company policy documents on women empowerment, renewable energies or membership of trade institutions promoting such issues (If yes, provide a Copy)	<input type="checkbox"/> Yes <input type="checkbox"/> No

Is your company a member of the UN Global Compact	<input type="checkbox"/> Yes <input type="checkbox"/> No			
Bank Information	Bank Name: Click or tap here to enter text. Bank Address: Click or tap here to enter text. IBAN: Click or tap here to enter text. SWIFT/BIC: Click or tap here to enter text. Account Currency: Click or tap here to enter text. Bank Account Number: Click or tap here to enter text.			
Previous relevant experience: 3 contracts				
Name of previous contracts	Client & Reference Contact Details including e-mail	Contract Value	Period of activity	Types of activities undertaken

**Bidder's Declaration**

Yes	No	
<input type="checkbox"/>	<input type="checkbox"/>	<b>Requirements and Terms and Conditions:</b> I/We have read and fully understand the RFQ, including the RFQ Information and Data, Schedule of Requirements, the General Conditions of Contract, and any Special Conditions of Contract. I/we confirm that the Bidder agrees to be bound by them.
<input type="checkbox"/>	<input type="checkbox"/>	I/We confirm that the Bidder has the necessary capacity, capability, and necessary licenses to fully meet or exceed the Requirements and will be available to deliver throughout the relevant Contract period.
<input type="checkbox"/>	<input type="checkbox"/>	<b>Ethics:</b> In submitting this Quote I/we warrant that the bidder: has not entered into any improper, illegal, collusive or anti-competitive arrangements with any Competitor; has not directly or indirectly approached any representative of the Buyer (other than the Point of Contact) to lobby or solicit information in relation to the RFQ ;has not attempted to influence, or provide any form of personal inducement, reward or benefit to any representative of the Buyer.
<input type="checkbox"/>	<input type="checkbox"/>	I/We confirm to undertake not to engage in proscribed practices, , or any other unethical practice, with the UN or any other party, and to conduct business in a manner that averts any financial, operational, reputational or other undue risk to the UN and we have read the United Nations Supplier Code of Conduct : <a href="https://www.un.org/Depts/ptd/about-us/un-supplier-code-conduct">https://www.un.org/Depts/ptd/about-us/un-supplier-code-conduct</a> and acknowledge that it provides the minimum standards expected of suppliers to the UN.
<input type="checkbox"/>	<input type="checkbox"/>	<b>Conflict of interest:</b> I/We warrant that the bidder has no actual, potential, or perceived Conflict of Interest in submitting this Quote or entering a Contract to deliver the Requirements. Where a Conflict of Interest arises during the RFQ process the bidder will report it immediately to the Procuring Organisation's Point of Contact.
<input type="checkbox"/>	<input type="checkbox"/>	<b>Prohibitions, Sanctions:</b> I/We hereby declare that our firm, its affiliates or subsidiaries or employees, including any JV/Consortium members or subcontractors or suppliers for any part of the contract is not under procurement prohibition by the United Nations, including but not limited to prohibitions derived from the Compendium of United Nations Security Council Sanctions Lists and have not been suspended, debarred, sanctioned or otherwise identified as ineligible by any UN Organization or the World Bank Group or any other international Organization.
<input type="checkbox"/>	<input type="checkbox"/>	<b>Bankruptcy:</b> I/We have not declared bankruptcy, are not involved in bankruptcy or receivership proceedings, and there is no judgment or pending legal action against them that could impair their operations in the foreseeable future.
<input type="checkbox"/>	<input type="checkbox"/>	<b>Offer Validity Period:</b> I/We confirm that this Quote, including the price, remains open for acceptance



Yes	No	
		for the Offer Validity.
<input type="checkbox"/>	<input type="checkbox"/>	I/We understand and recognize that you are not bound to accept any Quotation you receive, and we certify that the goods offered in our Quotation are new and unused.
<input type="checkbox"/>	<input type="checkbox"/>	By signing this declaration, the signatory below represents, warrants and agrees that he/she has been authorised by the Organization/s to make this declaration on its/their behalf.

Signature: \_\_\_\_\_

Name: Click or tap here to enter text.

Title: Click or tap here to enter text.

Date: Click or tap to enter a date.

**ANNEX 3: TECHNICAL AND FINANCIAL OFFER – WORKS**

*Bidders are requested to complete this form, sign it and return it as part of their quotation along with Annex 2 Quotation Submission Form. The Bidder shall fill in this form in accordance with the instructions indicated. No alterations to its format shall be permitted and no substitutions shall be accepted.*

Name of Bidder:	Click or tap here to enter text.	
RFQ reference:	Click or tap here to enter text.	Date: Click or tap to enter a date.

**Technical Offer**

*Provide the following:*

- a brief description of your qualification and capacity that is relevant to the Scope of Works;
- a brief method statement and implementation plan;
- team composition and CVs of key personnel

**Financial Offer**

	Description of Works	UOM	Qty	Unit Price	Total Price
LOT 1	Construction of the community rescue/fire station, in the village Pirlita, district Ungheni	unit	1		
LOT 2	Construction of the community rescue/fire station, in the village Baimaclia, district Cantemir	unit	1		
	<b>Total</b>				

**Compliance with Requirements**

	You Responses		
	Yes, we will comply	No, we cannot comply	If you cannot comply, pls. indicate counter - offer
Delivery Lead Time (150 days)	<input type="checkbox"/>	<input type="checkbox"/>	Click or tap here to enter text.
Validity of Quotation	<input type="checkbox"/>	<input type="checkbox"/>	Click or tap here to enter text.
Payment terms	<input type="checkbox"/>	<input type="checkbox"/>	Click or tap here to enter text.
Special Conditions of Contract	<input type="checkbox"/>	<input type="checkbox"/>	Click or tap here to enter text.

I, the undersigned, certify that I am duly authorized to sign this quotation and bind the company below in event that the quotation is accepted.

<b>Exact name and address of company</b> Company Name: Click or tap here to enter text. Address: Click or tap here to enter text. Click or tap here to enter text. Phone No.: Click or tap here to enter text. Email Address: Click or tap here to enter text.	<b>Authorized Signature:</b> Date: Click or tap here to enter text. Name: Click or tap here to enter text. Functional Title of Authorised Signatory: Click or tap here to enter text. Email Address: Click or tap here to enter text.
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