



INVITATION TO BID

Construction of Civic Amenity Centers in Kilis and Şanlıurfa Provinces

Lot 1: Civic Amenity Center- Demirciler/Kilis

Lot 2: Civic Amenity Center- Haliliye/Şanlıurfa

ITB No.: UNDP-TUR-ITB(USB)-2020/08

Project: Effective Urban Waste Management for Host Communities Phase II:
Strengthening Social Cohesion through Participatory Waste Management

Country: Turkey

Issued on: 02 September 2020

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SECTION 1.LETTER OF INVITATION

The United Nations Development Programme (UNDP) hereby invites you to submit a Bid to this Invitation to Bid (ITB) for the above-referenced subject.

This ITB includes the following documents and the General Terms and Conditions of Contract which is inserted in the Bid Data Sheet:

- Section 1: This Letter of Invitation
- Section 2: Instruction to Bidders
- Section 3: Bid Data Sheet (BDS)
- Section 4: Evaluation Criteria
- Section 5: Schedule of Requirements and Technical Specifications
- Section 6: Returnable Bidding Forms
 - o Form A: Bid Submission Form
 - o Form B: Bidder Information Form
 - o Form D: Qualification Form
 - o Form E: Format of Technical Bid
 - o Form F: Price Schedule
 - o Form G: Form of Bid Security

Please be informed that this procurement process is being conducted through the online tendering system of UNDP. Bidders who wish to submit an offer must be registered in the system.

- Visit this page for system user guides and videos in different languages:
<http://www.undp.org/content/undp/en/home/operations/procurement/business/procurement-notice/resources/>

- If already registered, go to <https://etendering.partneragencies.org> and sign in using your username and password.

- Use "Forgotten password" link if you do not remember your password. Do not create a new profile.

- If you have never registered in the system before, you can register by visiting the link below and follow the instructions in the user guide (attached): <https://etendering.partneragencies.org>

- o Username: event.guest
- o Password: why2change

- It is strongly recommended to create a username with two parts: your first name and last name separated by a ".", (similar to the one shown above). Once registered you will receive a valid password to the registered email address which you can use for signing in and changing your password.

- Please note that your new password should meet the following criteria:

- o Minimum 8 characters
- o At least one UPPERCASE LETTER
- o At least one lowercase letter
- o At least one number

You can view and download tender documents with the guest account as per the above username and

password, However, if you are interested to participate, you must register in the system and subscribe to this tender to be notified when amendments are made.

E-Mail and Hard Copy Submissions are not accepted. Bids shall be submitted through e-tendering only. However, **Original Bid Security** shall be delivered to the below address on or before the submission deadline indicated in e-tendering system, with a PDF copy submitted as part of the electronic submission.

Focal Point: Ümit ALSAÇ, Procurement Officer

Yıldız Kule, 21st Floor, Dikmen Mahallesi, Turan Güneş Bulvarı, No:106, 06550, Çankaya, Ankara, Turkey

If you are interested in submitting a Bid in response to this ITB, please prepare your Bid in accordance with the requirements and procedure as set out in this ITB and submit it by the "Deadline for Submission of Bids" set out in the eTendering System. Note that e-tendering system time zone is in **EST/EDT (New York)** time zone.

Please acknowledge receipt of this ITB by utilizing the "Accept Invitation" function in eTendering system. This will enable you to receive amendments or updates to the ITB. Should you require further clarifications, kindly communicate with the contact person identified in the attached Data Sheet as the focal point for queries on this ITB.

UNDP looks forward to receiving your Bid and thank you in advance for your interest in UNDP procurement opportunities.

Sincerely;

UNDP TURKEY Country Office

SECTION 2. INSTRUCTION TO BIDDERS

GENERAL PROVISIONS

1. Introduction	<p>1.1 Bidders shall adhere to all the requirements of this ITB, including any amendments made in writing by UNDP. This ITB is conducted in accordance with the UNDP Programme and Operations Policies and Procedures (POPP) on Contracts and Procurement which can be accessed at https://popp.undp.org/SitePages/POPPBSUnit.aspx?TermID=254a9f96-b883-476a-8ef8-e81f93a2b38d</p> <p>1.2 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 ITB.</p> <p>1.3 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> <p>1.4 As part of the bid, it is desired that the Bidder registers at the United Nations Global Marketplace (UNGM) website (www.ungm.org). The Bidder may still submit a bid 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.</p>
2. Fraud & Corruption, Gifts and Hospitality	<p>2.1 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 observe the highest standard of ethics during the procurement process and contract implementation. UNDP's Anti-Fraud Policy can be found at http://www.undp.org/content/undp/en/home/operations/accountability/audit/office_of_audit_andinvestigation.html#anti</p> <p>2.2 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 or dinners.</p> <p>2.3 In pursuance of this policy, UNDP:</p> <p>(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;</p> <p>(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> <p>2.4 All Bidders must adhere to the UN Supplier Code of Conduct, which may be found at https://www.un.org/Depts/ptd/about-us/un-supplier-code-conduct</p>
3. Eligibility	<p>3.1 A vendor should 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</p>

	<p>whether they are subject to any sanction or temporary suspension imposed by these organizations.</p> <p>3.2 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>
4. Conflict of Interests	<p>4.1 Bidders must 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. Without limitation on the generality of the above, Bidders, and any of their affiliates, shall be considered to have a conflict of interest with one or more parties in this solicitation process, if they:</p> <ul style="list-style-type: none"> a) Are or have been associated in the past, with a firm or any of its affiliates which have been engaged by UNDP to provide services for the preparation of the design, specifications, Terms of Reference, cost analysis/estimation, and other documents to be used for the procurement of the goods and services in this selection process; b) Were involved in the preparation and/or design of the programme/project related to the goods and/or services requested under this ITB; or c) Are found to be in conflict for any other reason, as may be established by, or at the discretion of UNDP. <p>4.2 In the event of any uncertainty in the interpretation of a potential conflict of interest, Bidders must disclose to UNDP, and seek UNDP's confirmation on whether or not such conflict exists.</p> <p>4.3 Similarly, the Bidders must disclose in their Bid their knowledge of the following:</p> <ul style="list-style-type: none"> a) If the owners, part-owners, 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 ITB; and b) All other circumstances that could potentially lead to actual or perceived conflict of interest, collusion or unfair competition practices. <p>Failure to disclose such an information may result in the rejection of the Bid or Bids affected by the non-disclosure.</p> <p>4.4 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 ITB, among others. Conditions that may lead to undue advantage against other Bidders may result in the eventual rejection of the Bid.</p>
B. PREPARATION OF BIDS	
5. General Considerations	<p>5.1 In preparing the Bid, the Bidder is expected to examine the ITB in detail. Material deficiencies in providing the information requested in the ITB may result in rejection of the Bid.</p> <p>5.2 The Bidder will not be permitted to take advantage of any errors or omissions in the ITB. Should such errors or omissions be discovered, the Bidder must notify the UNDP accordingly.</p>

6. Cost of Preparation of Bid	6.1 The Bidder shall bear all costs related to the preparation and/or submission of the Bid, regardless of whether its Bid is selected or not. UNDP shall not be responsible or liable for those costs, regardless of the conduct or outcome of the procurement process.
7. Language	7.1 The Bid, as well as any and all related correspondence exchanged by the Bidder and UNDP, shall be written in the language (s) specified in the BDS.
8. Documents Comprising the Bid	8.1 The Bid shall comprise of the following documents and related forms which details are provided in the BDS: a) Documents Establishing the Eligibility and Qualifications of the Bidder; b) Technical Bid; c) Price Schedule; d) Bid Security, if required by BDS; e) Any attachments and/or appendices to the Bid.
9. Documents Establishing the Eligibility and Qualifications of the Bidder	9.1 The Bidder shall furnish documentary evidence of its status as an eligible and qualified vendor, using the Forms provided under Section 6 and providing documents required in those forms. In order to award a contract to a Bidder, its qualifications must be documented to UNDP's satisfaction.
10. Technical Bid Format and Content	10.1 The Bidder is required to submit a Technical Bid using the Standard Forms and templates provided in Section 6 of the ITB. 10.2 Samples of items, when required as per Section 5, shall be provided within the time specified and unless otherwise specified by the Purchaser, at no expense to the UNDP. If not destroyed by testing, samples will be returned at Bidder's request and expense, unless otherwise specified. 10.3 When applicable and required as per Section 5, the Bidder shall describe the necessary training programme available for the maintenance and operation of the equipment offered as well as the cost to the UNDP. Unless otherwise specified, such training as well as training materials shall be provided in the language of the Bid as specified in the BDS. 10.4 When applicable and required as per Section 5, the Bidder shall certify the availability of spare parts for a period of at least five (5) years from date of delivery, or as otherwise specified in this ITB.
11. Price Schedule	11.1 The Price Schedule shall be prepared using the Form provided in Section 6 of the ITB and taking into consideration the requirements in the ITB. 11.2 Any requirement described in the Technical Bid but not priced in the Price Schedule, shall be assumed to be included in the prices of other activities or items, as well as in the final total price.
12. Bid Security	12.1 A Bid Security, if required by BDS, shall be provided in the amount and form indicated in the BDS. The Bid Security shall be valid for a minimum of thirty (30) days after the final date of validity of the Bid. 12.2 The Bid Security shall be included along with the Bid. If Bid Security is required by the ITB but is not found in the Bid, the offer shall be rejected. 12.3 If the Bid Security amount or its validity period is found to be less than what is required by UNDP, UNDP shall reject the Bid.

	<p>12.4 In the event an electronic submission is allowed in the BDS, Bidders shall include a copy of the Bid Security in their bid and the original of the Bid Security must be sent via courier or hand delivery as per the instructions in BDS.</p> <p>12.5 The Bid Security may be forfeited by UNDP, and the Bid rejected, in the event of any, or combination, of the following conditions:</p> <ul style="list-style-type: none"> a) If the Bidder withdraws its offer during the period of the Bid Validity specified in the BDS, or; b) In the event the successful Bidder fails: <ul style="list-style-type: none"> i. to sign the Contract after UNDP has issued an award; or ii. to furnish the Performance Security, insurances, or other documents that UNDP may require as a condition precedent to the effectivity of the contract that may be awarded to the Bidder.
13. Currencies	<p>13.1 All prices shall be quoted in the currency or currencies indicated in the BDS. Where Bids are quoted in different currencies, for the purposes of comparison of all Bids:</p> <ul style="list-style-type: none"> a) UNDP will convert the currency quoted in the Bid into the UNDP preferred currency, in accordance with the prevailing UN operational rate of exchange on the last day of submission of Bids; and b) In the event that UNDP selects a Bid for award that is quoted in a currency different from the preferred currency in the BDS, UNDP shall reserve the right to award the contract in the currency of UNDP's preference, using the conversion method specified above.
14. Joint Venture, Consortium or Association	<p>14.1 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.</p> <p>14.2 After the Deadline for Submission of Bid, the lead entity identified to represent the JV, Consortium or Association shall not be altered without the prior written consent of UNDP.</p> <p>14.3 The lead entity and the member entities of the JV, Consortium or Association shall abide by the provisions of Clause 9 herein in respect of submitting only one Bid.</p> <p>14.4 The description of the organization of the JV, Consortium or Association must clearly define the expected role of each of the entities in the joint venture in delivering the requirements of the ITB, both in the Bid and the JV, Consortium or Association Agreement. All entities that comprise the JV, Consortium or Association shall be subject to the eligibility and qualification assessment by UNDP.</p> <p>14.5 A JV, Consortium or Association in presenting its track record and experience should clearly differentiate between:</p> <ul style="list-style-type: none"> a) Those that were undertaken together by the JV, Consortium or Association; and

	<p>b) Those that were undertaken by the individual entities of the JV, Consortium or Association.</p> <p>14.6 Previous contracts completed by individual experts working privately but who are permanently or were temporarily associated with any of the member firms cannot be claimed as the experience of the JV, Consortium or Association or those of its members, but should only be claimed by the individual experts themselves in their presentation of their individual credentials</p> <p>14.7 JV, Consortium or Associations are encouraged for high value, multi-sectoral requirements when the spectrum of expertise and resources required may not be available within one firm.</p>
15. Only One Bid	<p>15.1 The Bidder (including the individual members of any Joint Venture) shall submit only one Bid, either in its own name or as part of a Joint Venture.</p> <p>15.2 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"> 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 c) they have the same legal representative for purposes of this ITB; or d) 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 ITB process; e) 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 some key personnel proposed to be in the team of one Bidder participates in more than one Bid received for this ITB process. This condition relating to the personnel, does not apply to subcontractors being included in more than one Bid.
16. Bid Validity Period	<p>16.1 Bids shall remain valid for the period specified in the BDS, commencing on the Deadline for Submission of Bids. A Bid valid for a shorter period may be rejected by UNDP and rendered non-responsive.</p> <p>16.2 During the Bid validity period, the Bidder shall maintain its original Bid without any change, including the availability of the Key Personnel, the proposed rates and the total price.</p>
17. Extension of Bid Validity Period	<p>17.1 In exceptional circumstances, prior to the expiration of the Bid validity period, UNDP may request Bidders to extend the period of validity of their Bids. The request and the responses shall be made in writing, and shall be considered integral to the Bid.</p> <p>17.2 If the Bidder agrees to extend the validity of its Bid, it shall be done without any change to the original Bid.</p> <p>17.3 The Bidder has the right to refuse to extend the validity of its Bid, in which case, the Bid shall not be further evaluated.</p>
18. Clarification of Bid (from the Bidders)	<p>18.1 Bidders may request clarifications on any of the ITB documents no later than the date indicated in the BDS. Any request for clarification must be sent in writing in the manner indicated in the BDS. If inquiries are sent other than specified channel, even if they are sent to a UNDP staff member, UNDP shall have no obligation to respond or confirm that the query was officially received.</p>

	<p>18.2 UNDP will provide the responses to clarifications through the method specified in the BDS.</p> <p>18.3 UNDP shall endeavour to provide responses to clarifications in an expeditious manner, but any delay in such response shall not cause an obligation on the part of UNDP to extend the submission date of the Bids, unless UNDP deems that such an extension is justified and necessary.</p>
19. Amendment of Bids	<p>19.1 At any time prior to the deadline of Bid submission, UNDP may for any reason, such as in response to a clarification requested by a Bidder, modify the ITB in the form of an amendment to the ITB. Amendments will be made available to all prospective bidders.</p> <p>19.2 If the amendment is substantial, UNDP may extend the Deadline for submission of Bid to give the Bidders reasonable time to incorporate the amendment into their Bids.</p>
20. Alternative Bids	<p>20.1 Unless otherwise specified in the BDS, alternative Bids shall not be considered. If submission of alternative Bid is allowed by BDS, a Bidder may submit an alternative Bid, but only if it also submits a Bid conforming to the ITB requirements. Where the conditions for its acceptance are met, or justifications are clearly established, UNDP reserves the right to award a contract based on an alternative Bid.</p> <p>20.2 If multiple/alternative bids are being submitted, they must be clearly marked as "Main Bid" and "Alternative Bid"</p>
21. Pre-Bid Conference	<p>21.1 When appropriate, a pre-bid conference will be conducted at the date, time and location specified in the BDS. All Bidders are encouraged to attend. Non-attendance, however, shall not result in disqualification of an interested Bidder. Minutes of the Bidder's conference will be disseminated on the procurement website and shared by email or on the e-Tendering platform as specified in the BDS. No verbal statement made during the conference shall modify the terms and conditions of the ITB, unless specifically incorporated in the Minutes of the Bidder's Conference or issued/posted as an amendment to ITB.</p>
c. SUBMISSION AND OPENING OF BIDS	
22. Submission	<p>22.1 The Bidder shall submit a duly signed and complete Bid comprising the documents and forms in accordance with requirements in the BDS. The Price Schedule shall be submitted together with the Technical Bid. Bid can be delivered either personally, by courier, or by electronic method of transmission as specified in the BDS.</p> <p>22.2 The Bid shall be signed by the Bidder or person(s) duly authorized to commit the Bidder. The authorization shall be communicated through a document evidencing such authorization issued by the legal representative of the bidding entity, or a Power of Attorney, accompanying the Bid.</p> <p>22.3 Bidders must be aware that the mere act of submission of a Bid, in and of itself, implies that the Bidder fully accepts the UNDP General Contract Terms and Conditions.</p>
Hard (manual) submission	<p>22.4 Hard copy (manual) submission by courier or hand delivery allowed or specified in the BDS shall be governed as follows:</p> <p>a) The signed Bid shall be marked "Original", and its copies marked "Copy" as appropriate. The number of copies is indicated in the BDS. All copies shall be made from the signed original only. If there are discrepancies between the</p>

	<p>original and the copies, the original shall prevail.</p> <p>(b) The Technical Bid and Price Schedule must be sealed and submitted together in an envelope, which shall:</p> <ol style="list-style-type: none"> Bear the name of the Bidder; Be addressed to UNDP as specified in the BDS; and Bear a warning not to open before the time and date for Bid opening as specified in the BDS. <p>If the envelope with the Bid is not sealed and marked as required, UNDP shall assume no responsibility for the misplacement, loss, or premature opening of the Bid.</p>
Email and eTendering submissions	<p>22.5 Electronic submission through email or eTendering, if allowed as specified in the BDS, shall be governed as follows:</p> <ol style="list-style-type: none"> Electronic files that form part of the Bid must be in accordance with the format and requirements indicated in BDS; Documents which are required to be in original form (e.g. Bid Security, etc.) must be sent via courier or hand delivered as per the instructions in BDS. <p>22.6 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: http://www.undp.org/content/undp/en/home/operations/procurement/business/procurement-notice/resources/</p>
23. Deadline for Submission of Bids and Late Bids	<p>23.1 Complete Bids must be received by UNDP in the manner, and no later than the date and time, specified in the BDS. UNDP shall only recognise the actual date and time that the bid was received by UNDP</p> <p>23.2 UNDP shall not consider any Bid that is received after the deadline for the submission of Bids.</p>
24. Withdrawal, Substitution, and Modification of Bids	<p>24.1 A Bidder may withdraw, substitute or modify its Bid after it has been submitted at any time prior to the deadline for submission.</p> <p>24.2 Manual and Email submissions: A bidder may withdraw, substitute or modify its Bid by sending a written notice to UNDP, duly signed by an authorized representative, and shall include a copy of the authorization (or a Power of Attorney). The corresponding substitution or modification of the Bid, if any, must accompany the respective written notice. All notices must be submitted in the same manner as specified for submission of Bids, by clearly marking them as "WITHDRAWAL" "SUBSTITUTION," or "MODIFICATION"</p> <p>24.3 eTendering: A Bidder may withdraw, substitute or modify its Bid by Cancelling, Editing, and re-submitting the Bid directly in the system. It is the responsibility of the Bidder to properly follow the system instructions, duly edit and submit a substitution or modification of the Bid as needed. Detailed instructions on how to cancel or modify a Bid directly in the system are provided in the Bidder User Guide and Instructional videos.</p> <p>24.4 Bids requested to be withdrawn shall be returned unopened to the Bidders (only for manual submissions), except if the bid is withdrawn after the bid has been opened.</p>
25. Bid Opening	<p>25.1 UNDP will open the Bid in the presence of an ad-hoc committee formed by UNDP of at least two (2) members.</p> <p>25.2 The Bidders' names, modifications, withdrawals, the condition of the envelope labels/seals, the number of folders/files and all other such other details as UNDP may consider appropriate, will be announced at the opening. No Bid</p>

	<p>shall be rejected at the opening stage, except for late submissions, in which case, the Bid shall be returned unopened to the Bidders.</p> <p>25.3 In the case of e-Tendering submission, bidders will receive an automatic notification once the Bid is opened.</p>
D. EVALUATION OF BIDS	
26. Confidentiality	<p>26.1 Information relating to the examination, evaluation, and comparison of Bids, and the recommendation of contract award, shall not be disclosed to Bidders or any other persons not officially concerned with such process, even after publication of the contract award.</p> <p>26.2 Any effort by a Bidder or anyone on behalf of the Bidder to influence UNDP in the examination, evaluation and comparison of the Bids or contract award decisions may, at UNDP's decision, result in the rejection of its Bid and may subsequently be subject to the application of prevailing UNDP's vendor sanctions procedures.</p>
27. Evaluation of Bids	<p>27.1 UNDP will conduct the evaluation solely on the basis of the Bids received.</p> <p>27.2 Evaluation of Bids shall be undertaken in the following steps:</p> <ul style="list-style-type: none"> a) Preliminary Examination including Eligibility b) Arithmetical check and ranking of bidders who passed preliminary examination by price. c) Qualification assessment (if pre-qualification was not done) a) Evaluation of Technical Bids b) Evaluation of prices <p>Detailed evaluation will be focussed on the 3 - 5 lowest priced bids. Further higher priced bids shall be added for evaluation if necessary</p>
28. Preliminary Examination	<p>28.1 UNDP shall examine the Bids to determine whether they are complete with respect to minimum documentary requirements, whether the documents have been properly signed, and whether the Bids are generally in order, among other indicators that may be used at this stage. UNDP reserves the right to reject any Bid at this stage.</p>
29. Evaluation of Eligibility and Qualification	<p>29.1 Eligibility and Qualification of the Bidder will be evaluated against the Minimum Eligibility/Qualification requirements specified in the Section 4 (Evaluation Criteria).</p> <p>29.2 In general terms, vendors that meet the following criteria may be considered qualified:</p> <ul style="list-style-type: none"> a) They are not included in the UN Security Council 1267/1989 Committee's list of terrorists and terrorist financiers, and in UNDP's ineligible vendors' list; b) They have a good financial standing and have access to adequate financial resources to perform the contract and all existing commercial commitments, c) They have the necessary similar experience, technical expertise, production capacity, quality certifications, quality assurance procedures and other resources applicable to the supply of goods and/or services required; d) They are able to comply fully with the UNDP General Terms and Conditions of Contract;

	<p>e) They do not have a consistent history of court/arbitral award decisions against the Bidder; and</p> <p>f) They have a record of timely and satisfactory performance with their clients.</p>
30. Evaluation of Technical Bid and prices	<p>30.1 The evaluation team shall review and evaluate the Technical Bids on the basis of their responsiveness to the Schedule of Requirements and Technical Specifications and other documentation provided, applying the procedure indicated in the BDS and other ITB documents. When necessary, and if stated in the BDS, UNDP may invite technically responsive bidders for a presentation related to their technical Bids. The conditions for the presentation shall be provided in the bid document where required.</p>
31. Due diligence	<p>31.1 UNDP reserves the right to undertake a due diligence exercise, aimed at determining to its satisfaction, the validity of the information provided by the Bidder. Such exercise shall be fully documented and may include, but need not be limited to, all or any combination of the following:</p> <ul style="list-style-type: none"> a) Verification of accuracy, correctness and authenticity of information provided by the Bidder; b) Validation of extent of compliance to the ITB requirements and evaluation criteria based on what has so far been found by the evaluation team; c) Inquiry and reference checking with Government entities with jurisdiction on the Bidder, or with previous clients, or any other entity that may have done business with the Bidder; d) Inquiry and reference checking with previous clients on the performance on on-going or completed contracts, including physical inspections of previous works, as deemed necessary; e) Physical inspection of the Bidder's offices, branches or other places where business transpires, with or without notice to the Bidder; f) Other means that UNDP may deem appropriate, at any stage within the selection process, prior to awarding the contract.
32. Clarification of Bids	<p>32.1 To assist in the examination, evaluation and comparison of Bids, UNDP may, at its discretion, request any Bidder for a clarification of its Bid.</p> <p>32.2 UNDP's request for clarification and the response shall be in writing and no change in the prices or substance of the Bid shall be sought, offered, or permitted, except to provide clarification, and confirm the correction of any arithmetic errors discovered by UNDP in the evaluation of the Bids, in accordance with the ITB.</p> <p>32.3 Any unsolicited clarification submitted by a Bidder in respect to its Bid, which is not a response to a request by UNDP, shall not be considered during the review and evaluation of the Bids.</p>
33. Responsiveness of Bid	<p>33.1 UNDP's determination of a Bid's responsiveness will be based on the contents of the bid itself. A substantially responsive Bid is one that conforms to all the terms, conditions, specifications and other requirements of the ITB without material deviation, reservation, or omission.</p> <p>33.2 If a bid is not substantially responsive, it shall be rejected by UNDP and may not subsequently be made responsive by the Bidder by correction of the material deviation, reservation, or omission.</p>
34. Nonconformities,	<p>34.1 Provided that a Bid is substantially responsive, UNDP may waive any non-conformities or omissions in the Bid that, in the opinion of UNDP, do not</p>

Reparable Errors and Omissions	<p>constitute a material deviation.</p> <p>34.2 UNDP may request the Bidder to submit the necessary information or documentation, within a reasonable period, to rectify nonmaterial nonconformities or omissions in the Bid related to documentation requirements. Such omission shall not be related to any aspect of the price of the Bid. Failure of the Bidder to comply with the request may result in the rejection of its Bid.</p> <p>34.3 For the bids that have passed the preliminary examination, UNDP shall check and correct arithmetical errors as follows:</p> <ul style="list-style-type: none"> a) if there is a discrepancy between the unit price and the line item total that is obtained by multiplying the unit price by the quantity, the unit price shall prevail and the line item total shall be corrected, unless in the opinion of UNDP there is an obvious misplacement of the decimal point in the unit price; in which case, the line item total as quoted shall govern and the unit price shall be corrected; b) if there is an error in a total corresponding to the addition or subtraction of subtotals, the subtotals shall prevail and the total shall be corrected; and c) if there is a discrepancy between words and figures, the amount in words shall prevail, unless the amount expressed in words is related to an arithmetic error, in which case the amount in figures shall prevail. <p>34.4 If the Bidder does not accept the correction of errors made by UNDP, its Bid shall be rejected.</p>
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E. AWARD OF CONTRACT

35. Right to Accept, Reject, Any or All Bids	<p>35.1 UNDP reserves the right to accept or reject any bid, to render any or all of the bids as non-responsive, and to reject all Bids at any time prior to award of contract, without incurring any liability, or obligation to inform the affected Bidder(s) of the grounds for UNDP's action. UNDP shall not be obliged to award the contract to the lowest priced offer.</p>
36. Award Criteria	<p>36.1 Prior to expiration of the period of Bid validity, UNDP shall award the contract to the qualified and eligible Bidder that is found to be responsive to the requirements of the Schedule of Requirements and Technical Specification, and has offered the lowest price.</p>
37. Debriefing	<p>37.1 In the event that a Bidder is unsuccessful, the Bidder may request for a debriefing from UNDP. The purpose of the debriefing is to discuss the strengths and weaknesses of the Bidder's submission, in order to assist the Bidder in improving its future Bids for UNDP procurement opportunities. The content of other Bids and how they compare to the Bidder's submission shall not be discussed.</p>
38. Right to Vary Requirements at the Time of Award	<p>38.1 At the time of award of Contract, UNDP reserves the right to vary the quantity of goods and/or services, 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.</p>
39. Contract Signature	<p>39.1 Within fifteen (15) days from the date of receipt of the Contract, the successful Bidder shall sign and date the Contract and return it to UNDP. Failure to do so may constitute sufficient grounds for the annulment of the award, and forfeiture of the Bid Security, if any, and on which event, UNDP may award the Contract to the Second highest rated or call for new Bids.</p>

40. Contract Type and General Terms and Conditions	40.1 The types of Contract to be signed and the applicable UNDP Contract General Terms and Conditions, as specified in BDS, can be accessed at http://www.undp.org/content/undp/en/home/procurement/business/how-we-buy.html
41. Performance Security	41.1 A performance security, if required in the BDS, shall be provided in the amount specified in BDS and form available at https://popp.undp.org/_layouts/15/WopiFrame.aspx?sourcedoc=/UNDP_POPP_DOCUMENT_LIBRARY/Public/PSU_Solicitation_Performance%20Guarantee%20Form.docx&action=default within a maximum of fifteen (15) days of the contract signature by both parties. Where a performance security is required, the receipt of the performance security by UNDP shall be a condition for rendering the contract effective.
42. Bank Guarantee for Advanced Payment	42.1 Except when the interests of UNDP so require, it is UNDP's standard practice to not make advance payment(s) (i.e., payments without having received any outputs). If an advance payment is allowed as per the BDS, and exceeds 20% of the total contract price, or USD 30,000, whichever is less, the Bidder shall submit a Bank Guarantee in the full amount of the advance payment in the form available at https://popp.undp.org/_layouts/15/WopiFrame.aspx?sourcedoc=/UNDP_POPP_DOCUMENT_LIBRARY/Public/PSU_Contract%20Management%20Payment%20and%20Taxes_Advanced%20Payment%20Guarantee%20Form.docx&action=default
43. Liquidated Damages	43.1 If specified in the BDS, UNDP shall apply Liquidated Damages for the damages and/or risks caused to UNDP resulting from the Contractor's delays or breach of its obligations as per Contract.
44. Payment Provisions	44.1 Payment will be made only upon UNDP's acceptance of the goods and/or services performed. The terms of payment shall be within thirty (30) days, after receipt of invoice and certification of acceptance of goods and/or services issued by the proper authority in UNDP with direct supervision of the Contractor. Payment will be effected by bank transfer in the currency of the contract.
45. Vendor Protest	45.1 UNDP's vendor protest procedure provides an opportunity for appeal to those persons or firms not awarded a contract through a competitive procurement process. In the event that a Bidder believes that it was not treated fairly, the following link provides further details regarding UNDP vendor protest procedures: http://www.undp.org/content/undp/en/home/procurement/business/protest-and-sanctions.html
46. Other Provisions	<p>46.1 In the event that the Bidder offers a lower price to the host Government (e.g. General Services Administration (GSA) of the federal government of the United States of America) for similar goods and/or services, UNDP shall be entitled to the same lower price. The UNDP General Terms and Conditions shall have precedence.</p> <p>46.2 UNDP is entitled to receive the same pricing offered by the same Contractor in contracts with the United Nations and/or its Agencies. The UNDP General Terms and Conditions shall have precedence.</p> <p>46.3 The United Nations has established restrictions on employment of (former) UN staff who have been involved in the procurement process as per bulletin</p>

	ST/SGB/2006/15 http://www.un.org/en/ga/search/view_doc.asp?symbol=ST/SGB/2006/15&referer
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SECTION 3. BID DATA SHEET

The following data for the civil works to be procured shall complement, supplement, or amend the provisions in the Invitation to Bid. In the case of a conflict between the Instructions to Bidders, the Bid Data Sheet, and other annexes or references attached to the Bid Data Sheet, the provisions in the Bid Data Sheet shall prevail.

BD S No .	Ref. to Section.2	Data	Specific Instructions / Requirements
1	7	Language of the Bid	English
2		Submitting Bids for Parts or sub-parts of the Schedule of Requirements (partial bids)	<p>Allowed.</p> <p>The ITB document defines 2 lots:</p> <p>Lot 1: Civic Amenity Center- Demirciler/Kilis</p> <p>Lot 2: Civic Amenity Center- Haliliye/Şanlıurfa</p> <p>Bidders can submit their bids for either one of the two lots or both lots. However, they are not allowed to submit a bid for only some part of a specific lot.</p> <p>UNDP will award the contract to one Bidder for each Lot.</p>
3	20	Alternative Bids	Shall not be considered
4	21	Pre-Bid conference	<p>Will be Conducted</p> <p>Time: 11:00 am (GMT +3, Local time-Turkey)</p> <p>Date: September 11, 2020 (Friday)</p> <p>Venue: Zoom meeting (Meeting ID will be shared with participants)</p> <p>Please be informed that E-tendering guidance session will also be conducted following the pre-bid conference to guide bidders on how to prepare their bids through e-tendering. E-tendering session will be provided in Turkish and/or English.</p> <p>Prospective bidders are highly encouraged to visit following page for system user guides and videos in different languages before attending to the Guidance Session:</p> <p>http://www.undp.org/content/undp/en/home/operations/procurement/business/procurement-notice/resources/</p> <p>Prospective Bidders who wish to participate in the Pre-Bid conference and e-tendering guiding session, shall contact following focal person for</p>

			<p>arrangement <u>no later than 10 September 2020 (Tuesday) 14:00 hrs. (GMT +3, Local time-Turkey)</u></p> <p>Focal person: Ümit ALSAÇ, Procurement Officer</p> <p>E-mail: tr.procurement@undp.org</p> <p>Considering Covid-19 related travel restrictions and risks, site visits <u>will not be conducted</u> in order to examine the sites of Work and their surroundings.</p> <p>For bidders who would like to be informed about the locations of sites, or visit the sites at their own expense, the coordinates are listed below:</p> <p>The location of sites:</p> <p>For Lot 1, Saraç Mehmet Çavuş ,79000 Demirciler/Kilis,, the coordinates of the construction site are 36°43'24.9"N 37°06'59.5"E (GoogleMaps)</p> <p>For Lot 2, Konuklu 63290 Haliliye/Şanlıurfa,, the coordinates of the construction site are 37°07'44.7"N, 38°50'29.9"E (GoogleMaps).</p> <p>It is the bidders' responsibility to consider Covid-19 related risks in the case they visit the locations of the sites mentioned above. UNDP is not responsible for any Covid-19 related events and health issues that may arise during and after the site visits.</p> <p>The contractor to be identified through this procurement process shall not be entitled to receive any payment due to unexpected costs that are caused by its failure to participate in the Pre-bid conference and/or not conducting a site visit.</p>
5	16	Bid Validity Period	90 days starting from the submission deadline
6	12	Bid Security	<p>Required;</p> <p>-In the amount of;</p> <p>USD 5,000.00 for Lot 1- Civic Amenity Center- Demirciler/Kilis;</p> <p>USD 4.000,00 for Lot 2- Civic Amenity Center- Haliliye/Şanlıurfa</p> <p>If bidders submit bids for both lots, bid securities shall be submitted separately for each lot.</p> <p>Acceptable Forms of Bid Security: Bank Guarantee (See Section 6, Form F for the template)</p> <ul style="list-style-type: none"> ▪ Bid Security shall be in English as per the template ▪ Currency of the Bid Security shall be in USD as per the amounts indicated above

			<ul style="list-style-type: none"> No change shall be made to the template except for fields indicated in the template Bid Security shall be valid until 30 days after the expiry of Bid Validity Period. (i.e. 90 days after bid submission deadline) Original Bid Security(ies) <u>shall be delivered to the below address on or before the submission deadline indicated in e-tendering system</u>, with a PDF copy submitted as part of the electronic submission. <p>Focal Point: Ümit ALSAÇ, Procurement Officer</p> <p>Yıldız Kule, 21st Floor, Dikmen Mahallesi, Turan Güneş Bulvarı, No:106, 06550, Çankaya, Ankara, Turkey</p>
7	42	Advanced Payment upon signing of contract	Not allowed.
8	43	Liquidated Damages	<p>Will be imposed as follows:</p> <p>Percentage of contract price per day of delay beyond 150 days of completion period (for each lot separately) after Access to the Site by UNDP and the contractor: 0,25%</p> <p>Max. number of days of delay is 35, after which UNDP reserves the right to terminate the contract.</p>
9	41	Performance Security	<p>Required in the amount of 10% of the total contract amount</p> <p>Note: Performance Security will be a condition for signing the contract. Contract will be signed after receipt of performance security from the successful bidder.</p> <p>Performance security must be provided no later than 15 days after the bidder receives the award letter from UNDP. If the selected bidder fails to provide the security within this period, UNDP reserves the right to sign the contract with "Second lowest priced technically compliant bidder".</p> <p>The Performance Security must be issued by an accredited bank, in the format included in Appendix I to UNDP General Conditions of Contract for Civil Works and must be valid up to twenty-eight days after issuance of the Certificate of Final Completion. The Performance Security will only be released</p>

			upon the issuance of Certificate of Final Completion in accordance with the Clause 10 of the UNDP General Conditions of Contract for Civil Works.
10	13	Currency of Bid	United States Dollar
11	18	Deadline for submitting requests for clarifications/ questions	7 days before the submission deadline
12	18	Contact Details for submitting clarifications/questions	Focal Person in UNDP: Ümit ALSAÇ, Procurement Officer Address: Yıldız Kule, Yukari Dikmen Mah. Turan Gunes Blv. No:106 06550, Cankaya/Ankara E-mail address: tr.procurement@undp.org
13	18, 19 and 21	Manner of Disseminating Supplemental Information to the ITB and responses/clarifications to queries	Posted directly to e-Tendering
14	23	Deadline for Submission of Bids via UNDP e-Tendering System	September 23, 2020, 07:00 am (EST/EDT New York Time) September 23, 2020, 14:00 pm (Turkey Local Time)
15	22	Allowable Manner of Submitting Bids	E-Tendering only EVENT ID: ITB-20-08 This procurement process is being conducted through the online tendering system of UNDP. Bidders who wish to submit an offer must be registered in the system. Visit this page for system user guides and videos in different languages: http://www.undp.org/content/undp/en/home/operations/procurement/business/procurement-notices/resources/ If already registered, go to https://etendering.partneragencies.org and sign in using your username and password. Use "Forgotten password" link if you do not remember your password. Do not create a new profile. If you have never registered in the system before, you can register by visiting

			<p>the link below and follow the instructions in the user guide (attached): https://etendering.partneragencies.org</p> <ul style="list-style-type: none"> •Username: event.guest •Password: why2change <p>It is strongly recommended to create a username with two parts: your first name and last name separated by a ".", (similar to the one shown above). Once registered you will receive a valid password to the registered email address which you can use for signing in and changing your password.</p> <p>Please note that your new password should meet the following criteria:</p> <ul style="list-style-type: none"> • Minimum 8 characters • At least one UPPERCASE LETTER • At least one lowercase letter • At least one number <p>You can view and download tender documents with the guest account as per the above username and password, However, if you are interested to participate, you must register in the system and subscribe to this tender to be notified when amendments are made.</p>
16	22	Bid Submission Address	<p>Bids shall be submitted through UNDP e-tendering system. However, <u>original bid security(ies)</u> shall be delivered to the below address with a PDF copy submitted as part of the electronic submission on or before the submission deadline indicated in e-tendering system:</p> <p>Although bids shall be submitted through e-tendering, UNDP reserves the right to request original copies of the documents submitted as part of the bids during evaluation period, if required.</p> <p>Focal Point: Ümit ALSAÇ, Procurement Officer Yıldız Kule, 21st Floor, Dikmen Mahallesi, Turan Güneş Bulvarı, No:106, 06550, Çankaya, Ankara, Turkey</p>
18	22	Electronic submission (email or eTendering) requirements	<p>EVENT ID: ITB-20-08</p> <p>File names must be maximum 60 characters long and must not contain any letter or special/Turkish character other than from Latin alphabet/keyboard.</p> <p>All files must be free of viruses and not corrupted.</p> <p>Max. File Size per transmission: 45MB</p>
19	25	Date, time and venue for the opening of bid	<p>Public Opening will be conducted.</p> <p>Bidders will receive notification through e-tendering when bids are opened.</p> <p>In addition, the bidders will be invited to a public bid opening session to be conducted via Zoom to demonstrate lot prices which are not provided in Public Bid Opening Notification that is submitted to bidders via UNDP E-Tendering system.</p> <p>The date, time and Zoom meeting information will be notified to bidders after the due date and time for submission of bids.</p>

20	27, 36	Evaluation Method for the Award of Contract	Lowest priced technically responsive, eligible and qualified bid for each lot.
21		Expected date for commencement of Contract	Contract is expected to be signed in October 2020.
22		Maximum expected duration of contract	<p>For each lot, separately 180 days (150 days for completion of the works+30 days for acceptance and final payment to the Contractor), starting from the date on which the Contractor will be given Access to the Site and receive a notice from the UNDP Engineer to commence the Works and ending on the date of substantial completion of Works stated in the Certificate of Substantial Completion.</p> <p>If the Contractor is awarded the contract for both lots, then the total expected duration of the contract will be 180 days (150 days for completion of the works+30 days for acceptance and final payment to the Contractor) <u>for completion and acceptance of both Civic Amenity Centers.</u></p> <p>As stated in the General Conditions of Contract for Civil Works, clause 47.1; "Defects Liability Period" is 12 months calculated from the date of completion of the Works stated in the Certificate of Substantial Completion issued by the UNDP Engineer.</p>
23	35	UNDP will award the contract to:	<p>One or more Bidders, depending on the following factors: UNDP will award the contract to one Bidder for each LOT or one Bidder for both LOTs.</p> <p>Each lot will form a separate contract and the works for different lots will be indivisible. If the bidder is awarded more than one lot, a single contract may be concluded covering all those lots.</p>
24	40	Type of Contract	<p>Contract for Civil Works</p> <p>http://www.undp.org/content/undp/en/home/procurement/business/how-we-buy.html</p>
25	40	UNDP Contract Terms and Conditions that will apply	<p>UNDP General Terms and Conditions for Works</p> <p>http://www.undp.org/content/undp/en/home/procurement/business/how-we-buy.html</p>
26	44	Payment Provisions	<p>Pricing Structure;</p> <p>The contract is based on unit price, and the final price of the Contract will be determined on the basis of actual quantities of work and materials utilized in the complete and satisfactory performance of the Works as certified by the Engineer and the unit prices contained in the Contractor's financial proposal. Such unit prices are fixed and are not subject to any variation whatsoever. Unless the technical specifications or the Bill of Quantities specifically and expressly state otherwise, only permanent works are to be measured and paid for by UNDP.</p> <p>Payment Terms;</p>

			<p>The Contractor shall submit monthly invoices (reflecting the monthly work performed and materials utilized every month for the work performed and materials utilized every month as accepted by UNDP through the "Monthly Progress Reports") and a final invoice within 30 days from the issuance of the Certificate of Substantial Completion by the Engineer.</p> <p>UNDP shall affect payment of the invoices after receipt of the certificate of payment issued by the Engineer, approving the amount contained in the invoice. The Engineer may make corrections to that amount, in which case UNDP may affect payment for the amount so corrected. The Engineer may also withhold invoices if the work is not performed at any time in accordance with the terms of the Contract or if the necessary insurance policies or performance security are not valid and/or in order. The Engineer shall process the invoices submitted by the Contractor within 15 days of their receipt. Invoices will be paid within thirty (30) days of the date of their receipt and acceptance by UNDP.</p> <p>Currency of Payment;</p> <p>If the Contractor is registered and operating in Turkey, the payment shall be realized in Turkish Liras (TRY). Contract price will be converted from United States Dollar (USD) to Turkish Liras (TRY) by the UN operational rate of exchange¹ valid on the date of money transfer. Otherwise, the payments shall be affected in United States Dollar.</p>
27		Taxation	<p>UN and its subsidiary organs are exempt from all taxes. Therefore, Bidders shall prepare their financial bids excluding Value Added Tax (VAT). It is the Bidder's responsibility to learn from relevant authorities (Ministry of Treasury and Finance) and/or to review /confirm published procedures and to consult with a certified financial consultant as needed to confirm the scope and procedures of VAT exemption application as per VAT Law, Ministry of Treasury and Finance General Communiqués. The contractor selected for the award shall not be entitled to receive any amount over its bid price in relation to VAT, Special Consumption Tax and any other applicable taxes.</p>
28	14	Joint Venture, Consortium or Association	<p>Not allowed.</p>
29		Other Information	<p>1) Women owned and managed businesses are especially encouraged to apply to this ITB.</p> <p>2) The documents that will be attached to Form B: Bidder Information Form (such as <i>Certificate of Incorporation/Business Registration and Power of Attorney</i>) and Form D: Eligibility and Qualification Form (such as <i>balance sheets and experience certificates</i>) can be submitted in local languages in the case that they are provided only in the local language by issuing authorities. In that case, the English translations of these documents shall be submitted by Bidders along with original documents in the local language. UNDP reserves the right to request notarized versions of these translations any time</p>

¹ Available at the website: <https://treasury.un.org/operationalrates/OperationalRates.php#E>

			during the evaluation.
30	COVID-19 Specific Measures	<p>The Bidders shall review all local regulations, as well as that of UN and UNDP concerning the measures they must take during performance of the contract in the context of COVID-19, before they submit their bids and factor relevant costs, if any, to their bids.</p> <p>The Contractor shall take all measures against COVID-19, imposed by local regulations as well as by UN and UNDP during performance of the contract, to protect health and social rights of its own personnel, as well as UNDP personnel, Project Stakeholders and third parties.</p> <p>Pursuant to "Clause 12- Indemnification" of UNDP General Terms and Conditions for Contracts (<i>given in Item 40. "Contract Type and General Terms and Conditions" in Section 2. Instruction to Bidders of the ITB document</i>), the Contractor shall indemnify, defend, and hold and save harmless, UNDP, and its officials, agents and employees, from and against all suits, proceedings, claims, demands, losses and liability of any kind or nature brought by any third party against UNDP, including, but not limited to, all litigation costs and expenses, attorney's fees, settlement payments and damages, based on, arising from, or relating to COVID-19 measures that must be taken by the Contractor in the context of the contract.</p> <p>UNDP shall not be held accountable for any COVID-19 related health risks or events that are caused by negligence of the Contractor and/or any other third party.</p>	
31	Contingency and variations	<p>The contingency allowance to manage variations for the unforeseen and unknown additional components of Works within the overall general scope is maximum 15% of the contract price. However, it shall only be accessed by the Contractor upon the approval by the UNDP Engineer, who will obtain prior approval from UNDP as the Employer.</p> <p>The project engineer (employer's representative) may use this contingency with no additional procurement process to manage variations with the approval of UNDP. Any variation that utilizes the contingency but is not covered by rates in the BOQ or schedule of rates shall be subject to a value for money analysis by the Engineer and UNDP.</p> <p>The contingency allowance shall not be used to compensate the Contractor for its fault to include required items in the Bill of Quantities as per Schedule of Requirements/Technical Specifications or unreasonably low unit prices of one or more of the items included in the submitted Bill of Quantities.</p>	

SECTION 4. EVALUATION CRITERIA

Preliminary Examination Criteria

Bids will be examined to determine whether they are complete and submitted in accordance with ITB requirements as per below criteria on a Yes/No basis:

- Appropriate signatures
- Power of Attorney
- Minimum Bid documents provided
- Bid Validity
- Bid Security submitted as per ITB requirements with compliant validity period

Minimum Eligibility and Qualification Criteria

Eligibility and Qualification will be evaluated on a Pass/Fail basis.

Subject	Criteria	Document Submission requirement
ELIGIBILITY		
Legal Status	Vendor is a legally registered entity.	Form B: Bidder Information Form
Eligibility	Vendor is not suspended, nor debarred, nor otherwise identified as ineligible by any UN Organization or the World Bank Group or any other international Organization in accordance with ITB clause 3.	Form A: Bid Submission Form
Conflict of Interest	No conflicts of interest in accordance with ITB clause 4.	Form A: Bid Submission Form
Bankruptcy	Has not declared bankruptcy, is not involved in bankruptcy or receivership proceedings, and there is no judgment or pending legal action against the vendor that could impair its operations in the foreseeable future.	Form A: Bid Submission Form
Certificates and Licenses	<ul style="list-style-type: none">▪ Power of Attorney▪ Official appointment as local representative, if Bidder is submitting a Bid on behalf of an entity located outside the country	Form B: Bidder Information Form
QUALIFICATION		
History of Non-Performing Contracts²	Non-performance of a contract did not occur as a result of contractor default for the last 3 years.	Form D: Qualification Form
Litigation History	No consistent history of court/arbitral award decisions against the	Form D: Qualification

² Non-performance, as decided by UNDP, shall include all contracts where (a) non-performance was not challenged by the contractor, including through referral to the dispute resolution mechanism under the respective contract, and (b) contracts that were so challenged but fully settled against the contractor. Non-performance shall not include contracts where Employers decision was overruled by the dispute resolution mechanism. Non-performance must be based on all information on fully settled disputes or litigation, i.e. dispute or litigation that has been resolved in accordance with the dispute resolution mechanism under the respective contract and where all appeal instances available to the Bidder have been exhausted.

	Bidder for the last 3 years.	Form
Previous Experience	Minimum 3 (three) years of relevant experience in the construction field.	Form D: Qualification Form
	<p>The Bidder must have successfully completed, as the prime contractor, minimum one civil works contract of similar nature (<i>construction of reinforced concrete buildings involving steel structure works, all kinds of industrial facilities and factories, waste disposal facilities, waste management facilities, civic amenity centers or waste transfer stations.</i>) each at a minimum value of USD 250.000,00 over the last 5 years.</p> <p>In the case of submission of a bid for two lots, then the bidder shall have successfully completed, as the prime contractor, minimum two civil works contracts of nature and value specified above,</p> <p>or,</p> <p>minimum one civil contract of nature specified above, each at a minimum value of USD 500.000,00 over the last 5 years.</p> <p>Note: Renovation, rehabilitation and restoration works will not be considered as similar experience.</p> <p>Bidders shall substantiate the claimed experiences by presenting copies of Satisfactory Work Completion Certificates from Clients demonstrating nature and value of the civil work successfully completed.</p> <p>UNDP reserves the right to request submission of originals of all proof documents (<i>such as contracts, invoices, acceptance reports etc.</i>) as well as further information/documentation from both the bidder and its clients.</p>	Form D: Qualification Form
Financial Standing	<p>Minimum average annual turnover of;</p> <ul style="list-style-type: none"> - USD 250.000,00 for the last 3 fiscal years (i.e. 2017, 2018, 2019) if bid submitted only for Lot 1; - USD 200.000,00 for the last 3 fiscal years (i.e. 2017, 2018, 2019) if bid submitted only for Lot 2; - USD 450.000,00 for the last 3 fiscal years (i.e. 2017, 2018, 2019) if bid submitted for Lot 1 and Lot 2 together. <p><i>(The amount of business done in a year, income generated from on-going works and income generated from works undertaken shall be considered as part of the turnover)</i></p>	Form D: Qualification Form
Technical Evaluation	The technical bids shall be evaluated on a pass/fail basis for compliance or non-compliance with the technical specifications identified in the bid document.	Form E: Technical Bid Form
Financial Evaluation	<p>Detailed analysis of the price schedule based on requirements listed in Section 5 and quoted for by the bidders in Form F.</p> <p>Price comparison shall be based on the total estimated price for all the quantities set out in the Bill of Quantities.</p>	Form F: Price Schedule Form

SECTION 5A: SCHEDULE OF REQUIREMENTS AND TECHNICAL SPECIFICATIONS

The Works for “Construction of Civic Amenity Centers in Demirciler/Kilis and Haliliye/Şanlıurfa” comprises two lots;

Lot 1; Construction of Civic Amenity Center in Demirciler/Kilis

Lot 2; Construction of Civic Amenity Center in Haliliye/Şanlıurfa

Unless otherwise stipulated in the related sections of technical specifications, the following sections shall take precedence over one another in the following order in terms of technical specifications/requirements;

1) Section 5A.1 Statement of Works/Technical Specifications

2) Section 5A.2 Specifications for Items/Pose Definitions

3) Section 5A.3 Design Drawings

SECTION 5A.1 STATEMENT OF WORKS / TECHNICAL SPECIFICATIONS

1. GENERAL

1.1. INTRODUCTION AND BACKGROUND

UNDP supports the Government of Turkey to respond to this large-scale displacement through its Syria Crisis Response and Resilience Programme in Turkey to strengthen the resilience of refugees, host community members, local municipalities and relevant national institutions to cope with and recover from the impact. UNDP's resilience response strategy is to invest in existing national and local systems to ensure they can adequately serve both host and refugee communities. As part of this programme, UNDP will implement the Effective Urban Waste Management for Host Communities Phase II: Strengthening Social Cohesion through Participatory Waste Management Project (2019-2020) , funded by United States Bureau of Population and Refugee Management (USBPRM Fund).

The Project aims;

- to contribute strengthened the social cohesion between the Syrian and host community members in the South-eastern Anatolia Region,
- to improve waste management practices and reduce the negative impact to the local environment and public health.
- to strengthen recycling capacities of municipalities, Syrians and local community members,
- to provide vocational trainings in relevant areas, to ensure informed and trained recyclers have the potential to be environmental stewards for the local community
- to support community driven and collective incentives to transform the recyclables into new products, adding value to the materials and expanding the capacity of generating income for of Syrians and host communities
- to provide livelihoods options, bringing Syrians and host community members together over common economic and environmental interests

The project will achieve its targets through;

- construction of two Civic Amenity Centres in Kilis and Haliliye district of Şanlıurfa Province,
- provision of support to institutional capacity building of Kilis and Şanlıurfa-Haliliye Municipalities in terms of establishment of a system for zero waste management,
- provision of awareness raising activities on Zero Waste Management targeting households, schools, government institutions,
- supply of equipment to the municipalities; vehicles, containers, ateliers to be established for recycling, etc.
- provision of vocational training to women (Syrian and host community member) to enable them to be involved in the local market and strengthen the social cohesion,

The outputs of the project are as follows;

- 10,000 households engaged in community based zero waste management system
- 2 Civic Amenity Centers established (1 in Haliliye-Şanlıurfa, 1 in Kilis)
- 2,500 tones/annum recyclables collected
- 20 % of savings per ton of solid waste achieved within operations at targeted province and districts
- 2 women's collectives established, or existing ones supported to be made operational

For Lot 1;

In the scope of this contract, a **Civic Amenity** center in **Demirciler** district of **Kilis** will be constructed. Center will be mainly composed of **Civic Amenity** divisions, administrative building, intra-site roads and landscaping.



For Lot 2;

In the scope of this contract, a **Civic Amenity** center in **Haliliye** district of **Şanlıurfa** will be constructed. Center will be mainly composed of **Civic Amenity** divisions, administrative building, intra-site roads and landscaping.



1.2. DEFINITION AND SCOPE OF THE CONTRACT

1.2.1. Definition

This contract comprises;

For Lot 1; Construction of Civic Amenity Center in Demirciler/Kilis.

For Lot 2; Construction of Civic Amenity Center in Haliliye/Şanlıurfa.

The centers will contain fourteen types of waste collection divisions as first class waste collection center. These divisions will be for wood, glass, textile, paper, plastic, voluminous wastes, metal, fluorescent lamp/mercury wastes, oil, batteries, leaded mercury batteries, medicine, dangerous waste, electrical electronics.

1.2.2. Scope of Works

The works mainly consist of:

- Excavation and filling for all designed structures according to the site excavation plan.
- Construction of Waste Collection Center including structural, architectural, mechanical, electrical and landscape works detailed with drawings and technical specifications for the buildings
- Providing all "as-built drawings" and all summary tables of laboratory results at the end of the Works, fully describing the finalized Permanent Works.

In all construction and manufacturing, the provisions of the Technical Specifications shall be obeyed.

Before erection/installation for all materials, the contractor shall request prior approval from the engineer.

All measurements given on the drawings shall be checked on-site by the Contractor. The Contractor shall prepare the shop drawings accordingly and get the approval of the Engineer before starting the construction.

The Contractor shall be responsible for taking all the necessary health & safety measures according to the relevant legislations until the taking over of the works by the Employer.

The works shall be executed under this contract, as mentioned in detail, in the Technical Specifications and on Drawings, together with all related civil works.

The scope of civil, electrical and mechanical works includes the supply, installation, testing and commissioning.

The Contractor shall prepare shop drawings and as-built drawings for Engineer's approval, during the execution of the relevant stages of permanent works. The Employer and/or Engineer may request variations and/or additional works to be designed by the Contractor. The variations or new design works shall be carried out in accordance with the provisions of Technical Specifications and subject to Engineer's approval.

1.2.3. Construction Site

LOT 1; Civic Amenity Center in Kilis

The **Kilis** allocated working field's area of **1111m2**. Construction site is **1111m2** located within the borders of Demirciler, Kilis, and field coordinates are given below:

WASTE COLLECTION CENTER WORKING FIELD COORDINATE / ATIK GETİRME MERKEZİ ÇALIŞMA SAHASI KOORDİNATI

NOKTA NO	Z	X	Y
POINT NAME			
1	697.16	4066413.294	599717.755
2	696.69	4066413.258	599742.754
3	696.62	4066408.826	599742.755
4	696.52	4066408.8266	599757.754
5	696.63	4066383.8266	599757.750
6	696.85	4066383.833	599717.750

ALLOCATED FIELD AREA TAHSİS EDİLMİŞ ARAZİ ALANI	1111 m2
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PERIMETER WALL-FENCE FIELD COORDINATE / ÇEVRE DUVARI- ÇİTİ KOORDİNATI

NOKTA NO	Z	X	Y
POINT NAME			
TC.1	696.53	4066376.86	599710.00
TC.2	699.03	4066445.97	599709.90
TC.3	701.75	4066494.68	599710.27
TC.4	701.75	4066494.81	599716.02
TC.5	698.77	4066446.58	599715.69
TC.6	697.88	4066443.61	599722.71
TC.7	697.88	4066442.22	599768.52
TC.8	697.88	4066437.36	599768.40
TC.9	697.84	4066437.20	599774.94
TC.10	697.90	4066431.07	599775.04
TC.11	697.02	4066379.58	599775.41

LOT 2; Civic Amenity Center in Haliliye/Şanlıurfa

The **Haliliye** allocated working field's area of **1000m²**. Construction site is **1000m²** located within the borders of Haliliye, Şanlıurfa, and field coordinates are given below:

WASTE COLLECTION CENTER WORKING FIELD COORDINATE / ATIK GETİRME MERKEZİ ÇALIŞMA SAHASI KOORDİNATI

NOKTA NO	Z	X	Y
POINT NAME			
1	458.48	4110896.75	485912.73
2	458.455	4110886.13	485935.74
3	458.42	4110851.51	485921.38
4	458.21	4110861.32	485897.53
5	458.23	4110865.24	485899.09
6	458.37	4110875.43	485903.39
7	458.45	4110888.15	485908.82
8	458.60	4110896.75	485912.73

1.3. SPECIFICATIONS AND STANDARDS

Equivalency of Standards and Codes

Wherever reference is made in the Contract to specific standards and codes to be met by the goods and materials to be furnished, and work performed or tested, the provisions of the latest current edition or revision of the relevant standards and codes in effect shall apply, unless otherwise expressly stated in the Contract. Where such standards and codes are national or related to a particular country or region, other authoritative international standards that ensure substantially equal or higher quality than the specified standards and codes should be acceptable subject to the Engineer's prior review and written consent. Differences between the standards specified and the proposed alternative standards shall be fully described in writing by the Contractor and submitted to the Engineer at least 7 days prior to the date when the Contractor desires Engineer's consent. In the event the Engineer determines that such proposed deviations do not ensure substantially equal or higher quality, the Contractor shall comply with the standards specified in the documents.

During the implementation and management of all issues of the Works; the standards, specifications and principles shall be adhered to in the management, design, construction, testing and acceptance and commissioning of all works.

1.3.1. Standards

The Contractor shall comply with the last updated editions of the following standards, in the order of precedence as listed, in the design, implementation, testing, acceptance and operation of all works within the scope of the tender. In circumstances for which there is no description in the following standards, it shall be permitted to use the last updated editions of other national and international standards on condition that the Engineer accepts.

- Turkish Standards (TS),
- European Norm (EN),
- International Standards Organization (ISO),

1.3.2. Legislation

The Contractor shall execute and complete the Works in strict accordance with applicable legislation of Turkey.

1.3.3. Specifications

The Contractor shall execute and complete the Works in strict accordance with the last updated editions of;

- Republic of Turkey Ministry of Environment and Urbanization "Construction Works, Civil, Mechanical Works and Electrical Works General Technical Specifications"³
- Republic of Turkey General Directorate of Highways "Highways Technical Specifications"
- Union of Chambers of Turkish Engineers and Architects, Chamber of Landscape Architects Publication; Technical Specifications for Landscape Works
- Republic of Turkey İlbank construction works technical specifications.
- Republic of Turkey PTT Turkish Post construction works technical specifications.

1.4. SITE

Refer to provisions stipulated in Clauses 11, 32, 33, 37, 39, 41 and Sub-Clauses 6.2, 34.2 of the General Conditions of Contract.

1.4.1. Arrangement of the Site

The ground levels of the Site shall not be changed without the permission of the Engineer and no infrastructure, structure or tree shall be removed or permanent structure shall be built without the Engineer's prior approval.

The Contractor shall construct temporary parking areas, loading and unloading areas, open storage areas, approach and internal roads, temporary facilities to facilitate its methodology and order of construction of the Works.

1.4.2. Site Requirements

Provision of all the necessary utility requirements on site, such as electricity, water, gas, etc. during the execution of the works shall be under the responsibility of the Contractor.

Application to the relevant authorities for subscription to provide utility connections shall also be under the responsibility of the Contractor. All costs of the consumptions on site shall be covered by the Contractor.

Any temporary fencing used by the contractor to protect the works shall be appropriate for the task to keep the public from danger and protect the workers.

³Applicable communiques:

- "Communique related to Construction Works, Civil, Mechanical Works and Electrical Works General Technical Specifications" issued by Ministry of Public Works and Settlement, published in Official Gazette of Republic of Turkey no: 29459, dated 28 August 2015(complementary version) available at <http://www.resmigazete.gov.tr/eskiler/2007/06/20070630M1-1.htm>
- "Communique related to making amendmends on communique related to Construction Works, Civil, Mechanical Works and Electrical Works General Technical Specifications" issued by Ministry of Public Works and Settlement, published in Official Gazette of Republic of Turkey no: 27853, dated 21 February 2011 available at: <http://www.resmigazete.gov.tr/main.aspx?home=http://www.resmigazete.gov.tr/eskiler/2011/02/20110221.htm&main=http://www.resmigazete.gov.tr/eskiler/2011/02/20110221.htm>
- "Communique related to making amendmends on communique related to Construction Works, Civil, Mechanical Works and Electrical Works General Technical Specifications" issued by Ministry of Environment and Urbanisation, published in Official Gazette of Republic of Turkey no: 30352, dated 06 March 2018 available at: http://sgb.csb.gov.tr/mevzuat/dosyalar/r_20180306093845756_03c559f6-993f-40e1-9009-6701e836970d.pdf

The Contractor shall erect such fencing as soon as he is given possession of the relevant portion of the Site. The Contractor shall regularly inspect and maintain all such fencing, any defects being made good without delay.

Access shall be provided in temporary site fencing as necessary for the use of the occupiers of adjacent properties.

Temporary site fencing shall remain in position until the Works are sufficiently completed to enable that portion of the Site to be brought into use without danger to the public.

1.4.2.1. Site Temporary Buildings

The Contractor shall provide offices, dining halls and accommodation places for his own personnel, Subcontractors and furnish and maintain these places.

1.4.2.2. Temporary Water Supply

The Contractor shall supply and distribute water both for the personnel and for the Works. All of the piping, storage and similar main and intermediate systems shall be established in accordance with drawings and specifications. In the event that the municipal water supply is not available in sufficient amounts or pressure, additional supplies shall be provided by the Contractor.

It is the responsibility of the Contractor to provide all necessary back-up, maintenance and repair works for the uninterrupted supply of water sufficient for construction of the Works.

1.4.2.3. Temporary Electricity Supply

Provision of all the necessary utility requirements on site, such as electricity and gas, etc. during the execution of the works shall be under the responsibility of the Contractor.

The Contractor shall be required to make all necessary arrangements with relevant local authorities and/or owners/occupiers of the properties in order to obtain the supply of necessary utilities and cover the expenses for supplying and consuming these services, where necessary.

The Contractor shall provide connection to the site from a suitable point.

The Contractor is obliged to take all precautions for the safety of employees and third parties both in the supply and distribution of the energy. It is the responsibility of the Contractor to provide all necessary back-up, maintenance and repair works for the uninterrupted performance of the temporary electrical supply.

The Contractor shall take necessary measures related to the unexpected cuts off of these services.

1.4.2.4. Temporary Sanitary Installation, Cleaning

The Contractor shall clean the site when necessary and in such a way as to preserve it in a hygienic state and shall comply with the relevant laws and instructions of the Engineer.

The Contractor shall establish temporary sanitary facility in the site in order to meet the requirements for the working personnel. For this purpose, the Contractor shall supply flushed W.C. in suitable places on the site. Domestic water connections of facilities shall be protected against frost. Sewerage drains shall be connected to the sewerage network as much as possible. In the event that this is not possible, connection shall be made to cesspools built in accordance with national specifications. Cesspools shall be drained at suitable intervals.

1.4.2.5. Employer's Equipment and Free-issue material

There is no Employer's Equipment available for the use of the Contractor in the execution of the Works.

Free-issue materials are not available on behalf of the Employer.

1.4.2.6. Temporary Project Sign Board

The Contractor shall at his own cost supply, erect and maintain 1 signboard (size 1.5 m x 2 m) at locations to be determined by the Engineer on which the names and information asked by the Engineer. The design of the sign board requires the prior approval of the Engineer and the Employer.

1.4.2.7. Plant and Temporary Works

The property of all structures, materials, vehicles, tools and equipment supplied and established by the Contractor for the performance of the Work belongs to the Contractor.

Temporary facilities shall be removed within the time and method to be decided by the Engineer after Substantial Completion and their places shall be cleared. Fences, billboards, etc. that have been removed temporarily shall be placed again.

1.4.2.8. Protection of Existing Structures and Utilities

The Contractor shall assume full responsibility for the protection of all buildings, structures, and roads existing in the area of the construction site, public or private, whether or not they are shown on the drawings. Any damage resulting from the Contractor's operations shall be repaired at his expense.

The Contractor shall take all necessary precautions to avoid causing any unwarranted damage to roads, lands, properties, trees and other features and, during the Contract, shall deal promptly with any complaints by owners or occupiers.

Where any portion of the Works is close to, across, or under any existing apparatus of Statutory Undertakers, the Municipality or other parties, the Contractor shall temporarily support and work round, under or adjacent to all apparatus in a manner designed to avoid damage, leakage or danger, and to ensure uninterrupted operation.

Should any leakage's or damage be discovered, the Contractor shall at once notify the Employer and the Statutory Undertaker, Municipality or owner concerned, as appropriate and the Contractor shall afford every facility for the repair or replacement of the apparatus affected.

Building interiors shall be adequately protected during the course of the works to ensure that they remain water-tight.

The Contractor shall adequately safeguard the buildings affected by the works against damage and theft.

All electrical installations shall comply with the relevant national regulations and shall be safe for the Contractor and members of the public. All Works shall be illuminated when daylight seems to be insufficient.

Before commencement of works nearby the existing structures preconstruction photos shall be taken.

1.5. CONTRACTOR'S KEY PERSONNEL

The Contractor shall employ following key personnel with qualifications listed below on site in line with Programme of Work.

Project Manager/Construction Manager: English speaking, minimum 5 years' experience in construction of any kind of structure and degree in civil engineering or architecture. Project Manager/Construction Manager shall be present on site on a full time basis for the period starting from the date on which the Contractor will be given Access to the Site and receive a notice from the UNDP Engineer to commence the Works and ending on the date of substantial completion of Works stated in the Certificate of Substantial Completion.

Site Engineer(2, 1 for Lot 1: Demirciler/Kilis and 1 for Lot 2: Haliliye/Şanlıurfa): Minimum 3 years' experience in construction of any kind of structure, and degree in civil engineering.

Electrical Engineer: Minimum 3 years' experience in construction of any kind of structure, and degree in electrical engineering.

Mechanical Engineer: Minimum 3 years' experience in construction of any kind of structure and degree in mechanical engineering.

Surveyor: Minimum 3 years' experience in construction of any kind of structure and degree in Survey Engineer (or equivalent) or minimum 5 years' experience in construction of any kind of structure and degree in Survey Technician.

If awarded contract for both lots, the Contractor shall employ different personnel as the Project Manager/Construction Manager and Site Engineer for each lot. Same personnel may be employed by the Contractor for both lots as Mechanical Engineer, Electrical Engineer and Surveyor.

1.6. PLANT

The contractor shall ensure availability of the followings on site in line with Programme of Work.

Equipment	Specifications (minimum)	Minimum number of Quantity
Excavator	90 hp	1
Truck	15 tons	2
Compressor	180 hp	1
Power Supply Generator	250 kVA	1
Crane	40 tons	1
Roller Compactor	n/a	1
Loader	n/a	1
Grader	n/a	1
Concrete Vibrators	n/a	4
Formwork	Plywood	500 m2
Scaffolding	Steel pipe	250 m3
Water Tank	10 tons	1
Panels for Power & Lighting	n/a	4

1.7. MATERIALS

1.7.1. Conditions for Materials and Equipment

Materials and equipment within the scope of the Work shall comply with the conditions stated in the Technical Specifications. Materials and equipment proposed to be used by the Contractor and which have not been specified shall only be incorporated in the Works after their equivalence with the Technical Specifications has been verified and approved by the Engineer.

Any material or equipment proposed by the Contractor for substitution from that specified shall be subject to prior approval of the Engineer.

1.7.2. Storage Facilities

The Contractor shall establish open and closed storage places in suitable and sufficient extent at his own expense for the storage of materials and equipment in the site. The Contractor is obliged to take all necessary protective precautions against damage, contamination inclement weather and theft.

1.7.3. Terms of Transportation

All of the materials and equipment shall be packaged in such a way to facilitate transporting in and out of the storage and to the Work Place and to be protected against damage.

Materials and equipment shall be loaded on vehicles in conformity with international transportation rules. During transportation, all necessary additional precautions shall be taken and adequate transportation insurance shall be provided at the sole responsibility and cost of the Contractor.

1.8. SETTING - OUT

All necessary application, measurement and instrumentation processes and equipment necessary for construction of the Works and for preservation of the environment in the vicinity of the Works are the responsibility of the Contractor at his own expense.

1.8.1. Application Works

The Contractor shall prepare application drawings showing the setting out of the structures on the site and based on the reference points and levels given in the Drawings and submit to the Engineer for approval. The accuracy of the setting out shall be the sole responsibility of the Contractor.

For application and measurement processes; the Contractor shall:

- Employ qualified and experienced land surveyors.
- Use modern type and high-quality topography devices suitable for the works.

1.8.2. Other Measurements for Site Inspection

The Contractor shall conduct any kind of measurement necessary for the determination of water, ground, seismic events and movements that might be caused by the aforementioned, which is related to the construction and the environment. These measurements shall be conducted in methods and at locations, which shall assist in execution of the project in line with Technical Specifications and in taking the corresponding precautions, which may damage the structures.

Within the frame of the aforementioned measurements, including but not limited to the following, fixed and moving measurement devices shall be supplied and installed by the Contractor in order to:

- Determine the ground movements that might occur due to various reasons and the movements that these shall cause in current structures and excavation supporting systems,
- Determine the vibrations and movements due to explosion, pole and sheet pile driving and earthquake and also determine the effects of these on the current structure and also structure and excavation supporting systems,
- Determine excessive rain condition and underground water movements.

Measurement devices, which are subject to the approval of the Engineer, supplied by the Contractor shall have the quality for correct reading.

The Contractor shall conduct correctly and fully:

- Placement and usage of devices,
- Recording and evaluating the measurements,
- Determination of device's lack of adjustment and ensuring their adjustment.

The Contractor's staff for measurements shall be subject to the approval of the Engineer as well.

The Contractor shall prepare and submit a Measurement Plan to the Engineer for approval in relation to the measurements including:

- Purposes of utilization of fixed and moving measurement devices, places of their settlement or points of measurement,
- Qualities and technical specifications of all measurement devices
- Reading, evaluation and reporting periods in ordinary situations,
- Any kind of determination before construction related to current structures.

In the event of detection of extraordinary events as a result of readings and evaluations, the decisions such as appropriate permanent and temporary precautions or ceasing the operations in the region shall be taken together with the Engineer and shall be implemented immediately. In the event that values are at levels affecting the calculation criteria, safety at work shall be taken into account and project shall be changed.

This measurement shall be done in case the Engineer needs them and the Engineer will give instruction to the Contractor and the Contractor shall apply them in its cost.

1.9. ACCOMODATION FOR THE ENGINEER

Before commencing the Contract, the Contractor shall supply and erect on the site an office of a minimum 10 m2 room for the exclusive use of the Engineer at a location to be agreed with the Engineer. This office shall be provided for the total construction period.

The washroom shall be provided with a washbasin, hot and cold-water supplies and a flush operated WC connected to the existing sewer. The Contractor shall be responsible for the security of the Engineer's office and all equipment therein until the office is finally closed.

The Contractor shall maintain, light, heat/cooling and clean the office for the duration of the contract. The Contractor shall be responsible for the insurance of the office for the duration of the contract. The Contractor shall insure the office and the contents provided by him, against fire, burglary and other risks ordinarily insured against during the period of the Contract.

Material	Quantity
Working Table	1
Director Chair	2
Guest Chairs	5
Design Review Table	1

The electricity, water supply, and maintenance costs of this office shall be met by the Contractor(s) until substantial completion of the Works.

The Contractor shall ensure that all equipment is kept in good condition and shall repair or replace, as directed by the Engineer, any equipment that becomes unserviceable.

1.10. COORDINATION

The Contractor is responsible for ensuring all coordination necessary for the execution of the work in accordance with the quality, cost and timing objectives foreseen by the Employer at the beginning of the work.

The Contractor shall prepare a Critical Path Method (CPM) work schedule, inspect the schedules according to the project timeframe, check the integrity of the schedules between infrastructure, superstructure constructions, electrical and mechanical works, combine the schedules and submit to the Engineer for approval.

The Contractor shall be responsible for ensuring administrative and technical coordination with the Employer, the Engineer and other parties who might directly affect the works along with the following parties who might have indirect effect:

- a. Relevant official institutions and organizations,
- b. Other authorized persons, institutions and organizations

1.11. MEETINGS

Progress meetings will be held by the Contractor at the times indicated on the progress chart (at least once in a month, unless agreed otherwise), and will take place at location, which shall be proposed by the Contractor and approved by the Engineer.

The meetings shall be attended by the Contractor, the Employer, the Engineer and the End user. Any other participation shall be subject to proposal of the above mentioned in an assistant/consulting capacity.

The major items to be addressed in the progress meetings are those identified for the progress reports and any other items, which are deemed necessary by the Engineer, the End Recipient or the Contractor.

The Contractor shall additionally organize periodical site meetings when necessary or upon request from the Engineer, the End Recipient or the Employer for the purpose of execution, orientation, future arrangement and coordination of the works and also for briefing. The Contractor is also responsible for organizing additional meetings upon the instruction of the Employer or the Engineer.

The agenda of these meetings shall be determined by the Engineer and the Contractor together. In addition to the Engineer and the Contractor, the meetings can be attended by supply companies, manufacturer companies, subcontractors and other institutions and organizations related to the works when necessary.

1.12. CONTROL AND EXAMINATION OF MATERIALS AND EQUIPMENT

If the Engineer requests, s/he sends his own members to the project offices, factories of the Contractor and to factories of its subcontractors for the technical control and examination of the material and equipment, production in factories and for their participation in the project works. Any such visits, if required, are deemed to be additional to FAT (Factory Acceptance Test). The Contractor will inform the Engineer about the date when the material is ready for examination and request personnel. Engineer will be present in the construction, mounting of production parts, mounting of main groups and trial works, and will prepare the joint examination report as a result of the control.

FAT shall be organized by the Contractor. The Contractor will propose a program and a testing procedure to be approved by the Engineer. The Contractor and the Engineer shall attend the FAT and at the end of the FATs, materials and equipment will be delivered on basis of the FAT Report signed by the Engineer.

1.13. OBTAINING OF RELEVANT APPROVALS AND CERTIFICATES

The Contractor shall obtain all relevant approvals and certificates from local Authorities regarding construction and operation of the Plants in the site.

Permits, license and approval costs which are required by the Turkish laws/regulations will be determined by the relevant local authorities.

1.14. AS-BUILT DRAWINGS AND OPERATION & MAINTENANCE MANUALS

This part of the Specifications covers the "As-built Drawings" to be prepared by the Contractor including Operation and Maintenance Manuals of the Plant incorporated in the Permanent Works. Three complete draft sets of prints of Drawings showing all Works exactly as made shall be submitted to the Engineer for approval within one month following the substantial completion of the Works on site.

The Contractor shall record all information necessary for preparing as-built drawings during the execution of the Works on the Sites. Neatly marked-up drawings and other documents covering the Permanent Works as completed shall be available to the Engineer at any time during construction.

Marked-up drawings shall be kept up to date and submitted to the Engineer for approval, as the Works are completed.

The Contractor shall submit complete sets of instructions and manuals to Engineer for approval describing the installed Plant in order to facilitate operation and maintenance, together with the "As-built Drawings". The documents shall include but not be limited to:

- Layout drawings
- Schematic cabling diagrams
- Specific operation instructions
- Specific maintenance instructions
- Detailed record of all types of tests
- Component list specified for all installed Plant.
- Identifications of key design elements, systems and materials that are critical to long-term quality and performance of your project: e.g. exterior wall and roof materials, windows, exterior doors, landscaping, key mechanical equipment.
- Developing or collecting available operation and maintenance information/manuals on each of these components. (Much of this information will already exist and simply needs to be assembled.)
- Ensuring all materials, as-built drawings, final finish schedules and plans, and all warranties, guarantees and certifications – that are contractually owed to contractor are collected from contractor's design team before final payments are made.

All information in these manuals shall apply specifically to the Plant and equipment being supplied, and they shall be free from irrelevant matters such as might be contained in the manufacturer's general literature.

The as-built documentation shall include all architectural and engineering disciplines including architectural/ structural, electrical and mechanical drawings, and operation and maintenance manuals. Final version of as-built drawings in two hard copies and one electronic (in Auto CAD and Microsoft Word, Excel, etc) copy of each document shall be provided together with the notice for substantial completion incorporating Engineers' comments and all the modifications/revisions effected during construction. Operation and maintenance manuals shall be provided in Turkish.

All material except drawings shall be A4 size. Drawings shall be on international A size sheets, and drawings shall be marked as "AS-BUILT".

2. PROJECT CONTROL DOCUMENTS

2.1. PROJECT MANAGEMENT

2.1.1. Project Management Obligation

The Contractor shall be responsible for effectively managing his efforts in carrying out the requirements of this Contract.

The Contractor shall be responsible for the management, performance, monitoring and coordination of the whole project in order to fulfil all requirements of the Contract and those given in Technical Specifications.

The Contractor's management obligations shall include the efficient planning of work to be performed in cooperation with the Engineer and Employer along with their appointed representatives to ensure project progress visibility.

2.1.2. General Requirements

The Contractor shall establish a project organization in accordance with requirements included herein, having the necessary resources, qualification and experience to fulfil all the Contractor's obligations.

The Contractor shall unambiguously define the tasks, responsibilities and authorities of each individual role within the organization, at least at the management level.

The project organization shall have clear and well-defined command lines and channels for reporting, within and outside the project organization.

The Contractor shall describe which parts of the Contractor's organization are used for staffing the project, and how the project organization aligns with the Contractor's main organization.

The Contractor shall describe the support functions, which are available for the project organization in the Contractor's main organization and how such resources are put to the disposal of the project.

The Contractor shall describe the organizational interfaces towards any sub-contractor and supplier that shall be in or outside the project organization. Such interfaces shall provide a clear reference between the project management level within the Contractor's and the sub-contractor's/Supplier's organizations.

The Contractor shall appoint key staff members, and these shall to the highest possible extent remain unchanged by the Contractor for the entire project.

Any later changes in such appointments shall be informed to and approved by the Engineer and shall be argued by the Contractor in order for the Engineer to assess the reasons and likely impact of such change.

The Contractor shall, unless this is not within the power of the Contractor, ensure that existing staff remains until suitable and acceptable replacements have been found.

2.1.3. Programme of Work

The programme of work shall comprise following as minimum:

- The proposed location of office on the site, stations (steel/concrete structures), warehouses, accommodation, etc. (sketches to be attached as required).
- A brief outline for completing the works in accordance with the required method of construction and stated time of completion
- A critical milestone bar chart (schedule of execution) representing the construction programme and detailing relevant activities, dates, allocation of labour and plant resources, etc.

- If the Contractor plans to subcontract part of the works, it must provide the following details:
 - Details of work to be subcontracted,
 - Name and details of subcontractors,
 - Value of subcontracting,
 - Experience of subcontractor in similar work.

The contractor shall not be permitted to subcontract the Works without approval of UNDP. In addition, the contractor is not permitted to subcontract the whole of the Works. The amount of works that may be subcontracted **shall not exceed 30% of the total contract price**.

2.1.4. Project Manager Responsibilities

The Contractor shall define a project management team and shall appoint a Project Manager in charge of the entire project.

The Contractor shall allocate the necessary competence and authority to the Project Manager, entitling the Project Manager to make decisions related to all aspects of the day-to-day management of the project.

Any restriction in the Project Manager's rights in this respect shall be clearly identified and described. Such restriction shall not impose management difficulties upon the project.

All official communication between the Engineer/ the Employer and the Contractor shall be passed through the Contractor's Project Manager.

2.1.5. Engineer's Involvement

For the execution of this project, the Engineer reserves the right to be assisted by other agencies for technical, operational and contractual matters.

The Contractor shall establish a close coordination with the Engineer for the development of all planning activities related to the project, and shall forward relevant plans, procedures etc. for review and approval, prior to putting such plans or procedures into force.

Engineer's duties and responsibilities are defined within the UNDP General Conditions of Contract for Civil Works.

2.1.6. Project Plans

The Contractor shall prepare the following Project plans, which shall be reviewed and approved by the Engineer:

- a) Authority Liaison and Permitting Plan with Manual and Schedule
- b) Quality Control and Quality Assurance Plan
- c) Safety Management Plan
- d) Operation and Maintenance Manual

In co-ordination with the Engineer, the Contractor shall also unambiguously define which information is required from the Engineer and when during development and testing.

In addition, the Contractor shall prepare method statements for each activity. Any site activity (excavation, filling etc.) can be start after the approval of the method statements by the Engineer.

2.1.7. Reporting and Reports

The Contractor shall ensure that the Engineer and the Employer are kept informed about the status of all areas within the project, and as a whole ensure that the Engineer can maintain a complete and detailed knowledge of the project.

The Contractor shall provide progress reports to the Engineer describing, but not limited to, achievement, problems, risks and containing updated schedules, WBS, cost/schedule control reports, status of contract variation proposals, and other data which are required for the efficient management of the project.

The Contractor shall agree with the Employer dates for the submission of monthly Progress Reports. These reports shall normally be submitted no later than 7 working days after the completion of each month.

Such reports shall provide information on the status of the Contract, and/or on any matters that could interfere with the timely achievement of any aspect of the Contract and the steps proposed by the Contractor to remedy such matters. The progress report will have minimum the following contents:

- Project progress
- * Project management overview. Describes major results achieved, problems that have occurred, and corrective action that has been taken or is planned for solving the problems.
- * Technical status: Identifies detailed status, including requirements definition status, design and development progress, problems encountered, corrective actions taken, and a summary of outstanding and approved change items during the period.
- * Quality follow-up: Describes activities of the quality assurance program
- Project Schedules: Shows activities completed (e.g., milestones and deliveries), status of ongoing activities, schedule changes (if any). This section also identifies the outlook for the next three months with an assessment of the major activity completion dates.
- Action item status: Describes outstanding action items and action items that have been closed during the reporting period.
- Risk assessment: Presents the current critical paths, critical activities, and technical risk, including assessment, impact, and containment plans.

Action Items Management

The Contractor will generate action items throughout the project life cycle, either at formal reviews and project progress meetings, or as issues arise during work development.

The Contractor shall record and track all action items relating to schedule, technical issues, subcontractor problems, or the Engineer's concerns. The project managers will assign action items to the person responsible for resolving the issue.

Action items list and status shall be attached to the Progress report and shall be issued by the Contractor on request from the Engineer. The list shall at least include following information:

- Action item description
- Person in Charge
- Due Date
- Status

2.1.8. Meetings

2.1.8.1. Progress Meetings

Progress meetings will be held at the times indicated on the progress chart (at least every 1 months, unless agreed otherwise), and will take place at location, which shall be proposed by the Contractor and approved by the Engineer.

The following persons shall be present at progress meetings:

- The Contractor's representative (i.e. the project manager)
- The representatives of the Employer, the Engineer and the Implementing Partner.
- Any other persons whom the above representatives consider should be present in an assistant/consulting capacity.

The major items to be addressed in the progress meetings are those identified for the progress reports and any other items, which are deemed necessary by the Engineer, the Implementing Partner or the Contractor.

The Contractor shall prepare an agenda and forward it to the Engineer no later than 1 week prior to each meeting for review and approval.

The Contractor shall prepare and produce the minutes. Draft minutes will be ready at the end of meetings and reviews. Minutes signed by the Engineer and the Contractor shall be attached to the contract file and shall become binding for both parties. All of these proceedings pertaining to progress meetings shall be conducted by the Contractor under the orientation of the Engineer.

2.1.8.2. Weekly Site Meetings

Site Meetings (SMs) will be convened by the Contractor as mutually agreed between the Contractor and the Engineer, during the project to allow discussion on specific aspects of the execution, orientation, future arrangement and coordination of the works and also for briefing. SMs may be held to formalize important technical discussions, generally prior to the Progress Meetings and record information's and recommendations arising from these discussions. Decision shall be normally taken at the Progress Meeting.

SMs will be held at locations to be mutually agreed between the Contractor and the Engineer. The Contractor shall provide SMs with the papers documenting the technical items for discussion and recommendations.

The agenda of SMs shall be determined by the Engineer and the Contractor together. In addition to the Engineer, the Employer and the Contractor, SMs can be attended by supply companies, manufacturer companies, subcontractors and other institutions and organizations related to the works when necessary.

Meeting minutes shall be recorded by the Contractor, kept carefully and these shall be distributed as minutes of SMs to the Employer and the Engineer, participants and other persons, institutions and organizations to be found necessary by the Engineer. Minutes signed by the Engineer and the Contractor shall be attached to the contract file and shall become binding for both parties. Minutes shall be forwarded to the Employer for consideration at the next Progress Meeting. All of these proceedings pertaining to SMs shall be conducted by the Contractor under the orientation of the Engineer.

The Contractor is also responsible for organizing additional meetings upon the instruction of the Employer or the Engineer.

2.1.9. Sub- Contractor Involvement

Generally spoken it is the responsibility of the Contractor that all sub-contractors perform their part of the work in accordance with the rules laid down in the contract between the Employer and the Contractor.

This implies that the sub-contractors are subject to the same Project Management procedures and must follow the same standards as applied by the Contractor. The Engineer has the same rights against any sub-contractor as against the Contractor, but this will not free the Contractor for his responsibility for the work performed by the sub-contractors.

To finish the approval procedure for Sub-Contractors involved by the Contractor within the Project, the Contractor shall provide to the Engineer specified documents for each Sub-Contractor (means Sub-Contractor and Sub-Designer) as stated below.

Registration for chamber of commerce

Trade registry gazette

Criminal records of the responsible people of the Sub-contractor

Delivery statement of previous project accomplished by the sub-contractor

Authorized signatures list

Relevant quality certificates like ISO 9001

No bankruptcy statement given by the commercial record authorities

A summary of the status of Sub-contractor with monthly progress payments needs for hand over to keep overview.

Be aware that this matter is pre-condition of payment for works done by Sub-contractors.

The Engineer shall have the right to disapprove a proposed sub-contractor in case of objective evidence that the sub-contractor cannot comply with requirements within this contract, that be related to the delivery or the Project Management and Quality Assurance.

The Contractor shall keep a list of all sub-contractors and suppliers, which are used or are planned to be used within the project and shall forward such list to the Engineer every time it is updated.

The list shall include a precise identification of which parts or components the sub-contractor or supplier in question shall deliver to the Contractor.

The Contractor shall be fully responsible for the work performed by any sub-contractor as for the work performed by the Contractor himself.

2.2. SPECIFIC ON-SITE ACTIVITIES

2.2.1. Management and Planning

The Contractor shall have the full responsibility for the construction, installation and setting up the Works.

The planning of the construction, installation and setting up of the Works shall be developed in close cooperation with the Engineer.

The Contractor shall be responsible for the maintenance and operation of the system during its installation and setting up.

2.2.2. Installation Plan

At each site where installation is going to take place, the Contractor shall prepare an installation plan comprising:

- The Engineer's activities
- Sub-contractors involved
- Tasks to be performed and who is responsible for each task
- Timing of the tasks
- Documentation of installation (e.g. instructions, specifications and drawings)
- and other information important for the final installation.

The installation plan shall be approved by the Engineer in due time before the final installation

2.2.3. Installation

The Contractor shall, in due time before installation, submit instructions and specifications with detailed information concerning:

- interior
- installation
- cabling, routing, grounding, power, communication
- other topics important for the installation of the Works.

The installation shall take into consideration local legislation, rules and procedures to (i.e.) cabling, power connection and working conditions.

The Contractor shall produce, procure and supply all necessary equipment, tools, etc. consumable as well as non-consumable needed for the installation and setting-up.

2.2.4. Setting up

Setting up covers the activities after the physical installation to adjust and tailor system parameters, fine tuning, etc. to make the system 100% operational.

The Contractor shall specify which procedures will be used to set up the Works.

2.3. SAFETY

The Contractor is responsible for taking all necessary precautions in respect of Works, materials, machinery, equipment and current facilities, persons on site and neighbouring environment. All expenses including indemnities that might arise are the responsibility of the Contractor.

2.3.1. Safety of the Construction Site and Periphery

2.3.1.1. Safety Fence

Contractor shall determine the extent of site boundary fencing necessary to protect the site, works, materials, equipment and facilities against unauthorized access and for safety of the public, to control entries-exits and prevent the entrance of unauthorized persons.

There shall be sufficient number of security officers provided by the Contractor at entrance-exit gates and locations where deemed necessary. There shall be adequate night lighting for ensuring supervision of security officers throughout the fence.

2.3.1.2. Fire Protection

The Contractor is responsible for taking necessary precautions for the protection of Works, Temporary Works and any kind of property and person during performance. All of the precautions, including raising the awareness of personnel, and the proceedings to be implemented in the event of a fire shall be determined working closely with the Fire Department.

During the Work, the special additional precautions that might be needed in the following cases shall be taken and implemented:

- Storage of materials that might easily inflame,
- Collection, storage and disposing of inflammable wastes,
- Operations performed with electric-arc welding and oxy-acetylene cutting machines,

In case a fire breaks out, the Contractor shall supply and get ready following equipment:

- Dry chemical powder type fire extinguishers that can be installed to walls, carried manually with nitrogen pressurized in certain places
- Special extinguishing systems in sections where Fire Department can't enter or access easily

2.3.1.3. Warning Marks, Lighting

All of the open excavations, material piles, structures, facilities and equipment that might create hazard shall be surrounded by barricades with appropriate marks with the aim of protecting the employees and other people.

In the same manner, the roads and passages blocked due to Works shall be protected by barricades.

This kind of areas shall be marked with warning plates placed in appropriate distances and attract the attention of people. All of the barricades, obstacles and marks shall be illuminated from dusk to sunrise.

2.3.2. Safety at Work

It is the responsibility of the Contractor to take necessary precautions to prevent accidents that might cause damage to persons, materials, equipment and facilities during the work.

The Contractor shall assign a Safety Team under the leadership of an experienced Safety Manager for any kind of work on safety at work. The primary duties of this team shall include but not limited to:

- Training the employees in respect of actions and practices that shall cause accidents or damage, taking precautions in the site that shall at least meet the requirement of "TS 8983 General Safety Precautions that Should be Taken in Structures During Construction", Monitoring whether precautions and warning are obeyed or not,
- Taking additional precautions, warning orally, and giving punishment in the event that faults are detected.
- Stepping in and performing what should be done in the event of a harmful event.

The Contractor shall carry out the works in accordance with the Turkish Health and Safety regulations.

2.3.2.1. First Aid

Shall be arranged in accordance with the applicable Turkish Health and Safety Regulations.

2.3.2.2. Hazardous Substances

When the following are encountered, Works shall be ceased in the section where the event occurs:

- Buried known or unknown toxic substances,

- Unnaturally coloured ground water or soil,
- Asbestos,
- Volatile organic compounds measured with photo ionization detector,
- Chemical substances or oil products or other similar circumstances that are spilt and spread on the site.

Cleaning of the area in such a way not to damage employees and removal of the hazardous substance shall be performed by an expert team trained and equipped for this kind of works.

2.4. QUALITY CONTROL AND QUALITY ASSURANCE

2.4.1. Quality Responsibility

All of the Works shall be performed according to the most appropriate engineering practices and standards in respect of construction, material, equipment and workmanship.

It is the responsibility of the Contractor to control the quality of the work and to take samples and carry out necessary tests in respect of achieving conformity with specifications and approved materials at his own expense. A Quality Control and Quality Assurance Manager to be assigned by the Contractor shall be responsible for all phases of quality control and sustain an efficient communication with the Engineer.

2.4.2. Material Quality and Equivalent Materials

All of the materials and equipment supplied to be used permanently within the scope of the works shall comply with current standards and specifications. The products of other Manufacturers instead of determined materials and equipment shall be accepted on condition that their equivalency is approved by the Engineer. In such events, the Contractor shall submit to the Engineer all of the evidences of the equivalency of the new product.

2.4.3. Quality Control and Quality Assurance Plan

After signature of the Contract, the Contractor shall submit to the Engineer a detailed Quality Control and Quality Assurance Plan within 14 days for approval. The plan shall cover quality control and assurance of all phases of works on the site.

The plan shall include at least the following items and shall be supported by additional information that might be needed by the Engineer.

The Plan shall cover the quality assurance of all aspects of the Works, and contain, as a minimum, the following items:

- Organization chart for quality control and quality assurance
- List of Contractor's staff to be engaged in quality control and materials testing together with details of their relevant experience
- List of facilities which will be inspected and tested by the Contractor at stages during implementation of the Works as part of his quality control, together with inspection procedures and test types
- Certificates of materials
- Specifications of equipment and work
- Tests
- Relevant certificates on supplied materials
- Detailed checklist for all installations. The checklist shall be for the Contractor's own use, documenting the Contractor's own quality control of the installation.

The Plan may be supplemented with additional items from time to time as requested by the Engineer.

The approved Quality Plan shall be followed throughout the performance of the Contract, unless the Engineer to the contrary issues specific approvals or instructions. Any approval of the Engineer shall not relieve the Contractor of his obligation to ensure that the Works comply with the requirements of the Contract.

Quality assurance records, test certificates, reports and daily records of on-site testing and inspection shall be kept on site during the works, and the results shall be certified by the responsible member of the Contractor's staff.

Quality Control and Assurance Plan shall enter into force after the approval of the Engineer.

2.4.4. Tests Samples, Materials and Equipment

The Contractor shall supply all of the samples including storage, packaging and transportation related to quality control and tests. The materials represented by these samples shall not be manufactured without the approval of the Engineer, brought to work place or used in any work.

Approved material and equipment samples to be used on the site shall be kept carefully under they are permitted to be disposed by the Engineer.

2.4.5. Test Laboratory Services

Quality Control tests shall be done in the laboratory accredited by Republic of Turkey Ministry of Environment and Urbanization shall be used at the expense of the Contractor.

The Contractor shall ensure that the laboratory perform the desired material inspection, sample receiving and test processes as fast as possible and conclude them.

Test results shall be immediately submitted to Engineer. In the event of detection of disorders or deficiencies that might affect the Work, the Contractor shall take any kind of corrective precaution immediately.

The laboratory is not authorized to change, expand or invalidate the terms of the Contract.

2.4.6. Examinations and Manufacturer's Tests

The Contractor is responsible for ensuring that quality control and all relevant examinations and tests are carried out duly without taking into account whether they are on Site or in any other place and also for taking corrective precautions when necessary.

The Engineer can audit the work carried out in the Manufacturer Company's facilities and also the tests related to these works. The Contractor shall inform the Engineer on time so that this can be done as desired.

The manufactured items and materials that are delivered to the Site shall be examined by the Contractor on their arrival and any kind of fault shall be informed to the Engineer. The products with important faults shall be returned to the Manufacturer Company to be amended or replaced.

Examinations and tests carried out by the Engineer or on his behalf do not release the Contractor of his obligations related to quality control.

2.4.7. Construction Site Records and Tests Certificates

Quality Control records, test certificates, reports, daily construction site tests and examination records shall be kept on forms approved by the Engineer.

All of the test certificates and examination records shall be divided into their relevant departments and kept including those in the Manufacturer Company and other test institutions. The processes shall be under the responsibility of qualified personnel of the Contractor and moreover the Contractor shall establish a comprehensive archive and library related to quality control.

The Contractor shall prepare details lists including tests, approvals, orders and delivery information related to quality control and other materials and products depending on approval. These lists shall be submitted to Engineer as they are updated, however once in a month under any circumstance.

Test results shall be delivered to Engineer at the end of the test in respect of determining the necessary precautions, if any. Test certificates, on the other hand, shall be submitted to the Engineer

- When the tests of the Production Plant and Manufacturer Company are completed or not later than 7 days before the date on which products should be used in the Work under any circumstance,
- Within 7 days following the completion of the test for those conducted during or upon completion of the continuous work.

3. ENVIRONMENTAL MANAGEMENT

The Contractor shall comply with the provisions of the applicable Turkish legislation on environment protection that may affect the Project (the "Environmental Requirements"). In particular this shall include compliance with the following regulations (latest version of the below mentioned laws will be in placed):

Environment Law (no. 2872, date: 09.08.1983, published in the 11.08.1983 dated and 18132 y numbered Official Gazette, amended on 26.04.2006 no 5491),

Worker Health and Work Safety Act (published in the 11.01.1974 dated and 14765 numbered Official Gazette),

The Regulation for the Assessment and Control Air Pollution 2009

The regulation for the assessment and management of environmental noise (2008),

Water Pollution Control Regulation 2004

Solid Waste Control Regulation (published in the 14.03.1991 dated and 20814 numbered Official Gazette),

Hazardous Waste Control Regulation 2005

Cultural and Natural Assets Protection Law and relevant regulations

Waste Oil Control Regulation (21.01.2004 dated and 25353 numbered Official Gazette.)

Excavation Soil, Construction and Debris Waste Control Regulation (18.03.2004 dated and 25406 numbered Official Gazette)

Soil Pollution Control Regulation (31.05.2005 dated and 28831 numbered Official Gazette.)

The Contractor shall take all measures and precautions to avoid any nuisance or disturbance arising from the execution of Project Activities. This shall, wherever possible, be achieved by suppression of the nuisance at source rather than abatement of the nuisance once generated. The Contractor will also be required to compensate for any damage, loss, spoilage, or disturbance of the properties and health of the project affected people during construction. In conformance with the Contract Specifications of which these Environmental Provisions are a part, the Employer reserves the right to withhold payments and/or stop construction in the event of serious or repeated violations of the conditions stipulated herein.

The Contractor shall, at his own expense, obtain, retain in force and renew as necessary all Consents provided for by the Environmental Requirements of the Government of Turkey that are required to enable it to meet its obligations in designing and constructing the Project.

4. PARTICULAR TECHNICAL SPECIFICATIONS

Unless otherwise stated in particular technical specifications, the Contractor shall execute and complete the Works in strict accordance with the last updated editions of;

- Republic of Turkey Ministry of Environment and Urbanization "Construction Works, Civil, Mechanical Works and Electrical Works General Technical Specifications"
- Republic of Turkey General Directorate of Highways "Highways Technical Specifications"
- Union of Chambers of Turkish Engineers and Architects, Chamber of Landscape Architects Publication; Technical Specifications for Landscape Works
- Republic of Turkey İlbank construction works technical specifications.

4.1. PARTICULAR TECHNICAL SPECIFICATIONS FOR CIVIL/STRUCTURAL WORKS

4.1.1. EARTHWORKS

General

This specification consists of; excavation for all structures, described in the excavation plans; backfill, compaction of backfill and transportation of excavated material under conditions written in this document and according to the drawings or with the directives of the Engineer.

All excavation, fill and soil bent works must comply with directions figured out in the drawings, slopes and elevations or the Engineer's directives shall be followed.

In case the amount of excavation exceeds the amount calculated from the Engineer approved excavation plan, the contractor is responsible fiscally. Addition to this the extra amount of excavation shall be filled according to the requirements with compacted soil, crushed stone or concrete with the directives of the Engineer, by the contractor without any additional payment.

Before starting the earthworks, contractor must study the layout plan, elevation plan, and topographic map of the area which is given by the Employer and complete all the controls. The contractor must prepare the excavation plans, sections, and calculations to be checked and investigated by the Engineer for all structures.

The contractor shall clean the area and the ground surface, trees and roots, before starting the earthworks. Cleaning includes all the organic wastes and other rubble to be removed out from the site. The brushwood and other plants to be removed from site area shall be cut at the ground level or below. This process shall be done by the Engineer's directives and the plants shall be cut carefully. The removal process includes trees having a diameter greater than 7.5 cm and the ones which have roots that tied to each other forming a wire shape. All the refuses, the organic and non-organic wastes shall be removed from the site by the Contractor.

Definitions

Appropriate materials are classified in TS 1500 as GW, GP, SW, GM, SP, SM, and SC

GW : Well graded gravels, sandy gravels with little or no fines.

GP : Poorly graded gravels, sandy gravels with little or no fines.

SW : Well graded sands, gravely sands with little or no fines.

GM : Silty gravels, silty sandy gravels

SP : Poorly graded sands, gravely sands with little or no fines.

SM : Silty sands

SC : Clayey sands

Inappropriate materials are classified in TS 1500 as PT, OH, ML and OL. If the materials listed in the above statement are encountered during excavation the Contractor has the responsibility to remove these materials.

PT : Peat and other highly soils.

OH : Organic clays of high plasticity

ML : Inorganic silts, silty or clayey fine sands with slight plasticity.

OL : Organic Silts and organic silty clays of low plasticity

Cohesionless materials are listed in TS 1500 as GW, GP, SW, and SP. Cohesive materials are listed as GC, SC, ML, and CH. The materials classified as GM and SM can only be defined as cohesionless materials in case their fine content contains no plasticity.

Compaction degree; required Modified Proctor Test compaction degree is expressed as the percentage of max dry density. (TS 1900)

Confined ground water table; is the permanent or temporary water table existing over the ground water table, isolated by an impermeable soil layer.

Accumulated water; the accumulated water exists between the foundation walls and compacted stabilized fill and can be seen in a suspended form in the relatively less permeable fine graded soil.

Materials

The selected fill material shall be used around the foundations under structures, excluding structural foundations. The above selected material must not contain roots or similar organic materials, waste, and rubble greater than 7.5 cm. It must be compactable. Contents of this material have gradation passing percentage %10 from sieve no 200 (0.075mm).

The capilar water barrier shall be constructed under the foundation slabs and shall be formed of crushed stone or natural gravel. Maximum size of the particle must not be greater than 4 cm and the total weight of passing percentage from sieve #4. shall not be greater than %2.

If there are local weak areas and voids under the foundations, with the order of the Engineer, these areas shall be filled with 200 dosage lean concrete or compacted stabilized fill material.

Excavation

The Contractor is required to expose the base of the excavation for foundations and to arrange for the Engineer to inspect it prior to covering it, with the first blinding layer of concrete. If the ground is not found to be satisfactory for the proper support of the foundation without unacceptable settlement, then the Engineer will instruct the Contractor to excavate down to a firmer strata and backfill with mass concrete or take other measures that are necessary to ensure an adequate foundation for the structure.

Areas outside of each building/structure shall be sloped to drain away from the building/structure, and shall be maintained free of trash and debris until provisional approval has been completed and the work has been accepted. In addition, the topsoil which is adversely affected and compacted due to the activities of construction equipment or which is contaminated by cement, lime, etc. shall be ploughed, cleaned and graded. The stockpiled topsoil shall be evenly spread over the ploughed, cleaned and graded surface.

If, at the bottom of the excavations, any pockets of soft material or loose stones or fissures are found, these shall be removed by hand and cavities will be filled in with suitable material.

Starting Foundation Excavation

Contractor shall make application of structures and check the correctness of the process.

Following the approval of the excavation plan by the Engineer, according to the excavation plan, first the top soil part shall be removed and stored in place within the site. Then those stored material shall be used for landscape purposes by the contractor. The foundation excavation shall be made according to the directives of the Engineer and related drawings with the earthwork and as in the specifications.

Methodology of Opening Foundations

Earthwork shall comply with the defined dimensions and elevations for the structure. The excavation area shall have the adequate distance from the walls and foundation piers that allows to establishment of the services and control, locate the establishment of forms and remove them. The only exception of this condition is the allowance of lean concrete and gravel-sand fill material casted directly, adjacent to the excavation surfaces. There shall not be any excavation under the defined levels. If the excavations made without the Engineer's instructions, the additional cost shall not be reflected to the Employer and the selected fill material shall be used for the compaction again and shall be filled. Areas outside of each building shall be sloped to drain away from the building and shall be maintained free of trash and debris until the work has been accepted. In addition, the topsoil which is adversely affected and compacted due to the activities of construction equipment or which is contaminated by cement, lime, etc. shall be ploughed, cleaned and graded.

The excavation slopes shall be protected against slope failures (i.e. with plastic sheets during the rainy periods) according to the instructions of the Engineer.

Appropriate Excavation Material

The appropriate excavated material shall be stored and used in the backfill in the project. If the amount of appropriate excavated material is greater than amount of backfill, the contractor shall transport this excessiveness without bringing any additional cost to the Employer. In case there is an over excavation, the excavated fill material shall be taken away from site like other inappropriate materials in a same manner.

Last Leveling of Ground and protection of Base for Concrete

It is only allowed for a large size scale of excavation for foundations up to 20-30 cm over the designated base elevations. The last 20-30 cm of natural ground elevation shall be excavated under the control of the Engineer and care shall be taken to ground soil not to be disturbed. The surface of soil must be protected from getting wet and drying. Compacted and non-compacted surfaces under the foundation piers are subject to approval before concrete is casted. When the required level of elevation for foundation of structures is reached, 15 cm of lean concrete shall coat the level under the foundation base and overflows 15 cm from both sides, immediately.

Preparation of Foundation Soil

The last leveling operation is made and if required, soft parts of soil is excavated and filled with an appropriate material and prepared.

The elevation difference between two points on the foundation soil must not exceed 1.5 cm and this shall be controlled by a gauge rod of 5m length. Addition to these restrictions, the foundation elevation changes' must be in an interval of ± 2 cm tolerance according to the drawings.

The base of excavation area must be leveled in the above-mentioned statement. The locations that have an elevation difference greater than 2 cm shall be excavated and filled as mentioned in the related paragraphs. All these works shall be a part of the Contractor's responsibility without any additional cost impact.

The Engineer must be informed for checking the works done, and to approve them. If necessary for recording data, before the final excavation elevations are reached and starting of next process. Besides, Engineer has the authority to control the works done.

Removal of Soft Parts

Although the processes are followed there may be still soft parts or cracks found in the excavation base. These shall be excavated by hand and shall be filled with appropriate material by the Contractor.

Removal of Soft Parts under The Foundations:

To remove the soft parts under the foundations, 150 kg/m³ of lean concrete or compacted stabilized fill material shall be used as an appropriate material. The Engineer must approve the selected material. The concrete fill preparation, casting, compaction, curing and testing shall be made regarding the concrete specification and Engineers instructions.

Removal of Soft Parts under Non-Structural Sections:

The selected fill material shall be used as an appropriate fill material for the excavated soft parts under non-structural sections. The arrangement, location, compaction and testing procedure shall be done as described below.

Fill and Compaction:

Fill material shall be laid in the form of horizontal layers and the thickness of the material laid shall not exceed 20 cm in the loose state. Then it shall be compacted. Fill material shall not be laid in muddy surfaces in any conditions. The fill shall be straight and compacted in a stabilized way to avoid the formation of eccentric loading and shear forces in the places adjacent to structures. The sloped surfaces consist of barriers and terraces shall be constructed to prevent sliding of fill materials. During the process of backfill and construction of barriers, machines that may exert additional loads to structures shall not be used for compaction.

In accordance with the Engineer's approval, compaction operation shall be done with vibrated cylinders, cylinders with steel wheels or other machines certified for that type of operation. If required, material shall be moisturized to obtain desired compaction degree and also ventilated. All layers shall be compacted to a degree of not less than a maximum density ratio percentage as tabulated below:

Compacted Layer	Dry density ratio %	
According to Modified Proctor Test	Cohesive	Cohesionless
	Materials	Materials

Fills and backfills under the structures, slabs of the buildings	90	95
Fills under walkways and open areas	85	90
Under building sidewalks For top 30 cm	90	95

Rearrangement of Foundation Excavation Bases

The approved foundation bases may be damaged due to the weather conditions, because of a contractor's interference or any unexpected situation. In this case before starting the construction, soil shall be controlled without any cost impact to the Employer. Underground installation compaction shall be made by hand.

Tests

There shall be no payment for sampling, testing and reporting the test results to contractor.

The laboratory tests concerning moisture density relationships shall be made according to the procedure regarding the compaction of fills mentioned in the above statements.

Preparing samples in accordance with the laboratory tests does not include any additional payment to contractor. Field tests are also carried out in accordance with TS1900 to check whether the compaction conditions are verified the tests made by contractor must be in an Engineer certified laboratory. The copy of test results following 24 hours after the tests were made shall be given to Engineer.

The fill and backfill not compacted as defined shall be excavated to the depth that Engineer decides and the degree of density conditions shall be provided with no additional cost to administration. These re-compacted locations are going to be checked whether the conditions are satisfied by the tests. Also these tests shall be out of payment procedure. The test type and frequency intervals are listed in the below table:

TEST FREQUENCY AND TYPE OF THE TEST

Test Type	Frequency
Field Moisture	1 test for each layer of material laid
Classification Gradation and Atterberg Limits	1 density test for each fill and once for compaction test
Field Moisture and Density (sand cone and water balloon method)	Once for each layer of material laid
TS 1900 Modified Proctor Test	if the material is homogenous, for each 200 m2 once (1) (Check the used material types) Density / Moisture

Support

There shall be no additional payment to contractor for support work items.

If required, protection by supports is an obligation for; safety of workers, adjacent fills and structures, installations, etc Support walls, plates and supports shall be dismantled without causing any collapse of soil in the working area.

The contractor shall be responsible for all type of accidents and damages to workers and structures, respectively that may be happened because of a collapse near the excavation area or any other reason that may cause collapsing of the soil. These types of damages must be prevented by providing adequate slopes along the surfaces of excavation or the sides of the excavation area must be supported by the contractor. Support procedure shall be done by taking care of soil's state of nature.

The method for strengthening the sides of the excavation area must be approved by the Engineer. But this approval does not abrogate the contractor's responsibility. If Engineer desires the supports remain unchanged in their places for safety reasons at the stage of re-filling after foundation excavation or piping works, contractor shall not have any rights to request a payment for that application.

The re-arrangements or any changes in the support system made by the contractor or the Engineer's directives shall not have any cost impact to the Employer.

Dewatering

There shall be no additional payment for dewatering because these works are included in excavation item.

The excavation works shall be carried on with effective and continuous drainage. There shall not be any permission of water accumulation in the site for any reason. Until concrete and filling works are being completed water accumulated in the foundation or installation holes and surface run-offs shall be drained temporarily by pumping, drainage or other certified methods.

Drainage and dewatering in earthworks shall be carried out by the Contractor as part of the Contract. Excavations shall be performed so that the area of the site and the area immediately surrounding the site, which may affect operations at the site, will be continually and effectively drained. Water shall not be permitted to accumulate in the excavation.

Foundations for structures and utility trenches shall be kept free from standing and surface water at all times by pumping, draining or other approved methods until concreting and backfilling operations are completed. Where pumping is used, a back-up excavation, site drainage and sub grade protection plan shall be approved by the Supervisor prior to initiating construction. The plan shall include proposed measures to keep concrete curing water out of backfill and sub grade areas.

Removing Excavation Material

The excess of excavation material which the Engineer judged to transport from the site area shall be carried to an adequate area that is decided by the contractor, Engineer and local administration together. The permission for transporting materials from site to the selected area is under the contractor's responsibility. After all the excavation is completed all temporary storage and stack areas must be cleaned, drainage slopes are set, and the site is remained in a good view according to the local administration rules.

Transportation and unloading procedures shall be done without giving any disturbance to environment. The trucks shall be prepared covered to prevent rubble pouring, according to the traffic rules.

It may be not convenient to transport some of the trees in the site. In this case these shall be stacked in a suitable place that the Engineer shows.

Exported Compacted Stabilized Fill

Compacted stabilized fill is used between foundations. Fill material shall be in the form as defined in the capillary water paragraph or in the re-arrangement of bases and loading paragraph.

Borrow materials for the use of compacted stabilized fill requirements shall be selected whether the capillary barrier exists. Borrow material shall be obtained outside from the site from a specific location chosen by contractor and shall be approved by the Engineer. Obtaining compact stabilized fill material, transportation and similar costs are included in the related items.

Sieve Analysis of compacted stabilized fill:

Grain Size	Passing the Sieve (% Percentage)
75 mm	100
35.5 mm	85-100
10 mm	40-70
5 mm	25-45
600 micron	8-22
75 micron	0-5

Backfill

Backfill process shall not begin before; the approval of construction under the final level, control of underground installation systems and their testing, removing form, cleaning the area from wastes and rubbles.

The above-mentioned construction under the final leveling includes water insulation over the faces of exterior basement walls, protection walls but not limited with these.

Fill shall not be placed over the wetted surfaces of soil. Fill material shall be placed and compacted as described in the related paragraphs.

Laying fill materials and compaction shall not be applied with the heavy work machines to foundations and retaining walls at a distance smaller than the height between the foundation system structure and fill level. The compaction work between these distances shall be made with appropriate hand compactors of layers having a compacted thickness of not greater than 20 cm. Fill material shall be placed carefully without giving any harm to covers around pipes. To place the fill material around walls, 7 days must be passed over the construction time. Backfill shall be placed around the walls at equal amounts and level shall be raised up. Also, for the drainage of water, slope shall be given to the surfaces in an applicable ratio. Care must be taken to the locations under the building entrance, slabs and sidewalks. Compaction tests shall be made according to the tests paragraph.

Rock Excavation

If rock is encountered during excavation, no additional payment shall be done. In rock excavations appropriate machines shall be used but explosives are not permitted.

Protection of Existing Service Lines and Structures

Contractor is responsible from protection of existing service lines and structures against damaging. In case of any damage occurrence its rehabilitation is also under Contractor's guarantee.

Levelling

The areas outside the buildings/structures shall be leveled according to project parameters and drainage shall be maintained. Finally, after the last control the area shall be kept clean.

Addition to these, the upper soil layer may be compacted and dirtied by lime or cement because of the working machines. Then it must be cleaned and ventilated.

The stored vegetable soil shall be placed into the ventilated, cleaned and leveled layers.

Transportation of Earthworks

No additional or directly payment for transportation shall be made in any part of the work.

4.1.2. CONCRETE WORKS

Concrete

Concrete Works as specified hereunder shall include the supply of materials, mixing of concrete, formwork, reinforcement, placing, compaction and curing of concrete and site clearance after completion of works. In general, TS 1247 or DIN 1045 shall be respected when mixing, placing and curing concrete.

The prices entered in the price proposal shall fully include the value of works described shall cover the cost of all labour, subsidence, traveling, materials, admixtures, temporary works, yards and stockpiles, sampling and testing and any other expenses whatsoever together with all risks, liabilities and obligations set forth or implied in the Contract Documents.

Record of Concreting

The Contractor shall keep accurate and up to date records of concreting showing for each day when sections of the works were concreted:

- Date, time, weather and temperature;
- Results of all concrete tests including identification for which part of works the sampled material is representative;
- Class of concrete, volume of concrete placed and number of batches used for each location.

The laboratory where concrete test have to be carried out shall be approved by the Engineer and be accessible for him at any time.

Organization of Concrete Production at the Site

At the commencement of the Contract the Contractor shall submit for the approval of the Engineer a Method Statement detailing his proposals for the organization of concreting activities at the site. The concrete to be used for Works should be ready-mixed.

The Method Statement shall include the following items:

- Plant proposed including plant capacity and capability to continuous supply of concrete.
- Quality control procedures for concreting by the contractor.

- Transport and placing of concrete.
- Details of formwork including striking/removing times and procedure for temporary support of beams and slabs.
- Protection and curing.

Ready Mixed Concrete

Concrete obtained from a supplier of ready-mixed concrete may be used in the Works subject to the written approval of the Engineer. Such approval shall not be given until the Engineer is satisfied that the organization and control of the manufacture and delivery of all ready-mixed concrete is satisfactory. Ready mixed concrete shall comply with TS 206-1.

Placing and Compaction of Concrete

Preparatory Work:

The Engineer's approval in writing shall always be obtained before any concrete is placed in the Works. All constructional plant and materials required, or which may be required during the concreting work and for curing shall be on site and the Contractor shall be fully prepared for the work. The Engineer's approval to place concrete shall only be given after such preparations and other relevant requirements of the Technical Specifications have been carried out and complied with.

If necessary and/or directed by the Engineer, the Contractor shall cool any shuttering that has become overheated or exceptionally dry through prolonged exposure to the sun. The Contractor shall ensure that all shuttering retains a sufficient amount of humidity and has not become shrunk or warped. All soaking or spraying of shuttering shall be done with potable water.

When concreting in hot weather the requirements set out under the heading "Concreting in Hot Weather" shall be complied with. The Engineer may completely forbid the placing of concrete in any shuttering, which he believes has become too and/or dry and the condition of which could harm the quality and strength of concrete. No extra payment for cooling or soaking of shuttering shall be made. Pursuant to Section 2.3.6 all shuttering, area of deposition, reinforcement and exposed surfaces of adjoining concrete surface shall be thoroughly cleaned and free from dust, debris, oil any other substance that may be harmful to fresh concrete.

Depositing in Work:

The methods of conveying and depositing concrete shall be such as to prevent segregation of the materials and shall be approved by the Engineer before concreting begins. The placing and compaction of concrete shall be carried out under the direct supervision of a competent member of the Contractor's staff.

Concrete shall be placed directly in the Works as soon as possible without the need for re-handling and not more than 45 minutes after mixing and in any case, before the initial setting has taken place. If any delay has occurred after mixing and the concrete has begun to set, it shall not be used in the Works and shall be removed from the site. Unless otherwise agreed by the Engineer on the basis of satisfactory site trials concrete shall not be dropped into place from a height exceeding 1,5 meters.

Concreting of any section or unit shall be carried out in one continuous operation up to the construction joints. No interruption of the concreting shall be allowed without the approval of the Engineer. Where deposition of concrete has to be interrupted, precautions shall be taken to ensure satisfactory adhesion of later batches of concrete to that previously placed.

Where delays of more than one hour has occurred between concreting operations in one section or unit of work, concreting shall only be resumed when, in the opinion of the Engineer, the previously placed concrete has had ample time to harden and the resulting joint shall be treated as a Construction Joint within the meaning and description of Section 2.4.9. At all times when concrete is being placed, a competent steel fixer shall be in continuous attendance to adjust and correct the position of any reinforcement, which may become displaced.

Transportation of concrete directly over fixed reinforcement steel during concreting shall not be allowed unless proper provisions are made to avoid displacing or damage to the reinforcement.

Pouring in Layers:

Concrete shall be poured in approved quantities and horizontal layers of such depth as to permit thorough incorporation with the layers below by vibration, spading, ramming and working. If, for unforeseen reasons, it is necessary to stop concreting before completion of a section, then construction joints as specified shall be formed and further concreting shall be suspended for at least 24 hours.

Concreting in Hot Weather:

The Contractor's attention is drawn to TS 1248 or ACI 305 entitled "Hot Weather Concreting". The Contractor's methods shall comply with the recommendations in that document as modified and supplemented below.

The Contractor shall take great care during hot weather to prevent the cracking or crazing of concrete. The

Contractor shall arrange for concrete to be placed in the early morning or late evening as directed by the Engineer.

The Contractor shall pay particular attention to the requirements specified herein for curing. Formwork shall be shaded from direct exposure to the sun both prior to placing of the concrete and during its settings. The Contractor shall take appropriate measures to ensure that reinforcement in the section to be concreted is maintained at the lowest temperature practicable.

Concrete at placing shall have a temperature of not more than 32°C. If necessary the Contractor shall cool the aggregates and mixing water by methods approved by the Engineer.

Where necessary the Contractor shall design, install and operate a cooling system by which cooling water is pumped through a piping system in order to decrease the heat of hydration during concreting. The proposal for such a cooling system shall be submitted to the Engineer for his approval well in advance of the concreting operations.

The temperatures of ambient air, concrete at various levels and intervals not exceeding 5 meters and cooling water where applicable shall be measured by means of thermocouples and recorded.

Concreting in Cold Weather:

Cold weather is defined as the situation existing at the Works, where either or both of the following conditions existing:

- The air temperature at the time considered is below 2°C;
- The mean daily air temperature over three or more successive days has dropped below 5°C.

Under no circumstances may concrete be placed in contact with frozen ground or formwork, or in contact with ice, snow or frost on the ground or on formwork or reinforcement. Concrete shall not be made with frozen materials.

Concreting may proceed in cold weather provided special precautions are taken to ensure that the surface temperature of the concrete at the time of placing is not less than 5°C for a succeeding period of at least:

4 days when the cement used in the concrete is ordinary Portland cement;

2 days when the cement used in the concrete is rapid hardening Portland cement.

Such precautions may include the following:

- Warming the aggregates and heating the water, provided that the temperature of either does not exceed 60°C. Water and aggregates shall be mixed for a period sufficiently long for them to acquire a uniform temperature before cement is added.
- Completely surrounding the freshly placed concrete with a cover and heating the enclosed air, which shall be kept moist. Draughts of hot or dry air shall not be directed at surfaces.
- Insulating the formwork and finished concrete surfaces.
- Providing screens to protect the concrete from air currents.

The Contractor shall provide the Engineer with details of the precautions he proposes to take to protect the concrete from the effects of low temperatures and with details of the methods he proposes to use assess the correct timing at which such protection may be removed. No concreting shall be done in cold weather prior to the approval the Engineer for the proposed measures.

Concreting in Unfavorable Weather:

Concreting shall not be permitted during heavy rain or snowfall, or when the air temperature falls below 2°C, or when the concrete temperature rises above 32°C. When the air temperature exceeds 25°C, concreting shall only be permitted after special precautions, approved by the Engineer, have been taken to prevent early setting of the concrete, such as lowering the temperature of the water to be used in the mix or by means of a cooling-system, keeping the aggregates and shutters continuously sprayed with water and erection of temporary sun shades over the working area. During concreting operations the temperature of the placed concrete shall be recorded.

Compaction of Concrete:

The Contractor shall regard the compacting of the concrete to be of fundamental importance for the objects which he shall produce. A watertight concrete of maximum density and strength must be obtained.

Concrete shall be thoroughly compacted during the operation of placing and shall be thoroughly worked around the reinforcement and embedded fixtures and into corners of the formwork and moulds.

Mechanical vibrators shall be of the immersion type with a frequency of not less than 8000 vibrations per minute and as approved by the Engineer. A sufficient number of vibrators shall be used to handle the maximum rate of concrete production with a 50% allowance for stand-by units during any period of concreting. All operators handling vibrators shall be trained in their operation.

Vibrators shall be inserted into the not compacted concrete vertically and at regular intervals. Where the not compacted concrete is in a layer above freshly compacted concrete the vibrator shall be allowed to penetrate vertically for about 100 mm into the previous layer. Vibrators shall be withdrawn slowly from the mass of concrete so as to leave no voids. Internal type vibrators shall not be placed in the concrete in a random or haphazard manner nor shall concrete be moved from one part of the work to another by means of the vibrators. Vibration shall not be applied directly or through the reinforcement to sections or layers of concrete which have hardened to the degree that the concrete flow in the formwork over distances so great as to cause segregation.

Every care shall be taken to see that reinforcement and fittings attached to the shuttering are not disturbed, and that no damage is caused to concrete that has already set or to the internal face of the shuttering by using immersion type vibrators. In areas of congested reinforcement, it may be necessary to use small diameter poker and the Contractor shall supply suitable sizes of pokers for each part of the work. Vibration of concrete by hammering the shuttering with hand tools is not permitted.

When placing concrete against horizontal or inclined elements of waterstops they shall be lifted and the concrete placed and compacted to a level slightly higher than the underside of the waterstop before releasing the waterstop to ensure complete compaction of the concrete around the waterstop.

The duration of vibration shall be limited to that required to produce satisfactory compaction without causing segregation. Vibration shall not be continued after water or excess grout has appeared on the surface.

Concrete shall not be disturbed after compaction and placing in its final position. Concrete that has partially set before final placing shall not be used and shall be removed from the site.

Placing Concrete on Previously Executed Work:

Where concrete is to be poured against or on top of previously executed work, the surface of the old concrete shall be thoroughly wire brushed, hacked and cleaned with water and air under pressure to expose the surface of the aggregate and to remove all laitance. Special care shall be taken to ensure that the new concrete is thoroughly compacted and rammed against the old.

Protection and Curing of Concrete:

Water used for curing shall comply with TS 1247 and TS 1248. Concrete shall be protected from damage by climatic conditions (direct sunlight, rain, snow or frost), running water or mechanical damage during curing. All methods to be used for curing and protection of freshly placed concrete shall be subject to the prior approval of the Engineer.

The maximum and minimum ambient temperatures and humidity shall be measured and recorded each day by the Contractor. The records shall be made available for the Engineer's inspection.

All exposed surfaces shall as finishing proceed be covered with a wet hessian sheet followed by a reflective polythene sheet. These shall be securely fastened around the edges and supported in order not to damage the finished concrete surface. As soon as practicable the hessian and polythene shall be lowered into close contact with the concrete and securely weighted or fastened down to prevent wind blowing underneath. The hessian sheet shall be maintained in a moist condition at all times and shall be inspected at intervals not exceeding 6 hours. Concrete shall be kept moist on exposed surfaces for a period of not less than 72 hours or as approved by the Engineer.

Alternative methods of protecting and curing concrete, such as ponding in which the water is to be maintained at least 50mm deep, may be approved by the Engineer. In any case liquid curing membranes shall not be used on exposed surfaces or where laitance is to be removed and aggregate exposed to provide satisfactory bond for placing further concrete or mortar screeds. Liquid curing membranes shall not be used where mortar, resin mortar, or joint sealant is to be applied.

Sufficient methods to afford full protection to a concrete pour shall be available at the place of work prior to the commencement of concreting.

During very hot weather conditions, the Contractor may be required to cool formwork containing concrete by spraying with water. This shall be carried out where directed notwithstanding and whatever other measures the Contractor may have employed for the curing of the concrete. All materials spray equipment and an ample supply of water for curing shall be ready on site before any concreting starts.

Faulty Work:

Any portion of the work which is honeycombed or otherwise inferior shall on the written instruction of the Engineer, be immediately cut out and reconstructed in an approved manner without extra charge. Plastering of defective work shall not be permitted. Any leaks or cracks shall be sealed by injection with a synthetic resin or other appropriate methods approved by the Engineer.

Blinding Concrete (Sub-base):

A blinding layer of minimum 150 mm lean concrete shall be placed under foundations where shown on the Drawings or ordered by the Engineer. The blinding layer shall be allowed to harden before the structural concrete for the ground slab is placed.

Blinding of trimmed surfaces in excavations and trenches includes placing, compaction and screening of surfaces as specified in the Technical Specifications.

Blinding shall be measured net by square meters, referring to minimum trench width as specified for earth works and to the size of structures as shown on approved Drawings.

Loads on Concrete Structures:

No external load of any kind shall be applied to any part of a concrete structure until the concrete has matured for at least 7 days and then only with the approval of the Engineer and after confirmation those 7 days specimen strengths as agreed by the Engineer have been met.

Field Concrete

Joint Sealants and Fillers

The Contractor shall provide Class 5 or Class 8 joint-sealant materials and fillers unless otherwise shown on the plans or approved and other sealant materials of the size, shape, and type shown on the plans in accordance with DMS-6310 (or equivalent), "Joint Sealants and Fillers.

Sawing Equipment

The Contractor shall provide power-driven concrete saws to saw the joints shown on the plans. Provide standby power-driven concrete saws during concrete sawing operations. Provide adequate illumination for nighttime sawing.

Grinding Equipment

When required, provide self-propelled powered grinding equipment that is specifically designed to smooth and texture concrete pavement using circular diamond blades. Provide equipment with automatic grade control capable of grinding at least a 90 cm width longitudinally in each pass without damaging the concrete.

Joints

The Contractor shall

- install joints as shown on the plans,
- clean and seal joints,
- repair excessive spalling of the joint saw groove using an approved method before installing the sealant
- seal all joints before opening the pavement to all traffic,
- When placing of concrete is stopped, install a rigid transverse bulkhead, accurately notched for the reinforcing steel and shaped accurately to the cross-section of the pavement

Placing and Removing Forms

The Contractor shall

- Use clean and oiled forms.
- Secure forms on a base or firm subgrade that is accurately graded and that provides stable support without deflection and movement by form riding equipment.
- Pin every form at least at the middle and near each end.
- Tightly join and key form sections together to prevent relative displacement

Spreading and Finishing

The Contractor shall

- Finish all concrete pavement with approved self-propelled equipment.
- Use power-driven spreaders, power-driven vibrators, power-driven strike-off, and screed, or approved alternate equipment.
- Use the transverse finishing equipment to compact and strike off the concrete to the required section and grade without surface voids. Use float equipment for final finishing.
- Use concrete with a consistency that allows completion of all finishing operations without addition of water to the surface.
- Use the minimal amount of water fog mist necessary to maintain a moist surface.
- Reduce fogging if float or straightedge operations result in excess slurry.

4.1.3. SHUTTERING AND CONCRETE FINISHES

General

Shuttering shall include all temporary moulds for forming the concrete together with all temporary

constructions required to support such moulds.

Shuttering shall be of suitable design and adequate construction to carry the loads without excessive bulging, distortion or deflection. Shuttering shall be constructed so as to prevent loss of water or grout from the concrete. Special attention shall be measured to shuttering where poker or shutter vibrators are used to compact the concrete.

Materials for Shuttering

Shuttering shall be made from good quality timber, free from loose knots, shakes and warped surfaces. Timber for shuttering shall not be less than 30 mm in thickness, and the board faces in contact with concrete and the board edges shall be planed smooth. Shutters used to have fair faced concrete shall be appropriate for this purpose.

Alternatively, with the approval of the Engineer, shuttering may be made from:

- metal with accurately aligned and close fitting joints
- plywood or hardboard 5 mm in thickness supported by close boarded timber
- plywood not less than 17.5 mm in thickness. The plywood or hardboard shall be resistant to deterioration by water, and shall be fixed and jointed in such a manner as to give a perfectly smooth and even finish to the concrete.

Fixing of Shuttering

Shuttering shall be fixed to perfect line and level and be truly plane with no crevices at joints, and shall be securely braced, supported and wedged so as to retain its position without displacement or deflection during the placing and compaction of the concrete. All joints shall be either horizontal or vertical.

Coating to Prevent Adhesion

All shuttering in contact with concrete shall be treated with an approved mould oil or solution before usage to prevent the adhesion of the concrete. Such oil or solution shall be carefully applied in such a manner that there is no contamination of the reinforcement or previously placed concrete by the oil or solution. Any materials which shall adhere to or discolor the concrete shall not be used.

Access Holes

Adequate access holes shall be left for the purpose of cleaning the shutters and for placing and compaction of the concrete.

Cleaning and Re-Using of Shuttering

Before any concrete is placed, the shutters shall be properly cleaned and washed out with water and air under pressure to remove sawdust, shavings and all other foreign matter. All water shall then be drained and mopped out from the shutter.

In no case shall concrete be placed in shuttering before the shuttering has been approved by the Engineer. If shutters or moulds are to be re-used, all surfaces shall be cleaned and shall be completely free from remnants of concrete or mortar. If in the opinion of the Engineer, shutters or moulds are not acceptable for reuse, they shall be either properly repaired or substituted with new shutters or moulds which shall comply with the requirements of Section 2.5.3.

Removal of Shutters

Formwork shall be designed as to permit easy removal without resorting hammering or levering against the surface.

The period of time elapsing between the placing of the concrete and the striking of the formwork shall be as approved by the Engineer and shall be in any case not less than the period stated in TS 500 or DIN 1045. If not otherwise directed, the striking times for side formwork for slabs shall be 3 days.

At all times the Contractor shall delay the removal of the shutter if in the opinion of the Engineer the concrete contained therein has not attained sufficient hardness.

In cases of average temperatures being below 4°C, the period of removal shall be extended by the number of days the temperature has been lower than 4°C. The periods given in days are days of 24 hours duration.

Alternatively, the removal of shutters shall be determined by the demanded compressive strength of the concrete.

Finish to Concrete Surfaces

All surfaces shall be free from cracks, sand runs, honeycombing, porosity and grout/matrix loss.

Dimension and Surfaces of In-Situ Concrete

Workmanship in formwork and concreting shall be such that concrete shall normally require no making good, surfaces being perfectly compacted, smooth and with no irregularities. Concrete surfaces for the various finishes shall in any event never exceed the maximum permitted tolerances stated below:

- Line and level: ± 12 mm
- Dimension: ± 12

Remedial Treatment of Concrete Surfaces

Any remedial treatment to concrete surfaces shall be agreed with the Engineer following inspection immediately after the stripping of formwork and shall be carried out without delay.

Any concrete surface which is found to have been treated before inspection by the Engineer shall be rejected.

Any minor surface blemishes shall be repaired to the satisfaction of the Engineer immediately after completion of curing. Remedial measures may include, but shall not be limited to, the following:

- Holes left for formwork supports shall be thoroughly cleaned out to remove all loose material and the sides shall be roughened, if necessary, to ensure a satisfactory bond. They shall then be filled with dry-pack mortar.
- Fins, pinhole bubbles, surface discoloration and minor defects may be rubbed down with sacking and cement immediately the formwork is removed.
- Abrupt and gradual irregularities may be rubbed down with carborundum and water after the concrete has been fully cured, where curing shall be applied in accordance with principles stipulated in the "Protection and Curing of Concrete" section
- Small defects and minor honeycombing shall be chipped out perpendicular to the face of the concrete to a depth of at least 25 mm and filled with dry-pack mortar.
- Fissures shall be repaired by using epoxy based materials or by using materials approved by the Engineer.

All other defects shall be regarded as too extensive to permit satisfactory repair and the concrete containing the defect shall be broken out and replaced.

4.1.4. STEEL REINFORCEMENT

Types, Quality and Storage

Steel reinforcement for concrete shall consist of steel bars or steel wire fabric. Steel bars shall consist of deformed bars of type ST III (S420a (with a characteristic tensile strength of 420 MPa)) as specified in TS 500 and TS 706 EN 12620 or DIN 488 T1 and DIN 488 T2. Steel wire fabric reinforcement shall be in accordance with TS 4559 or DIN 488 T4.

The Contractor shall submit reinforcement detail Drawings and calculations for approval of Engineer, if deemed necessary by the Engineer.

The Contractor shall prepare test specimens of steel reinforcement to be used in the Works. Test specimens shall be taken in the presence of the Engineer and shall be of a size sufficient to carry out the tests as described below. They shall be tested in an approved laboratory and the certified copies of the results of the tests shall be submitted to the Engineer. The specimens shall be tested for bending and tensile properties and the wire fabric also for weld shear strength. The methods and requirements for testing shall be carried out in accordance with TS 4559 and TS 802 or DIN 488 T3, 488 T5 and 488 T6. No steel reinforcement shall be used in the Works until the testing results have been approved by the Engineer. If ordered by the Engineer, test procedures shall be repeated at the Contractor's expense for any new supply of reinforcement during the course of the Works.

Storage of reinforcement shall be on racks or supports clear of the ground. Different types and sizes of reinforcement shall be kept separate.

The Contractor shall execute the reinforcement fixing in accordance with the Drawings and/or according to the requirements specified in TS 500 and DIN 1045.

Bending and Cutting Schedules

The Contractor shall prepare for his own use bar bending schedules and bar lists, cutting schedules and sheet lists for wire fabrics for each individual structure from the information given in the approved working Drawings,

and shall be responsible for ensuring that correct information is given when ordering reinforcement. Copies of these schedules, lists and orders shall be submitted to the Engineer for his approval. Steel bar supports shall be included in the bending schedules.

The approval of the bar bending and cutting schedules, list, and orders shall not relieve the Contractor of his responsibility to execute the reinforcement fixing in accordance with the Drawings and/or according to the requirements specified in TS 500 and DIN 1045.

Protection and Cleaning

Reinforcement shall be protected at all times from damage, and when placed in the structure shall be free from dirt, loose mill scale, rust scale, paint, oil or other foreign substance. All reinforcing steel shall be carefully cleaned of all set or partially set concrete, shutter oil or paint which may have been deposited during the construction of adjacent works.

Bending of Bars

Steel reinforcement shall be cut from straight bars free from kinks and bends or other damage and shall be bent cold by experienced competent workmen. Bars of diameter greater than 16 mm shall be bent in a bending machine designed for the purpose and approved by the Engineer. Any reinforcing bar that has already been bent shall not be re-bent at the place of the previous bend.

Cutting of Wire Fabrics

Wire fabric reinforcement shall be cut straight from the sheets. The use of off-cuts shall not be permitted.

Lapping of Bars and Wire Fabrics

Lapping bars and wire fabrics is permitted when necessary and approved by the Engineer. No welding of reinforcement shall be carried out unless authorized by the Engineer, welding and testing for reinforcement shall comply with the requirements specified in TS 500 or DIN 4099 T1.

Unless otherwise specified, lap length of bars shall be at least forty (40) times the diameter of the larger bar, and laps shall be positioned in a staggered pattern.

Laps on adjacent section of wire fabrics shall generally be carried out as follows:

- End to end by lapping the two pieces one full mesh (measured from the ends of the longitudinal wires in the other piece) and securing the two pieces together with wire ties placed at intervals of about 450 mm.
- Side by side by placing the two selvage wires (the longitudinal wires at the edges of the fabric) one alongside and lapping the other, and by securing the two pieces together with wire ties placed at intervals of about 900 mm.

Fixing of Reinforcement

All reinforcement steel shall be accurately placed and fixed in position and retained in that position during the placing of the concrete.

Spacer blocks for holding the reinforcement from contact with the forms or adjacent reinforcement, shall be of dense pre-cast concrete blocks of approved shapes and dimensions. The blocks shall be fitted with a semi-circular hollowing and double bent poured-in binding wires. The water tightness of these blocks must be at least similar to the concrete into which they are concreted. The use of pebbles, pieces of broken stone or brick or other materials shall not be permitted. Steel shall be bound and tied in its correct position using steel wire. Apart from any other requirement, the reinforcement, the reinforcing steel shall be fixed in such a manner that it shall support its own weight and any loads which may be imposed upon it during construction without displacement, deflection, or movement of any kind.

In slabs provided with two or more layers of reinforcement the parallel layers of steel bars shall be supported in position by the use of steel chairs. Spacer blocks shall be placed at each chair to support the layers of reinforcement from the blinding concrete or shuttering.

The distance between any two parallel bars except at laps shall not be less than 5 mm greater than the nominal aggregate size.

All reinforcement exposed to the weather for long periods before concreting is commenced shall be covered with polythene blinding tape, cement grout or other materials to the surrounding concrete. Should in spite of these precautions rust staining occurs on any permanently visible surfaces, it shall be removed at once to the satisfaction of the Engineer.

Thickness of Cover

The thickness of cover for the reinforced concrete ground slab shall be 50 mm. For the beams and columns it

shall be 25mm. For external works, water retaining structures and casting of concrete in/under water, it shall be 75 mm.

Tolerances

Tolerances in placing reinforcement shall be +/- 10 mm.

Approval before Concreting

All reinforcement, after having been fixed in position, shall be inspected and approved by the Engineer before any concrete is placed. Any concrete placed contrary to this requirement shall, if ordered by the Engineer, be removed together with the reinforcement and replaced by the Contractor at his own expense.

External treatment of walls towards ground

Drawings and general provisions of the Contract apply to this Section. Related sections of the relevant Turkish Standards may be applicable in place of the given codes, norms or standards after the Engineer's approval.

Product data for each type of product specified, including data substantiating that materials comply with requirements for each damp proofing material specified. Include recommended method of application, recommended primer, number of coats, coverage or thickness, and recommended protection course.

Comply with manufacturer's recommendations except where more stringent requirements are indicated and where Project conditions require extra precautions to ensure satisfactory performance of work for the materials specified in the item's definitions.

5. TECHNICAL SPECIFICATIONS FOR ARCHITECTURAL WORKS / MATERIALS

All goods and materials used in the Works shall comply with international standards (EN, BS or ISO) or those of the appropriate national standards where no other standard is given, for both manufacturing and testing. Where no comment is made against an item, the Contractor shall assume that these standards are to be complied with.

All goods and materials to be provided by the Contractor and incorporated in the Works shall be new, unused, and of the most recent or current design and specification, and incorporate all recent improvements in design and materials, unless provided otherwise in the Contract.

The Contractor shall submit to the Engineer a list of his proposed suppliers and sources of materials required for the execution of the Works. Samples shall also be submitted at the request of the Engineer. The Contractor shall get written approval of the Engineer prior to use of the materials.

The materials subsequently supplied shall conform to the quality of samples which have been inspected by the Engineer.

Names of additional suppliers and sources may be submitted by the Contractor during the execution of the Contract, but no source of supply shall be changed without the Engineer's approval.

Materials and components shall be stored in such a manner as to preserve their quality and condition to the standards required by the Contract.

Materials and components shall be handled in such a manner as to avoid any damage or contamination, and in accordance with all applicable recommendations of the manufacturers.

Unless otherwise described in the Contract, the use, installation, application or fixing of materials and components shall be in accordance with all applicable recommendations of the manufacturers. Where appropriate, the Contractor shall make use of any technical advisory services offered by manufacturers.

5.1. Glass for Glazing

The glass provided under this Contract shall comply with requirements of the Turkish standards.

5.2. Granular Sub-base Material

Granular sub-base material shall be natural sands, gravels, crushed rock, crushed slag, and crushed concrete or well burnt non-plastic shale of uniform grading. The material shall be capable of being compacted to achieve a well-knit dense layer and lie within the following grading limits unless stated elsewhere in the Contract. Stones larger than 100 mm shall be removed.

Sieve size	Percentage by mass passing	
	Type 1	Type 2
50 mm	100	100
37.5 mm	85 – 100	85 – 100
10 mm	40 – 70	45 – 100
5 mm	25 – 45	25 – 85
600µm	8 – 22	8 – 40
75µm	0 – 10	0 – 10

Where granular sub-base material is to be used within 450 mm of the surface of any road, the Contractor shall supply to the Engineer a certificate confirming that the material has a heave not greater than 15 mm when subjected to a frost test as specified by the Highway Authority.

Natural sands and gravels shall only be permitted in Type 2 material.

The particle size shall be determined by washing and sieving method. The material passing a 425 µm sieve shall be non-plastic for Type 1 and have a Plasticity Index of less than 6 for Type 2.

With the exception of well burnt non-plastic shale, the material shall have a 'ten per cent fines' value of 50 kN or more when tested in accordance with EN 1097-2.

Sub-base material shall be spread evenly in layers not more than 150 mm compacted thickness and compacted to obtain a well-bound surface finish, any loose areas or segregated areas being made good by addition of fines or by removing and replacing with fresh material as directed by the Engineer.

SECTION 5A.2 SPECIFICATIONS FOR ITEMS/POSE DEFINITIONS

The works described in this section include all the necessary materials and losses, loading, horizontal and vertical transportation, unloading, workmanship, **transportation of material to the site**, contractor's profit and general expenses for the successful completion of the specified items.

Whenever item/pose is related to an item/pose number from the official books⁴ published by Turkish public institutes, the definition in this specification shall prevail for any inconsistency. In case of vagueness/absence of an issue in the item definition in this specification, the official definition shall prevail for only the vagueness/absence.

The units of measurement used in the items/pose definitions are those of the International System of Units (SI). No other units may be used for measurements, pricing, detail drawings etc. (Any units not mentioned in the technical documentation must also be expressed in terms of the SI.) Abbreviations used are to be interpreted as follows:

mm	means	millimetre
m	means	metre
da	means	decare
mm ²	means	square millimetre
m ²	means	square metre
m ³	means	cubic metre
kg	means	kilogram
ton	means	tonne (1000 kg)
pcs	means	pieces
h	means	hour
L.s.	means	Lump sum

⁴Official books valid for those specifications are published by;

- Republic of Turkey Ministry of Environment and Urbanization
- Republic of Turkey General Directorate of Highways
- İller Bank, Turkey
- Republic of Turkey General Directorate of State Hydraulic Works
- Republic of Turkey General Directorate of Railways, Harbors, Airports

km	means	kilometre
l	means	litre
kVAR	means	kilovolt ampere reactive
%	means	per cent

Civil/Structural Works

Item no:	Item	Unit	Quantity
Civ.01	6 mm tempered glass(TS EN 14321-1,2)	m ²	
Description/ Specifications	The price includes 1m2of 6 mm tempered glass.		
Related official pose/item number,Book	Republic of Turkey Ministry of Environment and Urbanization 10.380.2001		

Item no:	Item	Unit	Quantity
Civ.02	6 mm normal flat glass installation (with metallic construction)	m ²	
Description/ Specifications	with a profile or a metal lath: the mounting of normal flat glass with 6 mm thickness.		
Related official pose/item number,Book	Republic of Turkey Ministry of Environment and Urbanization 28.063/1/ANL		
Item no:	Item	Unit	Quantity
Civ.03	Providing Sand, Hand Laying, Watering and Compacting	m ²	
Description/ Specifications	1 m3 price, including all kinds of workmanship, materials and casualties, loading at the workplace, horizontal and vertical transport, unloading, contractor overhead and profit for sand supply, pouring into the area, manual laying, leveling, watering and compacting layer by layer.		
Related official pose/item number,Book	Republic of Turkey Ministry of Environment and Urbanization 15.125.1001		

Item no:	Item	Unit	Quantity
Civ.04	Providing Gravel, Hand Laying, Watering and Compacting	m ³	
Description/ Specifications	1 m3 price includes all kinds of workmanship, materials and casualties, loading at the workplace, horizontal and vertical transport, unloading, contractor overhead and profit for gravel supply, pouring into the area, manual laying, leveling, watering and compacting layer by layer. Measurement: Volume shall be calculated according to the dimensions in its project.		
Related official pose/item number,Book	Republic of Turkey Ministry of Environment and Urbanization 15.125.1002		

Item no:	Item	Unit	Quantity
Civ.05	Supply of gravel and flooring, irrigation and compression by machine	m ³	
Description/ Specifications	In accordance with certified projects and details, the price of 1 m3, including, providing gravel for drainage, manuallybeing thrown into the ditch to be drainedand all kinds of workmanship,		

	materials and casualties, loading in the workplace, horizontal and vertical transport, unloading, contractor overheads and profits for sheet layering Measurement: Volume shall be calculated according to the dimensions in its project.
Related official pose/item number,Book	Republic of Turkey Ministry of Environment and Urbanization 15.125.1004

Item no:	Item	Unit	Quantity
Civ.06	Making drainage by providing gravel	m³	
Description/ Specifications	Technical Description: Supply of gravel, discharge on the field, flooring by motor grader, irrigation, compression of each layer separately by vibrating rubber-tired roller, labor, material and wastage, loading, vertical and horizontal transport, unloading, contractor profit and overheads. Measurement: Volume shall be calculated according to the dimensions in its project.		
Related official pose/item number,Book	Republic of Turkey Ministry of Environment and Urbanization 15.125.1006		

Item no:	Item	Unit	Quantity
Civ.07	Readymix concrete placement meeting the compressive strength requirements of C 16/20, including procurement, delivery, concrete pump and placement.	M3	
Description/ Specifications	<p>Delivery and placement of readymix concrete procured from concrete batch plant (Batch plant shall meet the following requirements; minimum one loader, sufficient number of transmixers and concrete pumps, backup generator, weight type admixture feeders, 60 m³/h plant capacity, with air compressor, 4 aggregate bunkers, moisture sensors, conveyor belt-fed, fully automated from computer control cabinet, having a cement silo with minimum 50 tons of capacity, recycling system integrated. Batch plant shall have a laboratory capable of performing aggregate and concrete tests. All instruments of the batch plant shall be regularly calibrated and documented) composed of water, granulometric washed aggregate with artificial or natural sand designed as per the project requirements meeting the compressive strength of C 16/20 including cementitious materials and admixtures. Procurement, transmixer loading & unloading, vertical and horizontal transportation, placement, consolidation, curing, protection from cold and hot weather, providing mixing and curing / cleaning water are included. Quality control procedures of the concrete such as specimen preparation, testing and laboratory services are included. All equipment costs, batch plant expenses, laboratory expenses, advance payments, indirect costs, contractor costs and contractor profit are included.</p> <p>Measuremet : Calculated based on the dimensions in the project.</p> <p>Notes:</p> <p>1- Prequalification of the batch plant meeting the requirements of TSE and governing standards, either manufactured at or procured from, shall be submitted to the administration prior to the batch plant operations for approval. Batch plant can only be used after the approval of the prequalification documentation proving that the batch plant meets the requirements of TSE.</p> <p>2- Invoices including the company information and project name have to be submitted as an attachment to the payment applications if the concrete is procured from a readymix plant.</p> <p>3- Admixtures used during the concrete production will be paid separately.</p> <p>4- If a concrete pump is used, the cost of the concrete pump shall be deducted from the analysis.</p>		
Related	Republic of Turkey Ministry of Environment and Urbanization		

official pose/item number,Book	15.150.1003
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Item no:	Item	Unit	Quantity
Civ.08	Concreting of C 30/37 compressive strength class concrete being manufactured at a concrete plant or purchased (including concrete transport)	m³	
Description/ Specifications	<p>Technical Description: 1 m³ price of concrete with compressive strength C 30/37 being poured at site including: the supply of ready concrete manufactured at a complete concrete facility (minimum 60m3/h capacity, with four unit aggregate bunker compressor, computer controlled with control cabin, min. 50 ton capacity cement silo and conveyor system, recycling unit, laboratory for aggregate and concrete tests, generator, sufficient number of truck mixers and mobile concrete pumps and at least one loader, ingredient tank and ingredient tank bunker, humidity-meter and similar tools and equipment) compliant to the standards and the project, manufactured with washed, screened granulometric sand-gravel and/or ballast, cement, water and ingredients if necessary at C 30 / 37 class or having same characteristics; execution of concrete quality controls, loading to truck mixers, transportation to the work place, pouring by concrete pump to the pouring place, placement, compression with vibrator, irrigation, protection from cold, heat and other external effects and maintenance, taking sufficient number of samples for necessary and adequate tests and execution such tests, any labor, tool and equipment and outages, laboratory expenses for the aforementioned, any vertical and horizontal transport in the work place, loadings and unloading, loading of any granulometric sand, gravel or ballast and cement which is a part of concrete from the place of production, supply or purchase, transport to the concrete facility, unloading from vehicles, stapling, placement into the concrete facility, supply and transport of water for irrigation in the concrete, supply of concrete facility and all other equipment and its amortization expenses, any other expenses, contractor profit and expenses.</p> <p>Measurement: To calculated over the dimensions in the project.</p> <p>Notes: 1) The facility which the concrete is manufactured at or purchased from shall have all certifications required by the TSE and legislation and such documents must be submitted to the employer before starting the production. Provided that only after it has been identified that the submitted documents are compliant and the use is allowed, such concrete produced or purchased from such facility, with compliance certificate and bearing the conditions of the applicable legislation and market supply terms can be used. 2) If the concrete is supplied by purchase, one copy of the purchase invoices which shall show the name of the works shall be added to the payment documents. 3) The cost of ingredients to be added to the concrete shall be paid separately.</p>		
Related official pose/item number,Book	<p>Republic of Turkey Ministry of Environment and Urbanization</p> <p>15.150.1006</p>		

Item no:	Item	Unit	Quantity
Civ.09	Field concrete (concrete pavement)	m³	
Description/ Specifications	<p>This price includes materials (concrete, formwork/metal side forms, joint sealants and fillers), equipment, labor, tools for;</p> <ul style="list-style-type: none"> • Concreting of C30/37 compressive strength class concrete • Sawing • Grinding • Joints 		

	<ul style="list-style-type: none"> Placing and removing forms Spreading and finishing <p>in accordance with "Field concrete expansion and shrinkage plan". Mesh reinforcement is not included to this price and will be paid by the item 15.160.1002.</p>
Related official pose/item number,Book	Republic of Turkey Ministry of Environment and Urbanization 15.150.1006A

Item no:	Item	Unit	Quantity																																																																																																																																																									
Civ.10	Ribbed wire mesh (3.00-10.00 kg/m2) Installation (including 10.00 kg / m²)	ton																																																																																																																																																										
Description/ Specifications	<p>Technical description: Mounting in accordance with the project of the steel masonry with the spot-welded joints of the stabs of the St IVb of 4,00 mm and bigger, and installation and support in accordance with the specifications and details, installation at the construction site, horizontal and vertical transportation, Price of 1 ton wire mesh including unloading, all kinds of materials and losses, labor, tools, equipment expenses, contractor general expenses and profits</p> <p>Measurement:</p> <p>1) According to the reinforced concrete project, the calculated square of the steel mesh is multiplied by the weights shown in the following table and calculated as tons.</p> <p>2) Steel and inserts not shown in the project are not included in the account.</p> <p>3) Bonded, kg / m weight differences (relative to the table) are not included in the calculation as the support is included in the loss in the analysis</p> <p>STEEL DAMAGE TABLES RANGE BY Kg / m² (One way)</p> <table><tr><th>Diameter</th><th>Kg/m.</th><th>50mm</th><th>75mm</th><th>100m</th><th>150m</th><th>200m</th><th>250m</th><th>300m</th></tr><tr><td>4.0</td><td>0.099</td><td>1.97</td><td>1.32</td><td>0.99</td><td>0.66</td><td>0.49</td><td>0.39</td><td>0.33</td></tr><tr><td>5.0</td><td>0.154</td><td>3.08</td><td>2.06</td><td>1.54</td><td>1.03</td><td>0.77</td><td>0.62</td><td>0.51</td></tr><tr><td>5.5</td><td>0.187</td><td>3.73</td><td>2.49</td><td>1.87</td><td>1.24</td><td>0.93</td><td>0.75</td><td>0.62</td></tr><tr><td>6.0</td><td>0.222</td><td>4.44</td><td>2.96</td><td>2.22</td><td>1.48</td><td>1.11</td><td>0.89</td><td>0.74</td></tr><tr><td>6.5</td><td>0.260</td><td>5.21</td><td>3.47</td><td>2.60</td><td>1.74</td><td>1.30</td><td>1.04</td><td>0.87</td></tr><tr><td>7.0</td><td>0.302</td><td>6.04</td><td>4.03</td><td>3.02</td><td>2.01</td><td>1.51</td><td>1.21</td><td>1.01</td></tr><tr><td>7.5</td><td>0.347</td><td>6.94</td><td>4.62</td><td>3.47</td><td>2.31</td><td>1.73</td><td>1.39</td><td>1.16</td></tr><tr><td>8.0</td><td>0.395</td><td>7.89</td><td>5.26</td><td>3.95</td><td>2.63</td><td>1.97</td><td>1.58</td><td>1.32</td></tr><tr><td>8.5</td><td>0.445</td><td>8.91</td><td>5.94</td><td>4.45</td><td>2.97</td><td>2.23</td><td>1.78</td><td>1.48</td></tr><tr><td>9.0</td><td>0.499</td><td>9.99</td><td>6.66</td><td>4.99</td><td>3.33</td><td>2.50</td><td>2.00</td><td>1.66</td></tr><tr><td>9.5</td><td>0.556</td><td>11.13</td><td>7.42</td><td>5.56</td><td>3.71</td><td>2.78</td><td>2.23</td><td>1.85</td></tr><tr><td>10.0</td><td>0.617</td><td>12.33</td><td>8.22</td><td>6.17</td><td>4.11</td><td>3.08</td><td>2.47</td><td>2.06</td></tr><tr><td>10.5</td><td>0.680</td><td>13.59</td><td>9.06</td><td>6.80</td><td>4.53</td><td>3.40</td><td>2.72</td><td>2.27</td></tr><tr><td>11.0</td><td>0.746</td><td>14.92</td><td>9.95</td><td>7.46</td><td>4.97</td><td>3.73</td><td>2.98</td><td>2.49</td></tr><tr><td>11.5</td><td>0.815</td><td>16.31</td><td>10.87</td><td>8.15</td><td>5.44</td><td>4.08</td><td>3.26</td><td>2.72</td></tr><tr><td>12.0</td><td>0.888</td><td>17.76</td><td>11.84</td><td>8.88</td><td>5.92</td><td>4.44</td><td>3.55</td><td>2.96</td></tr></table>			Diameter	Kg/m.	50mm	75mm	100m	150m	200m	250m	300m	4.0	0.099	1.97	1.32	0.99	0.66	0.49	0.39	0.33	5.0	0.154	3.08	2.06	1.54	1.03	0.77	0.62	0.51	5.5	0.187	3.73	2.49	1.87	1.24	0.93	0.75	0.62	6.0	0.222	4.44	2.96	2.22	1.48	1.11	0.89	0.74	6.5	0.260	5.21	3.47	2.60	1.74	1.30	1.04	0.87	7.0	0.302	6.04	4.03	3.02	2.01	1.51	1.21	1.01	7.5	0.347	6.94	4.62	3.47	2.31	1.73	1.39	1.16	8.0	0.395	7.89	5.26	3.95	2.63	1.97	1.58	1.32	8.5	0.445	8.91	5.94	4.45	2.97	2.23	1.78	1.48	9.0	0.499	9.99	6.66	4.99	3.33	2.50	2.00	1.66	9.5	0.556	11.13	7.42	5.56	3.71	2.78	2.23	1.85	10.0	0.617	12.33	8.22	6.17	4.11	3.08	2.47	2.06	10.5	0.680	13.59	9.06	6.80	4.53	3.40	2.72	2.27	11.0	0.746	14.92	9.95	7.46	4.97	3.73	2.98	2.49	11.5	0.815	16.31	10.87	8.15	5.44	4.08	3.26	2.72	12.0	0.888	17.76	11.84	8.88	5.92	4.44	3.55	2.96
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Item no:	Item	Unit	Quantity
Civ.11	Cutting, bending and placement of Ø 8- Ø 12 mm deformed	ton	

	concrete steel bars										
Description/ Specifications	<p>Technical Description: 1-ton unit price of deformed concrete steel bar including the cutting, bending and placement of such bars according to the application project, iron bonding wire and any material required for binding the bars and outages, loading, vertical and horizontal transport and unloading at workplace, labor, contractor profit and overhead costs.</p> <p>Measurement:</p> <p>1) The length of the iron including crotchets shall be measured according to the concrete application drawings.</p> <p>2) The weights of the steel bars shall be taken from the chart below.</p> <p>3) Steel bars and joints which are not shown in the project shall not be taken into the calculation.</p> <p>4) The weights (m) in the chart are base for calculation. As bonding wires, steel parts used in the alignment of steel bars and outages are considered in the analysis, no additional payment shall be made.</p> <p>Diameter(Ø)Unit weight</p> <table><tr><td>mm</td><td>Kg/m</td></tr><tr><td>8</td><td>0.395</td></tr><tr><td>10</td><td>0.617</td></tr><tr><td>12</td><td>0.888</td></tr></table>			mm	Kg/m	8	0.395	10	0.617	12	0.888
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8	0.395										
10	0.617										
12	0.888										
Related official pose/item number,Book	Republic of Turkey Ministry of Environment and Urbanization 15.160.1003										

Item no:	Item	Unit	Quantity																		
Civ.12	Cutting, bending and placement of Ø 14- Ø 28 mm deformed concrete steel bars	ton																			
Description/ Specifications	<p>Technical Description: 1-ton unit price of deformed concrete steel bar including the cutting, bending and placement of such bars according to the application project, iron bonding wire and any material required for binding the bars and outages, loading, vertical and horizontal transport and unloading at workplace, labor, contractor profit and overhead costs.</p> <p>Measurement:</p> <p>1) The length of the iron including crotchets shall be measured according to the concrete application drawings.</p> <p>2) The weights of the steel bars shall be taken from the chart below.</p> <p>3) Steel bars and joints which are not shown in the project shall not be taken into the calculation.</p> <p>4) The weights (m) in the chart are base for calculation. As bonding wires, steel parts used in the alignment of steel bars and outages are considered in the analysis, no additional payment shall be made.</p> <p>Diameter (Ø)Unit Weight</p> <table><tr><td>mm</td><td>Kg/m</td></tr><tr><td>14</td><td>1.208</td></tr><tr><td>16</td><td>1.578</td></tr><tr><td>18</td><td>1.998</td></tr><tr><td>20</td><td>2.466</td></tr><tr><td>22</td><td>2.984</td></tr><tr><td>24</td><td>3.551</td></tr><tr><td>26</td><td>4.168</td></tr><tr><td>28</td><td>4.834</td></tr></table>			mm	Kg/m	14	1.208	16	1.578	18	1.998	20	2.466	22	2.984	24	3.551	26	4.168	28	4.834
mm	Kg/m																				
14	1.208																				
16	1.578																				
18	1.998																				
20	2.466																				
22	2.984																				
24	3.551																				
26	4.168																				
28	4.834																				
Related official	Republic of Turkey Ministry of Environment and Urbanization 15.160.1004																				

pose/item number,Book	
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Item no:	Item	Unit	Quantity
Civ.13	Preparation and installation of framing construction using all kind of iron profiles as seperated parts or composately	ton	
Description/ Specifications	<p>Price of 1 ton includes prepearing and placing iron profilesindividually or in combination, all kinds of materials and losses, (including rivets, welding) at the construction site, horizontal and vertical transport, scaffolding or lifting equipment, unloading, labor, contractor expenses and profits, construction and installation, excluding paint cost.</p> <p>Measurement:</p> <p>1) The iron profile is weighed together with the fixing material before painting.</p> <p>2) However, if required by the contracting authorities, it can determine the weighing weight of the project according to the weights of all profiles and nodes. As a result of this weighing; Payments are paid up to 7% more than the rulers. Over 7% weight is not taken into account. The account is taken full of rivets and bolt holes. If the weight is less than the ruler as a result of this weighing, the weighing shall be taken as a basis, provided that the production is accepted by the Contracting Entity.</p>		
Related official pose/item number,Book	<p>Republic of Turkey Ministry of Environment and Urbanization 15.165.1001</p>		

Item no:	Item	Unit	Quantity
Civ.14	Production of reinforced concrete plain surface form works with plywood	m²	
Description/ Specifications	<p>Technical Description: 1 m2 unit price of production reinforced concrete plain surface form works made of 21 mm thickness plywood (filmed) artificial wood and inner surface lubricated according to the project and specification, including their disassembly, strengthening against the vibration required, material and their outages, vertical and horizontal transport at workplace, loading-unloading, labor, contractor profit and overhead costs.</p> <p>Measurement:</p> <p>The surfaces facing the form works shall be calculated from their project or by measuring at site. The surrounding form works of production holes which their gap volume has not been reduced shall be not taken into the measurement. No hole gap shall be extracted from the hole side at the form side.</p> <p>Notes:</p> <p>1) The form works scaffolding shall be paid separately.</p> <p>2) The material extracted from the forms shall be the contractor's property.</p>		
Related official pose/item number,Book	<p>Republic of Turkey Ministry of Environment and Urbanization 15.180.1003</p>		

Item no:	Item	Unit	Quantity
Civ.15	Quartz Aggregated (Gray) Floor Hardener and Cure Application for Fresh Concrete	m²	
Description/ Specifications	<p>The price of 1m2 includes, in the first stage, sprinkling the gray surface hardener with quartz aggregate on the poured concrete in accordance with its project, with a consumption of approximately 3.5 kg / m², in a homogeneous distribution,polishing by using trowel machine with float pan; in the second stage, sprinkling the gray aggregate hardener with quartz aggregatein a homogeneous distribution with a consumption of approximately 1.5 kg / m² andpolishing by using trowel machine with float pan until the concrete set,then, using the finishing trowel machine with trowel blades until the desired brightness is achieved,after</p>		

	obtaining the desired gloss, applying acrylic-based liquid curing material to the surface by brush roller or spraying method with a consumption of 0,200 kg / m ² , all kinds of materials and casualties, workmanship, loading in the workplace, horizontal and vertical transport, unloading and contractor profit and general expenses. Measurement:The projected area is calculated as m2. Note: 2/3 of the total material should be used in the first stage, 1/3 of it should be used in the second stage.
Related official pose/item number,Book	Republic of Turkey Ministry of Environment and Urbanization 15.190.1002

Item no:	Item	Unit	Quantity
Civ.16	Supply and placement of HDPE based drainage and protection sheet on waterproofing of basement shear walls (200 dpressure resistance <250 KN / m2)	m²	
Description/ Specifications	According to the project and detail approved by the administration, the price of 1m2, including,gluing the insulation pins from the head sides by using 4 pieces in 1 m2 area on the waterproofing made in accordance with the details in the basement shear walls, fixing bubuly sides of HDPE-based drainage and protection board to the surface with pins by overlapping minimum10 cm of joints, loading, horizontal and vertical transport, unloading, all kinds of materials and craftsmanship, labor and equipment costs, general expenses and profits of contractor at the construction site. Measurement:The projected area is calculated as m2. Notes: 1- This exposure is not used in horizontal application. 2- If the cover fillet is applied at the end point of the drainage plate (top elevation), the price shall be paid by its item.		
Related official pose/item number,Book	Republic of Turkey Ministry of Environment and Urbanization 15.200.1005		

Item no:	Item	Unit	Quantity
Civ.17	Ø 200 mm nominal diameter, PVC-based corrugated drainage pipe and its placement	m	
Description/ Specifications	Technical Description: Ø 200 mm nominal diameter PVC-based corrugated drainage pipes are prepared for drainage and laying down, all kinds of materials and wastes, workmanship and equipment expenses, workplace loading, horizontal and vertical transportation, unloading, general contractor and profit Price of 1 m including: MEASURE: The area laid on the drainage pipe is calculated as m. NOTE: The excavation of the drainage pipe to be laid to the drainage base, the material or concrete layer to be laid on the base of the drainage, the filling and compression of the drainage with the appropriate size of material on the side and top is paid from its own pose.		
Related official pose/item number,Book	Republic of Turkey Ministry of Environment and Urbanization 15.205.1004		

Item no:	Item	Unit	Quantity
Civ.18/a	Laying 150 g / m² weight geotextile felt	m²	
Description/ Specifications	In accordance with the project and detail approved by the administration, the price of 1m2, including laying the joints of the 250 g / m ² weight of geotextile felt by overlapping at least 10		

	cm in order to protect the insulation on the foundation or on the terrace, loading, horizontal vertical transport and unloading at construction site, all kinds of materials and craftsmanship, labor tools and equipment expenses, installation and dismantling of work tables when necessary, and general expenses and profits of the contractor. Measurement: According to the dimensions in the project, all surfaces laid in felt are calculated. Notes: It can be measured according to the test standards in the project and specification except weight. In cases where different features are required, this recipe is not applied.
Related official pose/item number,Book	Republic of Turkey Ministry of Environment and Urbanization 15.245.1001

Item no:	Item	Unit	Quantity
Civ.18/b	Laying 250 g / m² weight geotextile felt	m²	
Description/ Specifications	In accordance with the project and detail approved by the administration, the price of 1m2, including laying the joints of the 250 g / m ² weight of geotextile felt by overlapping at least 10 cm in order to protect the insulation on the foundation or on the terrace, loading, horizontal vertical transport and unloading at construction site, all kinds of materials and craftsmanship, labor tools and equipment expenses, installation and dismantling of work tables when necessary, and general expenses and profits of the contractor. Measurement: According to the dimensions in the project,all surfaces laid in felt are calculated. Notes: It can be measured according to the test standards in the project and specification except weight. In cases where different features are required, this recipe is not applied.		
Related official pose/item number,Book	Republic of Turkey Ministry of Environment and Urbanization 15.245.1002		

Item no:	Item	Unit	Quantity
Civ.19	Two layers of dampproofing application of 3 and 4 mm thick elastomeric polymer modified bitumen sheet (-20 degrees cold rolled) with mat reinforcement	m²	
Description/ Specifications	In accordance with the approved detail project,the price of 1m2 includes cleaning of the surface prepared for insulation and applying bitumen emulsion as a primer in a dry condition, with a minimum of 0,400 kg per m ² , after the primer has dried, applying it as a first layer of elastomer-based 3 mm thick polyester felt carrier (-20 ° C cold-bent) polymer bituminous cover with a full adhesive method, at least 10 cm from the joints, without igniting the polymer bitumen cover with the torch flame, as the second layer, placing the elastomer based 4 mm thick polyester felt carrier (-20 ° C cold-bent) polymer bituminous cover, in the same direction as the first layer, and gluing in full strips by overlapping the joints by 10 cm, loading, horizontal vertical transport and unloading at the construction site, all kinds of materials and craftsmanship, labor tools and equipment expenses, installation and dismantling of work tables when necessary, and general expenses and profit for the contractor. Measurement: According to the dimensions in the project,all surfaces insulated are calculated. Notes: Necessary precautions shall be taken to protect the dampproofing material, cost shall included in the same item number.		
Related official pose/item number,Book	Republic of Turkey Ministry of Environment and Urbanization 15.255.1009		

Item no:	Item	Unit	Quantity
Civ.20	Single layer waterproofing with a 4.3 mm plastomer-based polyester felt carrier (bending at -5 ° C) with a mineral coated polymer bituminous cover	m ²	
Description/ Specifications	<p>The price of 1 m² includes cleaning the surface prepared for insulation, in dry condition, applying bitumen emulsion as a primer to spend at least 0.400 kg of m², after the primer has dried, applying it without sticking the polymer bituminous cover with torch flame, and a plaster-based 4.3-mm-thick polyester felt carrier (which should be bent at -5 ° C in cold) with a mineral bonded polymer bituminous cover in full strips by 10 cm, loading at the construction site, horizontal vertical transport and unloading, all kinds of materials and craftsmanship, labor and equipment costs, installation and dismantling of work tables when necessary, and general expenses and profit for the contractor.</p> <p>SIZE: All surfaces insulated according to the dimensions in the project are calculated.</p> <p>NOTE: Necessary precautions must be taken for insulation covers and their costs must be paid in their own pose.</p>		
Related official pose/item number,Book	<p>Republic of Turkey Ministry of Environment and Urbanization</p> <p>15.255.1016</p>		

Item no:	Item	Unit	Quantity
Civ.21	Mesh reinforced elastomeric resin based liquid applied dampproof plastic coating, 3 layers, 1,5 mm total thickness	m ²	
Description/ Specifications	<p>According to the project and detail approved by the administration, the price of 1m2 includes purifying surfaces from cracked parts, oil, dust and similar residues that will prevent adhesion and washing the product in accordance with the data sheet, after the surfaces are dried, applying elastomeric resin-based liquid plastic surface coating material to the surface in the same direction by brush, roller or spraying method, by diluting with a maximum of 1/4 of water, overlapping 75 g / m² net joints on top of each other at least 10 cm, applying elastomeric resin-based liquid plastic coating material on the second and third layers to the surface by brush, roller or spraying method perpendicular to the previous coat application, without diluting the product according to the technical application conditions, all kinds of materials and craftsmanship, labor tools and equipment expenses, loading at the workplace, horizontal and vertical transport, unloading, installation and dismantling of work tables when necessary, and general expenses and profits of the contractor</p> <p>Measurement: All surfaces insulated according to the project are calculated.</p>		
Related official pose/item number,Book	<p>Republic of Turkey Ministry of Environment and Urbanization</p> <p>15.270.1004</p>		

Item no:	Item	Unit	Quantity
Civ.22	Roof covering with a 0.50 mm thick hot dipped galvanized corrugated / trapezoidal sheet (painted with fabricated roll painting systemRAL6002) on steel or reinforced concrete beam (analysis with 10.200.1404)	m ²	
Description/ Specifications	<p>The price of 1m2 of roof covering on steel or reinforced concrete beam with 0,50 mm thick hot dip galvanized corrugated sheet metal includes, starting the laying process of 0.50 mm thick hot dip galvanized corrugated / trapezoidal sheet metal sheets on the existing steel or pre-reinforced concrete beam in the opposite direction to the dominant wind direction, mounting on these beams by using a metallic or preformed reinforced concrete beam with cap hook screws after drilling the corrugated sheets with a drill, at least 10 cm from the width and at least 15 cm from the length in accordance with the specifications, the waterproofing of the flue</p>		

	<p>bottom and other plaster bottoms in a watertight manner, formation of ridge elements and ridge, loading at the construction site, horizontal and vertical transport, unloading, all kinds of materials and casualties, vehicle and equipment expenses, contractor general expenses and profit.</p> <p>Measurement: It is calculated over inclined surfaces. Gaps larger than 0.25 m² are deducted, if any, eaves foreheads are included in the measurement.</p> <p>Notes:</p> <ol style="list-style-type: none"> 1- If the intervals of existing steel and pre-reinforced concrete corrugated plate fixing purlins are not suitable for plate fixing, the purlins are rebuilt in the appropriate range for the price in their pose. 2- Color code of the painting should be RAL 6002.
Related official pose/item number,Book	<p>Republic of Turkey Ministry of Environment and Urbanization</p> <p>15.325.1109/ANL</p>

Item no:	Item	Unit	Quantity
Civ.23	Covering floor with 1st quality, colored ceramic tile that has 40 x 40 cm nominal sizes, all kinds of patterns, surface features and 3 mm grout joint (with tile adhesive)	m²	
Description/ Specifications	<p>The price of 1 m² includes, cleaning the smooth surface suitable for the approved detail project from dirt, dust, burrs and similar residues that prevent adhesion and moistened, applying cement-based, high-performance, low-sliding tile adhesive with extended open time on the surface, grooving with special comb, placing colored, 1st quality ceramic floor tiles having all kinds of pattern and surface features in nominal dimensions of 40 x 40 cm with 3 mm joint gaps in accordance with floating rule and leveling, filling the joints with the desired color cement based, standard performance joint filling material, cleaning the coated surface, all kinds of materials and craftsmanship, labor and equipment costs, loading at the workplace, horizontal and vertical transport, unloading, contractor overhead and profit</p> <p>Size: It is calculated according to dimensions in its project.</p>		
Related official pose/item number,Book	<p>Republic of Turkey Ministry of Environment and Urbanization</p> <p>15.375.1053</p>		

Item no:	Item	Unit	Quantity
Civ.24	Covering wall and facade with 1st quality, glazed porcelain tile that has 40 x 40 cm nominal sizes, all kinds of patterns, surface features and 3 mm grout joint (with tile adhesive)	m²	
Description/ Specifications	<p>The price of 1 m² includes, cleaning the smooth surface suitable for the approved detail project from dirt, dust, burrs and similar residues that prevent adhesion and moistened, applying cement-based, high-performance, low-sliding tile adhesive with extended open time on the surface, grooving with special comb, placing 1st quality glazed porcelain tiles having all kinds of pattern and surface features in nominal dimensions of 40 x 40 cm with 3 mm joint gaps in accordance with floating rule and leveling, filling the joints with the desired color cement based, standard performance joint filling material, cleaning the coated surface, all kinds of materials and craftsmanship, labor and equipment costs, loading at the workplace, horizontal and vertical transport, unloading, contractor overhead and profit</p> <p>Size: It is calculated according to dimensions in its project.</p>		
Related official pose/item	<p>Republic of Turkey Ministry of Environment and Urbanization</p> <p>15.385.1065</p>		

number,Book	
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Item no:	Item	Unit	Quantity
Civ.25	Covering with 8 cm height normal cement steam cured concrete paving stone (every size, color and pattern)	m²	
Description/ Specifications	<p>Technical Description: Disassembly: Is the TL/m2 price including disassembly, disposal, transport, labor, contractor profit and any overheads.</p> <p>Measurement: The disassembled area shall be calculated by measuring based on m2.</p> <p>b) PARQUET, concrete, ordinary pavement and blockage disassembly. Is the TL/m2 price including removal, sorting and stapling of the parquets, transport, labor, contractor profit and overheads.</p> <p>Measurement: The disassembled stones and plates shall be calculated by measuring based on m2.</p> <p>Production: The TL/m2 price for arranging the ground to be floored with paving stone, layering of sand of 10 cm thickness, flooring of parquet stones of 16 cm height and other dimensions of 12x22 cm on the sand layer at required slope, sand-filling of spaces between the stones and sweeping.</p> <p>Measurement: The disassembled area shall be calculated by measuring based on m2.</p> <p>b) Asphalt paving: The TL/m2 price for asphalt concrete wearing layer of 5 cm compressed thickness on asphalt concrete binder layer of 7 cm compressed thickness over bitumen hot base asphalt concrete layer together with crushed and screened quarry stones with 14 cm compressed thickness.</p> <p>Measurement: The area of asphalt paving shall be calculated by m2 measurement.</p> <p>c) Concrete slab: The TL/m2 price for arranging the layer for concrete slab, layering of sand of 10 cm thickness, applying 250 dose concrete of 20 cm thickness over the sand layer with slope.</p> <p>Measurement: The concrete applied field shall be calculated by m2 measurement.</p> <p>d) Macadam construction with quarry stone: TL/m2 price for paving of macadamization of 30 cm thickness on the prepared ground.</p> <p>Measurement: The floored field shall be calculated by m2 measurement.</p>		
Related official pose/item number,Book	<p>Republic of Turkey Ministry of Environment and Urbanization</p> <p>15.435.1005</p>		

Item no:	Item	Unit	Quantity
Civ.26	Laying of Concrete border (chamfered, any colour) (50 x 20 x 10 cm)	M	
Description/ Specifications	<p>According to the project and the technique of 50 x 20 x 10cm in size of the normal cemented concrete cured concrete curb installation instead. Sealing the joints between the two borders with a 400-dose cement mortar; price of 1 m including all kinds of materials and casualties, labor in the workplace, horizontal and vertical transport, unloading, vehicle and equipment expenses, contractor general expenses and profit:</p> <p>SIZE: It is calculated on the border length project.</p>		
Related official pose/item number,Book	<p>Republic of Turkey Ministry of Environment and Urbanization</p> <p>15.435.1203</p>		
Item no:	Item	Unit	Quantity
Civ.27	Laying of Concrete border (chamfered, any colour) (75 x 30 x 15 cm)	M	
Description/ Specifications	<p>According to the project and the technique of 75 x 30 x 15 cm in size of the normal cemented concrete cured concrete curb installation instead. Sealing the joints between the two borders</p>		

	<p>with a 400-dose cement mortar; price of 1 m including all kinds of materials and casualties, labor in the workplace, horizontal and vertical transport, unloading, vehicle and equipment expenses, contractor general expenses and profit:</p> <p>SIZE: It is calculated on the Border length project.</p>
Related official pose/item number,Book	<p>Republic of Turkey Ministry of Environment and Urbanization</p> <p>15.435.1204</p>

Item no:	Item	Unit	Quantity
Civ.28	Applying dilatation overlay on walls, ceilings and facades with 120 mm width, min 1.3 mm wall thickness, anodized aluminum cover profiles (for 50 mm width dilatations)	m²	
Description/ Specifications	<p>Drilling the smooth surface that forms the dilatation joint in accordance with the hole spacing (max. 45 cm) and diameter in the aluminum cover profile, adhering 120 mm wide, anodized aluminum cover profile with a wall thickness of min 1.3 mm, butyl tape to the back side of the back of the wall, facing the wall surface, 10 mm wide, 3 mm thick, mounting profile on the surface from one side with the help of screws and plastic dowels and tightening the banded side, all kinds of materials and crafts,</p> <p>Measurement:</p> <p>It is measured on the dimensions of the project.</p> <p>Notes:</p> <p>1- Improvement / correction applications on the surface on which the aluminum cover profile will be applied are paid from its own item.</p> <p>2- If insulation is applied to dilatation, screw and hole lengths should be chosen so as not to pierce the insulation.</p>		
Related official pose/item number,Book	<p>Republic of Turkey Ministry of Environment and Urbanization</p> <p>15.440.1001</p>		

Item no:	Item	Unit	Quantity
Civ.29	Waterproofing of dilatations with 30 cm wide, at least 1 mm thick dilatation insulation tapes	m²	
Description/ Specifications	<p>Purification of both sides of the area shown as dilatation in the approved detail project from loose, cracked, cracked parts, oil, dust and similar residues that will prevent adhesion, epoxy-based double component repair and bonding mortar, in proportion to product technical application conditions of components A and B, without lumps, Mixing until homogeneous and the resulting mortar, trowel etc. on both sides of the dilatation cavity. The application of tools with an average thickness of 2 mm and a width of 10 cm, after the time has passed in accordance with the technical application conditions of the product, 30 cm width and min. The price of 1 m including the adhesion of the 1 mm thick dilatation insulation tape on both sides of the dilatation to the dilatation, all kinds of materials and craftsmanship, labor and equipment expenses, loading at the workplace, horizontal and vertical transportation, unloading, contractor overheads and profit:</p> <p>Measurement:</p> <p>It is measured on the dimensions of the project.</p> <p>Notes:</p> <p>1- With the waterproofing material applied to the dilatation area, terrace, foundation etc. The insulation material applied to the area should be boiled together in a way that will provide sealing with suitable method.</p> <p>2- In areas where bundling is insulated, this application should be applied on walls as much as</p>		

	the height of bundling.
Related official pose/item number,Book	Republic of Turkey Ministry of Environment and Urbanization 15.440.1008

Item no:	Item	Unit	Quantity
Civ.30	Manufacturing and installing natural-matte anodized profiles with aluminum joinery without heat insulation	kg	
Description/ Specifications	<p>With regard to the detail pictures, chosen sample and project approved by the administration; in terms of classification, chemical composition, mechanical properties, design, size and thickness tolerances, price of 1kg including, extruded and load bearing aluminum joinery profiles (casing, sash bar, casement profiles) with natural-matt anodized aluminum profiles; any kind of biaxial, normal opening or sliding etc. window, window wall, door leaf and frame etc. fabricated in the factory, all kinds of mounting materials (epdmgasket, PVC cloth (bituminous foil tape), mounting anchor, etc.) to provide insulation for heat, water, air tightness between the place where the installation will be made (subframe etc.) and delivery in operating state, including transportation to the workplace, all kinds of materials and losses, workmanship, horizontal and vertical transportation expenses at the workplace, general expenses and profit of contractor:</p> <p>Measurement:</p> <p>1) Aluminum isweighed with manufactured parts (including screws, rivets, protection packaging). If there are additionally paid accessories that are weighed together with main parts, such as locks and additions, window handles, door handles, hinges, transom shears and bumps, latches, under-door brushes, hydraulic mechanisms, pivot mechanisms, sliding and biaxial mechanisms etc., weights of these accessories are deducted. Accessory fees are paid by the competent authorities, if any, from their current value, and by adding 25% contractor profit and general expense to the certified invoice cost.</p> <p>2) If the administration seems it necessary, weight of profiles based on their dimensions on the project, can be controlled according to the weight of the profiles in the table. As a result of this control, if the values are higher than the values on the table up to 7% more than the values on tables are paid. If the controlled value is more than 7% of the value on the table is ignored. If the controlled weight is lesser than the values on the tables, the controlled weight will be accepted as long as the administration approves the manufacturing.</p> <p>Notes:</p> <p>1) The load-bearing aluminum profiles will be 2 mm ($\pm 10\%$) wall thickness provided that they provide the required strength according to the static calculation. (This condition is not required for complementary profiles such as glazing beads, T-over profiles, adapter profiles, angles, etc. without a carrier feature).</p> <p>2) In the corner joints of the joinery, the corner fastening element made of aluminum profile (if it is heat insulated, both corners of the heat insulated profile) will be used and the corners will be pressed.</p> <p>3) Aluminum profiles with heat insulation shall have at least three chambers.</p> <p>2) In the corner joints of the joinery, the corner fastening element made of aluminum profile (if it is heat insulated, both corners of the heat insulated profile) will be used and the corners will be pressed.</p>		
Related official pose/item number,Book	Republic of Turkey Ministry of Environment and Urbanization 15.460.1001		

Item no:	Item	Unit	Quantity
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Civ.31	Two layers of anticorrosive, two layers of synthetic paint (RAL 9005) on iron surfaces	m²	
Description/ Specifications	<p>1 m2 price including abrasive and wire brush cleaning of iron manufacturing surfaces, 0,100 kg 1st layer, 0,100 kg 2nd layer (each layer of different colors) anticorrosion application, 0,100 kg 1st layer, 0,100 kg 2nd layer paint with synthetic paint in desired color, all kinds material and casualty, labor, contractor general expenses and profit:</p> <p>Measurement:</p> <p>a) Painted surfaces are measured in furniture.</p> <p>b) In doors and partitions;</p> <p>1) For those with a wire frame; two sides are measured from plaster to plaster.</p> <p>2) Case areas are included in the size of the two faces in the vertical plane from the case to the case.</p> <p>3) In cases with casing and moldings, the frame is added to the casing from the sill to the size of the two sides.</p> <p>4) In all dimensions, recesses, protrusions and glass gaps are not included. If there is a lath on the window, the measure is taken from here.</p> <p>c) In windows and windows;</p> <p>1) In the window and sill windows; The windows in the vertical plane are measured on the plaster side of the plaster due to the plaster on the windows without wedge. Only one surface is taken into account, two surfaces are painted. If glass void is not removed, sills, casings and edges are also measured and added to the area.</p> <p>2) Double windows are measured exactly, the wooden case between two windows is measured separately and the area is added. Both sides of each window are painted, one face is calculated. The gap of glazing is ignored.</p> <p>d) In the fence and railings, the projection area of a face in the vertical plane is measured. The area of the gaps is ignored.</p> <p>e) Columns, roof trusses, beams, curves and similar iron-painted faces are measured.</p> <p>Notes: Color code of the painting should be RAL 9005.</p>		
Related official pose/item number,Book	<p>Republic of Turkey Ministry of Environment and Urbanization</p> <p>15.540.1102</p>		

Item no:	Item	Unit	Quantity
Civ.32	Writing on exposed concrete surfaces with water-based epoxy paint(RAL9005)(exterior)(analysis with 10.300.1027)	m²	
Description/ Specifications	<p>1 m2 price including all kinds of materials and craftsmanship, labor, contractor overheads and profits required for the correction of the surfaces to be painted with sandpaper or mosaic wipe stone, application of water-based epoxy paint to the surface by brush or roller after disposal of burrs and excess grains</p> <p>Measurement: The painted surfaces are measured through the project. All gaps are deducted.</p> <p>Notes:</p> <p>1- A scaffold is also given on walls and ceilings higher than 3 m. If there is a scaffold for plastering, it is also not given to the paint.</p> <p>2- The text should be painted with water based eposi paint in RAL9005 color code as specified in the project, based on the font, height and placement in the architectural project.</p> <p>Material:</p> <p>10.300.1602 Sanding paper</p> <p>10.300.1027 Water-based epoxy paint</p> <p>Workmanship:</p> <p>10.100.1023 Painter master</p>		

	10.100.1062 Worker (construction worker)
Related official pose/item number,Book	Republic of Turkey Ministry of Environment and Urbanization 15.540.1301/ANL

Item no:	Item	Unit	Quantity
Civ.33	Applying water based transparent uv resistant protector for concrete or plastered surfaces (exterior)	m²	
Description/ Specifications	<p>1 m2 price including correction of the surfaces to be painted with sandpaper or mosaic wipe stone, all kinds of materials and weakening required for the application of 0,150 kg 1st layer of water-based UV resistant transparent protector before the burrs and excess grains are removed, and workmanship, general expenses and profit of contractor</p> <p>Measurement: The painted surfaces are measured through the project. Areas of all gaps are subtracted from the total area.</p> <p>Notes: Work scaffolding is also given for walls and ceilings higher than 3 m. If there is a scaffold for plastering, it is not given to the paint separately.</p>		
Related official pose/item number,Book	Republic of Turkey Ministry of Environment and Urbanization 15.540.1311		

Item no:	Item	Unit	Quantity
Civ.34	Manufacturing and installation of pressed sheet door frame made of 1.50 mm thick hot rolled sheet	kg	
Description/ Specifications	<p>Price of 1 kg (excluding paint), including all kinds of material loss, workshop costs, labor, contractor overhead and profit for making bending door frame made of 2.00 mm hot rolled sheet and installing it together with its hinges:</p> <p>Measurement:</p> <p>The main parts of the production are weighed before they are painted together with the clamps to be placed on the wall, they are recorded in the attachment and attached. All production is paid at the same price.</p> <p>Notes:</p> <p>If the administration seems it necessary, weight of profiles based on their dimensions on the project, can be controlled according to the weight of the profiles in the table. As a result of this control, if the values are higher than the values on the table up to 7% more than the values on tables are paid. If the controlled value is more than 7% of the value on the table is ignored. If the controlled weight is lesser than the values on the tables, the controlled weight will be accepted as long as the administration approves the manufacturing.</p>		
Related official pose/item number,Book	Republic of Turkey Ministry of Environment and Urbanization 15.550.1002		
Item no:	Item	Unit	Quantity
Civ.35	Individual manufacturing and placement of various profile bars and sheet metal (water tanks and so on)	kg	
Description/ Specifications	<p>1 kg price includes made of single or double sided reinforced sheet metal, according to the project, of all kinds of profile irons, all kinds of materials and losses, resource and workshop costs, loading at the workplace, horizontal and vertical transport, unloading, labor, contractor overhead and profit for the construction of water tanks and similar production (excluding paint price)</p>		

	<p>SIZE: The main parts of the production are weighed before they are painted together with the locks, bolt arms, clamps to be placed on the wall, they are recorded in the attachment and attached. All production is paid at the same price.</p> <p>NOTE: 1) Workmanship and material expenses are paid separately only if iron, metal, decoration, lock, bolt or levers are nicked. 2) All kinds of hinge and bearing prices and the price of espagnolette, lock and similar material made of non-iron materials are paid separately by issuing the price report. 3) Installation of the hardware (hinge, bearing, lock, espagnolette etc.) is included in the price. 4) If the administration seems it necessary, weight of profiles based on their dimensions on the project, can be controlled according to the weight of the profiles in the table. As a result of this control, if the values are higher than the values on the table up to 7% more than the values on tables are paid. If the controlled value is more than 7% of the value on the table is ignored. If the controlled weight is lesser than the values on the tables, the controlled weight will be accepted as long as the administration approves the manufacturing.</p>
Related official pose/item number,Book	<p>Republic of Turkey Ministry of Environment and Urbanization 15.550.1201</p>

Item no:	Item	Unit	Quantity
Civ.36	Making and replacing various iron works from iron band,hollow section and steel profile	kg	
Description/ Specifications	<p>1 kg price (excluding paint price) including, iron rivets, bolts, welding and all kinds of materials for building all kinds of stairs, balconies, bridges, balustrades, window and garden railings, roofing, septic tanks and similar works made of various steel bars, flat bars and profile irons. and casualties, workplace loading, horizontal and vertical transport, unloading, labor, contractor general expenses and profits Measurement: It is weighed before being painted and assembled together with the production and, if necessary, the fixing material. Note: If the administration seems it necessary, weight of profiles based on their dimensions on the project, can be controlled according to the weight of the profiles in the table. As a result of this control, if the values are higher than the values on the table up to 7% more than the values on tables are paid. If the controlled value is more than 7% of the value on the table is ignored. If the controlled weight is lesser than the values on the tables, the controlled weight will be accepted as long as the administration approves the manufacturing.</p>		
Related official pose/item number,Book	<p>Republic of Turkey Ministry of Environment and Urbanization 15.550.1202</p>		
Item no:	Item	Unit	Quantity
Civ.37	Preparing sphero casting manhole (77 kg, automatic lock)/Sfero Döküm Baca Kapağı Hazırlanması 77 kg otomatik kilitli ID 400 Basınç Dayanım Sınıfı)	piece	
Description/ Specifications			
Related official pose/item number,Book	<p>İller Bank 43.115.1006</p>		

Item no:	Item	Unit	Quantity
Civ.38	Precast manhole base element (h: 0,50 m, internal dimensions: 0,60 x 0,60 m, thickness: 0,10 m) (500 Dose, steam cured concrete,	piece	

	joints,between manhole elements will be made with 600 doses of mortar)		
Description/ Specifications			
Related official pose/item number,Book	iller Bank 43.560.1121		

Item no:	Item	Unit	Quantity
Civ.39	Steam Cured 500 Doses Precast Manhole Riser (h: 0,50 m, internal dimensions: 0,60 x 0,60 m, thickness: 0,10 m) (500 Dose, steam cured concrete, joints,between manhole elements will be made with 600 doses of mortar)	piece	
Description/ Specifications			
Related official pose/item number,Book	iller Bank 43.560.1122		
Item no:	Item	Unit	Quantity
Civ.40	Installing parcel manhole with prefabricated body height setting element (h: variable height, internal size: 0,60 x 0,60 m, wall thickness: 0,10 m) (500 doses, steam cured junction places between shaft elements with 600 dose plaster)	m	
Description/ Specifications			
Related official pose/item number,Book	iller Bank 43.560.1124		

Item no:	Item	Unit	Quantity
Civ.41	Made for manhole placing the rimless reinforced concrete cover over the menhole (0,40 x 0,80 x 0,10 m) (C35/45 concrete I)	piece	
Description/ Specifications			
Related official pose/item number,Book	iller Bank 43.560.1125		

Item no:	Item	Unit	Quantity
Civ.42	Installing manhole shaft with 300 mm output diameter, 1 input and 1 output prefabricated base element (Connections between 500 dose, steam cured, base element pipe entries and integrated sealed shaft elements, permeability tes tprice included)	piece	
Description/ Specifications			
Related official pose/item number,Book	iller Bank 2019 and after works 43.560.1404		

Item no:	Item	Unit	Quantity
Civ.43	Laying 200 mm diameter HDPE corrugated pipe(S N 8, rubber seal and pipe price included)/Prefabricated Conic Element With Concrete Menhole To Be Formed and Placed	mt	
Description/ Specifications			
Related official pose/item number,Book	iller Bank 2019 and after works 43.527.1002		

Item no:	Item	Unit	Quantity
Civ.44	Laying 300 mm diameter HDPE corrugated pipe(S N 8, rubber seal and pipe price included)/Prefabricated Conic Element With Concrete Menhole To Be Formed and Placed	mt	
Description/ Specifications			
Related official pose/item number,Book	iller Bank 2019 and after works 43.527.1003		

Item no:	Item	Unit	Quantity
Civ.45	Installing manhole shaft with prefabricated conical element (h: 0.65 m variable, internal diameter: 1,00 m, wall thickness: 0,15 m) (Connections between 500 dose, steam cured, shaft elements, with integrated gasketed, permeability test price included)	piece	
Description/ Specifications			
Related official pose/item number,Book	iller Bank 2019 and after works 43.560.1457		

Item no:	Item	Unit	Quantity
Civ.46	Installing manhole shaft with prefabricated neck bracket element (h: 0.15 m variable, internal diameter: 0,62 m, wall thickness: 0,15 m)(Connections between 500 dose, steam cured, shaft elements, with integrated gasketed, permeability test price included)	piece	
Description/ Specifications			
Related official pose/item number,Book	iller Bank 2019 and after works 43.560.1459		

Item no:	Item	Unit	Quantity
Civ.47	Installing manhole shaft with prefabricated frame mounting element (h: 0.29 m variable, internal diameter: 0,62 m, wall thickness: 0,15 m) (Connections between 500 dose, steam cured, shaft elements, with integrated gasketed, permeability	piece	

	test price included)		
Description/ Specifications			
Related official pose/item number,Book	İller Bank 2019 and after works 43.560.1460		

Item no:	Item	Unit	Quantity
Civ.48	Cast iron cover procurement and installation for storm water and drainage water	KG	
Description/ Specifications	Procurement, delivery and installation of graphite cast iron storm water or drainage covers as per the approved project and technical requirements of 08.1559 / IB item number. Cast iron covers shall be painted with two coats of bitumen rubber based paint. Procurement, vertical and horizontal transportation, wastage, workmanship, manpower & equipment costs, loading & unloading, administrative costs and contractor profit are included. Means of Measurement : Per kilogram Remarks: Only transportation and installation workmanship cost will be paid if the cast iron covers are provided by the management.		
Related official pose/item number,Book	İller Bank 2019 and after works 43.665.1037		
Item no:	Item	Unit	Quantity
Civ.49	Placing sphero casting, frame shaft cover used in sewerage constructions (88 kg, having appropriate sizes and characteristics with İller Bankası KNL-TP-30 type project)	piece	
Description/ Specifications			
Related official pose/item number,Book	İller Bank 2019 and after works 43.665.1054		

Item no:	Item	Unit	Quantity
Civ.50	Shrinkage joint application to field concrete and concrete roads	m	
Description/ Specifications	The price of 1m includes, pouring field or road concrete into areas of 3x4 m sizechequerwise(one empty, one filled), chamfering concrete edges with a trowel,forming 50 mm deep and 6 mm thick joint according to the detail in the approved project by inserting a T50 profile into the intermediate section with the old concrete without taking the concrete socket poured into the empty spaces, filling the joint with mastic asphalt and bitumen mixture heated up to 190 ° C so as not to fall below 170 ° C, all necessary materials and losses, workmanship, tool and equipment expenses, loading in the workplace, horizontal and vertical transport, unloading, contractor profit and general expenses. Size: Shrinkage joint length is calculated in accordance with the project.		
Related	The Ministry of National Defense		

official pose/item number,Book	48.150.2002
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Item no:	Item	Unit	Quantity
Civ.51	Expansion joint application to field concrete and concrete roads	m	
Description/ Specifications	<p>The price of 1m includes, adding 20x150 mm sized timber gauge soaked in water for 48 hours to form a 20 mm width joint, in concrete roads, 30-50 meters apart, in field concretes, 30-50 meters in both directions temporarily, removing 20x50 mm piece after pouring concrete in empty areas and after it is set, chamfering concrete edges with a trowel, filling the joint with mastic asphalt and bitumen mixture heated up to 190 ° C so as not to fall below 170 ° C, all necessary materials and losses, workmanship, tool and equipment expenses, loading in the workplace, horizontal and vertical transport, unloading, contractor profit and general expenses.</p> <p>Size: Expansion joint length is calculated in accordance with the project.</p>		
Related official pose/item number,Book	<p>The Ministry of National Defense 48.150.2004</p>		

Item no:	Item	Unit	Quantity
Civ.52	Facade cladding with mineral filled composite aluminum sheets (without heat insulation) (RAL 9005)	m²	
Description/ Specifications	<p>According to the project, the price of 1m2, including, coating facade with aluminum panels and composite panel (Fire Class: A2 S1 d0) painted with primer between filler (4 mm wall thickness aluminum composite panel (0,50mm + 3mm + 0,50mm) between 0,50mm thickness (EN AW 3000 Series) aluminum plates, 3mm thickness mineral filled aluminum sheets that are visible on the outer face of at least 28 micron thickness PVDF painted) anchoring the main load bearing system formed from the box profile on the wallpainted with anticorrosion, connecting 28 micron thick PVDF painted aluminum sheets to joint elements, covering and siliconizing main load bearing joint gaps with aluminum molding joint, all kinds of materials, casualties, labor, vehicle and equipment expenses, manufacturing and / or transportation of the material to the workplace, loading at the workplace, horizontal and vertical transport, unloading, assembly, contractor profit and general expenses.</p> <p>Notes: Color code of the painting should be RAL 9005.</p>		
Related official pose/item number,Book	<p>PTT 77.105.1001</p>		

Item no:	Item	Unit	Quantity
Civ.53	Excavation soft rock with excavator and using the excavated rock	m³	
Description/ Specifications	<p>Technical Description: According to project Excavation soft rock with excavator and using the excavated rock</p> <p>Costs Included in Unit Price:</p> <p>Using the machine and, if necessary, explosive materials; soft rock excavation is carried out by "laying on vehicles, transporting, emptying up to 100 m distance to the final, laying it in layers" and making all other works, other than those listed under the heading "Costs Not Included in Unit Price", below. machine "contractor profits and overhead expenses with tool</p>		

	<p>and vehicle-expenses.</p> <p>Costs Not Included in Unit Price:</p> <p>The final average of the excavation will be more than 100 m distances,</p> <p>Road cutting and removal of roots</p> <p>Removing the roots of previously cut trees(excavation of soil, vegetation, etc.)</p> <p>Driving and embossing of existing road surfaces under the infill,</p> <p>"Irrigation and Compression" works during the use of excavated material.</p> <p>Measure:</p> <p>The soft rock that will go from the water to the filling; It is the volume in cubic meters which is measured in the field before and after the excavation and calculated with the average of the fields.</p>
Related official pose/item number,Book	<p>Republic of Turkey General Directorate of Highways</p> <p>KGM/15.010/A</p>

Item no:	Item	Unit	Quantity
Civ.54	Laying the subbase and base material	m³	
Description/ Specifications	<p>After B-15.044-In line with completion of the works of engineering structure and earth works on the way, they shall be placed on the motorized grader in accordance with the shapes, sizes and rims of the slopes, ditches, fillings and slopes of the fine leveling surface as described in section 9 of the Roads Technical Specifications attached to the contract, Leveling machines, as well as the price per kilometer of the way in which all kinds of workmanship, materials and expenses necessary for the finishing of the hand work as well as the fine leveling by hand are included, including the contractual profit and general expenses.</p> <p>Sand, gravel, clay, crushed stone, sand, stabilize and similar materials to be made.</p> <p>Unit Fees Included Costs:</p> <p>Any kind of and workmanship required for the construction of sand, gravel, clay, Materials, machinery, tools and utilities, and contractor profits and overheads.</p> <p>Unit Price Incomparable Costs: There is no expense not included in the unit price.</p> <p>Measure: The volume of the shaped material is the volume in cubic meters, which is calculated without regard to the swelling and collapse of the figure.</p> <p>Payment: Unit Price Bidding Schedule Exposure is done at the unit price of "m³ (Sand, Gravel, Clay, Crushed stone, Stabilize, etc.)" in KGM / 15.150 /</p> <p>Note: These poses; If the price of the above-mentioned materials, which are formed upon request of the buyer, is not included in the unit price, it is applied.</p>		
Related official pose/item number,Book	<p>Republic of Turkey General Directorate of Highways</p> <p>KGM/15.150/K</p>		

Item no:	Item	Unit	Quantity
Civ.55	Removal of hardwood, concrete slab, ordinary pavement and blockade	m²	
Description/ Specifications	<p>Removal of parquet, concrete slabs, ordinary paving and blockade.</p> <p>Charges Included in Unit Price:</p> <p>Removal of parquet, concrete slab, ordinary pavement and blockage, separation, loading on vehicles, transporting to a final average distance of 100 m, unloading and shown by the administration.</p> <p>all kinds of labor, materials, machinery, tools, contractor's profits and general expenses required for carrying out all other works other than those listed under the heading "Costs Not Included in the Unit Price" below.</p> <p>Costs Not Included in the Unit Price:</p>		

	<p>Transport of the material to a final average distance of more than 100 m.</p> <p>Measure: It is the area of the removed parquet, concrete slab, ordinary pavement and blockade in square meters measured in place before removal.</p> <p>Payment: In the Unit Price Quotation Sheet, the exposure of "Parquet, Concrete Plaque, Ordinary Pavement and Blockage Removal" in KGM / 18.189 is made on the unit price of m2.</p>
Related official pose/item number,Book	<p>Republic of Turkey General Directorate of Highways</p> <p>KGM/18.189</p>

Item no:	Item	Unit	Quantity
Civ.56	Irrigation and compression of any type of soil	m³	
Description/ Specifications	<p>Technical Description: Irrigation and compression of any type of soil in line with the principles of the related sections of the KTŞ. Costs included in the unit price: Water supply by motor pump, supply of irrigation and compression machines to the workplace, irrigation of any type of soil for filling flooded at any desired thickness depending on the compression machines according to specification until optimum humidity is achieved, compression of material with appropriate compression machines, any labor, material, machine, tool and equipment, contractor profit and overheads, excluding the works and material stated under the heading "costs not included in the unit price". Costs not included in the unit price: Water supply to the workplace. Measurement: The volume in cubic meters of the filling prepared by irrigation and compression. Payment: To be made in accordance with the m³ unit price in the unit price bid chart - Poz KGM/2205' "Irrigation and Compression of any type of soil".</p>		
Related official pose/item number,Book	<p>Republic of Turkey General Directorate of Highways</p> <p>KGM/2205</p>		
Item no:	Item	Unit	Quantity
Civ.57	Making a sub-base with crushed and screened material of non-sieved gravel material	m³	
Description/ Specifications	<p>Substrate construction with 50 mm (2") material, which is crushed and screened with a crusher, which is not sieved in accordance with the principles and conditions in the relevant part of the KTŞ.</p> <p>Costs Included in the Unit Price: Material with gravel; removal, storage, loading into vehicles, transporting the quarry to a final average distance of 150 m between the crusher, unloading, conveying to the crusher, crushing and sieving with the crusher to obtain the granulometry specified in the KŞT, loading, unloading, figuring, and motoring the crushed and screened material into the vehicles. All kinds of labor, materials, machinery, tools and vehicles and contractor's profits and general expenses required for the preparation of the water with the pump, the laying and compression of the sub-base material by providing optimum water content, and all other works other than "Costs Not Included in the Unit Price" below. .</p> <p>Costs Not Included in the Unit Price: Transportation of the material from the crusher to the work, carrying the water to the average distance of more than 150 m between the crusher and the crusher.</p> <p>Measure : It is the volume in cubic meters of the laid and compacted sub-base material calculated on the size of the figure, regardless of swelling and collapse before laying.</p>		

	<p>Payment:</p> <p>In the Unit Price Proposal List, pose is made over the m3 unit price of KGM / 6030 "Making a Substrate with Unscrambled Pebbled Material with Crushed and Screened Material".</p> <p>Note:</p> <p>1- The figure will be in the place, shape and size to be requested by the administration and will be made with the figure machine.</p> <p>2- The contractor will keep the figure, and will eliminate the depression and disturbances.</p>
Related official pose/item number,Book	<p>Republic of Turkey General Directorate of Highways</p> <p>KGM/6030</p>

Item no:	Item	Unit	Quantity
Civ.58	Formation of base layer (with crushed and screened quarry stone (1 inch))	m³	
Description/ Specifications	<p>Technical Description: Foundation construction using 25 mm ("1") quarry stone, crushed by stone crusher and screened material in accordance with the principles and terms stated in the related sections of the KTŞ. Costs included in the unit price: Extraction of stones from the mine, crushing to sizes appropriate for stone crusher, loading on to vehicles, transport between mine and stone crusher of distance up to 150 meters, unloading, feeding to stone crusher, grain size and characteristics research, crushing by stone crusher for achieving the grain size specified in the KTŞ, screening, loading to vehicles, unloading and figuration, water supply by water pump, layering the foundation material by optimum water supply, compression, any labor, material, machine, tool and equipment, contractor profit and overheads, excluding the works and material stated under the heading "costs not included in the unit price". Costs not included in the unit price: Transport between the mine and stone crusher exceeding 150 m in average, transport of material from the stone crusher to the workplace, water transport. Measurement: The volume in cubic meter, calculated on the figuration dimensions of the floored and compressed material, without taking into respect the bulking and slump before the layering.</p> <p>Payment: To be made in accordance with m³ unit prices in the Unit Price Bid Chart - Poz KGM/6040' "Foundation [with crushed and screened quarry stone (1'')]".</p> <p>Note: (1) Figuration shall be in the place, form and dimension as requested by the employer and shall be made by figuration machine. (2) The contractor shall protect the figuration and shall remove any slumps and deformations.</p>		
Related official pose/item number,Book	<p>Republic of Turkey General Directorate of Highways</p> <p>KGM/6040</p>		

Item no:	Item	Unit	Quantity
Civ.59	Plant-Mix Subbase production (with crushed and screened quarry stone)	Ton	
Description/ Specifications	<p>Technical Description: Plant-Mix Sub base construction, using crushed and screened quarry stones and layered by finisher according to the principles and terms of the related sections of the KTŞ.</p> <p>Costs included in the unit price:</p> <p>Supply, assembly and disassembly of any required machine an equipment, extraction of stones from the mine, crushing up to size suitable for stone crusher, loading to vehicles, transport between the mine and stone crusher of distance up to 150 meters, unloading, feeding to stone crusher, crushing and screening in stone crusher until achievement of grain size required by the employer or specified in the specification, regular screening and grain size adjustment, discharge of the stone crusher bottom, loading of crushed aggregate to vehicles, unloading to plant field and storage, loading from storage place to trucks, transport to field silo and</p>		

	<p>unloading, rodding by hand, if necessary for achieving good flow of aggregate in the silo, transfer from silo to mixing plant, water supply by motor pump and filling the water tanks, feeding into mixer, mixing of aggregate and water, loading of mixed material to trucks, waiting at plant and weighing, research and technical supervision, weighing of material by automatic weigher with bill printer at a capacity required by the employer, waiting of trucks until their turn comes, discharge of material to finisher, flooring of material by finisher at referencing, axis, cross-section and elevation given by the employer, correction of faults manually, making, cleaning, adjusting, irrigating and compressing longitudinal and transverse joints, fine adjustment, irrigation of floored material, compression by vibrating and rubber-tired roller, any labor, material, machine, tool and equipment, contractor profit and overheads, excluding the works and material stated under the heading "costs not included in the unit price".</p> <p>Costs not included in the unit price: Transport between the mine and stone crusher at distance exceeding 150 meters, transport of aggregate to plant field, transport of water to work place and transport of mixture to place of flooring. Measurement: Is the weight in tons found by weighing the prepared, floored and compressed mixture used in the sub base layer. Payment: To be paid over the ton unit price in the Unit Price Bid Chart - Poz KGM/6100/3-1 "Plant-Mix Sub Base Foundation (by crushed and screened quarry stone)". Note: (1) As the contractor is obliged to make the production according to the mixture design approved by the employer, no changes shall be made in the unit price due to design changes. (2) If the final average distance between the mine and stone crusher should be over 150 and under 10.000 m upon the employer's approval; transport cost for (M) meters shall be paid using following formula: $F = A \times 1,25 \times 0,00017 \times K \times \text{square root (M)} - 0,00260 \times K \text{ TL/ton.}$ In this formula, (square root(M)), (K), (A) and (Y), are the same as in Poz 07.005/K. If the final average distance between the mine and stone crusher should be over 10.000 m upon the employer's approval; transport cost for (M) meters shall be paid using following formula $F = A \times 1,25 \times K \times (0,0007 \times M + 0,01) - 0,00260 \times K \text{ TL/ton.}$ In this formula, (square root(M)), (K), (A) and (Y), are the same as in Poz 07.006/K.</p>
Related official pose/item number,Book	<p>Republic of Turkey General Directorate of Highways</p> <p>KGM/6100/3-1</p>

Item no:	Item	Unit	Quantity
Civ.60	Forming a 1 m² Compacted Asphalt Concrete Bituminous Hot Foundation Layer of 10 cm Thickness (With Cracked and Screened Quarry Stone) (TYPE-A)	piece	
Description/ Specifications			
Related official pose/item number,Book	<p>Republic of Turkey General Directorate of Highways</p> <p>KGM/6210</p>		

Item no:	Item	Unit	Quantity
Civ.61	Forming 1 m² Compacted Asphalt Concrete Binder Layer with 8 cm Thickness (With Cracked and Screened Quarry Stone)	piece	




Description/ Specifications	
Related official pose/item number,Book	Republic of Turkey General Directorate of Highways KGM/6308

Item no:	Item	Unit	Quantity
Civ.62	Forming 1 m² Compacted Asphalt Concrete Abrasion Layer of 5 cm Thickness (With Cracked and Screened Quarry Stone) (Type-1)	piece	
Description/ Specifications			
Related official pose/item number,Book	Republic of Turkey General Directorate of Highways KGM/6405		

Item no:	Item	Unit	Quantity
ÖBF 1	Site Signboard with foot pedestal	piece	
Description/ Specifications	Technical Description: UNDP standard identification signboards and montage, including all material painting and writing works, to be determined by the characteristics and measurements. A signboard of 2.5m X 2,7 m in dimension and Project fund, project name, stakeholder, budget, schedule and contractor's name will be shown on. The signboard will be produced as specified in the project.		
Related official pose/item number,Book	Special		

Item no:	Item	Unit	Quantity
ÖBF 2	Supplying and placing 10 mm PVC triangular joint profile on the formwork for 10 mm joint gap	m	
Description/ Specifications	10 mm PVC triangular jointprofile shall be added to the plywood formworks to obtain joint gap on reinforced concrete surfaces at height of 1 cm. Architectural project will be taken as basis for the level of the joint gap.		
Related official pose/item number,Book	Special		

Item no:	Item	Unit	Quantity
ÖBF 3	Traffic signs and boards	piece	5
Description/ Specifications	Technical Description: Accordance with the regulations on traffic signs way traffic sign boards will be defined. Drivers and application sheets and strips to protect pedestrians, interior signs 12 cm wide cut white striped drawing, external signs 12 cm wide white striped ribbon for continuously drawing and stop drawing lines is 30 cm white line Traffic sign board including all kinds of materials and workmanship for the adhesion of reflex materials by painting, writing and marking with all the standard traffic sign boards and galvanized profiles suitable for the highway specifications and mounting in place. The implementation of traffic signs and plates for the purpose of protecting drivers and pedestrians: For inner signalization, white dashed lines with width of 12 cm.		

	<p>For outer signalization, white continuous lines with width of 12 cm. For STOPPING LINES, white line with width of 30 cm. Following signs will be used as minimum:</p> <div style="display: flex; justify-content: space-around; align-items: center;">    </div>
Related official pose/item number,Book	Special

Item no:	Item	Unit	Quantity
ÖBF 4	Panel Fence	m	
Description/ Specifications	<p>1. FENCE PANEL SPECIFICATIONS:</p> <ul style="list-style-type: none"> Panel should be 50 cm height and 250 cm width Fence wires should have clean surface and comply with TS 4559 standards Fence wires should be hot-dip galvanized. Galvanized rate: 40–60 gr/m² High wire thickness 4,5 mm Short wire thickness :4,5 mm Horizontal interocular distance: 50 mm Vertical interocular distance: 150 mm Panel fence should have minimum 4 plies to prevent twisting as shown in the detail drawings. Panel fence should be painted electrostatic polyester paint. 80–100 mikron paint thickness RAL 6005 paint colour and % 90 Brightness intensity <p>2. FENCE POST SPECIFICATIONS:</p> <ul style="list-style-type: none"> 50 cm fence post height. 50mm x 50mm fence post's rectangular hollow steel should be bended from 1.5 mm hot-dip galvanized sheet steel Galvanize density 40–60 gr/m² Post should have minimum 4 pieces of hole (diameter :12 mm) for clips mounting. 6 mm thickness (120mm x 120 mm) Base steel sheet Post mounting to the concrete should have 120 mm x 120 mm and 6 mm (thickness) steel sheet base. Steel sheet base should be hot-dip galvanized. It should drilled 15 mm diameters holes on it for screwdriving. Fence post should be painted electrostatic polyester paint. 80–100 mikron paint thickness RAL 6005 paint colour and % 90 Brightness intensity <p>3. FENCE ACCESSORY SPECIFICATIONS:</p> <ul style="list-style-type: none"> 12mm plastic dowel for fence post mounting on the concrete base 		

	<ul style="list-style-type: none"> • 12mm transformer screw for fence post mounting on the concrete base • Transformer screw should be hot-dip galvanized. • Galvanized rate : 40–60 gr/m² • Polyamide fastening type clips for fences mounting to the posts. • Polyamide tops for covering top of the fence posts. • Clips and tops colour should be same as fence and posts. <p>Note : Construction of concrete perimeter walls and/or retaining walls which the fence will be built on is not included.</p>
Related official pose/item number, Book	Special

Item no:	Item	Unit	Quantity
ÖBF 5	Sliding Entrance Gate (Panel fence)	m	
Description/ Specifications	<p>150x600 cm Panel Fence Entrance Gate Specifications:</p> <p>Main bearing Posts: (height: 200cm) Gate main posts should be constructed from 50x50x2mm RHS (as shown in landscaping detail projects)</p> <ul style="list-style-type: none"> - 50mm x 50mm fence post's and connection rectangular hollow steel should be bended from 1.5 mm hot-dip galvanized sheet steel - Main Post should have same as specifications of fence posts. - 50x50x2mm RHS post should have steel sheet base for mounting on the concrete base. <p>Entrance Gate: Gate should be made from fence panel. Gate must have minimum 4 wheels to support the weight. 1200 cm (5mm steel) rail should be mounted on the concrete base.</p> <p>1. FENCE PANEL SPECIFICATIONS:</p> <ul style="list-style-type: none"> • Panel should be 150 cm height and 600 cm width • Fence wires should have clean surface and comply with TS 4559 standards • Fence wires should be hot-dip galvanized. • Galvanized rate: 40–60 gr/m² • High wire thickness 4,5 mm • Short wire thickness :4,5 mm • Horizontal interocular distance: 50 mm • Vertical interocular distance: 150 mm • Panel fence should have minimum 4 plies to prevent twisting as shown in the detail drawings. • Panel fence should be painted electrostatic polyester paint. • 80–100 mikron paint thickness • RAL 6005 paint colour and % 90 Brightness intensity <p>2. FENCE POST SPECIFICATIONS:</p> <ul style="list-style-type: none"> • 152 cm fence post height. • 50mm x 50mm fence post's rectangular hollow steel should be bended from 1.5 mm hot-dip galvanized sheet steel • Galvanize density 40–60 gr/m² • Post should have minimum 4 pieces of hole (diameter :12 mm) for clips mounting. • 6 mm thickness (120mm x 120 mm) Base steel sheet Post mounting to the concrete should have 120 mm x 120 mm and 6 mm (thickness) steel sheet base. • Steel sheet base should be hot-dip galvanized. It should have 15 mm diameter holes drilled on it for screw driving. • Fence post should be painted electrostatic polyester paint. • 80–100 mikron paint thickness 		

	<ul style="list-style-type: none"> • RAL 6005 paint colour and % 90 Brightness intensity 3. FENCE ACCESSORY SPECIFICATIONS: <ul style="list-style-type: none"> • 12mm plastic dowel for fence post mounting on the concrete base • 12mm transformer screw for fence post mounting on the concrete base • Transformer screw should be hot-dip galvanized. • Galvanized rate: 40–60 gr/m2 • Polyamide fastening type clips for fences mounting to the posts. • Polyamide tops for covering top of the fence posts. • Clips and tops colour should be same as fence and posts.
Related official pose/item number,Book	Special

Item no:	Item	Unit	Quantity
ÖBF 6	Supply and installation of prefabricated container building.	piece	
Description/ Specifications	PROCUREMENT AND INSTALLATION Specifications: EXTERIOR WALLS: 50mm H=2640mm (Indoor height H=2360mm) EXTERIOR WALL SYSTEM: 50mm POLYURETHANE (38-40kg/m3) (fire rating B1) SANDWICH PANEL CLADDING (exterior surface of sheet metal thickness 0.50 mm (0.45 mm raw materials +0.02mm zinc + 0.03mm paint). Both sides of sandwich panel will be painted RAL 9002 INTERIOR WALL SYSTEM: 50mm (38-40kg/m3) (fire rating B1) (exterior surface of sheet metal thickness 0.50 mm (0.45 mm raw materials +0.02mm zinc + 0.03mm paint)Both sides of sandwich panel will be painted RAL 9002. Inner side will have rough surface. FRAME :3mm thickness sheet metal BASE: At the bottom, 0.50 mm thickness, galvanized corrugated steel sheet subframe CEILING: 0.50 mm thickness, galvanized corrugated steel sheet will be mounted on 40x60x2mm RHS structure. Rainwater from the roof to be drained into free flowing. Ceiling finish will be 0.50 mm thickness sheet metal. INSULATION: 100mm 14 kg/m3 glass-wool (Insulation density should be selected according to mechanical calculating) PLUMBING PIPES AND FITINGS: Clean water pipes and fittings (pprc) will be hard plastic material. All installations should be left exposed. DOORS AND WINDOWS 1. DOORS DOOR FRAME: 1.20 mm Galvanized sheet metal which has electrostatic powder coated will be processed cold forming under pressure. Door will be american panel. EXTERIOR DOOR: White painted sheet metal door (one leaf) WC DOORS: White PVC door (one leaf) GENERAL <ul style="list-style-type: none"> • Electrical installation will be exposed. • Electrical installation 220v • Sockets 220V • All sockets should be earthing. • Sockets should be mounted 50cm high from the floor. • Electric panel boards entrance should have automatic switch (w-otomat) • All used material should have TSE certificate 1. LIGHTING <ul style="list-style-type: none"> • Lights should be energy saving globe according to Necessary lighting violence • C type globe light should be used above the exterior door. 2. WIRING <ul style="list-style-type: none"> • için 2x1,5 mm2 NYM /2X2,5mm2 NYM and 1,5mm2 NYA wire should be used for lighting 		

	<p>installation</p> <ul style="list-style-type: none"> • 3x2,5 mm² NYM wire should be used for socket installation • 16x25mm² pvc cable duct should be used for Inner installation line and wiring outlet <p>Wet floors</p> <p>WINDOWS: According to the window dimensions of the project; PVC frame and 4+12+4mm glass unit will be used for all exterior windows. 4mm frosted glass will be used for wc window.</p> <p>Must include following items:</p> <ul style="list-style-type: none"> • <u>ITEM NO 071.112</u> -APPROX. 45X55 CM HALF PEDESTAL BASIN In the abovementioned types and sizes, with fixed soap dispenser, self-overflow, white colored, Washbasin assembly with wall plug and screw, supply and installation at workplace. Note: If colored glazed ceramics is used,15 % increase should be applied to the installation included priceswithout additionally increasing the installation costs. Should be in accordance with 305/2011 / EU Building Materials Directive, and have CE mark of conformity • <u>ITEM NO 072.401</u> - FIRST CLASS FAUCET TS EN 200 SIPHON TS-EN274-1-2-3 For use with the washbasins mentioned in BFT.071-000; brass chrome plated, or plastic based (acetal copolymer), quality certified, with 15 mm tap and badge or battery certified according to TS-EN 274-1-2-3, in a type which can be removed and cleaned, with 6 cm odor fermentor, minimum 16cm extension part and rosette, brass chrome plated or hard plastic base, according to TS-EN 274-1-2-3 dismantled and cleaned, at least 80 ° C temperature and acid resistant, 32 mm. squeezed siphon and drain pipe connection adapter included; supply and installation in workplace workplace together with the connection to the siphon and the connection to the drain pipe. (Waste water pipe is not included in the price.) • <u>ITEM NO 073.202</u>- Mirror 40x60 cm The thickness of the glass is 5 mm. Wall connection screws shall be made of brass material and minimum 5-micron nickel plated or stainless steel. Assemble the mirror wall hanger on the wall with screws and dowels. The mirrors shall be supplied to the market with the CE mark of conformity in accordance with the 305/2011 / EU Building Materials Regulation. • <u>ITEM NO 074.101</u>Whatnot 50x10 cm 5 mm. thick, cleanly polished, painted with chamfered silver lining on the edges and back with a coat of synthetic oil paint on the back of gun and sachet; 4 pieces of stainless steel to the wall and the mirror to fit exactly in the mirror. ø 40 mm. and 4 mm. The thickness of the cork is duly placed in the chock or pin on the wall instead of the installation. • Wall-mounted type, approximately 65x35 CM self-contained toilet and installation A reservoir can be placed on it, with intermittent white (glazed ceramic) tiles, quality certificate, stone; Complete reservoir of at least 13 liters of tiles, hard plastic seat and cover; 15 liter brass chrome plated quality certificate reservoir intermediate and bidet taps with copper pipe, badges and chrome plated fixing screws and wedges, supply, installation and working delivery in the workplace. Note: In the case of using colored glazed ceramics, the mounted prices will be increased by 15% and they will be applied exactly without increasing the mounting prices. • <u>ITEM NO 079.300</u>WALL BASED WC (WATER CLOSET) 65X35CM Supply and installation of toilet bowl made of white colored glazed ceramic with a hard-plastic seat cover and a reservoir made of ceramic with a capacity of at least 13 lt; 15 lt capacity brass chrome plated and quality certificated, reservoirs and lathing taps, copper intermediate pipe, badges and chromed fixing screws and wedges. <p>Note:This item number includes the cost of the prefabrication of the container according the specifications and items mentioned above, shipping and installation and fixing in place.</p>
Related	Special

official pose/item number,Book	
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Item no:	Item	Unit	Quantity
ÖBF 7	Manufacturing and installing 2mm aluminum sheet wall coping (RAL9005)	m	
Description/ Specifications	1 m price of the aluminium wall coping including, all kinds of materials and losses, workmanship, transportation, horizontal and vertical transportation, profit and general expenses of contractor, bending in accordance with the project, size and detail from the 2 mm thick aluminum sheet top and the bottom support made with 3 mm aluminum sheet, Notes: 1- The color code should be RAL 9005. 2- It must be resistant to corrosion. 3- There should not be any mounting elements (screws, nails, etc.) on the visible surface. 4- There should be no change in physical properties against heat changes. 5- All the features it possesses must comply with international standards.		
Related official pose/item number,Book	Special		

Item no:	Item	Unit	Quantity
ÖBF 8	Flameless Tarpaulin	M²	
Description/ Specifications			
Related official pose/item number,Book	Special		

6. TECHNICAL SPECIFICATIONS FOR MECHANICAL WORKS

SANITARY INSTALLATION

General:

Installation details of all bathroom and toilet appliances and accessories will be provided from the manufacturer companies. The general layout of the sanitary installation shall be as shown in the drawings. The equipment, materials and equipment specified in this section shall be delivered in a complete and accurate manner to provide a complete and operational system to be provided in accordance with their specifications. All fixing plates, anchors and fasteners of all equipment and fittings shall be complete. Flush mounting plates shall be of robust construction and have a corrosion resistant surface. The Contractor shall

examine the drawings carefully and shall be held responsible for the proper installation of the materials and equipment as specified, without any substantial change. The contractor shall be responsible for the city water supply and sewerage connection.

Drawings:

Plumbing general layout is shown in the drawings. However, where a different application is required due to the conditions of the work place, the Contractor shall prepare and submit drawings containing such changes.

Cutting and Repairing:

All work will be carefully planned in advance, and any drilling in the building will only be with permission of inspection. Drilling will be done carefully. Damage to buildings, pipes, cables or devices due to the cutting operation to be carried out shall be repaired by experienced technical personnel.

Inspection and Tests:

Prior to acceptance, the Contractor shall perform the necessary tests for waste water and water pipes and shall be approved by CONTROL. Underground pipes will be tested before they are covered. The necessary equipment for the tests shall be provided by the Contractor without incurring any additional costs to the employer.

Waste Water Installation Test:

All the necessary openings of the entire piss system and the pumice system will be blocked to allow the system to fill with the water up to the top level of the venting pipe on the roof. The system will keep this water for

30 minutes without decreasing more than 10 cm. If part of the system needs to be tested, the partial test shall be performed as described for the whole system; however, a vertical pipe 3 meters above the highest horizontal line to be tested can be installed and filled with water to ensure proper pressure or a pump can be used to maintain the desired pressure. The pressure will be maintained for 30 minutes.

Air Tests:

If the tests are carried out with air, a pressurized pump will apply a pressure of not less than 0.35 kg / cm² (5 PSI) and will be maintained for at least 15 minutes without leakage. A mercury column indicator will be used to perform the air test. "

Test of Clean Water Installation:

Upon completion of rough work, all hot and cold water systems will be tested at hydrostatic pressure, which will not be less than 1.5 times the operating pressure before the installation of the luminaires. where a portion of the pipe system is to be embedded, this part will also be tested by the method specified for the whole system.

If there is an error in the inspection or test, the erroneous work or material shall be replaced by the Contractor without any additional charges and the requested tests shall be repeated until approved by the Consultant in writing. Repair of the pipes will be done with new material. Screw connections or holes shall not be covered with putty.

At the end of the work, all parts of the installation will be thoroughly cleaned by pressurized water. The internal and external surfaces of all equipment, pipes, valves and fittings shall be cleaned from oil, metal parts, mortar and mud that may accumulate by the operation of the system for testing. Any interruption, discoloration or other damage that may occur to the surface of the building or other equipment in other parts of the building due to the Contractor's fault during proper cleaning of the piping system will be repaired by the Contractor.

Faulty Business:

If the inspection or test presents an error, this erroneous work or material will be replaced without any additional costs to the employer and will be repeated until the required tests are accepted by CONTROL. Repair of pipes will be made with new materials.

Cleaning and adjustment:

After completion of the work, the entire installation will be thoroughly cleaned. The equipment, pipes, valves and fittings shall be cleaned from the oil metal crumbs and sludge that may accumulate by running the system for testing. Any interruption, discoloration or other damage that may occur in the parts, surfaces or equipment of the building due to the Contractor's fault in proper cleaning of the piping system shall be repaired by the Contractor without incurring any expenses to the Employer.

CUSTOMER INSTALLATION

General:

This Part covers the subjects of pipes, pumps valves, insulation, etc., generally used in mechanical installations.

Piping:

The water pipe to the structure and the underground water pipes within the structure shall be 10 Atu resistant PE drinking water pipe. The water connection pipe is 15 cm from the lowest floor. It will extend to a point that is not less than 2 m apart from the structure or from the interior of the structure. The pipes in the main columns inside the building shall be TS 301 galvanized steel. Cold, hot water pipes will be PPRC pipes in the wet areas of the floors and in the suspended ceiling and in the walls (after the shut-off valve). The pipes between the filling or shut-off valve and the fittings will be as shown in the project.

Additional Rivets: The fittings of all pipes will be of their own kind.

Fittings for galvanized steel pipes shall be cast iron, tempered and dipped galvanized, with a wall thickness of at

least 2.65 mm according to TS 11 EN 10242.

PE and PPRC pipe joining operations will be done by fusion welding system. Polypropylene pipe (PPRC) fittings shall comply with TS 11451.

Infrastructure Systems:

The water and drainage pipes shall be extended to the outside of the building until the building, the plugs or caps shall be attached to the mouths of the pipes and shall be ready for connection or shall be extended as shown in the drawings and shall be connected to the distribution network. Water lifting lines will be installed below the soil freezing level.

Concrete Flooring and Ceilings: All pipes to be laid under or under concrete slabs and ceilings will be fully reinforced before concrete is poured. The contractor is responsible for ensuring the integrity of the parts during the pouring of concrete.

Cutting and Repairing:

All work will be planned carefully in advance and any drilling in the building will only be with the permission of the relevant technical staff. Drilling will be done carefully. Damage to buildings, pipes, cables or devices due to the cutting operation for installation purposes shall be repaired by experienced technical personnel on the subject without any additional cost.

Paint Works:

All the outer surface of the pipes installed in or along the floor shall be painted with two coats of paint and shall be painted with one (1) layer of bituminous acid-resistant paint. Pipe hangers shall be supported and all other iron works shall be thoroughly cleaned and painted with two coats of mortar and one (1) layer of asphalt varnish shall be applied. The open pipes, pipe linings, hangers and other ironwork shall be made in such a way that the top coat paint is described.

The stitched black pipes used in the installation shall be painted with two coats of paint and two coats of oil shall be painted with oil paint. The pipes will be defined according to the fluid passing through them. The labeling process will be in places that can be seen during the inspection. The letters will be capitalized. The labels will be white and will show the direction of flow with the arrows. The arrows are suitable for the fluid type and the width and length will be determined according to the diameter of the pipe.

Installation:

Pipes and Pipe Routes: Pipe paths will be as specified in the drawings, the pipes will be correctly cut according to the dimensions taken in the building and will be fixed without twisting. Care shall be taken not to weaken the structural parts of the building. As the structural and plant requirements may be required, the conduits from the service line, suitable pipes from the top, bottom or side of the main network may not be less than 12 mm between the finished surfaces in different places, and other work and services may be used to permit repair. will be away. Diameter changes in pipes shall be made by means of reduction joints. Long screws and sleeves will not be used.

All cold water, hot water, circulation, fire and heating distribution pipes will be distributed and collected

from the places specified in the project.

The horizontal ones of galvanized pipes will be distributed on the ceiling. The vertical ones shall be connected to the installation under plaster.

The horizontal ones of galvanized pipes will be distributed on the ceiling. The vertical ones shall be connected to the installation under plaster.

Galvanized pipe galvanized fittings material will be used. Pipe cover shall be used in all pipes' wall, floor and ceiling passages.

a-Heating and hot water pipes in the floor, wall and ceiling passes over the finished floor 5cm over the polyethylene-based prefabricated insulation PVC pipe passing through the application of sheath.

b-Application of sheath by passing PVC pipes onto polyethylene based prefabricated insulation to extend the cold- water pipes 5 cm from the finished floor in cold water pipes in the places where condensation will be.

c-Cold water pipes, floor, wall and ceiling passages in places where condensation will not exceed 5 cm from the ground floor will be passed through PVC pipes will be applied to the sheath application. "

Necessary tolerance will be given for expansion and contraction of pipes. The horizontal pipes exceeding 15 m in length shall be supported by an acceptable technique to the wall or support structure. Fixed lines and sliding bearings to meet the expansion and contraction in the pipes shall be used in the lines where the pipe lengths are long.

Galvanized cast iron pipes with a diameter of 2 dökme and smaller pipes shall be galvanized. Fittings in water pipes of 2 ½ galvan in diameter shall be made of flanged type and galvanized cast iron. Flanged records will be made of the best quality fiber, plastic or leather. Fittings shall not be embedded in walls, ceilings or chambers.

Screw Connections:

Screw connections shall be made with neatly cut tapered teeth. The screwed connections shall be made tightly and tightly using a solid consistency graphite and oil composition applied to the pipe threads without brushing the pipe fittings in any way. Up to three teeth will appear after the connection is completed.

Welded Connections:

Welded joints shall be welded to melt. Pipe deflection shall be made only with welded fittings. Angle cutting or grooving of the pipes is not permitted for the elbow, T and similar type of installation. Secondary connections can be made with either welded T's or forged connection parts without a size limitation. Secondary pipe fittings, where used, shall be curved for good flow in the places where they are attached, forged, to the main line, they shall be reinforced against stresses arising from external influences and shall have the strength of the pipe to which it is used.

POSE DEFINITIONS

Official item definition from the related book shall prevail, in case of any inconsistency and vagueness about item definition.

Itemno:	Item	Unit	Quantity
MEC.01	WASHBASINS; 45 x 60 cm Semi-pedestal set	PCS	

Description/ Specifications	Supply to the work site and installation of white washbasins of the types and dimensions given below with or without fixed soap dishes, including fittings. Washbasins shall be in compliance with the Regulation 305/2011/EU on Construction Products and released with a CE compliance marking. Note: If colored glazed ceramic is used, installed prices shall be increased by 15% with the installation fee remaining unchanged.
Related official pose/item number,Book	RepublicofTurkeyMinistryofEnvironmentandUrbanization 25.100.1016

Itemno:	Item	Unit	Quantity
MEC.02	WASHBASIN PIPING SYSTEM; First class: (Faucet: TS EN 200 or TS EN 817, Siphon:TS-EN274-1-2-3)	Group	
Description/ Specifications	Supply to the work site with a sink siphon and sewer pipe connection adapter, and nstallation and delivery in working order of brass-chromized or plastic-based (acetal copolymer) washbasin installation sized to comply with TS-EN 274-1-2-3, certified for quality, resistant to min. 80°C and acids for use with the washbasins given in the item 25.100.1000, with a 15-mm tap and rosette or faucet certified for compliance with TS-EN 274-1-2-3, a 6-cm anti-odor part, a min. 16-cm extension, brass-chromized or hard plastic rosette, which can be removed and cleaned, and tightened by a 32-mm wrench.		
Related official pose/item number,Book	RepublicofTurkeyMinistryofEnvironmentandUrbanization 25.102.1301		

Itemno:	Item	Unit	Quantity
MEC.03	MIRRORS (Unit: Qty.) (TS EN 1036) Approximately 40 x 60 cm	Pcs	
Description/ Specifications	5-mm glass thickness, ground edges, and with beveled stripes, if any. Wall attachment screws shall be brass with min. 5-micron nickel plating or stainless steel. Installation on a wall with braces, screws and dowel pins. Mirrors shall be in compliance with the Regulation 305/2011/EU on Construction Products and released with a CE compliance marking.		
Related official pose/item number,Book	RepublicofTurkeyMinistryofEnvironmentandUrbanization 25.104.1002		

Itemno:	Item	Unit	Quantity
MEC.04	SHELF UNIT:Glazed ceramic Approximately 50 x 10 cm Extra class	Pcs	
Description/ Specifications	Supply to the work site and installation of a white shelf unit with integrated console and of the type and dimensions specified below, along with its special wedge or installation components. Note: If colored glazed ceramic is used, installed prices shall be increased by 15% with the installation fee remaining unchanged.		

Related official pose/item number,Book	RepublicofTurkeyMinistryofEnvironmentandUrbanization 25.106.1101
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Itemno:	Item	Unit	Quantity
MEC.05	FLUSH TOILET AND INSTALLATION WITH BUILT-IN RESERVOIR Flush with the wall, Approximately 65 x 35 cm (Extra-quality)	Group	
Description/ Specifications	Supply to the work site, installation and delivery in working order of white (glazed) ceramic flush toilets with sufficient spacing for installation of a cistern, with min. 13-liter ceramic bowl, fully hard plastic cistern, brass-chromized seat and cover, complete with copper pipes for utility water connection of the cistern and bidet nozzle, rosettes and chrome-plated set screws and fixing blocks. Note: If colored glazed ceramic is used, installed prices shall be increased by 15% with the installation fee remaining unchanged.		
Related official pose/item number,Book	RepublicofTurkeyMinistryofEnvironmentandUrbanization 25.112.1104		

Itemno:	Item	Unit	Quantity
MEC.05/b	Short tap 1/2"	Pcs	
Description/ Specifications			
Related official pose/item number,Book	RepublicofTurkeyMinistryofEnvironmentandUrbanization 25.130.1101		

Itemno:	Item	Unit	Quantity
MEC.06	PAPER DISPENSER Stainless Steel	Pcs	
Description/ Specifications	Supply to the work site and installation of a stainless steel sheet paper dispenser with chromized set screws and special wedges or dowel pins.		
Related official pose/item number,Book	RepublicofTurkeyMinistryofEnvironmentandUrbanization 25.135.2002		

Itemno:	Item	Unit	Quantity
MEC.07	FLOOR DRAIN STRAINERS: Plastic, 10x10 cm. with Ø50 outlet	Pcs	
Description/ Specifications	Supply to the work site and installation of a floor drain strainer with built-in odor closure, grating and cleaning plug.		
Related official pose/item number,Book	RepublicofTurkeyMinistryofEnvironmentandUrbanization 25.138.1021		

Itemno:	Item	Unit	Quantity
MEC.08	PN.20POLYPROPYLENEWATERPIPE1/2"(insidethebuilding)	M	
Description/ Specifications	TSENISO15874-1,2,3,5,7 Polypropylene (PPR-C) in accordance with the TS EN ISO 15874-2, certified by the Ministry of Health for use as drinkable water pipes, their supply in work site, cutting in accordance with the project physio thermal welding with the fittings at a temperature of 260°C by squeezing. (Including all kinds of materials and labor for welding) The cost of installation materials shall be paid separately.		
Related official pose/item number,Book	RepublicofTurkeyMinistryofEnvironmentandUrbanization 25.305.2101		

Itemno:	Item	Unit	Quantity
MEC.09	PN.20POLYPROPYLENEWATERPIPE3/4"(insidethebuilding)	M	
Description/ Specifications	TSENISO15874-1,2,3,5,7 Polypropylene (PPR-C) in accordance with the TS EN ISO 15874-2, certified by the Ministry of Health for use as drinkable water pipes, their supply in work site, cutting in accordance with the project physio thermal welding with the fittings at a temperature		
Related official pose/item number,Book	RepublicofTurkeyMinistryofEnvironmentandUrbanization 25.305.2102		

Itemno:	Item	Unit	Quantity
MEC.10	PN.20POLYPROPYLENEWATERPIPE1"(insidethebuilding)	M	
Description/ Specifications	TSENISO15874-1,2,3,5,7 Polypropylene (PPR-C) in accordance with the TS EN ISO 15874-2, certified by the Ministry of Health for use as drinkable water pipes, their supply in work site, cutting in accordance with the project physio thermal welding with the fittings at a temperature of 260°C by squeezing. (Including all kinds of materials and labor for welding) The cost of installation materials shall be paid separately.		
Related official pose/item number,Book	RepublicofTurkeyMinistryofEnvironmentandUrbanization 25.305.2103		

Itemno:	Item	Unit	Quantity
MEC.11	PN.20POLYPROPYLENEWATERPIPEASSEMBLYFEE	%45	

Description/ Specifications	For the cost of the fittings for polypropylene pipes in item 25.305.2100, used for indoor installations, connected with physio welding with each other or for connections with valves, unions, taps etc., fittings such as bends, sleeves, tee cross, reductions, caps and inegal tee made of polypropylene PPR-C Type 3, having one end for welded (PP) and the other end threaded (bronze) connections and every kind of fixing material such as plastic and metal clamp, hanger, sleeve, the following percentage of the installed polypropylene pipe cost shall be taken: Note: (It shall be documented by the Ministry of Health that there is no harm in the use for drinkable water.)
Related official pose/item number,Book	RepublicofTurkeyMinistryofEnvironmentandUrbanization 25.305.5000

Itemno:	Item	Unit	Quantity
MEC.12	Rigid PVC Plastic Drain Pipes;40 - 50	m	
Description/ Specifications	Supply to the work site of rigid PVC plastic drain pipes in accordance with TS 1329-1, installation in its designated location as slip-on or stick-on bellmouth		
Related official pose/item number,Book	RepublicofTurkeyMinistryofEnvironmentandUrbanization 25.305.6101		

Itemno:	Item	Unit	Quantity
MEC.13	Rigid PVC Plastic Drain Pipes;70 - 75	m	
Description/ Specifications	Supply to the work site of rigid PVC plastic drain pipes in accordance with TS 1329-1, installation in its designated location as slip-on or stick-on bellmouth		
Related official pose/item number,Book	RepublicofTurkeyMinistryofEnvironmentandUrbanization 25.305.6102		

Itemno:	Item	Unit	Quantity
MEC.14	Rigid PVC Plastic Drain Pipes;100 - 110	m	
Description/ Specifications	Supply to the work site of rigid PVC plastic drain pipes in accordance with TS 1329-1, installation in its designated location as slip-on or stick-on bellmouth		
Related official pose/item number,Book	RepublicofTurkeyMinistryofEnvironmentandUrbanization 25.305.6103		

Itemno:	Item	Unit	Quantity
MEC.15	Rigid PVCPlastic Drain Pipes ASSEMBLYFEE	%25	

Description/ Specifications	For the cost of the fittings, adhesives and gaskets used for the installation of rigid PVC slip-on or stick-on bellmouth plastic drinkable water pipes, the following percentages of the installed pipe cost shall be taken: In case of indoor installation (Unit: %)
Related official pose/item number,Book	RepublicofTurkeyMinistryofEnvironmentandUrbanization 25.305.1201

Itemno:	Item	Unit	Quantity
MEC.16	BALLVALVEØ15mm.	PCS	
Description/ Specifications	The supply to the work site and on-site installation in its designated location of ball valves , in compliance with the Directive 2014/68/ ABon Pressure Equipment, with brass cut-off element, cast iron or stainless steel body, threaded, wafer, lug or flange, flow controlled by a ball, hand operated. Brass, Teflon (PTFE) gasket made in press, full bore, threaded;		
Related official pose/item number,Book	RepublicofTurkeyMinistryofEnvironmentandUrbanization 25.320.2101		

Itemno:	Item	Unit	Quantity
MEC.17	WallsplitairconditionersUNIT12.000Btu/h	PCS	
Description/ Specifications	InstallationWallmountedsplitairconditionerwith12.000btu/hcoolingcapacity		
Related official pose/item number,Book	Republic of Turkey General Directorate of Foundations V.1882/2		

Item no:	Item	Unit	Quantity
M ÖBF 1	Wastewater collection tank	PCS	
Description/ Specifications	<p>Technical details:</p> <p>Approximate wall thickness of the tank is 6 mm.</p> <p>There is 1 breakwater in the product to support the sand pressure that will be poured on it.</p> <p>There are 2 locating lugs on the product. Product placement should be done through eyebolts.</p> <p>There is 1 ventilation pipe on the tank. It is ensured that the air pressure that will occur during the discharge of the vacuum truck is removed.</p> <p>Notes:</p> <ul style="list-style-type: none"> Excavation soil should never be used when covering the tank. The tank should be placed at the center of the excavation area, so that it remains equidistant from the 4 sides of the excavation area. When closing the tank, sand should be filled equally and equally from 4 sides. There should be no hard material in the sand to be poured around the tank. The tank ventilation pipe provides to discharge of air pressure that is applied during the evacuation of the vacuum truck. Especially during discharge, this pipe must be open. 		
Related official pose/item number,Book	Special		

7. ITEM DESCRIPTIONS - ELECTRICAL WORKS

The works described in this section include all the necessary engineering studies, materials and losses, loading in place, horizontal and vertical transportation, unloading, workmanship, contractor's profit and general expenses for the complete installation and functional delivery of the specified items.

Item no:	Item	Unit	Quantity
ELC.01	From 0.40 to 0.50 m ² (including 0.50 m ²)	piece	
Description/ Specifications	<p>Surface-mounted steel electric panels: (Unit: Qty., Materials on construction site: 60%) (TS EN 61439-1/2) Note: "Type tests" shall be run, and the results of such tests shall be submitted to the PIECEministration. A surface-mounted platform mPIECEe from DKP steel sheet minimum 1-mm in thickness shall be installed. The panel shall consist of three parts. A lockable door, a steel box with bracket or profile frame and a key lock, an internal door with holes on the chassis supporting the devices for controlling the devices, and means of attachment welded on the steel box, which shall facilitate attachment and removal of the chassis. Depending on the project design, the box shall have an opening on the side through which various conductors are to enter the box, and the said opening shall be covered with a steel sheet cap mounted on the box with screws. The holes required for cable entry shall be drilled on the cover, and bakelite or plastic bushings shall be installed in the holes to keep the insulation of the conductors intact. The chassis shall be placed on brackets or a panel mPIECEe of bent DKP. It shall be possible to mount all devices, terminal blocks and similar equipment on the chassis. The internal door with holes shall be easily mountable on the chassis for controlling the devices on the panel. Once the internal door is removed, all connections and devices in the panel shall be exposed, and this door shall be decorated with tags for each device. The aforementioned three parts shall be detachable without removing the panel. The projects concerning placement of devices in the panel shall be prepared in compliance with the type projects, submitted to the PIECEministration for approval, and manufactured only thereafter. A sufficient number of gray, black and brown, fireproof terminal blocks or busbars, and light blue neutral and green/yellow earthing busbars shall be available for the phase lines on the panel in compliance with TS EN 60445, and all iron parts shall be coated in a layer of red lePIECE and two layers of gun-sprayed paint, and the panel's door shall be attached to the main body with a flexible conductor and earthed. Supply, transportation to the work site and installation of the panel. Delivery in working order, including any material and electric terminal blocks and labor. Unit: The internal door area shall be compared to the values given in the approved project, and the payment shall be mPIECEe accordingly. This amount includes any small material, paint, connection and installation. The fuse switches, etc. and earthing installation on the panel shall be paid separately.</p>		
Related official pose/item number,Book	<p>Republic of Turkey Ministry of Environment and Urbanization 35.100.6405</p>		

Item no:	Item	Unit	Quantity
ELC.02	3-phase, Up to 16 A (3 kA)	piece	
Description/ Specifications	<p>Miniature Circuit Breakers (with 3-kA breaking capacity): (Unit: Qty.) Supply and installation, including any material and labor, of an automatic circuit breaker with 3-kA short-circuit breaking capacity, 2 and 4 pole versions of which are capable of breaking neutral and phase lines, B or C curve, which was manufactured in compliance with the TS 5018-1 EN 60898-1 standards and released with CE compliance marking, and which also functions as a switch.</p>		
Related official	<p>Republic of Turkey Ministry of Environment and Urbanization 35.105.1130</p>		

pose/item number,Book	
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Item no:	Item	Unit	Quantity
ELC.03	Up to 16 A (6 kA)	piece	
Description/ Specifications	Miniature Circuit Breakers (with 6-kA breaking capacity): (Unit: Qty.) Supply and installation, including any material and labor, of an automatic circuit breaker with 6-kA short-circuit breaking capacity, which has the same specifications as the item 35.105.1100.		
Related official pose/item number,Book	Republic of Turkey Ministry of Environment and Urbanization 35.105.1210		

Item no:	Item	Unit	Quantity
ELC.04	3-phase, Up to 40 A (10 kA)	piece	
Description/ Specifications	Miniature Circuit Breakers (with 10-kA breaking capacity): (Unit: Qty.) Supply and installation, including any material and labor, of an automatic circuit breaker with 10-kA short-circuit breaking capacity, which has the same specifications as the item 35.105.1100.		
Related official pose/item number,Book	Republic of Turkey Ministry of Environment and Urbanization 35.105.1332		

Item no:	Item	Unit	Quantity
ELC.05	Up to 4 x 25 A (30 mA)	piece	
Description/ Specifications	Residual current circuit breakers: (Unit: Qty.) Supply, installation, and delivery in working order, including any material and labor, of a residual current circuit breaker designed in compliance with the Regulations, specifications, and standards on Internal Electrical Installation and released in compliance with the TS EN 61008-1, TS EN 61008-2-1 standards and with a CE compliance marking, which, in case of any residual current in electrical installation, detects the faulty current on the phases and neutral line and breaks the circuit in 10-30 seconds to ensure safety of life and property, features a differential coil that steps in at 220 V for single-phase circuits, and at 380 V for 3-phase circuits, and a test button for testing whether the system is functioning, which is available for installation on the carriage rails, protected against external effects, can continue on working at 30 mA for life protection and 300 mA for fire protection even if neutral line breaks down.		
Related official pose/item number,Book	Republic of Turkey Ministry of Environment and Urbanization 35.115.1020		

Item no:	Item	Unit	Quantity
ELC.06	Up to 4 x 40 A (300 mA)	piece	
Description/ Specifications	Residual current circuit breakers: (Unit: Qty.) Supply, installation, and delivery in working order, including any material and labor, of a residual current circuit breaker designed in compliance with the Regulations, specifications, and standards on Internal Electrical Installation and released in compliance with the TS EN 61008-1, TS EN 61008-2-1 standards and with a CE compliance marking, which, in case of any residual current in electrical installation, detects the faulty current on the phases and neutral line and breaks the circuit in 10-30 seconds to ensure safety of life and property, features a differential coil that steps in at 220 V for single-phase circuits, and at 380 V for 3-phase circuits, and a test button for testing whether the system is functioning, which is available for installation on the carriage rails, protected against external		

	effects, can continue on working at 30 mA for life protection and 300 mA for fire protection even if neutral line breaks down.
Related official pose/item number,Book	Republic of Turkey Ministry of Environment and Urbanization 35.115.1061

Item no:	Item	Unit	Quantity
ELC.07	Class B, 230 V AC, 100 kA (I imp; 10/350 µs), 3-phase, neutral/ earth, with extra contact output	piece	
Description/ Specifications	Enclosure-type overvoltage protectors (Low-Voltage Surge Arresters) (Unit: Qty.) Overvoltage protectors of Type 1 (class B), Type 2 (class C), Type 3 (class D) protecting energy supplies against atmospheric discharges (lightning strikes) temporary overvoltage peaks, and providing single-phase, 2-phase, 3-phase and neutral protection against over-voltage, which are equipped with an extra contact output for signalization, fully hermetically enclosed, installed on the rails of the enclosure without damaging it or other equipment in it or requiring a safety distance with the enclosure, and were released in compliance with the TS EN 61643-11 standard and with a CE compliance marking. 1- Overvoltage protectors shall be completely hermetically sealed. The protector should not have an arc discharge gap. The protector shall suppress arcs in itself rather than drawing it through the arc discharge gap and suppressing it with air. Thus, it shall be possible to install the protector anywhere within the enclosure without the requirement of a safety distance. 2- Type 2 (Class C) and Type 3 (Class D) protectors shall be equipped with an indicator that indicates whether the device runs smoothly or not. (I imp: Maximum impulse current for Type 1 surge arresters, I max: Maximum discharge current for type 2 and Type 3 surge arresters)		
Related official pose/item number,Book	Republic of Turkey Ministry of Environment and Urbanization 35.115.2102		

Item no:	Item	Unit	Quantity
ELC.08	Up to 250 V	piece	
Description/ Specifications	SIGNAL LIGHTS: (Unit: Qty.) Supply, transportation to the work site, installation and connection, delivery in working order of flush-mounted signal lights of specified colors depending on the location, which shall comply with the TS 2575 EN 60073 standards (socket and light bulb are included in the price.)		
Related official pose/item number,Book	Republic of Turkey Ministry of Environment and Urbanization 35.120.1454		

Item no:	Item	Unit	Quantity
ELC.09	3 x 230 / 400V..3 x 10 (60) A	piece	
Description/ Specifications	3-Phase, Hour-Tariff Electronic Energy Meters: (Unit: Qty.; Materials on construction site: 60%) Supply, transportation to the work site, installation and connection, and delivery in working order, of a TEDAŞ-approved, 3-phase, four-wire electronic active meter with backlit digital display with six integer and two decimal places, a real-time clock of 100 years on the circuit of the meter, and time tariff and its base, which shall be in compliance with the standards TS EN 62053-21 and TS 6205211 as well as Directive (76/891/EEC) on Metering Instruments and Electric Energy Meters, awarded a brand registration certificate by the Ministry of Science, Industry and Technology, capable of metering in maximum two accuracy classes in its designated current and voltage ranges, rated for an operating frequency of 50 Hz, capable of exchanging information with the meter as per the TS EN 62056-21 standard and of dividing a day into eight different time spans in minute-level precision based on the program of the		

	meter, and manufactured as dustproof and waterproof in IP 51 degree of protection (TS EN 60529).
Related official pose/item number,Book	Republic of Turkey Ministry of Environment and Urbanization 35.135.3201

Item no:	Item	Unit	Quantity
ELC.10	3 x 2.5 mm ²	MT	
Description/ Specifications	Installation of a supply line with halogen-free, flame-retardant, isolated, multi-core NHXMH cables: (Unit: m) Installation of column or supply lines (NHXMH, minimum 300/500 V), including the supply of any material and labor.		
Related official pose/item number,Book	Republic of Turkey Ministry of Environment and Urbanization 35.150.1531		

Item no:	Item	Unit	Quantity
ELC.11	5 x 10 mm ²	MT	
Description/ Specifications	Installation of column and supply lines with 1-KV, underground N2XH cables: (Unit: m) Supply to the workplace, including cable bushings and escape pipes, any other material and labor, of 0.6/1kV, underground N2XH cables for installation on plaster, on walls and ceilings through consoles or clips, or through conduits inside the building, and through conduits outside the building. Note: The item shall be manufactured in compliance with the TS EN 50575 and TS EN 50575/A1 standards, the Regulation (EU) No.305/2011 Construction Products - CPR, released with a CE marking, and the manufacturer shall have a declaration of performance and Certificate of Constancy of Performance issued by an organization accredited by the European Union.		
Related official pose/item number,Book	Republic of Turkey Ministry of Environment and Urbanization 35.150.2214		

Item no:	Item	Unit	Quantity
ELC.12	Single switch outlet branch	piece	
Description/ Specifications	Branch and outlet branch lines made of lead-free antigron (NHXMH). (Unit: Qty)		
Related official pose/item number,Book	Republic of Turkey Ministry of Environment and Urbanization 35.160.3331		

Item no:	Item	Unit	Quantity
ELC.13	Dual Switch Outlet Branch	piece	
Description/ Specifications	Branch and outlet branch lines made of lead-free antigron (NHXMH). (Unit: Qty)		
Related official pose/item number,Book	Republic of Turkey Ministry of Environment and Urbanization 35.160.3332		

Item no:	Item	Unit	Quantity
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ELC.14	Parallel Outlet Branch	piece	
Description/ Specifications	Branch and outlet branch lines made of lead-free antigron (NHXMH). (Unit: Qty)		
Related official pose/item number,Book	Republic of Turkey Ministry of Environment and Urbanization 35.160.3334		

Item no:	Item	Unit	Quantity
ELC.15	Power socket outlet branch for the security line.	piece	
Description/ Specifications	Power socket outlet line with halogen-free cables: (Unit: Qty. Materials on construction site: 60%) Supply, transportation to the work site, and installation of complete power socket outlet lines, including any material and labor, of junction boxes, terminal blocks, power sockets within halogen-free, flame-retardant pipes with branch and outlet lines minimum 2.5 mm ² in section, phase, neutral and safety conductors for the sockets with phase, neutral and safety line colored per TS EN 60445 and plastic insulated (HO7Z, O7Z1). (Halogen-free, flame-retardant pipe outlets complying with the standards TS EN 60332-1-2, TS EN 60754-1/2 and TS EN 61034-2, and bearing CE marking shall be included in the price) Note: The item shall be manufactured in compliance with the TS EN 50575 and TS EN 50575/A1 standards, the Regulation (EU) No.305/2011 Construction Products - CPR, released with a CE marking, and the manufacturer shall have a declaration of performance and Certificate of Constancy of Performance issued by an organization accredited by the European Union. Unit: The part of the branch line exceeding 35 m shall be charged as a supply line per the Unit Price No. 35.150.1000.		
Related official pose/item number,Book	Republic of Turkey Ministry of Environment and Urbanization 35.160.3401		

Item no:	Item	Unit	Quantity
ELC.16	Surface-mounted LED ceiling fixtures sized minimum 60x60 (with minimum 3300 lm light flux, and maximum 36 w consumption	piece	
Description/ Specifications	LED FIXTURES: Every LED fixture shall be equipped with an ENEC-certified driver with a PFC value of 0.95. LEDs must be IESNA LM-80 certified. The fixtures shall have a life cycle of minimum 50,000 (L70) hours per the TM-21 calculation table, the color rendering index (CRI) of the fixtures shall be minimum 80 and homogeneous light diffusion shall be available. The fixtures shall be in compliance with the standards TS EN 60598-1, TS 8698 EN 60598-2-1, TS EN 60598-2-2, and the fixture drivers shall be in compliance with the standards TS EN 61347-1 and TS EN 61347-2-13 and the 2014/35/EU Low Voltage Directive (LVD), and released with a CE compliance marking. The fixtures shall be accompanied by a photometric measurement report as per IESNA LM-79 standards by an accredited laboratory, and IP degree of protection shall be tested as per the TS 3033 EN 60529 standard and IK degree of protection shall be tested as per the TS EN 62262 standard. Also, the fixtures shall be manufactured in compliance with the Restriction of the Use of Certain Hazardous Substances Directive. Note: The luminous flux (lm) values specified in the LED fixture items are the output values of the fixtures, and the consumption power represents the total power drawn from the mains by a fixture.		
Related official pose/item number,Book	Republic of Turkey Ministry of Environment and Urbanization 35.170.1105		

Item no:	Item	Unit	Quantity
ELC.17	Minimum 3600 lm light flux, maximum 40 W consumption.	piece	
Description/	Surface-Mounted Waterproof LED Fixtures (with aluminum body): (Unit: Qty.) Supply to the		

Specifications	work site, and delivery in working order, including any material, labor and installation, of fixtures of minimum IP 65 degree of protection, and with aluminum body and opal diffuser.
Related official pose/item number,Book	Republic of Turkey Ministry of Environment and Urbanization 35.170.1703

Item no:	Item	Unit	Quantity
ELC.18	Minimum 17,000 lm light flux, maximum 200 W consumption.	piece	
Description/ Specifications	LED Projectors (Unit: Qty.) Supply to the work site, and delivery in working order, including any material and labor, of projectors with body and front glass frame made of injected cast aluminum, which shall be coated with oven-dried paint, equipped with a tempered front glass, resistant to 250°C temperature and impacts, certified with minimum IP 65 and IK 09 degree of protection, operable at -20°C to +85°C, provided with the components necessary for installation (on ceiling, wall or floor), and released with the CE compliance marking in compliance as per the standard TS EN 60598-2-5 and the 2014/35/EU Low Voltage Directive (LVD). Note: To be equipped with an ENEC-certified driver with a PFC value of 0.95. LEDs must be IESNA LM-80 certified. They shall have a life cycle of minimum 50,000 (L70) hours per the TM-21 calculation table, the color rendering index (CRI) of the fixtures shall be minimum 65. The projectors shall be awarded a photometric measurement report as per IESNA LM-79 standards by an accredited laboratory, and IP degree of protection shall be tested as per the TS 3033 EN 60529 standard and IK degree of protection shall be tested as per the TS EN 62262 standard.		
Related official pose/item number,Book	Republic of Turkey Ministry of Environment and Urbanization 35.170.4006		

Item no:	Item	Unit	Quantity
ELC.19	RJ-11 or RJ-12 telephone sockets (6 contacts) (22.5 x 45 mm)	piece	
Description/ Specifications	Cable Duct Sockets (Unit: Qty.) Supply, transportation to the work site, installation, and delivery in working order, including any material and labor, of sockets made of flame-retardant (UL94 V0) material (clamping or sliding type) in compliance with the standard TS IEC 60884-1+A1+A2 for earthed mains and UPS sockets, with regular or 45°-inclined holes, child safety covers, IP 20 degree of protection, transparent label covers above the sockets, RJ-45 data sockets with spring covers, RJ-11 or RJ-12 telephone sockets with spring covers, which shall allow connection among the sockets by attachment busbars, and support both T568A and T568B connection types (Prices of the socket installation sets and frames are included in the unit price).		
Related official pose/item number,Book	Republic of Turkey Ministry of Environment and Urbanization 35.190.1703		

Item no:	Item	Unit	Quantity
ELC.20	CAT 5e or CAT 6e RJ-45 data sockets (8 contacts) (22.5 x 45 mm)	piece	
Description/ Specifications	Cable Duct Sockets (Unit: Qty.) Supply, transportation to the work site, installation, and delivery in working order, including any material and labor, of sockets made of flame-retardant (UL94 V0) material (clamping or sliding type) in compliance with the standard TS IEC 60884-1+A1+A2 for earthed mains and UPS sockets, with regular or 45°-inclined holes, child safety covers, IP 20 degree of protection, transparent label covers above the sockets, RJ-45 data sockets with spring covers, RJ-11 or RJ-12 telephone sockets with spring covers, which shall allow connection among the sockets by attachment busbars, and support both T568A and T568B		

	connection types (Prices of the socket installation sets and frames are included in the unit price).
Related official pose/item number,Book	Republic of Turkey Ministry of Environment and Urbanization 35.190.1704

Item no:	Item	Unit	Quantity
ELC.21	Single-loop, addressable fire alarm control panel, with min. 120 address capacity.	piece	
Description/ Specifications	<p>Address fire alarm control panel (Unit: Qty., Materials on construction site: 80%) Addressable smoke, heat, gas, flame and temperature detectors shall be modular, equipped with a microprocessor, and compatible with the connectors of addressable internal and external fire alarm buttons, input and output interface units, short circuit insulators and addressable audible and visual alarm devices, which can be connected to each other by a fire alarm control panel network system with minimum 16 addresses in a large distributed system, support Modbus, Bacnet or another accepted communication module for communication with other control and automation systems of the building, allow different event types (fire, error, security, alarm, information, etc.) to be defined on all addressable devices by the user, ensure full compatibility among the locations and fire scenarios for which the system is installed, allow additional devices to be installed on the system in a manner that does not upset the existing local addressing order, and provided with Turkish and English control panel firmware and Turkish front-end firmware. The control panel with minimum 2 programmable audible alarm outputs as well as controlled alarm and failure outputs dedicated to signalization to the fire department or a remote firefighting center; a pre-alarm function for early response (before the alarm activates) from the control panel in case of low smoke density; an overall fire alarm and failure lamp and individual alarm and failure lamps for each fire zone; an alphanumeric indicator and local audible warning device; zone numbers next to the fire lamps indicating the zone which each fire lamp is assigned to; and with a fully enclosed, sealed, maintenance-free accumulator that will ensure that the fire alarm system performs the detection functions for min. 24 hours and keep all alarm, control and communication functions up and running for min. 30 minutes at the end of the said period, which shall support RS communication module for remote access, and TCP/IP (compatible with IPv4 and IPv6) for remote access over LAN, WAN and the Internet; send the event details including the "date, time, event type, location, etc." to a predetermined mobile phone number (SMS) during the event by means of a GPRS communication module that can be installed on the control panel or integrated in the control panel by means of an external GPRS communication module; integrated in the existing audio system and allow monitoring of errors and failures in the connection by the control panel; provide a programmable alarm relay output to the camera, hence allow automatic switching to the location of fire as part of its integration with the closed circuit television (CCTV) system; continuously check the detectors for contamination and issue a "Service Required" alert if it detects contamination; allow connection of repeater and mimic panels to the control panel; allow continuous inspection of all cables and connections for broken wires, short circuit and earth leakage; store min. last 1000 events on its fail-proof memory; and allow connection of a mini thermal printer. The control panel shall be manufactured in compliance with the standards TS EN 54-2 and TS EN 54-4, the Regulation (EU) No.305/2011 Construction Products - CPR, released with the CE compliance marking, and awarded the manufacturer's declaration of performance, and Certificate of Constancy of Performance by an organization accredited by the European Union. Supply, transportation to the work site, installation, connection to alarm outlet lines, adjustment, and delivery in working order, including any material and labor, of the control panel. Note: Specifications of the module given in the description shall be in compliance with the relevant descriptions in the unit price descriptions. The said module prices are not included in the unit price of the control panel.</p>		
Related official pose/item	<p>Republic of Turkey Ministry of Environment and Urbanization 35.410.1101</p>		

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Item no:	Item	Unit	Quantity
ELC.22	Addressable optical smoke detector with short circuit insulator	piece	
Description/ Specifications	Addressable optical smoke detector with short circuit insulator (Unit: Qty.): The detector shall be equipped with a short circuit insulator to ensure that the system keeps operating in case of short circuits that may occur in the loop line. The detector shall be manufactured in compliance with the TS EN 54-7 and TS EN 54-17 standards, the Regulation (EU) No.305/2011 Construction Products - CPR, released with a CE compliance marking, and the manufacturer shall have a declaration of performance and Certificate of Constancy of Performance issued by an organization accredited by the European Union. The rest of the specifications shall be the same as the item 35.410.2020, and it shall be transported to the work site, installed at the location specified in the project design, tested and delivered with any small material.		
Related official pose/item number,Book	Republic of Turkey Ministry of Environment and Urbanization 35.410.2030		

Item no:	Item	Unit	Quantity
ELC.23	Resettable addressable fire alarm button	piece	
Description/ Specifications	Resettable addressable fire alarm button (Unit: Qty., Materials on construction site: 60%) The resettable addressable fire alarm button shall be microprocessor controlled. It should activate once the flexible nonbreakable glass on the button is pressed and remain in that state until it is reset. The LED located on the fire alarm button shall flash while the button is queried through the loop and flash continuously during an alarm. Supply, transportation to the work site, testing, and delivery in working order, including any small material, of buttons manufactured in compliance with the TS EN 54-11 standard, the Regulation (EU) No.305/2011 Construction Products - CPR, released with a CE compliance marking, with the manufacturer awarded a declaration of performance and Certificate of Constancy of Performance issued by an organization accredited by the European Union.		
Related official pose/item number,Book	Republic of Turkey Ministry of Environment and Urbanization 35.410.2530		

Item no:	Item	Unit	Quantity
ELC.24	Addressable loop-powered fire siren	piece	
Description/ Specifications	Addressable loop-powered fire siren (Unit: Qty., Materials on construction site: 60%) The microprocessor-controlled siren shall have a minimum sound volume of 75 db/mt. The device shall communicate with the fire alarm control panel through, and powered by, the loop cable. No external 24 V DC supply voltage shall be required. It shall be programmable and can be included in fire scenarios. Supply, transportation to the work site, testing, and delivery in working order, including any small material, of sirens manufactured in compliance with the TS EN 54-3 standard, the Regulation (EU) No.305/2011 Construction Products - CPR, released with a CE compliance marking, with the manufacturer awarded a declaration of performance and Certificate of Constancy of Performance issued by an organization accredited by the European Union.		
Related official pose/item number,Book	Republic of Turkey Ministry of Environment and Urbanization 35.410.3000		

Item no:	Item	Unit	Quantity
ELC.25	24 Ports	piece	
Description/ Specifications	UTP CAT 6 Patch Panel (Unit: Qty., Materials on construction site: 60%) The item shall be in CAT 6 standards, 19 inches wide, unshielded, with RJ-45 8-contact female connector, and the Connector Contact Point coated with a highly conductive material, which shall be used at 250-MHz bandwidth and 1000-Mbps data transfer rate for cable terminations at the points of contact in local area networks (LAN), horizontal distribution and telecommunication rooms, equipment terminations. It shall be made of steel, aluminum, aluminum alloy or anodized aluminum, in compliance with the standards ANSI/TIA/ EIA-568 B.2-1 and ISO/IEC -11801, and labels, labor, installation, and testing shall be included.		
Related official pose/item number,Book	Republic of Turkey Ministry of Environment and Urbanization 35.505.7301		

Item no:	Item	Unit	Quantity
ELC.26	Up to 10 pairs (with ground) P.18	MT	
Description/ Specifications	Trunk line installation within the building: (Unit: m) Installing trunk line wires with PVC-insulated and PVC-sheathed telephone cables 0.5 mm in diameter with conductors color-coded as per the standards and installed to prevent through peschel, bergman or PVC pipes within the building, including any small material and labor.		
Related official pose/item number,Book	Republic of Turkey Ministry of Environment and Urbanization 35.510.1105		

Item no:	Item	Unit	Quantity
ELC.27	Up to 30 pairs (with ground)	MT	
Description/ Specifications	Trunk line installation within the building: (Unit: m) (TS-3930) Installation of main line wiring at building interior or exterior using exterior type telephone cables 0.5 mm in diameter, manufactured as certified for compliance with the TS EN 60708 standard, colored as per the relevant standards and positioned to prevent crosstalk, resistant to moisture and water, with annealed electrolytic copper conductors, polyethylene insulator, polyethylene interior jacket, aluminum shield and polyethylene exterior jacket laid through cable ducts, reinforced concrete ducts, PVC pipes or directly through earth at building exterior, and through peschel, bergman and PVC pipes or cable clips at building interior, including any small material and labor (installation of PVC pipes, cable ducts, conduits, bricks, briquettes and laying sand at building exterior shall be charged per the relevant items.)		
Related official pose/item number,Book	Republic of Turkey Ministry of Environment and Urbanization 35.510.1205		

Item no:	Item	Unit	Quantity
ELC.28	Up to 20 pairs	Piece	
Description/ Specifications	Self-extinguishing plastic telephone distribution panels: (Unit: Qty., Materials on construction site: 60%) Self-extinguishing plastic telephone distribution panel, including a cable termination module that couples cables without screws or solder and by separating the cable insulator without using any other tool, and a (seamless) stainless steel roof and coupling of the		

	flushmounted or surface-mounted cables by appropriate color codes. The other specifications shall be the same as the item 35.510.1600.
Related official pose/item number,Book	Republic of Turkey Ministry of Environment and Urbanization 35.510.1701

Item no:	Item	Unit	Quantity
ELC.29	Utp Cat6H HALOGEN-FREE 4 x 2 x 23 AWG	MT	
Description/ Specifications	Utp Cat6H HALOGEN-FREE 4 x 2 x 23 AWG Unit: m Materials on construction site: 60%. Supply, transportation to the work site, installation and testing, including any small material and labor, of 4 pairs of cables at ISO class D - CAT 6e standard and complying with the 23 AWG 0.57 mm bare-stranded copper coating criteria for 250-Mbps data communication at 250 MHz bandwidth for horizontal installations of local area networks, which retard fire and usually extinguish itself, and do not release toxic gases or smoke due to 4-pair, 4-color coded, unshielded twisted pairs enclosed in HFFR outer jacket; which are certified for passing the IEC 60332-1 IEC 60754 tests. Depending on the cable installation conditions, materials of production shall be charged by the relevant items (Payment for the pipes if cables are laid through pipes, or for the trays if cables are laid through cable trays)		
Related official pose/item number,Book	Republic of Turkey Ministry of Environment and Urbanization 35.515.7030		

Item no:	Item	Unit	Quantity
ELC.30	2 x 2 x 0.8 + 0.8 mm ²	MT	
Description/ Specifications	JE-H(St)H FE180 PH120 FIRE-PF, HALOGEN-FREE FIRE ALARM CABLES (Unit: m.) (VDE 0815) Supply to the work site, including gateways and security pipes, any material and labor, of fire alarm cables used with security systems, communication, indoor and dry areas, with halogen-free and fireproof signal and communication cables with the cable core made by twisting in layers of the cladding insulated by a halogenfree jackets in compliance with TS EN 50290-2-26 in colors as per VDE 0815 over mono-annealed copper wire in compliance with TS EN 60228 fixed with polyester tape, wrapped in a special flameretardant glass fiber tape along with an aluminum-coated polyester tape, screened with a tinned earth conductor, with an outer jacket in compliance with TSE K 178, colored RAL 3000 red or RAL 2003 orange, halogen-free outer jacket as per TS EN 50290-2-27, temperature in fixed conditions between -30°C to +70°C, provides circuit integrity for 180 minutes as per IEC 60331-21 and 120 minutes as per EN 50200, and certified for flame retardance as per TS EN 60332-1-2 and TS EN 60332-3-24, and for smoke density as per TS EN 61034-2. Note: HFFR pipe is included for the internal wiring.		
Related official pose/item number,Book	Republic of Turkey Ministry of Environment and Urbanization 35.520.5002		

Item no:	Item	Unit	Quantity
ELC.31	12 Fiber SC / SM	Piece	
Description/ Specifications	Rack Mount Fiber Optic Termination (Unit: Qty., Materials on construction site: 60%) To be used for connecting optical fiber equipment for high-quality and wideband data, audio and video transfer on local area networks, closed circuit television systems, industrial automation systems, telecommunication rooms, and between transfer points with min. 90-meter distance to each other. 4U-high, compatible with 19" rack cabinets, and optical fiber cables of ITU G 651, 652 and 655 standards, equipped with min. 14 detachable and (V0) fireproof plastic adapter panels, fireproof plastic dust caps for unused adapter slots, additional modular cassettes made of		

	fireproof plastic with transparent covers, special compartments for 5 cassettes, a fiber distribution panel, and min. 16 fiber capacity each for direct transmissions and terminations; cable inputs on the sides and at the back compatible with cable inputs, outputs and tee connectors and equipped with plastic dust caps compatible with such inputs; and adapters, panels, additional cassettes and additional guards, and available for insertion of simplex and duplex ST, SC, FC, LC, MTRJ optical adapters. Any material and labor shall be included.
Related official pose/item number,Book	Republic of Turkey Ministry of Environment and Urbanization 35.545.4046

Item no:	Item	Unit	Quantity
ELC.32	9U 600 mm x 600 mm 19" cabinet	Piece	
Description/ Specifications	Wall-mounted cabinets: Supply, and installation in working order, including any small material, of cabinets coated with electrostatic powder paint, with type tests conducted and results submitted to the administration; min. 2-mm-thick back covers and internal rails (2 in front, 2 at the back), min. 1.5-mm-thick DKP sheet metal internal surfaces, 19-inch-wide gaps between the rails, bottom chassis with a cable input section that prevents dust ingress and secures cables, key-lock, detachable front and side covers, front cover made of tempered, anti-static, secure, smoke gray glass with 4-mm grinding and 135 degrees of angle, which can be opened with a key and detached, with at least a 3-cm diameter screw-fixed frame with metal fittings around the glass that hold it to enhance its strength, with ventilation gratings on the top and/or side surfaces, with the edges of the holes on the rails sized min. 9.5 ± 0.01 mm each, and with the rails moveable along the depth of the cabinet.		
Related official pose/item number,Book	Republic of Turkey Ministry of Environment and Urbanization 35.550.1005		

Item no:	Item	Unit	Quantity
ELC.33	19" rack-type 6-outlet socket with switch	Piece	
Description/ Specifications	Product Accessories		
Related official pose/item number,Book	Republic of Turkey Ministry of Environment and Urbanization 35.550.4014		

Item no:	Item	Unit	Quantity
ELC.34	19" 1U horizontal cable organizer	Piece	
Description/ Specifications	Product Accessories		
Related official pose/item number,Book	Republic of Turkey Ministry of Environment and Urbanization 35.550.4019		

Item no:	Item	Unit	Quantity
ELC.35	50-mm ² solid copper	MT	
Description/ Specifications	İletkenlerden binai hata iletken tesisatı yapılması, binai dış çevresinde en az 60 - 80 cm. derinlikte her cinstopraktakana açılması, iletken ferşive kanalın kapatılması,		

	perçinveyakaynaklaelektrotlarabağlanması her nevi ufakmalzemeveişçilikdahil
Related official pose/item number,Book	Republic of Turkey Ministry of Environment and Urbanization 35.750.3001

Item no:	Item	Unit	Quantity
ELC.36	30 x 3.5-mm galvanized steel flat bars as described in the project design	MT	
Description/ Specifications	Installation of surrounding wires around the building (Unit: m, Materials on construction site: 60%) Installing surrounding wires for the building using the conductors, making a 60 to 80-cm-deep canal around the building, laying the conductor and filling the canal back, connecting to the electrodes with rivets or by welding, including any small material and labor.		
Related official pose/item number,Book	Republic of Turkey Ministry of Environment and Urbanization 35.750.3002		

Item no:	Item	Unit	Quantity
ELC.37	Earth electrode (bar) electrolytic copper	Piece	
Description/ Specifications	Earth electrode (bar) electrolytic copper (Unit: Qty.) Supply to the work site of a min 3.5-meter electrolytic copper bar in compliance with the TS 435/T1 standard, Ø20 mm in diameter, screw-mounting of a tapered head on one end to facilitate driving the bar into the ground, supply of the attachment with 4 cm threads if the bar is made up of two pieces, burying the bar min. 60 cm in the ground, connection to the drop conductors and surrounding conductors of the building by silver soldering or special bronze cast retaining clamps, including any small material and labor. Note: If the ground is rocky, appropriate soil shall be sought around that area.		
Related official pose/item number,Book	Republic of Turkey Ministry of Environment and Urbanization 35.750.4002		

Item no:	Item	Unit	Quantity
ELC.38	Up to 115 g welding powder	Piece	
Description/ Specifications	Exothermic welding attachment (copper to copper), (copper to aluminum), (copper to iron) (Unit: Qty.) Attachment of conductors of any section to each other by exothermic reaction of copper oxide powder, including pots, pot pliers, scrapers, brushes, lighters, any material and labor.		
Related official pose/item number,Book	Republic of Turkey Ministry of Environment and Urbanization 35.750.5004		

Item no:	Item	Unit	Quantity
EÖBF01	Grounding Manhole	Piece	
Description/ Specifications	MATERIAL: PLASTIC SIZE : 400x400x400 mm WEIGHT: 2,400 STANDART: TS EN 62561-2		
Related official pose/item	Republic of Turkey Ministry of Environment and Urbanization		

number,Book	
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SECTION 5A.3DESIGN DRAWINGS

Lot 1; Civic Amenity Center in Kilis

LANDSCAPE DRAWINGS		
No	Drawing No	Drawing Name
1	KLS-DMRC-WCC-LNSCP-101	SURVEY MAP / ETÜT HARİTASI
2	KLS-DMRC-WCC-LNSCP-102	GENERAL LAYOUT / GENEL YERLEŞİM
3	KLS-DMRC-WCC-LNSCP-103	TRAFİK İŞARETLERİ PLANI /TRAFFIC SIGN BOARDS PLAN
4	KLS-DMRC-WCC-LNSCP-104	STRUCTURAL LANDSCAPE PLAN / YAPISAL PEYZAJ PLANI
5	KLS-DMRC-WCC-LNSCP-105	INFRASTRUCTURE APPLICATION PROJECT / ALTYAPI UYGULAMA PROJESİ
6	KLS-DMRC-WCC-LNSCP-106	GENEL YERLEŞİM - HAFRİYAT VE KAZI-DOLGU / GENERAL LAYOUT - GRID OF EXCAVATIONS AND EMBANKMENTS
7	KLS-DMRC-WCC-LNSCP-107	FIELD CONCRETE EXPANSION -CONSTRUCTION JOINT PLAN / SAHA BETONU GENLEŞME-BÜZÜŞME DERZ PLANI
8	KLS-DMRC-WCC-LNSCP-108	LANDSCAPE STRUCTURAL DETAILS / YAPISAL PEYZAJ DETAYLARI
9	KLS-DMRC-WCC-LNSCP-109	INFRASTRUCTURE TYPE DETAILS / ALTYAPI TİP DETAYLARI
ARCHITECTURAL DRAWINGS		
No	Drawing No	Drawing Name
1	KLS-DMRC-WCC-ARC-101	ATIK GETİRME MERKEZİ/CIVIC AMENITY CENTER OFİS BİNASI / OFFICE BUILDING ATIKSU HDPE TANK / WASTEWATER COLLECTION HDPE TANK PLAN-KESİT-GÖRÜNÜŞ / PLAN-SECTIONS-ELEVATIONS
2	KLS-DMRC-WCC-ARC-102	DETAYLAR / DETAILS
STRUCTURAL DRAWINGS		
No	Drawing No	Drawing Name
1	KLS-DMRC-WCC-STR-101	ATIK GETİRME MERKEZİ/CIVIC AMENITY CENTER STATİK PROJESİ /STRUCTURAL DRAWING
2	KLS-DMRC-WCC-STR-102	ATIKSU HDPE TANK / WASTEWATER COLLECTION HDPE TANKSTATİK PROJESİ /STRUCTURAL DRAWING
3	KLS-DMRC-WCC-STR-103	İDARİ VE PERSONEL BİNASI / ADMINISTRATIVE AND STAFF BUILDING STATİK PROJESİ /STRUCTURAL DRAWING
4	KLS-DMRC-WCC-STR-104	TEMEL KALIP PLANI /FOUNDATION FORMWORK PLAN
5	KLS-DMRC-WCC-STR-105	PLATFORM PLAN / PLATFORM PLANI
6	KLS-DMRC-WCC-STR-106	BETONARME ÇEVRE DUVARI DETAYLARI /REINFORCED CONCRETE PERIMETER WALL DETAILS
MECHANICAL DRAWINGS		
No	Drawing No	Drawing Name
1	KLS-DMRC-WCC-MEK-101	MECHANICAL INFRASTRUCTURE APPLICATION PROJECT / MEKANİK ALTYAPI UYGULAMA PROJESİ

2	KLS-DMRC-WCC-MEK-102	OFİS BİNASI MEKANİK PROJELERİ OFFICE BUILDING MECHANICAL APPLICATION PROJECT
3	KLS-DMRC-WCC-MEK-103	OFİS BİNASI İKLİMLENDİRME PROJESİ OFFICE BUILDING AIR-CONDITIONER PROJECT
ELECTRICAL DRAWINGS		
No	Drawing No	Drawing Name
1	KLS-DMRC-WCC-ELK-101	WASTE COLLECTION CENTER AND OFFICE BUILDING ELECTRICAL APPLICATION PROJECT / ATIK GETİRME MERKEZİ VE OFİS BİNASI ELEKTRİK UYGULAMA PROJESİ

Lot 2; Civic Amenity Center in Haliliye/Şanlıurfa
LIST OF DRAWINGS

LANDSCAPE DRAWINGS		
No	Drawing No	Drawing Name
1	UNDP-URF-HLY-WCC-LNSCP-101	SURVEY MAP / ETÜT HARİTASI
2	UNDP-URF-HLY -WCC-LNSCP-102	GENERAL LAYOUT / GENEL YERLEŞİM
3	UNDP-URF-HLY -WCC-LNSCP-103	TRAFİK İŞARETLERİ PLANI /TRAFFIC SIGN BOARDS PLAN
4	UNDP-URF-HLY -WCC-LNSCP-104	STRUCTURAL LANDSCAPE PLAN / YAPISAL PEYZAJ PLANI
5	UNDP-URF-HLY -WCC-LNSCP-105	INFRASTRUCTURE APPLICATION PROJECT / ALTYAPI UYGULAMA PROJESİ
6	UNDP-URF-HLY -WCC-LNSCP-106	GENEL YERLEŞİM - HAFRİYAT VE KAZI-DOLGU / GENERAL LAYOUT - GRID OF EXCAVATIONS AND EMBANKMENTS
7	UNDP-URF-HLY -WCC-LNSCP-107	FIELD CONCRETE EXPANSION -CONSTRUCTION JOINT PLAN / SAHA BETONU GENLEŞME-BÜZÜŞME DERZ PLANI
8	UNDP-URF-HLY -WCC-LNSCP-108	LANDSCAPE STRUCTURAL DETAILS / YAPISAL PEYZAJ DETAYLARI
9	UNDP-URF-HLY -WCC-LNSCP-109	INFRASTRUCTURE TYPE DETAILS / ALTYAPI TİP DETAYLARI
ARCHITECTURAL DRAWINGS		
No	Drawing No	Drawing Name
1	UNDP-URF-HLY -WCC-ARC-101	ATIK GETİRME MERKEZİ/CIVIC AMENITY CENTER OFİS BİNASI / OFFICE BUILDING ATIKSU HDPE TANK / WASTEWATER COLLECTION HDPE TANK PLAN-KESİT-GÖRÜNÜŞ / PLAN-SECTIONS-ELEVATIONS
2	UNDP-URF-HLY -WCC-ARC-102	DETAYLAR / DETAILS
STRUCTURAL DRAWINGS		
No	Drawing No	Drawing Name
1	UNDP-URF-HLY -WCC-STR-101	ATIK GETİRME MERKEZİ/CIVIC AMENITY CENTER STATİK PROJESİ /STRUCTURAL DRAWING
2	UNDP-URF-HLY -WCC-STR-102	ATIKSU HDPE TANK / WASTEWATER COLLECTION HDPE TANKSTATİK PROJESİ /STRUCTURAL DRAWING
3	UNDP-URF-HLY -WCC-STR-103	İDARİ VE PERSONEL BİNASI / ADMINISTRATIVE AND STAFF BUILDING STATİK PROJESİ /STRUCTURAL DRAWING

MECHANICAL DRAWINGS		
No	Drawing No	Drawing Name
1	UNDP-URF-HLY -WCC-MEK-101	MECHANICAL INFRASTRUCTURE APPLICATION PROJECT / MEKANİK ALTYAPI UYGULAMA PROJESİ
2	UNDP-URF-HLY -WCC-MEK-102	OFİS BİNASI MEKANİK PROJELERİ OFFICE BUILDING MECHANICAL APPLICATION PROJECT
3	UNDP-URF-HLY -WCC-MEK-103	OFİS BİNASI İKLİMLENDİRME PROJESİ OFFICE BUILDING AIR-CONDITIONER PROJECT
ELECTRICAL DRAWINGS		
No	Drawing No	Drawing Name
1	UNDP-URF-HLY -WCC-ELK-101	WASTE COLLECTION CENTER AND OFFICE BUILDING ELECTRICAL APPLICATION PROJECT / ATIK GETİRME MERKEZİ VE OFİS BİNASI ELEKTRİK UYGULAMA PROJESİ

SECTION 5B: OTHER RELATED REQUIREMENTS

Further to the SECTION 5A: SCHEDULE OF REQUIREMENTS AND TECHNICAL SPECIFICATIONS/BILL OF QUANTITIES, Bidders are requested to take note of the following additional requirements, conditions, and related services pertaining to the fulfilment of the requirements:

Commencement of work	The Contractor shall commence work within 7 days from the date on which he shall have been given access to the Site and received the notice to commence from the Engineer
Duration of work	For each lot, maximum 150 days, starting from the date on which the Contractor will be given Access to the Site and receive a notice from the UNDP Engineer to commence the Works and ending on the date of substantial completion of Works stated in the Certificate of Substantial Completion. If the Contractor is awarded the contract for both lots, then the total duration of works will be 150 days for completion of works of both Civic Amenity Centers.
Time limit for submission of Programme of Work (Clause 13 of UNDP General Conditions of Contract for Civil Works)	The Contractor shall submit to the Engineer the Programme of Work in 7 days from the contract signature date.
Price and Payment Terms	The contract is based on unit price, and the final price of the Contract will be determined on the basis of actual quantities of work and materials utilized in the complete and satisfactory performance of the Works as certified by the Engineer and the unit prices contained in the Contractor's financial proposal. Such unit prices are fixed and are not subject to any variation whatsoever.
Currency of Bid	United States Dollar
Currency of Payment	If the Contractor is registered and operating in Turkey, the payment shall be realized in Turkish Liras (TRY). Contract price will be converted from United States Dollar (USD) to Turkish Liras (TRY) by the UN operational rate of exchange ⁵ valid on the date of money transfer. Otherwise, the payments shall be affected in United States Dollar.
Interim Payment	The Contractor shall submit an invoice for the work performed and materials utilized every month .
Insurance of work	For all risks stipulated by Clause 21 of UNDP General Conditions of Contract for Civil Works for the 110 % of the total estimated price of the Contract.
Minimum amount of liability insurance (Clause 23 of UNDP General Conditions of Contract for Civil Works)	15 % of the total estimated price of the Contract

⁵Available at the website: <https://treasury.un.org/operationalrates/OperationalRates.php#E>

SECTION 6: RETURNABLE BIDDING FORMS / CHECKLIST

This form serves as a checklist for preparation of your Bid. Please complete the Returnable Bidding Forms in accordance with the instructions in the forms and return them as part of your Bid submission. No alteration to format of forms shall be permitted and no substitution shall be accepted.

Before submitting your Bid, please ensure compliance with the Bid Submission instructions of the BDS 22.

Technical Bid:

Have you duly completed all the Returnable Bidding Forms?	
▪ Form A: Bid Submission Form	<input type="checkbox"/>
▪ Form B: Bidder Information Form	<input type="checkbox"/>
▪ Form D: Qualification Form	<input type="checkbox"/>
▪ Form E: Format of Technical Bid/Bill of Quantities	<input type="checkbox"/>
▪ Form G: Form of Bid Security	
Have you provided the required documents to establish compliance with the evaluation criteria in Section 4?	<input type="checkbox"/>

Price Schedule:

▪ Form E: Price Schedule Form	<input type="checkbox"/>
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Form A: Bid Submission Form

Name of Bidder:	[Insert Name of Bidder]	Date:	Select date
ITB reference:	[Insert ITB Reference Number]		

We, the undersigned, offer to complete civil works [Insert Title of lots] in accordance with your Invitation to Bid No. UNDP-TUR(USB)-2020/08 and our Bid. We hereby submit our Bid, which includes this Technical Bid and Price Schedule.

Our attached Price Schedule is for the sum of [Insert amount in words and figures and indicate currency][for LOT 1; Construction of Civic Amenity Center in Demirciler/Kilis]

Our attached Price Schedule is for the sum of [Insert amount in words and figures and indicate currency][for LOT 2; Construction of Civic Amenity Center in Haliliye/Şanlıurfa]

We hereby declare that our firm, its affiliates or subsidiaries or employees, including any JV/Consortium /Association members or subcontractors or suppliers for any part of the contract:

- a) 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;
- b) 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;
- c) have no conflict of interest in accordance with Instruction to Bidders Clause 4;
- d) do not employ, or anticipate employing, any person(s) who is, or has been a UN staff member within the last year, if said UN staff member has or had prior professional dealings with our firm in his/her capacity as UN staff member within the last three years of service with the UN (in accordance with UN post-employment restrictions published in ST/SGB/2006/15);
- e) 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;
- f) undertake not to engage in proscribed practices, including but not limited to corruption, fraud, coercion, collusion, obstruction, 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 embrace the principles of the United Nations Supplier Code of Conduct and adhere to the principles of the United Nations Global Compact.

We declare that all the information and statements made in this Bid are true and we accept that any misinterpretation or misrepresentation contained in this Bid may lead to our disqualification and/or sanctioning by the UNDP.

We offer to complete works in conformity with the Bidding documents, including the UNDP General Conditions of Contract and in accordance with the Schedule of Requirements and Technical Specifications.

Our Bid shall be valid and remain binding upon us for the period specified in the Bid Data Sheet.

We understand and recognize that you are not bound to accept any Bid you receive.

I, the undersigned, certify that I am duly authorized by [Insert Name of Bidder] to sign this Bid and bind it should UNDP accept this Bid.

Name: _____

Title: _____

Date: _____

Signature: _____

[Stamp with official stamp of the Bidder]

Form B: Bidder Information Form

Legal name of Bidder	[Complete]
Legal address	[Complete]
Year of registration	[Complete]
Bidder's Authorized Representative Information	Name and Title: [Complete] Telephone numbers: [Complete] Email: [Complete]
Are you a UNGM registered vendor?	<input type="checkbox"/> Yes <input type="checkbox"/> No If yes, [insert UGNM vendor number]
Are you a UNDP vendor?	<input type="checkbox"/> Yes <input type="checkbox"/> No If yes, [insert UNDP vendor number]
Countries of operation	[Complete]
No. of full-time employees	[Complete]
Quality Assurance Certification (e.g. ISO 9000 or Equivalent) (If yes, provide a Copy of the valid Certificate):	[Complete]
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):	[Complete]
Does your Company have a written Statement of its Environmental Policy? (If yes, provide a Copy)	[Complete]
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	[Complete]
Is your company a member of the UN Global Compact	[Complete]
Contact person that UNDP may contact for requests for clarifications during Bid evaluation	Name and Title: [Complete] Telephone numbers: [Complete] Email: [Complete]
Please attach the following	<ul style="list-style-type: none"> Company Profile, which should <u>not</u> exceed fifteen (15)

documents:	<p>pages,</p> <ul style="list-style-type: none"> ▪ Certificate of Incorporation/ Business Registration ▪ Tax Registration/Payment Certificate issued by the Internal Revenue Authority evidencing that the Bidder is updated with its tax payment obligations, or Certificate of Tax exemption, if any such privilege is enjoyed by the Bidder ▪ Trade name registration papers, if applicable ▪ Power of Attorney. ▪ Official Letter of Appointment as local representative, if Bidder is submitting a Bid on behalf of an entity located outside the country
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Form D: Eligibility and Qualification Form

Name of Bidder:	[Insert Name of Bidder]	Date:	Select date
ITB reference:	[Insert ITB Reference Number]		

History of Non- Performing Contracts

☐ Non-performing contracts did not occur during the last 3 years.

☐ Contract(s) not performed in the last 3 years.

Year	Non- performed portion of contract	Contract Identification	Total Contract Amount (current value in US\$)
		Name of Client: Address of Client: Reason(s) for non-performance:	

Litigation History (including pending litigation)

☐ No litigation history for the last 3 years.

☐ Litigation History as indicated below

Year of dispute	Amount in dispute (in US\$)	Contract Identification	Total Contract Amount (current value in US\$)
		Name of Client: Address of Client: Matter in dispute: Party who initiated the dispute: Status of dispute: Party awarded if resolved:	

Previous Relevant Experience

The Bidder must have successfully completed, **as the prime contractor, minimum one civil works contract of similar nature** (*construction of reinforced concrete buildings involving steel structure works, all kinds of industrial facilities and factories, waste disposal facilities, waste management facilities, civic amenity center or waste transfer station.*) each at a minimum value of **USD 250.000,00**, over the **last 5 years**.

In the case of submission of a bid for two lots, then the bidder shall have successfully completed, as the prime contractor, **minimum two civil works contracts** of nature and value specified above,

or,

minimum one civil contract of nature specified above, each at a minimum value of **USD 500.000**, over the **last 5 years**.

Note: Renovation, rehabilitation and restoration works will not be considered as similar experience.

Bidders shall substantiate the claimed experiences by presenting copies of **Satisfactory Work Completion Certificates from Clients** demonstrating nature and value of the civil work successfully completed.

List only those assignments for which the Bidder was legally contracted by the Client as a company or was one of the Consortium/JV partners. Assignments completed by the Bidder's individual experts working privately or through other firms cannot be claimed as the relevant experience of the Bidder, or that of the Bidder's partners or sub-consultants, but can be claimed by the Experts themselves in their CVs.

Project name & Country of Assignment	Client & Reference Contact Details	Contract Value (in USD equivalent*)	Period of activity and status	Types of activities undertaken

- Bidders shall convert the currency quoted in the "Certificate of Completion" into USD, in accordance with the prevailing UN operational rate of exchange on the contract date stated by "Certificate of Completion". UN operational rate of exchange are available at the following website: <https://treasury.un.org/operationalrates/OperationalRates.php#E>

Bidders may also attach their own Project Data Sheets with more details for assignments above.

☐ Attached are the Statements of Satisfactory Performance / Work Completion Certificates from the Client(s).

Financial Standing

Annual Turnover for the last 3 years (in US\$ equivalent ⁶)	Year 2017	USD	
	Year 2018	USD	
	Year 2019	USD	
Latest Credit Rating (if any), indicate the source			
Financial information (in US\$ equivalent ⁷)	Historic information for the last 3 years		
	2017	2018	2019
	Information from Balance Sheet		
Total Assets (TA)			

⁶Bidders shall convert the currency into USD by using the UN operational rate of exchange which was effective for December of each corresponding year. UN operational rate of exchange are available at the following website: <https://treasury.un.org/operationalrates/OperationalRates.php#E>

⁷Bidders shall convert the currency into USD by using the UN operational rate of exchange which was effective for December of each corresponding year. UN operational rate of exchange are available at the following website: <https://treasury.un.org/operationalrates/OperationalRates.php#E>

Total Liabilities (TL)			
Current Assets (CA)			
Current Liabilities (CL)			
	<i>Information from Income Statement</i>		
Total / Gross Revenue (TR)			
Profits Before Taxes (PBT)			
Net Profit			
Current Ratio			

☐ Attached are copies of the audited financial statements (balance sheets, including all related notes, and income statements) for the years required above complying with the following condition:

- a) Must reflect the financial situation of the Bidder or party to a JV, and not sister or parent companies;
- b) Historic financial statements must be audited by a certified public accountant;
- c) Historic financial statements must correspond to accounting periods already completed and audited. No statements for partial periods shall be accepted.

Form E: Format of Technical Bid

Name of Bidder:	[Insert Name of Bidder]	Date:	Select date
ITB reference:	[Insert ITB Reference Number]		
Lot No/Title	[Insert Lot Number and Title]		

Bidders who submit bids for both of the lots shall submit technical bid separately for each lot.

The Bidder's Bid should be organized to follow this format of the Technical Bid. Where the bidder is presented with a requirement or asked to use a specific approach, the bidder must not only state its acceptance, but also describe how it intends to comply with the requirements. **Where a descriptive response is requested, failure to provide the same will be viewed as non-responsive.**

SECTION 1: Bidder's qualification, capacity and expertise

- 1.1 General organizational capability which is likely to affect implementation: management structure, financial stability and project financing capacity, project management controls, extent to which any work would be subcontracted (if so, provide details).
- 1.2 Relevance of specialized knowledge and experience on similar engagements done in the region/country.
- 1.3 Quality assurance procedures and risk mitigation measures.
- 1.4 Organization's commitment to sustainability.

SECTION 2: Method Statement

This section should demonstrate the Bidder's responsiveness to the specification by identifying the specific components proposed, addressing the requirements, as specified, point by point; providing a detailed description of the essential performance characteristics proposed; and demonstrating how the proposed bid meets or exceeds the requirements/specifications. All important aspects should be addressed in sufficient detail.

- 2.1 A detailed description of how the Bidder will complete civil works, keeping in mind the appropriateness to local conditions and project environment.
- 2.2 Explain whether any work would be subcontracted, to whom, how much percentage of the requirements and how much percentage of the contract price, the rationale for such, and the roles of the proposed subcontractors and how everyone will function as a team. *(please note that the Contractor may not be permitted to subcontract the whole of the Works and subcontracted works shall not be permitted to exceed 30% of the total contract price. In this regard, the list of items that are planned to be subcontracted and mentioned in technical bid, their value and percentage of the contract price shall be in accord with prices submitted for these items in the Bill of Quantities.)*
- 2.3 The bid shall also include details of the Bidder's internal technical and quality assurance review mechanisms.
- 2.4 Implementation plan including a Gantt Chart or Project Schedule indicating the detailed sequence of activities that will be undertaken and their corresponding timing.
- 2.5 Demonstrate how you plan to integrate sustainability measures in the execution of the contract. (e.g. Environmental Management)

SECTION 3: Management Structure and Key Personnel

- 3.1 Describe the overall management approach toward planning and implementing the project. Include an organization chart for the management of the project describing the relationship of key positions and designations.
- 3.2 Provide CVs for key personnel required by technical specifications using the format below. CVs should demonstrate qualifications in areas relevant to the scope of works. **(The bidders who submit bids for both of the lots shall propose different personnel as the Project Manager/Construction Manager and Site Engineer for each lot. The bidders who submit bids for both lots may propose the same personnel for both lots as Mechanical Engineer, Electrical Engineer and Surveyor.)**

Key personnel required:

Project Manager/Construction Manager: English speaking, minimum 5 years' experience in construction of any kind of structure and degree in civil engineering or architecture. Project Manager/Construction Manager shall be present on site on a full time basis for the period starting from the date on which the Contractor will be given Access to the Site and receive a notice from the UNDP Engineer to commence the Works and ending on the date of substantial completion of Works stated in the Certificate of Substantial Completion.

Site Engineer(2, 1 for Lot 1: Demirciler/Kilis and 1 for Lot 2: Haliliye/Şanlıurfa): Minimum 3 years' experience in construction of any kind of structure, and degree in civil engineering.

Electrical Engineer: Minimum 3 years' experience in construction of any kind of structure, and degree in electrical engineering.

Mechanical Engineer: Minimum 3 years' experience in construction of any kind of structure and degree in mechanical engineering.

Surveyor: Minimum 3 years' experience in construction of any kind of structure and degree in Survey Engineer (or equivalent) or minimum 5 years' experience in construction of any kind of structure and degree in Survey Technician.

Format for CV of Proposed Key Personnel

Name of Personnel	[Insert]
Position for this assignment	[Insert]
Nationality	[Insert]
Language proficiency	[Insert]
Education/Qualifications	<i>[Summarize college/university and other specialized education of personnel member, giving names of schools, dates attended, and degrees/qualifications obtained.]</i> [Insert]
Professional certifications	<i>[Provide details of professional certifications relevant to the scope of goods and/or services]</i> <ul style="list-style-type: none">■ ame of institution: [Insert]■

	ate of certification: [Insert]
Employment Record/ Experience	<i>[List all positions held by personnel (starting with present position, list in reverse order), giving dates, names of employing organization, title of position held and location of employment. For experience in last five years, detail the type of activities performed, degree of responsibilities, location of assignments and any other information or professional experience considered pertinent for this assignment.]</i>
	[Insert]
References	<i>[Provide names, addresses, phone and email contact information for two (2) references]</i>
	Reference 1: [Insert] Reference 2: [Insert]

I, the undersigned, certify that to the best of my knowledge and belief, the data provided above correctly describes my qualifications, my experiences, and other relevant information about myself.

Signature of Personnel

Date (Day/Month/Year)

FORM F: Price Schedule Form/Bill of Quantities

Lot 1; Construction of Civic Amenity Center in Demirciler/Kilis

(Bidders who submit bids for both of the lots should submit Price Schedule Form/Bill of Quantities separately for each lot.)

Name of Bidder:	[Insert Name of Bidder]	Date:	Select date
ITB reference:	[Insert ITB Reference Number]		

This Bill of Quantities is an itemized breakdown of the works to be carried out, indicating a quantity for each item and the corresponding unit price. The quantities set out in this Bill of Quantities are estimated quantities. The amounts due shall be determined through the measurement of the actual quantities of the works executed and by applying the unit rates to the quantities actually executed for the respective items.

The prices inserted in the Bill of Quantities are to be the full inclusive values of the works described under the items, including all costs and expenses which may be required in and for the construction of the works described together with any temporary works and installations which may be necessary, and all general risks, liabilities and obligations set forth or implied in the documents on which the tender is based. It will be assumed that establishment charges, profit and allowances for all obligations are spread evenly over all the unit rates.

No specific payment will be made against transportation of materials to the site.

Unless the technical specifications or the Bill of Quantities specifically and expressly state otherwise, only permanent works are to be measured and paid for by UNDP.

No allowance will be made for loss of materials or volume thereof during installation, transport or compaction. UN and its subsidiary organs are exempt from all taxes. Therefore, the prices shall exclude Value Added Tax (VAT). The Contractor to be selected shall not be entitled to receive any amount over the prices in relation to VAT, Special Consumption Tax and any other applicable taxes.

In the bill of quantities, rates and prices shall be entered by the Contractor in the appropriate columns in USD. In the Unit Price column in the Bill of Quantities Unit Rates shall include the overheads. "Overheads" shall be deemed to cover:

- i. Profit
- ii. Head Office charges
- iii. Site Supervision and Site Staff costs and expenses
- iv. Transport of labour and travelling allowances
- v. Use of protective clothing or equipment
- vi. Any statutory or incidental charges levied on the employment of labour
- vii. Overtime, unless specifically ordered or subsequently sanctioned in writing by the Engineer
- viii. Time lost due to inclement weather
- ix. Insurances of whatsoever nature
- x. Holiday and sickness pay or benefits
- xi. Use, repair and sharpening of small tools
- xii. All non-mechanically operated equipment, erected scaffolding, staging and trestles, protective clothing, artificial lighting, storage facilities and the like that may be in general use on the site
- xiii. All other liabilities and obligations whatsoever

The units of measurement used in the annexed technical documentation are those of the International System of Units (SI). No other units may be used for measurements, pricing, detail drawings etc. (Any units not mentioned in the technical documentation must also be expressed in terms of the SI.) Abbreviations used in the bill of quantities are to be interpreted as follows:

mm	means	millimetre
m	means	metre
da	means	decare
mm ²	means	square millimetre
m ²	means	square metre
m ³	means	cubic metre
kg	means	kilogram
ton	means	tonne (1000 kg)
pcs	means	pieces
h	means	hour
L.s.	means	Lump sum
km	means	kilometre
l	means	litre
kVAR	means	kilovolt ampere reactive
%	means	per cent

Currency of the Bid: United States Dollar, USD

Price Schedule for Lot 1

Item #	Description	Total Price (USD)
1	Civil Works	
2	Mechanical Works	
3	Electrical Works	
Total estimated price (item 1 +item 2 +item 3) (USD)		

Excel format of Bill of Quantities shall also be provided with the Bid. In case of any discrepancy between the excel format and the following formats, the prices given in the below format shall prevail.

BILL OF QUANTITIES FOR CIVIL WORKS, LOT 1;

Pose/ Item No	Pose/Item Definition	Unit	Quantity	Unit Price (USD)	Price (USD)
Civ.01	6 mm tempered glass / 6 mm kalınlıkta temperli cam (TS EN 14321-1,2)	m ²	2,65		
Civ.03	Providing Sand, Hand Laying, Watering and Compacting/Kum Temin Edilerek, El İle Serme, Sulama Ve Sıkıştırma Yapılması	m ³	8,51		
Civ.05	Supply of gravel and flooring, irrigation and compression by machine. / Çakıl temin edilerek, makine ile serme, sulama ve sıkıştırma yapılması	m ³	290,71		

Pose/ Item No	Pose/Item Definition	Unit	Quantity	Unit Price (USD)	Price (USD)
Civ.06	Making drainage by providing gravel / Çakıl temin edilerek, drenaj yapılması	m ³	92,41		
Civ.07	Readymix concrete placement meeting the compressive strength requirements of C 16/20, including procurement, delivery, concrete pump and placement. / Beton santralinde üretilen veya satın alınan ve beton pompasıyla basılan, C 16/20 basınç dayanım sınıfında, gri renkte, normal hazır beton dökülmesi (beton nakli dahil)	m ³	135,72		
Civ.08	Concreting of C 30/37 compressive strength class concrete being manufactured at a concrete plant or purchased (including concrete transport) / Beton santralinde üretilen veya satın alınan ve beton pompasıyla basılan, C 30/37 basınç dayanım sınıfında beton dökülmesi	m ³	404,47		
Civ.09	Field concrete (Concrete pavement)	m3	138,15		
Civ.10	Ribbed wire mesh (3,001-10,000 kg/m2) Installation / Nervürlü çelik hasırın yerine konulması 3,001-10,000 kg/m2 (10,000 kg/m2 dahil)	ton	10,60		
Civ.11	Cutting, bending and placement of Ø 8- Ø 12 mm deformed concrete steel bars / ø 8-12 mm Nervürlü Demir	ton	45,96		
Civ.12	Cutting, bending and placement of Ø 14- Ø 28 mm deformed concrete steel bars / ø 14-28 mm Nervürlü Demir	ton	24,67		
Civ.13	Preparation and installation of framing construction using all kind of iron profiles as seperated parts or compositely / Her türlü profil demirlerin münferit veya birleşik olarak hazırlanması ve yerine tespit edilmesi	ton	3,33		
Civ.14	Production of reinforced concrete plain surface formworks with plywood / Plywood ile düz yüzeyli betonarme kalıbı yapılması	m ²	2.448,00		

Pose/ Item No	Pose/Item Definition	Unit	Quantity	Unit Price (USD)	Price (USD)
Civ.15	Quartz Aggregated (Gray) Floor Hardener and Cure Application for Fresh Concrete/Kuvars agregalı (gri) yüzey sertleştirici ve kür uygulaması (taze betonda)	m ²	690,74		
Civ.16	Supply and replacement of HDPE based drainage and protection sheet on waterproofing of basement curtains (200 dpressure resistance <250 KN / m2) / Bodrum perdelerinde su yalıtımı üzerine HDPE esaslı drenaj ve koruma levhası temini ve yerine döşenmesi (200≤basınç dayanımı<250 KN/m2)	m ²	227,39		
Civ.17	200 mm nominal diameter, rather than supply and laying of PVC corrugated drainage pipe / ø200 mm Spiral Sarımlı Pvc Boru Döşenmesi (Drenaj,Y.Suyu İçin)	m	192,43		
Civ.18/b	Laying of 250 g/m ² weight geotextile fabric mat / 250 gr/m ² ağırlıkta geotekstil keçe serilmesi	m ²	730,43		
Civ.19	Two layers of dampproofing application of 3 and 4 mm thick elastometric polymer modified bitumen sheet (-20 degrees cold rolled) with mat reinforcement / 3 mm ve 4 mm kalınlıkta elastomer esaslı (-20 soğukta bükülmeli) polyester keçe taşıyıcılı polimer bitümlü örtüler ile iki kat su yalıtımı yapılması	m ²	730,43		
Civ.21	Mesh reinforced elastometric resin based liquid applied dampproof plastic coating, 3 layers, 1,5 mm total thickness / Elastomerik reçine esaslı sıvı plastik kaplama malzemesi ile file takviyeli olarak, 3 kat halinde toplam 1,5 mm kalınlıkta su yalıtımı yapılması	m ²	409,87		

Pose/ Item No	Pose/Item Definition	Unit	Quantity	Unit Price (USD)	Price (USD)
Civ.22	Roof covering with a 0.50 mm thick hot dipped galvanized corrugated / trapezoidal sheet (painted with fabricated roll painting system) on steel or reinforced concrete beam (analysis with 10.200.1404) / Çelik veya ön yapımlı betonarme kiriş üzerine 0.50 mm kalınlıkta sıcak daldırma galvanizli oluklu/trapez sac (fabrikasyon rulo boyama sistemi ile boyanmış) ile çatı örtüsü yapılması. (10.200.1404 ile analiz)	m ²	386,87		
Civ.25	Covering with 8 cm height normal cement steam cured concrete paving stone (every size, color and texture) 8 cm yüksekliğinde normal çimentolu buhar kürlü beton parke taşı ile döşeme kaplaması yapılması (her ebat, renk ve desende)	m ²	54,00		
Civ.27	Laying of Concrete border (chamfered, any colour) (75 x 30 x 15 cm) / (75 x 30 x 15 cm boyutlarında normal çimentolu buhar kürlü beton bordür döşenmesi (pahlı, her renk)	m	29,05		
Civ.28	Applying dilatation overlay on walls, ceilings and facades with 120 mm width, min 1.3 mm wall thickness, anodized aluminum cover profiles (for 50 mm width dilatations) / 120 mm genişlikte, min. 1,3 mm et kalınlığında eloksallı alüminyum kapak profilleri ile duvar, tavan ve cephelerde kaplama üstü dilatasyon fugası yapılması (50 mm genişlikte dilatasyonlar için)	m	7,50		
Civ.29	Waterproofing of dilatations with 30 cm wide, at least 1 mm thick dilatation insulation tapes/ 30 cm genişlikte, min. 1 mm kalınlıkta dilatasyon yalıtım bantları ile dilatasyonlarda su yalıtımı yapılması.	m	7,50		

Pose/ Item No	Pose/Item Definition	Unit	Quantity	Unit Price (USD)	Price (USD)
Civ.30	Manufacturing and installing natural-matte anodized profiles with aluminum joinery without heat insulation / Naturel-mat eloksallı profillerle ısı yalıtımsız alüminyum doğrama imalatı yapılması ve yerine konulması	kg	1,31		
Civ.31	Two layers of anticorrosive, two layers of synthetic paint on iron surfaces / Demir yüzeylere iki kat antipas, iki kat sentetik boya yapılması	m ²	342,57		
Civ.32	Writing on exposed concrete surfaces with water-based epoxy paint (RAL9005)(exterior)(analysis with 10.300.1027) / Brüt beton yüzeylere, su bazlı epoksi boya ile yazı yazılması (RAL9005)(dış cephe) (10.300.1027 ile analiz)	m ²	17,78		
Civ.33	Applying water based transparent uv resistant protector for concrete or plastered surfaces (exterior) / Brüt beton veya sıvalı yüzeylere, koruma amaçlı su bazlı şeffaf uv dayanımlı koruyucu yapılması (dış cephe)	m ²	1.353,62		
Civ.34	Manufacturing and installation of pressed sheet door frame made of 1.50 mm thick hot rolled sheet / 1,50 mm kalınlığında sıcak haddelenmiş sacdan bükme kapı kasası yapılması ve yerine konulması	kg	22,78		
Civ.36	Making and replacing various iron works from iron band,hollow section and steel profile / Çeşitli demir işleri yapılması	kg	3.949,92		
Civ.38	Placement of parcel chimney with prefabricated base element (h: 0,50 m, internal size: 0,60 x 0,60 m, wall thickness: 0,10 m) (500 doses, steam cured, joints between chimney elements with 600 doses mortar)/Prefabrik taban elemanı ile parsel bacası teşkil edilmesi (h: 0,50 m, iç ebadı: 0,60 x 0,60 m, et kalınlığı: 0,10 m) (500 dozlu, buhar kürlü, baca elemanları arası birleşim yerleri 600 dozlu harçla)	piece	1,00		

Pose/ Item No	Pose/Item Definition	Unit	Quantity	Unit Price (USD)	Price (USD)
Civ.39	Placement of parcel chimney with prefabricated body element (h: 0,50 m, internal size: 0,60 x 0,60 m, wall thickness: 0,10 m) (500 doses, steam cured, joints between chimney elements 600 doses mortar)/Prefabrik gövde elemanı ile parsel bacası teşkil edilmesi (h: 0,50 m, iç ebadı: 0,60 x 0,60 m, et kalınlığı: 0,10 m) (500 dozlu, buhar kürlü, baca elemanları arası birleşim yerleri 600 dozlu harçla)	piece	1,00		
Civ.41	Placement of the frameless reinforced concrete cover for the parcel chimney on the chimney (0.40 x 0.80 x 0.10 m) (manufactured with C35 / 45 concrete, for the parcel chimneys in the garden)/Parsel bacası için imal edilmiş çerçevesiz betonarme kapağın baca üzerine yerleştirilmesi (0,40 x 0,80 x 0,10 m) (C35/45 betonu ile imal edilmiş, bahçedeki parsel bacaları için)	piece	2,00		
Civ.48	Cast iron cover procurement and installation for storm water and drainage water (500x300x45mm) / Sfero Döküm Kanal Izgarası	kg	1.770,00		
Civ.50	Shrinkage joint application to field concrete and concrete roads / Saha betonu ve beton yollarda büzülme derzi yapılması	mt	157,51		
Civ.51	Expantion joint application to field concrete and concrete roads / Saha betonu ve beton yollarda genişleme derzi yapılması	mt	28,17		
Civ.52	Facade cladding with mineral filled composite aluminum sheets (without heat insulation) /Mineral dolgulu kompozit alüminyum levhalar ile cephe kaplaması yapılması (ısı yalıtımsız)	m ²	68,59		
Civ.53	Excavation soft rock with excavator and using the excavated rock /Ekskavatörle yumuşak kayanın kazılması ve kullanılması (yarma ve yan ariyetten dolguya gidecek kazılarda))	m ³	1.716,76		

Pose/ Item No	Pose/Item Definition	Unit	Quantity	Unit Price (USD)	Price (USD)
Civ.54	Laying the sub base and base material / Alt temel ve temel malzemelerinin figüre edilmesi	m ³	496,07		
Civ.56	Irrigation and compression of any type of soil/Her cins toprağın sulanması ve sıkıştırılması	m ³	610,93		
Civ.58	Formation of base layer (with crushed and screened quarry stone (1 inch)) / Temel Yapılması (Kırılmış ve Elenmiş Ocak Taşı ile(1 inç))	m ³	228,66		
Civ.59	Plant-Mix Sub base production (with crushed and screened quarry stone) / Plentmix ile Alt Temel Yapılması (kırılmış ocak taşı ile)	ton	427,32		
Civ.60	Forming a 1 m ² Compacted Asphalt Concrete Bituminous Hot Foundation Layer of 10 cm Thickness (With Cracked and Screened Quarry Stone) (TYPE-A)/10 cm Sıkışmış Kalınlıkta 1 m ² Asfalt Betonu Bitümlü Sıcak Temel Tabakası Yapılması (Kırılmış ve Elenmiş Ocak Taşı ile) (TİP-A)	m ²	291,21		
Civ.61	Forming 1 m ² Compacted Asphalt Concrete Binder Layer with 8 cm Thickness (With Cracked and Screened Quarry Stone)/8 cm Sıkışmış Kalınlıkta 1 m ² Asfalt Betonu Binder Tabakası Yapılması (Kırılmış ve Elenmiş Ocak Taşı ile)	m ²	291,21		
Civ.62	Forming 1 m ² Compacted Asphalt Concrete Abrasion Layer of 5 cm Thickness (With Cracked and Screened Quarry Stone) (Type-1)/5 cm Sıkışmış Kalınlıkta 1 m ² Asfalt Betonu Aşınma Tabakası Yapılması (Kırılmış ve Elenmiş Ocak Taşı ile) (Tip-1)	m ²	291,21		
ÖBF 1	Site Signboard with foot pedestal	piece	2,00		
ÖBF 2	Supplying and placing 10 mm PVCtriangular joint profile on the formwork for 10mm joint gap/ 10mm derz boşluğu için 10 mm PVC üçgen fuga profilinin temini ve kalıplara yerleştirilmesi	m	309,30		
ÖBF 3	Traffic signs and boards / Trafik İşaret Levhası	piece	4,00		
ÖBF 4	Panel Fence / Panel Çit H;50cm	m	38,10		

Pose/ Item No	Pose/Item Definition	Unit	Quantity	Unit Price (USD)	Price (USD)
ÖBF 5	Sliding Entrance Door (Panel fence) / Giriş Kapısı (Panel Çit kapı)	piece	2,00		
ÖBF 6	Suplly and Installation of Prafabricated Container Building/ Prefabrik Konteyner Binası Temini ve Yerine Montajı	piece	1,00		
ÖBF 7	Manufacturing and installing 2mm aluminum sheet wall coping (RAL9005)/ 2mm kalınlığında alüminyum levhadan harpuştta yapılması ve yerine konması	m	11,00		
Total for Civil Works, Lot 1					

BILL OF QUANTITIES FOR MECHANICAL WORKS, LOT 1;

Pose/ Item No	Pose/Item Definition	Unit	Quantity	Unit Price (USD)	Price (USD)
MEC.01	WASHBASINS 45 x 60 cm Semi-pedestal set/45x60 cm yarım ayaklı tk.lavabo	piece	2		
MEC.02	WASHBASIN PIPING SYSTEM: First class: (Faucet: TS EN 200 or TS EN 817, Siphon: TS-EN 274-1-2-3)/Lavabo tesisatı gömme tip bataryalı 1.sınıf	group	2		
MEC.03	MIRRORS (Unit: Qty.) (TS EN 1036) Approximately 40 x 60 cm/Ayna takriben 40x60 cm	piece	2		
MEC.04	SHELF UNIT:Glazed ceramic Approximately 50 x 10 cm Extra class/Etajer sırlı seramik takriben 50x10 cm ekstra sınıf	piece	2		
MEC.05	FLUSH TOILET AND INSTALLATION WITH BUILT-IN RESERVOIR Flush with the wall, Approximately 65 x 35 cm (Extra- quality)/Duvara tam dayalı tip,takriben 65x35 cm kendinden rezervuarlı alafranga hela ve tesisatı	group	1		
MEC.06	PAPER DISPENSER Stainless Steel/Paslanmaz çelik kağıtlık	piece	1		
MEC.07	FLOOR DRAIN STRAINERS:Plastic, 10x10 cm. with Ø50 outlet/Yer süzgeci plastikten 10x10 cm. Ø 50 çıkışlı	piece	1		

Pose/ Item No	Pose/Item Definition	Unit	Quantity	Unit Price (USD)	Price (USD)
MEC.08	PN 20 Polypropylene Pipes;1/2" 20/3.4/Pn 20 polipropilen 1/2" ø20/3,4 mm temiz su boruları	m	45		
MEC.09	PN 20 Polypropylene Pipes;3/4" 25/4.2/Pn 20 polipropilen 3/4" ø25/4,2 mm temiz su boruları	m	43		
MEC.11	PN.20 POLYPROPYLENE WATER PIPE ASSEMBLY FEE/Bina içinde fizyoterm kaynak ve vidalı olarak döşenmiş polipropilen boru montaj malzemesi bedeli	%	612,25		
MEC.12	Rigid PVC Plastic Drain Pipes;40 - 50/Sert pvc plastik pis su borusu dış çap ø 50-40/3,0 mm (geçme veya yapıştırma muflu)	m	2		
MEC.13	Rigid PVC Plastic Drain Pipes;70 - 75/Sert pvc plastik pis su borusu dış çap ø 75-70/3,0 mm (geçme veya yapıştırma muflu)	m	3		
MEC.14	Rigid PVC Plastic Drain Pipes;100 - 110/Sert pvc plastik pis su borusu dış çap ø 100-110/3,0 mm (geçme veya yapıştırma muflu)	m	45		
MEC.15	Rigid PVC Plastic Drain Pipes ASSEMBLY FEE/Yapıştırma ve geçme muflu boru montaj malzemesi bedeli	%	1.055,28		
MEC.17	12.000 Btu/h Wall split air conditioner UNIT/12.000 Btu/h soğutma kapasitesinde duvar tipi split klima	piece	2		
M.ÖBF.1	Wastewater collection tank (5000LT) / Atıksu toplama tankı (5000LT)	piece	1		
Total for Mechanical Works, Lot 1					

BILL OF QUANTITIES FOR ELECTRICAL WORKS, LOT 1;

Pose/ Item No	Pose/Item Definition	Unit	Quantity	Unit Price (USD)	Price (USD)
ELC.01	From 0.40 to 0.50 m ² (including 0.50 m ²)/Sıva üstü sac tablo 0,40 - 0,50m ² 'ye kadar (0,50 m ² dahil) (TS 3367 EN 60439-1)	piece	1,00		
ELC.02	3-phase, Up to 16 A (3 kA)/Üç fazlı anahtarlı 16 a.'e kadar anahtarlı otomatik sigorta (3ka)	piece	1,00		
ELC.03	Up to 16 A (6 kA)/Anahtarlı otomatik sigorta 16 a. (6ka) (ts 5018-1 en 60898-1)	piece	13,00		
ELC.04	3-phase, Up to 40 A (10 kA)/Üç fazlı 40 A'e kadar (10 kA) Anahtarlı Otomatik Sigortalar (10 kA kesme kapasiteli)	piece	1,00		
ELC.05	Up to 4 x 25 A (30 mA)/Kaçak akım koruma şalteri 4*25 a.e kadar(30ma)	piece	1,00		
ELC.06	Up to 4 x 40 A (300 mA)/Kaçak akım koruma şalteri 4*40 a.e kadar(300ma)	piece	1,00		

Pose/ Item No	Pose/Item Definition	Unit	Quantity	Unit Price (USD)	Price (USD)
ELC.07	Class B, 230 V AC, 100 kA (I imp; 10/350 µs), 3-phase, neutral/ earth, with extra contact output/B sınıfı, 230V AC, 100 kA (I imp; 10/350µs), üç faz, nötr-toprak, ilave kontak çıkışlı	piece	1,00		
ELC.08	Up to 250 V/İşaret lambası 250 v.a kadar	piece	3,00		
ELC.09	3 x 230 / 400V..3 x 10 (60) A/Üç fazlı zaman tarifeli elektronik elektrik sayaçlar 3x230/400v..3x10 (60)a	piece	1,00		
ELC.10	3 x 2.5 mm ² /3x2.5 mm ² kurşunsuz pvc izol.kablo.besleme hattı (nhxmh)	MT	12,00		
ELC.11	5 x 10 mm ² /5x10 mm ² 1KV yer altı kabloları ile kolon ve besleme hattı tesisi	MT	245,00		
ELC.12	Single switch outlet branch/Normal sorti (linye ve sorti hatları kurşunsuz antigron (nhxmh) malzemeyle.)	piece	14,00		
ELC.13	Dual Switch Outlet Branch/Komutator sorti (linye ve sorti hatları kurşunsuz antigron (nhxmh) malzemeyle.)	piece	2,00		
ELC.14	Parallel Outlet Branch/Paralel sorti (linye ve sorti hatları kurşunsuz antigron (nhxmh) malzemeyle.)	piece	10,00		
ELC.15	Power socket outlet branch for the security line./Halogenfree kablo ile güvenlik hattı priz sortisi.	piece	8,00		
ELC.16	Surface-mounted LED ceiling fixtures sized minimum 60x60 (with minimum 3300 lm light flux, and maximum 36 w consumption/Sıva üstü, min. 60x60 ebatlarında LED li tavan armatürü (ışık akısı en az 3300 lm, tüketim değeri en fazla 36 w olan)	piece	2,00		
ELC.17	Minimum 3600 lm light flux, maximum 40 W consumption./Işık akısı en az 3600 lm, tüketim değeri en fazla 40 W. LED Sıva Üstü Etanj Armatür	piece	18,00		
ELC.18	Minimum 17,000 lm light flux, maximum 200 W consumption/Işık akısı en az 17000 lm, tüketim değeri en fazla 200 w olan. Led Projektörler	piece	6,00		
ELC.19	RJ-11 or RJ-12 telephone sockets (6 contacts) (22.5 x 45 mm/Telefon prizi rj-11 veya rj-12 (6 kontaklı) (22,5 x 45 mm)	piece	3,00		
ELC.20	CAT 5e or CAT 6e RJ-45 data sockets (8 contacts) (22.5 x 45 mm)/Data prizi cat 5e veya cat 6e rj-45 (8 kontaklı) (22,5 x 45 mm)	piece	3,00		

Pose/ Item No	Pose/Item Definition	Unit	Quantity	Unit Price (USD)	Price (USD)
ELC.21	Single-loop, addressable fire alarm control panel, with min. 120 address capacity./1 çevrimli, 12 bölge adresli yangın alarm santrali 127 adres kapasiteli, 12 yangın bölgesi göstergeli.	piece	1,00		
ELC.22	Addressable optical smoke detector with short circuit insulator /Adresli kısa devre izolatörlü optik duman dedektörü	piece	1,00		
ELC.23	Resettable addressable fire alarm button /Adresli sıfırlanabilir yangın ihbar butonu	piece	1,00		
ELC.24	Addressable loop-powered fire siren /Adresli çevrimden beslemeli yangın ihbar sireni	piece	1,00		
ELC.25	24 Ports/24 portlu utp cat6 patch panel	piece	1,00		
ELC.26	Up to 10 pairs (with ground) P.18/Bina içi ana hat tesisatı 10 çift kadar p.18	MT	5,00		
ELC.27	Up to 30 pairs (with ground)/Bina harici ana hat tesisatı 0.5 mm. 30 çift.	MT	160,00		
ELC.28	Up to 20 pairs/Yanmaz plastik telefon dağıtım kutusu 20 çift	piece	1,00		
ELC.29	Utp Cat6H HALOGEN-FREE 4 x 2 x 23 AWG /Utp cat6h halojen free 4x2x23 awg kablo	MT	32,00		
ELC.30	2 x 2 x 0.8 + 0.8 mm ² /2x2x0,8+0,8 mm ² Je-H(St)H Fe180 Ph120 Yangına dayanıklı halojensiz yangın alarm kabloları (VDE 0815)	MT	15,00		
ELC.31	12 Fiber SC / SM/Rak tipi fiber optik terminasyon birimi 12 fiber kapasiteli sc / sm	piece	1,00		
ELC.32	9U 600 mm x 600 mm 19" cabinet/Rack kabinler 9u 600 mm * 600 mm 19"	piece	1,00		
ELC.33	19" rack-type 6-outlet socket with switch/Ürüne ait aksesuar 19" rack tipi 6 lı grup priz anahtarlı	piece	1,00		
ELC.34	19" 1U horizontal cable organizer/Ürüne ait aksesuar 19" 1u yatay kablo düzenleyici	piece	1,00		
ELC.35	50-mm ² solid copper/Bina ihata iletkeni 50 mm ² bakır tel/Bina ihata iletkeni 30x3.5 mm galvanizli çelik lama	MT	5,00		
ELC.36	30 x 3.5-mm galvanized steel flat bars as described in the project design/Bina ihata iletkeni 30x3.5 mm galvanizli çelik lama	MT	20,00		
ELC.37	Earth electrode (bar) electrolytic copper /Toprak elektrodu (çubuk), elektrolitik bakır	piece	5,00		
ELC.38	Up to 115 g welding powder/Termokaynak eki 115 gr.kaynak tozuna kadar	piece	5,00		
EÖBF01	Grounding Manhole/TOPRAKLAMA MENHOLÜ	piece	1,00		

Pose/ Item No	Pose/Item Definition	Unit	Quantity	Unit Price (USD)	Price (USD)
Total for Electrical Works					

Name of Bidder: _____

Authorised signature: _____

Name of authorised signatory: _____

Functional Title: _____

FORM F: Price Schedule Form/Bill of Quantities

Lot 2; Construction of Civic Amenity Center in Haliliye/Şanlıurfa

(Bidders who submit bids for both of the lots should submit Price Schedule Form/Bill of Quantities separately for each lot.)

Name of Bidder:	[Insert Name of Bidder]	Date:	Select date
ITB reference:	[Insert ITB Reference Number]		

This Bill of Quantities is an itemized breakdown of the works to be carried out, indicating a quantity for each item and the corresponding unit price. The quantities set out in this Bill of Quantities are estimated quantities. The amounts due shall be determined through the measurement of the actual quantities of the works executed and by applying the unit rates to the quantities actually executed for the respective items.

The prices inserted in the Bill of Quantities are to be the full inclusive values of the works described under the items, including all costs and expenses which may be required in and for the construction of the works described together with any temporary works and installations which may be necessary, and all general risks, liabilities and obligations set forth or implied in the documents on which the tender is based. It will be assumed that establishment charges, profit and allowances for all obligations are spread evenly over all the unit rates.

No specific payment will be made against transportation of materials to the site.

Unless the technical specifications or the Bill of Quantities specifically and expressly state otherwise, only permanent works are to be measured and paid for by UNDP.

No allowance will be made for loss of materials or volume thereof during installation, transport or compaction. UN and its subsidiary organs are exempt from all taxes. Therefore, the prices shall exclude Value Added Tax (VAT). The Contractor to be selected shall not be entitled to receive any amount over the prices in relation to VAT, Special Consumption Tax and any other applicable taxes.

In the bill of quantities, rates and prices shall be entered by the Contractor in the appropriate columns in USD. In the Unit Price column in the Bill of Quantities Unit Rates shall include the overheads. "Overheads" shall be deemed to cover:

- i. Profit
- ii. Head Office charges
- iii. Site Supervision and Site Staff costs and expenses
- iv. Transport of labour and travelling allowances
- v. Use of protective clothing or equipment
- vi. Any statutory or incidental charges levied on the employment of labour
- vii. Overtime, unless specifically ordered or subsequently sanctioned in writing by the Engineer
- viii. Time lost due to inclement weather
- ix. Insurances of whatsoever nature
- x. Holiday and sickness pay or benefits
- xi. Use, repair and sharpening of small tools
- xii. All non-mechanically operated equipment, erected scaffolding, staging and trestles, protective clothing, artificial lighting, storage facilities and the like that may be in general use on the site
- xiii. All other liabilities and obligations whatsoever

The units of measurement used in the annexed technical documentation are those of the International System of Units (SI). No other units may be used for measurements, pricing, detail drawings etc. (Any units not mentioned in the technical documentation must also be expressed in terms of the SI.) Abbreviations used in the bill of quantities are to be interpreted as follows:

mm	means	millimetre
m	means	metre
da	means	decare
mm ²	means	square millimetre
m ²	means	square metre
m ³	means	cubic metre
kg	means	kilogram
ton	means	tonne (1000 kg)
pcs	means	pieces
h	means	hour
L.s.	means	Lump sum
km	means	kilometre
l	means	litre
kVAR	means	kilovolt ampere reactive
%	means	per cent

Currency of the Bid: United States Dollar, USD

Price Schedule for Lot 2

Item #	Description	Total Price (USD)
1	Civil Works	
2	Mechanical Works	
3	Electrical Works	
Total estimated price (item 1 +item 2 +item 3) (USD)		

Excel format of Bill of Quantities shall also be provided with the Bid. In case of any discrepancy between the excel format and the following formats, the prices given in the below format shall prevail.

BILL OF QUANTITIES FOR CIVIL WORKS, LOT 2;

Pose/ Item No	Pose/Item Definition	Unit	Quantity	Unit Price (USD)	Price (USD)
Civ.02	6 mm normal flat glass installation (with metallic construction)/6 mm normal düz cam takma (madeni konst.çita ile)	m ²	2,36		
Civ.03	Providing Sand, Hand Laying, Watering and Compacting/Kum Temin Edilerek, El İle Serme, Sulama Ve Sıkıştırma Yapılması	m ³	29,12		
Civ.04	Providing Gravel, Hand Laying, Watering and Compacting / Çakıl Temin Edilerek, El İle Serme, Sulama Ve Sıkıştırma Yapılması	m ³	4,44		

Pose/ Item No	Pose/Item Definition	Unit	Quantity	Unit Price (USD)	Price (USD)
Civ.05	Supply of gravel and flooring, irrigation and compression by machine. / Çakıl temin edilerek, makine ile serme, sulama ve sıkıştırma yapılması	m ³	287,74		
Civ.06	Making drainage by providing gravel / Çakıl temin edilerek, drenaj yapılması	m ³	85,50		
Civ.07	Readymix concrete placement meeting the compressive strength requirements of C 16/20, including procurement, delivery, concrete pump and placement. / Beton santralinde üretilen veya satın alınan ve beton pompasıyla basılan, C 16/20 basınç dayanım sınıfında, gri renkte, normal hazır beton dökülmesi (beton nakli dahil)	m ³	124,98		
Civ.08	Concreting of C 30/37 compressive strength class concrete being manufactured at a concrete plant or purchased (including concrete transport) / Beton santralinde üretilen veya satın alınan ve beton pompasıyla basılan, C 30/37 basınç dayanım sınıfında beton dökülmesi	m ³	447,99		
Civ.10	Ribbed wire mesh (3,001-10,000 kg/m ²) Installation / Nervürlü çelik hasırın yerine konulması 3,001-10,000 kg/m ² (10,000 kg/m ² dahil)	ton	5,03		
Civ.11	Cutting, bending and placement of Ø 8- Ø 12 mm deformed concrete steel bars / ø 8-12 mm Nervürlü Demir	ton	18,59		
Civ.12	Cutting, bending and placement of Ø 14- Ø 28 mm deformed concrete steel bars / ø 14-28 mm Nervürlü Demir	ton	20,59		
Civ.13	Preparation and installation of framing construction using all kind of iron profiles as seperated parts or compositely / Her türlü profil demirlerin münferit veya birleşik olarak hazırlanması ve yerine tespit edilmesi	ton	3,11		

Pose/ Item No	Pose/Item Definition	Unit	Quantity	Unit Price (USD)	Price (USD)
Civ.14	Production of reinforced concrete plain surface formworks with plywood / Plywood ile düz yüzeyli betonarme kalıbı yapılması	m ²	2.330,44		
Civ.15	Quartz Aggregated (Gray) Floor Hardener and Cure Application for Fresh Concrete/Kuvars agregalı (gri) yüzey sertleştirici ve kür uygulaması (taze betonda)	m ²	360,03		
Civ.16	Supply and replacement of HDPE based drainage and protection sheet on waterproofing of basement curtains (200 dpressure resistance <250 KN / m2) / Bodrum perdelerinde su yalıtımı üzerine HDPE esaslı drenaj ve koruma levhası temini ve yerine döşenmesi (200≤basınç dayanımı<250 KN/m2)	m ²	245,81		
Civ.17	200 mm nominal diameter, rather than supply and laying of PVC corrugated drainage pipe / ø200 mm Spiral Sarımlı Pvc Boru Döşenmesi (Drenaj,Y.Suyu İçin)	m	148,34		
Civ.18/a	Laying of 150 g/m ² weight geotextile fabric mat / 150 gr/m ² ağırlıkta geotekstil keçe serilmesi	m ²	38,60		
Civ.18/b	Laying of 250 g/m ² weight geotextile fabric mat / 250 gr/m ² ağırlıkta geotekstil keçe serilmesi	m ²	1.193,53		
Civ.19	Two layers of dampproofing application of 3 and 4 mm thick elastometric polymer modified bitumen sheet (-20 degrees cold rolled) with mat reinforcement / 3 mm ve 4 mm kalınlıkta elastomer esaslı (-20 soğukta bükülmeli) polyester keçe taşıyıcılı polimer bitümlü örtüler ile iki kat su yalıtımı yapılması	m ²	649,68		

Pose/ Item No	Pose/Item Definition	Unit	Quantity	Unit Price (USD)	Price (USD)
Civ.20	Single layer waterproofing with a 4.3 mm plastomer-based polyester felt carrier (bending at - 5 ° C) with a mineral coated polymer bituminous cover / 4,3 mm kalınlıkta plastomer esaslı (-5 ° C soğukta bükülmeli) polyester keçe taşıyıcılı bir yüzü mineral kaplı polimer bitümlü örtü ile tek kat su yalıtımı yapılması	m ²	0,95		
Civ.21	Mesh reinforced elastometric resin based liquid applied dampproof plastic coating, 3 layers, 1,5 mm total thickness / Elastomerik reçine esaslı sıvı plastik kaplama malzemesi ile file takviyeli olarak, 3 kat halinde toplam 1,5 mm kalınlıkta su yalıtımı yapılması	m ²	850,32		
Civ.22	Roof covering with a 0.50 mm thick hot dipped galvanized corrugated / trapezoidal sheet (painted with fabricated roll painting system) on steel or reinforced concrete beam (analysis with 10.200.1404) / Çelik veya ön yapımlı betonarme kiriş üzerine 0.50 mm kalınlıkta sıcak daldırma galvanizli oluklu/trapez sac (fabrikasyon rulo boyama sistemi ile boyanmış) ile çatı örtüsü yapılması. (10.200.1404 ile analiz)	m ²	386,62		
Civ.23	Covering floor with 1st quality, colored ceramic tile that has 40 x 40 cm nominal sizes, all kinds of patterns, surface features and 3 mm grout joint (with tile adhesive) / 40 X 40 Cm Anma Ebatlarında, Her Türlü Desen Ve Yüzey Özelliğinde, I.Kalite, Renkli Seramik Yer Karoları İle 3 Mm Derz Aralıklı Döşeme Kaplaması Yapılması (Karo Yapıştırıcısı İle)	m ²	5,01		

Pose/ Item No	Pose/Item Definition	Unit	Quantity	Unit Price (USD)	Price (USD)
Civ.24	Covering wall and facade with 1st quality, glazed porcelain tile that has 40 x 40 cm nominal sizes, all kinds of patterns, surface features and 3 mm grout joint (with tile adhesive)/ 40 X 40 Cm Anma Ebatlarında, Her Türlü Desen Ve Yüzey Özelliğinde, I.Kalite, Renkli, Sırlı Porselen Karo İle 3 Mm Derz Aralıklı Duvar Ve Cephe Kaplaması Yapılması (Karo Yapıştırıcısı İle)	m ²	5,01		
Civ.25	Covering with 8 cm height normal cement steam cured concrete paving stone (every size, color and texture) 8 cm yüksekliğinde normal çimentolu buhar kürlü beton parke taşı ile döşeme kaplaması yapılması (her ebat, renk ve desende)	m ²	109,19		
Civ.26	Laying of Concrete border (chamfered, any colour) (50 x 20 x 10 cm) / (50 x 20 x 10 cm boyutlarında normal çimentolu buhar kürlü beton bordür döşenmesi (pahlı, her renk)	m	8,16		
Civ.27	Laying of Concrete border (chamfered, any colour) (75 x 30 x 15 cm) / (75 x 30 x 15 cm boyutlarında normal çimentolu buhar kürlü beton bordür döşenmesi (pahlı, her renk)	m	101,06		
Civ.28	Applying dilatation overlay on walls, ceilings and facades with 120 mm width, min 1.3 mm wall thickness, anodized aluminum cover profiles (for 50 mm width dilatations) / 120 mm genişlikte, min. 1,3 mm et kalınlığında eloksallı alüminyum kapak profilleri ile duvar, tavan ve cephelerde kaplama üstü dilatasyon fugası yapılması (50 mm genişlikte dilatasyonlar için)	m	8,00		

Pose/ Item No	Pose/Item Definition	Unit	Quantity	Unit Price (USD)	Price (USD)
Civ.29	Waterproofing of dilatations with 30 cm wide, at least 1 mm thick dilatation insulation tapes/ 30 cm genişlikte, min. 1 mm kalınlıkta dilatasyon yalıtım bantları ile dilatasyonlarda su yalıtımı yapılması.	m	8,00		
Civ.30	Manufacturing and installing natural-matte anodized profiles with aluminum joinery without heat insulation / Naturel-mat eloksallı profillerle ısı yalıtımsız alüminyum doğrama imalatı yapılması ve yerine konulması	kg	28,00		
Civ.31	Two layers of anticorrosive, two layers of synthetic paint on iron surfaces / Demir yüzeylere iki kat antipas, iki kat sentetik boya yapılması	m ²	360,99		
Civ.32	Writing on exposed concrete surfaces with water-based epoxy paint (RAL9005)(exterior)(analysis with 10.300.1027) / Brüt beton yüzeylere, su bazlı epoksi boya ile yazı yazılması (RAL9005)(dış cephe) (10.300.1027 ile analiz)	m ²	17,78		
Civ.33	Applying water based transparent uv resistant protector for concrete or plastered surfaces (exterior) / Brüt beton veya sıvalı yüzeylere, koruma amaçlı su bazlı şeffaf uv dayanımlı koruyucu yapılması (dış cephe)	m ²	1.104,42		
Civ.34	Manufacturing and installation of pressed sheet door frame made of 1.50 mm thick hot rolled sheet / 1,50 mm kalınlığında sıcak haddelenmiş sacdan bükme kapı kasası yapılması ve yerine konulması	kg	18,92		
Civ.35	individual production and replacement of various profile iron and sheet metal plates (water tanks and similar) / çeşitli profil demiri ve sac levhalardan münferit imalat yapılması ve yerine konulması (su depolari ve benzeri)	kg	6,18		

Pose/ Item No	Pose/Item Definition	Unit	Quantity	Unit Price (USD)	Price (USD)
Civ.36	Making and replacing various iron works from iron band,hollow section and steel profile / Çeşitli demir işleri yapılması	kg	4.227,72		
Civ.37	Preparing sphero casting manhole (77 kg, automatic lock)/Sfero Döküm Baca Kapağı Hazırlanması 77 kg otomatik kilitli ID 400 Basınç Dayanım Sınıfı)	piece	1,00		
Civ.38	Installing parcel manhole with prefabricated base element (h: 0,50 m, internal size: 0,60 x 0,60 m, wall thickness: 0,10 m) (500 doses, steam cured junction places between shaft elements with 600 dose plaster)/Prefabrik taban elemanı ile parsel bacası teşkil edilmesi (h: 0,50 m, iç ebadı: 0,60 x 0,60 m, et kalınlığı: 0,10 m) (500 dozlu, buhar kürlü, baca elemanları arası birleşim yerleri 600 dozlu harçla)	piece	2,00		
Civ.39	Installing parcel manhole with prefabricated body element (h: 0,50 m, internal size: 0,60 x 0,60 m, wall thickness: 0,10 m) (500 doses, steam cured junction places between shaft elements with 600 dose plaster) /Prefabrik gövde elemanı ile parsel bacası teşkil edilmesi (h: 0,50 m, iç ebadı: 0,60 x 0,60 m, et kalınlığı: 0,10 m) (500 dozlu, buhar kürlü, baca elemanları arası birleşim yerleri 600 dozlu harçla)	piece	2,00		
Civ.40	Installing parcel manhole with prefabricated body height setting element (h: variable height, internal size: 0,60 x 0,60 m, wall thickness: 0,10 m) (500 doses, steam cured junction places between shaft elements with 600 dose plaster) /Prefabrik gövde yüksekliği ayar elemanı ile parsel bacası teşkil edilmesi (h:değişken yüksekliği, iç ebadı:0,60x0,60m et kalınlığı 0,10m (500 dozlu, buhar kürlü baca elemanı arası birleşim yerleri 600 dozlu harçla)	m	0,24		

Pose/ Item No	Pose/Item Definition	Unit	Quantity	Unit Price (USD)	Price (USD)
Civ.41	Installing frameless concrete cover produced for parcel manhole on the shaft (0,40 x 0,80 x 0,10 m) (For parcel manholes in the garden by using C35/45 concrete)/Parsel bacası için imal edilmiş çerçevesiz betonarme kapağın baca üzerine yerleştirilmesi (0,40 x 0,80 x 0,10 m) (C35/45 betonu ile imal edilmiş, bahçedeki parsel bacaları için)	piece	2,00		
Civ.42	Installing manhole shaft with 300 mm output diameter, 1 input and 1 output prefabricated base element (Connections between 500 dose, steam cured, base element pipe entries and integrated sealed shaft elements, permeability test price included)/Çıkış çapı 300mm , 1giriş 1 çıkışlı prefabrik taban elemanı ile muayene bacası teşkil edilmesi	piece	1,00		
Civ.43	Laying 200 mm diameter HDPE corrugated pipe(S N 8, rubber seal and pipe price included)/Prefabricated Conic Element With Concrete Manhole To Be Formed and Placed/Çapı 200mm HDPE Boru döşenmesi (SN 8 LASTİK CONTA VE BORU BEDELİ DAHİL)	m	22,00		
Civ.44	Laying 300 mm diameter HDPE corrugated pipe(S N 8, rubber seal and pipe price included)/Prefabricated Conic Element With Concrete Manhole To Be Formed and Placed/Çapı 300mm HDPE Boru döşenmesi (SN 8 LASTİK CONTA VE BORU BEDELİ DAHİL)	m	34,00		

Pose/ Item No	Pose/Item Definition	Unit	Quantity	Unit Price (USD)	Price (USD)
Civ.45	Installing manhole shaft with prefabricated conical element (h: 0.65 m variable, internal diameter: 1,00 m, wall thickness: 0,15 m) (Connections between 500 dose, steam cured, shaft elements, with integrated gasketed, permeability test price included) /Prefabrik konik elemanı ile muayene bacası teşkil edilmesi	piece	1,00		
Civ.46	Installing manhole shaft with prefabricated neck bracket element (h: 0.15 m variable, internal diameter: 0,62 m, wall thickness: 0,15 m) (Connections between 500 dose, steam cured, shaft elements, with integrated gasketed, permeability test price included) /Prefabrik boyun bileziği elemanı ile muayene bacası teşkil edilmesi (h:0.15m çapı 0.62m et kalınlığı :0.15m (500 dozlu, buhar kürlü, baca elemanları arası bağlantılar entegre contalı , sızdırmazlık test bedeli dahil)	piece	1,00		
Civ.47	Installing manhole shaft with prefabricated frame mounting element (h: 0.29 m variable, internal diameter: 0,62 m, wall thickness: 0,15 m) (Connections between 500 dose, steam cured, shaft elements, with integrated gasketed, permeability test price included)/Prefabrik çerçeve montaj elemanı ile muayene bacası teşkil edilmesi (h:0.29 m çapı 0.62m,et kalınlığı :0,15m) (500 dozlu, buhar kürlü, baca elemanları arası bağlantılar entegre contalı , sızdırmazlık test bedeli dahil)	piece	1,00		
Civ.48	Making and placing sphero casting grid for sewerage constructions (500x300x45mm) / Sfero Döküm Kanal Izgarası	kg	1.395,00		

Pose/ Item No	Pose/Item Definition	Unit	Quantity	Unit Price (USD)	Price (USD)
Civ.49	Placing sphero casting, frame shaft cover used in sewerage constructions (88 kg, having appropriate sizes and characteristics with İller Bankası KNL-TP-30 type project)/Kanalizasyon İnşaatlarında kullanılan , çerçeveli baca kapağının yerine konulması(88kg İller Bankası KNL-TP-30 Tip Projesine Uygun Boyut ve Özelliklere Sahip)	piece	1,00		
Civ.50	Shrinkage joint application to field concrete and concrete roads / Saha betonu ve beton yollarda büzülme derzi yapılması	mt	105,69		
Civ.51	Expansion joint application to field concrete and concrete roads / Saha betonu ve beton yollarda genleşme derzi yapılması	mt	23,93		
Civ.52	Facade cladding with mineral filled composite aluminum sheets (without heat insulation) /Mineral dolgulu kompozit alüminyum levhalar ile cephe kaplaması yapılması (ısı yalıtımsız)	m ²	110,55		
Civ.53	Excavation soft rock with excavator and using the excavated rock /Ekskavatörle yumuşak kayanın kazılması ve kullanılması (yarma ve yan ariyetten dolguya gidecek kazılarda))	m ³	2.096,36		
Civ.54	Laying the sub base and base material / Alt temel ve temel malzemelerinin figüre edilmesi	m ³	350,00		
Civ.55	Removal of hardwood, concrete slab, ordinary pavement and blockade/ Parke, Beton Plak, Adi Kaldırım ve Blokaj Sökülmesi	m ²	94,99		
Civ.56	Irrigation and compression of any type of soil/Her cins toprağın sulanması ve sıkıştırılması	m ³	284,93		
Civ.57	Making a sub-base with crushed and screened material of non-sieved gravel material/elenmemiş çakilli malzemeden konkasörle kırılmış ve elenmiş malzeme ile alttemel yapılması	m ³	250,58		

Pose/ Item No	Pose/Item Definition	Unit	Quantity	Unit Price (USD)	Price (USD)
Civ.58	Formation of base layer (with crushed and screened quarry stone (1 inch)) / Temel Yapılması (Kırılmış ve Elenmiş Ocak Taşı ile(1 inç))	m ³	250,58		
Civ.60	Forming a 1 m ² Compacted Asphalt Concrete Bituminous Hot Foundation Layer of 10 cm Thickness (With Cracked and Screened Quarry Stone) (TYPE-A)/10 cm Sıkışmış Kalınlıkta 1 m ² Asfalt Betonu Bitümlü Sıcak Temel Tabakası Yapılması (Kırılmış ve Elenmiş Ocak Taşı ile) (TİP-A)	m ²	40,96		
Civ.61	Forming 1 m ² Compacted Asphalt Concrete Binder Layer with 8 cm Thickness (With Cracked and Screened Quarry Stone)/8 cm Sıkışmış Kalınlıkta 1 m ² Asfalt Betonu Binder Tabakası Yapılması (Kırılmış ve Elenmiş Ocak Taşı ile)	m ²	40,96		
Civ.62	Forming 1 m ² Compacted Asphalt Concrete Abrasion Layer of 5 cm Thickness (With Cracked and Screened Quarry Stone) (Type-1)/5 cm Sıkışmış Kalınlıkta 1 m ² Asfalt Betonu Aşınma Tabakası Yapılması (Kırılmış ve Elenmiş Ocak Taşı ile) (Tip-1)	m ²	40,96		
ÖBF 1	Site Signboard with foot pedestal	piece	2,00		
ÖBF 2	Supplying and placing 10 mm PVCtriangular joint profile on the formwork for 10mm joint gap/ 10mm derz boşluğu için 10 mm PVC üçgen fuga profilinin temini ve kalıplara yerleştirilmesi	m	270,88		
ÖBF 3	Traffic signs and boards / Trafik İşaret Levhası	piece	4,00		
ÖBF 6	Suplly and Installation of Prefabricated Container Building/ Prefabrik Konteyner Binası Temini ve Yerine Montajı	piece	1,00		
ÖBF 7	Manufacturing and installing 2mm aluminum sheet wall coping (RAL9005)/ 2mm kalınlığında alüminyum levhadan harpuşta yapılması ve yerine konması	m	7,10		
ÖBF 8	Flameless Tarpaulin	m ²	6,30		
Total for Civil Works Lot 2					

BILL OF QUANTITIES FOR MECHANICAL WORKS, LOT 2;

Pose/ Item No	Pose/Item Definition	Unit	Quantity	Unit Price (USD)	Price (USD)
MEC.01	WASHBASINS 45 x 60 cm Semi-pedestal set / 45x60 cm yarım ayaklı tk.lavabo	piece	1		
MEC.02	WASHBASIN PIPING SYSTEM: First class: (Faucet: TS EN 200 or TS EN 817, Siphon: TS-EN 274-1-2-3) / Lavabo tesisatı gömme tip bataryalı 1.sınıf	group	1		
MEC.03	MIRRORS (Unit: Qty.) (TS EN 1036) Approximately 40 x 50 cm / Ayna takriben 40x60 cm	piece	1		
MEC.04	SHELF UNIT:Glazed ceramic Approximately 50 x 10 cm Extra class / Etajer sırlı seramik takriben 50x10 cm ekstra sınıf	piece	1		
MEC.05	FLUSH TOILET AND INSTALLATION WITH BUILT-IN RESERVOIR Flush with the wall, Approximately 65 x 35 cm (Extra-quality) / Duvara tam dayalı tip,takriben 65x35 cm kendinden rezervuarlı alafranga hela ve tesisatı	group	1		
MEC.05/b	Short tap 1/2" / Kısa musluk 1/2" (süzgeçli rozet dahil)	piece	1		
MEC.06	PAPER DISPENSER Stainless Steel / Paslanmaz çelik kağıtlık	piece	1		
MEC.07	FLOOR DRAIN STRAINERS:Plastic, 10x10 cm. with Ø50 outlet / Yer süzgeci plastikten 10x10 cm. Ø 50 çıkışlı	piece	2		
MEC.08	PN 20 Polypropylene Pipes;1/2" 20/3.4 / Pn 20 polipropilen 1/2" ø20/3,4 mm temiz su boruları	m	12		
MEC.09	PN 20 Polypropylene Pipes;3/4" 25/4.2 / Pn 20 polipropilen 3/4" ø25/4,2 mm temiz su boruları	m	82		
MEC.11	PN.20 POLYPROPYLENE WATER PIPE ASSEMBLY FEE / Bina içinde fizyoterm kaynak ve vidalı olarak döşenmiş polipropilen boru montaj malzemesi bedeli	%	773,38		
MEC.12	Rigid PVC Plastic Drain Pipes;40 - 50 / Sert pvc plastik pis su borusu dış çap ø 50-40/3,0 mm (geçme veya yapıştırma muflu)	m	1		
MEC.13	Rigid PVC Plastic Drain Pipes;70 - 75 / Sert pvc plastik pis su borusu dış çap ø 75-70/3,0 mm (geçme veya yapıştırma muflu)	m	2		
MEC.14	Rigid PVC Plastic Drain Pipes;100 - 110 / Sert pvc plastik pis su borusu dış çap ø 100-110/3,0 mm (geçme veya yapıştırma muflu)	m	52		
MEC.15	Rigid PVC Plastic Drain Pipes ASSEMBLY FEE / Yapıştırma ve geçme muflu boru montaj malzemesi bedeli	%	1.189,09		
MEC.17	12.000 Btu/h Wall split air conditioner UNIT / 12.000 Btu/h soğutma kapasitesinde duvar tipi split klima	piece	2		
M.ÖBF.1	Wastewater collection tank (5000LT) / Atıksu toplama tankı (5000LT)	piece	1		
Total for Mechanical Works, Lot 2					

BILL OF QUANTITIES FOR ELECTRICAL WORKS, LOT 2;

Pose/ Item No	Pose/Item Definition	Unit	Quantity	Unit Price (USD)	Price (USD)
ELC.01	From 0.40 to 0.50 m ² (including 0.50 m ²)/Sıva üstü sac tablo 0,40 - 0,50m2'ye kadar (0,50 m2 dahil) (TS 3367 EN 60439-1)	piece	1,00		
ELC.03	Up to 16 A (6 kA)/Anahtarlı otomatik sigorta 16 a. (6ka) (ts 5018-1 en 60898-1)	piece	12,00		

Pose/ Item No	Pose/Item Definition	Unit	Quantity	Unit Price (USD)	Price (USD)
ELC.04	3-phase, Up to 40 A (10 kA)/Üç fazlı 40 A'e kadar (10 kA) Anahtarlı Otomatik Sigortalar (10 kA kesme kapasiteli)	piece	1,00		
ELC.05	Up to 4 x 25 A (30 mA)/Kaçak akım koruma şalteri 4*25 a.e kadar(30ma)	piece	1,00		
ELC.06	Up to 4 x 40 A (300 mA)/Kaçak akım koruma şalteri 4*40 a.e kadar(300ma)	piece	1,00		
ELC.07	Class B, 230 V AC, 100 kA (I imp; 10/350 µs), 3-phase, neutral/ earth, with extra contact output/B sınıfı, 230V AC, 100 kA (I imp; 10/350µs), üç faz, nötr-toprak, ilave kontak çıkışlı	piece	1,00		
ELC.08	Up to 250 V/İşaret lambası 250 v.a kadar	piece	3,00		
ELC.09	3 x 230 / 400V..3 x 10 (60) A/Üç fazlı zaman tarifeli elektronik elektrik sayaçlar 3x230/400v..3x10 (60)a	piece	1,00		
ELC.10	3 x 2.5 mm ² /3x2.5 mm ² kurşunsuz pvc izol.kablo.besleme hattı (nhxmh)	MT	10,00		
ELC.11	5 x 10 mm ² /5x10 mm ² 1KV yer altı kabloları ile kolon ve besleme hattı tesisi	MT	20,00		
ELC.12	Single switch outlet branch/Normal sorti (linye ve sorti hatları kurşunsuz antigron (nhxmh) malzemeye.)	piece	14,00		
ELC.13	Dual Switch Outlet Branch/Komutator sorti (linye ve sorti hatları kurşunsuz antigron (nhxmh) malzemeye.)	piece	2,00		
ELC.14	Parallel Outlet Branch/Paralel sorti (linye ve sorti hatları kurşunsuz antigron (nhxmh) malzemeye.)	piece	10,00		
ELC.15	Power socket outlet branch for the security line./Halogenfree kablo ile güvenlik hattı priz sortisi.	piece	8,00		
ELC.16	Surface-mounted LED ceiling fixtures sized minimum 60x60 (with minimum 3300 lm light flux, and maximum 36 w consumption/Sıva üstü, min. 60x60 ebatlarında LED li tavan armatürü (ışık akısı en az 3300 lm, tüketim değeri en fazla 36 w olan)	piece	2,00		
ELC.17	Minimum 3600 lm light flux, maximum 40 W consumption./Işık akısı en az 3600 lm, tüketim değeri en fazla 40 W. LED Sıva Üstü Etanj Armatür	piece	20,00		
ELC.18	Minimum 17,000 lm light flux, maximum 200 W consumption/Işık akısı en az 17000 lm, tüketim değeri en fazla 200 w olan. Led Projektörler	piece	6,00		
ELC.19	RJ-11 or RJ-12 telephone sockets (6 contacts) (22.5 x 45 mm/Telefon prizi rj-11 veya rj-12 (6 kontaklı) (22,5 x 45 mm)	piece	3,00		

Pose/ Item No	Pose/Item Definition	Unit	Quantity	Unit Price (USD)	Price (USD)
ELC.20	CAT 5e or CAT 6e RJ-45 data sockets (8 contacts) (22.5 x 45 mm)/Data prizi cat 5e veya cat 6e rj-45 (8 kontaklı) (22,5 x 45 mm)	piece	3,00		
ELC.21	Single-loop, addressable fire alarm control panel, with min. 120 address capacity./1 çevrimli, 12 bölge adresli yangın alarm santralı 127 adres kapasiteli, 12 yangın bölgesi göstergeli.	piece	1,00		
ELC.22	Addressable optical smoke detector with short circuit insulator /Adresli kısa devre izolatörlü optik duman dedektörü	piece	1,00		
ELC.23	Resettable addressable fire alarm button /Adresli sıfırlanabilir yangın ihbar butonu	piece	1,00		
ELC.24	Addressable loop-powered fire siren /Adresli çevrimden beslemeli yangın ihbar sireni	piece	1,00		
ELC.25	24 Ports/24 portlu utp cat6 patch panel	piece	1,00		
ELC.26	Up to 10 pairs (with ground) P.18/Bina içi ana hat tesisatı 10 çift kadar p.18	MT	5,00		
ELC.27	Up to 30 pairs (with ground)/Bina harici ana hat tesisatı 0.5 mm. 30 çift.	MT	160,00		
ELC.28	Up to 20 pairs/Yanmaz plastik telefon dağıtım kutusu 20 çift	piece	1,00		
ELC.29	Utp Cat6H HALOGEN-FREE 4 x 2 x 23 AWG /Utp cat6h halojen free 4x2x23 awg kablo	MT	32,00		
ELC.30	2 x 2 x 0.8 + 0.8 mm ² /2x2x0,8+0,8 mm ² Je-H(St)H Fe180 Ph120 Yangına dayanıklı halojensiz yangın alarm kabloları (VDE 0815)	MT	15,00		
ELC.31	12 Fiber SC / SM/Rak tipi fiber optik terminasyon birimi 12 fiber kapasiteli sc / sm	piece	1,00		
ELC.32	9U 600 mm x 600 mm 19" cabinet/Rack kabinler 9u 600 mm * 600 mm 19"	piece	1,00		
ELC.33	19" rack-type 6-outlet socket with switch/Ürüne ait aksesuar 19" rack tipi 6 lı grup priz anahtarlı	piece	1,00		
ELC.34	19" 1U horizontal cable organizer/Ürüne ait aksesuar 19" 1u yatay kablo düzenleyici	piece	1,00		
ELC.35	50-mm ² solid copper/Bina ihata iletkeni 50 mm ² bakır tel/Bina ihata iletkeni 30x3.5 mm galvanizli çelik lama	MT	5,00		
ELC.36	30 x 3.5-mm galvanized steel flat bars as described in the project design/Bina ihata iletkeni 30x3.5 mm galvanizli çelik lama	MT	20,00		
ELC.37	Earth electrode (bar) electrolytic copper /Toprak elektrodu (çubuk), elektrolitik bakır	piece	5,00		
ELC.38	Up to 115 g welding powder/Termokaynak eki 115 gr.kaynak tozuna kadar	piece	5,00		

Pose/ Item No	Pose/Item Definition	Unit	Quantity	Unit Price (USD)	Price (USD)
EÖBF01	Grounding Manhole/TOPRAKLAMA MENHOLÜ	piece	1,00		
Total for Electrical Works, Lot 2					

Name of Bidder: _____

Authorised signature: _____

Name of authorised signatory: _____

Functional Title: _____

FORMG: Form of Bid Security

**Bid Security must be issued using the official letterhead of the Issuing Bank.
Except for indicated fields, no changes may be made on this template.
(Bidders who submit bids for both of the lots should submit Price Schedule Form/Bill of Quantities
separately for each lot.)**

To: UNDP
[Insert contact information as provided in Data Sheet]

WHEREAS [Name and address of Bidder](hereinafter called "the Bidder") has submitted a Bid to UNDP dated [Click here to enter a date](#) To complete the works stipulated in the ITB with reference UNDP-TUR-ITB(USB)-2020/08 with the title "Construction of Civic Amenity Centers in Kilis and Şanlıurfa; [Please insert the name of the lot]" (hereinafter called "the Bid"):

AND WHEREAS it has been stipulated by you that the Bidder shall furnish you with a Bank Guarantee by a recognized bank for the sum specified therein as security if the Bidder:

- a) Fails to sign the Contract after UNDP has awarded it;
- b) Withdraws its Bid after the date of the opening of the Bids;
- c) Fails to comply with UNDP's variation of requirement, as per ITB instructions; or
- d) Fails to furnish Performance Security, insurances, or other documents that UNDP may require as a condition to rendering the contract effective.

AND WHEREAS we have agreed to give the Bidder such Bank Guarantee:

NOW THEREFORE we hereby affirm that we are the Guarantor and responsible to you, on behalf of the Bidder, up to a total of [amount of guarantee] [in words and numbers], such sum being payable in the types and proportions of currencies in which the Price Bid is payable, and we undertake to pay you, upon your first written demand and without cavil or argument, any sum or sums within the limits of [amount of guarantee as aforesaid] without your needing to prove or to show grounds or reasons for your demand for the sum specified therein.

This guarantee shall be valid up to 30 days after the final date of validity of bids,

SIGNATURE AND SEAL OF THE GUARANTOR BANK

Signature: _____

Name: _____

Title: _____

Date: _____

Name of Bank _____

Address _____

[Stamp with official stamp of the Bank]