

INVITATION TO BID

CONSTRUCTION OF TWO SOLID WASTE TRANSFER STATIONS IN ARABAN/GAZİANTEP and BİRECİK/ŞANLIURFA

UNDP-TUR-ITB-PROJ(SR)2017/02

**Effective Urban Waste Management Project
and
Strengthening Social Stability in Southeast Turkey Project**

TURKEY



**United Nations Development Programme
MARCH 2017**

Section 1: Letter of Invitation

Ankara, 10.03.2017

Invitation to Bid for Construction of Two Solid Waste Transfer Stations in Araban / Gaziantep and Birecik/ Şanlıurfa, within the scope of Effective Urban Waste Management Project (95752) and Strengthening Social Stability in Southeast Turkey Project (99640)

Dear Madam/Sir,

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:

- Section 1 – This Letter of Invitation
- Section 2 – Instructions to Bidders (including Data Sheet)
- Section 3 – Schedule of Requirements and Technical Specifications
- Section 4 – Bid Submission Form
- Section 5 – Documents Establishing the Eligibility and Qualifications of the Bidder
- Section 6 – Technical Bid Form
- Section 7a – Price Schedule Form for LOT 1
- Section 7b – Price Schedule Form for LOT 2
- Section 8 – Form for Bid Security
- Section 9 – Form for Performance Security
- Section 10 – Technical Drawings
- Section 11 – Contract to be Signed, including General Terms and Conditions
- Annex 1 – Submission Templates and Forms

Your offer, comprising of a Technical Bid and Price Schedule, in sealed envelope, should be submitted in accordance with Section 2.

You are kindly requested to submit your bid to UNDP to the following address:

United Nations Development Programme
Birlik Mah. Katar Cad. No:11 Cankaya/Ankara/Turkey,
<http://www.tr.undp.org>

Attention: *Bahadır Murat Akin, Procurement Officer*

The bid should be received by UNDP no later than Friday, 31st March 2017, 16:00, Ankara Time.

Please confirm your interest to participate in this tender by sending an email with the reference “Invitation to Bid No: UNDP-TUR-ITB-PROJ(SR)2017/02” to sr.procurement.tr@undp.org , preferably no later than Friday, 24 March 2017, 16:00, Ankara Time. The same email should advise whether your company intends to submit a Bid. If that is not the case, UNDP would appreciate your indicating the reason, for our records.

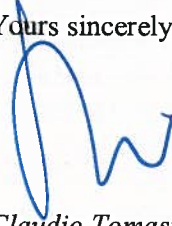
If you have received this ITB through a direct invitation by UNDP, transferring this invitation to another firm requires notifying UNDP accordingly.

Should you require any clarification, 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 thanks you in advance for your interest in UNDP procurement opportunities.

Yours sincerely,



Claudio Tomasi
Country Director

Section 2: Instruction to Bidders

Definitions

- a) “*Bid*” refers to the Bidder’s response to the Invitation to Bid, including the Bid Submission Form, Technical Bid and Price Schedule and all other documentation attached thereto as required by the ITB.
- b) “*Bidder*” refers to any legal entity that may submit, or has submitted, a Bid for the supply of goods and provision of related services and civil works requested by UNDP.
- c) “*Contract*” refers to the legal instrument that will be signed by and between the UNDP and the successful Bidder, all the attached documents thereto, including the General Terms and Conditions (GTC) and the Appendices.
- d) “*Country*” refers to the country indicated in the Data Sheet.
- e) “*Data Sheet*” refers to such part of the Instructions to Bidders used to reflect conditions of the tendering process that are specific for the requirements of the ITB.
- f) “*Day*” refers to calendar day.
- g) “*Goods*” refer to any tangible product, commodity, article, material, wares, equipment, assets or merchandise that UNDP requires under this ITB.
- h) “*Government*” refers to the Government of the country where the goods and related services provided/rendered specified under the Contract will be delivered or undertaken.
- i) “*Instructions to Bidders*” refers to the complete set of documents which provides Bidders with all information needed and procedures to be followed in the course of preparing their Bid.
- j) “*ITB*” refers to the Invitation to Bid consisting of instructions and references prepared by UNDP for purposes of selecting the best supplier or service provider to fulfil the requirement indicated in the Schedule of Requirements and Technical Specifications.
- k) “*LOI*” (Section 1 of the ITB) refers to the Letter of Invitation sent by UNDP to Bidders.
- l) “*Material Deviation*” refers to any contents or characteristics of the bid that is significantly different from an essential aspect or requirement of the ITB, and (i) substantially alters the scope and quality of the requirements; (ii) limits the rights of UNDP and/or the obligations of the Bidder; and (iii) adversely impacts the fairness and principles of the procurement process, such as those that compromise the competitive position of other Bidders.
- m) “*Schedule of Requirements and Technical Specifications*” refers to the document included in this ITB as Section 3 which lists the goods required by UNDP, their specifications, the related services, activities, tasks to be performed, and other information pertinent to UNDP’s receipt and acceptance of the goods.
- n) “*Services*” refers to the entire scope of tasks related or ancillary to the completion or delivery of the goods required by UNDP under the ITB.
- o) “*Supplemental Information to the ITB*” refers to a written communication issued by UNDP to prospective Bidders containing clarifications, responses to queries received from prospective Bidders, or changes to be made in the ITB, at any time after the release of the ITB but before the deadline for the submission of Bid.

A. GENERAL

1. UNDP hereby solicits Bids as a response to this Invitation to Bid (ITB). Bidders must strictly adhere to all the requirements of this ITB. No changes, substitutions or other alterations to the rules and provisions stipulated in this ITB may be made or assumed unless it is instructed or approved in writing by UNDP in the form of Supplemental Information to the ITB.
2. Submission of a Bid shall be deemed as an acknowledgement by the Bidder that all obligations stipulated by this ITB will be met and, unless specified otherwise, the Bidder has read, understood and agreed to all the instructions in this ITB.
3. Any Bid submitted will be regarded as an offer by the Bidder and does not constitute or imply the acceptance of any Bid by UNDP. UNDP is under no obligation to award a contract to any Bidder as a result of this ITB.

4. UNDP implements a policy of zero tolerance on proscribed practices, including fraud, corruption, collusion, unethical practices, and obstruction. UNDP is committed to preventing, identifying and addressing all acts of fraud and corrupt practices against UNDP as well as third parties involved in UNDP activities. (See http://www.undp.org/about/transparencymdocs/UNDP_Anti_Fraud_Policy_English_FINAL_june_2011.pdf and http://www.undp.org/content/undp/en/home/operations/procurement/procurement_protest/ for full description of the policies)
5. In responding to this ITB, UNDP requires all Bidders to conduct themselves in a professional, objective and impartial manner, and they must at all times hold UNDP's interests paramount. Bidders must strictly avoid conflicts with other assignments or their own interests, and act without consideration for future work. All 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:
 - 5.1 Are, or have been associated in the past, with a firm or any of its affiliates which have been engaged UNDP to provide services for the preparation of the design, Schedule of Requirements and Technical Specifications, cost analysis/estimation, and other documents to be used for the procurement of the goods and related services in this selection process;
 - 5.2 Were involved in the preparation and/or design of the programme/project related to the goods and related services requested under this ITB; or
 - 5.3 Are found to be in conflict for any other reason, as may be established by, or at the discretion of, UNDP.

In the event of any uncertainty in the interpretation of what is potentially a conflict of interest, Bidders must disclose the condition to UNDP and seek UNDP's confirmation on whether or not such conflict exists.

6. Similarly, the following must be disclosed in the Bid :
 - 6.1 Bidders who are owners, part-owners, officers, directors, controlling shareholders, or key personnel who are family of UNDP staff involved in the procurement functions and/or the Government of the country or any Implementing Partner receiving the goods and related services under this ITB; and
 - 6.4 Others that could potentially lead to actual or perceived conflict of interest, collusion or unfair competition practices.

Failure of such disclosure may result in the rejection of the Bid.

7. 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 as an independent entity, the extent of Government ownership/share, receipt of subsidies, mandate, access to information in relation to this ITB, and others that may lead to undue advantage against other Bidders, and the eventual rejection of the Bid.
8. All Bidders must adhere to the UNDP Supplier Code of Conduct, which may be found at this link: <http://web.ng.undp.org/procurement/undp-supplier-code-of-conduct.pdf>

B. CONTENTS OF BID

9. Sections of Bid

Bidders are required to complete, sign and submit the following documents:

- 9.1 Bid Submission Form (see ITB Section 4);
- 9.2 Documents Establishing the Eligibility and Qualifications of the Bidder (see ITB Section 5);
- 9.3 Technical Bid (see prescribed form in ITB Section 6);
- 9.4 Price Schedule (see prescribed form in ITB Section 7);
- 9.5 Bid Security, - (as stated in the DS nos. 9-11, see prescribed Form in ITB Section 8);
- 9.6 Any attachments and/or appendices to the Bid (including all those specified under the **Data Sheet**)

10. Clarification of Bid

- 10.1 Bidders may request clarification of any of the ITB documents no later than the number of days indicated in the **Data Sheet** (DS no. 16) prior to the Bid submission date. Any request for clarification must be sent in writing via courier or through electronic means to the UNDP address indicated in the **Data Sheet** (DS no. 17). UNDP will respond in writing, transmitted by electronic means and will transmit copies of the response (including an explanation of the query but without identifying the source of inquiry) to all Bidders who have provided confirmation of their intention to submit a Bid.
- 10.2 UNDP shall endeavor to provide such 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 Bid, unless UNDP deems that such an extension is justified and necessary.

11. Amendment of Bid

- 11.1 At any time prior to the deadline for submission of Bid, UNDP may for any reason, such as in response to a clarification requested by a Bidder, modify the ITB in the form of a Supplemental Information to the ITB. All prospective Bidders will be notified in writing of all changes/amendments and additional instructions through Supplemental Information to the ITB and through the method specified in the **Data Sheet** (DS No. 18).
- 11.2 In order to afford prospective Bidders reasonable time to consider the amendments in preparing their Bid, UNDP may, at its discretion, extend the deadline for submission of Bid, if the nature of the amendment to the ITB justifies such an extension.

C. PREPARATION OF BID

12. Cost

The Bidder shall bear any and all costs related to the preparation and/or submission of the Bid, regardless of whether its Bid was selected or not. UNDP shall in no case be responsible or liable for those costs, regardless of the conduct or outcome of the procurement process.

13. Language

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 **Data Sheet** (DS No. 4). Any printed literature furnished by the Bidder written in a language other than the language indicated in the **Data Sheet**, must be accompanied by a translation in the preferred language indicated in the **Data Sheet**. For purposes of interpretation of the Bid, and in the event of discrepancy or inconsistency in meaning, the version translated into the preferred language shall govern. Upon conclusion of a contract, the language of the contract shall govern the relationship between the contractor and UNDP.

14. Bid Submission Form

The Bidder shall submit the Bid Submission Form using the form provided in Section 4 of this ITB.

15. Technical Bid Format and Content

Unless otherwise stated in the **Data Sheet** (DS no. 28), the Bidder shall structure the Technical Bid as follows:

- 15.1 Expertise of Firm/Organization – this section should provide details regarding management structure of the organization, organizational capability/resources, and experience of organization/firm, the list of projects/contracts (both completed and on-going, both domestic and international) which are related or similar in nature to the requirements of the ITB, manufacturing capacity of plant if Bidder is a manufacturer, authorization from the manufacturer of the goods if Bidder is not a manufacturer, and proof of financial stability and adequacy of resources to complete the delivery of goods and provision of related services required by the ITB (see ITB Clause 18 and DS No. 26 for further details). The same shall apply to any other entity participating in the ITB as a Joint Venture or Consortium.
- 15.2 Technical Specifications and Implementation Plan – this section should demonstrate the Bidder's response to the Schedule of Requirements and Technical Specifications by identifying the specific components proposed; how each of the requirements shall be met point by point; providing a detailed specification and description of the goods required, plans and drawings where needed; the essential performance characteristics, identifying the works/portions of the work that will be subcontracted; a list of the major subcontractors, and demonstrating how the bid meets or exceeds the requirements, while ensuring appropriateness of the bid to the local conditions and the rest of the project operating environment during the entire life of the goods provided. Details of technical bid must be laid out and supported by an Implementation Timetable, including Transportation and Delivery Schedule where needed, that is within the duration of the contract as specified in the **Data Sheet** (DS noS. 29 and 30).

Bidders must be fully aware that the goods and related services that UNDP require may be transferred, immediately or eventually, by UNDP to the Government partners, or to an entity nominated by the latter, in accordance with UNDP's policies and procedures. All bidders are therefore required to submit the following in their bids :

- a) A statement of whether any import or export licences are required in respect of the goods to be purchased or services to be rendered, including any restrictions in the country of origin, use or dual use nature of the goods or services, including any disposition to end users;
 - b) Confirmation that the Bidder has obtained license of this nature in the past, and have an expectation of obtaining all the necessary licenses, should their bid be rendered the most responsive; and
 - c) Complete documentation, information and declaration of any goods classified or may be classified as "Dangerous Goods".
- 15.3 Management Structure and Key Personnel – This section should include the comprehensive curriculum vitae (CVs) of key personnel that will be assigned to support the implementation of the technical bid, clearly defining their roles and responsibilities. CVs should establish competence and demonstrate qualifications in areas relevant to the requirements of this ITB.

In complying with this section, the Bidder assures and confirms to UNDP that the personnel being nominated are available to fulfil the demands of the Contract during its stated full term. If any of the key personnel later becomes unavailable, except for unavoidable reasons such as death or medical incapacity, among other possibilities, UNDP reserves the right to render the Bid non-responsive. Any deliberate substitution of personnel arising from unavoidable reasons, including delay in the implementation of the project of programme through no fault of the Bidder, shall be made only with UNDP's acceptance of the justification for substitution, and

UNDP's approval of the qualification of the replacement who shall be either of equal or superior credentials as the one being replaced.

15.4 Where the **Data Sheet** requires the submission of the Bid Security, the Bid Security shall be included along with the Technical Bid. The Bid Security may be forfeited by UNDP, and reject the Bid, in the event of any or any combination of the following conditions:

- a) If the Bidder withdraws its offer during the period of the Bid Validity specified in the **Data Sheet** (DS no. 11), or;
- b) If the Bid Security amount is found to be less than what is required by UNDP as indicated in the **Data Sheet** (DS no. 9), or;
- c) In the case the successful Bidder fails:
 - i. to sign the Contract after UNDP has awarded it;
 - ii. to comply with UNDP's variation of requirement, as per ITB Clause 35; or
 - iii. to furnish Performance Security, insurances, or other documents that UNDP may require as a condition to rendering effective the contract that may be awarded to the Bidder.

16. Price Schedule

The Price Schedule shall be prepared using the attached standard form (Section 7). It shall list all major cost components associated with the goods and related services, and the detailed breakdown of such costs. All goods and services described in the Technical Bid must be priced separately on a one-to-one correspondence. Any output and activities described in the Technical Bid but not priced in the Price Schedule, shall be assumed to be included in the prices of the items or activities, as well as in the final total price of the bid.

17. Currencies

All prices shall be quoted in the currency indicated in the **Data Sheet** (DS no. 15). However, where Bids are quoted in different currencies, for the purposes of comparison of all Bid:

- 17.1 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 Bid; and
- 17.2 In the event that the Bid found to be the most responsive to the ITB requirement is quoted in another currency different from the preferred currency as per **Data Sheet** (DS no. 15), then UNDP shall reserve the right to award the contract in the currency of UNDP's preference, using the conversion method specified above.

18. Documents Establishing the Eligibility and Qualifications of the Bidder

18.1 The Bidder shall furnish documentary evidence of its status as an eligible and qualified vendor, using the forms provided under Section 5, Bidder Information Forms. In order to award a contract to a Bidder, its qualifications must be documented to UNDP's satisfactions. These include, but are not limited to the following:

- a) That, in the case of a Bidder offering to supply goods under the Contract which the Bidder did not manufacture or otherwise produce, the Bidder has been duly authorized by the goods' manufacturer or producer to supply the goods in the country of final destination;
- b) That the Bidder has the financial, technical, and production capability necessary to perform the Contract; and
- c) That, to the best of the Bidder's knowledge, it is not included in the UN 1267 List or the UN Ineligibility List, nor in any and all of UNDP's list of suspended and removed vendors.

18.2 Bids submitted by two (2) or more Bidders shall all be rejected by UNDP if they are found to have any of the following :

- 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
- f) an expert proposed to be in the bid of one Bidder participates in more than one Bid received for this ITB process. This condition does not apply to subcontractors being included in more than one Bid.

19. Joint Venture, Consortium or Association

If the Bidder is a group of legal entities that will form or have formed a joint venture, consortium or association at the time of the submission of 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 joint venture jointly and severally, and this shall be duly evidenced by a duly notarized Agreement among the legal entities, which shall be submitted along 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 entities that comprise the joint venture.

After the bid has been submitted to UNDP, the lead entity identified to represent the joint venture shall not be altered without the prior written consent of UNDP. Furthermore, neither the lead entity nor the member entities of the joint venture can:

- a) submit another Bid, either in its own capacity; nor
- b) as a lead entity or a member entity for another joint venture submitting another Bid.

The description of the organization of the joint venture/consortium/association must clearly define the expected role of each of the entity in the joint venture in delivering the requirements of the ITB, both in the bid and in the Joint Venture Agreement. All entities that comprise the joint venture shall be subject to the eligibility and qualification assessment by UNDP.

Where a joint venture is presenting its track record and experience in a similar undertaking as those required in the ITB, it should present such information in the following manner:

- a) Those that were undertaken together by the joint venture; and
- b) Those that were undertaken by the individual entities of the joint venture expected to be involved in the performance of the services defined in the ITB.

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 joint venture or those of its members, but should only be claimed by the individual experts themselves in their presentation of their individual credentials.

If the Bid of a joint venture is determined by UNDP as the most responsive Bid that offers the best value for money, UNDP shall award the contract to the joint venture, in the name of its designated lead entity, who shall sign the contract for and on behalf of all the member entities.

20. Alternative Bid

Unless otherwise specified in the **Data Sheet** (DS nos. 5 and 6), alternative bid shall not be considered. 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.

21. Validity Period

- 21.1 Bid shall remain valid for the period specified in the **Data Sheet** (DS no. 8), commencing on the submission deadline date also indicated in the **Data Sheet** (DS no. 21). A Bid valid for a shorter period shall be immediately rejected by UNDP and rendered non-responsive.
- 21.2 In exceptional circumstances, prior to the expiration of the Bid validity period, UNDP may request Bidders to extend the period of validity of their Bid. The request and the responses shall be made in writing, and shall be considered integral to the Bid.

22. Bidder's Conference

When appropriate, a Bidder's conference will be conducted at the date, time and location specified in the **Data Sheet** (DS no. 7). 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 either posted on the UNDP website, or disseminated to the individual firms who have registered or expressed interest with the contract, whether or not they attended the conference. No verbal statement made during the conference shall modify the terms and conditions of the ITB unless such statement is specifically written in the Minutes of the Conference, or issued/posted as an amendment in the form of a Supplemental Information to the ITB.

D. SUBMISSION AND OPENING OF BID

23. Submission

- 23.1 The Technical Bid and the Price Schedule must be submitted together and sealed together in one and the same envelope, delivered either personally, by courier, the Technical Bid and Price Schedule must be sealed together in an envelope whose external side must :
- a) Bear the name of the Bidder;
 - b) Be addressed to UNDP as specified in the **Data Sheet** (DS no.20); and
 - c) Bear a warning not to open before the time and date for Bid opening as specified in the **Data Sheet** (DS no. 24).

If the envelope is not sealed nor labeled as required, the Bidder shall assume the responsibility for the misplacement or premature opening of Bid due to improper sealing and labeling by the Bidder.

- 23.2 Bidders must submit their Bid in the manner specified in the **Data Sheet** (DS nos. 22 and 23). When the Bid is expected to be in transit for more than 24 hours, the Bidder must ensure that sufficient lead time has been provided in order to comply with UNDP's deadline for submission. UNDP shall indicate for its record that the official date and time of receiving the Bid is the actual date and time when the said Bid has physically arrived at the UNDP premises indicated in the **Data Sheet** (DS no. 20).
- 23.3 Bidders submitting Bid by mail or by hand shall enclose the original and each copy of the Bid, in separate sealed envelopes, duly marking each of the envelopes as "Original Bid" and the others as "Copy of Bid". The two envelopes, consisting of original and copies, shall then be sealed in an outer envelope. The number of copies required shall be as specified in the **Data Sheet** (DS no. 19). In the event of any discrepancy between the contents of the "Original Bid" and the "Copy of Bid", the contents of the original shall govern. The original version of the Bid shall be signed or initialed by the Bidder or person(s) duly authorized to commit the Bidder on every page. The authorization shall be communicated through a document evidencing such

authorization issued by the highest official of the firm, or a Power of Attorney, accompanying the Bid.

- 23.4 Bidders must be aware that the mere act of submission of a Bid, in and of itself, implies that the Bidder accepts the General Contract Terms and Conditions of UNDP as attached hereto as Section 11.

24. Deadline for Submission of Bid and Late Bids

Bid must be received by UNDP at the address and no later than the date and time specified in the **Data Sheet** (DS no. 20 and 21).

UNDP shall not consider any Bid that arrives after the deadline for submission of Bid. Any Bid received by UNDP after the deadline for submission of Bid shall be declared late, rejected, and returned unopened to the Bidder.

25. Withdrawal, Substitution, and Modification of Bid

- 25.1 Bidders are expected to have sole responsibility for taking steps to carefully examine in detail the full consistency of its Bid to the requirements of the ITB, keeping in mind that material deficiencies in providing information requested by UNDP, or lack clarity in the description of goods and related services to be provided, may result in the rejection of the Bid. The Bidder shall assume any responsibility regarding erroneous interpretations or conclusions made by the Bidder in the course of understanding the ITB out of the set of information furnished by UNDP.
- 25.2 A Bidder may withdraw, substitute or modify its Bid after it has been submitted by sending a written notice in accordance with ITB Clause 23, 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 must accompany the respective written notice. All notices must be received by UNDP prior to the deadline for submission and submitted in accordance with ITB Clause 23 (except that withdrawal notices do not require copies). The respective envelopes shall be clearly marked "WITHDRAWAL," "SUBSTITUTION," or "MODIFICATION".
- 25.3 Bid requested to be withdrawn shall be returned unopened to the Bidders.
- 25.4 No Bid may be withdrawn, substituted, or modified in the interval between the deadline for submission of Bid and the expiration of the period of Bid validity specified by the Bidder on the Bid Submission Form or any extension thereof.

26. Bid Opening

UNDP will open the Bid in the presence of an ad-hoc committee formed by UNDP of at least two (2) members. If electronic submission is permitted, any specific electronic Bid opening procedures shall be as specified in the **Data Sheet** (DS no. 23).-

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 shall be rejected at the opening stage, except for late submission, for which the Bid shall be returned unopened to the Bidder.

27. Confidentiality

Information relating to the examination, evaluation, and comparison of Bid, 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.

Any effort by a Bidder to influence UNDP in the examination, evaluation and comparison of the Bid or contract award decisions may, at UNDP's decision, result in the rejection of its Bid.

In the event that a Bidder is unsuccessful, the Bidder may seek a meeting with UNDP for a debriefing. The purpose of the debriefing is discussing the strengths and weaknesses of the Bidder's submission, in order to assist the Bidder in improving the bid presented to UNDP. The content of other bid and how they compare to the Bidder's submission shall not be discussed.

E. EVALUATION OF BID

28. Preliminary Examination of Bid

UNDP shall examine the Bid to determine whether they are complete with respect to minimum documentary requirements, whether the documents have been properly signed, whether or not the Bidder is in the UN Security Council 1267/1989 Committee's list of terrorists and terrorist financiers, and in UNDP's list of suspended and removed vendors, and whether the Bid are generally in order, among other indicators that may be used at this stage. UNDP may reject any Bid at this stage.

29. Evaluation of Bid

29.1 UNDP shall examine the Bid to confirm that all terms and conditions under the UNDP General Terms and Conditions and Special Conditions have been accepted by the Bidder without any deviation or reservation.

29.2 The evaluation team shall review and evaluate the 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 **Data Sheet** (DS No. 25). Absolutely no changes may be made by UNDP in the criteria after all Bids have been received.

29.3 UNDP reserves the right to undertake a post-qualification exercise, aimed at determining, to its satisfaction the validity of the information provided by the Bidder. Such post-qualification shall be fully documented and, among those that may be listed in the **Data Sheet** (DS No.33), may include, but need not be limited to, all or any combination of the following :

- a) Verification of accuracy, correctness and authenticity of the information provided by the bidder on the legal, technical and financial documents submitted;
- 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 any other entity that may have done business with the bidder;
- d) Inquiry and reference checking with other previous clients on the quality of performance on ongoing or previous contracts completed;
- e) Physical inspection of the bidder's plant, factory, branches or other places where business transpires, with or without notice to the bidder;
- f) Testing and sampling of completed goods similar to the requirements of UNDP, where available; and
- g) Other means that UNDP may deem appropriate, at any stage within the selection process, prior to awarding the contract.

30. Clarification of Bid

To assist in the examination, evaluation and comparison of bids, UNDP may, at its discretion, ask any Bidder to clarify its Bid.

UNDP's request for clarification and the Bidder's response shall be in writing. Notwithstanding the written communication, 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 Bid, in accordance with ITB Clause 32.

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 Bid.

31. Responsiveness of Bid

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, and specifications of the ITB without material deviation, reservation, or omission.

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.

32. Nonconformities, Reparable Errors and Omissions

32.3 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 constitute a material deviation.

32.4 Provided that a Bid is substantially responsive, UNDP may request the Bidder to submit the necessary information or documentation, within a reasonable period of time, 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.

32.5 Provided that the Bid is substantially responsive, UNDP shall correct arithmetical errors as follows:

- 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 subject to the above.

32.6 If the Bidder does not accept the correction of errors made by UNDP, its Bid shall be rejected.

F. AWARD OF CONTRACT

33. Right to Accept, Reject, or Render Non-Responsive Any or All Bid

33.1 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. Furthermore, UNDP is not obligated to award the contract to the lowest price offer.

33.2 UNDP shall also verify, and immediately reject their respective Bid, if the Bidders are found

to appear in the UN's Consolidated List of Individuals and Entities with Association to Terrorist Organizations, in the List of Vendors Suspended or Removed from the UN Secretariat Procurement Division Vendor Roster, the UN Ineligibility List, and other such lists that as may be established or recognized by UNDP policy on Vendor Sanctions. (See http://www.undp.org/content/undp/en/home/operations/procurement/procurement_protest/)

34. Award Criteria

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 (See DS No. 32).

35. Right to Vary Requirements at the Time of Award

At the time of award of Contract, UNDP reserves the right to vary the quantity of the goods and/or related 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.

36. Contract Signature

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 of the successful Bidder to comply with the requirement of ITB Section F.3 and this provision shall 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 Bidder with the second highest rated Bid, or call for new Bid.

37. Performance Security

A performance security, if required, shall be provided in the amount and form provided in Section 9 and by the deadline indicated in the **Data Sheet** (DS no. 14), as applicable. Where a Performance Security will be required, the submission of the said document, and the confirmation of its acceptance by UNDP, shall be a condition for the effectivity of the Contract that will be signed by and between the successful Bidder and UNDP.

38. Bank Guarantee for Advanced Payment

Except when the interests of UNDP so require, it is the UNDP's preference to make no advanced payment(s) on contracts (i.e., payments without having received any outputs). In the event that the Bidder requires an advanced payment upon contract signature, and if such request is duly accepted by UNDP, and the said advanced payment exceeds 20% of the total Bid price, or exceed the amount of USD 30,000, UNDP shall require the Bidder to submit a Bank Guarantee in the same amount as the advanced payment. (See DS No. 12)

39. Vendor Protest

UNDP's vendor protest procedure provides an opportunity for appeal to those persons or firms not awarded a purchase order or 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/procurement/protest.shtml>

Instructions to Bidders

DATA SHEET

The following data for the Civil Works shall complement / supplement the provisions in the Instruction to Bidders. In the case of a conflict between the Instruction to Bidders and the Data Sheet, the provisions in the Data Sheet shall prevail.

DS No.	Cross Ref. to Instructions	Data	Specific Instructions / Requirements
1		Project Title :	Effective Urban Waste Management Project and Strengthening Social Stability in Southeast Turkey Project
2		Title of Goods/Services/Work Required:	LOT 1: Construction of Solid Waste Transfer Station in Araban / Gaziantep LOT 2: Construction of Solid Waste Transfer Station in Birecik/ Şanlıurfa
3		Country:	Turkey
4	C.13	Language of the Bid:	English
5	C.20	Conditions for Submitting Bid for Parts or sub-parts of the Total Requirements	<input checked="" type="checkbox"/> Allowed Bidders may quote prices for <u>one or both lots</u> listed in the Price Schedule Form. However, the Bidders shall quote prices for all of the items of the lot(s), for which they submit bids.
6	C.20	Conditions for Submitting Alternative Bid	Shall not be considered.
7	C.22	A pre-Bid conference will be held on:	N/A
8	C.21.1	Period of Bid Validity commencing on the deadline of bid submission	90 days
9	B.9.5 C.15.4 b)	Bid Security	Required <ul style="list-style-type: none"> · Amount for LOT1: US\$15.000 · Amount for LOT2: US\$15.000 · · (in case a Bidder submits bids for both LOTs, the bid security should be US\$ 30.000 to cover both LOTs) · Section 8: Form For Bid Security
10	B.9.5	Acceptable forms of Bid Security	Bank Guarantee (See Section 8 for template)
11	B.9.5 C.15.4 a)	Validity of Bid Security	120 days from the deadline of Bid submission. Bid Security of unsuccessful Bidders shall be returned after the contract is signed with the successful Bidder.

12		Advanced Payment upon signing of contract	Not allowed
13		Liquidated Damages	<p>To be imposed under the following conditions :</p> <ul style="list-style-type: none"> · In case of the Contractor's non-performance or delay in completing the civil works as required by the Schedule of Requirements and Technical Specifications by the deadline set at ITB, 0.5% (half percent) of the total contract amount per day of delay shall be paid by the Contractor to UNDP, as liquidated damages. · The Contractor will also ensure presence of its Engineers (Site Manager i.e.) on site at all times, in line with conditions of the contract. UNDP shall deduct US\$500 per day for any absences of its key personnel on site. · Once a deduction of 10% (ten percent) (equivalent to 20 days delay) of the total contract amount has been reached, UNDP may consider termination of the contract.
14	F.37	Performance Security	<p>Required</p> <ul style="list-style-type: none"> · Amount: 10% of the total contract price. · Section 9: Form for Performance Security
15	C.17 C.17.2	Preferred Currency of Bid and Method for Currency conversion	United States Dollars (US\$)
16	B.10.1	Deadline for submitting requests for clarifications/ questions	7 days before the deadline for submission of bids. (24.03.2017, 16.00 hrs.)
17	B.10.1	Contact Details for submitting clarifications/questions	<p>Focal Person in UNDP: <i>Bahadir Murat Akin, Procurement Officer</i></p> <p>Email: sr.procurement.tr@undp.org</p> <p>UNDP shall respond only to inquiries sent to the attention of focal person through above email, referencing the tender number (UNDP-TUR-ITB-PROJ(SR)2017/02). In case requests for clarification/questions are sent to UNDP through other means without the name of the focal person, UNDP shall not be responsible.</p>
18	B.11.1	Manner of Disseminating Supplemental Information to the ITB and responses/clarifications to queries	<p>Announcement in the following web sites:</p> <p>www.undp.org www.ungm.org www.un.org.tr www.tr.undp.org https://www.devbusiness.com/</p>
19	D.23.3	No. of copies of Bid that must	Original: [1]

		be submitted	Copies: [1] CD Copies [2] (copies of bid documents including Excel and word documents (Price Schedule, i.e.))
20	D.23.1 b) D.23.2 D.24	Bid submission address	UNDP BM Binası Katar Cad. No:11 06610 Birlik/Çankaya/Ankara/Turkey
21	C.21.1 D.24	Deadline for Physical Delivery of the Bid to UN House in Ankara	Date : 31.03.2017 Time: 16:00 hrs, local time The bidders shall make all arrangements and controls to ensure that their bids are physically delivered to UN House, address of which is given in this ITB by the stated deadline. The bidders are free to make arrangements either for physical dispatch of their proposal or through courier companies, at their own risk. UNDP shall not be responsible for any late physical delivery of the bids to UN House due to potential delays in courier companies, working/non-working days, official holidays, strikes, etc. Physical dispatch of the bids to UN House is possible as there is a 7days/24hrs working security desk that will issue delivery receipts. Late bids shall be rejected and returned unopened.
22	D.23.2	Manner of Submitting Bid	Courier/Hand Delivery to UN House, address of which is given above.
23	D.23.2 D.26	Conditions and Procedures for electronic submission and opening, if allowed	N/A
24	D.23.1 c)	Date, time and venue for opening of Bid	N/A
25		Evaluation method to be used in selecting the most responsive Bid	Lowest price offer for each LOT of technically qualified/responsive Bid
26	C.15.1	Required Documents that must be Submitted to Establish Qualification of Bidders (In “Certified True Copy” form only)	<ul style="list-style-type: none"> Trade name registration papers i.e. Trade Registration Gazette or equivalent Official Letter of Appointment as local representative, if Bidder is submitting a Bid on behalf of an entity located outside the country Latest Audited Financial Statement, preferably in English (Income Statement and Balance Sheet) including Auditor’s Report for the past 3 years [2014, 2015, 2016] A declaration including all information regarding any past [last five (5) years] and current (2017) litigation, in which the bidder is involved, indicating the parties concerned, the subject of the litigation, the amounts involved, and the final resolution if already concluded. A declaration stating that the Bidder has no performance issues in relation to a contract within the last 5 years (2012 and onwards) prior to the deadline for submission of bid, based on all information on fully settled disputes or litigation. A fully settled dispute or litigation is one that

			<p>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.</p> <ul style="list-style-type: none"> · Be established as single legal entity (real persons, JVs, consortia are not eligible) in 2012 or before. · A declaration stating that the Bidder is not in the circumstances of disqualification or restriction set forth in the Laws (or as per the relevant laws of the country in which we operate) and we are not in the circumstances of those that cannot participate in the procurement as per the same Laws (or as per the relevant laws of the country in which we operate). · A declaration stating that the Bidder is not associated, or have not been associated in the past, directly or indirectly, with entities or any of their affiliates, which have been engaged by the Employer to provide consulting services for the preparation of the design specifications, other documents and/or the present ITB. · Have participated as contractor or subcontractor, in at least 1 single contract, since 2012, with a value of at least <u>the offered price</u>, carried out by the Bidder, that has been successfully and substantially completed, and that concerns construction of civil works of superstructures, (e.g. reinforced concrete/steel factories, processing facilities, etc.) and/or infrastructures, (road etc.) · Have participated as contractor or subcontractor, to contracts, since 2012, with a total value of at least US\$1.000.000 (one-million US\$), carried out by the Bidder, that have been successfully and substantially completed, and that concern construction of civil works. · Have an average annual turnover equal to or higher than US\$500.000 (five-hundred-thousand US\$) for 2014, 2015 and 2016 or an annual turnover equal to or higher than US\$500.000 (five-hundred-thousand US\$) in 2016. · An average current ratio (current assets/current liabilities) equal to or higher than 1 (one) in the period of review (i.e. 2014, 2015 and 2016) or current ratio (current assets/current liabilities) equal to or higher than 1 (one) in 2016. · Minimum average construction turnover of US\$300.000 (three-hundred-thousand US\$), over the last five years (2012 onwards), calculated as total certified payments received for contracts in progress or completed, and demonstrating construction activity or turnover each and every year within the same period (2012 onwards). · The Bidder shall demonstrate, by a bank statement(s) from its bank(s), that the Bidder has available or has access to liquid assets, lines of credit or other financial means sufficient to meet the construction cash flow for an amount not less than US\$1.000.000 (One-million US\$) as demonstrated by the sum of available cash, unused cash credit and unused credit letter as per Form 1.3.1: Financial Resources.
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27		Other documents that may be Submitted to Establish Eligibility	<ul style="list-style-type: none"> · Quality Certificate (e.g., ISO, etc.) and/or other similar certificates, accreditations, awards and citations received by the Bidder, if any
28	C.15	Structure of the Technical Bid and List of Documents to be Submitted	<ul style="list-style-type: none"> · Bid Submission Form · Bidder Information Form · Documents Establishing the Eligibility and Qualifications of the Bidder · Technical Bid Form · Form 1.1: Statement of Declaration · Form 1.1.4: History Of Non-Performance and Litigation · Form 1.2.1: Single Similar Work Experience · Form 1.2.2: Total Similar Work Experience · Form 1.3.1: Financial Resources · Form 1.3.2: Financial Strength · Form 1.3.3: Annual Construction Turnover · Form 2.2.3: Time Plan · Form 2.2.4: Equipment Commitment Form · Form 3.1: List of Proposed Key Personnel · Form 3.1.x: CV Templates · Power of Attorney, Circular of Signature / Signature Specimen
29	C.15.2	Expected date for commencement of Contract	April 2017
30	C.15.2	Maximum Expected duration of contract	<ul style="list-style-type: none"> · 16 weeks following site delivery by UNDP · As the construction works for both LOTs must be completed within 16 weeks following site delivery, the bidders who will submit proposals for more than one LOT shall ensure that their bids enable them to complete the work in each LOT they apply for, concurrently against strict deadlines. To ensure this, the proposers who will submit proposals for more than one LOT shall; · <u>1- Propose unique set of 'Key Personnel', (without any repetition in other LOT) for each LOT they apply for.</u> · <u>2- Propose a unique set of 'key equipment and systems' (without any repetition in other LOT) that can be deployed concurrently for performance of construction work in each LOT.</u> · The bids shall be prepared with due consideration to above listed issues concerning submission of bids for more than one LOT and no volume discount shall be offered by the proposers who submit proposals for more than one
31		UNDP will award the contract to:	<p><u>One or more Bidders.</u></p> <p>Bidders are allowed to bid for one or both lots indicated in the price schedule. Each lot will be evaluated individually and hence UNDP may consider contracting more than one bidder (i.e. one contractor for each LOT).</p>

32	F.34	Criteria for the Award and Evaluation of Bid	<p><u>Award Criteria</u></p> <ul style="list-style-type: none"> · Prior to expiration of the period of Bid validity, UNDP shall award the contract for each LOT, to the qualified and eligible Bidder that is found to be responsive to the requirements of the Schedule of Requirements and Technical Specifications, and has offered the lowest price for each lot. (Grand Total of Consolidated Price Schedule for each Lot) <p><u>Bid Evaluation Criteria</u></p> <ul style="list-style-type: none"> · Having satisfied all eligibility requirements listed in Section DS26 · Full compliance of Bid to the Technical Requirements; · Appropriateness of the Implementation Timetable to Project Schedule; · Qualification of all other personnel to be assigned to the Contract
33	E.29	Post qualification Actions	N/A
34		Conditions for Determining Contract Effectivity	<p>Upon satisfaction of conditions below:</p> <ol style="list-style-type: none"> 1- UNDP's receipt of Performance Security 2- Signature of Contract by both parties 3- UNDP's approval of plans, drawings, samples, etc.
35		Site visit	<p>The bidders are advised to visit and examine the Site of Works and its surroundings and obtain for itself on its own responsibility all information that may be necessary for preparing the bid and entering into a contract for construction of the Works. The costs of visiting the Site shall be at the bidder's own expense.</p> <p><i>The Contractor shall not be entitled to any payment over and above its bid price during contract implementation, due to reasons that come out as a result of the Contractor's failure to conduct a site visit prior to submitting its bid.</i></p>
36		Engineer	The UNDP's contracted Engineer(s) with delegated authority shall serve for the "Engineer" role as defined in "General Conditions of Contract for Civil Works"
37		Valued Added Tax (VAT)	<p>Bidders shall take into account the following issues, while preparing their bids;</p> <p>UN and its subsidiary organs are exempt from taxes. Therefore bidders shall prepare their bids excluding Value Added Tax (VAT). It is the Bidder's responsibility to learn from relevant authorities (Ministry of 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 Finance's General Communiqués and all other related legislation.</p>

38		Payment	<ol style="list-style-type: none"> 1) All payments shall be effected to the Contractor in Turkish Liras through conversion of the USD amounts to Turkish Liras by the official UN Exchange rate valid on the date of money transfer, in case the Contractor is established and operating in Turkey. Otherwise, the payments shall be effected in USD. 2) UNDP shall effect payments to the Contractor in the form of “monthly progress payments” based on the completion of items in Bill of Quantities at the end of each month after acceptance by UNDP of the invoices submitted by the contractor. 3) The Contractor shall submit, after completion of each month, a monthly progress payment certificate, which shall contain the actual quantities completed / constructed within the reporting period. This monthly progress payment certificate shall be certified and approved by the Engineer. UNDP shall effect the payment to the Contractor after certification/approval of Engineer is received.
39		Contract Duration	<p>The Contractor shall commence and complete construction works, required through this ITB, latest by 16 (sixteen) weeks following site delivery through the “Notification for Commencement to Proceed” as explained below, in line with the work plan to be submitted by the Contractor and approved by Employer.</p> <p>Having secured the permissions and written commitments from third parties UNDP shall notify the Contractor in written form that the site is ready for commencement of construction works. This notification will serve as “Notification for Commencement to Proceed” and the contract duration will start as of the date this notification to the Contractor. As stated in the General Conditions of Contract for Civil Works, clause 47.1 defects liability period is 12 months calculated from the issuance of “Substantial Completion Certificate” for whole works.</p>

Section 3: Schedule of Requirements and Technical Specifications

General Notes:

The contractor will be required, at the minimum, to mobilize the key personnel, listed below, that carry the qualifications. The bidders shall furnish Key Personnel Commitment Form, supplemented with CVs of the key personnel (by using the CV template provided in these solicitation documents) and copies of the diplomas, certificates, memberships to occupational organizations etc. of the proposed key personnel.

Form	Subject	Requirement	Documentation to be submitted
3.1	Personnel	The Bidder must demonstrate an exclusive team <u>for each applied Lot</u> that it will have the personnel for the key positions that meet the following requirements:	Form: 3.1: List of Proposed Key Personnel
3.1.1		Project Coordinator: <ul style="list-style-type: none"> University degree in civil engineering, Fluency in Turkish, Knowledge in English At least 10 years of similar work experience 	Form 3.1.x, to be replicated for each key expert position (the CVs should substantiate that the proposed personnel meet the requirements)
3.1.2		Survey Technician: <ul style="list-style-type: none"> University degree in survey technician. Fluency in Turkish Experienced on supervision and measurement, At least 5 years of similar work experience. 	
2.2.4	Equipment	The Bidder must demonstrate exclusive sets of equipment <u>for each applied Lot</u> that it will have access to the key Contractor's equipment listed hereafter: <ul style="list-style-type: none"> 1 (one) Excavator with hydraulic breaker, 2 (two) Dump trucks (20 ton capacity lorry) 1 (one) JCB type backhoe loader (Dipper) 1 (one) Roller 2 (two) Concrete Vibrator 1 (one) Crane, wheeled, (25 tones) 1 (one) Tractor 	Form 2.2.4: Equipment Commitment Form

The Contractor is expected to mobilize sufficient resources to complete the construction works within 16 weeks following the site delivery through the "Notification for Commencement to Proceed", as explained in ITB with due consideration to weather, geographical and other risks associated with the construction itself. In this regard, Bidders are expected to present a realistic work plan. This duration shall not exceed sixteen (16) weeks.

Employer's Requirements

Rules and Regulations

- The Contractor shall provide a billboard (on free of charge basis) mentioning the project and partners to ensure visibility of the project. The billboard shall be constructed in accordance with these specifications and as shown on the detail drawings.

- Unless otherwise is confirmed by the engineer, ready-mixed concrete shall be used.
- The fact that any construction works carried out under the supervision and approval of the engineer does not relieve the contractor from the responsibility of completing the work in full compliance with the project, contract, statement of works and general rules for construction works.
- All construction works should be done in accordance with the approved projects, Technical Specifications and all laws and regulations in effect.
- The costs of building the service roads from the quarry of materials to the workplace and the transportation of materials are included in the offer made by the bidder.
- All the temporary roads in the construction site will be built by the contractor. No additional payments will be made.
- All the materials have to be examined and approved by the UNDP. The samples and materials will be in accordance with the specifications.
- The minimum amount of machinery and equipment that should be present in the work place is stated in the administrative specifications.
- The amount of ready-mixed concrete that is specified in technical drawings will be used. If not specified in the drawings for reinforced concrete C25 class concrete shall be used.
- During the excavation, the contractor is responsible for securing and supporting the excavation area, keeping the excavation site dry, transportation of materials excavated, storage and safety of materials excavated with any kind of safety precautions approved by UNDP.
- The sites that are specified in the project will be cleaned of plants and roots. The excavation will start after the completion of the cleaning process (e.g. uprooting the trees).
- The irregularities and problems that may occur because of cleaning procedures (e.g. uprooting a tree) will be fixed by the contractor
- The ground that the construction will be built on has to be safe and suitable. The unsuitable ground should be excavated for a depth that will be decided, no less than 30 cm, by the administration.
- Before the concrete is poured, the inspection engineer will examine and approve the reinforcement that is placed and anchored. The Engineer can ask to remove the concrete if not examined and approved.
- The contractor has to make available enough number of vibrators in the construction site, to be able to immediately compression and the vibration of the concrete that is poured.
- The experiments on the concrete will be made on a calendar depending on the classifications and amount of concrete. If the experiments do not satisfy necessary specifications, the contractor will, by consulting the administration, take the immediate actions to adjust the concrete mix, improve the quality control and make a study of relevant methods in order to guarantee the necessary level of quality. The daily concrete amounts and samples, specimens and other samples will be kept by the contractor.
- The concrete can only be poured with the presence of the Engineer.
- The Bill of Quantities is the document containing an itemized breakdown of the works to be carried out in a unit price contract, indicating a quantity for each item and the corresponding unit price. The quantities set out in the 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.

- Save where the technical specifications or the Bill of Quantities specifically and expressly state otherwise, only permanent works are to be measured.
- No allowance will be made for loss of materials or volume thereof during transport or compaction.

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

- *Profit*
- *Head Office charges*
- *Site Supervision and Site Staff costs and expenses*
- *Transport of labour and travelling allowances*
- *Use of protective clothing or equipment*
- *Any statutory or incidental charges levied on the employment of labour*
- *Overtime, unless specifically ordered or subsequently sanctioned in writing by the Engineer*
- *Time lost due to inclement weather*
- *Insurances of whatsoever nature*
- *Holiday and sickness pay or benefits*
- *Use, repair and sharpening of small tools*
- *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*
- *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*
- *mm² means square millimetre*
- *m² means square metre*
- *m³ 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*
- *% means per cent*
- *N.d means nominal diameter*
- *da means decar*

Section 3 – Schedule of Requirements and Technical Specifications

Section 3.1. Common Technical Specifications for Şanlıurfa Birecik and Gaziantep Araban Waste Transfer Stations

1. GENERAL

1.1. INTRODUCTION

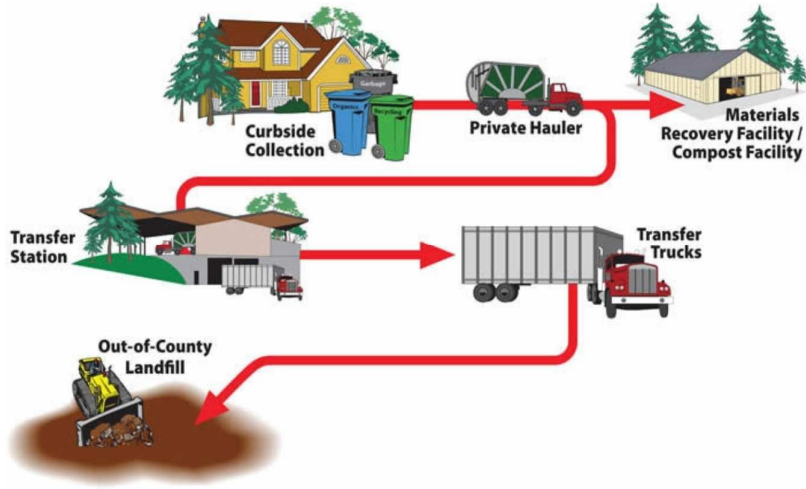
The project purpose is the construction of a solid waste transfer stations in the province of Şanlıurfa, district of Birecik, and province of Gaziantep, district of Araban which its projects and designs have been prepared.

Transfer stations may be erected in the central parts of cities in order to keep the transport of solid wastes economically and to avoid any heavy traffic on the transport route in these stations, the solid wastes being collected with small volume vehicles shall be transferred to bigger vehicles and shall be transported to process and storage areas. The transfer process shall be realized by loading the waste on the waste collection trucks to bigger trucks of higher carrying capacity with aid of a bunker. The discharging/unloading places shall be constructed as closed area in order to avoid environmental pollution in terms of odor, dust, noise and appearance.

A solid waste transfer station is, in plain language, a facility which receives solid wastes from a community and where solid waste is collected and transferred to bigger vehicles in order to transport such solid waste to long distance solid waste storage facilities in a more efficient and economical way.

Transfer stations are generally used for following purposes:

- The transport of solid waste to a long distance sanitary landfill in an economical way,
- Increase of the municipality's collecting efficiency,
- Providing convenient waste disposal places for citizens,
- Decrease of the heavy traffic in the sanitary landfill.



In this section of the tender documents, *Special and Technical Specifications are stated for:*

- **Lot 1: Araban Solid Waste Transfer Station**
- **Lot 2: Birecik Solid Waste Transfer Station**

The issues in respect with the execution of the works are sated in the construction drawings and special technical specification of the Birecik and Araban Solid Waste Transfer Stations.

The terms and references of this special specification shall prevail against the references of other projects and documents.

It shall be assumed that each section shall be continuation and the supplement of the other, regardless of the sections under separate headings of the specification.

It shall not be assumed that this specification shall include everything; it shall be considered that the bidder has submitted its proposal for all required works, facilities and equipment, whether or not enlisted.

1.2. PROJECT LOCATION

The Birecik dumpsite working field's area of 17.799,102 m². The Birecik transfer station is located on a land of 13.091,404 m². The wastes incoming at each transfer station are directly connected to the collecting system. One transfer system shall be available in the transfer station. As the wet and dry wastes shall be collected at their source separately, the dry wastes shall be collected separately on defined days of the week and shall be loaded onto the trailer without any composition with the wet wastes.

The site where the Solid Waste Transfer Station shall be built is within the borders of the municipality of Birecik of the province of Şanlıurfa and the site coordinates are specified in the design sheets and below as well.

**TRANSFER STATION WORKING FIELD COORDINATE /
AKTARMA İSTASYONU ÇALIŞMA SAHASI KOORDİNATI**

NOKTA NO				NOKTA NO			
POINT NAME	X	Y	Z	POINT NAME	X	Y	Z
1	411352.784	4099514.074	504.50	10	411431.845	4099357.127	503.54
2	411402.161	4099534.099	497.63	11	411415.209	4099357.774	504.11
3	411444.766	4099543.239	490.66	12	411405.319	4099360.547	505.15
4	411485.158	4099424.279	488.47	13	411401.530	4099365.538	505.97
5	411520.849	4099356.896	502.98	14	411401.530	4099372.562	505.97
6	411510.406	4099354.724	501.03	15	411404.487	4099383.376	505.97
7	411494.231	4099351.951	501.01	16	411402.639	4099402.415	506.68
8	411476.856	4099353.523	502.60	17	411386.002	4099428.201	509.61
9	411456.615	4099355.833	502.44	18	411371.399	4099459.810	509.50

**DUMPSITE WORKING FIELD COORDINATE /
DÜZENSİZ DEPOLAMA ÇALIŞMA SAHASI KOORDİNATI**

NOKTA NO				NOKTA NO			
POINT NAME	X	Y	Z	POINT NAME	X	Y	Z
TC.1	411352.784	4099514.074	504.50	TC.10	411420.767	4099366.297	502.68
TC.2	411402.161	4099534.099	497.63	TC.11	411405.732	4099367.049	505.10
TC.3	411444.766	4099543.239	490.66	TC.12	411403.424	4099363.041	505.50
TC.4	411463.729	4099487.388	492.90	TC.13	411401.530	4099365.538	505.97
TC.5	411471.265	4099416.821	495.13	TC.14	411401.530	4099372.562	505.97
TC.6	411448.554	4099391.090	500.83	TC.15	411404.487	4099383.376	505.97
TC.7	411432.307	4099388.160	502.25	TC.16	411402.639	4099402.415	506.68
TC.8	411428.834	4099378.665	502.96	TC.17	411386.002	4099428.201	509.61
TC.9	411421.224	4099370.993	503.50	TC.18	411371.399	4099459.810	509.50

1.3. SCOPE OF WORKS

The works to be conducted in scope of the two Solid Waste Transfer Station Projects are as following.

- Excavation and Filling Works
- Facility Gateway
- Surrounding Wire Fence Construction
- Prefab Administrative and Weighing Building
- Water Tank Building
- Steel Water Tank
- 2 units of Cesspit
- 1 unit of Waste Loading Bunker Construction
- Waste Spilling Platform and Entry-Exit Ramps Construction
- Construction of Intra-Site Roads
- Construction of the Roads between Access Road Entry and Facility Entry (0+0.00 .. 0+507.00)
- Leachate Collection System
- Rain Water Collection System
- Surface Water Collection System
- Environmental Lighting
- Lightning Rod
- Botanic Landscape
- Other related works stated in the Project,

The works shall also include the production and/or supply of the site material, conducting the factory and witness tests, assembly, tests at workplace and commissioning as stated and described in details in these documents and projects.

The solid waste transfer station to be constructed shall comply with the science and craft rules as described in the facility units' projects in scope of the project.

If deemed necessary, the revision of the construction drawings shall be included in this scope.

2. GENERAL REQUIREMENTS

2.1. DEFINITIONS

Construction Manager: The person or persons assigned by the employer for the control of the works.

Contractor : Person or company whose bid has been approved and an agreement will be concluded with.

Day : Means a calendar day.

As the project documents complement each other, the following clauses shall be read together with the other specifications, projects and documents.

2.2. LEGISLATION / STANDARDS

The contractor agrees and guarantees that he is obliged to plan, apply, monitor, inspect and report and the work or works contracted to the administration, based on the following law, regulations, specifications and standards. The works to be executed and the material and equipment to be produced or supplied in scope of this specification and contract shall comply with the latest issues of the Turkish Standards Institute, The General Technical Specification for Public Works, The General technical Specification for Highways and the

specifications and communiques of the Ministry of Environment and Urban Planning and the Bank of Provinces (İller Bankası).

- ✓ The Labor Law No.4857
- ✓ The General Public Health Law No.1593
- ✓ The Social Insurance and General Health Insurance Law No.5510
- ✓ The Building Law No.3194
- ✓ The Environment Law No.2872
- ✓ The Occupational Health and Safety Law No.6331
- ✓ The Regulation for Working Times related to the LaborLaw
- ✓ The Regulation of Special Procedures and Principles for Works where Employees are working in Shifts
- ✓ The Regulation of Over-Work and Over-Hours related to the LaborLaw
- ✓ The Regulation for works to be conducted maximum seven and a half hours or less per day due to HealthRules
- ✓ Internal Electrical InstallationsRegulation
- ✓ Electrical High-Current FacilitiesRegulation
- ✓ Regulation for Assessment and Management of Environmental Noise
- ✓ The General Specification for ConstructionWorks
- ✓ All laws/regulations/communiques and specifications to be followed in line with the Environment LawNo. 28722872

This list is of informative nature only and the contractor shall ensure the full compliance with all applicablelegislation.

2.3. CONTRACTUAL MAINTENANCE WORKS

The maintenance period shall start after the temporary acceptance. The contractor shall be responsible for all defects in material and labor and the removal of such defects being identified during the maintenance period.

The guarantee period shall not end unless all defects identified in the maintenance period will have been removed.

The contractor shall realize all adjustments and repair, cleaning and lubrications etc, during the maintenance period. If necessary, a report of the completed works shall be combined with the maintenance records and shall be submitted to the employer and control organization.

During the periodical maintenance visits, the contractor shall teach the employer's personnel the maintenance techniques of all equipment and control gear.

Before paying such visits, the contractor shall notify the employer in written so that the employer shall assign its related employees to participate in these maintenance applications.

Upon the notification to the contractor about defected material, the contractor renews such material and remove any defects caused by labor within seven days and if necessary, shall supply the new parts as soon as he will have been notified for.

The contractor shall include in the bid price the costs for; the operation and maintenance instructions to be submitted to the employer, operation and maintenance services and the costs for all tools, devices, equipment, form works and their transportation expenses which are required for completing the works and obligations duly and in full and their transportation costs.

2.4. JOB COMMENCEMENT PROJECTS

With signing the contract, the administration shall submit the construction drawings to the contractor in digital media. However, the contractor shall be deemed having seen the site before the bid also shall be deemed having prepared his bid in this line.

2.5. AS-BUILT PROJECTS

Any amendments and corrections on the project shall be approved by the designers and submitted to the administration as as-built projects in a format of 1 CD and 3 printouts.

3. FIELD ARRANGEMENTS AND FACILITY UNITS

Transfer stations are used in order to make benefit from the cost savings to be achieved by using high-capacity transport vehicles instead of waste collection vehicles for the transport of the waste to the final disposal area.

In this transfer station, 1 ramp and 1 bunker are available for the loading of the waste to big vehicles. In the transfer station, a direct unloading shall be made from the bunkers to collection vehicles, open top trailers or compactors. This system shall increase efficiency and lower labor costs.

In scope of the project, the facility shall be equipped with an appropriate leachate collection system and other safety measures

During operation, semi-trailers with hydraulic compressors and a capacity of 36 m³ to 52 m³ may be used as transfer trucks. The conceptual drawings for the transfer stations are provided in the design sheets.

All designs and details of construction, electrical and mechanical works which may be revised if deemed necessary, shall be made by the contractor and shall be submitted together with their respective drawings to the administration for approval in accordance with the technical specification.

3.1. EXCAVATION AND LAND FILLING WORKS

Before bidding the contractual price, the contractor shall execute all site purchases in the project area and surrounding and shall prepare the related city maps, all related costs shall be covered by the contractor. The contractor shall include and take into respect any deficiencies, defects, if any and all measures to be taken around the project area in the bid price. After the tender, *the contractor shall not request any price increase*, claiming that either there is a discrepancy between the project area and the city maps provided by the administration or there are incomplete or wrong purchases. Also, any works (interception ditch, interception channel, supporting wall, culvert, areas needed to be filled etc.) which have to be made when taking the project area and surrounding into consideration and which are not stipulated in the tender documents, shall be deemed included in the contractor's bid price. **Due to all the aforementioned matters, it is assumed that the contractor has visited the site before bidding and has prepared its bid in this respect.**

Before starting the field works, the contractor shall be liable for field measuring and for obtaining approval from the administration. The works in scope of the project shall not commence without approval. No payment shall be made for works having started without approval. Any roads, ramps as well as excavation and filling works on-site and other locations according to the projects shall be made in compliance with the project elevations by the contractor. When an excavation reaches the planned ground all excavated surfaces shall be inspected. In cases where any material below the standards have been identified, such material shall be replaced with material which is placed and compressed according to the filling requirements. Excavation material surplus shall be transported to the area specified by the administration.

Fillings shall be applied in layers of 25 cm thickness and shall be irrigated and compressed until achieving a standard proctor of 96%.

The ground shall be leveled and trimmed upon excavation and filling and a rubbed surface shall be achieved. The field elevations after the leveling shall be approved by the administration.

The filling material in the platform and ramp are of high importance. In order to prevent any slumps due to vehicle traffic, the filling shall consist of layers of 25 cm thickness using material which has been prepared by a 0 - 50 stabilized stone crusher. The mine and material shall be approved by the administration before bringing to the site and approved material shall be used only. Upon preparing the field other productions shall be started.

3.2. FACILITY GATEWAY

A facility gateway shall be made for preventing unauthorized access to the facility and to keep entry and exit in control. The facility gateway shall operate in type of a double leaf door.

The length of the gate shall be 9 m and shall be suitable for vehicle entry and exit at the same time. The gate shall be produced according to the architectural project detail sheets.

3.3. WEIGHING MACHINE AND WEIGHING CONTAINER

The solid wastes being collected in the city center by small volume vehicles shall be weighed in the facility before transferring to vehicles of higher volume. The weighing shall be realized with fully-automatic electronic weighing machines. For weighing purposes, an aboveground weighing machine with dimensions of 4 x 16 meters and capacity of 60 tons shall be installed in the facility entry. The details of the weighing machine are given in its project and in the technical characteristics chart below.

A weigher control room of 2.4 x 3.64 m dimensions in which the computer hardware and printer of the weighing system shall be placed, shall be installed beside the weighing machine, in the administrative building. All electrical installations, cabling and electrical switchboard works are under the responsibility of the contractor. The contractor shall be liable for the weighing machine calibration upon completion of the works and for arranging a training related to the operation and maintenance of the weighing machine to the persons to be assigned by the administration.

During operation, an electronic ticket shall be printed upon weighing in the weighing house, which shall consist of three copies. One copy of the ticket shall be given to the truck driver upon weighing.

Lean concrete of 10 cm, stabilized filling and base platform of 25 cm thickness shall be made by the contractor as specified in the weigher project. A blockage of 15 cm shall be applied under the stabilized filling. Before starting the reinforced concrete production of the weigher, a comparison with the project of the weighing machine manufacturer shall be made and upon such comparison, the production shall commence.

Weigher Technical Specification

- ✓ The weigher manufacturer shall be certified with an ISO 9001:2008 quality assurance system.
- ✓ The weigher manufacturer shall be certified with 90384 AT certificate, related to the weighing devices.
- ✓ The references related to previously delivered weighing machines shall be attached to the bids.
- ✓ Catalogs, brochures, technical drawings and related documents shall be attached to the bids.
- ✓ Transport, assembly and start-up of the materials shall be conducted by the company.
- ✓ The first control and sealing procedures of the weighing machine shall be made by the company in accordance with the 90384 AT directives.
- ✓ A "Calibration Certificate" evidencing that the weighing machine is in compliance with European Standards and traceable shall be presented.

- ✓ The company shall provide a free-of-charge training for the operation of the weighing machine.
- ✓ The construction works related to the weighing machine shall be conducted by the contractor in accordance with the project to be provided by the weighing machine manufacturer.
- ✓ The transporting vehicle required during the assembly of the weighing machine shall be provided by the contractor.
- ✓ The warranty period shall be two years minimum.

Material to be used and Technical Characteristics

Following materials shall be used in the system:

- ✓ 1 piece of 4x16 cm foreground steel platform
- ✓ 8 pieces of 20 tons Load Cells
- ✓ Assembly accessories for 8 pieces of Load Cells-
- ✓ 1 piece of junction box
- ✓ 1 piece of weighing terminal
- ✓ 1 piece of monitor
- ✓ 1 piece of keyboard
- ✓ 1 piece of printer

4x16 cm Foreground Steel Platform

- ✓ The main beams shall be located at the longitude side edges of the platform. The beams shall be placed 25 cm above the platform level. The weighing machine platform shall be aboveground and the platform height shall not exceed 36 cm from the ground.
- ✓ Gas metal arc welding shall be applied in the welded connection points of the weighing machine.
- ✓ All surfaces of the platform shall be coated with two layers of paint base and one layer of synthetic paint.
- ✓ The weighing machine shall be designed in such way, being capable of operating under overload of 30% over the nominal capacity.
- ✓ Weighing shall be made without any need for a side load-feeding system.

Load Cells

- ✓ The weigher shall be equipped with 8 units of load cells with 20 tons' capacity.
- ✓ The load cells shall be of 1/3000 precision, class C3 and OIML certified.
- ✓ Protection class shall be IP 68, and shall be water-proof according to DIN 40050 norms.
- ✓ Output shall be 2 mV/V.
- ✓ Operating temperature shall be -40 to +60 C. Hysteresis and non-linearity fault shall not be higher than 0,03 %.
- ✓ Calibrated heat area shall be -10, +40 C.
- ✓ The load cells shall be capable of weighing at the same precision even at 150% of the allowed value.
- ✓ The load cells shall operate without any defects even when a load of 200% of the nominal value is applied.
- ✓ Rubber based assembly accessories shall be used at the bottom of the load cells against sudden moves of the trucks towards the weighing machine and against irregular loads to the weighing machine at entry and exit.
- ✓ The CALIBRATION CERTIFICATES which shall include the failure graphics showing that the failure limits of all test results are in compliance with OIML 3000d shall be presented by the manufacturer for each load cell.

3.4. WATER TANK

To provide for the non-potable water needs of the transfer station, a Prismatical Modular Stainless Steel Water Tank of 10 m³ shall be installed in the facility; a booster pump installed and all plumbing installation connections be made. Initially, the tank shall be filled by water transported by

water tankers. Later, if possible, the administration shall procure the drilling of a well or build a line from the tank to the water mains to receive water.

A line shall be installed from the Prismatical Modular Stainless Steel Water Tank to the dismantled container and for the cleaning of areas where the bunkers are located. The booster pump group to be installed shall be chosen to meet the pressurized water needs of the entire facility. Necessary measures shall be taken to prevent harm to the booster pump group due to the winter conditions; polyethylene pipes (underground) shall be used for clean water, and PPRC or galvanized steel pipes (for overground).

The design and sections of the water tank are included in the application drawings, and the following shall be applied:

Two-layer steel mesh (2x2 Q221/221) ground concrete (C25/30) 25 cm

Compacted Stabilized Fill 20 cm

0.90 m controlled backfill of granular material

0.10 m lean concrete.

The water network pipes in the site shall have the diameters and specifications as stated in the application drawings; and the pipes shall be laid in the ditch bed and filled over according to their application drawings.

The compaction of the fill shall be made according to the requirements of non-settling fill. The connections shall be made from the main water line by way of T-elbows and other necessary equipment.

The technical specifications and pressure curves etc. documents for the booster pump group shall be submitted to the engineering supervision unit before supply.

3.5. CESSPIT CONSTRUCTION

A fully leak-proof cesspit of 32 m³ and 32 m³ capacity shall be installed for the collection of the facility's waste water. A weighing staff and a security staff shall be available in the facility, continuously. The 32 m³ cesspit has been selected, taking into respect that waste collection truck drivers, heavy truck drivers and the accompanying cleaning staff may use WC, lavatory and shower. The garbage waters from the garbage collection vehicles and trucks shall be collected in the cesspit with a capacity of 32 m³. The cesspit shall be fully leak-proof and shall be discharged by sewage trucks when full. It shall be ensured that the garbage waters which may appear during discharge of trucks to the bunkers and which may leak from garbage water discharge valves of the trucks shall be collected and transferred to the cesspit through the pipeline.

In respect with environmental health, it is essential that the cesspit shall be leak-proof and shall be discharged when full, at once. All projects of the cesspit are specified in the related design sheets.

3.6. WASTE SPILLING PLATFORM, ENTRY-EXIT RAMPS AND ROADS

Upon the completion of the field leveling works of the facility area, a platform on which the vehicles shall spill the wastes shall be constructed. The Platform dimensions shall be as specified in its project and the height shall be h=6,00 m. One discharge bunker shall be available in the platform. A reinforced concrete ramp shall be constructed on the platform for the entry and exit of vehicles. The ramp length shall be 42.14 m. Detailed projects are given in the related design sheets. During the Platform construction, the form work, concrete and structural bars shall be produced according to science and craft rules.

The number of bunkers on the platform has been planned as 1, in order to restrict heavy traffic of vehicles on the platform.

Any excavation works required for the construction of buildings specified in the project shall be provided by the contractor. Safety rails made of iron pipes which shall surround the spill platform consisting of concrete section buildings and the entry-exit ramp shall be made by the contractor.

The safety rails shall be made of profile as specified in the details of the project and profile supply, assembly and any transport and labor shall be provided by the contractor. The anchorage of the safety rails into the reinforced concrete wall shall be made by the contractor. The safety rails shall be coated with 2 layers of anti-rust and 2 layers of oil paint, by the contractor.

The width of the roads and platform shall be 10.00 m minimum. The slope of the ramp shall be %8.00 - %2,75 to %7,12 as specified in its project. The shear walls around the ramp shall be constructed as per its project.

The necessary patterns on the concrete coated surfaces of the waste spill platforms and entry-exit ramps enabling comfortable road handling for trucks shall be available and the contractor shall ensure that the concrete coated surfaces shall be non-slip.

Concrete coating of roads, ramp, platform and filed coatings shall be constructed by placement and compression of following layers:

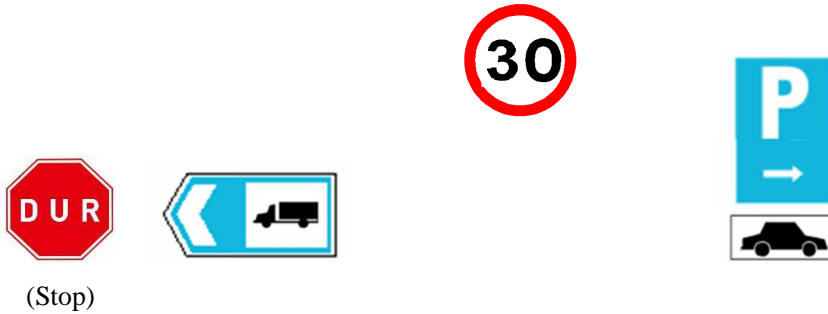
- 0.20 m C25/30 concrete (2XQ188/Q188 wiremesh)
- 0.25 m base layer (sand, gravel)
- 0.25 m sub base layer (granular material)

All coated areas shall be equipped with systems for collection and discharge of surface water. The concrete used in the shears and base constructions shall be of class C25/30, concrete strength tests shall be applied by sampling at each 100 m³ minimum and the test results issued by accredited laboratories shall be submitted to the administration.

The implementation of traffic signs and plates for the purpose of protecting drivers and pedestrians is mandatory.

- For inner signalization, white dashed lines with width of 12 cm.
- For outer signalization, white continuous lines with width of 12 cm.
- For STOPPING LINES, white line with width of 30 cm.

Following signs are recommended:



All above the aforementioned items take place in the architectural project.

3.7. WASTE LOADING BUNKER

One waste loading bunker shall be available in the platform which shall be constructed by the contractor. The height of the bunker shall be 6.00 m above the ground and 6 m above the platform. The bunker carrying structure shall be made of steel construction. The roof and three faces shall be covered with galvanized and coated corrugated steel sheet (38/906-0.70 mm). By this way, the wetting of wastes by rain shall be prevented.

By the aid of the bunker system, the waste trucks with automatic compression approaching under the bunker shall be filled with waste spilled from above without any need for intervention. The waste shall not be stored in the bunker for long times. The spilled waste shall be transferred directly into the trucks. The spilling of garbage water shall be prevented as well. Nevertheless, surfaces which garbage water has spilled on shall be cleaned with clean water and shall be transferred to the cesspit through the sanitary installation, without flowing under the soil.

3.8. ENVIRONMENTAL LIGHTING

As the facility shall operate at nights as well, environmental lighting shall be provided in the site. All necessary cabling works in this respect shall be conducted in accordance with its project. The works to be conducted are specified in the electrical application project design sheets. The temporary acceptance of the installation shall be conducted by the related electricity distribution company on the order of the contractor.

3.9. SURFACE WATER DRAINAGE CHANNELS

Drainage channels shall be constructed at all slope bottoms and road slopes being split in the facility, for the purpose of removing rain and surface water in a safe manner. The drainage channels are planned concrete coated and with corrugated sections. All works shall be constructed according to their shop drawings and to science and craft rules.

3.10. SURROUNDING WIRE FENCE CONSTRUCTION

The facility shall be encircled with wire fences as shown in the related project and typical sections. The site shall be secured with wire fences in order to prevent unauthorized access and intervention of wild animals etc. The wire fences shall be applied from the borders of assigned land. In the course of the wire fence production, the posts shall be straight, unbroken and fixed properly.

- Holes of 50cm depth and 40x50 cm dimension (50x50 cm for wire fence application of 3 meters) shall be prepared with a distance of 3 meters, on the soil ground.

- Nato type concrete fence posts shall be erected in these holes.
- Double-side stopper buttresses shall be installed in the middle of the posts every 45 meters and at each corner.
- Spiral weaving wire (galvanized or PVC coated) shall be installed on the plain partsof the post.
- Guy wires (galvanized or PVC coated) shall be installed in three lines being at the top, middle and bottom of the weaving wire.
- The weaving wire, guy wire and barb wire shall be bonded to the concrete posts by bonding wire.
- 4 pieces of iron bars with 6 mm thickness and 4 to 7 stirrups in average shall be used in the concrete fence posts against cracks and breaking.
- The length of the post shall be 300 cm.

In the course of the wire fence application, the materials deemed as necessary by the contractor shall be presented to the control organization before the supply ofsuch material.

3.11. ADMINISTRATIVE BUILDING

An administrative building shall be constructed as a head office of the facility. Due to this characteristic, the administrative building shall is positioned in such sight distance, allowing the observation of other units. In the administrative building which is designed as prefab;

- Main Entrance
- Weigher Control Office
- Meeting Room - Office
- Office
- Kitchen
- Tool Crib
- Locker rooms, shower and toilet
- Toilet for Handicapped
- Medicine Cabinet
- Laboratory

shall be available. This building shall serve the administrative personnel using the facility. It shall also embody the equipment required for the monitoring and recording of the incoming vehicles as well as for weighing the incoming vehicles.

Therefore, the said building shall be located across the weigher. The single-store building has a rectangular form and takes a space of 101,65 square meters.

Technical specifications:

Outer wall (120mm thickness): Prefab Wall + 2 layers of water based paint

Isolation: Rock wool, 4 cm

INNER WALL (100mm thickness): Prefab Wall + 2 layers of water based paint

Isolation: Rock wool, 4 cm

Roof: Roof Coating: Pre-painted trapezoid galvanized steel

Isolation: Rock wool, 5 cm

External doors: PVC

Inner doors: MDF Lamellar Pressed Panel

Windows: PVC

Access to the weigher control office from the building's main entrance shall be available and a separate door shall be available

for direct access to the weigher. Also, a separate access door shall be available for the laboratory. The ground of the building shall be floored with ceramic tiles, the external environment of the building shall be floored and a ramp for handicapped shall be available.

Local fire extinguishers and fully equipped fire stations shall be available in the building.

3.12. IN-SITE LANDSCAPE

Upon completion of the works, the whole soil surface within the site shall be leveled with vegetable soil of 30 cm thickness, shall be covered with grass and shall be handed over to the employer in clean condition and allowing botanic seeding.

KULLANILAN BİTKİLER / PLANTATION USED				
LATINCE ADI / LATIN NAME	ADI / NAME	SEMBOL/ SYMBOL	BOY-ÇAP/ HEIGHT/DIA.	ADET/NOs
Robinia pseudoacacia	Yalancı Akasya / Black Locust		Ø10-12	8
Juniperus oxycedrus	Katran Ardıcı / Prickly Juniper		150-175	129
Quercus brantii	Palamut Meşesi / Turkish Oak		Ø10-12	15
Pinus halepensis	Halep Çamı / Aleppo Pine		100-125	11

4. OTHER ISSUES

- The special technical specification and the projects are integral and complementary parts. The contractor agrees to assess the special technical specification and the construction projects together.
- Before starting the said productions, the contractor is obliged to present in written the works to be conducted and the materials to be used in these works to the control organization and has to get the approval by the control organization. Upon approval, the production shall start within the control organization's knowledge.

- Any material and labor required for the execution of the works specified in the projects and specifications shall be provided by the contractor.
- All excavations of any type and class shall be provided by the contractor.
- All water and electricity supply required for the production shall be supplied by the contractor.
- Any labor (Preparation, Construction, Assembly, Test and Completion) and supply of any machinery and equipment, supply of any material being an ingredient of the production or as supplement (scaffolding, form works, mortar, concrete etc.), supply of any materials, vertical or horizontal transportations, loading, unloading, handling, stapling, storage and the related expenses, any dismantling and demolition works, excavation in any grounds by machinery and/or manually including underwater works, leveling, layering, irrigating, compressing works during and after excavation, water supply to the workplace, water discharge at the construction site, transportation of excavation material and disposal of construction wastes related to the works in scope of the contractual works shall be conducted by the contractor.
- The contractor is obliged to take all measures related to occupational and workers' safety in the site. The contractor shall be responsible for all material, non-material and health damages which third parties may be exposed to due to insufficient measures taken by the contractor.
- Workplace safety warning signs, traffic signs, warning lines and all materials related to occupational safety (visual warning devices, barriers etc.) shall be provided and installed by the contractor and the environmental safety shall be ensured by the contractor as well.
- Any scaffoldings shall be provided by the contractor.
- Any transport shall be provided by the contractor.
- All works specified in the construction, electrical and mechanical projects of this works shall be handed over intact by the contractor to the administration.

5. BOREHOLE DRILLING AND TEST PUMPING

5.1. DRILLING SITE

The contractor shall drill the borehole(s) at location(s) designated by the Engineer. Tracks required for access of drilling plant, gear, camp, and accessories to the borehole site shall be made by the Contractor, and should not interfere with existing structures.

Care must be taken in the handling and storage of all drilling fluids, oils, greases, and fuel on site, to avoid any environmental degradation. The Contractor shall dispose of any toxic materials, drilling fluids and other additives, cutting and discharged water in a manner approved by the Engineer so as not to create damage to public and private property.

The Contractor is expected to carry out works as instructed by the Engineer thorough and workman-like, and up to today's professional standards. For this purpose, the Contractor shall use suitable machinery and gear, and supply efficient and experienced staff.

All necessary machinery, equipment, and material to carry out, test pumping, headwork construction, etc, as specified in Bill of Quantities, are to be mobilized for the Works. Test pumping equipment should be independent from the drilling rig(s). Prior to mobilization the Engineer shall verify the specifications and state of repair of all major item of plant and transport, and shall have the right to order the removal and/or replacement of any items, which is insufficient, or in unsatisfactory condition. Acceptance by the Engineer of the Contractors proposed plant and transport does not, however, relieve the Contractor of his obligations under this Contract, in case such plant and transport accepted by the Engineer fails to successfully complete the required Works.

The Contractor shall drill to the total depth and such diameter as shall be instructed by the Engineer. No borehole shall be accepted if drilled to a depth and diameter other than that instructed by the Engineer.

5.2. DRILLING METHOD

The Contractor may use any percussion/rotary drilling technique that he feels applicable to achieve the depth and diameter required, provided that the techniques used are those specified in his proposal or are approved by the Engineer. The use of bentonite mud, lost circulation agents or any form of plugging material that may ultimately affect the production capacity of water bearing strata intersected will not be permitted. Any drilling fluid additives must be approved by the Engineer and must be of low solids, non-toxic degradable type.

5.2.1 Sampling

Representative, continuous samples (min.100 grams) of the strata penetrated shall be collected at every 1 m interval and when required by the Engineer, by whatever method is standard for the drilling technique in use and approved by the Engineer. The Contractor shall take every possible precaution to guard against sample contamination. Samples are not to be washed. Representative samples shall be put into approved containers supplied by the Contractor, labeled in a manner approved by the Engineer with the borehole number and depth interval, and stored in a position where they will not be contaminated by the site conditions or drilling operations. On completion of works at each site, samples should be handed to the Engineer's Representative on site at intervals agreed between the Engineer and the Contractor.

5.2.2 Temporary Casing

Installation diameter (which should not be less than 8 inches) of any temporary casing required for the successful construction of the boreholes shall be at the discretion of the Contractor provided that the completed borehole meets the specifications and design required under the Contract and is approved by the Engineer. The cost for supply, installation and removal of temporary casing shall be entirely for the contractor. The Contractor cannot claim from the Client any casing left in the borehole that is not retrievable.

5.2.3 Water Supply for Drilling

The Contractor shall make his own arrangements for obtaining, storing, transporting and pumping of water, required for drilling purposes and for use by the drilling crew at their camp-site.

5.3. BOREHOLE DESIGN

The final design of the borehole shall be confirmed by the Engineer in consultation with the Contractor during the drilling process, or immediately after drilling is completed. Two types of standard borehole design are given.

Borehole Design Type I: Drilled with 10 5/8 "bit to final depth and finished with 8" bit to final depth. Cased to full depth with 5" ND uPVC Class D casing, 6mm-wall thickness. Screened sections adjacent to aquifer zones at depths as instructed by the Engineer. The screened sections are to be gravel packed.

Borehole Design Type II: Drilled at 10 5/8 "through soft collapsible overburden until firm rock is encountered. Drilled further with 8" bit for 3m or more through non-collapsing formation. Cased to full depth with 5" ND uPVC Class D casing, 6mm wall thickness. Bottom annular space between UPVC casing and borehole to be grouted with cement slurry of 1.76 - 2.08 kg cement/litre (24-30 litres of water per 50kg bag of cement). Grout is to be injected into the annulus using tremie pipes, or a method approved by the Engineer, in a continuous operation so that a complete and continuous seal is achieved.

5.3.1 Casing and Screens

Aquifer zones shall be completely lined with uPVC screen as approved by the Engineer. The uPVC 5" ND casings to be supplied by the Contractor shall have a minimum wall thickness of 6mm and a minimum collapse resistance of 6.5 kg/cm².

The uPVC 5" ND screen open areas shall not be less than 4%, with a uniform slot size of 1 mm, minimum wall thickness of 6mm and a minimum collapse resistance of 3.2 kg/cm²

Sections of the screen shall be provided in maximum 3m lengths and joined with water tight by an appropriate method recommended by the screen manufacturers. The resulting joint shall be strong and have the same structural integrity as the casing and screen. The bottom end shall be sealed with uPVC bottom cap.

The casings and screens must be centralized in the boreholes so that an annular space of at least 25 mm exists between the borehole wall and the casing. Suitable centralizers should be provided to allow the casing and screen to be set correctly in the centre of borehole. A centralizer should be used every 3 m.

5.3.2 Verticality

All boreholes shall be vertical, shall be drilled and cased straight and all casings/screens shall be set round, plumb and true to line. The Contractor shall make a verticality test during and after drilling by the approved methods and at his own expense to demonstrate that the departure from the vertical does not exceed 3 mm per 100 mm between ground level and the bottom of the borehole. If this departure is exceeded, the contractor shall make the necessary corrections to the approval of the Engineer, without additional payment. If the error cannot be corrected, then drilling shall cease, and a new borehole shall be drilled at a position nearby, indicated by the Engineer. The abandoned borehole shall be back-filled and/or capped by methods approved by the Engineer. No payment shall be made for the re-drilling, the sealing/back-filling of the abandoned borehole, or for moving to the new site. Any materials (i.e. casing, screen, gravel pack, cement etc) lost in the abandoned borehole shall be to the Contractors cost.

5.3.3 Gravel Pack

The Contractor shall supply suitable gravel pack. Prior to delivery, samples of the gravel pack shall be subjected to a grain size analysis at the Contractors expenses and the Engineer must approve the results before the gravel pack is used. Gravel pack should consist of washed, well-round particles of a uniform grading of between 2.5 and 4.0 mm, shall comprise 90% siliceous material and must contain no clay, shale silt, fines, excessive amount of calcareous, material or crushed rock.

In terms of grain size, 90% of the gravel pack material shall conform to the grading specified by the Engineer prior to the commencement of the Works, and Contractor shall be required to submit samples of the gravel pack material prior to installation for approval by the Engineer.

Sufficient gravel pack shall be installed to cover completely the uppermost screen, plus an additional 2 m length (to allow for settling). Emplacement should be by means of a conductor pipe, and a good supply of water should be introduced with the gravel to prevent "bridging". The tremie (conductor) pipe should be raised gradually as the level of the gravel builds up. The pack should be capped with clay seal to prevent contamination. The annular space above this seal can be back-filled with inert drill cutting. The top 3m of the annular space should be grouted, leaving 0.4 m at the top for construction of the pump pedestal.

5.3.4 Sanitary Seal

To provide an effective seal against the entry of contaminants, the upper 3m of the annular space between the casing and the borehole wall shall be grouted using cement slurry of 1.85 - 2.15kg cement/litre. Grout is to be injected into the annulus in a single operation so that a complete and continuous seal is achieved, by a method to be approved by the Engineer.

5.3.5 Yield Estimates during Drilling

Yield estimates during the course of drilling shall be made using the calibrated bucket method. Average yields shall be read, and recorded in the Daily Record.

5.4. DEVELOPING AND CLEANING OF BOREHOLES

Development and cleaning of the boreholes, in order to remove native silts, clays, loose rock particles and drilling fluid residues deposited on the borehole wall during the drilling process, shall be carried out by the Contractor upon completion of the drilling and installation of casing

The method proposed by the Contractor for development of boreholes shall be submitted to the Engineer in writing for his approval. Development of boreholes shall be effective from the depth at which water is encountered to the bottom of each borehole. Development shall continue for such time as directed by the Engineer and until the Engineer is satisfied that the water is as free from fine particles as possible. Upon completion of development, any accumulation of material shall be removed from the bottom of the borehole by airlifting.

5.5. TEST PUMPING

The Contractor shall perform test pumping to establish the performance and yield of the borehole, and shall provide a suitable, self-contained, mobile test-pumping unit, approved by the Engineer, for this purpose. The method for varying the discharge rate of pumps will depend on the type of pump used, but the Contractor shall ensure the provision of suitable means of achieving the range of constant flow rates specified by the Engineer. Test pumping shall be undertaken in each productive borehole, as assessed by the Engineer from the yields indicated during drilling.

In case of boreholes with indicative yield between 500 and 1500 l/h, the borehole will be tested at a constant discharge rate of 800 l/h, for 2-3 hours.

In the case of boreholes with an indicative yield of greater than 1500 l/h., the borehole shall be tested in the manner of a step-test, with the initial step being at 800 l/h. The duration of each step shall be 90 minutes, and minimum of three steps of increasing discharge will be undertaken. The final step should lower the dynamic water level to approximately 3 meters above the level of the pump. Discharge for each step shall be kept constant. On completion of the final step, the Contractor shall monitor the recovery of the water level until 95% recovery has been achieved. It is anticipated that the maximum testing and recovery time per boreholes should not exceed 24 hours.

Water levels shall be measured during testing pumping by the Contractor by means of an electric contact gauge (dipper), suitably calibrated such that measurements can be made to an accuracy of 5mm. The frequency of measurements shall be as specified on an agreed test pumping data form, or as otherwise determined by the Engineer.

Discharge shall be measured by volumetric methods, or means of some other approved calibrated measuring device. During the test pumping, the discharged water must be handled and disposed of in an appropriate manner to a point of overland drainage sufficiently far from the borehole to prevent recharge. This distance shall be at least 100 m from the borehole, but may be reduced with the approval of the Engineer if the pumping aquifer is confined.

During all testing operations, once the flow rate has been determined and preliminary adjustments made, the measured discharge rate shall be maintained within 5% of the required rate for the duration of the test or test stage. Persistent fluctuations beyond this tolerance will require abortion on the test.

When continuous pumping at a uniform rate is specified, failure of the pump operation for a period greater than 1 % of the elapsed pumping time also required abortion of the test.

Any test that is aborted due to reason above shall be repeated, after full recovery of the water level. *No payment shall be made to the Contractor for aborted tests, or for standing time during water level recovery after aborted tests.*

5.5.1 Water Level Observations

The Contractor shall supply appropriate electrical contact water level gauges for measuring water level in the boreholes. Measurements must be made to the nearest 10mm at pre-determined intervals, dependent on the nature of the test.

Electrical Conductivity Measurements

The Contractor shall provide an operational Electrical Conductivity meter to take electrical conductivity readings of the discharge water during test pumping.

5.6. RECORDS

The Contractor shall keep daily activity records for each borehole. In addition separate records shall be supplied for each borehole upon completion.

Borehole Completion Record

- As per standard Borehole Completion Form
- Detailed Drillers geological log.
- Borehole design and installation details (as-built drawing)

A copy of Borehole Completion Record shall be made to, and approved by the Engineer on completion of each borehole, before being forwarded to the Client.

5.7. WATER SAMPLING

Water samples for testing the physico-chemical and bacteriological quality shall be taken at the end of the test pumping. The Contractor shall keep on site a minimum of 4 suitable one-litres capacity water containers, to collect and store water samples.

5.8. CAPPING OF BOREHOLE

During boreholes construction, installation, development and test pumping the Contractor shall use all reasonable measures to prevent entrance of foreign matter into the borehole. The Contractor shall be responsible for any objectionable materials that may fall into the borehole and any effect it may have on water quality or quantity until completion of the Works and acceptance by the Engineer.

5.9. ACCEPTANCE OF BOREHOLES

The borehole shall only be acceptable by the Engineer upon satisfactory completion of all drilling operations, installation of casing and screens, development works, and test pumping.

5.10. LOSS OF EQUIPMENT

The Contractor shall remove any equipment lost down a borehole or the borehole shall be considered a lost borehole. A replacement borehole shall be constructed and test pumped at the Contractor's expense. The contractor shall not be entitled to any payment for such tools or equipment.

5.11. LOST BOREHOLE

Should any incident to the plant, behavior of the ground, jamming of the tools, or casing, or any other cause prevent the satisfactory completion of the borehole, then a borehole shall be deemed to be lost. No payment shall be made for that borehole or for any materials not recovered thereafter nor for any time spent during drilling or while attempting to overcome problems.

In the event of a lost borehole, the Contractor shall construct a borehole at site indicated by the Engineer. The option of declaring any borehole lost shall rest with the Contractor, subject to the approval of the Engineer.

A lost borehole shall be treated as follows:

- The Contractor may salvage as much casing and screen from the lost borehole as possible, and may use it if not damaged in replacement borehole, with the approval of the Engineer.
- Any material supplied by the Client and salvaged damaged shall become the property of the Contractor, and the Contractor shall compensate the Client accordingly.
- The lost borehole shall be sealed by concrete, cement grout, or neat cement, which shall be placed from the bottom upward to avoid segregation or dilution of materials.
- The upper 2 m of the lost borehole shall be back-filled with native topsoil. Sealing of such abandoned boreholes shall be done in such a manner as to avoid accidents or subsidence, and to prevent it from acting as vertical conduit for transmitting contaminated surface or subsurface waters into water bearing formations.

5.12. CLEARING THE SITE

On completion of each borehole the site must be left clean and free from all debris, hydrocarbons and waste, and all pits filled to the satisfaction of the Engineer. A site not delivered clean may render borehole unacceptable.

6. CONTAINER TECHNICAL SPECIFICATION

Building Name : GUARD HOUSE

Drawing No. : C001

6.1. GENERAL

W :2200mm L : 2200mm H :2600mm

The demountable containers in our offer are composed by steel chassis, roof structure and the panels. The architectural and structural design of the container is carried on by our expert Technical Staff, by using AutoCAD and SAP 2000 drawing and structural analysis programs.

6.2. TECHNICAL DATA

Roof Live Load (Snow Load)	: 75 kg/m ²
Basic Wind Speed	: 100 km/h
Seismic	: Effective Ground Acceleration: Ao=0.40 g
Floor Chassis Live Load Capacity	: 250 kg/m ²
Codes & Standarts	:TS-EN,BS-EN,ASCE 7,IBC 2006

6.3. EXTERNAL PANELS

Panel Thickness 72 mm.

External Panel Frame (Non Welding): Produced with 0,8-2,0 mm thick galvanized steel sheet. Exterior panel frame thickness is 50 mm

External Wall Covering : 0.50 mm thick RAL 9002 electrostatic powder painted galvanized trapezoidal steel sheet,

Insulation : 50 mm thick glass wool (12-14 kg/m³ density)
Heat Transmission Coefficient : 0,56 kcal/m²K
Internal Wall Covering : Both surfaces 8 mm white color chipboard (700 kg/m³ density)

6.4. INTERNAL PANELS

NONE

6.5. LOAD - BEARING SYSTEM

Panel Structure (Non Welding) : 0,8-2,0 mm thick galvanized steel C and U profiles produced in CNC roll-form line, and connected by seamless technology.

Column - Ceiling and Floor Chassis Profiles: Corner columns, floor and roof structures are produced by connecting 3 mm especially cold formed steel profiles. Then two layers of primer coating and one layer of final paint is applied. In between the structural profiles, 2 mm thick galvanized steel profiles are placed to form the floor and ceiling platforms.

6.6. ROOF AND CEILING

Roof Covering : 0.50 mm thick galvanized trapezoidal steel sheet, 27/200 mm
Insulation : 50 mm thick glasswool (12-14 kg/m³ density)
Ceiling : Both surfaces 8 mm white color chipboard (700 kg/m³ density)

Rain gutters and Down Pipes: At the short sides of the container roof, specially formed rain gutters are placed. The water inside the rain gutters are discharged by the PVC down pipes which are hidden in the corner columns.

6.7. FLOOR

Floor Decking : 16 mm thick cement board (1250 kg/m³ density) .
Undersheeting : 0.50 mm thick galvanized trapezoidal steel sheet, 27/200 mm
Insulation : 50 mm glasswool (12-14kg/m³ density)
Floor Covering "2-2,5mm thick vinyl,
: Skirtings;50/80mm PVC"

6.8. DOORS

A. EXTERNAL DOORS:

Door Frame : 1.50 mm galvanized steel sheet, electrostatic powder coated RAL 9010

Door Wing : 0.80 mm thick, RAL 9002 electrostatic powder coated galvanized steel sheet in both faces, in-between 50 mm EPS insulation.

Door Handle and Lock : Metal ROZETTE door handle and cylinder lock.

Door Type & Dimensions : (D1) 854 x 2015 mm single wing

6.9. WINDOWS

Window Quality: PVC frame with double glazing of 4+12+4 mm

Window Type & Dimensions : (W1) 845 x 1130 mm tilt & turn opening

: (W1S) 845 x 1130 mm fixed window

6.10. ELECTRICAL AND TELEPHONE INSTALLATION

Electric equipment 220/380 volt, 50 Hz according to TSE standards will be established.

The electrical installation will be surface mounted.

Illumination Levels: Illumination levels will be provided 1 m height from the floor level; Offices, Meeting Rooms:150 lux, Dining Rooms:125 lux , Bedrooms:100 lux, Bathrooms, Wc's, Corridors, Halls and Other Areas:50 lux

Cabling : Lighting sorties 3x1,5 mm² NYM, Lighting Lines 3x2,5 mm² N

:Power Socket sorties 3x2.5 mm² NYM, socket lines 3x 2,5 mm² NYM

Lighting Fixtures : 1x36 - 2x36 TMS lighting fixtures

IP 44 Globe fixtures will be used on exterior doors.

Switches and sockets : 16 amp, 230 volt, 3-wire will be grounded.

Fuses : V-automatic fuses, lighting fuse 10 amp, Power socket fuses are 16 amp. PVC fuse box at the entrance of the building and there will be leakage relay.

*UPS and TV lines are excluded. Telephone and data sockets will be jack type. Including telephone and data sockets in container.

** Telephone switchboard, data distribution units and rack cabinets are not included in our offer.

*** Will be used wire copper 1.5 m Ø15 for the boards grounding

6.11. PLUMBING INSTALLATION

None

6.12. HEATING SYSTEM

Electrical heater shall be installed.

6.13. VENTILATION, AIR CONDITIONING AND AIR CONDITIONING INSTALLATION

Excluded

6.14. FURNITURE

Excluded

6.15. FIRE DETECTION SYSTEM AND FIRE FIGHTING SYSTEM

Excluded

Section 3.2.

Technical Specifications for Şanlıurfa Birecik Solid Waste Transfer Station

1. CONSTRUCTION WORKS

1- İ-ÖBF 5 Excavation of all kinds of materials (earth, rock, loose, etc.) with every depth and width(m³)

On all kinds of floors; Excavation with machinery, transportation up to 25 meters, unloading of the warehouse, sign or sill in the ground, laying, filling of the spaces remaining at the excavation site after the construction has been done, all kinds of materials made for laying and repairing the bottom and side walls of the excavated floor, And excavation price of 1 m³ including waste, labor, tools and equipment expenses, contractor general expenses and profit: MEASURE: The excavation volume is calculated on the excavation project. NOTE: The unit price does not include water hike, bracing, transportation outside the 25 meters, irrigation and compression costs. Depreciation is not paid.

2- 21.059 Wood mold pier (up to 6.01-8 meters)(m³)

Construction and industrial production of wooden elevator scaffolding, dismantling, all kinds of materials and wastes necessary for these works, workmanship and work place loading, horizontal and vertical handling, unloading, contractor general expenses and profits, which is higher than the approved project according to the approved project 1 m³ price: MEASUREMENT: 1) The space between the face of the building and the industrial production falling within the scope of this measure and the ground to which the scaffold applies is calculated. If the slope is inclined, the moderate altitude is taken as basis. 2) When applied to these exposed tunnels or galleries, the gap between the bottom surface of the gallery or tunnel arch and the floor where the screed is applied is calculated. 3) This pose is applied in the water depot construction scaffoldings falling within the scope of this measure. The space between the concrete water depression ceiling and the floor where the scaffold resembles is calculated. 4) The scaffold width required for frames, beams and columns not to be built together with the floor is determined. NOTE: 1) The volume of the lumber used for scaffolding and casting and the volume of the construction elements (gusseler, beams, columns, curtains, water reservoirs and similar construction elements ..) in the space shall not be deducted from the scaffold cavity volume. 2) Length and other tunnel hikes for tunnels and galleries are also applied to these poses in a certain way. 3) In the buildings, triangular pier space volumes are calculated which carry the reinforced concrete fringes, balconies, concrete, reinforced concrete walls, curtains and similar manufacturing molds. The triangular horizontal size can not be more than half of the mold height. 4) Concrete wall with a height of less than one meter. Inverted beam width is less than 0.50 m. Portafo and fringes and doorway lenghts with a width of less than 1.5 m. 5) Since the mold scaffolding will be installed for the reinforced concrete scaffoldings, concrete scaffolding and concrete screed which remain in the building, independent columns and similar productions are not allowed with mold scaffolding. 6) This price shall not be applied for construction scaffolding of construction or manufacture to be made with special sliding mold. 7) Material from the sculpture belongs to the contractor

3- N.YF.06 Transport of excavation surplus material to the warehouse at 1 km distance(m³)

4- KGM/2205 Irrigation and compression of any type of soil(m³)

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 floored 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".

5- Y.15.140/04 Supply of gravel and flooring, irrigation and compression by machine. (m³)

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.

6- KGM/6040 Foundation construction [with crushed and screened quarry stone (1 inch)] (m³)

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 KTS. 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 KTS, 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. 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'')]" . Note: (1) Figuration shall be in the place, form and dimension as requested by the administration and shall be made by figuration machine. (2) The contractor shall protect the figuration and shall remove any slumps and deformations.

7- KGM/6100/3-1 Plant-Mix Sub base Construction (with crushed and screened quarry stone) (Ton)

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 KTS.

Costs included in the unit price:

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 administration 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 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 administration, 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 administration, 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".

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 administration, 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 administration'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 administration'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.

8- 15.150/L Figuring the sub base and base material (m³)

Sand, gravel, clay, crushed stone, sand, stabilize and similar materials to be made.

Unit Fees Included Costs:

Any kind of workmanship, workmanship, workmanship, workmanship, workmanship, workmanship, workmanship, workmanship and workmanship required for the construction of sand, gravel, clay, Materials, machinery, tools and utilities, and contractor profits and overheads.

Unit Price Incomparable Costs: There is no expense not included in the unit price.

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.

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 /

Note: This 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.

9- N-041 Transport price to 20000 m distance (Ton)

Technical Description: Note: The transport prices stated in Table 1 are calculated from the formula in the İller Bankası (Bank of Provinces) analysis book and shall be applied for excavation material of the production. (excluding loading, unloading, stapling and 25% contractor profit and overheads)

10- KGM/16.002/K Plain concrete at each dosage (with concrete mixer) (m³)

Technical Description: Preparation of plain concrete by concrete mixer at each class according to the instructions to be given by the administration and in compliance with the principles and conditions stated in

the related sections of the KTS. Costs included in the unit price: Supply and storage of required machinery and equipment and water, and if necessary, chemical curing material and all-in material, sand and gravel screened and irrigated according to its grain size, loading and unloading of these material, weighing or if allowed by the administration, volume measuring and feeding into concrete mixer with required amount of cement and water according to the concrete mix design report approved by the administration, mixing, loading, vertical and horizontal transport, unloading, layering, compression, protection from heat and cold, curing by using water or chemical curing material if necessary, sampling, laboratory services and all labor, material, machinery, 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: Cost of cement to be used within the construction, loading, unloading and stapling, supply of chemicals and mineral ingredients if to be used, transport of cement, sand and gravels to the workplace. Measurement: The measured volume in cubic meters of the implemented concrete. Payment: To be made in accordance with the m³ unit price in the unit price bid chart - Poz KGM/16.002/K "Plain concrete at every dosage (by concrete mixer)".

11- Y.21.001/03 Production of reinforced concrete plain surface form works with plywood (m²)

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. MEASUREMENT: 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 not taken into the measurement. No hole gap shall be extracted from the hole side at the form side. NOTE 1) The form works scaffolding shall be paid separately. 2) The material extracted from the forms shall be the contractor's property.

12- Y.23.014 Cutting, bending and placement of Ø 8- Ø 12 mm deformed concrete steel bars (Ton)

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.

MEASUREMENT:

- 1) The length of the iron including crotchets shall be measured according to the concrete application drawings.
- 2) The weights of the steel bars shall be taken from the chart below.
- 3) Steel bars and joints which are not shown in the project shall not be taken into the calculation.
- 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.

Diameter (Ø)	Unit weight
	mmKg/m
	80.395
	100.617
	120.888

13- Y.23.015 Cutting, bending and placement of Ø 14- Ø 28 mm deformed concrete steel bars (Ton)

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.

MEASUREMENT:

- 1) The length of the iron including crotchets shall be measured according to the concrete application drawings.
- 2) The weights of the steel bars shall be taken from the chart below.
- 3) Steel bars and joints which are not shown in the project shall not be taken into the calculation.
- 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.

Diameter (Ø)	Unit Weight
mm	Kg/m
141	208
161	578
181	998
202	466
222	984
243	551
264	168
284	834

14- N-127 Transport price to 700.000 m distance (Ton)

Technical Description: Note: The transport prices stated in Table 1 are calculated from the formula in the İller Bankası (Bank of Provinces) analysis book and shall be applied for excavation material of the production. (excluding loading, unloading, stapling and 25% contractor profit and overheads)

15- 23.01 Ribbed wire mesh (1.50-3.00 kg/m2) Installation (Ton)

Technical Description: 1-ton price of wire mesh: placement of wire mesh by spot welding at rods with 5,00 mm diameter or higher and type St IVb according to its project, including lap-weld joint and support installation according to the specification and details, loading, horizontal and vertical transport and unloading at workplace, any material and wastages, labor, tools and equipment costs, contractor profit and overheads.

MEASUREMENT:1) One square meter of wire mesh which has been calculated according the reinforced concrete project shall be calculated in tons by multiplying with the weights shown in the chart below.

2) Steel and joints which are not indicated in the project shall not be added to the calculation.

3) As the bonding wire, kg/m weight differences (compared to the chart) and support ate included in the wastage of the analysis, they shall not be included in the calculation.

WIRE MESH WEIGHT CHART ACCORDING TO THE ROD DISTANCES Kg/m²

Diameter	kg/m	50mm	75mm	100mm	150mm	200mm	250mm	300mm
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

16- Y.16.050/06 Concreting of C 30/37 compressive strength class concrete being manufactured at a concrete plant or purchased (including concrete transport) (m³)

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 overhead costs

MEASUREMENT:

To calculated over the dimensions in the project.

NOTE:

- 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 have to be submitted to the administration 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.

17- 21,057 *Wooden false work (4 to 6 meters) (m³)*

Technical Description: 1 m³ price of: production and dismantling of wooden supporting false for buildings and industrial production of height which is in the scope of this position and depending on the approved project if deemed necessary by the administration, including any material and wastage required for such works, labor, transport to workplace, vertical and horizontal transport, unloading, contractor profit and overheads.

MEASUREMENT:1) The gap between the side of the building or industrial production facing the false work and the ground which the false work supports shall be calculated. If the ceiling is sloped the average height shall be taken as reference.

2) If this item is applied in tunnels or galleries, the gap between the soffit of the gallery or tunnel arch and the ground which the false work supports shall be calculated.

3) In scaffoldings of water tank constructions of this measurement, this item shall be applied. In this case, the gap between the water tank ceiling and the ground which the false work supports shall be calculated.

4) The width of the supporting false work required for frame, beam and columns which are not constructed with the flooring together shall be defined by the administration.

NOTE:1) The volume of timber used in the scaffolding and form works and volumes of construction elements in the gap (gussets, beams, columns, shears, water tank and similar construction elements) shall not be deducted from the scaffolding gap volume.

2) The length pays increases for tunnels and galleries and other tunnel pay increases shall also be applied to these items at certain rates.

3) The scaffold gap volumes in shape of triangle which hold and carry the form works of reinforced concrete eaves, balconies, concrete and reinforced concrete supporting walls, shears and similar constructions in the buildings shall be calculated. The horizontal length of the triangle shall not be more than the half of the form work height.

4) No scaffolding cost shall be paid for concrete wall upstanding beams with height less than 1 meter, consoles and eaves with a width less than 0.50 m and door and window lentils with a span less than 1,50 m.

5) As a false work shall be erected for reinforced concrete decks, no extra false work cost shall be paid for concrete and reinforced concrete shears, individual columns and similar productions inside the building.

6) This price shall not be applied for the form work scaffolding where constructions or productions shall be executed with special sliding forms.

7) The outage material from the scaffolding shall belong the contractor.

18- 21,054 Wooden false work (up to and including 4 meters) (m³)

Technical Description: 1 m³ price of: production and dismantling of wooden supporting false for buildings and industrial production of height which is in the scope of this position and depending on the approved project if deemed necessary by the administration, including any material and wastage required for such works, labor, transport to workplace, vertical and horizontal transport, unloading, contractor profit and overheads.

MEASUREMENT: 1) The gap between the side of the building or industrial production facing the false work and the ground which the false work supports shall be calculated. If the ceiling is sloped the average height shall be taken as reference.

2) If this item is applied in tunnels or galleries, the gap between the soffit of the gallery or tunnel arch and the ground which the false work supports shall be calculated.

3) In scaffoldings of water tank constructions of this measurement, this item shall be applied. In this case, the gap between the water tank ceiling and the ground which the false work supports shall be calculated.

4) The width of the supporting false work required for frame, beam and columns which are not constructed with the flooring together shall be defined by the administration.

NOTE: 1) The volume of timber used in the scaffolding and form works and volumes of construction elements in the gap (gussets, beams, columns, shears, water tank and similar construction elements) shall not be deducted from the scaffolding gap volume. 2) The length pays increases for tunnels and galleries and other tunnel pay increases shall also be applied to these items at certain rates. 3) The scaffold gap volumes in shape of triangle which hold and carry the form works of reinforced concrete eaves, balconies, concrete and reinforced concrete supporting walls, shears and similar constructions in the buildings shall be calculated. The horizontal length of the triangle shall not be more than the half of the form work height. 4) No scaffolding cost shall be paid for concrete wall upstanding beams with height less than 1 meter, consoles and eaves with a width less than 0.50 m and door and window lentils with a span less than 1.50 m. 5) As a false work shall be erected for reinforced concrete decks, no extra false work cost shall be paid for concrete and reinforced concrete shears, individual columns and similar productions inside the building. 6) This price shall not be applied for the form work scaffolding where constructions or productions shall be executed with special sliding forms. 7) The outage material from the scaffolding shall belong the contractor.

19- Y.23.071 The preparation and replacement of all kinds of profiled iron individually or in combination (looms made in love, scrap pavers, continuous beams, individual roof looms and tiles used in simple manner, lentals, scrap pavers,(kg)

Technical description: All kinds of materials and wastes for the preparation and consolidation of the profile irons individually and jointly, loading on the construction site (including rivets, welding), horizontal and vertical transport, conveyor scaffold or lifting platform, unloading, workmanship, contractor general expenses and profit (Excluding paint) and replacement, 1-ton price:

MEASURE:

1) Weigh the used profile together with the fastening fixture before painting.

2) However, administrations may ascertain the weight of the project relative to the weights of all profiles and nodal points on the scale of the project, if necessary. As a result of this weighing; Pay up to 7% weight over the rules. 7% dense weight is not considered. The rivet and bolt holes are filled in the account check. If the weight is less than the weight found in the result of this weighing, weighing shall be based on acceptance of the manufacture made.

20- Y.23.176 Making and replacing various iron works from lama and profile iron (kg)

Technical description: Iron rivets, bolts, welding and other tools for the construction of staircases, grilles and similar works made of various steel bars, lathes and profile bars made of all kinds of stairs, balconies, bridges, balustrades, window and garden stands, roofing, septic tank and similar places 1 kg price, including all kinds of materials and casualties, workplace loading, horizontal and vertical handling, unloading, workmanship, contractor general expenses and profits (excluding paint)

MEASURE: It is weighed together with the production and, if necessary, the fixing material, before being painted and assembled.

NOTE: However, administrations may ascertain the weight of the project relative to the weights of all profiles

and nodal points on the scale of the project, if it is deemed necessary. As a result of this weighing; 7% weight surcharges will be paid in comparison with rulings, 7% dense weight will not be taken into consideration. If the weight of this weighing is less than the weight of the weighing, the weighing shall be based on acceptance of the manufacture made.

21- Y.25.002/01 Two layers of coating on metal surfaces against corrosion (m²)

Technical Description: 1 m² price of: cleaning metal works surfaces with sandpaper and wire brush, anti-rust coating of 0,100 kg for 1st layer and 0,100 kg for 2nd layer (each layer shall be of different colors), including any material and labor required for such works, contractor profit and overheads.

MEASUREMENT:

- a) For furnitures, the coated surfaces shall be measured.
- b) For doors and compartments;
 - 1) For Telaro type window frames; two side shall be measure from plaster to plaster.
 - 2) For window frames (without jamb); frame fields shall be added to the two sides from case to case, vertically
- 3) For window frames jamb, the casing shall be added to two sides measurement from jamb to jamb
- 4) For all measurements indent, outgrowth and window gaps shall not be added to the measuring If there are laths at the window edge, measurement shall start from there.
- c) In window walls and windows;
 - 1) In window walls and windows with jamb; vertical field from jam to jam shall be measured whereas for windows without jamb the vertical field from plaster to plaster shall be measured. One surface shall be calculated, but two surfaces shall be coated. Glass gaps shall not be deducted, if sill, casing and edges are available they will be measured separately and added to the field.
 - 2) For double windows the measurement shall be the same, the wooden case between two windows shall be measured separately and added to the field. Two sides shall be coated of both windows but one side shall be calculated. Glass gap shall not be deducted.
- d) For fences and rods, the projection field of one side vertically shall be measured. Gaps shall not be deducted.
- e) The coated surfaces of columns, roof trusses, beams, area ways and similar metal works shall be measured.

22- 33.2.a Cobblestone (parquet) production (m²)

Technical Description: Disassembly: Is the TL/m² price including disassembly, disposal, transport, labor, contractor profit and any overheads.

Measurement: The disassembled area shall be calculated by measuring based on m².

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.

Measurement: The disassembled stones and plates shall be calculated by measuring based on m².

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.

Measurement: The disassembled area shall be calculated by measuring based on m².

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.

Measurement: The area of asphalt paving shall be calculated by m² measurement.

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.

Measurement: The concrete applied field shall be calculated by m² measurement.

d) Macadam construction with quarry stone: TL/m² price for paving of macadamization of 30 cm thickness on the prepared ground.

Measurement: The floored field shall be calculated by m² measurement.

23- 17.141/İB Concrete border construction (m)

Technical Description: 1 meter price of: border with 18x30 cm dimensions and with 3/5 cm slope on front upper side and made of 350 dose concrete depending on the project, including any material and wastage

required for layering with 400 dose mortar over base layer made of 200 dose lean concrete, labor, transport to workplace, loading and unloading costs, contractor profit and overheads (excluding transport to workplace, loading and unloading, stapling and figuration costs of cement, sand and gravel).

24- KGM/37.556/K Grass seed sowing (da)

Technical Description: Grass seed sowing according to the principles and terms stated in the related sections of the KTŞ.

Costs included in the unit price:

Supply of any tool, equipment and grass seed, raking by hand the soil for grass field, preparation of grass seed mixture at rates required by the building inspector, sowing the seeds at least 50 kg per decare, screening of layering material, preparation by adding turf, loading and unloading, flooring at 1-1,5 cm thickness and supporting, water supply to workplace and applying sap to at least 15 cm depth, 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:

Cost and transport to workplace of topsoil and dung added to the layering material.

Measurement:

The field sowed with grass seed is measured in decare.

Payment:

To be made over the decare unit price in the Unit Price Bid Chart - Poz KGM/37.556/K' "Sowing of Grass Seed (perennial ryegrass)".

25- 37.092/2 Layering of topsoil - 10 to 15 cm thickness (m³)

For nursery, park and reforestation fields, the plant soil for forests development, forests, shrubs etc. Loading and unloading of all kinds of workmanship, materials and casualty necessary for the figure, transportation of the meters, transportation of the meters, discharging of the equipment, equipment and utilities; Including the cost of the contractor's profits and overheads, the price of cubic meter per square meter of plant material. MEASUREMENT: 90% of the value found in the cubic meter of plant soil is calculated. M 10 000 m. (07.006 / 1-22)

26- 37.092/3 SUPPLY OF TOPSOIL. (INCLUDING TRANSPORT) (m³)

All kinds of workmanship, materials and casualties necessary for planting, 10 to 15 cm thick soil taken from fig and planting, nursery, park and nursery fields to be sorted out from foreign materials, suitable for seed growing, machinery, tools and equipments, unloading; Contractor profits and general expenses, including the provision of herbal soil, except for the field of herbal coating on the field 10 - 15 cm. The thickness of the vegetable soil spreading per cubic meter price. MEASUREMENTS: Puppies no. Measured in cubic meters according to 37.092 / 2. Thickness control is performed after pouring.

27- MSB.521/B2 Roof coating with painted trapezoidal section sheet (m²)

Technical Description: Price of 1m2 painted trapezoidal sheet roof coating: overlapping of 0.50mm galvanized and painted trapezoidal sheet, painted with fabricated roll paint system (outwards surface min. 5 micron, inwards surface min. 7 micron epoxy coating and polyester paint coat of min. 20 micron), fixing to suspensions, placement of accessories (goin, eaves, wall, edge coting etc.), silicon application to lag washer holes, loading, horizontal and vertical transport, unloading, assembly at workplace, material, transport, labor, assembly, wastage, tools and equipment, contractor profit and overheads. Measurement: The coated roof surfaces shall be calculated in field.

28- N-040 Transport price to 15000 m distance (Ton)

Technical Description: Note: The transport prices stated in Table 1 are calculated from the formula in the İller Bankası (Bank of Provinces) analysis book and shall be applied for excavation material of the production. (excluding loading, unloading, stapling and 25% contractor profit and overheads)

29- Y.18.460/24 Ø 200 mm nominal diameter, PVC based coruge drainage pipe and its replacement (m)

Technical Description: Ø 200 mm nominal diameter PVC-based Koruge 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.

30- Y.18.461/041 Geotextile felt laying at 150 gr / m² weight (m)

Technical description: In order to protect basically or terasta isolation in accordance with the approved projects and details, laying of joints of at least 10 cm of geotextile weft of 150 g / m² in weight, loading at construction site, horizontal vertical transportation and unloading, all kinds of materials and wastes, And equipment expenses, if necessary, installation and dismantling of working platforms and the contractor's general expenses and profit including 1 m² price:

MEASUREMENT: All surfaces laid on the felt are calculated according to the measured values in the project.

NOTE: This description is not applicable in cases where different specifications that can be measured according to test standards other than weight in project and specifications are sought

31- 23.260/İB-1 Construction of reinforced concrete gauze with post of 2 63 m height and protective fences (m)

Technical Description: 1 meter price of: construction of reinforced concrete gauze with 2.63 m height and protective fences, preparation of reinforced concrete twin pole, gauze with 3 mm thickness and 5x5 cm interocular distance, guy wire and galvanized barb wire at workplace in accordance with the approved typical project, placing of reinforced concrete poles with distance of 2.50 m supported with 1 buttress at corners and 2 buttresses at each 30 meters along the fence, placing of fence poles into 250 dose concrete of 40 x 40 x 50 cm and buttresses into 250 dose concrete of 60 x 60 x 50 cm, installation of three lines of guy wire of 3 mm thickness along the top, middle and bottom of the galvanized gauze for a proper appearance, installation of 2 lines of barb wire above the upper guy wire, assembly of a door dimension and type as specified in the typical project for access to the protected field, costs for applying padlock, contractor profit and overheads included (transport, loading, unloading, stapling of iron, sand, gravel and cement only and padlock cost excluded).





32- İ-ÖBF 1 Supply and assembly of 101,65 m² Prefabric Building (piece)

33- İ-ÖBF 2 Traffic signs and boards (piece)

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

34- İ-ÖBF 3 False Acacia, Juniper, Acorn Oak, Aleppo Pine trees and planting supplies (piece)

KULLANILAN BİTKİLER / PLANTATION USED

LATİNCE ADI / LATIN NAME	ADI / NAME	SEMBOL/ SYMBOL	BOY-ÇAP/ HEIGHT/DIA.	ADET/NOs
Robinia pseudoacacia	Yalancı Akasya / Black Locust		Ø10-12	20
Juniperus oxycedrus	Katran Ardıcı / Prickly Juniper		150-175	186
Quercus brantii	Palamut Meşesi / Turkish Oak		Ø10-12	6
Pinus halepensis	Halep Çamı / Aleppo Pine		100-125	20

Tree planting will be cultivation is the soil, anchors, hand with the opening of the pit in soft soil in tree seedlings on the characteristics of the appropriate diameter and depth; hard and gravelly soil, the trees' characteristics to the appropriate diameter and depth of the pit open hand or by machine seedlings and according to the diameter and depth to the characteristics of tree planting saplings made to the appropriate holes.

35- 15.140/İB-4 Graded Sand-Gravel Hands To Compress The Base Of The Pipe Of Bedding (M3)

In each category, graded sand-gravel compacted by hand, ditches and basic breeding base, and the base of the pipe bedding and making the sheathing

36- 15.140/İB-8 Making All-In Sand-Gravel Bed Base Tubes Compressed The Basic Filler By Hand (M3)

Pipe, ditch, and completed the liquidation of the foundation base; After drying the water at the base, 08 008 / IB prepared in accordance with the principles and requirements of Pose No. unit price described, or brought to ditch edge purchased commercially at the same qualifications, the all-in sand and gravel on the machine next to the trench, thrown into ditch and foundation base, Laying by hand in 20-cm plates, and watering ramming all necessary to compress labor, materials and casualties, machinery, tools and equipment expenses and work on horizontal and vertical transport, including the contractor's profit and general expenses, (Excluding tuvenan-sand moved to the ditch edge from the quarry gravel and figure the cost) 1,000 m3 of tuvenan sand and gravel with specified in the application project conditions and principles in the ditch and foundation base reclamation, the base bearing the pipe, the construction of ditch and foundation fill the sheathing of the pipe; 1 m3 price:

SIZE: 1) Soil improvement: the type specified in section project done by filling the trench width and length of the trench fill height is the amount obtained by multiplying the cubic meters.

2) pipe sheathing and bedding in: filling in the ditch and basic, bedding and trench width and height specified in section fills in the type of project and shirts made to ditch the length of the product remaining in the core section; cubic meters of concrete pipes and the amount obtained by subtracting the outer volume.

37- 12.2190 / 1 Steam Cured 500 Dz. Prefabric Parcel Of Chimney Base Element Formation (H = 0.60 M., Gaskets Tire Combination Of Place) (piece)

Pose number: 08.1574 / 1 under the terms and principles, manufactured or purchased, accepted by the bank making all kinds of experiments, steam cured manhole prefabricated base elements those of chimney, to be ready on the edge of the excavation pit, chimney excavation pit on the edge of whether leveling the base and improvement made, to be placed in accordance with the lowering of the project the foundation base, all kinds of necessary costs , and casualties, loading the workplace, horizontal and vertical transport, unloading, labor, including contractor's general expenses and profits, (steam cured precast manhole entering the manufacturing base element concrete, iron, cement, transportation to the sand and gravel to the construction site storage, installation of this transport, unloading and manufactured by stacking the cost of steam cured manhole construction site as the transmission of the manhole prefabricated base element and installation of this transport, unloading and stacking price, are excluded.) h = 0.60 m. 500 high dose of steam cured manhole base element made of prefabricated chimney form; 1 piece's price:

SIZE: According to the project, within the manufacturing registered parcel manholes, manhole prefabricated steam cured, the amount denominated in pieces of the base member.

38- **12.2190 / 2 Steam Cured 500 Dz Prefabricated Chimney Body Parts Parcel Formation (H = 0.50 M., 600 Dose Combination Of Location Mortar) (Piece)**

Pose number: 08.1574 / 2 - 08.1574 / 3 made within the current conditions and principles or purchased, all kinds of experiments are performed, has been accepted by the bank, steam curing of the manhole prefabricated concrete cover, to be ready on the edge of the chimney excavation pit, chimney taken from the edge of the excavation pit, according to the project, to be placed on the manhole, all kinds of necessary expenses and casualties, loading the workplace, horizontal and vertical transport, unloading, labor, including contractor's general expenses and profits, (Parcel chimney entering the manufacture of precast concrete lid, iron, cement, transportation to the sand and gravel to the construction site storage, installation of this transport, unloading and manufactured by stacking the cost of steam cured manhole construction site as the transmission of the precast concrete lid and installation of this transport, unloading and stacking price, are excluded.) 500 dose steam cured manhole made of prefabricated body elements constituting the chimney; 1 pieces price:

SIZE: which is registered under the Project, within the manufacturing manhole, steam-cured manhole prefabricated body element has, in terms of the pieces' amount.

39- **12.2190 / 3 Steam Cured 500 Dz. Prefabrik Chimney Body Parts Parcel Formation (H = 0.25 M., 600 Dose Combination Of Location Mortar) (Piece)**

Pose number: 08.1574 / 2 - 08.1574 / 3 made within the current conditions and principles or purchased, all kinds of experiments are performed, has been accepted by the bank, steam curing of the manhole prefabricated concrete cover, to be ready on the edge of the chimney excavation pit, chimney taken from the edge of the excavation pit, according to the project, to be placed on the manhole, all kinds of necessary expenses and casualties, loading the workplace, horizontal and vertical transport, unloading, labor, including contractor's general expenses and profits, (Parcel chimney entering the manufacture of precast concrete lid, iron, cement, transportation to the sand and gravel to the construction site storage, installation of this transport, unloading and manufactured by stacking the cost of steam cured manhole construction site as the transmission of the precast concrete lid and installation of this transport, unloading and stacking price, are excluded.) 500 dose steam cured manhole made of prefabricated body elements constituting the chimney; 1 pieces price:

SIZE: which is registered under the Project, within the manufacturing manhole, steam-cured manhole prefabricated body element has, in terms of the pieces' amount.

40- **12.2190 / 4 S team Cured, The Body Height Adjustment With 500 Dz Prefabricated Element, Parcel Chimney, Formation (piece)**

Pose number: 08.1574 / 4 made within the current conditions and principles or purchased, all kinds of experiments are performed, has been accepted by the bank, steam curing of the manhole prefabricated body height adjust elements, to be ready on the edge of the chimney excavation pit, chimney taken from the edge of excavation, according to the project, necessary for the placement on the body member, all expenses, and casualties, loading the workplace, horizontal and vertical transport, unloading, labor, including contractor's general expenses and profits, (steam cured within the manufacturing manhole prefabricated housing height adjustment element, cement, transportation to the sand and gravel to the construction site storage, installation of this transport, unloading and manufactured by stacking the cost of steam cured manhole prefabricated housing height adjustment element has; construction as the transmission and installation of transport, unloading and stacking price, are excluded.) 500 dose steam cured manhole made of prefabricated chimney constituting actuator body height; 1 meter price:

SIZE: which is registered under the Project, within the manufacturing manhole, the manhole is the amount of steam cured prefabricated housing element has height adjustment meters.

41- **12.2190/5 Concrete (350 Doses), The Placing of Frames Prefabricated Concrete Cover (Piece)**

Pose number: 08.1574 / 5 - 08.1574 / 6 made within the current conditions and principles or purchased, all kinds of experiments are performed, has been accepted by the bank, steam curing of the manhole prefabricated concrete cover, to be ready on the edge of the chimney excavation pit, chimney taken from the edge of the excavation pit, according to the project, to be placed on the manhole, all kinds of necessary expenses and casualties, loading the workplace, horizontal and vertical transport, unloading, labor, including contractor's

general expenses and profits, (Parcel chimney entering the manufacture of precast concrete lid, iron, cement, transportation to the sand and gravel to the construction site storage, installation of this transport, unloading and manufactured by stacking the cost of steam cured manhole construction site as the transmission of the precast concrete lid and installation of this transport, unloading and stacking price, are excluded.) BS 18 concrete (350 doses) been manufactured with, the manhole will be placed on the precast concrete manhole cover; 1 piece's price:

SIZE: It is manufactured according to the standards and technical specifications related to the project, and the manhole cover was placed over the precast concrete elements, in terms of the pieces' amount.

42- **Y.19.090/002 4 mm wide and 40 mm deep joint cutting and filling with polyethylene wick and polyurethane joint mastic (m)**

Technical Description: Cutting joint with 4 mm width, 40 mm depth with joint cutting machine, air compressor etc. at joint location. Dust, dirt, burrs and so on. 1m price including all kinds of materials and wastes, workmanship, loading at work, horizontal and vertical transportation, unloading and contractor's profits and overheads filled with UV resistant polyurethane based mastic after tightly placing Ø6 mm diameter polyethylene wick inside the joint:

MEASURE:

The application area is calculated through the project.

NOTE:

1-Joint cutting operation will be done within 1-3 days after concrete casting.

2-The joint depth should be between 1/3 and 1/4 of the concrete thickness.

3-Cleaning and filling works after cutting of joints should be started 28 days after the earliest concrete casting.

4-30% more grouting joint filler than joint width is selected.

43- **İ-ÖBF 4 Construction Site Signboard (Piece)**

Technical Description: Signature construction signboard, painting and writing of 2,5 m x 3,00 m dimensions to be given in accordance with the directive and standards of the address.

44-**İ-ÖBF 6 Bunker Building and Supporting Steelwork Production**

One waste loading bunker shall be built by the contractor on the platform as described in the application drawings. The height of the bunker shall be 6,25 m from the ground and 6 m from the platform surface. All the pieces of the bunker, including the carrying structure shall be manufactured of galvanized material. Its roof and three fronts shall be covered with deck sheet painted over galvanization. Thereby, the garbage will not be wetted in rainy weather.

The self-compacting, sliding-floor garbage semi-trailer trucks which come under the bunker shall be filed with garbage from the top with no requirement of intervention. The garbage shall not be kept in the bunker. The unloaded garbage shall be directly transferred to semi-trailer trucks. This shall also prevent the spilling of garbage fluids. Still, the surfaces on which garbage fluids are spilled shall be cleaned with clean water, and led into the cesspit through the installation, not allowing them to leak into the soil.

2. MECHANICAL INSTALLATION

1	089-101	Faucet (short) Class 1, 1/2 "	pieces
	Supply and installation in the workplace instead of having a quality certificate fittings.		
2	097-203	Location filter (rigid plastic grille), 10x10 cm	pieces
	made of cast iron, self smell la fermette is provided in the workplace and cleaning grate floor drain plug, and instead of assembly. h = 13.5 cm. Ø 50 mm.		
3	103-108	Cold water meter (diameter 80 mm, flange)	pieces
	Measuring Instruments Directive (2004/22 / EC) shall have the CE mark required.		
4	107-1101	Only vertical National Frequency Converter Pump Booster (Output 0-5 m³ / h, pressure: 20-40 MSS)	pieces
	mounted on a metal frame, the necessary check valves, valve, connected by suction and discharge manifolds using fasteners, with multi-stage pump 1 to 6 selected so as to perform the automatic operation of the pump, an integrated frequency converter unit within formed by the electrical control panel; Press on the analogue pressure collector		
5	15.D.62	All kinds of dubious ground pipe trench excavation	m³
	Item No. 15.D.61 basis until the price per cubic meters for every kind of luxury ground pipe breakage opening hole with all kinds of tools and machines within. MEASURE: Of course, the horizontal plane level with the ground surface and the lower inner tube remaining net volume between the two vertical planes 20 cm away from the outside pipe is excavated. NOTE: a- This rate is applied to the pipeline network of irrigation pipes. b - Making more extensive excavation due to the structure of the excavation machinery, precisely due to the formation of ground structure slope excavation and no change is made to measure for any other reason than the case of excavation and will not be paid or other consideration. c - hike the unit price of inefficiency in the implementation of excavation and water hike is not paid.		
6	204-3102	Pn 20 polypropylene clean water pipe 1/2 "20 / 3.4 mm polypropylene clean water pipes	m
	According to DIN 8077- 8078, polypropylene (PPR-C) Type; 3 products and has been documented that there may be reliably used as .boru drinking water from the Health Ministry to ensure the establishment of the pipes, cut according to the project, physio term welding to the ends of pipe with fittings at 260 ° C to tightening supply. (Including all materials and workmanship for a resource.) Mounting material costs are also payable.		
7	204-3103	Pn 20 polypropylene clean water pipe 3/4 "25 / 4.2 mm polypropylene clean water pipes	m
	According to DIN 8077- 8078, polypropylene (PPR-C) Type; 3 products and has been documented that there may be reliably used as .boru drinking water from the Health Ministry to ensure the establishment of the pipes, cut according to the project, physio term welding to the ends of pipe with fittings at 260 ° C to tightening supply. (Including all materials and workmanship for a resource.) Mounting material costs are also payable.		
8	204-402	Rigid PVC plastic drain (pass muffle, diameter: 75-70 mm, thickness 3 mm)	m
	TS-275-1 in accordance with EN 1329-1, instead of the supply and installation of a hard pass to muffle the establishment of PVC plastic sewage pipe		
9	204-403	Rigid PVC plastic drain (pass muffle, diameter: 100-110 mm, wall thickness 3 mm)	m
	TS-275-1 in accordance with EN 1329-1, instead of the supply and installation of a hard pass to muffle the establishment of PVC plastic sewage pipe		
10	204-814/B	PE100 class SDR 17 series PN 10 polyethylene tube (outer diameter: 63 mm, 10 bar) (outside of the building ground, 10%)	m
	PE100 class SDR 17 series PN 10 polyethylene pipes		
11	210-624	Ball valve, brass presses, Teflon gasket (diameter: 20 mm)	pieces
	97/23 / EC Pressure Equipment suitable for regulation of water, air and steam systems in the element cutter brass, cast carbon steel or stainless steel, threaded or flanged, which is controlled by a sphere transition, manually opening and closing the supply of the establishment of a regular ball valves Instead assembly. Note: When using the TS 3148 Sheet 2 short dimensions specified size 10 unit price will be paid 35% missing.		

12	210-625	Ball valve, brass presses, Teflon gasket (diameter: 25 mm)	pieces
97/23 / EC Pressure Equipment suitable for regulation of water, air and steam systems in the element cutter brass, cast carbon steel or stainless steel, threaded or flanged, which is controlled by a sphere transition, manually opening and closing the supply of the establishment of a regular ball valves Instead assembly. Note: When using the TS 3148 Sheet 2 short dimensions specified size l0 unit price will be paid 35% missing.			
13	210-626	Ball valve, brass presses, Teflon gasket (diameter: 32 mm)	pieces
97/23 / EC Pressure Equipment suitable for regulation of water, air and steam systems in the element cutter brass, cast carbon steel or stainless steel, threaded or flanged, which is controlled by a sphere transition, manually opening and closing the supply of the establishment of a regular ball valves Instead assembly. Note: When using the TS 3148 Sheet 2 short dimensions specified size l0 unit price will be paid 35% missing.			
14	210-729	Ball valve, stainless steel body steel ball screw (50 mm, 1 1/2 ")	pieces
97/23 / EC Pressure Equipment suitable for regulation of water, air and steam systems in the element cutter brass, cast carbon steel or stainless steel, threaded or flanged, which is controlled by a sphere transition, manually opening and closing the supply of the establishment of a regular ball valves Instead assembly. Note: When using the TS 3148 Sheet 2 short dimensions specified size l0 unit price will be paid 35% missing.			
15	221-207	Strainer, cast iron, flange (diameter: 50 mm)	pieces
liquid, steam and will be mounted on the gas equipment, fluid pressure and body, subject to the temperature of brass, bronze, cast iron or steel, interior cleaning brass or stainless steel, which can be removed and cleaned filter easily, to be approved by the administration of catalogs flanged or screw the strainer to be selected supply and installation rather than in the workplace. Note: The filter sensitivity; DN 20 up to 500 mm (0.5 mm) and above DN 50 up to 700 .mu.M (0.7 mm) and above DN 150 up to 1200 .mu.M (1.2 mm) and it will be up.			
16	227-301	Non-return valve, cast iron flanges (diameter: 50 mm)	pieces
to be used in hot or cold water systems, EN 1074-3 compliance certificate, which is screwed on a small scale, brass or bronze, larger diameter ones screws, those massive than brass or bronze flanged and cast iron, hinged or clapper or ball should sit tight supply of non-return valve in the workplace can operate in horizontal or vertical position, and instead of assembly.			
17	M ÖBF 1	Floor Scales Over 60 Tons	pieces
18	M ÖBF 2	Polyethylene pipes, PE100 PN CLASS (6 atm) Ø mm: 32 (Exterior Building Ground)	m
EN 12201-2: 2011 A1'Y the supply of polyethylene pipe and fitting Excluded appropriate work Ø mm Diameter Pressure Atmosphere in the land borders of the units will be installed for use in business.			
19	M ÖBF 3	Polyethylene pipes, PE100 PN CLASS (6 atm) Ø mm: 40 (Exterior Building Ground)	m
EN 12201-2: 2011 A1'Y the supply of polyethylene pipe and fitting Excluded appropriate work Ø mm Diameter Pressure Atmosphere in the land borders of the units will be installed for use in business.			
20	M ÖBF 4	Polyethylene pipes, PE100 PN CLASS (6 atm) Ø mm: 50 (Exterior Building Ground)	m
EN 12201-2: 2011 A1'Y the supply of polyethylene pipe and fitting Excluded appropriate work Ø mm Diameter Pressure Atmosphere in the land borders of the units will be installed for use in business.			
21	M ÖBF 5	Ø 100 Corrugated Pipe supply and laying	m
22	M ÖBF 6	Ø200 Corrugated Pipe supply and laying	m
23	M ÖBF 7	Ø300 Corrugated Pipe supply and laying	m
24	M ÖBF 8	Electric heaters (50 Lt.) AND BOARDS ADDITIONAL	pieces
25	M ÖBF 9	800 Kg capacity sliding door automation	Pieces
26	280,2103	COOLING CAPACITY (NOM): 3 KW. HEATING CAPACITY (NOM):	pieces

	3.5 KW. Wall unit	
	Wall can be used by being suspended in the air directing blades with up / down, right / left capable of routing, instead of mounting the indoor unit.	
27	280.2103-M MOUNT COOLING CAPACITY (NOM): 3 KW. HEATING CAPACITY (NOM): 3.5 KW. Wall unit	pieces
	Wall can be used by being suspended in the air directing blades with up / down, right / left capable of routing, instead of mounting the indoor unit.	
28	VK ÖBF-01 Multi VRF outdoor unit: Rated Heating Capacity: 9.0 kW	pieces
	Air cooled condensers, frequency control DC inverter compressor, the outdoor unit or the outdoor unit is one of the group dealt with menstrual fluid and gas lines, including one line on can be connected to the indoor units of different capacity and type of the branch parts.EUR (cooling efficiency coefficient) values of at least 3.2 and a COP of at least 3.4 with the outdoor unit supplies and all kinds of pipes and electrical connections are pressured with nitrogen after the works, including filling the entire system refrigerant gas even though the spot delivery. Nominal cooling capacity and efficiency values Indoor: 27 CDB / 19 CWB Outdoor: 35 CDB / 24 CWB; heating the environment: 20 ° C DB / 15 CWB Outdoor: 7 CDB / 6 CWB temperature in the pipe length and height difference are data from 0 to 7.5 M. V m. -External Units after installation of the mounting N2 (nitrogen) to 25 bar pressure is gradually removed with the gas to be tested for at least 24 hours under this pressure.	
29	276,101 Wall split air conditioners UNIT 8.500 Btu / h	pieces
	Standard on heat pump with a hermetic compressor (heat-pump) is automatically programmed, wireless remote control, air directing blades with up / down, left / right orientation makes memory against power failure protected, among the first to begin working and the cool-cooling function have delayed work on the compressor protection switch, defrost warning, dehumidification function , cleanable air filter, heating when cold air blowing arrester, sleep function, four-speed indoor fan, overload protection, indoor / outdoor unit frost prevention devices, heating-made air circulation without cooling, automatic function selection feature ,with lights indicating the operation wall mounted wall mounted split the elements to 5 mt of copper pipes and electrical contacts to operate the air conditioner, all kinds of equipment and provision of necessary accessory devices, mounting and delivery work state.	
30	276.101-M EQUIPMENT INSTALLATION wall split air conditioners 8500 Btu / h	Pieces
	Standard on heat pump with a hermetic compressor (heat-pump) is automatically programmed, wireless remote control, air directing blades with up / down, left / right orientation makes memory against power failure protected, among the first to begin working and the cool-cooling function have delayed work on the compressor protection switch, defrost warning, dehumidification function , cleanable air filter, heating when cold air blowing arrester, sleep function, four-speed indoor fan, overload protection, indoor / outdoor unit frost prevention devices, heating-made air circulation without cooling, automatic function selection feature ,with lights indicating the operation wall mounted wall mounted split the elements to 5 mt of copper pipes and electrical contacts to operate the air conditioner, all kinds of equipment and provision of necessary accessory devices, mounting and delivery work state.	
31	276,102 Wall split air conditioners DEVICE 10,500 Btu / h	Pieces
	Standard on heat pump with a hermetic compressor (heat-pump) is automatically programmed, wireless remote control, air directing blades with up / down, left / right orientation makes memory against power failure protected, among the first to begin working and the cool-cooling function have delayed work on the compressor protection switch, defrost warning, dehumidification function , cleanable air filter, heating when cold air blowing arrester, sleep function, four-speed indoor fan, overload protection, indoor / outdoor unit frost prevention devices, heating-made air circulation without cooling, automatic function selection feature ,with lights indicating the operation wall mounted wall mounted split the elements to 5 mt of copper pipes and electrical contacts to operate the air conditioner, all kinds of equipment and provision of necessary accessory devices, mounting and delivery work state.	
32	276.102-M EQUIPMENT INSTALLATION wall split air conditioners 10,500 Btu / h	Pieces
	Technical description: automatically programmed, wireless remote control, air directing blades with up / down, left / right orientation makes memory against power failure protected, among the first to begin working and the cool-cooling function have delayed work on the compressor protection switch, defrost warning, dehumidification function , cleanable air filter, heating when cold air blowing arrester, sleep function, four-speed indoor fan, overload protection, indoor / outdoor unit frost prevention devices, heating-made air circulation without cooling, automatic function selection feature ,with lights indicating the operation wall	

		mounted wall mounted split the elements to 5 mt of copper pipes and electrical contacts to operate the air conditioner, all kinds of equipment and provision of necessary accessory devices, mounting and delivery work state.	
33	281.501	COPPER PIPE GROUP 1/4 "0.8 MM (13 MM İZO) COPPER PIPING SYSTEMS	Pieces
		EN 12449, according to the mouth of the pipe manufactured from copper pipes will be tested against moisture and dust, with a silver-copper alloy welding process, to prevent oxidation of N2 (nitrogen) under will be made. At least 1 meter away from each carrier clamp 1 will be used in copper pipes.Copper piping is completed and before the system is switched to N2 (nitrogen) will be swept by the gas inside the tube. Copper tube copper piping installation work after the completion of the N2 (nitrogen) to 41.5 bar pressure is gradually removed by the gas shall be tested for at least 24 hours under this pressure.With Variable Refrigerant Flow Multi indoor unit mounts to be used in the air conditioning system installation, following isolated with minimum specified thickness and rubber or elastomeric rubber foam, installation of over wrapping installation, commissioning performing the test.	
34	'281.501-M	INSTALLATION COPPER TUBE GROUP 1/4 "0.8 MM (13 MM İZO) COPPER PIPING SYSTEMS	Pieces
		EN 12449, according to the mouth of the pipe manufactured from copper pipes will be tested against moisture and dust, with a silver-copper alloy welding process, to prevent oxidation of N2 (nitrogen) under will be made. At least 1 meter away from each carrier clamp 1 will be used in copper pipes.Copper piping is completed and before the system is switched to N2 (nitrogen) will be swept by the gas inside the tube. Copper tube copper piping installation work after the completion of the N2 (nitrogen) to 41.5 bar pressure is gradually removed by the gas shall be tested for at least 24 hours under this pressure.With Variable Refrigerant Flow Multi indoor unit mounts to be used in the air conditioning system installation, following isolated with minimum specified thickness and rubber or elastomeric rubber foam, installation of over wrapping installation, commissioning performing the test.	
35	281.503	COPPER PIPE GROUP 1/2 "0.8 MM (13 MM İZO) COPPER PIPING SYSTEMS	Pieces
		EN 12449, according to the mouth of the pipe manufactured from copper pipes will be tested against moisture and dust, with a silver-copper alloy welding process, to prevent oxidation of N2 (nitrogen) under will be made. At least 1 meter away from each carrier clamp 1 will be used in copper pipes.Copper piping is completed and before the system is switched to N2 (nitrogen) will be swept by the gas inside the tube. Copper tube copper piping installation work after the completion of the N2 (nitrogen) to 41.5 bar pressure is gradually removed by the gas shall be tested for at least 24 hours under this pressure.With Variable Refrigerant Flow Multi indoor unit mounts to be used in the air conditioning system installation, following isolated with minimum specified thickness and rubber or elastomeric rubber foam, installation of over wrapping installation, commissioning performing the test.	
36	281.503-M	INSTALLATION COPPER TUBE GROUP 1/2 "0.8 MM (13 MM İZO) COPPER PIPING SYSTEMS	Pieces
		EN 12449, according to the mouth of the pipe manufactured from copper pipes will be tested against moisture and dust, with a silver-copper alloy welding process, to prevent oxidation of N2 (nitrogen) under will be made. At least 1 meter away from each carrier clamp 1 will be used in copper pipes.Copper piping is completed and before the system is switched to N2 (nitrogen) will be swept by the gas inside the tube. Copper tube copper piping installation work after the completion of the N2 (nitrogen) to 41.5 bar pressure is gradually removed by the gas shall be tested for at least 24 hours under this pressure.With Variable Refrigerant Flow Multi indoor unit mounts to be used in the air conditioning system installation, following isolated with minimum specified thickness and rubber or elastomeric rubber foam, installation of over wrapping installation, commissioning performing the test.	
37	281.302	CONTROL DEVICE and extend the WIRELESS SENSOR	Pieces
		Between all functions of the indoor unit can be controlled without any cable connection control devices and sensors, including, procurement, installation and delivery in operation	
38	281.302-M	CONTROL DEVICE AND SENSOR ASSEMBLY extends from WIRELESS	Pieces
		Between all functions of the indoor unit can be controlled without any cable connection control devices and sensors, including, procurement, installation and delivery in operation	
39	VK ÖBF-02	Additional R410A GAS FILLING	Kg
40	105-607	Prismatic Modules Stainless Steel Water Depot 10,0 m³	M3

Technical description: All of the internal, external materials, tension rods, bolts, foot, manhole, ventilation and connection mouths made of AISI 304 stainless steel are made from stainless material and their fittings are made from stainless or brass material, the strength calculations and projects are approved by management. Cold forming, bending or bending method in the conditions; Replacement of the modular water reservoir, which has PVC or polyethylene diaphragm which is connected with bolts by using silicon and epidemic rubber seals and which is connected with bolts at the bottom of the tank, without replacing any welding operation in the manufacturing and installation site, without using welding process.

Note:

- Stainless steel or chrome-plated brass fittings on the tank, stainless steel tank foot, level float, inlet-outlet ball valves, ball valve, air discharge breathing apparatus, storage overflow mouth and pipe, level indicator, valves and drain tap, Lower manhole maintenance cover, warehouse climbing ladder fiyatı.
- Unit prices for intermediate values are found by interpolation.
- Schedule for tank sheet thicknesses is given in general description of sanitary installation.

3. ELECTRICAL INSTALLATION

1	701-201 Special sheet panel-front cover	pieces
Technical Description: Panel on frame with dimensions: height 1.800 mm , depth 350 mm and width 500 mm made of gusset or profile, coated with 2mm DKP sheet, totally closed, with locks and covers on front or rear or both sides, with holes for installing other devices if necessary depending on the project, painting of the panel inner and outer frame against external impact with oven-dried cellulose paint at desired color, any small material, terminals for device connection, labor costs and on-site assembly.		
2	705-103 Built-in sheet table-0.20-0.30 m² (0,30 m² included)	pieces
Technical Description: Unit Price No. As same as 704-100 and additionally; a clamp frame for embedding the box into the wall shall be available. The sheet box can be easily mounted to this clamp frame. Measurement: Unit Price No. As same as 704-100.		
3	710-100 Copper Bar supply and assembly	kg
Technical Description: If the installation has to be protected against humidity, dust and mechanical impacts, the boards shall be made of cast iron or aluminum and waterproof boxes with sealed covers being spliced to each other. In cases where connections with sections higher than 16 mm ² .have to be used, distribution shall be enabled by copper bars in separate boxes. Entries to and exits from the board shall be enabled by sealed openings made of stainless steel. Upon opening a cover for the fuses to be installed, it shall be possible to control the switches even when the cover is closed. Grounding bars for safety lines and isolated bars for the neutral lines shall be available. All parts carrying current shall be made of galvanized or stainless steel. The Bar unit price shall be paid over unit price no 710-100. Construction of empty waterproof board with depth of 17 cm minimum, transport to workplace, assembly, including any material and labor and hand over in operating condition.		
4	713-204 Selector package switch-behind board- up to 3x25 A	pieces
Technical Description: Supply, assembly, including any material and labor of a package switch equipped with an assembly fitting, in such way that control knob and position scale shall be in front of the board. Supply of package switch with positioning dial and control leer or knob, for board assembly, with plastic or sheet cover, rotating pivot pin, with positions as specified in the project, contact opening and closing by turning including assembly, any material and labor.		
5	718-102 Dry type non-protective contactor, up to 3x16 A	pieces
Technical Description: Supply of dry-type three-phase contactor, class AC3, for frequent opening and closing, to be mounted behind board, without protective relays, with separate control knobs to be assembled on the board front including assembly, any material and labor. Measurement: The number of mounted contactors shall be counted.		
6	718-310 Time relay, used for lighting control. (Measurement pieces, preparation 60%)	pieces
Technical Description: supply of time relay being designed for use in specific voltage limits, with type examination test reports and CE compliance marking according to the regulation for electrical equipment (2006/95/AT), Electromagnetic compatibility regulation (2004/108/AT), TS EN 60730-2-7 standards and directives, ensuring lighting control at desired times by calculation of the adjusted time zone through the program, equipped with output contacts, battery, user manual including transport to workplace, any supplementary small material, testing and handing over in operational condition.		
7	718-507 Residual current protection switch -up to 4x25 A (30 mA)	pieces
Technical Description: Supply of residual current protection switch, designed in compliance with electrical indoor installations regulations, specifications and standards, sensing the fault current in the phases and neutral line in case of any leakage in the electrical installations and ensuring safety of life and property by switching off the circuit in a period of 10 to 30 ms, operating under 220 V in single-phase circuits and under 380 V under three-phase circuits, with differential coil, with test button to control whether the system operates or not, mountable to carrying rails in the board, protected against external impacts, compliant with CEE 27 and other international standards,30 m A for life protection, 300 mA for fire protection, operative even when neutral line is disrupted including assembly, any material and labor and handing over in operating condition.		
8	718-520 Residual current circuit-breakers up to 4x25 (30mA)	pieces
Internal Electrical Installations Regulations, specifications and phases is any leakage in the electrical		

	<p>system made according to standard and fault current sensing on the neutral line consisting of 10 - 30 ms. cut cycle time in providing life and property by, for single-phase circuit 220 V three-phase circuit at 380 V working differential coil, which test button above to check that the system is working, the tables inside transport rails protected against external influences that can be mounted, CE 27, and in accordance with international standards, 30 mA for life protection, 300 mA for protection against fire, procurement, installation even operable leakage protection switch in the neutral line disconnection in value, all kinds of materials and labor including delivery business case.</p>	
9	718-521 Residual current circuit-breakers up to 4x40 (300mA)	Pieces
	<p>Internal Electrical Installations Regulations, specifications and phases is any leakage in the electrical system made according to standard and fault current sensing on the neutral line consisting of 10 - 30 ms. cut cycle time in providing life and property by, for single-phase circuit 220 V three-phase circuit at 380 V working differential coil, which test button above to check that the system is working, the tables inside transport rails protected against external influences that can be mounted, CE 27, and in accordance with international standards, 30 mA for life protection, 300 mA for protection against fire, procurement, installation even operable leakage protection switch in the neutral line disconnection in value, all kinds of materials and labor including delivery business case.</p>	
10	723-401 Automatic control central compensation coil-400 to V	kVAR
	<p>Automatic control relay complete with reagents, other features BFT No. Such as 723-300 (cos m., Capacitors, contactors and to remove stuck a circuit fuses belong to this circuit, cos m and relay transformer current required for the control circuit fuses, which controls the switch cam switches and thermal magnetic protector switch is included in the price.</p>	
11	725-401 100-500 current measurement transformer / 5A	Pieces
	<p>Boring and the free types of instruments to be used in the same quality, strength 5-10 VA, class: 0,5 - 1, supply and installation of measuring current transformer.</p>	
12	725-731 Scheduled Time 725-731 Three Phase Electronic Type (active-reactive) meter, 3x230 / 400 V 3x5 (7.5) Quantity	Pieces
	<p>IEC 1036-96, EN 62053-21 / 23, according to TS 62052-11 standard, Science, Industry and Technology Ministry trademark registration and the Registration Certificate, reactive measurement while capacitive and inductive measurement that can measure separately, the maximum in their specified current and voltage range Class 2 can measure the error class, a minimum of 5 (7.5) of the input current, working with frequency 50 Hz, information communication with Counter (TSE comply with the EN 62056-21 standard) can be provided with optical port (standard on adhering to the data communication in the EDIS and OBIS code system will be easily understandable terms in but the counter display will be used.) Counter Electricity Tariffs according to the Regulation, the resolution of one day per minute adhering to counter program with the divisibility properties of up to 8 different time zones, the IP 51 protection class (EN 60529) and dust made to enter the water, background on the counter-light and 6 full, with 2 decimal digit digital display, measuring instruments and electrical counters Directive (76/891 / EC) suitable TEDAŞ approved, three-phase four-wire electronic type active-reactive Meters and supplying the base, rather than transfer the business, making the delivery of installation and connection work state. (CTs fee is also paid in the current transformer system.)</p>	
13	724-401 Switch fuse (3 kA)- up to 16 A	Pieces
	<p>Technical Description: Supply of switch fuse, to serve as switch as well, 3 kA breaking capacity, phase breaking feature for 2- and 4-poles types, B and C curve including assembly, any material and labor</p>	
14	724-406 Switch fuse (3 kA) - up to 3x16 A	Pieces
	<p>Technical Description: Supply of switch fuse, to serve as switch as well, 3 kA breaking capacity, phase breaking feature for 2- and 4-poles types, B and C curve including assembly, any material and labor</p>	
15	724-407 Switch fuse (3 kA) - up to 3x40 A	Pieces
	<p>Technical Description: Supply of switch fuse, to serve as switch as well, 3 kA breaking capacity, phase breaking feature for 2- and 4-poles types, B and C curve including assembly, any material and labor</p>	
16	725-904 Signal light up to 250 V	Pieces
	<p>Technical Description: supply of signal light, compliant with TS 2575 EN 60073 standard, built-in type, in colors as specified in the standard depending on application including transport to workplace, assembly an connections and handing over in operating condition (plug and bulb are included in the price.)</p>	
17	726-304 Grounding line -16 mm² (without conduit)	M

	Technical Description: Grounding line without conduit, to be installed on free consoles, crochets including any material and labor. (Measurement: m)	
18	727-412 Lead-free PVC isolated (NYM) cable-3x1,5 mm²	M
	Technical Description: Column or supply line installation with plastic isolations of the phase and neutral conductors according to the actual lists of the electrical inner installations regulation including conduits, crochets, junction box, joints, elbows, terminals, iron console, paint, any material and labor. MEASUREMENT: The conduit length including junction box, joint is the length of the supply line. No separate payment shall be made for junction boxes, joints and crochets, in case of lengths exceeding 10 meters 1 junction box shall be placed at each 10 meters. For intermediary items, payment shall be made from the higher level.	
19	727-511 1 kV underground cable (NYY) -3x6 mm	M
	Building inside on walls, shelves or hooks on the wall, into the ceiling or channels, to ensure the establishment of underground cables to be laid in the channel outside the building, gate and security pipes, all kinds of material crochet and including labor.	
20	727-523 1 kV underground cable (NYY)-3x25+16 mm²	M
	Technical Description: Supply of underground cables to be installed surface mounted o the wall, ceiling or channels through consoles or crochets in case of indoor, to be installed into channels in case of outdoor including transport to workplace, line and safety conduits any material, crochets and labor.	
21	727-526 1 kV underground cable (NYY)-4x6 mm²	M
	Technical Description: Supply of underground cables to be installed surface mounted o the wall, ceiling or channels through consoles or crochets in case of indoor, to be installed into channels in case of outdoor including transport to workplace, line and safety conduits any material, crochets and labor.	
22	727-527 1 kV underground cable (NYY)-4x4 mm²	M
	Technical Description: Supply of underground cables to be installed surface mounted o the wall, ceiling or channels through consoles or crochets in case of indoor, to be installed into channels in case of outdoor including transport to workplace, line and safety conduits any material, crochets and labor.	
23	742-265 Fluorescent armature T1 (plexi-glass)-1x40 W	Pieces
	Technical Description: Type T1 plexi-glass fluorescent armature. (**) Supply of surface mounted plexi-glass armature of type to be approved by the administration, with special profile made of sheet with minimum thickness 0,50 mm., depth of 10 - 15 cm., depending on the type and number of bulbs, frame dimensions: 3 - 4 mm. thickness, with easily detachable cover made of mat plexi-glass or transparent prism plexi-glass with light transmittance of minimum 75 %, with frame made of sheet with special oven-dried paint or oxal aluminum, bulb shall be spliced side by side or end to end if necessary, TSE certified ballasts, lock-type socket with starter made of fire resistant material, TSE certified connecting cables including any material and labor, transport to workplace and assembly.	
24	742-532 ATY2-4x18 W (double-parabolic reflector) decorative drop ceiling armature	Pieces
	Technical Description: With special profile made of DKP with minimum 0,7 mm. thickness, hole diameter 9-11 cm., with width and length depending on bulb type and number, back sections shall be enhanced by additional twists, designed in such way that the heat generated by ballasts and the hot air in the environment shall be transferred outside from the armature, housing with special air channels, with special frame, with mounting brackets allowing fast and easy intervention, providing light distribution in form of a symmetric bat wing, with double-parabolic eloxal pure aluminum reflector standing upright or parallel to the fluorescent bulbs, made of eloxal high-purity (99,9%) anodic aluminum (with eloxal aluminum lamellar stripes placed upright to fluorescent bulbs with a distance of to 10 cm in case of single parabolic), protection class IP 20, coated with oven-dried paint and color to be approved by the administration (Armature efficiency shall not be less than 70%. If deemed necessary, the administration may request from the manufacturer the testings related to efficiency values and to prove such values by a certificate to be obtained from an institution laboratory), with fluorescent bulbs and lock-type sockets made of fire-resistant material, with TSE certified ballasts and starters, with TSE certified connecting cables resistant to high temperatures including transport to workplace, any material, labor and handing over in operating condition.	
25	742-125 Type L2 Waterproof fixtures	Pieces
	Same with Type L 1, only ovoid.	
26	734-101 Normal outlet, lighting outlet	Pieces
	Technical Description: Supply of surface or flush mounted lighting outlet (armature excluded) in Peschel,	

	<p>Bergman or PVC conduit, with minimum 2,5 mm² lines and minimum 1,5 mm² outlet lines, phase and neutral conductors colored according to TS 6429, plastic insulation including junction box, terminal, switch, armature, fixing block and any material, transport to workplace and labor (without excluded). No price difference shall be paid if wall thickness is higher than normal.</p> <p>Measurement: No separate payment shall be made unless line length exceeds 35 m.. For line lengths after 35 m, a separate payment for supply line shall be made on unit price no. 727-000.</p> <p>For the normal outlets and luster outlets a single outlet shall be taken as normal. Additional outlets connected to these outlets shall be deemed as parallel. In the Two-way switch outlet, two two-way switches and one outlet shall be deemed as normal outlet whereas two-way switch outlet and connected other outlets shall be deemed as parallel. The deviator switches shall be paid on their own unit prices. Among outlets controlled by switches, the first two outlets in the same place shall be deemed as one switch outlet whereas others shall be deemed as parallel outlets. If a circuit breaker is used instead of a switch, the switch cost shall be reduced from the price and the circuit breaker price shall be paid separately. Three-phase outlet is similar to normal outlet where each armature is supplied with three-phase four or five conductors. In the three-phase outlet the switch, contactor and contactor control lines shall be paid separately. If each armature is supplied from a separate phase, the first outlet shall be paid over single-phase normal outlet whereas other connected outlets shall be paid over single-phase parallel outlets. The armature prices shall be paid over unit price no. 742-000, separately.</p>	
27	<p>734-102 Switch outlet, lighting outlet</p> <p>Technical Description: Supply of surface or flush mounted lighting outlet (armature excluded) in Peschel, Bergman or PVC conduit, with minimum 2,5 mm² lines and minimum 1,5 mm² outlet lines, phase and neutral conductors colored according to TS 6429, plastic insulation including junction box, terminal, switch, armature, fixing block and any material, transport to workplace and labor (without excluded). No price difference shall be paid if wall thickness is higher than normal.</p> <p>Measurement: No separate payment shall be made unless line length exceeds 35 m.. For line lengths after 35 m, a separate payment for supply line shall be made on unit price no. 727-000.</p> <p>For the normal outlets and luster outlets a single outlet shall be taken as normal. Additional outlets connected to these outlets shall be deemed as parallel. In the two-way switch outlet, two two-way switches and one outlet shall be deemed as normal outlet whereas two-way switch outlet and connected other outlets shall be deemed as parallel. The deviator switches shall be paid on their own unit prices. Among outlets controlled by switches, the first two outlets in the same place shall be deemed as one switch outlet whereas others shall be deemed as parallel outlets. If a circuit breaker is used instead of a switch, the switch cost shall be reduced from the price and the circuit breaker price shall be paid separately. Three-phase outlet is similar to normal outlet where each armature is supplied with three-phase four or five conductors. In the three-phase outlet the switch, contactor and contactor control lines shall be paid separately. If each armature is supplied from a separate phase, the first outlet shall be paid over single-phase normal outlet whereas other connected outlets shall be paid over single-phase parallel outlets. The armature prices shall be paid over unit price no. 742-000, separately.</p>	Pieces
28	<p>734-104 Parallel sorties, sorties Lighting</p> <p>"Pesel, Bergman or lignin lines in PVC pipe at least 2.5 mm² sorties lines at least 1.5 mm² phase and neutral conductors TS 6429 by junction to be denominated colored plastic insulated, terminals, switches, fittings, fixing wedge, all kinds of material supply, transport and labor, including work on the complete surface mounted or flush-mounted lighting made the sortie (excluding fixtures). In cases where the wall thickness is greater than normal price difference shall be paid.</p> <p>Size: Linyi length of 35 m of height will not be paid unless they exceed the cost also. To 35 m of line after line, as also the supply line Unit Price No. Shall be paid from 727-000.</p> <p>A single sortie sortie will be normal in the regular sorties and chandeliers. This additional sorties connected to lines shall be considered as parallel. Væver sorties in the two Væver key and a normal Væver the sorties sorties, consequently other parallel sortie sortie will be accepted. Pack diverters switches paid separately from their unit prices. Located in the same locality of the first two sorties sorties sorties, which is managed by commutator commutator switch, others will be considered in parallel sortie. When the key switch is used instead of keys will be deducted from the price, the price is to be paid additionally switch. Three-phase sorties, conducted every four or five fixtures to three-phase power supply conductors similar to regular sorties. Three-phase sortie switch contactor, contactor control lines also paid. The first sortie into the single-phase feed from the separate phases each regular fixtures, other related single-phase parallel</p>	Pieces

	sorties sorties are to be paid. Fixtures cost unit price No. He paid separately from 742-000. "		
29	735-102	Safety line plug outlet	Pieces
	Technical Description: Measurement: If the line exceeds 35 m, payment for the supply line shall be made over unit price no. 727-000.		
30	742-456	LED PRJ - up to 150 W (including 150 W) (220 V. AC.), Led Projectors	Pieces
	Technical Description: Supply of projector, housing and front glass frame made of cast aluminum, coated with oven-dried paint, tempered front glass, resistant to temperature up to 250 C° and impacts, protection class IP 20, coated with silicon seal between the glass and housing, with junction box behind or under the housing, consisting of high-power LEDs with special lenses of minimum 100 lumen per watt, equipped with constant current LED driver and cooler, minimum 30.000 hours of luminous service life, minimum 90 % efficiency, operating temperature -20°C to +85°C, with necessary assembly apparatus for surface, flush or ground mounting, manufactured in accordance with TS EN 60598-1, TS 8702 EN 60598-2-5, TS EN 61347-2-13 standards and the regulation 2006/95 /AT related to electrical equipment designed for use in specific voltage limits, put on the market with CE Conformity marking including transport to workplace, any material, labor and handing over in operating condition.		
31	983-102	Ground electrode (rod) electrolytic copper according to TS 435 / T1 standard	Pieces
	Technical Description: Supply of electrolytic copper rod of ø 20 mm. diameter and minimum length of 3,5 m., compliant with TS 435/T1 standard, screwing of conical headpiece to the end for penetrating into the soil, ensuring a connection by a thread of 4 cm length if the rod shall consist of 2 parts, burying into the ground at least 60 cm deep as of the surface level, connection to down conductors and building up conductors by silver welding or fixing brackets made of red matter, including any material and labor. Note: If the ground consists of rocks appropriate soil shall be sought in the surrounding.		
32	980-214	average excitation path dl=60 m, active capture rod	Pieces
	Technical Description: Supply of active lightning rod, with characteristics as written in the specification, with early warning operation, high corrosion resistance, made of stainless steel or material with stainless characteristics (for example chrome coated copper, chrome nickel, stainless steel etc.), resistant to highest wind speed, flawless operation temperature -40°C to +120°C, protection class IP 65, (delta)T warning time minimum 15 µs, resistant to the lightning test current of class H, 100 kA as specified in TS EN 50164-1 and shall not cause any significant damage upon the test, compliant with the (NFC17-102) and (UNE 21.186) standards as well as the (TSE K 122) certification criteria, ISO 9001 and CE certified, with an operation warranty certificate of minimum 15 years approved by the Ministry of Science, Industry and Technology including transport, mounting to the post, connection of down conductors, any material, labor and handing over in operating condition. NOTE: 1- The active lightning rod type examination test shall be conducted at laboratories accredited by TURKAK and the related reports shall be submitted to the administration. 2- A document which shows that the IP 65 protection class test has been conducted by an institution accredited by TURKAK shall be submitted to the administration.		
33	980-100	Metal catcher (Lightning protection system)	Pieces
	Technical description: Ø 20 mm. (40 mm. Part with screw) 800 mm. The connection of the roof connector (as in EL-2 No. 2) to the roof conductor by means of bolted clamps made of copper material, in the workplace of the catching end made of solid copper with a conical end with a conical end, to be firmly fixed to the roof in conformity with this catching end, Screwing of this terminal to the wooden wedge, delivery of all kinds of small workmanship and workmanship.		
34	981-101	50 mm² electrolytic copper wire and roof up and down conductors installation	M
	Technical Description: Roof and conductor installation with bare electrolytic solid copper conductor, jagged or screw type fork fixing crochets made of red cast or similar material, with measures to prevent any corrosion in the capture rod or connection points to the ground electrode, silver welding at joints of the conductors if necessary, including inspection, terminals, any material and labor.		
35	985-101	Thermo welding joint up to 32 gr welding powder	Pieces
	Technical Description: Splicing of conductors of any section by exothermic reaction of aluminum copper oxide powder including pot, pot pliers, scraper, brush, lighter and any material and labor.		

36	5.5.3.2.1/009	AD1-70 / 15 TYPE, RANGE 80 KG.TEK console galvanized steel lighting pole	Pieces
		AD1-70 / 15 TYPE, RANGE 80 KG.TEK console galvanized steel lighting pole	
37	20.5.1.-003	150W sodium vapor lamp, iron, wood and concrete poles, except the bulb	pieces
		150W sodium vapor lamp, iron, wood and concrete poles, except the bulb	
38	08.2.2-01	50mm, Cable Protection Pipe, 450N (non-metallic, underground)	m
		50mm, Cable Protection Pipe, 450N (non-metallic, underground)	
39	982-102	Building Engirdling Conductor 30x3.5 mm Galvanized Steel Sheet	m
		Made building engirdling conductor installation of conductors, building exterior around at least 60-80 cm depth in the open channel in every kind of soil, the closure of the conductor laying and the channel, the rivets or welding electrodes, all kinds of small parts and included labor.	
40	742-333	Fibreglass Reinforced Polyester hull. U1 2x40 W. Fluorescent Fixture	Piece
		Dust, moisture and insects to enter the rubber gasket, TS 60598-1, TS 8698 EN 60598-2 / 1 standards, stainless steel hinges serving as latches that can be opened depending on the body with internal pattern can withstand high temperatures in the icy 3 mm thick acrylic cover, the high temperature resistant PIVMA (polymethylmethacrylate) capped shocks, fire-resistant glass fiber reinforced PC (polycarbonate) hull special mounting bracket IP protection class glass fiber reinforced polyester hull stainless steel armature for installation.	

Section 3.3.

Technical Specifications for Gaziantep Araban Solid Waste Transfer Station

1. CONSTRUCTION WORKS

Job Name: GAZİANTEP ARABAN SOLID WASTE TRANSFER STATION

Job Group: Main Group>Construction Works





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S. No	Pos No	Production Type	Unit		
1	07.006	Transport of fill material: 20 km	Ton		
2	15.140/İB-1	Making ditch and foundation fill with stabilized (08 008) (material)	m ³		
	<p>Technical Description: The price of 1 m³ of making ditch and foundation filling with stabilized material including all loading, unloading and figuration for the stabilized material which is prepared within the rules and specifications at Pos. No. 08.008 and figured by the side of its due place; placing inside the ditch or foundation floor by receiving from the side of ditch or foundation; clearing off the roots, grass, clods and stones; laying manually in the form of layers of 20 cm; compacting by hand ramming; leveling the upper surfaces and leveling, with all costs of loading, unloading and figuring, contractor's profit and overhead costs (only excluding the transport of the stabilized material from the quarry to the work site). Measurement: It is the remaining quantity in cubic meters by subtracting the outer volumes of pipes and industrial manufactures within the fill section from the volume calculated over the dimensions in the approved application drawings or attachments of the sections of ditch and foundation filled with stabilized material.</p>				
3	15.150/K	Figuring the sand, gravel, clay, all-in mix and similar material	m ³		
4	17.141/İB	Concrete border construction	m		
	<p>Technical Description: 1 meter price of: border with 18x30 cm dimensions and with 3/5 cm slope on front upper side and made of 350 dose concrete depending on the project, including any material and wastage required for layering with 400 dose mortar over base layer made of 200 dose lean concrete, labor, transport to workplace, loading and unloading costs, contractor profit and overheads (excluding transport to workplace, loading and unloading, stapling and figuration costs of cement, sand and gravel).</p>				
5	23.260/İB-1	Construction of reinforced concrete gauze with post of 2 63 m height and protective fences	m		
	<p>Technical Description: 1 meter price of: construction of reinforced concrete gauze with 2.63 m height and protective fences, preparation of reinforced concrete twin pole, gauze with 3 mm thickness and 5x5 cm interocular distance, guy wire and galvanized barb wire at workplace in accordance with the approved typical project, placing of reinforced concrete poles with distance of 2.50 m supported with 1 buttress at corners and 2 buttresses at each 30 meters along the fence, placing of fence poles into 250 dose concrete of 40 x 40 x 50 cm and buttresses into 250 dose concrete of 60 x 60 x 50 cm, installation of three lines of guy wire of 3 mm thickness along the top, middle and bottom of the galvanized gauze for a proper appearance, installation of 2 lines of barb wire above the upper guy wire, assembly of a door dimension and type as specified in the typical project for access to the protected field, costs for applying padlock, contractor profit and overheads included (transport, loading, unloading, stapling of iron, sand, gravel and cement only and padlock cost excluded). Measurement: The door cost shall be separately paid over the related item according to the weigh protocol.</p>				
6	37.092/2	Layering of topsoil - 10 to 15 cm thickness	m ³		
	<p>Technical Description: The price per cubic meter of supply of topsoil, including all workmanship, material and waste, costs of machinery and equipment and all types of loading, transport, unloading, contractor's profit and overhead costs for the excavation, loading on vehicles, M-meter transport,</p>				

	unloading, figuring of the topsoil necessary for the growth of plants in the nursery, parks and afforestation areas. Measurement: The figured topsoil shall be calculated in cubic meters, 90% of which shall be taken. M 10 000 m (07.006/22)				
7	37.092/3	SUPPLY OF TOPSOIL.(INCLUDING TRANSPORT)	m ³		
	Technical Description: The price per cubic meter of laying of topsoil at a thickness of 10-15 cm of the topsoil over the area to be covered, excluding the supply of the topsoil, including all workmanship, material and waste, costs of machinery and equipment and all types of loading, transport, unloading, contractor's profit and overhead costs, for laying at a thickness of 10-15 cm of the topsoil taken from the figured pile over the nursery, parks and afforestation areas, removing all foreign materials, and making it fit for vegetative growth. Measurement: It shall be measured in cubic meters over the figured pile dimensions of the topsoil according to the conditions in Pos. No. 37.092/2, after the laying, the thickness shall be checked.				
8	B-15.044	Leveling and fine adjustment on any ground (roads)	km		
	Technical Description: Per kilometer price for adjusted roads: upon completion of engineering structures and earth works in line with the related principles, fine leveling and adjustment of surface, cut-off, fillings and scarps according to the form, dimension and elevation stated in the cross sections by motor grader or other bladed leveling machines and handcrafting as well as specified in the 9th section of the Roads Technical Specification attached to the contract, including labor, material and costs, contractor profit and overheads.				
9	İ-ÖBF 6	Bunker Building and Supporting Steelwork Production	m ³		
	One waste loading bunker shall be built by the contractor on the platform as described in the application drawings. The height of the bunker shall be 6,25 m from the ground and 6 m from the platform surface. All the pieces of the bunker, including the carrying structure shall be manufactured of galvanized material. Its roof and three fronts shall be covered with deck sheet painted over galvanization. Thereby, the garbage will not be wetted in rainy weather. The self-compacting, sliding-floor garbage semi-trailer trucks which come under the bunker shall be filled with garbage from the top with no requirement of intervention. The garbage shall not be kept in the bunker. The unloaded garbage shall be directly transferred to semi-trailer trucks. This shall also prevent the spilling of garbage fluids. Still, the surfaces on which garbage fluids are spilled shall be cleaned with clean water, and led into the cesspit through the installation, not allowing them to leak into the soil.				
10	İ-ÖBF 7	Supply and Installation of 3x7 Container Weighbridge Cabin	piece		
	Walls: For the container, the outer height is 252 cm, the inner height is 235 cm; and the inner and outer covering is sandwich panel. The panel thickness is 5 cm. Between panels is polyurethane material. The maximum use temperature of the polyurethane material must be 70-80°C. The endurance temperature is 100-110°C. No bacteria grow inside. Since the compression strength is high, its use performance is good. Its fire resistance rating is Euroclass B. White color wainscot shall be used in the internal wall. Roof Insulation: The frame will be 40x40 section and white wainscot be laid. Galvanized deck sheet of 0,60 and 8 cm Izocam shall be used for insulation. The declared thermal conductivity (at 10°C) is $0,031 \leq \lambda < 0,043$ w/mK. Depending on the declared thermal conductivity value, Izocam glass wool products of 035, 040 and 045 are thermal conductivity groups. Water vapor diffusion resistance factor is $\mu=1$. Depending on the product type, the use temperature is within the range of +50/+250°C. Unbound glass wool products can be used up to 500°C. In addition, special glass wool products are produced for used in the range of -200/+450°C. The melting temperature is >1000°C. Its dimensions do not change even when exposed to heat and humidity. It does not degrade, rot, grow mildew, get corroded or rusted over time. It is not destroyed by bugs or microorganisms. It is not hygroscopic or capillary. Bare glass wool products are in Class A1 which are "non-combustible materials" according to TS EN 13501-1. Flooring: 16 mm concrete panel is used on 80x40 section. It derives its values of resistance to bending, pressure and impact from the wooden structure inside. The deflection factor: 1.8 N/mm ² (Safety				

	<p>Coefficient = 5). Elasticity modulus: 4500 N/mm², tensile strength: 0.8 N/mm² (Safety Coefficient = 5). All these values represent the seismic and impact strength of concrete panel. The impact strength shows superiority compared to gypsum boards. The concrete panel is PVC covered.</p> <p>Doors: The external door is iron 90x210 cm; internal doors and WC doors 72x210 cm.</p> <p>Windows: 40x40cm laminated glass application may be made for WC-shower containers, and for other glasses, 110x110cm window, up to 32 mm glass may be applied. Such laminated glass application will provide sound insulation up to 37 Db. It is not affected by solar radiation and external factors. It is not deformed; absolutely impermeable by special black design EPDM seal and gray TPE seal. Inclinations of 15° and 40° on the PVC section accelerates the discharge of water. No water leak will occur in the rain.</p> <p>Electrical Installation: It shall be installed to standards. TSE certified products shall be used. The product has the air-conditioning line. 3x2.5mm H05VV-F(FVV-n) TRR KABLO 300/500 V PVC insulated, PVC cased, multi-core cables, flexible conductivity are used.</p> <p>Plumbing Installation: The water piping shall be laid for the plumbing installation; and a la Turca toilets at WCs, lavatories, shower battery at the showers etc. ceramics and fixtures shall be installed. All materials used for plumbing installation are 1st class TSE certified material compliant with the application drawings.</p> <p>Color: As designated by the administration.</p>				
11	İ-ÖBF 8	Mosaic Ceramics	m ²		
	<p>The price of 1 m², including all workmanship, material and waste, costs of machinery and equipment and all types of loading, vertical and horizontal transport, unloading, contractor's profit and overhead costs, for the removal of any dirt, dust, burr and other residues that prevent adhesion from the smooth surface compliant with the approved application drawings and moistening; applying the tile adhesive on the surface which is cement based, standard performance, reduced slipping, and grooving with special rake; laying the meshed (laid on mesh) ceramic mosaics (enameled/non-enameled ceramics) of all colors, dimensions, shapes and pattern; filling the joints with a joint filling of cement-based, standard performance; cleaning the covered surface.</p> <p>Measurement: The area covered according to the application drawings shall be measured.</p>				
12	İ-ÖBF 5	Excavation by machine of all types of materials (soil, rock, loose etc) at any depth and width	m ³		
	<p>The price of 1 m³ of excavation, including all workmanship, material and waste, costs of machinery and equipment and contractor's profit and overhead costs, for the excavation by machinery on all types of ground; loading on vehicles; transport up to 25 meters, unloading at storage, filling or banking place; laying; filling the gaps at the excavation site after the construction; grading and correcting the floor and side walls, storage and filling at the excavated site.</p> <p>Measurement: The volume of the excavation shall be calculated over the excavation application drawings.</p> <p>NOTE: 1) This unit price does not include water surcharge, shoring, transport beyond 25 m, watering and compacting the fill. 2) No surcharge for depth shall be paid.</p>				
13	İ-ÖBF 3	Supply and planting the trees of black locust, juniper, Turkish oak, Aleppo pine and necessary materials.	piec e		

KULLANILAN BİTKİLER / PLANTATION USED

LATİNCE ADI / LATIN NAME	ADI / NAME	SEMBOL/ SYMBOL	BOY-ÇAP/ HEIGHT/DIA.	ADET/NOs
Robinia pseudoacacia	Yalancı Akasya / Black Locust		Ø10-12	20
Juniperus oxycedrus	Katran Ardıcı / Prickly Juniper		150-175	186
Quercus brantii	Palamut Meşesi / Turkish Oak		Ø10-12	6
Pinus halepensis	Halep Çamı / Aleppo Pine		100-125	20

14	İ-ÖBF 9	Supply and installation of watchguard cabin of 220x220 dimensions	piec e		
<p>1-) OUTER WALL AND CEILING</p> <p>Polyurethane must be injected into the two-sidewalled material for the panels (CTP glass, fiber reinforced, Polyester) which constitute the walls and ceiling of the security cabin and watchguard cabin to provide sound and heat insulation for the security cabin and watchguard cabin.</p> <p>2-INSULATION</p> <p>After providing insulation to the panels of the security cabin and watchguard cabin, these panels must be applied silicone paste around against dust, moisture and other weather conditions.</p> <p>3- MAINTENANCE AND RESISTANCE</p> <p>The security cabin and watchguard cabin must not be affected by the solar radiation; be corrosion-proof; no degradation must occur.</p> <p>The interior and exterior surfaces of the security cabin and watchguard cabin must be resistant to 60 degrees of solar radiation and -50 degrees of cold.</p> <p>4- WINDOWS AND GLASSES</p> <p>The glasses of the security cabin and watchguard cabin must have aluminum panes painted with white electrostatic paint. They must be 4 mm tempered glass.</p> <p>5- ELECTRICAL INSTALLATION</p> <p>The electrical installation of the security cabin and watchguard cabin must be laid as 2.5 NYA cable. At the corner of the security cabin and watchguard cabin, there must be an outlet of 16A automatic fuse and earthing, switch and phone outlet. On the ceiling, there must be fluorescent lighting fixture.</p> <p>6- DOORS AND GLASSES</p> <p>For the door of the security cabin and watchguard cabin, aluminum sections of white color electrostatic powder painted must be used; and in addition, the door must be installed with 3 hinges. The doors must have safe locks; the lower mirror side of the door must be made of polyurethane injected two-sidewalled panels. The window on the door shall have 4 mm glass. The dimensions of the door: Width: 71 cm; Height: 186 cm.</p> <p>7- CARRYING SYSTEM AND BASE</p> <p>The base of the security cabin and watchguard cabin must be constructed of chassis material of at least 1.5 mm metal sections. The sections must be painted with chassis antirust paint. The sections must be laid with concrete panels of 16 mm in thickness on the chassis; the concrete panels must be painted over completely with industrial paint. The security cabins and watchguard cabins must have warranty of at least 2 years against manufacturing and workmanship defects.</p>					
15	İ-ÖBF 4	Making work site signboard	piec e		
<p>Technical Description: Manufacturing the work site signboard of 2.5m x 3.0m in accordance with the directives and standards of the administration, with details provided by administration; painting and inscribing the same.</p>					
16	KGM/16.002/	Plain concrete at each dosage (with concrete mixer)	m ³		

	K				
	<p>Technical Description: Preparation of plain concrete by concrete mixer at each class according to the instructions to be given by the administration and in compliance with the principles and conditions stated in the related sections of the KTŞ.</p> <p>Costs included in the unit price:</p> <p>Supply and storage of required machinery and equipment and water, and if necessary, chemical curing material and all-in material, sand and gravel screened and irrigated according to its grain size, loading and unloading of these material, weighing or if allowed by the administration, volume measuring and feeding into concrete mixer with required amount of cement and water according to the concrete mix design report approved by the administration, mixing, loading, vertical and horizontal transport, unloading, layering, compression, protection from heat and cold, curing by using water or chemical curing material if necessary, sampling, laboratory services and all labor, material, machinery, 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:</p> <p>Cost of cement to be used within the construction, loading, unloading and stapling, supply of chemicals and mineral ingredients if to be used, transport of cement, sand and gravels to the workplace.</p> <p>Measurement:</p> <p>The measured volume in cubic meters of the implemented concrete.</p> <p>Payment:</p> <p>To be made over the m³ unit price in the unit price bid chart - Poz KGM/16.002/K "Plain concrete at every dosage (by concrete mixer)".</p>				
17	KGM/2205	Irrigation and compression of any type of soil	m ³		
	<p>Technical Description: Irrigation and compression of any type of soil in line with the principles of the related sections of the KTŞ.</p> <p>Costs included in the unit price:</p> <p>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".</p> <p>Costs not included in the unit price:</p> <p>Water supply to the workplace.</p> <p>Measurement:</p> <p>The volume in cubic meters of the filling prepared by irrigation and compression.</p> <p>Payment:</p> <p>To be made over the m³ unit price in the unit price bid chart - Poz KGM/2205 "Irrigation and Compression of any type of soil".</p>				
18	KGM/23.010/K	Supply and Placing at Designated Location of Ribbed Steel Mesh (excluding transport) 1,500 - 3,000 kg/m² (3,000 kg/m² included)	Ton		
	<p>Technical Description: The price of supply and placing at designated location of the ribbed steel mesh of 1,500-3,000 Kg/m² (3,000 Kg/m² included) according to the application drawings and within the principles and conditions in the relevant section of KTŞ (excluding transport).</p> <p>Costs included in the unit price:</p> <p>All workmanship, material, costs of machinery and equipment, contractor's profit and overhead costs, except those listed under "Costs not included in the unit price", for the price of ribbed steel mesh, processing according to the application drawings (cutting, bending, cleaning etc.), transporting and placing to any depth and height; additional parts and weight tolerances not shown in the application drawings, all parts used in the installation, excess arising from the manufacture and processing, all waste for the fastening wire, keeping the position of the ribbed steel mesh during concrete pouring as shown in the application drawings.</p> <p>Costs not included in the unit price:</p> <p>Loading, transport to work site, unloading and stacking of the ribbed steel mesh.</p>				

	<p>Measurement: The weight in tons of the ribbed steel mesh calculated as the ribbed steel mesh incorporated in the construction over the width and length with excesses of the manufacture made according to the dimensions shown in the application drawings. Iron and additions not shown in the application drawings shall not be taken into account.</p> <p>Payment: It shall be paid at the unit price per ton as stated in “Supply and Placing at Designated Location of Ribbed Steel Mesh (excluding transport) 1,500 - 3,000 kg/m² (3,000 kg/m² included)” at Pos. No. KGM/23.010/K in the Unit Price Bid Schedule.</p>				
19	KGM/37.014/K-1	Manually digging a young-tree hole of 40 cm in diameter and 50 cm in depth on soft soil at cut and fill slopes and road-dividing islands of the roads	piece		
	<p>Technical Description: Manually digging a young-tree hole of 40 cm in diameter and 50 cm in depth on soft soil at cut and fill slopes and road-dividing islands of the roads for the planting of young trees within the principles and conditions in the relevant section of KTŞ.</p> <p>Costs included in the unit price: All workmanship, material, costs of machinery and equipment, contractor’s profit and overhead costs, except those listed under “Costs not included in the unit price”, for the supply of all equipment, instruments and materials and workers at the work site; opening the young-tree holes in the shape of a cylinder in accordance with the application dimensions at the young-tree planting sites shown in the application drawings and the height of the hole conforming to the graded ground level and/or the lower end of the slope; taking aside the good quality extracted soil; removing from the site stones, clay, graywacke etc. non-usable material, stacking the same, where necessary loading on the vehicles upon the instructions of a staff member of the engineering supervision unit and unloading at the storage location.</p> <p>Costs not included in the unit price: Transport of the non-usable material removed from the holes to the storage site.</p> <p>Measurement: The number of holes dug.</p> <p>Payment: It shall be paid at the unit price per piece as stated in “Manually digging a young-tree hole of 40 cm in diameter and 50 cm in depth on soft soil at cut and fill slopes and road-dividing islands of the roads” at Pos. No. KGM/37.014/K-1 in the Unit Price Bid Schedule.</p>				
20	KGM/6000	Constructing Subfoundation with Material of Crushed Quarry Stone	m ³		
	<p>Technical Description: Constructing subfoundation with material of 50 mm (2”) of crushed and screened quarry stone, within the principles and conditions in the relevant section of KTŞ.</p> <p>Costs included in the unit price: All workmanship, material, costs of machinery and equipment, contractor’s profit and overhead costs, except those listed under “Costs not included in the unit price”, for the extraction of stones from the quarry; crushing them to reduce to dimensions for feed into the crusher; loading on vehicles; transport at a distance of 150 m on average between the quarry and the crusher; unloading, feeding into the crusher; crushing by the crusher to achieve the granulation as indicated in KTŞ; screening, loading on vehicles, unloading and figuring, preparing water by motor pump; providing optimum water content to the subfoundation material; laying and compacting.</p> <p>Costs not included in the unit price: Transport beyond the distance of 150 m on average between the quarry and the crusher, and the transport of the material from the crusher to the work site; transport of water.</p> <p>Measurement: The volume in cubic meters calculated over the figured dimensions, without taking into account the swelling and settling, prior to the laying of the laid and compacted subfoundation material.</p> <p>Payment: It shall be paid at the unit price m³ as stated in “Constructing subfoundation with material of 50 mm (2”) of crushed and screened quarry stone” at Pos. No. KGM/6000 in the Unit Price Bid Schedule.</p> <p>NOTE: (1) The figuration shall be made by the figuring machine at the location, shape and dimensions as requested by the Administration.</p>				

	(2) The contractor shall maintain the figuration; remedy the settling and deformation.				
21	KGM/6040	Foundation construction [with crushed and screened quarry stone (1 inch)]	m ³		
	<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.</p> <p>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".</p> <p>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.</p> <p>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 over m³ unit prices in the Unit Price Bid Chart - Poz KGM/6040'daki "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 administration and shall be made by figuration machine. (2) The contractor shall protect the figuration and shall remove any slumps and deformations.</p>				
22	KGM/60.025	Manufacturing circular signboard of 60 cm in diameter of galvanized sheet metal of 2 mm in thickness	piece		
	<p>Technical Description: Manufacturing circular signboard of 60 cm in diameter of galvanized sheet metal of 2 mm in thickness within the principles and conditions in the Traffic Signs Manual and the relevant section of KTŞ.</p> <p>Costs included in the unit price: All workmanship, material, costs of machinery and equipment, contractor's profit and overhead costs, except those listed under "Costs not included in the unit price", for the supply at the work site of the galvanized sheet metal of 2 mm in thickness; cutting according to the application drawings; drilling the holes; cleaning the burrs; all types of loading at the workshop and factory, vertical and horizontal transport, unloading; templating and material waste.</p> <p>Costs not included in the unit price: Supply and gluing the reflective material at the work site.</p> <p>Measurement: The number of produced circular signboards 60 cm in diameter of galvanized sheet metal of 2 mm in thickness.</p> <p>Payment: It shall be paid at the unit price per piece as stated in "Manufacturing circular signboard of 60 cm in diameter of galvanized sheet metal of 2 mm in thickness" at Pos. No. Poz KGM/60.025 in the Unit Price Bid Schedule.</p>				
23	KGM/60.038	Manufacturing traffic informatory signs of galvanized sheet metal (2 mm in thickness)	m ²		
	<p>Technical Description: Manufacturing traffic informatory signs of galvanized sheet metal of 2 mm in thickness within the principles and conditions in the Traffic Signs Manual and the relevant section of KTŞ.</p> <p>Costs included in the unit price: All workmanship, material, costs of machinery and equipment, contractor's profit and overhead costs, except those listed under "Costs not included in the unit price", for the supply at the work site of the</p>				

	<p>galvanized sheet metal of 2 mm in thickness; cutting according to the application drawings; bending; drilling the holes; cleaning the burrs; all types of loading at the workshop and factory, vertical and horizontal transport, unloading; templating and material waste.</p> <p>Costs not included in the unit price:</p> <p>Supply and gluing the reflective material at the work site.</p> <p>Measurement:</p> <p>The measured surface area in square meters of the traffic informatory signs of galvanized sheet metal of 2 mm in thickness.</p> <p>Payment:</p> <p>It shall be paid at the unit price per m² as stated in “Manufacturing traffic informatory signs of galvanized sheet metal (2 mm in thickness)” at Pos. No. KGM/60.038 in the Unit Price Bid Schedule.</p>				
24	KGM/60.042	Manufacturing and galvanizing the posts for traffic informatory signs (5 mm in thickness, 170 mm in open view)	m		
	<p>Technical Description: Manufacturing and galvanizing the posts for traffic informatory signs of 5 mm in thickness, 170 mm in open view according to the application drawings and within the principles and conditions in the relevant section of KTŞ.</p> <p>Costs included in the unit price:</p> <p>All workmanship, material, costs of machinery and equipment, contractor’s profit and overhead costs, except those listed under “Costs not included in the unit price”, for the supply at the work site of the galvanized black sheet metal of 5 mm in thickness; cutting according to the application drawings; shaping; drilling the holes; cleaning the burrs; cleaning the grease and rust of all material by chemical bath; galvanizing by hot dipping according to the standard; cleaning of the galvanization waste from the material; all types of loading at the workshop and factory, vertical and horizontal transport, unloading; templating and material waste.</p> <p>Costs not included in the unit price:</p> <p>Loading, transport to the workshop or factory, unloading and stacking of the black sheet metal.</p> <p>Measurement:</p> <p>The length in meters of the galvanized sign posts made of black sheet metal of 5 mm in thickness.</p> <p>Payment:</p> <p>It shall be paid at the unit price per meter as stated in “Manufacturing and galvanizing the posts for traffic informatory signs (5 mm in thickness, 170 mm in open view)” at Pos. No. KGM/60.042 in the Unit Price Bid Schedule.</p>				
25	KGM/60.051	Making inscriptions and symbols on the signboard by vinyl (folio) material (standard signboards and informatory signs)	piec e		
	<p>Technical Description: Making inscriptions and symbols on traffic signboards by vinyl (folio) material according to the application drawings and within the principles and conditions in the relevant section of KTŞ.</p> <p>Costs included in the unit price:</p> <p>All workmanship, material, costs of machinery and equipment, contractor’s profit and overhead costs, except those listed under “Costs not included in the unit price”, for the cleaning of the signboard surface produced by covering with reflective material at the workshop or factory; gluing the cut vinyl on the signboard; all types of loading at the workshop and factory, vertical and horizontal transport, unloading; templating and material waste. Costs not included in the unit price:</p> <p>Supply of the vinyl material at the work site.</p> <p>Measurement:</p> <p>The surface area in square meters of the surface where vinyl (folio) material is glued.</p> <p>Payment:</p> <p>It shall be paid at the unit price per m² as stated in “Making inscriptions and symbols on the signboard by vinyl (folio) material (standard signboards and informatory signs)” at Pos. No. KGM/60.051 in the Unit Price Bid Schedule.</p>				
26	KGM/60.054	Constructing foundations and installing posts for traffic informatory signs	piec e		
	Technical Description: Constructing foundations and installing posts for traffic informatory signs				

	<p>according to the application drawings and within the principles and conditions in the relevant section of KTŞ.</p> <p>Costs included in the unit price: All workmanship, material, costs of machinery and equipment, contractor's profit and overhead costs, except those listed under "Costs not included in the unit price", for the supply of cement, sand, gravel, cement pipes at the work site; transport of signboard posts and installation teams; making the foundation excavation; preparing the foundation formwork according to the application drawings; placing the cement pipes in the foundations; supply and pouring in the foundation the ready-concrete grouting (C 30/37); treating; removing formworks; placing the signboard post (NPI section iron) inside the cement pipe; filling around with screened sand and gravel; pouring ring concrete as shown in the application drawings; all types of loading at the work site, vertical and horizontal transport, unloading; templating and material waste.</p> <p>Costs not included in the unit price: The price for posts made of NPI section iron.</p> <p>Measurement: The number of installed posts for informatory signboards.</p> <p>Payment: It shall be paid at the unit price per piece as stated in "Constructing foundations and installing posts for traffic informatory signs" at Pos. No. KGM/60.054 in the Unit Price Bid Schedule.</p>				
27	MSB.521/B2	Roof coating with painted trapezoidal section sheet	m ²		
	<p>Technical Description: Price of 1m² painted trapezoidal sheet roof coating: overlapping of 0.50mm galvanized and painted trapezoidal sheet, painted with fabricated roll paint system (outwards surface min. 5 micron, inwards surface min. 7 micron epoxy coating and polyester paint coat of min. 20 micron), fixing to suspensions, placement of accessories (goin, eaves, wall, edge coting etc.), silicon application to lag washer holes, loading, horizontal and vertical transport, unloading, assembly at workplace, material, transport, labor, assembly, wastage, tools and equipment, contractor profit and overheads.</p> <p>Measurement: The coated roof surfaces shall be calculated in field.</p>				
28	N-040	Transport price to 15000 m distance	Ton		
	<p>Technical Description: Note: The transport prices stated in Table 1 are calculated from the formula in the İller Bankası (Bank of Provinces) analysis book and shall be applied for excavation material of the production. (excluding loading, unloading, stapling and 25% contractor profit and overheads)</p>				
29	Y.15.140/04	Supply of gravel and flooring, irrigation and compression by machine.	m ³		
	<p>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.</p> <p>Measurement: Volume shall be calculated according to the dimensions in its project.</p>				
30	Y.16.050/06	Concreting of C 30/37 compressive strength class concrete being manufactured at a concrete plant or purchased (including concrete transport)	m ³		
	<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</p>				

	<p>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 overhead costs</p> <p>Measurement: To calculated over the dimensions in the project.</p> <p>NOTE:</p> <p>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 have to be submitted to the administration 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.</p> <p>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.</p> <p>3) The cost of ingredients to be added to the concrete shall be paid separately.</p>				
31	Y.18.461/041	Laying geotextile felt of 150 gr/m ² in weight	m ²		
	<p>Technical Description: The price of 1 m² of laying the geotextile felt of 150 gr/m² in weight with joints overlapping at least for 10 cm in order to protect the insulation at the foundation or terrace according to the application drawings and details approved by the administration; including loading at the work site, vertical and horizontal transport, unloading; all materials and waste, workmanship, costs of machinery and equipment, assembling and disassembling the work platforms as necessary and contractor's profit and overhead costs.</p> <p>Measurement: All the surfaces shall be calculated which are laid with felt according to the measures in the application drawings.</p> <p>NOTE: This tariff shall not apply where measurable different specifications are required according the test standards other than the weight in the application drawings and specifications.</p>				
32	Y.19.090/002	Cutting joints of 4 mm in width and 40 mm in depth, and filling with polyethylene filler and polyurethane joint sealant	m		
	<p>Technical Description: The price of 1 m of cutting the joint of 4 mm in width and 40 mm in depth with a grooving machine; clearing the joint site of dust, dirt, burrs etc. by an air compressor etc; laying the polyethylene filler of Ø6 mm in diameter firmly inside the joint; then filling it polyurethane-based joint sealant resistant to UV; including all materials and waste, workmanship, loading at the work site, vertical and horizontal transport, unloading; and contractor's profit and overhead costs.</p> <p>Measurement: The area shall be calculated over the application drawings on which the application is made.</p> <p>NOTE:</p> <p>1- The grooving shall be made at the latest 1-d days following the concrete pouring.</p> <p>2- The joint depth shall be 1/3 to 1/4 of the concrete thickness.</p> <p>3- Following the grooving, the cleaning and filling operations shall start no earlier than 28 days following the concrete pouring.</p> <p>4- The joint filler shall have 30% wider than the joint width.</p>				
33	Y.21.001/03	Production of reinforced concrete plain surface form works with plywood	m ²		
	<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: 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 not be taken into the measurement. No hole gap shall be extracted from the hole side at the form side. NOTE</p> <p>NOTE:</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>				

34	Y.21.050/C11	Assembling formworks scaffold of steel pipes (0.00-4.00 m)	m ³		
	<p>Technical Description: The price of 1 m³ of assembling and disassembling the carrying scaffold of steel pipes by taking the necessary safety measures, where deemed necessary by the administration for the constructional and industrial production whose height falls under this position; including all materials and waste, loading at the construction site, vertical and horizontal transport, unloading, workmanship; costs of machinery and equipment; and contractor's profit and overhead costs.</p> <p>Measurement:</p> <ol style="list-style-type: none"> 1) The space shall be calculated between the surface of the construction and industrial production falling under this measure which looks to the formwork and the ground on which the formwork is based. If the ceiling is sloped, the average height shall be taken as basis. 2) Where this position is applied to tunnels or galleries, the space shall be calculated between the lower surface of the arch of the tunnel or gallery and the ground on which the formwork is based. 3) This position shall apply to the formworks of construction of water reservoirs falling under this measure. Then, the space shall be calculated between the ceiling of the concrete water reservoir's ceiling and the ground on which the formwork is based. 4) The width of the carrying scaffold necessary for frames, beams and columns not constructed simultaneously with the floor shall be determined by the administration. <p>NOTE:</p> <ol style="list-style-type: none"> 1) The volumes of the steel pipes and woodwork used in the scaffold and formwork and the volumes of the construction elements in the space (gussets, beams, columns, curtains, water reservoir and similar construction elements) shall not be deducted from the volume of the scaffold space. 2) The surcharges of length to be given for tunnels and galleries and other surcharges for tunnels shall apply at a certain proportion to these positions. 3) For the buildings, the volume of the scaffold space shall be calculated in the form of triangle that holds and carries the formworks of the production such as reinforced concrete eaves, balconies, concrete, reinforced concrete retaining walls, curtains and similar production. The horizontal length of the triangle shall not exceed half of the formwork height. 4) The scaffold price shall not be paid for the concrete wall reverse beams less than 1 m in height, overhangs and eaves less than 0.50 m in width and door and window transoms with a clearance less than 1.50 m. 5) Since the formwork scaffold is to be assembled for the reinforced concrete decks, no separate scaffold price shall be paid for the concrete and reinforced concrete curtains, detached columns and similar production inside the building. 6) This price shall not apply to the formwork scaffold of the construction or production which shall be executed by special sliding formworks. 7) The material coming out of the formwork shall belong to the contractor. 				
35	Y.21.050/C12	Assembling formworks scaffold of steel pipes (4.01-6.00 m)	m ³		
	<p>Technical Description: The price of 1 m³ of assembling and disassembling the carrying scaffold of steel pipes by taking the necessary safety measures, where deemed necessary by the administration for the constructional and industrial production whose height falls under this position; including all materials and waste, loading at the construction site, vertical and horizontal transport, unloading, workmanship; costs of machinery and equipment; and contractor's profit and overhead costs.</p> <p>Measurement:</p> <ol style="list-style-type: none"> 1) The space shall be calculated between the surface of the construction and industrial production falling under this measure which looks to the formwork and the ground on which the formwork is based. If the ceiling is sloped, the average height shall be taken as basis. 2) Where this position is applied to tunnels or galleries, the space shall be calculated between the lower surface of the arch of the tunnel or gallery and the ground on which the formwork is based. 3) This position shall apply to the formworks of construction of water reservoirs falling under this measure. Then, the space shall be calculated between the ceiling of the concrete water reservoir's ceiling and the ground on which the formwork is based. 4) The width of the carrying scaffold necessary for frames, beams and columns not constructed simultaneously with the floor shall be determined by the administration. <p>NOTE:</p> <ol style="list-style-type: none"> 1) The volumes of the steel pipes and woodwork used in the scaffold and formwork and the volumes of 				

	<p>the construction elements in the space (gussets, beams, columns, curtains, water reservoir and similar construction elements) shall not be deducted from the volume of the scaffold space.</p> <p>2) The surcharges of length to be given for tunnels and galleries and other surcharges for tunnels shall apply at a certain proportion to these positions.</p> <p>3) For the buildings, the volume of the scaffold space shall be calculated in the form of triangle that holds and carries the formworks of the production such as reinforced concrete eaves, balconies, concrete, reinforced concrete retaining walls, curtains and similar production. The horizontal length of the triangle shall not exceed half of the formwork height.</p> <p>4) The scaffold price shall not be paid for the concrete wall reverse beams less than 1 m in height, overhangs and eaves less than 0.50 m in width and door and window transoms with a clearance less than 1.50 m.</p> <p>5) Since the formwork scaffold is to be assembled for the reinforced concrete decks, no separate scaffold price shall be paid for the concrete and reinforced concrete curtains, detached columns and similar production inside the building.</p> <p>6) This price shall not apply to the formwork scaffold of the construction or production which shall be executed by special sliding formworks.</p> <p>7) The material coming out of the formwork shall belong to the contractor.</p>				
36	Y.23.014	Cutting, bending and placement of Ø 8- Ø 12 mm deformed concrete steel bars	Ton		
	<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 mmKg/m 80.395 100.617 120.888</p>				
37	Y.23.015	Cutting, bending and placement of Ø 14- Ø 28 mm deformed concrete steel bars	Ton		
	<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 mmKg/m 141.208 161.578 181.998 202.466 222.984 243.551 264.168</p>				

	284.834				
38	Y.23.176	Manufacturing various iron works of sheet bars and iron sections and placing at designated location	kg		
	<p>Technical Description: The price of 1 kg of iron, rivets, bolts, welding for the manufactures made of various steel bars, sheet bars and iron sections of all types of ladders/stairs, balconies, bridges, railing, windows, garden iron fences, roof outbuilding and stairs/ladders, grills and similar works done for cesspit and similar structures; including all types of material and waste, loading at the work site, vertical and horizontal transport, unloading, workmanship and contractor's profit and overhead costs (excluding the price of paint).</p> <p>Measurement:</p> <p>The production and fixing materials if any shall be weighed before paint and installation.</p> <p>NOTE:</p> <p>However, where the administrations deem necessary, they may inspect the weight obtained by weighing compared to the weight in the schedules of all sections and knotting boards over the dimensions in the application drawings. If as a result of such weighing, the excess weight of up to 7% compared to the schedules shall be paid; anything beyond that shall not be taken into account. Where the weight found in the weighing is less than the weights in the schedules, that weighing shall be taken as the basis provided that the production be accepted by the administration.</p>				
39	Y.25.002/01	Two layers of coating on metal surfaces against corrosion	m ²		
	<p>Technical Description: 1 m2 price of: cleaning metal works surfaces with sandpaper and wire brush, anti-rust coating of 0,100 kg for 1st layer and 0,100 kg for 2nd layer (each layer shall be of different colors), including any material and labor required for such works, contractor profit and overheads.</p> <p>Measurement:</p> <p>a) For furnitures, the coated surfaces shall be measured.</p> <p>b) For doors and compartments;</p> <p>1) For Telaro type window frames; two side shall be measure from plaster to plaster.</p> <p>2) For window frames (without jamb); frame fields shall be added to the two sides from case to case, vertically</p> <p>3) For window frames jamb, the casing shall be added to two sides measurement from jamb to jamb</p> <p>4) For all measurements indent, outgrowth and window gaps shall not be added to the measuring If there are laths at the window edge, measurement shall start from there.</p> <p>c) In window walls and windows;</p> <p>1)In window walls and windows with jamb; vertical field from jam to jam shall be measured whereas for windows without jamb the vertical field from plaster to plaster shall be measured. One surface shall be calculated, but two surfaces shall be coated. Glass gaps shall not be deducted, if sill, casing and edges are available they will be measured separately and added to the field.</p> <p>2) For double windows the measurement shall be the same, the wooden case between two windows shall be measured separately and added to the field. Two sides shall be coated of both windows but one side shall be calculated. Glass gap shall not be deducted.</p> <p>d) For fences and rods, the projection field of one side vertically shall be measured. Gaps shall not be deducted.</p> <p>e) The coated surfaces of columns, roof trusses, beams, area ways and similar metal works shall be measured.</p>				
40	12.2190/1	Construction of parcel shaft with steam-treated 500 dose prefabricated base element (H=0.60 m and pipe joints rubber sealed)	piece		
	<p>Technical Description: The price of 1 piece of the construction of a parcel shaft of h=0.60 m in height by 500 dose steam-treated prefabricated base elements, produced or procured within the principles and conditions in Pos. No. 08.1574/1, all tests conducted and accepted by the Bank; with prefabricated base elements made ready by the excavation hole; taking the same from the side of the shaft excavation hole and getting down to the graded and improved foundation base and placing according to the application drawings, including all types of expenses, all workmanship, machinery, equipment, instruments and tools, horizontal and vertical transport, loading, unloading, material and waste costs, contractor's profit and overhead costs (however, excluding the price of the transport of cement, sand and gravel used in the production of the steam-treated parcel shaft prefabricated base element to the work site storage; loading, unloading and stacking associated with such transport; and the on-site transport of the produced steam-</p>				

	<p>treated parcel shaft prefabricated base element and loading, unloading and stacking associated with such transport.</p> <p>Measurement: The number of pieces of steam-treated parcel shaft prefabricated base element used in the production of the parcel shaft according to the application drawings.</p> <p>NOTE:</p> <p>1) Where the steam-treated parcel shaft prefabricated base element is purchased: Unless the special specifications or contract annexes provide otherwise, no price shall be paid other than for the transport of transport of cement, sand and gravel not included in the preparation of the base element to the work site storage; loading, unloading and stacking associated with such transport; the transport of the base element from the work site storage to the side of the shaft foundation hole; and loading, unloading and stacking associated with such transport.</p> <p>2) To the excavation widths of the parcel shaft constructed by steam-treated parcel shaft prefabricated base elements, at most 2 x 0.50 m of working clearance shall be added in addition to the dimensions indicated in the type drawing TP10/18B for the parcel shaft base element. Such working clearance does not include the shoring thickness.</p> <p>3) During the implementation, the payment of the price for the foundation excavation depth made in smaller width than the one stated in item 2 shall be made according to the actual width.</p>				
41	12.2190/2	Construction of parcel shaft with steam-treated 500 dose prefabricated body element (H=0.50 m and pipe joints 600 dose grouting)	piece		
	<p>Technical Description: The price of 1 piece of the construction of a parcel shaft by 500 dose steam-treated prefabricated body elements, produced or procured within the principles and conditions in Pos. No. 08.1574/2 - 08.1574/3, all tests conducted and accepted by the Bank; with prefabricated body elements made ready by the excavation hole; taking the same from the side of the shaft excavation hole and placing on the base element according to the application drawings, including all types of expenses, all workmanship, machinery, equipment, instruments and tools, horizontal and vertical transport, loading, unloading, material and waste costs, contractor's profit and overhead costs (however, excluding the price of the transport of cement, sand and gravel used in the production of the steam-treated parcel shaft prefabricated body element to the work site storage; loading, unloading and stacking associated with such transport; and the on-site transport of the produced steam-treated parcel shaft prefabricated body element and loading, unloading and stacking associated with such transport.</p> <p>Measurement: The number of pieces of steam-treated parcel shaft prefabricated body element used in the production of the parcel shaft according to the application drawings.</p> <p>NOTE:</p> <p>Where the steam-treated parcel shaft prefabricated body element is purchased: Unless the special specifications or contract annexes provide otherwise, no price shall be paid other than for the transport of transport of cement, sand and gravel not included in the preparation of the body element to the work site storage; loading, unloading and stacking associated with such transport; the transport of the body element from the work site storage to the side of the shaft foundation hole; and loading, unloading and stacking associated with such transport.</p>				
42	12.2190/3	Construction of parcel shaft with steam-treated 500 dose prefabricated body element (H=0.25 m and pipe joints 600 dose grouting)	piece		
	<p>Technical Description: The price of 1 piece of the construction of a parcel shaft by 500 dose steam-treated prefabricated body elements, produced or procured within the principles and conditions in Pos. No. 08.1574/2 - 08.1574/3, all tests conducted and accepted by the Bank; with prefabricated body elements made ready by the excavation hole; taking the same from the side of the shaft excavation hole and placing on the base element according to the application drawings, including all types of expenses, all workmanship, machinery, equipment, instruments and tools, horizontal and vertical transport, loading, unloading, material and waste costs, contractor's profit and overhead costs (however, excluding the price of the transport of cement, sand and gravel used in the production of the steam-treated parcel shaft prefabricated body element to the work site storage; loading, unloading and stacking associated with such transport; and the on-site transport of the produced steam-treated parcel shaft prefabricated body element and loading, unloading and stacking associated with such transport.</p> <p>Measurement: The number of pieces of steam-treated parcel shaft prefabricated body element used in the production of the parcel shaft according to the application drawings.</p>				

	<p>NOTE: Where the steam-treated parcel shaft prefabricated body element is purchased: Unless the special specifications or contract annexes provide otherwise, no price shall be paid other than for the transport of transport of cement, sand and gravel not included in the preparation of the body element to the work site storage; loading, unloading and stacking associated with such transport; the transport of the body element from the work site storage to the side of the shaft foundation hole; and loading, unloading and stacking associated with such transport.</p>				
43	12.2190/4	Construction of parcel shaft with steam-treated 500 dose prefabricated body height adjustment element (H=variable and pipe joints 600 dose grouting)	m		
	<p>Technical Description: The price of 1 piece of the construction of a parcel shaft by 500 dose steam-treated prefabricated body height adjustment elements, produced or procured within the principles and conditions in Pos. No. 08.1574/4, all tests conducted and accepted by the Bank; with prefabricated body height adjustment elements made ready by the excavation hole; taking the same from the side of the shaft excavation hole and placing on the body element according to the application drawings, including all types of expenses, all workmanship, machinery, equipment, instruments and tools, horizontal and vertical transport, loading, unloading, material and waste costs, contractor's profit and overhead costs (however, excluding the price of the transport of cement, sand and gravel used in the production of the steam-treated parcel shaft prefabricated body height adjustment element to the work site storage; loading, unloading and stacking associated with such transport; and the on-site transport of the produced steam-treated parcel shaft prefabricated body height adjustment element and loading, unloading and stacking associated with such transport.</p> <p>Measurement: The quantity in meters of steam-treated parcel shaft prefabricated body height adjustment element used in the production of the parcel shaft according to the application drawings.</p> <p>NOTE: Where the steam-treated parcel shaft prefabricated body height adjustment element is purchased: Unless the special specifications or contract annexes provide otherwise, no price shall be paid other than for the transport of transport of cement, sand and gravel not included in the preparation of the body height adjustment element to the work site storage; loading, unloading and stacking associated with such transport; the transport of the body height adjustment element from the work site storage to the side of the shaft foundation hole; and loading, unloading and stacking associated with such transport.</p>				
44	12.2190/5	Placing the unframed prefabricated reinforced concrete cover made of BS 18 concrete (350 dose) on the parcel shaft (for parcel shafts in the yard)	piece		
	<p>Technical Description: The price of 1 piece of the placement of the reinforced concrete cover made of BS 18 concrete (350 dose) on the parcel shaft, produced or procured within the principles and conditions in Pos. No. 08.1574/6, all tests conducted and accepted by the Bank; with prefabricated reinforced concrete cover made ready by the excavation hole; taking the same from the side of the shaft excavation hole and placing on the parcel shaft according to the application drawings, including all types of expenses, all workmanship, machinery, equipment, instruments and tools, horizontal and vertical transport, loading, unloading, material and waste costs, contractor's profit and overhead costs (however, excluding the price of the transport of cement, sand and gravel used in the production of the parcel shaft prefabricated reinforced concrete cover to the work site storage; loading, unloading and stacking associated with such transport; and the on-site transport of the produced parcel shaft prefabricated reinforced concrete cover and loading, unloading and stacking associated with such transport.</p> <p>Measurement: The number of pieces of prefabricated reinforced concrete covers produced according to the application drawings, technical specifications and relevant standards, and placed on the parcel shaft.</p> <p>NOTE: 1) Where the reinforced concrete cover made of BS 18 concrete (350 dose) is purchased: Unless the special specifications or contract annexes provide otherwise, no price shall be paid other than for the transport of transport of cement, sand and gravel not included in the preparation of the parcel shaft's prefabricated reinforced concrete cover element to the work site storage; loading, unloading and stacking associated with such transport; the transport of the base element from the work site storage to the side of the shaft foundation hole; and loading, unloading and stacking associated with such transport. 2) The weight of the parcel shaft's prefabricated reinforced concrete cover element shall be taken as</p>				

	0,108 ton/ad for the transport on-site. The transport quantities of materials used in the production shall be taken from the bill of quantities in the analysis. 3) Two covers shall be used for one parcel shaft.				
45	Y.18.460/24	Supply and laying at designated location of PVC-based corrugated drain pipe of Ø 200 mm of nominal diameter.	m		
	<p>Technical Description: The price of 1 m of the PVC-based corrugated drain pipe of Ø 200 mm of nominal diameter being lowered and laid in the ditch for drains, including all materials and waste, workmanship, costs of machinery and equipment, including loading at the work site, vertical and horizontal transport, unloading; and contractor's profit and overhead costs.</p> <p>Measurement: The area where the drain pipe is laid according to the application drawings shall be calculated as surface area in meters.</p> <p>NOTE: The prices of excavating the ditch where the drain pipe is laid, materials or concrete layer at the foundation base of drain, filling and compacting the sides and top of the drainage with appropriate size materials shall be paid at their own positions.</p>				
46	N.YF.07	Transport of Ribbed Iron and Steel Mesh 210 km	m		
47	07.006.1	Transport of subfoundation and foundation gravel material 20 km	m		
48	N.YF.01	Transport of stones (to a distance of 250 meters)	m		
49	30-15-8801/III	Drilling a water borehole of 9 7/8" in diameter (in hard formations) (with equipment and filter)	m		
50	03.032/3	Vertical shaft deepwell pump of Ø: 20-40 lt/sn (40 included), up to 50 MSS	piece		
	<p>Technical Description: Construction machinery and vehicles; up to 50 MSS, deepwell pump of vertical shaft, crown and column group, with header and diesel motor Up to 50 MSS, deepwell pump of vertical shaft, crown and column group, with header and diesel motor</p> <p>Ø :20-40 lt/sn (40 included)</p> <p>NOTE: For each additional MSS, the prices shall be increased by 20%.</p>				
51	38.1589	Installation of deepwell pump [Conduct of water yield test (pumping)]	piece		

2. MECHANICAL INSTALLATION

Job Name: GAZİANTEP ARABAN SOLID WASTE TRANSFER STATION

Job Group: Main Group>Mechanical Works

Sayfa: 85

S. No	Pos No	Production Type			
1	071-103	Lavatory-sinks 40x50 cm with screws, enameled ceramics, extra class	piece	0,000	
	<p>Technical Description: Supply including installation materials at work site and installation to the designated location of the lavatory-sink, white, in the following types and measures, with fixed soap holder or without soap holder.</p> <p>NOTE: If colored enameled ceramics is used, the installed prices shall be increased by 15%; the installation price shall be kept without raise. The lavatory-sinks shall comply with the Construction Products Regulation 305/2011/EU and be placed in the marked with CE marking.</p>				
2	072-401	Lavatory materials; First class: (Faucet TS EN 200; Siphon TS-EN 274-1-2-3)	set	0,000	
	<p>Technical Description: Supply, installation and delivery in working condition at work site of 15 mm faucet, made of chrome plated brass or plastics based (acetal copolymer), quality certified; and rosette or battery certified to TS-EN 274-1-2-3, which can be disassembled and cleaned, with 6 cm odor sealer,</p>				

	with at least 16 cm of extension piece and rosette, made of chrome plated brass or hard plastics based, certified to TS-EN 274-1-2-3, in appropriate size, which can be disassembled and cleaned, resistant to at least 80°C of temperature and acids, with 32 mm depressible sink siphon and with connection adaptor to the waste water drain pipe, all to be used along with the lavatory-sinks described at Pos. No. BFT.071-000. (waste water drain pipe not included in the price).				
3	073-201	Mirror (crystal glass) 40x50 cm+D106	piece	0,000	
	<p>Technical Description: Glass thickness 5mm, glass edges ground; when the mirror is on straps, they shall be beveled. Wall fastening screws shall be made of brass material and coated with at least 5-micron nickel or be made of stainless steel. Installation to the designated location of the mirror with wall hanger, screws and dowels.</p> <p>The mirrors shall comply with the Construction Products Regulation 305/2011/EU and be placed in the marked with CE marking.</p>				
4	079-800	Toilet Set A La Franc with Recess Flush Tank	set	0,000	
	<p>Technical Description: Supply and installation at work site including all installation materials of the item, white color, made of enameled ceramics, wall hanging type, extra class hanging closet (compliant with TS EN 997), seat and cover made of hard plastics or droplast; produced of raw materials compliant with TS EN 12164, TS EN 12165 standards; classical or ceramics gasketed compliant with TS EN 248 surface standard requirements, TS 15 EN 1213, built-in stop valve, including rosette; flush tank with plastic or stainless steel parts, installable in wall recess, compliant with TS 823, TS 2535. The products shall comply with the Construction Products Regulation 305/2011/EU and be placed in the marked with CE marking.</p>				
5	089-101	Faucet (short) Class 1, 1/2 "	piece	0,000	
	Supply and installation in the workplace instead of having a quality certificate fittings.				
6	094-100	Paper holder (ceramics), 16x16 cm	piece	0,000	
	<p>Technical Description: Supply and installation to the designated location including all installation materials of the paper holder, which is extra quality, made of white ceramics, half recessed in the wall or on the wall tiles.</p>				
7	097-203	Location filter (rigid plastic grille), 10x10 cm	piece	0,000	
	made of cast iron, self smell la fermette is provided in the workplace and cleaning grate floor drain plug, and instead of assembly. h = 13.5 cm. Ø 50 mm.				
8	103-108	Cold water meter (diameter 80 mm, flange)	piece	0,000	
	Measuring Instruments Directive (2004/22 / EC) shall have the CE mark required.				
9	105-607	Prismatical Modular Stainless Steel Water Tank 10,0 m³	piece		
	<p>Technical Description: Supply and installation to the designated location and connection to the piping system of the modular water tank which is wholly made of AISI 304 stainless steel; all internal and external materials, strain bars, bolts, legs, manhole, air vent, connection openings made of stainless materials, on-board fixtures made of stainless or brass materials; resistance calculations and application drawings approved by the administration; all parts produced in the factory by cold moulding, bending or twisting method; no welding required in its manufacture or installation, can be assembled using silicone or epidem rubber seals; with a PVC or polyethylene at the bottom of the tank to isolate the flooring material; certified to Turkish Standards.</p> <p>NOTE:</p> <ul style="list-style-type: none"> - The prices include fixtures made of stainless or chrome plated brass material, stainless tank legs level float, in-out globe valves, blow-off globe valve, air vent apparatus, tank surge relief and pipe, level indicator, valves and discharge tap, upper and lower manhole cover, tank ladder. - The prices for intermediate values shall be determined by interpolation. - The table for the sheet metal thicknesses of the tank are provided in the general explanation section for plumbing. 				
10	107-1101	Only vertical National Frequency Converter Pump Booster (Output 0-5 m³ / h, pressure: 20-40 MSS)	piece	0,000	

	mounted on a metal frame, the necessary check valves, valve, connected by suction and discharge manifolds using fasteners, with multi-stage pump 1 to 6 selected so as to perform the automatic operation of the pump, an integrated frequency converter unit within formed by the electrical control panel; Press on the analogue pressure collector				
11	12.21910	Installation of parcel shaft to the designated location and construction of parcel shaft G – Construction of parcel shaft with prefabricated, non-steam treated parcel shaft pieces (with grout combined) (made of sulfate resistant cement)	m	0,000	
12	İ.ÖBF 4	Excavation by machine of all types of materials (soil, rock, loose etc) at any depth and width	m ³	0,000	
	<p>Technical Description: Price per m³ to excavate piping hole in any type of soft mix soil by any type of instrument and machiner within the rules at Pos. No. 15.D.61.</p> <p>Measurement: The net volume between the natural ground level and the horizontal plane that passes through the lower inner level and 20 cm away from the outside of the pipe shall be excavated.</p> <p>NOTE: a- This price shall apply to pipelines of the pipe irrigation networks.</p> <p>b- The measure shall not be changed nor any other price be paid if a wider section is excavated due to the structure of the excavating machine, or inclination forms at the excavation due to the ground conditions or excess excavation is made due to any other reason.</p> <p>c- Efficiency drop charges or water charges shall not apply to the excavations to which this unit price applies.</p>				
13	210-624	Ball valve, brass presses, Teflon gasket (diameter: 20 mm)	piec e	0,000	
	<p>97/23 / EC Pressure Equipment suitable for regulation of water, air and steam systems in the element cutter brass, cast carbon steel or stainless steel, threaded or flanged, which is controlled by a sphere transition, manually opening and closing the supply of the establishment of a regular ball valves Instead assembly.</p> <p>Note: When using the TS 3148 Sheet 2 short dimensions specified size 10 unit price will be paid 35% missing.</p>				
14	210-729	Ball valve, stainless steel body steel ball screw (50 mm, 1 1/2")	piec e	0,000	
	<p>97/23 / EC Pressure Equipment suitable for regulation of water, air and steam systems in the element cutter brass, cast carbon steel or stainless steel, threaded or flanged, which is controlled by a sphere transition, manually opening and closing the supply of the establishment of a regular ball valves Instead assembly.</p> <p>Note: When using the TS 3148 Sheet 2 short dimensions specified size 10 unit price will be paid 35% missing.</p>				
15	221-207	Strainer, cast iron, flange (diameter: 50 mm)	piec e	0,000	
	<p>liquid, steam and will be mounted on the gas equipment, fluid pressure and body, subject to the temperature of brass, bronze, cast iron or steel, interior cleaning brass or stainless steel, which can be removed and cleaned filter easily, to be approved by the administration of catalogs flanged or screw the strainer to be selected supply and installation rather than in the workplace.</p> <p>Note: The filter sensitivity;</p> <p>DN 20 up to 500 mm (0.5 mm) and above</p> <p>DN 50 up to 700 .mu.M (0.7 mm) and above</p> <p>DN 150 up to 1200 .mu.M (1.2 mm) and it will be up.</p>				
16	227-301	Non-return valve, cast iron flanges (diameter: 50 mm)	piec e	0,000	
	<p>to be used in hot or cold water systems, EN 1074-3 compliance certificate, which is screwed on a small scale, brass or bronze, larger diameter ones screws, those massive than brass or bronze flanged and cast iron, hinged or clapper or ball should sit tight supply of non-return valve in the workplace can operate in horizontal or vertical position, and instead of assembly.</p>				
17	23.256/01	Supply and placement at location of concrete composite manhole cover (net clearance of the cover minimum 600 mm)	piec e	0,000	
	<p>Technical Description: The price of placing and fixing the box with installation pieces of one concrete composite manhole cover at its designated location, application drawing approved by the administration, including all materials and waste, workmanship, loading, horizontal and vertical carrying, unloading,</p>				

	vehicle and equipment costs, contractor's overhead costs and profit. Measurement: It shall be calculated as piece. NOTE: The fill, concrete and other covering works around the manhole cover shall be separately paid at its Pos. No.				
18	M ÖBF 1	Floor Scales Over 60 Tons	piece	0,000	
19	M ÖBF 3	Polyethylene pipes, PE100 PN CLASS (8 atm) Ø mm: 40 (Exterior Building Ground)	m	0,000	
	EN 12201-2: 2011 A1'Y the supply of polyethylene pipe and fitting Excluded appropriate work Ø mm Diameter Pressure Atmosphere in the land borders of the units will be installed for use in business.				
20	M ÖBF 4	Polyethylene pipes, PE100 PN CLASS (8 atm) Ø mm: 50 (Exterior Building Ground)	m	0,000	
	EN 12201-2: 2011 A1'Y the supply of polyethylene pipe and fitting Excluded appropriate work Ø mm Diameter Pressure Atmosphere in the land borders of the units will be installed for use in business.				
21	M ÖBF 10	Polyethylene pipes, PE100 PN CLASS (8 atm) Ø mm: 63 (Exterior Building Ground)	m	0,000	
	EN 12201-2: 2011 A1'Y the supply of polyethylene pipe and fitting Excluded appropriate work Ø mm Diameter Pressure Atmosphere in the land borders of the units will be installed for use in business.				
22	M ÖBF 6	Ø 200 Corrugated Pipe supply and laying	m	0,000	
23	M ÖBF 7	Ø300 Corrugated Pipe supply and laying	m	0,000	
24	M ÖBF 9	Automatic door latching device 800 kg capacity	piece		
25	V.1882/2	12.000 Btu/h cooling capacity	piece	0,000	
	Technical Description: It shall be Energy Class A for heating and cooling, with inverter compressor, operating with R410A gas, CE certified, cooling range of -10/+43°C, heating range of -15/+24°C. The price includes 4 m of copper pipe and hand-held remote control. The price does not include the drainage line. The price includes transport and installation.				

3. ELECTRICAL INSTALLATION

Job Name: GAZİANTEP ARABAN SOLID WASTE TRANSFER STATION

Job Group: Main Group>Electrical Works

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S. No	Pos No	Production Type	Unit		
1	5.5.3.2-009	AD1-70 / 15 TYPE, RANGE 80 KG.TEK console galvanized steel lighting pole	piece	0,000	
	AD1-70 / 15 TYPE, RANGE 80 KG.TEK console galvanized steel lighting pole				
2	08.2.2-01	50mm, Cable Protection Pipe, 450N (non-metallic, underground)	m	0,000	
	50mm, Cable Protection Pipe, 450N (non-metallic, underground)				
3	20.5.1.-003	150W sodium vapor lamp, iron, wood and concrete poles, except the bulb	piece	0,000	
	150W sodium vapor lamp, iron, wood and concrete poles, except the bulb				
4	701-201	Special sheet panel-front cover	piece	0,000	
	Technical Description: Panel on frame with dimensions: height 1.800 mm , depth 350 mm and width 500 mm made of gusset or profile, coated with 2mm DKP sheet, totally closed, with locks and covers on front or rear or both sides, with holes for installing other devices if necessary depending on the application drawing, painting of the panel inner and outer frame against external impact with oven-dried cellulose paint at desired color, any small material, terminals for device connection, labor costs and on-site assembly.				

5	705-103	Built-in sheet table-0.20-0.30 m² (0,30 m² included)	piece	0,000	
	Technical Description: Unit Price No. As same as 704-100 and additionally; a clamp frame for embedding the box into the wall shall be available. The sheet box can be easily mounted to this clamp frame. Measurement: Unit Price No. As same as 704-100.				
6	710-100	Copper Bar supply and assembly	kg	0,000	
	Technical Description: If the installation has to be protected against humidity, dust and mechanical impacts, the boards shall be made of cast iron or aluminum and waterproof boxes with sealed covers being spliced to each other. In cases where connections with sections higher than 16 mm ² , have to be used, distribution shall be enabled by copper bars in separate boxes. Entries to and exits from the board shall be enabled by sealed openings made of stainless steel. Upon opening a cover for the fuses to be installed, it shall be possible to control the switches even when the cover is closed. Grounding bars for safety lines and isolated bars for the neutral lines shall be available. All parts carrying current shall be made of galvanized or stainless steel. The Bar unit price shall be paid over unit price no 710-100. Construction of empty waterproof board with depth of 17 cm minimum, transport to workplace, assembly, including any material and labor and hand over in operating condition.				
7	713-204	Selector package switch-behind board- up to 3x25 A	piece	0,000	
	Technical Description: Supply, assembly, including any material and labor of a package switch equipped with an assembly fitting, in such way that control knob and position scale shall be in front of the board. Supply of package switch with positioning dial and control leer or knob, for board assembly, with plastic or sheet cover, rotating pivot pin, with positions as specified in the application drawing, contact opening and closing by turning including assembly, any material and labor.				
8	718-102	Dry type non-protective contactor, up to 3x16 A	piece	0,000	
	Technical Description: Supply of dry-type three-phase contactor, class AC3, for frequent opening and closing, to be mounted behind board, without protective relays, with separate control knobs to be assembled on the board front including assembly, any material and labor. Measurement: The number of mounted contactors shall be counted.				
9	718-310	Time relay, used for lighting control. (Measurement pieces, preparation 60%)	piece	0,000	
	Technical Description: supply of time relay being designed for use in specific voltage limits, with type examination test reports and CE compliance marking according to the regulation for electrical equipment (2006/95/AT), Electromagnetic compatibility regulation (2004/108/AT), TS EN 60730-2-7 standards and directives, ensuring lighting control at desired times by calculation of the adjusted time zone through the program, equipped with output contacts, battery, user manual including transport to workplace, any supplementary small material, testing and handing over in operational condition.				
10	718-501	Residual current circuit breakers-up to 2x25 A (30 mA)	piece	0,000	
	Technical Description: Supply, installation and delivery in working condition including all materials and workmanship of the residual current circuit breaker which is manufactured in compliance with the Regulation on Indoor Electrical Installations, specifications and standards; ensures safety of life and property by breaking the circuit within a duration of 10 - 30 ms by detecting the fault current occurring on the phases and neutral line when there is a leak current in the electrical installations; operates at 220V at mono-phasic circuits and at 380V at tri-phasic circuits; has a differential coil and a test button to check whether the system is operating; can be installed on carrying rails inside the panel; is protected against external impact; complies with CEE 27 and other international standards, is capable of operating even when the neutral line disrupted at 30 mA life protection and 300 mA for fire protection.				
11	718-507	Residual current protection switch -up to 4x25 A (30 mA)	piece	0,000	
	Technical Description: Supply of residual current protection switch, designed in compliance with electrical indoor installations regulations, specifications and standards, sensing the fault current in the phases and neutral line in case of any leakage in the electrical installations and ensuring safety of life and property by switching off the circuit in a period of 10 to 30 ms, operating under 220 V in single-phase circuits and under 380 V under three-phase circuits, with differential coil, with test button to control whether the system operates or not, mountable to carrying rails in the board, protected against external impacts, compliant with CEE 27 and other international standards, 30 m A for life protection, 300 mA for fire protection, operative even when neutral line is disrupted including assembly, any material and labor and handing over in operating condition.				
12	718-514	Residual current circuit breakers- up to 2x25 A (300 mA)	piece	0,000	

	Technical Description: Supply, installation and delivery in working condition including all materials and workmanship of the residual current circuit breaker which is manufactured in compliance with the Regulation on Indoor Electrical Installations, specifications and standards; ensures safety of life and property by breaking the circuit within a duration of 10 - 30 ms by detecting the fault current occurring on the phases and neutral line when there is a leak current in the electrical installations; operates at 220V at mono-phasic circuits and at 380V at tri-phasic circuits; has a differential coil and a test button to check whether the system is operating; can be installed on carrying rails inside the panel; is protected against external impact; complies with CEE 27 and other international standards, is capable of operating even when the neutral line disrupted at 30 mA life protection and 300 mA for fire protection.				
13	718-520	Residual current circuit breakers- up to 4x25 A (300 mA)	piece	0,000	
	Technical Description: Supply, installation and delivery in working condition including all materials and workmanship of the residual current circuit breaker which is manufactured in compliance with the Regulation on Indoor Electrical Installations, specifications and standards; ensures safety of life and property by breaking the circuit within a duration of 10 - 30 ms by detecting the fault current occurring on the phases and neutral line when there is a leak current in the electrical installations; operates at 220V at mono-phasic circuits and at 380V at tri-phasic circuits; has a differential coil and a test button to check whether the system is operating; can be installed on carrying rails inside the panel; is protected against external impact; complies with CEE 27 and other international standards, is capable of operating even when the neutral line disrupted at 30 mA life protection and 300 mA for fire protection.				
14	718-521	Residual current circuit-breakers up to 4x40 (300mA)	piece	0,000	
	Internal Electrical Installations Regulations, specifications and phases is any leakage in the electrical system made according to standard and fault current sensing on the neutral line consisting of 10 - 30 ms. cut cycle time in providing life and property by, for single-phase circuit 220 V three-phase circuit at 380 V working differential coil, which test button above to check that the system is working, the tables inside transport rails protected against external influences that can be mounted, CE 27, and in accordance with international standards, 30 mA for life protection, 300 mA for protection against fire, procurement, installation even operable leakage protection switch in the neutral line disconnection in value, all kinds of materials and labor including delivery business case.				
15	723-401	Automatic control central compensation coil-400 to V	kVAR	0,000	
	Automatic control relay complete with reagents, other features BFT No. Such as 723-300 (cos m., Capacitors, contactors and to remove stuck a circuit fuses belong to this circuit, cos m and relay transformer current required for the control circuit fuses, which controls the switch cam switches and thermal magnetic protector switch is included in the price.				
16	724-401	Switch fuse (3 kA)- up to 16 A	piece	0,000	
	Technical Description: Supply of switch fuse, to serve as switch as well, 3 kA breaking capacity, phase breaking feature for 2- and 4-poles types, B and C curve including assembly, any material and labor				
17	724-402	Switch fuse (3 kA) – up to 25 A	piece	0,000	
	Technical Description: Supply including installation, all materials and workmanship of switch fuse, to serve as switch as well, 3 kA breaking capacity, phase breaking feature for 2- and 4-pole types, B and C curve.				
18	724-406	Switch fuse (3 kA) - up to 3x16 A	piece	0,000	
	Technical Description: Supply of switch fuse, to serve as switch as well, 3 kA breaking capacity, phase breaking feature for 2- and 4-poles types, B and C curve including assembly, any material and labor				
19	724-407	Switch fuse (3 kA) - up to 3x40 A	piece	0,000	
	Technical Description: Supply of switch fuse, to serve as switch as well, 3 kA breaking capacity, phase breaking feature for 2- and 4-poles types, B and C curve including assembly, any material and labor				
20	725-401	100-500 current measurement transformer / 5A	piece	0,000	
	Boring and the free types of instruments to be used in the same quality, strength 5-10 VA, class: 0,5 - 1, supply and installation of measuring current transformer.				
21	725-731	Scheduled Time 725-731 Three Phase Electronic Type (active-reactive) meter, 3x230 / 400 V 3x5 (7.5) Quantity	piece	0,000	
	IEC 1036-96, EN 62053-21 / 23, according to TS 62052-11 standard, Science, Industry and Technology Ministry trademark registration and the Registration Certificate, reactive measurement while capacitive and inductive measurement that can measure separately, the maximum in their specified current and voltage range Class 2 can measure the error class, a minimum of 5 (7.5) of the input current, working				

	with frequency 50 Hz, information communication with Counter (TSE comply with the EN 62056-21 standard) can be provided with optical port (standard on adhering to the data communication in the EDIS and OBIS code system will be easily understandable terms in but the counter display will be used.) Counter Electricity Tariffs according to the Regulation, the resolution of one day per minute adhering to counter program with the divisibility properties of up to 8 different time zones, the IP 51 protection class (EN 60529) and dust made to enter the water, background on the counter-light and 6 full, with 2 decimal digit digital display, measuring instruments and electrical counters Directive (76/891 / EC) suitable TEDAŞ approved, three-phase four-wire electronic type active-reactive Meters and supplying the base, rather than transfer the business, making the delivery of installation and connection work state. (CTs fee is also paid in the current transformer system.)			
22	725-904	Signal light up to 250 V	piece	0,000
	Technical Description: supply of signal light, compliant with TS 2575 EN 60073 standard, built-in type, in colors as specified in the standard depending on application including transport to workplace, assembly an connections and handing over in operating condition (plug and bulb are included in the price.)			
23	726-304	Grounding line -16 mm² (without conduit)	m	0,000
	Technical Description: Grounding line without conduit, to be installed on free consoles, crochets including any material and labor. (Measurement: m)			
24	727-412	Lead-free PVC isolated (NYM) cable-3x1,5 mm²	m	0,000
	Technical Description: Column or supply line installation with plastic isolations of the phase and neutral conductors according to the actual lists of the electrical inner installations regulation including conduits, crochets, junction box, joints, elbows, terminals, iron console, paint, any material and labor. MEASUREMENT: The conduit length including junction box, joint is the length of the supply line. No separate payment shall be made for junction boxes, joints and crochets, in case of lengths exceeding 10 meters 1 junction box shall be placed at each 10 meters. For intermediary items, payment shall be made from the higher level.			
25	727-511	1 kV underground cable (NYY) -3x6 mm	m	0,000
	Building inside on walls, shelves or hooks on the wall, into the ceiling or channels, to ensure the establishment of underground cables to be laid in the channel outside the building, gate and security pipes, all kinds of material crochet and including labor.			
26	727-523	1 kV underground cable (NYY)-3x25+16 mm²	m	0,000
	Technical Description: Supply of underground cables to be installed surface mounted on the wall, ceiling or channels through consoles or crochets in case of indoor, to be installed into channels in case of outdoor including transport to workplace, line and safety conduits any material, crochets and labor.			
27	727-526	1 kV underground cable (NYY)-4x6 mm²	m	0,000
	Technical Description: Supply of underground cables to be installed surface mounted on the wall, ceiling or channels through consoles or crochets in case of indoor, to be installed into channels in case of outdoor including transport to workplace, line and safety conduits any material, crochets and labor.			
28	727-527	1 kV underground cable (NYY)-4x4 mm²	m	0,000
	Technical Description: Supply of underground cables to be installed surface mounted on the wall, ceiling or channels through consoles or crochets in case of indoor, to be installed into channels in case of outdoor including transport to workplace, line and safety conduits any material, crochets and labor.			
29	734-101	Normal outlet, lighting outlet	piece	0,000
	Technical Description: Supply of surface or flush mounted lighting outlet (armature excluded) in Peschel, Bergman or PVC conduit, with minimum 2,5 mm ² lines and minimum 1,5 mm ² outlet lines, phase and neutral conductors colored according to TS 6429, plastic insulation including junction box, terminal, switch, armature, fixing block and any material, transport to workplace and labor (without excluded). No price difference shall be paid if wall thickness is higher than normal. Measurement: No separate payment shall be made unless line length exceeds 35 m.. For line lengths after 35 m, a separate payment for supply line shall be made on unit price no. 727-000. For the normal outlets and luster outlets a single outlet shall be taken as normal. Additional outlets connected to these outlets shall be deemed as parallel. In the Two-way switch outlet, two two-way switches and one outlet shall be deemed as normal outlet whereas two-way switch outlet and connected other outlets shall be deemed as parallel. The deviator switches shall be paid on their own unit prices. Among outlets controlled by switches, the first two outlets in the same place shall be deemed as one			

	switch outlet whereas others shall be deemed as parallel outlets. If a circuit breaker is used instead of a switch, the switch cost shall be reduced from the price and the circuit breaker price shall be paid separately. Three-phase outlet is similar to normal outlet where each armature is supplied with three-phase four or five conductors. In the three-phase outlet the switch, contactor and contactor control lines shall be paid separately. If each armature is supplied from a separate phase, the first outlet shall be paid over single-phase normal outlet whereas other connected outlets shall be paid over single-phase parallel outlets. The armature prices shall be paid over unit price no. 742-000, separately.				
30	735-102	Safety line plug outlet	piece	0,000	
	Technical Description: Measurement: If the line exceeds 35 m, payment for the supply line shall be made over unit price no. 727-000.				
31	742-125	Type L2 Waterproof fixtures	piece	0,000	
	Same with Type L 1, only ovoid.				
32	742-265	Fluorescent armature T1 (plexi-glass)-1x40 W	piece	0,000	
	Technical Description: Type T1 plexi-glass fluorescent armature. (**) Supply of surface mounted plexi-glass armature of type to be approved by the administration, with special profile made of sheet with minimum thickness 0,50 mm., depth of 10 - 15 cm., depending on the type and number of bulbs, frame dimensions: 3 - 4 mm. thickness, with easily detachable cover made of mat plexi-glass or transparent prism plexi-glass with light transmittance of minimum 75 %, with frame made of sheet with special oven-dried paint or oxal aluminum, bulb shall be spliced side by side or end to end if necessary, TSE certified ballasts, lock-type socket with starter made of fire resistant material, TSE certified connecting cables including any material and labor, transport to workplace and assembly.				
33	742-456	LED PRJ - up to 150 W (including 150 W) (220 V. AC.), Led Projectors	piece	0,000	
	Technical Description: Supply of projector, housing and front glass frame made of cast aluminum, coated with oven-dried paint, tempered front glass, resistant to temperature up to 250 C° and impacts, protection class IP 20, coated with silicon seal between the glass and housing, with junction box behind or under the housing, consisting of high-power LEDs with special lenses of minimum 100 lumen per watt, equipped with constant current LED driver and cooler, minimum 30.000 hours of luminous service life, minimum 90 % efficiency, operating temperature -20°C to +85°C, with necessary assembly apparatus for surface, flush or ground mounting, manufactured in accordance with TS EN 60598-1, TS 8702 EN 60598-2-5, TS EN 61347-2-13 standards and the regulation 2006/95 /AT related to electrical equipment designed for use in specific voltage limits, put on the market with CE Conformity marking including transport to workplace, any material, labor and handing over in operating condition.				
34	742-532	ATY2-4x18 W (double-parabolic reflector) decorative drop ceiling armature	piece	0,000	
	Technical Description: With special profile made of DKP with minimum 0,7 mm. thickness, hole diameter 9-11 cm., with width and length depending on bulb type and number, back sections shall be enhanced by additional twists, designed in such way that the heat generated by ballasts and the hot air in the environment shall be transferred outside from the armature, housing with special air channels, with special frame, with mounting brackets allowing fast and easy intervention, providing light distribution in form of a symmetric bat wing, with double-parabolic eloxal pure aluminum reflector standing upright or parallel to the fluorescent bulbs, made of eloxal high-purity (99,9%) anodic aluminum (with eloxal aluminum lamellar stripes placed upright to fluorescent bulbs with a distance of to 10 cm in case of single parabolic), protection class IP 20, coated with oven-dried paint and color to be approved by the administration (Armature efficiency shall not be less than 70%. If deemed necessary, the administration may request from the manufacturer the testings related to efficiency values and to prove such values by a certificate to be obtained from an institution laboratory), with fluorescent bulbs and lock-type sockets made of fire-resistant material, with TSE certified ballasts and starters, with TSE certified connecting cables resistant to high temperatures including transport to workplace, any material, labor and handing over in operating condition.				
35	980-100	Metal lightning rod (lightning protection system)	piece	0,000	
	Technical Description: Supply to the worksite of the lightning rod made of solid copper, conical tipped, Ø 20 mm in diameter, 800 mm in length (with 40 mm part screw-threaded); supply of the roof connection piece (as in EL-2 application drawing) in length suitable for this lightning rod to fix the rod firmly on the roof; connecting it to the roof conductor with bolted connectors in the connection piece made of copper, screwing this connector to the roof's wooden base; delivery including all small				

	materials and workmanship.				
36	980-214	average excitation path dl=60 m, active capture rod	piece	0,000	
	<p>Technical Description: Supply of active lightning rod, with characteristics as written in the specification, with early warning operation, high corrosion resistance, made of stainless steel or material with stainless characteristics (for example chrome coated copper, chrome nickel, stainless steel etc.), resistant to highest wind speed, flawless operation temperature -40°C to +120°C, protection class IP 65, (delta)T warning time minimum 15 µs, resistant to the lightning test current of class H, 100 kA as specified in TS EN 50164-1 and shall not cause any significant damage upon the test, compliant with the (NFC17-102) and (UNE 21.186) standards as well as the (TSE K 122) certification criteria, ISO 9001 and CE certified, with an operation warranty certificate of minimum 15 years approved by the Ministry of Science, Industry and Technology including transport, mounting to the post, connection of down conductors, any material, labor and handing over in operating condition.</p> <p>NOTE:</p> <p>1- The active lightning rod type examination test shall be conducted at laboratories accredited by TURKAK and the related reports shall be submitted to the administration.</p> <p>2- A document which shows that the IP 65 protection class test has been conducted by an institution accredited by TURKAK shall be submitted to the administration.</p>				
37	981-101	50 mm² electrolytic copper wire and roof up and down conductors installation	m	0,000	
	<p>Technical Description: Roof and conductor installation with bare electrolytic solid copper conductor, jagged or screw type fork fixing crochets made of red cast or similar material, with measures to prevent any corrosion in the capture rod or connection points to the ground electrode, silver welding at joints of the conductors if necessary, including inspection, terminals, any material and labor.</p>				
38	982-102	Building Engirdling Conductor 30x3.5 mm Galvanized Steel Sheet	m	0,000	
	<p>Made building engirdling conductor installation of conductors, building exterior around at least 60-80 cm depth in the open channel in every kind of soil, the closure of the conductor laying and the channel, the rivets or welding electrodes, all kinds of small parts and included labor.</p>				
39	983-103	Conductor protective tube (3 m)	piece	0,000	
	<p>Technical Description: Placing the down conductors inside the galvanized iron tube of 20 mm in diameter and 3 m in length (if more than 3 m of tube is used, it shall be paid additionally) with 0.5 m inside the ground; insulating the part of the conductor inside the tube by PVC or similar insulation material to prevent contact with the tube; and fixing it to the tube as a conductor to prevent it from operating as a transformer at the moment of lightning hit; providing the inspection connector made of corrosion-resistant material; supply and installation at work site including all small materials and workmanship.</p>				
40	985-101	Thermo welding joint up to 32 gr welding powder	piece	0,000	
	<p>Technical Description: Splicing of conductors of any section by exothermic reaction of aluminum copper oxide powder including pot, pot pliers, scraper, brush, lighter and any material and labor.</p>				

Section 4: Bid Submission Form¹

(This should be written in the Letterhead of the Bidder. Except for indicated fields, no changes may be made in this template.)

[insert: Location, Date]

To: United Nations Development Programme

Dear Sir/Madam:

We, the undersigned, hereby offer to supply the goods and related services required for **Construction of Two Solid Waste Transfer Stations in Araban / Gaziantep and Birecik / Şanlıurfa** in accordance with your Invitation to Bid dated [insert: Date]. We are hereby submitting our Bid, which includes the Technical Bid and Price Schedule. We hereby declare that:

- a) All the information and statements made in this Bid are true and we accept that any misrepresentation contained in it may lead to our disqualification;
- b) We are currently not on the removed or suspended vendor list of the UN or other such lists of other UN agencies, nor are we associated with, any company or individual appearing on the 1267/1989 list of the UN Security Council;
- c) We have no outstanding bankruptcy or pending litigation or any legal action that could impair our operation as a going concern; and
- d) We do not employ, nor anticipate employing, any person who is or was recently employed by the UN or UNDP.

We confirm that we have reviewed and learnt from relevant Turkish Authorities, laws, communiqués, etc. application of VAT exemption to UNDP and quoted our prices excluding VAT accordingly. We understand and accept that we will issue and get paid for the invoices excluding VAT.

We confirm that we have read, understood and hereby fully accept the Schedule of Requirements and Technical Specifications describing the duties and responsibilities required of us in this ITB, and the General Terms and Conditions of UNDP's Standard Contract for this ITB. We agree to abide by this Bid for 90 days as indicated in Data Sheet.

We undertake, if our Bid is accepted, to initiate the supply of goods and provision of related services not later than the date indicated in the Data Sheet. We fully understand and recognize that UNDP is not bound to accept this Bid, that we shall bear all costs associated with its preparation and submission, and that UNDP will in no case be responsible or liable for those costs, regardless of the conduct or outcome of the evaluation.

We remain,

Yours sincerely,

Authorized Signature:

Name and Title of Signatory:

Name of Firm:

Contact Details :

¹ No deletion or modification may be made in this form. Any such deletion or modification may lead to the rejection of the Bid.

Section 5: Documents Establishing the Eligibility and Qualifications of the Bidder

Bidder Information Form²

Date: *[insert date (as day, month and year) of Bid Submission]*

ITB No.: UNDP-TUR-ITB-PROJ(SR)2017/02

Page _____ of _____ pages

1. Bidder's Legal Name		
2. In case of Joint Venture (JV), legal name of each party: <i>[insert legal name of each party in JV](not allowed)</i>		
3. Actual or intended Country/ies of Registration/Operation: <i>[insert actual or intended Country of Registration]</i>		
4. Year of Registration in its Location: <i>[insert Bidder's year of registration]</i>		
5. Countries of Operation	6. No. of staff in each Country	7. Years of Operation in each Country
8. Legal Address/es in Country/ies of Registration/Operation: <i>[insert Bidder's legal address in country of registration]</i>		
9. Value and Description of Top three (3) Biggest Contract for the past five (5) years		
10. Latest Credit Rating (Score and Source, if any)		
11. Brief description of litigation history (disputes, arbitration, claims, etc.), indicating current status and outcomes, if already resolved.		
12. Bidder's Authorized Representative Information Name: <i>[insert Authorized Representative's name]</i> Address: <i>[insert Authorized Representative's Address]</i> Telephone/Fax numbers: <i>[insert Authorized Representative's telephone/fax numbers]</i> Email Address: <i>[insert Authorized Representative's email address]</i>		
13. Are you in the UNPD List 1267.1989 or UN Ineligibility List ? (Y / N) Link for checking: http://www.un.org/sc/committees/1267/		
14. Attached are copies of original documents of: <ul style="list-style-type: none"> All eligibility document requirements listed in the Data Sheet The document(s) (e.g. trade registration gazette or equivalent etc.) that prove(s) the constitution of the Company named as the Bidder, above. The document(s) (e.g. trade registration gazette or equivalent etc.) that demonstrate(s) change(s) (i.e. title, address, shareholding structure) and current status of the Company, named as the Bidder, above. Signature Circular and/or Power of Attorney, demonstrating authority to sign on behalf of the Bidder, certified by the notary public. 		

² The Bidder shall fill in this Form in accordance with the instructions. Apart from providing additional information, no alterations to its format shall be permitted and no substitutions shall be accepted.

Section 6: Technical Bid Form³

Construction of Solid Waste Transfer Station in Araban / Gaziantep and Birecik / Şanlıurfa

Name of Bidding Organization / Firm:	
Country of Registration:	
Name of Contact Person for this Bid:	
Address:	
Phone / Fax:	
Email:	

SECTION 1: EXPERTISE OF FIRM / ORGANIZATION

This section should fully explain the Bidder's resources in terms of personnel and facilities necessary for the performance of this requirement. All contents of this section may be modified or expanded depending on the evaluation criteria stated in the ITB.

Section 1 will be composed of three sub-sections, which will collectively demonstrate the management plan of the Bidder, as described below.

Sub-Section 1.1: Organizational Capacity: This section should provide corporate orientation, including but not limited to the year and state/country of incorporation and a brief description of the Bidder's activities. It should focus on services related to the Proposal. Bidder should attach Form 1.1: Statement of Declaration and promotional brochures, if any.

- **Sub-section 1.1.1 General Experience:** A brief description of corporate background and orientation with a focus on relevant experience (e.g. Construction for civil works contracts etc.), and services delivered to multinational and international organizations.
- **Sub-section 1.1.2 Specialization:** This section should focus on the Bidder's scope of specialization with an emphasis on ongoing/present or recently completed activities.
- **Sub-section 1.1.3: General organizational capability:** This section should also describe the organizational unit(s) that will become responsible for the contract, and the general management approach towards a project of this kind, and the quality assurance and/or risk management/mitigation systems and mechanisms in place. (Attach copy of quality assurance certificate(s) if any)

³ Technical Bids not submitted in this format may be rejected.

- **Sub-section 1.1.4: Litigation and Arbitration History:** This section should elaborate on Bidder's litigation and arbitration history. If the Bidder has no litigation and arbitration history, this section should explain how the Bidder has managed to avoid from potential conflicts that may result in a case of litigation or arbitration. (Attach Form 1.1.4)

Sub-Section 1.2: Similar Work Experience: This section should initially provide a narrative presentation of the Bidder's experience in similar undertakings, preferably focusing on the Bidder's recent activities (2011 and onwards).

The Bidder shall complete and submit Form 1.2.1 (Single Similar Work Experience) and Form 1.2.2 (Total Similar Work Experience). Form 1.2.2 shall be replicated for each of the similar work experience to be referenced by the Bidder. A maximum of 10 (ten) similar work experiences shall be submitted. Form 1.2.1 and Form 1.2.2 should be supplemented with documents (e.g. copies of work completion certificates, copies of client letters etc.) substantiating and evidencing the similarity, amount (values of contracts) and substantial or successful completion of the referenced work experiences.

For the purposes of this ITB, in order to be considered "similar",

- A referenced work experience should include construction of civil works.
- Successfully or substantially completed in 2012 or later in the public or private sector.
- If the referenced work experience concerns of construction of civil works of superstructures such as factories and industrial facilities etc. are considered similar experience.

Sub-section 1.3: Financial Resources and Strength: This section should describe Bidder's current financial capabilities. Bidder shall complete Form 1.3.1: Financial Resources and Form 1.3.2: Financial Strength, supplemented with bank reference letters and audited financial statements for years 2014, 2015 and 2016. Bidder shall complete Form 1.3.3: Annual Construction Turnover supplemented by invoices and work completion certificates.

SECTION 2: PROPOSED METHODOLOGY, APPROACH AND IMPLEMENTATION PLAN:

This section should demonstrate the Bidder's responsiveness to the Terms of Reference by identifying the specific components proposed, addressing the requirements, as specified, point by point; providing a detailed description of the essential performance characteristics, proposed warranty; and demonstrating how the proposed methodology meets or exceeds the specifications.

Sub-section 2.1: Responsiveness to the Terms of Reference: This section should focus on the (a) comments on the Terms of Reference; (b) the Technical Approach and Methodology; proposed by the Bidder; (c) Quality Assurance Mechanisms to be deployed; and (d) Risks, identified, along with proposed risk mitigation strategies.

- **Sub-section 2.1.1 Comments on the Terms of Reference:** The Bidder shall initially provide a description of the scope of the work, demonstrating the Bidder's understanding of the Terms of Reference. Additionally, the Bidder shall present and justify here any improvement to the Terms of Reference it is proposing to improve performance in carrying out the assignment. Such suggestions should be concise and to the point, and incorporated in your Proposal.
- **Sub-section 2.2.2 Technical Approach and Methodology:** Here the Bidder shall explain its understanding of the objectives of the assignment, approach to the services, methodology for carrying out the activities and obtaining the expected output, and the degree of detail of such output. Bidder should highlight the problems being addressed and their importance, and explain the technical approach it would adopt to address them. Bidder should also explain the methodologies it proposes to adopt and highlight the compatibility of those methodologies with the proposed approach.
- **Sub-section 2.2.3 Quality Assurance:** This sub-section should focus on the quality assurance mechanism to be proposed by the Bidder.
- **Sub-section 2.1.4 Risks:** This sub-section should focus on the risks to be identified by the Bidder, along with proposed risk mitigation strategies and measures.

Sub-section 2.2: Work flow and time plan: In this sub-section the Bidder should propose the main activities of the Assignment, their content and duration, phasing and interrelations, milestones (including interim approvals by the Employer), and delivery dates of the reports. The proposed work plan should be consistent with the technical approach and methodology, showing understanding of the Terms of Reference and ability to translate them into a feasible working plan. A list of the final documents, including reports, drawings, and tables to be delivered as final output, should be included here.

- **Sub-section 2.2.1 Work Flow:** Here the Bidders are expected to provide a logically sequenced, step-by-step work flow that demonstrates the inter-dependencies between the various steps of the Assignment in line with the ToR.
- **Sub-section 2.2.2 Milestones:** This sub-section should clearly identify and list the critical milestones of the Assignment.
- **Sub-section 2.2.3 Time plan:** The Bidders are expected to present a time plan in the form of Gantt-Chart (Form 2.2.3), consistent with sub-section 2.2.1 and sub-section 2.2.2, and in line with the ToR.

- **Sub-section 2.2.4 Resource Schedule, Equipment and Vehicles:** This sub-section should demonstrate the resources (human resources and capital assets), required to be deployed by the Bidder in order to achieve the contract objectives in a timely manner. Here the Bidders are expected to fully explain their resources in terms of equipment and vehicles to be provided for successful completion of the Contract.

SECTION 3: MANAGEMENT STRUCTURE AND KEY PERSONNEL:

This should fully explain the Bidder's resources in terms of personnel and facilities necessary for the performance of this requirement. It should describe the Bidder's current capabilities/facilities and any plans for their expansion.

Sub-section 3.1 Proposed Team Structure: This sub-section should introduce the team that will fulfill the services within the scope of the Schedule of Requirements and Technical Specifications, and focus on the division of labor among the team members (job descriptions of key and non-key personnel), including management of contractual and technical relations with the Employers, as well as with the Civil Works Contractors. Attach Form 3.1. (Annex 1– Submission Templates and Forms)

Sub-section 3.2 Personnel: Provide CVs of the proposed key personnel, and copies of the diploma(s), documents demonstrating professional experience, and documents demonstrating membership to relevant chambers of the team members. Attach Form 3.1.x (Annex 1 – Submission Templates and Forms). **Form shall be replicated for each key personnel.**

Section 7a: Price Schedule Form⁴ for LOT 1

The Bidder is required to prepare the Price Schedule as indicated in the Instruction to Bidders.

- 1) The Price Schedule must provide a detailed cost breakdown for each item. The components comprising the total price must provide sufficient detail to allow UNDP to determine compliance of Offer with requirements as per Statement of Works of this ITB.
- 2) All prices/rates quoted must be exclusive of taxes, since the UNDP is exempt from taxes as detailed **DATA SHEET DS-37. It is the bidders' responsibility to learn from Ministry of Finance and other relevant authorities, the application of tax exemption through the related laws, decrees, communiqués, etc.**
- 3) The format shown on the following pages should be used in preparing the price schedule.
- 4) If there is a discrepancy between the unit price and the total price that is obtained by multiplying the unit price and quantity, the unit price shall prevail and the total price shall be corrected. If the Bidder does not accept the correction of errors, its Bid will be rejected
- 5) All prices shall be quoted in US Dollars.
- 6) Price Schedules not submitted in this format may be rejected.
- 7) Grand Total to be quoted by the Bidders will be the price for the whole project including all different project activities to be completed in **Construction of Solid Waste Transfer Station in Araban/Gaziantep, within the scope of Effective Urban Waste Management Project** in full compliance with the Schedule of Requirements and Technical Specifications. Therefore, this price will include all types of costs, like transportation of the material and equipment to and from the sites, water drainage, variation in soil conditions, direct and indirect nature, associated with the satisfactory completion of each work item in accordance with Statement of Works/Technical Drawings and in overall in accordance with the Conditions of Contract, to be incurred by the Contractor until final delivery to UNDP.
- 8) The unit prices to be quoted shall be firm and final during the validity of the contract. The Contractor will not be entitled to receive any price difference due to changes in market conditions and/or prices.
- 9) The Contractor commits to design, construct, deploy, test, commission and trial operation of solid waste transfer station and equipment.
- 10) Costs of all these materials, equipment, consumables, workmanship, transport or any other expenses of the Contractor as well as the costs associated with the design, construction, erection, testing, commissioning and trial operation of all these equipment shall be included in the Contractor's tender price as lump-sum.
- 11) Construction and electricity connection related costs of permit and licenses will be borne by the Contractor and corresponding costs shall be integrated into the tender price.
- 12) The Contractor shall provide the Engineer for each LOT with 1 double cabin 4x4 pick-up vehicles and office space, and cover all associated costs thereof, during the supervision of construction.

⁴ No deletion or modification may be made in this form. Any such deletion or modification may lead to the rejection of the Bid.

Title: GAZİANTEP ARABAN SOLID WASTE TRANSFER STATION

CONSTRUCTION WORKS

NO	POSE NUMBER	UNIT	TYPE OF WORKS	QUANTITY	UNIT PRICE (\$)	AMOUNT (\$)
1	İ-ÖBF 5	m³	Excavation of every kind of materials (soil, rock, loose etc.) at any depth and width by machine	4.605		
2	O7.006	m³	Transportation of filling materials-20 km	3.450		
3	B-15.044	km	Leveling and fine adjustment works on any ground	13,5		
4	KGM/2205	m³	Irrigation and compression of filling	4.605		
5	Y.15.140/04	m³	Supply of gravels and flooring, irrigation and compression by machine	100		
6	KGM/6040	m³	foundation construction [with crushed and screened quarry stone]	1.200		
7	KGM/6000	m³	Sub base construction [with crushed quarry stone]	1.200		
8	O7.006	m³	Transportation of filling materials-20 km	2.400		
9	15.150/K	m³	Figuration of sub base and base material	2.400		
10	KGM/16.002/K	m³	Plain concrete	90		
11	Y.21.001/03	m²	Plain surface reinforced concrete form works with Plywood	3.000		
12	Y.23.014	ton	Cutting, bending and placement of Ø 8- Ø 12 mm deformed concrete steel bars	29		
13	Y.23.015	ton	Cutting, bending and placement of Ø 14- Ø 28 mm deformed concrete steel bars	90		
14	N.YF.07	ton	Ribbed bars and mew wire transport to a distance of 210 km	140		
15	KGM/23.010/K	ton	Implementation of corrugated wire mesh (1.50-3.00 kg/m2)	27		
16	Y.16.050/06	m³	Pouring of Concrete of C 30/37 compressive strength class which has been manufactured in a concrete plant or has been purchased	1.950		
17	Y.21.050/C12	m³	Wooden scaffolding (4 to 6 meters)	2.230		
18	Y.21.050/C11	m³	Wooden scaffolding (0 to 4 meters)	330		
19	23.176/1	kg	Various iron works	8.100		
20	Y.25.002/01	m²	Two layer coating of iron surfaces against corrosion	100		
21	17.141/İB	mt	Concrete kerbs	1.230		
22	KGM/37.014/K-1	pcs	Opening sapling hole (having 40 cm diameter and 50 cm depth) by hand	232		
23	37.092/2	m³	Supply of topsoil	1.080		
24	37.092/3	m³	Flooring of topsoil on area subject to herbal flooring	1.080		
25	MSB.521/B2	m²	Roof coating and facing works with trapezoid sheets	150		
26	N-040	ton	Transport of trapezoid sheets surrounding the bunker to a distance of 5 km	5,7		

Title: GAZİANTEP ARABAN SOLID WASTE TRANSFER STATION

CONSTRUCTION WORKS

27	23.260/İB-1	mt	Erection of reinforced concrete poles of 2,63 m height, gauze and protective fences	450		
28	İ-ÖBF 6	pcs	Bunker structure and supporting steel(Galvanized) structure construction	1		
29	İ-ÖBF 7	pcs	Supply and assembly of 3x7 Container as weighing house	1		
30	İ-ÖBF 8	m²	Ceramic mosaic	55		
31	N.YF.01	m³	Transportation of Stones(250 meter)	3.000		
32	Y.18.461/041	m²	Laying geotextile seal (keçe)	1.884		
33	15.140/İB-1	m³	Making foundation and ditch filling with stabilized material(08.008)	3.500		
34	İÖBF-3	pcs	False Acacia, Juniper, Acorn Oak, Aleppo Pine trees and planting supplies	232		
35	İÖBF-9	pcs	Supply of quard building(220*220) and installation of it	1		
36	İÖBF-4	pcs	Intruduction signboard of the Project.	1		
37	Y.18.460/24	mt	200 mm nominal diameter, rather than supply and laying of PVC corrugated drainage pipe	370		
38	12.2190/1	pcs	Steam Cured 500 Dz.Prefabrik Parcel Of Chimney Base Element Formation (H = 0.60 M., Gaskets Tire Combination Of Place)	4		
39	12.2190/2	pcs	Buhar Kürlü 500 Dz.Pref.Gövde Eleman.Parsel Bacası Teşkili (H=0.50 Mt.,Birl.Yeri 600 Dz.Harç)	12		
40	12.2190/3	pcs	Steam Cured 500 Dz.Prefabrik Chimney Body Parts Parcel Formation (H = 0.25 M., 600 Dose Combination Of Location Mortar)	4		
41	12.2190/4	mt	Steam Cured, The Body Height Adjustment With 500 Dz Prefabricated Element, Parcel Chimney, Formation	4		
42	12.2190/5	pcs	Bs 18 Concrete (350 Doses), The Placing Of Frames Prefabricated Concrete Cover	4		
43	Y.19.090/002	mt	Cutting joint(having 4 mm width,40 mm depth) and filling polyetilen roving and polyuretan joint mastic material	300		
44	KGM/60.025	pcs	Making circular(60 cm diameter) plate with 2 mm galvanized steel	6		
45	KGM/60.038	m²	Making traffic signboards with 2 mm galvanized profile	4		
46	KGM/60.042	mt	Making trafic sign board pole and being galvanized(5 mm thickness,170 mm opening)	66		
47	KGM/60.051	pcs	Writing and making symbol to the plate with folyo material	66		
48	KGM/60.054	pcs	Making foundation for trafic info. Plate and its installation	22		
49	30-15-8801/III	mt	Drilling 12'' diameter water well(hard ground,fully equipped,filtered)	300		
50	03.032/3 38.1589	pcs	30 Kw submerged pump and installation (including pose no 381.589)	1		
CONSTRUCTION WORKS SUB-TOTAL						

Title: GAZİANTEP ARABAN SOLID WASTE TRANSFER STATION

MECHANICAL WORKS

NO	POSE NUMBER	UNIT	TYPE OF WORKS	QUANTITY	UNIT PRICE (\$)	AMOUNT (\$)
1	M ÖBF 1	Pcs	Over ground 60 Tons Weighing Machine	1		
2	M ÖBF 3	M	Polyethylene Pipe, PE100 Class PN (8 atm) Ø mm :40 (Outdoor ground)	3		
3	M ÖBF 4	M	Polyethylene Pipe, PE100 Class PN (8 atm) Ø mm :50 (Outdoor ground)	105		
4	M ÖBF 10	M	Polyethylene Pipe, PE100 Class PN (8 atm) Ø mm :63 (Outdoor ground)	35		
5	M ÖBF 6	M	Supply and installation of Ø200 corrugated pipe	235		
6	M ÖBF 7	M	Supply and installation of Ø300 corrugated pipe	48		
7	M ÖBF 9	Pcs	Sliding gate otomatic having 800 kg capacity	1		
8	İ-ÖBF4	m³	Excavation of every kind of materials(soil,rock,loose etc.) at any depth and width by machine	89		
9	097-203	Pcs	Floor Trap, Hard Plastic 10X10 cm	3		
10	210-624	Pcs	Ball Valve (Brass, with teflon seal) 20 Ø mm.	3		
11	210-729	Pcs	Ball Valve (PN 25-40) (steel cast, with screw) ø65 mm.	3		
12	221-207	Pcs	Silt Trap, PN 16, (for vapor+water, pig cast) ø65 mm	2		
13	227-301	Pcs	Check Valve, ø 65 mm	1		
14	089-101	Pcs	Short Tap 1/2" (With Filtered Rosette)	3		
15	103-108	Pcs	Cold Water Meter	1		
16	107-1101	Pcs	Flow rate:0-5 m3/h, Perssure:20-40mSS, Water Pressure Tank, With Single Pump, Vertical Shaft And Frequency Converter	1		
17	23.256/01	Pcs	Supply and Installation of Reinforced Composite Manhole Cover (Cover's Minimum Net Clearance is 600 mm)	3		
18	12.21910	M	Parcel Chimney	3,82		
19	071-103	Pcs	Extra type wash basin (screwed,ceramic and 40*50 cm)	1		
20	072-401	set	Wash basin installation(first class)(tap TS EN 200;siphon TS- EN 274-1-2-3)	1		
21	073-201	Pcs	Mirror-crystal glass 40x50 cm+D106	1		
22	094-100	Pcs	Toilet paper holder(tile) 16x16 cm	1		
23	079-800	Pcs	Alafranga toilet set with built-in reservoir	1		
24	V.1882/2	Pcs	12 BTU Split Air Conditioner	2		
25	105-607	Pcs	10 m3 steel water tank(moduler stainless)	1		
MECHANICAL WORKS SUB-TOTAL						

GAZİANTEP ARABAN SOLID WASTE TRANSFER STATION

ELECTRICAL WORKS

NO	POSE NUMBER	UNIT	TYPE OF WORKS	QUANTITY	UNIT PRICE (\$)	AMOUNT (\$)
1	701-201	Pcs	Metal Enclosure with Front Cover (TS EN 61439-1/2)	1		
2	705-103	Pcs	Steel plate with built-in 0.20-0.30 m2. (ts en 61439-1/2)	3		
3	710-100	Kg	Supply,montage and paint of copper bar	10		
4	713-204	Pcs	Selector Package Switch 3*25 A. (Behind the board) (TS 4915 EN 60669-1, TS EN 60947-3)	2		
5	718-102	Pcs	Dry-Type Non-Protective Contactor 3*16 A.	2		
6	718-310	Pcs	Time Relay Used For Lighting Control	2		
7	718-501	Pcs	Residual Current Protection Switch, up to 2*25 A (30mA)	1		
8	718-514	Pcs	Residual Current Protection Switch, up to 2*25 A (300mA)	1		
9	718-507	Pcs	Residual Current Protection Switch, up to 4*25 A (30mA)	4		
10	718-520	Pcs	Residual Current Protection Switch, up to 4*25 A (300mA)	1		
11	718-521	Pcs	Residual Current Protection Switch, up to 4*40 A (300mA)	1		
12	723-401	kVAR	Automatically Controlled Central Compensation Batteries	12,5		
13	725-401	Pcs	Current Measurement Transformer 100 - 500/5 A.	3		
14	725-731	Pcs	3 Phase Reactive Energy Meter, up to 3*230/400A.	1		
15	724-401	Pcs	Breaker, With Switch 16 A. (3KA) (TS 5018-1 EN 60898-1)	18		
16	724-402	Pcs	Breaker, With Switch 25 A. (3KA) (TS 5018-1 EN 60898-1)	1		
17	724-406	Pcs	3 Phase Breaker, With Switch 16 A. (3KA) (TS 5018-1 EN 60898-1)	2		
18	724-407	Pcs	3 Phase Breaker, With Switch 40 A. (3KA) (TS 5018-1 EN 60898-1)	8		
19	725-731	Pcs	Electronic type(active-reactive) counter with three phase 3x230/400 v..3x5 (7,5) a	1		
20	724-401	Pcs	Current measurement transformer 100 - 500/5 a.	3		
21	725-904	Pcs	Signal Lamp, up to 250 V.	3		
22	726-304	M	Ground Line Without Conduit, Free Installed 16 mm2	365		
23	727-412	M	Lead-Free, Pvc Insulated Cable And Supply Line Unleaded PVC 3*1.5 mm2 NYM	150		
24	727-511	M	1KV Underground Cable And Column And Supply Line 3*6 mm2 NYY (TS IEC 60502-1)	41		
25	727-523	M	1KV Underground Cable And Column And Supply Line 3*25+16 mm2 NYY (TS IEC 60502-1)	200		
26	727-526	M	1KV Underground Cable And Column And Supply Line 4*6 mm2 NYY (TS IEC 60502-1)	375		
27	727-527	M	1KV Underground Cable And Column And Supply Line 4*4 mm2 NYY (TS IEC 60502-1)	7		

GAZİANTEP ARABAN SOLID WASTE TRANSFER STATION

ELECTRICAL WORKS

28	742-265	Pcs	Plexiglass fluorescence shipowner Type t1-1*40 w.	1		
29	742-532	Pcs	Ceiling floor shipowner for decorative purpose aty2- 4x18 w	2		
30	742-125	Pcs	Weatherproof shipowner Type l2	2		
31	734-101	Pcs	Normal lighting outlet	5		
32	735-102	Pcs	Socket sorti with security line	7		
33	742-456	Pcs	LED Proj. up to 150 Watt (220 V. AC.)	2		
34	982-102	M	Building conductive 30×3.5 mm galvanized steel plate	40		
35	983-103	Pcs	Conductive protection pipe	3		
36	980-214	Pcs	Active Capture Rod, Average Signal Path L=60 MT	1		
37	980-100	Pcs	Installation set to protect against lightning (ihzarat:%60)(ts en 62305-1/2/3/4)	2		
38	981-101	M	Roof Up An Down Conductor, 50 mm ² Electrolytic copper conductor	60		
39	985-101	Pcs	Thermo-Welding Joint, up to 32 Gr. Welding Powder	2		
40	5.5.3.2.1/009	Pcs	Ad1-70/15 Type, 80 Kg. Singel Console Galvanized Steel Polygon Lighting Pole	12		
41	20.5.1.-003	Pcs	150W Sodium Vapor Lamp on Metal, Wood and Concrete Poles, without bulb	12		
42	08.2.2-01	M	50mm, Cable Conduit, 450N (Non-metallic, underground)	565		
ELECTRICAL WORKS SUB-TOTAL						

GAZIANTEP ARABAN SOLID WASTE TRANSFER STATION

ELECTRICAL WORKS (Energy Transmission Line (ENH))

N O	POSE NUMBER	UNIT	TYPE OF WORKS	QUANTITY	UNIT PRICE (\$)	AMOUNT (\$)
1	3.1.2	kg	Metal Enclosure with Front Cover (TS EN 61439-1/2)	12		
2	5.1	kg	Steel plate with built-in 0.20-0.30 m2. (ts en 61439-1/2)	3.023		
3	5.4	kg	Supply,montage and paint of copper bar	574		
4	8.1	KG	Selector Package Switch 3*25 A. (Behind the board) (TS 4915 EN 60669-1. TS EN 60947-3)	30		
5	8	MT	Dry-Type Non-Protective Contactor 3*16 A.	2,15		
6	9.3	kg	Time Relay Used For Lighting Control	205		
7	11.4	piece	Residual Current Protection Switch, up to 2*25 A (30mA)	34		
8	11.5	piece	Residual Current Protection Switch, up to 2*25 A (300mA)	34		
9	11.7	piece	Residual Current Protection Switch. up to 4*25 A (30mA)	3		
10	11.8	piece	Residual Current Protection Switch. up to 4*25 A (300mA)	9		
11	11.6.3.	piece	Residual Current Protection Switch. up to 4*40 A (300mA)	12		
12	15.2	piece	Automatically Controlled Central Compensation Batteries	3		
13	17.7	piece	Current Measurement Transformer 100 - 500/5 A.	1		
14	17.8	piece	3 Phase Reactive Energy Meter. up to 3*230/400A.	1		
15	17.9	piece	Breaker. With Switch 16 A. (3KA) (TS 5018-1 EN 60898-1)	6		
16	24.4.2	piece	Breaker. With Switch 25 A. (3KA) (TS 5018-1 EN 60898-1)	1		
17	26.2.4	piece	3 Phase Breaker. With Switch 16 A. (3KA) (TS 5018-1 EN 60898-1)	8		
18	30.1.1	MT	3 Phase Breaker. With Switch 40 A. (3KA) (TS 5018-1 EN 60898-1)	55		
19	30.2.2	MT	Electronic type(active-reactive) counter with three phase 3x230/400 v..3x5 (7.5) a	30		
20	30.4.2	piece	Current measurement transformer 100 - 500/5 a.	9		
21	32.15.1	MT	Signal Lamp. up to 250 V.	3		
22	32.34.14.1	piece	Ground Line Without Conduit. Free Installed 16 mm2	3		
23	31.6.4.3	piece	Lead-Free. Pvc Insulated Cable And Supply Line Unleaded PVC 3*1.5 mm2 NYM	1		
24	32.12	MT	1KV Underground Cable And Column And Supply Line 3*6 mm2 NYY (TS IEC 60502-1)	10		
25	32.12	MT	1KV Underground Cable And Column And Supply Line 3*25+16 mm2 NYY (TS IEC 60502-1)	100		
26	32.21	piece	1KV Underground Cable And Column And Supply Line 4*6 mm2 NYY (TS IEC 60502-1)	1		
27		MT	1KV Underground Cable And Column And Supply Line 4*4 mm2 NYY (TS IEC 60502-1)	30		
28		tk	Plexiglass flourescence shipowner Type t1-1*40 w.	1		
ELECTRICAL WORKS (ENH LINE) SUB-TOTAL						

LOT 1- Gaziantep Araban Solid Waste Transfer Station

BILL OF QUANTITIES SUMMARY		
No	Description	Amount (\$)
1.1	Construction Works	
1.2	Mechanical Works	
1.3	Electrical Works	
1.4	Electrical Works (ENH LINE)	
LOT 1- GRAND TOTAL (\$)		

Above bid prices are based on the Bill of Quantities, and are inclusive of all other costs (that are not costed through BoQ) whether direct or indirect nature, associated with the satisfactory completion of each work item in accordance with Statement of Works/Technical Drawings and in overall in accordance with the Conditions of Contract.

The Contractor shall provide the Engineer for each LOT with 1 double cabin 4x4 pick-up vehicles and office space, and cover all associated costs thereof, during the supervision of construction

Above prices exclude VAT and shall be the basis of the invoices to be issued to UNDP.

“Duly authorized to sign the Proposal for and on behalf of

(Name of Company)

Signature/Stamp of Entity/Date
Name of representative:
Address:
Telephone/Fax:
Email:

Section 7b: Price Schedule Form⁵ for LOT 2

The Bidder is required to prepare the Price Schedule as indicated in the Instruction to Bidders.

- 1) The Price Schedule must provide a detailed cost breakdown for each item. The components comprising the total price must provide sufficient detail to allow UNDP to determine compliance of Offer with requirements as per Statement of Works of this ITB.
- 2) All prices/rates quoted must be exclusive of all taxes, since the UNDP is exempt from taxes as detailed **DATA SHEET DS-37. It is the bidders' responsibility to learn from Ministry of Finance and other relevant authorities, the application of tax exemption through the related laws, decrees, communiqués, etc.**
- 3) The format shown on the following pages should be used in preparing the price schedule.
- 4) If there is a discrepancy between the unit price and the total price that is obtained by multiplying the unit price and quantity, the unit price shall prevail and the total price shall be corrected. If the Bidder does not accept the correction of errors, its Bid will be rejected
- 5) All prices shall be quoted in US Dollars.
- 6) Price Schedules not submitted in this format may be rejected.
- 7) Grand Total to be quoted by the Bidders will be the price for the whole project including all different project activities to be completed in **Construction of Solid Waste Transfer Station in Birecik/Sanlıurfa, within the scope of Strengthening Social Stability in Southeast Turkey Project** in full compliance with the Schedule of Requirements and Technical Specifications. Therefore, this price will include all types of costs, like transportation of the material and equipment to and from the sites, water drainage, variation in soil conditions, direct and indirect nature, associated with the satisfactory completion of each work item in accordance with Statement of Works/Technical Drawings and in overall in accordance with the Conditions of Contract, to be incurred by the Contractor until final delivery to UNDP.
- 8) The unit prices to be quoted shall be firm and final during the validity of the contract. The Contractor will not be entitled to receive any price difference due to changes in market conditions and/or prices.
- 9) The Contractor commits to design, construct, deploy, test, commission and trial operation of solid waste transfer station and equipment.
- 10) Costs of all these materials, equipment, consumables, workmanship, transport or any other expenses of the Contractor as well as the costs associated with the design, construction, erection, testing, commissioning and trial operation of all these equipment shall be included in the Contractor's tender price as lump-sum.
- 11) Construction and electricity connection related costs of permit and licenses will be borne by the Contractor and corresponding costs shall be integrated into the tender price.
- 12) The Contractor shall provide the Engineer for each LOT with 1 double cabin 4x4 pick-up vehicles and office space, and cover all associated costs thereof, during the supervision of construction.

⁵ No deletion or modification may be made in this form. Any such deletion or modification may lead to the rejection of the Bid.

Title: LOT 2 - ŞANLIURFA BİRECİK SOLID WASTE TRANSFER STATION

CONSTRUCTION WORKS

NO	POSE NUMBER	UNIT	TYPE OF WORKS	QUANTITY	UNIT PRICE (\$)	AMOUNT (\$)
1	İ-ÖBF 5	m³	Excavation of soft hard soil,rock,loose at any width and depth by machine (deep excavation)	8.000		
2	N.YF.06	m³	Transport of excavation surplus material to the warehouse at 1 km distance	7.000		
3	KGM/2205	m³	Irrigation and compression of any type of soil	1.150		
4	Y.15.140/04	m³	Supply of gravel and flooring, irrigation and compression by machine	430		
5	KGM/6040	m³	Foundation construction [with crushed and screened quarry stone (1 inch)]	1.610		
6	KGM/6100/3-1	ton	Plant-Mix Sub base Construction (with crushed and screened quarry stone)	2.900		
7	15.150/L	m³	Figuring the sub base and base material	3.250		
8	N-041	ton	Transport price to 20.000 m distance	6.600		
9	KGM/16.002/K	m³	Plain concrete at each dosage (with concrete mixer)	190		
10	Y.21.001/03	m²	Production of reinforced concrete plain surface form works with plywood	3.800		
11	Y.23.014	ton	Cutting, bending and placement of Ø 8- Ø 12 mm deformed concrete steel bars	23		
12	Y.23.015	ton	Cutting, bending and placement of Ø 14- Ø 28 mm deformed concrete steel bars	59		
13	N-127	ton	Transport price to 700000 m distance	120		
14	Y.23.010	ton	Ribbed wire mesh (1.50-3.00 kg/m2) Installation	38		
15	Y.16.050/06	m³	Concreting of C 30/37 compressive strength class concrete being manufactured at a concrete plant or purchased (including concrete transport)	2.700		
16	21.059	m³	Wooden false work (6 to 8 meters)	1.000		
17	21.057	m³	Wooden false work (4 to 6 meters)	1.100		
18	21.054	m³	Wooden false work (up to and including 4 meters)	1.200		
19	Y.23.176	kg	Various Metal Works	14.200		
20	Y.25.002/01	m²	Two layers of coating on metal surfaces against corrosion	180		
21	33.2.a	m²	Cobblestone (parquet) production	100		
22	17.141/İB	mt	Concrete border construction	410		
23	KGM/37.556/K	da	Grass seed sowing	8		
24	37.092/2	m³	Supply of topsoil.(Including Transport)	1.200		
25	37.092/3	m³	Layering of topsoil - 10 to 15 cm thickness	1.200		
26	MSB.521/B2	m²	Roof coating with painted trapezoidal section sheet	300		
27	N-040	ton	Transport price to 5000 m distance	12		

Title: LOT 2 - ŞANLIURFA BİRECİK SOLID WASTE TRANSFER STATION

CONSTRUCTION WORKS

28	23.260/İB-1	mt	Construction of reinforced concrete gauze with post of 2 63 m height and protective fences	471		
29	Y.23.071	ton	Preparation and replacement of all kinds of profiled iron individually or in combination	6,00		
30	İ-ÖBF 1	pcs	Supply and assembly of 101.65 m² Prefabric Building	1,00		
31	Y.18.460/24	mt	200 mm nominal diameter, rather than supply and laying of PVC corrugated drainage pipe	405		
32	Y.18.461/041	m2	Laying of geotextile	7.000		
33	15.140/İB-4	m3	T=N*(0,50x(0,20+Ddiş+0,20)x0,15) /Graded Sand-Gravel Hands To Compress The Base Of The Pipe Of Bedding	10		
34	15.140/İB-8	m3	K=0,68xH-BxN-T-B'*0,68 /Making All-In Sand-Gravel Bed Base Tubes Compressed The Basic Filler By Hand	50		
35	12.2190/1	pcs	Steam Cured 500 Dz.Prefabrik Parcel Of Chimney Base Element Formation (H = 0.60 M., Gaskets Tire Combination Of Place)	4		
36	12.2190/2	pcs	/Buhar Kürlü 500 Dz.Pref.Gövde Eleman.Parsel Bacası Teşkili (H=0.50 Mt.,Birl.Yeri 600 Dz.Harç)	3		
37	12.2190/3	pcs	Steam Cured 500 Dz.Prefabrik Chimney Body Parts Parcel Formation (H = 0.25 M., 600 Dose Combination Of Location Mortar)	3		
38	12.2190/4	mt	Steam Cured, The Body Height Adjustment With 500 Dz Prefabricated Element, Parcel Chimney, Formation	1		
39	12.2190/5	pcs	Bs 18 Concrete (350 Doses) Have Been Made, The Placing Of Frames Prefabricated Concrete Cover	4		
40	İ-ÖBF 2	pcs	Traffic signs and boards	5		
41	İ-ÖBF 3	pcs	False Acacia, Juniper, Acorn Oak, Aleppo Pine trees and planting supplies	163		
42	İ-ÖBF 4	Pcs	Supply of project introduction plate and its installation	1		
43	Y.19.090/002	mt	Cutting joint(having 4 mm width,40 mm depth) and filling polyetilen roving and polyuretan joint mastiz material	300		
44	İ-ÖBF 6	Pcs	Bunker Building and Supporting Steelwork(Galvanized) Production	1		
LOT 2- CONSTRUCTION WORKS SUB-TOTAL						

Title: LOT 2 - ŞANLIURFA BİRECİK SOLID WASTE TRANSFER STATION

MECHANICAL WORKS

NO	POSE NUMBER	UNIT	TYPE OF WORKS	QUANTITY	UNIT PRICE (\$)	AMOUNT (\$)
1	M ÖBF 1	Piece	Floor Scales Over 60 Tons	1		
2	M ÖBF 2	Meter	Polyethylene pipes, PE100 PN CLASS (8 atm) Ø mm: 32 (Exterior Building Ground)	25		
3	M ÖBF 3	Meter	Polyethylene pipes, PE100 PN CLASS (8 atm) Ø mm: 40 (Exterior Building Ground)	3		
4	M ÖBF 4	Meter	Polyethylene pipes, PE100 PN CLASS (8 atm) Ø mm: 50 (Exterior Building Ground) /	125		
5	M ÖBF 5	Meter	Ø 100 Corrugated Pipe supply and laying	19		
6	M ÖBF 6	Meter	Ø 200 Corrugated Pipe supply and laying	165		
7	M ÖBF 7	Meter	Ø 300 Corrugated Pipe supply and laying	105		
8	M ÖBF 8	Piece	Electric heaters (50 Lt.) AND BOARDS ADDITIONAL	1		
9	105-607	Piece	10 m3 steel water tank (moduler stainless)	1		
10	15.D.62	m³	All kinds of dubious ground pipe trench excavation	45		
11	204-814/B	Meter	Polyethylene Pipe PE100 SDR 17 CLASS SERIES PN (10 atm) Ø mm: 50 (Exterior Building Ground) (Inc. Pipe Fitting Material Cost)	55		
12	204-3102	Meter	PN.20 POLYPROPYLENE WATER BORUSU1 / 2 "(inside the building)	12		
13	204-3103	Meter	PN.20 POLYPROPYLENE WATER BORUSU3 / 4 "(inside the building)	8		
14	204-402	Meter	HARD PLASTIC PVC SEWAGE PIPE Ø mm outer diameter: 75-70 mm Thickness: 3.0 Application: B-BD	4		
15	204-403	Meter	HARD PLASTIC PVC SEWAGE PIPE Ø mm Diameter: 100-110 mm Thickness: 3.0 Application: B-BD (Inc. Pipe Fitting Material Cost)	5		
16	097-203	Piece	PLACE OF HARD PLASTIC DRAIN 10X10 cm	2		
17	210-624	Piece	BALL VALVE (brass, Teflon Gasket) Ø 20 mm.	1		
18	210-625	Piece	BALL VALVE (brass, Teflon Gasket) Ø 25 mm	1		
19	210-626	Piece	BALL VALVE (brass, Teflon Gasket) Ø 32 mm	1		
20	210-729	Piece	BALL VALVE (PN 25-40) (Steel Casting, Screw) Ø 50 mm	5		
21	221-207	Piece	STRAINER PN 16 (for water vapor, Cast Iron) ø 50 mm	3		
22	227-301	Piece	Non-return valve, Ø 50 mm	1		
23	089-101	Piece	BRIEF TAPS 1/2 "(FILTER INCLUDED BADGE)	2		
24	103-108	Piece	COLD WATER METERS	1		
25	107-1101	Piece	Flow: 0-5 m3 / h Pressure: 20-40mss SINGLE NATIONAL PUMP VERTICAL frequency converter is HYDROPHORE	1		

Title: LOT 2 - ŞANLIURFA BİRECİK SOLID WASTE TRANSFER STATION

MECHANICAL WORKS

26	280.2103	Piece	COOLING CAPACITY (NOM): 3 KW. HEATING CAPACITY (NOM): 3.5 KW. Wall unit	3		
27	280.2103-M	Piece	MOUNT COOLING CAPACITY (NOM): 3 KW. HEATING CAPACITY (NOM): 3.5 KW. Wall unit	3		
28	VK ÖBF-01	Piece	Multi VRF outdoor unit: Rated Heating Capacity: 9.0 kW	1		
29	276.101	Piece	Wall split air conditioners UNIT 8.500 Btu / h	2		
30	276.101-M	Piece	EQUIPMENT INSTALLATION wall split air conditioners 8500 Btu / h	2		
31	276.102	Piece	Wall split air conditioners DEVICE 10.500 Btu / h	1		
32	276.102-M	Piece	EQUIPMENT INSTALLATION wall split air conditioners 10.500 Btu / h	1		
33	281.501	Meter	COPPER PIPE GROUP 1/4 "0.8 MM (13 MM İZO) COPPER PIPING SYSTEMS	16		
34	281.501-M		INSTALLATION COPPER TUBE GROUP 1/4 "0.8 MM (13 MM İZO) COPPER PIPING SYSTEMS	16		
35	281.503	Meter	COPPER PIPE GROUP 1/2 "0.8 MM (13 MM İZO) COPPER PIPING SYSTEMS	16		
36	281.503-M	Meter	INSTALLATION COPPER TUBE GROUP 1/2 "0.8 MM (13 MM İZO) COPPER PIPING SYSTEMS	16		
37	281.302	Piece	CONTROL DEVICE and extend the WIRELESS SENSOR	3		
38	281.302-M	Piece	CONTROL DEVICE AND SENSOR ASSEMBLY extends from WIRELESS	3		
39	VK ÖBF-02	Kg.	Additional R410A GAS FILLING	4,5		
40	M ÖBF 9	Pcs	Sliding gate otomatic having 800 kg capacity	1		
LOT 2 - MECHANICAL WORKS SUB-TOTAL						

Title: LOT 2 - ŞANLIURFA BİRECİK SOLID WASTE TRANSFER STATION

ELECTRICAL WORKS

NO	POSE NUMBER	UNIT	TYPE OF WORKS	QUANTITY	UNIT PRICE (\$)	AMOUNT (\$)
1	701-201	pcs	Special sheet panel-front cover	1		
2	705-103	pcs	Built in sheet table	1		
3	710-100	KG	Copper Bar supply and assembly	10		
4	713-204	Pcs	Selector package switch-behind board- up to 3x25 A) (TS 4915 EN 60669-1. TS EN 60947-3)	2		
5	718-102	Pcs	Dry type non-protective contactor. up to 3x16 A	1		
6	718-310	pcs	Time relay. used for lighting control. (Measurement pieces. preparation 60%)	1		
7	718-507	Pcs	Residual current protection switch -up to 4x25 A (30 mA)	3		
8	718-520	Pcs	Residual current circuit-breakers up to 4x25 (30mA)	3		
9	718-521	Pcs	Residual current circuit-breakers up to 4x40 (300mA)	1		
10	723-401	kVAR	Automatic control central compensation coil-400 to V	12,5		
11	725-401	Pcs	100-500 current measurement transformer / 5A	3		
12	725-731	Pcs	Scheduled Time 725-731 Three Phase Electronic Type (active-reactive) meter, 3x230 / 400 V 3x5 (7.5) Quantity	1		
13	724-401	Pcs	Switch fuse (3 kA)- up to 16 A (3KA) (TS 5018-1 EN 60898-1)	21		
14	724-406	Pcs	Switch fuse (3 kA) - up to 3x16 (TS 5018-1 EN 60898-1)	2		
15	724-407	Pcs	Switch fuse (3 kA) - up to 3x40 A (TS 5018-1 EN 60898-1)	8		
16	725-904	Pcs	Signal light up to 250 V .	3		
17	726-304	MT	Grounding line -16 mm ² (without conduit)	360		
18	727-412	MT	Lead-free PVC isolated (NYM) cable-3x1.5 mm ²	80		
19	727-511	MT	1 kV underground cable (NYY) -3x6 mm NYY (TS IEC 60502-1)	10		
20	727-523	MT	1 kV underground cable (NYY)-3x25+16 mm ² NYY (TS IEC 60502-1)	200		
21	727-526	MT	1 kV underground cable (NYY)-4x6 mm ² NYY (TS IEC 60502-1)	375		
22	727-527	MT	1 kV underground cable (NYY)-4x4 mm ² NYY (TS IEC 60502-1)	20		
23	742-265	Pcs	Fluorescent armature T1 (plexi-glass)-1x40 W	1		
24	742-532	Pcs	ATY2-4x18 W (double-parabolic reflector) decorative drop ceiling armature	8		
25	742-125	Pcs	Type L2 Waterproof fixtures	6		
26	734-101	Pcs	Normal outlet. lighting outlet	6		
27	734-102	Pcs	Switch outlet. lighting outlet	4		
28	734-104	Pcs	Parallel sorties. sorties Lighting	2		

Title: LOT 2 - ŞANLIURFA BİRECİK SOLID WASTE TRANSFER STATION

ELECTRICAL WORKS

29	735-102	Pcs	Safety line plug outlet	20		
30	742-456	Pcs	LED PRJ - up to 150 W (including 150 W) (220 V. AC.). Led Projectors	2		
31	983-102	Pcs	Ground electrode (rod) electrolytic copper according to TS 435 / T1 standard	8		
32	980-214	Pcs	average excitation path dl=60 m. active capture rod	2		
33	980-100	Pcs	Ridgepole (for the radioactive capture rod) (Measurement: Pieces. preparation: 60%)	2		
34	981-101	MT	50 mm² electrolytic copper wire and roof up and down conductors installation /	80		
35	985-101	Pcs	Thermo welding joint up to 32 gr welding powder	3		
36	5.5.3.2.1/009	Pcs	AD1-70 / 15 TYPE. RANGE 80 KG.TEK console galvanized steel lighting pole	13		
37	20.5.1.-003	Pcs	150W sodium vapor lamp. iron. wood and concrete poles. except the bulb/	13		
38	08.2.2-01	mt	50mm. Cable Protection Pipe. 450N (non-metallic. underground) /	360		
39	982-102	MT	Building Engirdling Conductor 30x3.5 mm Galvanized Steel Sheet	61		
40	742-333	Pcs	Fibreglass Reinforced Polyester hull. U1 2x40 W. Fluorescent Fixture	1		

LOT 2 - ELECTRICAL WORKS SUB-TOTAL

LOT 2 - Şanlıurfa Birecik Solid Waste Transfer Station

BILL OF QUANTITIES SUMMARY		
No	Description	Amount (\$)
2.1	Construction Works	
2.2	Mechanical Works	
2.3	Electrical Works	
LOT 2 - GRAND TOTAL (\$)		

Above bid prices are based on the Bill of Quantities, and are inclusive of all other costs (that are not costed through BoQ) whether direct or indirect nature, associated with the satisfactory completion of each work item in accordance with Statement of Works/Technical Drawings and in overall in accordance with the Conditions of Contract.

The Contractor shall provide the Engineer for each LOT with 1 double cabin 4x4 pick-up vehicles and office space, and cover all associated costs thereof, during the supervision of construction.

Above prices exclude VAT and shall be the basis of the invoices to be issued to UNDP.

“Duly authorized to sign the Proposal for and on behalf of

(Name of Company)

Signature/Stamp of Entity/Date

Name of representative:

Address:

Telephone/Fax:

Email:

Section 8: FORM FOR BID SECURITY

*(This must be finalized using the official letterhead of the Issuing Bank.
Except for indicated fields, no changes may be made in this template.)*

To: UNDP
BM Binası Katar Cad. No:11 06610
Birlik/Çankaya/Ankara/Turkey

WHEREAS [name and address of Contractor] (hereinafter called “the Bidder”) has submitted a Bid to UNDP dated , to deliver goods and execute related services for **UNDP-TUR-ITB-PROJ(SR)2017/02** (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 in the event that 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 Bid;
- c) Fails to comply with UNDP’s variation of requirement, as per ITB Item 33; 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 this 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 until 30 days after the date of validity of the bids.

SIGNATURE AND SEAL OF THE GUARANTOR BANK

Date

Name of Bank

Address

Section 9: FORM FOR PERFORMANCE SECURITY⁶

*(This must be finalized using the official letterhead of the Issuing Bank.
Except for indicated fields, no changes may be made in this template.)*

To: UNDP
BM Binası Katar Cad. No:11 06610
Birlik/Çankaya/Ankara/Turkey

WHEREAS *[name and address of Contractor]* (hereinafter called “the Contractor”) has undertaken, in pursuance of Contract No. dated, to deliver the goods and execute related services (hereinafter called “the Contract”):

AND WHEREAS it has been stipulated by you in the said Contract that the Contractor shall furnish you with a Bank Guarantee by a recognized bank for the sum specified therein as security for compliance with his obligations in accordance with the Contract:

AND WHEREAS we have agreed to give the Contractor such a Bank Guarantee:

NOW THEREFORE we hereby affirm that we are the Guarantor and responsible to you, on behalf of the Contractor, 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 Contract Price 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 until a date 30 days from the date of issue by UNDP of a certificate of satisfactory performance and full completion of services by the Contractor.

SIGNATURE AND SEAL OF THE GUARANTOR BANK

Date

Name of Bank

Address

⁶ If the ITB requires the submission of a Performance Security, which shall be made a condition to the signing and effectivity of the contract, the Performance Security that the Bidder's Bank will issue shall use the contents of this template

Section 10: Technical Drawings

LOT 1 Construction of Solid Waste Transfer Station in Araban / Gaziantep

TABLE OF CONTENTS	
Discipline	# of Design
ARCHITECTURAL	6
STRUCTURAL	8
MECHANICAL	3
ELECTRICAL	5

ARCHITECTURAL		
No	Design No	Design Name
1	GZN-TRS-ARC-01-100-R1	LAYOUT
2	GZN-TRS-ARC-01-101-R1	SITE PLAN
3	GZN-TRS-ARC-01-102-R1	SECTIONS
4	GZN-TRS-ARC-01-103-R1	ADMINISTRATIVE BUILDING - PLAN - VIEW - DETAILS
5	GZN-TRS-ARC-01-104-R1	60 TONNES ABOVE GRADE WEIGHBRIDGE PLAN - SECTIONS
6	GZN-TRS-ARC-01-105-R1	WATER TANK PLAN-SECTION

STRUCTURAL		
No	Design No	Design Name
1	GZN-TRS-STR-02-100-R1	LAYOUT
2	GZN-TRS-STR-02-101-R1	FOUNDATION FORMWORK and PLATFORM PLAN
3	GZN-TRS-STR-02-102-R1	SEPTIC PROJECT
4	GZN-TRS-STR-02-103-R1	BUNKER STRUCTURAL PLAN and SECTIONS
5	GZN-TRS-STR-02-104-R1	BUNKER STRUCTURAL SECTIONS and DETAILS
6	GZN-TRS-STR-02-105-R1	PARTITION DETAILS
7	GZN-TRS-STR-02-106-R1	WATER TANK FOUNDATION-STEEL PROJECT-KONTEYNER FOUNDATION PROJECT
8	GZN-TRS-STR-02-107-R1	STRUCTURAL DETAILS

MECHANICAL		
No	Design No	Design Name
1	GZN-TRS-MEC-03-100-R1	LAYOUT
2	GZN-TRS-MEC-03-101-R1	FLOOD PROTECTION AND LEACHATE WORKS & HYDRAULIC INSTALLATION
3	GZN-TRS-MEC-03-102-R1	ADMINISTRATIVE BUILDING MECHANICAL APPLICATION PROJECT

ELECTRICAL		
No	Design No	Design Name
1	GZN-TRS-ELC-04-100-R1	ELECTRICAL INSTALLATION - GENERAL LAYOUT
2	GZN-TRS-ELC-04-101-R1	CABLE DUCT AND MANHOLE PLAN
3	GZN-TRS-ELC-04-102-R1	LIGHTNING ROD PLAN
4	GZN-TRS-ELC-04-103-R1	ADMINISTRATIVE BUILDING ELECTRICAL APPLICATION PROJECT
5	GZN-TRS-ELC-04-104-R1	OUTDOOR LIGHTING POLE and VOLTAGE DROP CALCULATION

**LOT 2 Construction of Solid Waste Transfer Station in
Birecik / Şanlıurfa**

<i>Discipline</i>		<i>Number of Drawings</i>
ARCHITECTURAL		12
STRUCTURAL		13
MECHANICAL		5
ELECTRICAL		5
ARCHITECTURAL		
No	Design No	Design Name
1	URF-BRCK-TRS-ARC-101	SURVEY MAP
2	URF-BRCK-TRS-ARC-102	GENERAL LAYOUT
3	URF-BRCK-TRS-ARC-103	TRAFFIC SIGN BOARDS PLAN
4	URF-BRCK-TRS-ARC-104	GENERAL LAYOUT - GRID OF EXCAVATIONS AND EMBANKMENTS
5	URF-BRCK-TRS-ARC-105	LANDSCAPE PLAN
6	URF-BRCK-TRS-ARC-106	GENERAL PLAN
7	URF-BRCK-TRS-ARC-107	I-I SECTION
8	URF-BRCK-TRS-ARC-108	II-II SECTION - III-III SECTION
9	URF-BRCK-TRS-ARC-109	CONTROL BUILDING AND WEIGHINGBRIDGE
10	URF-BRCK-TRS-ARC-110	CONTROL BUILDING AND WEIGHINGBRIDGE DETAILS
11	URF-BRCK-TRS-ARC-111	GENERAL DETAILS
12	URF-BRCK-TRS-ARC-112	WEIGHINGBRIDGE PLAN-SECTIONS-ELEVATIONS
STRUCTURAL		
No	Design No	Design Name
1	URF-BRCK-TRS-STR-101	GENEL YERLEŞİM
2	URF-BRCK-TRS-STR-102	FOUNDATION FORMWORK PLAN
3	URF-BRCK-TRS-STR-103	PLATFORM PLAN
4	URF-BRCK-TRS-STR-104	CONCRETE CURTAIN WALL DETAILS
5	URF-BRCK-TRS-STR-105	CESSPOOL PROJECT
6	URF-BRCK-TRS-STR-106	BUNKER STRUCTURAL PLAN and SECTIONS
7	URF-BRCK-TRS-STR-107	BUNKER STRUCTURAL SECTIONS and DETAILS

8	URF-BRCK-TRS-STR-108	BUNKER STRUCTURAL SECTIONS and DETAILS
9	URF-BRCK-TRS-STR-109	BUNKER STRUCTURAL SECTIONS and DETAILS
10	URF-BRCK-TRS-STR-110	BUNKER STRUCTURAL SECTIONS and DETAILS
11	URF-BRCK-TRS-STR-111	BUNKER STRUCTURAL SECTIONS and DETAILS
12	URF-BRCK-TRS-STR-112	BUNKER STRUCTURAL SECTIONS and DETAILS
13	URF-BRCK-TRS-STR-113	BUNKER STRUCTURAL SECTIONS and DETAILS
MECHANICAL		
No	Design No	Design Name
1	URF-BRCK-TRS-MEK-101	GENERAL LAYOUT
2	URF-BRCK-TRS-MEK-102	FLOOD PROTECTION AND LEACHATE WORKS & HYDRAULIC INSTALLATION
3	URF-BRCK-TRS-MEK-103	ADMINISTRATIVE BUILDING MECHANICAL APPLICATION PROJECT
4	URF-BRCK-TRS-MEK-104	ADMINISTRATIVE BUILDING AIR-CONDITIONER PROJECT
5	URF-BRCK-TRS-MEK-105	INFRASTRUCTURE PROJECT
ELECTRICAL		
No	Design No	Design Name
1	URF-BRCK-TRS-ELK-101	GENERAL LAYOUT
2	URF-BRCK-TRS-ELK-102	CABLE DUCT AND MANHOLE PLAN
3	URF-BRCK-TRS-ELK-103	ADMINISTRATIVE BUILDING ELECTRICAL APPLICATION PROJECT
4	URF-BRCK-TRS-ELK-104	OUTDOOR LIGHTING POLE and VOLTAGE DROP CALCULATION
5	URF-BRCK-TRS-ELK-105	LIGHTNING ROD PLAN

**PLEASE REFER TO THE ATTACHED
TECHNICAL DRAWINGS**

Section 11: Contract

**THIS IS UNDP'S TEMPLATE FOR CONTRACT FOR THE BIDDER'S
REFERENCE. ADHERENCE TO ALL TERMS AND CONDITIONS IS
MANDATORY.**



Model Contract for Works

Date _____

Dear Sir/Madam,

Ref.: _____/ _____/ _____[INSERT PROJECT NUMBER AND TITLE]

The United Nations Development Programme (hereinafter referred to as "UNDP"), wishes to engage your company, duly incorporated under the Laws of _____ [INSERT NAME OF THE COUNTRY] (hereinafter referred to as the "Contractor") in order to perform _____ [INSERT SUMMARY DESCRIPTION OF THE WORKS] (hereinafter referred to as the "Works"), in accordance with the following Contract:

1. Contract Documents

- 1.1 This Contract is subject to the UNDP General Conditions for Civil Works, [INSERT REVISION NUMBER AND DATE FROM THE CONTRACTS DOCUMENTS LIBRARY], attached hereto as Annex I. The provisions of such Annex shall control the interpretation of this Contract and in no way shall be deemed to have been derogated by the contents of this letter and any other Annexes, unless otherwise expressly stated under section 4 of this letter, entitled "Special Conditions".
- 1.2 The Contractor and UNDP also agree to be bound by the provisions contained in the following documents, which shall take precedence over one another in case of conflict in the following order:
 - a) this letter;
 - b) the Technical Specifications and Drawings [ref.dated.....], attached hereto as Annex II;
 - c) the Contractor's Tender [IF THE CONTRACT IS ON THE BASIS OF UNIT PRICE, INSERT: including the Priced Bill of Quantities] [ref....., dated], as clarified by the agreed minutes of the negotiation meeting [dated.....], not attached hereto but known to and in the possession of both parties.
- 1.3 All the above shall form the Contract between the Contractor and UNDP, superseding the contents of any other negotiations and/or agreements, whether oral or in writing, pertaining to the subject of this Contract.

[INSERT NAME AND ADDRESS OF THE CONTRACTOR]

2. Obligations of the Contractor

- 2.1 The Contractor shall commence work within [INSERT NUMBER OF DAYS] days from the date on which he shall have been given access to the Site and received the notice to commence from the Engineer, and shall perform and substantially complete the Works by [INSERT DATE], in accordance with the Contract. The Contractor shall provide all materials, supplies, labour and other services necessary to that end.
- 2.2 The Contractor shall submit to the Engineer the Programme of Work referred to in Clause 13 of the General Conditions by [INSERT DATE].
- 2.3 The Contractor represents and warrants the accuracy of any information or data provided to UNDP for the purpose of entering into this Contract, as well as the quality of the Works foreseen under this Contract in accordance with the highest industrial and professional standards.

3. Price and payment

- 3.1 The total estimated price of the Contract is contained in the Bill of Quantities and amounts to [INSERT CURRENCY & AMOUNT IN FIGURES AND WORDS].
- 3.2 The final price of the Contract will be determined on the basis of the 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.
- 3.3 If the Contractor foresees that the final price of the Contract may exceed the total estimated price contained in 3.1 above, he shall so inform the Engineer without delay, in order for UNDP to decide, at its discretion, to increase the estimated price of the Contract as a result of a larger quantity of work/material or to reduce the quantity of work to be performed or materials to be used. UNDP shall not be responsible for payment of any amount in excess of that stipulated in 3.1 above unless this latter amount has been increased by means of a written amendment of this Contract in accordance with its paragraph 7 below.
- 3.4 The Contractor shall submit an invoice for the work performed and materials utilized every month and a final invoice within 30 days from the issuance of the Certificate of Substantial Completion by the Engineer. All invoices shall be accompanied by the 'Progress Payment Certificates' indicating the percentage of completion of the works by the end of that respective month and corresponding amounts due, in line with the detailed breakdown of the price is given above.
- 3.5 UNDP shall effect payments to the Contractor in the form of "monthly progress payments" based on the completion of items in Bill of Quantities at the end of each month after acceptance by UNDP of the invoices submitted by the contractor. The Engineer may make corrections to that amount, in which case UNDP may effect 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.
- 3.6 Payments effected by UNDP to the Contractor shall be deemed neither to relieve the Contractor of its obligations under this Contract nor as acceptance by UNDP of the Contractor's performance of the Works.
- 3.7 Payment of the final invoice shall be effected by UNDP after issuance of the Certificate of Substantial Completion by the Engineer.

4. Special conditions

- 4.1 The Performance Bond referred to in Clause 10 of the General Conditions shall be submitted by the Contractor for an amount of 10% (ten per cent) of the final price of the Contract
- 4.2 The Contractor should provide the following insurances:
a) All Risks for Works in accordance with Clause 21 of General Conditions,
b) Liability (referred to in Clause 23 of the General Conditions) in the amount of 15% (fifteen percent) of the final price of the Contract, per occurrence.
- 4.3 According to Clause 45 of the General Conditions, the liquidated damages for delay shall be 1% of the price of the Contract per week of delay, up to a maximum of 10% of the final price of the Contract.
- 4.4 According to Clause 45 of the General Conditions, the liquidated damages for absence of Contractor's key staff/personnel from the construction site without Engineer's approval shall be \$200 per day.

5. Submission of invoices

- 5.1 One original and one copy of every invoice shall be submitted by mail by the Contractor for each payment under the Contract to the Engineer's address specified in clause 8.2.
- 5.2 Invoices submitted by fax shall not be accepted by UNDP.

6. Time and manner of payment

- 6.1 Invoices shall be paid within thirty (30) days of the date of their receipt and acceptance by UNDP.
- 6.2 All payments shall be made by UNDP to the following Bank account of the Contractor:

[NAME OF THE BANK]
[ACCOUNT NUMBER]
[ADDRESS OF THE BANK]

7. Modifications

- 7.1 Any modification to this Contract shall require an amendment in writing between both parties duly signed by the authorized representatives of the Contractor and UNDP.

8. Notifications

- 8.1 For the purpose of notifications under the Contract, the addresses of UNDP and the Contractor are as follows:

For the UNDP:

[INSERT NAME OF RR OR DIVISION CHIEF]
United Nations Development Programme
Ref. [INSERT CONTRACT REFERENCE & NUMBER]
Fax: [REDACTED]

For the Contractor:

[REDACTED]
[Insert Name, Address and Telex, Fax and Cable Numbers]

- 8.2 UNDP shall communicate as soon as possible to the Contractor after the signature of the Contract, the address of the Engineer for the purposes of communication with the Engineer under the Contract.

If the above terms and conditions meet with your agreement as typed in this letter and in the Contract Documents, please initial every page of this letter and its attachments and return to this office one original of this Contract, duly signed and dated.

Yours sincerely,

[INSERT NAME OF RR or Bureau/Division Director]

For [Insert name of the company/organization]

Agreed and Accepted:

Signature	
Name	
Title	
Date	

GENERAL CONDITIONS OF CONTRACT FOR CIVIL WORKS

1. Definitions
2. Singular and Plural
3. Headings or Notes
4. Legal Relationships
5. General Duties/Powers of Engineer
6. Contractor's General Obligations/Responsibilities
7. Assignment and Subcontracting
8. Drawings
9. Work Book
10. Performance Security
11. Inspection of Site
12. Sufficiency of Tender
13. Programme of Work to be Furnished
14. Weekly Site Meeting
15. Change Orders
16. Contractor's Superintendence
17. Contractor's Employees
18. Setting-Out
19. Watching and Lighting
20. Care of Works
21. Insurance of Works, Etc.
22. Damage to Persons and Property
23. Liability Insurance
24. Accident or Injury to Workmen
25. Remedy on Contractor's Failure to Insure
26. Compliance with Statutes, Regulations, Etc.
27. Fossils, Etc.
28. Copyright, Patents and Other Proprietary Rights, and Royalties
29. Interference with Traffic and Adjoining Properties
30. Extraordinary Traffic and Special Loads
31. Opportunities for Other Contractors
32. Contractor to Keep Site Clean
33. Clearance of Site on Substantial Completion
34. Labour
35. Returns of Labour, Plant, Etc.
36. Materials, Workmanship and Testing
37. Access to Site
38. Examination of Work Before Covering Up
39. Removal of Improper Work and Materials
40. Suspension of Work

41. Possession of Site
42. Time for Completion
43. Extension of Time for Completion
44. Rate of Progress
45. Liquidated Damages for Delay
46. Certificate of Substantial Completion
47. Defects Liability
48. Alterations, Additions and Omissions
49. Plant, Temporary Works and Materials
50. Approval of Materials, Etc., Not Implied
51. Measurement of Works
52. Liability of the Parties
53. Authorities
54. Urgent Repairs
55. Increase and Decrease of Costs
56. Taxation
57. Blasting
58. Machinery
59. Temporary Works and Reinstatement
60. Photographs and Advertising
61. Prevention of Corruption
62. Date Falling on Holiday
63. Notices
64. Language, Weights and Measures
65. Records, Accounts, Information and Audit
66. Force Majeure
67. Suspension by the UNDP
68. Termination by the UNDP
69. Termination by the Contractor
70. Rights and Remedies of the UNDP
71. Settlement of Disputes
72. Privileges and Immunities
73. Security
74. Audit and Investigations
75. Anti-terrorism

1. DEFINITIONS

For the purpose of the Contract Documents the words and expressions below shall have the following meanings:

- a) "Employer" means the United Nations Development Programme (UNDP).
- b) "Contractor" means the person whose tender has been accepted and with whom the Contract has been entered into.
- c) "Engineer" means the person whose services have been engaged by UNDP to administer the Contract as provided therein, as will be notified in writing to the Contractor.
- d) "Contract" means the written agreement between the Employer and the Contractor, to which these General Conditions are annexed.
- e) "The Works" means the works to be executed and completed under the Contract.
- f) "Temporary Works" shall include items to be constructed which are not intended to be permanent and form part of the Works.
- g) "Drawings" and "Specifications" mean the Drawings and Specifications referred to in the Contract and any modification thereof or addition thereto furnished by the Engineer or submitted by the Contractor and approved in writing by the Engineer in accordance with the Contract.
- h) "Bill of Quantities" is the document in which the Contractor indicates the cost of the Works, on the basis of the foreseen quantities of items of work and the fixed unit prices applicable to them.
- i) "Contract Price" means the sum agreed in the Contract as payable to the Contractor for the execution and completion of the Works and for remedying of any defects therein in accordance with the Contract.
- j) "Site" means the land and other places on, under, in or through which the Works or Temporary Works are to be constructed.

2. SINGULAR AND PLURAL

Words importing persons or parties shall include firms or companies and words importing the singular only shall also include the plural and vice versa where the context requires.

3. HEADINGS OR NOTES

The headings or notes in the Contract Documents shall not be deemed to be part thereof or be taken into consideration in their interpretation.

4. LEGAL RELATIONSHIPS

The Contractor and the sub-contractor(s), if any, shall have the status of an independent contractor vis-à-vis the Employer. The Contract Documents shall not be construed to create any contractual relationship of any kind between the Engineer and the Contractor, but the Engineer shall, in the exercise of his duties and powers under the Contract, be entitled to performance by the Contractor of its obligations, and to enforcement thereof. Nothing contained in the Contract Documents shall create any contractual relationship between the Employer or the Engineer and any subcontractor(s) of the Contractor.

5. GENERAL DUTIES/POWERS OF ENGINEER

- a) The Engineer shall provide administration of Contract as provided in the Contract Documents. In particular, he shall perform the functions hereinafter described.
- b) The Engineer shall be the Employer's representative vis-à-vis the Contractor during construction and until final payment is due. The Engineer shall advise and consult with the Employer. The Employer's instructions to the Contractor shall be forwarded through the Engineer. The Engineer shall have authority to act on behalf of the Employer only to the extent provided in the Contract Documents as they may be amended in writing in accordance with the Contract. The duties, responsibilities and limitations of authority of the Engineer as the Employer's representative during construction as set forth in the Contract shall not be modified or extended without the written consent of the Employer, the Contractor and the Engineer.
- c) The Engineer shall visit the Site at intervals appropriate to the stage of construction to familiarize himself generally with the progress and quality of the Works and to determine in general if the Works are proceeding in accordance with the Contract Documents. On the basis of his on-site observations as an Engineer, he shall keep the Employer informed of the progress of the Works.
- d) The Engineer shall not be responsible for and will not have control or charge of construction means, methods, techniques, sequences or procedures, or for safety precautions and programs in connection with the Works or the Temporary Works. The Engineer shall not be responsible for or have control or charge over the acts or omissions of the Contractor (including the Contractor's failure to carry out the Works in accordance with the Contract) and of Sub-contractors or any of their agents or employees, or any other persons performing services for the Works, except if such acts or omissions are caused by the Engineer's failure to perform his functions in accordance with the contract between the Employer and the Engineer.
- e) The Engineer shall at all times have access to the Works wherever and whether in preparation or progress. The Contractor shall provide facilities for such access so that the Engineer may perform his functions under the Contract.
- f) Based on the Engineer's observations and an evaluation of the documentation submitted by the Contractor together with the invoices, the Engineer shall determine the amounts owed to the Contractor and shall issue Certificates for Payment as appropriate.
- g) The Engineer shall review and approve or take other appropriate action upon the Contractor's submittals such as Shop Drawings, Product Data and Samples, but only for conformity with the design concept of the Works and with the provisions of the Contract Documents. Such action shall be taken with reasonable promptness so as to cause no delay. The Engineer's approval of a specific item shall not indicate approval of an assembly of which the item is a component.
- h) The Engineer shall interpret the requirements of the Contract Documents and judge the performance thereunder by the Contractor. All interpretations and orders of the Engineer shall be consistent with the intent of and reasonably inferable from the Contract Documents and shall be in writing or in the form of drawings. Either party may make a written request to the Engineer for such interpretation. The Engineer shall render the interpretation necessary for the proper execution of the Works with reasonable promptness and in

accordance with any time limit agreed upon. Any claim or dispute arising from the interpretation of the Contract Documents by the Engineer or relating to the execution or progress of the Works shall be settled as provided in Clause 71 of these General Conditions.

- i) Except as otherwise provided in the Contract, the Engineer shall have no authority to relieve the Contractor of any of his obligations under the Contract nor to order any work involving delay in completion of the Works or any extra payment to the Contractor by the Employer, or to make any variations to the Works.
- j) In the event of termination of the employment of the Engineer, the Employer shall appoint another suitable professional to perform the Engineer's duties.
- k) The Engineer shall have authority to reject work which does not conform to the Contract Documents. Whenever, in his opinion, he considers it necessary or advisable for the implementation of the intent of the Contract Documents, he will have authority to require special inspection or testing of the work whether or not such work be then fabricated, installed or completed. However, neither the Engineer's authority to act nor any reasonable decision made by him in good faith either to exercise or not to exercise such authority shall give rise to any duty or responsibility of the Engineer to the Contractor, any subcontractor, any of their agents or employees, or any other person performing services for the Works.
- l) The Engineer shall conduct inspections to determine the dates of Substantial Completion and Final Completion, shall receive and forward to the Employer for the Employer's review written warranties and related documents required by the Contract and assembled by the Contractor, and shall issue a final Certificate for Payment upon compliance with the requirements of Clause 47 hereof and in accordance with the Contract.
- m) If the Employer and Engineer so agree, the Engineer shall provide one or more Engineer's Representative(s) to assist the Engineer in carrying out his responsibilities at the site. The Engineer shall notify in writing to the Contractor and the Employer the duties, responsibilities and limitations of authority of any such Engineer's Representative(s).

6. CONTRACTOR'S GENERAL OBLIGATIONS/RESPONSIBILITIES

6.1.Obligation to Perform in Accordance with Contract

The Contractor shall execute and complete the Works and remedy any defects therein in strict accordance with the Contract, with due care and diligence and to the satisfaction of the Engineer, and shall provide all labor, including the supervision thereof, materials, Constructional Plant and all other things, whether of a temporary or permanent nature, required in and for such execution, completion and remedying of defects, as far as the necessity for providing the same is specified in or is reasonably to be inferred from the Contract. The Contractor shall comply with and adhere strictly to the Engineer's instructions and directions on any matter, touching or concerning the Works.

6.2 Responsibility for Site Operations

The Contractor shall take full responsibility for the adequacy, stability and safety of all site operations and methods of construction, provided that the Contractor shall not be responsible, except as may be expressly provided in the Contract, for the design or

specification of the Permanent Works or of any Temporary Works prepared by the Engineer.

6.3.Responsibility for Employees

The Contractor shall be responsible for the professional and technical competence of his employees and will select for work under this Contract, reliable individuals who will perform effectively in the implementation of the Contract, respect local customs and conform to a high standard of moral and ethical conduct.

6.4.Source of Instructions

The Contractor shall neither seek nor accept instructions from any authority external to the Employer, the Engineer or their authorized representatives in connection with the performance of his services under this Contract. The Contractor shall refrain from any action which may adversely affect the Employer and shall fulfill his commitments with fullest regard for the interest of the Employer.

6.5.Officials Not to Benefit

The Contractor warrants that no official of the Employer has been or shall be admitted by the Contractor to any direct or indirect benefit arising from this Contract or the award thereof. The Contractor agrees that breach of this provision is a breach of an essential term of the Contract.

6.6.Use of Name, Emblem or Official Seal of UNDP or the United Nations

The Contractor shall not advertise or otherwise make public the fact that he is performing, or has performed services for the Employer or use the name, emblem or official seal of the Employer or the United Nations or any abbreviation of the name of the Employer or the United Nations for advertising purposes or any other purposes.

6.7.Confidential Nature of Documents

All maps, drawings, photographs, mosaics, plans, reports, recommendations, estimates, documents and all other data compiled by or received by the Contractor under the Contract shall be the property of the Employer, shall be treated as confidential and shall be delivered only to the duly authorized representative of the Employer on completion of the Works; their contents shall not be made known by the Contractor to any person other than the personnel of the Contractor performing services under this Contract without the prior written consent of the Employer.

7. ASSIGNMENT AND SUBCONTRACTING

7.1.Assignment of Contract

The Contractor shall not, except after obtaining the prior written approval of the Employer, assign, transfer, pledge or make other disposition of the Contract or any part thereof or of any of the Contractor's rights, claims or obligations under the Contract.

7.2.Subcontracting

In the event the Contractor requires the services of subcontractors, the Contractor shall obtain the prior written approval of the Employer for all such subcontractors. The approval of the Employer shall not relieve the Contractor of any of his obligations under the Contract, and the terms of any subcontract shall be subject to and be in conformity with the provisions of the Contract.

7.3.Assignment of Subcontractor's Obligations

In the event of a subcontractor having undertaken towards the Contractor in respect of the work executed or the goods, materials, Plant or services supplied by such subcontractor for the Works, any continuing obligation extending for a period exceeding that of the Defects Liability Period under the Contract, the Contractor shall at any time after the expiration of such Period, assign to the Employer, at the Employer's request and cost, the benefit of such obligation for the unexpired duration thereof.

8. DRAWINGS

8.1.Custody of drawings

The drawings shall remain in the sole custody of the Employer but two (2) copies thereof shall be furnished to the Contractor free of cost. The Contractor shall provide and make at his own expense any further copies required by him. At the completion of the Works, the Contractor shall return to the Employer all drawings provided under the Contract.

8.2.One copy of Drawings to be kept on Site

One copy of the Drawings furnished to the Contractor as aforesaid shall be kept by the Contractor on the Site and the same shall at all reasonable times be available for inspection and use by the Engineer and by any other person authorized in writing by the Engineer.

8.3.Disruption of Progress

The Contractor shall give written notice to the Engineer whenever planning or progress of the Works is likely to be delayed or disrupted unless any further drawing or order, including a direction, instruction or approval, is issued by the Engineer within a reasonable time. The notice shall include details of drawing or order required and of why and by when it is required and of any delay or disruption likely to be suffered if it is late.

9. WORK BOOK

The Contractor shall maintain a Work Book at the Site with numbered pages, in one original and two copies. The Engineer shall have full authority to issue new orders, drawings and instructions to the Contractor, from time to time and as required for the correct execution of the Works. The Contractor shall be bound to follow such orders, drawings and instructions.

Every order shall be dated and signed by the Engineer and the Contractor, in order to

account for its receipt.

Should the Contractor want to refuse an order in the Work Book, he shall so inform the Employer, through the Engineer, by means of an annotation in the Work Book made within three (3) days from the date of the order that the Contractor intends to refuse. Failure by the Contractor to adhere to this procedure shall result in the order being deemed accepted with no further possibility of refusal.

The original of the Work Book shall be delivered to the Employer at the time of Final Acceptance of the Works. A copy shall be kept by the Engineer and another copy by the Contractor.

10. PERFORMANCE SECURITY

- a) As guarantee for his proper and efficient performance of the Contract, the Contractor shall on signature of the Contract furnish the Employer with a Performance Security issued for the benefit of the Employer. The amount and character of such security (bond or guarantee) shall be as indicated in the Contract.
- b) The Performance Bond or Bank Guarantee must be issued by an acceptable insurance company or accredited bank, in the format included in Appendix I to these General Conditions, and must be valid up to twenty-eight days after issuance by the Engineer of the Certificate of Final Completion. The Performance Bond or Bank Guarantee shall be returned to the Contractor within twenty-eight days after the issuance by the Engineer of the Certificate of Final Completion, provided that the Contractor shall have paid all money owed to the Employer under the Contract.
- c) If the surety of the Performance Bond or Bank Guarantee is declared bankrupt or becomes insolvent or its right to do business in the country of execution of the Works is terminated, the Contractor shall within five (5) days thereafter substitute another bond or guarantee and surety, both of which must be acceptable to the Employer.

11. INSPECTION OF SITE

The Contractor shall be deemed to have inspected and examined the site and its surroundings and to have satisfied himself before submitting his Tender and signing the Contract as to all matters relative to the nature of the land and subsoil, the form and nature of the Site, details and levels of existing pipe lines, conduits, sewers, drains, cables or other existing services, the quantities and nature of the work and materials necessary for the completion of the Works, the means of access to the Site, and the accommodation he may require, and in general to have himself obtained all necessary information as to risk contingencies, climatic, hydrological and natural conditions and other circumstances which may influence or affect his Tender, and no claims will be entertained in this connection against the Employer.

12. SUFFICIENCY OF TENDER

The Contractor shall be deemed to have satisfied himself before tendering as to the correctness and sufficiency of his Tender for the construction of the Works and of the rates and prices, which rates and prices shall, except in so far as it is otherwise provided in the

Contract, cover all his obligations under the Contract and all matters and things necessary for the proper execution and completion of the Works.

13. PROGRAMME OF WORK TO BE FURNISHED

Within the time limit specified in the Contract, the Contractor shall submit to the Engineer for his consent a detailed Programme of Work showing the order of procedure and the method in which he proposes to carry out the Works. In preparing his Programme of Work the Contractor shall pay due regard to the priority required by certain works. Should the Engineer, during the progress of work, require further modifications to the Programme of Work, the Contractor shall review the said program. The Contractor shall also whenever required by the Engineer submit particulars in writing of the Contractor's arrangements for carrying out the Works and of the Constructional Plant and Temporary Works which the Contractor intends to supply, use or construct as the case may be. The submission of such program, or any modifications thereto, or the particulars required by the Engineer, shall not relieve the Contractor of any of his duties or obligations under the Contract nor shall the incorporation of any modification to the Programme of Work either at the commencement of the contract or during its course entitle the Contractor to any additional payments in consequence thereof.

14. WEEKLY SITE MEETING

A weekly site meeting shall be held between the UNDP Project Coordinator or engineer, if any, the representative of the Contractor and the Engineer or the Engineer's Representative, in order to verify that the Works are progressing normally and are executed in accordance with the Contract.

15. CHANGE ORDERS

- a) The Engineer may instruct the Contractor, with the approval of the Employer and by means of Change Orders, all variations in quantity or quality of the Works, in whole or in part, that are deemed necessary by the Engineer.
- b) Processing of change orders shall be governed by clause 48 of these General Conditions.

16. CONTRACTOR'S SUPERINTENDENCE

The Contractor shall provide all necessary superintendence during the execution of the Works and as long thereafter as the Engineer may consider necessary for the proper fulfillment of the Contractor's obligations under the Contract. The Contractor or a competent and authorized agent or representative of the Contractor approved in writing by the Engineer, which approval may at any time be withdrawn, shall be constantly on the site and shall devote his entire time to the superintendence of the Works. Such authorized agent or representative shall receive on behalf of the Contractor directions and instructions from the Engineer. If the approval of such agent or representative shall be withdrawn by the Engineer, as provided in Clause 17(2) hereinafter, or if the removal of such agent or representative shall be requested by the Employer under Clause 17(3) hereinafter, the Contractor shall as soon as it is practicable after receiving notice of such withdrawal remove the agent or representative from the Site, and replace him by another agent or representative approved by the Engineer. Notwithstanding the provision of Clause 17(2) hereinafter, the

Contractor shall not thereafter employ, in any capacity whatsoever, a removed agent or representative again on the Site.

17. CONTRACTOR'S EMPLOYEES

- a) The Contractor shall provide and employ on the Site in connection with the execution and completion of the Works and the remedying of any defects therein:
 - i. Only such technical assistants as are skilled and experienced in their respective callings and such sub-agent foremen and leading hands as are competent to give proper supervision to the work they are required to supervise, and
 - ii. Such skilled, semi-skilled, and unskilled labour as is necessary for the proper and timely execution and completion of the Works.
- b) The Engineer shall be at liberty to object to and require the Contractor to remove forthwith from the Works any person employed by the Contractor in or about the execution or completion of the Works, who in the opinion of the Engineer is misconducting himself, or is incompetent or negligent in the proper performance of his duties, or whose employment is otherwise considered reasonably by the Engineer to be undesirable, and such person shall not be again employed on the Site without the written permission of the Engineer. Any person so removed from the Works shall be replaced as soon as reasonably possible by a competent substitute approved by the Engineer.
- c) Upon written request by the Employer, the Contractor shall withdraw or replace from the Site any agent, representative or other personnel who does not conform to the standards set forth in paragraph (1) of this Clause. Such request for withdrawal or replacement shall not be considered as termination in part or in whole of this Contract. All costs and additional expenses resulting from any withdrawal or replacement for whatever reason of any of the Contractor's personnel shall be at the Contractor's expense.

18. SETTING-OUT

The Contractor shall be responsible for the true and proper setting out of the Works in relation to original points, lines and levels of reference given by the Engineer in writing and for the correctness of the position, levels, dimensions and alignment of all parts of the Works and for the provision of all necessary instruments, appliances and labor in connection therewith. If, at any time during the progress of the Works, any error shall appear or arise in the position, levels, dimensions or alignment of any part of the Works, the Contractor, on being required so to do by the Engineer, shall, at his own cost, rectify such error to the satisfaction of the Engineer.

19. WATCHING AND LIGHTING

The Contractor shall in connection with the Works provide and maintain at his own cost all lights, guards, fencing and watching when and where necessary or required by the Engineer or by any duly constituted authority for the protection of the Works and the materials and equipment utilized therefor or for the safety and convenience of the public or others.

20. CARE OF WORKS

- a) From the commencement date of the Works to the date of substantial completion as stated in the Certificate of Substantial Completion, the Contractor shall take full responsibility for the care thereof and of all Temporary Works. In the event that any damage or loss should happen to the Works or to any part thereof or to any Temporary Works from any cause whatsoever (save and except as shall be due to Force Majeure as defined in Clause 66 of these General Conditions), the Contractor shall at his own cost repair and make good the same so that, at completion, the Works shall be in good order and condition and in conformity in every respect with the requirements of the Contract and the Engineer's instructions. The Contractor shall also be liable for any damage to the Works occasioned by him in the course of any operations carried out by him for the purpose of complying with his obligations Clause 47 hereof.
- b) The Contractor shall be fully responsible for the review of the Engineering design and details of the Works and shall inform the Employer of any mistakes or incorrectness in such design and details which would affect the Works.

21. INSURANCE OF WORKS, ETC.

Without limiting his obligations and responsibilities under Clause 20 hereof, the Contractor shall insure immediately following signature of this Contract, in the joint names of the Employer and the Contractor (a) for the period stipulated in Clause 20(1) hereof, against all loss or damage from whatever cause arising, other than cause of Force majeure as defined in clause 66 of these General Conditions, and (b) against loss or damage for which the Contractor is responsible, in such manner that the Employer and the Contractor are covered for the period stipulated in Clause 20 (1) hereof and are also covered during the Defects Liability Period for loss or damage arising from a cause occurring prior to the commencement of the Defects Liability Period and for any loss or damage occasioned by the Contractor in the course of any operations carried out by him for the purpose of complying with his obligations under Clause 47 hereof:

- a) The Works, together with the materials and Plant for incorporation therein, to their full replacement cost, plus an additional sum of ten (10) per cent of such replacement cost, to cover any additional costs of and incidental to the rectification of loss or damage including professional fees and the cost of demolishing and removing any part of the Works and of removing debris of whatsoever nature;
- b) The Contractor's equipment and other things brought on to the Site by the Contractor to the replacement value of such equipment and other things;
- c) An insurance to cover the liabilities and warranties of Section 52(4);

Such insurance shall be effected with an insurer and in terms approved by the Employer, which approval shall not be unreasonably withheld, and the Contractor shall, whenever required, produce to the Engineer the policy or policies of insurance and the receipts for payment of the current premiums.

22. DAMAGE TO PERSONS AND PROPERTY

The Contractor shall (except if and so far as the Contract provides otherwise) indemnify,

hold and save harmless and defend at his own expense the Employer, its officers, agents, employees and servants from and against all suits, claims, demands, proceedings, and liability of any nature or kind, including costs and expenses, for injuries or damages to any person or any property whatsoever which may arise out of or in consequence of acts or omissions of the Contractor or its agents, employees, servants or subcontractors in the execution of the Contract. The provision of this Clause shall extend to suits, claims, demands, proceedings and liability in the nature of workmen's compensation claims and arising out of the use of patented inventions and devices. Provided always that nothing herein contained shall be deemed to render the Contractor liable for or in respect of or with respect to:

- a) The permanent use or occupation of land by the Works or any part thereof;
- b) The right of the Employer to construct the Works or any part thereof on, over, under, or through any land.
- c) Interference whether temporary or permanent with any right of light, airway or water or other easement or quasi-easement which is the unavoidable result of the construction of the Works in accordance with the Contract.
- d) Death, injuries or damage to persons or property resulting from any act or neglect of the Employer, his agents, servants or other contractors, done or committed during the validity of the Contract.

23. LIABILITY INSURANCE

23.1. Obligation to take out Liability Insurance

Before commencing the execution of the Works, but without limiting his obligations and responsibility under Clause 20 hereof, the Contractor shall insure against his liability for any death, material or physical damage, loss or injury which may occur to any property, including that of the Employer or to any person, including any employee of the Employer by or arising out of the execution of the Works or in the carrying out of the Contract, other than due to the matters referred to in the proviso to Clause 22 hereof.

23.2. Minimum Amount of Liability Insurance

Such insurance shall be effected with an insurer and in terms approved by the Employer, which approval shall not be unreasonably withheld, and for at least the amount specified in the contract. The Contractor shall, whenever required by the Employer or the Engineer, produce to the Engineer the policy or policies of insurance and the receipts for payment of the current premiums.

23.3. Provision to Indemnify Employer

The insurance policy shall include a provision whereby, in the event of any claim in respect of which the Contractor would be entitled to receive indemnity under the policy, being brought or made against the Employer, the insurer shall indemnify the Employer against such claims and any costs, charges and expenses in respect thereof.

24. ACCIDENT OR INJURY TO WORKMEN

- a) The Employer shall not be liable for or in respect of any damages or compensation payable at law in respect or in consequence of any accident or injury to any workman or other person in the employment of the Contractor or any sub-Contractor, save and except an accident or injury resulting from any act or default of the Employer, his agents or servants. The Contractor shall indemnify, hold and save harmless the Employer against all such damages and compensation, save and except as aforesaid, and against all claims, proceedings, costs, charges and expenses whatsoever in respect thereof or in relation thereto.
- b) Insurance Against Accident, etc., to Workmen

The Contractor shall insure against such liability with an insurer approved by the Employer, which approval shall not be unreasonably withheld, and shall continue such insurance during the whole of the time that any persons are employed by him for the Works and shall, when required, produce to the Engineer such policy of insurance and the receipt for payment of the current premium. Provided always that, in respect of any persons employed by any subcontractor, the Contractor's obligation to insure as aforesaid under this sub-clause shall be satisfied if the subcontractor shall have insured against the liability in respect of such persons in such manner that the Employer is indemnified under the policy but the Contractor shall require such subcontractor to produce to the Engineer when required such policy of insurance and the receipt for the current premium, and obtain the insertion of a provision to that effect in its contract with the subcontractor.

25. REMEDY ON CONTRACTOR'S FAILURE TO INSURE

If the Contractor shall fail to effect and keep in force any of the insurances referred to in Clauses 21, 23 and 24 hereof, or any other insurance which he may be required to effect under the terms of the Contract, the Employer may in any such case effect and keep in force any such insurance and pay such premium as may be necessary for that purpose and from time to time deduct the amount so paid by the Employer as aforesaid from any monies due or which may become due to the Contractor, or recover the same as a debt due from the Contractor.

26. COMPLIANCE WITH STATUTES, REGULATIONS, ETC.

- a) The Contractor shall give all notices and pay all fees and charges required to be given or paid by any national or State Statutes, Ordinances, Laws, Regulations or By-laws, or any local or other duly constituted authority in relation to the execution of the Works or of any Temporary Works and by the Rules and Regulations of all public bodies and companies whose property or rights are affected or may be affected in any way by the Works or any Temporary Works.
- b) The Contractor shall conform in all respects with any such Statutes, Ordinances, Laws, Regulations, By-laws or requirements of any such local or other authority which may be applicable to the Works and shall keep the Employer indemnified against all penalties and liabilities of every kind for breach of any such Statutes, Ordinances, Laws, Regulations, By-laws or requirements.

27. FOSSILS, ETC.

All fossils, coins, articles of value or antiquity and structures and other remains or things of geological or archaeological interest discovered on the Site of the Works shall as between the Employer and the Contractor be deemed to be the absolute property of the Employer and the Contractor shall take reasonable precautions to prevent his workmen or any other persons from removing or damaging any such article or thing and shall immediately upon discovery thereof and before removal acquaint the Employer of such discovery and carry out at the expense of the Employer the Engineer's orders as to the disposal of the same.

28. COPYRIGHT, PATENT AND OTHER PROPRIETARY RIGHTS, AND ROYALTIES

- a) The Contractor shall hold harmless and fully indemnify the Employer from and against all claims and proceedings for or on account of infringement of any patent rights, design trademark or name or other protected rights in respect of any Plant, equipment, machine, work or material used for or in connection with the Works or Temporary Works and from and against all claims, demands proceedings, damages, costs, charges and expenses whatsoever in respect thereof or in relation thereto, except where such infringement results from compliance with the design or Specification provided by the Engineer.
- b) Except where otherwise specified, the Contractor shall pay all tonnage and other royalties, rent and other payments or compensation, if any, for getting stone, sand, gravel, clay or other materials required for the Works or Temporary Works.

29. INTERFERENCE WITH TRAFFIC AND ADJOINING PROPERTIES

All operations necessary for the execution of the Works and for the Construction of any Temporary Works shall, so far as compliance with the requirements of the Contract permits, be carried on so as not to interfere unnecessarily or improperly with the public convenience, or the access to, use and occupation of, public or private roads and footpaths to or of properties whether in the possession of the Employer or of any other person. The Contractor shall hold harmless and indemnify the Employer in respect of all claims, demands, proceedings, damages, costs, charges and expenses whatsoever arising out of or in relation to any such matters in so far as the Contractor is responsible therefor.

30. EXTRAORDINARY TRAFFIC AND SPECIAL LOADS

- a) The Contractor shall use every reasonable means to prevent any of the roads or bridges communicating with or on the routes to the Site from being damaged by any traffic of the Contractor or any of his sub-contractors and, in particular, shall select routes, choose and use vehicles and restrict and distribute loads so that any such extraordinary traffic as will inevitably arise from the moving of plant and material from and to the Site shall be limited as far as reasonably possible and so that no unnecessary damage may be occasioned to such roads and bridges.
- b) Should it be found necessary for the Contractor to move any load of Constructional Plant, machinery, preconstructed units or parts of units of work, or other thing, over part of a road or bridge, the moving whereof is likely to damage any such road or bridge unless special protection or strengthening is carried out, then the Contractor shall before moving the load

on to such road or bridge, save insofar as the Contract otherwise provide, be responsible for and shall pay for the cost of strengthening any such bridge or altering or improving any such road to avoid such damage, and the Contractor shall indemnify and keep the Employer indemnified against all claims for damage to any such road or bridge caused by such movement, including such claim as may be made directly against the Employer, and shall negotiate and pay all claims arising solely out of such damage.

31. OPPORTUNITIES FOR OTHER CONTRACTORS

The Contractor shall in accordance with the requirements of the Engineer afford all reasonable opportunities for carrying out their work to any other contractors employed by the Employer and their workmen and to the workmen of the Employer and of any other duly constituted authorities who may be employed in the execution on or near the Site of any work not included in the Contract or of any contract which the Employer may enter into in connection with or ancillary to the Works. If work by other contractors of the Employer as above-mentioned involves the Contractor in any direct expenses as a result of using his Site facilities, the Employer shall consider payment to the Contractor of such sum or sums as may be recommended by the Engineer.

32. CONTRACTOR TO KEEP SITE CLEAN

During the progress of the Works, the Contractor shall keep the Site reasonably free from all unnecessary obstruction and shall store or dispose of any Constructional Plant and surplus materials and clear away and remove from the Site any wreckage, rubbish or Temporary Works no longer required.

33. CLEARANCE OF SITE ON SUBSTANTIAL COMPLETION

On the substantial completion of the Works, the Contractor shall clear away and remove from the Site all Constructional Plant surplus materials, rubbish and Temporary Works of every kind and leave the whole of the Site and Works clean and in a workmanlike condition to the satisfaction of the Engineer.

34. LABOUR

34.1 Engagement of Labour

The Contractor shall make his own arrangements for the engagement of all labour local or otherwise.

34.2 Supply of Water

The Contractor shall provide on the Site to the satisfaction of the Engineer an adequate supply of drinking and other water for the use of the Contractor's staff and work people.

34.3 Alcoholic Drinks or Drugs

The Contractor shall comply with Government laws and regulations and orders in force as regards the import, sale, barter or disposal of alcoholic drinks or narcotics and he shall not allow or facilitate such importation, sale, gift, barter or disposal by his sub-contractors, agents or employees.

34.4 Arms and Ammunition

The restrictions specified in clause 34.3 above shall include all kinds of arms and ammunition.

34.5 Holiday and Religious Customs

The Contractor shall in all dealings with labour in his employ have due regard to all holiday, recognized festivals and religious or other customs.

34.6 Epidemics

In the event of any outbreak of illness of an epidemic nature the Contractor shall comply with and carry out such regulations, orders, and requirements as may be made by the Government or the local medical or sanitary authorities for the purpose of dealing with and overcoming the same.

34.7 Disorderly Conduct, etc.

The Contractor shall at all times take all reasonable precautions to prevent any unlawful riotous or disorderly conduct by or amongst his employees and for the preservation of peace and the protection of persons and property in the neighborhood of the Works against the same.

34.8 Observance by Sub-Contractors

The Contractor shall be considered responsible for the observance of the above provisions by his Sub-Contractors.

34.9 Legislation applicable to Labour

The Contractor shall abide by all applicable legislation and regulation with regard to labour.

35. RETURNS OF LABOUR, PLANT, ETC.

The Contractor shall, if required by the Engineer, deliver to the Engineer at his office, a return in detail in the form and at such intervals as the Engineer may prescribe showing the supervisory staff and the numbers of the several classes of labour from time to time employed by the Contractor on the Site and such information respecting Constructional plant as the Engineer may require.

36. MATERIALS, WORKMANSHIP AND TESTING

36.1 Materials and Workmanship

- a) All materials and workmanship shall be of the respective kinds described in the Contract and in accordance with the Engineer's instructions and shall be subjected from time to time

to such tests as the Engineer may direct at the place of manufacture or fabrication, or on the Site or at all or any of such places. The Contractor shall provide such assistance, instruments, machines, labour and materials as are normally required for examining, measuring and testing any work and the quality, weight or quantity of any materials used and shall supply samples of materials before incorporation in the Works for testing as may be selected and required by the Engineer. All testing equipment and instruments provided by the Contractor shall be used only by the Engineer or by the Contractor in accordance with the instructions of the Engineer.

- b) No material not conforming with the Specifications in the Contract may be used for the Works without prior written approval of the Employer and instruction of the Engineer, provided always that if the use of such material results or may result in increasing the Contract Price, the procedure in Clause 48 shall apply.

36.2 Cost of Samples

All samples shall be supplied by the Contractor at his own cost unless the supply thereof is clearly intended in the Specifications or Bill of Quantities to be at the cost of the Employer. Payment will not be made for samples which do not comply with the Specifications.

36.3 Cost of Tests

The Contractor shall bear the costs of any of the following tests:

- a) Those clearly intended by or provided for in the Contract Documents.
- b) Those involving load testing or tests to ensure that the design of the whole of the Works or any part of the Works is appropriate for the purpose which it was intended to fulfill.

37. ACCESS TO SITE

The Employer and the Engineer and any persons authorized by either of them shall, at all times, have access to the Works and to the Site and to all workshops and places where work is being prepared or whence materials, manufactured articles or machinery are being obtained for the Works and the Contractor shall afford every facility for and every assistance in or in obtaining the right to such access.

38. EXAMINATION OF WORK BEFORE COVERING UP

No work shall be covered up or put out of view without the approval of the Engineer and the Contractor shall afford full opportunity for the Engineer to examine and measure any work which is about to be covered up or put out of view and to examine foundations before permanent work is placed thereon. The Contractor shall give due notice to the Engineer whenever any such work or foundations is or are ready or about to be ready for examination and the Engineer shall without unreasonable delay unless he considers it unnecessary and advises the Contractor accordingly attend for the purpose of examining and measuring such work or of examining such foundations.

39.REMOVAL OF IMPROPER WORK AND MATERIALS

39.1 Engineer's power to order removal

The Engineer shall during the progress of the Works have power to order in writing from time to time, and the Contractor shall execute at his cost and expense, the following operations:

- a) The removal from the Site within such time or times as may be specified in the order of any materials which in the opinion of the Engineer are not in accordance with the Contract;
- b) The substitution of proper and suitable materials; and
- c) The removal and proper re-execution (notwithstanding any previous test thereof or interim payment therefore) of any work which in respect of materials or workmanship is not in the opinion of the Engineer in accordance with the Contract.

39.2 Default of Contractor in carrying out Engineer's Instructions

In case of default on the part of the Contractor in carrying out an instruction of the Engineer, the Employer shall be entitled to employ and pay other persons to carry out the same and all expenses consequent thereon or incidental thereto shall be borne by the Contractor and shall be recoverable from him by the Employer and may be deducted by the Employer from any monies due or which may become due to the Contractor.

40.SUSPENSION OF WORK

The Contractor shall on the written order of the Engineer suspend the progress of the Works or any part thereof for such time or times and in such manner as the Engineer may consider necessary and shall, during such suspension, properly protect and secure the Works so far as it is necessary in the opinion of the Engineer. The Employer should be notified and his written approval should be sought for any suspension of work in excess of three (3) days.

41.POSSESSION OF SITE

41.1 Access to Site

The Employer shall with the Engineer's written order to commence the Works, give to the Contractor possession of so much of the Site as may be required to enable the Contractor to commence and proceed with the construction of the Works in accordance with the Programme referred to in Clause 13 hereof and otherwise in accordance with such reasonable proposals of the Contractor as he shall make to the Engineer by notice in writing, and shall from time to time as the Works proceed give to the Contractor possession of such further portions of the Site as may be required to enable the Contractor to proceed with the construction of the Works with due dispatch in accordance with the said Programme or proposals, as the case may be.

41.2 Wayleaves, etc.

The Contractor shall bear all expenses and charges for special temporary wayleaves required by him in connection with access to the Site. The Contractor shall also provide at his own cost any additional accommodation outside the Site required by him for the purpose of the Works.

41.3 Limits of the Site

Except as defined below, the limits of the Site shall be as defined in the Contract. Should the Contractor require land beyond the Site, he shall provide it entirely at his own expense and before taking possession shall supply the Engineer with a copy of the necessary permits. Access to the Site is available where the Site adjoins a public road but it is not provided unless shown on the Drawings. When necessary for the safety and convenience of workmen, public or livestock or for the protection of the Works, the Contractor shall, at his own expense, provide adequate temporary fencing to the whole or part of the Site. The Contractor shall not disturb, damage or pull down any hedge, tree or building within the Site without the written consent of the Engineer.

42.TIME FOR COMPLETION

- a) Subject to any requirement in the Contract as to completion of any section of the Works before completion of the whole, the whole of the Works shall be completed, in accordance with the provisions of Clause 46 and 47 hereof, within the time stated in the Contract.
- b) The completion time includes weekly rest days, official holidays, and days of inclement weather.

43.EXTENSION OF TIME FOR COMPLETION

If, subject to the provisions of the Contract, the Engineer orders alterations or additions in the Works in accordance with Clause 48 hereof, or if circumstances constituting force majeure as defined in the Contract have occurred, the Contractor shall be entitled to apply for an extension of the time for completion of the Works specified in the Contract. The Employer shall, upon such application, determine the period of any such extension of time; provided that in the case of alterations or additions in the Works, the application for such an extension must be made before the alterations or additions in the Works are undertaken by the Contractor.

44.RATE OF PROGRESS

The whole of the materials, plant and labour to be provided by the Contractor and the mode, manner and speed of execution and completion of the Works are to be of a kind and conducted in a manner to the satisfaction of the Engineer. Should the rate of progress of the Works or any part thereof be at any time in the opinion of the Engineer too slow to ensure the completion of the Works by the prescribed time or extended time for completion,

the Engineer shall so notify the Contractor in writing and the Contractor shall thereupon take such steps as the Contractor may think necessary and the Engineer may approve to expedite progress so as to complete the Works by the prescribed time or extended time for completion. If the work is not being carried on by day and by night and the Contractor shall request permission to work by night as well as by day, then, if the Engineer shall grant such permission, the Contractor shall not be entitled to any additional payment. All work at night shall be carried out without unreasonable noise and disturbance. The contractor shall indemnify the Employer from and against any claims or liability for damages on account of noise or other disturbance created while or in carrying out the work and from and against all claims, demands, proceedings, costs and expenses whatsoever in regard or in relation to such noise or other disturbance. The Contractor shall submit in triplicate to the Engineer at the end of each month signed copies of explanatory Drawings or any other material showing the progress of the Works.

45.LIQUIDATED DAMAGES FOR DELAY

- a) If the Contractor shall fail to complete the Works within the time for completion prescribed in the Contract, or any extended time for completion in accordance with the Contract, then the Contractor shall pay to the Employer the sum specified in the Contract as liquidated damages, for the delay between the time prescribed in the Contract or the extended time for completion, as the case may be, and the date of substantial completion of the Works as stated in the Certificate of Substantial Completion, subject to the applicable limit stated in the Contract. The said sum shall be payable by the sole fact of the delay without the need for any previous notice or any legal proceedings, or proof of damage, which shall in all cases be considered as ascertained. The Employer may, without prejudice to any other method of recovery, deduct the amount of such liquidated damages from any monies in its hands due or which may become due to the Contractor. The payment or deduction of such damages shall not relieve the Contractor from his obligation to complete the Works or from any other of his obligations and liabilities under the Contract.
- b) If, before the time for completion of the whole of the Works or of a Section of the Works, a Certificate of Substantial Completion has been issued for any part or Section of the Works, the liquidated damages for delay in completion of the remainder of the Works or of that Section may, for any period of delay after the date stated in such Certificate of Substantial Completion, and in the absence of alternative provisions in the Contract, be reduced in the proportion which the value of the part or Section so certified bears to the total value of the whole of the Works or Section, as applicable. The provisions of this Sub-Clause shall only apply to the rate of liquidated damages and shall not affect the limit thereof.

46.CERTIFICATE OF SUBSTANTIAL COMPLETION

46.1 Substantial Completion of the Works

When the whole of the Works have been substantially completed and have satisfactorily passed any test on completion prescribed by the Contract, the Contractor may give a notice to that effect to the Engineer accompanied by an undertaking to finish any outstanding work during the Defects Liability Period. Such notice and undertaking shall be in writing and shall be deemed to be a request by the Contractor, for the Engineer to issue a Certificate of

Substantial Completion in respect of the Works. The Engineer shall, within twenty-one (21) days of the date of delivery of such notice either issue to the Contractor, with a copy to the Employer, a Certificate of Substantial Completion stating the date on which, in his opinion, the Works were substantially completed in accordance with the Contract or give instructions in writing to the Contractor specifying all the work which, in the Engineer's opinion, requires to be done by the Contractor before the issuance of such Certificate. The Engineer shall also notify the Contractor of any defects in the Works affecting substantial completion that may appear after such instructions and before completion of the work specified therein. The Contractor shall be entitled to receive such Certificate of Substantial Completion within twenty-one (21) days of completion, to the satisfaction of the Engineer, of the work so specified and making good any defect so notified. Upon issuance of the Certificate of Substantial Completion of the Works, the Contractor shall be deemed to have undertaken to complete with due expedition any outstanding work during the Defects Liability Period.

46.2 Substantial Completion of Sections or Parts of the Works

In accordance with the procedure in Sub-Clause (1) of this Clause and on the same conditions as provided therein, the Contractor may request the Engineer to issue, and the Engineer may issue, a Certificate of Substantial Completion in respect of any Section or part of the Works which has been substantially completed and has satisfactorily passed any tests on completion prescribed by the Contract, if:

- a) a separate time for completion is provided in the Contract in respect of such Section or part of the Works;
- b) such Section or part of the Works has been completed to the satisfaction of the Engineer and is required by the Employer for his occupation or use.

Upon the issuance of such Certificate, the Contractor shall be deemed to have undertaken to complete any outstanding work during the Defects Liability Period.

47. DEFECTS LIABILITY

47.1 Defects Liability Period

The expression "Defects Liability Period" shall mean the period of twelve (12) months, calculated from the date of completion of the Works stated in the Certificate of Substantial Completion issued by the Engineer or, in respect of any Section or part of the Works for which a separate Certificate of Substantial Completion has been issued, from the date of completion of that Section or part as stated in the relevant Certificate. The expression "the Works" shall, in respect of the Defects Liability Period, be construed accordingly.

47.2 Completion of Outstanding Work and Remedying of Defects

During the Defects Liability Period, the Contractor shall finish the work, if any, outstanding at the date of the Certificate of Substantial Completion, and shall execute all such work of repair, amendment, reconstruction, rectification and making good defects, imperfections, shrinkages or other faults as may be required of the Contractor in writing by the Engineer

during the Defects Liability Period and within fourteen (14) days after its expiration, as a result of an inspection made by or on behalf of the Engineer prior to expiration of the Defects Liability Period.

47.3 Cost of Execution of Work of Repair, etc.

All such outstanding work shall be carried out by the Contractor at his own expense if the necessity thereof shall, in the opinion of the Engineer, be due to the use of material or workmanship not in accordance with the Contract, or to neglect or failure on the part of the Contractor to comply with any obligation expressed or implied, on the Contractor's part under the Contract.

47.4 Remedy on Contractor's Failure to Carry Out Work Required

If the Contractor shall fail to do any such work outstanding on the Works, the Employer shall be entitled to employ and pay other persons to carry out the same, and all expenses consequent thereon or incidental thereto shall be recoverable from the Contractor by the Employer, and may be deducted by the Employer from any monies due or which may become due to the Contractor.

47.5 Certificate of Final Completion

Upon satisfactory completion of the work outstanding on the Works, the Engineer shall within twenty eight (28) days of the expiration of the Defects Liability period issue a Certificate of Final Completion to the Contractor. The Contract shall be deemed to be completed upon issuance of such Certificate, provided that the provisions of the Contract which remain unperformed and the Settlement of Disputes provision in the Contract shall remain in force for as long as is necessary to dispose of any outstanding matters or issues between the Parties.

48. ALTERATIONS, ADDITIONS AND OMISSIONS

48.1 Variations

The Engineer may within his powers introduce any variations to the form, type or quality of the Works or any part thereof which he considers necessary and for that purpose or if for any other reasons it shall, in his opinion be desirable, he shall have power to order the Contractor to do and the Contractor shall do any of the following:

- (a) increase or decrease the quantity of any work under the Contract;
- (b) omit any such work;
- (c) change the character or quality or kind of any such work;
- (d) change the levels, lines, positions and dimensions of any part of the Works;
- (e) execute additional work of any kind necessary for the completion of the Works, and no such variation shall in any way vitiate or invalidate the Contract.

48.2 Variations Increasing Cost of Contract or altering the Works.

The Engineer shall, however, obtain the written approval of the Employer before giving any order for any variations which may result in an increase of the Contract Price or in an essential alteration of the quantity, quality or character of the Works.

48.3 Orders for Variations to be in Writing

No variations shall be made by the Contractor without an order in writing from the Engineer. Variations requiring the written approval of the Employer under Item (2) of this Clause shall be made by the Contractor only upon written order from the Engineer accompanied by a copy of the Employer's approval. Provided that, subject to the provisions of the Contract, no order in writing shall be required for any increase or decrease in the quantity of any work where such increase or decrease is not the result of an order given under this Clause but is the result of the quantities exceeding or being less than those stated in the Bill of Quantities.

48.4 Valuation of Variations

The Engineer shall estimate to the Employer the amount to be added or deducted from the Contract Price in respect of any variation, addition or omission. In the case of any variation, addition or omission which may result in an increase of the Contract Price, the Engineer shall communicate such estimate to the Employer together with his request for the Employer's written approval of such variation, addition or omission. The value of any variation, addition or omission shall be calculated on the basis of the unit prices contained in the Bill of Quantities.

49.PLANT, TEMPORARY WORKS AND MATERIALS

49.1 Plant, etc., Exclusive Use for the Works

All Constructional Plant, Temporary Works and Materials provided by the Contractor shall, when brought on the Site, be deemed to be exclusively intended for the construction and completion of the Works and the Contractor shall not remove the same or any part thereof (save for the purpose of moving it from one part of the Site to another) without the consent in writing of the Engineer which shall not be unreasonably withheld.

49.2 Removal of Plant, etc.

Upon completion of the Works the Contractor shall remove from the Site all the said Constructional Plant and Temporary Works remaining thereon and any unused materials provided by the Contractor.

49.3 Employer not liable for Damage to Plant

The Employer shall not be at any time liable for the loss of any of the said Constructional plant, Temporary Works or Materials save if such loss results from the act or neglect of the Employer, its employees or agents.

49.4 Ownership of paid material and work

All material and work covered by payments made by the Employer to the Contractor shall thereupon become the sole property of the Employer, but this provision shall not be construed as relieving the Contractor from the sole responsibility for all material and work upon which payments have been made or the restoration of any damaged work or as waiving the right of the Employer to require the fulfillment of all of the terms of the Contract.

49.5 Equipment and supplies furnished by Employer

Title to any equipment and supplies which may be furnished by the Employer shall rest with the Employer and any such equipment and supplies shall be returned to the Employer at the conclusion of the Contract or when no longer needed by the Contractor. Such equipment when returned to the Employer, shall be in the same condition as when delivered to the Contractor, subject to normal wear and tear.

50.APPROVAL OF MATERIALS ETC., NOT IMPLIED

The operation of Clause 49 hereof shall not be deemed to imply any approval by the Engineer of the materials or other matters referred to therein nor shall it prevent the rejection of any such materials at any time by the Engineer.

51.MEASUREMENT OF WORKS

The Engineer shall, when he requires any part or parts of the Works to be measured, give notice to the Contractor or the Contractor's authorized agent or representative who shall forthwith attend or send a qualified agent to assist the Engineer in making such measurement and shall furnish all particulars required by either of them. Should the Contractor not attend or neglect or omit to send such agent, then the measurement made by the Engineer or approved by him shall be taken to be the correct measurement of the work. The purpose of measuring is to ascertain the volume of work executed by the Contractor and therefore determine the amount of the monthly payments.

52.LIABILITY OF THE PARTIES

- 52.1** The Works shall not be considered as completed until a Certificate of Final Completion shall have been signed by the Engineer and delivered to the Employer stating that the Works have been completed and that the Contractor has fulfilled all his obligations under Clause 47 to his satisfaction.

52.2 The Employer shall not be liable to the Contractor for any matter arising out of or in connection with the Contract or the execution of the Works unless the Contractor shall have made a claim in writing in respect thereof before the giving of the Certificate of Final Completion and in accordance with the Contract.

52.3 Unfulfilled Obligations

Notwithstanding the issue of the Certificate of Final Completion, the Contractor shall remain liable for the fulfillment of any obligation incurred under the provisions of the Contract prior to the issuance of the Certificate of Final Completion and which remains unperformed at the time such Certificate is issued. For the purpose of determining the nature and extent of any such obligation the Contract shall be deemed to remain in force between the parties hereto.

52.4 Contractor Responsible

Notwithstanding any other provisions in the Contract documents, the Contractor shall be totally responsible for and shall bear any and all risks of loss or damage to or failure of the Works or any part thereof for a period of ten years after issuance of the Certificate of Final Completion, provided always that such risks, damage or failure result from acts, defaults and negligence of the Contractor, his agents, employees or workmen and such contractors.

53.AUTHORITIES

53.1 The Employer shall have the right to enter upon the Site and expel the Contractor therefrom without thereby voiding the Contract or releasing the Contractor from any of his obligations or liabilities under the Contract or affecting the rights and powers conferred on the Employer and the Engineer by the Contract in any of the following cases:

- (a) If the Contractor is declared bankrupt or claims bankruptcy or court protection against his creditors or if the Contractor is a company or member of a company which was dissolved by legal action;
- (b) If the Contractor makes arrangements with his creditors or agrees to carry out the Contract under an inspection committee of his creditors;
- (c) If the Contractor withdraws from the Works or assigns the Contract to others in whole or in part without the Employer's prior written approval;
- (d) If the Contractor fails to commence the Works or shows insufficient progress to the extent which in the opinion of the Engineer will not enable him to meet the target completion date of the Works;
- (e) If the Contractor suspends the progress of the Works without due cause for fifteen (15) days after receiving from the Engineer written notice to proceed;

- (f) If the Contractor fails to comply with any of the Contract conditions or fails to fulfill his obligations and does not remedy the cause of his failure within fifteen (15) days after being notified to do so in writing;
- (g) If the Contractor is not executing the work in accordance with standards of workmanship specified in the Contract;
- (h) If the Contractor gives or promises to give a present or loan or reward to any employee of the Employer or of the Engineer.

Then the Employer may himself complete the Works or may employ any other contractor to complete the Works and the Employer or such other contractor may use for such completion so much of Constructional Plant, Temporary Works and Materials, which have been deemed to be reserved exclusively for the construction and completion of the Works under the provision of the Contract as he or they may think proper and the Employer may at any time sell any of the said Constructional Plant, Temporary Works and unused materials and apply the proceeds of sale in or towards the satisfaction of any sums due or which may become due to him from the Contractor under the Contract.

53.2 Evaluation after Re-entry

The Engineer shall as soon as may be practicable after any such entry and expulsion by the Employer notify the Contractor to attend the necessary evaluation of the Works. In the event that for any reason the Contractor does not attend such evaluation the Engineer shall undertake the said evaluation in the absence of the Contractor and shall issue a certificate stating the sum, if any, due to the Contractor for work done in accordance with the Contract up to the time of entry and expulsion by the Employer which has been reasonably accumulated to the Contractor in respect of the Works he has executed in such case in accordance with the Contract. The Engineer shall indicate the value of the materials whether unused or partially used and the value of construction equipment and any part of the Temporary Works.

53.3 Payment After Re-entry

If the Employer shall enter and expel the Contractor under this Clause he shall not be liable to pay the Contractor any money on account of the Contract until the expiration of the Defects Liability Period, and thereafter until the costs of completion and making good any defects of the Works, damages for delay in completion (if any), and all other expenses incurred by the Employer have been ascertained and their amount certified by the Engineer. The Contractor shall then be entitled to receive only such sum or sums (if any) as the Engineer may certify would have been due to him upon due completion by him after deducting the said amount. But if such amount shall exceed the sum which would have been payable to the Contractor on due completion by him,, then the Contractor shall upon demand pay to the Employer the amount of such excess. The Employer in such case may recover this amount from any money due to the Contractor from the Employer without the need to resort to legal procedures.

54.URGENT REPAIRS

If by reason of any accident or failure or other event occurring to, in or in connection with the Works or any part thereof either during the execution of the Works or during the Defects Liability Period any remedial or other work or repair shall in the opinion of the Engineer be urgently necessary for security and the Contractor is unable or unwilling at once to do such work or repair, the Employer may by his own or other workmen do such work or repair as the Engineer may consider necessary. If the work or repair so done by the Employer is work which in the opinion of the Engineer the Contractor was liable to do at his own expense under the Contract, all costs and charges properly incurred by the Employer in so doing shall on demand be paid by the Contractor to the Employer or may be deducted by the Employer from any monies due or which may become due to the Contractor provided always that the Engineer shall as soon after the occurrence of any such emergency as may be reasonably practicable notify the Contractor thereof in writing.

55.INCREASE AND DECREASE OF COSTS

Except if otherwise provided by the Contract, no adjustment of the Contract Price shall be made in respect of fluctuations of market, prices of labour, materials, plant or equipment, neither due to fluctuation in interest rates nor devaluation or any other matters affecting the Works.

56.TAXATION

The Contractor shall be responsible for the payment of all charges and taxes in respect of income including value added tax, all in accordance with and subject to the provisions of the income tax laws and regulations in force and all amendments thereto. It is the Contractor's responsibility to make all the necessary inquiries in this respect and he shall be deemed to have satisfied himself regarding the application of all relevant tax laws.

57.BLASTING

The Contractor shall not use any explosives without the written permission of the Engineer who shall require that the Contractor has complied in full with the regulations in force regarding the use of explosives. However, the Contractor, before applying to obtain these explosives, has to provide well arranged storage facilities. The Engineer's approval or refusal to permit the use of explosives shall not constitute ground for claims by the Contractor.

58.MACHINERY

The Contractor shall be responsible for coordinating the manufacture, delivery, erection and commissioning of plant machinery and equipment which are to form a part of the Works. He shall place all necessary orders as soon as possible after the signing of the Contract. These orders and their acceptance shall be produced to the Engineer on request. The Contractor shall also be responsible for ensuring that all sub-contractors adhere to such programs as are agreed and are needed to ensure completion of the Works within the period for completion. Should any sub-contracted works be delayed, the Contractor shall initiate the necessary action to speed up such completion. This shall not prejudice the Employer's right to exercise his remedies for delay in accordance with the Contract.

59.TEMPORARY WORKS AND REINSTATEMENT

The Contractor shall provide and maintain all temporary roads and tracks necessary for movement of plant and materials and clear same away at completion and make good all works damaged or disturbed. The Contractor shall submit drawings and full particulars of all Temporary Works to the Engineer before commencing same. The Engineer may require modifications to be made if he considers them to be insufficient and the Contractor shall give effect to such modifications but shall not be relieved of his responsibilities. The Contractor shall provide and maintain weather-proof sheds for storage of material pertinent to the Works both for his own use and for the use of the Employer and clear same away at the completion of the Works. The Contractor shall divert as required, at his own cost and subject to the approval of the Engineer, all public utilities encountered during the progress of the Works, except those specially indicated on the drawings as being included in the Contract. Where diversions of services are not required in connection with the Works, the Contractor shall uphold, maintain and keep the same in working order in existing locations. The Contractor shall make good, at his own expense, all damage to telephone, telegraph and electric cable or wires, sewers, water or other pipes and other services, except where the Public Authority or Private Party owning or responsible for the same elects to make good the damage. The costs incurred in so doing shall be paid by the Contractor to the Public Authority or Private Party on demand.

60.PHOTOGRAPHS AND ADVERTISING

The Contractor shall not publish any photographs of the Works or allow the Works to be used in any form of advertising whatsoever without the prior approval in writing from the Employer.

61.PREVENTION OF CORRUPTION

The Employer shall be entitled to cancel the Contract and to recover from the Contractor the amount of any loss resulting from such cancellation, if the Contractor has offered or given any person any gift or consideration of any kind as an inducement or reward for doing or intending to do any action in relation to the obtaining or the execution of the Contract or any other contract with the Employer or for showing or intending to show favour or disfavour to any person in relation to the Contract or any other contract with the Employer, if the like acts shall have been done by any persons employed by him or acting on his behalf whether with or without the knowledge of the Contractor in relation to this or any other Contract with the Employer.

62.DATE FALLING ON HOLIDAY

Where under the terms of the Contract any act is to be done or any period is to expire upon a certain day and that day or that period fall on a day of rest or recognized holiday, the Contract shall have effect as if the act were to be done or the period to expire upon the working day following such day.

63.NOTICES

- 63.1** Unless otherwise expressly specified, any notice, consent, approval, certificate or determination by any person for which provision is made in the Contract Documents shall be in writing. Any such notice, consent, approval, certificate or determination to be given or made by the Employer, the Contractor or the Engineer shall not be unreasonably withheld or delayed.
- 63.2** Any notice, certificate or instruction to be given to the Contractor by the Engineer or the Employer under the terms of the Contract shall be sent by post, cable, telex or facsimile at the Contractor's principal place of business specified in the Contract or such other address as the Contractor shall nominate in writing for that purpose, or by delivering the same at the said address against an authorized signature certifying the receipt.
- 63.3** Any notice to be given to the Employer under the terms of the Contract shall be sent by post, cable, telex or facsimile at the Employer's address specified in the Contract, or by delivering the same at the said address against an authorized signature certifying the receipt.
- 63.4** Any notice to be given to the Engineer under the terms of this Contract shall be sent by post, cable, telex or facsimile at the Engineer's address specified in the Contract, or by delivering the same at the said address against an authorized signature certifying the receipt.

64.LANGUAGE, WEIGHTS AND MEASURES

Except as may be otherwise specified in the Contract, English shall be used by the Contractor in all written communications to the Employer or the Engineer with respect to the services to be rendered and with respect to all documents procured or prepared by the Contractor pertaining to the Works. The metric system of weights and measures shall be used in all instances.

65.RECORDS, ACCOUNTS, INFORMATION AND AUDIT

The Contractor shall maintain accurate and systematic records and accounts in respect of the work performed under this Contract.

The Contractor shall furnish, compile or make available at all times to the UNDP any records or information, oral or written, which the UNDP may reasonably request in respect of the Works or the Contractor's performance thereof.

The Contractor shall allow the UNDP or its authorized agents to inspect and audit such records or information upon reasonable notice.

66.FORCE MAJEURE

Force majeure as used herein means Acts of God, war (whether declared or not), invasion,

revolution, insurrection or other acts or events of a similar nature or force.

In the event of and as soon as possible after the occurrence of any cause constituting force majeure, the Contractor shall give notice and full particulars in writing to the UNDP and to the Engineer of such force majeure if the Contractor is thereby rendered unable, wholly or in part, to perform its obligations and meet its responsibilities under this Contract. Subject to acceptance by the UNDP of the existence of such force majeure, which acceptance shall not be unreasonably withheld, the following provisions shall apply:

- (a) The obligations and responsibilities of the Contractor under this Contract shall be suspended to the extent of his inability to perform them and for as long as such inability continues. During such suspension and in respect of work suspended, the Contractor shall be reimbursed by the UNDP substantiated costs of maintenance of the Contractor's equipment and of per diem of the Contractor's permanent personnel rendered idle by such suspension;
- (b) The Contractor shall within fifteen (15) days of the notice to the UNDP of the occurrence of the force majeure submit a statement to the UNDP of estimated costs referred to in sub-paragraph (a) above during the period of suspension followed by a complete statement of actual expenditures within thirty (30) days after the end of the suspension;
- (c) The term of this Contract shall be extended for a period equal to the period of suspension taking however into account any special condition which may cause the additional time for completion of the Works to be different from the period of suspension;
- (d) If the Contractor is rendered permanently unable, wholly or in part, by reason of force majeure, to perform his obligations and meet his responsibilities under the Contract, the UNDP shall have the right to terminate the Contract on the same terms and conditions as provided for in Clause 68 of these General Conditions, except that the period of notice shall be seven (7) days instead of fourteen (14) days, and
- (e) For the purpose of the preceding sub-paragraph, the UNDP may consider the Contractor permanently unable to perform in case of any suspension period of more than ninety (90) days.

67.SUSPENSION BY THE UNDP

The UNDP may by written notice to the Contractor suspend for a specified period, in whole or in part, payments to the Contractor and/or the Contractor's obligation to continue to perform the Works under this Contract, if in the UNDP' sole discretion:

- (a) any conditions arise which interfere, or threaten to interfere with the successful execution of the Works or the accomplishment of the purpose thereof, or
- (b) the Contractor shall have failed, in whole or in part, to perform any of the terms and conditions of this Contract.

After suspension under sub-paragraph (a) above, the Contractor shall be entitled to reimbursement by the UNDP of such costs as shall have been duly incurred in accordance

with this Contract prior to the commencement of the period of such suspension.

The term of this Contract may be extended by the UNDP for a period equal to any period of suspension, taking into account any special conditions which may cause the additional time for completion of the Works to be different from the period of suspension.

68 .TERMINATION BY THE UNDP

The UNDP may, notwithstanding any suspension under Clause 67 above, terminate this Contract for cause or convenience in the interest of the UNDP upon not less than fourteen (14) days written notice to the Contractor.

Upon termination of this Contract:

- (a) The Contractor shall take immediate steps to terminate his performance of the Contract in a prompt and orderly manner and to reduce losses and to keep further expenditures to a minimum, and
- (b) The Contractor shall be entitled (unless such termination has been occasioned by the Contractor's breach of this Contract), to be paid for the part of the Works satisfactorily completed and for the materials and equipment properly delivered to the Site as of the date of termination for incorporation to the Works, plus substantiated costs resulting from commitments entered into prior to the date of termination as well as any reasonable substantiated direct costs incurred by the Contractor as a result of the termination, but shall not be entitled to receive any other or further payment or damages.

69.TERMINATION BY THE CONTRACTOR

In the case of any alleged breach by the UNDP of the Contract or in any other situation which the Contractor reasonably considers to entitle him to terminate his performance of the Contract, the Contractor shall promptly give written notice to the UNDP detailing the nature and the circumstances of the breach or other situation. Upon acknowledgement in writing by the UNDP of the existence of such breach and the UNDP' inability to remedy it, or upon failure of the UNDP to respond to such notice within twenty (20) days of receipt thereof, the Contractor shall be entitled to terminate this Contract by giving 30 days written notice thereof. In the event of disagreement between the Parties as to the existence of such breach or other situation referred to above, the matter shall be resolved in accordance with Clause 71 of these General Conditions.

Upon termination of this Contract under this Clause the provisions of sub-paragraph (b) of Clause 68 hereof shall apply.

70.RIGHTS AND REMEDIES OF THE UNDP

Nothing in or relating to this Contract shall be deemed to prejudice or constitute a waiver of any other rights or remedies of the UNDP.

The UNDP shall not be liable for any consequences of, or claim based upon, any act or omission on the part of the Government.

71.SETTLEMENT OF DISPUTES

In the case of any claim, controversy or dispute arising out of, or in connection with this Contract or any breach thereof, the following procedure for resolution of such claim, controversy or dispute shall apply.

71.1 Notification

The aggrieved party shall immediately notify the other party in writing of the nature of the alleged claim, controversy or dispute, not later than seven (7) days from awareness of the existence thereof.

71.2 Consultation

On receipt of the notification provided above, the representatives of the Parties shall start consultations with a view to reaching an amicable resolution of the claim, controversy or dispute without causing interruption of the Works.

71.3 Conciliation

Where the representatives of the Parties are unable to reach such an amicable settlement, either party may request the submission of the matter to conciliation in accordance with the UNCITRAL Rules of Conciliation then obtaining.

71.4 Arbitration

Any claim, controversy or dispute which is not settled as provided under clauses 71.1 through 3 above shall be referred to arbitration in accordance with the UNCITRAL Arbitration Rules then obtaining. The Parties shall be bound by the arbitration award rendered in accordance with such arbitration as the final adjudication of any such controversy or claim.

72. PRIVILEGES AND IMMUNITIES

Nothing in or relating to this Contract shall be deemed a waiver of any of the privileges and immunities of the United Nations of which the UNDP is an integral part.

73. SECURITY

The Contractor shall:

- (a) put in place an appropriate security plan and maintain the security plan, taking into account the security situation in the country where the services are being provided;
- (b) assume all risks and liabilities related to the Contractor's security, and the full implementation of the security plan.

UNDP reserves the right to verify whether such a plan is in place, and to suggest modifications to the plan when necessary. Failure to maintain and implement an appropriate

security plan as required hereunder shall be deemed a breach of this contract. Notwithstanding the foregoing, the Contractor shall remain solely responsible for the security of its personnel and for UNDP's property in its custody as set forth in paragraph 4.1 above.

74. AUDIT AND INVESTIGATIONS

Each invoice paid by UNDP shall be subject to a post-payment audit by auditors, whether internal or external, of UNDP or the authorized agents of the UNDP at any time during the term of the Contract and for a period of three (3) years following the expiration or prior termination of the Contract. The UNDP shall be entitled to a refund from the Contractor for any amounts shown by such audits to have been paid by the UNDP other than in accordance with the terms and conditions of the Contract. Should the audit determine that any funds paid by UNDP have not been used as per contract clauses, the company shall reimburse such funds forthwith. Where the company fails to reimburse such funds, UNDP reserves the right to seek recovery and/or to take any other action as it deems necessary.

The Contractor acknowledges and agrees that, at anytime, UNDP may conduct investigations relating to any aspect of the Contract, the obligations performed under the Contract, and the operations of the Contractor generally. The right of UNDP to conduct an investigation and the Contractor's obligation to comply with such an investigation shall not lapse upon expiration or prior termination of the Contract. The Contractor shall provide its full and timely cooperation with any such inspections, post-payment audits or investigations. Such cooperation shall include, but shall not be limited to, the Contractor's obligation to make available its personnel and any documentation for such purposes and to grant to UNDP access to the Contractor's premises. The Contractor shall require its agents, including, but not limited to, the Contractor's attorneys, accountants or other advisers, to reasonably cooperate with any inspections, post-payment audits or investigations carried out by UNDP hereunder.

75. ANTI-TERRORISM

The Contractor agrees to undertake all reasonable efforts to ensure that none of the UNDP funds received under this Contract are used to provide support to individuals or entities associated with terrorism and that the recipients of any amounts provided by UNDP hereunder do not appear on the list maintained by the Security Council Committee established pursuant to resolution 1267 (1999). The list can be accessed via <http://www.un.org/Docs/sc/committees/1267/1267ListEng.htm>. This provision must be included in all sub-contracts or sub-agreements entered into under this Contract.

ANNEX 1. Submission Templates and Forms

The table below is provided to the Bidders for instructive purposes. Offers shall be organized in the order below and in reference to the respective sections.

Bidders are responsible with a detailed examination of all the ITB in order not to overlook any requirement and make sure to submit all required documents that may not be listed in the following table.

Inner Envelope 1: Price Proposal

Price Proposal		Reference
1	Bid Submission Form	Section 4 of the ITB
2	Price Schedule Form	Section 7a and 7b of the ITB
3	Form for Bid Security	Section 8 of the ITB

Inner Envelope 2: Technical Proposal

Administrative Compliance Documents		Relevant Submission Forms
1	<u>Notarized</u> copy of the document(s) (e.g. trade registration gazette or equivalent etc.) that prove(s) the constitution of the company	-
2	<u>Notarized</u> copy of the document(s) (e.g. trade registration gazette or equivalent etc.) that demonstrate(s) recent change(s) (i.e. title, address, shareholding structure) and current status of the Company	-
3	Signature Circular and/or Power of Attorney, demonstrating authority to sign on behalf of the Bidder, certified by the notary public.	-
4	Statement of Declaration for <ul style="list-style-type: none"> • Eligibility in Tendering Process • Address Notification 	<ul style="list-style-type: none"> • Form 1.1: Statement of Declaration
5	All other requested administrative documents as indicated in Data Sheet (No. 28)	-

Technical Proposal					
Section	Title	Content	Relevant Submission Forms	Mandatory Attachments	Optional Attachments
Section 1:	Expertise of the Firm/Organization	As described in the Instructions to Bidders	<ul style="list-style-type: none"> Form 1.1: Statement of Declaration Form 1.1.4: History Of Non-Performance and (last 5 years) Form: 1.2.1: Single Similar Work Experience Form: 1.2.2: Total Similar Work Experience Form: 1.3.1: Financial Resources Form: 1.3.2: Financial Strength Form 1.3.3: Annual Construction Turnover 	<ul style="list-style-type: none"> Document(s) evidencing financial volume and similarity of the scope of referenced work. Reference letters from the bidder's bank(s) Copy of the quality assurance certificate(s), if any Copies of work completion certificates, copies of client letters etc. Audited financial statements for years 2014, 2015 and 2016. (Income Statement and Balance Sheet) Annual Construction Turnover is calculated as total certified payments received for work in progress or completed. Attach copies of progress payments or work completion certificates 	Bidders <u>may</u> consider submitting optional attachments that would substantiate their proposals.
Section 2	Proposed Methodology, Approach and Implementation Plan	As described in the Instructions to Bidders	<ul style="list-style-type: none"> Form: 2.2.3: Time Plan Form: 2.2.4: Equipment Commitment Form 	None	Bidders <u>may</u> consider submitting optional attachments that would substantiate their proposals.
Section 3:	Management Structure and Key Personnel	As described in the Instructions to Bidders	<ul style="list-style-type: none"> Form 3.1: List of Proposed Key Personnel Form 3.1.x.: Identical CVs of the Assignment Team members <p><u>Submission form 3.1.x is to be replicated for all key technical staff, and enumerated accordingly.</u></p>	<ul style="list-style-type: none"> Copies of diplomas, Certifications, if any, that are indicated as assets for the key personnel in the Terms of Reference 	Bidders <u>may</u> consider submitting optional attachments that would substantiate their proposals.

All "submission forms" regardless of whether there is a specific place for signature should be signed by the authorized person(s) of the Bidder, demonstrating correctness and accuracy of the information provided in the submission forms. This does not apply to the notarized documents and to the bid bond.

(To be printed on company letterhead.)

Form 1.1: Statement of Declaration

To:

United Nations Development Programme (UNDP)
Birlik Mah. Katar Cad. No: 11, Çankaya, Ankara, Turkey

We, the undersigned, submit our Proposal the referenced ITB and declare that:

We have examined and have no reservations to the ITB including any Addendum (or Addenda to same effect), issued by the procuring UNDP entity in accordance with Instructions to Bidders.

We understand that you may cancel the ITB process at any time and that you are neither bound to accept any proposal that you may receive, without incurring any liability to the Bidders.

We are not associated, or have been associated in the past, directly or indirectly, with a firm or any of its affiliates which have been engaged by the Employer to provide consulting services for the preparation of the ITB, and/or services for design and construction of the civil works, defined Schedule of Requirements and Technical Specifications in of the ITB,

As of the date of this statement of declaration, we are not in the circumstances of disqualification or restriction set forth in the Laws (or as per the relevant laws of the country in which we operate) and we are not in the circumstances of those that cannot participate in the procurement as per the same Laws (or as per the relevant laws of the country in which we operate). If any change occurs in this case declared, we undertake to notify the UNDP the Contracting Entity promptly.

a) The following information shall be used by UNDP to notify us:

Name of the Company Submitting the Offer	
Country of Registration	
Name of the Authorized Contact Person for this submission	
Notification Address	
Telephone	
Fax	
E-mail	

On this Date: .../.../.....

Signature & Stamp

Name, Last name,

Title,

Form 1.1.4: History Of Non-Performance and Litigation (last 5 years)

ITB No. and title: [UNDP-TUR-ITB-PROJ(SR)2017/02]

To: UNDP
Birlik Mah. Katar Cad. No:11
Çankaya, Ankara, 06610, Turkey

We, the undersigned, confirm that following information is correct and reflects our company's history of non-performance and litigation in the last five years (2012 - 2017):

Non-performing Contracts:				
<input type="checkbox"/> Contract non-performance did not occur during the last 5 years				
<input type="checkbox"/> Contract non-performance occurred during the last 5 years				
	Year	Outcome as % of Total Assets	Contract Identification	Total Contract Value (USD, Equivalent)
			<i>Contract Identification: Name of Employer: Address of Employer: Matter in dispute:</i>	

Litigation History				
<input type="checkbox"/> No litigation history				
<input type="checkbox"/> Litigation history				
	Year	Outcome as % of Total Assets	Contract Identification	Total Contract Value (USD, Equivalent)
			<i>Contract Identification: Name of Employer: Address of Employer: Matter in dispute:</i>	

Best regards,

On this Date: .../.../.....

Signature & Stamp

Name, Last name,

Title,

Form: 1.2.1: Single Similar Work Experience						
Ref No: 1	Project title					
Country	Overall project value (USD)*	Proportion carried out by Bidder (%)*	Nº of staff provided*	Name of the Employer	Source of funding*	Dates (start/end)
Detailed description of project*				Type of services provided*		

* The information presented in these sections constitute the eligibility criteria

Please attach documents evidencing financial volume and similarity of the referenced work. If such documents are in a Language other than the English Language, a translation in English Language should also be provided.

In order to arrive to the USD values please use the conversion rates or cross rates of the Central Bank of Republic of Turkey (www.tcmb.gov.tr). The conversion rate (selling prices) or the cross rate to be used is the rate published by the Central Bank of Republic of Turkey for the last day of the year in which the referenced work is completed. The conversion rates (selling prices) and cross rates (EUR/USD) for the years 2012, 2013, 2014, 2015 and 2016 are provided below for reference purposes.

Year	Reference Institution	Reference Date	1 USD =	1 EUR=
2012	Central Bank of the Republic of Turkey	31.12.2012	1.7862 TRL	1.3193 USD
2013	Central Bank of the Republic of Turkey	31.12.2013	2.1343 TRL	1.3774 USD
2014	Central Bank of the Republic of Turkey	31.12.2014	2.3311TRL	1,2150 USD
2015	Central Bank of the Republic of Turkey	31.12.2015	2.9233 TRL	1.0911 USD
2016	Central Bank of the Republic of Turkey	30.12.2016	3.5255 TRL	1.0542 USD

On this Date: .../.../.....

Signature & Stamp

Name, Last name,

Title,

Form: 1.2.2: Total Similar Work Experience							
Ref No	Title of the Project*	Brief description of project*	Name of the Employer	Country	Proportion carried out by the Bidder (%)*	Dates (start /end)	Overall project value (USD)*
1							
2							
...							
<i>n</i>							
Total							

* The information presented in these sections constitute the eligibility criteria

Please attach documents evidencing financial volume and similarity of the referenced work. If such documents are in a Language other than the English Language, a translation in English Language should also be provided.

In order to arrive to the USD values please use the conversion rates or cross rates of the Central Bank of Republic of Turkey (www.tcmb.gov.tr). The conversion rate (selling prices) or the cross rate to be used is the rate published by the Central Bank of Republic of Turkey for the last day of the year in which the referenced work is completed.

On this Date: .../.../.....

Signature & Stamp

Name, Last name,

Title,

Form 1.3.1: Financial Resources (to be printed on company letterhead, signed, dated and stamped)

ITB No. and title: [UNDP-TUR-ITB-PROJ(SR)2017/02]

To: UNDP
Birlik Mah. Katar Cad. No: 11
Çankaya, Ankara, 06610, Turkey

We, the undersigned, confirm that following information is correct and reflects our company's financial resources.

Cash and Credit position as of submission date				
Bank	Available Cash	Unused		
		Cash Credit	Credit Letter	
Total				
	A	B	C	A+B+C

All Bank reference letters in Local New Turkish Lira should be converted into US\$ through using the conversion rate of the Central Bank of Republic of Turkey (www.tcmb.gov.tr) for 2 January 2017. (1 US\$ = 3.5313 TRL).

Bidder shall complete Form 1.3.1, supplemented with Bank Reference letters.

On this Date: .../.../.....

Signature & Stamp

Name, Last name,

Title,

Form 1.3.2: Financial Strength

ITB No. and title: [UNDP-TUR-ITB-PROJ(SR)2017/02]

To: UNDP
Birlik Mah. Katar Cad. No:11
Çankaya, Ankara, 06610, Turkey

We, the undersigned, confirm that following information is correct and reflects our company's financial situation.

	2014	2015	2016	Average
Turnover (USD)*				
Current Assets				
Current Liabilities				
Current Ratio*				

Bidder shall complete Form 1.3.2, supplemented with audited financial statements for years 2014, 2015 and 2016.

*An average current ratio (current assets/current liabilities) equal to or higher than 1 (one) in the period of review (i.e. 2014, 2015 and 2016) or current ratio (current assets/current liabilities) equal to or higher than 1 (one) in 2016.

On this Date: .../.../.....

Signature & Stamp

Name, Last name,

Title,

Form 1.3.3: Annual Construction Turnover

Annual Construction Turnover								
	Ref 1	Ref 2	Ref 3	Ref 4	Ref n	Total
2012								
2013								
2014								
2015								
2016								
Total								
Average								

The information above complies with the following conditions:

- * Annual Construction Turnover is calculated as total certified payments received for work in progress or completed. **Attach copies of progress payments or work completion certificates.**
- ** In order to arrive to the USD values, the following conversion rates need to be used. If the subject matter currency (i.e. the currency of the work completion certificate, income statement etc.) is other than Turkish Lira (TRL) or Euro (EUR), the conversion (selling prices) or cross rates for the reference dates given in below table and available at the web page of Central Bank of Republic of Turkey (www.tcmb.gov.tr) are to be used. The following table provides the reference dates for each eligible year. The conversion rates or cross rates to be used by Bidder should be the conversion rates or cross rates stated for the reference dates in the following table.

Year	Reference Institution	Reference Date	1 USD =	1 EUR=
2012	Central Bank of the Republic of Turkey	31.12.2012	1.7862 TRL	1.3193 USD
2013	Central Bank of the Republic of Turkey	31.12.2013	2.1343 TRL	1.3774 USD
2014	Central Bank of the Republic of Turkey	31.12.2014	2.3311TRL	1,2150 USD
2015	Central Bank of the Republic of Turkey	31.12.2015	2.9233 TRL	1.0911 USD
2016	Central Bank of the Republic of Turkey	30.12.2016	3.5255 TRL	1.0542 USD

Name
Title
Date
Signature

FORM 2.2.3: TIME PLAN

	Month 1				Month 2				Month 3				Month 4		
Activities	W01	W02	W03	W04	W05	W08	W09	W10	W11	W12	W13	W14	W15	W16		
1...																		
1.1...																		
1.2...																		
...																		
...																		
<i>Add lines for activities as necessary</i>																		
...																		
...																		
...																		

Add months and weeks as necessary

- 1 Indicate all main activities of the assignment, including delivery of reports and other benchmarks such as Client approvals. For phased assignments indicate activities, delivery of reports, and benchmarks separately for each phase.
- 2 Duration of activities shall be indicated in the form of a bar chart.

Form 2.2.4: Equipment Commitment Form *(Duplicate the form in case of application to both LOTS)*

Guidance note: the equipment commitment form should be printed on company letterhead, signed by the authorized representative(s) of the bidder, dated and stamped. The bidder must demonstrate that it will have access, at the minimum, to the key equipment, listed hereafter. The list of equipment hereafter is will be used as minimum benchmark for assessment of bids. However, the bidders should propose an extensive list of required equipment to successfully complete the works. The bidders' list must match their approach to the works and demonstrate their understanding and ability to complete the works satisfactorily. Fields with asterisk (*) shall be used for evaluation.

To: UNDP, Birlik Mah. Katar Cad. No: 11, Çankaya Ankara

Subject: Construction of Solid Waste Transfer Station in Araban / Gaziantep and Birecik/ Şanlıurfa. within the scope of Effective Urban Waste Management Project (95752) and Strengthening Social Stability in Southeast Turkey Project (99640)

We, the undersigned, undertake to commit at the minimum the following equipment for the subject matter, civil works.

[Signature of the Authorized Representative(s) of the Bidder]

Name: [Insert name(s) of the Authorized Representative(s) of the Bidder]

In the Capacity of [insert capacity of person signing the application]

Duly authorized to sign the application for and on behalf of: [insert full name of Bidder]

Address [insert street number/town or city/country address]

Dated on [insert the date: DD/MM/YYYY]

Equipment	Information on the Equipment				Current Status		Source
	Manufacturer	Model and Power Rating	Capacity*	Year of Manufacture	Current Location	Details of current commitments	Select the option that applies
Excavator with hydraulic breaker no:1							<input type="checkbox"/> Owned <input type="checkbox"/> Rented <input type="checkbox"/> Leased
Dump Truck no:1							<input type="checkbox"/> Owned <input type="checkbox"/> Rented <input type="checkbox"/> Leased

Equipment	Information on the Equipment				Current Status		Source
	Manufacturer	Model and Power Rating	Capacity*	Year of Manufacture	Current Location	Details of current commitments	Select the option that applies
Dump Truck no:2							<input type="checkbox"/> Owned <input type="checkbox"/> Rented <input type="checkbox"/> Leased
JCB type backhoe loader (Dipper) no:1							<input type="checkbox"/> Owned <input type="checkbox"/> Rented <input type="checkbox"/> Leased
Concrete Vibrator No:1							<input type="checkbox"/> Owned <input type="checkbox"/> Rented <input type="checkbox"/> Leased
Concrete Vibrator No:2							<input type="checkbox"/> Owned <input type="checkbox"/> Rented <input type="checkbox"/> Leased
Roller no:1							<input type="checkbox"/> Owned <input type="checkbox"/> Rented <input type="checkbox"/> Leased
Crane, wheeled, (25 tones)							<input type="checkbox"/> Owned <input type="checkbox"/> Rented <input type="checkbox"/> Leased
Tractor							<input type="checkbox"/> Owned <input type="checkbox"/> Rented <input type="checkbox"/> Leased
<u>Add here needed machinery and equipment for successful Construction of Solid Waste Transfer Station in Araban/Gaziantep.</u>							<input type="checkbox"/> Owned <input type="checkbox"/> Rented <input type="checkbox"/> Leased

Form: 3.1: List of Proposed Key Personnel (i.e. Assignment Team Members) (Duplicate the form in case of application to both LOTS)

We the undersigned commit to engaging the key technical staff whose names appear below. We confirm that the key personnel listed below meet the minimum requirements listed in the Terms of Reference

No	Position	Name, Last Name	Degree and Year of Graduation	Years of general professional experience	# of projects involved in the proposed area of expertise	English Language Skills (Yes/No)	Turkish Language Skills (Yes/No)
3.1.1	Project Coordinator						
3.1.2	Survey Technician						

On this Date: .../.../.....

Signature & Stamp

Name, Last name,

Title,

Form: 3.1.1: CV Template [Replicate this form and enumerate accordingly for each key personnel]				
1	Proposed Position			
2	Name and Last Name			
3	Nationality			
4	Contact Information		Address: Tel: Email:	
General Qualifications				
5.	Education (start with the highest degree obtained) – attach copy of the diploma			
	Degree	University/Faculty/Department		Year of Graduation
5.1				
5.2				
5.3				
6	Language Qualifications (5: excellent, 1: very poor)			
	Language	Writing	Reading	Speaking
6.1	Turkish			
6.2	English			
6.3	Other			
7	Computer Skills (5: excellent, 1: beginner)			Certifications (if any)
7.1	[Name the software]	[Rate skill level: 5: Excellent, 1: Beginner]		[Attach, if yes]
7.2	[Name the software]	[Rate skill level: 5: Excellent, 1: Beginner]		[Attach, if yes]
7.3	[Name the software]	[Rate skill level: 5: Excellent, 1: Beginner]		[Attach, if yes]
7.4	[Name the software]	[Rate skill level: 5: Excellent, 1: Beginner]		[Attach, if yes]
7.5	[Name the software]	[Rate skill level: 5: Excellent, 1: Beginner]		[Attach, if yes]
8	Other Skills (Reporting, writing skills etc., 5: excellent, 1: very poor) – add rows if needed,			
8.1	[indicate the skill]			[rate]
8.3	[indicate the skill]			[rate]
8.4	[indicate the skill]			[rate]
9	Membership to relevant professional/occupational bodies add/delete rows if needed,			
	Professional/Occupational Body			Membership since
9.1	[Name the Professional/Occupational Body]			[year]
9.2	[Name the Professional/Occupational Body]			[year]
10	Experience with International Organizations add/delete rows if needed,			
	Int'l Organization	From (mm/yyyy)	To (mm/yyyy)	Services
10.1				
10.2				
10.3				
Professional Experience –add/delete rows if needed				
11	General Professional Experience			Reference to Similar Work Experience based on the Terms of Reference
	From/To	Entity	Description of Main Functions	

Form: 3.1.1: CV Template [Replicate this form and enumerate accordingly for each key personnel]				
11.1	From: Month/Year To: Month/Year	Indicate the name of the employer, or self employed	Describe your role and main function (civil engineer, survey engineer etc.)	Indicate similar work experience
11.2	From: Month/Year To: Month/Year	Indicate the name of the employer, or self employed	Describe your role and main function	Indicate similar work experience
11.3	From: Month/Year To: Month/Year	Indicate the name of the employer, or self employed	Describe your role and main function	Indicate similar work experience
11.4	Add rows if needed	Indicate the name of the employer, or self employed	Describe your role and main function	Indicate similar work experience
12	References			
	Name of Reference	Entity and Position	Contact Information	Project
12.1				
12.2				
12.3				
13	Certification			
13.1	By the proposed personnel: I, the undersigned, certify that to the best of my knowledge and belief, these data correctly describes me, my qualifications and my experience. I confirm my intention to serve within the proposed capacity and my availability to perform the duties listed in the ToR.			
	Date and Signature			

Attachments: Copies of diploma(s) and copies of certifications (if any) should be attached.

Guidance Note on Form: 1.2.1: Single Similar Work Experience, Form: 1.2.2: Total Similar Work Experience, Form 1.3.3: Annual Construction Turnover

Not to be submitted

Bidders are expected to fill out Form 1.2.1 and Form 1.2.2, in accordance with the guidance provided below.

1) What is similar work experience?

Similar Work Experience is superstructure related construction works such as reinforced concrete/steel factories and industrial facilities etc. and infrastructure works such as roads etc.

2) What is the time horizon that determines eligibility of a reference?

The similar construction work experience, cited by the bidders should be “ongoing” or “completed” in 2012, 2013, 2014, 2015, 2016 and/or 2017.

3) What are the supporting documents to be attached to Form 1.2.1 and Form 1.2.2?

Supporting to be attached to Form 1.2.1 and Form 1.2.2 are:

a) For completed projects

- Copy of work completion certificates (notarized copies shall be requested)
- Copies of invoices
- Copies of progress payment certificates

b) For ongoing projects

- Notarized copy of the contract (and amendment(s), if any) (notarized copies shall be requested)
- Copies of progress payment certificates
- Copies of invoices

4) What is the basis of calculation of contract amount?

For completed projects the basis of calculation should be the amount indicated in the work completion certificate (i.e. Proportion of the total contract amount carried out by the Bidder)

For ongoing projects the basis of calculation should be the amount indicated in the contract (i.e. Proportion of the total contract amount carried out by the Bidder) as amended by addenda, if any.

5) How the non-USD amounts are converted into USD?

In order to arrive to the USD values, the following conversion rates need to be used. If the subject matter currency (i.e. the currency of the work completion certificate, income statement etc.) is other than Turkish Lira (TRL) or Euro (EUR), the conversion (selling prices) or cross rates for the reference dates given in below table and available at the web page of Central Bank of Republic of Turkey (www.tcmb.gov.tr) are to be used. The following table provides the reference dates for each eligible year. The conversion rates or cross rates to be used by Bidder should be the conversion rates or cross rates stated for the reference dates in the following table.

Year	Reference Institution	Reference Date	1 USD =	1 EUR=
2012	Central Bank of the Republic of Turkey	31.12.2012	1.7862 TRL	1.3193 USD
2013	Central Bank of the Republic of Turkey	31.12.2013	2.1343 TRL	1.3774 USD

Guidance Note on Form: 1.2.1: Single Similar Work Experience, Form: 1.2.2: Total Similar Work Experience, Form 1.3.3: Annual Construction Turnover

Not to be submitted

2014	Central Bank of the Republic of Turkey	31.12.2014	2.3311TRL	1,2150 USD
2015	Central Bank of the Republic of Turkey	31.12.2015	2.9233 TRL	1.0911 USD
2016	Central Bank of the Republic of Turkey	30.12.2016	3.5255 TRL	1.0542 USD

Guidance Note on Form: 1.2.1: Single Similar Work Experience, Form: 1.2.2: Total Similar Work Experience, Form 1.3.3: Annual Construction Turnover

Not to be submitted

Bidders are expected to fill out Form 1.3.3, in accordance with the guidance provided below.

What is the time horizon that determines eligibility of a reference?

The construction works experience, cited as references by the bidders should be “ongoing” or “completed” in 2012, 2013, 2014, 2015, 2016 and/or 2017.

2) What are the supporting documents to be attached to Form 1.3.3

Supporting to be attached to Form 1.3.3 are:

- a) For completed projects
 - Copy of work completion certificates (notarized copies shall be requested)
 - Copies of invoices
 - Copies of progress payment certificates
- b) For ongoing projects
 - Copy of the contract (and amendment(s), if any) (notarized copies shall be requested)
 - Copies of progress payment certificates
 - Copies of invoices

4) What is the basis of calculation of annual turnover?

Payments received within 2012, 2013, 2014, 2015, 2016 or 2017.

5) How the non-USD amounts are converted into USD?

In order to arrive to the USD values, the following conversion rates need to be used. If the subject matter currency (i.e. the currency of the work completion certificate, income statement etc.) is other than Turkish Lira (TRL) or Euro (EUR), the conversion (selling prices) or cross rates for the reference dates given in below table and available at the web page of Central Bank of Republic of Turkey (www.tcmb.gov.tr) are to be used. The following table provides the reference dates for each eligible year. The conversion rates or cross rates to be used by Bidder should be the conversion rates or cross rates stated for the reference dates in the following table.

No escalation (based on formal or informal coefficients) should be applied to the annual turnover figures.

Year	Reference Institution	Reference Date	1 USD =	1 EUR=
2012	Central Bank of the Republic of Turkey	31.12.2012	1.7862 TRL	1.3193 USD
2013	Central Bank of the Republic of Turkey	31.12.2013	2.1343 TRL	1.3774 USD
2014	Central Bank of the Republic of Turkey	31.12.2014	2.3311TRL	1,2150 USD
2015	Central Bank of the Republic of Turkey	31.12.2015	2.9233 TRL	1.0911 USD
2016	Central Bank of the Republic of Turkey	30.12.2016	3.5255 TRL	1.0542 USD

Guidance Note on Form: 1.2.1: Single Similar Work Experience, Form: 1.2.2: Total Similar Work Experience, Form 1.3.3: Annual Construction Turnover

Not to be submitted

	Contract 1	Contract 2	Contract 3	Total
Description:	<i>Contract 1 started in 2007 and completed in 2014</i>	<i>Contract 2 started in 2012 and completed in 2017</i>	<i>Contract 3 started in 2017 and is on going</i>	
2007	1.000 USD			1.000 USD
2008	1.000 USD			1.000 USD
2009	1.000 USD			1.000 USD
2010	1.000 USD			1.000 USD
2011	1.000 USD			1.000 USD
2012	1.000 USD	3.000 USD		4.000 USD
2013	1.000 USD	3.000 USD		4.000 USD
2014	1.000 USD	3.000 USD		4.000 USD
2015		3.000 USD		3.000 USD
2016		3.000 USD	29.945 TRL = 10.000 USD	13.000 USD
2017		3.000 USD	35.810 TRL = 10.000 USD	13.000 USD
Attachments	Copies of Invoices Copies of Progress Payments Notarized Copy of Work Completion Certificate	Copies of Invoices Copies of Progress Payments Notarized Copy of Work Completion Certificate	Copies of Invoices Copies of Progress Payments	
Explanation	Although the total value of the contract is \$8.000, only \$3.000 is collected as progress/final payments within the eligible years.			

Annual Construction Turnover								
	Ref 1	Ref 2	Ref 3	Ref 4	Ref <i>n</i>	Total
2012	1.000	3.000		-	-	-	-	4.000
2013	1.000	3.000		-	-	-	-	4.000
2014	1.000	3.000		-	-	-	-	4.000
2015		3.000		-	-	-	-	3.000
2016		3.000	10.000	-	-	-	-	13.000
2017		3.000	10.000	-	-	-	-	13.000
Total	3.000	18.000	20.000	-	-	-	-	41.000
Years	(5 years + 1 quarters)							5,25
Average								7.810