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INVITATION TO BID

Construction of Livestock Market in Akçamescit Neighborhood Bartın Province

ITB No.: UNDP-TUR-ITB(UR)-2022-125

Project: Uplands Rural Development Project

Country: Turkey

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Contents

Section 1. Letter of Invitation	4
Section 2. Instruction to Bidders	6
A. GENERAL PROVISIONS	6
1. Introduction	6
2. Fraud & Corruption, Gifts and Hospitality	6
3. Eligibility	6
4. Conflict of Interests	7
B. PREPARATION OF BIDS	7
5. General Considerations	7
6. Cost of Preparation of Bid	7
7. Language	7
8. Documents Comprising the Bid	7
9. Documents Establishing the Eligibility and Qualifications of the Bidder	8
10. Technical Bid Format and Content	8
11. Price Schedule.....	8
12. Bid Security	8
13. Currencies	8
14. Joint Venture, Consortium or Association.....	9
15. Only One Bid	9
16. Bid Validity Period.....	10
17. Extension of Bid Validity Period	10
18. Clarification of Bid (from the Bidders).....	10
19. Amendment of Bids	10
20. Alternative Bids.....	10
21. Pre-Bid Conference.....	11
C. SUBMISSION AND OPENING OF BIDS.....	11
22. Submission	11
Hard copy (manual) submission.....	11
Email and eTendering submissions.....	11
23. Deadline for Submission of Bids and Late Bids	12
24. Withdrawal, Substitution, and Modification of Bids.....	12
25. Bid Opening.....	12
D. EVALUATION OF BIDS	12
26. Confidentiality.....	12
27. Evaluation of Bids	12
28. Preliminary Examination	13
29. Evaluation of Eligibility and Qualification	13
30. Evaluation of Technical Bid and prices	13
31. Due diligence	13
32. Clarification of Bids.....	13

33. Responsiveness of Bid	14
34. Nonconformities, Reparable Errors and Omissions.....	14
E. AWARD OF CONTRACT	14
35. Right to Accept, Reject, Any or All Bids	14
36. Award Criteria.....	14
37. Debriefing.....	14
38. Right to Vary Requirements at the Time of Award.....	15
39. Contract Signature.....	15
40. Contract Type and General Terms and Conditions.....	15
41. Performance Security	15
42. Bank Guarantee for Advanced Payment	15
43. Liquidated Damages	15
44. Payment Provisions	15
45. Vendor Protest.....	15
46. Other Provisions	15
Section 3. Bid Data Sheet	17
Section 4. Evaluation Criteria	24
SECTION 5A: SCHEDULE OF REQUIREMENTS AND TECHNICAL SPECIFICATIONS	29
SECTION 5A.1 SPECIFICATIONS FOR ITEMS/POSE DEFINITIONS	67
SECTION 5A.2 DESIGN DRAWINGS	177
SECTION 5B: OTHER RELATED REQUIREMENTS	179
Section 6: Returnable Bidding Forms / Checklist	180
Form A: Bid Submission Form	181
Form B: Bidder Information Form	182
Form C: Joint Venture/Consortium/Association Information Form.....	184
Form D: Eligibility and Qualification Form	185
Form E: Format of Technical Bid.....	188
FORM F: Price Schedule Form/Bill of Quantities	190
FORM G: Form of Bid Security.....	192

SECTION 1. LETTER OF INVITATION

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

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

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

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

- Visit this page for system user guides and videos in different languages: <https://www.undp.org/content/undp/en/home/procurement/business/resources-for-bidders.html>
- If already registered, go to <https://etendering.partneragencies.org> and sign in using your username and password.
- Use "Forgotten password" link if you do not remember your password. Do not create a new profile.
- If you have never registered in the system before, you can register by visiting the link below and follow the instructions in the user guide (attached): <https://etendering.partneragencies.org>
 - o Username: event.guest
 - o Password: why2change
- It is strongly recommended to create a username with two parts: your first name and last name separated by a ".", (similar to the one shown above). Once registered you will receive a valid password to the registered email address which you can use for signing in and changing your password.
- Please note that your new password should meet the following criteria:
 - o Minimum 8 characters
 - o At least one UPPERCASE LETTER
 - o At least one lowercase letter
 - o At least one number

You can view and download tender documents with the guest account as per the above username and password, However, if you are interested to participate, you must register in the system and subscribe to this tender to be notified when amendments are made.

E-Mail and Hard Copy Submissions are not accepted. Bids shall be submitted through e-tendering only.

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

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

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

Sincerely;

UNDP Türkiye Country Office

SECTION 2. INSTRUCTION TO BIDDERS

A. GENERAL PROVISIONS

1. Introduction	<p>1.1 Bidders shall adhere to all the requirements of this ITB, including any amendments made in writing by UNDP. This ITB is conducted in accordance with the UNDP Programme and Operations Policies and Procedures (POPP) on Contracts and Procurement which can be accessed at https://poppp.undp.org/SitePages/POPPBSUnit.aspx?TermID=254a9f96-b883-476a-8ef8-e81f93a2b38d</p> <p>1.2 Any Bid submitted will be regarded as an offer by the Bidder and does not constitute or imply the acceptance of the Bid by UNDP. UNDP is under no obligation to award a contract to any Bidder as a result of this ITB.</p> <p>1.3 UNDP reserves the right to cancel the procurement process at any stage without any liability of any kind for UNDP, upon notice to the bidders or publication of cancellation notice on UNDP website.</p> <p>1.4 As part of the bid, it is desired that the Bidder registers at the United Nations Global Marketplace (UNGM) website (www.ungm.org). The Bidder may still submit a bid even if not registered with the UNGM. However, if the Bidder is selected for contract award, the Bidder must register on the UNGM prior to contract signature.</p>
2. Fraud & Corruption, Gifts and Hospitality	<p>2.1 UNDP strictly enforces a policy of zero tolerance on proscribed practices, including fraud, corruption, collusion, unethical or unprofessional practices, and obstruction of UNDP vendors and requires all bidders/vendors observe the highest standard of ethics during the procurement process and contract implementation. UNDP's Anti-Fraud Policy can be found at http://www.undp.org/content/undp/en/home/operations/accountability/audit/office_of_audit_andinvestigation.html#anti</p> <p>2.2 Bidders/vendors shall not offer gifts or hospitality of any kind to UNDP staff members including recreational trips to sporting or cultural events, theme parks or offers of holidays, transportation, or invitations to extravagant lunches or dinners.</p> <p>2.3 In pursuance of this policy, UNDP:</p> <p>(a) Shall reject a bid if it determines that the selected bidder has engaged in any corrupt or fraudulent practices in competing for the contract in question;</p> <p>(b) Shall declare a vendor ineligible, either indefinitely or for a stated period, to be awarded a contract if at any time it determines that the vendor has engaged in any corrupt or fraudulent practices in competing for, or in executing a UNDP contract.</p> <p>2.4 All Bidders must adhere to the UN Supplier Code of Conduct, which may be found at http://www.un.org/depts/ptd/pdf/conduct_english.pdf</p>
3. Eligibility	<p>3.1 A vendor should not be suspended, debarred, or otherwise identified as ineligible by any UN Organization or the World Bank Group or any other international Organization. Vendors are therefore required to disclose to UNDP whether they are subject to any sanction or temporary suspension imposed by these organizations.</p> <p>3.2 It is the Bidder's responsibility to ensure that its employees, joint venture members, sub-contractors, service providers, suppliers and/or their employees meet the eligibility requirements as established by UNDP.</p>

4. Conflict of Interests	<p>4.1 Bidders must strictly avoid conflicts with other assignments or their own interests, and act without consideration for future work. Bidders found to have a conflict of interest shall be disqualified. Without limitation on the generality of the above, Bidders, and any of their affiliates, shall be considered to have a conflict of interest with one or more parties in this solicitation process, if they:</p> <ul style="list-style-type: none"> a) Are or have been associated in the past, with a firm or any of its affiliates which have been engaged by UNDP to provide services for the preparation of the design, specifications, Terms of Reference, cost analysis/estimation, and other documents to be used for the procurement of the goods and services in this selection process; b) Were involved in the preparation and/or design of the programme/project related to the goods and/or services requested under this ITB; or c) Are found to be in conflict for any other reason, as may be established by, or at the discretion of UNDP. <p>4.2 In the event of any uncertainty in the interpretation of a potential conflict of interest, Bidders must disclose to UNDP, and seek UNDP's confirmation on whether or not such conflict exists.</p> <p>4.3 Similarly, the Bidders must disclose in their Bid their knowledge of the following:</p> <ul style="list-style-type: none"> d) If the owners, part-owners, officers, directors, controlling shareholders, of the bidding entity or key personnel who are family members of UNDP staff involved in the procurement functions and/or the Government of the country or any Implementing Partner receiving goods and/or services under this ITB; and e) All other circumstances that could potentially lead to actual or perceived conflict of interest, collusion or unfair competition practices. <p>Failure to disclose such information may result in the rejection of the Bid or Bids affected by the non-disclosure.</p> <p>4.4 The eligibility of Bidders that are wholly or partly owned by the Government shall be subject to UNDP's further evaluation and review of various factors such as being registered, operated and managed as an independent business entity, the extent of Government ownership/share, receipt of subsidies, mandate and access to information in relation to this ITB, among others. Conditions that may lead to undue advantage against other Bidders may result in the eventual rejection of the Bid.</p>
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B. PREPARATION OF BIDS

5. General Considerations	<p>5.1 In preparing the Bid, the Bidder is expected to examine the ITB in detail. Material deficiencies in providing the information requested in the ITB may result in rejection of the Bid.</p> <p>5.2 The Bidder will not be permitted to take advantage of any errors or omissions in the ITB. Should such errors or omissions be discovered, the Bidder must notify the UNDP accordingly.</p>
6. Cost of Preparation of Bid	<p>6.1 The Bidder shall bear all costs related to the preparation and/or submission of the Bid, regardless of whether its Bid is selected or not. UNDP shall not be responsible or liable for those costs, regardless of the conduct or outcome of the procurement process.</p>
7. Language	<p>7.1 The Bid, as well as any and all related correspondence exchanged by the Bidder and UNDP, shall be written in the language (s) specified in the BDS.</p>
8. Documents Comprising the Bid	<p>8.1 The Bid shall comprise of the following documents and related forms which details are provided in the BDS:</p> <ul style="list-style-type: none"> a) Documents Establishing the Eligibility and Qualifications of the Bidder;

	<ul style="list-style-type: none"> b) Technical Bid; c) Price Schedule; d) Bid Security, if required by BDS; e) Any attachments and/or appendices to the Bid.
9. Documents Establishing the Eligibility and Qualifications of the Bidder	<p>9.1 The Bidder shall furnish documentary evidence of its status as an eligible and qualified vendor, using the Forms provided under Section 6 and providing documents required in those forms. In order to award a contract to a Bidder, its qualifications must be documented to UNDP's satisfaction.</p>
10. Technical Bid Format and Content	<p>10.1 The Bidder is required to submit a Technical Bid using the Standard Forms and templates provided in Section 6 of the ITB.</p> <p>10.2 Samples of items, when required as per Section 5, shall be provided within the time specified and unless otherwise specified by the Purchaser, at no expense to the UNDP. If not destroyed by testing, samples will be returned at Bidder's request and expense, unless otherwise specified.</p> <p>10.3 When applicable and required as per Section 5, the Bidder shall describe the necessary training programme available for the maintenance and operation of the equipment offered as well as the cost to the UNDP. Unless otherwise specified, such training as well as training materials shall be provided in the language of the Bid as specified in the BDS.</p> <p>10.4 When applicable and required as per Section 5, the Bidder shall certify the availability of spare parts for a period of at least five (5) years from date of delivery, or as otherwise specified in this ITB.</p>
11. Price Schedule	<p>11.1 The Price Schedule shall be prepared using the Form provided in Section 6 of the ITB and taking into consideration the requirements in the ITB.</p> <p>11.2 Any requirement described in the Technical Bid but not priced in the Price Schedule, shall be assumed to be included in the prices of other activities or items, as well as in the final total price.</p>
12. Bid Security	<p>12.1 A Bid Security, if required by BDS, shall be provided in the amount and form indicated in the BDS. The Bid Security shall be valid for a minimum of thirty (30) days after the final date of validity of the Bid.</p> <p>12.2 The Bid Security shall be included along with the Bid. If Bid Security is required by the ITB but is not found in the Bid, the offer shall be rejected.</p> <p>12.3 If the Bid Security amount or its validity period is found to be less than what is required by UNDP, UNDP shall reject the Bid.</p> <p>12.4 In the event an electronic submission is allowed in the BDS, Bidders shall include a copy of the Bid Security in their bid and the original of the Bid Security must be sent via courier or hand delivery as per the instructions in BDS.</p> <p>12.5 The Bid Security may be forfeited by UNDP, and the Bid rejected, in the event of any, or combination, of the following conditions:</p> <ul style="list-style-type: none"> a) If the Bidder withdraws its offer during the period of the Bid Validity specified in the BDS, or; b) In the event the successful Bidder fails: <ul style="list-style-type: none"> i. to sign the Contract after UNDP has issued an award; or ii. to furnish the Performance Security, insurances, or other documents that UNDP may require as a condition precedent to the effectivity of the contract that may be awarded to the Bidder.
13. Currencies	<p>13.1 All prices shall be quoted in the currency or currencies indicated in the BDS. Where Bids are quoted in different currencies, for the purposes of comparison</p>

	<p>of all Bids:</p> <ul style="list-style-type: none"> a) UNDP will convert the currency quoted in the Bid into the UNDP preferred currency, in accordance with the prevailing UN operational rate of exchange on the last day of submission of Bids; and b) In the event that UNDP selects a Bid for award that is quoted in a currency different from the preferred currency in the BDS, UNDP shall reserve the right to award the contract in the currency of UNDP's preference, using the conversion method specified above.
14. Joint Venture, Consortium or Association	<p>14.1 If the Bidder is a group of legal entities that will form or have formed a Joint Venture (JV), Consortium or Association for the Bid, they shall confirm in their Bid that : (i) they have designated one party to act as a lead entity, duly vested with authority to legally bind the members of the JV, Consortium or Association jointly and severally, which shall be evidenced by a duly notarized Agreement among the legal entities, and submitted with the Bid; and (ii) if they are awarded the contract, the contract shall be entered into, by and between UNDP and the designated lead entity, who shall be acting for and on behalf of all the member entities comprising the joint venture.</p> <p>14.2 After the Deadline for Submission of Bid, the lead entity identified to represent the JV, Consortium or Association shall not be altered without the prior written consent of UNDP.</p> <p>14.3 The lead entity and the member entities of the JV, Consortium or Association shall abide by the provisions of Clause 9 herein in respect of submitting only one Bid.</p> <p>14.4 The description of the organization of the JV, Consortium or Association must clearly define the expected role of each of the entities in the joint venture in delivering the requirements of the ITB, both in the Bid and the JV, Consortium or Association Agreement. All entities that comprise the JV, Consortium or Association shall be subject to the eligibility and qualification assessment by UNDP.</p> <p>14.5 A JV, Consortium or Association in presenting its track record and experience should clearly differentiate between:</p> <ul style="list-style-type: none"> a) Those that were undertaken together by the JV, Consortium or Association; and b) Those that were undertaken by the individual entities of the JV, Consortium or Association. <p>14.6 Previous contracts completed by individual experts working privately but who are permanently or were temporarily associated with any of the member firms cannot be claimed as the experience of the JV, Consortium or Association or those of its members, but should only be claimed by the individual experts themselves in their presentation of their individual credentials</p> <p>14.7 JV, Consortium or Associations are encouraged for high value, multi-sectoral requirements when the spectrum of expertise and resources required may not be available within one firm.</p>
15. Only One Bid	<p>15.1 The Bidder (including the individual members of any Joint Venture) shall submit only one Bid, either in its own name or as part of a Joint Venture.</p> <p>15.2 Bids submitted by two (2) or more Bidders shall all be rejected if they are found to have any of the following:</p> <ul style="list-style-type: none"> a) they have at least one controlling partner, director or shareholder in common; or

	<ul style="list-style-type: none"> b) any one of them receive or have received any direct or indirect subsidy from the other/s; or c) they have the same legal representative for purposes of this ITB; or d) they have a relationship with each other, directly or through common third parties, that puts them in a position to have access to information about, or influence on the Bid of another Bidder regarding this ITB process; e) they are subcontractors to each other's Bid, or a subcontractor to one Bid also submits another Bid under its name as lead Bidder; or some key personnel proposed to be in the team of one Bidder participates in more than one Bid received for this ITB process. This condition relating to the personnel, does not apply to subcontractors being included in more than one Bid.
16. Bid Validity Period	<p>16.1 Bids shall remain valid for the period specified in the BDS, commencing on the Deadline for Submission of Bids. A Bid valid for a shorter period may be rejected by UNDP and rendered non-responsive.</p> <p>16.2 During the Bid validity period, the Bidder shall maintain its original Bid without any change, including the availability of the Key Personnel, the proposed rates and the total price.</p>
17. Extension of Bid Validity Period	<p>17.1 In exceptional circumstances, prior to the expiration of the Bid validity period, UNDP may request Bidders to extend the period of validity of their Bids. The request and the responses shall be made in writing and shall be considered integral to the Bid.</p> <p>17.2 If the Bidder agrees to extend the validity of its Bid, it shall be done without any change to the original Bid.</p> <p>17.3 The Bidder has the right to refuse to extend the validity of its Bid, in which case, the Bid shall not be further evaluated.</p>
18. Clarification of Bid (from the Bidders)	<p>18.1 Bidders may request clarifications on any of the ITB documents no later than the date indicated in the BDS. Any request for clarification must be sent in writing in the manner indicated in the BDS. If inquiries are sent other than specified channel, even if they are sent to a UNDP staff member, UNDP shall have no obligation to respond or confirm that the query was officially received.</p> <p>18.2 UNDP will provide the responses to clarifications through the method specified in the BDS.</p> <p>18.3 UNDP shall endeavour to provide responses to clarifications in an expeditious manner, but any delay in such response shall not cause an obligation on the part of UNDP to extend the submission date of the Bids, unless UNDP deems that such an extension is justified and necessary.</p>
19. Amendment of Bids	<p>19.1 At any time prior to the deadline of Bid submission, UNDP may for any reason, such as in response to a clarification requested by a Bidder, modify the ITB in the form of an amendment to the ITB. Amendments will be made available to all prospective bidders.</p> <p>19.2 If the amendment is substantial, UNDP may extend the Deadline for submission of Bid to give the Bidders reasonable time to incorporate the amendment into their Bids.</p>
20. Alternative Bids	<p>20.1 Unless otherwise specified in the BDS, alternative Bids shall not be considered. If submission of alternative Bid is allowed by BDS, a Bidder may submit an alternative Bid, but only if it also submits a Bid conforming to the ITB requirements. Where the conditions for its acceptance are met, or justifications are clearly established, UNDP reserves the right to award a contract based on an alternative Bid.</p>

	20.2 If multiple/alternative bids are being submitted, they must be clearly marked as "Main Bid" and "Alternative Bid"
21. Pre-Bid Conference	21.1 When appropriate, a pre-bid conference will be conducted at the date, time and location specified in the BDS. All Bidders are encouraged to attend. Non-attendance, however, shall not result in disqualification of an interested Bidder. Minutes of the Bidder's conference will be disseminated on the procurement website and shared by email or on the e-Tendering platform as specified in the BDS. No verbal statement made during the conference shall modify the terms and conditions of the ITB, unless specifically incorporated in the Minutes of the Bidder's Conference or issued/posted as an amendment to ITB.
C. SUBMISSION AND OPENING OF BIDS	
22. Submission	<p>22.1 The Bidder shall submit a duly signed and complete Bid comprising the documents and forms in accordance with requirements in the BDS. The Price Schedule shall be submitted together with the Technical Bid. Bid can be delivered either personally, by courier, or by electronic method of transmission as specified in the BDS.</p> <p>22.2 The Bid shall be signed by the Bidder or person(s) duly authorized to commit the Bidder. The authorization shall be communicated through a document evidencing such authorization issued by the legal representative of the bidding entity, or a Power of Attorney, accompanying the Bid.</p> <p>22.3 Bidders must be aware that the mere act of submission of a Bid, in and of itself, implies that the Bidder fully accepts the UNDP General Contract Terms and Conditions.</p>
Hard copy (manual) submission	<p>22.4 Hard copy (manual) submission by courier or hand delivery allowed or specified in the BDS shall be governed as follows:</p> <p>a) The signed Bid shall be marked "Original", and its copies marked "Copy" as appropriate. The number of copies is indicated in the BDS. All copies shall be made from the signed original only. If there are discrepancies between the original and the copies, the original shall prevail.</p> <p>(b) The Technical Bid and Price Schedule must be sealed and submitted together in an envelope, which shall:</p> <ol style="list-style-type: none"> Bear the name of the Bidder; Be addressed to UNDP as specified in the BDS; and Bear a warning not to open before the time and date for Bid opening as specified in the BDS. <p>If the envelope with the Bid is not sealed and marked as required, UNDP shall assume no responsibility for the misplacement, loss, or premature opening of the Bid.</p>
Email and eTendering submissions	<p>22.5 Electronic submission through email or eTendering, if allowed as specified in the BDS, shall be governed as follows:</p> <ol style="list-style-type: none"> Electronic files that form part of the Bid must be in accordance with the format and requirements indicated in BDS; Documents which are required to be in original form (e.g. Bid Security, etc.) must be sent via courier or hand delivered as per the instructions in BDS. <p>22.6 Detailed instructions on how to submit, modify or cancel a bid in the eTendering system are provided in the eTendering system Bidder User Guide and Instructional videos available on this link: https://www.undp.org/content/undp/en/home/procurement/business/resources-for-bidders.html</p>

23. Deadline for Submission of Bids and Late Bids	<p>23.1 Complete Bids must be received by UNDP in the manner, and no later than the date and time, specified in the BDS. UNDP shall only recognise the actual date and time that the bid was received by UNDP</p> <p>23.2 UNDP shall not consider any Bid that is received after the deadline for the submission of Bids.</p>
24. Withdrawal, Substitution, and Modification of Bids	<p>24.1 A Bidder may withdraw, substitute or modify its Bid after it has been submitted at any time prior to the deadline for submission.</p> <p>24.2 Manual and Email submissions: A bidder may withdraw, substitute or modify its Bid by sending a written notice to UNDP, duly signed by an authorized representative, and shall include a copy of the authorization (or a Power of Attorney). The corresponding substitution or modification of the Bid, if any, must accompany the respective written notice. All notices must be submitted in the same manner as specified for submission of Bids, by clearly marking them as "WITHDRAWAL" "SUBSTITUTION," or "MODIFICATION"</p> <p>24.3 eTendering: A Bidder may withdraw, substitute or modify its Bid by Cancelling, Editing, and re-submitting the Bid directly in the system. It is the responsibility of the Bidder to properly follow the system instructions, duly edit and submit a substitution or modification of the Bid as needed. Detailed instructions on how to cancel or modify a Bid directly in the system are provided in the Bidder User Guide and Instructional videos.</p> <p>24.4 Bids requested to be withdrawn shall be returned unopened to the Bidders (only for manual submissions), except if the bid is withdrawn after the bid has been opened.</p>
25. Bid Opening	<p>25.1 UNDP will open the Bid in the presence of an ad-hoc committee formed by UNDP of at least two (2) members.</p> <p>25.2 The Bidders' names, modifications, withdrawals, the condition of the envelope labels/seals, the number of folders/files and all other such other details as UNDP may consider appropriate, will be announced at the opening. No Bid shall be rejected at the opening stage, except for late submissions, in which case, the Bid shall be returned unopened to the Bidders.</p> <p>25.3 In the case of e-Tendering submission, bidders will receive an automatic notification once the Bid is opened.</p>
D. EVALUATION OF BIDS	
26. Confidentiality	<p>26.1 Information relating to the examination, evaluation, and comparison of Bids, and the recommendation of contract award, shall not be disclosed to Bidders or any other persons not officially concerned with such process, even after publication of the contract award.</p> <p>26.2 Any effort by a Bidder or anyone on behalf of the Bidder to influence UNDP in the examination, evaluation and comparison of the Bids or contract award decisions may, at UNDP's decision, result in the rejection of its Bid and may subsequently be subject to the application of prevailing UNDP's vendor sanctions procedures.</p>
27. Evaluation of Bids	<p>27.1 UNDP will conduct the evaluation solely on the basis of the Bids received.</p> <p>27.2 Evaluation of Bids shall be undertaken in the following steps:</p> <ul style="list-style-type: none"> a) Preliminary Examination including Eligibility b) Arithmetical check and ranking of bidders who passed preliminary examination by price. c) Qualification assessment (if pre-qualification was not done) <ul style="list-style-type: none"> a) Evaluation of Technical Bids b) Evaluation of prices <p>Detailed evaluation will be focussed on the 3 - 5 lowest priced bids. Further higher</p>

	priced bids shall be added for evaluation if necessary
28. Preliminary Examination	<p>28.1 UNDP shall examine the Bids to determine whether they are complete with respect to minimum documentary requirements, whether the documents have been properly signed, and whether the Bids are generally in order, among other indicators that may be used at this stage. UNDP reserves the right to reject any Bid at this stage.</p>
29. Evaluation of Eligibility and Qualification	<p>29.1 Eligibility and Qualification of the Bidder will be evaluated against the Minimum Eligibility/Qualification requirements specified in the Section 4 (Evaluation Criteria).</p> <p>29.2 In general terms, vendors that meet the following criteria may be considered qualified:</p> <ul style="list-style-type: none"> a) They are not included in the UN Security Council 1267/1989 Committee's list of terrorists and terrorist financiers, and in UNDP's ineligible vendors' list; b) They have a good financial standing and have access to adequate financial resources to perform the contract and all existing commercial commitments, c) They have the necessary similar experience, technical expertise, production capacity, quality certifications, quality assurance procedures and other resources applicable to the supply of goods and/or services required; d) They are able to comply fully with the UNDP General Terms and Conditions of Contract; e) They do not have a consistent history of court/arbitral award decisions against the Bidder; and f) They have a record of timely and satisfactory performance with their clients.
30. Evaluation of Technical Bid and prices	<p>30.1 The evaluation team shall review and evaluate the Technical Bids on the basis of their responsiveness to the Schedule of Requirements and Technical Specifications and other documentation provided, applying the procedure indicated in the BDS and other ITB documents. When necessary, and if stated in the BDS, UNDP may invite technically responsive bidders for a presentation related to their technical Bids. The conditions for the presentation shall be provided in the bid document where required.</p>
31. Due diligence	<p>31.1 UNDP reserves the right to undertake a due diligence exercise, aimed at determining to its satisfaction, the validity of the information provided by the Bidder. Such exercise shall be fully documented and may include, but need not be limited to, all or any combination of the following:</p> <ul style="list-style-type: none"> a) Verification of accuracy, correctness and authenticity of information provided by the Bidder; b) Validation of extent of compliance to the ITB requirements and evaluation criteria based on what has so far been found by the evaluation team; c) Inquiry and reference checking with Government entities with jurisdiction on the Bidder, or with previous clients, or any other entity that may have done business with the Bidder; d) Inquiry and reference checking with previous clients on the performance on on-going or completed contracts, including physical inspections of previous works, as deemed necessary; e) Physical inspection of the Bidder's offices, branches or other places where business transpires, with or without notice to the Bidder; f) Other means that UNDP may deem appropriate, at any stage within the selection process, prior to awarding the contract.
32. Clarification of Bids	<p>32.1 To assist in the examination, evaluation and comparison of Bids, UNDP may, at its discretion, request any Bidder for a clarification of its Bid.</p> <p>32.2 UNDP's request for clarification and the response shall be in writing and no change in the prices or substance of the Bid shall be sought, offered, or</p>

	<p>permitted, except to provide clarification, and confirm the correction of any arithmetic errors discovered by UNDP in the evaluation of the Bids, in accordance with the ITB.</p> <p>32.3 Any unsolicited clarification submitted by a Bidder in respect to its Bid, which is not a response to a request by UNDP, shall not be considered during the review and evaluation of the Bids.</p>
33. Responsiveness of Bid	<p>33.1 UNDP's determination of a Bid's responsiveness will be based on the contents of the bid itself. A substantially responsive Bid is one that conforms to all the terms, conditions, specifications and other requirements of the ITB without material deviation, reservation, or omission.</p> <p>33.2 If a bid is not substantially responsive, it shall be rejected by UNDP and may not subsequently be made responsive by the Bidder by correction of the material deviation, reservation, or omission.</p>
34. Nonconformities, Reparable Errors and Omissions	<p>34.1 Provided that a Bid is substantially responsive, UNDP may waive any non-conformities or omissions in the Bid that, in the opinion of UNDP, do not constitute a material deviation.</p> <p>34.2 UNDP may request the Bidder to submit the necessary information or documentation, within a reasonable period, to rectify nonmaterial nonconformities or omissions in the Bid related to documentation requirements. Such omission shall not be related to any aspect of the price of the Bid. Failure of the Bidder to comply with the request may result in the rejection of its Bid.</p> <p>34.3 For the bids that have passed the preliminary examination, UNDP shall check and correct arithmetical errors as follows:</p> <ul style="list-style-type: none"> a) if there is a discrepancy between the unit price and the line item total that is obtained by multiplying the unit price by the quantity, the unit price shall prevail and the line item total shall be corrected, unless in the opinion of UNDP there is an obvious misplacement of the decimal point in the unit price; in which case, the line item total as quoted shall govern and the unit price shall be corrected; b) if there is an error in a total corresponding to the addition or subtraction of subtotals, the subtotals shall prevail, and the total shall be corrected; and c) if there is a discrepancy between words and figures, the amount in words shall prevail, unless the amount expressed in words is related to an arithmetic error, in which case the amount in figures shall prevail. <p>34.4 If the Bidder does not accept the correction of errors made by UNDP, its Bid shall be rejected.</p>
E. AWARD OF CONTRACT	
35. Right to Accept, Reject, Any or All Bids	<p>35.1 UNDP reserves the right to accept or reject any bid, to render any or all of the bids as non-responsive, and to reject all Bids at any time prior to award of contract, without incurring any liability, or obligation to inform the affected Bidder(s) of the grounds for UNDP's action. UNDP shall not be obliged to award the contract to the lowest priced offer.</p>
36. Award Criteria	<p>36.1 Prior to expiration of the period of Bid validity, UNDP shall award the contract to the qualified and eligible Bidder that is found to be responsive to the requirements of the Schedule of Requirements and Technical Specification and has offered the lowest price.</p>
37. Debriefing	<p>37.1 In the event that a Bidder is unsuccessful, the Bidder may request for a debriefing from UNDP. The purpose of the debriefing is to discuss the strengths and</p>

	weaknesses of the Bidder's submission, in order to assist the Bidder in improving its future Bids for UNDP procurement opportunities. The content of other Bids and how they compare to the Bidder's submission shall not be discussed.
38. Right to Vary Requirements at the Time of Award	38.1 At the time of award of Contract, UNDP reserves the right to vary the quantity of goods and/or services, by up to a maximum twenty-five per cent (25%) of the total offer, without any change in the unit price or other terms and conditions.
39. Contract Signature	39.1 Within fifteen (15) days from the date of receipt of the award letter, the successful Bidder shall sign the Contract. Failure to do so may constitute sufficient grounds for the annulment of the award, and forfeiture of the Bid Security, if any, and on which event, UNDP may award the Contract to the Second highest rated or call for new Bids.
40. Contract Type and General Terms and Conditions	40.1 The types of Contract to be signed and the applicable UNDP Contract General Terms and Conditions, as specified in BDS, can be accessed at http://www.undp.org/content/undp/en/home/procurement/business/how-we-buy.html
41. Performance Security	41.1 A performance security, if required in the BDS, shall be provided in the amount specified in BDS and form available at https://popp.undp.org/_layouts/15/WopiFrame.aspx?sourcedoc=/UNDP_POPP_DOCUMENT_LIBRARY/Public/PSU_Solicitation_Performance%20Guarantee%20Form.docx&action=default within a maximum of fifteen (15) days of the contract signature by both parties. Where a performance security is required, the receipt of the performance security by UNDP shall be a condition for rendering the contract effective.
42. Bank Guarantee for Advanced Payment	42.1 Except when the interests of UNDP so require, it is UNDP's standard practice to not make advance payment(s) (i.e., payments without having received any outputs). If an advance payment is allowed as per the BDS, and exceeds 20% of the total contract price, or USD 30,000, whichever is less, the Bidder shall submit a Bank Guarantee in the full amount of the advance payment in the form available at https://popp.undp.org/_layouts/15/WopiFrame.aspx?sourcedoc=/UNDP_POPP_DOCUMENT_LIBRARY/Public/PSU_Contract%20Management%20Payment%20and%20Taxes_Advanced%20Payment%20Guarantee%20Form.docx&action=default
43. Liquidated Damages	43.1 If specified in the BDS, UNDP shall apply Liquidated Damages for the damages and/or risks caused to UNDP resulting from the Contractor's delays or breach of its obligations as per Contract.
44. Payment Provisions	44.1 Payment will be made only upon UNDP's acceptance of the goods and/or services performed. The terms of payment shall be within thirty (30) days, after receipt of invoice and certification of acceptance of goods and/or services issued by the proper authority in UNDP with direct supervision of the Contractor. Payment will be affected by bank transfer in the currency of the contract.
45. Vendor Protest	45.1 UNDP's vendor protest procedure provides an opportunity for appeal to those persons or firms not awarded a contract through a competitive procurement process. In the event that a Bidder believes that it was not treated fairly, the following link provides further details regarding UNDP vendor protest procedures: http://www.undp.org/content/undp/en/home/procurement/business/protest-and-sanctions.html
46. Other Provisions	46.1 In the event that the Bidder offers a lower price to the host Government (e.g.

	<p>General Services Administration (GSA) of the federal government of the United States of America) for similar goods and/or services, UNDP shall be entitled to the same lower price. The UNDP General Terms and Conditions shall have precedence.</p> <p>46.2 UNDP is entitled to receive the same pricing offered by the same Contractor in contracts with the United Nations and/or its Agencies. The UNDP General Terms and Conditions shall have precedence.</p> <p>46.3 The United Nations has established restrictions on employment of (former) UN staff who have been involved in the procurement process as per bulletin ST/SGB/2006/15 http://www.un.org/en/ga/search/view_doc.asp?symbol=ST/SGB/2006/15&referer</p>
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SECTION 3. BID DATA SHEET

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

BDS No.	Ref. to Section.2	Data	Specific Instructions / Requirements
1	7	Language of the Bid	English Please be informed that Turkish translation of this ITB is given only for information purpose and in case of any discrepancy between Turkish and English versions, the English version shall prevail. Bidders shall prepare their bids in English.
2		Submitting Bids for Parts or sub-parts of the Schedule of Requirements (partial bids)	Shall not be considered
3	20	Alternative Bids	Shall not be considered
4	21	Pre-Bid conference	Will not be conducted
5		Site Visit	Will be conducted as per the following schedule: Date: 13 October 2022 Time: 14:00 hrs. Türkiye Time Address: Exact address will be provided to the prospective bidders who communicate interest for participation by sending and e-mail to tr.procurement@undp.org latest by 12 October 2022, 14:00 hrs. Türkiye Time.
6	16	Bid Validity Period	90 days starting from the submission deadline
7	12	Bid Security	Required in the amount of USD 24,000 Acceptable Forms of Bid Security: Bank Guarantee (See Section 6; Form G for template) Bid Securities will be returned to all bidders upon signature of contract with the successful Bidder. Bid Security shall be valid up to 30 days after the final date of validity of bids. (i.e. 120 days after bid submission deadline). ▪ Bid Security shall be in English as per the template. ▪ Currency of the Bid Security shall be in USD.

			<p>▪ No change shall be made to the template except for fields indicated in the template.</p> <p><u>PDF copy of the Bid Security shall be submitted as part of e-tendering submission.</u></p> <p><u>Additionally, original Bid Security shall be delivered to the below address within 7 days after bid submission deadline.</u></p> <p><i>Focal Point: Mahir OZDEMIR, Procurement Associate</i> <i>Mustafa Fehmi Gerçeker Sokak No:12 Oran, Çankaya, Ankara, Turkey</i></p>
8	42	Advanced Payment upon signing of contract	<p>Allowed up to a maximum of 20% of contract value</p> <p>In case of an advance payment request, after contract signature, the Contractor shall submit a bank guarantee (valid for the duration of the contract) for advance payment in the format given in below link, before the payment can be released by UNDP:</p> <p>https://popp.undp.org/ layouts/15/WopiFrame.aspx?source=doc=/UNDP POPP DOCUMENT LIBRARY/Public/PSU Contract%20Management%20Payment%20and%20Taxes Advanced%20Payment%20Guarantee%20Form.docx&action=default</p>
9	43	Liquidated Damages	<p>Will be imposed as follows:</p> <p>Percentage of contract price per week (7 calendar days) of delay beyond 365 days after site delivery by UNDP: 2%</p> <p>Max. number of weeks (7 calendar days) of delay is 5, after which UNDP may terminate the contract.</p>
10	41	Performance Security	<p>Required in the amount of 10% of the total contract amount</p> <p>Note: Performance Security will be a condition for signing the contract. Contract will be signed after receipt of performance security from the successful bidder.</p> <p>Performance security must be provided no later than 15 days after the bidder receives the award letter from UNDP. If the selected bidder fails to provide the security within this period, UNDP reserves the right to sign the contract with "Second lowest priced technically compliant bidder".</p> <p>The Performance Security must be issued by an accredited bank, in the format included in Appendix I to UNDP General Conditions of Contract for Civil Works and must be valid up to twenty-eight days after issuance of the Certificate of Final Completion. The Performance Security will only be released upon the issuance of Certificate of Final Completion in accordance with the Clause 10 of the UNDP General Conditions of Contract for Civil Works.</p>
11	13	Currency of Bid	United States Dollar
12	18	Deadline for submitting requests for clarifications/ questions	5 days before the submission deadline

13	18	Contact Details for submitting clarifications/questions	Focal Person in UNDP: Mahir OZDEMIR, Procurement Associate E-mail address: tr.procurement@undp.org
14	18, 19	Manner of Disseminating Supplemental Information to the ITB and responses/clarifications to queries	Posted directly to eTendering and published on the following websites: www.undp.org www.ungm.org www.devbusiness.com https://www.tr.undp.org
15	23	Deadline for Submission of Bids	<u>Deadline for submission of bids is indicated in the e-tendering System.</u> <u>Please note that system will not accept any bids after the closing date/time. Bidders shall ensure that the bids are submitted before the indicated deadline.</u> UNDP highly encourages bidders <u>not to wait for the last minute for the submission of bids</u> and ensure that there is sufficient time for fixing any issues or challenges bidder may encounter with the system during bid submission. Note that system time zone is in <u>EST/EDT (New York) time zone</u>
16	22	Allowable Manner of Submitting Bids	E-Tendering only Any submission by other means such as e-mail or hard copy will be rejected. EVENT ID: TUR10-ITB-22-125 This procurement process is being conducted through the online tendering system of UNDP. Bidders who wish to submit an offer must be registered in the system. Visit this page for system user guides and videos in different languages: https://www.undp.org/content/undp/en/home/procurement/business/resources-for-bidders.html If already registered, go to https://etendering.partneragencies.org and sign in using your username and password. Use "Forgotten password" link if you do not remember your password. Do not create a new profile. If you have never registered in the system before, you can register by visiting the link below and follow the instructions in the user guide (attached): https://etendering.partneragencies.org •Username: event.guest •Password: why2change

			<p>It is strongly recommended to create a username with two parts: your first name and last name separated by a ".", (similar to the one shown above). Once registered you will receive a valid password to the registered email address which you can use for signing in and changing your password.</p> <p>Please note that your new password should meet the following criteria:</p> <ul style="list-style-type: none"> • Minimum 8 characters • At least one UPPERCASE LETTER • At least one lowercase letter • At least one number <p>You can view and download tender documents with the guest account as per the above username and password, However, if you are interested to participate, you must register in the system and subscribe to this tender to be notified when amendments are made.</p>
17	22	Bid Submission Address	<p><u>Link to e-tendering System:</u> https://etendering.partneragencies.org <u>EVENT ID: TUR10-ITB-22-125</u></p>
18	22	Electronic submission (eTendering) requirements	<ul style="list-style-type: none"> ▪ File names must be maximum 60 characters long and must not contain any letter or special/Turkish character other than from Latin alphabet/keyboard. ▪ All files must be free of viruses and not corrupted. ▪ Max. File Size per transmission: 45MB
19	25	Date, time and venue for the opening of bid	No Public Opening will be conducted. Bidders will receive notification through e-tendering when bids are opened.
20	27 - 36	Evaluation Method for the Award of Contract	Lowest priced technically responsive, eligible and qualified bid.
21		Expected date for commencement of Contract	November 2022
22		Maximum expected duration of contract	<p>365 calendar days starting from the date on which the Contractor is given access to the Site and receive a notice from the UNDP Engineer to commence the Works and ending on the date of substantial completion of Works stated in the Certificate of Substantial Completion.</p> <p>As stated in the General Conditions of Contract for Civil Works, clause 47.1; "Defects Liability Period" is 12 months calculated from the date of completion of the Works stated in the Certificate of Substantial Completion issued by the UNDP Engineer.</p>
23	35	UNDP will award the contract to:	One Bidder Only
24	40	Type of Contract	<p>Contract for Civil Work</p> <p>http://www.undp.org/content/undp/en/home/procurement/business/how-we-buy.html</p>

25	40	UNDP Contract Terms and Conditions that will apply	UNDP General Terms and Conditions for Works http://www.undp.org/content/undp/en/home/procurement/business/how-we-buy.html
26	44	Payment Provisions	<p>Pricing Structure; The contract is based on unit price, and the final price of the Contract will be determined on the basis of actual quantities of work and materials utilized in the complete and satisfactory performance of the Works as certified by the Engineer and the unit prices contained in the Contractor's financial proposal. Such unit prices are fixed and are not subject to any variation whatsoever.</p> <p>Unless the technical specifications or the Bill of Quantities specifically and expressly state otherwise, only permanent works are to be measured and paid for by UNDP.</p> <p>Advance payment of up to a maximum of 20% of contract value is allowed following contract signature. However, the Contractor will be required to submit an advance payment bank guarantee in the format given in above sections, for the amount of advance payment in order to claim for the amount.</p> <p>Payment Terms; The Contractor shall submit monthly invoices (reflecting the monthly work performed and materials utilized every month as accepted by UNDP through the "Monthly Progress Reports") and a final invoice within 30 days from the issuance of the Certificate of Substantial Completion by the Engineer.</p> <p>UNDP shall effect payment of the invoices after receipt of the certificate of payment issued by the Engineer, approving the amount contained in the invoice. The Engineer may make corrections to that amount, in which case UNDP may affect payment for the corrected amount. 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.</p> <p>Invoices will be paid within thirty (30) days of the date of their receipt and acceptance by UNDP.</p>
27		Currency of Payment	<p>If the Contractor is registered and operating in Türkiye, the payment shall be realized in Turkish Liras (TRY).</p> <p>Payment amount will be converted from United States Dollar (USD) to Turkish Liras (TRY) by the UN operational rate of exchange valid on "the date of UNDP's official written acceptance of goods/services/works", when the Contractor shall issue the invoice to UNDP. If the Contractor is not registered and operating in Turkey, the payments shall be effected in United States Dollar.</p> <p>UN Operational Exchange rates can be accessed through https://treasury.un.org/operationalrates/OperationalRates.php</p>

28		Taxation	UN and its subsidiary organs are exempt from all 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. The Contractor to be selected shall not be entitled to receive any amount over its Bid price in relation to VAT, Special Consumption Tax and any other applicable taxes.
29	14	Joint Venture, Consortium or Association	Allowed
30		Covid-19 Specific Measures	<p>The Bidders shall review all local regulations, as well as that of UN and UNDP concerning the measures, they must take during performance of the contract in the context of COVID-19, before they submit their bids and factor relevant costs, if any, to their bids.</p> <p>The Contractor shall take all measures against COVID-19 imposed by local regulations as well as by UN and UNDP during performance of the contract to protect health and social rights of its own personnel, as well as UNDP personnel, Project Stakeholders and third parties.</p> <p>Pursuant to "Clause 12- Indemnification" of UNDP General Terms and Conditions for Contracts (given in Clause Number 24 of Bid Data Sheet), the Contractor shall indemnify, defend, and hold and save harmless, UNDP, and its officials, agents and employees, from and against all suits, proceedings, claims, demands, losses and liability of any kind or nature brought by any third party against UNDP, including, but not limited to, all litigation costs and expenses, attorney's fees, settlement payments and damages, based on, arising from, or relating to COVID-19 measures that must be taken by the Contractor in the context of the contract. UNDP shall not be held accountable for any Covid-19 related health risks or events that are caused by negligence of the Contractor and/or any other third party.</p>
31		Contingency and variations	<p>The contingency allowance to manage variations for the unforeseen and unknown additional components of Works within the overall general scope is maximum 15% of the contract price. However, it shall only be accessed by the Contractor upon the approval by the UNDP Engineer, who will obtain prior approval from UNDP as the Employer.</p> <p>The project engineer (employer's representative) may use this contingency with no additional procurement process to manage variations with the approval of UNDP. Any variation that utilizes the contingency but is not covered by rates in the BOQ or schedule of rates shall be subject to a value for money analysis by the Engineer and UNDP.</p> <p>The contingency allowance shall not be used to compensate the Contractor for its fault to include required items in the Bill of</p>

			Quantities as per Schedule of Requirements/Technical Specifications or unreasonably low unit prices of one or more of the items included in the submitted Bill of Quantities.
32		Other Information	<p>1. Women owned, and managed businesses are especially encouraged to apply to this ITB.</p> <p>2. The documents that will be attached to Form B: Bidder Information Form (such as Certificate of Incorporation/Business Registration and Power of Attorney) can be submitted in local languages in the case that they are provided only in the local language by issuing authorities. In that case, the English translations of these documents shall be submitted by Bidders along with original documents in the local language. UNDP reserves the right to request notarized versions of these translations any time during the evaluation.</p>

SECTION 4. EVALUATION CRITERIA

Preliminary Examination Criteria

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

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

Minimum Eligibility and Qualification Criteria

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

In case the bid is submitted as a Joint Venture/ Consortium/Association, bidders shall refer to the below given table named "Conditions for meeting eligibility and qualification criteria in case of submission as a Joint Venture" which elaborates on the conditions for meeting the minimum criteria.

Subject	Criteria	Document Submission requirement
ELIGIBILITY		
Legal Status	Vendor is a legally registered entity established in or before October 2019.	Form B: Bidder Information Form
Eligibility	Vendor is not suspended, nor debarred, nor otherwise identified as ineligible by any UN Organization or the World Bank Group or any other international Organization in accordance with ITB clause 3.	Form A: Bid Submission Form
Conflict of Interest	No conflicts of interest in accordance with ITB clause 4.	Form A: Bid Submission Form
Bankruptcy	Has not declared bankruptcy, is not involved in bankruptcy or receivership proceedings, and there is no judgment or pending legal action against the vendor that could impair its operations in the foreseeable future.	Form A: Bid Submission Form
Certificates and Licenses	<ul style="list-style-type: none">▪ Official appointment as local representative, if Bidder is submitting a Bid on behalf of an entity located outside the country▪ Certificate of Incorporation/ Business Registration▪ Trade name registration papers, if applicable▪ Signature Circular/Power of Attorney demonstrating authorization of the individual signing the Bid documents.	Form B: Bidder Information Form
QUALIFICATION		
History of Non-Performing Contracts¹	Non-performance of a contract did not occur as a result of contractor default for the last 3 years.	Form D: Qualification Form

¹ Non-performance, as decided by UNDP, shall include all contracts where (a) non-performance was not challenged by the contractor, including through referral to the dispute resolution mechanism under the respective contract, and (b) contracts that were so challenged but fully settled against the contractor. Non-performance shall not include contracts where Employers decision was overruled by the dispute resolution mechanism. Non-performance must be based on all information on fully settled disputes or litigation, i.e. dispute or litigation that has been resolved in accordance with the dispute resolution mechanism under the respective contract and where all appeal instances available to the Bidder have been exhausted.

Litigation History	No consistent history of court/arbitral award decisions against the Bidder for the last 3 years.	Form D: Qualification Form
Previous Experience	Minimum three years of experience in the construction field as a legally registered entity.	Form D: Qualification Form
	<p>The Bidder must have successfully completed, as the prime contractor, minimum one contract for construction of any kind of building and/or Steel superstructure, at a minimum value of USD 700,000.00 over the last five years counting back from the bid submission deadline.</p> <p>Important Notes:</p> <ul style="list-style-type: none"> - <u>Renovation, rehabilitation and restoration works</u> will not be considered as similar experience. - Graduation Diploma will not be accepted as Previous Experience. <p>Bidders shall submit <u>Statements of Satisfactory Performance</u> officially issued by their previous employers (i.e. Reference Letters or Work Completion Certificates) along with their bids.</p>	Form D: Qualification Form
Financial Standing	Minimum average annual turnover of USD 800,000.00 for the last 3 years. (2019, 2020, 2021)	Form D: Qualification Form
	<p>Bidders shall submit copies of the audited financial statements (balance sheets, including all related notes, and income statements) for the years required above.</p> <p>Bidder must demonstrate the current soundness of its financial standing and indicate its prospective long-term profitability by submitting its "audited financial statement" along with the bid.</p>	Form D: Qualification Form
Technical Evaluation	The technical bids shall be evaluated on a pass/fail basis for compliance or non-compliance with the technical requirements identified in the bid document.	Form E: Technical Bid Form
Financial Evaluation	<p>Detailed analysis of the price schedule based on requirements listed in Section 5 and quoted for by the bidders in Form F.</p> <p>Price comparison shall be based on the total estimated price for all the quantities set out in the Bill of Quantities.</p>	Form F: Price Schedule Form

**Conditions for meeting eligibility and qualification criteria in case of submission as a Joint Venture/
Consortium/Association**

Joint Venture/Consortium/Association is limited with maximum 3 members including Lead Entity.

In case of Joint Venture/Consortium/Association, Minimum Eligibility and Qualification Criteria shall be met in line with the following conditions:

No	Subject	Requirement	If bidding as a Single Entity	If bidding as a Joint Venture / Consortium /Association		
				All Combined	Lead Entity	Other Partner(s)
1	Legal Status	Vendor is a legally registered entity	Must meet Requirement	Must meet Requirement	Must meet Requirement	Must meet Requirement
2	Eligibility	Vendor is not suspended, nor debarred, nor otherwise identified as ineligible by any UN Organization or the World Bank Group or any other international Organization in accordance with ITB clause 3.	Must meet Requirement	Must meet Requirement	Must meet Requirement	Must meet Requirement
3	Conflict of Interest	No conflicts of interest in accordance with ITB clause 4.	Must meet requirement	Must meet Requirement	Must meet Requirement	Must meet Requirement
4	Bankruptcy	Not declared bankruptcy, not involved in bankruptcy or receivership proceedings, and there is no judgment or pending legal action against the vendor that could impair its operations in the foreseeable future.	Must meet Requirement	Must meet Requirement	Must meet Requirement	Must meet Requirement
5	History of Non-Performing Contracts	Non-performance of a contract did not occur as a result of contractor default for the last 3 years.	Must meet Requirement	Must meet Requirement	Must meet Requirement	Must meet Requirement
6	Litigation History	No consistent history of court/arbitral award decisions against the Bidder for the last 3 years.	Must meet Requirement	Must meet Requirement	Must meet Requirement	Must meet Requirement

No	Subject	Requirement	If bidding as a Single Entity	If bidding as a Joint Venture / Consortium /Association		
				All Combined	Lead Entity	Other Partner(s)
7	Previous Experience	Minimum three years of experience in the construction field as a legally registered entity.	Must meet Requirement	Must meet Requirement	Must meet Requirement	Must meet Requirement
		<p>The Bidder must have successfully completed, as the prime contractor, minimum one contract for construction of any kind of building and/or Steel superstructure, at a minimum value of USD 700,000.00 over the last five years counting back from the bid submission deadline.</p> <p>Important Notes:</p> <ul style="list-style-type: none"> – Renovation, rehabilitation and restoration works will not be considered as similar experience. – Graduation Diploma will not be excepted as Previous Experience. <p>Bidders shall submit Statements of Satisfactory Performance officially issued by their previous employers (i.e. Reference Letters, Work Completion Certificates) along with their bids.</p>	Must meet 100% of the Requirement	Must meet 100% of the Requirement	Lead Entity must meet the requirement individually.	No requirement for other partner(s)
8	Financial Standing	Minimum average annual turnover of USD 800,000.00 for	Must meet 100% of the Requirement	Must meet 100% of the Requirement	The lead entity shall meet more	Other member(s) of the JV

No	Subject	Requirement	If bidding as a Single Entity	If bidding as a Joint Venture / Consortium /Association		
				All Combined	Lead Entity	Other Partner(s)
		<p>the last 3 years. (2019, 2020, 2021)</p> <p>Bidders shall submit copies of the audited financial statements (balance sheets, including all related notes, and income statements) for the years required above.</p>			<p>than 50% of the requirement with a minimum average annual turnover not less than USD 400,001</p>	<p>/Consortium / Association shall jointly complete the remaining portion of the criteria.</p>

SECTION 5A: SCHEDULE OF REQUIREMENTS AND TECHNICAL SPECIFICATIONS

TECHNICAL SPECIFICATIONS FOR THE CONSTRUCTION OF LIVESTOCK MARKET IN AKÇAMESCIT NEIGHBORHOOD BARTIN PROVINCE

1. EXPLANATION OF THE WORK

1.1. BACKGROUND

Uplands Rural Development Project has been implemented by the Republic of Turkey Ministry of Agriculture and Forestry since 2018 with the technical support of the United Nations Development Program. It is carried out with the financial agreement signed between the International Fund for Agricultural Development (IFAD) and the Republic of Turkey.

In the first phase, the Program will be implemented in six provinces and two regions, namely Eastern Mediterranean (Adana, Mersin, Osmaniye) and Western Black Sea (Bartın, Kastamonu, and Sinop), covering 35 districts and targeting 30,000 households. In the second phase, the program will assess the feasibility of including two more provinces: Kahramanmaraş (Eastern Mediterranean) and Çankırı (Western Black Sea), reaching a total of 30,000 more households. The program is implemented by the General Directorate of Agricultural Reform (GDAR) under the Republic of Turkey - Ministry of Agriculture and Forestry and the Central Program Management Unit is settled within this unit and the regional program coordination units (RPMUs) are located in Adana and Kastamonu and there is a provincial support team in each of the initial six provinces, all of which are under the Provincial Directorates of Agriculture and Forestry.

Within the scope of the Public Economic Infrastructure Investment activities of the project, the construction of the livestock market, which is planned to be established in the Akçamescit Neighbourhood of Bartın province, will be carried out.

1.2. ABBREVIATIONS

URDP	: Uplands Rural Development Project,
ADMINISTRATION-EMPLOYER	: United Nations Development Program (UNDP),
IFAD	: International Fund for Agriculture Development,
ENGINEER	: Technical personnel representing the Administration,
CONTRACTOR	: The tenderer on whom the contract has been signed.

1.3. DESCRIPTION OF WORK

It is the construction work of the Livestock Market to be built in Bartın province, Akçamescit Neighbourhood, block 120, parcel 53, within the scope of URDP.

1.4. SCOPE OF THE WORK

- Excavation and filling works of all structures designed according to the excavation plan,
- Construction of the Marketplace, which includes structural, architectural, mechanical and electrical works detailed with drawings and technical specifications,

- Preparation of As-Built drawings at the end of the work, submission of material test reports,
- Completion of temporary acceptance deficiencies, completion of all repair, correction and reconstruction works that arise after the provisional acceptance until the final acceptance date and deemed necessary by the Engineer.
- Obtaining the necessary permits, documents and licenses for construction work.

1.5. GENERAL PRINCIPLES

It shall be deemed that the Contractor, prior to submitting the bid and signing the contract, has visited the site and its surroundings, have knowledge of the land and sub-soil structure, the form and nature of the site, the details and levels of existing pipelines and other existing structures, the quantities and types of work and materials required to complete the work, access roads to the site and all aspects of shelter that may be required, that also he/she has obtained all necessary information on other circumstances that may affect its offer, and he/she shall not make any claims against the Administration regarding these matters.

The contractor will carry out studies related to level controls, road-structure level status, building settlements, site slopes, infrastructure connection levels within 7 working days from the site delivery, and in case of any discrepancy between the project and the site, it will share it with the Administration during this period.

During the execution of the relevant stages of the works, the Contractor shall prepare the shop drawings and the finished manufacturing drawings (As-Built) for the approval of the Engineer. The Engineer may request revisions and/or additional works to be designed by the Contractor, changes or new design studies shall be carried out in accordance with the provisions of the Technical Specification and subject to the approval of the Engineer.

The Contractor shall be responsible for the actual and proper commencement of the Works with regard to the original points, lines and reference levels given in writing by the Engineer, and for the correctness of the location, levels, dimensions and alignment of all parts of the Works and the provision of all necessary instruments, assemblies and manpower thereon. In the event that any error with respect to the location, levels, dimensions and alignment of any part of the Works occurs at any time during the performance of the Works, the Contractor shall, upon request by the Employer, correct such defect to the Engineer's satisfaction, at its own cost.

The Contractor shall be obliged to take all necessary health and safety measures in accordance with the relevant legislation until the works are taken over by the Employer.

The Contractor shall carry out all the productions to be implemented under the Contract as detailed in the Technical Specifications and drawings.

The Contractor shall check all the dimensions given in the drawings on site, prepare the manufacturing projects accordingly, and obtain the Engineer's approval before installation/assembly for all materials/manufacturing before starting the construction.

The Engineer reserves the right to object to any person assigned by the Contractor who is incompetent, negligent in the performance of his/her duties, or whose employment is found reasonably inappropriate by the Engineer, and to request that such person be removed from work under the Contract. Any person dismissed from the works in this way shall not be re-employed at the site without the written consent of the Engineer. All costs and expenses related to the withdrawal of personnel shall be under the responsibility of the Contractor.

The Engineer has the right to give instructions to the Contractor through "Change Orders" to make changes in the quantity and quality of all or part of the works, when necessary, during the continuation of the work.

Within the scope of the Agreement, Change Orders may involve:

- Exclusion of a job out of scope,
- Changing the nature or quality or type of work,
- Changing the levels, lines, positions and dimensions of any part of the works,
- Performing any type of additional work necessary to complete the work.

Such changes shall not break or invalidate the Agreement. The cost comparison to occur due to the change orders shall be prepared by the Contractor immediately and shared with the Engineer, and the transactions shall be started after the approval.

The Engineer shall have the authority to refuse work that does not comply with the Contract documents. The Engineer may request a special examination or testing of the work where, in his/her opinion, he/she deems necessary or advisable for the implementation of the purposes of the Contract documents, this is equally true whether the work is manufactured, installed or completed at the factory.

No additional payment shall be made for transportation costs (transports to be made for material supply and horizontal or vertical transportation within the facility) and transportation difficulties for any manufacturing within the scope of the contract, transportation costs are included in the offered unit prices.

The amounts specified in the Contract regarding the works to be performed are estimates. Quantities may vary due to the nature of the business. The amounts subject to payment shall be determined by measuring the actual amounts of the works carried out.

The unit prices to be offered shall include any temporary work or facility that may be required for the construction of the works specified in the item descriptions as well as transportation, costs and expenses, risks, insurances, liabilities, material workmanship and equipment costs. It shall be assumed that all expenses are equally distributed in the unit prices offered by the contractor.

1.6. STANDARDS

In the design, implementation, testing, acceptance and operation of all works within the scope of the tender, the Contractor shall comply with the latest updated versions of the following standards in order of priority. In cases where there is no definition in the following standards, the latest updated editions of other national and international standards shall be allowed to be used, provided that the Engineer agrees.

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

The Contractor shall carry out and complete the construction works covered by the Contract in full compliance with the latest relevant versions of the below mentioned specifications;

- Republic of Turkey Ministry of Environment and Urbanization "General Technical Specifications for Civil Works, Construction Works, Mechanical Works and Electrical Works".
- Republic of Turkey General Directorate of Highways "Highways Technical Specifications".
- The Bank of Provinces Technical Specifications,
- Technical Specifications of the Ministry of National Defence,

- TEDAŞ Technical Specifications,
- DSI Technical Specifications etc.

1.7. ARRANGEMENT OF THE SITE

The ground levels of the construction site shall not be altered without the Engineer's permission and no infrastructure, structures or trees shall be removed or permanent structures constructed without the Engineer's prior approval.

With the Engineer's approval, the Contractor may construct temporary parking areas, loading and unloading areas, open storage areas, approach and interior roads, temporary facilities to facilitate the construction layout and methodology of the Works.

It shall be under the Contractor's responsibility to provide all usage needs on site such as electricity, water, internet etc. required during the execution of the works.

Subscription application to the relevant authorities for the provision of facility connections shall be under the responsibility of the Contractor. All costs of consumption on site shall be borne by the Contractor.

Any temporary fence used by the contractor to protect works shall be fit for its duty to keep the public out of danger and protect workers.

As soon as the Contractor owns the relevant part of the Site, he/she shall install the said fences and take the relevant security measures.

The Contractor shall regularly inspect and maintain all such fences and any defects shall be corrected without delay.

Access to temporary site fences shall be provided as needed for use by residents of adjacent properties.

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

The contractor shall supply water for the construction work. It is the Contractor's responsibility to provide all necessary backup, maintenance and repair works for the uninterrupted supply of water sufficient for the construction of the works.

The Contractor shall clean the construction site in a way that maintains it in a hygienic condition when necessary and shall comply with the relevant law and the instructions of the Engineer.

The Contractor shall set up a temporary WC at the construction site to meet the needs of the working personnel. Sewerage outlets shall be connected to the sewerage network to the extent possible. If this is not possible, connection shall be made to septic tanks built in accordance with national specifications. Septic tanks shall be emptied at appropriate intervals.

The Contractor, at his/her own cost, shall erect and maintain 2 signboards (1.25 m x 2.25 m), the location and content information of which shall be communicated by the Engineer. The design of the sign shall be made in accordance with the approval of the Engineer.

Ownership of all structures, materials, tools, equipment and tools supplied and installed by the Contractor for the performance of the Work belongs to the Contractor.

Temporary facilities shall be removed, and their places shall be cleaned in a time and method to be determined by the Engineer after temporary acceptance. Temporarily removed fences, billboards, etc. if any, shall be reinstated.

1.8. PROTECTION OF EXISTING FACILITIES AND BUILDINGS

The contractor shall be fully responsible for the protection of all public or private buildings, structures and roads in the construction site, whether shown in the drawings or not. Any damage caused by the contractor's activities shall be repaired at his/her own expense.

The Contractor shall take all necessary measures to avoid damage to roads, lands, properties, trees and other structures, and shall promptly deal with complaints from owners during the Contract.

If any damage is found, the Contractor shall promptly notify the Employer and the Legal Contractor, the Municipality or the relevant owner of the situation and the Contractor shall provide every means for repair or replacement of the affected part.

The Contractor shall adequately protect the buildings affected by the works from damage and theft.

All electrical installations shall comply with relevant national regulations and be safe for the Contractor and the public. In cases where daylight is insufficient, the site shall be illuminated.

Before starting the works, pre-construction photographs shall be taken near the existing structures.

1.9. KEY TECHNICAL STAFF

In accordance with the Work Program, the Contractor shall employ the following key personnel with the following qualifications at the site.

Project Manager: Civil engineer who has at least 10 years of experience in the construction of superstructures/buildings. The Project Manager/Construction Manager shall be on site full time from the date the Engineer gives Site Access to the Contractor until the provisional acceptance date.

Electrical Engineer: Electrical engineer with at least 3 years of experience in the construction of superstructures/buildings.

Mechanical Engineer: Mechanical engineer with at least 3 years of experience in the construction of superstructures/buildings.

Survey Engineer / Surveyor: A Survey Engineer (or equivalent) with at least 3 years of experience in the construction of superstructures/buildings or a Survey Technician with at least 5 years of experience in the construction of superstructures/buildings

1.10. MACHINE- EQUIPMENT

The Contractor shall keep the following machinery-equipment in the site in accordance with the Work Program. The engineer reserves the right to increase the specified amounts for the timely completion of the works.

Machinery - Equipment	Minimum Specifications	Minimum Quantity
Excavator	90 hp	1
Truck	15 tons	2
Compressor	180 hp	1
Generator	250 kVA	1
Crane	40 tons	1
Cylinder	n/a	1

Loader	n/a	1
Grader	n/a	1
Concrete Vibrator	n/a	4
Mould	Plywood	500 m ²
Scaffolding	Steel	250 m ³
Water tank	10 tons	1
Lighting	n/a	4
Topographical Instrument-Equipment	-	2

The materials and equipment within the scope of the work shall comply with the conditions specified in the Technical Specification. Materials and equipment that are recommended for use by the Contractor but not specified shall only be included in the works after their equivalence with the Technical Specification is verified and approved by the Engineer. In case of any material or equipment that is planned to be replaced by the Contractor in place of those specified in the technical conditions, the Engineer's approval shall be obtained.

The Contractor shall, at his/her own expense, establish suitable and sufficient open and closed storage areas for the storage of materials and equipment at the construction site. The contractor is obliged to take all necessary protective measures against damage, pollution, weather conditions and theft.

All materials and equipment shall be packed in such a way that they are protected against damage during entry and exit from the warehouse and transportation to the workplace.

Materials and equipment shall be loaded into vehicles in accordance with international transportation rules. During transportation, all necessary additional precautions shall be taken and adequate transportation insurance shall be provided at the Contractor's sole responsibility and expense.

All applications, measurement processes and equipment required for the construction of the works, protection of the site environment, are under the responsibility of the Contractor at his/her own expense.

1.11. APPLICATION WORKS

The Contractor shall prepare the application drawings showing the layout of the structures at the construction site based on the reference points and levels given in the drawings and submit them to the Engineer's approval. The correctness of the arrangement shall be the sole responsibility of the Contractor.

For application and measurement processes; the contractor:

- Shall employ qualified and experienced land surveyors,
- Shall use modern type and quality topography devices suitable for the job.

1.12. UNDP ENGINEER'S OFFICE

Before starting the contract, the Contractor shall procure and install a room of at least 10 m² on site for the exclusive use of the UNDP Engineer at a location agreed with the Engineer. This office shall be maintained during the entire construction period.

The toiletry shall have hot and coldwater system and a WC with a siphon connected to the existing sewer. The Contractor shall be responsible for the safety of all equipment inside the Engineer's office during the contract period.

The Contractor shall maintain, illuminate, heat/cool and clean the office for the duration of the contract. The contractor shall be responsible for the insurance of the workplace for the duration of the contract. The Contractor shall insure the office and the content provided by it against fire, theft and other risks for the duration of the Contract.

Material	Quantity
Work desk	1
Executive Chair	2
Guest Chair	5
Whiteboard	1

Electricity, water supply and maintenance expenses of this office shall be borne by the Contractor until the Works are complete.

The Contractor shall ensure that all equipment is kept in good condition and shall repair or replace any equipment that has become out of service, as directed by the Engineer.

1.13. COORDINATION

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

The Contractor shall prepare a Critical Path Method (CPM) worksheet, review the worksheet against the project timeframe, check the integrity of the worksheets between infrastructure, superstructure construction, electrical and mechanical works, combine the worksheets and submit to the Engineer for approval.

The contractor is obliged to provide administrative and technical coordination with the employer, Engineer and other parties that may directly affect the works and the following parties that may have an indirect effect:

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

1.14. MATERIAL AND EQUIPMENT INSPECTION AND INSPECTION, CERTIFICATION AND APPROVAL

In case the engineer requests, it reserves the right to visit the contractor's project offices, factories and subcontractors' factories in order to observe the project design and production works for the technical control and inspection of materials and equipment.

As a result of the control and counting of the material, the materials that are found not to comply with the quality specified in the specification, to be defective, missing or incorrectly sent, shall be exchanged and delivered within 14 days at the Contractor's expense (this period is mutually determined when special manufacturing is required). Otherwise, the Employer shall procure them on behalf of the Contractor and collect all expenses from the receivables from the Employer or the performance bond.

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

It is the Contractor's responsibility to pay the permit, license (including construction license) and approval fees required by Turkish laws/regulations and determined by the relevant local authorities.

1.15. AS-BUILT DRAWINGS, USER AND MAINTENANCE MANUALS

The "As-Built" project to be prepared by the contractor shall also include the operation and maintenance manuals of the facility.

5 (five) complete draft print sets of "As-Built" drawings showing all the works as they are done shall be submitted to the Engineer for approval within one month following the provisional acceptance of the work.

The Contractor shall record all necessary information to prepare "As-Built" drawings during the execution of the Works at the site. Properly specified drawings and other documents covering permanent works completed shall be submitted to the Engineer prior to progress payment during construction.

These drawings covering permanent works shall be kept up to date and submitted to the Engineer's approval after the works are completed.

The Contractor shall submit the "As-Built Drawings" together with the complete set of instructions and manuals of the installed plant to the Engineer for approval to facilitate operation and maintenance. Documentation shall include, but is not limited to:

- Layout drawings,
- Schematic wiring diagrams,
- Special operating instructions
- Special maintenance instructions,
- Detailed record of all kinds of tests,
- Delivery of all materials finished drawings, all warranties and certificates used in the contract, depending on the contract, by the Contractor before final progress payment is made.

All information in these manuals shall apply specifically to the equipment supplied and shall be free from irrelevant matters that may appear in the manufacturer's general literature.

As-Built documents shall include all architectural and engineering disciplines, including architectural/structural, electrical and mechanical drawings, and operation and maintenance manuals. Except for the As-Built drawings, the final version of each document in two hard copy and one electronic (Microsoft Word, Excel, etc.) copy, including the Engineer's comments and information including all changes/revisions made during construction, shall be submitted. Usage and maintenance manuals shall be presented in Turkish.

All documents except drawings shall be in A4 size. Drawings shall be on international A-size pages and shall be marked "AS-BUILT".

1.16. FINAL BENEFICIARY

The Contractor shall coordinate with the District Municipality, which is the final beneficiary. If deemed necessary by the employer, representatives of the final beneficiary may attend the meetings, material tests, acceptance and inspection of materials and equipment, etc.

The representatives of the final beneficiary have the right to access the site to monitor the progress of the work, the compliance of the work with the contractual requirements. The Contractor shall provide representatives with access to the site at any time requested. However, representatives have no legal authority in terms of contract terms and conditions.

2. PROJECT DOCUMENTS

2.1. PROJECT MANAGEMENT

2.1.1. Project Management Responsibility

The Contractor shall be responsible for the management, execution, monitoring and coordination of the entire project to meet all the requirements set out in the Contract and Technical Specification.

The Contractor shall carry out the planning in collaboration with the Employer's designated representatives to ensure the visibility of the progress of the project and the timely completion of the works.

2.1.2. General Conditions

The Contractor shall establish a project organization with the necessary resources, qualifications and experience to fulfil all its obligations, in accordance with the requirements contained herein.

The contractor shall clearly define the duties, responsibilities and authorities of each role within the organization, at least at the management level.

The contractor shall define the organizational interfaces for any subcontractors and suppliers to be found within or outside the project organization. Such interfaces shall provide a clear reference between the level of project management within the Contractor and subcontractor/Supplier organizations.

The Contractor shall appoint key staff members and they shall remain unchanged by the Contractor for the entire project for the longest period of time possible.

Any subsequent changes in such assignments shall be notified to the Engineer and approved by the Engineer and shall be consulted with the Contractor for the Engineer to evaluate the reasons and possible impact of such change.

Unless within the Contractor's mandate, the Contractor shall ensure that existing personnel remain until suitable and acceptable substitutes are found.

2.1.3. Work Schedule

The work program to be submitted within 1 week following the signing of the contract shall include at least the following:

- Suggested office location on site, stations (steel/concrete structures), warehouses, accommodation etc. (sketches shall be added as needed).
- A brief outline of the construction method of how things will be run so that the work can be completed in the relevant time,
- A critical milestone bar chart (Gantt chart) representing the construction schedule and detailing related activities, dates, allocation of workforce and facility resources, etc.

If the bidder plans to subcontract some of the works, he/she must provide the following details:

- Details of the work to be assigned to the subcontractor,
- Name and details of subcontractors,
- Personnel lists of subcontractors,
- Subcontracting value,
- Similar work experience documents of the subcontractor.

2.1.4. Project Manager's Responsibilities

The contractor shall define a project management team and appoint a Project Manager responsible for the entire project.

The Contractor shall empower the Project Manager to make decisions regarding all aspects of the day-to-day management of the project.

Any restrictions on the Project Manager's rights in this regard must be clearly identified and defined. Possible restrictions must not impose management difficulties on the project.

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

2.1.5. Engineer's Involvement

For the execution of this project, the Engineer reserves the right to receive assistance from other institutions in technical, operational and contractual matters.

The Contractor shall establish a close coordination with the Engineer for the development of the planning activities of all applications related to the project, and submit the documents such as the relevant plans, procedures, etc., for review and approval before putting this plan or procedures into effect.

The duties and responsibilities of the engineer are defined in the UNDP Civil Works Contract General Conditions.

2.1.6. Project Plans

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

- Quality Control and Quality Assurance Plan,
- Safety Management Plan,
- Method Statement,

The Contractor shall prepare method statements (Method Statements) for each activity, and shall start the approved field activities (excavation, filling etc.) after the method statements are approved by the Engineer. Quality Control and Quality Assurance Plan and Safety Management Plan shall be prepared before the first progress payment and submitted to the Engineer for approval.

2.1.7. Reports and Reporting

The Contractor shall ensure that the Engineer and the Employer are aware of the status of all areas within the project and that the Engineer has complete and detailed information about the project as a whole.

Daily site reports shall be prepared and shared daily in the format to be shared by the Engineer, including photographs showing the productions made during the day.

The contractor shall provide the Engineer with progress reports describing, but not limited to, achievements, problems, risks and including updated schedules, cost/program control reports, status of contract change proposals, and other data necessary for efficient management.

Contractor shall accept Employer's due dates for submission of Monthly Progress Reports. These reports shall normally be submitted no later than 7 business days after the completion of each month.

These reports shall provide information on the steps recommended by the Contractor to address such issues on any matter that may prevent the timely performance of any part and/or the entire Agreement. The progress report shall have the following content as a minimum:

- Project progress,
- Project management overview: Explains the significant results achieved, the problems that occurred and the corrective actions taken or planned to solve the problems.
- Technical condition: Describes the detailed status, including requirements definition status, design and development progress, issues encountered, corrective actions taken, and a summary of pending and approved change items over the period.
- Quality tracking: Explain the activities of the quality assurance program.
- Project calendars: It shows completed activities (e.g. milestones and deliveries), status of ongoing activities, program changes (if any). This section also defines planning for the next month with an assessment of key activity completion dates.
- Action status: Explains the pending action items and action items that were settled during the reporting period.
- Risk assessment: The assessment presents current critical paths, critical activities, and technical risk, including impact and containment plans.

2.1.8. Meetings

2.1.8.1. Progress Meetings

Progress meetings shall be held at the times specified in the progress schedule (at least once a month unless otherwise agreed) and shall be held at a location proposed by the Contractor and approved by the Engineer.

The following people shall be present at the progress meetings:

- Contractor's representative (project manager)
- Representatives of the Employer, the Engineer and, if applicable, the Implementing Partner.
- Other persons considered by the above representatives must be present as assistants/advisors.

The main topics to be discussed at the progress meetings are those determined for the progress reports and other items deemed necessary by the Engineer or the Contractor.

The Contractor shall prepare an agenda and forward it to the Engineer for review and approval at least 1 week before each meeting.

The Contractor shall prepare and submit the minutes. Draft minutes shall be ready at the end of the meetings and reviews. The minutes signed by the Engineer and the Contractor shall be attached to the contract file and shall be binding on both parties. All these processes regarding progress meetings shall be carried out by the Contractor under the direction of the Engineer.

2.1.8.2. Weekly Construction Site Meetings

Site Meetings (SMs) shall be convened by the Contractor to enable discussion on specific aspects of the execution, orientation, future arrangement and coordination of the works during the project as mutually agreed between the Contractor and the Engineer.

In general, SMs can be held to formalize important technical issues prior to Progress Meetings and to record the information and suggestions arising from these meetings. The decision shall normally be taken at the Progress Meeting.

The SMs shall be made in places mutually agreed between the Contractor and the Engineer. The Contractor shall provide the SMs with documents documenting the technical elements for discussion and advice.

The agenda of the SMs shall be determined jointly by the Engineer and the Contractor.

In addition to Engineers, Employers and Contractors, suppliers, manufacturers, subcontractors and other institutions and organizations related to the works can join the STs when necessary.

Meeting minutes shall be recorded by the Contractor, carefully kept and distributed to the Employer and the Engineer, the participants and other persons, institutions and organizations deemed necessary by the Engineer as STs. The minutes signed by the Engineer and the Contractor shall be attached to the contract file and shall be binding on both parties. The minutes shall be forwarded to the Employer for consideration at the next Progress Meeting.

All these transactions regarding the STs shall be carried out by the Contractor under the direction of the Engineer.

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

2.1.9. Subcontractor's Participation

Subcontractors are required to follow the same standards applied by the Contractor as they are subject to the same Project Management procedures as the Contractor. It is the Contractor's responsibility for the subcontractors to perform the work in accordance with the rules specified in the contract between the Employer and the Contractor.

The Engineer has the same rights against the Contractor as against any subcontractor, but this does not relieve the Contractor from its responsibility for the work performed by the subcontractors.

In order to complete the approval procedure for the sub-contractors involved by the Contractor within the scope of the Project, the Contractor shall provide the Engineer with the specified documents for each sub-contractor (meaning the sub-contractor and sub-designer) as specified below.

- Registration with the chamber of commerce,
- Trade registry gazette,
- Criminal records of subcontractors,
- Delivery statement of the previous project completed by the subcontractor,
- Authorized signature list,
- "No bankruptcy" declaration issued by the commercial registry authorities,
- A summary of the subcontractor's status with monthly vesting payments that must be rolled over to maintain the overview. (This is a prerequisite for payment for work done by subcontractors)

The Engineer reserves the right not to approve a proposed subcontractor if there is objective evidence that the subcontractor has not complied with the terms of this contract regarding the delivery of works or Project Management and Quality Assurance.

The Contractor shall keep a list of all subcontractors and suppliers used or planned to be used in the project and forward this list to the Engineer whenever it is updated.

The list shall contain a precise description of what parts or components that subcontractor or supplier shall deliver to the Contractor.

The Contractor shall be fully responsible for work performed by any subcontractor, as well as for work performed by the Contractor himself.

2.2. SPECIAL ON-SITE WORKS

2.2.1. Management and Planning

The Contractor shall have full responsibility for the construction, erection and installation of the Works.

Planning of the construction, installation and erection of the Works shall be made in close cooperation with the Engineer.

The contractor shall be responsible for the maintenance and operation of the system during installation and installation.

2.2.2. Installation Plan

At each site where installation shall take place, the Contractor shall prepare an installation plan that includes:

- Engineer's activities,
- Relevant subcontractors,
- Tasks to be performed and who is responsible for each task,
- Timing of tasks,
- Installation documentation (instructions, specifications, and drawings) and other information important to final installation.

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

2.2.3. Installation

At an appropriate time prior to installation, the contractor shall provide instructions and specifications with detailed information on:

- Interior space,
- Installation,
- Wiring, routing, grounding, power, communication,
- Other issues that are important for the installation of works.

As an example, the installation shall consider local laws, rules and procedures regarding wiring, power connection and operating conditions.

The Contractor shall supply and have others supplied installation and all consumables and non-consumables required for installation.

2.2.4. Commissioning

Commissioning covers the activities such as adjusting and adapting system parameters, fine tuning, etc. to make the system 100% operational after physical installation.

The Contractor shall determine what procedures shall be used to commission the Works.

2.3. SECURITY

The contractor is responsible for taking all necessary safety measures regarding the works, materials, equipment, tools and existing facilities, people in the site and the neighbouring environment. All expenses, including compensations that may occur due to security weakness, shall be under the responsibility of the Contractor.

2.3.1. Construction Site and Environmental Safety

2.3.1.1. Security Fence

The Contractor shall determine the extent of the construction site boundary fences necessary to protect the site, works, materials, equipment and facilities from unauthorized access and to ensure public safety, control entrances and exits and prevent unauthorized entry.

A sufficient number of security guards shall be provided by the Contractor at the entrance-exit gates and where deemed necessary. Along the fence, there shall be sufficient night lighting to provide surveillance by security guards.

2.3.1.2. Fire Protection

The Contractor is obliged to take the necessary measures for the protection of the Works, temporary Works and all kinds of goods and persons during the performance. All measures, including raising awareness of personnel, and actions to be taken in case of fire shall be determined in close cooperation with the Fire Brigade.

During the study, special additional measures that may be needed in the following situations shall be taken and applied:

- Storage of easily flammable materials,
- Collection, storage and disposal of combustible waste,
- Operations with electric arc welding and oxyacetylene cutting machines,
- In case of fire, the Contractor shall provide and prepare the following equipment:
- Dry chemical powder type fire extinguishers that can be mounted on the walls and carried by hand, with nitrogen pressure in certain places,
- Special extinguishing systems in sections where the fire brigade cannot enter or enter easily.

2.3.1.3. Warning Signs and Lighting

All open excavations, material piles, structures, facilities and equipment that may pose a hazard shall be barricaded with appropriate signs to protect workers and other persons.

Likewise, roads and crossings closed to traffic due to the works shall be protected by barricades.

Such areas shall be marked with warning signs placed at appropriate distances and shall attract people's attention. All barricades, obstacles and signs shall be illuminated from dusk until sunrise.

2.3.2. Occupational Safety

It is the Contractor's responsibility to take the necessary measures to prevent accidents that may cause damage to persons, materials, equipment and facilities during the work.

The Contractor shall assign a Security Team under the leadership of an experienced Security Manager for all kinds of work related to occupational safety. The main tasks of this team shall include, but are not limited to:

- Training the employees on actions and practices that may cause accidents or damage, taking measures to ensure at least the conditions in "TS 8983 General Safety Precautions to be Taken During Construction in Buildings" at the construction site, monitoring whether the precautions are taken, whether the warnings are complied with,
- Taking additional precautions, giving verbal warnings, applying penalties in case of malfunction,
- To intervene in the event of a harmful event and to implement the relevant procedures.

The Contractor shall perform the work and operations in accordance with the applicable Occupational Health and Safety law.

2.3.2.1. First aid

It shall be carried out in accordance with the applicable Occupational Health and Safety law.

2.3.2.2. Hazardous Substances

Works are stopped in the section where the event occurred when the following situations are encountered:

- Known or unknown toxic substances embedded,
- Unnaturally colored groundwater or soil,
- Asbestos,
- Volatile organic compounds measured by photoionization detector,
- Chemicals or petroleum products or similar spills and spreads on the site.

Cleaning the area in a way that will not harm the employees and removing the dangerous substance shall be done by a trained and equipped expert team for this type of work.

2.4. QUALITY CONTROL AND QUALITY ASSURANCE

2.4.1. Quality Responsibility

All Work shall be performed in accordance with the most appropriate engineering practices and standards in terms of construction, materials, equipment and workmanship.

It is the Contractor's responsibility, at his/her own expense, to control the quality of the work, take samples and perform the necessary tests to ensure compliance with specifications and approved materials. A Quality Control and Quality Assurance Manager to be appointed by the Contractor shall be responsible for all stages of quality control and shall maintain an effective communication with the Engineer.

2.4.2. Material Quality and Equivalent Materials

All materials and equipment provided for permanent use within the scope of the works shall comply with the current standards and specifications. Instead of the specified materials and equipment, other Manufacturers' products shall be accepted, provided that their equivalence is approved by the Engineer. In such cases, the Contractor shall submit to the Engineer all evidence of equivalence of the new product.

2.4.3. Quality Control and Quality Assurance Plan

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

The Plan shall cover the quality assurance of all aspects of the Works, include as a minimum the following items and be supplemented with additional information as may be required by the Engineer:

- Organization chart for quality control and quality assurance,
- List of Contractor personnel who will perform quality control and material testing, with details of their relevant experience,
- The list of facilities to be inspected and tested at stages during the execution of the Works as part of the quality control by the Contractor, together with the inspection procedures and types of tests;
- Material certificates,
- Equipment and job characteristics,
- Tests,
- Certificates related to the supplied materials,
- Detailed checklist for all installations. The checklist shall be for the Contractor's own use, documenting the Contractor's own quality control of the installation.

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

The approved Quality Plan shall be followed throughout the performance of the Contract unless the Engineer provides specific approvals or instructions unless otherwise specified. Any approval by the Engineer does not relieve the Contractor of its obligation to ensure that the Works conform to the requirements of the Contract.

During the works, quality assurance records, test certificates, reports and log records of on-site testing and inspection shall be kept in place and the results shall be approved by the responsible member of the Contractor's staff.

The Quality Control and Assurance Plan shall come into effect after the Engineer's approval.

2.4.4. Test Specimens, Materials and Equipment

The Contractor shall provide all samples related to quality control and testing, including storage, packaging and transportation. The materials represented by these samples shall not be produced, carried out or used in any work without the approval of the Engineer.

Approved samples of materials and equipment to be used on site shall be carefully stored within the scope of those allowed to be used by the Engineer.

2.4.5. Test Laboratory Services

Quality Control tests shall be carried out in a laboratory accredited by the Ministry of Environment and Urbanization of the Republic of Turkey and the costs shall be borne by the Contractor.

The Contractor shall ensure that the laboratory performs and finalizes the requested material inspection, sampling and testing processes as quickly as possible.

The test results shall be immediately available to the Engineer. In case of detection of defects or deficiencies that may affect the work, the Contractor shall immediately take any corrective action.

The laboratory is not authorized to change, expand or override the terms of the Agreement.

2.4.6. Inspections and Manufacturer Tests

The contractor is obliged to ensure that quality control and all related inspections and tests are duly performed, regardless of whether it is on site or elsewhere, and to take corrective measures when necessary.

The engineer may also supervise the works performed at the manufacturer's facilities and the tests related to these works. The Contractor shall timely inform the Engineer so that this can be done as requested.

The products and materials delivered to the construction site shall be inspected by the Contractor upon their arrival at the site and any malfunctions shall be reported to the Engineer. Products with significant defects shall be returned to the manufacturer to be corrected or replaced.

Inspections and tests performed by or on behalf of the Engineer do not exempt the Contractor from its obligations regarding quality control.

2.4.7. Construction Site Records and Tests Certificates

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

All test certificates and inspection records, including those in the manufacturer and other test institutions, shall be kept in their respective sections. The processes shall be under the responsibility of the Contractor's qualified personnel, and the Contractor shall also establish a comprehensive archive and library on quality control.

The contractor shall prepare detailed lists containing tests, approvals, orders and delivery information for other materials and products, subject to quality control and approval. These lists shall be made available to the Engineer as they are updated, on a monthly basis under any circumstances.

The test results shall be sent to the Engineer at the end of the test in order to determine the necessary precautions, if any.

- In any case, at the latest 7 days before the production starts, for those products which need to be used at work,
- In order not to interrupt the productions after the test, if it is necessary to start and continue the work with the approval of the Engineer, within 7 days at the latest following the test.

3. ENVIRONMENTAL MANAGEMENT

The Contractor shall comply with the provisions of the Turkish legislation (Environmental Obligations) in force regarding the protection of the environment in cases that may affect the project. This shall be carried out in particular on the basis of the most up-to-date version of the following laws and regulations.

- Environmental law,
- Occupational Health and Safety Law,
- Air Pollution Evaluation and Control Regulation,
- Regulation on Assessment and Management of Environmental Noise,
- Regulation on Preventing Water Pollution,

- Solid Waste Control Regulation,
- Hazardous Waste Control Regulation,
- Law on the Protection of Cultural and Natural Assets,
- Waste Oil Management Regulation,
- Regulation on Preventing the Excavation Earth Construction and Demolition Waste,
- Regulation on Preventing Soil Pollution.

The Contractor shall take all measures and measures to prevent any environmental problem or disturbance arising from the execution of the Project Activities. Wherever possible, this shall ensure that discomfort is resolved at the source, rather than reduced discomfort once created. The contractor shall also be required to compensate for any damage, loss, deterioration or inconvenience to the property and health of the persons affected by the project during construction. In accordance with the Contract specifications of which these environmental obligations are a part, the Employer reserves the right to withhold payments and/or stop construction in case of serious or repeated violations of the conditions specified herein.

The Contractor shall obtain, at its own expense, keep in force and renew as necessary all Permits required in terms of environmental obligations in order to fulfil its obligations to implement the project and construct the facility.

4. SPECIAL TECHNICAL SPECIFICATION

Unless otherwise specified in the technical specifications, the Contractor shall carry out and complete the productions of the item numbers specified in the contract regarding the Works in accordance with the latest updated versions of the specifications stated below;

- Republic of Turkey Ministry of Environment and Urbanization "General Technical Specifications for Construction Works, Mechanical Works and Electrical Works".
- Republic of Turkey General Directorate of Highways "Highways Technical Specifications",
- The Bank of Provinces Technical Specifications,
- Technical Specifications of the Ministry of National Defence,
- TEDAŞ Technical Specifications,
- DSI Technical Specifications etc.

Whether or not in the survey chart; it is the Contractor's responsibility to complete the works specified in the project, detail and site list in accordance with the rules of science and art.

4.1. CIVIL WORKS SPECIAL TECHNICAL SPECIFICATIONS

4.1.1. EXCAVATION AND FILLING WORKS

General

This specification covers excavation for all structures described in the excavation plans; backfill, compaction of backfill and transportation of excavation material under the conditions written in this document and according to the drawings or according to the Engineer's instructions.

All excavation, fill and earth embankment works must comply with the instructions specified in the drawings, slopes and elevations or Engineer's directives.

In case the amount of excavation exceeds the amount calculated in the excavation plan approved by the Engineer, the Contractor is financially responsible. In addition, the excess excavation sites shall be filled by the Contractor with compressed earth, crushed stone or concrete according to the needs of the Engineer, without any additional payment.

Before starting the earthworks, the Contractor must examine the site plan, elevation plan and topographic map of the area given by the Employer and make all the controls. The Contractor must prepare excavation plans, sections and calculations for all structures to be checked and investigated by the Engineer.

Shrubs and other plants to be removed from the construction site shall be cut at or below ground level. This process shall be done with the Engineer's directives and the plants shall be cut carefully.

Removal involves trees larger than 7.5 cm in diameter and whose roots are interconnected and wire-like. All wastes, organic and non-organic wastes shall be removed from the site by the Contractor.

The contractor shall clear the area and ground surface, trees and roots before beginning earthworks. Cleaning up includes all organic waste and other debris to be removed from the site. No additional payment shall be made to the Contractor for dismantling, cleaning and removal from the site.

Definitions

- Proper Materials; are the materials classified in TS 1500 as GW, GP, SW, GM, GC, SP, SM and SC.
- Improper Materials are the materials classified in TS 1500 as PT, OH, ML, MH and OL. In case such materials are discovered during the excavation, removal of the materials shall be under the responsibility of the Contractor.
- Cohesionless materials: are the materials classified as GW, GP, SW and SP in TS 1500. Cohesive materials are the materials classified as GC, SC, ML, CL, MH and CH. The materials classified as GM and SM shall be defined as cohesionless material only if the fine grains are not plastic.
- Degree of compression shall be expressed as the desired Modified Proctor Test compaction degree; a percentage of maximum dry density. (TS 1900)
- Suspended water level; is the groundwater that is temporarily or permanently retained above the groundwater level and separated from the existing water table by a waterproof layer.
- Backwater; is an underground water pond in the granular fill between the foundation walls, in the fine-grained soil with relatively less water permeability, showing the character of suspended water.

Materials

- Selected filling material: Selected filling material shall consist of suitable material that does not contain roots and similar organic matter, garbage, rubble and stones larger than 7.5 cm, to be used around foundations and under structures, except for the bottom of the structural foundations. The material must be compressible and qualified to pass less than 10% of No.200 mesh (0.075 mm) and have a plastic index of 12 or less.
- The capillary water barrier shall be used under the floors resting on the ground and shall consist of crushed stone and crushed or natural gravel. Maximum grain size shall be 4 cm and not more than 2% by weight of No 4 sieve.
- In case there are soft soil pockets under the foundations, 200 doses of lean concrete or compressed stabilized filling material shall be used as filling material in these areas with the instruction of the Engineer.

Excavation

The Contractor is required to have the Engineer survey the site before revealing the excavation base for the foundations and covering it with the first layer of concrete. If the ground is determined to be insufficient to adequately support the foundation without unexpected settlement, the Engineer shall instruct the Contractor to dig up to a firmer layer and backfill with bulk concrete or take other measures necessary to provide adequate bearing strength.

Areas outside each building/structure shall be sloped to provide drainage from the building/structure and shall be free of garbage and debris until the temporary acceptance is completed and final acceptance is made. In addition, topsoil contaminated with substances such as cement, lime, etc., and which are negatively affected and compressed by the activities of construction machinery, shall also be plowed, cleaned and levelled. The stocked topsoil shall be spread evenly over the plowed, cleared and levelled surface.

If pockets of soft material or loose stones or cracks are found at the bottom of the excavations, they shall be manually removed and the gaps filled with suitable material.

Class determination shall not be made for the excavation area. For excavations to be made on all types of soils and depths, the only pose specified in the contract shall be valid.

Starting the Foundation Excavation

The contractor shall make the application of the structures according to the plans and projects given to him and check the accuracy.

Following the approval of the excavation plan by the Engineer, the topsoil shall first be removed according to the excavation plan and stored in a suitable place within the site. Later, this stored material shall be used by the Contractor for landscaping purposes. Foundation excavation shall be carried out in accordance with the Engineer's directives and the relevant excavation plans.

Foundation Opening Method

Excavation work shall be carried out in accordance with the dimensions and elevations specified in the drawings for the structures. The excavation area shall contain sufficient distance from the walls and foundation piers to allow the placement and removal of formwork, the establishment of services and inspection without incurring a cost to the Administration. The only exception to this condition is the share of lean concrete and gravel-sand filling material poured directly adjacent to the excavation surfaces. No excavation shall be carried out below the determined levels. In excavations made without the instruction of the Engineer, the additional cost shall not be charged to the Employer and the selected filling material shall be used for recompression and filled. Areas outside each building shall be sloped to divert water away from the building and shall be free of trash and debris until the work is accepted. In addition, topsoil contaminated with substances such as cement, lime, etc., and which are negatively affected and compressed by the activities of construction machinery, shall also be plowed, cleaned and levelled.

Excavation slopes shall be protected against slope disturbances (e.g. with plastic covers during rainy periods) in accordance with the Engineer's instructions.

Suitable Excavation Material

The appropriate material removed during the excavation shall be stored on site regularly and shall be used for backfilling in the project after obtaining the opinion of the Engineer. In the event that suitable material is removed to exceed the need for backfill material, this excess shall be transferred by the Contractor to a place in the Construction Site to be used in field works, in accordance with the instruction of the Engineer, without

reflecting the financial burden on the Administration. In case the amount of material exceeds the need, the surplus shall be removed from the site as unsuitable material.

Final Levelling of the Floor for Concrete and Protection of the Base

Large-scale excavation for the foundation shall only be allowed up to 20-30 cm above the specified base elevations. The last 20-30 cm of the natural ground shall be excavated in accordance with the Engineer's instructions and special care shall be taken not to disturb the ground. The floor surface shall be protected from wetting and drying. All completed and compacted surfaces falling under the foundation piers shall be approved by the Engineer before concrete is poured. When the required level for the building foundations is reached, a layer of lean concrete of 10 cm to cover the foundation shall be poured immediately, covering the surface under the foundation base and overflowing the base of the foundations by 15 cm from the outer edges to both sides.

Preparation of the Foundation Ground

The foundation ground shall be prepared by water levelling and if necessary, the soft ground parts shall be excavated and filled with suitable material.

The difference in height between two points on the Foundation Ground shall not exceed 1.5 cm when measured with a 5 m horizontal gauge and the foundation elevations shall not deviate more than 2 cm from those specified in the drawings.

The bottom of the excavation area shall be carefully levelled within the tolerances specified in this section. Areas where the level difference is more than 2 cm shall be excavated or filled by compaction as specified in the Filling and Compaction paragraph. All such work shall be part of the Contractor's responsibility at no additional cost.

After the excavation is completed to the final levels, before starting any foundation work, the Engineer shall be informed to check and approve the works and to record the data for measurement if necessary. Except from this case, the Engineer shall have the authority to control the works at any time.

Removing Soft Parts

Although the procedures are followed, if there are still soft parts or cracks in the excavation floor, these parts shall be manually excavated and filled with suitable material by the Contractor.

Removing Soft Parts under Foundations:

150 kg/m³ lean concrete or compressed stabilized filling material shall be used as suitable material for filling the soft parts under the foundations. The engineer must approve the selected material. The preparation, pouring, compaction, curing and testing of the concrete fill shall be done according to the concrete specification and Engineer's instructions.

Removal of Soft Parts under Non-Structural Sections:

The selected fill material shall be used as suitable fill material for excavated soft parts under non-structural sections. The arrangement, position, compression and test procedure must be done as described below.

Filling and Compression

The filling material shall be placed in horizontal layers and in a loose state, with a thickness not exceeding 20 cm, and then compacted. No material shall be placed on muddy surfaces. In order to prevent shear forces adjacent to the structures or eccentric loading on the structures, the fill shall be smooth and evenly compacted. Sloping surfaces shall be set or terraced to prevent the filling from slipping. During the backfilling operations

and in the formation of the embankments, the machines that will put too much load on the structure shall not be used during the compression of these fillings.

Subject to the approval of the Consultant Officer, compaction shall be carried out with vibratory rollers, rubber tire rollers, steel wheel rollers or other machinery suitable and approved for soil compaction. If necessary, the material shall be moistened or aerated to create the humidity that will provide the desired degree of compaction. Each layer shall be compressed in such a way that it does not fall below the maximum density ratio percentage specified below.

Layer to be Compressed	% of maximum dry density according to Modified Proctor Test	
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	Cohesive Materials	Cohesionless Materials
Filling and backfilling under building floors under buildings	90	95
Filling under footpaths and open spaces	85	90
Under the pavements, for the top 30 m	90	95

Support

No additional payment shall be made to the contractor for support work items.

Whenever necessary; shoring shall be made for the safety of workers and for the protection of adjacent embankments and structures, installations and the like. Retaining curtains, supports and slabs shall be removed as the excavations are refilled so as not to cause dents.

The Contractor shall be responsible for all kinds of accidents that may happen to the workers and damage to the works as a result of the formation of dents on the edges of the excavation made for foundation or other reasons. In order to prevent such dents, the Contractor shall either make appropriate slopes to the edges of the excavation area or strengthen the edges by supporting them. Shoring and supporting operations shall be made in accordance with the condition of the ground.

The method of reinforcing the edges of the excavation area must be approved by the Engineer. However, this approval does not relieve the Contractor from liability. If the Engineer requests the bearings to be left in place for safety reasons during the refilling phase after the foundation excavation or piping works, the Contractor shall implement these instructions without any charge.

Reorganizations or any changes in the support system made by the Contractor directly or with the Engineer's directives shall not have any cost impact for the Employer.

Drainage

Since these works are included in the excavation item, no additional payment shall be made for drainage.

Excavation works shall be continued with effective and continuous drainage. No water shall be allowed to accumulate on the site for any reason. Until the concrete and filling works are completed, the water and runoff

accumulating in the foundation or plumbing holes shall be temporarily discharged by pumping, drainage or other approved methods.

Drainage in earthworks shall be done by the Contractor within the scope of the Contract. Excavations shall be carried out in such a way as to ensure continuous and effective drainage of the area immediately surrounding the site, which may affect the area of the site and the work on the site. No water shall be allowed to accumulate in the excavation area.

Foundations of structures and auxiliary trenches shall be kept stable and free of surface water at all times by pumping, dumping or other approved means until concreting and backfilling is complete. Where pumping is used, a backup excavation, site drainage and subsoil protection plan shall be approved by the Engineer prior to commencing construction. The plan shall include recommended measures to keep concrete curing water out of the fill and subfloor areas.

Removal of Excavation Material

Excess excavation material, which the Engineer decides to transport from the construction site, shall be transported to an adequate area agreed by the Contractor, the Engineer and the local administration. It is the Contractor's responsibility to allow materials to be transported from the construction site to the selected area. It is the Contractor's responsibility to obtain the necessary permission from the local authorities for the dumping area of the excess excavation and the dumping fees. Since it is assumed that the contractor has explored the possible dumping sites during the tender preparation period, no additional cost shall be paid due to any distance change, including the change in the transfer site.

After all excavations are completed, all temporary storage and stowage areas must be cleared, drainage slopes must be determined, and the site must be left in good condition according to local government rules.

Transportation and unloading shall be done without harming the environment. Trucks shall be prepared as covered to prevent debris from spilling in accordance with traffic rules.

Some trees may not be suitable for transportation in the site. In this case, they shall be stacked in a suitable place to be indicated by the Engineer.

Imported Compressed Stabilized Fill

Compacted stabilized fill shall be used between the foundations. The filling materials shall be as defined in the Capillary Water Barrier paragraph.

The creation of the stabilized fill shall be carried out in accordance with the drawings.

Stabilized backfill material shall be placed directly on the foundation ground that has taken its final shape as described in the Foundation Ground Preparation paragraph above or corrected as specified in the Foundation Bases and Levelling Reorganization paragraph, in order to provide levelling between foundations and to create a capillary water barrier as stated above. Capillary water barrier shall be compacted until the Engineer's approval is obtained by passing over each layer of the with a hand-operated compression vibrator several times, and a solid ground shall be prepared for the floor to be dumped on it.

Loan materials shall be selected to meet the rules and conditions applicable to the stabilized filling material to be used, with or without a capillary water barrier. The loan material shall be procured from private sources outside the construction site, shall be selected by the Contractor, but shall be subject to the approval of the Engineer. No additional cost shall be paid for the supply, transportation and similar costs of the stabilized filling material.

Sieve analysis of compressed stabilized filler:

Size of Grains Passing the Sieve	(% Percentage)	
	Type-1	Type-2
50 mm	100	100
37.5 mm	85-100	85-100
10 mm	40-70	40-100
5 mm	25-45	25-85
600 microns	8-22	8-40
75 microns	0-10	0-10

The stabilized material shall be natural sand, gravel, crushed stone, crushed slag and crushed concrete or uniform grade well-burned non-plastic shale. The material may be compacted to produce a well-laid dense layer and shall remain within the above rating limits unless specified elsewhere in the Contract. Rocks larger than 100 mm shall be removed.

Natural sand and gravel shall only be allowed in Type 2 material.

The sub-base material shall be spread evenly in layers with a compacted thickness of not more than 200 mm and compacted to obtain a smooth surface finish.

Backfill

Backfilling shall not begin before construction below the final level has been approved, underground plumbing systems have been checked and tested, formwork has been removed, and the excavation site cleared of rubbish and debris.

The construction below the final level mentioned above shall include, but shall not be limited to, the waterproofing and protection wall to be applied to the outer surfaces of the basement perimeter walls.

Backfill shall not be placed on wet floors. The backfill material shall be placed and compacted as described in the Fill and Foundation Ground Preparation paragraph.

Filling and compaction shall not be made on the foundation or retaining walls by heavy-duty machinery at distances smaller than the height between the upper level of the foundation structure and the filling level; the compaction process in this region shall be carried out in layers whose compacted thickness cannot exceed 20 cm and with motorized hand compactors suitable for the quality of the compressed material. The filling material shall be placed carefully around the pipes in a way that will not damage the coatings and windings. It shall be expected that 7 days have passed since the completion of the curtains in order to place the filling material around the foundation curtains. To the extent possible, the backfill shall be made at equal levels on both sides of the bulkheads and shall be raised and a surface slope shall be given to ensure that the waters are removed from the wall.

Maximum attention shall be paid to the compaction of the filling that corresponds to the building entrance floor and under the pavement. Compression tests shall be carried out according to the Tests paragraph.

Rock Excavation

If a rock is encountered during excavation, no additional payment shall be made and the current excavation pose shall be valid.

Appropriate machinery shall be used for rock excavations, but explosives shall not be allowed.

Preservation of Existing Service Lines and Structures

The Contractor shall be responsible for protecting the existing service lines and structures within the construction site against damage and restoring them if they are damaged during construction. Like the existing installation lines and cables, the lines manufactured under this Contract shall also be protected and if damaged, they shall be repaired within the scope of the Contractor's financial responsibility. In the event that the Contractor damages any existing plumbing lines or cables, the incident shall be reported to the Engineer immediately.

Levelling

The areas outside the building shall be levelled in accordance with the project elevations, shall be removed from the building with a smooth slope to provide drainage and shall be kept clean until the final inspection is completed, and the work is accepted.

In addition to these, the top layer of the ground, which is contaminated by the materials such as cement, lime, etc., which is stuck and affected due to the operation of construction equipment shall be ventilated, cleaned and re-levelled.

The stored topsoil shall be placed in equal layers in a ventilated, cleaned and levelled manner.

Earthworks Transportation

No additional or direct payment shall be made for transportation on any part of the work, transportation shall be included in the bid.

4.1.2. CONCRETE WORKS

Concrete

Concrete Works specified herein shall include material procurement, mixing of concrete, formwork, reinforcement, placing, compaction and curing of concrete, and cleaning of the site after completion of works. In general, TS 1247 or DIN 1045 must be followed when mixing, placing and curing concrete.

The prices entered in the quotation shall fully cover all labour, collapse, travelling, materials, additives, temporary works, on-site stocking, sampling and testing and all other costs, all risks, and work described in the obligations and obligations set out or implied in the Contract Documents.

Concrete Casting Record

The contractor shall keep accurate and up-to-date concrete records for each day that parts of the works are concreted:

- Date, time, weather and temperature;
- The results of all concrete tests, including determining which part of the works the sampled material represents;
- Concrete class, volume of concrete placed and number of batches used for each location.

The laboratory where the concrete test must be performed shall be approved by the Engineer and shall be accessible to him/her at any time.

Concrete Production Organization at the Construction Site

At the beginning of the contract, the Contractor shall submit to the Engineer a Method Statement detailing his/her proposals for the organization of the concreting activities at the site. The concrete to be used in the works must be ready.

The Method Statement shall contain the following items:

- The proposed plant, including the plant capacity and the capacity to continuously supply concrete.
- Quality control procedures for concrete pouring by the contractor.
- Transport and placing of concrete.
- Formwork details, including the times and procedure for installing/removing formwork to temporarily support beams and slabs.
- Protection and curing.

Ready-mixed concrete

Concrete supplied from the ready mixed concrete supplier can be used in the Works subject to the written approval of the Engineer. It may allow the use of ready mixed concrete, provided that the mixing ratios and full details of workability are submitted for preliminary approval.

This approval shall not be granted until the Engineer is satisfied that the organization and control of the manufacture and delivery of all ready mixed concrete is satisfactory. Ready mixed concrete shall comply with TS EN 206+A2.

The engineer shall request a slump (conical collapse) test before the concrete pouring works and may request a test cylinder be taken from each truck. Performing the slump test is under the responsibility of the Contractor, no additional payment shall be made for this.

Each shipment shall be accompanied by a transportation compass showing the mixing time, the destination and the water additive and concrete class of each material.

Placing and Compacting Concrete

Preparation Studies:

Written approval of the Engineer shall always be obtained before the concrete is placed in any part of the work. All construction tools required or may be required during concrete works and for curing shall be in place and the Contractor shall be fully prepared for the work. The Engineer's approval for concrete placement shall be granted only after such preparations and other relevant requirements of the Technical Specification have been carried out and adhered to.

If necessary and/or directed by the Engineer, the Contractor shall cool any mould that has overheated or exceptionally dried out due to prolonged exposure to the sun. The contractor shall ensure that all moulds retain sufficient moisture and do not shrink or warp. Wetting or spraying of all moulds shall be done with potable water.

While pouring concrete in hot weather, the conditions specified under the title of "Concrete Casting in Hot Weather" shall be complied with. The Engineer may outright prohibit the placing of concrete in any formwork that he/she believes has become excessive and/or dry and whose condition may damage the quality and strength of the concrete. No additional payment shall be made for cooling or soaking the mould. All formwork, pavement, reinforcement and exposed surfaces of the adjacent concrete surface shall be thoroughly cleaned and free of dust, debris, oil that may be harmful to the fresh concrete.

Pouring Concrete:

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

The concrete shall be poured directly into the mould as soon as possible without the need for rework and after mixing, and in any case not more than 45 minutes before it sets for the first time. If there is any delay after mixing and the concrete has started to set, it shall not be used in the works and shall be removed from the site. Concrete shall not be dropped from a height exceeding 1.5 metres, unless otherwise agreed by the Engineer on the basis of satisfactory on-site trials.

Concreting of any section or unit shall be done in a continuous process up to the construction joints. Concreting shall not be interrupted without the approval of the engineer. Where concrete deposition needs to be interrupted, measures shall be taken to ensure that subsequent sections of concrete adhere satisfactorily to that previously placed.

When delays of more than one hour occur between concreting operations on a workpiece or work unit, concreting shall, in the Engineer's view, be resumed when sufficient time remains for the previously placed concrete to cure and the resulting joint filled. Any time the concrete is placed, a competent steel anchor shall always be available to adjust and correct the position of any reinforcements that may be displaced.

Transport of concrete directly over the fixed rebar steel during concreting shall not be permitted unless appropriate measures are taken to prevent displacement or damage to the reinforcement.

Casting as a Layer:

Concrete shall be poured in approved quantities and in horizontal layers at a depth to allow it to fully coalesce with the following layers by vibration, bottling, compaction and ramming. If for unforeseen reasons, concreting must be stopped before the completion of a section, construction joints shall be created as specified and further concreting shall be stopped for at least 24 hours.

Pouring Concrete in Hot Weather:

The Contractor shall carry out "Concrete Casting in Hot Weather" operations in accordance with TS 1248 or ACI 305. The contractor's methods shall comply with the recommendations in this document as amended and added below.

The contractor shall take great care to prevent cracking of concrete or surface cracks in hot weather. The Contractor shall ensure that the concrete is placed early in the morning or late in the evening, according to the Engineer's instruction.

The Contractor shall pay particular attention to the conditions specified here for curing. The formwork shall be shaded so that it is not exposed to direct sun both before the concrete is placed and during its setting. The Contractor shall take appropriate measures to ensure that the reinforcement in the section to be concreted is kept at the lowest possible temperature.

The concrete at the time of placement shall have a temperature of not more than 32°C. If necessary, the Contractor shall cool the aggregates and mixing water by methods approved by the Engineer.

When required, the Contractor shall design, install and operate a cooling system in which cooling water is pumped through a piping system to reduce the heat of hydration during concrete pouring. The proposal for such a cooling system shall be submitted to the Engineer's approval long before the concreting works.

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

Concrete Casting in Cold Weather:

Cold weather is defined as the condition present in Works where one or both of the following conditions are present:

- The air temperature being below 2°C at the time in question;
- Average daily air temperature below 5°C for three or more consecutive days.

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

Concrete pouring can continue in cold weather, provided that special precautions are taken to ensure that the surface temperature of the concrete during placement is not less than 5°C for at least the following period:

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

2 days when fast-setting Portland cement.

Such measures may include:

- Heating of aggregates and water, provided that the temperature of each does not exceed 60°C. The water and aggregates shall be mixed long enough to achieve a uniform temperature before the cement is added.
- Heating the indoor air that needs to be kept moist by completely surrounding the freshly poured concrete with a blanket. Hot or dry air currents must not be directed to surfaces.
- Sealing formwork and finished concrete surfaces.
- Providing curtains to protect concrete from air currents.

The Contractor shall provide the Engineer with details of the measures he/she proposes to take to protect the concrete from the effects of low temperatures and the methods he/she proposes to use to evaluate the correct timing at which this protection can be removed. Concreting shall not be made in cold weather without the approval of the Engineer for the suggested measures.

Concreting in Adverse Weather:

Concrete pouring shall not be allowed during heavy rain or snowfall or when the air temperature drops below 2°C or when the concrete temperature rises above 32°C.

When the air temperature exceeds 25°C, concrete pouring shall be allowed to be undertaken only after special measures approved by the Engineer are taken, such as cooling the aggregates and moulds with a cooling system that provides continuous spraying of water to reduce the temperature of the water to be used in the mixture or to prevent premature setting of the concrete, and installing temporary awnings on the work area. During the concreting processes, the temperature of the placed concrete shall be recorded.

Compaction of Concrete:

The Contractor shall attach utmost importance to the compaction of concrete for the structures to be produced. At the end of compaction, a waterproof concrete with maximum density and strength must be obtained.

The concrete shall be well compacted during the placing process and thoroughly machined around the reinforcement and embedded fixtures, into the insides and corners of the formwork.

Mechanical vibrators shall be of the immersion type with a frequency of not less than 8000 vibrations per minute approved by the Engineer. A sufficient number of vibrators shall be used to process the maximum concrete pouring rate with 50% spare for spare units at any period of concreting. All operators using vibrators shall be trained in their use.

Vibrators shall be placed vertically and at regular intervals into the uncompacted concrete. In case the uncompacted concrete is in one layer above the freshly compacted concrete, the vibrator must be allowed to penetrate the previous layer approximately 100 mm vertically. Vibrators shall be pulled slowly from the concrete mass so that there are no voids. Internal type vibrators shall not be placed in the concrete randomly or by rote, and concrete shall not be transported from one part of the work to another by means of vibrators. Vibration must not be applied directly or through reinforcement to sections or layers of hardened concrete at distances large enough to cause segregation of the concrete in the formwork.

Care shall be taken not to damage the reinforcement and fasteners attached to the formwork with immersion vibrators, and not to cause any damage to the set concrete or the inner surface of the formwork. In congested reinforcement areas, it may be necessary to use small diameter vibrators and the Contractor shall supply vibrators of appropriate sizes for each part of the work. Vibration of concrete by beating with hand tools is not allowed.

When placing concrete on the horizontal or inclined members of the waterstop, they shall be lifted and placed and compacted slightly higher than the bottom of the waterstop before releasing the waterstop to allow the concrete to be fully compacted around the waterstop.

Vibration time shall be limited to the time required to achieve satisfactory compression without causing segregation. Vibration shall not be continued after water or excess mortar appears on the surface.

Concrete shall not deteriorate after compaction and placing in its final position. Partially cured concrete shall not be used and shall be removed from the site prior to final placement.

Placing Concrete on the Previous Work:

If concrete is to be poured next to or over previously completed work, the surface of the old concrete shall be completely wire brushed, the weak parts shall be broken off, and it must be cleaned under pressure with water and air to reveal the surface of the aggregate and remove all weaknesses. Special care must be taken to ensure that the new concrete is fully compacted and adhered to the old concrete.

Protection and Curing of Concrete:

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

Maximum and minimum ambient temperatures and humidity shall be measured and recorded daily by the Contractor. The records shall be processed into daily reports and made available for the Engineer's review.

All exposed surfaces shall be covered with a wet burlap as finishing followed by a reflective polyethylene sheet. These shall be securely fixed and supported from the edges to avoid damaging the finished concrete surface. As soon as possible, the burlap and polyethylene shall be lowered in close contact with the concrete and securely weighted or fixed to prevent wind blowing from below. The burlap sheet shall be kept moist at all

times and checked at intervals not exceeding 6 hours. Concrete shall be kept moist on exposed surfaces for not less than 72 hours or as approved by the Engineer.

Alternative concrete protection and curing methods such as ponding where water shall be kept at a depth of at least 50 mm can be approved by the Engineer. In any event, liquid curing membranes shall not be used on exposed surfaces or where the screed will be removed and aggregate exposed to provide a satisfactory bond to accommodate more concrete or mortar screeds. Liquid-cured membranes shall not be used in areas where mortar, resin mortar or joint filling shall be made.

Adequate methods shall be available at the workplace to provide full protection to a concrete pour before concreting begins.

In very hot weather, the Contractor may be requested to cool the mould containing concrete by spraying water. This shall be done when instructed, regardless of any other measures the Contractor may have taken to cure the concrete. All material spraying equipment and sufficient water for curing shall be available on site before any concrete casting begins.

Faulty Working:

Segregated or poor-quality concrete shall be broken down immediately upon Engineer's written instruction and reconstructed in an approved manner at no extra cost. Imperfect works shall not be allowed to be plastered. Any leaks or cracks shall be sealed by injection with synthetic resin or other suitable methods approved by the Engineer.

Gro Concrete (Sub-base):

A blanking layer consisting of at least 100 mm lean concrete shall be placed under the foundations that are shown in the drawings or are requested by the Engineer. The blanking layer shall be allowed to cure prior to placing the structural concrete for the flooring.

Blinding smoothed surfaces in excavations and trenches includes placing, compacting and scanning the surfaces specified in the Technical Specification.

Blanking shall be measured in square metres, net based on the minimum trench width specified for earthworks and the size of structures shown in the approved Drawings.

Loads on Concrete Structures:

No external load of any kind shall be applied to any part of the concrete structure before the 7-day sample strengths are finalized and approved by the Engineer.

Field Concrete

Joint Fillers and Fills

Unless otherwise specified in the plans, the Contractor shall use Class 5 or Class 8 grouting materials and sealant or approved and other fillers of the size, shape and type shown on the plans in accordance with DMS-6310 "Joint Sealant and Sealants" (or equivalent).

Sawing Equipment

The contractor shall provide power driven concrete saws for cutting the joints shown in the plans. Concrete saws with backup power shall be used during concrete cutting operations. Adequate lighting shall be provided for cutting at night.

Grinding Equipment

When necessary, specially designed, self-propelled electric grinding equipment shall be used to level and texturize the concrete pavement using circular diamond blades. Automatic levelling-controlled equipment that can grind at least 90 cm wide and longitudinally without damaging the concrete shall be used in each pass.

Joints

The contractor shall apply the following method;

- Shall install the joints as shown in the plans,
- Shall clean and seal the joints,
- Repair excessive swelling of the joint saw groove with an approved method prior to installing the sealant.
- Before putting the platform into use, shall close all joints,
- When the concrete is stopped placing, it shall install a rigid transverse bulkhead for the reinforcing steel that is accurately notched and shaped to the cross section of the pavement.

Laying and Finishing

The contractor shall apply the following method;

- Shall process the entire concrete pavement with approved self-propelled equipment,
- Shall use powered vibrators, powered levelling and screed or approved alternative equipment.
- Shall level the concrete without surface voids, using the transverse finishing equipment to compact and hammer the concrete to the required cross-section,
- Shall use concrete with a consistency that will ensure that all finishing processes are completed without adding water to the surface,
- Shall use the minimum amount of water vapour needed to maintain a moist surface,
- In line with the engineer's request, the concrete shall be vacuumed and finished.

4.1.3. MOULD AND CONCRETE FINISHES

Formwork works shall include all temporary forms to form the concrete and any necessary temporary structures to support these forms.

Formworks shall be of suitable design and of sufficient construction to carry loads without excessive bulging, distortion or deflection. The formwork shall be constructed in such a way as to prevent the loss of water or grout from the concrete. Particular attention must be paid to the formwork where joint or external vibrators are used to compact the concrete.

Materials for Mould

The mouldings shall be made of quality plywood free of loose knots, ripples and warped surfaces. The thickness of the formwork plywood shall not be less than 17.5 mm, the plywood shall be resistant to deterioration by water, fixed and joined to give a perfectly smooth and uniform finish to the concrete. Alternatively, with the Engineer's approval, the shutter can be made from:

- Metal mould with correctly aligned and tight-fitting connections,
- Wooden formwork of plywood or chipboard with a thickness of 5 mm.

Fixing the Moulds

Formwork shall be fixed to a perfect line and flatness, perfectly flat with no cracks in the joints, and securely supported and fixed in such a way that it holds its position without displacement or deflection during placing and compaction of the concrete. All joints shall be horizontal or vertical in the same way.

Coating to Prevent Sticking

All formwork to be done under the contract shall be treated with an approved formwork oil or solution prior to use to prevent concrete from sticking. This oil or solution shall be carefully applied so that the reinforcement or pre-placed concrete is not contaminated by the oil or solution. No material shall be used that will stick to the concrete or discolour it.

Cleaning and Reusing Moulds

Before any concrete is poured, the moulds must be properly cleaned and flushed with water and compressed air to remove sawdust and all other foreign matter. Then all the water shall be drained and wiped from the moulds. Residues from the previous concrete shall be carefully cleaned with a scraper and a smooth surface shall be formed.

Under no circumstances shall concrete be poured into the formwork before the formwork has been approved by the Engineer. If the moulds are to be reused, all surfaces shall be cleaned and completely free of any concrete or mortar residue. If, in the Engineer's opinion, the moulds are not acceptable for reuse, they shall either be properly repaired or replaced with suitable new moulds.

Removing Moulds

The formwork shall be designed to allow easy removal without hammering or the application of leverage against the surface.

The time elapsed between placing the concrete and removing the formwork shall be as approved by the Engineer and in any case shall not be less than the time specified in TS 500 or DIN 1045, and the slab edge formwork times shall be at least 3 days.

The Contractor has the right at any time to delay the removal of the formwork if, in the Engineer's opinion, the contained concrete has not reached sufficient hardness.

In cases where the average temperatures are below 4°C, the removal period is extended by the number of days the temperature drops below 4°C. The times given as days are 24 hour days.

Alternatively, the removal of formwork shall be determined by the demanded compressive strength of the concrete. In case of a negative situation in the concrete productions related to the moulds that are dismantled prematurely, the Contractor shall re-make the relevant production without demanding any additional cost.

Finishing Concrete Surfaces

There shall be no cracks, sand flows, segregation, porosity and mortar/mould loss on all surfaces.

In-situ Concrete Dimensions and Surfaces

Formwork and concreting work shall be such that the concrete normally does not require trimming, the surfaces are perfectly compacted, smooth and uneven. Concrete surfaces for various finishes may in no case exceed ± 12 mm tolerance in terms of size and level.

Healing Treatments on Concrete Surfaces

Any improvement to concrete surfaces shall be agreed with the Engineer and carried out without delay, following the inspection to be made immediately after the formwork has been dismantled.

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

Any minor surface defects shall be repaired to the Engineer's satisfaction immediately upon completion of curing. Remedial measures may include, but are not limited to:

- The holes left for the formwork supports shall be thoroughly cleaned to remove all loose material and the edges shall be roughened if necessary to ensure a satisfactory joint. It shall then be filled with dry mortar.
- Pinhole bubbles, surface discoloration and minor imperfections can be rubbed with bagging and cement immediately after the mould is removed.
- Sudden and gradual irregularities can be rubbed with carborundum and water after the concrete has completely cured, and curing is applied according to the principles specified in the "Concrete Protection and Curing" section.
- Minor imperfections and minor segregations shall be chipped to a depth of at least 25 mm perpendicular to the concrete surface and filled with dry mortar.
- Cracks shall be repaired using epoxy-based materials or materials approved by the Engineer.

All other defects shall be deemed too extensive to allow for satisfactory repair and the concrete containing the defect shall be broken and replaced.

4.1.4. STEEL WORKS

Reinforcement Types, Quality and Storage

Steel reinforcement for concrete shall consist of ribbed steel bars or steel mesh. Steel bars shall consist of deformable bars suitable for ST III type (S420a (with characteristic tensile strength of 420 MPa)) as specified in TS 500 and TS 708. Wire mesh reinforcement shall comply with TS 4559 or DIN 488.

If deemed necessary by the Engineer, the Contractor shall submit the detailed drawings and calculations of the reinforcement to the approval of the Engineer. Paint colour of steel, various iron works and sheet metal fabrications shall be determined by the Engineer.

The Contractor shall prepare the steel reinforcement test samples to be used in the Works. Test specimens shall be randomly taken from each lot shipment in the presence of the Engineer and shall be of sufficient size to perform the tests described below. The samples shall be tested in an approved laboratory and certified copies of the results of the tests shall be submitted to the Engineer. The samples shall be tested for bending and tensile properties and the wire mesh is also to be tested for weld shear strength. No additional payment shall be made to the Contractor for these tests, they are included in the offered unit price.

Test methods and requirements shall be made according to TS 4559, or DIN 488 T3, 488 T5 and 488 T6. No steel reinforcement shall be used in the Works until the test results are approved by the Engineer. If ordered by the Engineer, the testing procedures shall be repeated at the Contractor's expense for the supply of any new equipment during the Works.

Storage of reinforcement shall be on racks or supports away from the floor. Reinforcements of different types and sizes shall be kept separate.

The Contractor shall fix the reinforcement according to the Drawings and/or the issues specified in TS 500.

Transports for steel reinforcement, structural steel and various iron works shall be included in the offered unit price.

Protection and Cleaning

The reinforcement shall at all times be protected from damage and be free of dirt, loose mill scale, rust deposits, paint, oil or other foreign matter when placed in the structure. All reinforcing steel shall be carefully cleaned of any frozen or partially set concrete, form oil or paint that may have accumulated during the construction of adjacent works.

Bending Rods

Steel reinforcement shall be cut from flat bars free from crushing, bending or other damage and shall be cold bent by experienced, competent workers. Bars with a diameter greater than 16 mm shall be bent on a bending machine designed for this purpose and approved by the Engineer. Any reinforcing bar that has already been bent shall not be re-bent at the location of the previous bend.

Cutting of Steel Mesh

Wire mesh reinforcements shall be cut straight from mesh plates. The use of wicker plates and small pieces that are not cut properly shall not be allowed.

Overlap of Ribbed Bars and Wire Mesh

Lapping operation on ribbed bars and steel mesh is permitted by the Engineer, provided that it is in accordance with the technique. Reinforcement welding shall not be performed unless authorized by the engineer, welding and tests for reinforcement shall be in accordance with the definitions specified in TS 500.

Unless otherwise specified, the overlap length of the rebars shall be at least forty (40) times the diameter of the larger bar and laps shall be applied in stages.

The overlapping length of the steel mesh shall be applied as specified in TS 500, with at least 3 meshes in the running direction and at least 1 mesh in the distribution direction.

Fixing the Rebar

All reinforcing steels shall be correctly placed and fixed during the placing of the concrete, and shall be held in a fixed position during the concrete pouring.

To protect the reinforcement from contact with moulds or adjacent reinforcement, the spacers shall be of dense precast concrete blocks or rigid plastic material in shapes and sizes approved by the Engineer. The use of pebbles, broken stone chips or bricks or other materials shall not be permitted. The reinforcements shall be tied and fixed in the correct position using steel binding wire. Except for any other requirement, the reinforcement shall be fixed in such a way that the reinforcing steel supports its own weight and any load that may come upon it during construction, without any displacement, bending or movement.

In floors with two or more layers of reinforcement, parallel steel rebars shall be supported in situ using steel stands. To support the lean concrete or formwork reinforcement layers, a spacer shall be placed on each stand.

The distance between any two parallel steel bars, excluding laps, shall not be less than the nominal aggregate size of 5 mm.

All reinforcements exposed to weather conditions for a long time before starting concrete shall be covered with polyethylene holding tape, cement grout or other materials to the surrounding concrete. If rust stains

occur on permanently visible surfaces despite these precautions, it shall be removed immediately upon the Engineer's directive.

Spacer Distances

The spacer distance shall be 50 mm for reinforced concrete foundations and 25 mm for beams and columns.

Tolerances

Reinforcement placement tolerances shall be +/- 10 mm.

Pre-Concrete Approval

After all the reinforcement is fixed in place, it shall be checked and approved by the Engineer before any concrete is poured. Any concrete placed in violation of this requirement shall be removed together with the reinforcement and remanufactured by the Contractor at his/her own expense, if instructed by the Engineer.

4.2. SPECIAL TECHNICAL SPECIFICATIONS FOR ARCHITECTURAL WORKS

All goods and materials used in the works shall have a TSE certificate with the criteria established for their own manufacturing standards. All goods and materials to be supplied by the Contractor and included in the Works shall be new, unused and of the most up-to-date design.

The Contractor shall submit to the Engineer the list of material proposals required for the execution of the Works. Samples shall also be made available at the Engineer's request. The Contractor shall obtain the Engineer's written approval before using the materials.

Materials supplied thereafter shall be in accordance with the quality of the samples examined by the Engineer.

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

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

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

Unless otherwise specified in the contract, the use, installation, application or fixation of materials and components shall comply with all applicable recommendations from the manufacturers. Where appropriate, the Contractor shall make use of the technical advisory services offered by the manufacturers.

4.3. SPECIAL TECHNICAL SPECIFICATIONS FOR ELECTRICAL AND MECHANICAL WORKS

The contractor is responsible for the materials and installations within the work until the final acceptance of the work. The Contractor is also obliged to install all systems in the building and other structures in a complete and working condition and to promptly repair any faults, excluding usage faults, free of charge, during the 12-month defect liability period between temporary acceptance and final acceptance. In case the necessary repair works cannot be completed within one month, the parts not repaired within this period shall be repaired by the Employer on behalf of the Contractor and shall be deducted from the Contractor's Performance Guarantee.

Visual Inspection

All materials to be used in mechanical installations shall be subjected to a visual examination by the Engineer to verify that the materials are not broken, rusty, cracked or old.

Functioning Inspection

All materials to be used in mechanical installations shall be subjected to functional examination with tests without any cost impact to the Employer.

Warranty Period

All materials to be used in mechanical installations shall have a commercial warranty of two (2) years from the manufacturers as of the temporary acceptance of the work.

4.4 CONSTRUCTION SPECIAL TECHNICAL SPECIFICATIONS

GENERAL:

1. The works specified in the site list according to the unit price descriptions of the Ministry of Environment and Urbanization, other institutions and the provisions of the special technical specifications shall be carried out and evaluated under the following conditions.
2. For the realization of the service, the contractor shall accept that the following items will be included in the tender price.
 - Labour and all labour related expenses
 - Materials, ready-made products, goods and all related expenses
 - All equipment expenses of the Contractor, including but not limited to central station, scaffolding, tools, equipment, motor vehicles, construction machinery and similar equipment.
 - All transportation expenses, such as transportation, assembly materials and delivery costs of the products to the places where the construction work will be carried out, up to and within the places where the construction work will be carried out.
 - Expenses for preparation of all mounting methods and mounting materials to be made in all kinds of infrastructure and environment, and bringing them to the construction site
 - Expenses of de-assembly and re-assembly on site of fabricated productions outside the construction site
 - Material waste
 - Working at any location and height
 - Small and isolated jobs
 - Protection of the work being done or finished with materials against bad weather conditions, fire, accident etc.
 - Protection of the construction site and work against all kinds of flooding
 - Approved application projects required for the execution and completion of the work,
 - All other work, compound and auxiliary operations shown or expressed in detail projects, drawings and/or technical specifications
 - Contractor overhead and profit
 - The expenses of the following items shall be included in the whole work, except for the items for which the unit price has been given by the contractor.
 - Workplace safety and administration, including temporary facilities and works
 - Water costs
 - Electricity charges
 - Safe discharges of sewage and water
 - Temporary use facilities of the administration, controlling authority and contractor
 - Temporary roads, transportation to the workplace
 - Temporary fences, curtains, signs, boards, sidewalks, guardrails and the like
 - Application and announcements
 - Safety, health and well-being of employees
 - Traffic signs and management

- Noise and environmental pollution control, fire precautions, and other general and mandatory measures
 - Removal of garbage, protective coating, packaging, environmental cleaning and cleaning of the workplace at the end of the work
 - Commissioning and starting procedures, including energy and fuel costs
 - Laboratory experiments including material samples, laboratory and equipment supply
 - Making production drawings, preparing operation and maintenance booklets
 - Control studies, building placement studies, application
 - Preparation of progress photos and albums
 - Other information and data required in the specification
3. All kinds of materials required for manufacturing shall be brought to the construction site and protected from adverse environmental and weather conditions.
 4. Road, infrastructure, pavement, paved area, green area, landscaping, signage, traffic light, etc. that are removed, deteriorated, damaged during the construction of constructions shall be restored to its original state. Reparations shall be made in a way that will maintain the continuity and safety of the services (infrastructure, etc.), without any inconvenience, restriction or hindrance to the service owner, and in a way that will serve as before unless a change is necessary.
 5. During the construction, the dumping place where the materials from the excavation, demolition and dismantling are poured shall be corrected.
 6. All excess materials that arise due to activities during construction shall be considered waste and shall be removed from the construction site within a reasonable time after their arising. The contractor is responsible for their removal from the construction site and their disposal by transporting them. The expenses incurred for the transportation or disposal of waste materials shall be borne by the contractor.
 7. The contractor company shall take the necessary safety measures at the construction site, shall display appropriate warning signs for occupational safety, and shall also arrange the buildings where the personnel employed at the construction site stay in accordance with the occupational health and safety regulations.
 8. Any transportation cost or transportation price difference shall not be paid under any name whatsoever for Construction, Landscape, Mechanical Installation or Electrical Installation, etc.
 9. The contractor is responsible for constructing and maintaining all temporary roads, walkways and structures necessary for the performance of the work. Upon successful completion of the works and thereafter, all temporary roads, walkways and structures shall be removed.
 10. The Contractor shall not pollute the construction site or its environment, and shall not unnecessarily disturb the land, roads and other structures. The construction site shall be surrounded by fences and curtains and the entrances shall be controlled. The construction site shall always be clean and tidy.
 11. The Contractor shall make every effort to ensure the health, safety and welfare of its employees and other personnel at the construction site, and to ensure the satisfaction of the Administration in this regard. All accidents that may occur during construction are the sole responsibility of the contractor.
 12. If the Administration decides that the contractor's working method is unsafe, safety barriers or other safety elements, security and rescue equipment are insufficient; the contractor shall change the working method, increase the security measures or provide rescue equipment according to the given instructions. Such instructions shall not relieve the contractor from other obligations under the contract.
 13. The Contractor shall provide and install sufficient temporary lighting and electrical energy for all necessary parts of the works and shall take measures to ensure the safety of all personnel regarding these installations.
 14. The Contractor shall provide sufficient lighting accepted by the Administration for the proper execution and control of the works. If the Administration does not find this lighting sufficient, the contractor shall make the required additional lighting arrangements.
 15. Noise and disturbances to the environment shall be kept at a minimum and reasonable level.
 16. The Contractor shall take all necessary precautions to keep all public roads and pavements near the project

site clean and away from debris that may occur from construction site activities.

17. The productions related with Construction, Mechanical Installation, Electrical Installation, Landscape Unit Price Pos numbers (Ministry of Environment and Urbanization, Provinces Bank, Municipalities, Highways, Ministry of National Defence, TEDAŞ, DSI, Türk Telekom etc.) shall be made according to the description and construction conditions specified in the General Specifications, Technical Specifications and Unit Price Descriptions of the relevant public administrations. In the construction of other Special Productions, the description and construction conditions in the Special Technical Specifications in the Tender Documents for this work shall be followed.
18. Workmanship shall be of first class and shall comply with the highest quality workmanship. Compliance with the standards in the Technical Specifications shall be ensured. Productions that are not made in accordance with the specifications shall be broken and shall be made again. No compensation shall be paid for broken productions.
19. In any part of the construction work, if natural gas, water, wastewater, electricity, telephone, cable TV, drainage and similar the infrastructure service is encountered, the contractor shall stop the work immediately and inform the Administration and the authorities. The Administration is not responsible for damage to existing infrastructure facilities as a result of the work of the contractor or its subcontractors. Any damages shall be borne by the contractor.
20. In constructions, a sample section must be built at the beginning of each production, and the production must be continued after the approval of its suitability by the administration and the project author. If there is a faulty production in the construction, it shall be broken and rebuilt in accordance with the project and specification.
21. Special productions shall be made in accordance with the items specified in the relevant technical specifications and a sample section shall be made, and the production shall continue after its suitability is approved by the administration.
22. The Contractor shall manufacture all retaining walls specified in the Layout Plan at the specified heights in the appropriate dimensions in the static project. Railings made of 80 cm iron pipes on a 70 cm reinforced concrete wall, as shown in the site plan, shall be built on the entire retaining walls and all of the outer borders of the animal market and after this, it shall be painted.
23. All paddock areas and outdoors areas of the Animal Market shall be filled with 20 cm high single row steel mesh field concrete (C-20) as shown and shall be smoothed by polishing by helicopter.
24. The Contractor shall allocate one passenger car, with the fuel to the account of the contractor, which is not older than 3 years, to the administration for the purpose of carrying out the supervision services of the work within the scope of the work. Following the temporary acceptance of the work, the vehicle shall be returned to the contractor.
25. The necessary procedures and construction works for the completion of all the works within the scope of the contract and for bringing the facility into a fully operational condition, no matter if it is implied or not in the contract documents, whether it is stated partially incompletely or incorrectly, or whether it is not stated clearly in these documents but just implied, shall be made by the contractor within the scope of the proposal.

SECTION 5A.1 SPECIFICATIONS FOR ITEMS/POSE DEFINITIONS

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

Whenever item/pose is related to an item/pose number from the official books² published by Turkish public institutes, the definition in this specification shall prevail for any inconsistency. In case of vagueness/absence of an issue in the item definition in this specification, the official definition shall prevail for only the vagueness/absence.

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

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

² Official books valid for those specifications are published by;

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

Civil and Architectural Works

Pose No	Pose	Unit
Civ01	Foundation and sub-foundation filling under construction, industrial productions and field concretes by compacting the stabilized material (08.008) with a vibrating roller	m ³
Description/ Specification	<p>Technical Description: After the ground water of the building, industrial productions and field concrete subfloors to be filled is dried and levelling is completed, the stabilized material is prepared in accordance with the principles and conditions in the unit price description No. 08.008 and is figured on the side of the place where it will be placed, by taking the stabilized material from the figure and moving it with a machine to the place where it will be laid, cleaning of root, grass, clod and stones, 15 cm laying and watering by machine in layers, 4-5 tons of static weight, 8-9 tons of dynamic force vibratory roller compacted at the request of the administration, (The density of the core material to be taken from compressed stabilized material is min. 1,960 tons/m³) including all kinds of workmanship, water, material and losses, machinery, tools and equipment expenses required for the transportation from the quarry to the workplace (excluding the transportation cost) 1.100 m³ with stabilized material at the compression rate requested by the administration, filling of trenches and foundations with stabilized material compacted by vibrating roller; 1 m³ price:</p> <p>MEASUREMENT: It is the amount in cubic meters remaining after deducting the external volumes of the industrial productions in the fill section from the volume calculated on the basis of the cross-sections processed on the approved projects of the filling of the foundation, sub-foundation and field concretes with stabilized filling, or the attachments with a report issued by the authorities.</p> <p>NOTE:</p> <p>1) The amount based on the transportation of stabilized filling material compacted by vibrating roller; It is the amount in tons obtained by multiplying the compressed stabilized fill volume calculated over the dimensions in the approved project or determined in the attachments, with the 1.10 swelling coefficient and the amount in cubic meters multiplied by 1.8 tons/m³ (density of the stabilized material in the figure).</p> <p>2) This unit price;</p> <p>a- is applied in the foundation and sub-foundation fillings of buildings, industrial productions and field concretes, which was decided by the General Directorate or Authorized Units to be compacted with a vibrating roller, whose project has been approved or the report has been determined and the report has been approved.</p> <p>b- is not applied if the compaction is not actually done with a vibrating roller.</p>	
Related reference posenumber book	43.610.1022 / İlbak	

Pose No	Pose	Unit
Civ02	Making formwork scaffolding from steel pipe (between 0,00- 4,00 m)	m3
Description/ Specification	<p>Technical Description: When deemed necessary by the administration, the erection and dismantling of the steel pipe carrier scaffolding for the building and industrial production, the height of which falls within the scope of this pose, according to its standard and approved project, by taking the necessary safety precautions, all kinds of materials and losses, loading at the construction site, horizontal and vertical transportation, unloading, workmanship, tool and equipment costs, contractor overheads and profit included, 1 m³ price: Measurement: 1) The gap between the formwork face of the building and industrial production within the scope of this measure and the ground to which the scaffold is attached is calculated. If the roof is inclined, the</p>	

	average altitude is taken as a basis. 2) When this pose is applied to tunnels or galleries, the gap between the lower surface of the gallery or tunnel arch and the ground to which the scaffold is attached is calculated. 3) This pose is applied for the water tank construction scaffolds within the scope of this measure. In this case, the gap between the ceiling of the concrete water tank and the floor to which the scaffold is attached is calculated. 4) The required width of the carrier scaffolding for the frame, beam and columns that are not built with the flooring is determined by the administration.
Related reference pose number book	15.185.1005/ Ministry of Environment, Urbanization and Climate Change

Pose No	Pose	Unit
Civ03	Construction of a fully secure, exterior scaffolding consisting of pre-built components. (Between 0,00- 51,50 m)	m2
Description/ Specification	<p>Technical Description: The price per 1 m² of installation and dismantling of the full-security exterior scaffolding, which will be used as a fixed item for the productions to be made on the exterior of the buildings, in accordance with the legislation, (all legislation including occupational health and safety law, occupational health and safety regulation in construction works, health and safety regulations in the use of work equipment, communiqué on the exterior scaffolding consisting of wood and pre-built steel and aluminium alloy components) material and design standards, in accordance with the project, consisting of pre-built components, whose load class is min. 4, by taking the necessary safety precautions, all kinds of materials and losses, loading at the construction site, horizontal and vertical transportation, unloading, workmanship, tool and equipment expenses, contractor general expenses and profit included: Measurement: The upper level of the scaffolding is taken as the height and the length at the base is taken as the width, and the multiplication of the width and height is calculated as the scaffolding area. Note: 1) If there is a production that will require a work scaffolding on the ceiling in the area surrounding a space; scaffolding fee is additionally paid for the ceiling, but scaffolding fee is not paid for the walls. 2) The scaffolding established in a location is considered to be established for the construction of all the productions to be made at that location and requiring the establishment of a scaffolding, and the scaffolding fee is paid once for this location. 3) This pose applies to the construction of walls higher than 3.00 meters and to individual constructions of this nature. 4) Constructions with a height of 3,00 metre or less than 3.00 meters will not be charged a scaffolding fee. 5) When necessary, security measures are taken with net, tarpaulin etc. No extra fee is paid. 6) The fact that the scaffolding was built in accordance with the standards, legislation and project will be recorded in a report together with the building inspection officer and the contractor and this report will be submitted to the administration for approval. In addition, the scaffolding will be transferred to CD in a way to show the general and detailed status and this CD will be attached to the minutes. This report and CD must be attached to the payment documents, and the scaffolding fee is not paid until these issues are fulfilled. 7) The material coming out of the scaffolding belongs to the contractor.</p>	
Related reference pose number book	15.185.1013 / Ministry of Environment, Urbanization and Climate Change	

Pose No	Pose	Unit
Civ04	Making a satin plaster coating (average 1 mm thickness)	m2
Description/ Specification	Technical Description: 1 m ² price of carefully cleaning and deburring the surfaces to be satin polished, applying the satin gypsum mortar prepared after cleaning to the surface with an average 1 mm thickness using a steel trowel, sanding, cleaning from dust, all	

	<p>kinds of materials and losses, loading, horizontal and vertical transport, unloading, workmanship, contractor's overhead and profit included.</p> <p>Measurement:</p> <p>1) According to the dimensions in the project, all plastered faces (including the gap sides) are calculated.</p> <p>2) Joinery mouldings and plaster surfaces under wooden skirting, if any, are taken into account.</p> <p>3) All cavities and other types of pavement surfaces are deducted.</p>
Related reference pose number book	15.280.1011 / Ministry of Environment, Urbanization and Climate Change

Pose No	Pose	Unit
Civ05	Applying single layer of 20 mm thick gypsum plaster to the walls with machine plaster (on concrete, brick, etc. surfaces)	m2
Description/ Specification	<p>Technical Description: Applying a single layer of 2 cm plaster of average thickness on the wall surfaces with the mortar obtained by mixing a single layer of gypsum machine plaster with an appropriate amount of water, prepared by the factory as dry and following the instructions for use written on the bags, cleaning the wall surface, including all kinds of materials and losses, workmanship, work benches, loading, horizontal and vertical transportation, unloading at the construction site, contractor overheads and profit included. The price for 1 m²:</p> <p>Measurement:</p> <p>1) According to the dimensions in the project, all plastered faces (including the gap sides) are calculated.</p> <p>2) Joinery mouldings and plaster surfaces under wooden skirting, if any, are taken into account.</p> <p>3) All cavities and other types of pavement surfaces are deducted.</p>	
Related reference pose number book	15.280.1013 / Ministry of Environment, Urbanization and Climate Change	

Pose No	Pose	Unit
Civ06	Making wall and facade cladding with 3 mm joint spaces, with 15x60 cm nominal size, rectified, all kinds of colours, patterns and surface features, 1st quality, matte, unglazed porcelain tiles (with tile adhesive)	m2
Description/ Specification	<p>Technical Description: The price per 1 m² of cleaning and moistening the smooth surface in accordance with the approved detail project from dirt, dust, burrs and similar residues that prevent adhesion, applying cement-based, high-performance, slip-reduced, extended open time tile adhesive on the surface and grooving with a special comb, with 15 x 60 cm nominal size, rectified, 1st quality, matte, unglazed porcelain tiles with all kinds of colour, pattern and surface properties, in accordance with the gauge, leaving 3 mm joint gaps, filling the joints with cement-based, high performance, high abrasion resistant, water-absorption-reduced joint filler in the desired colour, cleaning of the coated surface, all kinds of materials and losses, workmanship tool and equipment expenses, loading at the workplace, horizontal and vertical transportation, unloading, contractor general expenses and profit included:</p> <p>Measurement: Coated surfaces are calculated according to the dimensions on the project.</p>	
Related reference pose number	15.390.1049 / Ministry of Environment, Urbanization and Climate Change	

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Pose No	Pose	Unit
Civ07	Making suspended ceiling with double scaffold suspension system with gypsum boards (Staple distance in the same direction is 900 mm, main carrier profile distance is 1000 mm, secondary carrier profile distance is 500 mm with axis intervals) (12,5 mm with single layer standard plasterboard)	m ²
Description/ Specification	<p>Technical Description: According to the project approved by the administration and its details; Price per 1 m² for attaching 50 mm insulation tape to the parts of the ceiling U-profile (TU28) in contact with the wall, and fixing it to the existing wall using screws and plastic dowels, starting at a distance of approximately 5 cm from the ends of both profiles with 60 cm intervals, marking the first main carrier axis on the ceiling surface at a distance of 15 cm from the existing wall, marking the lines on which successive axes will be fixed, with a maximum distance of 100 cm, fixing the 20 cm staples on the marked lines with steel dowels at maximum 90 cm intervals, adjusting the staple wings by bending them according to the suspended ceiling gap distance, cutting the ceiling C-profile (TC60), placing and levelling TC60 profiles between the two wings of the staples, fixing the staples to both wings of the TC60 profiles with staple screws and thus creating the prime mover, fixing the secondary carrier TC60 profiles perpendicular to the main carrier TC60 profiles with clips at 50 cm intervals, using fittings at the joints of all TC60 profiles and staggering profile joints, cutting and sizing gypsum boards when necessary, and correction of the cut edges using a grater, artificial chamfering at an angle of approximately 45° with suitable tools for the cut edges and the non-bevelled edges of the boards, fixing gypsum boards to TU28 and TC60 profiles, with screw heads flush with the gypsum board, at a distance of 30 cm at most with trumpet screws, staggering the short side joints of the boards at least 40 cm from each other, pre-filling of gaps more than 3 mm with joint filler plaster, sealing the screw heads with joint filler plaster, bonding the joint tape to the gypsum wall board joints, creating a suspended ceiling by applying joint filler plaster on the tape, including all kinds of materials and losses, workmanship, loading at the workplace, horizontal and vertical transportation, unloading and contractor general expenses and profit:</p> <p>Measurement: It is calculated as m² over the dimensions in the project.</p> <p>Note:</p> <p>1) Spaces less than 0,50 m² are not deducted.</p> <p>2) The application rules specified in the TS 1475-1 application standard must be followed.</p>	
Related reference posenumber book	15.530.1901 / Ministry of Environment, Urbanization and Climate Change	

Pose No	Pose	Unit
Civ08	Applying two layers of antirust and two layers of synthetic paint on iron surfaces	m ²
Description/ Specification	<p>Technical Description: Cleaning iron surfaces with carborundum and wire brush, applying the anticorrosion substances 0,091 l (1st layer), 0,091 kg (2nd layer) (each layer in different colours), painting with synthetic paint in any desired colour with 0,096 kg (1st layer), 0,096 kg (2nd layer), the price for 1 m² price, including all kinds of material and losses, workmanship, contractor's overhead and profit: Measurement: a) Painted surfaces are measured on furniture. b) In doors and compartments; 1) For those with a Telaro frame; the two sides are measured from plaster to plaster. 2) For those with a casing (without ribs); the frame areas are included in the measure of the two faces in the vertical plane from frame to frame. 3) In the ones with frames and ribs, the frame is included in the size of the two faces from the rib to rib. 4) In all sizes, recesses, protrusions and glass spaces are not included in the measure. If there is a lath on the windowsill, the measure</p>	

	is started here. c) On windows and display windows; the area in the vertical plane shall be measured 1) until the out of the rib in windowsills and framed windows, and from the plaster face to the plaster face in non-ribbed windows. Only one surface is taken into account, two surfaces are painted. Glass blank is not subtracted, windowsills, safe and edges are also measured, if available, are added to the area. 2) In double windows, it is measured exactly, the wooden frame between the two windows is measured separately and added to the area. Two sides of both windows are painted and only one side is calculated. Glass gap is not subtracted. d) The projection area of a face in the vertical plane is measured in railings and banisters. Space is not subtracted. e) The painted faces in column, roof truss, beam, English yard and similar iron production are measured.
Related reference posenumber book	15.540.1112 / Ministry of Environment, Urbanization and Climate Change

Pose No	Pose	Unit
Civ09	Applying two coats of water-based matte paint by applying a primer to satin plaster and gypsum board surfaces (interior facade)	m2
Description/ Specification	<p>Technical Description: After sanding on the surface to be painted and after cleaning the sanding dust, 0.070 L water-based primer is applied, on top of this, an average of 0.146 l water-based matte paint in 2 coats is applied in the desired colour. The price of 1 m², including all kinds of materials and losses, workmanship, contractor overheads and profit:</p> <p>Measurement: The surfaces painted over the project are measured. All spaces are deducted. Note: For walls and ceilings higher than 3 m, additional scaffolding is provided. If there is a scaffolding for plaster, it is not given separately for the painting work.</p>	
Related reference posenumber book	15.540.1256 / Ministry of Environment, Urbanization and Climate Change	

Pose No	Pose	Unit
Civ10	Applying two coats of antibacterial water-based matte paint by applying a primer to satin plaster and gypsum board surfaces (interior facade)	m2
Description/ Specification	<p>Technical Description: On the surface to be painted; after cleaning, making an average of 0.144 l acrylic-based water-based matte antibacterial paint in 2 coats in the desired colour on 0.070 l water-based paint primer, the price of 1 m², including all kinds of materials and losses, workmanship, contractor general expenses and profit:</p> <p>Measurement: The surfaces painted over the project are measured. All spaces are deducted. Note: For walls and ceilings higher than 3 m, additional scaffolding is provided. If there is a scaffolding for plaster, it is not given separately for the painting work.</p>	
Related reference posenumber book	15.540.1265 / Ministry of Environment, Urbanization and Climate Change	

Pose No	Pose	Unit
Civ11	Applying 1.5 mm thick, silicone-added acrylic-based colour coating on concrete, plaster and similar surfaces	m2

Description/ Specification	Technical Description: In accordance with the project and details approved by the administration, 1 m ² price for applying decorative coating primer to the surfaces such as concrete, plaster, etc. with a roller or brush at a rate of 0.250 kg per m ² , then applying a 1.50 mm thick silicone-added acrylic-based colored coating in the desired colour with a trowel to hit 2.200 kg per m ² , duly polishing with a plastic trowel, cleaning, all kinds of materials and losses, loading at the construction site, horizontal and vertical transportation, unloading, workmanship, tool and equipment expenses, contractor general expenses and profit included; Measurement: The surfaces covered by the project are measured. All spaces are deducted. Note: For walls and ceilings higher than 3 m, additional scaffolding is provided. If there is a scaffolding for plaster, it is not given separately for the coating work.
Related reference posenumber book	15.540.1424 / Ministry of Environment, Urbanization and Climate Change

Pose No	Pose	Unit
Civ12	Roof covering with 0.70 mm thick trapezoidal aluminium sheets (EN AW 3003 Al-Mn1 Cu) on the existing wooden, steel, reinforced concrete beam or purlin roof	m2
Description/ Specification	Technical Description: Overlaying 0.70 mm thick trapezoidal aluminium sheets (EN AW 3003 Al-Mn1Cu) on the existing wooden, steel, reinforced concrete beam or purlin roof in accordance with the specification and project, fixing them to the purlins, riveting with pop rivets, placing the accessories (ridge, under eaves, bottom of the wall, edge coating, etc.), applying silicon under lag screw and rivet heads with transverse and longitudinal overlaps, loading, unloading, horizontal and vertical transportation at the construction site, all kinds of materials and losses, workmanship, tool and equipment expenses, contractor general expenses and profit included; 1m ² price of building roofing with 0.70 mm thick trapezoidal aluminium sheet on wood, steel, reinforced concrete beam or purlin roof: Measurement: Calculated over the inclined surface.	
Related reference posenumber book	15.325.1005 / Ministry of Environment, Urbanization and Climate Change	

Pose No	Pose	Unit
Civ13	Building a roof with 0.50 mm thick hot-dip galvanized corrugated/trapezoidal sheet on steel or pre-built reinforced concrete beam	m2
Description/ Specification	Technical Description: Starting the laying process of 0.50 mm thick hot-dip galvanized corrugated/trapezoidal metal sheets on the existing steel or pre-made reinforced concrete beam from the opposite direction to the prevailing wind direction and overlapping each other by at least 10 cm in width and 15 cm in length in accordance with the specification, after the corrugated sheets are perforated with a drill, using metal washer and rubber gasket, shaping steel or pre-constructed reinforced concrete beam appropriately with capped hook screws, and mounting them to these beams, watertight insulation of the bottom of the chimney and other plaster bottoms, formation of ridge elements with ridges, loading at the construction site, horizontal and vertical transportation, unloading, all kinds of material and losses, equipment and tool expenses, contractor general expenses and profit included; 1 m ² price of roofing with 0.50 mm thick hot-dip galvanized corrugated sheet metal on steel or pre-constructed reinforced concrete beam: Measurement: Calculated over the inclined surfaces. Spaces larger than 0.25 m ² are deducted, if any, eaves are included in the measurement. Note: If the gaps of the existing steel and pre-constructed reinforced concrete	

	corrugated plate fastening purlins are not suitable for plate fixation, the purlins are rebuilt at the appropriate intervals in exchange for their own cost.
Related reference posenumber book	15.325.1109 / Ministry of Environment, Urbanization and Climate Change

Pose No	Pose	Unit
Civ14	Building a kitchen cabinet under the counter (Uncoated)	m2
Description/ Specification	<p>Technical Description: Price per 1 m² for construction of kitchen under-counter cabinets (without coating) including supplying the necessary material according to the project, manufacturing and assembling the box profile skeleton, cutting the artificial boards of 19 mm thickness and making the edges of them massive with hard woods, assembling the parts and making the cabinet ready for use, including all kinds of materials and workmanship, transportation, loading and unloading costs to and from the workplace, contractor profit and general expenses included.</p> <p>NOTE: Oil paint and metal parts are paid separately.</p> <p>MEASUREMENT: The front facade projection area of the cabinet is calculated over the project.</p>	
Related reference posenumber book	43.690.1061 / ilbank	

Pose No	Pose	Unit
Civ15	Building a kitchen cabinet over the counter (Uncoated)	m ²
Description/ Specification	<p>Technical Description: Price per 1 m² for construction of kitchen over-counter cabinets (without coating) including supplying the necessary material according to the project, cutting the artificial boards of 19 mm thickness and making the edges of them massive with hard woods, assembling the parts and making the cabinet ready for use, and installing it to its location, including all kinds of materials and workmanship, transportation, loading and unloading costs to and from the workplace, contractor profit and general expenses included.</p> <p>NOTE: Oil paint and metal parts are paid separately.</p> <p>MEASUREMENT: The front facade projection area of the cabinet is calculated over the project.</p>	
Related reference posenumber book	43.690.1071 / ilbank	

Pose No	Pose	Unit
Civ16	Building a walnut veneered information desk	m2
Description/ Specification	<p>Technical Description: Price per 1 m² for building a walnut veneered information desk, according to the project, providing the necessary material, cutting the 19 mm thick artificial boards and making the edges massive with hardwood in veneer type, coating the surfaces with walnut veneer and primer coating and press as shown in the project, cleaning the coating surfaces, applying two coats of varnish, making deredor polish, combining the parts and making the desk ready for use; including all kinds of materials and workmanship, transportation, loading and unloading costs to and from the workplace, contractor profit and general expenses.</p> <p>NOTE: Metal parts are paid separately.</p> <p>MEASUREMENT: The front facade projection area of the counter is calculated over the</p>	

	project.
Related reference posenumber book	43.690.1101 / İlbank

Pose No	Pose	Unit
Civ17	Building a suspended system suspended ceiling from 60x60 cm, 0.70 mm thick, minimum 20-micron electrostatic powder coated (polyester based) perforated aluminium plate (EN AW 3000 series)	m ²
Description/ Specification	<p>Technical Description: According to the project and details approved by the administration, 1 m² price for levelling and suspending 24 mm wide T main and intermediate carrier profiles with 40 cm long and 4 mm diameter specially adjusted galvanized steel hanger sets at 60 cm intervals and at the level at the desired level, applying 0.50 mm thick Z profiles on the ceiling edges, placing aluminium plates (EN AW 3000 Series) in desired colour (60x60) cm in size (0.70 mm thick aluminium plate with 20 micron thick polyester-based electrostatic powder painted on both sides) on T main and intermediate carrier profiles, electrical fixtures or construction of suspended ceilings by opening the places according to the installation requirements, including all kinds of materials and losses, workshop expenses, horizontal and vertical transportation in the workplace, unloading, workmanship, contractor general expenses and profit.</p> <p>Measurement:</p> <p>1) Surfaces on which suspended ceilings are made are measured.</p> <p>2) Spaces smaller than 0.25 m² for ventilation and electrical fixtures and other spaces are not deducted.</p>	
Related reference posenumber book	15.535.1014 / Ministry of Environment, Urbanization and Climate Change	

Pose No	Pose	Unit
Civ18	Building a protection fence with a 2.63 m high reinforced concrete pole mesh wire	m
Description/ Specification	<p>Technical Description: In accordance with the principles shown in the approved type project, the preparation of galvanized cage wire with 3 mm thickness and 5 x 5 cm mesh, and the necessary tension wire and galvanized barbed wire, erecting reinforced concrete pillars in the prepared pits with a distance of 2.50 m from axis to axis, one at the corner points of the building plot and two at every 30 m along the fence, reinforced with buttress posts, embedding in 250 dz concrete with a fully secure fence posts 40 x 40 x 50 cm and the bottoms of the buttress posts 60 x 60 x 50 cm in size, tensioning the galvanized mesh wire with three rows of 3 mm thick tension wire, at the bottom, top and middle, in order to provide a smooth appearance for the galvanized cage wire, installing 2 rows of galvanized barbed wire from the top of the upper tension wire, installation of the door of the size and type shown in the type project in order to provide protection zone interference, all kinds of expenses for installing a lock on the door, including the contractor's profit and general costs, (Only, excluding the cost for transportation, loading, unloading, stacking of iron, sand, gravel and cement as well as padlock cost), construction of a protection fence with a 2.63 m high reinforced concrete pole mesh wire; 1 meter price.</p> <p>MEASUREMENT: The gate fee shall be paid separately from the relevant item according to the weighing report.</p>	
Related reference posenumber	43.665.1082 / İlbank	

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Pose No	Pose	Unit
Civ19	Making a vertical rain pipe with a diameter of 100 mm from the zinc plate No. 12 and fixing it in place	m
Description/ Specification	<p>Technical Description: 1 m price for preparing the pipes by cutting from the zinc plate no. 12 with an inner diameter of 100 mm and an overlap of 1.5 cm, soldering the overlap, drawing a single or double cord (wick) at a distance of 10 cm to both sides of the pipe, fixing the openable galvanized clamps, made of iron with a section of 3x20 mm, to the wall with one meter intervals, with the pipe under the upper cord, putting the pipes in place by interlacing them up to the cord, completing the connection of the rain pipes to the wall by tightening the clamps with a screw with galvanized nut, including all kinds of materials and losses, workmanship, loading, vertical and horizontal transportation at the construction site, unloading, contractor's overhead expenses and profit:</p> <p>Measurement: It is measured over the length of the axis of the installed pipe, and the curved parts are given a double raise.</p>	
Related reference posenumber book	15.310.1003 / Ministry of Environment, Urbanization and Climate Change	

Pose No	Pose	Unit
Civ20	Making a rain duct with a diameter of 155 mm from the zinc plate No. 12 and fixing it in place	m
Description/ Specification	<p>Technical Description: 1 m price for making suspended grooves and skirts from zinc plate no. 12 in round or rectangular section, according to the skirt diameter or project, drawing the pipe to the free edge, soldering it thoroughly from inside and outside, placing a layer of bitumen cardboard under the skirt, placing a galvanized wire or zinc strainer, placing it in its location with two galvanized 5x30 mm iron hooks per meter, including all kinds of materials and losses, workmanship, loading, vertical and horizontal transportation at the construction site and unloading, contractor's overhead expenses and profit:</p> <p>Measurement: It is measured over the length of the axis of the installed pipe, and the curved parts are given a double raise.</p> <p>Note: If bar iron is placed in the pipe which is pulled to the free side, the bar fee is paid separately from its own pose.</p>	
Related reference posenumber book	15.310.1103 / Ministry of Environment, Urbanization and Climate Change	

Pose No	Pose	Unit
Civ21	Replacing the interior and exterior door lock with mortise roller cylinder (Wide and narrow type)	Pcs
Description/ Specification	Technical Description: JOINERY METAL PARTS Door Joinery Hardware Unit Price (Wood, Metal, Plastic)	
Related reference posenumber book	15.465.1005 / Ministry of Environment, Urbanization and Climate Change	

Pose No	Pose	Unit
Civ22	Replacing the door handle and mirrors (Chrome)	Pcs

Description/ Specification	Technical Description: JOINERY METAL PARTS Door Joinery Hardware Unit Price (Wood, Metal, Plastic)	
Related reference posenumber book	15.465.1008 / Ministry of Environment, Urbanization and Climate Change	

Pose No	Pose	Unit
Civ23	Replacing the hinge	Pcs
Description/ Specification	Technical Description: JOINERY METAL PARTS Door Joinery Hardware Unit Price (Wood, Metal, Plastic)	
Related reference posenumber book	15.465.1010 / Ministry of Environment, Urbanization and Climate Change	

Pose No	Pose	Unit
Civ24	Replacing the espagnolette set (Arm, iron and detailed)	Pcs
Description/ Specification	Technical Description: JOINERY METAL PARTS Window Joinery Hardware Unit Price (Wood, Metal, Plastic)	
Related reference posenumber book	15.465.1101 / Ministry of Environment, Urbanization and Climate Change	

Pose No	Pose	Unit
Civ25	Replacing the hinge	Pcs
Description/ Specification	Technical Description: JOINERY METAL PARTS Window Joinery Hardware Unit Price (Wood, Metal, Plastic)	
Related reference posenumber book	15.465.1116 / Ministry of Environment, Urbanization and Climate Change	

Pose No	Pose	Unit
Civ26	Making the Coping with Aluminium Composite Panels	m ²
Description/ Specification	Technical Description: 1 m2 price for sizing the aluminium composite panels according to the project to be given by the Administration and mounting them on the scales at the specified places, including all materials and losses, loading, vertical and horizontal transportation at the construction site, unloading, workmanship expenses and contractor's profit and overhead expenses are included. MEASUREMENT: The surface area of the on-site production is measured in square meters.	
Related reference posenumber book	KTB.91.2002 / Ministry of Culture and Tourism	

Pose No	Pose	Unit
Civ27	Covering countertops with 3 cm colored marble plaques	m ²

Description/ Specification	Technical Description: According to the project, covering the countertops in the kitchen and similar places using a 3 cm thick colored marble plaque, making a 2 cm thick colored marble skirting board to the wall joints, opening the sink cavity, making the dropper, bevelling the edges of the marble plaque, including all types of materials and losses, workmanship, tool and equipment expenses manufacturing and/or transportation of the material to the workplace, loading, vertical and horizontal transportation at the workplace , unloading, installation, contractor's profit and overhead expenses, the price per 1 m ² .
Related reference posenumber book	77.165.1010 / PTT

Pose No	Pose	Unit
Civ28	Hot-dip galvanized coating on iron manufacturing	kg
Description/ Specification	<p>1 m price for supplying Ø100 mm diameter pipe made of PVC, fixing the clamps to the wall, mounting the pipes from the gutter, including the elbows, completing the connection of the rain pipes to the wall by tightening the clamps with galvanized nut screw, including all kinds of connections, elbows and miscellaneous parts, materials and losses, labour, loading, horizontal and vertical transportation, unloading at the construction site, contractor overheads and profit:</p> <p>MEASUREMENT: It is measured over the length of the axis of the installed pipe, and the curved parts are given a double raise.</p>	
Related reference posenumber book	V.0720 / Directorate General of Foundation	

Pose No	Pose	Unit
Civ29	Excavation of soft and hard soil by machine (Free excavation)	m3
Description/ Specification	<p>Technical Description: Excavation price for 1 m³, on soft and hard soil ground; all kinds of materials and costs for excavation with machinery, loading on vehicles, transporting up to 25 meters, unloading to warehouse, filling place or embankment, laying, filling the gaps left in the excavation site after the construction, levelling and correcting the excavated place, storehouse and fill including losses and labour, equipment and supplies, contractor overheads and profits:</p> <p>Measurement: The volume of the excavation shall be calculated over the excavation project.</p> <p>Note:</p> <p>1) This unit price does not include, transportation outside 25 meters, irrigation and compaction of the embankment.</p> <p>2) Depth mark up shall not be paid.</p>	
Related reference posenumber book	15.120.1001 / Ministry of Environment, Urbanization and Climate Change	

Pose No	Pose	Unit
Civ30	Excavation of soft rock with machinery without using explosives (Free excavation)	m3

Description/ Specification	<p>Technical Description: Excavation price for 1 m³, on soft rocky ground; all kinds of materials and costs for breaking, dismantling, digging, loading into vehicles with machinery without using explosives, loading on vehicles, transporting up to 25 meters, unloading to warehouse, filling place or embankment, laying, filling the gaps left in the excavation site after the construction, levelling and correcting the excavated place, storehouse and fill including losses and labour, machinery, equipment and supplies, contractor overheads and profits:</p> <p>Measurement: The volume of the excavation shall be calculated over the excavation project.</p> <p>Note:</p> <p>1) This unit price does not include, transportation outside 25 meters, irrigation and compaction of the embankment.</p> <p>2) Depth mark up shall not be paid.</p>
Related reference posenumber book	15.120.1005 / Ministry of Environment, Urbanization and Climate Change

Pose No	Pose	Unit
Civ31	Supplying gravel, laying, irrigation and compaction by machine	m3
Description/ Specification	<p>1 m2 price for cleaning and wetting the existing surfaces made in accordance with the specifications, making a base with 400 kg cement dosed mortar, covering coating in place and cleaning the outer windowsill made of 3 cm thick honed or polished marble slabs, prepared in one piece with a slope and dropper, wiping, and all kinds of workmanship, material and losses, loading-unloading at the workplace, horizontal-vertical transportation as needed by this work, contractor's general expenses and profit : MEASUREMENT: Coated surfaces are calculated over the project.</p>	
Related reference posenumber book	15.125.1004 / Ministry of Environment, Urbanization and Climate Change	

Pose No	Pose	Unit
Civ32	Pouring normal ready-mixed concrete in C 8/10 pressure strength class, gray colour, produced or purchased at the concrete plant and pressed with a concrete pump (including concrete transport)	m3
Description/ Specification	<p>Plastic joinery and accessories and glass laths made of rigid PVC profiles, which are made according to the project and details approved by the administration, must be resistant to all weather conditions and their surfaces must be smooth. The main profile made of PVC (according to the standard, the wall thickness must be class "A" and the wall thickness must be 2.8 mm on visible surfaces and 2.5 mm on invisible surfaces.) sections shall have a front chamber system designed to accelerate water discharge and to ensure both heat and sound insulation. The required strength of the metal reinforcement profiles and the main profiles (case, wing, middle register) shall be provided. Metal reinforcement profiles are U or box profiles made of hot-dip galvanized steel and protected against rust. In both cases, the sheet thickness will not be more than 1.5 mm in the case and wings and 2 mm in the middle. (However, if the moment of inertia is higher than the above-mentioned sheet thicknesses as a result of the calculation made on very wide registers and wings, sheet metal with a thickness compatible with the result must be used). Metal-reinforced PVC profiles shall be combined with plastic corner welding, screws, sash fastening and other means, and all kinds of window joinery, doors, windows and similar productions shall be made with the help of auxiliary joinery profiles, sheets and other profiles. In accordance with the system recommended by the manufacturer, the wing gaps shall be insulated with two rows of EPDM rubber, neoprene</p>	

	<p>or tpe gaskets. The installation of glass of all types and thicknesses is done with the help of glass laths. Glass fixation shall be provided by gasket, mastic and other methods in accordance with the system recommended by the manufacturer. Each window sash frame (jointing) shall be fixed to the joinery frame with at least 2 (two) door sash frames and at least 3 (three) hinges for the door sash frame. The hinges shall be of the strength and design that will allow the wing to work in an adjusted manner. Plastic joinery frame and wing combinations shall be cut at 45 degrees and fixed to masonry parts or iron construction (blind frame) of the plastic joinery produced by welding with machines developed for this work.</p> <p>NOTE:</p> <p>1) The cost of installing the metal parts is included in the joinery prices.</p> <p>2) Plastic joinery accessories (espagnolette, hinges, locks and additions, transom scissors and strikers, pivot hinges, bolts, brushes under the door, all kinds of door handles, hydraulic mechanisms such as opening, closing, locking mechanisms, etc.) are not included in the weighing, its price is included in the joinery prices.</p>
Related reference pose number book	15.150.1001 / Ministry of Environment, Urbanization and Climate Change

Pose No	Pose	Unit
Civ33	Pouring normal ready-mixed concrete in C 16/20 pressure strength class, gray colour, produced or purchased at the concrete plant and pressed with a concrete pump (including concrete transport)	m3
Description/ Specification	<p>Technical Description: The price of 1 m³ of normal ready mixed concrete in gray colour with a compressive strength of C 16/20 and poured in situ: where such ready mixed concrete mortar shall have been produced in a complete concrete facility suitable for concrete production (with a minimum 60m³/h capacity, with four-eyed aggregate hopper, compressor and control cabinet, computer controlled, having a cement silo with a min. capacity of 50 tons, with conveyor belt system, recovery unit, laboratory capable of performing aggregate and concrete tests, generator, enough truck mixers and mobile concrete pumps, at least one loader, additive tank and additive weighing bunker, moisture meter and all kinds of similar teams and equipment, periodically calibrated concrete production facility) in accordance with the standard and project, after being washed, sieved granulometric sand-gravel and/or crushed stone, cement, water and, if necessary, additives and ready mixed concrete mortar produced in C 16/20 class or purchased from a concrete facility with these qualities; concrete quality controls, loading into truck mixers, transporting to the workplace, pressing with a concrete pump to the pouring location, placing, compaction with vibrator, irrigation, protection and maintenance from cold, heat and other external influences, taking samples for the necessary and sufficient number of tests, and carrying out the necessary tests, any labour material and loss required, machinery, equipment and laboratory expenses, all kinds of horizontal and vertical transports in the workplace, loading and unloading, loading the granulometric sand, gravel or crushed stone into the concrete body and the cement from the place where it is procured, produced or purchased, transportation to the concrete plant, unloading from vehicles, stacking, placing in the concrete plant, supply and transport of water used in concrete and for irrigation, supply of concrete plant and all other equipment, with depreciation expenses including any other expenses and contractor overheads and profits.</p> <p>Measurement: It is calculated over the dimensions in the project.</p> <p>Note:</p> <p>1) The facility where the produced or purchased concrete is produced must have other documents required by the TSE and its legislation and submit these documents to the</p>	

	<p>administration before starting production. Provided that the submitted documents are determined to be appropriate and it is allowed to be used, it will be possible to use the concrete with a certificate of conformity produced or purchased in this facility and which also meets the market supply conditions according to the current legislation.</p> <p>2) In case the concrete is procured by purchasing, a copy of the invoices on which the name of the work is stated must be attached to the payment documents.</p> <p>3) The cost of the additive material to be added to the concrete body shall be paid separately.</p> <p>4) If the pump is not used, the pump cost is deducted from the analysis.</p>
Related reference pose number book	15.150.1003 / Ministry of Environment, Urbanization and Climate Change

Pose No	Pose	Unit
Civ34	Pouring normal ready-mixed concrete in C 25/30 pressure strength class, gray colour, produced or purchased at the concrete plant and pressed with a concrete pump (including concrete transport)	m3
Description/ Specification	<p>Technical Description: The price of 1 m³ of normal ready mixed concrete in gray colour with a compressive strength of C 25/30 and poured in situ: where such ready mixed concrete mortar shall have been produced in a complete concrete facility suitable for concrete production (with a minimum 60m³/h capacity, with four-eyed aggregate hopper, compressor and control cabinet, computer controlled, having a cement silo with a min. capacity of 50 tons, with conveyor belt system, recovery unit, laboratory capable of performing aggregate and concrete tests, generator, enough truck mixers and mobile concrete pumps, at least one loader, additive tank and additive weighing bunker, moisture meter and all kinds of similar teams and equipment, periodically calibrated concrete production facility) in accordance with the standard and project, after being washed, sieved granulometric sand-gravel and/or crushed stone, cement, water and, if necessary, additives and ready mixed concrete mortar produced in C 25/30 class or purchased from a concrete facility with these qualities; concrete quality controls, loading into truck mixers, transporting to the workplace, pressing with a concrete pump to the pouring location, placing, compaction with vibrator, irrigation, protection and maintenance from cold, heat and other external influences, taking samples for the necessary and sufficient number of tests, and carrying out the necessary tests, any labour material and loss required, machinery, equipment and laboratory expenses, all kinds of horizontal and vertical transports in the workplace, loading and unloading, loading the granulometric sand, gravel or crushed stone into the concrete body and the cement from the place where it is procured, produced or purchased, transportation to the concrete plant, unloading from vehicles, stacking, placing in the concrete plant, supply and transport of water used in concrete and for irrigation, supply of concrete plant and all other equipment, with depreciation expenses including any other expenses and contractor overheads and profits.</p> <p>Measurement: It is calculated over the dimensions in the project.</p> <p>Note:</p> <p>1) The facility where the produced or purchased concrete is produced must have other documents required by the TSE and its legislation and submit these documents to the administration before starting production. Provided that the submitted documents are determined to be appropriate and it is allowed to be used, it will be possible to use the concrete with a certificate of conformity produced or purchased in this facility and which also meets the market supply conditions according to the current legislation.</p> <p>2) In case the concrete is procured by purchasing, a copy of the invoices on which the name of the work is stated must be attached to the payment documents.</p> <p>3) The cost of the additive material to be added to the concrete body shall be paid</p>	

	separately. 4) If the pump is not used, the pump cost is deducted from the analysis.
Related reference posenumber book	15.150.1005 / Ministry of Environment, Urbanization and Climate Change

Pose No	Pose	Unit
Civ35	Building a wall with 85 mm thick horizontally perforated brick (190x85x190 mm)	m ²
Description/ Specification	<p>Technical Description: 1 m² price for sizing the aluminium composite panels according to the project to be given by the Administration and mounting them on the scales at the specified places, including all materials and losses, loading, vertical and horizontal transportation at the construction site, unloading, workmanship expenses and contractor's profit and overhead expenses.</p> <p>Measurement: It is calculated over the dimensions in its project. Spaces smaller than 0.10 m² are not deducted.</p>	
Related reference posenumber book	15.220.1001 / Ministry of Environment, Urbanization and Climate Change	

Pose No	Pose	Unit
Civ36	Building a wall with 200 mm thick horizontally perforated brick (250x200x250 mm)	m ²
Description/ Specification	<p>Technical Description: 1 m² price for sizing the aluminium composite panels according to the project to be given by the Administration and mounting them on the scales at the specified places, including all materials and losses, loading, vertical and horizontal transportation at the construction site, unloading, workmanship expenses and contractor's profit and overhead expenses.</p> <p>Measurement: It is calculated over the dimensions in its project. Spaces smaller than 0.10 m² are not deducted.</p>	
Related reference posenumber book	15.220.1006 / Ministry of Environment, Urbanization and Climate Change	

Pose No	Pose	Unit
Civ37	Waterproofing under the roof covering on pitched roofs with a 3 mm thick elastomer-based, polyester felt carrier polymer bitumen cover (bend at -20°C cold).	m ²
Description/ Specification	<p>Technical Description: The price per 1 m² for cleaning the sloping roof surface in accordance with the approved detail project, laying the 3 mm thick elastomer-based polyester felt carrier polymer bitumen cover parallel to the eave line and overlapping each other by at least 10 cm, nailing with wide-headed galvanized nails at maximum 10 cm intervals from the bottom of the joints, and bonding joints with torch flame, loading at the construction site, horizontal vertical transportation and unloading, including all kinds of materials and losses, workmanship, tool and equipment expenses, contractor's overhead expenses and profit:</p> <p>Measurement: Insulated surfaces are calculated according to the dimensions in the project.</p>	
Related reference posenumber book	15.330.1007/ Ministry of Environment, Urbanization and Climate Change	

Pose No	Pose	Unit
Civ38	Supply and installation of PVC-based corrugated drainage pipe with Ø 200 mm nominal diameter	m
Description/ Specification	<p>Technical Description: 1 m price for lowering and laying PVC-based Corrugated drainage pipes with Ø 200 mm nominal diameter, in the trench prepared for drainage, including every kind of materials and losses, workmanship tool and equipment expenses, loading at the workplace, vertical and horizontal transportation, unloading, contractor's overhead expenses and profit:</p> <p>Measurement: The area where the drainage pipe is laid over the project is calculated in m.</p> <p>Note: The costs of digging the trench where the drainage pipe will be laid, the material or concrete layer to be placed on the drainage foundation base, filling and compacting the side and top of the drainage with material of appropriate size are paid at their own expense.</p>	
Related reference posenumber book	15.205.1004 / Ministry of Environment, Urbanization and Climate Change	

Pose No	Pose	Unit
Civ39	Applying external thermal insulation on the outer walls with 5 cm thick rockwool slabs (min. 120 kg/m ³ density) and applying thermal insulation plaster on it (Sheathing)	m ²
Description/ Specification	<p>Technical Description: According to the project and details approved by the administration, after 5 cm thick rockwool boards on the outer walls are attached to the wall with thermal insulation board adhesive with a consumption of 4 kg per m², and then fixed to the surface with a steel nailed thermal insulation dowel, applying the 1st layer of thermal insulation plaster with a consumption of 3 kg per m² on the board, placing the plaster mesh on it so that the joints are overlapped by at least 10 cm, and applying the 2nd layer of thermal insulation plaster with a consumption of 2 kg per m², including loading, vertical and horizontal transportation at the construction site, unloading, all kinds of materials and losses, workmanship tool and equipment expenses, contractor's overhead expenses and profit. The price of this work per 1 m²:</p> <p>Measurement: All insulated surfaces are calculated according to the dimensions in the project.</p> <p>Note:</p> <ol style="list-style-type: none"> 1) The thickness of the rockwool plate shall be determined according to the heat calculation to be made. 2) The anchor to be used shall be determined according to the material properties on the façade to be sheathed. 3) Exterior thermal insulation systems must comply with the criteria specified in TS EN 13500 system standard or ETAG 004. 	
Related reference posenumber book	15.340.1003 / Ministry of Environment, Urbanization and Climate Change	

Pose No	Pose	Unit
Civ40	Thermal insulation horizontally (traditional navigable terrace roof etc.) with 5 cm thick rockwool plates (Rockwool - 150 kg/m ³ density-loadable)	m ²
Description/ Specification	<p>Technical Description: According to the project and details approved by the administration, the price per 1 m² of laying of 5 cm thick rock wool boards on the ground where the thermal insulation boards will be laid, without gaps between them, including</p>	

	<p>all kinds of materials and losses, loading, vertical and horizontal transportation at the construction site, unloading, workmanship tool and equipment expenses, contractor's overhead expenses and profit:</p> <p>Measurement: All insulated surfaces are calculated according to the dimensions in the project.</p> <p>Note: The thickness of the rockwool plate shall be determined according to the heat calculation to be made.</p>
Related reference pose number book	15.340.1203 / Ministry of Environment, Urbanization and Climate Change

Pose No	Pose	Unit
Civ41	Making flat surface concrete and reinforced concrete formwork, of wood	m2
Description/ Specification	<p>Technical Description: According to the project and its specification; The price per 1 m² for building and dismantling flat-surfaced concrete and reinforced concrete formwork from grade II pine timber, whose inner surfaces are planed and oiled, including the boards, supports, cadres, braces, supports, nails, wire, similar materials, materials and losses and workmanship, vertical-horizontal transportation at the workplace, loading-unloading, contractor's overhead expenses and profit:</p> <p>Measurement: Mould faces shall be calculated based on the project or by measuring in situ. Perimeter moulds of manufacturing holes for which the void volume is not subtracted are not included in the measurement. The hole gap is not removed from the face of the hole on the mould side.</p> <p>Note:</p> <p>1) Formwork scaffolding is paid separately.</p> <p>2) The material coming out of the mould belongs to the contractor.</p>	
Related reference pose number book	15.180.1002 / Ministry of Environment, Urbanization and Climate Change	

Pose No	Pose	Unit
Civ42	Making a flat surface reinforced concrete formwork with plywood	m2
Description/ Specification	<p>Technical Description: According to the project and its specification; The price per 1 m² for building flat-surfaced concrete and reinforced concrete formwork from 21 mm thick plywood (film-covered) artificial boards with oiled inner surface, reinforcing it to withstand the vibration deemed necessary, dismantling the formwork, including all kinds of materials and losses and workmanship, vertical-horizontal transportation at the workplace, loading-unloading, contractor's overhead expenses and profit:</p> <p>Measurement: Mould faces shall be calculated based on the project or by measuring in situ. Perimeter moulds of manufacturing holes for which the void volume is not subtracted are not included in the measurement. The hole gap is not removed from the face of the hole on the mould side.</p> <p>Note:</p> <p>1) Formwork scaffolding is paid separately.</p> <p>2) The material coming out of the mould belongs to the contractor.</p>	
Related reference pose number book	15.180.1003 / Ministry of Environment, Urbanization and Climate Change	

Pose No	Pose	Unit
Civ43	Making a snap roof made of wood (under the roof cover with OSB/3 coating)	m2

Description/ Specification	<p>Technical Description: According to the project approved by the administration, The price per 1 m² for construction of a planed wooden snap roof made of grade II pine timber, laying OSB/3 with a thickness of at least 18 mm on it continuously, including the laths, rafters, purlins, buttresses, nails, iron fasteners and losses, workmanship, loading, vertical and horizontal transportation at the construction site, unloading, contractor's overhead expenses and profit:</p> <p>Measurement:</p> <p>1) The projection of the roof in the horizontal plane from the approved project is calculated in m² by measuring from the outside of the eaves to the outside of the eaves (excluding the gutter).</p> <p>2) The size is the same for roofs with hidden creeks.</p> <p>3) The chimney is not subtracted from the gap.</p> <p>4) The cost of the roof cover is included in the price of the roof.</p> <p>Note:</p> <p>1) Production, excluding roof elements, shall be paid at their own cost.</p> <p>2) In Atika masonry roofs, no additional increase is given for the height difference of the bollards.</p> <p>3) For roofs with a slope of more than 1/3, this unit price is increased by 10%.</p>
Related reference posenumber book	15.300.1002 / Ministry of Environment, Urbanization and Climate Change

Pose No	Pose	Unit
Civ44	Applying OSB/3 coating on the roof	m2
Description/ Specification	<p>Technical Description: According to the project approved by the administration; The price per 1 m² for continuous hammering of 18 mm thick OSB/3 boards on the existing rafters, the necessary materials and losses, workmanship, loading, vertical and horizontal transportation at the construction site, unloading, contractor's overhead expenses and profit:</p> <p>Measurement:</p> <p>The area of its projection on the covered horizontal plane is subtracted from its project.</p> <p>Note:</p> <p>This price is applied only if OSB/3 coating is applied on the existing rafters.</p>	
Related reference posenumber book	15.300.1006 / Ministry of Environment, Urbanization and Climate Change	

Pose No	Pose	Unit
Civ45	Building laminate-coated, pressed, kraft-filled interior door leaf with boards made of wood fibre on both sides (mdf), replacing it	m2
Description/ Specification	<p>Technical Description: According to its project, 1 m² price for building an interior door leaf by pressing 4 mm wood fibre board (mdf) on both sides of the skeleton, which is made with 32 mm kraft filling between the frame made of spar caps at least 32 mm thick with the clean one of white pine timber, with a thickness of at least 42 mm, laminate coating both-sides and installation in its location, including nails, screws, glue and similar materials and their losses, workmanship, loading at the workplace, horizontal and vertical transport, unloading and replacement of metal parts, fitting and lapping the door leaf, contractor general expenses and profit (excluding hardware cost):</p> <p>Measurement:</p> <p>1) The area is calculated by multiplying the width and length of the door leaf from outside to outside. Door frames are not included in this measurement.</p> <p>2) If the door wings in the gap are duplicated, all of the opened or fixed wings shall be</p>	

	<p>measured as closed. (If the fixed wings are finished in the form of a telaro case, they are included in the wing size, and the case fee is not paid.)</p> <p>Note:</p> <p>1) In general, the metal parts to be used in door joinery consist of all kinds of locks and lock handles, mirrors, bolts, stop rubber bumpers, hinges and spring hinges, provided that the administration approves them.</p> <p>2) The workmanship of fixing the metal parts is included in the prices of the joinery.</p>
Related reference posenumber book	15.510.1103 / Ministry of Environment, Urbanization and Climate Change

Pose No	Pose	Unit
Civ46	Replacing ribbed wire mesh 1,500-3,000 kg/m ² (including 3,000 kg/m ²)	Ton
Description/ Specification	Technical Description: The price of 1 ton of mesh steel, including assembling the wire mesh formed into wire mesh by spot welding from 5.00 mm and larger St IVb bars in accordance with the project, adding it by overlapping according to the specifications and details and forming the support, loading at the construction site, horizontal and vertical transport, unloading, including all kinds of materials and losses, workmanship, tools, equipment expenses, contractor general expenses and profit: Measurement: 1) According to the reinforced concrete project, the calculated square meter of the steel mesh is multiplied by the weights shown in the table below, and it is calculated as tons. 2) Steel and attachments not shown in the project are not taken into account. 3) Tie wire, kg/m weight differences (relative to the scale) are not taken into account as the support bar is included in the loss in the analysis.	
	STEEL MESH WEIGHT TABLE Kg/m ² ACCORDING TO BAR SPACES (One-way) 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		
Related reference posenumber book	15.160.1001 / Ministry of Environment, Urbanization and Climate Change	

Pose No	Pose	Unit
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Civ47	Ø 8- Ø 12 mm ribbed concrete steel bar, cutting, bending and repositioning of bars	Ton
Description/ Specification	<p>Technical Description: The price of 1 ton, including the preparation of the ribbed concrete steel bar by cutting and bending according to the detail project, including iron, binding wire and all kinds of necessary materials and losses for its fastening, loading at the construction site, horizontal and vertical transportation, unloading, workmanship, contractor general expenses and profit:</p> <p>Measurement:</p> <p>1) According to the reinforced concrete project reinforcement details, the length of the iron is measured with the clasps.</p> <p>2) The weights of the steel bars are taken from the table below.</p> <p>3) Steel bars and attachments not shown in the project are not taken into account.</p> <p>4) The weights in the chart (m) are based on the calculation. No additional payment is made as the tie wire, the steels to be used between the steel bar rows and the loss are taken into account in the analysis.</p> <p>Diameter (Ø) Unit Weight mmKg/m</p> <p>80,395 100,617 120,888</p>	
Related reference posenumber book	15.160.1003 / Ministry of Environment, Urbanization and Climate Change	

Pose No	Pose	Unit
Civ48	Ø 14- Ø 28 mm ribbed concrete steel bar, cutting, bending and repositioning of bars	Ton
Description/ Specification	<p>Technical Description: The price of 1 ton, including the preparation of the ribbed concrete steel bar by cutting and bending according to the detail project, including iron, binding wire and all kinds of necessary materials and losses for its fastening, loading at the construction site, horizontal and vertical transportation, unloading, workmanship, contractor general expenses and profit:</p> <p>Measurement:</p> <p>1) According to the reinforced concrete project reinforcement details, the length of the iron is measured with the clasps.</p> <p>2) The weights of the steel bars are taken from the table below.</p> <p>3) Steel bars and attachments not shown in the project are not taken into account.</p> <p>4) The weights in the chart (m) are based on the calculation. No additional payment is made as the tie wire, the steels to be used between the steel bar rows and the loss are taken into account in the analysis.</p> <p>Diameter (Ø) Unit Weight mmKg/m</p> <p>141,208 161,578 181,998 202,466 222,984 243,551 264,168 284,834</p>	
Related reference posenumber	15.160.1004 / Ministry of Environment, Urbanization and Climate Change	

book	
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Pose No	Pose	Unit
Civ49	Making and replacing roof trusses from profile irons	Ton
Description/ Specification	<p>Technical Description: 1 ton price for construction and replacement of roof trusses, including making lattice beam roof trusses at every opening from all kinds of profile iron according to the project, attaching the parts to each other with plates and placing and fixing all the parts, all kinds of materials and losses, welding, rivets, bolts, workshop expenses, loading at the construction site, horizontal and vertical transportation, carrier scaffolding or lifting device, unloading, workmanship, contractor overheads and profit (excluding paint cost):</p> <p>Measurement:</p> <p>1) Weighing is essential in the measurement, the profile iron rivets, bolts, additional plates and similar fasteners used are weighed and attached to the attachment before they are painted together and assembled.</p> <p>2) However, if the administrations deem it necessary, it can inspect the scale weight of all profiles and hub point plates over the project dimensions compared to the weights on the table. As a result of this weighing; the payment is made up to 7% more by weight compared to the tables. Weight more than 7% is not taken into account. Rivet and bolt holes are considered as full in the calculation. If the weight found as a result of this scale is less than the one in the table, the scale is taken as the basis, provided that the production is accepted by the administration.</p>	
Related reference posenumber book	15.165.1002 / Ministry of Environment, Urbanization and Climate Change	

Pose No	Pose	Unit
Civ50	Carcass, (frame) construction with all kinds of profiles, steel bars and steel sheets, fixing in place (structure frame, beams from profile iron in bridges, caps, connections and similar manufactures)	Ton
Description/ Specification	<p>Technical Description: 1 ton price for carcass construction with all kinds of profiles, steel bars, steel sheets according to the project, at every height and opening, adding the parts with rivets, bolts and welding, assembling all the parts in place, all kinds of materials and losses, loading at the construction site, horizontal and vertical transport, carrier scaffolding or lifting device, unloading, workmanship, contractor general expenses and profit (excluding paint cost):</p> <p>Measurement:</p> <p>1) Weighing is essential in the measurement, the profile iron rivets, bolts, additional plates and similar fasteners used are weighed and attached to the attachment before they are painted together and assembled.</p> <p>2) However, if the administrations deem it necessary, it can inspect the scale weight of all profiles and hub point plates over the project dimensions compared to the weights on the table. As a result of this weighing; the payment is made up to 7% more by weight compared to the tables. Weight more than 7% is not taken into account. Rivet and bolt holes are considered as full in the calculation. If the weight found as a result of this scale is less than the one in the table, the scale is taken as the basis, provided that the production is accepted by the administration.</p>	
Related reference posenumber book	15.165.1003 / Ministry of Environment, Urbanization and Climate Change	

Pose No	Pose	Unit
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Civ51	Making and installing windows and doors with square and rectangular profiles	kg
Description/ Specification	<p>Technical Description: Building windows and doors from all kinds of profiles, with the addition of profile iron, sheet metal and flat irons with square and rectangular profiles if necessary, according to the project and its specification, attaching locks, slides and similar materials specified in the project and specification, iron welding, rivets, bolts, all kinds of materials and losses for fixing them with clamp bars or other parts, workshop expenses, loading at the construction site, horizontal and vertical transport, unloading, including all kinds of labour, contractor overheads and profits, (excluding metal parts and paint costs) to be made and put in place, 1 kg price:</p> <p>Measurement: The main parts of the production, the locks, the bolt handles, together with the clamps to be placed on the wall, shall be weighed before being painted; they are recorded on the attachment and fixed in place. All production shall be paid at the same price.</p> <p>Note:</p> <p>1) However, in case of putting decorations made of metal other than iron, and nickeling some parts of locks, bolts or arms, then labour and material expenses shall be paid separately.</p> <p>2) The costs of all kinds of hinges and bearings and the cost of materials made of non-iron materials, espagnolettes, locks and similar materials shall be paid separately by issuing a price report.</p> <p>3) Installation of metal parts (hinge, bearing, lock, espagnolette etc.) is included in the price.</p> <p>4) However, if the administrations deem it necessary, it can inspect the scale weight of all profiles and similar plates over the project dimensions compared to the weights on the table. As a result of this weighing; 7% of the weight more than the tables shall be paid, more than 7% of the weight shall not be taken into account. If the weight found as a result of this scale is less than the one in the table, the scale is taken as the basis, provided that the production is accepted by the administration.</p>	
Related reference posenumber book	15.550.1001 / Ministry of Environment, Urbanization and Climate Change	

Pose No	Pose	Unit
Civ52	Building and installing in place the bending door frame from 2.00 mm thick hot rolled sheet metal	kg
Description/ Specification	<p>Technical Description: The price of 1 kg for building a bent door frame from 2.00 mm hot rolled sheet metal and fixing it together with its hinges, (excluding paint), including any material loss, workshop costs, workmanship, contractor overheads and profits:</p> <p>Measurement: The main parts of the production, together with the clamps to be placed on the wall, shall be weighed before being painted; they are recorded on the attachment and fixed in place. All production shall be paid at the same price.</p> <p>Note: However, if the administrations deem it necessary, it can inspect the scale weight of all profiles and hub point plates over the project dimensions compared to the weights on the table. As a result of this weighing; 7% of the weight more than the tables shall be paid, more than 7% of the weight shall not be taken into account. If the weight found as a result of this scale is less than the one in the table, the scale is taken as the basis, provided that the production is accepted by the administration.</p>	
Related reference posenumber book	15.550.1003 / Ministry of Environment, Urbanization and Climate Change	

Pose No	Pose	Unit
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Civ53	Building and installing various iron works from flat and profile irons	kg
Description/ Specification	<p>Technical Description: 1 kg price for all kinds of stairs, balcony bridge railings, window and garden railings, stairs made to the roof, cesspool and similar places, iron rivets, bolts, welding and all kinds of materials and losses for the construction of grates and similar works made of various steel bars, flat bars and profile irons, including loading, horizontal and vertical transportation, unloading, workmanship, contractor overheads and profit at the workplace (excluding paint cost):</p> <p>Measurement: It is weighed before painting and mounting together with manufacturing and fixing material, if any.</p> <p>Note: However, if the administrations deem it necessary, it can inspect the scale weight of all profiles and hub point plates over the project dimensions compared to the weights on the table. As a result of this weighing; 7% of the weight more than the tables shall be paid, more than 7% of the weight shall not be taken into account. If the weight found as a result of this scale is less than the one in the table, the scale is taken as the basis, provided that the production is accepted by the administration.</p>	
Related reference posenumber book	15.550.1202 / Ministry of Environment, Urbanization and Climate Change	

Pose No	Pose	Unit
Civ54	Building a railing from iron pipe by welding, putting it in place	kg
Description/ Specification	<p>Technical Description: According to the project, 1 kg price for doing window and garden wall fences and similar works with any dimension of pipes, fixing the parts and welding them, including all kinds of materials and losses, workshop expenses, loading, horizontal and vertical transportation, unloading, workmanship, contractor general expenses and profit, (excluding paint cost):</p> <p>Measurement: It is weighed before painting and mounting together with manufacturing and fixing material, if any.</p> <p>Note: However, if the administrations deem it necessary, it can inspect the scale weight of all profiles and hub point plates over the project dimensions compared to the weights on the table. As a result of this weighing; 7% of the weight more than the tables shall be paid, more than 7% of the weight shall not be taken into account. If the weight found as a result of this scale is less than the one in the table, the scale is taken as the basis, provided that the production is accepted by the administration.</p>	
Related reference posenumber book	15.550.1203 / Ministry of Environment, Urbanization and Climate Change	

Pose No	Pose	Unit
Civ55	Production and installation of plastic joinery (Any kind of door, window, paneling and similar other applications of hard PVC joinery profiles) Note: All main and additional profiles should be marked along the profile length at min. 1-meter intervals on spots that are not visible when the window is closed. Marking of the main and additional profiles should contain the following minimum information. The name or trademark of the manufacturer, The marking and number of this standard (in the form of TS EN 12608-1), Wall thickness class, Production code (e.g. date, etc.) to ensure traceability	kg
Description/ Specification	Technical Description: Plastic joinery and accessories and glass laths made of rigid PVC profiles, which are made according to the project and details approved by the administration, must be resistant to all weather conditions and their surfaces must be smooth. The main profile made of PVC (according to the standard, the wall thickness	

must be class "A" and the wall thickness must be 2.8 mm on visible surfaces and 2.5 mm on invisible surfaces.) sections shall have a front chamber system designed to accelerate water discharge and to ensure both heat and sound insulation. The required strength of the metal reinforcement profiles and the main profiles (case, wing, middle register) shall be provided. Metal reinforcement profiles are U or box profiles made of hot-dip galvanized steel and protected against rust. In both cases, the sheet thickness will not be more than 1.5 mm in the case and wings and 2 mm in the middle. (However, if the moment of inertia is higher than the above-mentioned sheet thicknesses as a result of the calculation made on very wide registers and wings, sheet metal with a thickness compatible with the result must be used). Metal-reinforced PVC profiles shall be combined with plastic corner welding, screws, sash fastening and other means, and all kinds of window joinery, doors, windows and similar productions shall be made with the help of auxiliary joinery profiles, sheets and other profiles. In accordance with the system recommended by the manufacturer, the wing gaps shall be insulated with two rows of EPDM rubber, neoprene or tpe gaskets. The installation of glass of all types and thicknesses is done with the help of glass laths. Glass fixation shall be provided by gasket, mastic and other methods in accordance with the system recommended by the manufacturer. Each window sash frame (jointing) shall be fixed to the joinery frame with at least 2 (two) door sash frames and at least 3 (three) hinges for the door sash frame. The hinges shall be of the strength and design that will allow the wing to work in an adjusted manner. Plastic joinery frame and wing combinations shall be cut at 45 degrees and fixed to masonry parts or iron construction (blind frame) of the plastic joinery produced by welding with machines developed for this work.

The installation to the masonry assembly can be done in 3 ways.

a) With clamping blades; the clamp blades are mounted to the joinery on one side with a screw of the appropriate size, after the joinery is placed in its location, the clamping plate is mounted on the masonry assembly with the appropriate size screw on the other side.

b) With steel dowels; after the joinery is placed in its location, the slot is opened with a drill so that the masonry fittings can be passed over the joinery. An appropriately sized steel dowel is inserted into this slot and tightened.

c) With steel mounting screws; after the joinery is placed in its location, the slot is opened with a drill so that the masonry fittings can be passed over the joinery. Steel mounting screws of the appropriate size are inserted into this slot and tightened.

Mounting to the bare frame can be done in 2 ways.

a) With sheet metal screws; after the joinery is placed in its location, the slot is opened with a drill so that it passes over the joinery to the blind casing. Sheet metal screws of appropriate size are placed in this slot and tightened.

b) With lock profiles; the first part of the lock profiles to be attached to the joinery is attached to the joinery from all directions. After the joinery is placed in place, the second part of the lock profiles is put in place so that it is interlocked with the first part.)

Price of 1 kg of plastic joinery installed in place including ensuring water, air and soundproof sealing, and fixing the gaskets that will provide insulation in the wing gaps in accordance with the system, including All kinds of materials and losses, loading at the construction site, horizontal and vertical transportation, unloading, workmanship, tool and equipment expenses, contractor's general expenses and profit:

Measurement:

1) Only rigid PVC plastic joinery material, EPDM, neoprene or tpe gaskets, silicone-based putty, fixing screws or lock profiles, joint parts, reinforcements in the profile are weighed together.

2) If the Administration deems it necessary, it can verify the weight of the scales over the project dimensions, according to the weights of the profiles in the table. As a result of this weighing, a payment is made up to 7% more than the tables. In case the weight found as a result of the weighing is less than the weights in the table, the scale is taken

	<p>as the basis, provided that the production is accepted by the administration.</p> <p>3) In the detail projects, the meter weights of both the plastic profiles and the metal reinforcement profiles and the unit weights of the fasteners will be specified.</p> <p>Note:</p> <p>1) The cost of installing the metal parts is included in the joinery prices.</p> <p>2) Plastic joinery accessories (espagnolette, hinges, locks and additions, transom scissors and strikers, pivot hinges, bolts, brushes under the door, all kinds of door handles, hydraulic mechanisms such as opening, closing, locking mechanisms, etc.) are not included in the weighing. They are paid from their own price, if any, or paid by adding 25% of the contractor's general expenses and profit to the invoice price approved by the competent authorities, otherwise.</p> <p>3) All main profiles and additional profiles must be marked legibly and visibly along the length of the profile at least 1 m apart, in an inconspicuous and invisible place when the window is closed. The marking of main profiles and additional profiles must contain at least the following information.</p> <ul style="list-style-type: none"> - Manufacturer's name or trademark, - The sign and number of this standard (as TS EN 12608-1), - Wall thickness class, - Manufacturing code (e.g. date etc.) which may be sufficient to ensure traceability.
Related reference pose number book	15.455.1001 / Ministry of Environment, Urbanization and Climate Change

Pose No	Pose	Unit
Civ56	Production and replacement of natural-matte and anodized heat-insulated aluminium joinery	kg
Description/ Specification	<p>Technical Description: According to the project approved by the administration, detailed pictures and the sample; 1 kg price for the carrier aluminium joinery profiles (case, record, wing profiles) shaped by extrusion in accordance with current standards and technical specifications in terms of classification, chemical composition, mechanical properties, design, size and thickness tolerances, with natural-matte and anodized aluminium profiles; manufacture of any kind of single or biaxial, normal opening or sliding, etc.; window, showcase, door leaf and case etc. in the factory, all kinds of assembly materials (EPDM wick, PVC pulp (bituminous foil tape) to provide heat, water and air tightness insulation between the joinery and the installation place (blind casing, etc.), mounting dowel, etc.) installation and delivery in working condition, including transportation to the workplace, all kinds of material losses, workmanship, horizontal and vertical transportation expenses at the workplace, contractor general expenses and profit:</p> <p>Measurement:</p> <p>1) Aluminium is weighed together with the manufactured parts (including screws, rivets, protective packaging). If weighed together; if there are accessories which are paid separately, such as locks and attachments, window handles, door handles, hinges, transom scissors and strikers, bolts, under-door brushes, hydraulic mechanisms, pivot mechanisms, sliding and double axis mechanisms, etc. their weight is deducted. Accessory costs are paid based on its own market price, if any, or by adding 25% contractor's profit and general expenses to the invoice price approved by the competent authorities, if not.</p> <p>2) If the Administration deems it necessary, it can verify the weight of the scales over the project dimensions, according to the weights of the profiles in the table. As a result of this weighing, a payment is made up to 7% more than the tables. In case the weight found as a result of the weighing is less than the weights in the table, the scale is taken as the basis, provided that the production is accepted by the administration.</p> <p>Note:</p>	

	<p>1) Carrier aluminium profiles shall have a wall thickness of 2 mm (\pm 10%) provided that they provide the necessary strength according to the static calculation. (This condition is not sought for complementary profiles such as non-bearing glazing beads, T-bin profiles, adapter profiles, brackets, etc.).</p> <p>2) Corner fasteners made of aluminium profile (in case of thermal insulation, both corners of the thermally insulated profile) shall be used in the corner joints of the joinery and the corners shall be pressed.</p> <p>3) Heat insulated aluminium profiles will have at least three chambers.</p>
Related reference pose number book	15.460.1006 / Ministry of Environment, Urbanization and Climate Change

Pose No	Pose	Unit
Civ57	Levelling the floor with an average thickness of 2 mm with a cement-based self-levelling mortar and applying a 2 mm thick PVC-based floor covering on it (homogeneous - Group T - 04.443/A2C)	m ²
Description/ Specification	<p>Technical Description: After applying the mortar, the details of which are specified in 15.190.1007, and after sufficient drying time, removing possible fluctuations that may occur on the surface, applying acrylic-based PVC adhesive with a consumption of 0.350 kg/m², laying 2.0 mm thick homogeneous PVC (Group T) floor covering material and firmly fixing it, placing PVC welding cord suitable for the coating colour on the joints formed at the material joints and joining them with hot welding, including all kinds of materials and losses, workmanship, loading at the workplace, horizontal and vertical transportation, unloading, contractor profit and general expenses. The price of 1 m² of this work:</p> <p>Measurement:</p> <p>1) The coated surfaces are measured over the project.</p> <p>2) In case of self-returning capped skirting; the covered surfaces, including the skirting board, are measured according to the dimensions in the project. In addition, the cost of the skirting board is paid from its own pose.</p> <p>Note:</p> <p>1) A certificate of conformity issued by an internationally approved accredited organization stating that the PVC flooring material is produced in accordance with EN 649 standard is required. It is required that the fire class, volume loss and abrasion thickness loss test results have been published on international web pages by the manufacturer.</p> <p>2) PVC flooring material is tested within the knowledge of the administration. Along with the payment documents, laboratory test reports are required.</p>	
Related reference pose number book	15.365.1008 / Ministry of Environment, Urbanization and Climate Change	

Pose No	Pose	Unit
Civ58	Making floor cladding with 3 mm joint spaces, with 60x60 cm nominal size, rectified, all kinds of colours, patterns and surface features, 1st quality, shining, unglazed porcelain tiles (with tile adhesive)	m ²
Description/ Specification	<p>Technical Description: The price per 1 m² of cleaning and moistening the smooth surface in accordance with the approved detail project from dirt, dust, burrs and similar residues that prevent adhesion, applying cement-based, high-performance, slip-reduced, extended open time tile adhesive on the surface and grooving with a special comb, with 60 x 60 cm nominal size, rectified, 1st quality, shining, unglazed porcelain tiles with all kinds of colour, pattern and surface properties, in accordance with the gauge and</p>	

	levelling, leaving 3 mm joint gaps, filling the joints with cement-based, high performance, high abrasion resistant, water-absorption-reduced joint filler in the desired colour, cleaning of the coated surface, all kinds of materials and losses, workmanship tool and equipment expenses, loading at the workplace, horizontal and vertical transportation, unloading, contractor general expenses and profit included: Measurement: It is calculated according to the dimensions on the coated surface and the skirting project, if any.
Related reference pose number book	15.390.1028 / Ministry of Environment, Urbanization and Climate Change

Pose No	Pose	Unit
Civ59	Making floor cladding with 3 mm joint spaces, with 30x60 cm nominal size, rectified, all kinds of colours, patterns and surface features, 1st quality, shining, unglazed porcelain tiles (with tile adhesive)	m2
Description/ Specification	Technical Description: The price per 1 m ² of cleaning and moistening the smooth surface in accordance with the approved detail project from dirt, dust, burrs and similar residues that prevent adhesion, applying cement-based, high-performance, slip-reduced, extended open time tile adhesive on the surface and grooving with a special comb, with 30 x 60 cm nominal size, rectified, 1st quality, shining, unglazed porcelain tiles with all kinds of colour, pattern and surface properties, in accordance with the gauge and levelling, leaving 3 mm joint gaps, filling the joints with cement-based, high performance, high abrasion resistant, water-absorption-reduced joint filler in the desired colour, cleaning of the coated surface, all kinds of materials and losses, workmanship tool and equipment expenses, loading at the workplace, horizontal and vertical transportation, unloading, contractor general expenses and profit included: Measurement: It is calculated according to the dimensions on the coated surface and the skirting project, if any.	
Related reference pose number book	15.390.1030 / Ministry of Environment, Urbanization and Climate Change	

Pose No	Pose	Unit
Civ60	Laying a 50x20x10 cm white cement steam cured concrete border (chamfered, any colour)	m
Description/ Specification	Technical Description: 1m price for installation of 50x20x10 cm white cement steam-cured concrete curbs in accordance with the project and technique, closing the joints between two curbs with 400-dose cement mortar, all kinds of materials and losses, workmanship, loading, horizontal and vertical transportation, unloading, tool and equipment expenses, contractor overhead and profit: Measurement: The curb length is calculated over the project.	
Related reference pose number book	15.435.1201 / Ministry of Environment, Urbanization and Climate Change	

Pose No	Pose	Unit
Civ61	Floor covering with 3 cm thick colored marble slabs (3cmx30-40-50 cmxfree length) (honed or polished))	m2
Description/ Specification	Technical Description: 1 m ² price for cleaning and wetting the existing concrete step surfaces made in accordance with the specifications, making a base with a 4 cm thick 400 kg cement dosed mortar, laying honed or polished marble slabs with 2 mm spacing on	

	it, levelling it according to the shape and division in the project, plastering joints and all surfaces with cement-based joint paste, cleaning and wiping the paste on the slab surface after half an hour, including all kinds of workmanship, material and loss, loading-unloading at the workplace, horizontal-vertical transportation, contractor general expenses and profit for performing these works, (except for levelling concrete): Measurement: Coated surfaces are calculated over the project.
Related reference pose number book	15.410.1103 / Ministry of Environment, Urbanization and Climate Change

Pose No	Pose	Unit
Civ62	Stair tread covering with colored marble slabs (step 3 cm, pier 2 cm thick) (honed or polished)	m
Description/ Specification	<p>Technical Description: 1 m price for cleaning and wetting the existing concrete step surfaces made in accordance with the specifications, making a base with 400 kg cement dosed mortar, preparing a step with a 3 cm thick honed or polished marble slab and the pier with a 2 cm thick honed or polished marble slab separately and covering them, cleaning, wiping them, including all kinds of workmanship, materials and losses required for performing these works, loading-unloading at the workplace, horizontal-vertical transportation, contractor overheads and profit:</p> <p>Measurement: The length of the outer edge of the step from the skirting to the tip of the step is calculated over the project.</p> <p>Note: Skirting and conservatory coverings are not included in this price.</p>	
Related reference pose number book	15.410.1303 / Ministry of Environment, Urbanization and Climate Change	

Pose No	Pose	Unit
Civ63	Applying a single layer of thin plaster with 350 kg cement dosed mortar	m2
Description/ Specification	<p>Technical Description: 1 m² price for spreading a layer with the mortar prepared by adding 350 kg of cement to 1 m³ alluvion sand and applying a plaster with an average thickness of 1.2 cm on concrete or reinforced concrete surfaces at once with the same mortar, cleaning the wall surface, watering it when necessary, all kinds of materials and losses, workmanship, work benches, on-site loading, horizontal and vertical transport, unloading, contractor overheads and profit:</p> <p>Measurement: All plastered surfaces are calculated over the project.</p>	
Related reference pose number book	15.275.1105 / Ministry of Environment, Urbanization and Climate Change	

Pose No	Pose	Unit
Civ64	Filling the metal door frame backs with concrete mortar	m2
Description/ Specification	<p>Technical Description: After the assembly of door frames and trims made of metal (sheet metal, aluminium, etc.), closing the edges with laths when necessary, filling the gaps behind the frame with 300 kg cement dosed mortar so that there are no gaps, all kinds of materials and losses, loading at the workplace, horizontal and vertical transport, unloading, workmanship, contractor overheads and profit. 1 m² price of this work:</p> <p>Measurement: It is calculated over the case surface project.</p>	
Related reference pose number	15.275.9991 / Ministry of Environment, Urbanization and Climate Change	

book	
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Pose No	Pose	Unit
Civ65	Making a 200 kg cement dose levelling layer	m2
Description/ Specification	<p>Technical Description: According to the project and detail project, 1 m² price for cleaning and washing the place where the levelling layer shall be made, making a levelling layer by adding 200 kg of cement to 1 m³ of toothed sand and compressing it in an average 3 cm thick gauge, watering it when necessary, cleaning it from mortar and similar residues, including all kinds of materials and losses, workmanship, loading at the construction site, horizontal and vertical transportation, unloading, contractor overheads and profit:</p> <p>Measurement: The area of the levelled place is calculated over the project.</p>	
Related reference posenumber book	15.250.1001 / Ministry of Environment, Urbanization and Climate Change	

Pose No	Pose	Unit
Civ66	Applying screed with a thickness of 2.5 cm and 400 kg of cement	m2
Description/ Specification	<p>Technical Description: According to the project and detail project, 1 m² price for cleaning, washing the surface to be screed, with the mortar obtained by adding 400 kg of cement to 1 m³ of sand, applying trowel-polished screed with an average thickness of 2.5 cm on the anodes made with planed laths in 2x2 cm section, watering, cleaning, washing when necessary, including all necessary materials and losses, workmanship, loading at the construction site, horizontal and vertical transportation, unloading, contractor overheads and profit:</p> <p>Measurement: The area of the screed place is calculated over the project.</p>	
Related reference posenumber book	15.250.1101 / Ministry of Environment, Urbanization and Climate Change	

Pose No	Pose	Unit
Civ67	Installing a double-glazed window unit of 4+4 mm thickness with 16 mm gaps to PVC and aluminium joinery with a profile	m2
Description/ Specification	<p>Technical Description: 1 m² price for preparing the double-glazed window unit with 4+4 mm thickness, 16 mm gap, according to the size of the place where it will be installed, placing wedges in the glass slot and placing the glass in the slot, placing the profile and its wick, balancing the unit with glazing wedges, applying neutral (acid-free) silicone to the joints of the profiles in the form of punctuation including, loading at the construction site, horizontal vertical transportation and unloading, all kinds of materials and losses, workmanship, tool and equipment expenses, contractor general expenses and profit:</p> <p>Measurement: Glass-installed areas are calculated according to the dimensions in the project.</p> <p>Note: Profile and wick cost is paid from its own joinery pose.</p>	
Related reference posenumber book	15.470.1014 / Ministry of Environment, Urbanization and Climate Change	

Mechanical Works

Pose No	Pose	Unit
Mec01	Under-counter or over-counter oval washbasin Approximately 40x50 cm Glazed Ceramic Extra Class Washbasins	pcs
Description/ Specification	Technical Description: On site supply and installation of the washbasin with the specified type and dimensions, with or without a fixed soap dish, white colour, together with the mounting elements. Note: In case of use of colored glazed ceramics, the assembled prices shall be increased by 15% and the installation costs shall be applied without increasing. Washbasins shall have been placed on the market with CE marking, in accordance with 305/2011/EC Building Materials Regulations.	
Related reference posenumber book	25.100.1010 / Ministry of Environment, Urbanization and Climate Change	

Pose No	Pose	Unit
Mec02	50x60 cm Half Leg Set	pcs
Description/ Specification	Technical Description: On site supply and installation of the washbasin with the specified type and dimensions, with or without a fixed soap dish, white colour, together with the mounting elements. Washbasins shall have been placed on the market with CE marking, in accordance with 305/2011/EC Building Materials Regulations. Note: In case of use of colored glazed ceramics, the assembled prices shall be increased by 15% and the installation costs shall be applied without increasing	
Related reference posenumber book	25.100.1020 / Ministry of Environment, Urbanization and Climate Change	

Pose No	Pose	Unit
Mec03	50x60 cm Handicapped Washbasin. (The depth of the washbasin must be minimum 43 cm and maximum 49 cm.)	pcs
Description/ Specification	Technical Description: On site supply and installation of the washbasin with the specified type and dimensions, with or without a fixed soap dish, white colour, together with the mounting elements. Washbasins shall have been placed on the market with CE marking, in accordance with 305/2011/EC Building Materials Regulations. Note: In case of use of colored glazed ceramics, the assembled prices shall be increased by 15% and the installation costs shall be applied without increasing.	
Related reference posenumber book	25.100.1019 / Ministry of Environment, Urbanization and Climate Change	

Pose No	Pose	Unit
Mec04	Washbasin fittings, First class: (Battery TS EN 200; Siphon TS-EN 274-1-2-3)	sets
Description/ Specification	Technical Description: To be used with the washbasins mentioned in BFT.071-000, brass chrome or plastic based (acetal copolymer), quality certified, with 15 mm tap and badge or battery certified according to TS-EN 274-1-2-3, easy to disassemble and clean, 6 cm. odour trap, with at least 16 cm. extension piece and badge made of brass chrome or hard-plate based in accordance with TS-EN 274-1-2-3, easy to disassemble and clean, resistant to acids and temperatures of at least 80°C, on-site supply of the product together with 32 mm Washbasin siphon with its connection adapter to the waste water pipe, assembly and delivery in working condition, (Sewer drain pipe is not included in the	

	price.).
Related reference posenumber book	25.102.1301 / Ministry of Environment, Urbanization and Climate Change

Pose No	Pose	Unit
Mec05	Mirror (crystal glass) 40x50 cm+D106	pcs
Description/ Specification	Technical Description: Glass thickness 5 mm, mirror edge grinded, when there are stripes on the mirror, the stripes shall be bevelled. Wall-connection screws shall be made of brass material and minimum 5-micron nickel plated or stainless steel. To be mounted on the wall with mirror wall hanger, screws and dowels. Mirrors shall have been placed on the market with CE marking, in accordance with 305/2011/EC Building Materials	
Related reference posenumber book	25.104.1001 / Ministry of Environment, Urbanization and Climate Change	

Pose No	Pose	Unit
Mec06	Turkish-style toilet bowl (Extra class made of glazed ceramic) with plastic siphon, 50x60 cm	pcs
Description/ Specification	Technical Description: On-site supply of white, 4-cornered toilet bowl; Made of solid Ø 100 mm PVC in accordance with TS-EN 274-1-2-3, resistant to 80°C temperature and acids, 6 cm odour trap and installation in the workplace, together with the squash toilet siphon, shall be in compliance with (TS 799) with quality certification. Note: In case of use of colored glazed ceramics, the assembled prices shall be increased by 15% and the installation costs shall be applied without increasing.	
Related reference posenumber book	25.108.1101 / Ministry of Environment, Urbanization and Climate Change	

Pose No	Pose	Unit
Mec07	Approximately 35x55 cm (Extra quality), SELF RESERVOIR AND LESS WATER CONSUMPTION EUROPEAN STYLE TOILET AND INSTALLATION (TS 800 EN 997)	Sets
Description/ Specification	Technical Description: A quality certified toilet made of white colour (glassed tile) with intermittent spaces, capable of washing completely with 4 litres and a reservoir can be placed on it; complete cistern made of tile, seat and cover made of hard plastic; Brass chrome-plated quality certified reservoir intermediate and bidet faucets, plastic bidet pipe, rosettes and chrome-plated fixing screws and wedges, on-site supply, installation and delivery in working condition. Note: In the case of using colored vitrified tiles, the prices including assembly shall be increased by 15% and assembly prices shall be applied the same without increasing. Products shall have been placed on the market with CE marking, in accordance with 305/2011/EC Building Materials Regulations.	
Related reference posenumber book	25.112.1201 / Ministry of Environment, Urbanization and Climate Change	

Pose No	Pose	Unit
Mec08	For the handicapped, approximately 35x70 cm. Extra quality. (The height of the	Sets

	toilet seat from the ground must be between 43 cm and 48 cm), SELF RESERVOIR AND LOW WATER CONSUMPTION EUROPEAN-STYLE TOILET AND INSTALLATION (TS 800 EN 997)	
Description/ Specification	Technical Description: A quality certified toilet made of white colour (glazed tile) with intermittent spaces, capable of washing completely with 4 litres and a reservoir can be placed on it; complete cistern made of tile, seat and cover made of hard plastic; Brass chrome-plated quality certified reservoir intermediate and bidet faucets, plastic bidet pipe, rosettes and chrome-plated fixing screws and wedges, on-site supply, installation and delivery in working condition. Note: In the case of using colored vitrified tiles, the prices including assembly shall be increased by 15% and assembly prices shall be applied the same without increasing. Products shall have been placed on the market with CE marking, in accordance with 305/2011/EC Building Materials Regulations.	
Related reference posenumber book	25.112.1203 / Ministry of Environment, Urbanization and Climate Change	

Pose No	Pose	Unit
Mec09	Foldable grab bar for the handicapped, Foldable grab bar for the handicapped,	pcs
Description/ Specification	Technical Description: Chrome plated on stainless steel, approx. 800 mm, min Ø 30 mm (If spray painted instead of chrome plated, installed prices are reduced by 10%, installation costs are paid without deduction.)	
Related reference posenumber book	25.135.4004 / Ministry of Environment, Urbanization and Climate Change	

Pose No	Pose	Unit
Mec10	Toilet grab bar for the disabled, Toilet grab bar for the disabled	pcs
Description/ Specification	Technical Description: Chrome plated on stainless steel, approx. 700x 740 mm, min Ø 30 mm (If spray painted instead of chrome plated, installed prices are reduced by 10%, installation costs are paid without deduction.)	
Related reference posenumber book	25.135.4003 / Ministry of Environment, Urbanization and Climate Change	

Pose No	Pose	Unit
Mec11	Paper holder (stainless steel)	Pcs
Description/ Specification	Technical Description: On site supply and installation of paper holder made of stainless-steel sheet with chrome plated fixing screws and special wedges or dowels.	
Related reference posenumber book	25.135.2002 / Ministry of Environment, Urbanization and Climate Change	

Pose No	Pose	Unit
Mec12	Hose Diameter DN 25 Hose Length 20 m, Tube Model Fire Cabinets, IN COMPLIANCE WITH TS. IN EN 671-1 NORMS	Pcs

Description/ Specification	Technical Description: With the reel consisting of two steel discs with a maximum diameter of not more than 800 mm and an inner circular part and a drum with a minimum diameter of not less than 200 mm for hoses with a diameter of 25 mm, manufactured in accordance with the 2014/68 Pressure Vessels Regulation, Compliant with TS EN 671-1, TS EN 671-2. Hose manufactured in accordance with the 305/2011/EU Construction Materials Regulation and presented to the market with CE conformity mark: Round semi-rigid nozzle or lance conforming to TS EN 694+A1, with a hose diameter of 25 mm and a hose length not exceeding 30 m: Fire valve that can do closing and spraying and/or sprinkling in accordance with TS EN 671-1, 671-2: manually operated, DN50 diameter, with coupling, valve and fitting in accordance with TS 12258, 12259. The appropriate one of the plates stipulated in the Directive on Minimum Conditions for Safety and/or Health Signs in the Workplace (92/58/EEC) is used, in dimensions that can contain the cabinet and the entire fire extinguishing installation. Note: Supply and assembly at the workplace with 6 Kg ABC type dry chemical powder tube in accordance with TS 862 EN 3 in Tube Models.
Related reference posenumber book	25.700.1201 / Ministry of Environment, Urbanization and Climate Change

Pose No	Pose	Unit
Mec13	DN 50, Fireman's Floor Connection Valve	Pcs
Description/ Specification	Technical Description: Fireman's Floor Connection Valve (Measurement: Pieces) On site supply and installation of fireman's floor connection valve, in accordance with TS 12259, with a forged brass body, coupling suitable for firemen connection and aluminium chain cover.	
Related reference posenumber book	25.712.2001 / Ministry of Environment, Urbanization and Climate Change	

Pose No	Pose	Unit
Mec14	6 kg, ABC Dry Chemical Powder Portable Fire Extinguishers	pcs
Description/ Specification	Technical Description: Supply of portable fire extinguisher in compliance with TS 862-7 EN 3-7+A1 standards and supplied to the market with the 97/23/CE conformity mark, suitable for extinguishing ABC Class fires, with dry chemical powder, continuous pressure or internal cartridge, alloy spinning body, phosphated and protective painted against external corrosion, with body and label in accordance with EN standards, with safety valve, brass valve, its installation in accordance with the project and technical specifications, delivery in working condition	
Related reference posenumber book	25.732.1104 / Ministry of Environment, Urbanization and Climate Change	

Pose No	Pose	Unit
Mec15	25 Ø mm (1") screw Cold water meters, Cold water meters: Supply and installation in the workplace	pcs
Description/ Specification	Technical Description: Supply and on-site installation of meters with CE conformity mark in accordance with the Measuring Instruments Regulation (2004/22/AT).	
Related	25.142.1102 / Ministry of Environment, Urbanization and Climate Change	

reference posenumber book	
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Pose No	Pose	Unit
Mec16	7.50 m ³ Prismatic Modular Stainless Steel Water Tank	pcs
Description/ Specification	<p>Technical Description: On site supply and installation of the modular water tank, whose entire body is manufactured of AISI 304 stainless steel, all internal and external materials, tension rods, bolts, feet, manholes, vents and connection openings are made of stainless steel, the fixtures on it are made of stainless or brass material, strength calculations and projects are approved by the administration, all parts are produced by cold forming, bending or twisting method under factory conditions; which is connected with bolts using silicone and epidem rubber gaskets at the manufacturing and assembly site without any welding process, which has a PVC or polyethylene diaphragm at the bottom of the tank to cut the contact with the base material, which has the Turkish Standards Conformity Certificate, and its installation on site after connecting to the mains.</p> <p>Note:</p> <ul style="list-style-type: none"> - The fixtures made of stainless or chromed brass material on the tank, stainless tank feet, level floater, inlet-outlet ball valves, ball blowdown valve, air discharge breathing apparatus, tank overflow mouth and pipe, level indicator, valves and discharge tap, upper and lower manhole maintenance cover, warehouse climbing ladder are included in the price. - Unit prices of intermediate values are found by interpolation. - The Chart regarding the tank sheet thicknesses is given in the Sanitary Installation general explanations section. 	
Related reference posenumber book	25.150.1206 / Ministry of Environment, Urbanization and Climate Change	

Pose No	Pose	Unit
Mec17	Flow-m ³ /h: 0-10 Pressure-mSS: 30-60, Two Pumps, Vertical Shaft Centrifugal Pump, Booster	pcs
Description/ Specification	<p>Technical Description: Electrical panel package booster in the specified capacity and features, with strainer, check valve, ball on-off valves, automatic pressure switch (equal to the number of pumps) whose lower and upper limits can be adjusted to the required pressure, manometer showing water pressure, floating water level switch with thermal protection against overload or level control with electrodes, safe against waterless operation, with switches and indicators on it. Centrifugal Pump: Pressurized Tank Having TSE certificate of conformity, vertical or horizontal shaft with different stages according to its capacity, with connection flanges, coupled to the pump directly with a special coupling, ensuring the watertightness of the engine by a mechanical seal, activated individually or jointly according to the water demand, having a 3000 rpm with single-phase or three-phase pump motor: Supply and installation of the fully automatic package booster, in compliance with TS EN ISO 11124-1,2,3,4, made of proper steel, closed to the atmosphere, replaceable membrane, made of St. 37-2 material, with sufficient volume and number of balance tanks, with the pump-motor fixed on the same chassis or connected with the connection hose, with the necessary measures taken against rust, with all pipes, collectors, cable connections made, with TSE quality certified vertical or horizontal shaft, in full working condition. NOTE: 1- Maximum number of pump switches: Pump power 180 times/h up to 1.1. kW. If it is over 1.1 kW, 40 times/h will be considered 2- The capacities specified in booster pumps with more than one pump are the sum of the pump flow rates.</p>	

Related reference posenumber book	25.160.1201 / Ministry of Environment, Urbanization and Climate Change	
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Pose No	Pose	Unit
Mec18	Welded galvanized pipe (1") (In-house screwed, 30% added)	m
Description/ Specification	Technical Description: Shall be in accordance with TS EN 10255 + A1, where its materials shall be in accordance with Fe 33-2305/2011/ EU Building Materials Directive and 2014/68/EU Pressure Equipment Regulation, launched on the market with CE conformity mark, with the steel pipes installed in accordance with the relevant specifications and project, including making connections and workmanship, except from blue lead and paint.	
Related reference posenumber book	25.300.1403/A / Ministry of Environment, Urbanization and Climate Change	

Pose No	Pose	Unit
Mec19	Pn 20 polypropylene clean water pipe 1/2" 20/3,4 mm Polypropylene clean water pipes (Physiotherm welded and screwed inside the building, 45% added)	m
Description/ Specification	Technical Description: Polypropylene Clean Water Pipes (TS EN ISO 15874-1, 2, 3, 5, 7) (Measurement: m) On-site supply of the pipes which are in compliance with TS EN ISO 15874-2, made of polypropylene (PPR-C) Type 3; certified by the Ministry of Health to have no impediment to be used as a drinking water pipe, cutting them in accordance with the project, squeezing and welding the fittings to the pipe terminals at 260 °C with a physiotherm welding machine. (Including all kinds of materials and labour for welding) The costs of assembly materials are included.	
Related reference posenumber book	25.305.2101/3300 / Ministry of Environment, Urbanization and Climate Change	

Pose No	Pose	Unit
Mec20	Pn 20 polypropylene clean water pipe 3/4" 25/4.2 mm Polypropylene clean water pipes (Physiotherm welded and screwed inside the building, 45% added)	m
Description/ Specification	Technical Description: Polypropylene Clean Water Pipes (TS EN ISO 15874-1, 2, 3, 5, 7) (Measurement: m) On-site supply of the pipes which are in compliance with TS EN ISO 15874-2, made of polypropylene (PPR-C) Type 3; certified by the Ministry of Health to have no impediment to be used as a drinking water pipe, cutting them in accordance with the project, squeezing and welding the fittings to the pipe terminals at 260 °C with a physiotherm welding machine. (Including all kinds of materials and labour for welding) The costs of assembly materials are included.	
Related reference posenumber book	25.305.2102/3300 / Ministry of Environment, Urbanization and Climate Change	

Pose No	Pose	Unit
Mec21	Pn 20 polypropylene clean water pipe 1" 32/5.4 mm Polypropylene clean water pipes (Physiotherm welded and screwed inside the building, 45% added)	m
Description/ Specification	Technical Description: Polypropylene Clean Water Pipes (TS EN ISO 15874-1, 2, 3, 5, 7) (Measurement: m) On-site supply of the pipes which are in compliance with TS EN ISO	

	15874-2, made of polypropylene (PPR-C) Type 3; certified by the Ministry of Health to have no impediment to be used as a drinking water pipe, cutting them in accordance with the project, squeezing and welding the fittings to the pipe terminals at 260 °C with a physiotherm welding machine. (Including all kinds of materials and labour for welding) The costs of assembly materials are included.	
Related reference pose number book	25.305.2103/3300 / Ministry of Environment, Urbanization and Climate Change	

Pose No	Pose	Unit
Mec22	Pn 20 polypropylene pipe 1 1/4" 40/6.7 mm Polypropylene clean water pipes (18% added, to the soil outside the building)	m
Description /Specification	Technical Description: Polypropylene Clean Water Pipes (TS EN ISO 15874-1, 2, 3, 5, 7) (Measurement: m) On-site supply of the pipes which are in compliance with TS EN ISO 15874-2, made of polypropylene (PPR-C) Type 3; certified by the Ministry of Health to have no impediment to be used as a drinking water pipe, cutting them in accordance with the project, squeezing and welding the fittings to the pipe terminals at 260 °C with a physiotherm welding machine. (Including all kinds of materials and labour for welding) The costs of assembly materials are included.	
Related reference pose number book	25.305.2104/3500 / Ministry of Environment, Urbanization and Climate Change	

Pose No	Pose	Unit
Mec23	Pn 20 polypropylene pipe 1 1/2" 50/8.4 mm Polypropylene clean water pipes (18% added, to the soil outside the building)	m
Description/ Specification	Technical Description: Polypropylene Clean Water Pipes (TS EN ISO 15874-1, 2, 3, 5, 7) (Measurement: m) On-site supply of the pipes which are in compliance with TS EN ISO 15874-2, made of polypropylene (PPR-C) Type 3; certified by the Ministry of Health to have no impediment to be used as a drinking water pipe, cutting them in accordance with the project, squeezing and welding the fittings to the pipe terminals at 260 °C with a physiotherm welding machine. (Including all kinds of materials and labour for welding) The costs of assembly materials are included.	
Related reference pose number book	25.305.2105/3500 / Ministry of Environment, Urbanization and Climate Change	

Pose No	Pose	Unit
Mec24	Pn 20 polypropylene pipe 2", 63/10.5 mm Polypropylene clean water pipes (18% added, to the soil outside the building)	m
Description/ Specification	Technical Description: Polypropylene Clean Water Pipes (TS EN ISO 15874-1, 2, 3, 5, 7) (Measurement: m) On-site supply of the pipes which are in compliance with TS EN ISO 15874-2, made of polypropylene (PPR-C) Type 3; certified by the Ministry of Health to have no impediment to be used as a drinking water pipe, cutting them in accordance with the project, squeezing and welding the fittings to the pipe terminals at 260 °C with a physiotherm welding machine. (Including all kinds of materials and labour for welding) The costs of assembly materials are included.	
Related reference pose number book	25.305.2106/3500 / Ministry of Environment, Urbanization and Climate Change	

Pose No	Pose	Unit
Mec25	Rigid PVC plastic wastewater pipe (plug-in muff, diameter: 50-40 mm, wall thickness 3 mm) (Excluding the cost of mounting material)	m
Description/ Specification	Technical Description: Supply of rigid PVC plastic wastewater pipes in accordance with TS EN 1329-1 in the workplace, installation in place as plug-in or adhesive muff	
Related reference posenumber book	25.305.6101 / Ministry of Environment, Urbanization and Climate Change	

Pose No	Pose	Unit
Mec26	Rigid PVC plastic wastewater pipe (plug-in muff, diameter: 75-70 mm, wall thickness 3 mm) (Excluding the cost of mounting material)	m
Description/ Specification	Technical Description: Supply of rigid PVC plastic wastewater pipes in accordance with TS EN 1329-1 in the workplace, installation in place as plug-in or adhesive muff	
Related reference posenumber book	25.305.6102 / Ministry of Environment, Urbanization and Climate Change	

Pose No	Pose	Unit
Mec27	Rigid PVC plastic wastewater pipe (plug-in muff, diameter: 100-110 mm, wall thickness 3 mm) (Excluding the cost of mounting material)	m
Description/ Specification	Technical Description: Supply of rigid PVC plastic wastewater pipes in accordance with TS EN 1329-1 in the workplace, installation in place as plug-in or adhesive muff	
Related reference posenumber book	25.305.6103 / Ministry of Environment, Urbanization and Climate Change	

Pose No	Pose	Unit
Mec28	20 Ø mm (3/4"), Brass, pressed Teflon (PTFE), gasketed, full bore,	pcs
Description/ Specification	Technical Description: BALL VALVES (TS 3148) The supply and workplace-installation of the ball valves, in accordance with the 2014/68/EU Pressure Equipment Regulation, with brass cutting elements, made of peak carbon steel or stainless steel, with screws, wafers, lugs or flanges, passage controlled by a transition sphere, with manually opening and closing system.	
Related reference posenumber book	25.320.2102 / Ministry of Environment, Urbanization and Climate Change	

Pose No	Pose	Unit
Mec29	Ball valve, brass press, Teflon seal (diameter: 40 mm)	pcs
Description/ Specification	Technical Description: The supply and workplace-installation of the ball valves, in accordance with the 97/23/EC Pressure Equipment Regulation, with brass cutting elements, made of peak carbon steel or stainless steel, with screws, wafers, lugs or flanges, passage controlled by a transition sphere, with manually opening and closing system.	
Related reference posenumber	25.320.2105 / Ministry of Environment, Urbanization and Climate Change	

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Pose No	Pose	Unit
Mec30	20 Ø mm (3/4"), Brass die casting screw, BACK VALVES (For hot and cold water) (TS EN 1074-3)	pcs
Description/ Specification	Technical Description: Supply and workplace-installation of holding valve to be used in hot or cold-water installations, with brass diecast or cast body, operating in horizontal or vertical positions, with hinges or insertable flap or ball.	
Related reference posenumber book	25.325.2102 / Ministry of Environment, Urbanization and Climate Change	

Pose No	Pose	Unit
Mec31	25 Ø mm (1"), Brass die casting screw, BACK VALVES (For hot and cold water) (TS EN 1074-3)	pcs
Description/ Specification	Technical Description: Supply and workplace-installation of holding valve to be used in hot or cold-water installations, with brass diecast or cast body, operating in horizontal or vertical positions, with hinges or insertable flap or ball.	
Related reference posenumber book	25.325.2103 / Ministry of Environment, Urbanization and Climate Change	

Pose No	Pose	Unit
Mec32	Vehicle Disinfection Tunnel 8 Meters	pcs
Description/ Specification	<p>1. Disinfection Tunnel</p> <p>The disinfection tunnel must be 8m long, 4.5m wide, muster length must be 4.5m high, and the upper part must be R 2950 mm twisted.</p> <p>The profiles to be used in the tunnel skeleton must be made of at least 60x60x3mm vertically and at least 40x60x2mm horizontally thick and must be hot-dip galvanized. (Side wall and ceiling connection plates and tunnel's fixing plates to the ground must be 10 mm, buckling records must be present on the side walls at the start, end and middle block]</p> <p>In case of damages that may occur due to impact, 250cm high galvanized sheet must be covered at the bottom of the side walls, and 6mm polycarbonate sheet must be placed on the top of the side walls and ceiling in order to replace the damaged part as a part and reduce the damage costs.</p> <p>Installation of the tunnel skeleton must be carried out with galvanized fasteners without welding in order to prevent corrosion in external climatic conditions.</p> <p>The assembly of the tunnel skeleton must be on the concrete floor with epoxy dowels in 160x200x10mm dimensions, using flanges and Ø16mm galvanized rods.</p> <p>The floor concrete where the unit will be installed, and the electricity-water supply required for the system shall be made ready by the administration.</p> <p>The cladding thickness of the tunnel skeleton must be made with 6mm PC plate facade cladding material, having light transmittance of (±5%) 80.54, weight of 1250 g/m², non-flammability class of BI, K value [w/m²*k] of 3.6, density of 1.2 g/cm³, minimum bending of 1500 mm.</p> <p>There shall be an IP65 protection class start button at the tunnel entrance.</p> <p>In order for the vehicles entering the tunnel not to damage the tunnel (bumping, rubbing, etc.), there must be arch with a height warning plate made of metal pipe and yellow oven paint.</p> <p>Since the disinfection will be done with the bottling method, the wastewater and</p>	

disinfectant shall not accumulate, therefore, a drainage line shall not be created. In order to prevent the lines outside the disinfection cabinet from freezing, there must be a 100 l plastic anti-freeze tank with a magnetic level floater at the bottom level in the disinfection automation cabinet. It must have a digital timer controlled from the panel that allows the antifreeze to be filled on the line.

2. Disinfection Automation Cabinet

In order to put the pump motor group, filter group, water tank, dosing pump, disinfectant container, anti-freeze container and control panel; there shall be 2x2 (4m²) PVC panelling with a height of 2.20m, PVC panelling on the ceiling, 80mm thick glass wool and trapezoidal sheet on it, 16mm PVC vinyl coated concrete panel on the floor, 40*60 PVC window with single opening from the top for cabin ventilation

The ground concrete for at least 4m² cabin shall be prepared by the administration. There must be a thermostat controlled infrared heater for the cabin room (to protect the mixing tank, pump motor group and filter group against freezing). Electronic materials in the cabin room must comply with IP21 protection class, those above the tunnel and outside must be in IP54 protection class.

3. Disinfection Automation Supplies

3.1 High Pressure Pump

There must be 1 high pressure pump whose general characteristics are defined. Minimum 30 l/min capacity of 100 bar, working pressure of 70 bars, ceramic piston, 5.5KW, 380V., pressure manometer must be on pressure adjustment regulator. 380V electrical line to disinfection automation cabinet and water line for tank filling shall be provided by the relevant administration.

3.2 Control Panel

It shall be PLC controlled, with programmable digital timer, motor and pump protection circuit. There shall be a digital temperature controller that controls the cabin temperature, and a digital temperature controller that controls the outdoor temperature. All electrical materials and components in the control panel shall be used in accordance with TS9758, IEC947, IEC947-2 and IEC61010 standards.

3.3 Nozzles and Fasteners

It must have 0.5mm of hole diameter, 95° spray angle, cleanable, <13μ average particle diameter, 10-24 teeth size, made of stainless steel. There shall be a total of 150 nozzles in the tunnel. The nozzle carrier connection piece shall be nickel plated and there shall be 150 pieces in total.

3.4 High Pressure Hose

In order to distribute the disinfectant material to the nozzles, 1/2" high pressure hose must be at least 5m and maximum 25m between the disinfection tunnel and the cabinet. 3/8" high pressure hose must be used 100m in total, it must be polyamide 12, 3% UV added, with a working pressure of 70 bars, with a burst pressure of 140 bars.

4. Particle Retaining Filter Group

Filter container specifications; Double connected to each other with 10" brass unions in series, the cover part being 100% polypropylene, the cartridge container being

	<p>transparent yellow (yellow: is the plastic raw material's name, crystal-like, unbreakable and pressure-resistant body], O-ring NBR 70 Sh, max. working pressure of 8 bar, max. burst pressure of 35 bar, operating temperature must be minimum 0°C, maximum 50°C. Cartridge specifications: material 100% polypropylene, length 10", outer diameter 28mm, micron value 20µ-10 µ, efficiency 80%, max. working pressure 6 bar, max. pressure difference of 0.8 bar, max. working temperature must not exceed 80 °C.</p> <p>5. Water Tank</p> <p>It must be made of plastic with a capacity of 200 litres, water inlet to be solenoid valve controlled, magnetic level floater connected at the lower level, ball valve at the outlet. The water tank shall be in the automation cabinet. The water tank shall be protected against freezing by means of a thermostat-controlled infrared heater to be present in the automation cabinet.</p> <p>6. Disinfectant Container</p> <p>It must be at the level where the dosing pump can absorb into the disinfection cabinet, with a magnetic level floater connected at the lower level made of plastic with a capacity of 100 litres.</p> <p>7. Anti-Freeze Container</p> <p>It must be made of plastic with a capacity of 100 litres, with a magnetic level floater connected at its lower level, a 10"5µ filter at its output, and its connection to the pump must be such that it can be operated automatically with a timer from the control panel with a separate solenoid valve.</p> <p>8. Vacuum Pump</p> <p>There shall be a discharging system that will allow the anti-freeze in the line to be automatically discharged back to the tank with the vacuum pump after disinfection.</p> <p>9. Dosing Pump</p> <p>Fixed flow rate adjustable with stroke frequency must be 0%-20% or according to the 0-100% stroke frequency rate, it must have double-degree flow rate button, with analogue control, IP 65 protection class, 10 l/s. Indicators are monitored over the device.</p> <p>10. Hydrophore</p> <p>It is used to increase the pressure value of the water coming from the tank.</p> <p>Spare parts for the disinfection tunnel are available in our stocks.</p> <p>The materials are covered by the warranty, except for personal usage errors or problems in your electricity and water system under the responsibility of the central administration, damages that may occur due to natural disasters, deformations or blockages that may occur in the nozzles due to the limescale of the water, they can be provided for a price at the end of the guarantee period.</p> <p>The warranty period for the entire system shall be 1 (one) year.</p>	
Related reference posenumber book	Özel Poz 2 / SPECIAL	
Pose No	Pose	Unit

Mec33	Animal Drinker 2.5 Lt Capacity Cast, Floating	pcs
Description/ Specification		
Related reference posenumber book	Özel Poz1 / SPECIAL	

Pose No	Pose	Unit
Mec34	Wall type Inverter split air conditioner (Qcol: 18.000 Btu/h)	pcs
Description/ Specification		
Related reference posenumber book	PTT-ÖZEL.280 / PTT	

ELECTRICAL WORKS (High Current Interior Wiring)

Pose No	Pose	Unit
Elec1-01	ø8mm Solid Copper Bar (0.45 kg/m)	kg
Description/ Specification	<p>Technical Description: a) Material: Electrolytic copper busbars with rectangular or circular cross-sections, hollow or solid, in accordance with the specification and standard in every cross-section. The material cost of the flexible spacer to be used when necessary shall be paid from the material price of the copper busbar.</p> <p>b) Installation: Transportation of the busbars, insurance costs required for transportation, cutting and bending, drilling, painting and lacquering of the busbars in accordance with the specifications and installation, placing flexible (elastic) spacers where necessary for installation (material cost shall be paid separately) and the material and installation cost of the materials such as brass bolts, terminal blocks, cables serfil (bar holder) etc. to connect the cable shoe and post insulators are included in the installation unit price.</p>	
Related reference posenumber book	03.1.2-002 / Tedaş	

Pose No	Pose	Unit
Elec1-02	Sectional Welded Galvanized Iron Pole Traverse and Console (Urban)	kg
Description/ Specification	<p>Technical Description: a) Material: Profile iron, sheet metal plate and round bars required for the manufacture of railings in accordance with the Standard and Electrical General Technical Specifications.</p> <p>b) Installation: Manufacture of sectionally welded galvanized iron poles, traverses and consoles according to the project, galvanizing and assembly of them by hot-dip method in accordance with the specification and standard. In the manufacture of sectionally welded galvanized iron poles, traverses and consoles, iron material, angle iron, uprights, cross and iron plate connection point shall be welded by electric welding. After the lower and upper surfaces of the two parts to be welded are thoroughly cleaned, the electric welding shall be done all around and properly. There shall be no gaps, punctures and weld cracks between the welded parts. After the welding burrs in the welded joints of iron poles, traverses and consoles are cleaned by grinding, galvanization operation and workmanship shall be carried out. There shall be no galvanization cracking, swelling and rust leakage from the weld in the iron material in the welded parts of the sectionally welded galvanized iron, traverses and consoles whose manufacturing has been completed. The material and assembly cost of the railing, connection bolts, traverses and consoles of the sectionally welded galvanized iron poles, and the bolts and nuts connecting to the pole are included in the assembly price but are not included in the weight. Other items in the assembly shall be made in accordance with the conditions of the painted welded iron pole in Pos 5.1. These poles can be galvanized in parts. Adding these parts to each other and turning them into a monolithic pole is the manufacture of the pole. For this reason, the material and assembly of the connection bolts and additional parts required to make the pole monolithic are included in the manufacturing price.</p> <p>General bottom note to iron poles and traverses:</p> <p>1. In the event that the painted welded iron poles, traverses and consoles remaining after the evacuation or the completion of the facility are received by the administration, the material manufacturing and transportation costs in accordance with the items in the Unit Price Book descriptions are paid.</p>	

	2. If there is no contrary provision in the contract, material, manufacturing and transportation costs are paid for iron poles received due to evacuation or other reasons. No compensation is paid for the works such as transfer of the pole to the pit, pit opening, etc..
Related reference posenumber book	05.5.1.I / Tedaş

Pose No	Pose	Unit
Elec1-03	36 kV VHD-35 HH Normal Post Insulator	pcs
Description/ Specification	<p>Technical Description: a) Material: LV and MV overhead line post insulator in accordance with its specification and standard. LV insulators without ferrule, MV-VHD type insulators with ferrule and VKS type insulators with galvanized base, connecting bolt, nut and washer. Normal types of MV insulators (VHD-VKS type) shall have a leakage distance of 20mm/kV and fog types shall have a leakage distance of 25mm/kV.</p> <p>b) Installation: transportation of insulators to the poles, insurance costs required for transportation, fixation of insulator rebars according to the specification, materials required for fixation and installation of insulators attached to irons to traverses. (Insulator iron shall be paid separately for LV insulators and MV VHD type insulators. Insulator iron price is not paid for VKS type insulators.)</p>	
Related reference posenumber book	11.4-006 / Tedaş	

Pose No	Pose	Unit
Elec1-04	B-35 Iron Traverse (Stopper) Insulator Rebar	pcs
Description/ Specification	<p>Technical Description: a) Material: Insulator rebar with a quality in accordance with the specification, made by blowing, galvanized by hot-dip method in accordance with the standard, screwed or notched part entering the insulator, together with its nut and washer. (Galvanization shall be smooth and the screw part shall not be stripped under any circumstances.)</p> <p>b) Installation: Since the transportation of the insulator rebars and the insurance costs and installation costs required for transportation are included in the assembly of the insulator, only the material cost of the irons is paid.</p>	
Related reference posenumber book	11.5-008 / Tedaş	

Pose No	Pose	Unit
Elec1-05	K1 (Normal Type) HH Chain Insulator	pcs
Description/ Specification	<p>Technical Description: a) Material: Chain insulator unit in compliance with its standard and specification, made of porcelain or glass, disc type, unit connections made with collective socket type joints, equipped with appropriate locking device (coupler), in normal types, leakage distance of each unit for U 40 BL 185 mm., U 60 for BL 280 mm., U 100 BL 280 mm.</p> <p>b) Installation: With the conditions in Pos 11.9.b</p>	
Related reference	11.6-001 / Tedaş	

posenumber book	
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Pose No	Pose	Unit
Elec1-06	36kV Insulated Carpet	m2
Description/ Specification	Technical Description: a) Material: Insulated carpet of 36 kV in accordance with its specifications and standards.	
Related reference posenumber book	13.2 / Tedaş	

Pose No	Pose	Unit
Elec1-07	36kV, 10kA ZnO Surge Arrester	pcs
Description/ Specification	<p>Technical Description: a) Material: An LV and MV type external type surge arrester with serial jump spaces, variable resistance, porcelain casing, internal pressure limiting device, or MV external type surge arrester with variable metal oxide resistance, without jump gap, ceramic or polymer casing, in accordance with its specification and standard. In MV surge arresters, the leakage distance of the porcelain or polymer housing shall be 25 mm/kV, (in the types mounted with clamps; the material cost of hot-dip galvanized mounting clamps, connection bolts, nuts and washers are included in the material price of the surge arresters.)</p> <p>b) Installation: The transportation of surge arresters, the insurance costs required for transportation, their installation according to technical rules, (The connection between the conductor and the surge arrester shall be made properly with solid copper or aluminium conductor, the overhead line terminals used in the connection of copper to the surge arrester, the cable lug, and two metal (Al -Cu) line terminals used for the connection to the steel-aluminium conductor, the material and assembly costs of the necessary bolts for fastening the surge arrester clamp to the traverse or mounting surge arresters to the stand are included in the assembly unit price.) The iron cost used for the fixation of surge arresters is paid separately in accordance with Pos 5.4.1 or 5.5.2. If the surge arrester is mounted on the pole or panel, the installation costs do not change.</p>	
Related reference posenumber book	15.2-010 / Tedaş	

Pose No	Pose	Unit
Elec1-08	36kV, 630A, 12.5kA External Type Fuse-Disconnecter	pcs
Description/ Specification	<p>Technical Description: a) Material: Sectioner with external type fuse, with the conditions of Pos 17.a. (The material cost of the fuse bushing is paid separately according to Pos 17.9.a.)</p> <p>b) Installation: With the conditions in Pos 17.b., the material and assembly unit price of the padlock is included in the assembly unit price.</p>	
Related reference posenumber book	17.7-008 / Tedaş	

Pose No	Pose	Unit
Elec1-09	36kV, 2-20A MV Fuse Bushing	pcs

Description/ Specification	Technical Description: a) Material: Fuse plug (bushing) for internal and external type sectioners in accordance with the specification and standard. Fuse plugs (bushing) shall be of porcelain and with optical indicators. (Since unit prices are prepared according to the fuse button (bushing) with an optical indicator, payment is made by deducting 30% from the unit price of the material if it is not equipped with an optical indicator.) b) Installation: The transportation of the fuse plugs (bushing), the insurance costs required for transportation and their installation are included in the unit price of the sectional assembly.
Related reference posenumber book	17.9-023 / Tedaş

Pose No	Pose	Unit
Elec1-10	Decorative Lighting Pole 6m	pcs
Description/ Specification	Technical Description: 6m long Aluminium Led Profile Decorative Lighting Pole (including luminary). Anchoring materials, assembly and shipping included	
Related reference posenumber book	2022-P04 /	

Pose No	Pose	Unit
Elec1-11	30x30x30cm PVC-U Manhole and Manhole Cover	pcs
Description/ Specification	Technical Description: Including all kinds of materials, labour, transportation at the construction site, tool and equipment expenses for on-site installation of the frame and cover of the PVC-U manhole cover, fixing the frame with the mounting elements and filling the cover.	
Related reference posenumber book	2022-P06 /	

Pose No	Pose	Unit
Elec1-12	Waterproof Led High Bay Luminary (min. 1400 lm, max. 100 W)	pcs
Description/ Specification	Technical Description: • With aluminium body, with Enec certified driver • IP65 protection class certificate, CE security certificate, •Max.110 W min., providing cri >80 pFc >90 values at 4000-4500 K colour temperature. 14000 lm, Waterproof LED High Bay Luminary	
Related reference posenumber book	2022-P09 /	

Pose No	Pose	Unit
Elec1-13	Fire Proof Compact Breaker 4x100A	pcs

Description/ Specification	Technical Description: Fire-proof compact circuit breaker with 35kA short-circuit breaking capacity with setting range and trip coil
Related reference posenumber book	2022-P31 /

Pose No	Pose	Unit
Elec1-14	Electrical Panel Fire Extinguishing System (2kg)	pcs
Description /Specification	Technical Description: Delivery of FM200 gas fire extinguisher in working condition by fixing it to the wall next to the panel, including all kinds of special pipe connection and extinguishing equipment to be used inside the panel	
Related reference posenumber book	2022-P61 /	

Pose No	Pose	Unit
Elec1-15	Hazard Sign (Aluminium), conforming to new specification	pcs
Description/ Specification	<p>Technical Description: a) Material: Enamel or aluminium danger sign in accordance with its specifications and standards, and aluminium danger sign having the specifications defined in the Technical Specification for TEDAŞ Electricity Distribution Network Numbering Works regarding "Electrical Hazard" specified in the Safety and Health Signs Regulation published in the Official Gazette dated 23 December 2003 and numbered 25325 (new specification).</p> <p>b) Installation: Transportation of the danger sign, insurance costs required for transportation. Installation of the danger sign on site according to the principles specified in the Technical Specification for TEDAŞ Electricity Distribution Network Numbering Works. The material and installation cost of clamps, flat blades, nails, bolts and nuts required for installation are included in the installation price. The mounting of the danger sign can also be done using rust and corrosion resistant steel clips.</p>	
Related reference posenumber book	26.2-004 / Tedaş	

Pose No	Pose	Unit
Elec1-16	2 m long galvanized 65x65x7 angle iron and 5m galvanized braided steel wire and its burial	pcs
Description/ Specification	<p>Technical Description: All grounding shall be done in accordance with the Grounding Regulation, Electric High Current Facilities Regulation, General Technical Specification for Electricity Distribution Facilities and Type Projects. NYY cable with at least 50mm² copper conductor as grounding conductor and equivalent 70mm² galvanized braided steel rope or 3mm thick hot-dip galvanized strip with at least 100 mm² cross-section and hot-dip galvanized grounding plate with a size of at least 0.5 m² (50x100 cm) with a thickness of 3mm as grounding electrode or its equivalent, 2m long galvanized grounding stake made of 65x65x7mm angled iron or equivalent galvanized pipe shall be used. Grounding materials and assemblies listed below are valid for LV - MV networks, transformer buildings, direct transformer posts, protection and operation grounding of power plant buildings and surge arrester grounding.</p> <p>a) Material: Grounding plate and 5m long grounding strip with the characteristics</p>	

	<p>specified in Clause 30.</p> <p>b) Installation: Transportation of galvanized sheet and strip, insurance costs required for transportation, fastening of the strip to the plate with at least three bolts according to the specifications, passing the strip through the channel at a depth of 70 cm and excavating on all kinds of ground to bury the plate at a depth of 2 meters, burying the strip and plate, closing the pit and canal, dumping the remaining soil and stone to the place indicated by the administration. (Material and installation cost of all kinds of materials required for applying the strip to the grounding points according to the specifications are included in the installation unit price.)</p>
Related reference pose number book	30.4 /Tedaş

Pose No	Pose	Unit
Elec1-17	33/0.4-0.231kV, 200 kVA Dir. Power Transformer, Aluminium wound	pcs
Description/ Specification	<p>Technical Description: a) Material: MV / MV or MV / LV power transformers in accordance with its specification and standard, with three phase, two winding, oil immersed, with natural oil circulation, natural air cooling (ONAN) or forced oil circulation, forced air cooling (ONAF), manufactured as internal and external type. Power transformers shall have the maximum system voltages of 7.2-12-17.5-36 kV, with no-load tap changer up to 10MVA and five stages, after 10MVA with on-load tap changer and thirteen stages, rated frequencies 50Hz, rated powers 50-100 -160-250-400- 630- 1000-1250-1600kV at MV/LV, 0.5-1-2.5-4-5-6.3-10-16MVA at MV/MV, connection groups MV/LV and Dyn 11, MV/MV Dyn 5, losses (up to 630kVA), designed and manufactured at the values stipulated in TSE 1055. All transformers shall be filled with oil in accordance with the specification and shall be delivered with all the equipment specified in the specification. Accordingly, in MV/LV transformers: Oil level indicator in all transformers, alcohol thermometer with 250kVA and higher powers, air dryer and wheels. Double dial thermometer at 630kVA and above, Bucholz relay. In MV/MV transformers: Alcohol thermometer, double dial thermometer (In transformers where ONAF cooling is required, a separately adjustable double contact (start-stop) dial thermometer working with upper oil temperature shall be used for fan control.) Bucholz relay, oil level gauges (with alarm contacts), single contact gas relay for on-load tap-changer, pressure relief valve, control cabinet, wheels. In 12.5MVA and 20MVA powerful transformers with ONAF cooling system, mounted with fans; the complete unit with its motor, fan and all cooling system is included in the price. Transformers shall be fully operational. The material and assembly cost of all the above-mentioned additional equipment is included in the material price of the transformer.</p> <p>b) Installation: With the conditions in Pos 31.3.b. The console cost of the lifter vehicle shall not be paid and since the material and installation cost of the board to be laid on the transformer platform are included in the price of the transformer pole, no additional payment is made for them. All kinds of safety precautions shall be taken during the lifting of the transformer on the pole</p>	
Related reference pose number book	31.4.3-021 / Tedaş	

Pose No	Pose	Unit
Elec1-18	1kV, 1x50s mm ² NYY Cable (to concrete channel, pole, wall)	m

Description/ Specification	<p>Technical Description: a) Material: LV and MV cables manufactured in accordance with the specification and standard,</p> <p>LV Cables: Y cables conforming to the relevant TSE standard and N cables conforming to the relevant TSE standard (0.6/1 kV). In single core cables; copper conductor, PVC insulator and PVC outer sheath. In multi-core cables; they are manufactured as copper conductor, PVC insulator, common sheath and PVC outer sheath. In addition, in multi-core cables with concentric conductors; concentric conductor and protection tape (in these cables the concentric conductor is used as the neutral conductor), and in multi-core cables with armour, there shall be armour made of galvanized flat steel wires and galvanized steel holding tape. LV cable conductors with a cross-section of 16mm² and above shall be manufactured as multi-wire and compressed. The insulator material of these cables can be PVC or XLPE (cross-linked polyethylene).</p> <p>MV Cables: XLPE (cross-linked polyethylene) insulated single core and three core cables used in voltage levels of 3.5/6 - 5.8/10 - 8.7/15 - 20.3/35 kV manufactured in accordance with the relevant TSE standards and IEC 502. In single core cables; copper conductor, inner semiconductor layer, XLPE (cross-linked polyethylene) insulator, outer semiconductor layer, semiconductor tape, copper shield, shielding tape and outer sheath. In three core cables; copper conductor, inner semiconductor layer, XLPE (cross-linked polyethylene) insulator, outer semiconductor layer, semiconductor tape, copper shield, common sheath, PVC separating sheath, galvanized flat steel wire armour, galvanized steel holding tape and outer sheath shall be available. The conductors of MV cables shall be multi-core and compressed. Cables without Q band shall be made of red colored PVC based material.</p> <p>b. Installation: All Cable Tray INSTALLATION Unit Prices LAID UNDERGROUND given in poses 32.1-32.11 (included); it was made by taking into consideration the workmanship of laying the cable in the channel and the production of the Standard Soil Cable Channel (40x60x80cm) in size. Such that;</p> <ul style="list-style-type: none"> - Cable Installation in Standard Ground Duct: The transportation of the cable, the insurance costs required for the transportation, Preparation of 40x60x80cm standard cable duct according to its project, the Electricity Facilities High Current Installation Regulation, the Electricity Distribution Facilities General Technical Specification and TEDAŞ specifications, laying sand at the bottom of the duct, laying the cable in accordance with the specification, laying sand on the cable, placing protective elements such as crosswise brick (12 pieces per meter) or concrete block of 20x50x6cm (2 pieces per meter) on the cable, so that there is no gap in the whole channel, laying of the warning tape with the phrase "MV/LV ENERGY CABLE" written on it with 6 cm black font letters, made of flexible plastic, 20 cm above the Concrete Block or Brick (protective element), along the cable duct, 12 cm wide, at least 0.1 mm thick, compressing the soil etc. coming out of the canal excavation and filling it up to the road level. <p>All kinds of materials (excluding the cable material cost), excavation, transportation and workmanship costs for these operations, as well as the disposal of the surplus stone and soil to the place indicated by the administration, are included in the assembly unit price. The cable length shall be taken as the basis for the channel length. In this case, although it is known that the length of the excavated duct shall be less than the length of the cable, the extra length difference fee paid to the cable duct was accepted as the cost of expansion Due to the "S", and additional manhole construction, since no additional cost is paid to the expanded ducts for the bends of the cables to be left extra by making an "S" at the cable joints and at the end, as per the Electrical General Technical Specification.</p> <ul style="list-style-type: none"> - Cable Installation in Standard All-In Cable Tray: The transportation of the cable, the insurance costs required for the transportation, Preparation of 40x60x80cm standard cable duct according to its project, the Electricity Facilities High Current Installation Regulation, the Electricity Distribution Facilities General Technical Specification and TEDAŞ specifications, laying sand at the bottom of the duct, laying the cable in accordance with the specification, laying sand on the cable, placing protective elements
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	<p>such as crosswise brick (12 pieces per meter) or concrete block of 20x50x6cm (2 pieces per meter) on the cable, so that there is no gap in the whole channel, laying of the warning tape with the phrase "MV/LV ENERGY CABLE" written on it with 6cm black font letters, made of flexible plastic, 20cm above the Concrete Block or Brick (protective element), along the cable duct, 12 cm wide, at least 0.1 mm thick. The transportation of all the soil and rubble coming out of the canal to the place indicated by the administration, supply and to-site transportation of the all-in materials to be deemed appropriate by the relevant administration (Municipality or Highways Administration, etc.) based on the unit price definitions of the Ministry of Public Works and Settlement Pos No. 15.140/2, filling in the canal, levelling, ramming, presentation and compaction, including all kinds of workmanship, material and losses, loading at the workplace, horizontal and vertical transportation costs are included in the assembly unit price.</p> <p>EXPLANATION (NOTES) Since Standard Earth Cable Tray is included in all Cable Tray INSTALLATION Unit prices LAID UNDERGROUND in poses 32.1 - 32.11, additional payments or deductions to be made to the Standard Earth Cable Tray other than this price are calculated in NOTE I, II, III, and Dismantling and Construction costs due to the coating are calculated in Pos 33.1 and Pos 33.2 as MANUFACTURING DIFFERENCE UNIT PRICE. Such that; the applications for the changes to be made in the cable duct in case of necessity:</p> <p>a- If the Standard Earth Cable Tray described above is widened or deepened, or if widening and deepening are done jointly, they are paid from NOTE 1.a, 1.b, 1.c, 1.d, le written after Pos 32.11.3,</p> <p>b- Production difference unit price of the Standard all-in cable duct above, according to the standard earth duct shall be paid from Note II written after Pos 32.11.3, but if it is made by expanding or deepening the standard all-in cable duct or if the expansion and deepening is done jointly, it is paid from NOTE II.a, II.b, II.c, II.d, II.e written after Pos 32.11.3,</p> <p>c- Material and assembly costs of additional bricks or equivalent materials to be used outside the scope of poses shall be paid from Pos 32.b,</p> <p>d- For each cable to be laid after the first cable laid in the duct, the material and assembly cost / costs of the cable shall be paid from Pos 32.16-17-18-19 and the Matters explained above in items a, b, c, d shall be paid SEPARATELY and INDIVIDUALLY, in addition to the cable assembly unit price (i.e. including Pos 32.1 - Item 32.11) as the manufacturing difference fee.</p> <p>If there is a coating on the route where the Cable Channel shall be made: The dismantling and rebuilding costs of cobblestone (parquet), road, concrete, asphalt etc. on this coating shall be paid separately from Poses 33.1 and 33.2. For this reason, since less production shall be made in the cable duct as the thickness of the coatings; a- In the standard earth duct, the cost in NOTE III.a, which is the less production cost due to the coating, shall be deducted from the cable assembly cost (including Poses 32.1 - Poses 32.11). If there is expansion in the channel, for every 10 cm of expansion the Price in NOTE: III.c shall be deducted separately in addition to NOTE: III.a.</p> <p>b- In standard all-in cable ducts, the price in NOTE III. B, which is the manufacturing cost that is made less due to the coating shall be deducted from the cable assembly cost (including Poses 32.1 - Poses 32.11). If there is expansion in the channel, for every 10 cm of expansion the Price in NOTE: III.d shall be deducted separately in addition to NOTE: III.b. For special cases, the application shall be made according to the tariff in NOTE: III.e.</p> <p>III- Laying Multiple LV-MV Cables in the Same Ground Channel: For each cable after the main cable; the transportation of the cable, the insurance costs required for the transportation, laying LV or MV cables with the desired characteristics in the prepared earth duct, according to its project, High Current Regulation, Electricity General Technical Specification and TEK DAPT specification.</p>
Related reference	32.12-007 / Tedaş

posenumber book	
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Pose No	Pose	Unit
Elec1-19	1kV, 4x 25c mm2 NYY Cable (to concrete channel, pole, wall)	m
Description/ Specification	<p>Technical Description: a) Material: LV and MV cables manufactured in accordance with the specification and standard, LV Cables: Y cables conforming to the relevant TSE standard and N cables conforming to the relevant TSE standard (0.6/1 kV). In single core cables; copper conductor, PVC insulator and PVC outer sheath. In multi-core cables; they are manufactured as copper conductor, PVC insulator, common sheath and PVC outer sheath. In addition, in multi-core cables with concentric conductors; concentric conductor and protection tape (in these cables the concentric conductor is used as the neutral conductor), and in multi-core cables with armour, there shall be armour made of galvanized flat steel wires and galvanized steel holding tape. LV cable conductors with a cross-section of 16mm² and above shall be manufactured as multi-wire and compressed. The insulator material of these cables can be PVC or XLPE (cross-linked polyethylene). MV Cables: XLPE (cross-linked polyethylene) insulated single core and three core cables used in voltage levels of 3.5/6 - 5.8/10 - 8.7/15 - 20.3/35 kV manufactured in accordance with the relevant TSE standards and IEC 502. In single core cables; copper conductor, inner semiconductor layer, XLPE (cross-linked polyethylene) insulator, outer semiconductor layer, semiconductor tape, copper shield, shielding tape and outer sheath. In three core cables; copper conductor, inner semiconductor layer, XLPE (cross-linked polyethylene) insulator, outer semiconductor layer, semiconductor tape, copper shield, common sheath, PVC separating sheath, galvanized flat steel wire armour, galvanized steel holding tape and outer sheath shall be available. The conductors of MV cables shall be multi-core and compressed. Cables without Q band shall be made of red colored PVC based material.</p> <p>b. Installation: All Cable Tray INSTALLATION Unit Prices LAID UNDERGROUND given in poses 32.1-32.11 (included); it was made by taking into consideration the workmanship of laying the cable in the channel and the production of the Standard Soil Cable Channel (40x60x80cm) in size. Such that; - Cable Installation in Standard Ground Duct: The transportation of the cable, the insurance costs required for the transportation, Preparation of 40x60x80cm standard cable duct according to its project, the Electricity Facilities High Current Installation Regulation, the Electricity Distribution Facilities General Technical Specification and TEDAŞ specifications, laying sand at the bottom of the duct, laying the cable in accordance with the specification, laying sand on the cable, placing protective elements such as crosswise brick (12 pieces per meter) or concrete block of 20x50x6cm (2 pieces per meter) on the cable, so that there is no gap in the whole channel, laying of the warning tape with the phrase "MV/LV ENERGY CABLE" written on it with 6 cm black font letters, made of flexible plastic, 20 cm above the Concrete Block or Brick (protective element), along the cable duct, 12 cm wide, at least 0.1 mm thick, compressing the soil etc. coming out of the canal excavation and filling it up to the road level. All kinds of materials (excluding the cable material cost), excavation, transportation and workmanship costs for these operations, as well as the disposal of the surplus stone and soil to the place indicated by the administration, are included in the assembly unit price. The cable length shall be taken as the basis for the channel length. In this case, although it is known that the length of the excavated duct shall be less than the length of the cable, the extra length difference fee paid to the cable duct was accepted as the cost of expansion Due to the "S", and additional manhole construction, since no additional cost is paid to the expanded ducts for the bends of the cables to be left extra by making an "S" at the cable joints and at the end, as per the Electrical General Technical Specification.</p>	

- Cable Installation in Standard All-In Cable Tray: The transportation of the cable, the insurance costs required for the transportation, Preparation of 40x60x80cm standard cable duct according to its project, the Electricity Facilities High Current Installation Regulation, the Electricity Distribution Facilities General Technical Specification and TEDAŞ specifications, laying sand at the bottom of the duct, laying the cable in accordance with the specification, laying sand on the cable, placing protective elements such as crosswise brick (12 pieces per meter) or concrete block of 20x50x6cm (2 pieces per meter) on the cable, so that there is no gap in the whole channel, laying of the warning tape with the phrase "MV/LV ENERGY CABLE" written on it with 6cm black font letters, made of flexible plastic, 20cm above the Concrete Block or Brick (protective element), along the cable duct, 12 cm wide, at least 0.1 mm thick. The transportation of all the soil and rubble coming out of the canal to the place indicated by the administration, supply and to-site transportation of the all-in materials to be deemed appropriate by the relevant administration (Municipality or Highways Administration, etc.) based on the unit price definitions of the Ministry of Public Works and Settlement Pos No. 15.140/2, filling in the canal, levelling, ramming, presentation and compaction, including all kinds of workmanship, material and losses, loading at the workplace, horizontal and vertical transportation costs are included in the assembly unit price.

EXPLANATION (NOTES) Since Standard Earth Cable Tray is included in all Cable Tray INSTALLATION Unit prices LAID UNDERGROUND in poses 32.1 - 32.11, additional payments or deductions to be made to the Standard Earth Cable Tray other than this price are calculated in NOTE I, II, III, and Dismantling and Construction costs due to the coating are calculated in Pos 33.1 and Pos 33.2 as MANUFACTURING DIFFERENCE UNIT PRICE. Such that; the applications for the changes to be made in the cable duct in case of necessity:

a- If the Standard Earth Cable Tray described above is widened or deepened, or if widening and deepening are done jointly, they are paid from NOTE 1.a, 1.b, 1.c, 1.d, le written after Pos 32.11.3,

b- Production difference unit price of the Standard all-in cable duct above, according to the standard earth duct shall be paid from Note II written after Pos 32.11.3, but if it is made by expanding or deepening the standard all-in cable duct or if the expansion and deepening is done jointly, it is paid from NOTE II.a, II.b, II.c, II.d, II.e written after Pos 32.11.3,

c- Material and assembly costs of additional bricks or equivalent materials to be used outside the scope of poses shall be paid from Pos 32.b,

d- For each cable to be laid after the first cable laid in the duct, the material and assembly cost / costs of the cable shall be paid from Pos 32.16-17-18-19 and the Matters explained above in items a, b, c, d shall be paid SEPARATELY and INDIVIDUALLY, in addition to the cable assembly unit price (i.e. including Pos 32.1 - Item 32.11) as the manufacturing difference fee.

If there is a coating on the route where the Cable Channel shall be made: The dismantling and rebuilding costs of cobblestone (parquet), road, concrete, asphalt etc. on this coating shall be paid separately from Poses 33.1 and 33.2. For this reason, since less production shall be made in the cable duct as the thickness of the coatings; a- In the standard earth duct, the cost in NOTE III.a, which is the less production cost due to the coating, shall be deducted from the cable assembly cost (including Poses 32.1 - Poses 32.11). If there is expansion in the channel, for every 10 cm of expansion the Price in NOTE: III.c shall be deducted separately in addition to NOTE: III.a.

b- In standard all-in cable ducts, the price in NOTE III. B, which is the manufacturing cost that is made less due to the coating shall be deducted from the cable assembly cost (including Poses 32.1 - Poses 32.11). If there is expansion in the channel, for every 10 cm of expansion the Price in NOTE: III.d shall be deducted separately in addition to NOTE: III.b. For special cases, the application shall be made according to the tariff in NOTE: III.e.

III- Laying Multiple LV-MV Cables in the Same Ground Channel: For each cable after the

	main cable; the transportation of the cable, the insurance costs required for the transportation, laying LV or MV cables with the desired characteristics in the prepared earth duct, according to its project, High Current Regulation, Electricity General Technical Specification and TEK DAPT specification.
Related reference posenumber book	32.12.1-050 / Tedaş

Pose No	Pose	Unit
Elec1-20	1kV, 4x25s mm ² NYY Cable Termination	pcs
Description/ Specification	<p>Technical Description: a) Material: Complete cable termination in accordance with the specifications and standards, with the production date and expiry date specified on the packaging, with internal and external types the same in LV facilities, with the internal and external types sized separately at 3.5kV and higher voltages, its mould, filling material that provide insulation, special tapes, cleaning agents, including the necessary bracket, clamp and copper wires for grounding in shielded and armoured cables, insulators, funnel, special paste and tape for external type headers above 1 kV.</p> <p>b) Installation: Transfer of the cable head, insurance costs for transportation, opening the cable ends in accordance with the technical rules and the length specified in the cable head catalogue, scraping the upper semiconductor in MV cables and cleaning with a special cleaner, installing the grounding collar and grounding conductor in shielded and armoured cables, installation of the mould, pouring the insulating filler suitable for the operating voltage into the mould, removing the mould, taking measures to prevent water from leaking into the cable from the cable lug connection points, and making it ready for operation.</p>	
Related reference posenumber book	32.21-050 / Tedaş	

Pose No	Pose	Unit
Elec1-21	Surface-mounted galvanized sheet-metal boards up to 0,50-0,60 m ² (0,60 m ² included),	pcs
Description/ Specification	<p>Technical Description: Surface mounted galvanized sheet tables: (Measurement: Pcs) Panel body and covers shall be made of galvanized sheet metal stock with a thickness of at least 1 mm for the tables with an area of up to 0,5 m² and at least 1,5 mm for the tables with an area bigger than 0,5 m². Its depth shall be minimum 200 mm and all connections shall be made using fasteners such as bolts-nuts and rivets. The holes necessary for the cable entries shall be drilled on the cover and bakelite or plastic glands shall be mounted to the hole mouths to prevent the conductor insulation from deteriorating. In addition, there shall be labels for each device in the panel on the inner cover. For the phase lines inside the panel, there shall be non-flammable type terminals or busbars painted in grey, black and brown in accordance with TS EN 60445, light blue painted neutral and green/yellow painted grounding bars. The panel's inside and outside shall be painted with electrostatic powder paint, the panel cover shall be connected to the main body with a flexible conductor and grounded. The supply of the panel, its transfer to the workplace and its assembly, delivery in working condition including all kinds of materials, terminal blocks and workmanship. Measurement: The m² values indicated in the lower poses refer to the cover's inner area. The cost of grounding installation as well as the fuse, switch etc. in the panel shall be paid separately. Note: Panels shall be produced in accordance with the 2014/35/EU Regulation on Electrical Equipment Designed for Certain Voltage Limits, TS EN 61439-1/2 standards and shall</p>	

	have been placed on the market with the CE conformity mark. In addition, the degree of protection against mechanical impacts according to the TS EN 62262 standard shall be at least IK 08. "Type tests" shall be made according to EN 61439-1/2 standards, and the corresponding test results shall be submitted to the Administration.
Related reference posenumber book	35.100.2106 / Ministry of Environment, Urbanization and Climate Change

Pose No	Pose	Unit
Elec1-22	Panel with front cover, Special sheet panels (TS 3367 EN 60439-1) Note: "Type tests" shall be made and the test results shall be given to the Administration.	pcs
Description/ Specification	Technical Description: Additional sheet panels: (Measurement: pieces, preparation: 60%) Additional sheet metal panel shall be made under the same conditions as BFT (Unit Price Tariff) No 35.100.6100, only with the following changes. There is sheet metal only on the front of these panels. They are made together with the 1st panel, and the sheet metal wire mesh enclosure next to the table is only found in the last panel. The connection of adjacent panels shall be made by connecting the skeleton with bolts.	
Related reference posenumber book	35.100.6201 / Ministry of Environment, Urbanization and Climate Change	

Pose No	Pose	Unit
Elec1-23	Up to 0.10-0.20 m ² (including 0.20 m ²), Recessed type sheet metal tables (TS 3367 EN 60439-1) Note: "Type tests" shall be made and the corresponding test results shall be submitted to the Administration.	pcs
Description/ Specification	Technical Description: Surface mounted sheet tables: (Measurement: Pcs: Preparation: %60) (TS EN 61439-1/2) Note: "Type tests" shall be made and the corresponding test results shall be submitted to the Administration. . At least 1mm. thickness DKP, sheet metal surface-mounted table shall be installed. The table shall consist of three parts. A lockable cover, a sheet metal box with an angle or profile frame and a lock that can be opened with a key, the inner cover with the necessary holes for the control of the devices on the table on the chassis that carries the devices to be placed on the table, shall be welded with the sheet metal box and there shall be contact facilities on it that shall enable the chassis to be easily attached and removed. According to the project of the box, there shall be an opening on the side where various conductors will enter, and this opening shall be closed with a sheet metal cover fixed to the box with screws. The holes necessary for the cable entries shall be drilled on the cover and bakelite or plastic glands shall be mounted to the hole mouths to prevent the conductor insulation from deteriorating. Frame bracket or DKP profiled by bending shall be placed on the table to be made of sheet metal. It shall be possible to fix all devices, terminals etc. on the material. The inner cover, which has holes on it for the control of the devices in the table, shall be easily fixable on the chassis. When the inner cover is removed, all connections and devices in the table shall be revealed, and there shall be labels for each device on this cover. It shall be possible to separate the three parts named above without removing the table from its place. The projects for the placement of the devices on the table shall be prepared according to the type projects and approved by the administration, after which production shall begin. For the phase lines on the table, the required number of non-flammable type terminals or busbars painted in grey, black and brown colours in accordance with TS EN 60445, light blue painted neutral and green/yellow painted grounding busbars, all iron parts shall be painted with one layer sullen and two layers matte gun paint and the table cover shall be connected to the main body with a flexible conductor and grounded. Supply of the table, transport to the workplace and installation.	

	Delivery in working condition, including all kinds of materials, terminals and workmanship. Measurement: After the inner cover area is compared with the value in the approved project, payment shall be made according to the m2 of this area. This price includes all kinds of small materials, paints, connections and assembly. The cost of grounding installation as well as the fuse, switch etc. on the panel shall be paid separately.
Related reference pose number book	35.100.6502 / Ministry of Environment, Urbanization and Climate Change

Pose No	Pose	Unit
Elec1-24	Supply and assembly of copper busbars to be placed in cast boxes and panels in accordance with TSE conditions and painting with colours in TS EN 60445	kg
Description/ Specification	Technical Description: Supply and assembly of copper busbars to be placed in cast boxes and panels in accordance with TSE conditions and painting with colours in TS EN 60445 (Measurement: kg, Preparation: %60)	
Related reference pose number, book	35.100.7000 / Ministry of Environment, Urbanization and Climate Change	

Pose No	Pose	Unit
Elec1-25	Up to 3x100 A Icu: 35 kA, I1 (0,8-1) In, 3 poles, minimum Icu at 400 V AC: 35 kA, Thermic Protection adjustable, Magnetic Protection Fixed, Compact type thermal and magnetic shielded switches	pcs
Description/ Specification	Technical Description: Compact type thermal and magnetic protective switches: (Measurement: Pcs) Supply and installation of compact switches, which are compact type, capable of breaking in air media, has a breaking mechanism independent from hand movement, has thermal overcurrent and magnetic short circuit protection, has current limiting feature, Ics value equal to at least 50% Icu, which are supplied to the market with CE conformity mark in accordance with TS EN 60947-2 standard (I1: Adjustable thermal protection opening current, I3: Fixed or adjustable magnetic protection opening current, In: Rated current, Icu: Short-circuit breaking capacity, Ics: Operational short-circuit breaking capacity) Note: Type tests shall have been done.	
Related reference pose number book	35.110.1102 / Ministry of Environment, Urbanization and Climate Change	

Pose No	Pose	Unit
Elec1-26	Up to 3x10 A, Dry type unprotected contactors (TS -3629) (TS EN 60947-4-1)	pcs
Description/ Specification	Technical Description: Dry type contactors without protection: (Measurement: Pcs) Supply and installation of AC3 class, dry type three-phase contactors with separate control buttons without protective relays, auxiliary contacts, all materials and labour included. Measurement: The number of installed contactors shall be counted.	
Related reference pose number book	35.125.1101 / Ministry of Environment, Urbanization and Climate Change	

Pose No	Pose	Unit
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Elec1-27	Compensation contactor up to 15 kVAr (TS -3629) (TS EN 60947-4-1)	pcs
Description/ Specification	Technical Description: Compensation contactors (Measurement: Pcs) Same as BFT No 35.125.1100, the compensation contactor which, when energized, shall first take the power over the discharge resistor and close the main contacts after the first starting current, including all kinds of materials and workmanship.	
Related reference posenumber book	35.125.1201 / Ministry of Environment, Urbanization and Climate Change	

Pose No	Pose	Unit
Elec1-28	Time relay used in lighting control	pcs
Description/ Specification	Technical Description: Time relay used in lighting control. (Measurement: Piece: Preparation %60) Supply of battery powered digital timer with user manual, with output contacts, which provides lighting control at desired hours by calculating with the program according to the set time zone, having type test reports and CE Conformity Mark according to the regulation (2014/35/EU) on electrical equipment designed to be used within certain voltage limits, Electromagnetic compatibility regulation (2004/108/AT), TS EN 60730-2-7 standards and directives, delivery to the workplace, including all kinds of small materials, testing and delivering in working condition.	
Related reference posenumber book	35.125.1760 / Ministry of Environment, Urbanization and Climate Change	

Pose No	Pose	Unit
Elec1-29	Up to 2x63 A (30 mA), Residual current circuit breakers (TS EN 61008-1/TS EN 61008-2-1)	pcs
Description/ Specification	Technical Description: Residual current protection switches: (Measurement: Pcs) Supply and installation of residual current circuit breaker, built in accordance with the Electrical Indoor Installation Regulations, specifications and standards, which provides the safety of life and property by interrupting the circuit within 1030 ms. by sensing the faulty current occurring on the phases and neutral line when there is any leakage in the electrical installations, operating at 220 V in single-phase circuits and 380 V in three-phase circuits, with differential coil, with test button on it to check whether the system is working or not, that can be mounted on the in-table transport rails, protected against external influences, rated 30 mA for life protection and 300 mA for fire protection, able to operate even with neutral line disconnection, launched to the market with CE conformity mark in accordance with TS EN 61008-1, TS EN 61008-2-1 standards, delivery in working condition, including all kinds of materials and labour.	
Related reference posenumber book	35.115.1003 / Ministry of Environment, Urbanization and Climate Change	

Pose No	Pose	Unit
Elec1-30	Up to 4x40 A (30 mA), Residual current circuit breakers (TS EN 61008-1/TS EN 61008-2-1)	pcs
Description/ Specification	Technical Description: Residual current protection switches: (Measurement: Pcs) Supply and installation of residual current circuit breaker, built in accordance with the Electrical Indoor Installation Regulations, specifications and standards, which provides the safety	

	of life and property by interrupting the circuit within 1030 ms. by sensing the faulty current occurring on the phases and neutral line when there is any leakage in the electrical installations, operating at 220 V in single-phase circuits and 380 V in three-phase circuits, with differential coil, with test button on it to check whether the system is working or not, that can be mounted on the in-table transport rails, protected against external influences, rated 30 mA for life protection and 300 mA for fire protection, able to operate even with neutral line disconnection, launched to the market with CE conformity mark in accordance with TS EN 61008-1, TS EN 61008-2-1 standards, delivery in working condition, including all kinds of materials and labour.
Related reference posenumber book	35.115.1021 / Ministry of Environment, Urbanization and Climate Change

Pose No	Pose	Unit
Elec1-31	Up to 4x63 A (30 mA), Residual current circuit breakers (TS EN 61008-1/TS EN 61008-2-1)	pcs
Description/ Specification	Technical Description: Residual current protection switches: (Measurement: Pcs) Supply and installation of residual current circuit breaker, built in accordance with the Electrical Indoor Installation Regulations, specifications and standards, which provides the safety of life and property by interrupting the circuit within 1030 ms. by sensing the faulty current occurring on the phases and neutral line when there is any leakage in the electrical installations, operating at 220 V in single-phase circuits and 380 V in three-phase circuits, with differential coil, with test button on it to check whether the system is working or not, that can be mounted on the in-table transport rails, protected against external influences, rated 30 mA for life protection and 300 mA for fire protection, able to operate even with neutral line disconnection, launched to the market with CE conformity mark in accordance with TS EN 61008-1, TS EN 61008-2-1 standards, delivery in working condition, including all kinds of materials and labour.	
Related reference posenumber book	35.115.1022 / Ministry of Environment, Urbanization and Climate Change	

Pose No	Pose	Unit
Elec1-32	Class B, 230 V AC, 100 kA (I imp, 10/350µs), three phase, neutral-earth, Panel type surge protectors (Low Voltage Surge Arresters)	pcs
Description/ Specification	Technical Description: Panel type surge protectors (Low Voltage Surge Arresters) (Measurement: Pcs) Surge protectors of Type 1 (B class), Type 2 (C class), Type 3 (D class), to protect energy supplies against atmospheric discharges (lightning) and transient overvoltage peaks, able to provide one-phase, two-phase, three-phase and neutral protection against overvoltage, with additional contact output for signalling if desired, fully hermetically closed, mounted on the rail without damaging the panel and other materials on the panel, without the need to leave a safety distance with other materials and the panel, in accordance with the TS EN 61643-11 standard and supplied to the market with the CE conformity mark. 1-Surge protectors shall be completely hermetically closed. There must be no arc output gap on the protector. The protector must ensure that the arc exits the arc output range and extinguishes itself, not by air. Thus, the protector must be able to be safely mounted anywhere in the board without any safety distance requirement. 2-Type 2 (C class), Type 3 (D class) protectors must have an indicator showing that the device is working properly or has malfunctioned. (I imp: Maximum impulse current for type 1 surge arresters, I max: Maximum discharge current for Type 2 and Type 3 surge arresters)	

Related reference posenumber book	35.115.2101 / Ministry of Environment, Urbanization and Climate Change
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Pose No	Pose	Unit
Elec1-33	Up to 400 V, Additional compensation batteries	kVAr
Description/ Specification	Technical Description: Additional automatically controlled central compensation batteries, in compliance with (TS EN 60255-1) (Measurement: kVAr) For each kVAr after the first 30 kVAr in addition to Pos 35.130.1100 when the compensation batteries are larger than 30 kVAr	
Related reference posenumber book	35.130.1151 / Ministry of Environment, Urbanization and Climate Change	

Pose No	Pose	Unit
Elec1-34	Reactive Power Control Relay with at least 12 steps (SVC)	pcs
Description/ Specification	Technical Description: SVC THREE PHASE REACTIVE POWER CONTROL RELAYS (Measurement: Pcs) 3 Current Transformers, with 3x380 VAC feeding, 12-stage Reactive power control relay, able to set the power of each single-phase shunt reactor to an adjustable value, thanks to a semiconductor driver connected in addition to the stages	
Related reference posenumber book	35.130.2301 / Ministry of Environment, Urbanization and Climate Change	

Pose No	Pose	Unit
Elec1-35	Up to 5 kVAr (3x8A), Inductive Load driver	pcs
Description/ Specification	Technical Description: Inductive Load Driver (Measurement: Pcs) Inductive load drivers, that trigger the phase angle of the shunt reactors at different values with the semiconductor switching elements inside, and activate the single-phase shunt reactors at the desired power values, 3 x 230V m	
Related reference posenumber book	35.130.2601 / Ministry of Environment, Urbanization and Climate Change	

Pose No	Pose	Unit
Elec1-36	230 V, up to 3 kVAr, Shunt Reactor	pcs
Description/ Specification	Technical Description: The supply at the workplace of the shunt reactor which meets TS ?EN 61558-2-20, TS EN 60076-6 standards, has a nominal voltage of 230 VAC-1000 VAC, operates at 50 Hz frequency, having 3kV insulation, having at least 120 °C thermal protection, installation of such devices in accordance with its project, delivery in working condition, including all kinds of materials and labour.	
Related reference pose number, book	35.130.2703 / Ministry of Environment, Urbanization and Climate Change	

Pose No	Pose	Unit
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Elec1-37	Up to 16 A (3 kA), Switched Automatic Fuses (3 kA breaking capacity)	Pcs
Description/ Specification	Technical Description: Switched Automatic Fuses (3 kA breaking capacity) (Measurement: Pcs) The supply and installation of the automatic fuse which is manufactured in accordance with the TS 5018-1 EN 60898-1 standards, 3 kA short circuit breaking capacity, which also acts as a switch, those having 2 and 4 poles with neutral and phase breaking feature, B or C curve, launched on the market with the CE conformity mark, including all kinds of materials and labour.	
Related reference posenumber book	35.105.1130 / Ministry of Environment, Urbanization and Climate Change	

Pose No	Pose	Unit
Elec1-38	Up to 16 A (6 kA), Switched Automatic Fuses (6 kA breaking capacity)	pcs
Description/ Specification	Technical Description: Switched Automatic Fuses (6 kA breaking capacity) (Measurement: Pcs) Supply and installation of an automatic fuse with a short circuit breaking capacity of only 6 kA with the same features as BFT No 35.105.1100, including all kinds of materials and labour.	
Related reference posenumber book	35.105.1210 / Ministry of Environment, Urbanization and Climate Change	

Pose No	Pose	Unit
Elec1-39	Up to 16 A (6 kA), Switched Automatic Fuses (6 kA breaking capacity)	pcs
Description/ Specification	Technical Description: Switched Automatic Fuses (6 kA breaking capacity) (Measurement: Pcs) Supply and installation of an automatic fuse with a short circuit breaking capacity of only 6 kA with the same features as BFT No 35.105.1100, including all kinds of materials and labour.	
Related reference posenumber book	35.105.1230 / Ministry of Environment, Urbanization and Climate Change	

Pose No	Pose	Unit
Elec1-40	Up to 40 A (10 kA), Switched Automatic Fuses (10 kA breaking capacity)	pcs
Description/ Specification	Technical Description: Switched Automatic Fuses (10 kA breaking capacity) (Measurement: Pcs) Supply and installation of an automatic fuse with a short circuit breaking capacity of only 10 kA with the same features as BFT No 35.105.1100, including all kinds of materials and labour.	
Related reference posenumber book	35.105.1312 / Ministry of Environment, Urbanization and Climate Change	

Pose No	Pose	Unit
Elec1-41	Up to 25 A (10 kA), Switched Automatic Fuses (10 kA breaking capacity)	pcs

Description/ Specification	Technical Description: Switched Automatic Fuses (10 kA breaking capacity) (Measurement: Pcs) Supply and installation of an automatic fuse with a short circuit breaking capacity of only 10 kA with the same features as BFT No 35.105.1100, including all kinds of materials and labour.
Related reference posenumber book	35.105.1331 / Ministry of Environment, Urbanization and Climate Change

Pose No	Pose	Unit
Elec1-42	Up to 40 A (10 kA), Switched Automatic Fuses (10 kA breaking capacity)	pcs
Description/ Specification	Technical Description: Switched Automatic Fuses (10 kA breaking capacity) (Measurement: Pcs) Supply and installation of an automatic fuse with a short circuit breaking capacity of only 10 kA with the same features as BFT No 35.105.1100, including all kinds of materials and labour.	
Related reference posenumber book	35.105.1332 / Ministry of Environment, Urbanization and Climate Change	

Pose No	Pose	Unit
Elec1-43	100-500/5 A, Measurement Current Transformer (1 kV 5-10 VA, Sn: 0.5-1) (TS-620 EN 60044-1) With or without busbar type, same quality as the measuring instruments to be used, power 5-10 VA, class: 0.5-1, supply and installation of measurement current transformer	pcs
Description/ Specification	Technical Description: Measurement Current Transformer (1kV 5-10 VA, Sn: 0.5 -1) (Measurement: Pcs) (TS-620 EN 60044-1) With or without busbar type, same quality as the measuring instruments to be used, power 5-10 VA, class: 0.5-1, supply and installation of measurement current transformer.	
Related reference posenumber book	35.135.1901 / Ministry of Environment, Urbanization and Climate Change	

Pose No	Pose	Unit
Elec1-44	up to 250 V, MARKER LAMPS	pcs
Description/ Specification	Technical Description: MARKER LAMPS: (Measurement: Pcs) The supply of the marker lamp in accordance with the TS 2575 EN 60073 standard, recessed type, in the colours specified in the standard according to the place to be used, its transportation to the workplace, its assembly and connection, delivery in working condition. (Socket and bulb are included in the price.)	
Related reference posenumber book	35.120.1454 / Ministry of Environment, Urbanization and Climate Change	

Pose No	Pose	Unit
Elec1-45	2x10 mm ² , 1 kV underground cables and column and supply line installation YVV (NYY) (TS IEC 60502-1+A1)	m

Description/ Specification	Technical Description: Column and supply line installation with YVV (NYY) type 1 kV underground cables: (Measurement: m) Establishment of column and supply line with YVV (NYY) type 1 kV underground cables in accordance with TS IEC 60502-1+A1 standards. On-site supply of underground cable for laying on the plaster inside the building, on the wall, ceiling or in channels over consoles or clasps, and in ducts outside the building, with passage and safety pipes, including all kinds of materials, clasp and workmanship. Measurement: The length of the cable between the terminal box and the headers is measured. More than one cable laid in the same duct shall be kept separately in conduits or pipes of the required diameter and length at the transition points. Terminal box, head, junction box, console, cable duct and manhole shall be paid separately. Iron manufacturing shall be paid from BFT (Unit Price Tariff) No 15.550.1202. No additional fee shall be paid for transition ducts and pipes up to a total of 10 meters. Note: They shall have been manufactured in accordance with TS EN 50575 and TS EN 50575 / A1 standards, 305/2011/EU Construction Materials Regulation, launched to the market with the CE conformity mark, and shall have the Performance Declaration of the manufacturer and the Performance Constancy Certificate obtained from the organizations accredited by the European Union.
Related reference pose number bookc	35.140.3134 / Ministry of Environment, Urbanization and Climate Change

Pose No	Pose	Unit
Elec1-46	2x6 mm ² , 1 kV underground cables and column and supply line installation YVV (NYY) (TS IEC 60502-1+A1)	m
Description/ Specification	Technical Description: Column and supply line installation with YVV (NYY) type 1 kV underground cables: (Measurement: m) Establishment of column and supply line with YVV (NYY) type 1 kV underground cables in accordance with TS IEC 60502-1+A1 standards. On-site supply of underground cable for laying on the plaster inside the building, on the wall, ceiling or in channels over consoles or clasps, and in ducts outside the building, with passage and safety pipes, including all kinds of materials, clasp and workmanship. Measurement: The length of the cable between the terminal box and the headers is measured. More than one cable laid in the same duct shall be kept separately in conduits or pipes of the required diameter and length at the transition points. Terminal box, head, junction box, console, cable duct and manhole shall be paid separately. Iron manufacturing shall be paid from BFT (Unit Price Tariff) No 15.550.1202. No additional fee shall be paid for transition ducts and pipes up to a total of 10 meters. Note: They shall have been manufactured in accordance with TS EN 50575 and TS EN 50575 / A1 standards, 305/2011/EU Construction Materials Regulation, launched to the market with the CE conformity mark, and shall have the Performance Declaration of the manufacturer and the Performance Constancy Certificate obtained from the organizations accredited by the European Union.	
Related reference pose number, book	35.140.3133/ Ministry of Environment, Urbanization and Climate Change	

Pose No	Pose	Unit
Elec1-47	3x2.5 mm ² , 1 kV underground cables and column and supply line installation YVV (NYY) (TS IEC 60502-1+A1)	m

Description/ Specification	Technical Description: Column and supply line installation with YVV (NYY) type 1 kV underground cables: (Measurement: m) Establishment of column and supply line with YVV (NYY) type 1 kV underground cables in accordance with TS IEC 60502-1+A1 standards. On-site supply of underground cable for laying on the plaster inside the building, on the wall, ceiling or in channels over consoles or clasps, and in ducts outside the building, with passage and safety pipes, including all kinds of materials, clasp and workmanship. Measurement: The length of the cable between the terminal box and the headers is measured. More than one cable laid in the same duct shall be kept separately in conduits or pipes of the required diameter and length at the transition points. Terminal box, head, junction box, console, cable duct and manhole shall be paid separately. Iron manufacturing shall be paid from BFT (Unit Price Tariff) No 15.550.1202. No additional fee shall be paid for transition ducts and pipes up to a total of 10 meters. Note: They shall have been manufactured in accordance with TS EN 50575 and TS EN 50575 / A1 standards, 305/2011/EU Construction Materials Regulation, launched to the market with the CE conformity mark, and shall have the Performance Declaration of the manufacturer and the Performance Constancy Certificate obtained from the organizations accredited by the European Union.
Related reference posenumber book	35.140.3161 / Ministry of Environment, Urbanization and Climate Change

Pose No	Pose	Unit
Elec1-48	4x25 mm ² , 1 kV underground cables and column and supply line installation YVV (NYY) (TS IEC 60502-1+A1)	m
Description/ Specification	Technical Description: Column and supply line installation with YVV (NYY) type 1 kV underground cables: (Measurement: m) Establishment of column and supply line with YVV (NYY) type 1 kV underground cables in accordance with TS IEC 60502-1+A1 standards. On-site supply of underground cable for laying on the plaster inside the building, on the wall, ceiling or in channels over consoles or clasps, and in ducts outside the building, with passage and safety pipes, including all kinds of materials, clasp and workmanship. Measurement: The length of the cable between the terminal box and the headers is measured. More than one cable laid in the same duct shall be kept separately in conduits or pipes of the required diameter and length at the transition points. Terminal box, head, junction box, console, cable duct and manhole shall be paid separately. Iron manufacturing shall be paid from BFT (Unit Price Tariff) No 15.550.1202. No additional fee shall be paid for transition ducts and pipes up to a total of 10 meters. Note: They shall have been manufactured in accordance with TS EN 50575 and TS EN 50575 / A1 standards, 305/2011/EU Construction Materials Regulation, launched to the market with the CE conformity mark, and shall have the Performance Declaration of the manufacturer and the Performance Constancy Certificate obtained from the organizations accredited by the European Union.	
Related reference posenumber book	35.140.3226 / Ministry of Environment, Urbanization and Climate Change	

Pose No	Pose	Unit
Elec1-49	4x10 mm ² , 1 kV underground cables and column and supply line installation YVV (NYY) (TS IEC 60502-1+A1)	m
Description/ Specification	Technical Description: Column and supply line installation with YVV (NYY) type 1 kV underground cables: (Measurement: m) Establishment of column and supply line with YVV (NYY) type 1 kV underground cables in accordance with TS IEC 60502-1+A1 standards. On-site supply of underground cable for laying on the plaster inside the	

	building, on the wall, ceiling or in channels over consoles or clasps, and in ducts outside the building, with passage and safety pipes, including all kinds of materials, clasp and workmanship. Measurement: The length of the cable between the terminal box and the headers is measured. More than one cable laid in the same duct shall be kept separately in conduits or pipes of the required diameter and length at the transition points. Terminal box, head, junction box, console, cable duct and manhole shall be paid separately. Iron manufacturing shall be paid from BFT (Unit Price Tariff) No 15.550.1202. No additional fee shall be paid for transition ducts and pipes up to a total of 10 meters. Note: They shall have been manufactured in accordance with TS EN 50575 and TS EN 50575 / A1 standards, 305/2011/EU Construction Materials Regulation, launched to the market with the CE conformity mark, and shall have the Performance Declaration of the manufacturer and the Performance Constancy Certificate obtained from the organizations accredited by the European Union.
Related reference posenumber book	35.140.3224 / Ministry of Environment, Urbanization and Climate Change

Pose No	Pose	Unit
Elec1-50	4x6 mm ² , 1 kV underground cables and column and supply line installation YVV (NYY) (TS 1178 IEC 60502)	m
Description/ Specification	Technical Description: Column and supply line installation with YVV (NYY) type 1 kV underground cables: (Measurement: m) Establishment of column and supply line with YVV (NYY) type 1 kV underground cables in accordance with TS IEC 60502-1+A1 standards. On-site supply of underground cable for laying on the plaster inside the building, on the wall, ceiling or in channels over consoles or clasps, and in ducts outside the building, with passage and safety pipes, including all kinds of materials, clasp and workmanship. Measurement: The length of the cable between the terminal box and the headers is measured. More than one cable laid in the same duct shall be kept separately in conduits or pipes of the required diameter and length at the transition points. Terminal box, head, junction box, console, cable duct and manhole shall be paid separately. Iron manufacturing shall be paid from BFT (Unit Price Tariff) No 15.550.1202. No additional fee shall be paid for transition ducts and pipes up to a total of 10 meters. Note: They shall have been manufactured in accordance with TS EN 50575 and TS EN 50575 / A1 standards, 305/2011/EU Construction Materials Regulation, launched to the market with the CE conformity mark, and shall have the Performance Declaration of the manufacturer and the Performance Constancy Certificate obtained from the organizations accredited by the European Union.	
Related reference posenumber book	35.140.3223 / Ministry of Environment, Urbanization and Climate Change	

Pose No	Pose	Unit
Elec1-51	35.140.3221	m
Description/ Specification	Technical Description: Column and supply line installation with YVV (NYY) type 1 kV underground cables: (Measurement: m) Establishment of column and supply line with YVV (NYY) type 1 kV underground cables in accordance with TS IEC 60502-1+A1 standards. On-site supply of underground cable for laying on the plaster inside the building, on the wall, ceiling or in channels over consoles or clasps, and in ducts outside the building, with passage and safety pipes, including all kinds of materials, clasp and workmanship. Measurement: The length of the cable between the terminal box and the headers is measured. More than one cable laid in the same duct shall be kept separately	

	in conduits or pipes of the required diameter and length at the transition points. Terminal box, head, junction box, console, cable duct and manhole shall be paid separately. Iron manufacturing shall be paid from BFT (Unit Price Tariff) No 15.550.1202. No additional fee shall be paid for transition ducts and pipes up to a total of 10 meters. Note: They shall have been manufactured in accordance with TS EN 50575 and TS EN 50575 / A1 standards, 305/2011/EU Construction Materials Regulation, launched to the market with the CE conformity mark, and shall have the Performance Declaration of the manufacturer and the Performance Constancy Certificate obtained from the organizations accredited by the European Union.
Related reference pose number book	35.140.3221 / Ministry of Environment, Urbanization and Climate Change

Pose No	Pose	Unit
Elec1-52	5x2.5 mm ² , 1 kV underground cables and column and supply line installation YVV (NYY) (TS IEC 60502-1+A1)	m
Description/ Specification	Technical Description: Column and supply line installation with YVV (NYY) type 1 kV underground cables: (Measurement: m) Establishment of column and supply line with YVV (NYY) type 1 kV underground cables in accordance with TS IEC 60502-1+A1 standards. On-site supply of underground cable for laying on the plaster inside the building, on the wall, ceiling or in channels over consoles or clasps, and in ducts outside the building, with passage and safety pipes, including all kinds of materials, clasp and workmanship. Measurement: The length of the cable between the terminal box and the headers is measured. More than one cable laid in the same duct shall be kept separately in conduits or pipes of the required diameter and length at the transition points. Terminal box, head, junction box, console, cable duct and manhole shall be paid separately. Iron manufacturing shall be paid from BFT (Unit Price Tariff) No 15.550.1202. No additional fee shall be paid for transition ducts and pipes up to a total of 10 meters. Note: They shall have been manufactured in accordance with TS EN 50575 and TS EN 50575 / A1 standards, 305/2011/EU Construction Materials Regulation, launched to the market with the CE conformity mark, and shall have the Performance Declaration of the manufacturer and the Performance Constancy Certificate obtained from the organizations accredited by the European Union.	
Related reference pose number book	35.140.3251 / Ministry of Environment, Urbanization and Climate Change	

Pose No	Pose	Unit
Elec1-53	1x6 mm ² , 1 kV underground cables and column and supply line installation YVV (NYY) (TS IEC 60502-1+A1)	m
Description/ Specification	Technical Description: Column and supply line installation with YVV (NYY) type 1 kV underground cables: (Measurement: m) Establishment of column and supply line with YVV (NYY) type 1 kV underground cables in accordance with TS IEC 60502-1+A1 standards. On-site supply of underground cable for laying on the plaster inside the building, on the wall, ceiling or in channels over consoles or clasps, and in ducts outside the building, with passage and safety pipes, including all kinds of materials, clasp and workmanship. Measurement: The length of the cable between the terminal box and the headers is measured. More than one cable laid in the same duct shall be kept separately in conduits or pipes of the required diameter and length at the transition points. Terminal box, head, junction box, console, cable duct and manhole shall be paid separately. Iron manufacturing shall be paid from BFT (Unit Price Tariff) No 15.550.1202. No additional fee shall be paid for transition ducts and pipes up to a total of 10 meters. Note: They	

	shall have been manufactured in accordance with TS EN 50575 and TS EN 50575 / A1 standards, 305/2011/EU Construction Materials Regulation, launched to the market with the CE conformity mark, and shall have the Performance Declaration of the manufacturer and the Performance Constancy Certificate obtained from the organizations accredited by the European Union.
Related reference pose number book	35.140.3101 / Ministry of Environment, Urbanization and Climate Change

Pose No	Pose	Unit
Elec1-54	1x10 mm ² , 1 kV underground cables and column and supply line installation YVV (NYY) (TS IEC 60502-1+A1)	m
Description/ Specification	Technical Description: Column and supply line installation with YVV (NYY) type 1 kV underground cables: (Measurement: m) Establishment of column and supply line with YVV (NYY) type 1 kV underground cables in accordance with TS IEC 60502-1+A1 standards. On-site supply of underground cable for laying on the plaster inside the building, on the wall, ceiling or in channels over consoles or clasps, and in ducts outside the building, with passage and safety pipes, including all kinds of materials, clasp and workmanship. Measurement: The length of the cable between the terminal box and the headers is measured. More than one cable laid in the same duct shall be kept separately in conduits or pipes of the required diameter and length at the transition points. Terminal box, head, junction box, console, cable duct and manhole shall be paid separately. Iron manufacturing shall be paid from BFT (Unit Price Tariff) No 15.550.1202. No additional fee shall be paid for transition ducts and pipes up to a total of 10 meters. Note: They shall have been manufactured in accordance with TS EN 50575 and TS EN 50575 / A1 standards, 305/2011/EU Construction Materials Regulation, launched to the market with the CE conformity mark, and shall have the Performance Declaration of the manufacturer and the Performance Constancy Certificate obtained from the organizations accredited by the European Union.	
Related reference pose number book	35.140.3102 / Ministry of Environment, Urbanization and Climate Change	

Pose No	Pose	Unit
Elec1-55	1x16 mm ² , 1 kV underground cables and column and supply line installation YVV (NYY) (TS IEC 60502-1+A1)	m
Description/ Specification	Technical Description: Column and supply line installation with YVV (NYY) type 1 kV underground cables: (Measurement: m) Establishment of column and supply line with YVV (NYY) type 1 kV underground cables in accordance with TS IEC 60502-1+A1 standards. On-site supply of underground cable for laying on the plaster inside the building, on the wall, ceiling or in channels over consoles or clasps, and in ducts outside the building, with passage and safety pipes, including all kinds of materials, clasp and workmanship. Measurement: The length of the cable between the terminal box and the headers is measured. More than one cable laid in the same duct shall be kept separately in conduits or pipes of the required diameter and length at the transition points. Terminal box, head, junction box, console, cable duct and manhole shall be paid separately. Iron manufacturing shall be paid from BFT (Unit Price Tariff) No 15.550.1202. No additional fee shall be paid for transition ducts and pipes up to a total of 10 meters. Note: They shall have been manufactured in accordance with TS EN 50575 and TS EN 50575 / A1 standards, 305/2011/EU Construction Materials Regulation, launched to the market with the CE conformity mark, and shall have the Performance Declaration of the manufacturer and the Performance Constancy Certificate obtained from the organizations accredited	

	by the European Union.
Related reference posenumber book	35.140.3103 / Ministry of Environment, Urbanization and Climate Change

Pose No	Pose	Unit
Elec1-56	1x50 mm ² , 1 kV underground cables and column and supply line installation YVV (NYY) (TS IEC 60502-1+A1)	m
Description/ Specification	Technical Description: Column and supply line installation with YVV (NYY) type 1 kV underground cables: (Measurement: m) Establishment of column and supply line with YVV (NYY) type 1 kV underground cables in accordance with TS IEC 60502-1+A1 standards. On-site supply of underground cable for laying on the plaster inside the building, on the wall, ceiling or in channels over consoles or clasps, and in ducts outside the building, with passage and safety pipes, including all kinds of materials, clasp and workmanship. Measurement: The length of the cable between the terminal box and the headers is measured. More than one cable laid in the same duct shall be kept separately in conduits or pipes of the required diameter and length at the transition points. Terminal box, head, junction box, console, cable duct and manhole shall be paid separately. Iron manufacturing shall be paid from BFT (Unit Price Tariff) No 15.550.1202. No additional fee shall be paid for transition ducts and pipes up to a total of 10 meters. Note: They shall have been manufactured in accordance with TS EN 50575 and TS EN 50575 / A1 standards, 305/2011/EU Construction Materials Regulation, launched to the market with the CE conformity mark, and shall have the Performance Declaration of the manufacturer and the Performance Constancy Certificate obtained from the organizations accredited by the European Union.	
Related reference posenumber book	35.140.3106 / Ministry of Environment, Urbanization and Climate Change	

Pose No	Pose	Unit
Elec1-57	Ø=50 mm PE corrugated pipe, Cable Protection Pipes	m
Description/ Specification	Technical Description: Cable Protection Pipes (Measurement: m) Supply and laying of polyethylene corrugated pipes, which are used as cable protection pipes in energy and telecommunication infrastructure installations, in compliance with TS EN 61386-24 standard, resistant to at least 450 N external pressure, including all materials and workmanship.	
Related reference posenumber book	35.160.6501 / Ministry of Environment, Urbanization and Climate Change	

Pose No	Pose	Unit
Elec1-58	Ø=90 mm PE corrugated pipe, Cable Protection Pipes	m
Description/ Specification	Technical Description: Cable Protection Pipes (Measurement: m) Supply and laying of polyethylene corrugated pipes, which are used as cable protection pipes in energy and telecommunication infrastructure installations, in compliance with TS EN 61386-24	

	standard, resistant to at least 450 N external pressure, including all materials and workmanship.
Related reference posenumber book	35.160.6503 / Ministry of Environment, Urbanization and Climate Change

Pose No	Pose	Unit
Elec1-59	Surface mounted LED ceiling luminary with min. measurement of 30x60 (luminous flux at least 1500 lm, luminary's luminous efficiency at least 100 lm/w).	pcs
Description/ Specification	Technical Description: LED Ceiling Lights: (Measurement: Pcs) Supply to the workplace of a luminary with a body of at least 0.5 mm, a frame made of DKP sheet of at least 0.7 mm, with an opal PMMA diffuser of at least 1 mm thickness, with at least IP 40 protection degree, delivery in working condition, including all kinds of materials, workmanship and assembly.	
Related reference posenumber book	35.170.1103 / Ministry of Environment, Urbanization and Climate Change	

Pose No	Pose	Unit
Elec1-60	Surface mounted LED ceiling luminary with min. measurement of 60x60 (luminous flux at least 3300 lm, luminary's luminous efficiency at least 100 lm/w).	pcs
Description/ Specification	Technical Description: LED Ceiling Lights: (Measurement: Pcs) Supply to the workplace of a luminary with a body of at least 0.5 mm, a frame made of DKP sheet of at least 0.7 mm, with an opal PMMA diffuser of at least 1 mm thickness, with at least IP 40 protection degree, delivery in working condition, including all kinds of materials, workmanship and assembly.	
Related reference pose number, book	35.170.1105 / Ministry of Environment, Urbanization and Climate Change	

Pose No	Pose	Unit
Elec1-61	Flush mounted LED ceiling luminary with min. measurement of 60x60 (luminous flux at least 3300 lm, luminary's luminous efficiency at least 100 lm/w).	pcs
Description/ Specification	Technical Description: LED Ceiling Lights: (Measurement: Pcs) Supply to the workplace of a luminary with a body of at least 0.5 mm, a frame made of DKP sheet of at least 0.7 mm, with an opal PMMA diffuser of at least 1 mm thickness, with at least IP 40 protection degree, delivery in working condition, including all kinds of materials, workmanship and assembly.	
Related reference posenumber book	35.170.1106 / Ministry of Environment, Urbanization and Climate Change	

Pose No	Pose	Unit
Elec1-62	Flush-mounted, LED circular (downlight) luminary (with a luminous flux of at least 800 lm, luminary's luminous efficiency of at least 100 lm/w).	pcs
Description/ Specification	Technical Description: LED Circular (Downlight) Luminary: (Measurement: Pcs) The on-site supply of luminaries, whose body and cooler part is made of aluminium casting, with opal PMMA diffuser, which has at least IP 40 protection degree, and its delivery to the workplace in working condition, including all materials, workmanship and assembly.	

Related reference posenumber book	35.170.1501 / Ministry of Environment, Urbanization and Climate Change
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Pose No	Pose	Unit
Elec1-63	Surface-mounted, LED circular (downlight) luminary (with a luminous flux of at least 800 lm, luminary's luminous efficiency of at least 100 lm/w).	pcs
Description/ Specification	Technical Description: LED Circular (Downlight) Luminary: (Measurement: Pcs) The on-site supply of luminaries, whose body and cooler part is made of aluminium casting, with opal PMMA diffuser, which has at least IP 40 protection degree, and its delivery to the workplace in working condition, including all materials, workmanship and assembly.	
Related reference posenumber book	35.170.1503 / Ministry of Environment, Urbanization and Climate Change	

Pose No	Pose	Unit
Elec1-64	Emergency lighting kit price difference for led lighting fixtures	pcs
Description/ Specification	Technical Description: Emergency lighting kit price difference for led lighting fixtures: (Measurement: Pcs) On-site supply of kit, which is mounted to the luminaries to enable their operation also in emergencies, that can provide the emergency value illuminating light intensity specified in the project up to 3 hours depending on the project, consisting of high temperature type Ni-Cd battery, charger unit and status LED, compatible with LED luminaries drivers, manufactured in compliance with EN 61347-2-7, EN 60598-2-22 standards, placed on the market with CE marking, delivery of it in working condition, including all kinds of materials and workmanship	
Related reference posenumber book	35.170.3050 / Ministry of Environment, Urbanization and Climate Change	

Pose No	Pose	Unit
Elec1-65	Sensor led lighting fixture price difference	pcs
Description/ Specification	Technical Description: Sensor led lighting fixture price difference (Measurement: Pcs) LED lighting fixture price difference with motion sensor.	
Related reference posenumber book	35.170.3100 / Ministry of Environment, Urbanization and Climate Change	

Pose No	Pose	Unit
Elec1-66	Recessed earthed socket (TS-40), SEPARATELY MADE INSTALLATION SECTIONS	Pcs
Description/ Specification	Technical Description: SOCKETS: (Measurement: Pcs) The supply of normal sockets with a non-combustible material body, with contacts and screwed terminals and contacts that can be connected to the safety line, to withstand at least 10 Ae, in compliance with TS-40, at least 250 V, including its case, all kinds of small materials and workmanship.	
Related reference posenumber book	35.185.1201 / Ministry of Environment, Urbanization and Climate Change	

Pose No	Pose	Unit
Elec1-67	Surface mounted earthed socket (TS-40), SEPARATELY MADE INSTALLATION SECTIONS	Pcs
Description/ Specification	Technical Description: SOCKETS: (Measurement: Pcs) The supply of normal sockets with a non-combustible material body, with contacts and screwed terminals and contacts that can be connected to the safety line, to withstand at least 10 Ae, in compliance with TS-40, at least 250 V, including its case, all kinds of small materials and workmanship.	
Related reference posenumber book	35.185.1202 / Ministry of Environment, Urbanization and Climate Change	

Pose No	Pose	Unit
Elec1-68	2-pole (1NO+1NC contact), Ø 40 mm mushroom head	pcs
Description/ Specification	Technical Description: Emergency Stop Button (Measurement: Pcs) Supply of the emergency stop button, designed to perform emergency stop, emergency start, emergency deactivation, emergency activation functions, Ø 40 or Ø 60 mm diameter red mushroom-headed button, which cuts the energy of the system and switches to safe mode when pressed, which does not activate the system again unless the button is turned, returns to its original position by means of a spring when the button head is turned by hand and activates the system, with open and closed dry contacts, in compliance with TS EN 60947-5-1, TS EN 60947-5-5/A1 and TS EN ISO 13850 standards, made of plastic, manufactured by mechanical or laser engraving technique against wiping and fading, with special adhesive that will not leave itself due to heat and moisture, black "Emergency Stop" phrase on yellow background, with a circular warning label (60, 75 or 90 mm) in diameter, in compliance with the Regulation on Electrical Equipment Designed for Certain Voltage Limits of 2014/35/EU, with CE Conformity Mark, its transportation to the workplace, assembly and delivery in working conditions.	
Related reference posenumber book	35.185.1701 / Ministry of Environment, Urbanization and Climate Change	

Pose No	Pose	Unit
Elec1-69	Cable Tray Systems	kg
Description/ Specification	Technical Description: Cable Tray Systems: (Measurement: Kg. Preparation: %60) In order to provide the transport of electrical cables safely, supply of cable trays which are in compliance with TS EN 61537 standard, with the measurements specified in the approved electrical project and with electrical installation general technical specification, in compliance with the TS EN 10130/10131 standard, perforating holes on a sheet metal with a sufficient width and height to carry the cable load, bending it, opening grooves with longitudinal and transverse cord pulling method, on the (reinforced) ceiling in order to increase the strength of the sheet metal and prevent it from stretching, keeping it in a chemical bath for oil and rust removal, applying flux coating process, subjecting to pre-drying process, and then hot dip galvanizing in accordance with TS EN ISO 1461 standard, transportation to workplace, making its installation to the ceiling or wall by means of suspensions or mounting brackets, delivery of it in working condition, including all kinds of materials and workmanship. NOTE: 1-Only the weight of the tray shall be taken as a basis for dimensioning. 2- The joint parts to be used in horizontal, vertical and directional points, reduction, console that serves as a carrier, suspension rods, hanging brackets, fastening clasps and screws, nuts, washers, cotter etc. shall also be hot dip galvanized.	

	The costs of these are included in the unit price and shall not be paid separately. 3- A certificate of conformity shall be requested from the hot dip galvanizing manufacturer, stating that the TS EN ISO 1461 standard conditions are complied with.
Related reference posenumber book	35.190.1100 / Ministry of Environment, Urbanization and Climate Change

Pose No	Pose	Unit
Elec1-70	Cable Tray Systems Cover plate	kg
Description/ Specification	Technical Description: Cable Tray Systems Cover Plate (Measurement: kg) Cover plate suitable for Pose 35.190.1100 to be used to close the channels specified in the approved project, including all kinds of workmanship and materials, delivery in working condition.	
Related reference posenumber book	35.190.1101 / Ministry of Environment, Urbanization and Climate Change	

Pose No	Pose	Unit
Elec1-71	Column and supply line installation with 4x16 mm ² , 1 kV underground cables (N2XH, 0,6/1 kV)	m
Description/ Specification	Technical Description: Column and feeder line facility with N2XH type 1KV underground cables: (Measurement: m) On-site supply of underground cable in compliance with the TS HD 604 S1 Standard, while the N2XH, 0,6 / 1kV cables shall be installed in a surface-mounted manner indoors, to the walls, ceiling or channels over brackets or hooks, and within the channels outdoors, including passages and safety pipes, all kinds of materials, brackets and workmanship. Note: They shall have been manufactured in accordance with TS EN 50575 and TS EN 50575 / A1 standards, 305/2011/EU Construction Materials Regulation, launched to the market with the CE conformity mark, and shall have the Performance Declaration of the manufacturer and the Performance Constancy Certificate obtained from the organizations accredited by the European Union.	
Related reference posenumber book	35.150.2195 / Ministry of Environment, Urbanization and Climate Change	

Pose No	Pose	Unit
Elec1-72	8 TB CCTV HDD	m
Description/ Specification	Technical Description: Column and feeder line facility with N2XH type 1KV underground cables: (Measurement: m) On-site supply of underground cable in compliance with the TS HD 604 S1 Standard, while the N2XH, 0,6 / 1kV cables shall be installed in a surface-mounted manner indoors, to the walls, ceiling or channels over brackets or hooks, and within the channels outdoors, including passages and safety pipes, all kinds of materials, brackets and workmanship. Note: They shall have been manufactured in accordance with TS EN 50575 and TS EN 50575 / A1 standards, 305/2011/EU Construction Materials Regulation, launched to the market with the CE conformity mark, and shall have the Performance Declaration of the manufacturer and the Performance Constancy Certificate obtained from the organizations accredited by the European Union.	
Related reference posenumber book	35.150.2196 / Ministry of Environment, Urbanization and Climate Change	

Pose No	Pose	Unit
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Elec1-73	Column and supply line installation with 5x6 mm ² , 1 kV underground cables (N2XH, 0,6/1 kV)	m
Description/ Specification	Technical Description: Column and feeder line facility with N2XH type 1KV underground cables: (Measurement: m) On-site supply of underground cable in compliance with the TS HD 604 S1 Standard, while the N2XH, 0,6 / 1kV cables shall be installed in a surface-mounted manner indoors, to the walls, ceiling or channels over brackets or hooks, and within the channels outdoors, including passages and safety pipes, all kinds of materials, brackets and workmanship. Note: They shall have been manufactured in accordance with TS EN 50575 and TS EN 50575 / A1 standards, 305/2011/EU Construction Materials Regulation, launched to the market with the CE conformity mark, and shall have the Performance Declaration of the manufacturer and the Performance Constancy Certificate obtained from the organizations accredited by the European Union.	
Related reference posenumber book	35.150.2213 / Ministry of Environment, Urbanization and Climate Change	

Pose No	Pose	Unit
Elec1-74	Column and supply line installation with 1x16 mm ² , 1 kV underground cables (N2XH, 0,6/1 kV)	m
Description/ Specification	Technical Description: Column and feeder line facility with N2XH type 1KV underground cables: (Measurement: m) On-site supply of underground cable in compliance with the TS HD 604 S1 Standard, while the N2XH, 0,6 / 1kV cables shall be installed in a surface-mounted manner indoors, to the walls, ceiling or channels over brackets or hooks, and within the channels outdoors, including passages and safety pipes, all kinds of materials, brackets and workmanship. Note: They shall have been manufactured in accordance with TS EN 50575 and TS EN 50575 / A1 standards, 305/2011/EU Construction Materials Regulation, launched to the market with the CE conformity mark, and shall have the Performance Declaration of the manufacturer and the Performance Constancy Certificate obtained from the organizations accredited by the European Union.	
Related reference posenumber book	35.150.2103 / Ministry of Environment, Urbanization and Climate Change	

Pose No	Pose	Unit
Elec1-75	Column and supply line installation with 1x25 mm ² , 1 kV underground cables (N2XH, 0,6/1 kV)	m
Description/ Specification	Technical Description: Column and feeder line facility with N2XH type 1KV underground cables: (Measurement: m) On-site supply of underground cable in compliance with the TS HD 604 S1 Standard, while the N2XH, 0,6 / 1kV cables shall be installed in a surface-mounted manner indoors, to the walls, ceiling or channels over brackets or hooks, and within the channels outdoors, including passages and safety pipes, all kinds of materials, brackets and workmanship. Note: They shall have been manufactured in accordance with TS EN 50575 and TS EN 50575 / A1 standards, 305/2011/EU Construction Materials Regulation, launched to the market with the CE conformity mark, and shall have the Performance Declaration of the manufacturer and the Performance Constancy Certificate obtained from the organizations accredited by the European Union.	
Related reference posenumber book	35.150.2104 / Ministry of Environment, Urbanization and Climate Change	

Pose No	Pose	Unit
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Elec1-76	1x2,5 mm ² cross section, Plastic insulated conductor (HO7Z,O7Z1, at least 300/500 V)	m
Description/ Specification	Technical Description: HO7Z,O7Z1 type cable (at least 300/500 V) (Measurement: m) The supply of HO7Z, O7Z1 type cable in accordance with TS EN 50525-3-31 standard, its transportation to the workplace, including its assembly, all kinds of minor materials and workmanship.? Note: They shall have been manufactured in accordance with TS EN 50575 and TS EN 50575 / A1 standards, 305/2011/EU Construction Materials Regulation, launched to the market with the CE conformity mark, and shall have the Performance Declaration of the manufacturer and the Performance Constancy Certificate obtained from the organizations accredited by the European Union.	
Related reference posenumber book	35.150.1402 / Ministry of Environment, Urbanization and Climate Change	

Pose No	Pose	Unit
Elec1-77	1x4 mm ² cross section, Plastic insulated conductor (HO7Z,O7Z1, at least 300/500 V)	m
Description/ Specification	Technical Description: HO7Z,O7Z1 type cable (at least 300/500 V) (Measurement: m) The supply of HO7Z, O7Z1 type cable in accordance with TS EN 50525-3-31 standard, its transportation to the workplace, including its assembly, all kinds of minor materials and workmanship.? Note: They shall have been manufactured in accordance with TS EN 50575 and TS EN 50575 / A1 standards, 305/2011/EU Construction Materials Regulation, launched to the market with the CE conformity mark, and shall have the Performance Declaration of the manufacturer and the Performance Constancy Certificate obtained from the organizations accredited by the European Union.	
Related reference posenumber book	35.150.1403 / Ministry of Environment, Urbanization and Climate Change	

Pose No	Pose	Unit
Elec1-78	1x16 mm ² cross section, Plastic insulated conductor (HO7Z,O7Z1, at least 300/500 V)	m
Description/ Specification	Technical Description: HO7Z,O7Z1 type cable (at least 300/500 V) (Measurement: m) The supply of HO7Z, O7Z1 type cable in accordance with TS EN 50525-3-31 standard, its transportation to the workplace, including its assembly, all kinds of minor materials and workmanship.? Note: They shall have been manufactured in accordance with TS EN 50575 and TS EN 50575 / A1 standards, 305/2011/EU Construction Materials Regulation, launched to the market with the CE conformity mark, and shall have the Performance Declaration of the manufacturer and the Performance Constancy Certificate obtained from the organizations accredited by the European Union.	
Related reference posenumber book	35.150.1406 / Ministry of Environment, Urbanization and Climate Change	

Pose No	Pose	Unit
Elec1-79	2x2.5re, Flame resistant N2XHFE 180 0,6/1 kV cables (Cable Price)	m
Description/ Specification	Technical Description: N2XHFE 180 type flame resistant 0.6/1kV cables: (measurement: m) Cables conforming to TS HD 604 S1, TS EN 61034-1/2, TS EN 60754-1/2 standards, single or stranded, with copper conductor, special synthetic insulator, special filling layer and special synthetic outer sheath, maintaining its function in the flame for 180 minutes	

	according to TS EN 60332-3-24, TS IEC 60331-11/21 standard, (excluding pipes, junction boxes) including all materials and workmanship.
Related reference pose number book	35.150.3121 / Ministry of Environment, Urbanization and Climate Change

Pose No	Pose	Unit
Elec1-80	Normal Outlet, Security line lighting outlets	pcs
Description/ Specification	<p>Technical Description: Halogen free wired security line lighting outlets: (Measurement: Pcs, production 60%) With safety line, in accordance with TS EN 60332-1-2, TS EN 60754-1/2 and TS EN 61034-2 standards, plastic insulated (HO7Z, O7Z1) (The price of the halogen-free flame-proof pipe outlet with the CE conformity mark, in compliance with (TS EN 61386-1/21/22 standards. Are included in the outlet price). Note: They shall have been manufactured in accordance with TS EN 50575 and TS EN 50575 / A1 standards, 305/2011/EU Construction Materials Regulation, launched to the market with the CE conformity mark, and shall have the Performance Declaration of the manufacturer and the Performance Constancy Certificate obtained from the organizations accredited by the European Union. Measurement: Unless the length of the line exceeds 35 m, no additional payment is made. After 35m of the line, additional payment is made from BFT No 35.150.1000 as a supply line. In normal outlets and chandelier outlets, only one outlet shall be taken as a normal outlet. Additional outlets connected to these outlets shall be accepted in parallel. In Vaeviyen outlets, two Vaeviyen switches and one outlet shall be deemed to be normal Vaeviyen outlet; other outlets connected to this shall be considered as parallel outlets. Deviator switches are paid separately at their unit prices. Among the outlets managed with commutator switch, the first two outlets in the same place shall be considered as a commutator outlet and the others shall be considered as parallel outlets. When a switch is used instead of a circuit breaker, the switch price shall be deducted, and the circuit breaker price shall be paid extra. A three-phase outlet is similar to a regular outlet with three phase four or five conductors feeding each luminary. In the three-phase outlet, the switch contactor and the contactor control lines are paid separately. If each luminary is fed from a separate phase, the first outlet shall be paid as single-phase normal, the other outlets connected to it shall be paid as single-phase parallel outlets. Luminary costs are paid from Unit price no. 35.170.0000.</p>	
Related reference pose number book	35.160.3201 / Ministry of Environment, Urbanization and Climate Change	

Pose No	Pose	Unit
Elec1-81	Two-Way Switch Outlet, Security line lighting outlets	pcs
Description/ Specification	<p>Technical Description: Halogen free wired security line lighting outlets: (Measurement: Pcs, production 60%) With safety line, in accordance with TS EN 60332-1-2, TS EN 60754-1/2 and TS EN 61034-2 standards, plastic insulated (HO7Z, O7Z1) (The price of the halogen-free flame-proof pipe outlet with the CE conformity mark, in compliance with (TS EN 61386-1/21/22 standards. Are included in the outlet price). Note: They shall have been manufactured in accordance with TS EN 50575 and TS EN 50575 / A1 standards, 305/2011/EU Construction Materials Regulation, launched to the market with the CE conformity mark, and shall have the Performance Declaration of the manufacturer and the Performance Constancy Certificate obtained from the organizations accredited by the European Union. Measurement: Unless the length of the line exceeds 35 m, no additional payment is made. After 35m of the line, additional payment is made from BFT</p>	

	No 35.150.1000 as a supply line. In normal outlets and chandelier outlets, only one outlet shall be taken as a normal outlet. Additional outlets connected to these outlets shall be accepted in parallel. In Vaeviyen outlets, two Vaeviyen switches and one outlet shall be deemed to be normal Vaeviyen outlet; other outlets connected to this shall be considered as parallel outlets. Deviator switches are paid separately at their unit prices. Among the outlets managed with commutator switch, the first two outlets in the same place shall be considered as a commutator outlet and the others shall be considered as parallel outlets. When a switch is used instead of a circuit breaker, the switch price shall be deducted, and the circuit breaker price shall be paid extra. A three-phase outlet is similar to a regular outlet with three phase four or five conductors feeding each luminary. In the three-phase outlet, the switch contactor and the contactor control lines are paid separately. If each luminary is fed from a separate phase, the first outlet shall be paid as single-phase normal, the other outlets connected to it shall be paid as single-phase parallel outlets. Luminary costs are paid from Unit price no. 35.170.0000.
Related reference pose number book	35.160.3202 / Ministry of Environment, Urbanization and Climate Change

Pose No	Pose	Unit
Elec1-82	Vaeviyen Outlet, Security line lighting outlets	pcs
Description/ Specification	<p>Technical Description: Halogen free wired security line lighting outlets: (Measurement: Pcs, production 60%) With safety line, in accordance with TS EN 60332-1-2, TS EN 60754-1/2 and TS EN 61034-2 standards, plastic insulated (HO7Z, O7Z1) (The price of the halogen-free flame-proof pipe outlet with the CE conformity mark, in compliance with (TS EN 61386-1/21/22 standards. Are included in the outlet price). Note: They shall have been manufactured in accordance with TS EN 50575 and TS EN 50575 / A1 standards, 305/2011/EU Construction Materials Regulation, launched to the market with the CE conformity mark, and shall have the Performance Declaration of the manufacturer and the Performance Constancy Certificate obtained from the organizations accredited by the European Union. Measurement: Unless the length of the line exceeds 35 m, no additional payment is made. After 35m of the line, additional payment is made from BFT No 35.150.1000 as a supply line. In normal outlets and chandelier outlets, only one outlet shall be taken as a normal outlet. Additional outlets connected to these outlets shall be accepted in parallel. In Vaeviyen outlets, two Vaeviyen switches and one outlet shall be deemed to be normal Vaeviyen outlet; other outlets connected to this shall be considered as parallel outlets. Deviator switches are paid separately at their unit prices. Among the outlets managed with commutator switch, the first two outlets in the same place shall be considered as a commutator outlet and the others shall be considered as parallel outlets. When a switch is used instead of a circuit breaker, the switch price shall be deducted, and the circuit breaker price shall be paid extra. A three-phase outlet is similar to a regular outlet with three phase four or five conductors feeding each luminary. In the three-phase outlet, the switch contactor and the contactor control lines are paid separately. If each luminary is fed from a separate phase, the first outlet shall be paid as single-phase normal, the other outlets connected to it shall be paid as single-phase parallel outlets. Luminary costs are paid from Unit price no. 35.170.0000.</p>	
Related reference pose number book	35.160.3203 / Ministry of Environment, Urbanization and Climate Change	

Pose No	Pose	Unit
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Elec1-83	Parallel Outlet, Security line lighting outlets	pcs
Description/ Specification	<p>Technical Description: Halogen free wired security line lighting outlets: (Measurement: Pcs, production 60%) With safety line, in accordance with TS EN 60332-1-2, TS EN 60754-1/2 and TS EN 61034-2 standards, plastic insulated (HO7Z, O7Z1) (The price of the halogen-free flame-proof pipe outlet with the CE conformity mark, in compliance with (TS EN 61386-1/21/22 standards. Are included in the outlet price). Note: They shall have been manufactured in accordance with TS EN 50575 and TS EN 50575 / A1 standards, 305/2011/EU Construction Materials Regulation, launched to the market with the CE conformity mark, and shall have the Performance Declaration of the manufacturer and the Performance Constancy Certificate obtained from the organizations accredited by the European Union. Measurement: Unless the length of the line exceeds 35 m, no additional payment is made. After 35m of the line, additional payment is made from BFT No 35.150.1000 as a supply line. In normal outlets and chandelier outlets, only one outlet shall be taken as a normal outlet. Additional outlets connected to these outlets shall be accepted in parallel. In Vaeviyen outlets, two Vaeviyen switches and one outlet shall be deemed to be normal Vaeviyen outlet; other outlets connected to this shall be considered as parallel outlets. Deviator switches are paid separately at their unit prices. Among the outlets managed with commutator switch, the first two outlets in the same place shall be considered as a commutator outlet and the others shall be considered as parallel outlets. When a switch is used instead of a circuit breaker, the switch price shall be deducted, and the circuit breaker price shall be paid extra. A three-phase outlet is similar to a regular outlet with three phase four or five conductors feeding each luminary. In the three-phase outlet, the switch contactor and the contactor control lines are paid separately. If each luminary is fed from a separate phase, the first outlet shall be paid as single-phase normal, the other outlets connected to it shall be paid as single-phase parallel outlets. Luminary costs are paid from Unit price no. 35.170.0000.</p>	
Related reference posenumber book	35.160.3204 / Ministry of Environment, Urbanization and Climate Change	

Pose No	Pose	Unit
Elec1-84	Security line socket outlet, socket outlet	pcs
Description/ Specification	<p>Technical Description: Halogen free cable socket outlet: (Measurement: pieces, preparation: 60%) Halogen Free Line and outlet lines in a flameproof pipe, in accordance with TS EN 60332-1-2, TS EN 60754-1/2 and TS EN 61034-2 standards, with phase, neutral and safety lines with a cross section of at least 2.5 mm², with the phase, neutral and safety conductors of colored plastic insulated (HO7Z, O7Z1) in accordance with TS EN 60445, making a complete socket outlet at the socket, including junction box, terminal block, socket, all kinds of materials, transportation to the workplace and workmanship. (Included in the price of halogen-free flame-proof pipe outlet with CE conformity mark attached in accordance with TS EN 61386-1/21/22 standards) Note: They shall have been manufactured in accordance with TS EN 50575 and TS EN 50575 / A1 standards, 305/2011/EU Construction Materials Regulation, launched to the market with the CE conformity mark, and shall have the Performance Declaration of the manufacturer and the Performance Constancy Certificate obtained from the organizations accredited by the European Union. Measurement: When the line is more than 35 m, payment is made from BFT No 35.150.1000 as a supply line.</p>	
Related reference posenumber book	35.160.3401 / Ministry of Environment, Urbanization and Climate Change	

Pose No	Pose	Unit
Elec1-85	Average excitation path DL= 60 m, Active catching tip: (Measurement: Piece.)	pcs
Description/ Specification	<p>Technical Description: Active catching tip (Measurement: Piece) Supply of active lightning rod with at least 15 years working guarantee, having characteristics as written in the specification, having an early flow excited working system, with high corrosion resistance, made of stainless or non-corrosive material (such as chrome-plated copper, chrome-nickel, stainless steel, etc.), resistant to the highest wind speed, can operate within (-40 °C to +120 °C) without error, with at least IP 65 protection degree, with a AT stimulation time of at least 15 µs, resistant to the H class 100 kA lightning test current specified in TS EN 50164-1 / TS EN 62561-1 without causing any visible damage as a result of the test, complying with TS 13709/T1, (NFC17-102) and (UNE 21.186) standards, CE certified, approved by the Ministry of Science, Industry and Technology, as well as its transportation, mounting on the pole, connecting the down conductors, delivery in working condition, including all kinds of minor materials and labour. Note: 1-Active lightning rod type tests shall be carried out in laboratories accredited by TURKAK or an international organization, and their reports shall be submitted to the Administration. 2-The certificate indicating that the IP 65 protection class test has been carried out by TURKAK or an institution accredited by an international organization shall be submitted to the administration.</p>	
Related reference posenumber book	35.750.1504 / Ministry of Environment, Urbanization and Climate Change	

Pose No	Pose	Unit
Elec1-86	Roof pole (For active catching tip) (Measurement: Pcs: Preparation: 60%), LIGHTNING PROTECTION INSTALLATION	pcs
Description/ Specification	<p>Technical Description: Roof pole (For active catching tip) (Measurement: Pcs, Preparation: 60%) Supply of a 6 m long pole made of 80 mm galvanized pipe (1 lot) as written in the specification, including the unit down-conductor and all kinds of accessory materials related to the erection of the pole installation in place so as not to damage the roof. If the pole length, including the detection distance, exceeds 6 meters, the excess shall be paid separately from the relevant unit prices.</p>	
Related reference posenumber book	35.750.1600 / Ministry of Environment, Urbanization and Climate Change	

Pose No	Pose	Unit
Elec1-87	50 mm ² electrolytic copper conductor, installation of roof up and down conductors	m
Description/ Specification	<p>Technical Description: Roof surrounding and down conductors installation (Measurement: m, Preparation: 60%) Installation of roof and conductors with bare electrolytic solid copper conductor as written in the specification, taking the necessary measures to prevent corrosion at the point of point or screwed fork fixing clasps, catching tip or ground electrode connection points made of red casting or similar material, making the splices in the conductor with silver welding when necessary, including inspection terminal and all kinds of minor materials and labour.</p>	
Related reference posenumber book	35.750.2001 / Ministry of Environment, Urbanization and Climate Change	

Pose No	Pose	Unit
Elec1-88	50 mm ² solid copper, Building embracing conductor installation	m
Description/ Specification	Technical Description: Building surrounding conductor installation (Measurement: m, Preparation: 60%) Installation of building surrounding conductor from conductors, opening a channel in all kinds of soil at a depth of at least 60-80 cm around the outside of the building, closing the conductor ferrule and channel, connecting it to the electrodes with rivets or welding, including minor materials and labour.	
Related reference posenumber book	35.750.3001 / Ministry of Environment, Urbanization and Climate Change	

Pose No	Pose	Unit
Elec1-89	Galvanized steel sheet, 30x3.5 mm in size, coated with min 50μ zinc, in accordance with the specification, Building surrounding conductor installation	m
Description/ Specification	Technical Description: Building surrounding conductor installation (Measurement: m, Preparation: 60%) Installation of building surrounding conductor from conductors, opening a channel in all kinds of soil at a depth of at least 60-80 cm around the outside of the building, closing the conductor ferrule and channel, connecting it to the electrodes with rivets or welding, including minor materials and labour.	
Related reference posenumber book	35.750.3002 / Ministry of Environment, Urbanization and Climate Change	

Pose No	Pose	Unit
Elec1-90	Earth electrode (rod) electrolytic copper: (Measurement: Pcs:	pcs
Description/ Specification	Technical Description: Earth electrode (rod) electrolytic copper (Measurement: Pcs) Work place supply of an electrolytic copper bar with a diameter of Ø 20 mm and a length of at least 3.5 m in accordance with TS 435/T1 standard, screwing a cone-shaped cap on its end so that it can be driven into the ground, if the rod will be composed of 2 parts, the connection must be made by threading 4 cm, burying it at a depth of at least 60 cm from the ground level, connecting it to the down conductors and building enclosing conductors with silver welding or a special red clamp, including all kinds of small materials and workmanship. Note: If the ground is rocky, suitable soil is sought around.	
Re Related reference posenumber book	35.750.4002 / Ministry of Environment, Urbanization and Climate Change	

Pose No	Pose	Unit
Elec1-91	Conductor protective duct: (Measurement: Pcs:	pcs
Description/ Specification	Technical Description: Conductive protective duct (Measurement: Pcs) Taking the down conductors into 3 m of 20 mm galvanized iron pipe, 0.5 m of which remains in the soil (if more than 3 m of pipes are used, the cost shall be paid separately), insulating the part of the conductor inside the pipe with PVC or a similar insulating material to prevent contact with the pipe, and fixing it as a point-to-pipe conductor to prevent it from working as a transformer in case of lightning strike, inspection terminal made of material that will prevent corrosion, supply and assembly of all materials at the workplace, including all kinds of minor materials and labour.	
Related	35.750.4003 / Ministry of Environment, Urbanization and Climate Change	

reference posenumber book	
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Pose No	Pose	Unit
Elec1-92	ENH (ENERGY TRANSMISSION LINE) -TRANSFORMER PROJECT PREPARATION FEE	pcs
Description/ Specification		
Related reference posenumber book	ÖZEL P1 / SPECIAL	

ELECTRICAL WORKS (LOW CURRENT INTERIOR WIRING)

Pose No	Pose	Unit
Elec2-01	24-Port 10/100/1000 Manageable Switch (There will be 4 1G SFP entries)	pcs
Description/ Specification	Technical Description: Manageable, gigabit Ethernet switch with onboard power supply	
Related reference posenumber book	2022-P19 /	

Pose No	Pose	Unit
Elec2-02	120cm Dish Antenna	pcs
Description/ Specification	Technical Description: (Connection mechanism and Screws Antenna mount foot, rust-proof sheet metal, powder coated, LNB holder 23 – 40 m, Optimal wind resistance 90 km/H, Maximum wind resistance 150 km/H	
Related reference posenumber book	2022-P20 /	

Pose No	Pose	Unit
Elec2-03	Quadro Lnb	pcs
Description/ Specification	Technical Description: Compatible for Full HD broadcasts, with F Connector rain cover, Frequency: 10.7-12.75 GHz, Local Oscillator frequency Lo: 9.75 / 10.600 GHz)	
Related reference posenumber book	2022-P21 /	

Pose No	Pose	Unit
Elec2-04	10/24 Multiswitch Switchboard	pcs
Description/ Specification	Technical Description: Supply of 10/24 Multiswitch switchboard, installation in suitable place, supply line, downlink line between antenna and switchboard, distribution box, delivery in working condition, including all kinds of materials and labour.	
Related reference posenumber book	2022-P23 /	

Pose No	Pose	Unit
Elec2-05	Satellite Socket with F Connector	pcs
Description/ Specification	Description: Supply of Satellite Socket with F Connector, assembly in place accordance with its project, delivery in working condition, including all kinds of materials and labour.	

Related reference posenumber book	2022-P26 /
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Pose No	Pose	Unit
Elec2-06	Empty pipe laying outlet, EMPTY PIPELINE (with TS conformity certified material)	pcs
Description/ Specification	Technical Description: Empty pipe laying outlet: (Measurement: Pieces) Supply of 14 - 18 mm. peschel, PVC Bergman, empty pipe within reinforced concrete ceilings and walls, its installation, special wooden wedge for flooring according to the type of fixtures, installing and leaving the guide wire in the pipe, elbow, wedge, junction box, switch and socket case, all materials and workmanship included, empty. Measurement: Each luminary place is considered an empty pipe outlet. Line pipes are also included in the empty pipe outlets in both socket and lighting outlets. If a single line exceeds 35 metres, the excess length is paid from BFT no 35.160.6101 for laying the supply line empty pipe.	
Related reference posenumber book	35.160.6300 / Ministry of Environment, Urbanization and Climate Change	

Pose No	Pose	Unit
Elec2-07	Ø=50 mm PE corrugated pipe, Cable Protection Pipes	m
Description/ Specification	Technical Description: Cable Protection Pipes (Measurement: m) Supply and laying of polyethylene corrugated pipes, which are used as cable protection pipes in energy and telecommunication infrastructure installations, in compliance with TS EN 61386-24 standard, resistant to at least 450 N external pressure, including all materials and workmanship.	
Related reference posenumber book	35.160.6501 / Ministry of Environment, Urbanization and Climate Change	

Pose No	Pose	Unit
Elec2-08	Recessed earthed socket (TS-40), SEPARATELY MADE INSTALLATION SECTIONS	pcs
Description/ Specification	Technical Description: SOCKETS: (Measurement: Pieces) The supply of normal sockets with a non-combustible material body, with contacts and screwed terminals and contacts that can be connected to the safety line, to withstand at least 10 Ae, in compliance with TS-40, at least 250 V, including its case, all kinds of small materials and workmanship.	
Related reference posenumber book	35.185.1201 / Ministry of Environment, Urbanization and Climate Change	

Pose No	Pose	Unit
Elec2-09	Ground Embedded (Under Screed) Cable Trays	kg
Description/ Specification	Technical Description: Ground Embedded (Under Screed) Cable Trays (Measurement: kg) In order to ensure the safe transportation of electrical cables through the floor, in accordance with TS EN 50085-1 and TS EN 50085-2-2 standards, cutting and bending the "pre-galvanized" sheet metal with a minimum thickness of 1,5 mm, in accordance with the TS EN 10143 standard, according to the dimensions specified in the approved	

	electrical project and the general technical specifications of the electrical installation, turning it into a leakproof type channel in the dimensions specified below, making the partitions by self-forming, transporting them to the workplace, adjusting the height of the channel and junction box with the height adjustment screws in the workplace, installation them on the floor, placing junction boxes where necessary, drawing guide wire into the duct, (application of "Rabitz wire" on the ducts in case the screed thickness on the duct is low), including all kinds of workmanship and materials, delivery in working condition. NOTE: 1- Fittings to be used in horizontal, vertical and direction changing places, quadruple connection items, level adjustment unit, duct junction box that can be output from four directions, duct termination unit, duct socket box, dowel, screw, nut, washer, etc. will be hot dip galvanized. Duct junction box and multi socket box prices shall be paid separately from the relevant unit prices. 2- If rabitz wire is used on the duct, the price of rabitz wire shall be paid separately from the relevant unit prices.
Related reference posenumber book	35.190.1200 / Ministry of Environment, Urbanization and Climate Change

Pose No	Pose	Unit
Elec2-10	Underfloor Channel Junction	pcs
Description/ Specification	Technical Description: Underfloor Duct Junction Box (Measurement: Pcs) Supply of channel junction in accordance with TS EN 50085-1 and TS EN 50085-2-2 standards, the dimensions specified in the approved electrical project and the general technical specifications of the electrical installation, used in places where the floor duct changes direction or where an outlet is required, with its four sides can be opened in the dimensions that the floor duct can enter, with its base, top frame and locked top cover compatible with the case in order to be used as a distribution junction box, locked top cover made of ready-made galvanized sheet with a minimum thickness of 2 mm in accordance with TS EN 10143 standard, with stoppers to prevent the duct from entering the junction box, which can give output from four directions, with decorative appearance, which has a device that can be adjusted before and after screed, and with various types of barriers to prevent different types of cables from contacting each other, its transportation to the workplace, delivery in working condition, including all kinds of workmanship and installation.	
Related reference posenumber book	35.190.1201 / Ministry of Environment, Urbanization and Climate Change	

Pose No	Pose	Unit
Elec2-11	Under-Screed or Raised Floor Multi Socket Box	pcs
Description/ Specification	Technical Description: Under-Screed or Raised Floor Multi Socket Box (Measurement: Pieces) Supply of the socket box which is in accordance with TS EN 50085-1 and TS EN 50085-2-2 standards, the dimensions specified in the approved electrical project and the general technical specifications of the electrical installation, with special channels to fit the junction box for installation, made of flame-retardant, halogen-free material, the dimension of the box that can extend to the floor or junction minimum 235x235 mm, with the box cover frame reinforced with galvanized sheet at minimum 3 mm thickness, with the hinge shaft made of iron bar, with a cover that can be attached to both directions, has a lockable and recessed handle, the upper surface of the cover suitable for decorative coating (designed so that after the coating is made, the cover level is the same as the floor), with gaps covered with rubber plugs so that the plug cables can easily	

	come out when the cover is closed, Special slots with inclination for installation 8 pieces of 45x45 mm modules or 16 pieces of 22.5x45 mm modules to be placed inside the box opposite to each other, which has a device that can be adjusted to the ground level, its transportation to the workplace, installation, delivery in working condition, including all kinds of materials and workmanship. Note: The prices of the sockets shall be paid separately from the relevant poses
Related reference posenumber book	35.190.1202 / Ministry of Environment, Urbanization and Climate Change

Pose No	Pose	Unit
Elec2-12	Data socket CAT 5e or CAT 6e RJ-45 (8 contacts) (22,5x45 mm), Cable Channel Sockets	pcs
Description/ Specification	Technical Description: Cable Duct Sockets (Measurement: Pcs) Supply of electrical outlets where mains and UPS grounded sockets shall conform to TS IEC 60884-1+A1+A2 standard, socket holes shall be normal or 45° inclined, with child-proof protection, IP 20 protection class, allowing busbar connection by connection busbar between sockets, with data sockets of RJ-45 type, supporting both T568A and T568B connection types, with spring-loaded dust protection cover, with telephone sockets of RJ-11 or RJ-12 type, with spring-loaded dust protection cover, having transparent protective cover for labelling, made of flame retardant (UL94 V0) material (clawed) or slide-type), its transport to the workplace, assembly, making the cable connections, delivery of it in working condition, including all kinds of materials and workmanship. (Socket mounting kit and frame rates are included in the unit price.)	
Related reference posenumber book	35.190.1704 / Ministry of Environment, Urbanization and Climate Change	

Pose No	Pose	Unit
Elec2-13	2x1.5re, Flame resistant N2XHFE 180 0,6/1 kV cables (Cable Price)	m
Description/ Specification	Technical Description: N2XHFE 180 type flame resistant 0.6/1kV cables: (measurement: m) Cables conforming to TS HD 604 S1, TS EN 61034-1/2, TS EN 60754-1/2 standards, single or stranded, with copper conductor, special synthetic insulator, special filling layer and special synthetic outer sheath, maintaining its function in the flame for 180 minutes according to TS EN 60332-3-24, TS IEC 60331-11/21 standard, (excluding pipes, junction boxes) including all materials and workmanship.	
Related reference posenumber book	35.150.3120 / Ministry of Environment, Urbanization and Climate Change	

Pose No	Pose	Unit
Elec2-14	Up to 30 Pairs, Telephone distribution boxes	pcs
Description/ Specification	Technical Description: Telephone distribution boxes (Measurement: Pcs, Preparation: 60%). gun painted distribution boxes, one on each floor, with hinged and lockable cover, made of 1 mm thick DKP sheet metal, surface mounted or embedded in the wall, in the desired colour, and their small fixing and connection materials, special telephone terminal, duly opening and shaping the ends of the cables coming into the box and connecting with solder, including all kinds of minor materials and workmanship.	

Related reference posenumber book	35.510.1602 / Ministry of Environment, Urbanization and Climate Change
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Pose No	Pose	Unit
Elec2-15	Conventional resettable fire alarm button and its installation	pcs
Description/ Specification	Technical Description: Conventional resettable fire alarm button and its installation (Measurement: Pcs) Conventional resettable fire alarm button must be activated by pressing the flexible unbreakable glass on it and must remain in this state until the reset process is performed. They shall have been manufactured in accordance with TS EN 54-11 standards, 305/2011/EU Construction Materials Regulation, launched to the market with the CE conformity mark, and shall have the Performance Declaration of the manufacturer and the Performance Constancy Certificate obtained from the organizations accredited by the European Union. Supply of the button, installation in place, connection to fire alarm outlets, delivery in working condition, including all kinds of minor materials and workmanship.	
Related reference posenumber book	35.415.1410 / Ministry of Environment, Urbanization and Climate Change	

Pose No	Pose	Unit
Elec2-16	Conventional optical smoke detector and installation	pcs
Description/ Specification	Technical Description: Conventional optical smoke detector and installation (Measurement: Pcs, Preparation: 60%) The detector shall detect smoke by optical method. The detector shall have a photoelectric smoke cell operating on the light scattering principle. The detector shall be suitable for parallel warning lamp connection and shall have a socket that allows it to be attached and detached. The detector shall have been manufactured in accordance with TS EN 54-7 standard, 305/2011/EU Construction Materials Regulation, launched to the market with the CE conformity mark, and shall have the Performance Declaration of the manufacturer and the Performance Constancy Certificate obtained from the organizations accredited by the European Union. Supply of the detector, transportation to the workplace, including all kinds of small materials, testing and delivering in working condition.	
Related reference posenumber book	35.415.1450 / Ministry of Environment, Urbanization and Climate Change	

Pose No	Pose	Unit
Elec2-17	Conventional optical smoke and temperature detector and installation	pcs
Description/ Specification	Technical Description: Conventional optical smoke and temperature detector and installation (Measurement: Pcs, Preparation: 60%) The detector shall detect smoke by optical method. The detector shall have a photoelectric smoke cell operating on the light scattering principle. In addition, the detector shall detect temperature through a heat sensitive semiconductor. The detector shall be suitable for parallel warning lamp connection and shall have a socket that allows it to be attached and detached. The detector shall have been manufactured in accordance with TS EN 54-7 and TS EN 54-5 standards, 305/2011/EU Construction Materials Regulation, launched to the market with the CE conformity mark, and shall have the Performance Declaration of the manufacturer	

	and the Performance Constancy Certificate obtained from the organizations accredited by the European Union. Supply of the detector, transportation to the workplace, including all kinds of small materials, testing and delivering in working condition.
Related reference posenumber book	35.415.1470 / Ministry of Environment, Urbanization and Climate Change

Pose No	Pose	Unit
Elec2-18	Conventional type fire alarm switchboard for up to 4 zones (included)	pcs
Description/ Specification	<p>Technical Description: Conventional Type Fire Alarm Switchboard (Measurement: Pcs, Preparation: 80%) Conventional fire alarm switchboard shall be suitable for the connection of conventional optical smoke, constant temperature, temperature rise rate, optical smoke and temperature, flame detector natural gas, LPG and carbon monoxide detectors, conventional internal and external type fire alarm buttons, audible and light alarm devices. There must be at least 1 audible alarm output and alarm and fault outputs for signalling to the fire department or a remote fire fighting centre or an observation station as standard in the fire alarm control panel. The fire alarm panel must be able to work on its own as well as with the repeater panel. Conventional fire alarm switchboard must keep all lines going to detection and alarm devices under constant control against failures such as disconnection, short circuit and removal of devices on the line. The fire alarm switchboard must have a general fire alarm and fault lamp, separate alarm and fault lamps for each fire zone, and a local sound warning device. There shall be a lock system on the switchboard that prevents unauthorized persons from interfering with the switchboard. Fire alarm system must be able to fulfil its detection functions for at least 24 hours in case the main supply is gone and to perform all alarm, control and communication functions for at least 30 minutes, at the end of this period, must be fully closed and must be equipped with sealed type, maintenance-free accumulators. The grounding of the switchboard must be done independently in accordance with the Regulation on Grounding in Electrical Installations, not greater than 5 ohms. The switchboard shall have been manufactured in accordance with TS EN 54-2 and TS EN 54-4 standards, 305/2011/EU Construction Materials Regulation, launched to the market with the CE conformity mark, and shall have the Performance Declaration of the manufacturer and the Performance Constancy Certificate obtained from the organizations accredited by the European Union. Supply of conventional fire alarm switchboard, its installation, delivery in working condition, including all kinds of minor materials and workmanship.</p>	
Related reference posenumber book	35.415.1110 / Ministry of Environment, Urbanization and Climate Change	

Pose No	Pose	Unit
Elec2-19	Electronic fire alarm siren with built-in flasher	pcs
Description/ Specification	<p>Technical Description: Electronic fire alarm siren with built-in flasher (Measurement: Pcs, Preparation: 60%) The siren flasher must have a minimum volume of 100 db/1mt. The minimum flash energy of the siren flasher must be 2.5 Joules, and the flash frequency must be 1 Hz. The siren flasher must be visible even at a distance. The protection class of the siren flasher must be at least IP 42. Siren flasher: On-site supply of the siren flasher which have been manufactured in accordance with TS EN 54-3 and TS EN 54-23 standards, 305/2011/EU Construction Materials Regulation, launched to the market with</p>	

	the CE conformity mark, and which has the Performance Declaration of the manufacturer and the Performance Constancy Certificate obtained from the organizations accredited by the European Union, its transportation to the workplace, testing and delivering in working condition, including all kinds of small materials.
Related reference posenumber book	35.415.1580 / Ministry of Environment, Urbanization and Climate Change

Pose No	Pose	Unit
Elec2-20	Single-sided, emergency guidance luminary (with Led) with 1 hour duration	pcs
Description/ Specification	Technical Description: Emergency guidance luminary with LEDs, Supply of emergency guidance luminary whose colour and sign formats are in accordance with the relevant standards, single or double sided, with LED light source, produced in accordance with the TS EN 60598-2-22 standard and in accordance with the Regulation on the Control of Waste Electrical and Electronic Equipment, the Regulation on the Protection of Buildings from Fire, 2014/35/EU Regulation on Electrical Equipment Designed for Certain Voltage Limits and TS ISO 3864-1/2, TS ISO 7010, TS EN 1838 and TS EN 50172 standards and supplied to the market with the CE conformity mark, its transportation to the workplace and installation.	
Related reference posenumber book	35.440.2101 / Ministry of Environment, Urbanization and Climate Change	

Pose No	Pose	Unit
Elec2-21	Indoor type, Line transformer and installation	pcs
Description/ Specification	Technical Description: Line transformer and installation (Measurement: Pcs, Preparation: 60%) Installation of line transformer with suitable impedance at the locations shown in the project, in order to reduce the losses that may occur in the main lines of the systems such as speaker, telephone, intercom and the like, including all kinds of minor materials and workmanship, delivery in working condition.	
Related reference posenumber book	35.450.1301 / Ministry of Environment, Urbanization and Climate Change	

Pose No	Pose	Unit
Elec2-22	3-5 W single-sided loudspeaker, Speaker and installation	pcs
Description/ Specification	Technical Description: Speaker and its installation (Measurement: Pcs, Preparation: 60%) Procurement of loudspeaker and loudspeaker box in accordance with TS 976 EN 60268-5 standard, as written in the technical specification, installation in place, delivery in working condition, including all kinds of minor materials and workmanship.	
Related reference posenumber book	35.450.1401 / Ministry of Environment, Urbanization and Climate Change	

Pose No	Pose	Unit
Elec2-23	Outdoor type air pressure loudspeaker up to 10 W, Loudspeaker and its installation	pcs

Description/ Specification	Technical Description: Speaker and its installation (Measurement: Pcs, Preparation: 60%) Procurement of loudspeaker and loudspeaker box in accordance with TS 976 EN 60268-5 standard, as written in the technical specification, installation in place, delivery in working condition, including all kinds of minor materials and workmanship.
Related reference posenumber book	35.450.1405 / Ministry of Environment, Urbanization and Climate Change

Pose No	Pose	Unit
Elec2-24	Handheld microphone, Microphone	pcs
Description/ Specification	Technical Description: Microphone (Measure: Pcs, Preparation: 60%) Crystal or dynamic microphone in accordance with TS 6509 standard, with the features written in the technical specification, microphone cable of at least 10 m length, microphone socket and plug, installation in place, delivery in working condition, including all kinds of minor materials and workmanship.	
Related reference posenumber book	35.450.5003 / Ministry of Environment, Urbanization and Climate Change	

Pose No	Pose	Unit
Elec2-25	Microphone line installation	m
Description/ Specification	Technical Description: Microphone line installation (Measurement: m, Preparation: 60%) Microphone line installation with shielded conductors in peshel, Bergman or PVC pipe, hinged and lockable, at least 1 mm thick DKP sheet metal with a cover, light gray gun painted, surface-mounted or flush-mounted terminal box, junction box, terminal box, iron, console, crochet, paint, including all kinds of small materials and workmanship.	
Related reference posenumber book	35.450.5100 / Ministry of Environment, Urbanization and Climate Change	

Pose No	Pose	Unit
Elec2-26	100 W, Amplifier and installation	pcs
Description/ Specification	Technical Description: Amplifier and its installation (Measurement: Pcs, Preparation: 60%) Sound amplifier with the features written in the technical specification, installation on the iron frame to the place to be shown, delivery in working condition, including its frame, paint, all kinds of minor materials and workmanship.	
Related reference posenumber book	35.450.5704 / Ministry of Environment, Urbanization and Climate Change	

Pose No	Pose	Unit
Elec2-27	32U 600 mmx800 mm 19" Free Standing cabinet	pcs
Description/ Specification	Technical Description: Free Standing cabinets: With the type tests made and corresponding test results were provided to the administration, with the rear cover and the inner stud (2 at the front 2 at the rear) at least 2 mm thick, the inner surfaces of the cabin walls at least 1.5 mm thick, made of DKP sheet metal, stud openings 19" wide,	

	lockable, wheeled, with wheels capable of carrying at least 200 kg load, with the bottom chassis of the cabinet having a cables inlet section to prevent entrance of dust, capable of fixing the cables, the cabinet's front, rear and side flaps having a key and capable of opening and closing, the front cover of the cabinet shall be tempered, anti-static, secure, smoke-colour, grinded, with a thickness of at least 4 mm, at least 135 degrees, having a key and capable of opening and closing, uninstallable, at least 3 cm wide screws that hold the glass around the glass to increase the strength of the front cover, metal plug-in type, with a frame structure, painted with electrostatic powder coating, having ventilation portholes at the top of the cabinet and/or in the side surfaces, designed to respond to fan assembly when the upper cover and/or cap is removed, each side frame of the holes on the cabinet studs 9,5 ± 0.01 mm, cabinets studs capable of moving along the depth of the cabinet.
Related reference posenumber book	35.550.2019 / Ministry of Environment, Urbanization and Climate Change

Pose No	Pose	Unit
Elec2-28	Fixed shelf for 800 mm depth, Accessories belonging to the product	pcs
Description/ Specification		
Related reference posenumber book	35.550.4003 / Ministry of Environment, Urbanization and Climate Change	

Pose No	Pose	Unit
Elec2-29	Wheel group with brake (Front wheels with brake), Accessories belonging to the product	pcs
Description/ Specification		
Related reference posenumber book	35.550.4008 / Ministry of Environment, Urbanization and Climate Change	

Pose No	Pose	Unit
Elec2-30	Fan module with thermostat (2 fans), Accessories belonging to the Product	pcs
Description/ Specification		
Related reference posenumber book	35.550.4010 / Ministry of Environment, Urbanization and Climate Change	

Pose No	Pose	Unit
Elec2-31	19" rack type 6 group socket with switch, Accessories belonging to the product	pcs
Description/ Specification		
Related reference	35.550.4014 / Ministry of Environment, Urbanization and Climate Change	

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Pose No	Pose	Unit
Elec2-32	2x2x0.8+0.8 mm ² , JH(St) H HALOGEN-FREE FIRE ALARM CABLES (VDE 0815)	m
Description/ Specification	Technical Description: J-H(St)H HALOGEN-FREE FIRE ALARM CABLES (Measurement: m) (VDE 0815) Supply of the insulated fire alarm cable which is used in security systems, communication, indoor and dry areas, in accordance with TS EN 60228, with copper conductor, in accordance with DIN VDE 0815; with an operating temperature range from -30° C to + 70° C (for fixed installations), halogen-free in accordance with TS EN 50290-2-26, flame retardant vein isolation, pairs twisted, wrapped in aluminium foil with ground wire, with outer sheath RAL 7032 grey, in accordance with TS 13767 standard, halogen-free flame retardant, in accordance with TS EN 50290-2-27, including passage and security pipes, all kinds of materials and workmanship. Note: HFFR pipe is included in internal piping. Note: They shall have been manufactured in accordance with TS EN 50575 and TS EN 50575 / A1 standards, 305/2011/EU Construction Materials Regulation, launched to the market with the CE conformity mark, and shall have the Performance Declaration of the manufacturer and the Performance Constancy Certificate obtained from the organizations accredited by the European Union.	
Related reference posenumber book	35.515.1002 / Ministry of Environment, Urbanization and Climate Change	

Pose No	Pose	Unit
Elec2-33	RG 6/U-6 75, Coaxial Cables, TSEK Certified	m
Description/ Specification	Technical Description: Coaxial Cables (Measurement: m) On-site supply of coaxial cable, which is used for radio, TV, Radar, Fire control, many transmitting devices, security satellite antenna, CCTV antenna and measurement systems, applications where signal loss must be kept at minimum value or external interference must be avoided, in compliance with TS EN 50117-1 standard and 2014/35/EU Regulation on Electrical Equipment Designed for Certain Voltage Limits and placed on the market with CE conformity mark, including passage and safety pipes, and all kinds of materials and workmanship. Note: The internal installation includes (pincer, Bergman or PVC pipe).	
Related reference posenumber book	35.505.1020 / Ministry of Environment, Urbanization and Climate Change	

Pose No	Pose	Unit
Elec2-34	RG 11/U-6 75, Coaxial Cables, TSEK Certified	m
Description/ Specification	Technical Description: Coaxial Cables (Measurement: m) On-site supply of coaxial cable, which is used for radio, TV, Radar, Fire control, many transmitting devices, security satellite antenna, CCTV antenna and measurement systems, applications where signal loss must be kept at minimum value or external interference must be avoided, in compliance with TS EN 50117-1 standard and 2014/35/EU Regulation on Electrical Equipment Designed for Certain Voltage Limits and placed on the market with CE conformity mark, including passage and safety pipes, and all kinds of materials and workmanship. Note: The internal installation includes (pincer, Bergman or PVC pipe).	
Related	35.505.1026 / Ministry of Environment, Urbanization and Climate Change	

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Pose No	Pose	Unit
Elec2-35	2x1 mm ² , LIH(St) H HALOGEN FREE SIGNAL AND CONTROL CABLE (VDE 0815	m
Description/ Specification	Technical Description: LIH(St)H FE180 PH120 FIRE RESISTANT HALOGEN-FREE SIGNAL AND CONTROL CABLE (Measurement: m) (VDE 0812) On site supply of fire alarm cables which are used as halogen-free and fire-resistant signal and communication cable in security systems, communication, indoor and dry areas, conforming to TS EN 60228, with electrolytic copper wire, in colours in accordance with DIN 47100 standards, with the cable core formed by twisting the cores insulated with halogen-free sheath in accordance with TS EN 50290-2-26 in layers, fixed with a transparent polyester tape, wrapped with a special flame retardant glass fibre tape to increase flame resistance, shielded with a tinned or annealed earth conductor together with an aluminium-coated polyester tape, in accordance with TS 13734 standard, in RAL 2003 orange colour in accordance with DIN 47100, with halogen-free outer sheath in accordance with TS EN 50290-2-27, with a temperature between -30 °C and +70 °C in constant conditions, ensuring circuit integrity for 180 minutes according to IEC 60331-21 standard, 120 minutes according to EN 50200 standard under fire conditions, having TS EN 60332-1-2, TS EN 60332-3-24 flame retardancy, TS EN 61034-2 smoke density certificates, including passage and security pipes, all kinds of materials and workmanship. Note: HFFR pipe is included in internal piping.	
Related reference posenumber book	35.520.6009 / Ministry of Environment, Urbanization and Climate Change	

Pose No	Pose	Unit
Elec2-36	Utp Cat6H HALOGEN FREE 4x2x23 AWG, COPPER DATA CABLES	m
Description/ Specification	Technical Description: Utp Cat6H HALOGEN FREE 4X2X23 AWG Measurement: m Preparation: 60% Supply of cables which are used in data communication at 250 Mhz bandwidth and 250 Mbps speed between computers for horizontal installations in local area networks, with 4 pairs, 4 colour codes, unshielded twist pairs (unshielded spiral twist), and flame retardant thanks to its all-encompassing HFFR outer sheath, usually self-extinguishing, which does not emit toxic gas and smoke during combustion, having IEC 60332-1 IEC 60754 test conformity certificate; 4 pairs of cable in ISO class D-CAT6e standard, 23 AWG 0.57 mm bare copper plating cable, delivery to the workplace, including all kinds of minor materials, workmanship, assembly and testing. Under which condition the cable is installed during the application, the material cost of the material cost of such production shall also be paid based on the relevant clause (Payment of the pipe cost if it is passed through a pipe, payment of the duct cost, if it is passed through the cable tray based on the relevant clause)	
Related reference posenumber book	35.515.7030 / Ministry of Environment, Urbanization and Climate Change	

Pose No	Pose	Unit
Elec2-37	24 Port, Utp Cat6 Patch Panel	pcs

Description/ Specification	Technical Description: Utp Cat 6 Patch Panel (Measurement: Pcs, Preparation: 60%) It shall be in CAT 6 Standards used in data communication at 250 Mhz bandwidth and 1000 Mbps for equipment termination in local area networks (LAN), equipment termination in horizontal distribution or telecommunication rooms and cable terminations at junction points, with a RJ-45 type 8 Contact female connector, 19 inch wide, Unshielded, covered with a high-quality material in Jack Contact Point. Construction material made of steel, aluminium, aluminium alloy or anode aluminium material, in compliance with ANSI/TIA/EIA-568 B.2-1, ISO/IEC -11801 Standards, including labelling, workmanship, assembly, testing
Related reference posenumber book	35.505.7301 / Ministry of Environment, Urbanization and Climate Change

Pose No	Pose	Unit
Elec2-38	4/20, [number of external subscribers/number of internal subscribers], Electronic Type Fully Automatic Telephone Switchboard	pcs
Description/ Specification	Technical Description: Electronic Type Fully Automatic Telephone Switchboard (Measurement: Pcs, Preparation: %80) (1999/5/AT) On-site supply of modular, electronic, automatic, telephone switchboard, manufactured in accordance with (1999/5/AT) Radio and Telecommunication Terminal Equipment Regulation, placed on the market with CE conformity mark, composed of completely solid-state semiconductor circuit elements whose features are stated in the technical specification, micro process controlled, its assembly in place, internal and external subscriber distribution board, making cable connections from switchboards and subscribers, special battery for the power plant (TS 1352-1 EN 60896-11, TS 1352-2 EN 60896-21, TS 1352-3 EN 60896-22), rectifier, including any and all small materials and workmanship, delivery in working condition. Note: Robot operator and voicemail system port shall be available equal to the 15% of the number of external lines of the proposed plant.	
Related reference posenumber book	35.700.1102 / Ministry of Environment, Urbanization and Climate Change	

ELECTRICAL WORKS (Env. Sec. Cam. Sys.)

Pose No	Pose	Unit
Elec3-01	Operator Computer Monitor (Type-1 Monitor)	pcs
Description/ Specification	<p>3.10 Operator Computer Monitor (Type-1 Monitor)</p> <p>3.10.1 The monitor shall be an LED panel with IPS (In-Plane Switching), PLS (Plane Line Switching), TN (Twisted Nematic) or VA (Vertical Alignment) technology.</p> <p>3.10.2 The Monitor shall be minimum 23" (twenty-three inches) from corner to corner.</p> <p>3.10.3 There shall be no dead pixels on the screen.</p> <p>3.10.4 The response time of the monitor shall be 7 (seven) ms at most.</p> <p>3.10.5 It shall support at least 16.7 million (sixteen million seven hundred thousand) colours.</p> <p>3.10.6 The monitor shall support 1920 (one thousand nine hundred and twenty) x 1080 (one thousand eighty) resolution at 60 (sixty) Hz.</p> <p>3.10.7 The brightness of the monitor shall be at least 250 (two hundred and fifty) Cd/m2.</p> <p>3.10.8 The monitor screen shall be anti-glare.</p> <p>3.10.9 It shall support TCO or MPR-II or equivalent international standards of radiation emission and ergonomics</p> <p>3.10.10 The brand of the monitor shall be the same as the desktop computer to be offered. In case it is not the same brand, there shall be monitors (professional display solutions with 24/7 (seven twenty four) operation feature) specially produced for CGKS systems.</p>	
Related reference posenumber book	3.10 / SPECIAL (MINISTRY OF INTERIOR ENVIRONMENTAL SECURITY CAMERA SYSTEM TECHNICAL SPECIFICATION)	

Pose No	Pose	Unit
Elec3-02	Field Cabinet	pcs
Description/ Specification	<p>3.15 Field Cabinet</p> <p>3.15.1 Field cabinet naming works and processes shall be undertaken by the contractor in line with the request and approval of the administration/user unit.</p> <p>3.15.2 These cabinets shall be used for positioning devices such as field switch, adapter, fuse, UPS etc. in data and power termination and related points.</p> <p>3.15.3 The field cabinet shall be mounted at a point deemed appropriate by the administration/user unit.</p> <p>3.15.4 The field cabinet to be used shall qualify at least IP 66 protection class.</p> <p>3.15.5 Field cabinets shall be lockable and be resistant to all kinds of adverse conditions such as heat, humidity, water, wind, etc. to ensure that the materials such as the electronic devices they contain etc. work in appropriate technical specifications. For this purpose, the field cabinet to be used shall be manufactured with thermal insulation in order to prevent overheating due to sunlight and excessive cooling in very cold weather. For this purpose, thermal insulation shall be applied to all surfaces except the ventilation</p>	

holes.

3.15.6 It shall be at least 8 (eight) U height.

3.15.7 Field cabinet shall be manufactured of galvanized sheet in accordance with TS-914 EN ISO 1461:2011 standard or of galvanized sheet coated with electrolytic method in accordance with ISO 2081 standard. The outer walls and bottom of the field cabinet shall be at least 3 (three) mm, and the inner walls shall be at least 2 (two) mm thick.

3.15.8 Field cabinets shall be mounted on concrete bases. Concrete pedestal heights shall be at least 30 (thirty) cm above the ground.

3.15.9 Except for the bottom of the field cabinet, the side surfaces and the ceiling shall be double-walled. Heat insulation material shall be used between the inner and outer walls on the side surfaces. Polyurethane foam shall be used as heat insulation material.

3.15.10 Field cabinets shall be designed as two compartments (storey) and the ventilation of both sections shall be separate. There shall be no open space between the two sections except for the cable passages and the evacuations that provide ease of assembly. In both sections, there shall be ball fan units with thermostat operating independently of each other and suitable for 24/7 operation. The fuses and thermostats of the fans shall be independent of each other. The fans shall be activated automatically when the temperature inside the cabin exceeds 30 °C (± 4). In the lower part, there shall be the UPS and the energy unit with specially designed closed ventilation holes and cable entries for cable connections. All fuses shall be located in the energy unit. Cameras, fan modules, in-cabinet power module, UPS input and output shall be directly connected to separate fuses. In case of failure of any of the ventilation fans, the other shall continue to operate normally.

3.15.11 The field switch, fibre optic patch panel or fibre optic additional cassette, cable holder and power unit/units to be used/assembled by the Contractor shall be designed so that it is located in the upper compartment of the field cabinet, and there shall be 1 (one) shelf to put the materials in question. There shall be cable holder mounting places where fibre optic cables can be mounted on the back.

3.15.12 There shall be access to the field cabinet from the front door and all interventions shall be made from here.

3.15.13 There shall be 3 (three) A, 220 (two hundred and twenty) V AC socket and a compact fluorescent lamp with external type and self-contained automatic fuses for service purposes inside the field cabinet. When the cabinet door is opened, the lamp shall turn on automatically, and when the door is closed, the lamp shall turn off automatically.

3.15.14 In field cabinets, ventilation openings shall be located on the side surfaces and at the top of the side surface. Necessary protection measures against pressurized water and sabotage shall be taken while positioning of the ventilation outlets.

3.15.15 There shall be data and energy termination units and other related active devices inside the field cabinets.

3.15.16 2 (two) pipes shall be used for energy and data cables between the field cabinet and the pole. No cable or PVC pipe shall be visible explicitly.

3.15.17 The cables used in the connection of the active devices in the field cabinet with the camera shall not be exposed. The cables shall also be shielded at the input-output

	<p>point of the camera. For this purpose, the cables in the area between the camera and the galvanized protective pipe or pole shall be protected by plastic-coated steel spirals against sun, rain and other external effects.</p> <p>3.15.18 There shall be connection apparatus suitable for 19" rack mounting inside the field cabinet.</p> <p>3.15.19 The front doors of the field cabinet shall allow intervention to the inside and their design shall be made to open at least 100°.</p> <p>3.15.20 The Field Cabinet Lock System shall have the following features.</p> <p>3.15.20.1 The cabinet lock system shall be all metal.</p> <p>3.15.20.2 The cabinet lock system shall have 5 (five) mm round cylindrical notched locking.</p> <p>3.15.20.3 The cabinet lock system shall be corrosion resistant.</p> <p>3.15.20.4 There shall be a movable cover that closes the lock area and the gasket on its inner surface. For water tightness, IP65 standard shall be met.</p>
Related reference pose number book	3.15 / SPECIAL (MINISTRY OF INTERIOR ENVIRONMENTAL SECURITY CAMERA SYSTEM TECHNICAL SPECIFICATION)

Pose No	Pose	Unit
Elec3-03	1 KVA Uninterruptible Power Supply (UPS)	pcs
Description/ Specification	<p>3.16.1 1 KVA Uninterruptible Power Supply (UPS)</p> <p>3.16.1.1 The UPSs to be offered shall be of the same brand.</p> <p>3.16.1.2 These power supplies shall be located in field cabinets. It shall feed the camera, infrared armature and field switches connected to the cabin it belongs to.</p> <p>3.16.1.3 It shall be produced to operate, feed and protect an information system that draws 1 (one) KVA power.</p> <p>3.16.1.4 As long as the mains input stays within the limits of 220 (two hundred and twenty) V AC \pm 20% (twenty percent) voltage and 50 (fifty) Hz \pm 5% (five percent) frequency, it shall continue to operate uninterruptedly.</p> <p>3.16.1.5 UPS devices shall have 1 (one) phase input and 1 (one) phase output and online working principle.</p> <p>3.16.1.6 Output voltage shall not exceed 220 (two hundred and twenty) V AC \pm 2% (two percent) and frequency 50 (fifty) Hz \pm 0.5% (five thousandths) tolerance limits.</p> <p>3.16.1.7 At full load, the total amount of harmonics shall not exceed 3% (three percent) in linear loads and 6% (six percent) in computer loads.</p> <p>3.16.1.8 As long as the mains is within 50 (fifty) Hz \pm 1% (one percent) and 220 (two hundred and twenty) V \pm 10% (ten percent) voltage limits, it shall automatically synchronize and phase lock with the inverter output.</p> <p>3.16.1.9 Its efficiency at full load shall be at least 85% (eighty-five percent).</p> <p>3.16.1.10 It shall operate with less than 50 (fifty) dB noise at full load.</p> <p>3.16.1.11 The dynamic tolerance of the output voltage shall not exceed \pm 5% (five percent) at 100% (one hundred percent) load impact.</p>	

	<p>3.16.1.12 Battery groups shall supply 7 (seven) minutes for each UPS at full load. It shall provide 15 (fifteen) minutes of feeding in cabinet type.</p> <p>3.16.1.13 There shall be illuminated and warning buttons on the front panel of UPSs. On the front panel of UPSs, Mains on/off, Load by-pass, Load level, overload, Battery operation etc. status shall be visible.</p> <p>3.16.1.14 Logs, fault messages and alarms of the device shall be monitored based on SNMP and WEB.</p> <p>3.16.1.15 The input power factor of the UPS device shall be at least 95% (ninety-five percent).</p> <p>3.16.1.16 The output power factor of the UPS shall be at least 0.7 (zero point seven).</p> <p>3.16.1.17 UPS input and output shall be protected against short circuits.</p> <p>3.16.1.18 The battery group shall be completely maintenance-free and gas-free and mounted in its own cabinet or rack cabinet.</p> <p>3.16.1.19 Batteries shall have TSE (TS EN62040-1-2) certificate. TSE certificate or international equivalent standards of the products shall be submitted to the inspection and acceptance commission at the acceptance stage.</p> <p>3.16.1.20 After the batteries are fully discharged, they shall be charged in a maximum of 8 (eight) hours.</p> <p>3.16.1.21 The production date of the batteries to be used must be on it and the period between the battery manufacturing date and the delivery date shall not exceed 120 (one hundred and twenty) days.</p> <p>3.16.1.22 The name of the manufacturer, date of manufacture, (Month, year or the manufacturer's code indicating this information), Voltage, Ah or Watt values shall be written on the batteries, and the writings and markings shall be in such a way that they do not wear out and come off.</p> <p>3.16.1.23 All the devices offered must have never been used elsewhere, even for demonstration purposes, and must have been produced within the last 6 (six) months. If it is determined otherwise, the device shall be replaced with a new one by the contractor and any damage that the administration may incur shall be compensated by the contractor.</p> <p>3.16.1.24 When the 1 KVA UPS to be offered does not any longer supply the loads at its output during long power cuts (when the UPS is turned off); it shall automatically start to work (without any physical intervention) to feed the loads at its output when the mains energy comes back.</p>
Related reference pose number book	3.16.1 / SPECIAL (MINISTRY OF INTERIOR ENVIRONMENTAL SECURITY CAMERA SYSTEM TECHNICAL SPECIFICATION)

Pose No	Pose	Unit
Elec3-04	Fiber Patch Panel (Cord)	pcs
Description/ Specification	<p>3.17.7 Fibre Patch Panel (Cord)</p> <p>3.17.7.1 Fibre optic cables to be collected in the management centre shall be terminated with Fusion Splice technique in 19 (nineteen) inch fibre optic panels.</p>	

	<p>3.17.7.2 A panel with a capacity to meet the total fibre optic cables coming from the field cabinets shall be placed.</p> <p>3.17.7.3 Panels shall be of at least 12 (twelve) ports, duplex SC SM type, depending on the need.</p> <p>3.17.7.4 All required additional cassettes, pigtails and SM-SC duplex apparatuses shall be delivered to the administration together with the panels.</p> <p>3.17.7.5 Panels with a capacity to meet the total fibre optic cables coming from the field cabinets shall be placed.</p> <p>3.17.7.6 Panels shall be of at least 12 (twelve) ports, duplex SC SM type, depending on the need.</p>
Related reference posenumber book	3.17.7 / SPECIAL (MINISTRY OF INTERIOR ENVIRONMENTAL SECURITY CAMERA SYSTEM TECHNICAL SPECIFICATION)

Pose No	Pose	Unit
Elec3-05	Network Video Recorder (NVR) 32 Channels	pcs
Description/ Specification	<p>3.2.1 Network Video Recorder (NVR)</p> <p>3.2.1.1 Network video recorder is a device where the images taken from the cameras are recorded and stored, and the recorded images can be viewed again when needed.</p> <p>3.2.1.2 NVR shall record images in H264 and MJPEG or H265 video formats.</p> <p>3.2.1.3 The NVR shall support at least 32 (thirty) IP camera connections over the network. Required licenses for 32 (thirty) cameras shall come on the device.</p> <p>3.2.1.4 NVR device shall simultaneously record each of at least 32 (thirty) IP cameras with 1920 (one thousand nine hundred and twenty) x 1080 (one thousand eighty) resolution at a rate of at least 25 (twenty five) fps.</p> <p>3.2.1.5 The image processing bandwidth of the NVR device shall be at least 200 (two hundred) Megabits.</p> <p>3.2.1.6 Images shall be recorded on at least 7200 (seven thousand two hundred) RPM SATA II or at least 10,000 (ten thousand) RPM SCSI Hard Disks. The hard disks to be used in the recording unit shall be disks with high data writing and random access time performances.</p> <p>3.2.1.7 The hard disks to be used in the recording unit shall be resistant to vibration and propagation vibration.</p> <p>3.2.1.8 The hard disks to be used in the recording unit shall be professional product series, specially produced disks for image recording, suitable for 24 (twenty-four) hours of continuous operation, and this shall be confirmed on the official website of the manufacturer.</p> <p>3.2.1.9 The storage units of the NVR (hard disks) shall be configured as RAID 5 (five) or RAID 6 (six).</p> <p>3.2.1.10 The devices shall record continuously until the discs are full, and they shall continue to record on the same discs by deleting the oldest recorded record after the discs are full.</p>	

	<p>3.2.1.11 Devices shall be able to record simultaneously and send the recording images to the monitored operator computers.</p> <p>3.2.1.12 Different authorization levels shall be defined on the NVR. These authorization levels shall be restrictable and increasable.</p> <p>3.2.1.13 Date and time information shall be added to the frames recorded by the NVR.</p> <p>3.2.1.14 The recording quality of the cameras recorded on the devices shall be adjustable by the operator at different resolutions and recording speeds.</p> <p>3.2.1.15 It shall have the ability to be copy the images recorded on NVRs to DVD/CD or USB media in its own commercial format and uncompressed AVI or standard windows media format. If it is possible to record NVR images to external media in compressed AVI or standard windows media format, the codecs of these compressions shall be given to the administration. Moreover; in case there is no DVD writer on the NVR, the video recordings of the NVR shall have the ability to be recorded on DVDs via the Network Monitoring Software on the computer. Network Monitoring Software shall be delivered to the Administration in CD/DVD media with its license.</p> <p>3.2.1.16 In cases where the NVR transfers images to the operator's computer for monitoring, there shall be no slowdown, pause or interruption on the computer monitoring screen with the recording and broadcasting (streaming) features of the device.</p> <p>3.2.1.17 Every transaction made on the NVR shall be logged for at least 2 (two) years.</p> <p>3.2.1.18 The communication of the NVR with the operator computer shall be provided via the network switch.</p> <p>3.2.1.19 NVR shall be mounted in rack cabinet.</p> <p>3.2.1.20 In case the NVR is shut down due to a power outage or similar reason, when the conditions return to normal, it shall automatically turn on and start working, keeping the last settings fixed.</p> <p>3.2.1.21 If there is a system problem in the NVR for any reason, it shall give an alarm. Failure of any of the system components shall be notified with signals. Such failure shall not affect the operation of the entire system and the system shall be protected against any data loss. For this purpose, if necessary, additional measures shall be taken by the contractor.</p> <p>3.2.1.22 NVR devices shall operate at a minimum of + 10 (plus ten) ° C to + 35 (plus thirty-five) ° C.</p>
Related reference pose number book	3.2.1 / SPECIAL (MINISTRY OF INTERIOR ENVIRONMENTAL SECURITY CAMERA SYSTEM TECHNICAL SPECIFICATION)

Pose No	Pose	Unit
Elec3-06	Indoor Fixed Dome Camera	pcs
Description/ Specification	<p>3.2.2 Indoor Fixed Dome Camera Type-1</p> <p>3.2.2.1 Camera shall be a dome type IP-based camera with progressive scanning, multicast support, and vandalproof.</p>	

3.2.2.2 The camera shall have PoE (Power-Over-Ethernet) feature in IEEE 802.3af or 802.3at standard. In addition, the camera shall have 12 (twelve) V DC or 24 (twenty four) V / 50 (fifty) Hz AC electrical supply.

3.2.2.3 The image sensor size shall be at least 1/3 (one-third) inch.

3.2.2.4 Sensor type shall be CCD, CMOS or MOS.

3.2.2.5 Camera resolution shall be at least 2 (two) megapixels.

3.2.2.6 Camera shall support JPEG or MJPEG formats, including H.264 fixed, and shall be capable of displaying images in these formats at a resolution of at least 1920 (one thousand nine hundred and twenty) x 1080 (one thousand eighty) at 30 (thirty) fps. In case it is H.265, JPEG or MJPEG formats shall not be sought.

3.2.2.7 The camera shall have dual stream feature.

3.2.2.8 The camera shall have a lens (objective) that will support at least 2 (two) megapixel images. The lens shall be a varifocal or motorized, infrared corrective lens with a minimum range of 3.8 (three-point-eight) mm to 8 (eight) mm (adjustable viewing angle-focus adjustable).

3.2.2.9 Daytime light sensitivity (for receiving colour images) shall be 0.5 (zero point five) Lux at f:1.2 (one point two), and this value shall be maximum 0.05 (zero point zero five) at f:1.2 (one point two) for receiving black and white images at night.

3.2.2.10 The camera shall have a mechanical IR cut filter, shall automatically switch between day and night modes according to the light value, and there shall be no image loss during day-night mode changes.

3.2.2.11 The camera shall have the features of defining more than one exposure area and making light adjustments on the device with these definitions. The camera shall do this manually or automatically.

3.2.2.12 Camera shall support TCP/IP, HTTP, SNMP, SMTP, RTP, RTSP, DHCP, NTP, DNS protocols. The camera shall be accessed via the standard HTTP web interface via the IP address without the need for additional software.

3.2.2.13 Access to the camera shall be restricted with a password, and different users or user groups shall be defined for camera access.

3.2.2.14 When the camera is connected to the system that will be DHCP Server compatible, it shall automatically get an IP address from the system, however; when requested, the IP received by the camera shall be assigned as Static IP.

3.2.2.15 The camera shall have automatic focus adjustment (auto focus/auto back focus/easy focus).

3.2.2.16 The camera shall have a WDR feature of at least 70 dB.

3.2.2.17 There shall be Video Motion Detection (VMD) feature on the camera.

3.2.2.18 When requested, on the images coming from the camera, time and date information and at least 10 (ten) characters containing letters and numbers shall be added by the user.

3.2.2.19 The camera shall have alarm inputs and outputs on its own or an external interface. The camera shall have alarm management function.

3.2.2.20 The camera shall operate at a temperature range of at least 0 (zero) °C to +50 (plus fifty) °C.

3.2.2.21 The camera shall have memory card support.

	<p>3.2.2.22 The camera shall have a privacy mask feature in at least 2 (two) areas.</p> <p>3.2.2.23 The camera shall have a built-in IR LED and shall illuminate a distance of at least 15 (fifteen) meters.</p>
Related reference posenumber book	3.2.2 / SPECIAL (MINISTRY OF INTERIOR ENVIRONMENTAL SECURITY CAMERA SYSTEM TECHNICAL SPECIFICATION)

Pose No	Pose	Unit
Elec3-07	Outdoor Fixed Bullet Camera	pcs
Description/ Specification	<p>3.2.4 Outdoor Fixed Bullet Camera</p> <p>3.2.4.1 The camera shall be a bullet type IP based camera with progressive scanning, multicast support.</p> <p>3.2.4.2 The camera shall have PoE (Power-Over-Ethernet) feature in IEEE 802.3af or 802.3at standard.</p> <p>3.2.4.3 The image sensor size of the camera shall be at least 1/3 (one-third) inch.</p> <p>3.2.4.4 The sensor type of the camera shall be CCD, CMOS or MOS.</p> <p>3.2.4.5 Camera resolution shall be at least 2 (two) megapixels.</p> <p>3.2.4.6 Camera shall support JPEG or MJPEG formats, including H.264 fixed, and shall be capable of displaying images in these formats at a resolution of at least 1920 (one thousand nine hundred and twenty) x 1080 (one thousand eighty) at 30 (thirty) fps. In case it is H.265, JPEG or MJPEG formats shall not be sought.</p> <p>3.2.4.7 The camera shall have dual stream feature.</p> <p>3.2.4.8 The camera shall have a lens (objective) that will support at least 2 (two) megapixel images. The lens shall be a varifocal or motorized, infrared corrective lens with a minimum range of 3.8 (three-point-eight) mm to 8 (eight) mm (adjustable viewing angle-focus adjustable).</p> <p>3.2.4.9 In order to get color images, the daytime light sensitivity shall be maximum 0.5 (zero point five) Lux at f: 1.2 (one point two). For black and white images to be taken at night, this value shall be at most 0.05 (zero point zero five) Lux (when IR Led Projector is turned off) at f: 1.2 (one point two).</p> <p>3.2.4.10 The camera shall have a mechanical IR cut filter, shall automatically switch between day and night modes according to the light value, and there shall be no image loss during day-night mode changes.</p> <p>3.2.4.11 More than one exposure area shall be defined in the camera. With these definitions, light adjustments shall be made on the device. The camera shall do this manually or automatically.</p> <p>3.2.4.12 Camera shall support TCP/IP, HTTP, SNMP, SMTP, RTP, RTSP, DHCP, NTP, DNS protocols. The camera shall be accessed via the standard HTTP web interface via the IP address without the need for additional software.</p> <p>3.2.4.13 Access to the camera shall be restricted with a password, and different users or user groups shall be defined for camera access.</p> <p>3.2.4.14 When the camera is connected to the system that will be DHCP Server compatible, it shall automatically get an IP address from the system, however; when</p>	

	<p>requested, the IP received by the camera shall be assigned as Static IP.</p> <p>3.2.4.15 The camera shall have automatic focus adjustment (auto focus/auto back focus/easy focus).</p> <p>3.2.4.16 The camera shall have a WDR feature of at least 70 dB.</p> <p>3.2.4.17 There shall be Video Motion Detection (VMD) feature on the camera.</p> <p>3.2.4.18 When requested, on the images coming from the camera, time and date information and at least 10 (ten) characters containing letters and numbers shall be added by the user.</p> <p>3.2.4.19 The camera shall have alarm inputs and outputs on its own or an external interface. The camera shall have alarm management function.</p> <p>3.2.4.20 The camera shall have 12 (twelve) V DC or 24 (twenty four) V / 50 (fifty) Hz AC electrical supply.</p> <p>3.2.4.21 The camera shall have memory card support.</p> <p>3.2.4.22 The cameras shall have a privacy mask feature in at least 2 (two) areas.</p> <p>3.2.4.23 The camera shall meet IP66 protection standard.</p> <p>3.2.4.24 The camera shall operate with all its functions between -20 (minus twenty) °C and +50 (plus fifty) °C.</p> <p>3.2.4.25 The device shall illuminate a distance of at least 30 (thirty) meters with Infrared, and shall be activated automatically in all situations where daylight and external lighting shall be insufficient.</p> <p>3.2.4.26 All cables from the camera box mounting apparatus shall be routed through hidden, protected and reinforced channels. Thus, the cables shall be protected 100% (one hundred percent) against sabotage and external influences.</p> <p>3.2.4.27 The camera feet shall be original and shall be selected from the head type with adjustable angle.</p> <p>3.2.4.28 For any reason, there shall be not mechanical deformation, rust, corrosion, etc. on the feet or connection points over time.</p>
Related reference pose number book	3.2.4 / SPECIAL (MINISTRY OF INTERIOR ENVIRONMENTAL SECURITY CAMERA SYSTEM TECHNICAL SPECIFICATION)

Pose No	Pose	Unit
Elec3-08	Field Network Switch	pcs
Description/ Specification	<p>3.3 Field Network Switch</p> <p>3.3.1 Field network switch shall be Industrial type switch.</p> <p>3.3.2 The device shall be designed to operate in harsh conditions (in the system room and/or outside the cabinet).</p> <p>3.3.3 The device shall have an Industrially-hardened architecture and support at least the IP20 standard.</p> <p>3.3.4 The operating temperature of the device shall be between -40 (minus forty) °C and +60 (plus sixty) °C.</p> <p>3.3.5 The device to be offered shall have at least 8 (eight) ports IEEE 802.3af or 802.3at</p>	

	<p>Power over Ethernet (PoE) support or it shall be offered with 8 (eight) "power injectors" that can provide PoE power over the switch network cable.</p> <p>3.3.6 The device shall operate smoothly under 95% (ninety-five percent) Relative Humidity.</p> <p>3.3.7 The device shall have protection against impact and shock. In this context, the measures taken and the standards it supports shall be specified in detail in the proposal.</p> <p>3.3.8 There shall be at least 8 (eight) 10/100TX RJ45 autosense MDI/MDI-X ports and 2 (two) expansion slots (GBIC) SFPs on the device. 1000Base-SX, 1000BaseLX, 1000Base-TX ports shall be able to be inserted and removed from the expansion slots.</p> <p>3.3.9 The device to be offered shall support at least one of EN 61000-6-4, EN 61000-6-2, EN 61000-4-4, EN 61000-4-2 standards.</p> <p>3.3.10 The device shall be proposed with a backup Power supply for redundancy and high availability.</p> <p>3.3.11 At least 8000 (eight thousand) MAC addresses shall be supported.</p> <p>3.3.12 Layer2/Layer3 packet identification and classification features shall be supported.</p> <p>3.3.13 The device shall support IEEE 802.1d Spanning Tree, IEEE 802.1w Rapid Reconvert Night Spanning Tree protocols in order to prevent loops on the Network.</p> <p>3.3.14 The device shall support IEEE 802.3x Flow Control and Broadcast Suppression to regulate traffic flow.</p> <p>3.3.15 The device shall have IGMP v1, v2, Snooping support.</p> <p>3.3.16 In order to ensure network security, the device shall support the IEEE 802.1x Port Security Standard and have RADIUS support for the authorization of users connecting to the network.</p> <p>3.3.17 The device shall have the ability to query statistical information, alarms, and other information through RMON support.</p> <p>3.3.18 The device shall have SNMP v1, v2 and v3 support. The device shall have the ability to be managed via telnet, console port. Web browser SSL (HTTPS) based management shall be supported.</p> <p>3.3.19 The MTBF value of the device shall be at least 150,000 (one hundred and fifty thousand) hours.</p> <p>3.3.20 The device shall have syslog support.</p> <p>3.3.21 SNTP (Simple Network Time Protocol) or NTP (Network Time Protocol) protocol shall be supported in order to synchronize the time and date information of the switch with all other switches on the network.</p> <p>3.3.22 The device shall be offered with the latest and most advanced Firmware on it.</p> <p>3.3.23 The device shall support software configuration update via TFTP.</p> <p>3.3.24 The device shall be offered with the highest memory configuration supported.</p> <p>3.3.25 The GBIC ports to be offered shall definitely not be OEM, but shall be the product approved by the switch manufacturer or the switch manufacturer.</p>
Related reference posenumber book	3.3 / SPECIAL (MINISTRY OF INTERIOR ENVIRONMENTAL SECURITY CAMERA SYSTEM TECHNICAL SPECIFICATION)

Pose No	Pose	Unit
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Elec3-09	Indoor Network Switch	pcs
Description/ Specification	<p>3.4 Indoor Network Switch</p> <p>3.4.1 There shall be at least 24 (twenty four) 10/100/1000 Mbps RJ-45 Base-TX autosense ports and at least 2 (two) SFP/GBIC ports for fibre connections on the device. 1000BaseSX, 1000BaseLX or 100Base-FX modules shall be able to be attached to these empty SFP/GBIC ports. At least 26 (twenty six) ports shall be actively used on the switch.</p> <p>3.4.2 All 10/100/1000Base-TX ports shall work as full duplex, half duplex and active as auto-negotiate.</p> <p>3.4.3 All copper 10/100/1000 Base-TX ports on the device to be offered shall support IEEE 802.3af or 802.3at Power over Ethernet (PoE).</p> <p>3.4.4 The switching (backplane) capacity of the device shall be at least 56 (fifty-six) Gbps. Packet transmission performance shall be at least 41.7 (forty-one point seven) Mpps.</p> <p>3.4.5 Device MAC address table shall support at least 16,000 (sixteen thousand) MAC addresses.</p> <p>3.4.6 The device shall support the IEEE 802.1d Spanning Tree protocol.</p> <p>3.4.7 The device shall support BPDU guard feature.</p> <p>3.4.8 The device shall support the IEEE 802.3x specification to regulate traffic flow.</p> <p>3.4.9 The device shall support the IEEE 802.3ad Link Aggregation standard. At least 4 (four) groups (Trunk or LAG) can be able to be created on the device and there shall be at least 8 (eight) ports in each group.</p> <p>3.4.10 The device shall support IEEE 802.1Q VLAN standards. The device shall have at least 4K VLAN ID and at least 1000 (thousand) VLAN support.</p> <p>3.4.11 Jumbo frame 9000 (nine thousand) bytes shall be supported on the device to be offered.</p> <p>3.4.12 The device shall support the IEEE 802.1p standard. The device shall have the ability to perform queuing according to L2, L3 and L4 Protocol types. The device shall have DSCP Marking support and shall perform IP-based QoS service according to DSCP.</p> <p>3.4.13 The device shall also have the feature of adjusting port rates (Port Rate Limiting). It shall have at least 4 (four) prioritization queues (Priority Queue) and Weighted Round Robin or similar protocol support for each port on the device.</p> <p>3.4.14 The device shall have IGMP Snooping v1 and v2 support.</p> <p>3.4.15 At least 255 (two hundred and fifty five) Multicast groups shall be created on the device to be offered.</p> <p>3.4.16 The device shall have the ability to create an Access List according to the L2 MAC address, L3 IP address and L4 protocol information. At least 200 (two hundred) access control rules shall be created on the device.</p> <p>3.4.17 In order to ensure device network security, there shall be support for IEEE 802.1x Port Based Authentication and Mac Based Authentication for the authorization of users connecting to the network.</p> <p>3.4.18 The device shall have the ability to assign Dynamic VLANs using 802.1x. In addition, there shall be Guest VLAN support on the device.</p> <p>3.4.19 The switch shall have port mirroring support in order to analyze the traffic passing on it.</p> <p>3.4.20 The device shall have IPv4 Static Routing feature.</p> <p>3.4.21 The device shall have SSH support.</p> <p>3.4.22 The device shall have SNMP v1, v2, v3 support. It shall also be managed via console port and Web browser.</p> <p>3.4.23 The device to be offered shall have RMON 4 groups (Stats, History, Alarms and Events) support.</p> <p>3.4.24 The device to be offered shall support DHCP Relay, DHCP Snooping and DHCP</p>	

	<p>Option82.</p> <p>3.4.25 There shall be port security feature on the device to be offered.</p> <p>3.4.26 The proposed device shall have IEEE 802.1ab Link Layer Discovery Protocol (LLDP) support.</p> <p>3.4.27 There shall be SYSLOG support on the device to be offered.</p> <p>3.4.28 There shall be IPv6 support on the device to be offered.</p> <p>3.4.29 There shall be Radius and TACACS+ support on the device to be offered.</p> <p>3.4.30 The device shall be offered with the latest and most advanced Firmware.</p> <p>3.4.31 There shall be at least 128MB memory and 16MB flash memory on the device to be offered.</p> <p>3.4.32 More than one configuration file can be able to be stored on the device to be offered and the device software shall be updated via TFTP.</p> <p>3.4.33 - - -</p> <p>3.4.34 All necessary equipment (power cable, etc.) for the operation of the devices to be offered shall be given together with cabinet mounting materials and CAT6 cables.</p> <p>3.4.35 03/04/1935 SNTP (Simple Network Time Protocol) or NTP (Network Time Protocol) protocol shall be supported in order to synchronize the time and date information of the switch with all other switches on the network.</p>
Related reference pose number book	3.4 / SPECIAL (MINISTRY OF INTERIOR ENVIRONMENTAL SECURITY CAMERA SYSTEM TECHNICAL SPECIFICATION)

Pose No	Pose	Unit
Elec3-10	Monitoring and Control Software	pcs
Description/ Specification	<p>3.6 Monitoring and Control Software</p> <p>3.6.1 The Software shall be used for monitoring and listening the video and audio from NVRs and cameras, for printing via CD/DVD and USB media, controlling Action Cameras via the Camera Control Unit, and digital zooming on Still Camera images. Motion Cameras can be controlled via the operator computer via software, even without the Camera Control Unit.</p> <p>3.6.2 The Software shall be able to playback the images recorded on the NVR in H265 or H264, MJPEG and MPEG4 image formats, and shall have the ability to watch the camera images in real-time.</p> <p>3.6.3 The software shall be used by installing on all operator computers requested by the administration without paying any license fee.</p> <p>3.6.4 The Software shall have the ability to display and download retrospectively recorded images (with features such as date, time and desired camera images, etc.).</p> <p>3.6.5 The software shall be password protected.</p> <p>3.6.6 The Software shall run the audio and images coming from the camera and microphones synchronously.</p> <p>3.6.7 Software shall allow viewing images from cameras with a resolution of 1920 (one thousand nine hundred and twenty) x 1080 (one thousand eighty).</p>	
Related reference pose number book	3.6 / SPECIAL (MINISTRY OF INTERIOR ENVIRONMENTAL SECURITY CAMERA SYSTEM TECHNICAL SPECIFICATION)	

Pose No	Pose	Unit
Elec3-11	Operator Computer (Secondary Monitoring Centre) Type-2	pcs
Description/ Specification	<p>3.9 Operator Computer (for Secondary Monitoring Centres) Type-2</p> <p>3.9.1 These computers shall be planned for sub-monitoring centres with secondary powers to monitor and manage cameras in their area of responsibility.</p> <p>3.9.2 The computer shall have a 64-bit architecture, a processor with at least 4 (four) cores, with at least 6 (six) MB of cache memory, and shall run in harmony with the video card described in article 3.9.11.</p> <p>3.9.3 The Processor shall have at least 3.5 (three dots) GHz Speed (when Turbo Boost feature is not active) and Turbo Boost feature</p> <p>3.9.4 At least 8 (eight) GB, at least 2400 (two thousand four hundred) Mhz DDR4 RAM memory shall be installed on the computer.</p> <p>3.9.5 The motherboard shall bear the manufacturer's logo and the data bus shall support at least 2400 (two thousand four hundred) MHz.</p> <p>3.9.6 The motherboard shall support at least 32 (thirty) GB RAM technology.</p> <p>3.9.7 A RPM hard disk shall be installed on the motherboard, and it shall be at least 500 (five hundred) GB 3.5 (three point five) inches in size, with SATA3.0 read speed (6GB/s), at least 64 (sixty-four) MB cache and 7200 (seven thousand two hundred).</p> <p>3.9.8 There shall be at least 16 (sixteen) bit stereo full duplex sound support.</p> <p>3.9.9 There shall be at least 1 (one) free PCI expansion slot and at least 2 (two) free PCI Express expansion slots.</p> <p>3.9.10 There shall be at least 2 (two) free USB 2.0 ports and at least 2 (two) free USB 3.0 ports in total.</p> <p>3.9.11 It shall have external graphics card that uses at least 2 (two) GB GDDR5 RAM, PCI-Express interface, 128 (one hundred and twenty-eight) bit or better graphics processor, and that allow simultaneously monitoring of at least 2 (two) screens.</p> <p>3.9.12 It shall have at least 1 (one) 10/100/1000 Base TX Ethernet network interface.</p> <p>3.9.13 The computer shall have a power supply of at least 350 (three hundred and fifty) Watts.</p> <p>3.9.14 Together with the proposed computer, the latest version of the Windows-based operating system, on which the application software runs, shall be given as installed in 64 (sixty-four) Bit architecture.</p> <p>3.9.15 Installation files, together with their licenses, shall be submitted to the administration before inspection and acceptance, and the delivery report shall be submitted to the administration during inspection and acceptance.</p> <p>3.9.16 The BIOS of the systems shall be flash-enabled, and the BIOS password shall be able to be defined for the user and the administrator.</p> <p>3.9.17 1 (one) USB optical mouse and 1 (one) USB keyboard in the same colour as the computer shall be delivered with the computer.</p> <p>3.9.18 Type-2 Operator computers to be offered shall be the same brand within itself.</p>	
Related reference posenumber	3.9 / SPECIAL (MINISTRY OF INTERIOR ENVIRONMENTAL SECURITY CAMERA SYSTEM TECHNICAL SPECIFICATION)	

book	
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Pose No	Pose	Unit
Elec3-12	8 Ports Manageable Poe Network Switch (Measurement: Pcs)	pcs
Description/ Specification	Technical Description: 8 Ports Manageable Poe Network Switch (Measurement: Pcs) There shall be at least 8 pcs of 10/100/1000 Ethernet PoE ports and at least 2 1000 Base-xSFP ports on the switch. The device shall have at least IEEE 802.3af and IEEE 802.3at (PoE, PoE+) features. The device shall be able to provide 30 Watts of power per port and the total PoE Budget shall be at least 120 Watt. The device must have 220 VAC operating voltage. Placed on the market with the CE conformity mark in accordance with the 2014/35/EU Regulation on Electrical Equipment Designed for Certain Voltage Limits, transport to the workplace, installation, and delivery of the device, including all kinds of small mounting materials.	
Related reference posenumber book	35.445.1601 / Ministry of Environment, Urbanization and Climate Change	

Pose No	Pose	Unit
Elec3-13	12 Automatic fuse panel, Halogen-free flame retardant type surface mounted tables	pcs
Description/ Specification	Technical Description: Halogen-free flame retardant type surface mounted tables: (Measurement: pieces, preparation: 60%) TS EN 60670-24, TS IEC 60331, TS 61034, TS 50200, TS EN 50266, TS EN 60754-1 Note: 1- Type tests shall be done and the test results shall be given to the administration. 2- Insurance costs are paid separately from the relevant poses.	
Related reference posenumber book	35.100.7104 / Ministry of Environment, Urbanization and Climate Change	

Pose No	Pose	Unit
Elec3-14	Up to 2x25 A (30 mA), Residual current circuit breakers (TS EN 61008-1/TS EN 61008-2-1)	pcs
Description/ Specification	Technical Description: Residual current protection switches: (Measurement: Pcs) Supply and installation of residual current circuit breaker, built in accordance with the Electrical Indoor Installation Regulations, specifications and standards, which provides the safety of life and property by interrupting the circuit within 1030 ms. by sensing the faulty current occurring on the phases and neutral line when there is any leakage in the electrical installations, operating at 220 V in single-phase circuits and 380 V in three-phase circuits, with differential coil, with test button on it to check whether the system is working or not, that can be mounted on the in-table transport rails, protected against external influences, rated 30 mA for life protection and 300 mA for fire protection, able to operate even with neutral line disconnection, launched to the market with CE conformity mark in accordance with TS EN 61008-1, TS EN 61008-2-1 standards, delivery in working condition, including all kinds of materials and labour.	
Related reference posenumber book	35.115.1001 / Ministry of Environment, Urbanization and Climate Change	

Pose No	Pose	Unit
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Elec3-15	Up to 16 A (6 kA), Switched Automatic Fuses (6 kA breaking capacity)	pcs
Description/ Specification	Technical Description: Switched Automatic Fuses (6 kA breaking capacity) (Measurement: Pcs) Supply and installation of an automatic fuse with a short circuit breaking capacity of only 6 kA with the same features as BFT No 35.105.1100, including all kinds of materials and labour.	
Related reference posenumber book	35.105.1210 / Ministry of Environment, Urbanization and Climate Change	

Pose No	Pose	Unit
Elec3-16	Up to 40 A (10 kA), Switched Automatic Fuses (10 kA breaking capacity)	pcs
Description/ Specification	Technical Description: Switched Automatic Fuses (10 kA breaking capacity) (Measurement: Pcs) Supply and installation of an automatic fuse with a short circuit breaking capacity of only 10 kA with the same features as BFT No 35.105.1100, including all kinds of materials and labour.	
Related reference posenumber book	35.105.1312 / Ministry of Environment, Urbanization and Climate Change	

Pose No	Pose	Unit
Elec3-17	3x4 mm ² , 1 kV underground cables and column and supply line installation YVV (NYY) (TS IEC 60502-1+A1)	m
Description/ Specification	Technical Description: Column and supply line installation with YVV (NYY) type 1 kV underground cables: (Measurement: m) Establishment of column and supply line with YVV (NYY) type 1 kV underground cables in accordance with TS IEC 60502-1+A1 standards. On-site supply of underground cable for laying on the plaster inside the building, on the wall, ceiling or in channels over consoles or clasps, and in ducts outside the building, with passage and safety pipes, including all kinds of materials, clasp and workmanship. Measurement: The length of the cable between the terminal box and the headers is measured. More than one cable laid in the same duct shall be kept separately in conduits or pipes of the required diameter and length at the transition points. Terminal box, head, junction box, console, cable duct and manhole shall be paid separately. Iron manufacturing shall be paid from BFT (Unit Price Tariff) No 15.550.1202. No additional fee shall be paid for transition ducts and pipes up to a total of 10 meters. Note: They shall have been manufactured in accordance with TS EN 50575 and TS EN 50575 / A1 standards, 305/2011/EU Construction Materials Regulation, launched to the market with the CE conformity mark, and shall have the Performance Declaration of the manufacturer and the Performance Constancy Certificate obtained from the organizations accredited by the European Union.	
Related reference posenumber book	35.140.3162 / Ministry of Environment, Urbanization and Climate Change	

Pose No	Pose	Unit
Elec3-18	Ø=50 mm PE corrugated pipe, Cable Protection Pipes	m
Description/ Specification	Technical Description: Cable Protection Pipes (Measurement: m) Supply and laying of polyethylene corrugated pipes, which are used as cable protection pipes in energy and telecommunication infrastructure installations, in compliance with TS EN 61386-24	

	standard, resistant to at least 450 N external pressure, including all materials and workmanship.
Related reference posenumber book	35.160.6501 / Ministry of Environment, Urbanization and Climate Change

Pose No	Pose	Unit
Elec3-19	Supply line facility with 3x4 mm ² , Lead-free PVC insulated cables (NHXMH, at least 300/500 V)	m
Description/ Specification	Technical Description: Supply line facility with NHXMH type halogen-free flame-proof insulated multi-core cables (Measurement: m) NHXMH in accordance with TSEK 328 standard, column or supply line facility with at least 300/500 V, including all kinds of material supply and workmanship.	
Related reference posenumber book	35.150.1532 / Ministry of Environment, Urbanization and Climate Change	

Pose No	Pose	Unit
Elec3-20	20U 600 mmx600 mm 19" Free Standing cabinet	pcs
Description/ Specification	Technical Description: Free Standing cabinets: With the type tests made and corresponding test results were provided to the administration, with the rear cover and the inner stud (2 at the front 2 at the rear) at least 2 mm thick, the inner surfaces of the cabin walls at least 1.5 mm thick, made of DKP sheet metal, stud openings 19" wide, lockable, wheeled, with wheels capable of carrying at least 200 kg load, with the bottom chassis of the cabinet having a cables inlet section to prevent entrance of dust, capable of fixing the cables, the cabinet's front, rear and side flaps having a key and capable of opening and closing, the front cover of the cabinet shall be tempered, anti-static, secure, smoke-colour, grinded, with a thickness of at least 4 mm, at least 135 degrees, having a key and capable of opening and closing, uninstallable, at least 3 cm wide screws that hold the glass around the glass to increase the strength of the front cover, metal plug-in type, with a frame structure, painted with electrostatic powder coating, having ventilation portholes at the top of the cabinet and/or in the side surfaces, designed to respond to fan assembly when the upper cover and/or cap is removed, each side frame of the holes on the cabinet studs 9,5 ± 0.01 mm, cabinets studs capable of moving along the depth of the cabinet.	
Related reference posenumber book	35.550.2003 / Ministry of Environment, Urbanization and Climate Change	

Pose No	Pose	Unit
Elec3-21	Fixed shelf for 600 mm depth, Accessories belonging to the product	pcs
Description/ Specification		
Related reference posenumber book	35.550.4002 / Ministry of Environment, Urbanization and Climate Change	

Pose No	Pose	Unit
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Elec3-22	Wheel group with brake (Front wheels with brake), Accessories belonging to the product	pcs
Description/ Specification		
Related reference posenumber book	35.550.4008 / Ministry of Environment, Urbanization and Climate Change	

Pose No	Pose	Unit
Elec3-23	Fan module with thermostat (2 fans), Accessories belonging to the Product	pcs
Description/ Specification		
Related reference posenumber book	35.550.4010 / Ministry of Environment, Urbanization and Climate Change	

Pose No	Pose	Unit
Elec3-24	19" rack type 6 group socket with switch, Accessories belonging to the product	pcs
Description/ Specification		
Related reference posenumber book	35.550.4014 / Ministry of Environment, Urbanization and Climate Change	

Pose No	Pose	Unit
Elec3-25	Utp Cat6H HALOGEN FREE 4x2x23 AWG, COPPER DATA CABLES	m
Description/ Specification	<p>Technical Description: Utp Cat6H HALOGEN FREE 4X2X23 AWG Measurement: m Preparation: 60% Supply of cables which are used in data communication at 250 Mhz bandwidth and 250 Mbps speed between computers for horizontal installations in local area networks, with 4 pairs, 4 colour codes, unshielded twist pairs (unshielded spiral twist), and flame retardant thanks to its all-encompassing HFFR outer sheath, usually self-extinguishing, which does not emit toxic gas and smoke during combustion, having IEC 60332-1 IEC 60754 test conformity certificate; 4 pairs of cable in ISO class D-CAT6e standard, 23 AWG 0.57 mm bare copper plating cable, delivery to the workplace, including all kinds of minor materials, workmanship, assembly and testing. Depending on under which condition the cable is installed during the application, the material cost of the material cost of such production shall also be paid based on the said clause (Payment of the pipe cost if it is passed through a pipe, payment of the duct cost, if it is passed through the cable tray based on the relevant clause)</p>	
Related reference posenumber book	35.515.7030 / Ministry of Environment, Urbanization and Climate Change	

Pose No	Pose	Unit
Elec3-26	24 Port, Utp Cat6 Patch Panel	pcs
Description/	Technical Description: Utp Cat 6 Patch Panel (Measurement: Pcs, Preparation: 60%) It	

Specification	shall be in CAT 6 Standards used in data communication at 250 Mhz bandwidth and 1000 Mbps for equipment termination in local area networks (LAN), equipment termination in horizontal distribution or telecommunication rooms and cable terminations at junction points, with a RJ-45 type 8 Contact female connector, 19 inch wide, Unshielded, covered with a high quality material in Jack Contact Point. Construction material made of steel, aluminium, aluminium alloy or anode aluminium material, in compliance with ANSI/TIA/EIA-568 B.2-1, ISO/IEC -11801 Standards, including labelling, workmanship, assembly, testing
Related reference pose number book	35.505.7301 / Ministry of Environment, Urbanization and Climate Change

Pose No	Pose	Unit
Elec3-27	2 core SM Armoured F/O Cable, SINGLE MODE FIBRE OPTICAL CABLE	m
Description/ Specification	Technical Description: SINGLE MODE FIBRE OPTIC CABLE (Measurement: m) Single mode (SM) fibre optic cables; It is used in wide and local area networks (WAN-LAN), Closed circuit security camera systems (CCTV), Industrial automation systems (SCADA), cable TV systems, high quality audio, data and image transmission to long distances. The fibre core/vein diameter is 9/125 µm, and each core is also wrapped with a 250 micron diameter sheath. Corrugated steel tape, armoured or unarmoured, with Polyethylene outer sheath, "Thixotropic gel" filled to prevent water penetration. Maximum optical attenuation; At 1310 nm: 0.38 dB/km, at 1550 nm: 0.25 dB/km. It complies with TS EN 60793-1-1, TS EN 60794-1-23 standards. It is delivered to the service only after it is terminated with the "fusion splice" method with a special welding machine and tested end-to-end with an OTDR test device. Each fibre optic cable; after being laid, will be tested with the OTDR device and the test reports will be given to the administration. Including all materials and workmanship.	
Related reference pose number book	35.540.2001 / Ministry of Environment, Urbanization and Climate Change	

Pose No	Pose	Unit
Elec3-28	SM LC pigtail, PIGTAIL	pcs
Description/ Specification	Technical Description: PIGTAIL (Measurement: Pcs, Preparation: 60%) It is a fibre optic cable with one end connector used in fibre optic termination sets. The outer sheath diameter of the cables is 0.9 mm. SM and MM fibres have the same diameter outer sheath. Pigtail length is 1.5 m. There are varieties with ST, SC, FC, LC, MTRJ connectors. Interference loss values must be 0.3 dB or less, test reports will be given to the administration. Including all materials and workmanship.	
Related reference pose number book	35.545.1001 / Ministry of Environment, Urbanization and Climate Change	

Pose No	Pose	Unit
Elec3-29	ST/MM with 4 Fibre Capacity, Rack type Fibre Optic Termination Unit Pcs	pcs
Description/ Specification	Technical Description: Rack type Fibre Optic Termination Unit (Measurement: Pcs, Preparation: 60%) It is used in the connections of fibre optic equipment for high quality and broadband data, audio and video transmission at all transmission points in local area	

	networks, closed circuit security camera systems, industrial automation systems or telecommunication rooms, all transmission points where the distance between them is more than 90 meters. With a height of 1U, suitable for 19" rack cabinets, suitable for fibre optic cables in ITU G 651, 652 and 655 standards, having 2 detachable and (V0) non-combustible plastic adapter panels, allowing Simplex and duplex ST, SC, FC, LC, MTRJ optical adapters to be placed into the adapter panel, dust caps made of fireproof plastic in unused adapter slots, transparent cover for direct transitions and terminations, each with a minimum 16 fibre capacity, with modular splice cassette made of fireproof plastic, with cable entries from the sides and rear in accordance with T-joint and Cable entry-exit and plastic dust covers, adapters, panels, splice cassettes, splice protectors that are suitable for these entries, including all kinds of materials and workmanship.
Related reference posenumber book	35.545.3001 / Ministry of Environment, Urbanization and Climate Change

Pose No	Pose	Unit
Elec3-30	ST/MM with 8 Fibre Capacity, Rack type Fibre Optic Termination Unit Pcs	pcs
Description/ Specification	Technical Description: Rack type Fibre Optic Termination Unit (Measurement: Pcs, Preparation: 60%) It is used in the connections of fibre optic equipment for high quality and broadband data, audio and video transmission at all transmission points in local area networks, closed circuit security camera systems, industrial automation systems or telecommunication rooms, all transmission points where the distance between them is more than 90 meters. With a height of 1U, suitable for 19" rack cabinets, suitable for fibre optic cables in ITU G 651, 652 and 655 standards, having 2 detachable and (V0) non-combustible plastic adapter panels, allowing Simplex and duplex ST, SC, FC, LC, MTRJ optical adapters to be placed into the adapter panel, dust caps made of fireproof plastic in unused adapter slots, transparent cover for direct transitions and terminations, each with a minimum 16 fibre capacity, with modular splice cassette made of fireproof plastic, with cable entries from the sides and rear in accordance with T-joint and Cable entry-exit and plastic dust covers, adapters, panels, splice cassettes, splice protectors that are suitable for these entries, including all kinds of materials and workmanship.	
Related reference posenumber book	35.545.3003 / Ministry of Environment, Urbanization and Climate Change	

Pose No	Pose	Unit
Elec3-31	Earth electrode (rod) electrolytic copper: (Measurement: Pcs:	pcs
Description/ Specification	Technical Description: Earth electrode (rod) electrolytic copper (Measurement: Pcs) Work place supply of an electrolytic copper bar with a diameter of Ø 20 mm and a length of at least 3.5 m in accordance with TS 435/T1 standard, screwing a cone-shaped cap on its end so that it can be driven into the ground, if the rod will be composed of 2 parts, the connection must be made by threading 4 cm, burying it at a depth of at least 60 cm from the ground level, connecting it to the down conductors and building enclosing conductors with silver welding or a special red clamp, including all kinds of small materials and workmanship. Note: If the ground is rocky, suitable soil is sought around.	
Related reference posenumber book	35.750.4002 / Ministry of Environment, Urbanization and Climate Change	

SECTION 5A.2 DESIGN DRAWINGS

Please be informed that designed drawings can be accessed through the following link:

Link to following drawings: [Design Drawings](#)

ARCHITECTURAL DRAWINGS			
No	Drawing No	Drawing Name	Content
1	CLMA-ARC-101	VAZİYET PLANI / LAYOUT PLAN	VAZİYET PLANI / LAYOUT PLAN
2	CLMA-ARC-102	TEL ÇİT PLANI / FENCE PLAN	TEL ÇİT PLANI / FENCE PLAN
3	CLMA-ARC-103	PADOK MİMARİ PROJE / PADDOCK ARCHITECTURAL PROJECT	PADOK PLANI – ÇATI ÖRTÜSÜ PLANI - KESİTLER - GÖRÜNÜŞLER - DETAYLAR/ PADDOCK PLAN-ROOF PLAN-SECTIONS-VIEWS-DETAILS
4	CLMA-ARC-104	İDARİ BİNA MİMARİ PROJE / ADMINISTRATIVE BUILDING ARCHITECTURAL PROJECT	ZEMİN KAT PLANI – 1. KAT PLANI PLANI – ÇATI PLANI - KESİTLER - GÖRÜNÜŞLER / GROUND FLOOR PLAN-FIRST FLOOR PLAN-SECTIONS-VIEWS
5	CLMA-ARC-105	İDARİ BİNA MİMARİ DETAY PROJE / ADMINISTRATIVE BUILDING ARCHITECTURAL PROJECT	MİMARİ DETAYLAR // ARCHITECTURAL DETAILS
6	CLMA-ARC-106	KARANTİNA BİNASI MİMARİ PROJE / QUARANTINE BUILDING ARCHITECTURAL PROJECT	ZEMİN KAT PLANI – ÇATI PLANI - KESİTLER - GÖRÜNÜŞLER - DETAYLAR / GROUND FLOOR PLAN- ROOF PLAN- SECTIONS- VIEWS- DETAILS
7	CLMA-ARC-107	GÜVENLİK (BEKÇİ KULÜBESİ) MİMARİ PROJE / SECURITY (GUARDHOUSE) ARCHITECTURAL PROJECT	ZEMİN KAT PLANI – ÇATI PLANI - KESİTLER - GÖRÜNÜŞLER - DETAYLAR – GİRİŞ TAKI - DEZENFEKSİYON TÜNELİ / GROUND FLOOR PLAN- ROOF PLAN- SECTIONS- VIEWS- DETAILS-GİRİŞ TAKI -DİSINFECTION TUNNEL
8	CLMA-ARC-108	PLANKOTE /	PLANKOTE /
STRUCTURAL DRAWINGS			
1	CLMA-STR-101	BETONARME UYGULAMA PROJESİ- ÇELİK ÇATI PROJESİ / REINFORCED CONCRETE APPLICATION PROJECT- STEEL ROOF PROJECT	3D GÖRÜNÜŞ – KALIP PLANLARI – APLİKASYON PLANLARI - DETAYLAR /3D VIEW-FORMWORK PLAN- APPLICATION PLAN- DETAILS
2	CLMA-STR-102	ARAZİ KAZI PLANI / SITE EXCAVATION PLAN	ARAZİ KAZI PLANI / SITE EXCAVATION PLAN
3	CLMA-STR-103	SAHA BETONU DOLGU YERLEŞİM PLANI / SITE CONCRETE INFILL LAYOUT PLAN	SAHA BETONU DOLGU YERLEŞİM PLANI / SITE CONCRETE INFILL LAYOUT PLAN
4	CLMA-STR-104	SAHA BETONU HASIR YERLEŞİM PLANI / SITE CONCRETE RIBBED WIRE MESH INFILL LAYOUT PLAN	SAHA BETONU HASIR YERLEŞİM PLANI / SITE CONCRETE RIBBED WIRE MESH INFILL LAYOUT PLAN
5	CLMA-STR-105	İSTİNAT DUVARI VE DUVARLAR / RETAINING WALL AND WALLS	İSTİNAT DUVARI VE DUVARLAR - DETAYLAR / RETAINING WALL AND WALLS- DETAILS
6	CLMA-STR-106	GÜBRE ÇUKURU TEMEL KALIP PLANI VE DETAYLARI / FERTILIZER PIT FOUNDATION FORMWORK PLAN AND DETAILS	TEMEL KALIP PLANI – ÇATI PLANI – KESİTLER – DETAYLAR / FOUNDATION FORMWORK PLAN- ROOF PLAN- SECTIONS- DETAILS

7	CLMA-STR-107	ÇELİK GİRİŞ TAKI VE DETAYLARI /	PLANLAR – KESİTLER – DETAYLAR / PLANS- SECTIONS- DETAILS
8	CLMA-STR-108	BETONARME FOSEPTİK ÇUKURU / REINFORCED CONCRETE SEPTIC TANK	KALIP PLANLARI DONATI PLANLARI – DETAYLAR / FORMWORK AND REBAR DETAILS
9	CLMA-STR-109	İDARİ BİNA BETONARME PROJESİ / ADMINISTRATIVE BUILDING REINFORCED CONCRETE PROJECT	KALIP PLANLARI – APLİKASYON PLANLARI – DETAYLAR / FORMWORK PLAN- APPLICATION PLAN-DETAILS
10	CLMA-STR-110	GÜVENLİK (BEKÇİ KULÜBESİ) BETONARME PROJESİ / SECURITY (GUARDHOUSE) REINFORCED CONCRETE PROJECT	KALIP PLANLARI – APLİKASYON PLANLARI – DETAYLAR / FORMWORK PLAN- APPLICATION PLAN-DETAILS
11	CLMA-STR-111	KARANTİNA BİNASI BETONARME PROJESİ / QUARANTINE BUILDING REINFORCED CONCRETE PROJECT	KALIP PLANLARI – APLİKASYON PLANLARI – DETAYLAR / FORMWORK PLAN- APPLICATION PLAN-DETAILS
MECHANICAL DRAWINGS			
1	CLMA-MEC-101	SIHHİ TESİSAT UYGULAMA PROJESİ / SANITARY INSTALLATION PROJECT	SIHHİ TESİSAT UYGULAMA PROJESİ / SANITARY INSTALLATION PROJECT
ELECTRICAL DRAWINGS			
1	CLMA-ELC-101	KUVVETLİ AKIM PROJESİ / HIGH CURRENT PROJECT	AYDINLATMA – TEK HAT ŞEMASI – DETAYLAR – TOPRAKLAMA – PARATONER – GÜÇ DAĞITIM – ÇEVRE AYDINLATMA / LIGHTING – SINGLE LINE DIAGRAM - DETAILS – GROUNDING – LIGHTNING ARRESTER – POWER DISTRIBUTION - ENVIRONMENTAL LIGHTING
2	CLMA-ELC-102	ZAYIF AKIM PROJESİ / LOW CURRENT PROJECT	DATA, TV, TELEFON – YANGIN ALGILAMA – SES SİSTEMİ – GÜVENLİK KAMERA SİSTEMİ/ DATA, TV, PHONE - FIRE DETECTION - AUDIO SYSTEM - SECURITY CAMERA SYSTEM

SECTION 5B: OTHER RELATED REQUIREMENTS

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

Commencement of work	The Contractor shall commence work within 7 days from the date on which it is given access to the Site and it receives the notice to commence from the Engineer
Time limit for submission of Programme of Work (Clause 13 of UNDP General Conditions of Contract for Civil Works)	The Contractor shall submit to the Engineer the Programme of Work in 15 days from the contract signature date.
Price and Payment Terms	The contract is based on unit price, and the final price of the Contract will be determined on the basis of actual quantities of work and materials utilized in the complete and satisfactory performance of the Works as certified by the Engineer and the unit prices contained in the Contractor's financial proposal. Such unit prices are fixed and are not subject to any variation whatsoever.
Interim Payment / Payment Terms	The Contractor shall submit an invoice for the work performed and materials utilized every month . Advance payment of up to a maximum of 20% of contract value is allowed following contract signature. However, the Contractor will be requested to submit advance payment (bank) guarantee for the amount of advance payment in order to claim for the advance payment.
Insurance of work	For all risks stipulated by Clause 21 of UNDP General Conditions of Contract for Civil Works for the 110% of the total estimated price of the Contract.
Minimum amount of liability insurance (Clause 23 of UNDP General Conditions of Contract for Civil Works)	15% of the total estimated price of the Contract

SECTION 6: RETURNABLE BIDDING FORMS / CHECKLIST

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

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

Technical Bid:

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

Price Schedule:

▪ Form F: Price Schedule Form/Bill of Quantities (BoQ)	<input type="checkbox"/>
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FORM A: BID SUBMISSION FORM

Name of Bidder:	[Insert Name of Bidder]	Date:	Select date
ITB reference:	UNDP-TUR-ITB(UR)-2022-125		

We, the undersigned, offer to complete Construction of Livestock Market in Akçamescit Neighborhood Bartın Province in accordance with your Invitation to Bid No. UNDP-TUR-ITB(UR)-2022-125 and our Bid. We hereby submit our Bid, which includes this Technical Bid and Price Schedule.

Our attached Price Schedule is for the sum of [Insert amount in words and figures and indicate currency] for Construction of Livestock Market in Akçamescit Neighborhood Bartın Province.

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

- a) is not under procurement prohibition by the United Nations, including but not limited to prohibitions derived from the Compendium of United Nations Security Council Sanctions Lists;
- b) have not been suspended, debarred, sanctioned or otherwise identified as ineligible by any UN Organization or the World Bank Group or any other international Organization;
- c) have no conflict of interest in accordance with Instruction to Bidders Clause 4;
- d) do not employ, or anticipate employing, any person(s) who is, or has been a UN staff member within the last year, if said UN staff member has or had prior professional dealings with our firm in his/her capacity as UN staff member within the last three years of service with the UN (in accordance with UN post-employment restrictions published in ST/SGB/2006/15);
- e) have not declared bankruptcy, are not involved in bankruptcy or receivership proceedings, and there is no judgment or pending legal action against them that could impair their operations in the foreseeable future;
- f) undertake not to engage in proscribed practices, including but not limited to corruption, fraud, coercion, collusion, obstruction, or any other unethical practice, with the UN or any other party, and to conduct business in a manner that averts any financial, operational, reputational or other undue risk to the UN and we embrace the principles of the United Nations Supplier Code of Conduct and adhere to the principles of the United Nations Global Compact.

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

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

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

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

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

Name: _____

Title: _____

Date: _____

Signature: _____

[Stamp with official stamp of the Bidder]

FORM B: BIDDER INFORMATION FORM

Legal name of Bidder	[Complete]
Legal address	[Complete]
Year of registration	[Complete]
Bidder's Authorized Representative Information	Name and Title: [Complete] Telephone numbers: [Complete] Email: [Complete]
Are you a UNGM registered vendor?	<input type="checkbox"/> Yes <input type="checkbox"/> No If yes, [insert UGNM vendor number]
Are you a UNDP vendor?	<input type="checkbox"/> Yes <input type="checkbox"/> No If yes, [insert UNDP vendor number]
Countries of operation	[Complete]
No. of full-time employees	[Complete]
Quality Assurance Certification (e.g. ISO 9000 or Equivalent) <i>(If yes, provide a Copy of the valid Certificate):</i>	[Complete]
Does your Company hold any accreditation such as ISO 14001 or ISO 14064 or equivalent related to the environment? <i>(If yes, provide a Copy of the valid Certificate):</i>	[Complete]
Does your Company have a written Statement of its Environmental Policy? <i>(If yes, provide a Copy)</i>	[Complete]
Does your organization demonstrate significant commitment to sustainability through some other means, for example internal company policy documents on women empowerment, renewable energies or membership of trade institutions promoting such issues	[Complete]
Is your company a member of the UN Global Compact	[Complete]
Contact person that UNDP may contact for requests for clarifications during Bid evaluation	Name and Title: [Complete] Telephone numbers: [Complete] Email: [Complete]
Please attach the following documents:	<ul style="list-style-type: none"> ▪ Company Profile, which should <u>not</u> exceed fifteen (15) pages, ▪ Certificate of Incorporation/ Business Registration ▪ Trade name registration papers, if applicable

- | | |
|--|---|
| | <ul style="list-style-type: none">▪ Signature Circular/Power of Attorney▪ Official Letter of Appointment as local representative, if Bidder is submitting a Bid on behalf of an entity located outside the country |
|--|---|

FORM C: JOINT VENTURE/CONSORTIUM/ASSOCIATION INFORMATION FORM

Name of Bidder:	[Insert Name of Bidder]	Date:	Select date
ITB reference:	UNDP-TUR-ITB(UR)-2022-125		

To be completed and returned with your Bid if the Bid is submitted as a Joint Venture / Consortium / Association.

No	Name of Partner and contact information (address, telephone numbers, fax numbers, e-mail address)	Proposed proportion of responsibilities (in %) and type of goods and/or services to be performed
1	[Complete]	[Complete]
2	[Complete]	[Complete]
3	[Complete]	[Complete]

Name of leading partner (with authority to bind the JV, Consortium, Association during the ITB process and, in the event a Contract is awarded, during contract execution)	[Complete]
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Proposers shall attach either one of the copies of the below documents signed by every partner, which details the likely legal structure of and the confirmation of joint and severable liability of the members of the said joint venture:

☐ Letter of intent to form a joint venture (JV)

or

☐ JV / consortium / association agreement

We hereby confirm that if the contract is awarded, all parties of the Joint Venture/Consortium/Association shall be jointly and severally liable to UNDP for the fulfillment of the provisions of the Contract.

Name of partner: _____ Name of partner: _____

Signature: _____ Signature: _____

Date: _____ Date: _____

Name of partner: _____

Signature: _____

Date: _____

FORM D: ELIGIBILITY AND QUALIFICATION FORM

Name of Bidder:	[Insert Name of Bidder]	Date:	Select date
ITB reference:	UNDP-TUR-ITB(UR)-2022-125		

If JV/Consortium/Association, to be completed by each partner.

History of Non- Performing Contracts

<input type="checkbox"/> Non-performing contracts did not occur during the last 3 years.			
<input type="checkbox"/> Contract(s) not performed in the last 3 years.			
Year	Non- performed portion of contract	Contract Identification	Total Contract Amount (current value in US\$)
		Name of Client: Address of Client: Reason(s) for non-performance:	
		Name of Client: Address of Client: Reason(s) for non-performance:	
		Address of Client: Address of Client: Reason(s) for non-performance:	

Litigation History (including pending litigation)

<input type="checkbox"/> No litigation history for the last 3 years.			
<input type="checkbox"/> Litigation History as indicated below			
Year of dispute	Amount in dispute (in US\$)	Contract Identification	Total Contract Amount (current value in US\$)
		Name of Client: Address of Client: Matter in dispute: Party who initiated the dispute: Status of dispute: Party awarded if resolved:	

Previous Relevant Experience

Please list only previous similar assignments successfully completed in the last 5 years.

List only those assignments for which the Bidder was legally contracted by the Client as a company or was one of the Consortium/JV partners. Assignments completed by the Bidder's individual experts working privately or through other firms cannot be claimed as the relevant experience of the Bidder, or that of the Bidder's partners or sub-consultants, but can be claimed by the Experts themselves in their CVs. The Bidder should be prepared to substantiate the claimed experience by presenting copies of relevant documents and references if so requested by UNDP.

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

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

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

Bidders shall submit Statements of Satisfactory Performance (i.e. Reference Letters, Work Completion Certificates) along with their bids. Reference letters and/or Completion Certificates shall include the information requested in above table at minimum.

Please refer to SECTION 4. EVALUATION CRITERIA of the ITB for minimum qualification requirements and ensure that claimed experiences meet the qualification criteria in terms of nature and value.

Financial Standing

Annual Turnover for the last 3 years (in US\$ equivalent³)	Year 2019	USD	
	Year 2020	USD	
	Year 2021	USD	
Latest Credit Rating (if any), indicate the source			
Financial information (in US\$ equivalent)	Historic information for the last 3 years		
	2019	2020	2021
	<i>Information from Balance Sheet</i>		
Total Assets (TA)			
Total Liabilities (TL)			
Current Assets (CA)			
Current Liabilities (CL)			
	<i>Information from Income Statement</i>		
Total / Gross Revenue (TR)			
Profits Before Taxes (PBT)			
Net Profit			
Current Ratio			

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

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

³ Bidders shall convert the currency into USD by using the UN operational rate of exchange which was effective for 30 June of each corresponding year. UN operational rate of exchange are available at the following website:
<https://treasury.un.org/operationalrates/OperationalRates.php#E>

FORM E: FORMAT OF TECHNICAL BID

Name of Bidder:	[Insert Name of Bidder]	Date:	Select date
ITB reference:	UNDP-TUR-ITB(UR)-2022-125		

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

SECTION 1: Bidder's qualification, capacity and expertise

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

SECTION 2: Method Statement

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

- 2.1 A detailed description of how the Bidder will complete civil works, keeping in mind the appropriateness to local conditions and project environment.
- 2.2 Mobilization plan for the equipment and personnel demonstrating how the bidders will meet the requirements of the Statement of Works.
- 2.3 Implementation plan including a Gantt Chart or Project Schedule indicating the detailed sequence of activities that will be undertaken and their corresponding timing.

SECTION 3: Management Structure and Key Personnel

- 3.1 Provide CVs for key personnel using the format below. CVs should demonstrate qualifications requested in the following areas. **Minimum key personnel requirements are stated below;**

1. **Project Manager:** Civil engineer who has at least 10 years of experience in the construction of superstructures/buildings. The Project Manager/Construction Manager shall be on site full time from the date the Engineer gives Site Access to the Contractor until the provisional acceptance date.
2. **Electrical Engineer:** Electrical engineer with at least 3 years of experience in the construction of superstructures/buildings.
3. **Mechanical Engineer:** Mechanical engineer with at least 3 years of experience in the construction of superstructures/buildings.

4. **Survey Engineer / Surveyor:** A Survey Engineer (or equivalent) with at least 3 years of experience in the construction of superstructures/buildings or a Survey Technician with at least 5 years of experience in the construction of superstructures/buildings

Format for CV of Proposed Key Personnel

Name of Personnel	[Insert]
Position for this assignment	[Insert]
Nationality	[Insert]
Language proficiency	[Insert]
Education/Qualifications	<i>[Summarize college/university and other specialized education of personnel member, giving names of schools, dates attended, and degrees/qualifications obtained.]</i> [Insert]
Professional certifications	<i>[Provide details of professional certifications relevant to the scope of goods and/or services]</i> <ul style="list-style-type: none"> ▪ Name of institution: [Insert] ▪ Date of certification: [Insert]
Employment Record/Experience	<i>[List all positions held by personnel (starting with present position, list in reverse order), giving dates, names of employing organization, title of position held and location of employment. For experience in last five years, detail the type of activities performed, degree of responsibilities, location of assignments and any other information or professional experience considered pertinent for this assignment.]</i> [Insert]
References	<i>[Provide names, addresses, phone and email contact information for two (2) references]</i> Reference 1: [Insert] Reference 2: [Insert]

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

Signature of Personnel

Date (Day/Month/Year)

FORM F: PRICE SCHEDULE FORM/BILL OF QUANTITIES

Name of Bidder:	[Insert Name of Bidder]	Date:	Select date
ITB reference:	UNDP-TUR-ITB(UR)-2022-125		

This Bill of Quantities is an itemized breakdown of the works to be carried out, indicating a quantity for each item and the corresponding unit price. The quantities set out in this Bill of Quantities are estimated quantities.

The amounts due shall be determined through the measurement of the actual quantities of the works executed and by applying the unit rates to the quantities actually executed for the respective items.

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

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

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

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

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

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

The Contractor shall provide the UNDP Civil Engineer with one (1) vehicle, and cover all associated costs thereof, during the supervision of construction until substantial completion of works. The vehicle will be used by UNDP Civil Engineer and costs of the gas for the vehicle shall be borne by the Contractor and it shall not exceed 2,500 Liters over the contract period until substantial completion of works. Contractor shall bear all responsibility with regard to insurance and maintenance of the vehicle. UNDP shall bear the responsibility for payment of any traffic fine during the period vehicle is used by UNDP Engineer. With regard to the requested vehicle, there is no specific brand or model required by UNDP. The vehicle to be provided shall be reliable and free of defects to ensure smooth performance of contract management services by UNDP Engineer.

Price Schedule

Price Schedule Form is uploaded as separate excel sheets (FORM F: PRICE SCHEDULE FORM IN EXCEL) among solicitation documents in etendering. Bidders shall complete and submit the Price Schedule both in excel version and signed .pdf version.

Bidders shall also complete below table based on the subtotals of the sections quoted in excel. In case of any discrepancy between Excel Price Schedule and below pricing table, the unit prices quoted in excel shall prevail.

Summary of Price Schedule

Currency of the Bid: United States Dollar

Item #	Description	Total Price (USD)
1	Civil and Architectural Works	
2	Mechanical Works	
3	Electrical Works (High Current Interior Wiring)	
4	Electrical Works (LOW CURRENT INTERIOR WIRING)	
5	Electrical Works (ENV. SEC. CAM. SYS.)	
Grand Total Price (item 1+item 2+item 3+item 4+item 5) (USD)		

Name of Bidder: _____

Authorised signature: _____

Name of authorised signatory: _____

Functional Title: _____

FORM G: FORM OF BID SECURITY

**Bid Security must be issued using the official letterhead of the Issuing Bank.
Except for indicated fields, no changes may be made on this template.**

To: UNDP
[Insert contact information as provided in Data Sheet]

WHEREAS [Name and address of Bidder] (hereinafter called "the Bidder") has submitted a Bid to UNDP dated [Click here to enter a date](#), to complete the works stipulated in the ITB with reference UNDP-TUR-ITB(UR)-2022-125 with the title "Construction of Livestock Market in Akçamescit Neighborhood Bartın Province" (hereinafter called "the Bid"):

AND WHEREAS it has been stipulated by you that the Bidder shall furnish you with a Bank Guarantee by a recognized bank for the sum specified therein as security if the Bidder:

- a) Fails to sign the Contract after UNDP has awarded it;
- b) Withdraws its Bid after the date of the opening of the Bids;
- c) Fails to comply with UNDP's variation of requirement, as per ITB instructions; or
- d) Fails to furnish Performance Security, insurances, or other documents that UNDP may require as a condition to rendering the contract effective.

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

NOW THEREFORE we hereby affirm that we are the Guarantor and responsible to you, on behalf of the Bidder, up to a total of *[amount of guarantee] [in words and numbers]*, such sum being payable in the types and proportions of currencies in which the Price Bid is payable, and we undertake to pay you, upon your first written demand and without cavil or argument, any sum or sums within the limits of *[amount of guarantee as aforesaid]* without your needing to prove or to show grounds or reasons for your demand for the sum specified therein.

This guarantee shall be valid up to 30 days after the final date of validity of bids,

SIGNATURE AND SEAL OF THE GUARANTOR BANK

Signature: _____

Name: _____

Title: _____

Date: _____

Name of Bank _____

Address _____

[Stamp with official stamp of the Bank]