BIDDING DOCUMENTS

FOR

UPGRADATION OF SEWERAGE SYSTEM AND CONSTRUCTION OF WASTE WATER TREATMENT PLANT (WWTP) GOJRA CITY PACKAGE 1 – SEWERAGE SYSTEM



September 2023

MC GOJRA

TABLE OF CONTENTS

Description

INVITATION FOR BIDS INSTRUCTIONS TO BIDDERS

Δ	Genera
л.	uciicia

IB.1	Scope of Bid
IB.2	Source of Funds
IB.3	Eligible Bidders

IB.4 One Bid Per Bidder

IB.5 Cost of Bidding

IB.6 Site Visit

B. **Bidding Documents**

- IB.7 Contents of Bidding Documents
- IB.8 Clarification of Bidding Documents
- IB.9 Amendment of Bidding Documents

C. **Preparation of Bids**

- IB.10. Language of Bid
- IB.11 Documents Accompanying the Bid
- IB.12 Bid Prices
- IB.13 Currencies of Bid and Payment
- IB.14 Bid Validity
- IB.15 Bid Security
- IB.16 Alternate Proposals by Bidder
- IB.17 Pre-Bid Meeting
- IB.18 Format and Signing of Bid

D. Submission of Bids for Single Stage Two Envelope Bidding Procedure

- IB.19 Sealing and Marking of Bids
- IB.20 Deadline for Submission of Bids
- IB.21 Late Bids
- IB.22 Modification, Substitution and Withdrawal of Bids

E. Bid Opening and Evaluation for Single Stage Two Envelope Bidding Procedure

- IB.23 Bid Opening
- IB.24 Process to be Confidential
- IB.25 Clarification of Bids

- IB.26 Examination of Bids and Determination of Responsiveness
- IB.27 Correction of Errors
- IB.28 Evaluation and Comparison of Bids

F. Award of Contract

- IB.29 Award
- IB.30 Employer's Right to Accept any Bid and to Reject any or all Bids
- IB.31 Notification of Award
- IB.32 Performance Guarantee
- **IB.33** Signing of Contract Agreement
- IB.34 General Performance of the bidders
- IB.35 Integrity Pact
- IB.36 Instructions not Part of Contract
- IB.37 PPRA Act, 2009 and PPR-14 will have over-riding effect

BIDDING DATA SHEET

LETTERS OF TECHNICAL BID/FINANCIAL BID AND APPENDICES TO BID

Letter of Technical Bid Letter of Financial Bid

Appendix-A to Bid : Special Stipulations

Appendix-B to Bid : Foreign Currency Requirements

Appendix-C to Bid : Price Adjustment
Appendix-D to Bid : Bill of Quantities

Appendix-E to Bid : Proposed Construction Schedule

Appendix-F to Bid : Method of Performing the Work

Appendix-G to Bid : List of Major Equipment – Related

Items

Appendix-H to Bid : Construction Camp and Housing

Facilities

Appendix-I to Bid : List of Subcontractors

Appendix-J to Bid : Estimated Progress Payments

Appendix-K to Bid : Organization Chart of the Supervisory

Staff and Labor

Appendix-L to Bid : Integrity Pact

Appendix-M to Bid : Financial competence and access to

financial resources

Appendix-N to Bid : Technical Evaluation Criteria

FORMS

Bid Security

Form of Performance Security

Form of Contract Agreement

Mobilization Advance Guarantee/Bond

Indemnity Bond for Secured Advance Against Material Brought at Site



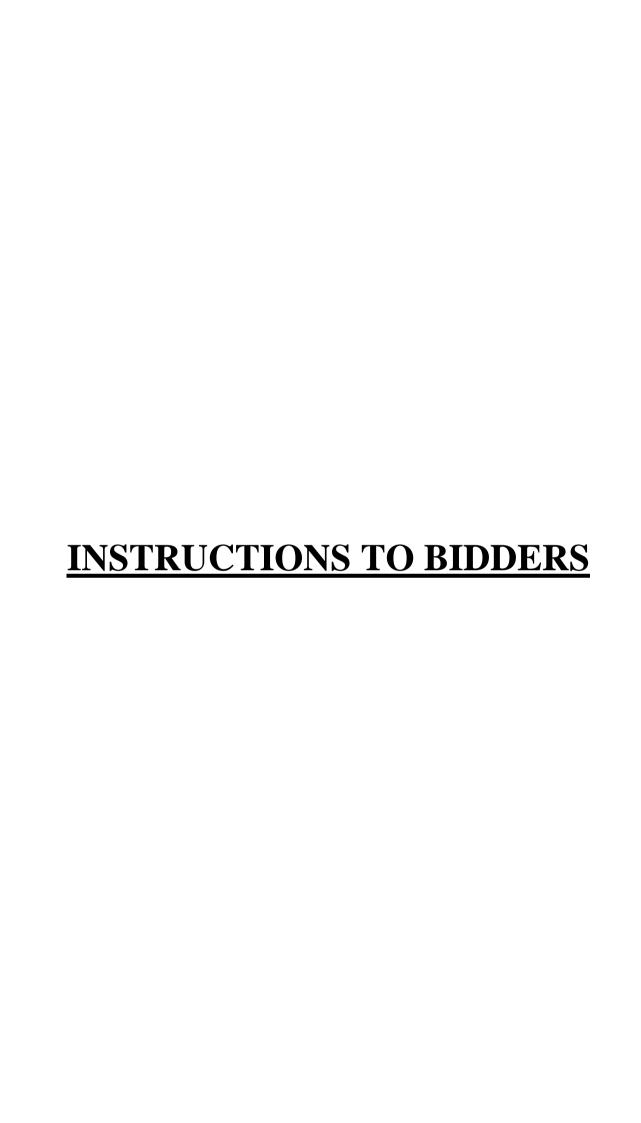
TENDER NOTICE

Municipal Committee, Gojra (MC Gojra) (hereinafter referred to as the "client"), invites the sealed bids from Contractors / firms / Manufacturer / Authorized dealers registered with **FBR & PRA (NTN, STRN and PNTN)**. The scope of work is as under:

S. #	Description	Estimated Cost (Rs.)	Bid Security (Rs.)	PEC Category and	Date and time of	Date and time of
"		oost (itol)	(1.0.)	Specialization	closing	opening
Ų	JPGRADATION OF SEWERAG	E SYSTEM AND	CONSTRUCTIO	N OF WASTE WA	ER TREATME	NT PLANT
		(WWT	(P) GOJRA CIT	Υ		
1	PACKAGE 1 – SEWERAGE	366,066,846	7,321,337	C3 & Above	19.09.2023	19.09.2023
	SYSTEM			with CE-09	12:00 P.M	12:30 P.M
2	PACKAGE 3 – PROVIDING	10,278,945	205,579	C6 & Above	19.09.2023	19.09.2023
	AND FIXING OF RPC			with CE-09	01:30 P.M	02:00 P.M
	MANHOLE COVER					
3	PACKAGE 5 – SUPPLY OF	5,669,500	112,460	Not Applicable	19.09.2023	19.09.2023
	LIQUID WASTE				03:00 P.M	03:30 P.M
	MACHINERY					

- 2. Each applicant may apply in any of the projects by rendering a separate request for every project and submission of unique / non-identical requisites against each project, required in bidding documents. (Same working experience, financial soundness and other resources for more than one project will not be acceptable).
- 3. The bidding documents are available immediately after publication (2014 Punjab Procurement Rule 25(1)) at the office of **Municipal Officer (I&S)**, **Municipal Committee Gojra** and a complete set of Bidding Documents can be obtained on submission of written application along with deposited slip of Bank of Punjab in the favour of Municipal Committee Gojra for Rs.10,000/- (non-refundable fee) for every project. Bidding documents shall be issued to owner of the firm by showing original CNIC and / or to Authorized representative of firm having authority letter with specimen signature of representative of firm along with original CNIC.
- **4. Single stage two envelopes** bidding procedure will be adopted. The Bids **(Technical & Financial)** prepared in accordance with the instructions given in the Bidding Documents must be accompanied by a Bid Security **given above** in shape of CDR / Bank Guarantee from any Scheduled Bank in Pakistan in the name of the Chief Officer, Municipal Committee Gojra. Last date for purchase of bidding documents is **18-09-2023**. The Bids **(Technical & Financial)** must be delivered in the office of Chief Officer, Municipal Committee Gojra. The Technical bids will be opened on **19-09-2023** in presence of the bidder / bidder's representatives who choose to present.
- **5**. Only technically responsive bidder(s) will be qualified for opening of financial bid(s). Financial bid(s) of bidder(s) found technically nonresponsive shall be returned unopened to the bidder(s).
- **6**. The procuring Authority may reject all bids or proposals at any time prior to the acceptance of a bid or proposal under Punjab Procurement Rules 2014 (Rule-35).
- 7. Conditional tender will not be accepted.
- **8**. Tendered rates and amount should be filled in figures as well as in words and tenders should be signed as per general directions given in the tender documents.
- **9**. In case the total tendered amount is equal to or less than 5% of the approved estimated (DNIT) amount, the lowest bidder will have to deposit quality assurance security equal to the amount difference between approved DNIT amount and the quoted bid amount from the Scheduled Bank within 15 days of issuance of notice or within expiry period of bid, whichever is earlier.
- 10. The bids will be valid for 120 days.
- **11**. In case, the last date of bid submission falls in / within the official holiday(s), the last date for submission of the bids shall be the next working day.
- **12.** A pre-bid meeting will be held on **Sep 12, 2023** at **12:00, 01:00 and 02:00 PM**, or any other date and time which may separately be notified by the Client to clarify any queries and to answer any questions on matters related to the bidding documents for aforementioned projects respectively.

Chief Officer Municipal Committee Gojra Administrator Municipal Committee Gojra



INSTRUCTIONS TO BIDDERS

A. GENERAL

IB.1 Scope of Bid

The Client "Chief Officer MC Gojra" intends "UPGRADATION OF SEWERAGE SYSTEM AND CONSTRUCTION OF WASTE WATER TREATMENT PLANT (WWTP) GOJRA CITYPACKAGE 1 – SEWERAGE SYSTEM"

Identification and number of Contract is:

IB.2 Source of Funds

2.1 The Source of fund is mentioned in bidding data.

IB.3 Eligible Bidders

3.1 The bidder (Firm/ Joint Venture) must fulfill the basic eligibility criteria as per Appendix – M to Bid.

IB.4 One Bid per Bidder

4.1 Each bidder shall submit only one bid either by himself, or as a partner in a joint venture. A bidder who submits or participates in more than one bid (other than alternatives pursuant to Clause IB.16) will be disqualified.

IB.5 Cost of Bidding

5.1 The Bidder shall bear all costs associated with the preparation and submission of their respective Bids and the Employer will in no case be responsible or liable for those costs, regardless of the conduct or outcome of the Bidding process.

IB.6 Site Visit

- 6.1 The Bidders are advised to visit and examine the Site of Works and its surroundings and obtain for themselves on their own responsibility all information that may be necessary for preparing the Bid and entering into a contract for construction of the Works. All cost in this respect shall be at the Bidder's own expense.
- 6.2 The Bidders and any of their personnel or agents would be free to visit site for the purpose of such inspection, but only upon the express condition that the Bidders, their personnel and agents, will release and indemnify the Employer, his personnel and agents from and against all liability in respect thereof and will be responsible for death or personal injury, loss of or damage to property and any other loss, damage, costs and expenses incurred as a result of such inspection.

B. BID DOCUMENTS

IB.7 Documents Comprising the Bid

- 7.1 The Bid Documents are those stated below and should be read in conjunction with any Addenda issued in accordance with Clause IB.9.
 - 1. Instructions to Bidders
 - 2. Bidding Data Sheet

- 3. Special Stipulations
- 4. Form of Bid & Appendices to Bid
- 5. Bill of Quantities (Appendix-D to Bid)
- 6. Form of Bid Security
- 7. Form of Contract Agreement
- 8. Forms of Performance Guarantee and Mobilization Advance Guarantee and Form of Indemnity Bond for Secured Advance
- 9. Special Provisions
- 10. Environment & Social Management & Monitoring Plan
- 7.2 The Bidders are expected to examine carefully the contents of all the above documents. Failure to comply with the requirements of Bid submission will be at the Bidders own risk. Pursuant to Clause IB.26, Bids which are not substantially responsive to the requirements of the Bid Documents will be rejected.

IB.8 Clarification of Bid Documents

8.1 Any prospective bidder requiring any clarification(s) in respect of the Bidding Documents may notify the Employer in writing at the Employer's address indicated in the Invitation for Bids. The Employer will respond to any request for clarification which he receives earlier than 7 days prior to the deadline for submission of bids. Copies of the Employer's response will be forwarded to all purchasers of the Bidding Documents, including a description of the enquiry but without identifying its source.

IB.9 Amendment of Bid Documents

- 9.1 At any time prior to the deadline for submission of Bids, the Employer may, for any reason, whether at his own initiative or in response to a clarification requested by a prospective Bidder, modify the Bid Documents by issuing addendum.
- 9.2 Any addendum thus issued shall be part of the Bid Documents pursuant to IB 7.1 hereof and shall be communicated in writing to all purchasers of the Bid Documents. Prospective Bidders shall acknowledge receipt of each addendum in writing to the Employer.
- 9.3 To give prospective Bidders reasonable time in which to take an addendum into account in preparing their Bids, the Employer may extend the deadline for submission of Bids in accordance with Clause IB.20.

C. PREPARATION OF BIDS

IB.10 Language

10.1 The Bid and all correspondence and documents related to the Bid exchanged by a Bidder and the Employer shall be in the bid language stipulated in the Bidding Data Sheet and conditions of Particular Application. Supporting documents and printed literature furnished by the Bidders may be in any other language provided the same are accompanied by an accurate translation of the relevant parts in the English language, in which case, for purposes of evaluation of the Bid, the English translation shall prevail.

IB.11 Documents Accompanying the Bid

11.1 The Bid shall comprise two envelopes submitted simultaneously, one called the Technical Bid and the other the Financial Bid, containing the documents listed in Bidding Data Sheet under the heading of IB 11.1 A & B respectively. Both envelopes to be enclosed together

in an outer single envelope called the Bid. Each bidder shall furnish all the documents as specified in Bidding Data Sheet 11.1 A& B

- 11.2 Bids submitted by a JV shall include a copy of the Joint Venture Agreement (in line with PEC JV modalities) entered into by all partners. Alternatively, a Letter of Intent to execute a Joint Venture Agreement in the event of a successful bid shall be signed by all partners and submitted with the bid, together with a copy of the proposed agreement (in line with PEC JV modalities). The role to be played by each partner to be specified therein. Bids submitted by a joint venture of two (2) or more firms shall comply with the following requirements: -
 - (a) In case of a successful bid, the Form of JV Agreement shall be signed so as to be legally binding on all partners within 7 days of the receipt of letter of acceptance failing which the contract and the letter of acceptance shall stand void and redundant.
 - (b) One of the joint venture partners shall be nominated as being in charge; and this authorization shall be evidenced by submitting a power of attorney signed by legally authorized signatories of all the joint venture partners;
 - (c) The partner-in-charge shall always be duly authorized to deal with the Employer regarding all matters related with and/or incidental to the execution of Works as per the terms and Conditions of JV Agreement and in this regard to incur any and all liabilities, receive instructions, give binding undertakings and receive payments on behalf of the joint venture;
 - (d) All partners of the joint venture shall at all times and under all circumstances be liable jointly and severally for the execution of the Contract in accordance with the Contract terms and a statement to this effect shall be included in the authorization mentioned under Sub-Para (b) above as well as in the Form of Bid and in the Form of JV Agreement (in case of a successful bid); and
 - (e) A copy of JV agreement shall be submitted before signing of the Contract, stating the conditions under which JV will function, its period of duration, the persons authorized to represent and obligate it and which persons will be directly responsible for due performance of the Contract and can give valid receipts on behalf of the joint venture, the proportionate participation of the several firms forming the joint venture, and any other information necessary to permit a full appraisal of its functioning. The JV Agreement shall be made part of the contract. No amendments / modifications whatsoever in the joint venture agreement shall be agreed to between the joint venture partners without prior written consent of the Employer
- 11.3 The Bidder shall furnish, as part of the Technical Bid, a Technical Proposal including a statement of work methods, equipment, personnel, schedule and any other information as stipulated Bidding Forms, in sufficient detail to demonstrate the adequacy of the Bidders' proposal to meet the work requirements and the completion time referred to in Sub-Clause 1.2 hereof.

IB.12 Bid Prices

- 12.1 Unless stated otherwise in the Bid Documents, the Contract shall be for the whole of the Works as described in IB 1.1 hereof, based on the unit rates and / or prices submitted by the Bidder.
- 12.2 The Bidders shall fill in rates and prices for all items of the Works described in the Bill of Quantities. Items against which no rate or price is entered by a Bidder will not be paid for

- by the Employer when executed and shall be deemed covered by rates and prices for other items in the Bill of Quantities.
- 12.3 All duties, taxes and other levies payable by the Contractor under the Contract, or for any other cause, throughout the duration of the Contract except PRA, shall be included in the rates and prices and the total Bid Price submitted by a bidder.

IB.13 Currencies of Bid and Payment

13.1 The unit rates and the prices shall be quoted by the bidder entirely in Pak rupees only.

IB.14 Bid Validity

- 14.1 Bids shall remain valid for the period stipulated in the Bidding Data Sheet after the Date of Bid Opening specified in sub-clause IB.23.
- 14.2 In exceptional circumstances, prior to expiry of the original Bid validity period, the Employer may request that the Bidders extend the period of validity for a specified additional period which shall in no case be more than the original bid validity period or 180 days whichever is more. The request and the responses thereto shall be made in writing. A Bidder may refuse the request without forfeiting his Bid Security. A Bidder agreeing to the request will not be required or permitted to modify his Bid, but will be required to extend the validity of his Bid Security for the period of the extension, and in compliance with Clause IB.15 in all respects.

IB.15 Bid Security

- Each Bidder shall furnish, as part of his Bid, a Bid Security in the amount stipulated in the Bidding Data Sheet in Pak Rupees.
- 15.2 The Bid Security shall be, at the option of the bidder, in the form of Deposit at Call or a Bank Guarantee issued by a Scheduled Bank in Pakistan in favor of the Employer valid for a period 28 days beyond the Bid Validity date.
- 15.3 Any Bid not accompanied by an acceptable Bid Security/Earnest money shall be rejected by the Employer as non-responsive.
- 15.4 The Bid security of unsuccessful bidder will be returned by adopting the following mechanism:
 - a) Written request certifying that bidder has no objection or grievance against the Procurement process.
 - b) Time for grievance period as provided by Punjab Procurement Rules-2014 has expired.
 - c) If he filed a grievance and same is dismissed by the Grievance Committee.
- 15.5 The Bid Security of the successful Bidder will be returned when the Bidder has furnished the required Performance Guarantee and signed the Agreement.
- 15.6 The Bid Security may be forfeited:
 - (a) If the bidder withdraws his bid except as provided in IB 22.1;
 - (b) If the Bidder does not accept the correction of his Bid Price pursuant to IB 27.2 hereof: or
 - (c) In the case of successful Bidder, if he fails within the specified time limit to:
 - (i) Furnish the required Performance Guarantee, or

- (ii) Sign the Agreement.
- (iii) Furnish the required JV agreement within 7-days of the receipt of letter of acceptance.

IB.16 Alternate Proposals by Bidder

Not Applicable

IB.17 Pre-Bid Meeting

- 17.1 The Employer may, on his own motion or at the request of any prospective Bidder(s), hold a pre-bid meeting to clarify issues and to answer any questions on matters related to the Bid Documents. The date, time and venue of pre-bid meeting, if convened, is as stipulated in the Bidding Data Sheet. All prospective Bidders or their authorized representatives shall be invited to attend such a pre-bid meeting.
- 17.2 The Bidders are requested to submit questions, if any, in writing so as to reach the Employer not later than one week before the proposed pre-bid meeting.
- 17.3 Minutes of the pre-bid meeting in shape of response to queries or suggestions of the bidders, including the text of the questions raised and the replies given, will be transmitted without delay to all purchasers of the Bid documents. Any modification of the Bid documents listed in IB 7.1 hereof which may become necessary as a result of the pre-bid meeting shall be made by the Employer exclusively through the issue of an Addendum pursuant to Clause IB.9 and not through the minutes of the pre-bid meeting.
- 17.4 Absence at the pre-bid meeting will not be a cause for disqualification of a Bidder.
- 17.5 All the concerned teams of client and consultant including Environmental and Social Management Team will be present to attend the queries / questions / clarifications of the bidders.

IB.18 Format and Signing of Bid

- 18.1 Bidders are particularly directed that the amount entered on the Form of Bid shall be for performing the Contract strictly in accordance with the Bid Documents.
- 18.2 All appendices to Bid are to be properly completed and signed.
- 18.3 No alteration is to be made in the Form of Bid nor in the Appendices thereto except in filling up the blanks as directed. If any such alterations be made or if these instructions be not fully complied with, the Bid may be rejected.
- 18.4 Each Bidder shall prepare by filling out the forms completely and without alterations one (1) original and number of copies, specified in the Bidding Data, of the documents comprising the Bid as described in Clause IB.7 and clearly mark them "ORIGINAL" and "COPY" as appropriate. In the event of discrepancy between them, the original shall prevail.
- 18.5 The original and all copies of the Bid shall be typed or written in indelible ink and shall be signed by a person duly authorized to sign on behalf of the Bidder. This authorization shall consist of a written confirmation as specified in the Bidding Data Sheet and shall be attached to the bid. The name and position held by each person signing the authorization must be

- typed or printed below the signature. All pages of the Bid, except for un-amended printed literature, shall be signed or initialed by the person signing the bid.
- 18.6 Any amendments such as interlineations, erasures, or overwriting shall be valid only if they are signed or initialed by the person signing the bid.
- 18.7 Bidders shall indicate in the space provided in the Letter of Technical and Financial Bids, their full and proper addresses at which notices may be legally served on them and to which all correspondence in connection with their bids and the Contract is to be sent.
- 18.8 Bidders should retain a copy of the Bidding Documents as their file copy.

D. SUBMISSION OF BIDS FOR SINGLE STAGE TWO ENVELOPE PROCEDURE

IB.19 Sealing and Marking of Bids

- 19.1 Each Bidder shall submit his Bid as under:
 - (a) ORIGINAL and each copy of the Bid shall be separately sealed and put in separate envelopes and marked as such.
 - (b) The envelopes containing the ORIGINAL and copies will be put in one sealed envelope and addressed / identified as given in Sub- Clause 19.2 hereof.
 - (c) The technical bid should comprise of documents listed in IB11.1 (A) & the Financial Bid should comprise of documents listed in IB 11.1 (B) which shall be placed in separate envelopes in accordance with IB 11.1.
- 19.2 The inner and outer envelopes shall;
 - (a) Be addressed to the Employer at the address provided in the Bidding Data Sheet.
 - (b) Bear the name and identification number of the contract as defined in the Bidding Data Sheet, and;
 - (c) Provide a warning not to open before the time and date for bid opening, as specified in the Bidding Data Sheet.
- 19.3 In addition to the identification required in IB 19.2 hereof, the inner envelope shall indicate the name and address of the Bidder to enable the Bid to be returned unopened in case it is declared "late" pursuant to Clause IB.21
- 19.4 If the outer envelope is not sealed and marked as above, the Employer will assume no responsibility for the misplacement or premature opening of the Bid.

IB.20 Deadline for Submission of Bids

- 20.1 (a) Bids must be received by the Employer at the address specified no later than the time and date stipulated in the Bidding Data Sheet
 - (b) Bids with charges payable will not be accepted, nor will arrangements be undertaken to collect the Bids from any delivery point other than that specified above. Bidders shall bear all expenses incurred in the preparation and delivery of Bids. No claims will be entertained for refund of such expenses.

- (c) Where delivery of a Bid is by mail and the Bidder wishes to receive an acknowledgment of receipt of such Bid, he shall make a request for such acknowledgment in a separate letter attached to but not included in the sealed Bid package.
- (d) Upon request, acknowledgment of receipt of Bids will be provided to those making delivery in person or by messenger.
- 20.2 The Employer may, at his discretion, extend the deadline for submission of Bids by issuing an amendment in accordance with Clause IB.9, in which case all rights and obligations of the Employer and the Bidders previously subject to the original deadline will thereafter be subject to the deadline as extended.

IB.21 Late Bids

- 21.1 (a) Any Bid received by the Employer after the deadline for submission of Bids prescribed in Clause IB.20 will be returned unopened to such Bidder.
 - (b) Delays in the mail, delays of person in transit, or delivery of a Bid to the wrong office shall not be accepted as an excuse for failure to deliver a Bid at the proper place and time. It shall be the Bidder's responsibility to determine the manner in which timely delivery of his Bid will be accomplished either in person, by messenger or by mail.

IB.22 Modification and Withdrawal of Bids

- 22.1 Any Bidder may modify or withdraw his Bid after Bid submission provided that written notice of the modification or withdrawal is received by the Employer prior to the deadline for submission of Bidders.
- 22.2 The modification, substitution, or notice for withdrawal of any bid shall be prepared, sealed, marked and delivered in accordance with the provisions of Clause IB.19 with the outer and inner envelopes additionally marked "MODIFICATION", "SUBSTITUTION" or "WITHDRAWAL" as appropriate.
- 22.3 No Bid may be modified by a Bidder after the deadline for submission of Bids except in accordance with IB 22.1 and 27.2.
- 22.4 Withdrawal of a Bid during the interval between the deadline for submission of Bids and the expiration of the period of Bid validity specified in the Form of Bid may result in forfeiture of the Bid Security in pursuance to Clause IB.15.

E. BID OPENING AND EVALUATION SINGLE STAGE TWO ENVELOPE PROCEDURE

IB.23 Bid Opening

- 23.1 The Employer will open the Technical Bids in public at the address, date and time specified in the Bidding Data Sheet in the presence of Bidders` designated representatives and anyone who choose to attend. The Financial Bids will remain unopened and will be held in custody of the Employer until the specified time of their opening.
- 23.2 First, envelopes marked "WITHDRAWAL" shall be opened and read out and the envelope with the corresponding bid shall not be opened, but returned to the Bidder. No bid withdrawal

shall be permitted unless the corresponding Withdrawal Notice contains a valid authorization to request the withdrawal and is read out at bid opening.

- 23.3 Second, outer envelopes marked "SUBSTITUTION" shall be opened. The inner envelopes containing the Substitution Technical Bid and/or Substitution Financial Bid shall be exchanged for the corresponding envelopes being substituted, which are to be returned to the Bidder unopened. Only the Substitution Technical Bid, if any, shall be opened, read out, and recorded. Substitution Financial Bid will remain unopened in accordance with IB .23.1. No envelope shall be substituted unless the corresponding Substitution Notice contains a valid authorization to request the substitution and is read out and recorded at bid opening
- 23.4 Next, outer envelopes marked "MODIFICATION" shall be opened. No Technical Bid and/or Financial Bid shall be modified unless the corresponding Modification Notice contains a valid authorization to request the modification and is read out and recorded at the opening of Technical Bids. Only the Technical Bids, both Original as well as Modification, are to be opened, read out, and recorded at the opening. Financial Bids, both Original and Modification, will remain unopened in accordance with IB 23.1. The Bidders" representatives who are present shall be requested to sign the record. The omission of a Bidder's signature on the record shall not invalidate the contents and effect of the record. A copy of the record shall be distributed to all Bidders.
- Other envelopes holding the Technical Bids shall be opened one at a time, and the following read out and recorded:
 - (a) The name of the Bidder;
 - (b) Whether there is a modification or substitution;
 - (c) The presence of a Bid Security, if required; and
 - (d) Any other details as the Employer may consider appropriate.

No Bid shall be rejected at the opening of Technical Bids except for late bids, in accordance with IB21.1. Only Technical Bids read out and recorded at bid opening, shall be considered for evaluation

- 23.6 Pre-liminary Examination of Technical Bids
 - (a) The Employer shall first examine qualification and experience Data as per appendix M and N submitted by the Bidder. The technical proposal examination of those bidders only shall be taken in hand who meet the minimum requirement as mentioned in appendix M and N. Only substantially responsive qualification shall be considered for further evaluation.
 - (b) The Employer shall examine the Technical Bid to confirm that all the documents have been provided, and to determine the completeness of each document submitted
- 23.7 The Employer shall confirm that all the documents and information have been provided for evaluation of Technical bid as required under these bidding documents.
- 23.8 At the end of the evaluation of the Technical Bids, the Employer will invite only those bidders who have submitted substantially responsive Technical Bids and who have been determined as being qualified for award to attend the opening of the Financial Bids. The date, time, and location of the opening of Financial Bids will be advised in writing by the Employer. Bidders shall be given reasonable notice for the opening of Financial Bids.

- 23.9 The Employer will notify Bidders in writing who have been rejected on the grounds of their Technical Bids being substantially non-responsive to the requirements of the Bidding Document and return their Financial Bids unopened before inviting others, who are determined as being qualified, to attend the opening of Financial Bids.
- 23.10 The Employer shall conduct the opening of Financial Bids of all Bidders who submitted substantially responsive Technical Bids, publicly in the presence of Bidders` representatives who choose to attend at the address, date and time specified by the Employer. The Bidder's representatives who are present shall be requested to sign a register evidencing their attendance.
- 23.11 All envelopes containing Financial Bids shall be opened one at a time and the following read out and recorded:
 - (a) The name of the Bidder;
 - (b) Whether there is a modification or substitution;
 - (c) The Bid Prices, including any discounts and alternative offers; and
 - (d) Any other details as the Employer may consider appropriate.

Only Financial Bids and discounts, read out and recorded during the opening of Financial Bids shall be considered for evaluation. No Bid shall be rejected at the opening of Financial Bids

23.12 If this Bidding Document allows Bidders to quote separate prices for different contracts, and the award to a single Bidder of multiple contracts, the methodology to determine the lowest evaluated price of the contract combinations is that which is most economical to the Employer.

IB.24 Process to be Confidential

24.1 Information relating to the examination, clarification, evaluation and comparison of bid and recommendations for the award of a contract shall not be disclosed to bidders or any other person not officially concerned with such process before the announcement of bid evaluation report which shall be done at least ten (10) days prior to issue of Letter of Acceptance. The announcement to all Bidders will include table(s) comprising read out prices, discounted prices, price adjustments made, final evaluated prices and recommendations against all the bids evaluated. Any effort by a bidder to influence the Employer's processing of bids or award decisions may result in the rejection of such bidder's bid. Whereas any bidder feeling aggrieved may lodge a written complaint not later than ten (10) days after the announcement of the bid evaluation report; however mere fact of lodging a complaint shall not warrant suspension of the procurement process.

IB.25 Clarification of Bids

25.1 To assist in the examination, evaluation and comparison of Bids, the Employer may, at his discretion, ask any Bidder for clarification of his Bid, including breakdowns of unit rates. The request for clarification and the response shall be in writing but no change in the price or substance of the Bid shall be sought, offered or permitted except as required to confirm the correction of arithmetic errors discovered by the Employer in the evaluation of the Bids in accordance with Clause IB.28.

25.2 If a Bidder does not provide clarifications of its Bid by the date and time set in the Employer's request for clarification, its bid may be rejected

IB.26 Examination of Bids and Determination of Responsiveness

- 26.1 Prior to the detailed evaluation of bids, the Employer will determine whether each bid is substantially responsive to the requirements of the Bidding Documents.
- A substantially responsive bid is one which (i) meets the eligibility criteria; (ii) has been properly signed; (iii) is accompanied by the required Bid Security; (iv) Includes signed Integrity Pact where required as per clause IB.35 and (v) conforms to all the terms, conditions and specifications of the Bidding Documents, without material deviation or reservation. A material deviation or reservation is one (i) which affect in any substantial way the scope, quality or performance of the Works; (ii) which limits in any substantial way, inconsistent with the Bidding Documents, the Employer's rights or the bidder's obligations under the Contract; (iii) adoption/rectification whereof would affect unfairly the competitive position of other bidders presenting substantially responsive bids. Only substantially responsive bid shall be considered for further evaluation.
- 26.3 If a bid is not substantially responsive, it may not subsequently be made responsive by correction or withdrawal of the non-conforming material deviation or reservation. The Employer may, however, seek confirmation/clarification in writing or by email which shall be responded accordingly.

IB.27 Correction of Errors

- 27.1 Bids determined to be substantially responsive will be checked by the Employer for any arithmetic errors. Errors will be corrected by the Employer as follows:
 - (a) Where there is a discrepancy between the amounts in figures and in words, the amount in words will govern; and
 - (b) where there is a discrepancy between the unit rate and the line item total resulting from multiplying the unit rate by the quantity, the unit rate as quoted will govern, unless in the opinion of the Employer there is an obviously gross misplacement of the decimal point in the unit rate, in which case the line item total as quoted will govern and the unit rate will be corrected.
- 27.2 The amount stated in the Letter of Financial Bid will be adjusted by the Employer in accordance with the above procedure for the correction of errors and with the concurrence of the Bidder, shall be considered as binding upon the Bidder. If the Bidder does not accept the corrected Bid Price, his Bid will be rejected, and the Bid Security shall be forfeited in accordance with IB 15.6(b) hereof.

IB.28 Evaluation and Comparison of Bids

- 28.1 The Employer will evaluate and compare only the Bids determined to be substantially responsive in accordance with Clause IB.26.
- 28.2 In evaluating the Bids, the Employer will determine for each Bid the evaluated Bid Price by adjusting the Bod Price as follows:-
 - (a) Making any correction for errors pursuant to Clause IB.27

- (b) Excluding Provisional Sums and the provision, if any, for contingencies in the Summary Bill of Quantities, but including competitively priced Day work.
- (c) Making an appropriate adjustment for any other acceptable variation or deviation.
- 28.3 The estimated effect of the price adjustment provisions of the Conditions of Contract, applied over the period of execution of the Contract, shall not be taken into account in Bid evaluation.
- 28.4 If the Bid of the successful Bidder is seriously imbalanced in relation to the Employer's estimate of the cost of work to be performed under the Contract, the Employer may require the Bidder to produce detailed price analyses for any or all items of the Bill of Quantities to demonstrate the internal consistency of those prices with the construction methods and schedule proposed. After evaluation of the price analyses, the Employer may require that the amount of the Performance Guarantee set forth in IB.32 be increased at the expense of the successful Bidder to a level sufficient to protect the Employer against financial loss in the event of default of the successful Bidder under the Contract.

F. AWARD OF CONTRACT

IB.29 Award

- 29.1 Subject to Clauses IB.30 and IB.34, the Employer will award the Contract to the bidder whose bid has been determined to be substantially responsive to the Bidding Documents and who has offered the lowest evaluated Bid Price, provided that such bidder has been determined to be eligible in accordance with the provisions of Clause IB.3 and qualify pursuant to IB 29.2.
- 29.2 The Employer, at any stage of the bid evaluation, having credible reasons for or *prima facie* evidence of any defect in Bidder's capacities, may require the bidders to provide information concerning their professional, technical, financial, legal or managerial competence whether already pre-qualified or not:

Provided that such qualification shall only be laid down after recording reasons in writing. They shall form part of the records of that bid evaluation report

IB.30 Employer's Right to Accept any Bid and to Reject any or all Bids

30.1 Notwithstanding Clause IB.29, the Employer reserves the right to accept or reject any Bid, and to annul the bidding process and reject all bids, at any time prior to award of Contract, without thereby incurring any liability to the affected bidders or any obligation except that the grounds for rejection of all bids shall upon request be communicated to any bidder who submitted a bid, without justification of grounds. Rejection of all bids shall be notified to all bidders promptly.

IB.31 Notification of Award

31.1 Prior to expiration of the period of bid validity prescribed by the Employer, the Employer will notify the successful bidder in writing ("Letter of Acceptance") that his Bid has been accepted. This letter shall name the sum which the Employer will pay the Contractor in consideration of the execution and completion of the Works by the Contractor as prescribed by the Contract (hereinafter and in the Conditions of Contract called the "Contract Price").

- 31.2 No Negotiation with the bidder having evaluated as lowest responsive or any other bidder shall be permitted, However, the lowest evaluated bidder may further reduce the Bid Price voluntarily without compromising the quality/ quantity.
- 31.3 The notification of award and its acceptance by the bidder will constitute the formation of the Contract, binding the Employer and the bidder till signing of the formal Contract Agreement.
- 31.4 Upon furnishing by the successful bidder of a Performance Guarantee, the Employer will promptly notify the other bidders that their Bids have been unsuccessful. No bid security can be returned without exhausting the grievance period or without finally disposing off the complaint of the non-responsive bidder. However, bid security may be returned earlier if any bidder submits affidavit that he is satisfied with the proceedings and hence his bid security may be returned.

IB.32 Performance Guarantee

- 32.1 The successful bidder shall furnish to the Employer a Performance Guarantee in the form and the amount stipulated in the Bidding Data Sheet and the Conditions of Contract within a period of 15 days after the receipt of Letter of Acceptance.
- 32.2 Failure of the successful bidder to comply with the requirements of IB.32.1 or IB.33 or IB.35 shall constitute sufficient grounds for the annulment of the award and forfeiture of the Bid Security.

IB.33 Signing of Agreement

33.1 Upon furnishing of acceptable Performance Guarantee under the Conditions of Contract, formal Agreement between the Employer and the successful bidder shall be executed.

IB.34 General Performance of the Bidders

The Employer reserves the right to obtain information regarding performance of the bidders on their previously awarded contracts/works. The Employer may in case of consistent poor performance of any Bidder as reported by the employers of the previously awarded contracts, inter-alia, reject his bid and/or refer the case to the Pakistan Engineering Council (PEC). Upon such reference, PEC in accordance with its rules, procedures and relevant laws of the land take such action as may be deemed appropriate under the circumstances of the case including black listing of such Bidder and debarring him from participation in future bidding for similar works.

The Successful Contractor/Joint Venture shall comply with and acquire all consents, approvals, permits and licenses applicable under the laws of Pakistan in relation to the performance of the work & services.

IB.35 Integrity Pact

The Bidder shall sign and stamp the Integrity Pact provided at Appendix-L to Bid in the Bidding Documents for all Federal / Provincial Government procurement contracts exceeding Rupees ten million. Failure to provide such Integrity Pact shall make the bidder non-responsive.

IB.36 Instructions not Part of Contract

Submission of bids shall be construed as evidence that the bidder has admitted all provisions of the instruction to the bidder.

IB.37 PPRA Act, 2009 and PPR-14 will have over-riding effect

PPRA Act, 2009 and PPR-14 as amended upto date will supersede and will have an over-riding effect in case in case of any contradiction with these Instructions, the Contract, or any other part of the Bidding Documents.

BIDDING DATA SHEET

BIDDING DATA SHEET

The following specific data for the Works shall complement, amend, or supplement the provisions in the Instructions to Bidders. Wherever there is a conflict, the provisions herein shall prevail over those in the Instructions to Bidders.

Instruction to Bidders

Clause Reference

Clause IB-1:

Sub-Clause: 1.1 Name and address of the Employer

Chief Officer,

Municipal Committee Gojra Email: mcgojratts@gmail.com

Phone: 046-9200083

Summary of Works

The newly proposed system in Gojra City will comprise of the below given components

SN	Description
1	RCC Sewers
	a) 15" I/d b) c) d) e) f) g) h
	b) 18" I/d
	c) 21" I/d
	d) 24" I/d
	e) 27" I/d
	f) 30" I/d
	g) 36" I/d
	h) 42" I/d etc
2	Restoration of Roads

Clause IB-2: Source of Funds

Sub-Clause 2.1

The Project is funded by Government of the Punjab through World Bank.

Clause IB-10: Language of Bid

Sub-Clause 10.1

English

Clause IB-11: Documents Accompanying the Bid

Sub-Clause 11.1:

- A) The Bidder shall submit with its Technical Bid the following documents:
 - (a) Letter of Technical Bid

(b) Bid Security (IB.15)

- (c) Written confirmation authorizing signatory of the bid to commit the Bidder. (IB 18.5)
- (d) Pending litigation information.

(e) Special Stipulations Appendix-A (f) Proposed Construction Schedule Appendix-E (g) Method of Performing the work Appendix-F (h) Availability of Critical Equipment Appendix-G (i) Construction Camp and Housing Facilities Appendix-H (i) List of Sub-Contractor Appendix-I (k) Organization Chart for Supervisory Staff Appendix-K (1) Integrity Pact Appendix-L (m) Technical Eligibility Criteria Appendix-M (n) Qualification Criteria Appendix-N

- B) The Bidder shall submit with its Financial Bid the following documents:
 - (o) Letter of Financial Bid
 - (p) Bid Security

(q) Bill of Quantities Appendix-D(r) Estimate Progress Payment Appendix-J

Clause IB-13: Currency of Bid and Payment:

Sub-Clause 13.1

The unit rates and the prices shall be quoted by the Bidder entirely in Pakistani Rupees and likewise payments will also be made entirely in Pakistani Rupees.

Clause IB-14 Bid Validity:

Sub-Clause 14.1 Period of Bid Validity

120 Days

Clause IB-15 Bid Security

2% of the Estimated Cost of Rs. 366,066,846 i.e (7,321,337 /-)

The bids must be accompanied with Bid Security for the Project in the form of CDR/Bank Guarantee of amount Specified above in the name of the undersigned from a Scheduled Bank of Pakistan. No bid security in cash will be accepted. Bid security should be attached with the technical bid, otherwise the bid will not be taken into account for evaluation and it will be rejected straight forward.

Clause IB-16 Alternate Proposals by Bidders

NOT APPLICABLE

Clause IB-17 Pre-Bid Meeting

The pre bid meeting with bidders and their authorize representatives will be held on **Sep 12th**, **2023** at 12:00 PM in the office of Chief Officer, Municipal Committee Gojra or in any other office specified by Client to clarify the issues and to answer any questions on matters related to bid documents

Clause IB-18 Format and Signing of Bid

Sub-Clause 18.4 Format and Signing of Bid

One Original & Three Copies (Two hard and one electronic in USB/DVD) of **Technical Bid** whereas One original and Two copies for **Financial Bid**.

Clause IB-19 Sealing and Making of Bid

Sub-Clause 19.2 (a) Employer's address for the purpose of Bid Submission is as follows:-

Municipal Committee Gojra Email: mcgojratts@gmail.com
Phone: 046-9200083
19.2 (b) Name and Number of the Contract is as follows: -
Contract No

Clause IB-20 Deadline for submission of Bid:

Sub-Clause 20.1 (a)

Venue: Chief Officer, Municipal Committee Gojra

Time: 12.00 PM, Date: Sept 19th, 2023

Clause IB-23 Bid Opening:

Sub-Clause 23.1 (a) Venue, Time and Date of Bid Opening

Venue: Chief Officer, Municipal Committee Gojra

Time: 12:30 PM

Date: Sept 19th, 2023

Clause IB-32 Performance Guarantee:

Sub-Clause 32.1

Delete the text sub-clause 32.1 and substitute with the following: -

The Performance Guarantee shall be 05% of **Contract Amount** (work being greater than 50 Million) mentioned in the Letter of Acceptance on the prescribed form [PS-1] in shape of Bank Guarantee from any Scheduled Bank in Pakistan in favor of the Employer.

Add at the end of **Sub-Clause 32.2**:

Next lowest Bidder

In the event, the Performance Guarantee is not provided by the lowest bidder, and the award is annulled, the Employer may award the Contract to the next lowest evaluated Bidder whose offer is substantially responsive and technically accepted and is determined by the Employer to be qualified to perform the Contract satisfactorily.

Clause IB-36 Instructions not part of Contract:

Fraud and Corrupt Practices:

Bidders and their sub-contractors under contracts must observe the highest standard of ethics during the procurement and execution of such contracts. In pursuance of this policy, the Employer:

- a) Defines, for the purposes of this provision, the terms set forth below are defined as follows:
 - "Corrupt practice" means the offering, giving, receiving, or soliciting, directly or indirectly, anything of value to influence improperly the actions of another party.
 - "Fraudulent practice" means any act or omission, including a misrepresentation, that knowingly or recklessly misleads, or attempts to mislead, a party to obtain a financial or other benefit or to avoid an obligation
 - "Coercive practice" means impairing or harming, or threatening to impair or harm, directly or indirectly, any party or the property of the party to influence improperly the actions of a party;
 - "Collusive practice" means an arrangement between two or more parties designed to achieve an improper purpose, including influencing improperly the actions of another party.
 - obstructive practice" means (a) deliberately destroying falsifying altering or concealing of evidence material to an investigation by the Employer; making false statements to investigators in order to materially impede an investigation by the Employer; (c) failing to comply with requests to provide information documents or records in connection with an office of Anticorruption investigation; (d) threatening harassing or intimidating any party to prevent it from disclosing its knowledge of matters relevant to the investigation or from pursuing the investigation; or (e) materially impeding the Employer's contractual rights of audit or access to information
 - "Integrity violation" is any act which violates the Government's Anticorruption Policy including (i) to (v) above and the following:

abuse, conflict of interest violations of the Government sanctions, retaliation against whistleblowers or witnesses and other violations of the Government's Anticorruption Policy including failure to adhere to the highest ethical standard.

- b) will reject any Bid/proposal for award if it determines that the Bidder recommended for award has, directly or through an agent, engaged in corrupt, fraudulent, collusive, coercive, or obstructive practices or other integrity violations in competing for the Contract:
- c) will cancel the contract if it determines at any time that its representatives or those of the Bidder were engaged in corrupt, fraudulent, collusive, coercive, or obstructive practices or other integrity violations during the selection process or the execution of the Contract; and
- d) will sanction bidders or its successor including declaring ineligible, either indefinitely or for a stated period of time, to participate in bidding activities in Pakistan if it at any time determines that the firm has, directly or through an agent, engaged in corrupt, fraudulent, collusive, or coercive practices in competing for, or in executing Contract
- e) Will have the right to require that consultants permit the Government or its appointed agent to inspect their accounts and records and other documents relating to the submission of proposals and contract performance and to have them audited by auditors appointed by the government.

FORM OF BID AND APPENDICES TO BID

Letter of Technical Bid

Pate: id Reference No: Jame of Contract/Works):
:
e, the undersigned, declare that:
We have examined and have no reservations to the Bidding Documents, including Addenda issued in accordance with Instructions to Bidders (IB) 9;
fer to execute and complete in conformity with the Bidding Documents the following Works: RADATION OF SEWERAGE SYSTEM AND CONSTRUCTION OF WASTE WATER TMENT PLANT (WWTP) GOJRA CITYPACKAGE 1 – SEWERAGE SYSTEM"
Our Bid consisting of the Technical Bid and the Financial Bid shall be valid for a period of 120 days from the date fixed for the bid submission deadline in accordance with the Bidding Documents, and it shall remain binding upon us and may be accepted at any time before the expiration of that period;
As security for due performance of the under takings and obligations of our bid, we submit here with a Bid security, in the amount specified in Bidding Data Sheet, which is valid (at least) 30 days beyond validity of Bid itself.
We are not participating, as a Bidder or as a subcontractor, in more than one bid in this bidding process, other than alternative offers submitted in accordance with IB16 (as applicable).
We agree to permit Employer or its representative to inspect our accounts and records and other documents relating to the bid submission and to have them audited by auditors. This permission is extended for verification of any information provided in our Technical Bid which comprises all documents enclosed herewith in accordance with IB.11.1 of the Bidding Data Sheet.
me
the capacity of
gned
ally authorized to sign the Bid for and on behalf of
te
ldress

Letter of Financial Bid

	Reference No:
	me of Contract/Works):
	the undersigned, declare that:
(a)	We have examined and have no reservations to the Bidding Documents, including Addenda issued in accordance with Instructions to Bidders (IB)9;
(b)	The total price of our Bid, excluding any discounts offered in item (c) below is:
(c)	The discounts offered and the methodology for their application are:
	Our Bid shall be valid for a period of 120 days from the date fixed for the bid submission deadline in accordance with the Bidding Documents, and it shall remain binding upon us and may be accepted at any time before the expiration of that period;
(e)	If our Bid is accepted, we commit to obtain a Performance Guarantee and Quality Assurance Security in accordance with the Bidding Documents;
(f)	We understand that this bid, together with your written acceptance thereof included in your notification of award, shall constitute a binding contract between us, until a formal contract is prepared and executed and we do hereby declare that the Bid is made without any collusion, comparison of figures or arrangement with any other bidder for the Works.
(g)	We understand that you are not bound to accept the lowest evaluated bid or any other bid that you may receive.
(h)	We agree to permit Employer or its representative to inspect our accounts and records and other documents relating to the bid submission and to have them audited by auditors. This permission is extended for verification of any information provided in our Technical Bid which comprises all documents enclosed herewith in accordance with IB.11.1 of the Bidding Data Sheet.
(i)	If awarded the contract, the person named below shall act as Contractor's Representative.
Nam	ne
In th	e capacity of
Sign	ed
Duly	authorized to sign the Bid for and on behalf of

Date	• • • • • • • • • • • • • • • • • • • •	 •	
Address		 	

SPECIAL STIPULATIONS Clause Conditions of Contract

1.	The Engineer's (Consultant) Authority to issue Variation in emergency	2% of the Contract Price stated in the Letter of Acceptance with the written approval of client.
2.	Law applicable	The relevant laws applied in the Province of Punjab.
3.	Amount of Performance Guarantee	The Performance Guarantee shall be <u>05%</u> of <u>Contract Amount</u> mentioned in the Letter of Acceptance on the prescribed form [PS-1] in the shape of Bank Guarantee from any Scheduled Bank in Pakistan in favor of the Employer.
4.	Time for Furnishing Work Programme	Within <u>14 days</u> from the date of receipt of Letter of Acceptance.
5.	Minimum amount of Third Party Insurance	The amount of insurance taken out by the Contractor per occurrence with number of occurrences unlimited shall be as follows: a. Bodily injury (any one person) PKR 0.5 (Half)
		Million (Max) b. Fatal Case (any one person) PKR 01 (one) million (Minimum)
		c. Property Damages Depending upon nature of loss (100% of the Damage)
6.	Time for Commencement	Within 7 days from the date of receipt of Engineer's Notice to Commence which shall be issued within 14 days after signing of Contract Agreement.
7.	Time for Completion	15 Months from the date of Commencement of the Project.
8.	a) Amount of Liquidated Damages	<u>0.1 %</u> of the Contract Price for each day of delay in completion of the Works subject to a maximum of <u>10%</u> of Contract Price stated in the Letter of Acceptance.
	b) Amount of Bonus for early completion	Not Applicable.
9.	Defects Liability Period	<u>365 days</u> from the effective date of Taking Over Certificate.
10	Percentage of Retention Money	10 % on the amount of work done up to Rs. 5 million and 5 % on the amount of work done beyond 5 million
11	Limit of Retention Money	<u>05%</u> of Contract Price stated in the Letter of Acceptance.
12	Minimum amount of Interim Payment Certificates (Running Bills)	Greater than PKR. Twelve Million (12 Million) except last 2 IPC's
13	Time of Payment from delivery of Engineer's Interim Payment Certificate to the Employer.	30 days
14	List of material	NOT USED
15	Mobilization Advance (Interest Free)	Not Applicable

16	Environment, Health & Safety	Contractor will be bound to comply the
		Environmental & Social Management & Monitoring
		Plan and Environmental Health Safety SOPs for
		Labor/Construction Workers including Wome
		Workers to fulfill E&S safeguards compliance
		otherwise 1 % of contractual amount will be forfeite
		upon Engineer's report from last IPC

NAME OF ELIGIBLE COUNTRIES

All countries of the World with whom Islamic Republic of Pakistan has commercial trade relations.

FOREIGN CURRENCY REQUIREMENTS

NOT APPLICABLE

PRICE ADJUSTMENT

Price adjustment / variation for the materials specified by the Government of Punjab will be paid as per rates issued by Finance department Government of Punjab from time to time and in the line with Punjab Local Government works Rules.

D-1 Appendix-D to Bid

BILL OF QUANTITIES

D. Preamble

- 1. The Bill of Quantities shall be read in conjunction with the Conditions of Contract, Specifications and Drawings.
- 2. The quantities given in the Bill of Quantities are estimated and provisional, and are given to provide a common basis for bidding. The basis of payment will be the actual quantities of work executed and measured by the Contractor and verified by the Engineer and valued at the rates and prices entered in the priced Bill of Quantities, where applicable, and otherwise at such rates and prices as the Engineer may fix as per the Contract (in case of item not mentioned in Bill of Quantities).
- 3. The rates and prices entered in the priced Bill of Quantities shall, except in so far as it is otherwise provided under the contract include all costs of contractor's plant, labour, supervision, materials, execution, insurance, profit, taxes and duties, together with all general risks, liabilities and obligations set out or implied in the contract. Furthermore, all duties, taxes and other levies payable by the contractor under the contract, or for any other cause, as on the date 14 days prior to dead line for submission of Bids in case of ICB/NCB respectively, shall be included in the rates and prices and the total bid price submitted by the bidder.
- 4. A rate or price shall be entered against each item in the priced Bill of Quantities, whether quantities are stated or not. The cost of items against which the contractor will have failed to enter a rate or price shall be deemed to be covered by other rates and prices entered in the Bill of Quantities and shall not be paid separately.
- 5. The whole cost of complying with the provisions of the Contract shall be included in the items provided in the priced Bill of Quantities, and where no items are provided, the cost shall be deemed to be distributed among the rates and prices entered for the related items of the works.
- 6. General directions and description of work and materials are not necessarily repeated nor summarized in the Bill of Quantities. References to the relevant sections of the bidding documents shall be made before entering prices against each item in the priced Bill of Quantities.
- 7. Provisional sums included and so designated in the Bill of Quantities shall be expended in whole or in part at the direction and discretion of the Engineer in accordance
- 8. Contractor will submit his submittal to Engineer/Employer in case of Non-scheduled items for approval prior to booking to supplier/manufacturer before undertaking the item into execution. Submittal proposed from contractor must comprise minimum three proposed manufacturers to be submitted to Engineer for approval purposes. It will be discretion of Engineer to recommend

for approval one of them or as contractor for other than those manufacturers proposed in shape of submittal by contractor for someone else on equivalency basis.

- 9. The contractor will also provide the submittals of imported items as stated above. Pre-shipment inspection of the selected manufacturer's equipment will be carried out as per by the engineer/employer. Contractor must submit Bill of lading of such imported equipment prior to transport to site.
- 10. Work program of level three must be submitted to Engineer/employer along with submittal.

D-2 Appendix –D to Tender

BILL OF QUANTITIES

SUMMARY ABSTRACT OF TENDER PRICE

Sr. No.	Description	Amount (Rs)
Part-	A	
1	Providing and Laying Trunk Sewer	
2	Restoration of Roads (Trunk Sewer Rute)	N/A
3	Providing and Laying Branch Sewer	
4	Restoration of Roads (Branch Sewer Rute)	
	Sub Total	
5	Environmental & Social Management & Monitoring Plan	
	Total Amount (Rs)	N/A
Note:	These rates are exclusive of PRA charges	

Note: All Provisional Sums are to be expended in whole or in part at the direction and discretion of the Engineer in-charge

PROPOSED CONSTRUCTION SCHEDULE

The Works shall be completed on or before the date stated in Appendix-A to Bid. The Bidder shall provide as Appendix-E to Bid his Construction Schedule in the Bar Chart form showing the sequence of work items and the period of time during which he proposes to complete each work item in such a manner that his proposed program for completion of the whole of the Works and parts of the works may meet Employer's completion targets in days noted below and counted from the date of issue of Engineer's Notice to Commence (Bidder to attach sheets as required for the specified form of Construction Schedule):

<u>Description</u>		Time for Completion
a)	Whole Works	days
b)	Part-A	days
c)	Part-B	days
d)		days
e)		days

Appendix-F to Bid

METHOD OF PERFORMING THE WORK

The Bidder is required to submit a narrative outlining the method of performing the Work. The narrative should indicate in detail and include but not be limited to:

- 1. Organization Chart indicating head office and field office personnel involved in management and supervision, engineering, equipment maintenance and purchasing.
- 2. Mobilization at site of works, the type of facilities including personnel accommodation, office accommodation, provision for maintenance and for Storage, communications, security and other services to be used.
- 3. The method of executing the Works, the procedures for installation of equipment and machinery and transportation of equipment and materials to the site.
- 4. Quality control/ Quality assurance measures to be adopted including procedures to be followed for carrying out all tests required under specifications.
- 5. Production of Authorization from Original Equipment Manufacturer.
- 6. Pre-shipment inspection at the factory premises shall be carried out by an independent Third-Party Firm having specialization in the task and possess the relevant professionals of the field. Third Party Validation Firm (TPV) shall be engaged by the Chief Engineer / D.G. (O&M) if required. The expenses in this connection shall be borne by the Contractor.
- 7. The Contractor should submit appropriate plans detailing how they intend to coordinate the Works with the ongoing system so that the existing system is not disturbed in any manner, and how they will ensure that the necessary facilities are available to enable it.

Note

- The Bidder shall provide the methods for performing the work in such manner that the works falling under the Construction must be in compliance with the Technical Specifications. These shall form part of and be included at the relevant appendix in the respective Contracts.
- Import documents like bill of lading, custom clearance, Air-way bill, port of shipment etc. will be provided by the contractor to the consultant/employer for verification of imported plants & equipment prior to submit the bill invoice of the same.

G-1 Appendix-G to Bid

LIST OF MAJOR EQUIPMENT – RELATED ITEMS

The Bidder will provide a list of all major equipment and related items, under separate heading for items owned, to be purchased or to be arranged on lease by him to carry out the Works. The information shall include make, type, capacity, and anticipated period of utilization for all equipment which shall be in sufficient detail to demonstrate fully that the equipment will meet all requirements of the Specifications.

LIST OF MAJOR EQUIPMENT

Owned Purchased or Leased	Description of Unit (Make, Model, Year)	Capacity HP Rating	Condition	Present Location or Source	Date of Delivery at Site	Period of Work on Project
1	2	3	4	5	6	7
a. Owned						
b. To be Purchased						
c. To be arranged on Lease						

H-1 Appendix-H to Tender

CONSTRUCTION CAMPS AND HOUSING FACILITIES

The Contractor in accordance with Clause 34 of the Conditions of Contract shall provide description of his construction camp's facilities and staff housing requirements.

The Contractor shall be responsible for pumps, electrical power, water and electrical distribution systems, and sewerage system including all fittings, pipes and other items necessary for servicing the Contractor's construction camp.

The Tenderer shall list or explain his plans for providing these facilities for the service of the Contract as follows:

- 1. Site Preparation (clearing, land preparation, etc.).
- 2. Provision of Services.
 - a) Power (expected power load, etc.).
 - b) Water (required amount and system proposed).
 - c) Sanitation (sewage disposal system, etc.)
- 3. Construction of Facilities
 - a) Contractor's Office. Workshop and Work Areas (areas required and proposed layout, type of construction of buildings, etc.).
 - b) Warehouses and Storage Areas (area required, type of construction and layout).
 - c) Housing and Staff Facilities (Plans for housing for proposed staff, layout, type of construction, etc.)
- 4. Construction Equipment Assembly and Preparation (detailed plans for carrying out this activity)
- 5. Other Items Proposed (Security services, etc.)

I-1

Appendix-I to Tender

LIST OF SUBCONTRACTORS

I/We intend to subcontract the following parts of the Work to sub-contractors. In my/our opinion, the sub-contractors named hereunder are reliable and competent to perform that part of the work for which each is listed.

Enclosed are documentation outlining experience of sub-contractors, the curriculum vitae and experience of their key personnel who will be assigned to the Contract, equipment to be supplied by them, size, location and type of contracts carried out in the past.

Part of Works	Sub-Contractor
(Give Details)	(With Complete Address
1	2

J-1 Appendix-J to Bid

ESTIMATED PROGRESS PAYMENTS

Note: Appendix - J duly filled by the Contractor should only be included in the **Financial Proposal/Financial Bid.**

Month	Amounts
	(Million Rs.)
1	2
Ist	
2 nd	
3 rd	
4 th	
5 th	
6 th	
Bid Price	

K-1 Appendix-K to Bid

ORGANIZATION CHART FOR THE SUPERVISORY STAFF AND LABOUR

(INTEGRITY PACT)

DECLARATION OF FEES, COMMISSION AND BROKERAGE ETC. PAYABLE BY THE SUPPLIERS OF GOODS, SERVICES & WORKS IN CONTRACTS WORTH RS 10.00 MILLION OR MORE

Contract No	Dated	
Contract Value:		
Contract Title:		
of any contract, right, in	terest, privilege or other	reby declares that it has not obtained or induced the procurement of obligation or benefit from Government of Pakistan (GoP) or or any other owned or controlled by GoP through any business
declared the brokerage, shall not give or agree to natural or juridical personarcheder, sponsor or described as consultation	commission, fees, etc. po give to anyone within son, including its affili subsidiary, any comming fee or otherwise, with the or other obligation or like the commission of the	g, [name of Supplier] represents and warrants that it has fully baid or payable to anyone and not given or agreed to give and nor outside Pakistan either directly or indirectly through any ate, agent, associate, broker, consultant, director, promoter ission, gratification, bride, finder's fee or kickback, whether the object of obtaining or inducing the procurement of a contract benefit in whatsoever from GoP, except that which has been
with all persons in respec	ct of or related to the train	d will make full disclosure of all agreements and arrangements in saction with GoP and has not taken any action or will not take representation or warranty.
full disclosure, misrepre representation and warra obtained or procured as	esenting facts or taking anty. It agrees that any a aforesaid shall, withou	nd strict liability for making any false declaration, not making any action likely to defeat the purpose of this declaration contract, right, interest privilege or other obligation or benefit prejudice to any other rights and remedies available to GoF voidable at the option of GoP.
indemnify GoP for any lo compensation to GoP ir finder's fee or kickback	oss or damage incurred by an amount equivalent given by [name of Supp	recised by GoP in this regard, [name of Supplier] agrees to by it on account of its corrupt business practices and further pay to ten time the sum of any commission, gratification, bribe plier] as aforesaid for the purpose of obtaining or inducing the ilege or other obligation or benefit in whatsoever from GoP.
Name of Employer:		Name of Contractor:
Signature:		Signature:
Seal/Stamp		Seal/Stamp

Appendix-M to Bid

Eligibility Criteria

The Bidders (Firm/ Joint Venture) fulfilling the following basic eligibility criteria shall only be considered for further evaluation. (Relevant documents to be attached):

- a) Duly licensed by the Pakistan Engineering Council (PEC) in the category C3 & Above with relevant code CE-09. In case of Joint Venture, the Lead partner must be registered in the category C3 & Above with the relevant code and the other member/s should at least have registration from PEC. No foreign Firm(s) is allowed to participate whether as Single entity or Lead member of JV.
- b) The bidder shall not have conflict of interest in the instant work. All the bidders found to have conflict of interest shall be considered as non-responsive.
- c) Valid legal entity of the bidder / firm/ company e.g. Certificate of registration from SECP or registrar of firms etc.
- d) Certificate of registration with active Income Tax & active Sales Tax under Relevant Authority.
- e) Affidavit on Non-Judicial Stamp paper for No litigation OR submission of Litigation History of last 10 years.
- f) Affidavit declaring "Neither the firms nor its Directors, Stakeholders, as a whole or as a part of the firm have ever been black listed/ defaulted by any government agency / department / organization / Donors or settled dispute in plea bargain or Volunteer recovery".

Un-signed and un-stamped bids will be rejected.

Note: In case of Joint Venture, all the members have to meet in full the afore-mentioned basic eligibility criteria.

Appendix-N to Bid

Qualification Criteria

Technical Evaluation will be based on the criteria given in succeeding paras regarding the Bidder's General Experience, Specific Experience, Personnel Capabilities and Equipment Capabilities as demonstrated by the Bidder's responses in the forms attached. The Procuring Agency reserves the right to waive minor deviations, if these don't materially affect the capability of a Bidder to perform the contract. Sub-contractor's experience and resources shall not be taken into account in determining the Bidder's compliance with the qualifying criteria. However, Joint Venture experience & resources shall be considered. Consortium or Association of Contractors will be considered for similar treatment as in case of Joint Venture. The detailed qualification criteria for Technical Evaluation is provided as follows:

Sr.No.	Category	Weightage/Marks
1.	Financial Soundness	30
2.	General & Relevant Experience	45
3.	Personnel Capabilities	15
4.	Equipment Capabilities	10
	Total:	100

The applicants must score total 65 marks and at least 50 % marks in each category, to qualify.

SUB CATEGORY A: FINANCIAL SOUNDNESS

For financial soundness, Letter from Banks and audited financial statements for last five financial years shall be submitted. if Bank statement (In case of Cash), letter from Banks (In case of Credit Line) & audited financial statements of last five financial years are not attached, no consideration will be given to bidder.

Sr.	Description	Maximum
No.		Marks
i)	Available Cash / Bank Credit Line	• Full Marks will be given if "A" is
	Limit (or combination of both)	PKR 100 Million or above.
		• For 'A' less than PKR 100 Million,
		marks will be awarded as:
	A= Available Cash/Bank Credit	(A/100) * 15
	Line limit or combination of both	• No Marks will be given if "A" is less
	(in PKR Million)	than PKR 50 Million.
	(
	(15 - Marks)	No marks shall be allotted if Bank
	(10 1/10110)	statement (In case of Cash) & letter
		from Bank (In case of Credit Line as
		proof of Credit Line) is not attached.
ii)	Average Working Capital in last Five	• Full Marks will be given if "A" is
11)	financial years.	PKR 100 Million or above.
	imanetar years.	
		• For 'A' less than PKR 100 Million,
	A - Averege Werking Conited in	marks will be awarded as:
	A= Average Working Capital in	(A/100) * 15
	last five financial years (in PKR	• No Marks will be given if "A" is less
	Million)	than PKR 50 Million.
	(15 - Marks)	No marks shall be allotted if audited
	(17 Tradition)	financial statements of last five
		financial years are not attached.
		amanciar years are not acarened.
	Sub-total:	30

SUB-CATEGORY B: EXPERIENCE RECORD

Bidder must meet following criteria for evaluation of the experience of the Firm/JV.

Sr. No.	Description	Max. Mark
i)	Projects of General Nature completed over last 05 years. a. Max 03-projects having minimum cost Rs. 200 Million each.	15
	(General nature project includes buildings, roads, bridges water supply, water/sewerage treatment etc.)	
	Each project having above-said minimum cost bracket; will have equal marks. (i.e. 3*5=15)	
ii)	Projects of similar nature and complexity a. Max 02-projects of Sewerage, Road and allied works having Min Cost Rs. 100 Million each (completed over last 05 years) (2*5=10) b. Max 02-projects of Sewerage, Road and allied works having Min Cost Rs. 100 Million each (in hand) (2*5=10)	20
iii)	Each project having above-said minimum cost bracket; Any construction project with satisfactory completion certificates granted by the departments for the other projects enlisted at Sr. no. i & ii. (02-projects)	10
	Sub-total:	45

SUB-CATEGORY C: PERSONNEL CAPABILITIES

The following key experts at a minimum shall be evaluated:

No personnel will be considered for evaluation if declaration of Professional Staff Employment & availability for this Project (Form T11-12-13) duly signed by authorized signatory is not attached. Bidder will also provide affidavit of employee on judicial stamp paper.

Bidders will submit the detailed particular of his experts considering that all staff **will serve** at site full time during execution of works In case bidder fails to appoint full time Project Manager at site, a penalty of PKR 100,000 will be imposed on monthly basis and in case bidder fails to appoint full time other supporting staff (all personnel or partly) mentioned below (other than Project Manager) at site, a penalty of Rs. 100,000/- will be imposed on monthly basis.

Sr. No.	Description	Maximum
		Points
i)	Engineers in employment of the contractor & Registered with PEC	
	a) Number of Civil Engineers (Min 02-No)	6
	b) Experience of Civil Engineers (Minimum 07 years)	3
ii)	Number of Diploma Engineers in Employment of the	
	Contractor	
	a) Number of Sub Engineers having Diploma in Associate Engineering (Civil) (Min 3-No)	3
	b) Experience of Engineers in number of Years (Minimum 05 -years)	3
	Sub-total:	15

Bidders will provide **short CVs**, showing details of experts are desired by highlighting the name of expert, qualification, year of graduation or other degree(s), general experience, specific experience, designation, time of association with this firm. Experience certificates, affidavit of employee on judicial stamp paper. No marks if required documents are not attached.

SUB-CATEGORY D: EQUIPMENT CAPABILITIES

The following Equipment shall be evaluated:

Declaration of ownership/lease of Equipment (Form T- 15) duly signed by authorized signatory shall be attached.

Form T-14 shall be filled along with manufacturer authorization.

Sr. No	Equipment Type	Maximum Marks
1	Surveying Equipment (Total Station) (01 Set)	1
2	Dump Truck 2-Ton (01 No.)	1
3	Excavator (01 No.)	1
4	Motor Grader (01 No.)	1
5	Roller (01 No.)	1
6	Tractor Trolley [01 No]	1
7	Asphalt Mixing Plant (01 No)	1
8	Water Bowser (01 No.)	1
9	Generator (50/100 KVA, 01 No)	0.5
10	Wheel Loader (01 No.)	0.5
11	Dewatering set	1
	Sub-total:	10

Bidder will provide evidence of ownership in case of his purchased equipment or Lease paper in case of any rented equipment OR Affidavit on his letter head that he will arrange the following equipment subject to award the work.

Joint Venture (JV)

Joint Venture must comply with the following requirements: -

- a) Minimum qualification requirements:
 - i) The lead partner shall meet not less than 50 percent of all qualifying criteria given in paras A to D heretofore.
 - ii) The joint venture must collectively satisfy the criteria of paras A to D, for which purpose the relevant figures for each of the partners shall be added together to arrive at the JV's total capacity.
- b) Any change in a qualified JV after qualification, shall be subject to the written approval of the Employer prior to the deadline for submission of bids. Such approval may be denied if:
 - i) Partner(s) withdrawn from a JV and remaining partners do not meet the qualifying requirements:
 - ii) The new partners to a JV are not qualified individually or as another JV; or
 - iii) In the opinion of the Employer, a substantial reduction in competition would result.

c) Bid shall be signed by all members in the JV so as to legally bind all partners, jointly and severally, and any bid shall be submitted with a copy of the JV agreement providing the joint and several liability with respect to the contract.

Conflict of Interest

The Bidder (including all members of a JV) must not be associated, nor have been associated in the past, with the consultant or any other entity that has prepared the design, specifications, and other prequalification and bidding documents for the project, or was proposed as Engineer for the contract, over the last Ten years. Any such association may result in disqualification of the Bidder.

General Information

Bidder (or each Member of a Joint Venture) applying for qualification is required to complete the information in this form.

1.	Name of Firm:		
2.	Head Office Address:		
3.	Telephone:		
4.	Email:		
5.	Type of Organization:		
6.	Place of Incorporation/Registration:	Year of incorporation/registration:	
7.	PEC Registration Category: PEC Registration No:	Validity:	
8.	NTN#		
9.	Name, Designation, email and Mobile Nur	mber of Firm's Representative	

Detail of Owners/ Directors

Name		Designation	Nationality
1.			
2.			
3.			
4.			
5.			

Financial Soundness

Name of Bidder (Lead Member of a Joint Venture, in case of JV) Bidder (Lead Member of a Joint Venture, in case of JV) applying for qualification is required to provide financial information to demonstrate that they meet the requirements of Evaluation Criteria. If necessary, use separate sheets to provide complete information. A copy of the audited financial statements of the past five (5) financial years must be attached.			
Bidder's Legal Name:	Date:		
JV Members Legal Name:	_		

Information Balance Sheet

	Year-1	Year-2	Year-3	Year-4	Year-5	Overall Average
Total Assets (TA)						
Total Liabilities (TL)						
Net Worth (TA-TL)						
Current Assets (CA)						
Current Liabilities (CL)						
		Average	Annual T	Turnover	(AATO)	
Average Annual Turnover						
	·]	Financial	Resource	s	
Cash/Bank Balance						
Credit Line Limit						

Summary of Similar Nature Project Completed

Name of Bidder or Member of a Joint Venture	

Bidder and each Member of a Joint Venture applying for qualification is required to complete the information in this form.

Use a separate sheet for each Member of a Joint Venture.

Project Name	Year of Completion	Location	Value in PKR (Million)

Details of Similar	Nature Pro	jects Completed
---------------------------	------------	-----------------

Name of Bidder or Member of a Joint Venture	

A separate form with adequate documentary evidence (Completion Certificate indicating Cost of Project) shall be provided for each project in Form T-03.

1.	Name of Contract
	Location
2.	Name of Employer
3.	Employer Address
4.	Nature of Works and special features of the contract
5.	Contract Role (Tick One)
	(a)Sole Contractor (b)Sub-Contractor (c) Member in JV
6.	Value of the total contract(in specified currencies) at completion, or at date of award for current contract
	PKR USD
7.	Date of Award
8.	Date of Completion
9.	Contract Duration (Years and Months)
	YearsMonths

Summary of Similar Nature Project in hand

Name of Bidder or Member of a Joint Venture

Bidder and each Member of a Joint Venture applying for qualification is required to complete the information in this form.

Use a separate sheet for each Member of a Joint Venture.

Project Name	Date of Award	Expected Date of Completion	Location	Value in PKR (Million)

.

Details of Similar Nature Projects in hand

ame of Bidder or Member of a Joint Venture

A separate form with adequate documentary evidence (Letter of Award/ Agreement indicating Cost of Project) shall be provided for each project in Form T-5.

1.	Name of Contract
	Location
2.	Name of Employer
3.	Employer Address
4.	Nature of Works and special features of the contract
5.	Contract Role (Tick One)
	(a)Sole Contractor (b)Sub-Contractor (c) Member in a JV
6.	Value of the total contract(in specified currencies) at completion, or at date of award for current contract
	PKR USD
7.	Date of Award
8.	Planned Date of Completion

Summary of General Nature Project Completed

Name of Bidder or Member of a Joint Venture	

Bidder and each Member of a Joint Venture applying for qualification is required to complete the information in this form.

Use a separate sheet for each Member of a Joint Venture.

Project Name	Year of Completion	Location	Value in PKR (Million)

Details of General Nature Projects Completed in Last 5 Years

Name of Bidder or Member of a Joint Venture	

A separate form with adequate documentary evidence (Completion Certificate indicating Cost of **Project**) shall be provided for each project in **Form T-07**.

1.	Name of Contract
	Location
2.	Name of Employer
3.	Employer Address
4.	Nature of Works and special features of the contract
5.	Contract Role (Tick One)
	(a)Sole Contractor (b)Sub-Contractor (c) Member in a JV
6.	Value of the total contract(in specified currencies) at completion, or at date of award for current contract
	PKR USD
7.	Date of Award
8.	Date of Completion
9.	Contract Duration (Years and Months)
	YearsMonths

Summary of Fast Track Project Completed

Name of Bidder or Member of a Joint Venture

Bidder and each Member of a Joint Venture applying for qualification is required to complete the information in this form.

Use a separate sheet for each Member of a Joint Venture.

Project Name	Year of Completion	Location	Value in PKR (Million)	Completion Duration
	NO	T	USED	

Details of Fast Track Similar Nature Projects Completed in Last Ten (10) Years

Name of Bidder or Member of a Joint Venture

A separate form with adequate documentary evidence (Completion Certificate indicating Cost of Project) shall be provided for each project in Form T-09.

1.	Name of Contract
	Location
2.	Name of Employer
3.	Employer Address Nature of Nature o
4.	Nature of Nature
5.	Contr (a)Sole-C (c) Member in a JV
6.	Value of the total contract (in specified currencies) at completion, or at date of award for current contract PKR
7.	Date of Award
8.	Date of Completion
9.	Contract Duration (Years and Months)
	YearsMonths

List of Proposed Staff

Name of Bidder: (Bidder or Member of Joint Venture)		(Bidder or Member of Joint Venture)
1	Title of Position	
	Name of Candidate	
	Education	
	Experience	
	PEC Registration No.	
2	Title of Position	
	Name of Candidate	
	Education	
	Experience	
	PEC Registration No.	

Candidate	Summary
------------------	---------

Name of Bidder:		
	(Bidder or Member of Joint	
	Venture)	

Position	Candidate	
	Prime	Alternate
Candidate Information	Name of Candidate	Date of Birth
	Professional Qualification:	
PEC Registration No. (Only for Engineer)		
Present Employer	Name of Employer:	
	Address of Employer	
	Telephone:	Fax:
	Job Title of Candidate	Years with Present Employer
Summarize professio	nal experience in reverse chronolo	ogical order.

From	То	Company	Project	Position	Relevant Technical & Management Experience

DECLARATION OF PROFESSIONAL STAFF EMPLOYMENT

[To be submitted on Company Letterhead]

TO WHOM IT MAY CONCERN

PROJECT:
SUBJECT: <u>DECLARATION OF PROFESSIONAL STAFF EMPLOYMENT & AVAILABILITY</u>
We hereby certify that the personnel nominated in Form-T-11 are employed by our firm and are available for the above-mentioned Assignment.
Yours Sincerely,
COMPANY NAME:
AUTHORIZED REPRESENTATIVE

Equipment Detail

lember of Joint Venture

Bidder and each Member of Joint Venture is required to provide adequate information to demonstrate clearly that it has the sufficient capability to undertake the Project. A separate form shall be prepared for each item of equipment listed in the Evaluation Criteria.

Item of Equip	ment		
Equipment information	1. Name of manufac	cturer	2. Model and power rating
	3. Capacity		4. Year of manufacture
Current	5. Current location		
status	6. Details of current commitments		
Source	7. Indicate source of the equipment		
	□ Owned	□Rented	□Leased
Omit the follow	ing information if it is o	owned by the B	idder or Member of JV.

Owner	8. Name of owner		
	9. Address of owner		
	Telephone	Contact name and title	
	Fax	Telex	
Agreement	Details of rental/lease specific to the Project.		

Affidavit of ownership/Availability of Equipment

PROJECT:
SUBJECT: <u>DECLARATION OF OWNERSHIP/ LEASE OF EQUIPMENT</u>
We hereby certify that the equipment nominated in T-14 is owned by/Leased by our firm and is available in Pakistan for the above-mentioned Assignment.
Yours Sincerely,
COMPANY NAME:
AUTHORIZED REPRESENTATIVE

Litigation History for the last Ten (10) Years

Name:	(Bidder or Member of Joint Venture)

Description of Contract	Year	Name of Client, Cause of litigation and matter in dispute	Disputed amount (Current value in PKR or US\$ equivalent)	Award FOR or AGAINST Bidder	Remarks by Bidder

Attach Affidavit/undertaking that non-performance of a contract did not occur within the last ten years based on information on all settled disputes or litigation.

Form -T-17

AFFIDAVIT FOR CORRECTNESS OF INFORMATION

(To be printed on PKR 100 Stamp Paper)

Name:_____

(Bidder or member of Joint Venture)
I, the undersigned, do hereby certify that all the statements made in the Forms and in the supporting documents are true, correct and valid to the best of my knowledge and belief and may be verified by employer if the Employer, at any time, deems it necessary.
The undersigned hereby authorize and request the bank, person, firm or corporation to furnish any additional information requested by the Employer deemed necessary to verify this statement regarding my (our) competence and general reputation.
The undersigned understands and agrees that further qualifying information may be requested and agrees to furnish any such information at the request of the Employer.
Employer undertakes to treat all information provided as confidential.
Signed by an authorized Officer of the firm
Title of Officer
Name of Firm

Date

POSSESSION OF SITE HANDING / TAKING OVER

Name of Sub-F	Project / Contract Name:	
Name of Contr	actor / Contracting Firm:	
Date of Award	of Work:	
Date of Contra	ct Agreement:	
Contract numb	er:	
are integral pa		ertains to the sites as shown in drawings ded over to the Contractor M/se of witness.
(Plan attached	list of sites being handed over	/ taken over)
Handed over b Name: Designation: Cell: Stamp: CNIC No:	y Chief Officer MC	— taken over by (Contractor / Firm) Name: Designation:
Witness (MOI) Name: Designation:		Cell No: Stamp: CNIC No: PEC No: I, hereby take over the sites as marked in the plan attached as Annexure-A of this document
		Witness: Designated approved Site Engineer of Contracting Firm

FORMS

BID SECURITY PERFORMANCE GUARANTEE CONTRACT AGREEMENT MOBILIZATION ADVANCE GUARANTEE/BOND

BID SECURITY (Bank Guarantee)

Security E	Executed on				
•	(Date)				
Name of S	Surety (Bank) with Address:				
(Scheduled	ed Bank in Pakistan)				
Name of P	Principal (Bidder) with Address				
	m of Security Rupees .	(Rs)		
	rence No.				
	ALL MEN BY THESE PRESENTS, st of the said Principal (Bidder)we, the				
and truly t	fter called the 'Employer') in the sum s to be made, we bind ourselves, our had severally, firmly by these presents.	_ ·			
the accom	NDITION OF THIS OBLIGATION IS npanying Bid dated for Bid Number; and				
furnishes a	AS, the Employer has required as a co a Bid Security in the above said su r, conditioned as under:				
(1)	that the Bid Security shall remains after the deadline for validity of as it may be extended by the I Surety is hereby waived;	bids as stated in the Ins	structions to Bidders or		
(2)	that the Bid Security of unsucce after expiry of its validity or upo				
(3)	that in the event of failure of t	he successful Bidder to	execute the proposed		

Agreement for such work and furnish the required Performance Guarantee, the entire said sum be paid immediately to the said Employer pursuant to Clause 15.6 of the Instruction to Bidders for the successful Bidder's failure to perform.

NOW THEREFORE, if the successful Bidder shall, within the period specified therefore, on the prescribed form presented to him for signature enter into a formal Contract with the said Employer in accordance with his Bid as accepted and furnish within twenty eight (28) days of his being requested to do so, a Performance Guarantee with good and sufficient surety, as may be required, upon the form prescribed by the said Employer for the faithful performance and proper fulfilment of the said Contract or in the event of non-withdrawal of the said Bid within the time specified for its validity then this obligation shall be void and of no effect, but otherwise to remain in full force and effect.

PROVIDED THAT the Surety shall forthwith pay the Employer the said sum upon first written demand of the Employer (without cavil or argument) and without requiring the Employer to prove or to show grounds or reasons for such demand, notice of which shall be sent by the Employer by registered post duly addressed to the Surety at its address given above.

PROVIDED ALSO THAT the Employer shall be the sole and final judge for deciding whether the Principal (Bidder) has duly performed his obligations to sign the Contract Agreement and to furnish the requisite Performance Guarantee within the time stated above, or has defaulted in fulfilling said requirements and the Surety shall pay without objection the said sum upon demand from the Employer forthwith and without any reference to the Principal (Bidder) or any other person.

IN WITNESS WHEREOF, the above bounden Surety has executed the instrument under its seal on the date indicated above, the name and seal of the Surety being hereto affixed and these presents duly signed by its undersigned representative pursuant to authority of its governing body.

WITNESS:	Signature		
1	Name Title		
Corporate Secretary (Seal)	Corporate Guarantor (Seal)		
2			
Name. Title & Address			

FORM OF PERFORMANCE GUARANTEE (Bank Guarantee)

	Guarantee No
	Executed on
	Expiry date
[Letter by the Guarantor to the Employer]	
Name of Guarantor (Bank) with address:	
	(Scheduled Bank in Pakistan)
Name of Principal (Contractor) with address:	
Penal Sum of Security (express in words and fig	gures)
Letter of Acceptance No	Dated
KNOW ALL MEN BY THESE PRESENTS, Documents and above said Letter of Acceptanc request of the said Principal we, the Guarantor the	e (hereinafter called the Documents) and at the above named, are held and firmly bound unto
Employer) in the penal sum of the amount stated truly to be made to the said Employer, we bind and successors, jointly and severally, firmly by	d above for the payment of which sum well and ourselves, our heirs, executors, administrators
THE CONDITION OF THIS OBLIGATION accepted the Employer's above said (Name	Letter of Acceptance for
(Name of	of Project).

NOW THEREFORE, if the Principal (Contractor) shall well and truly perform and fulfill all the undertakings, covenants, terms and conditions of the said Documents during the original terms of the said Documents and any extensions thereof that may be granted by the Employer, with or without notice to the Guarantor, which notice is, hereby, waived and shall also well and truly perform and fulfill all the undertakings, covenants terms and conditions of the Contract and of any and all modifications of said Documents that may hereafter be made, notice of which modifications to the Guarantor being hereby waived, then, this obligation to be void;

otherwise to remain in full force and virtue till all requirements of Clause 49, Defects Liability, of Conditions of Contract are fulfilled.

of any liability attaching to us under this	mited to the sum stated above and it is a condition Guarantee that the claim for payment in writing period of this Guarantee, failing which we shall be a Guarantee.
We,	(the Guarantor), waiving all objections and vocably and independently guarantee to pay to the r's first written demand without cavil or arguments we or to show grounds or reasons for such demand above, against the Employer's written declaration perform the obligations under the Contract which be Employer's designated Bank & Account Number.
the Principal (Contractor) has duly performed defaulted in fulfilling said obligations and to sums up to the amount stated above upon and without any reference to the Principal of IN WITNESS WHEREOF, the above-bound its seal on the date indicated above, the name	tall be the sole and final judge for deciding whether armed his obligations under the Contract or has the Guarantor shall pay without objection any sum a first written demand from the Employer forthwith or any other person. Inden Guarantor has executed this Instrument under the and corporate seal of the Guarantor being hereto is undersigned representative, pursuant to authority
Witness:	Guarantor (Bank)
1	Signature
Corporate Secretary (Seal)	Name
	Title
2	

Corporate Guarantor (Seal)

Name, Title & Address

FORM OF CONTRACT AGREEMENT

THIS	CONTI	RACT A	GREEME day	NT (hereina of	after called (mor		Agreement") 20	made on the
(herea	fter	called	the	"Employer	,	the	one e "Contracto	part and or") of the other
part.								
execut	ted by th	ne Contrac	ctor and h		a Bid by th	e Contr	actor for the	should be execution and
NOW	this Agr	reement w	itnessed a	s follows:				
1.		-		-			the same m t hereinafter	eanings as are referred to.
2.	otherw	ise, if any	, except th	-	ating to Inst	ructions	to Bidders s	n as agreed or shall be deemed
	a. b. c. d. e. f. g. h. i. j. k.	The Let The con Special Contrac The pric The con Special The Dra The Special	Stipulation t form for eed Bill of appleted Approvision awings; ecification chedule;	eptance; orm of Bid; ns (Appendi execution of Quantities (ppendices to s;	f work; Appendix-I	o to Bid)		
3.				-				eriod, according

- to specifications as mentioned in the acceptance letter and Contract Agreement to the entire satisfaction of the engineer in-charge
- 4. In consideration of the payments to be made by the Employer to the Contractor as hereinafter mentioned, the Contractor hereby covenants with the Employer to execute and complete the Works and remedy defects therein in conformity and in all respects with the provisions of the Contract.
- 5. The Employer hereby covenants to pay the Contractor, in consideration of the execution and completion of the Works as per provisions of the Contract, the Contract Price or such other sum as may become payable under the provisions of the Contract at the times and in the manner prescribed by the Contract.

- 6. That if the contractor fails to comply with any of the conditions of the contract, he will be held liable for the consequences thereof which shall be either in the form of liquidated damages or allotment of work at his risk and cost or both. The damages so incurred shall be recovered from the contractor, either from his security money or his running/outstanding bills. Further, if any information/ document submitted by contractor/ firm, founds false, fabricated, materially incorrect at any stage, he/firm will be liable for blacklisting.
- 7. The Employer hereby covenants to pay the Contractor, in consideration of the execution and completion of the Works as per provisions of the Contract, the Contract Price or such other sum as may become payable under the provisions of the Contract at the times and in the manner prescribed by the Contract.

IN WITNESS WHEREOF the parties hereto have caused this Agreement to be executed on the day, month and year first before written in accordance with their respective laws.

Signature of the Contactor	Signature of Employer
(Seal)	(Seal)
Signed, Sealed and Delivered in the presence of:	
Witness:	Witness:
(Name, Title and Address)	(Name, Title and Address)

MOBILIZATION ADVANCE GUARANTEE/BOND

Guarantee No	Date	
WHEREAS	(hereinafter called the 'Employer') has entered into a Contract	t for
	(Particulars of Contract)	
with	· · · · · · · · · · · · · · · · · · ·	
AND WHEREAS	he Employer has agreed to advance to the Control tract	tor's
		ount
	the Contractor as per pr	Juiit
AND WHEREAS	e	the
mobilization ad	NOT USED	
\	NOTUSE	1
AND WHEREA		7
(So (Hereinafter called	Employer) and in consideration of	f tha
Employer agreeing	Contractor, has agreed to furnish the	
Guarantee.	Contractor, has agreed to furnish the	sara
NOW, THEREFO	E, the Guarantor hereby guarantees that the Contractor shall use	the
	pose of above mentioned Contract and if he fails and commits defaul	
•	nis obligations for which the advance payment is made, the Guarantor s	hall
be liable to the Em	loyer for payment not exceeding the aforementioned amount.	
NI-41 ini41	and defects of additional formulation at all the december and final forder	
_	any default, of which the Employer shall be the sole and final judge actor, shall be given by the Employer to the Guarantor, and on such	
	yment shall be made by the Guarantor of all sums then due under	
	ny reference to the Contractor and without any objection.	uns
Guarantee Without	Ty reference to the Contractor and without any objection.	
This Guarantee sha	remain in force until the advance is fully adjusted against payments for	rom
the Interim	, , , , , , , , , , , , , , , , , , , ,	ıntil
	whichever is earlier.	
	(Date)	

The Guarantor's liability under this	Guarantee shall not in any case exceed the sum of R (Rs).	lupees
This Guarantee shall remain valid use aforesaid date or earlier if the adpayments from Interim Payment Cagrees that the aforesaid perimentioned date 11	dvance made to the control isted a set of the control is a set of the control	
WITNESS		
1.		
Corporate Secretary (Seal)		
2. (Name Title & Address)	Corporate Guarantor(Seal)	

INDEMNITY BOND FOR SECURED ADVANCE AGAINST MATERIALS BROUGHT AT SITE

(ON RS.40 NON JUDICIAL STAMP PAPER)

This Deed of Indemnity is issued	by M/s
	(Name of the Contractor) in favour
of <i>M/s</i>	(Name of the Employer).
Whereas	(hereinafter called the Employer) has paid the
Secured Advance against the cost of mate	erial through any Bank or like agency by any other
method by virtue of the terms of the cont	ract existing between the parties. The details of the
material and their price for which se	cured advance is being sought for the period
	till consumption aterial is as
under:-	
1at D	Rs.
2	Rs.
3.	s.
4	T USED
NO	
THEREFO	ZOWS:
I/We	
do hereby in	due to thefts, arson, pilferage, loss due
	ation and depreciation etc. through any act of Man
	I the materials financed or paid by the Employer on
our request for mancing payment against	
	indemnify against
any or all claims, action damages arising of	<u> </u>
	further declare that we will faithfully abide by the
	nat we will not remove, sell, pilferage any of the
	has paid us such a secured advance and will not
	Corporation, Firm, Company, Individual or the like
agency or create any change whereon in an	
	do hereby also declare that in the event of my/our
infringement of the declaration made above	e

will be entitled to forfeit all such material and also proceed according to the relevant clause pertaining to breach of contract and further into reseek any remedies secured of under the contract Agriculture with us or otherwise	voke the power
available under law.	
Place Dated	
ContractorNOT USED	

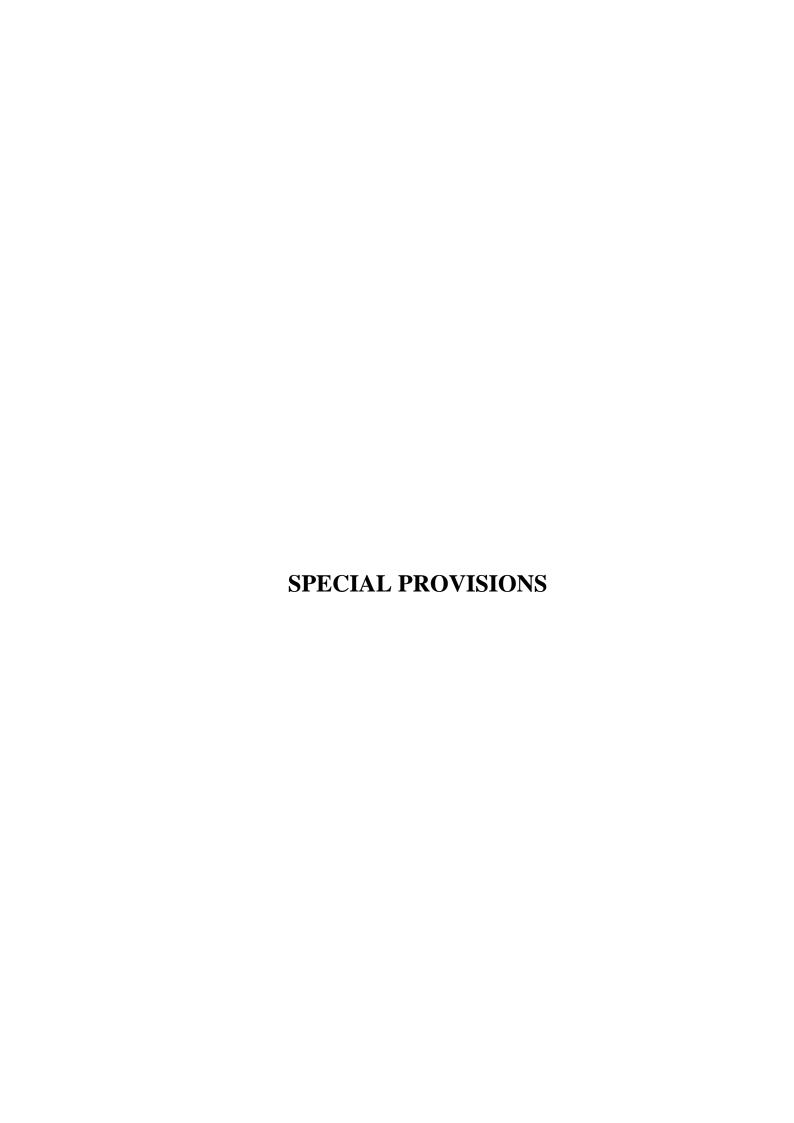
GENERAL / PARTICULAR CONDITIONS OF CONTRACT FOR WORKS

GOV	/FRNN	1FNT	OF T	HF	DIIN	ΙΙΔΒ

CONTRACT FORM FOR EXECUTION OF WORK

(To be procured by the Contractor)

Copies of the Contract Form for Execution of Work can be obtained from Finance Department Punjab's Website as well as from the Employer.



SPECIAL PROVISIONS (CIVIL WORKS)

Table of Contents

Clause No.	Descrip	otion	
SP-1	General		
SP-2	Descrip	otion of the Works	
SP-3	Site of	Works	
SP-4	Setting	Out	
SP-5	Climat	ological Data	
SP-6	Utilitie	s	
SP-7	Topogr	caphy and Geology of the Site	
SP-8	Extent	of Work	
SP-9	Drawin	ngs	
	9.1	Bidding Drawings	
	9.2	Construction Drawings	
	9.3	Checking Drawings	
SP-10	Right t	o Change	
SP-11	Drawings and Data to be Furnished by the Employer / En		
	11.1	Procedure for Submittal of Contractor's Drawings	
	11.2	Other Drawings	
	11.3	Ownership of Drawings etc.	
SP-12	Cooper	ration with Other Contractors	
SP-13	Quality	of Materials	
SP-14	Inspect	ion and Tests	
	14.1	Inspection	
	14.2	Testing	
	14.3	Cost	
SP-15	Constr	uction Programme	
	15.1	General	
	15.2	Submittals	
	15.3	Progress Schedule	
SP-16	Layout	of Works	
	16.1	Reference Points	

	16.2	Verifications				
	16.3	Primary Control Points				
	16.4	Construction Surveys				
	16.5	Basic Control Monument				
	16.6	Surveys and Computations				
	16.7	Tolerances				
	16.8	Material and Equipment				
SP-17	Standar	Standards and Specifications				
SP-18	Access t	to Site				
	18.1	Right of Way for Access and Haul Routes				
	18.2	Restoration of Site				
SP-19	Facilitie	s to be provided by the Contractor at Site				
	19.1	Contractor's Camps				
	19.2	Temporary Sanitary Facilities				
	19.3	Medical Facilities				
	19.4	Operation and Maintenance of the Camps and Facilities				
	19.5	Drainage				
	19.6	Water Supply				
	19.7	Electricity Supply				
	19.8	Utility Lines				
	19.9	Handing Over / Removal after Completion				
	19.10	Measurement and Payment				
SP-20	Provisio	on of Facilities for the Engineer/Employer				
	20.1	Site Office for the Engineer				
	20.2	Facilities for the Employer				
	20.3	Measurement and Payment				
SP-21	Progres	s Photographs				
SP-22	Site Fac	ilities to be provided by the Employer				
	22.1	General				
	22.2	Area for Storage and Workshop				
SP-23	Safety N	Measures at Construction Site				
SP-24	Environ	nmental Protection				

SPECIFICATIONS - SPECIAL PROVISIONS (CIVIL WORKS)

Gojra, is the administrative capital of Gojra Tehsil and a city in the Toba Tek Singh District in Punjab province of Pakistan. Gojra is 50 kilometers from Faisalabad, 170 kilometers from Lahore and 20 miles north of Toba Tek Singh.

Scope of the work for this particular project "UPGRADATION OF SEWERAGE SYSTEM AND CONSTRUCTION OF WASTE WATER TREATMENT PLANT (WWTP) GOJRA CITYPACKAGE 1 – SEWERAGE SYSTEM"

The Project comprises of the Replacement of old, outlived, damaged or worn-out components in existing infrastructure for; -

- The existing sewerage system was laid against the Topographic conditions of the city. Hence, as soon the electric shutdown occurs the low-lying areas start overflowing. The resident of the areas is suffering bad environmental conditions and find difficult to move about in the waste water flooding.
- To improve the service delivery by laying of trunk sewer according to topographic conditions. It will provide Improvement of service delivery level of the municipal services in the served areas of the city for provision of better basic urban services for improved livability of the citizen.
- The new system is proposed to reduce in annual O&M cost of the infrastructure due to reduced repairs in the forthcoming years because of repair or replacement of infrastructure components.
- The major areas like Tehsil Headquarter Hospital, Ali Asghar Park, Hockey stadium which are adjacent to main Jhang road are without any proper sewerage system and hospital waste is being dispose of without any treatment. It is using by the formers for agriculture. The Gojra city is divided into 4 zones A, B, C & D. Zone A, B & C are partially served with sewerage system whereas, no sewerage network exists in zone D as well as north west areas of other zones are also without sewerage system. Overflow on the road are occurring resultantly, road network are damaging. MC Gojra spending huge funds for maintenance as well as reconstruction of road network. Municipal Committee has construct open drain for dewatering of wastewater and this wastewater is going to the agriculture form without any treatment.
- On completion of scheme about one hundred thousand peoples will benefited with sewerage facility as well as improve the existing
- The major areas are without sewer along the planned route of trunk sewer which will be benefited with sewerage facility and environmental condition will be improved.

Municipal Committee Gojra City is unable to render satisfactory service to the entire area of the city because of degraded infrastructure wherein major replacements are direly needed but MC could not be able to accomplish them because of low revenue recovery and funding constraints. As a result, major areas are deprived of the required level of the service. This is resulting in low credibility of the municipal services and citizen dissatisfaction. Further, the municipal infrastructure has not been extended keeping in pace with the growth of population which has impacted the service delivery level of MC

SP-2 DESCRIPTION OF THE WORKS

2.1 The work included in this Contract are as follows but not limited to these items only:

SN	Description
1	RCC Sewers
	a) 15" I/d b) c) d) e) f) g) h
	b) 18" I/d
	c) 21" I/d
	d) 24" I/d
	e) 27" I/d
	f) 30" I/d
	g) 36" I/d
	h) 42" I/d etc
2	Rest of road works

SP-3 SITE OF WORKS

The work mainly comprising of "UPGRADATION OF SEWERAGE SYSTEM AND CONSTRUCTION OF WASTE WATER TREATMENT PLANT (WWTP) GOJRA CITYPACKAGE 1 – SEWERAGE SYSTEM"

SP-4 SETTING OUT

Setting out data and control points for the construction of the road and allied works will be provided by the Engineer following the Notice to Commence but, in any case, prior to start of work.

SP-5 CLIMATOLOGICAL DATA

Not used.

SP-6 UTILITIES

The Contractor shall directly enquire from the utility companies about availability of connections of electric power supply and telephone lines for his use at the Site. In case of non-availability of electric power supply from national grid to meet his requirements the Contractor shall provide at his own cost electric power generators as necessary for supply of power for the various parts of the Works including his camps, offices, stores, workshops and other installations as well as for the Engineer's Site office provided under Sub-Clause SP 20.1. The Contractor shall bear all costs for constructing, operating and maintaining the generation system, including the standby generation system, and distribution system including providing diesel, oil or other consumables and all services and necessary attendance to ensure uninterrupted power supply at all

times.

The Contractor shall make his own investigations and arrangements for supply of water of acceptable quality for construction requirements and safe drinking water for his staff and workmen and for the staff of the Engineer.

No separate payment will be made to the Contractor for works performed under this Clause and the costs thereof shall be deemed to be included in the rates and prices of the various items in the Bill of Quantities.

SP-7 TOPOGRAPHY AND GEOLOGY OF THE SITE

The details of Topography is with the Employer / Engineer.

SP-8 EXTENT OF WORK

The Contractor shall remove all debris and unsuitable construction to the Engineer's satisfaction with no additional cost.

The Contractor shall construct the Works in accordance with the Drawings and Specifications and as directed by the Engineer. The Contractor shall procure, furnish, provide and arrange all the necessary construction materials, equipment, transportation, fuel, electric power, water and services; be responsible for the construction and maintenance of the construction camps, offices, workshops and warehouses that he may require, and perform all other work necessary for completion of the Works described herein, in complete conformity with the Contract.

SP-9 DRAWINGS

9.1 Bidding Drawings

The Drawings provided as separate volume of Bid Documents and hereinafter referred to as Bid Drawings show the scope of the work to be performed by the Contractor. The Bid Drawings shall not be used as a basis for fabrication or construction, but may be used as the basis for planning, scheduling and placing preliminary orders for materials, subject to corrections based on future issue of Construction Drawings. Any other Drawings if issued through Addenda, before opening of Tenders, shall become part of the Bid Drawings.

9.2 Construction Drawings

After award of Contract, Bidding Drawings will be replaced by Drawings issued by the Engineer for Construction, with such modifications as may be necessary. The Drawings Issued for Construction will include Bid Drawings re-issued, Bidding Drawings modified and additional Drawings as required to develop in greater detail the construction required and shall be referred to hereinafter as "Construction Drawings". The Construction Drawings that show changes from the Tender Drawings and Specifications, will be reviewed by the Engineer for determination of adjustments, if any, of the Contract Price in accordance with the provisions of Clause 51.1, Variations, of the Conditions of Contract. The work shall be executed in conformity with the Construction Drawings.

The Engineer and Contractor shall jointly prepare a schedule for issuance of Drawings Issued for Construction of the various parts of the Works based on a list of drawings provided by the Engineer.

9.3 Checking of Drawings

The Contractor shall carefully check all Construction Drawings as soon as practicable after receipt thereof, and shall promptly advise the Engineer of any errors if discovered.

SP-10 RIGHT TO CHANGE

The Engineer may find it desirable to change location, alignment, dimensions or design of one or more of the features of the Works to conform to the newly disclosed conditions. Toward this end, the Engineer reserves the right to make such reasonable changes, and the Contractor's operations shall be conducted so as to accommodate any such changes in the Works.

SP-11 DRAWINGS/DATA TO BE FURNISHED BY EMPLOYER /ENGINEER

11.1 Procedure for Submittal of Contractor's Drawings

All drawings showing construction details shall be provided by the Employer/Engineer.

11.2 Other Drawings

Other drawings additional to those referred to herein-above required by the Specifications showing proposed methods of constructing Temporary Works and all bar bending schedules shall be submitted by the Contractor to the Engineer for approval.

11.3 Ownership of Drawings etc.

All the drawings, details, and any other information or documents furnished by the Engineer shall become the property of the Employer.

SP-12 COOPERATION WITH OTHER CONTRACTORS

The Contractor shall cooperate and coordinate his work with that of the other contractors working at the Site, to whatever extent may be necessary to complete the Works in accordance with the approved programme and the Engineer's instructions.

SP-13 QUALITY OF MATERIALS

All materials, fixtures, fittings, and supplies furnished under the Contract shall be new and unused, of standard first grade quality and of the best workmanship and design. No inferior or low grade materials and supplies will be either approved or accepted, and all work of assembly and construction shall be done in a first class and workmanlike manner. In asking for prices of materials intended for delivery to the Site and incorporation in the Works under any portion of these Specifications, the Contractor shall provide the manufacturer or supplier with complete information as may be necessary to secure compliance with these requirements and, in every case, he shall quote this Clause in full to each such manufacturer or supplier.

Prior to procurement, the Contractor shall furnish to the Engineer, for his approval, the names of the manufacturers of all equipment and materials which he contemplates incorporating in the Works. With this information, the Contractor shall also furnish such pertinent information as to capacities, efficiencies and sizes, and such other information as may be required by the Engineer. Samples of materials shall be submitted to the Engineer for approval unless waived of by the Engineer. Equipment, materials, supplies and articles installed or used without the Engineer's approval shall be at the risk of subsequent rejection.

The Contractor shall use non-reactive aggregates from suitable quarries for concrete work. The Contractor shall use deformed steel reinforcement bars rolled from Pakistan Steel Mills billet or equivalent from re-rolling mills proposed by the Contractor and approved by the Engineer.

SP-14 INSPECTIONS AND TESTS

14.1 Inspection

All equipment and materials furnished under the Contract and all work performed in connection therewith under the Contract shall be subject to inspection and testing by the Engineer or his authorized agent at all times and in all stages of completion. Inspection at the manufacturer's plant may be made to determine that the equipment and materials meet the requirements of these Specifications. The Contractor shall notify the Engineer not less than 05 days in advance of the date and place that the equipment or materials will be available for inspection and testing. No equipment or materials shall be transported until inspection at the manufacturer's plant has been made Acceptance of equipment and materials or the waiving of inspection and testing thereof shall in no way relieve the Contractor of the responsibility for furnishing equipment and materials meeting the requirements of the Contract Documents. Confirmatory tests shall also be carried out at the Site or at an approved laboratory, as instructed by the Engineer. These tests shall be witnessed by the Engineer and performed at no additional cost to the Employer.

Contractor will submit his submittal to Engineer/Employer in case of Non-scheduled items or Items to be imported for approval prior to booking to supplier/manufacturer before undertaking the item into execution. Submittal proposed from contractor must comprise minimum three proposed manufacturers to be submitted to Engineer for approval purposes. It will be discretion of Engineer to recommend for approval one of them or as contractor for other than those manufacturer proposed in shape of submittal by contractor for someone else on equivalency basis. Pre-shipment inspection of the selected manufacturer's equipment will be carried out by the engineer/employer. Contractor must submit Bill of lading of such imported equipment prior to transport to site. Confirmatory tests shall also be carried out at the Site or at an approved laboratory, as instructed by the Engineer. These tests shall be witnessed by the Engineer and performed at no additional cost to the Employer.

14.2 Testing

The Engineer will make such tests on concrete, aggregates, fill materials, reinforcing steel and other materials as he may from time to time select, and the Contractor shall provide at his own cost such samples or assistance in sampling materials at the Site as

the Engineer may reasonably require. Testing by the Engineer shall in no way relieve the Contractor of his responsibility to test materials to ensure that they meet all the specified requirements and to control their quality. The Engineer may accept that items manufactured away from the Site meeting the specified requirements without further testing subject to the Contractor furnishing satisfactory proof of compliance with these Specifications in one or more of the ways described below.

The Contractor shall provide free of charge such material testing equipment, labour, materials, electricity, fuel, water, stores, apparatus and feedstock as may be reasonably required by the Employer to carry out the Tests as per the required frequency. Further contractor shall make all kind of arrangements for third party inspection/ Witnessing of Factory Acceptance Tests of major components of manufacturing factory whether located in Pakistan/abroad for four officials (02 from Employer and 02 from Engineer-In-charge side). All expanses regarding air tickets, visa in case of abroad, boarding/lodging, food, transport, hoteling etc. will be borne by the Contractor and no extra/additional payment will be made to contractor. Contractor shall quote his prices keeping in view of such expanses.

Manufacturer's Certificate of Compliance

In the case of standard labelled stock products of standard manufacture which have a record of satisfactory performance in similar work over a period of not less than five years, the Engineer may accept a notarised statement from the approved manufacturer certifying that the product conforms to the applicable specifications.

Mill Certificates

Regarding materials for which such practice is usual, the Engineer may accept the approved manufacturer's certified mill and laboratory certificates.

Testing Laboratory Certificates

The Engineer may accept a certificate from a renowned commercial testing laboratory, satisfactory to him, certifying that the product has been tested within a period acceptable to the Engineer and that it conforms to the requirements of these Specifications.

Service Record

If a demonstrable satisfactory service record for a period not less than five (05) years is available for a material, certain specified tests may be waived off by the Engineer.

14.3 Cost

The cost of any laboratory, field and shop tests required from any agency of compliance with under Specifications shall be borne by the Contractor.

SP-15 CONSTRUCTION PROGRAMME

15.1 General

The Contractor shall submit his programme for execution of the Works in accordance with Clause 14.1 [*Programme to be Submitted*], under the Conditions of Contract, to the Engineer for approval. The programme may contain adjustments if any, to the CPM (Critical Path Method) based Bar Chart submitted with the Bid. The completion date, milestones, and key targets indicated in Appendix-E to Bid, or dates earlier than the said milestone and key target dates, shall be shown on the construction programme to be submitted by the Contractor. Other dates including rates of progress for various parts of the Works in the construction programme may be changed by the Contractor and submitted for approval. The operations under each section of the programme submitted by the Contractor shall be broken down in greater detail than those shown on the Schedule submitted with the Bid.

The programme shall also show the timing of provision of any facilities the Contractor is required to supply for use by the Employer and the Engineer, in such manner that these shall be available as stipulated in the Contract and instructed by the Engineer.

15.2 Submittals

(a) The initial submittal of network analysis shall include a description of the major items of construction equipment planned to be used. The description of the equipment shall include the type, number of units, their capacity, etc. The forecast shall include the estimated dates on which each major item of construction equipment will be on the job. The Bar Chart and the Network Analysis shall be submitted within 14 days after receipt of the Letter of Acceptance.

The submittal shall consist of:

- (i) 4 copies of the Bar Chart.
- (ii) A narrative summary of the construction plan.
- (iii) A backup of the schedule files on re-writable CD disks or pen drive.

The Engineer will review the construction schedule and the approved initial submittal will be the Project Baseline Schedule by which the performance of the Contractor will be measured

- (b) Monthly submittals shall show completed progress of each activity during the past month, with forecast for the coming month. Hammock networks shall be incorporated on the Base Line Schedule of activities. Each monthly submittal shall contain:
 - (i) 4 copies of the Bar Chart.
 - (ii) 4 copies of a time scaled logic diagram for the next three months.
 - (iii) A narrative summary of the schedule related issues and status. The narrative shall include discussion of pending schedule changes submitted to the Engineer in the past month.
 - (iv) A backup of the schedule files on rewritable CDs or pen drive.

(c) The successful bidder shall submit the supervision plan in respect of Environmental Health Safety SOPs and Environment and Social Management & Monitoring Plan on monthly basis along-with other deliverables manifesting the progress activities as per schedule.

15.3 Progress Schedule

Both the bar charts and network analysis schedules shall be continuously monitored and kept current and updated by the Contractor throughout the work, and at least on every milestone date and submitted for approval. The Contractor's schedules shall be available for examination during normal business hours. All revisions shall be accompanied by a detailed explanation of the reasons for the changes and describing any new or modified construction procedure proposed and, if applicable, any steps being taken to improve progress to achieve completion within the Time for Completion.

SP-16 LAY OUT OF WORKS

16.1 Reference Points, Lines and Levels

The Engineer will lay out a reference line or lines in the field with accompanying points and/or bench-marks to enable the Contractor to establish there from survey control for construction.

16.2 Verification

The Engineer may make checks as the work progresses to verify lines, levels and grades established by the Contractor and to determine the conformance of the work as it progresses with the requirements of the Specifications and the Drawings. Shall not relieve the Contractor of his responsibility to perform all work in accordance with the Drawings and Specifications and the lines, levels and grades given therein.

16.3 Primary Control Points

Based upon the Engineer's basic control, the Contractor shall provide his own primary control points, as needed for the Works, and shall preserve and maintain them until otherwise authorized.

The Contractor shall be responsible for maintaining all survey markers/monuments, and property corners. If any markers/monuments are disturbed or destroyed by the Contractor, the Contractor shall arrange, at his own cost, to retrace and replace them to the entire satisfaction of the Engineer. If a monument cannot be replaced in its original position, the Contractor shall install a witness corner. The Contractor shall complete and file monument reference cards on all monuments as per instructions of the Engineer.

16.4 Construction Surveyors

The Contractor shall provide experienced construction surveyor/s with adequate experience in the construction surveys similar in nature as required by this Contract.

16.5 Basic Control Monument

Based upon the Engineer's established basic control monuments, the Contractor shall establish all lines and grades necessary to control the Works, and shall be responsible for all measurements that may be required for execution of the Works to the tolerance prescribed in Sub-Clause 16.7 below.

16.6 Surveys and Computations

The Contractor shall perform such surveys and computations as are necessary to determine quantities of work performed or placed during each progress payment period, and shall also perform all surveys required by the Engineer to determine final quantities of work in place. The Engineer will determine final quantities based on original ground levels determined by the Contractor and agreed by the Engineer.

The Contractor shall notify the Engineer at least 24 hours before performing a quantity survey and, unless specifically waived, quantity surveys shall be performed in the presence of and agreed by an authorized representative of the Engineer.

16.7 Tolerances

Degree of accuracy for the survey works shall satisfy the following specified tolerances:

- (a) Alignment of tangents and curves shall be within 0.1 foot for 1,000 feet i.e., an accuracy of 1:10,000.
- (b) Structure points shall be set within 0.01 foot accuracy from point to point, except where tighter tolerances are required.
- (c) Cross-section points shall be located within 0.10 foot, horizontally and 0.01 foot vertically.
- (d) Permissible closing error for a levelling line meant for establishing Temporary Bench Mark (TBMs) shall not exceed $0.045 \text{ x} \sqrt{\text{M}}$ foot, where M is in miles. The permissible closing error shall be duly adjusted.

16.8 Material and Equipment

The Contractor shall provide all materials, equipment and labour required for work.

SP-17 STANDARDS AND SPECIFICATIONS

Except as otherwise provided by these Specifications or the Drawings all materials, equipment and fabrication and testing thereof shall conform to the latest applicable Standards and Specifications contained in the following list or to equivalent applicable Standards and Specifications. Copies of these Standards and Specifications may be purchased from the indicated agency, which publishes them:

-	British Standard	BS
-	American Concrete Institute	ACI
_	American Society for Testing and Materials	ASTM

Where relevant Standards and Codes of Practice now quote metric units only, these are to be interpreted as required to the nearest equivalent imperial (foot/pound) unit for the purposes of this Contract.

All materials and workmanship not fully specified herein or covered by an approved Standard shall be of such a kind as is used in first class work and suitable to the climate in the Project Area.

If the Contractor, at any time and for any reason, wishes to deviate from the above standards or desires to use material or equipment not covered by the above standards, he shall state the exact nature of the changes, the reason for making the change and shall submit complete specifications of the materials and equipment to the Engineer for approval.

SP-18 ACCESS TO SITE

18.1 Right of Way for Access and Haul Routes

The Contractor shall be responsible for providing and maintaining access routes for the Works. The right of way for access to the Works from existing roads will be provided by the Employer. The Contractor shall make his own investigations of the condition of available public or private roads and of clearances, restrictions, bridge load limits and other limitations that affect or may affect transportation and ingress and egress at the job sites. The repair and reinstatement of roadways, drain and canal banks if damaged during operation shall be the responsibility of the Contractor without any additional cost to the Employer. The Employer controlled right of way shall be the Right of Way (ROW) available to the Contractor for carrying out the Works.

18.2 Restoration of Site

On completion of the Works, the Site shall be restored by the Contractor to its original conditions as far as practicable and left in tidy condition.

SP-19 FACILITIES TO BE PROVIDED BY THE CONTRACTOR AT SITE

19.1 Contractor's Camps

The Contractor is required to arrange the facility of housing in nearby area of the project for the labour through portable containers or house on rent in compliance with PMDFC SOPs for labour / construction worker including women worker. In case of failure and on lodging of complaint by the labour to the Engineer will result in fining of Rs. 5000 / day. Preference shall be given to utilization of local labour / construction workers.

19.2 Temporary Sanitary Facilities

- (a) The Contractor shall provide adequate temporary sanitary conveniences for the use of his employees and persons engaged on the work, including the Engineer and his employees. He shall ensure that his employees and labour make proper use of the latrines and do not foul the Site.
- (b) In addition to toilet facilities, suitable and adequate washing facilities shall be provided.

- (c) Sanitary facilities shall be located as directed or approved by the Engineer and shall be maintained in a clean and sanitary condition during the entire course of the work.
- (d) The septic tank and/or temporary holding tank(s) shall be kept pumped out at such intervals that the tank(s) will not overflow and contaminate the ground, flowing streams or surface drainage.
- (e) On completion of the Works, sanitary facilities shall be properly disinfected and all evidence of same including temporary buried tanks and foundations removed from the Site.

19.3 Medical Facilities

The Contractor shall arrange provision of adequate medical facilities for his employees.

Adequately equipped dispensary/ies with qualified and experienced staff shall be provided by the Contractor at his camps. In addition suitably equipped first aid stations manned by trained staff shall be provided at strategic locations, to administer first aid treatment at all times free of charge to all persons on the Site, including personnel of the Engineer and the Employer. The nature, number and location of facilities furnished and the Contractor's staff for administering first-aid treatment shall meet the requirements of the Health Services of the Government of Pakistan.

19.4 Operation and Maintenance of the Camps and Facilities

For the purpose of operation and maintenance of the camps and facilities provided as above, the Contractor shall comply with all applicable provisions of the Pakistani Labour Laws and specifically to the following requirements:

- (a) Camp areas shall be kept dry and free from dense vegetation. Measures shall be taken to control dust within the camp area, by water or oil spraying or other approved means.
- (b) Any ponded water around a camp shall be sprayed weekly with oil or other approved anti-malaria liquid.
- (c) The Contractor shall provide garbage collection and disposal services for his construction camps and the Engineer's office. Disposal shall be by burial (landfill) and/or incineration. Disposal area shall be located a sufficient distance away and downwind from camp facilities and offices so as not to create objectionable odours or health hazards. Equipment, methods of collection and disposal and location of disposal areas shall be submitted to the Engineer for approval.
- (d) The interior walls and ceilings of buildings shall be lime washed or painted. The whole of the open spaces around the buildings shall be swept each day and all rubbish removed. The living areas shall be suitable for the climatic conditions. Roof height shall not be less than 10.5 ft. and adequate number of ceiling fans shall be provided.
- (e) Adequate sanitary conveniences, including washing and bathing places shall be

maintained at each of the camps. All sanitary fixtures, receptacles, toilet rooms, lavatories and wash rooms shall be cleaned and disinfected at least once every day.

19.5 Drainage

The ground around the buildings shall be graded to slope away from building perimeters so as to provide adequate drainage and shall be thoroughly compacted. Excavated material shall be disposed of by filling in low areas or as otherwise directed by the Engineer.

19.6 Water Supply

The Contractor shall arrange for the water supply for his staff residences, labour camps, site offices, work yards, workshops, and various camp facilities. Construction of pumps, storage tanks, overhead tank, distribution system, and their proper running and maintenance shall be his responsibility. Water shall be supplied to the camps 24 hours a day. Adequate supply of water, cooled in summer, shall be ensured in camps and sites of work. Water samples shall be tested periodically to ensure that it is fit for human consumption.

19.7 Electricity Supply

The Contractor shall provide electricity required for the Works including labour camps, staff residences, offices including the Engineer's Site office and various camp facilities. The Contractor shall also provide sufficient standby electricity supply arrangements for his needs.

19.8 Utility Lines

The Contractor Shall conduct his operations, make necessary arrangements, take suitable precautions and perform all required work incidental to the protection of and avoidance of interference with power, telephone, water and other utilities within the areas of his operations in connection with the Contract. No separate payment shall be made for such incidental work. In case the utility lines are required to be relocated the Contractor shall arrange their relocation with the concerned departments and organizations. The Contractor shall obtain cost estimates for relocation of utilities for the Engineer/Employer's approval before execution of the Work .The Contractor shall be reimbursed the actual approved cost carried in by him.

19.9 Handing Over/Removal after Completion

Upon completion of the Works, the Contractor shall remove all the Contractor's camps, labour and staff accommodation, site office, other installations and buildings constructed and all facilities provided by the Contractor under this Clause, and the Site cleared and reinstated to the satisfaction of the Engineer.

19.10 Measurement and Payment

Except as provided in SP-19.8 no separate payment will be made for the work included under the Clause SP-19; the cost thereof is deemed to be included in the rates and prices of other items entered in the Bill of Quantities. The contractor is bound to comply with

all the instructions stated in SP-19 and in case of otherwise or if any complaint lodged by the labour to the Engineer / Client, the contractor will be penalized for amounting to Rs. 5000 / day.

SP-20 PROVISION OF FACILITIES FOR THE ENGINEER (FOR CONSULTANT STAFF) /EMPLOYER

20.1 Facilities for Engineer/Employer's Staff:

(a) Site offices:

One furnished portacabin with all the requisite accessories for the Engineer / Employer

20.2 Ownership of Site facilities

All facilities/utilities provided by the contractor as stated above in Clause-20.1 will be property of Engineer In charge after successful handing taking over of project and expiration of defect liability period considering that the said amount is included in all items listed in Bill of Quantities.

20.3 Measurement and Payment

No extra/separate payment will be made to Contractor considering that Contractor has quoted his bid keeping in view of such expanses.

SP-21 PROGRESS PHOTOGRAPHS

The Contractor shall furnish to the Engineer every month, for the site of Fifteen colour photographs on CD or pen drive and 4 colour prints of each photograph taken with a digital camera to clearly show the progress of construction. Each photograph shall be submitted in four prints of size 20 cm x 25 cm. Each print shall be marked on the back side with the caption of the activity, date and serial number. There shall be no writing, lettering or marking on the face of the photograph. Progress photographs shall be submitted from the month, following the month in which Notice to Commence is issued and continued till completion of the Works.

No separate payment will be made for the work specified herein and the cost thereof shall be deemed to be included in the other items of the Bill of Quantities.

SP-22 SITE FACILITIES TO BE PROVIDED BY THE EMPLOYER

22.1 General

Without prejudice to the generality of the various clauses of the Contract and except for the facilities referred to hereinafter, particular attention is drawn to the obligations of the Contractor to make his own arrangements for providing, maintenance and furnishing of labour camps, staff residences, offices, workshops, stores watching and guarding thereof.

The Contractor shall submit his written demand of his requirements of land for his Site Facilities as herein specified, at least 28 days in advance.

22.2 Area for Storage and Workshop

The contractor will arrange an open area of adequate size for the facilities listed in Appendix-H to Tender and approved by the Engineer, for use as storage, and workshop areas. The Contractor shall provide and maintain at his own cost, all fencing, any necessary clearing, land levelling, foundations and above ground structures for sheds, covered areas, workshops, electricity, telephone, water distribution and waste water disposal etc, as he may need to meet his requirements.

SP-23 SAFETY MEASURES AT CONSTRUCTION SITE

- a) Pursuant to the provisions of Sub-Clause, for Safety Measures the Contractor shall observe high standards of safety for men and machines at all times and with regard to safety.
- b) The Contractor shall take all possible measures to protect his personnel from harm. In case of any casualty or injury to any person due to the Contractor's operations, the Contractor shall ensure quality medical treatment and payment of due compensation.
- c) The Contractor shall not permit casual observers to come close to the sites where excavation and other hazardous operations are being performed.

SP-24 ENVIRONMENTAL PROTECTION

The Contractor shall exercise care to protect the natural landscape and shall conduct his construction operations so as to prevent any unnecessary destruction, scarring or defacing of the natural surroundings in the vicinity of the Works. Except where clearing is required for the Permanent Works, approved construction roads and the Temporary Works, and for excavation operations, all trees and native vegetation shall be preserved and shall be protected from damage which may be caused by the Contractor's construction operations and equipment. On completion of the Works, all work areas shall be smoothed and graded in a manner to conform to the natural appearance of the landscape. Where unnecessary destruction, scarring, damage or defacing may occur as a result of the Contractor's operations, it shall be repaired, replanted, or otherwise corrected as directed by the Engineer at no additional cost to the Employer.

Contractor will get appreciation/performance certificate from Engineer in charge and reward of Rs. 200,000/- upon compliance with E&S attributes at the last IPC on recommendation of DPO-ESM to engineering in charge

Contract may be terminated upon serving of 4th E&S Non-Compliance notice from the DPO-ESM to Engineer in charge.

Contractor will hire services of a Qualified Environmentalist/Manager EHS before the commencement of construction activities under the Sub-Project. (CV to be shared for approval to DPO-ESM)

The Environmental Health Safety SOPs for Labour / Construction Workers including Women workers and Environment and Social Management & Monitoring Plan are attached with this bidding document as **Annexure-1** and **Annexure-II**

UPGRADATION OF SEWERAGE SYSTEM AND CONSTRUCTION OF WASTE WATER TREATMENT PLANT (WWTP) GOJRA CITY

BILL OF QUANTITY OF PROVIDING AND LAYING TRUNK AND BRANCH SEWER GOJRA

PACKAGE-1

GENERAL ABSTRACT OF COST

Ser #	Description	Amount (RS.)
1	Providing and Laying Trunk Sewer	
2	Restoration of Roads (Trunk Sewer Route)	
3	Providing and Laying Branch Sewer	
4	Restoration of Roads (Branch Sewer Route)	
	Sub Total Amount(Rs.)	
5	Environmental & Social Management & Monitoring Plan	
	Grand Total Amount (Rs.)	

BILL OF QUANTITY FOR THE SCHEME PROVIDING AND LAYING TRUNK SEWER IN GOJRA CITY

S#	Ref. CSR P/Item	Description	Unit	Quantity	Rate	Amount
1	C-4/46	Dismantling and removing road pavement etc, including screening and stacking of by products upto chain (30m) lead.	100 Cft.	78,396.75		
2	N.S	Dismentling of tuff tile	100 Cft.	12,375.00		
3	C-4/46	Dismentling of sub base	100 Cft.	6,187.50		
4	C-3/42	Earth work excavation in open cutting for sewers and manholes as shown in drawings including shuttering and timbering, dressing to correct sections and dimensions according to templates and levels, and removing surface water, in all types of soil except shingle gravel and rock. (i) 0 ft to 7 ft. Depth (ii) 7 ft to 15 ft. Depth (iii) Above 15 ft. Depth	1000 Cft. 1000 Cft. 1000 Cft.	1,551,471.36 1,026,703.76 61,527.79		
5	C-3/43	Earth work excavation in open cutting for sewers and manholes as shown in drawings including shuttering and timbering, dressing to correct sections and dimensions according to templates and levels, and removing surface water, in all types of soil except shingle gravel and rock. i) 0 ft. to 4.0 ft. (0 to 1.20 m) depth below SSWL. ii) 4.01 ft. to 8.0 ft. (1.22 to 2.4 m) depth below SSWL	1000 Cft. 1000 Cft.	66,636.00 49,977.00		
6	C-21/6	Lowering of sub-soil water table, by installation of tubewells along sewer line and pumping out water, for excavation in open cutting below sub-soil water level, concreting, curing, laying and jointing pipes, filling haunches, etc. till the completion of sewer line, including disposal of pumped out water:-				
_	0.0/07	6) 0-6 ft. (0 to 1830 mm) below SSWL	1 Rft	2,468.00		
7	C-3/27	Extra for slush or Daldal	1000 Cft	22,687.50		
8	C-26-35	Bailing out water:- b) by pump	1000 Cft	3,744,000.00		
9	C-21/23	Providing and laying crushed stone aggregate of 1/4" to 1" guage under and around the sewer pipe, including leveling, manual compaction, complete in all respects	100 Cft	254,557.03		
10	C-21/3	Providing and Laying R.C.C. pipe sewer moulded with cement concrete 1:1.5:3 conforming to ASTM specification C-76-79, Class-II, Wall-B, including carriage of pipe from factory to site of wor, lowering in trenches to correct alignment and grade, jointing with rubber ring, cutting pipes where necessary, testing etc. complete. 21" dia	Rft	1,010.00		
		24" dia 27" dia	Rft Rft	4,387.00 2,408.00		
11	C-21/4	Providing and Laying R.C.C. pipe sewer moulded with cement concrete 1:1.5:3 conforming to ASTM specification C 76-79, Class-III, Wall-B, including carriage of pipe from factory to site of wor, lowering in trenches to correct alignment and grade, jointing with rubber ring, cutting pipes where necessary, testing etc. complete.				
		33" dia 36" dia 42" dia	Rft Rft Rft	2,105.00 3,129.00 6,930.00		
12	C-21/4	Providing of R.C.C. pipe sewer moulded with cement concrete 1:1.5:3 conforming to ASTM specification C-76-79, Class-III, Wall-B, including carriage of pipe from factory to site of work, lowering in trenches to correct alignment and grade, jointing with rubber ring, cutting pipes where necessary, testing etc. complete.				
		36" dia 42" dia	Rft Rft	990.00 150.00		
13		Laying of pipe by jacking method 36" dia 42" dia	Rft Rft	990.00 150.00		
14	C-3/17	Transportation of earth all types when the total distance including the lead covered in the item of work, is more than 1000 ft. (300 m) lead upto 3 km	1000 Cft.	373,900.50		
15	C-3/13	(i) Rehandling of earth work. (a) Lead upto a single throw of Kassi, phaorah or shovel.	1000 Cft.	1,979,773.20		
16	C-3/24a,c	(ii) Compaction of earth work. (a) Mixing, moistening earth to optimum moisture content in layers for compaction etc. complete.	1000 Cft.	1,979,773.20		
17	N.S	Providing and applying epoxy lining in the main sewer lines (24" and above dia) complete in all respects	1 Sft	168,398.00		

C-21/9 Extra for making and finishing benching floor work in manhole chamber with 18° thick current finish. C-615 finishing, and curring complete (including screening and support of the path of the	S#	Ref. CSR P/Item	Description	Unit	Quantity	Rate	Amount
Cement concrete plain including, placing, compacting, limiting, and curring complete (including screening and limiting), and curring complete (including screening and limiting), and curring complete (including screening and limiting), P.C. 12-4. 10 C-770 Pacca brick work other than building upto 10 ft height in 1.3 coment sand mortor. 11 C-770 Extra for pacca brick work in steining of wells or any other circular massnary. 12 C-770 Extra for pacca brick work in steining of wells or any other circular massnary. 13 C-2118 Cement plaster 1/2* thick (1.3) cement sand mortor upto 20° high plants of 100 Cit. 14 C-802 Dry nammed bricks or stone balliast 1.5* to 2° gauge. 15 N.S Brick Manufactured with 100% Recycled Plastic Composite Material, 650 mm (22° dai) and RPC markhole frame cyclening size 600 mm (22° dai) and RPC markh	18	C-21/9		100 Sft.	2,553.95		
20 C-7/10 21 C-7/10 22 C-11/8 23 C-21/13 24 C-6/2 25 C-21/13 26 C-21/13 27 C-21/13 28 C-21/13 29 C-21/13 20 C-21/13 20 C-21/13 21 C-21/13 21 C-21/13 21 C-21/13 21 C-21/13 21 C-21/13 22 C-21/13 23 C-21/13 24 C-6/2 25 Diyr rammed bricks or stone ballast 1.5' to 2' gauge. 26 C-18/2 27 C-21/3 28 C-8/2 28 C-8/2 29 C-8/2 20 C-18/2 20 C-18/2 20 C-18/2 20 C-18/2 21 C-18/2 21 C-18/2 22 C-18/2 23 C-21/3 24 C-6/2 25 Diyr rammed bricks or stone ballast 1.5' to 2' gauge. 25 N.S Brown and the state of the state of the state opening size 600 mm (24' da) and RPC marbole frame having dia meter 790 mm (31.1') with average breaking load capacity of 10 Ton and weight including frame of 50 kg (Minimum). 26 C-11/2 26 C-11/2 27 C-21/2 27 C-21/2 28 C-8/2 28 C-18/2-3-11 29 C-19/3 28 C-18/3-4-11 30 C-10/4 31 C-19/4 30 C-10/4 31 C-19/4 30 C-10/4 31 C-10/4 31 C-10/4 31 C-10/4 31 C-10/4 32 Reinforced cement concrete (including prestressed occurred by the soft state of through dismertal ling of ordinary or polity ging strength of the complete in all respect. (Labour Rate orly) 18/3-19/3-19/3-19/3-19/3-19/3-19/3-19/3-19	19	C-6/5	Cement concrete plain including, placing, compacting, finishing, and curing complete (including screening and washing of stone aggregate. (I) P.C.C. 1:3:6				
circular masonany. Cement plaster 1/2" thick (1:3) cement sand mortor upto 20' height. Providing and fixing 11/x"x1/x"x3/16' (31x3/1x5 mm) angle in photography of the providing and fixing 11/x"x1/x"x3/16' (31x3/1x5 mm) angle in photography of the providing and fixing 11/x"x1/x"x3/16' (31x3/1x5 mm) angle in photography of the providing and fixing 11/x"x1/x"x3/16' (31x3/1x5 mm) angle in photography of the providing and strength of the providing the same in work to correct lines and levels. 24	20	C-7/7		100 Cft.	35,943.68		
22 C-21/13 height. 23 C-21/13 step, in manhole chambers, including carriage and setting the same in work to correct lines and levels. 24 C-62 Dry rammed bricks or stone ballast 1.5* to 2° gauge. 25 N.S. 26 RPC Manhole Cover Manufactured with 100% Recycled Plastic Composite Material, 650 mm (26° dia) with clear opening size 600 mm (24° dia) and RPC manhole frame having dia meter 790 mm (31.1) with average breaking load capacity of 10 Ton and weight including frame of 50 kg (Minimum). 27 C-21/21 Carriage of 100 Cft. (2.83 cum) of all materials like stone aggregate, spawk, kankar lime (unslaked), surhih, etc. or 150 cl. (14.25 cum) of simher, by truck or by any other means owned by the contraction 33 km lead (Ch.No. 1, Item.No. 1) 28 Providing and Installing C.I ventillating shaft painted with bituminous paint with foundation bots as per PHED standard to fix (11mt level 20° concrete foundation block)-6" (150 mm) lid shaft iv) 36 ft. (11mt level 50 ng 8" (150 mm) lid shaft, 24 ft. (7.30 metre) long 9" (150 mm) lid shaft, 24 ft. (7.30 metre) long 9" (150 mm) lid shaft, 24 ft. (7.30 metre) long 9" (150 mm) lid shaft, 24 ft. (7.30 metre) long 100 kg. 3,000.00 28 Restoration of furf tile Re-Laying of Sub Base Course by using old material (received through dismensilling of road crust, compacted up to 100% modified AASHO dry density complete in all respect. (Labour Rate only)18/3a-II 29 C-10/3 Supplying and filling sand under floor; or plugging in wells. C-10/41 Supplying and filling sand under floor; or plugging in wells. C-10/41 Supplying and filling sand under floor; or plugging in wells. C-10/42 Re-laying Tuff pavers, having 7000 PSI, crushing strength of approved manufacturer, over 2" to 3" sand catabina ligging to require slope complete in all respect. (60% Grey / 50% Coloured a) 50-mm thick P. P. It reinforced cement concrete in slab of Raffvirip foundation: base slab of column and retaining walls; etc. and other structural members other than those mentioned in 5(a) (i) above not requiring from work, complete	21	C-7/10		100 Cft.	35,943.68		
22 C-2/1/3 step, in manhole chambers, including carriage and setting the same in work to correct lines and levels. 24 C-6/2 Dry rammed bricks or stone ballast 1.5" to 2" gauge. 25 RPC Manhole Cover Manufactured with 100% Recycled Plastic Composite Material, 650 mm (26" dia) with clear opening size 600 mm (24" dia) and RPC manhole frame having dia meter 790 mm (31.1") with average breaking load capacity of 10 Ton and weight including frame of 50 kg (Minimum). 26 C-1/1 Carriage of 100 Cft. (2.83 c.u.m) of all materials like stone aggregate, spawl, kankar line (unstaked), sutthi, etc. or 150 Cft. (4.25 c.u.m) of timber, by truck or by any other means owned by the contractor. 93 km lead (Ch.No. 1, Item.No. 1) 27 C-21/21 Providing and Installing C.I ventiliating shaft painted with biturnious paint with foundation botts as per PHED standard drawing STD/PD No. 4 of 1977, complete in all respect (except concrete foundation block)-6" (150 mm) lid shaft iv) 36 ft. (11 metre) long 6" (150 mm) lid shaft. 24 ft. (7.30 metre) long 9" (225 mm) lid shaft. 24 ft. (7.30 metre) long 9" (225 mm) lid shaft. 24 ft. (7.30 metre) long 100 Kg. 3,000.00 28 C-18/3a-II contraction of fulf tile 10 to 100% modified AASHO dry density complete in all respect (Labour Rate only)18/3a-II 100 Cft. 5,568.75 to 100 Cft. 2,103.75 29 C-10/3 Supplying and filling sand under floor; or plugging in wells. 100 Cft. 2,103.75 30 C-10/41 Re-laying Tuff pavers, having 7000 PSI, crushing strength of approved manufacturer, over 2" to 3" sand cushion iv grouting with sand in joints lot finishing to require slope complete in all respect. (50% Grey / 50% Coloured a) 50-mm thick 31 C6-1-6 (3) Reinforced cement concrete (including prestressed concrete), using coarse sand and aggregate, in required shape and design, including forms, moulds, shutering, lifting, compacting, uning, rendering and finishing exposed surface, complete. (3) Reinforced cement concrete in all respects: Application of mild steel reinforcement for cement concrete in all respects: Applica	22	C-11/8	. , ,	100 Sft.	79,698.48		
RPC Manhole Cover Manufactured with 100% Recycled Plastic Composite Material, 650 mm (26°dia) with clear opening size 600 mm (24°dia) and RPC manhole frame having dia meter 790 mm (31.1°) with average breaking load capacity of 10 Ton and weight including frame of 50 kg (Minimum). Carriage of 100 Clt. (2.83 cu.m) of all materials like stone aggregate, spawl, kankar lime (unslaked), surkhi, etc. or 150 Clt. (4.25 cu.m) of timber, by truck or by any other means owned by the contractor. 93 km lead (Ch.No. 1, Item.No. 1) 100 Cft. (4.25 cu.m) of timber, by truck or by any other means owned by the contractor. 93 km lead (Ch.No. 1, Item.No. 1) 100 Cft. (4.25 cu.m) of thioter, by truck or by any other means owned drawing STD/PD No. 4 of 1977, complete in all respect (except concrete foundation blotk):-6' (150 mm) i/d shaft, vi) aft. (11 metre) long 8' (150 mm) i/d shaft, 24 ft. (7.30 metre) long 9' (225 mm) i/d shaft, 24 ft. (7.30 metre) long 100 kg. 1,500.00 gr (225 mm) i/d shaft, 24 ft. (7.30 metre) long 100 kg. 3,000.00 Restoration of tuff tile Re-Laying of Sub Base Course by using old material (received through dismentaling of road crust, compacted up 10 Cft. 1,5568.75 (1.250 mm) i/d shaft, 24 ft. (7.30 metre) long 100 kg. 3,000.00 Restoration of tuff tile Re-Laying of Sub Base Course by using old material (received through dismentaling of road crust, compacted up 100 Cft. 1,5568.75 (1.250 mm) i/d shaft, 24 ft. (7.30 metre) long 100 cm. 100 cft. 1,5568.75 (1.250 mm) i/d shaft, 24 ft. (7.30 metre) long 100 cm. 100 cft. 1,5568.75 (1.250 mm) i/d shaft, 24 ft. (7.30 metre) long 100 cm. 100 cft. 1,5568.75 (1.250 mm) i/d shaft long 100 cm. 100 cft. 1,5568.75 (1.250 mm) i/d shaft long 100 cm. 100 cft. 1,5568.75 (1.250 mm) i/d shaft long 100 cm. 100 cft. 1,5568.75 (1.250 mm) i/d shaft long 100 cm. 100 cft. 1,5568.75 (1.250 mm) i/d shaft long 100 cm. 100 cft. 1,5568.75 (1.250 mm) i/d shaft long 100 cm. 100 cft. 1,5568.75 (1.250 mm) i/d shaft long 100 cm. 100 cft. 1,5568.75 (1.250 mm) i/d shaft long 100 cm. 100 cft. 1,55	23	C-21/13	step, in manhole chambers, including carriage and setting the	- Each	926.00		
Plastic Composite Material, 550 mm (26'dia) with clear opening size 600 mm (24' dia) and RPC membole frame having dia meter 790 mm (31.1') with average breaking load capacity of 10 Ton and weight including frame of 50 kg (Minimum). Carriage of 100 Cft. (2.83 cu.m) of all materials like stone aggregate, spawl, kankar lime (unsiaked), surkhi, etc. or 150 Cft. (4.25 cu.m) of timber, by truck or by any other means owned by the contractor. 93 km lead (Ch.No. 1, lenn.No. 1) C-21/21 Providing and Installing C.I ventilating shaft painted with bituminous paint with foundation bolts as per PHED standard drawing STD/PD No. 4 of 1977, complete in all respect (except concrete foundation block)-6' (150 mm) i/d shaft, 24 ft. (7.30 metre) long 6' (150 mm) i/d shaft, 24 ft. (7.30 metre) long 6' (150 mm) i/d shaft, 24 ft. (7.30 metre) long 7 (225 mm) i/d shaft, 24 ft. (7.30 metre) long 100 Kg. 1.500.00 Restoration of tuff tile Re-Laying of Sub Base Course by using old material (received through dismentalling of road crust, compacted up to 100% modified A/SHO dry density complete in all respect. (Labour Rate only)18/3a-II 28 C-18/3a-II 29 C-10/3 Supplying and filling sand under floor; or plugging in wells. 100 Cft. 2,103.75 Re-laying Tuff pavers, having 7000 PSI, crushing strength of approved manufacturer, over 2' to 3' sand cushion i/c grouting with sand in joints i/c finishing to require slope. complete in all respect. (Labour Rate only)18/3a-II C6-10/41 Re-laying Tuff pavers, having 7000 PSI, crushing strength of approved manufacturer, over 2' to 3' sand cushion i/c grouting with sand in joints i/c finishing to require slope. complete in all respect. (Labour Rate only)18/3a-II	24	C-6/2	Dry rammed bricks or stone ballast 1.5" to 2" gauge.	100 Cft.	8,804.13		
aggregate, spawl, kankar lime (unslaked), surkhi, etc. or 150 Cft. (4.25 c.um) of timber, by truck or by any other means owned by the contractor. 93 km lead (Ch.No. 1, ltem.No. 1) Providing and Installing C.I ventilating shaft painted with bituminous paint with foundation bolts as per PHED standard drawing STD/PD No. 4 of 1977, complete in all respect (except concrete foundation block): 6" (150 mm) l/d shaft, 24 ft. (7.30 metre) long 6" (150 mm) l/d shaft, 24 ft. (7.30 metre) long 9" (225 mm) l/d shaft, 24 ft. (7.30 metre) long 9" (225 mm) l/d shaft, 24 ft. (7.30 metre) long 100 Kg. 3,000.00 Restoration of tuff tile Re-Laying of Sub Base Course by using old material (received through dismentalling of road crust, compacted up to 100% modified AASHO dry density complete in all respect. (Labour Rate only)18/2a-II Supplying and filling sand under floor; or plugging in wells. 100 Cft. 2,103.75 Re-laying Tuff pavers, having 7000 PSI, crushing strength of approved manufacturer, over 2" to 3" sand cushion l/c grouting with sand in joints it of finishing to require stope complete in all respect. (50% Grey / 50% Coloured a) 50-mm thick P/L reinforced cement concrete (including prestressed concrete), using coarse sand and aggregate, in required shape and design, including forms, moulds, shuttering, lifting, compacting, curing,rendering and finishing exposed surface, complete. (a) Reinforced cement concrete in slab of Ratf/strip foundation; base slab of column and retaining walls; etc. and other structural members other than those mentioned in 5(a) (i) above not requiring from work, complete in all respects: Ratio 1:1.5:3 P.Cft 1768.41	25	N.S	Plastic Composite Material, 650 mm (26"dia) with clear opening size 600 mm (24" dia) and RPC manhole frame having dia meter 790 mm (31.1") with average breaking load capacity of 10 Ton and weight including frame of 50 kg	- P.set	122		
bituminous paint with foundation bolts as per PHED standard drawing STD/PD No. 4 of 1977, complete in all respect (except concrete foundation block):-6' (150 mm) i/d shaft iv) 36 ft. (11 metre) long 6' (150 mm) i/d shaft, 24 ft. (7.30 metre) long 100 Kg. 1,500.00 9' (225 mm) i/d shaft, 24 ft. (7.30 metre) long 100 Kg. 3,000.00 Restoration of tuff tile Re-Laying of Sub Base Course by using old material (received through dismentalling of road crust, compacted up to 100% modified AASHO dry density complete in all respect. (Labour Rate only)18/3a-II Supplying and filling sand under floor; or plugging in wells. 100 Cft. 2,103.75 29 C-10/3 Supplying and filling sand under floor; or plugging in wells. 100 Cft. 2,103.75 Re-laying Tuff pavers, having 7000 PSI, crushing strength of approved manufacturer, over 2' to 3' sand cushion i/c grouting with sand in joints i/c finishing to require slope . complete in all respect. (50% Grey / 50% Coloured a) 50-mm thick PSt 12,375.00 131 C6-1-6 P/L reinforced cement concrete (including prestressed concrete), using coarse sand and aggregate, in required shape and design, including forms, moulds, shuttering, lifting, compacting, curing,rendering and finishing exposed surface, complete. (a) Reinforced cement concrete in slab of Raft/strip foundation; base slab of column and retaining walls; etc. and other structural members other than those mentioned in 5(a) (i) above not requiring from work, complete in all respects:-Ratio 1:1.5:3 P.Cft 1768.41 32 C-6/12 Fabrication of mild steel reinforcement for cement concrete including cutting, bending, laying in position, making joints	26	C-1/1	aggregate, spawl, kankar lime (unslaked), surkhi, etc. or 150 Cft. (4.25 cu.m) of timber, by truck or by any other means owned by the contractor. 93 km lead	100 Cft	13254.67		
Restoration of tuff tile Re-Laying of Sub Base Course by using old material (received through dismentalling of road crust, compacted up to 100% modified AASHO dry density complete in all respect. (Labour Rate only)18/3a-II 29 C-10/3 Supplying and filling sand under floor; or plugging in wells. Re-laying Tuff pavers, having 7000 PSI, crushing strength of approved manufacturer, over 2" to 3" sand cushion i/c grouting with sand in joints i/c finishing to require slope . complete in all respect. (50% Grey / 50% Coloured a) 50-mm thick P/L reinforced cement concrete (including prestressed concrete), using coarse sand and aggregate, in required shape and design, including forms, moulds, shuttering, lifting, compacting, curing,rendering and finishing exposed surface, complete. (a) Reinforced cement concrete in slab of Ratf/strip foundation; base slab of column and retaining walls; etc. and other structural members other than those mentioned in 5(a) (i) above not requiring from work, complete in all respects:- Ratio 1:1.5:3 P.Cft 1768.41	27	C-21/21	bituminous paint with foundation bolts as per PHED standard drawing STD/PD No. 4 of 1977, complete in all respect (except concrete foundation block):-6" (150 mm) i/d shaft iv) 36 ft. (11 metre) long 6" (150 mm) i/d shaft, 24 ft. (7.30 metre) long				
Re-laying Tuff pavers, having 7000 PSI, crushing strength of approved manufacturer, over 2" to 3" sand cushion i/c grouting with sand in joints i/c finishing to require slope . complete in all respect. (50% Grey / 50% Coloured a) 50-mm thick P/L reinforced cement concrete (including prestressed concrete), using coarse sand and aggregate, in required shape and design, including forms, moulds, shuttering, lifting, compacting, curing,rendering and finishing exposed surface, complete. (a) Reinforced cement concrete in slab of Raft/strip foundation; base slab of column and retaining walls; etc. and other structural members other than those mentioned in 5(a) (i) above not requiring from work, complete in all respects:- Ratio 1:1.5:3 P.Cft 1768.41 32 C-6/12 Fabrication of mild steel reinforcement for cement concrete including cutting, bending, laying in position, making joints	28	C-18/3a-II	Restoration of tuff tile Re-Laying of Sub Base Course by using old material (received through dismentalling of road crust, compacted up to 100% modified AASHO dry density complete in all respect.	100 Cft.	5,568.75		
30 C-10/41 approved manufacturer, over 2" to 3" sand cushion i/c grouting with sand in joints i/c finishing to require slope. complete in all respect. (50% Grey / 50% Coloured a) 50-mm thick P Sft 12,375.00 31 C6-1-6 P/L reinforced cement concrete (including prestressed concrete), using coarse sand and aggregate, in required shape and design, including forms, moulds, shuttering, lifting, compacting, curing,rendering and finishing exposed surface, complete. (a) Reinforced cement concrete in slab of Raft/strip foundation; base slab of column and retaining walls; etc. and other structural members other than those mentioned in 5(a) (i) above not requiring from work, complete in all respects:- Ratio 1:1.5:3 P.Cft 1768.41 32 C-6/12 Fabrication of mild steel reinforcement for cement concrete including cutting, bending, laying in position, making joints	29	C-10/3	Supplying and filling sand under floor; or plugging in wells.	100 Cft.	2,103.75		
21 C6-1-6 P/L reinforced cement concrete (including prestressed concrete), using coarse sand and aggregate, in required shape and design, including forms, moulds, shuttering, lifting, compacting, curing,rendering and finishing exposed surface, complete. (a) Reinforced cement concrete in slab of Raft/strip foundation; base slab of column and retaining walls; etc. and other structural members other than those mentioned in 5(a) (i) above not requiring from work, complete in all respects: Ratio 1:1.5:3 P.Cft 1768.41 22 C-6/12 Fabrication of mild steel reinforcement for cement concrete including cutting, bending, laying in position, making joints	30	C-10/41	approved manufacturer, over 2" to 3" sand cushion i/c grouting with sand in joints i/c finishing to require slope.				
concrete), using coarse sand and aggregate, in required shape and design, including forms, moulds, shuttering, lifting, compacting, curing, rendering and finishing exposed surface, complete. (a) Reinforced cement concrete in slab of Raft/strip foundation; base slab of column and retaining walls; etc. and other structural members other than those mentioned in 5(a) (i) above not requiring from work, complete in all respects:- Ratio 1:1.5:3 P.Cft 1768.41 32 C-6/12 Fabrication of mild steel reinforcement for cement concrete including cutting, bending, laying in position, making joints			a) 50-mm thick	P Sft	12,375.00		
foundation; base slab of column and retaining walls; etc. and other structural members other than those mentioned in 5(a) (i) above not requiring from work, complete in all respects: Ratio 1:1.5:3 P.Cft 1768.41 32 C-6/12 Fabrication of mild steel reinforcement for cement concrete including cutting, bending, laying in position, making joints	31	C6-1-6	concrete), using coarse sand and aggregate, in required shape and design, including forms, moulds, shuttering, lifting, compacting, curing,rendering and finishing exposed surface,				
32 C-6/12 Fabrication of mild steel reinforcement for cement concrete including cutting, bending, laying in position, making joints			foundation; base slab of column and retaining walls; etc. and other structural members other than those mentioned in 5(a)				
including cutting, bending, laying in position, making joints				P.Cft	1768.41		
and fastenings, including cost of binding wire and labour charges for binding of steel reinforcement (also includes removal of rust).	32	C-6/12	including cutting, bending, laying in position, making joints and fastenings, including cost of binding wire and labour charges for binding of steel reinforcement (also includes				
(b) deformed bars. 60 grade 100 Kg 3536.82 Total:- (A) Rs.				100 Kg		D-	

BILL OF QUANTITY

FOR THE SCHEME

PROVIDING AND LAYING TRUNK SEWER IN GOJRA CITY

S #	Ref. CSR P/Item	Description	Unit	Quantity	Rate	Amount
1	K.A	Making connections of sewer line with manhole of existing sewer line complete in all respect. (i) 9" to 18" dia with 27" dia (i) 12" to 18" dia with 36" dia	- Job - Job	5.00 8.00		
2		Left in place shuttering used for laying of pipe by jacking method		1,242.00		
				Total:- (B)	Rs.	

Total:- (B) Total:- (A+B) Say:-

Rs. Rs.

Restoration of Roads (Trunk Sewer Route)

Sr. No:	Description of items	Quantity	Rate	Unit	Amount
1	Supplying and filling sand under floor; or plugging in wells (10/3)	373,900.50		P.% Cft	
2	Re-Laying of Sub Base Course by using old material (received through dismentalling of road crust, compacted up to 100% modified AASHO dry density complete in all respect. (Labour Rate only)18/3a-II	67920.75		P.% Cft	
3	Providing and laying of road edging of 3" wide and 9" deep brick on end complete in all respect. 18/5	12374.00		P.Rft	
4	Providing & Laying (Water Bound macadam) Base Course of crushed stone aggregate form Kirana quarry of required thickness of approved quality and grade, and supply and spreading of stone screening, including placing, mixing, spreading and compaction of base course material to required depth, camber and grade to achieve 100% maximum modifed AASHO dry density, including carriage of all materials to site of work, complete in all respect. 18/4a	45506.90		P.% Cft	
5	Providing and Laying bitumenious priming coat, using 10 Lbs kerosin oil and 10 lbs binder per 100 Sft or 0.5 Kg Kerosene and 0.5 Kg binder per square metre.C-18/6	67920.75		P.% Sft	
6	Providing ana laying Plant Premixed bitumenious carpt i/c compaction and finishing to required grade camber and density with 4.5 % bitumen 2" thick. (AWC)	67920.75		P.% Sft	

Total

BILL OF QUANTITY FOR THE SCHEME PROVIDING AND LAYING BRANCH SEWER IN GOJRA CITY

1				Quantity	Rate	Amount
	C-4/46	(i) Dismantling and removing road pavement etc,				
1		including screening and stacking of by products upto chain (30m) lead.	100 Cft.	21,987.50		
2	C-4/29	Dismantling brick or flagged flooring without concrete	100 Cit.	21,987.50		
		foundation	100 311.	21,967.50		
3	C-3/42	Earth work excavation in open cutting for sewers and manholes as shown in drawings including shuttering and timbering, dressing to correct sections and dimensions according to templates and levels, and removng surface water, in all types of soil except shingle gravel and rock. (i) 0 ft to 7 ft. Depth	1000 Cft.	313,208.22		
_	0.04/00	(ii) 7 ft to 15 ft. Depth	1000 Cft.	84,061.43		
4	C-21/23	Supplying, laying, granular material crushed stone) 1/2" to 1" gauge under pipe line and up to half diameter of pipe.	1000 Cft.	33,913.25		
5	C-21/3	Providing and Laying R.C.C. pipe sewer moulded with cement concrete 1:1.5:3 conforming to ASTM specification C-76-79, Class-II, Wall-B, including carriage of pipe from factory to site of wor, lowering in trenches to correct alignment and grade, jointing with rubber ring, cutting pipes where necessary, testing etc. complete.	Rft	7,450.00		
6	C-3/17	18" dia Transportation of earth all types when the total distance	Rft	3,150.00		
7	C-3/13	including the lead covered in the item of work, is more than 1000 ft. (300 m) lead upto 3 km	1000 Cft.	65,962.50		
'	C-3/13	(i) Rehandling of earth work. (a) Lead upto a single throw of Kassi, phaorah or shovel or shovel.	1000 Cft.	247,473.75		
8	C-3/24a,c	(ii) Compaction of earth work.(a) Mixing, moistening earth to optimum moisture content in layers for compaction etc. complete.	1000 Cft.	247,473.75		
9	C-21/9	Extra for making and finishing benching floor work in manhole chamber with 1/8" thick cement finish.	100 Sft.	2,009.60		
9	C-6/5	Cement concrete plain including, placing, compacting, finishing, and curing complete (including screening and washing of stone aggregate. (I) P.C.C. 1:3:6	100 Cft.	7,069.50		
10	0.04/40	(II) P.C.C. 1:2:4	100 Cft.	4,340.80		
10	C-21/10	Restoration of brick pavement on edge, over laid service line, with 2" (50 mm) sand cushion under soling	100 Sft	21,987.50		
11	C-7/7 C-7/10	Pacca brick work other than building upto 10 ft height in 1:3 cement sand mortor. Extra for pacca brick work in steining of	100 Cft.	17,964.80		
13	C-11/8	wells or any other circular masonary. Cement plaster 1/2" thick (1:3) cement	100 Cft.	17,964.80		
10	0 11/0	sand mortor upto 20' height.	100 Sft.	21,384.00		
14	C-6/2	Dry rammed bricks or stone ballast 1.5" to 2" gauge.	100 Cft.	7,069.50		
15	N.S	RPC Manhole Cover Manufactured with 100% Recycled Plastic Composite Material, 650 mm (26"dia) with clear opening size 600 mm (24" dia) and RPC manhole frame having dia meter 790 mm (31.1") with average breaking load capacity of 10 Ton and weight including frame of 50 kg (Minimum).	- P.set	160.00		
16	C-21/13	Providing and fixing 1¼"x1¼"x3/16" (31x31x5 mm) angle iron step, in manhole chambers, including carriage and setting the same in work to correct lines and levels.	- Each	640.00		
17	C-21/8	8 Constructing standard gully grating chamber, 3'x2½' (900x750 mm), with chinaware trap as per PHED Drawing STD/PD No. 3 of 1977, complete in all respects.	1 Each	50.00		
18	C-1/1	Carriage of 100 Cft. (2.83 cu.m) of all materials like stone aggregate, spawl, kankar lime (unslaked), surkhi, etc. or 150 Cft. (4.25 cu.m) of timber, by truck or by any other means owned by the contractor. 93 km lead (Ch.No. 1. Item.No. 1)	100 Cft	10352.12		
19	N.S	Making connections of sewer line with manhole of existing sewer line complete in all respect.				
		15" to 18" dia 18" to 24" dia	- Job - Job	14.00 6.00		
	<u>[</u>			Total:- (B)	Rs.	<u> </u>

Restoration of Roads (Branch Sewer Route)

Sr. No:	Description of items	Quantity	Rate	Unit	Amount
1	Supplying and filling sand under floor; or plugging in wells (10/3)	65962.50		P.% Cft	
2	Re-Laying of Sub Base Course by using old material (received through dismentalling of road crust, compacted up to 100% modified AASHO dry density complete in all respect. (Labour Rate only)18/3a-II	8245 31		P.% Cft	
3	Providing and laying of road edging of 3" wide and 9" deep brick on end complete in all respect. 18/5	10600.00		P.Rft	
4	Providing & Laying (Water Bound macadam) Base Course of crushed stone aggregate form Kirana quarry of required thickness of approved quality and grade, and supply and spreading of stone screening, including placing, mixing, spreading and compaction of base course material to required depth, camber and grade to achieve 100% maximum modifed AASHO dry density, including carriage of all materials to site of work, complete in all respect. 18/4a	10993.75		P.% Cft	
5	Providing and Laying bitumenious priming coat, using 10 Lbs kerosin oil and 10 lbs binder per 100 Sft or 0.5 Kg Kerosene and 0.5 Kg binder per square metre.C-18/6			P.% Sft	
6	Providing ana laying Plant Premixed bitumenious carpt i/c compaction and finishing to required grade camber and density with 4.5 % bitumen 2" thick. (AWC)			P.% Sft	

Total

Package 01 Sewerage System Environmental & Social Management & Monitoring Plan					
Item	Quantity	Tentative Cost/Item-PKR.	Total Cost		
A-PPEs for Health and Safety of Lab	or/Workers				
Face Masks (3 PLY) - box	8				
Safety Hard Helmets	8				
Safety Shoes	8				
Hand Gloves	8				
Ear Plugs	8				
Reflective Safety Vest	8				
Safety Goggles	8				
B-Community Health and Safety	•				
First Aid Box Complete	1				
Safety Signs	2				
Safety Cones	8				
Safety Tapes	8				
Portable Delineator with chain	3				
Emergency Portable Lights	2				
Solid Waste Collection Drums with Cover	1				
Fire Fighting Equipment Purchase and refilling	1				
Hiring of Environmental Manager (for 03 months)	3				
Labor Campsite Management	1				
Water Sprinkling	1				
Ambient Air Quality-Before, during, and after construction	3				
Noise Quality-Before, during, and after construction	3				
Water Quality-Before, during, and after construction	3				
Total (PKR)-A+B					

Environmental & Social Screening Checklist

Instructions:

Environmental and Social Focal Persons (ESFPs)1 nominated by the MCs for PCP environmental and social management, will use this checklist in field for environmental and social screening and categorization of each and every sub-project proposed to be executed under the Program.

Deputy Program Officers-Environmental and Social Management deputed by PMDFC in regional offices will technically assist and support the ESFPs/MCs in filling in of this Checklist

It is to be attached with the main document2 of sub-projects at planning stage and will be duly signed by the relevant ESFP and endorsed by the respective DPO-ESM

This checklist focuses on environmental issues and social concerns. To ensure that social dimensions are adequately considered, Involuntary Resettlement Screening Checklist will also be used

(iii) The purpose of this E&S Screening Checklists is to identify potential "Negative" impacts of environmental and social attributes or to enhance the existing environmental & social benefits. Use the "remarks" section to discuss any anticipated mitigation measures.

Name of ESFP:		Muhammad S Asad (MOP)	hah Rukh Tariq MOI (I&S) Muhammad			
Name of MC:		Gojra				
Sub-Project Sector:		Sewerage				
Sub-Project Title:			of Sewerage System and Construction of Treatment Plant (WWTP) in Gojra			
Sub- Project Categorization:	<u> </u>	E-1 √	S-1			
		E-2	S-2✓			
		E-3	S-3			
Date of Screening:		07-06-2023				
Anticipated Project Activities		Laying of Trunk and Sub Main RCC Sewers of 7.2 km and Laying of Branch Sewer of 3.2 km in Gojra				
Estimated Cost of Subprojects		1460.25 millio	n			
Completion Time/Duration		1 year				
screening Questions	Yes	No	Remarks			

A. Project Siting

Is the Sub-Project area adjacent to or within any of the following?

¹ In all MCs, ESFPs are notified by Local government; MO (I&S) are focal persons for environmental sector and MO(P) are focal persons for social sectors.

² It is meant as PC-I and/or engineering estimates of sub-project

Environmentally sensitive areas?			
Legally protected Area		✓	No legally protected area lies within 200 meters jurisdiction of Sub-Project.
Any surface water body (river, canal, stream, lake, wetland) within 200 meters of the proposed sub project		✓	No water body observed within 200 meters in the Sub-Project area
Estuarine		✓	Not observed in sub project area
Special area for protecting biodiversity		✓	Not observed in sub project area
Buffer zone of protected area		✓	Not observed in sub project area
Mangroves Forest		✓	Not observed in sub project area
Man-made forest /game reserve, orchid /crops or any other area of environmental importance	√		Mostly are urban area around these lines but at some places green fields are present on both sides
Socially sensitive /important areas/comm people?	unities/		
Physical Cultural Resources (PCRs) and or any site of cultural/religious importance (Graveyard, Shrine, Mosque, Church, Gordwarah, Temple, Fort, archeological/historical site) within 100 m of the proposed subproject	√		10 Mosque, one shrine observed within 100 meters of the Sub-Project interventions but have no direct/indirect significant environmental & social impacts. There would be hindrance in the mobility of people during Sewerage construction phase. However, this will be a temporary impact and would be managed by proper controlling the traffic. No other significant adverse impacts on sensitive receptors are foreseen
Sensitive receptors (Schools, colleges, Shrine, Mosque, Church, hospitals and clinics) within 100 meters of the proposed sub project			13 school, and 01 madrassa exist within 100 m of the subproject interventions There would be hindrance in the mobility of people during Sewerage construction phase. However, this will be a temporary impact and would be managed by proper controlling the traffic. No other significant adverse impacts on sensitive receptors are foreseen
Any graveyard of local community (Muslims or Christians)	✓		One Graveyard exist within 10 m of the subproject interventions along Gojra Road. but have no direct/indirect significant environmental & social impacts
Any demographic or socio-economic aspects of the subproject area that are already vulnerable (e.g., high incidence of marginalized		✓	No negative impact observed on vulnerable groups (e.g., high incidence of marginalized populations, rural-urban migrants, illegal

settlements, squatters, ethnic minorities, people with disabilities, people with disabilities, people in old age, socially isolated segments ³ of the society and women or children)? Already existing infrastructure (including public amenities) which may be required to dismantle or may be affected temporarily by any means? B. Potential Environmental Impacts Will the Sub-Project cause 1. Disturbance to habitats/biodiversity of environmentally sensitive or protected areas? 2. Cutting of trees? 3. Disruption to habitats/biodiversity of surrounding ecosystem/environment? 4. Generation of wastewater during construction or operation? 5. Pollution of surface water/ground water due to wastewater discharge from construction site or due to direct/indirect disposal of wastewater? 6. Alteration of surface water hydrology of waterways resulting in increased sediment in streams/rivers or due to increased soil erosion at construction site? 7. Deterioration of surface water quality due to silt runoff and sanitary wastes from worker-based camps and chemicals used in construction. Page people with disabilities) Sub-Project area worker will be dismantling due to construction activities. No infrastructure will be dismantling due to construction activities. The proposed project site doesn't have an environmentally sensitive or protected areas environmenta			
amenities) which may be required to dismantle or may be affected temporarily by any means? B. Potential Environmental Impacts Will the Sub-Project cause 1. Disturbance to habitats/biodiversity of environmentally sensitive or protected areas? 2. Cutting of trees? 2. Cutting of trees? 3. Disruption to habitats/biodiversity of surrounding ecosystem/environment? 4. Generation of wastewater during construction or operation? 5. Pollution of surface water/ground water due to wastewater discharge from construction site or due to direct/indirect disposal of wastewater? 6. Alteration of surface water hydrology of waterways resulting in increased sediment in streams/rivers or due to increased soil erosion at construction site? 7. Deterioration of surface water quality due to silt runoff and sanitary wastes from workerbased camps and chemicals used in construction activities. Ohemical storage activities monitor regularly. 8. Over pumping of ground water, leading to	settlements, squatters, ethnic minorities, people with disabilities, people in old age, socially isolated segments ³ of the society and		settlements, squatters, ethnic minorities, people with disabilities) Sub-Project area
1. Disturbance to habitats/biodiversity of environmentally sensitive or protected areas? 2. Cutting of trees? 3. Disruption to habitats/biodiversity of surrounding ecosystem/environment? 4. Generation of wastewater during construction or operation? 5. Pollution of surface water/ground water due to wastewater discharge from construction site or due to direct/indirect disposal of wastewater? 6. Alteration of surface water hydrology of waterways resulting in increased soil erosion at construction site? 7. Deterioration of surface water quality due to silt runoff and sanitary wastes from workerbased camps and chemicals used in construction. 8. Over pumping of ground water, leading to ✓ No ocutting of trees involved durin construction phase. ✓ No significant adverse impacts of environment. ✓ No such impact anticipated as no wastewater will be generated during construction activities are limited level and away from the surface water bodies so no other significant adverse impacts on sensitive receptors are foreseen during construction Phase. ✓ No construction labor camps envisaged and a rental house is used as a labor camp. Due to limited scope of work under Sub-Project and un-skilled local labor will be engaged for the construction activities. Chemical storage activities monitor regularly.	amenities) which may be required to dismantle	·	No infrastructure will be dismantling due to construction activities.
1. Disturbance to habitats/biodiversity of environmentally sensitive or protected areas? 2. Cutting of trees? 3. Disruption to habitats/biodiversity of surrounding ecosystem/environment? 4. Generation of wastewater during construction or operation? 5. Pollution of surface water/ground water due to wastewater discharge from construction site or due to direct/indirect disposal of wastewater? 6. Alteration of surface water hydrology of waterways resulting in increased sediment in streams/rivers or due to increased soil erosion at construction of surface water quality due to silt runoff and sanitary wastes from workerbased camps and chemicals used in construction. 1. Disturbance to habitats/biodiversity of environmentally sensitive or protected areas environments on surface sinvolved durin construction activities on minor level so waste environment. 4. Construction activities on minor level so waste water water generation activities on minor level so waste water generation activities on minor level so waste water generation activities on minor level so waste water generation activi	B. Potential Environmental Impacts		
environmentally sensitive or protected areas? 2. Cutting of trees? 3. Disruption to habitats/biodiversity of surrounding ecosystem/environment? 4. Generation of wastewater during construction or operation? 5. Pollution of surface water/ground water due to wastewater discharge from construction site or due to direct/indirect disposal of wastewater? 6. Alteration of surface water hydrology of waterways resulting in increased sediment in streams/rivers or due to increased soil erosion at construction site? 7. Deterioration of surface water quality due to silt runoff and sanitary wastes from workerbased camps and chemicals used in construction. 8. Over pumping of ground water, leading to V No Cutting of trees involved durin construction phase Construction activities on minor level so waste water generation activities on lower level V No such impact anticipated as no wastewater will be generated during construction activities are limited level and away from the surface water bodies so no other significant adverse impacts on sensitive receptors are foreseen during construction labor camps envisaged and a rental house is used as a labor camp. Due to limited scope of work under Sub-Project and un-skilled local labor will be engaged for the construction activities. Chemical storage activities monitor regularly. 8. Over pumping of ground water, leading to	Will the Sub-Project cause		
a. Disruption to habitats/biodiversity of surrounding ecosystem/environment? 4. Generation of wastewater during construction or operation? 5. Pollution of surface water/ground water due to wastewater discharge from construction site or due to direct/indirect disposal of wastewater? 6. Alteration of surface water hydrology of waterways resulting in increased sediment in streams/rivers or due to increased soil erosion at construction site? 7. Deterioration of surface water quality due to silt runoff and sanitary wastes from workerbased camps and chemicals used in construction. 8. Over pumping of ground water, leading to V No significant adverse impacts of environment. V Construction activities on limitor level so waste water water generation activities on lower level V No such impact foreseen, as work activities are limited level and away from the surface water bodies so no other significant adverse impacts on sensitive receptors are foreseen during construction Phase. V No construction labor camps envisaged and a rental house is used as a labor camp. Due to limited scope of work under Sub-Project and un-skilled local labor will be engaged for the construction activities. Chemical storage activities monitor regularly. 8. Over pumping of ground water, leading to	environmentally sensitive or protected	*	The proposed project site doesn't have any environmentally sensitive or protected areas.
4. Generation of wastewater during construction or operation? 5. Pollution of surface water/ground water due to wastewater discharge from construction site or due to direct/indirect disposal of wastewater? 6. Alteration of surface water hydrology of waterways resulting in increased sediment in streams/rivers or due to increased soil erosion at construction of surface water quality due to silt runoff and sanitary wastes from workerbased camps and chemicals used in construction. 8. Over pumping of ground water, leading to Construction activities on minor level so waste water water leading to No such impact foreseen, as work activities are limited level and away from the surface water bodies so no other significant adverse impacts on sensitive receptors are foreseen during construction Phase. No construction labor camps envisaged and a rental house is used as a labor camp. Due to limited scope of work under Sub-Project and un-skilled local labor will be engaged for the construction activities. Chemical storage activities monitor regularly. 8. Over pumping of ground water, leading to Vonstruction activities on minor level so waste water water forevel water generation activities on lower level Vonsuch impact foreseen, as work activities are limited level and away from the surface water bodies so no other significant adverse impacts on sensitive receptors are foreseen during construction Phase. Von construction labor camps envisaged and a rental house is used as a labor camp. Due to limited scope of work under Sub-Project and un-skilled local labor will be engaged for the construction activities. Chemical storage activities monitor regularly.	2. Cutting of trees?	√	_
s. Pollution of surface water/ground water due to wastewater discharge from construction site or due to direct/indirect disposal of wastewater? 6. Alteration of surface water hydrology of waterways resulting in increased sediment in streams/rivers or due to increased soil erosion at construction site? 7. Deterioration of surface water quality due to silt runoff and sanitary wastes from workerbased camps and chemicals used in construction. 8. Over pumping of ground water, leading to water generation activities on lower level No such impact anticipated as no wastewater will be generated during construction activities. No such impact foreseen, as work activities are limited level and away from the surface water bodies so no other significant adverse impacts on sensitive receptors are foreseen during construction Phase. No construction labor camps envisaged and a rental house is used as a labor camp. Due to limited scope of work under Sub-Project and un-skilled local labor will be engaged for the construction activities. Chemical storage activities monitor regularly.		√	_
s. Pollution of surface water/ground water due to wastewater discharge from construction site or due to direct/indirect disposal of wastewater? 6. Alteration of surface water hydrology of waterways resulting in increased sediment in streams/rivers or due to increased soil erosion at construction site? 7. Deterioration of surface water quality due to silt runoff and sanitary wastes from workerbased camps and chemicals used in construction. 8. Over pumping of ground water, leading to water generation activities on lower level No such impact anticipated as no wastewater will be generated during construction activities. No such impact foreseen, as work activities are limited level and away from the surface water bodies so no other significant adverse impacts on sensitive receptors are foreseen during construction Phase. No construction labor camps envisaged and a rental house is used as a labor camp. Due to limited scope of work under Sub-Project and un-skilled local labor will be engaged for the construction activities. Chemical storage activities monitor regularly.			
to wastewater discharge from construction site or due to direct/indirect disposal of wastewater? 6. Alteration of surface water hydrology of waterways resulting in increased sediment in streams/rivers or due to increased soil erosion at construction site? 7. Deterioration of surface water quality due to silt runoff and sanitary wastes from workerbased camps and chemicals used in construction. Will be generated during construction activities. No such impact foreseen, as work activities are limited level and away from the surface water bodies so no other significant adverse impacts on sensitive receptors are foreseen during construction Phase. No construction labor camps envisaged and a rental house is used as a labor camp. Due to limited scope of work under Sub-Project and un-skilled local labor will be engaged for the construction activities. Chemical storage activities monitor regularly. 8. Over pumping of ground water, leading to	1	I I I	Construction activities on minor level so waste water generation activities on lower level
waterways resulting in increased sediment in streams/rivers or due to increased soil erosion at construction site? 7. Deterioration of surface water quality due to silt runoff and sanitary wastes from worker-based camps and chemicals used in construction. 8. Over pumping of ground water, leading to Imited level and away from the surface water bodies so no other significant adverse impacts on sensitive receptors are foreseen during construction labor camps envisaged and a rental house is used as a labor camp. Due to limited scope of work under Sub-Project and un-skilled local labor will be engaged for the construction activities. Chemical storage activities monitor regularly. No over pumping/pumping involved in scope of	to wastewater discharge from construction site or due to direct/indirect disposal of		No such impact anticipated as no wastewater will be generated during construction activities.
silt runoff and sanitary wastes from worker-based camps and chemicals used in construction. rental house is used as a labor camp. Due to limited scope of work under Sub-Project and un-skilled local labor will be engaged for the construction activities. Chemical storage activities monitor regularly. 8. Over pumping of ground water, leading to	waterways resulting in increased sediment in streams/rivers or due to increased soil erosion		No such impact foreseen, as work activities are limited level and away from the surface water bodies so no other significant adverse impacts on sensitive receptors are foreseen during construction Phase.
	silt runoff and sanitary wastes from worker- based camps and chemicals used in		rental house is used as a labor camp. Due to limited scope of work under Sub-Project and un-skilled local labor will be engaged for the construction activities. Chemical storage

³ Due to caste, creed, religion or gender e.g. transgender

9. Serious contamination of soil due to construction works?			Construction materials should be storage properly, no leakage or leaching Process involve so contamination of soil not observed
10. Aggravation of solid waste problems in the area?		✓	No aggravation of solid waste problems in the area is anticipated. The waste construction material will be collected and disposed at designated place on daily basis
11. Generation of hazardous waste?		√	Bitumen containing solid waste will be generated during dismantling of existing road at some point during laying of sewerage line that will be disposed properly at designated place.
12. Increased air pollution due to sub-project construction and operation?		✓	The subproject interventions are on small scale that will not significantly increase air pollution
13. Noise and vibration due to sub-project construction or operation?	√		Noise and vibration will be generated during excavation and pipe laying activities but the level is expected to be low. However, the noise will be monitored on regularly during construction by the contractor
14. Creation of temporary breeding habitats for diseases such as those transmitted by mosquitoes and rodents due to solid/liquid?		✓	No Temporary breeding habitats creates during Construction activities for diseases such as those transmitted by mosquitoes and rodents due to solid/liquid
15. Use of chemicals during construction?		✓	No chemicals will be used during construction activities
C: Potential Social Impacts			
Will the Sub-Project cause			
Impairment of historical/cultural areas; disfiguration of landscape or potential loss/damage to Physical Cultural Resources (PCRs)?		√	No impairment/damage to any PCR envisioned as per scope of construction activities
2. Displacement or involuntary resettlement of people?		✓	Not observed in sub project area
(physical displacement and/or economic displacement) (If "Yes", please also fill Involuntary Resettlement Screening Checklist)			

3. Disproportionate impacts on the poor, women and children and or other vulnerable groups 4(mentioned above)?		✓	There will be no Impact on the poor women, children and or other vulnerable groups
4. Temporary impediments in movements of people/transport and animals?	✓		There would be hindrance in the mobility of people during construction phase. However, this will be a temporary impact and would be managed by proper controlling the traffic. The Contractor in this context will ensure housekeeping.
5. Large population influx during sub-project construction and operation that causes increased burden on social infrastructure and services (such as water supply and sanitation systems)?		√	Due to Limited Scope of work activities, Local unskilled labor will be preferred by the Contractor
6. Social conflicts if workers from other areas are hired.		✓	Contractor will Hire local worker for unskilled construction activities
7. Risks and vulnerabilities related to occupational health and safety due to physical, chemical, biological, and radiological hazards during project construction and operation?	√		Contractor will follow EHS SOPs to avoid physical hazards which are part of PC-I.
8. Risks to community health and safety due to the transport, storage, and use and/or disposal of materials such as explosives, fuel, and other chemicals during construction and operation?	✓		There would be some safety issues during martial transportation, during construction phase. The SOPs for health and safety have been included in the PC-I that have to be followed by the contractors
9. Community safety risks due to both accidental and natural causes, especially where the structural elements or components of the project are accessible to members of the affected community or where their failure could result in injury to the community throughout project construction, operation, and decommissioning.	>		There would be safety issues in Construction phase, During storage of fuel and other chemicals and transport. The SOPs for health and safety have been included in the PC-I that have to be followed by the contractors
10. Any impact on sensitive receptors (mentioned above)		✓	Not observed in sub project area
11. Any impact of negative nature on already existing infrastructure including public amenities		✓	Not observed in sub project area

_

⁴ Women, Children, Women headed households, People in old age, people having disabilities, socially isolated community groups and or people living below the poverty line

Prepared By:

Name: Muhammad Imran

Designation: Environmentalist

Organization: MM Pakistan

Signature:

Date: 07-06-2023

Endorsed By:

Name: Muhammad Shah Rukh-

Designation: Municipal Officer Infrastructure (MOI)

Organization: MC Gojra

Signature

Date: 07-06-2023

Reviewed By:

Name: Hassan Ali

Designation: Deputy Program Officer ESM

Organization: PMDFC

Signature:

Date: 07-06-2023

INVOLUNTARY RESETTLEMENT SCREENING CHECKLIST

Name of City/MC/LG: Gojra Sub-Project Sector: Sewerage

Sub-Project Title: Laying of Trunk and Sub Main RCC Sewers of 7.2 km and Laying of Branch Sewer

of 3.2 km in Gojra

Sub- Project Categorization: E-1 & S-2

Date of Screening: 07-06-2023

SECTION 1	Yes	No	Expected	Remarks
Does the project require land acquisition? Yes/No		√]. 	Already Road exists and pipe line aying along the road. land owned by Govt so no land acquired for this ub project
If yes, then describe the type of land being acquired from the categories below:		✓	1	No Land acquired for this sub project
Has any AED been conducted at the proposed location by the government1? Yes/No		✓		Not observed in sub project area and confirm by MC Staff also
Land (Quantify and describe types of land being acquired in "remarks column".	ı	√		No Land acquired for this sub project
Government and LG owned land free of occupation (agriculture or settlement)		√		Already land owned by govt so no and acquired for this sub project
Government or state-owned land (other than LG) free of occupation (agriculture or settlement)		√	r c	No Land acquired for this sub project. No government or state- pwned land will be affected due to the implementation of the project
Private land		√	li F	Construction activities will be imited on streets, no additional private land will be required/
Residential		√	v	No residential structure or land vill be affected due to the ehabilitation of sewerage lines
Commercial		√		No Land acquired for this sub project
Agricultural		✓		No Land acquired for this sub project
Communal		√		No Land acquired for this sub project
Others (specify in "remarks").		√		Already land owned by govt so no and acquired for this sub project
Name of owner/owners and type of ownership document if available.		√	F	Already land owned by govt so no and acquired for this sub project

If land is being acquired, describe any structures constructed	1	√	No Land acquired for this sub
on it			project
Land-based assets:		✓	No Land acquired for this sub project
Residential structures		✓	No Land acquired for this sub project
Commercial structures (specify in "remarks")		✓	No Land acquired for this sub project
Community structures (specify in "remarks")		√	No Land acquired for this sub project
Agriculture structures (specify in "remarks")		✓	
Public utilities (specify in "remarks")	~		Already land owned by govt so no land acquired for this sub project. Ramps are away from ROW.
Others (specify in "remarks")		√	No Land acquired for this sub project
If agricultural land is being acquired, specify the following:		√	No Land acquired for this sub project
Agriculture related impacts		√	No Land acquired for this sub project
Crops and vegetables (specify types and cropping area in "remarks).	1	√	No Land acquired for this sub project
Trees (specify number and types in "remarks").		√	No Land acquired for this sub project
Others (specify in "remarks").		√	No Land acquired for this sub project
Affected Persons (APs)		√	No Persons Affected during this Project
Will any people be displaced from the land when acquired? Yes/No		√	No Land acquired for this sub project
Number of APs		√	No Persons Affected during this Project
Males		√	No Persons Affected during this Project
Females		√	No Persons Affected during this Project
Titled landowners		✓	No Land acquired for this sub project

Tenants and sharecroppers	✓	No Land acquired for this sub project
Leaseholders	√	No Land acquired for this sub project
Agriculture wage laborers	~	Not involved in this project
Encroachers and squatters (specify in remarks column)	√	No Land acquired for this sub project
Vulnerable APs (e.g. women headed households, minors and aged, orphans, disabled persons, and those below the poverty line). Specify the number and vulnerability in "remarks".	✓	No Land acquired for this sub project no one effected during this this intervention
Others (specify in "remarks")	✓	Not involved in this project









Public Consultation and pictoral view of Faisal Bihaari Colony, Gojra













Public Consultation and pictoral view of Javed Colony, Gojra

Pictures of Field Visit













Public Consultation and pictoral view of chack 298, Gojra

Pictures of Field Visit









Pictoral view of Farooq Park, Gojra









Pictoral view of Altaf Park, Gojra

Prepared By:

Name: Ihsan ul Haq Farooqi

Designation: Senior Sociologist

Organization: MM Pakistan

Signature:

Date: 07-06-2023

Endorsed By:

Name: Muhammad Asad

Designation: Municipal Officer Planning (MOP)

Organization: MC Gojra

Signature

Date: 07-06-2023

Reviewed By:

Name: Hassan Ali

Designation: Deputy Program Officer ESM

Organization: PMDFC

Signature:

Date: 07-06-2023

Package 01 Sewerage (Estimated Cost for ESSMP)
Laying of Trunk and Sub Main RCC Sewers of 7.2 km and Laying of Branch Sewer of 3.2 km in Gojra

iii Gojia									
Item	Quantity	Tentative Cost/Item-PKR.	Total Cost						
A-PPEs for Health and Safety of Labor/Workers									
Face Masks (3 PLY) - box	8								
Safety Hard Helmets	8								
Safety Shoes	8								
Hand Gloves	8								
Ear Plugs	8								
Reflective Safety Vest	8								
Safety Goggles	8								
B-Community Health and Safety									
First Aid Box Complete	1								
Safety Signs	2								
Safety Cones	8								
Safety Tapes	8								
Portable Delineator with chain	3								
Emergency Portable Lights	2								
Solid Waste Collection Drums with Cover	1								
Fire Fighting Equipment Purchase and refilling	1								
Hiring of Environmental Manager (for 03 months)	3								
Labor Campsite Management	1								
Water Sprinkling	1								
Ambient Air Quality-Before, during, and after construction	3								
Noise Quality-Before, during, and after construction	3								
Water Quality-Before, during, and after construction	3								
Total (PKR)-A+B									

Environmental & Social Management & Monitoring Plan Package 01: Sewerage System- Laying of Trunk and Sub Main RCC Sewers of 7.2 km and Laying of Branch Sewer of 3.2 km in Gojra

A-Design Stage	Design	Implementation
	Responsibility	Responsibility
1. Design Aspects	1	
The following Design Considerations have been integrated with the design of rehabilitation of existing sewerage system enabling to	Design	MC Gojra
it environmentally and socially sustainable.	Consultants	
1. Wastewater Treatment		
Safe and sustainable wastewater collection, transport, and treatment systems to ensure human and environmental well-being by providing missing links of sewerage supply lines, identification of the lines where desilting will be sufficient rather to replace the system and provision of manholes covers and replacement of pumping machinery from dry wells		
The sewerage system that conveys the wastewater discharge of the current population will be connected to infrastructure that performs storage and treatment functions, comprising a disposal station, a WWTP-WSP, and floating wetland up to the minimum acceptable levels to be discharged to a surface water body as per PEQSs and or re-used as per WHO and USEPA Guidelines.		
The importance of design criteria is that it allows the identification of problems associated with poor management and improves it through a comprehensive management model that provides solutions based on technical and sustainable criteria, being the innovative part that opens the opportunity for studies to be carried out by professionals; allowing to strengthen learning.		
2. Better Municipal services and sustainable water application after treatment.		
Major purpose is to improve quality of wastewater by eliminating pollutants, toxicants and many such to make. wastewater usable for other purposes and preservation of water quality of natural water resources.		
2.Permits, NOCs, Clearances		

Necessary consents, permits, and clearances shall be obtained before the start of civil works Permissions	and clearances are	PMDFC and MC	MC Gojra
required mainly from the government agencies including i.e. Punjab Environmental Protection Agency (EP	A) or from other		
Government entity in case of temporary obstruction in public utilities e,g. WAPDA in case of shifting of tra	nsmission lines.		
3.Land Acquisition and Resettlement Issues			
This component of subproject will be executed at MC owned ROW and existing systems		MC Gojra	MC Gojra
The contractor's temporary facilities will preferably be established on government owned land. Otherwise be obtained on a rental or lease basis.	, such lands/budlings will		
It will be ensured that no project works are carried out where AED activities have been or are being carrie	d out		
4.Preparation of Stakeholder Engagement Plan			
Stakeholder engagement plan with a realistic timeframe covering preliminary, construction and operation prepared and approved (prior to project appraisal) and implemented effectively ensuring engagement of the project cycle.	•	Design Consultant/	MC Gojra
5. Preparation of Labour Management Procedures		<u> </u>	
EHS SOPS for Labour workers/Including women workers have been prepared and approved (prior to proje	ct appraisal) and will be	ESFPS	
implemented effectively throughout the project period by making them part of contractors' term of refer	ence and bid documents.		
Pre-Construction Phase	Location/Project Phase	Institutional Responsibility	
		Implementation	Supervision
Contractors Terms of Reference		ESM Team PMDFC	E&S Supervision
The MC Gojra shall ensure to make EIA/ESIA Report approved from Punjab EPA and ESMMP of EIA/ESIA			Consultants
shall be made part of contractor terms of reference and part of the bid documents.			

sub	Environment and Social	of Impacts		Implementation Responsibility	Indicators	Frequency	Responsibility
Proposed	Anticipated	Magnitude	Proposed Mitigation Measures	Mitigation	Monitoring	Monitoring	Monitoring
C- Construc	ction phase						1
nsure to ke	ep a copy of the ES	MMP at all tim	es at the project supervision office on site.				
	•		ties that is fully in line with and guided by the	e project's GRM			
•		· ·	edure for receiving, documenting and addre	-			
rovide alter	rnative access road	for residents v	ia Peradeniya				
rovide sign	boards for pedestr	ians to inform	nature and duration of construction works				
•			entrance and main points of the site				
			&S Supervision consultants for public	to lodge their			Consultants
takeholders	and to receive cor	nplaints					E&S Supervision
⁄IC Gojra w	vith the technical	assistance of I	MDFC team shall share project details to	public, relevant			ESM Team PMDFC
Grievance Re	edress Mechanism	has been deve	oped under PCP	project	Cor	ntractor	PMDFC
Grievance Re	edress Mechanism			Throughout the	e cycle of MC	-	Regional Office
MDFC	•						
•	iste disposal.	• •		egional Office			
			essed here, but not limited to, and will consise ffic management, worker camp managemen				
onsequence							
	tai ana sociai issi	ues mat are	required to be managed to avoid or mi	tigated adverse			

Establish	Availability of	Medium	At current, land/road proposed for construction and	MC Gojra	Site Visits	Daily site visit	DPO-ESM of
ment of	Land		improvement of existing Sewerage system is open	Cambuantan	Minus I In an anti-	during	PMDFC
Labor	Carreite		and vacant from any legal/illegal occupants. There	Contractor	Visual Inspection	construction	Regional
Camp	Security		are no trees of important flora and fauna observed at		and pictorial evidence	phase	Office
	Environment,		the site.		evidence	Fortnightly/	E&S
	Health and		Currently MC owned land at proposed sewerage site		Monitoring	Weekly	Consultants
	Safety of Labor		is available for construction of labor camp at the		Reports	VVEEKIY	of
	at Campsite		current site.		Implementation		Supervision
	Community		current site.		of GRM		Consultants
	Concerns		Contractor will prepare Occupational Health and		OI GRIVI		team
	regarding		Safety Plan and get approval from MC before the				team
	privacy of		execution of work				
	women and		Contractor will be instructed (will be included in his				
	GBV5		term of reference and in the form of EHS SOPs)				
			strictly implement the PMDFC SOPs for EHS of labor/				
	Sustainable Use		construction workers				
	of						
	Environmental		Contractor will be instructed to prefer the local labor				
	Resources		to be engaged. Anyhow, for labor site management,				
			following mitigation measures will be provided:				
			Contractor will ensure provision of appropriate				
			housing, water supply, and sanitation facilities to				
			construction labor if they will be hired from				
			outstation.				
			Cood housekeening will be ensured incide compoite				
			Good housekeeping will be ensured inside campsite				

⁵ Gender Based Violence

Labor will be provided with hygienically good quality food. During winter hot water will be provided for bathing and likewise as per the weather condition. Labor Training and Code of Conduct-The contractor shall develop a labor code of conduct indicating specific labor management procedures applicable to different categories of workers including short time and full-time workers. The labor code of conduct shall be consistent with and part of the overall EHS SOPs for Labor developed by the PMDFC. The labour Code of Conduct shall be translated into Urdu language upon clearance from the MOI of MC Gojra and DPO-ESM of regional office of PMDFC. The code of conduct must be made available to all staff and displayed in the work site in local languages Labor awareness programs to educate the laborers about the code of conduct, general conduct, the **Environmental and Social Management and** Monitoring Plan, Public and Occupational Health and Safety Plan and sustainable use of local environmental resources etc. should be conducted throughout the contract period as per the Labor management plan and ESH plan approved by the MOI and DPO-ESM.

The contractor shall give priority to selecting labor from project influenced areas so as to minimize the need for erecting labor camps and minimizing labor influx. Frequent supervision of laborers' activities, labor welfare needs, and action to ensure hygienic conditions in the work sites/ camps Avoid social conflicts among contactor's labor force and the surrounding community or tension and prevalence of gender-based violence through the implementation of LMP. Conduct awareness program on Gender Based Violence (GBV), good hygienic practices and dangers of sexually transmitted diseases such as HIV/AIDS and sensitize them to avoid interference and consider the privacy of local community women and vulnerable groups. Introduce a code of conduct for labor teams to prevent alcohol and drug abuse, violence, sexual abuse etc. Continue consultation and interaction with host community Prepare an inventory (including names/ National ID numbers/addresses etc.) of entire labor force employed by contractor, and share with the Resident Supervision Consultants. This inventory shall be updated at each recruitment or resignation of labors.

Site Preparati on	Accessibility of local communities and Work Site Management Health and Safety of local communities Traffic Management	Medium to High	All public access to the site via adequate fencing and signage which prohibit public access completely, in order to avoid risk to the public The site entrance will include adequate signage indicating the details of the proposed subproject, implementing agencies etc. as well as safety signage to keep public away. A fence shall be erected to cover the entire perimeter of the facility using cost effective fence materials consisting of chain link fence fabric, concrete post, etc. as specified in the Technical Specifications in order to ensure, animals and public are unable to access the site. To avoid land disturbance and movement, the fence shall generally follow the contour of the ground. Grading shall be performed where necessary to provide a neat appearance The contractor should provide a site-specific proposed site layout plan that identifies various zones within the construction site for designated use such as material and equipment storage areas, construction vehicle parking areas, vehicle/equipment maintenance areas, labor camps (if any onsite), temporary spoil storage areas etc. which shall be approved by the MC	MC Gojra Contractor	Site Visits Visual Inspection and pictorial evidence Monitoring Reports Implementation of GRM	Daily site visit during construction phase Fortnightly/ Weekly	DPO-ESM of PMDFC Regional Office E&S Consultants of Supervision Consultants team

Parking, repairing vehicles, machinery and equipment shall be stationed only within the work site and/or in any other designated areas by the MC The contractor should provide instruction and advice to drivers and operators to park vehicles and store equipment at the designated area Traffic Safety and Management Plan-The contractor will prepare a Traffic management plan in consultation with the city traffic committee approved by the MC and duly disclosed to the public in a timely manner Carryout a road safety assessment in order to establish traffic control and safety measures such as road humps, fixing of signage etc. prior to commencement of construction Based on the initial road safety analysis a monitoring and management plan shall be prepared and submitted to the MC by contractor and Road Management Plan to be placed at the prominent places In order to ease traffic within the city, transport of construction material and machinery will be done prior to 6.00 am and after 8.00 pm During school traffic hour's transportation of construction materials and heavy machinery shall not be done.

Provide information and boards at each strategic location indicating basic info - times of closure, diversion routes etc. Special consideration shall be given in the preparation of the traffic management plan ensuring the safety of pedestrians and workers at night. Personnel used for traffic control by the contractor shall be properly trained, provided with proper gear including communication equipment, luminous jackets for night use. All signs, barricades, pavement markings used for traffic management should be to the standards and approved by the City Traffic Police Road Safety Monitoring Plan shall be implemented throughout the construction period. Monitoring incidents and accidents and monthly reporting shall be ensured. Appropriate safety improvement measures shall be implemented avoiding incidents due to movement of construction vehicles based on the periodic review of reports. Environment, Health and Safety of Labor and Communities and Implementation of ESMMP The contractor will employ a qualified Health and Safety Specialist in his team for a period of 06 months. He/she will submit to the engineer a comprehensive Health and Safety Plan for the site which will be based

on an assessment of OSH/EHS ad public safety risks in relation to various types of construction activity and which covers the entire construction period. The H&S specialist will oversee its implementation regularly assessing the risk of various hazards and adopting mitigation measures. He shall ensure the all-reasonable precautions will be taken to prevent danger of the workers and the public from accidents such as fire, explosions, blasts, falling to excavated pits, chemical sprays, unsafe power supply lines etc. The Contractor shall comply with requirements for the safety of the workmen as per the international labor organization (ILO) convention No. 62 and EHS SOPs of PMDFC to the extent that those are applicable to this contract. The contractor shall supply all necessary safety appliances such as safety goggles, helmets, masks, boots, etc., to the workers and staff. Community Safety Management Plan-All debris, waste generation from construction activity, labor camps etc. will be disposed only at locations approved by the MC for such purpose The debris and spoil shall be disposed in such a manner that; (i) waterways and drainage paths are not blocked

			(ii) the disposed material should not be washed away by runoff and (iii) should not be a nuisance to the public. (iv) The contractor shall do what is necessary in the minimum to ensure the disposal sites are made safe after disposal of the waste (level the waste, ensure drainage and safety) (v)The contractor shall as much as possible dispose waste on daily basis (or as necessary given the waste quantities generated and onsite stockpiling space) without allowing to stockpile onsite, at identified locations for debris disposal, recommended by the MC. (vi) During transportation, dispose materials should be covered with tarpaulin				
Excavatio n and Construct ion Activities	Dust/Air and noise	High	All sedimentation and pollution control works and maintenance thereof are deemed, as incidental to the earthwork. Works to minimize cleared areas and exposed soils at a given time. Barricades such as humps shall be erected around excavated areas for culverts, silt traps, foundations, sewerage pipes as some work in The contractor shall effectively manage the dust generating activities such as handling and transporting sand, rubble, bitumen, and cement during periods of high winds or during more stable conditions with	MC Gojra Contractor	Site Visits Visual Inspection and pictorial evidence Monitoring Reports Implementation of GRM	Daily site visit during construction phase Fortnightly/ Weekly	DPO-ESM of PMDFC Regional Office E&S Consultant of Supervision Consultans team

winds directed towards adjacent residences and other facilities. The Contractor shall erect a dust/noise barrier has around the site. All vehicles delivering materials shall be covered to avoid spillage and dust emission. The Contractor should avoid, where possible and take suitable action to prevent dirt and mud being carried to the roadway (particularly following wet weather). The contractor should enforce vehicle speed limits to minimize dust generation. The Contractor shall employ a water truck to sprinkle water for dust suppression on all exposed areas as required (note: the use of waste water / waste oil for dust suppression is prohibited) All existing roads used by vehicles of the contractor, or any of his sub-contractor or supplies of materials or plant and similar roads which are part of the works shall be kept clean and clear of all dust/mud or other extraneous materials dropped by such vehicles or their tyres. Clearance shall be affected immediately by manual sweeping and removal of debris and ensure sprinkled water using appropriate equipment Dust emissions should be controlled by wet spraying of construction sites and roads which are used for

transportation of Construction materials at regular intervals. Tarpaulin covering is mandatory on trucks /lorries which are used for transporting materials. All stockpiles including temporary storage of debris and construction materials should be covered using tarpaulin covering. Noise and Dust barriers with minimum height of 4m should be erected around entire working sites to control dust emission to the ambient air. Selection of the suitable material. Contractor shall take appropriate action to ensure that construction works do not result in damage to the adjacent properties due to vibration. Contractor shall pay due consideration on vibration impacts of construction on adjoining structures. In the event vibration levels are found to be exceeding national standards, he shall modify the method of construction until compliance with stipulated national vibration standards is met. Vehicles should be maintained in good condition regularly so that noise and emission generating from wear and tear will be minimal Maintenance of vehicles, equipment and machinery shall be regular and proper, to the satisfaction of the

	DPO-ESM to keep noise and air emissions from these at a minimum
Soil and Vegetation Cover Loss	Construction vehicle, machinery and equipment shall be used and stationed only in the areas of work and in any other area designated/approved by the MC Gojra
	Ad-hoc and scattered parking and placement of machinery should be avoided to minimize harm to roadside ground cover.
	The contractor shall include in the construction site layout plan indicating various areas identified for designated use including parking areas.
	Contractor should provide necessary instructions to drivers/operators and other construction workers not to destroy ground vegetation cover unnecessarily.
	Designated vehicle parks and maintenance yards must be informed to labor force.
	Top soil of productive areas where it has to be removed for the purpose of this project shall be stripped to a specified depth of 150mm and stored in stockpiles of height not exceeding 2m, if directed by the MC. If the contractor is in any doubt on whether to conserve the topsoil or not for any given area he/she shall obtain the direction from the MC in writing
	Removed top soil could be used as a productive soil when replanting/establishing vegetation under

	landscaping plans Stockpiled topsoil must be returned to cover the areas including cut slopes where the topsoil has been removed due to project activities.
	Vehicle/machinery and equipment servicing and maintenance work shall be carried out only in designated locations/ service stations approved by the MC.
	Waste oil, lubricants and other petroleum products and untreated wastewater shall not be discharged on ground so that to avoid soil pollution. Clean up measures shall be taken against pollution of soil by spillage of petroleum/oil products from storage tanks and containers
	Sites used for vehicle and plant service and maintenance shall be restored back to its initial status. Site restoration will be considered as incidental to work
Water and Soil Contamination	The contractor shall clean up any area including water-bodies affected/contaminated (if any) as directed by the MC at his own cost.
	The contractor shall indicate on a site layout plan the drainage network and strategic locations in which soil erosion control devices will be installed. The contractor shall, to the extent possible, schedule/stage these sections will have to be stopped during heavy rains due to heavy erosion.

	Aktool that hand to be a constant of the contract of
	Work that lead to heavy erosion shall be avoided
	during the raining season. If such activities need to be
	continued during rainy season prior approval must be
	obtained from the MC by submitting a proposal on
	actions that will be undertaken by the contractor to
	prevent erosion.
Damage to	Chance Find Procedure will be adopted in case any
archeological	such discovery of archeological property, the
sites	contractor shall take reasonable precaution to
	prevent his workmen or any other persons from
	removing/damaging any such article and shall
	immediately inform the MC and immediately stop
	construction activities.
Management of	
Hazardous	
Waste	Contractor prior to the commencement of work shall provide list of harmful, hazardous and risky chemicals/
	,
	material that will be used in the project work to the MC.
	IVIC.
	Contractor shall also provide the list of places where
	such chemicals/materials or their containers or other
	harmful Asbestos Containing Materials (ACM) shall
	not be used for any temporary and permanent work
	on the SEWERAGE site.
Disturbance to	All construction works shall be carried out in a manner
Flora and Fauna	that the destruction to flora and their habitats is
and vegetation	minimized.
cover	

	At commont, no two or one found at the constraint of the
	At current, no trees are found at the proposed site of sewerage but if all such cases of tree removal
	contractor shall take prior approval from the MC and
	DPO-ESM prior to removal with a justification as to
	why the removal is unavoidable and plantation will be
	carried out with 1:10 removal ratio
Wastage of	Arrange adequate supply of water for the project
Water	purpose throughout the construction period in
	consultation with the MC Gojra .
	The contractor should discuss the daily requirement
	for potable and non-potable water and confirm with
	the MC Gojra that the demand can be met through
	their supply connection.
	Do not extract water from surface water bodies or
	water sources without the permission from MC &
	relevant authority. Obtain permission for extracting
	ground water, if needed, prior to the commencing of
	the project, from the relevant authority
	The contractor will minimize wastage of water in the
	construction process/operations by reusing water as
	much as possible, utilizing only the required amount
	of water for the construction works etc.
	The contractor shall maintain a record of usage of
	water for various purposes and sources tapped.
	The contractor will adopt measures that are
	technically and

	Traffic Jams and Congestion and road accidents		financially feasible that avoid or minimize water usage throughout the construction period. The construction materials intended for temporarily storage should be properly stockpiled in most appropriate areas in the Site to avoid disturbance to site mobility, traffic and stored away from drainage paths Efficient use of all construction material in order to reduce waste generation. All use of chemicals and hazardous materials will be subject to national and international regulations and requirements. Their use will be minimized and their release will be controlled				
Construct ion Material Storage, Handling and Use	Spillage Odor	Low	Contractor shall take all precautions such as storing all chemicals used for construction works in properly closed containers with good ventilations to prevent odor and offensive smell emanating from chemicals and processes applied in construction works or from labor camps. In a situation when/where odor or offensive smell does occur, contractor shall take immediate action to rectify the situation Contractor is responsible for any compensation involved with any health issue arisen out of bad odor and offensive smells	MC Gojra Contractor	Site Visits Visual Inspection and pictorial evidence Monitoring Reports Implementation of GRM	Daily site visit during construction phase Fortnightly/ Weekly	DPO-ESM of PMDFC Regional Office E&S Consultants of Supervision Consultants team
Construct ion	Emissions from Construction	Low	The emission standards promulgated under the Punjab Environmental Quality Standards (PEQs) shall	MC Gojra	Site Visits	Daily site visit during	DPO-ESM

Machiner	Vehicles,	be strictly adhered to all vehicles, equipment and	Contractor	Visual Inspection	construction	of PMDFC
y/	Equipment and	machinery used for construction shall be regularly		and pictorial	phase	Regional
	Machinery	serviced and well maintained to ensure that emission		evidence		Office E&S
Equipme nt Use	Noise from Vehicles, Plants and Equipment Health and Safety of Labor /Workers	levels comply with the relevant standards. The contractor shall maintain the average noise levels within the construction site during the day time to 65 dB and night time to 55 dB Punjab Environmental Quality Standards (PEQs). Noise barriers (cum dust) with minimum height of 4m shall be installed around the site as shown in the following figures and the construction noise levels	Monitoring Reports during the day time to 65 B Punjab Environmental th minimum height of 4m ne site as shown in the	Monitoring Reports Implementation	Fortnightly/ Weekly	Consultants of Supervision Consultants team
		outside the noise barriers should be maintained below 75dB during day time.				
		Within the site, the contractor shall measure noise levels on a monthly basis, or as per requirement, and report to the DPO-ESM through the contractor's monthly progress reports. Where, exceedances are noted, that can adversely affect construction workers, the contractor shall propose methods to control noise levels.				
		All machinery and equipment should be well maintained and fitted with noise reduction devices in accordance with manufacturer's instructions.				
		All vehicles and equipment used in construction shall be fitted with exhaust silences. During routine servicing operations, the effectiveness				
		of exhaust silencers shall be checked and if found to				

			be defective shall be replaced. Notwithstanding any other conditions of contract, noise level from any item of plant(s) must comply with the relevant legislation for levels of sound emission. Non-compliant plant shall be removed from site Maintenance of vehicles, equipment and machinery shall be regular and proper, to the satisfaction of the Engineer, to keep noise from these at a minimum. Workers in vicinity of strong noise, and workers working with or in crushing, compaction, batching or concrete mixing operations shall be provided with PPEs		
Construci on activties	Impacts on sensitive receptors (10 Mosque, 13 school, and 01 madrassa, One Graveyard and shrines) High noise Air pollution Traffic congestion Access & Mobility	high	Implementing noise barriers and using quieter equipment to reduce noise pollution. Controlling dust and air pollution through water spraying and dust suppression measures. Scheduling construction activities during less sensitive times, such as avoiding school hours or reducing noisy activities during the evenings. Creating safe pedestrian pathways and ensuring smooth traffic flow. Engaging with the local community to inform them about the construction plans and potential disruptions.		

	Safety Concerns		Labor/workers will be sensitized to avoid any interference with the local communities who may be visiting the graveyard				
			Vehicle/machinery movement shall be strictly avoided from the passage of graveyard and alternate movement route (which is available) shall be used.				
			Sewerage lines will be ensured to be laid 100m away from the graveyard and MC will ensure it by the contractor and same is ensured in the design of the subproject.				
			Contractor will be instructed to avoid construction activities during religious practices days at shrine.				
			An effective GRM shall be in-placed to immediately resolve any complaint from the local communities.				
D- OPERAT	TON PHASE			<u> </u>	l	<u> </u>	<u>I</u>
Proposed sub project activity	Anticipated Environment and Social Issues	Magnitude of Impacts	Proposed Mitigation Measures	Mitigation Implementa tion Responsibili ty	Monitoring Indicators	Monitoring Frequency	Monitoring Responsibility
Seepage / salinity	Weaken the structure strength and in watering and salinity condition.		Runoff from the Site shall be controlled to ensure that adjacent areas are not affected and disturbance to the public is to minimum. Anti-percolation material layer will be installed under the sewerage lines that no seepage into the soil occur.	MC Gojra	Site Visits Monitoring Reports	Site visit	MC Gojra

Emergenc	Unhygienic condition, public health risks	Sewerage disposal connections to the periphery wastewater system shall be maintained properly with routine maintenance of plumbing/pumps diligently carried out. Trees shall be managed properly that includes watering, fertilizing, weeding, pest controlling, pruning and training of trees timely. MCJ shall take necessary actions to prevent the breeding of mosquitoes where stagnation of water in any areas along the sewerage system. MC shall ensure to adopt the emergency plans to deal	MC Gojra	Implementation of GRM	Site visit	MC Gojra
y Leakage and burst of Sewerage Lines	local inhabitants Odor and vector breeding hazards Mixing of sewerage water with drinking water	such leakages Current subproject is designed to be sustainable till atleast 20 years MCs shall adopt Integrated Development Asset Management Plans (IDAMPs) Record maintenance of emergency hazards and preparedness Emergency response plan is attached as Annexure H.	ivic Gojia	Implementation of GRM	Site Visit	ivic dojia
Waste water disposal without treatmen t	Environmental hazard Ecological Hazard	Improved sewerage network shall be connected to the proposed disposal station and will be further transmitted to WWTP where its BOD, temperature, flow and other parameters will be monitored at entry point (influent) to the last exit (effluent) after treatment through anaerobic ponds, facultative ponds	MC Gojra	Site Visits Lab Facility working and maintenance of record/data	Site visit	MC Gojra

Non-compliance of PEQSs	and through bioremediation by introducing floating wetlands.	Implementation of GRM
Hazardous impacts on agricultural crops if used for irrigation	Sludge dry beds will be used to prepare the compost for further selling to the local farmers which will be a source of revenue generation for the MC. After disinfection and chlorination and helminths and pathogens removal, treated water will be reused for irrigation purposes and during monsoon or no irrigation usage seasons, treated water shall be pumped through watercourse to the nearest canal which is 4-5km away from the WWTP. For discharge of treated water into surface water body, PEQSs6 shall be strictly followed (Attached as Annexure B) As Pakistan has no Guidelines/Standards for treated water re-use, so WHO, FAO and USEPA Guidelines and Standards (attached as Annexure K) shall be used to ensure the environmental and ecological safety	

^{6 .} As per PEQSs, Biochemical Oxygen Demand (BOD5) at 200 C for inland water discharge is 80