



STANDARD PROCUREMENT DOCUMENT

Request for Bids Small Works

(One-Envelope Bidding Process)

Procurement of:

Rehabilitation of Internal Roads-Ramallah City

RFB No: MDPIII-CII-0821062-01

Project: Municipal Development Project (MDP III) – 2nd Cycle.

Employer: Ramallah Municipality

Country: Palestine

Issued on: August, 2020.

Standard Procurement Document Summary

Specific Procurement Notice

Specific Procurement Notice - Request for Bids (RFB)

The template attached is the Specific Procurement Notice for Request for Bids method, one-envelope Bidding process. This is the template to be used by the Borrower.

Bidding Document: Request for Bids – Small Works (One-Envelope Bidding Process)

PART 1 – BIDDING PROCEDURES

Section I - Instructions to Bidders (ITB)

This Section provides information to help Bidders prepare their Bids. It is based on a one-envelope Bidding process. Information is also provided on the submission, opening, and evaluation of Bids and on the award of Contracts.

Section II - Bid Data Sheet (BDS)

This Section includes of provisions that are specific to each procurement and that supplement Section I, Instructions to Bidders.

Section III - Evaluation and Qualification Criteria

This Section specifies the criteria to determine the Most Advantageous Bid. The Most Advantageous Bid is the Bid of the Bidder that meets the Qualification Criteria and whose Bid has been determined to be:

- (a) Substantially responsive to the bidding document, and
- (b) The lowest evaluated cost.

Section IV - Bidding Forms

This Section includes the forms for the Bid submission, Bill of Quantities or Activity Schedule to be completed by the Bidder and submitted as part of its Bid.

Section V - Eligible Countries

This Section contains information regarding eligible countries.

Section VI - Fraud and Corruption

This section includes the Fraud and Corruption provisions which apply to this Bidding process.

PART 2 – WORKS' REQUIREMENTS

Section VII - Works' Requirements

This Section contains the Specification, the Drawings, and supplementary information that describe the Works to be procured.

PART 3 – CONDITIONS OF CONTRACT AND CONTRACT FORMS

Section VIII - General Conditions of Contract (GCC)

This Section contains the general clauses to be applied in all contracts.

Section IX - Particular Conditions of Contract (PCC)

This Section consists of Contract Data and Specific Provisions which contains clauses specific to each contract. The contents of this Section modify or supplement, but not over-write, the General Conditions and shall be prepared by the Employer.

Section X - Contract Forms

This Section contains forms which, once completed, will form part of the Contract. The forms for **Performance Security** and if required, Environmental, Social, Health and Safety (ESHS) Performance Security, and **Advance Payment Security**, when required, shall only be completed by the successful Bidder after Contract award.

Request for Bids Small Works

(One-Envelope Bidding Process)

Country: Palestine- Ramallah Governorate- Ramallah.

Name of Project: Municipal Development Program / MDP III/CYCLE II

Contract Title: Rehabilitation of Internal Roads – Ramallah city

Grant No.: TF 0A6154

RFB Reference No.: MDPIII-CII-0821062-01

- 1) The Palestine Liberation Organization, for the benefit of the Palestinian National Authority (PNA), has received an initial financing of 130 Million Euros from the World Bank-International Development Association (IDA), Central Government, KFW, Denmark, SDC, VNG, GIZ and AFD,EU towards the cost of the 3rd phase of the Municipal Development Program (MDP3). The Municipal Development and Lending Fund (MDLF) is entrusted in the execution and supervision of the implementation of the Project and intends to apply part of the proceedings of (MDTF) grant to eligible payments under the contract for: Rehabilitation of Internal Roads–Ramallah city for Ramallah Municipality. Contract No: MDPIIICII-0821062-01 for the benefit of Ramallah Municipality.
- 2) Ramallah municipality now invites sealed Bids from eligible and qualified bidders for carrying out Bidders for Rehabilitation of Internal Roads-Ramallah city, the project duration is 120 calendar days.
- 3) Bidding will be conducted through national competitive procurement using a Request for Bids (RFB) as specified in the World Bank's "Procurement Regulations for IPF Borrowers" January 2017 ("Procurement Regulations"), and is open to all Bidders as defined in the Procurement Regulations.
- 4) Qualifications requirements are presented in the Biding Documents.
- 5) Interested eligible Bidders may obtain further information from Ramallah municipality, procurement and purchasing Unit during office hours 8:00 A.M. till 3:00 P.M. starting from 10/8/2020 to 3/9/2020. The Bidding document can also be found on the Municipality website www.ramallah.ps.
- 6) A complete set of Bidding Documents in English may be purchased by interested bidders on the submission of a written application to the address below starting from 10/8/2020 to 3/9/2020 and upon payment of a nonrefundable fee 100Euro. The method of payment will be in a Cashier's Check or Direct deposit to Municipality account number (Arab Bank/ 9090-659-150-530 Ramallah Branch). The Bidding Documents will be available at Citizen Service Center (CSC) Ramallah Municipality.
- 7) The grant is **VAT included**.

- 8) A Site Visit and Pre-Bid Meeting: Contractors are invited to attend the site visit, which will be held on Monday 24/08/2020 at 10:00 AM, the pre-bid meeting shall be held at Ramallah Municipality, Issa Ziadeh, meeting Hall.
- 9) Bids shall be valid for a period of 90 after Bid closing and must be accompanied by a bid security of 13,000 Euro and shall be valid for 118 days after bid closing date.
- 10) Bids must be delivered to the address shown below on or before Wednesday 09/09/2020 at 12:00 PM. Electronic Bidding will not be permitted. Late Bids will be rejected. Bids will be publicly opened in the presence of the Bidders' designated representatives and anyone who chooses to attend at this address, on Wednesday 09/09/2020 at 12:00PM.

 Ramallah Municipality, Municipality hall- 1st floor.
- 11) The address referred to above is:
 Ramallah Municipality, Purchasing and Tendering Unit,
 Tel: 00970 2945555, Fax: 00970 2963214.

Mayor of Ramallah Eng. Musa Hadid

Funded by:





















Request for Bids Small Works

(One-Envelope Bidding Process)

Procurement of:

Rehabilitation of Internal Roads in Ramallah City

RFB No: MDPIII-CII-0821062-01

Project: Rehabilitation of Internal Roads -Ramallah city

Employer: Ramallah Municipality

Country: Palestine

Issued on: August, 2020

Standard Procurement Document

Table of Contents

PART 1 – Bidding Procedures	3
Section I - Instructions to Bidders	5
Section II - Bid Data Sheet (BDS)	
Section III - Evaluation and Qualification Criteria	33
Section IV - Bidding Forms	
Section V - Eligible Countries	81
Section VI - Fraud and Corruption	82
PART 2 – Works' Requirements	85
Section VII - Works' Requirements	86
PART 3 – Conditions of Contract and Contract Forms	120
Section VIII - General Conditions of Contract	121
Section IX - Particular Conditions of Contract	149
Section X - Contract Forms	157
PART 4 - Environmental and Social Management Plan	166

PART 1 – Bidding Procedures

Section I - Instructions to Bidders

Contents

A.	Ge	neral	7
		ope of Bid	
2	2. So	urce of Funds	7
3	3. Fr	aud and Corruption	7
		gible Bidders	
-		gible Materials, Equipment and Services	
В.	Co	ntents of Bidding Document	10
(5. Se	ctions of Bidding Document	10
7	7. Cl	arification of Bidding Document, Site Visit, Pre-Bid Meeting	11
8	3. Ar	mendment of Bidding Document	12
C.	Pro	eparation of Bids	12
()	ost of Bidding	10
	9. Ca 10.	Language of Bid	
	10. 11.		
	11. 12.	Documents Comprising the Bid Letter of Bid and Schedules	
	13.	Alternative Bids	
	14.	Bid Prices and Discounts	
	15.	Currencies of Bid and Payment	
	16.	Documents Comprising the Technical Proposal	
	17.	Documents Establishing the Eligibility and Qualifications of the Bidder	
	18.	Period of Validity of Bids	
	19.	Bid Security	
2	20.	Format and Signing of Bid	
D.	Sul	bmission and Opening of Bids	17
	21.	Sealing and Marking of Bids	
	22.	Deadline for Submission of Bids	
	23.	Late Bids	
	24.	Withdrawal, Substitution, and Modification of Bids	
4	25.	Bid Opening	18
E.	Ev	aluation and Comparison of Bids	20
2	26.	Confidentiality	20
4	27.	Clarification of Bids	20
	28.	Deviations, Reservations, and Omissions	
-	29	Determination of Responsiveness	20

Section I -	Instructions to Bidders (ITB)	6
30.	Nonmaterial Nonconformities	21
31.	Correction of Arithmetical Errors	21
32.	Conversion to Single Currency	21
33.	Margin of Preference	22
34.	Subcontractors	22
35.	Evaluation of Bids	22
36.	Comparison of Bids	23
37.	Abnormally Low Bids	23
38.	Unbalanced or Front Loaded Bids	23
39.	Qualification of the Bidder	
40.	Most Advantageous Bid	24
41.	Employer's Right to Accept Any Bid, and to Reject Any or All Bids	24
42.	Standstill Period	
43.	Notice of Intention to Award	24
	ard of Contract	
F. Aw	ard of Contract	25
4.4	A	25
44.	Award Criteria Notification of Award	25
45.		
46.	Debriefing by the Employer	
47.	Signing of Contract	
48. 49.	Performance Security	
	Adjudicator	20
50.	Procurement Related Complaint	21

Section I - Instructions to Bidders

A. General

1. Scope of Bid

- 1.1 In connection with the Specific Procurement Notice Request for Bids (RFB), specified in the Bid Data Sheet (BDS), the Employer, as specified in the BDS, issues this bidding document for the provision of Works as specified in Section VII, Works' Requirements. The name, identification and number of lots (contracts) of this RFB are specified in the BDS.
- **1.2** Throughout this bidding document:
 - (a) the term "in writing" means communicated in written form (e.g. by mail, e-mail, and fax, including if specified in the **BDS**, distributed or received through the electronic-procurement system used by the Employer) with proof of receipt;
 - (b) if the context so requires, "singular" means "plural" and vice versa; and
 - (c) "Day" means calendar day, unless otherwise specified as "Business Day". A Business Day is any day that is an official working day of the Borrower. It excludes the Borrower's official public holidays.

2. Source of Funds

- 2.1 The Borrower or Recipient (hereinafter called "Borrower") specified in the BDS has received or has applied for financing (hereinafter called "funds") from MDTF (hereinafter called "the Donor") in an amount specified in the BDS, toward the project named in the BDS. The Borrower intends to apply a portion of the funds to eligible payments under the contract(s) for which this bidding document is issued.
- 2.2 Payment by the Donor will be made only at the request of the Borrower and upon approval by the Donor, and will be subject, in all respects, to the terms and conditions of the Loan (or other financing) Agreement. The Loan (or other financing) Agreement prohibits a withdrawal from the loan account for the purpose of any payment to persons or entities, or for any import of goods, equipment, plant, or materials, if such payment or import is prohibited by a decision of the United Nations Security Council taken under Chapter VII of the Charter of the United Nations. No party other than the Borrower shall derive any rights from the Loan (or other financing) Agreement or have any claim to the proceeds of the Loan (or other financing).

3. Fraud and Corruption

- **3.1** The Donor requires compliance with the World Bank's (hereinafter called "the Bank") Anti-Corruption Guidelines and its prevailing sanctions policies and procedures as set forth in the WBG's Sanctions Framework, as set forth in Section VI.
- **3.2** In further pursuance of this policy, bidders shall permit and shall cause their agents (where declared or not), subcontractors,

subconsultants, service providers, suppliers, and their personnel, to permit the Donor to inspect all accounts, records and other documents relating to any initial selection process, prequalification process, bid submission, proposal submission, and contract performance (in the case of award), and to have them audited by auditors appointed by the Donor.

4. Eligible Bidders

- 4.1 A Bidder may be a firm that is a private entity, or a state-owned enterprise or institution, subject to ITB 4.6, or any combination of them in the form of a joint venture (JV), under an existing agreement, or with the intent to enter into such an agreement supported by a letter of intent. In the case of a joint venture, all members shall be jointly and severally liable for the execution of the entire Contract in accordance with the Contract terms. The JV shall nominate a Representative who shall have the authority to conduct all business for and on behalf of any and all the members of the JV during the Bidding process and, in the event the JV is awarded the Contract, during contract execution. Unless specified in the BDS, there is no limit on the number of members in a JV.
- **4.2** A Bidder shall not have a conflict of interest. All Bidders found to have a conflict of interest shall be disqualified. A Bidder may be considered to have a conflict of interest for the purpose of this Bidding process, if the Bidder:
 - (a) directly or indirectly controls, is controlled by or is under common control with another Bidder; or
 - (b) receives or has received any direct or indirect subsidy from another Bidder; or
 - (c) has the same legal representative as another Bidder; or
 - (d) has a relationship with another Bidder, directly or through common third parties, that puts it in a position to influence the Bid of another Bidder, or influence the decisions of the Employer regarding this bidding process; or
 - (e) or any of its affiliates participated as a consultant in the preparation of the design or technical specifications of the works that are the subject of the Bid; or
 - (f) or any of its affiliates has been hired (or is proposed to be hired) by the Employer or Borrower as Project Manager for the Contract implementation;
 - (g) would be providing goods, works, or non-consulting services resulting from or directly related to consulting services for the preparation or implementation of the project specified in the BDS ITB 2.1 that it provided or were provided by any affiliate that directly or indirectly controls, is controlled by, or is under common control with that firm;
 - (h) has a close business or family relationship with a professional staff of the Borrower (or of the project implementing agency, or of a recipient of a part of the loan) who: (i) are directly or indirectly involved in the preparation of the bidding document or specifications of the contract, and/or the Bid evaluation process of such contract; or (ii) would be involved

in the implementation or supervision of such contract unless the conflict stemming from such relationship has been resolved in a manner acceptable to the Bank throughout the procurement process and execution of the contract.

- **4.3** A firm that is a Bidder (either individually or as a JV member) shall not participate in more than one Bid, except for permitted alternative Bids. This includes participation as a Subcontractor in other Bids. Such participation shall result in the disqualification of all Bids in which the firm is involved. A firm that is not a Bidder or a JV member may participate as a subcontractor in more than one Bid.
- 4.4 A Bidder may have the nationality of any country, subject to the restrictions pursuant to ITB 4.8. A Bidder shall be deemed to have the nationality of a country if the Bidder is constituted, incorporated or registered in and operates in conformity with the provisions of the laws of that country, as evidenced by its articles of incorporation (or equivalent documents of constitution or association) and its registration documents, as the case may be. This criterion also shall apply to the determination of the nationality of proposed subcontractors or subconsultants for any part of the Contract including related Services.
- 4.5 A Bidder that has been sanctioned by the Bank, pursuant to the Bank's Anti-Corruption Guidelines, in accordance with its prevailing sanctions policies and procedures as set forth in the WBG's Sanctions Framework as described in Section VI paragraph 2.2 d., shall be ineligible to be prequalified for, initially selected for, bid for, propose for, or be awarded a Bank-financed contract or benefit from a Bank-financed contract, financially or otherwise, during such period of time as the Bank shall have determined. The list of debarred firms and individuals is available at the electronic address specified in the BDS.
- **4.6** Bidders that are state-owned enterprises or institutions in the Employer's Country may be eligible to compete and be awarded a Contract(s) only if they can establish, in a manner acceptable to the Bank, that they (i) are legally and financially autonomous (ii) operate under commercial law, and (iii) are not under supervision of the Employer.
- **4.7** A Bidder shall not be under suspension from Bidding by the Employer as the result of the operation of a Bid–Securing or Proposal-Securing Declaration.
- 4.8 Firms and individuals may be ineligible if so indicated in Section V and (a) as a matter of law or official regulations, the Borrower's country prohibits commercial relations with that country, provided that the Bank is satisfied that such exclusion does not preclude effective competition for the supply of goods or the contracting of works or services required; or (b) by an act of compliance with a decision of the United Nations Security Council taken under Chapter VII of the Charter of the United Nations, the Borrower's country prohibits any import of goods or contracting of works or services

from that country, or any payments to any country, person, or entity in that country. When the Works are implemented across jurisdictional boundaries (and more than one country is a Borrower, and is involved in the procurement), then exclusion of a firm or individual on the basis of ITB 4.8 (a) above by any country may be applied to that procurement across other countries involved, if the Bank and the Borrowers involved in the procurement agree.

- **4.9** A Bidder shall provide such documentary evidence of eligibility satisfactory to the Employer, as the Employer shall reasonably request.
- **4.10** A firm that is under a sanction of debarment by the Borrower from being awarded a contract is eligible to participate in this procurement, unless the Bank, at the Borrower's request, is satisfied that the debarment;
 - (a) relates to fraud or corruption, and
 - (b) Followed a judicial or administrative proceeding that afforded the firm adequate due process.
- **5.1** The materials, equipment and services to be supplied under the Contract and financed by the Donor may have their origin in any country subject to the restrictions specified in Section V, Eligible Countries, and all expenditures under the Contract will not contravene such restrictions. At the Employer's request, Bidders may be required to provide evidence of the origin of materials, equipment and services.

B. Contents of Bidding Document

6.1 The bidding document consists of Parts 1, 2, and 3, which include all the sections specified below, and which should be read in conjunction with any Addenda issued in accordance with ITB 8.

PART 1 Bidding Procedures

- Section I Instructions to Bidders (ITB)
- Section II Bid Data Sheet (BDS)
- Section III Evaluation and Qualification Criteria
- Section IV Bidding Forms
- Section V Eligible Countries
- Section VI Fraud and Corruption

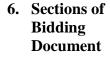
PART 2 Works' Requirements

• Section VII - Works' Requirements

PART 3 Conditions of Contract and Contract Forms

- Section VIII General Conditions of Contract (GCC)
- Section IX Particular Conditions of Contract (PCC)
- Section X Contract Forms
- **6.2** The Specific Procurement Notice Request for Bids (RFB) issued by the Employer is not part of this bidding document.
- **6.3** Unless obtained directly from the Employer, the Employer is not responsible for the completeness of the bidding document, responses to requests for clarification, the minutes of the pre-Bid meeting (if any), or Addenda to the bidding document in

5. Eligible Materials, Equipment and Services



- accordance with ITB 8. In case of any contradiction, documents obtained directly from the Employer shall prevail.
- **6.4** The Bidder is expected to examine all instructions, forms, terms, and specifications in the bidding document and to furnish with its Bid all information and documentation as is required by the bidding document.
- 7. Clarification of Bidding Document, Site Visit, Pre-Bid Meeting
- 7.1 A Bidder requiring any clarification of the bidding document shall contact the Employer in writing at the Employer's address specified in the BDS or raise its inquiries during the pre-Bid meeting if provided for in accordance with ITB 7.4. The Employer will respond in writing to any request for clarification, provided that such request is received prior to the deadline for submission of Bids within a period specified in the BDS. The Employer shall forward copies of its response to all Bidders who have acquired the bidding document in accordance with ITB 6.3, including a description of the inquiry but without identifying its source. If so specified in the BDS, the Employer shall also promptly publish its response at the web page identified in the BDS. Should the clarification result in changes to the essential elements of the bidding document, the Employer shall amend the bidding document following the procedure under ITB 8 and ITB 22.2.
- 7.2 The Bidder is advised to visit and examine the Site of Works and its surroundings and obtain for itself on its own responsibility all information that may be necessary for preparing the bid and entering into a contract for construction of the Works. The costs of visiting the Site shall be at the Bidder's own expense.
- 7.3 The Bidder and any of its personnel or agents will be granted permission by the Employer to enter upon its premises and lands for the purpose of such visit, but only upon the express condition that the Bidder, its personnel, and agents will release and indemnify the Employer and its 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 the inspection.
- **7.4** If so specified **in the BDS**, the Bidder's designated representative is invited to attend a pre-Bid meeting and/or a Site of Works visit. The purpose of the meeting will be to clarify issues and to answer questions on any matter that may be raised at that stage.
- **7.5** The Bidder is requested, to submit any questions in writing, to reach the Employer not later than one week before the meeting.
- 7.6 Minutes of the pre-Bid meeting, if applicable, including the text of the questions asked by Bidders, without identifying the source, and the responses given, together with any responses prepared after the meeting, will be transmitted promptly to all Bidders who have acquired the bidding document in accordance with ITB 6.3 Any modification to the bidding document that 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 ITB 8

and not through the minutes of the pre-Bid meeting. Nonattendance at the pre-Bid meeting will not be a cause for disqualification of a Bidder.

8. Amendment of Bidding Document

- **8.1** At any time prior to the deadline for submission of bids, the Employer may amend the bidding document by issuing addenda.
- **8.2** Any addendum issued shall be part of the bidding document and shall be communicated in writing to all who have obtained the bidding document from the Employer in accordance with ITB 6. The Employer shall also promptly publish the addendum on the Employer's web page in accordance with ITB 7.1.
- **8.3** To give prospective Bidders reasonable time in which to take an addendum into account in preparing their Bids, the Employer may, at its discretion, extend the deadline for the submission of Bids, pursuant to ITB 22.2.

C. Preparation of Bids

9. Cost of Bidding

9.1 The Bidder shall bear all costs associated with the preparation and submission of its Bid, and the Employer shall in no case be responsible or liable for those costs, regardless of the conduct or outcome of the Bidding process.

10. Language of Bid

10.1 The Bid, as well as all correspondence and documents relating to the Bid exchanged by the Bidder and the Employer, shall be written in the language specified in the BDS. Supporting documents and printed literature that are part of the Bid may be in another language provided they are accompanied by an accurate translation of the relevant passages in the language specified in the BDS, in which case, for purposes of interpretation of the Bid, such translation shall govern.

11. Documents Comprising the Bid

- **11.1** The Bid shall comprise the following:
 - (a) Letter of Bid prepared in accordance with ITB 12;
 - (b) **Bill of Quantities or Activity Schedule**: completed in accordance with ITB 12 and ITB 14, as specified **in the BDS**;
 - (c) **Bid Security or Bid-Securing Declaration**, in accordance with ITB 19.1;
 - (d) **Alternative Bid**, if permissible, in accordance with ITB 13;
 - (e) **Authorization:** written confirmation authorizing the signatory of the Bid to commit the Bidder, in accordance with ITB 20.3;
 - (f) **Bidder's Eligibility:** documentary evidence in accordance with ITB 17 establishing the Bidder's eligibility to Bid;
 - (g) **Qualifications**: documentary evidence in accordance with ITB 17 establishing the Bidder's qualifications to perform the contract if its Bid is accepted;
 - (h) **Conformity**: a technical proposal in accordance with ITB 16;
 - (i) Any other document required in the BDS.
 - 11.2 In addition to the requirements under ITB 11.1, Bids submitted by a JV shall include a copy of the Joint Venture Agreement entered into by all members. Alternatively, a letter of intent to execute a

Joint Venture Agreement in the event of a successful bid shall be signed by all members and submitted with the Bid, together with a copy of the proposed Agreement.

- 11.3 The Bidder shall furnish in the Letter of Bid information on commissions and gratuities, if any, paid or to be paid to agents or any other party relating to this Bid.
- 12. Letter of Bid and Schedules
- 12.1 The Letter of Bid and Schedules shall be prepared using the relevant forms furnished in Section IV, Bidding Forms. The forms must be completed without any alterations to the text, and no substitutes shall be accepted except as provided under ITB 20.3. All blank spaces shall be filled in with the information requested.
- 13. Alternative Bids
- **13.1** Unless otherwise specified **in the BDS**, alternative Bids shall not be considered.
- 13.2 When alternative times for completion are explicitly invited, a statement to that effect will be included in the BDS and the method of evaluating different alternative times for completion will be described in Section III, Evaluation and Qualification Criteria.
- 13.3 Except as provided under ITB 13.4 below, Bidders wishing to offer technical alternatives to the requirements of the bidding document must first price the Employer's design as described in the bidding document and shall further provide all information necessary for a complete evaluation of the alternative by the Employer, including drawings, design calculations, technical specifications, breakdown of prices, and proposed construction methodology and other relevant details. Only the technical alternatives, if any, of the Bidder with the Most Advantageous Bid conforming to the basic technical requirements shall be considered by the Employer.
- When specified **in the BDS**, Bidders are permitted to submit alternative technical solutions for specified parts of the Works. Such parts will be identified **in the BDS** and described in Section VII, Works' Requirements. The method for their evaluation will be stipulated in Section III, Evaluation and Qualification Criteria.
- 14. Bid Prices and Discounts
- 14.1 The prices and discounts quoted by the Bidder in the Letter of Bid and in the Activity Schedule or Bill of Quantities shall conform to the requirements specified below.
- 14.2 The Bidder shall submit a Bid for the whole of the Works described in ITB 1.1 by filling in prices for all items of the Works, as identified in Section IV. Bidding Forms. In case of admeasurement contracts, the Bidder 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 the Bidder will not be paid for by the Employer when executed and shall be deemed covered by the rates for other items and prices in the Bill of Quantities.
- **14.3** The price to be quoted in the Letter of Bid, in accordance with ITB 12.1, shall be the total price of the Bid, excluding any discounts offered.

- 14.4 The Bidder shall quote any discounts and indicate the methodology for their application in the Letter of Bid in accordance with ITB 12.1.
- 14.5 Unless otherwise specified in the BDS and the Conditions of Contract, the prices quoted by the Bidder shall be fixed. If the prices quoted by the Bidder are subject to adjustment during the performance of the Contract in accordance with the provisions of the Conditions of Contract, the Bidder shall furnish the indices and weightings for the price adjustment formulae in the Schedule of Adjustment Data in Section IV- Bidding Forms and the Employer may require the Bidder to justify its proposed indices and weightings.
- 14.6 If so specified in ITB 1.1, Bids are invited for individual lots (contracts) or for any combination of lots (packages). Bidders wishing to offer discounts for the award of more than one Contract shall specify in their Bid the price reductions applicable to each package, or alternatively, to individual Contracts within the package. Discounts shall be submitted in accordance with ITB 14.4, provided the Bids for all lots (contracts) are opened at the same time.
- 14.7 All duties, taxes, and other levies payable by the Contractor under the Contract, or for any other cause, as of the date 28 days prior to the deadline for submission of Bids, shall be included in the rates and prices¹ and the total Bid price submitted by the Bidder.

15. Currencies of Bid and Payment

- **15.1** The currency(ies) of the Bid and the currency(ies) of payments shall be the same and shall be as specified **in the BDS**.
- 15.2 Bidders may be required by the Employer to justify, to the Employer's satisfaction, their local and foreign currency requirements, and to substantiate that the amounts included in the unit rates and prices and shown in the Schedule of Adjustment Data are reasonable², in which case a detailed breakdown of the foreign currency requirements shall be provided by Bidders.
- 16. Documents
 Comprising the
 Technical
 Proposal
- 16.1 The Bidder shall furnish a technical proposal including a statement of work methods, equipment, personnel, schedule and any other information as stipulated in Section IV, Bidding Forms, in sufficient detail to demonstrate the adequacy of the Bidders' proposal to meet the work's requirements and the completion time.
- 17. Documents
 Establishing the
 Eligibility and
 Qualifications of
 the Bidder
- 17.1 To establish Bidder's eligibility in accordance with ITB 4, Bidders shall complete the Letter of Bid, included in Section IV, Bidding Forms.17.2 In accordance with Section III, Evaluation and Qualification
- 17.2 In accordance with Section III, Evaluation and Qualification Criteria, to establish its qualifications to perform the Contract, the Bidder shall provide the information requested in the corresponding information sheets included in Section IV, Bidding Forms.

In lump sum contracts, delete "rates and prices and the."

For lump sum contracts, delete "unit rates and prices and shown in the Schedule of Adjustment Data are reasonable" and replace with "Lump Sum."

17.3 If a margin of preference applies as specified in accordance with ITB 33.1, domestic Bidders, individually or in joint ventures, applying for eligibility for domestic preference shall supply all information required to satisfy the criteria for eligibility specified in accordance with ITB 33.1.

18. Period of Validity of Bids

- 18.1 Bids shall remain valid for the Bid Validity period specified in the BDS. The Bid Validity period starts from the date fixed for the Bid submission deadline (as prescribed by the Employer in accordance with ITB 22.1). A Bid valid for a shorter period shall be rejected by the Employer as nonresponsive.
- 18.2 In exceptional circumstances, prior to the expiration of the Bid validity period, the Employer may request Bidders to extend the period of validity of their Bids. The request and the responses shall be made in writing. If a Bid Security is requested in accordance with ITB 19, it shall also be extended for twenty-eight (28) days beyond the deadline of the extended validity period. A Bidder may refuse the request without forfeiting its Bid Security. A Bidder granting the request shall not be required or permitted to modify its Bid, except as provided in ITB 18.3.
- **18.3** If the award is delayed by a period exceeding fifty-six (56) days beyond the expiry of the initial Bid validity period, the Contract price shall be determined as follows:
 - (a) in the case of **fixed price** contracts, the Contract price shall be the Bid price adjusted by the factor specified **in the BDS**;
 - (b) in the case of **adjustable** price contracts, no adjustment shall be made; or
 - (c) in any case, Bid evaluation shall be based on the Bid price without taking into consideration the applicable correction from those indicated above.

19. Bid Security

- 19.1 The Bidder shall furnish as part of its Bid, either a Bid-Securing Declaration or a Bid Security as specified in the BDS, in original form and, in the case of a Bid Security, in the amount and currency specified in the BDS.
- **19.2** A Bid Securing Declaration shall use the form included in Section IV, Bidding Forms.
- 19.3 If a Bid Security is specified pursuant to ITB 19.1, the Bid Security shall be a demand guarantee in any of the following forms at the Bidder's option:
 - (a) an unconditional guarantee issued by a bank or non-bank financial institution (such as an insurance, bonding or surety company);
 - **(b)** an irrevocable letter of credit;
 - (c) a cashier's or certified check; or
 - (d) another security specified in the BDS,

from a reputable source from an eligible country. If an unconditional guarantee is issued by a non-bank financial institution located outside the Employer's Country, the issuing non-bank financial institution shall have a correspondent financial

institution located in the Employer's Country to make it enforceable, unless the Employer has agreed in writing, prior to Bid submission, that a correspondent financial institution is not required. In the case of a bank guarantee, the Bid Security shall be submitted either using the Bid Security Form included in Section IV, Bidding Forms, or in another substantially similar format approved by the Employer prior to Bid submission. The Bid Security shall be valid for twenty-eight (28) days beyond the original validity period of the Bid, or beyond any period of extension if requested under ITB 18.2.

- **19.4** If a Bid Security or Bid Securing Declaration is specified pursuant to ITB 19.1, any Bid not accompanied by a substantially responsive Bid Security or Bid-Securing Declaration shall be rejected by the Employer as non-responsive.
- 19.5 If a Bid Security is specified pursuant to ITB 19.1, the Bid Security of unsuccessful Bidders shall be returned as promptly as possible upon the successful Bidder's signing the Contract and furnishing the Performance Security and if required in the BDS, the Environmental, Social, Health and Safety (ESHS) Performance Security pursuant to ITB 48.
- 19.6 The Bid Security of the successful Bidder shall be returned as promptly as possible once the successful Bidder has signed the Contract and furnished the required Performance Security. and if required in the BDS, the Environmental, Social, Health and Safety (ESHS) Performance Security.
- **19.7** The Bid Security may be forfeited or the Bid-Securing Declaration executed:
 - (a) if a Bidder withdraws its Bid during the period of Bid validity specified by the Bidder on the Letter of Bid, or any extension thereto provided by the Bidder; or
 - **(b)** if the successful Bidder fails to:
 - (i) Sign the Contract in accordance with ITB 47; or
 - (ii) Furnish a Performance Security and if required in the BDS, the Environmental, Social, Health and Safety (ESHS) Performance Security in accordance with ITB 48.
- 19.8 The Bid Security or the Bid-Securing Declaration of a JV shall be in the name of the JV that submits the Bid. If the JV has not been constituted into a legally enforceable JV, at the time of Bidding, the Bid Security or the Bid-Securing Declaration shall be in the names of all future members as named in the letter of intent mentioned in ITB 4.1 and ITB 11.2.
- **19.9** If a Bid Security is not required **in the BDS**, pursuant to ITB 19.1, and;
 - (a) if a Bidder withdraws its Bid during the period of Bid validity specified by the Bidder on the Letter of Bid; or
 - (b) if the successful Bidder fails to: sign the Contract in accordance with ITB 47, or furnish a Performance Security and if required in the BDS, the Environmental, Social, Health

and Safety (ESHS) Performance Security in accordance with ITB 48;

the Borrower may, if provided for **in the BDS**, declare the Bidder ineligible to be awarded a contract by the Employer for a period of time stated **in the BDS**.

20. Format and Signing of Bid

- 20.1 The Bidder shall prepare one original of the documents comprising the Bid as described in ITB 11 and clearly mark it "ORIGINAL". Alternative Bids, if permitted in accordance with ITB 13, shall be clearly marked "ALTERNATIVE". In addition, the Bidder shall submit copies of the Bid in the number specified in the BDS, and clearly mark each of them "COPY." In the event of any discrepancy between the original and the copies, the original shall prevail.
- **20.2** Bidders shall mark as "CONFIDENTIAL" information in their Bids which is confidential to their business. This may include proprietary information, trade secrets, or commercial or financially sensitive information.
- 20.3 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 BDS 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 where entries or amendments have been made shall be signed or initialed by the person signing the Bid.
- 20.4 In case the Bidder is a JV, the Bid shall be signed by an authorized representative of the JV on behalf of the JV, and so as to be legally binding on all the members as evidenced by a power of attorney signed by their legally authorized representatives.
- 20.5 Any interlineations, erasures, or overwriting shall be valid only if they are signed or initialed by the person signing the Bid.

D. Submission and Opening of Bids

21. Sealing and Marking of Bids

- **21.1** The Bidder shall deliver the Bid in a single, sealed envelope (one-envelope Bidding process). Within the single envelope the Bidder shall place the following separate, sealed envelopes:
 - (a) in an envelope marked "ORIGINAL", all documents comprising the Bid, as described in ITB 11; and
 - (b) in an envelope marked "COPIES", all required copies of the Bid; and
 - (c) if alternative Bids are permitted in accordance with ITB 13, and if relevant:
 - (i) in an envelope marked "ORIGINAL ALTERNATIVE BID", the alternative Bid; and
 - (ii) in the enveloped marked "COPIES ALTERNATIVE BID" all required copies of the alternative Bid.
- **21.2** The inner and outer envelopes shall:
 - (a) bear the name and address of the Bidder;
 - **(b)** be addressed to the Employer in accordance with ITB 22.1;

- (c) bear the specific identification of this Bidding process specified in accordance with BDS 1.1; and
- (d) Bear a warning not to open before the time and date for Bid opening.
- **21.3** If all envelopes are not sealed and marked as required, the Employer will assume no responsibility for the misplacement or premature opening of the Bid.
- 22. Deadline for Submission of Bids
- 22.1 Bids must be received by the Employer at the address and no later than the date and time specified in the BDS. When so specified in the BDS, Bidders shall have the option of submitting their Bids electronically. Bidders submitting Bids electronically shall follow the electronic bid submission procedures specified in the BDS.
- 22.2 The Employer may, at its discretion, extend the deadline for the submission of Bids by amending the bidding document in accordance with ITB 8, in which case all rights and obligations of the Employer and Bidders previously subject to the deadline shall thereafter be subject to the deadline as extended.
- 23. Late Bids
- 23.1 The Employer shall not consider any Bid that arrives after the deadline for submission of Bids, in accordance with ITB 22. Any Bid received by the Employer after the deadline for submission of Bids shall be declared late, rejected, and returned unopened to the Bidder.
- 24. Withdrawal, Substitution, and Modification of Bids
- 24.1 A Bidder may withdraw, substitute, or modify its Bid after it has been submitted by sending a written notice, duly signed by an authorized representative, and shall include a copy of the authorization in accordance with ITB 20.3, (except that withdrawal notices do not require copies). The corresponding substitution or modification of the Bid must accompany the respective written notice. All notices must be:
 - (a) prepared and submitted in accordance with ITB 20 and ITB 21 (except that withdrawal notices do not require copies), and in addition, the respective envelopes shall be clearly marked "WITHDRAWAL," "SUBSTITUTION," "MODIFICATION"; and
 - **(b)** Received by the Employer prior to the deadline prescribed for submission of Bids, in accordance with ITB 22.
- **24.2** Bids requested to be withdrawn in accordance with ITB 24.1 shall be returned unopened to the Bidders.
- 24.3 No Bid may be withdrawn, substituted, or modified in the interval between the deadline for submission of Bids and the expiration of the period of Bid validity specified by the Bidder on the Letter of Bid or any extension thereof.
- 25. Bid Opening
- 25.1 Except in the cases specified in ITB 23 and ITB 24.2, the Employer shall publicly open and read out in accordance with this ITB, all Bids received by the deadline, at the date, time and place specified in the BDS, in the presence of Bidders' designated representatives and anyone who chooses to attend. All Bidders, or their representatives and any interested party may attend a public opening. Any specific electronic Bid opening procedures required

- if electronic bidding is permitted in accordance with ITB 22.1, shall be as specified **in the BDS**.
- 25.2 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.
- 25.3 Next, envelopes marked "SUBSTITUTION" shall be opened and read out and exchanged with the corresponding Bid being substituted, and the substituted Bid shall not be opened, but returned to the Bidder. No Bid substitution shall be permitted unless the corresponding substitution notice contains a valid authorization to request the substitution and is read out at Bid opening.
- 25.4 Next, envelopes marked "MODIFICATION" shall be opened and read out with the corresponding Bid. No Bid modification shall be permitted unless the corresponding modification notice contains a valid authorization to request the modification and is read out at bid opening.
- 25.5 Next, all remaining envelopes shall be opened one at a time, reading out: the name of the Bidder and whether there is a modification; the total Bid Price, per lot (contract) if applicable, including any discounts and alternative Bids; the presence or absence of a Bid Security, or Bid Securing Declaration, if required; and any other details as the Employer may consider appropriate.
- 25.6 Only Bids, alternative Bids and discounts that are opened and read out at Bid opening shall be considered further for evaluation. The Letter of Bid and the priced Schedules are to be initialed by representatives of the Employer attending Bid opening in the manner specified in the BDS.
- 25.7 The Employer shall neither discuss the merits of any Bid nor reject any Bid (except for late Bids, in accordance with ITB 23.1).
- **25.8** The Employer shall prepare a record of the Bid opening that shall include, as a minimum:
 - (a) the name of the Bidder and whether there is a withdrawal, substitution, or modification;
 - **(b)** the Bid Price, per lot (contract) if applicable, including any discounts;
 - (c) the presence or absence of a Bid Security or Bid-Securing Declaration, if one was required; and
 - (d) any alternative Bids.
- **25.9** 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.

E. Evaluation and Comparison of Bids

26. Confidentiality

- **26.1** Information relating to the evaluation of Bids and recommendation of contract award, shall not be disclosed to Bidders or any other persons not officially concerned with the Bidding process until information on Intention to Award the Contract is transmitted to all Bidders in accordance with ITB 43.
- **26.2** Any effort by a Bidder to influence the Employer in the evaluation of the Bids or Contract award decisions may result in the rejection of its Bid.
- **26.3** Notwithstanding ITB 26.2, from the time of Bid opening to the time of Contract award, if a Bidder wishes to contact the Employer on any matter related to the Bidding process, it shall do so in writing.

27. Clarification of Bids

- 27.1 To assist in the examination, evaluation, and comparison of the Bids, and qualification of the Bidders, the Employer may, at its discretion, ask any Bidder for a clarification of its Bid given a reasonable time for a response. Any clarification submitted by a Bidder that is not in response to a request by the Employer shall not be considered. The Employer's request for clarification and the response shall be in writing. No change, including any voluntary increase or decrease in the prices or substance of the Bid shall be sought, offered, or permitted, except to confirm the correction of arithmetic errors discovered by the Employer in the evaluation of the Bids, in accordance with ITB 31.
- 27.2 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.

28. Deviations, Reservations, and Omissions

- **28.1** During the evaluation of Bids, the following definitions apply:
 - (a) "Deviation" is a departure from the requirements specified in the bidding document;
 - (b) "Reservation" is the setting of limiting conditions or withholding from complete acceptance of the requirements specified in the bidding document; and
 - (c) "Omission" is the failure to submit part or all of the information or documentation required in the bidding document.

29. Determination of Responsiveness

- **29.1** The Employer's determination of a Bid's responsiveness is to be based on the contents of the Bid itself, as defined in ITB 11.
- **29.2** A substantially responsive Bid is one that meets the requirements of the bidding document without material deviation, reservation, or omission. A material deviation, reservation, or omission is one that:
 - (a) if accepted, would:
 - (i) Affect in any substantial way the scope, quality, or performance of the Works specified in the Contract; or
 - (ii) Limit in any substantial way, inconsistent with the bidding document, the Employer's rights or the Bidder's obligations under the proposed Contract; or

- **(b)** If rectified, would unfairly affect the competitive position of other Bidders presenting substantially responsive Bids.
- **29.3** The Employer shall examine the technical aspects of the Bid submitted in accordance with ITB 16, in particular, to confirm that all requirements of Section VII, Works' Requirements have been met without any material deviation, reservation or omission.
- **29.4** If a Bid is not substantially responsive to the requirements of the bidding document, it shall be rejected by the Employer and may not subsequently be made responsive by correction of the material deviation, reservation, or omission.

30. Nonmaterial Nonconformities

- **30.1** Provided that a Bid is substantially responsive, the Employer may waive any nonconformities in the Bid.
- 30.2 Provided that a Bid is substantially responsive, the Employer may request that the Bidder submit the necessary information or documentation, within a reasonable period of time, to rectify nonmaterial nonconformities in the Bid related to documentation requirements. Requesting information or documentation on such nonconformities shall not be related to any aspect of the price of the Bid. Failure of the Bidder to comply with the request may result in the rejection of its Bid.
- **30.3** Provided that a Bid is substantially responsive, the Employer shall rectify quantifiable nonmaterial nonconformities related to the Bid Price. To this effect, the Bid Price shall be adjusted, for comparison purposes only, to reflect the price of a missing or nonconforming item or component in the manner specified **in the BDS**.

31. Correction of Arithmetical Errors

- **31.1** Provided that the Bid is substantially responsive, the Employer shall correct arithmetical errors on the following basis:
 - (a) only for admeasurement contracts, if there is a discrepancy between the unit price and the total price that is obtained by multiplying the unit price and quantity, the unit price shall prevail and the total price shall be corrected, unless in the opinion of the Employer there is an obvious misplacement of the decimal point in the unit price, in which case the total price as quoted shall govern and the unit price shall be corrected;
 - (b) if there is an error in a total corresponding to the addition or subtraction of subtotals, the subtotals shall prevail and the total shall be corrected; and
 - (c) if there is a discrepancy between words and figures, the amount in words shall prevail, unless the amount expressed in words is related to an arithmetic error, in which case the amount in figures shall prevail subject to (a) and (b) above.
- **31.2** Bidders shall be requested to accept correction of arithmetical errors. Failure to accept the correction in accordance with ITB 31.1, shall result in the rejection of the Bid.
- 32. Conversion to Single Currency
- **32.1** For evaluation and comparison purposes, the currency(ies) of the Bid shall be converted into a single currency as specified **in the BDS**.

33. Margin of Preference

34. Subcontractors

- **33.1** Unless otherwise specified **in the BDS**, a margin of preference for domestic Bidders³ shall not apply.
- **34.1** Unless otherwise stated **in the BDS**, the Employer does not intend to execute any specific elements of the Works by subcontractors selected in advance by the Employer, Financial Parts
- 34.2 The subcontractor's qualifications shall not be used by the Bidder to qualify for the Works unless their specialized parts of the Works were previously designated by the Employer in the BDS as can be met by subcontractors referred to hereafter as 'Specialized Subcontractors', in which case, the qualifications of the Specialized Subcontractors proposed by the Bidder may be added to the qualifications.
- **34.3** Bidders may propose subcontracting up to the percentage of total value of contracts or the volume of works as specified **in the BDS**. Subcontractors proposed by the Bidder shall be fully qualified for their parts of the Works.

35. Evaluation of Bids

- 35.1 The Employer shall use the criteria and methodologies listed in this ITB and Section III, Evaluation and Qualification criteria. No other evaluation criteria or methodologies shall be permitted. By applying the criteria and methodologies the Employer shall determine the Most Advantageous Bid. This is the Bid of the Bidder that meets the Qualification Criteria and whose Bid has been determined to be:
 - (a) substantially responsive to the bidding document; and
 - **(b)** The lowest evaluated cost.
- **35.2** To evaluate a Bid, the Employer shall consider the following:
 - (a) the Bid price, excluding Provisional Sums and the provision, if any, for contingencies in the Summary Bill of Quantities⁴ for admeasurement contracts, but including Daywork⁵ items, where priced competitively;
 - **(b)** price adjustment for correction of arithmetic errors in accordance with ITB 31.1;
 - (c) price adjustment due to discounts offered in accordance with ITB 14.4;

An individual firm is considered a domestic Bidder for purposes of the margin of preference if it is registered in the country of the Employer, has more than 50 percent ownership by nationals of the country of the Employer, and if it does not subcontract more than 10 percent of the contract price, excluding provisional sums, to foreign contractors. JVs are considered as domestic Bidders and eligible for domestic preference only if the individual member firms are registered in the country of the Employer or have more than 50 percent ownership by nationals of the country of the Employer, and the JV shall be registered in the country of the Borrower. The JV shall not subcontract more than 10 percent of the contract price, excluding provisional sums, to foreign firms. JVs between foreign and national firms will not be eligible for domestic preference.

⁴ In lump sum contracts, delete "Bill of Quantities" and replace with "Activity Schedule."

Daywork is work carried out following instructions of the Project Manager and paid for on the basis of time spent by workers, and the use of materials and the Contractor's equipment, at the rates quoted in the Bid. For Daywork to be priced competitively for Bid evaluation purposes, the Employer must list tentative quantities for individual items to be costed against Daywork (e.g., a specific number of tractor driver staff-days, or a specific tonnage of Portland cement), to be multiplied by the Bidders' quoted rates and included in the total Bid price.

- (d) converting the amount resulting from applying (a) to (c) above, if relevant, to a single currency in accordance with ITB 32:
- (e) price adjustment for nonconformities in accordance with ITB 30.3; and
- (f) the additional evaluation factors are specified in Section III, Evaluation and Qualification Criteria.
- **35.3** 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.
- 35.4 If this bidding document allows Bidders to quote separate prices for different lots (contracts), the methodology to determine the lowest evaluated cost of the contract combinations, including any discounts offered in the Letter of Bid, is specified in Section III, Evaluation and Qualification Criteria.
- 36. Comparison of Bids
- **36.1** The Employer shall compare the evaluated costs of all substantially responsive Bids established in accordance with ITB 35.2 to determine the Bid that has the lowest evaluated cost.
- 37. Abnormally Low Bids
- 37.1 An Abnormally Low Bid is one where the Bid price, in combination with other constituent elements of the Bid, appears unreasonably low to the extent that the Bid price raises material concerns as to the capability of the Bidder to perform the Contract for the offered Bid price.
- 37.2 In the event of identification of a potentially Abnormally Low Bid, the Employer shall seek written clarifications from the Bidder, including detailed price analyses of its Bid price in relation to the subject matter of the contract, scope, proposed methodology, schedule, allocation of risks and responsibilities and any other requirements of the bidding document.
- 37.3 After evaluation of the price analyses, in the event that the Employer determines that the Bidder has failed to demonstrate its capability to perform the Contract for the offered Bid Price, the Employer shall reject the Bid.
- 38. Unbalanced or Front Loaded Bids
- **38.1** If the Bid for an admeasurement contract, which results in the lowest evaluated cost is, in the Employer's opinion, seriously unbalanced or, front loaded, the Employer may require the Bidder to provide written clarifications. Clarifications may include detailed price analyses to demonstrate the consistency of the Bid priceas with the scope of works, proposed methodology, schedule and any other requirements of the bidding document.
- **38.2** After the evaluation of the information and detailed price analyses presented by the Bidder, the Employer may as appropriate:
 - (a) accept the Bid; or
 - (b) require that the amount of the Performance Security be increased at the expense of the Bidder to a level not exceeding 20% of the Contract Price; or
 - (c) Reject the Bid.

39. Qualification of the Bidder

- **39.1** The Employer shall determine to its satisfaction whether the eligible Bidder that is selected as having submitted the lowest evaluated cost and substantially responsive Bid meets the qualifying criteria specified in Section III, Evaluation and Oualification Criteria.
- 39.2 The determination shall be based upon an examination of the documentary evidence of the Bidder's qualifications submitted by the Bidder, pursuant to ITB 17. The determination shall not take into consideration the qualifications of other firms such as the Bidder's subsidiaries, parent entities, affiliates, subcontractors (other than Specialized Subcontractors if permitted in the bidding document), or any other firm(s) different from the Bidder.
- 39.3 An affirmative determination of qualification shall be a prerequisite for award of the Contract to the Bidder. A negative determination shall result in disqualification of the Bid, in which event the Employer shall proceed to the substantially responsive Bid which offers the next lowest evaluated cost to make a similar determination of that Bidder's qualifications to perform satisfactorily.
- 40. Most Advantageous Bid
- **40.1** Having compared the evaluated costs of Bids, the Employer shall determine the Most Advantageous Bid. The Most Advantageous Bid is the Bid of the Bidder that meets the Qualification Criteria and whose Bid has been determined to be:
 - (a) substantially responsive to the bidding document; and
 - **(b)** The lowest evaluated cost.
- 41. Employer's
 Right to Accept
 Any Bid, and to
 Reject Any or All
 Bids
- 41.1 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 Contract Award, without thereby incurring any liability to Bidders. In case of annulment, all Bids submitted and specifically, Bid securities, shall be promptly returned to the Bidders.
- 42. Standstill Period
- **42.1** The Contract shall be awarded not earlier than the expiry of the Standstill Period. The duration of the Standstill Period is **specified in the BDS.** Where only one Bid is submitted, the Standstill Period shall not apply.
- 43. Notice of Intention to Award
- **43.1** When a Standstill Period applies, it shall commence when the Employer has transmitted to each Bidder the Notification of Intention to Award the Contract to the successful Bidder. The Notification of Intention to Award shall contain, at a minimum, the following information:
 - (a) the name and address of the Bidder submitting the successful Bid:
 - **(b)** the Contract price of the successful Bid;
 - (c) the names of all Bidders who submitted Bids, and their Bid prices as readout, and as evaluated;
 - (d) a statement of the reason(s) the Bid (of the unsuccessful Bidder to whom the letter is addressed) was unsuccessful, unless the price information in c) above already reveals the reason;
 - (e) the expiry date of the Standstill Period;

(f) Instructions on how to request a debriefing and/or submit a complaint during the standstill period.

F. Award of Contract

44. Award Criteria

44.1 Subject to ITB 41, the Employer shall award the Contract to the successful Bidder. This is the Bidder whose Bid has been determined to be the Most Advantageous Bid as specified in ITB 40.

45. Notification of Award

- 45.1 Prior to the expiration of the Bid Validity Period and upon expiry of the Standstill Period, specified in BDS ITB 42.1 or any extension thereof, or upon satisfactorily addressing a complaint that has been filed within the Standstill Period, the Employer shall transmit the Letter of Acceptance to the successful Bidder. The Letter of Acceptance shall specify the sum that the Employer will pay the Contractor in consideration of the execution of the contract (hereinafter and in the Conditions of Contract and Contract Forms called "the Contract Price").
- **45.2** At the same time, the Employer shall publish the Contract Award Notice which shall contain, at a minimum, the following information:
 - (a) name and address of the Employer;
 - (b) name and reference number of the contract being awarded, and the selection method used;
 - (c) names of all Bidders that submitted Bids, and their Bid prices as read out at Bid opening, and as evaluated;
 - (d) names of all Bidders whose Bids were rejected either as nonresponsive or as not meeting qualification criteria, or were not evaluated, with the reasons therefor; and
 - (e) The name of the successful Bidder, the final total contract price, the contract duration and a summary of its scope.
- **45.3** The Contract Award Notice shall be published on the Employer's website with free access if available, or in at least one newspaper of national circulation in the Employer's Country, or in the official gazette. The Employer shall also publish the contract award notice in UNDB online.
- **45.4** Until a formal contract is prepared and executed, the notification of award shall constitute a binding Contract.

46. Debriefing by the Employer

- 46.1 On receipt of the Employer's Notification of Intention to Award referred to in ITB 43.1, an unsuccessful Bidder has three (3) Business Days to make a written request to the Employer for a debriefing. The Employer shall provide a debriefing to all unsuccessful Bidders whose request is received within this deadline.
- 46.2 Where a request for debriefing is received within the deadline, the Employer shall provide a debriefing within five (5) Business Days, unless the Employer decides, for justifiable reasons, to provide the debriefing outside this timeframe. In that case, the standstill period shall automatically be extended until five (5) Business Days after such debriefing is provided. If more than one debriefing is so

- delayed, the standstill period shall not end earlier than five (5) Business Days after the last debriefing takes place. The Employer shall promptly inform, by the quickest means available, all Bidders of the extended standstill period
- 46.3 Where a request for debriefing is received by the Employer later than the three (3)-Business Day deadline, the Employer should provide the debriefing as soon as practicable, and normally no later than fifteen (15) Business Days from the date of publication of Public Notice of Award of contract. Requests for debriefing received outside the three (3)-day deadline shall not lead to extension of the standstill period.
- **46.4** Debriefings of unsuccessful Bidders may be done in writing or verbally. The Bidder shall bear their own costs of attending such a debriefing meeting.
- **47.1** Promptly upon Notification of Award, the Employer shall send the successful Bidder the Contract Agreement.
- **47.2** Within twenty-eight (28) days of receipt of the Contract Agreement, the successful Bidder shall sign, date, and return it to the Employer.
- Within twenty-eight (28) days of the receipt of the Letter of 48.1 Acceptance from the Employer, the successful Bidder shall furnish the Performance Security and, if required in the BDS, the Environmental, Social, Health and Safety (ESHS) Performance Security in accordance with the General Conditions of Contract, subject to ITB 38.2 (b), using for that purpose the Performance Security and ESHS Performance Security Forms included in Section X, Contract Forms, or another form acceptable to the Employer. If the Performance Security furnished by the successful Bidder is in the form of a bond, it shall be issued by a bonding or insurance company that has been determined by the successful Bidder to be acceptable to the Employer. A foreign institution providing a bond shall have a correspondent financial institution located in the Employer's Country, unless the Employer has agreed in writing that a correspondent financial institution is not required.
- 48.2 Failure of the successful Bidder to submit the above-mentioned Performance Security and, if required in the BDS, the Environmental, Social, Health and Safety (ESHS) Performance Security, or to sign the Contract Agreement shall constitute sufficient grounds for the annulment of the award and forfeiture of the Bid Security. In that event the Employer may award the Contract to the Bidder offering the next Most Advantageous Bid.
- 49.1 The Employer proposes the person named in the BDS to be appointed as Adjudicator under the Contract, at the hourly fee specified in the BDS, plus reimbursable expenses. If the Bidder disagrees with this proposal, the Bidder should so state in his Bid. If, in the Letter of Acceptance, the Employer does not agree on the appointment of the Adjudicator, the Employer will request the Appointing Authority designated in the Particular Conditions of

47. Signing of Contract

48. Performance Security

49. Adjudicator

Contract (PCC) pursuant to Clause 23.1 of the General Conditions of Contract (GCC), to appoint the Adjudicator.

- 50. Procurement Related Complaint
- **50.1** The procedures for making a Procurement-related Complaint are as specified in the BDS.



Section II - Bid Data Sheet (BDS)

The following specific data for the Works to be procured shall complement, supplement, or amend the provisions in the Instructions to Bidders (ITB). Whenever there is a conflict, the provisions herein shall prevail over those in ITB.

ITB Reference	A. General
ITB 1.1	The number of the Invitation for Bids is: One Invitation The Employer is: Ramallah Municipality. The reference number of the Request for Bids (RFB) is: MDPIIICII-0821062-01 The name of the RFB is: Rehabilitation of internal roads-Ramallah City. The number and identification of lots (contracts) comprising this RFB is: The RFB is comprised of one lot.
ITB 2.1	The Recipient is: Palestinian Liberation Organization (PLO) for the benefit of the Palestinian Authority." The Municipal Development and Lending Fund (MDLF) is entrusted in execution and supervision of the implementation of the Project and intends to apply part of the proceedings of this grant for the benefit of Ramallah Municipality to payments under the contract for procurement of Rehabilitation of internal roads - Ramallah City. All payments under the contract will be made to the Contractor directly by the MDLF
	upon certification by Ramallah Municipality. Accordingly, wherever indicated in the bidding document that the Employer Ramallah Municipality will pay to the Contractor means that the MDLF will pay directly to the contractor upon certification by the Employer. Financing Agreement amount: 130 Million Euro.
	The name of the Project is: Rehabilitation of internal roads - Ramallah City.
ITB 4.1	Maximum number of members in the Joint Venture (JV) shall be: 2
ITB 4.5	A list of debarred firms and individuals is available on the Bank's external website: http://www.worldbank.org/debarr.
	B. Contents of Bidding Document
ITB 7.1	For <u>Clarification of Bid purposes</u> only, the Employer's address is: Attention: Eng. Nuha Ghneim, Ramallah Municipality. Street Address: Issa Ziadeh St., Ramallah, Palestine.
	Floor/Room number: Projects Department. City: Ramallah Country: Palestine Telephone: : 00970 2945555 Facsimile number: 00970 2963214 Electronic mail address: n.ghuneim@ramallah.ps
ITB 7.1	Requests for clarification should be received by the Employer no later than: 7 days.

ITB 7.1	Web page: www.ramallah.ps
ITB 7.4	A Pre-Bid meeting <i>shall</i> take place, it will be at the following date, time& place: Date: 24/8/2020 Time: 10:00 A.M. Place: Ramallah Municipality - Meeting Room
	A site visit conducted by the Employer <i>shall be</i> organized.
	C. Preparation of Bids
ITB 10.1	The language of the Bid is: English
ITB 11.1 (b)	The following schedules shall be submitted with the Bid: Priced Bill of Quantities
ITB 11.1	The Bidder shall submit the following additional documents in its Bid:
(i)	Environmental and Social Management Plan (ESMP)
ITB 13.1	Alternative bids "shall not be" permitted.
ITB 13.2	Alternative times for completion "shall not be" permitted.
ITB 13.4	Alternative technical solutions "shall not be" permitted
ITB 14.5	The prices quoted by the Bidder "shall not be" subject to adjustment during the performance of the Contract.
ITB 15.1	The price shall be quoted by the Bidder in: EURO
ITB 18.1	The Bid validity period shall be: 90 calendar days from the bid submission deadline.
ITB 18.3 (a)	The Bid price shall be adjusted by the following factor(s): Not Applicable
ITB 19.1	The Bidder shall furnish a bid security in the amount of: 13,000 Euro.
	It should be valid for 28 days beyond the bid validity.
	A Bid-Securing Declaration is Not required.
ITB 19.3 (d)	Other types of acceptable securities: None
ITB 19.9	Not Applicable
ITB 20.1	In addition to the original of the Bid, the number of copies is: 2
ITB 20.3	The written confirmation of authorization to sign on behalf of the Bidder shall indicate:
	The name and description of the documentation required to demonstrate the authority of the signatory to sign the Bid such as a Power of Attorney; and

ITB 20.3	(a) In the case of Bids submitted by an existing or intended JV an undertaking signed by all parties (i) stating that all parties shall be jointly and severally liable, if so required in accordance with ITB 4.1(a), and (ii) nominating a Representative who shall have the authority to conduct all business for and on behalf of any and all the parties of the JV during the bidding process and, in the event the JV is awarded the Contract, during contract execution."]
	D. Submission and Opening of Bids
ITB 22.1	For bid submission purposes only, the Employer's address is: Attention:
	Attention: Ramallah Municipality Street Address: Issa Ziadeh St. Floor/Room number: Ground floor/ Citizen Service Center. City: Ramallah /West Bank ZIP Code: NA Country: Palestine.
	The deadline for bid submission is:
ITB 25.1	Date: 9./9/2020 Time: 12:00 P.M (Local time) Bidders shall not have the option of submitting their bids electronically. The bid opening shall take place at: Ramallah Municipality
110 23.1	Street Address: Issa Ziadeh St. Floor/Room number: Meeting hall. City: Ramallah Country: Palestine Date: 9/9/2020 Time: 12:00 P.M (Local time)
ITB 25.1	Not Applicable
ITB 25.6	The Letter of Bid and Priced Bill of Quantities shall be initialed by all representatives of the Employer conducting Bid opening. Each Bid shall be initialed by all representatives and shall be numbered, any modification to the unit or total price shall
	be initialed by the Representative of the Employer, etc.
	E. Evaluation and Comparison of Bids
ITB 30.3	The adjustment shall be based on the "highest" price of the item or component as quoted in other substantially responsive Bids. If the price of the item or component cannot be derived from the price of other substantially responsive Bids, the Employer shall use its best estimate.
ITB 32.1	The currency that shall be used for bid evaluation and comparison purposes to convert all bid prices expressed in various currencies into a single currency is: EURO. The source of exchange rate shall be: Palestine Monetary Authority The date for the exchange rate shall be: The deadline for bid submission.
ITB 33.1	A margin of domestic preference shall not apply.

ITB 34.1	At this time, the Employer "does not intend" to execute certain specific parts of the Works by sub-contractors selected in advance.
ITB 34.2	Not Applicable
ITB 34.3	Contractor's proposed subcontracting: Maximum percentage of subcontracting permitted is: 25% of the total contract amount. Bidders planning to subcontract more than 10% of total volume of work shall specify, in the Letter of Bid, the activity (ies) or parts of the Works to be subcontracted along with
	complete details of the subcontractors and their qualification and experience.
ITB 42 Standstill Period	The Standstill Period is 10 Business Days after the date the Employer has transmitted to all Bidders that submitted a Bid, the Notification of its Intention to Award the Contract to the successful Bidder.
	F. Award of Contract
ITB 48.1 and 48.4	Not Applicable
ITB 49	The Adjudicator proposed by the Employer is: Farouq Mohammad Kittani. The hourly fee for this proposed Adjudicator shall be: 50 Euro/hr. The biographical data of the proposed Adjudicator is as follows: • Education: Civil Engineer, Louisiana State University. • Experience: 33 years • Email: omar@pecdar.pna.net • Mobile: 0599896800 • Present Position: PECDAR -Projects Manager – Middle area.
	Well known for his integrity
ITB 50.1	The procedures for making a Procurement-related Complaint are detailed in the "Procurement Regulations for IPF Borrowers (Annex III)." If a Bidder wishes to make a Procurement-related Complaint, the Bidder should submit its complaint following these procedures, in writing (by the quickest means available, that is either by email or fax), to:
	 For the attention: Saleh Azer Title/position: Head of Procurement Section. Employer: Ramallah Municipality Email address: s.azar@ramallah.ps Fax number: 00970 2963214
	In summary, a Procurement-related Complaint may challenge any of the following: 1. The terms of the Bidding Documents; and 2. The Employer's decision to award the contract.

Section III - Evaluation and Qualification Criteria

Wherever a Bidder is required to state a monetary amount, Bidders should indicate the USD equivalent using the rate of exchange determined as follows:

- for construction turnover or financial data required for each year Exchange rate prevailing on the last day of the respective calendar year (in which the amounts for that year is to be converted) was originally established; or
- Value of single contract Exchange rate prevailing on the date of the contract.

Exchange rates shall be taken from the publicly available source identified in the ITB 32.1. Any error in determining the exchange rates in the Bid may be corrected by the Employer

Table of Criteria

1.	Margin of Preference "Not Applicable"	•••••••••••	35
2.	Evaluation		36
	Qualification		
4.	Key Personnel		43
5.	Equipment		44

1. Margin of Preference "Not Applicable"

If BDS so specifies, the Employer will grant a margin of preference of 7.5% (seven and one-half percent) to domestic contractors, in accordance with, and subject to, the following provisions:

- (a) Contractors applying for such preference shall be asked to provide, as part of the data for qualification, such information, including details of ownership, as shall be required to determine whether, according to the classification established by the Borrower and accepted by the Bank, a particular contractor or group of contractors qualifies for a domestic preference. The bidding document shall clearly indicate the preference and the method that will be followed in the evaluation and comparison of Bids to give effect to such preference.
- (b) After Bids have been received and reviewed by the Employer, responsive Bids shall be classified into the following groups:
 - (i) Group A: Bids offered by domestic contractors eligible for the preference.
 - (ii) Group B: Bids offered by other contractors.

All evaluated Bids in each group shall, as a first evaluation step, be compared to determine the Bid with lowest evaluated cost in each group shall be further compared with each other. If a result of this comparison, a Bid from Group A is the lowest, it shall be selected for the award as the Most Advantageous Bid, if the Bidder is qualified. If a Bid from Group B is the lowest, as a second evaluation step, all Bids from Group B shall then be further compared with the lowest evaluated cost from Group A. For the purpose of this further comparison only, an amount equal to 7.5% (seven and one-half percent) of the respective Bid price corrected for arithmetical errors, including unconditional discounts but excluding provisional sums and the cost of day works, if any, shall be added to the evaluated cost offered in each Bid from Group B. If the Bid from Group A is the lowest, it shall be selected for award. If not, the lowest evaluated cost from Group B based on the first evaluation step shall be selected.

The Employer shall use the criteria and methodologies listed in this Section to evaluate Bids. By applying these criteria and methodologies, the Employer shall determine the Most Advantageous Bid. This is the Bid that has been determined to be:

- (a) substantially responsive to the bidding document, and
- (b) the lowest evaluated cost.

2. Evaluation

In addition to the criteria listed in ITB 35.2 (a) - (e) the following criteria shall apply:

2.1 Adequacy of Technical Proposal

Evaluation of the Bidder's Technical Proposal will include an assessment of the Bidder's technical capacity to mobilize key equipment and personnel for the contract consistent with its proposal regarding work methods, scheduling, and material sourcing in sufficient detail and fully in accordance with the requirements stipulated in Section VII, Works' Requirements.

2.2 Multiple Contracts "Not Applicable"

Pursuant to ITB 35.4 of the Instructions to Bidders, if Works are grouped in multiple contracts, evaluation will be as follows:

(a) Award Criteria for Multiple Contracts [ITB 35.4]:

Lots: Bidders have the option to Bid for any one or more lots. Bids will be evaluated lot-wise, taking into account discounts offered, if any, after considering all possible combination of lots. The contract(s) will be awarded to the Bidder or Bidders offering the lowest evaluated cost to the Employer for combined lots, subject to the selected Bidder(s) meeting the required qualification criteria for lot or combination of lots as the case may be.

Packages: Bidders have the option to Bid for any one or more packages and for any one or more lots within a package. Bids will be evaluated package-wise, taking into account discounts offered, if any, for combined packages and/or lots within a package. The contract(s) will be awarded to the Bidder or Bidders offering the lowest evaluated cost to the Employer for combined packages, subject to the selected Bidder(s) meeting the required qualification criteria for combination of packages and or lots as the case may be.

(b) Qualification Criteria for Multiple Contracts:

Section III describes criteria for qualification for each lot (contract) for multiple lots (contracts). The criteria for qualification is aggregate minimum requirement for respective lots as specified under items 3.1, 3.2, 4.2(a) and 4.2(b). However, with respect to the specific experience under item 4.2 (a) of Section III, the Employer will select any one or more of the options as identified below:

N is the minimum number of contracts

V is the minimum value of a single contract

(a) For one Contract:

Option 1: (i) N contracts, each of minimum value V;

Or

Option 2: (i) N contracts, each of minimum value V; or

(ii) Less than or equal to N contracts, each of minimum value V, but with total value of all contracts equal or more than N x V.

(b) For multiple Contracts

Option 1: (i) Minimum requirements for combined contract(s) shall be the aggregate requirements for each contract for which the Bidder has submitted Bids as follows, and N1, N2, N3, etc. shall be different contracts:

Lot 1: N1 contracts, each of minimum value V1;

Lot 2: N2 contracts, each of minimum value V2;

Lot 3: N3 contracts, each of minimum value V3;

----etc.

or

Option 2: (i) Minimum requirements for combined contract(s) shall be the aggregate requirements for each contract for which the Bidder has submitted Bids as follows, and N1,N2,N3, etc. shall be different contracts:

Lot 1: N1 contracts, each of minimum value V1;

Lot 2: N2 contracts, each of minimum value V2;

Lot 3: N3 contracts, each of minimum value V3;

----etc., **or**

(ii) Lot 1: N1 contracts, each of minimum value V1; or number of contracts less than or equal to N1, each of minimum value V1, but with total value of all contracts equal or more than N1 x V1.

Lot 2: N2 contracts, each of minimum value V2; or number of contracts less than or equal to N2, each of minimum value V2, but with total value of all contracts equal or more than N2 x V2.

Lot 3: N3 contracts, each of minimum value V3; or number of contracts less than or equal to N3, each of minimum value V3, but with total value of all contracts equal or more than N3 x V3.

----etc.

Or

Option 3: (i) Minimum requirements for combined contract(s) shall be the aggregate requirements for each contract for which the Bidder has bid for as follows, and N1, N2, N3, etc. shall be different contracts:

Lot 1: N1 contracts, each of minimum value V1;

Lot 2: N2 contracts, each of minimum value V2;

Lot 3: N3 contracts, each of minimum value V3;

----etc., **or**

- (ii) Lot 1: N1 contracts, each of minimum value V1; or number of contracts less than or equal to N1, each of minimum value V1, but with total value of all contracts equal or more than N1 x V1.
- Lot 2: N2 contracts, each of minimum value V2; or number of contracts less than or equal to N2, each of minimum value V2, but with total value of all contracts equal or more than N2 x V2.

Lot 3: N3 contracts, each of minimum value V3; or number of contracts less than or equal to N3, each of minimum value V3, but with total value of all contracts equal or more than N3 x V3.

----etc., or

(iii) Subject to compliance as per (ii) above with respect to minimum value of single contract for each lot, total number of contracts is equal or less than N1 + N2 + N3 +---but the total value of all such contracts is equal or more than $N1 \times V1 + N2 \times V2 + N3 \times V3$ +---.

2.3 Alternative Completion Times "Not Applicable"

An alternative Completion Time, if permitted under ITB 13.2, will be evaluated as follows:

2.4 Sustainable procurement "Not Applicable"

[If specific sustainable procurement technical requirements have been specified in Section VII- Specification, either state that (i) those requirements will be evaluated on a pass/fail (compliance basis) or otherwise (ii) in addition to evaluating those requirements on a pass/fail (compliance basis), if applicable, specify the monetary adjustments to be applied to Bid prices for comparison purposes on account of Bids that exceed the specified minimum sustainable procurement technical requirements.]

.....

2.5 Alternative Technical Solutions for specified parts of Works "Not Applicable"

The acceptability of alternative technical solutions of parts of the Works, if permitted under ITB 13.4, will be determined as follows:

.....

2.6 Specialized Subcontractors "Not Applicable"

If permitted under ITB 34, only the specific experience of Subcontractors for specialized works permitted by the Employer will be considered. The general experience and financial resources of the Specialized Subcontractors shall not be added to those of the Bidder for purposes of qualification of the Bidder.

.....

3. Qualification

	Eligibility and Qua	alification Criteria		Compliance	Requirements		Documentation
No.	Subject	Requirement	Single Entity	Joint V All members Combined	enture (existing or into Each Member	At least one Member	Submission Requirements
1. Eli	gibility						
1.1	Nationality	Nationality in accordance with ITB 4.4	Must meet requirement	Must meet requirement	Must meet requirement	N/A	Forms ELI – 1.1 and 1.2, with attachments
1.2	Conflict of Interest	No conflicts of interest in accordance with ITB 4.2	Must meet requirement	Must meet requirement	Must meet requirement	N/A	Letter of Bid
1.3	Bank Eligibility	Not having been declared ineligible by the Bank, as described in ITB 4.5.	Must meet requirement	Must meet requirement	Must meet requirement	N/A	Letter of Bid
1.4	State-owned enterprise or institution of the Borrower country	Meets conditions of ITB 4.6	Must meet requirement	Must meet requirement	Must meet requirement	N/A	Forms ELI – 1.1 and 1.2, with attachments
1.5	United Nations resolution or Borrower's country law	Not having been excluded as a result of prohibition in the Borrower's country laws or official regulations against commercial relations with the Bidder's country, or by an act of compliance with UN Security Council resolution, both in accordance with ITB 4.8 and Section V.	Must meet requirement	Must meet requirement	Must meet requirement	N/A	Forms ELI – 1.1 and 1.2, with attachments
2. His	storical Contract Non-Performa	ance					
2.1	History of Non-Performing Contracts	Non-performance of a contract ¹ did not occur as a result of contractor default since 01 June 2017	Must meet requirement ^{1 & 2}	Must meet requirements	Must meet requirement ²	N/A	Form CON-2
2.2	Suspension Based on Execution of Bid /Proposal Securing Declaration by the	Not under suspension based on execution of a Bid/Proposal Securing Declaration pursuant to ITB 4.7 or	Must meet requirement	Must meet requirement	Must meet requirement	N/A	Letter of Bid

[.]

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

² This requirement also applies to contracts executed by the Bidder as JV member.

	Eligibility and Qu	alification Criteria		Compliance	e Requirements		Documentation
No.	Subject	Requirement	Single Entity	Joint V All members Combined	enture (existing or inte Each Member	nded) At least one Member	Submission Requirements
	Employer or withdrawal of the Bid within Bid validity period	withdrawal of the Bid pursuant ITB 19.9					
2.3	Pending Litigation	Bidder's financial position and prospective long term profitability sound according to criteria established in 3.1 below and assuming that all pending litigation will be resolved against the Bidder	Must meet requirement	N/A	Must meet requirement	N/A	Form CON – 2
2.4	Litigation History	No consistent history of court/arbitral award decisions against the Bidder ³ since 01 June 2017	Must meet requirement	Must meet requirement	Must meet requirement	N/A	Form CON – 2
2.5	Declaration: Environmental, Social, Health, and Safety (ESHS) past performance	Declare any civil work contracts that have been suspended or terminated and/or performance security called by an employer for reasons related to the non-compliance of any environmental, or social, or health or safety requirements or safeguard in the past five years ⁴ .	N/A	N/A	Each must make the declaration. Where there are Specialized Sub-contractor/s, the Specialized Sub-contractor/s must also make the declaration.	N/A	N/A
3. Fin	nancial Situation and Performan	ice					
3.1	Financial Capabilities	(i) The Bidder shall demonstrate that it has access to, or has available, liquid assets, unencumbered real assets, lines of credit, and other financial means (independent of any contractual advance payment) sufficient to meet the construction cash flow requirements estimated as 150,000 Euro for the subject contract(s) net of the Bidder's other	Must meet requirement	Must meet Requirement	N/A	Must meet Fifty percent (50%) of the requirement	Form FIN – 3.1, with attachments

³ The Bidder shall provide accurate information on the Letter of Bid about any litigation or arbitration resulting from contracts completed or ongoing under its execution over the last five years. A consistent history of court/arbitral awards against the Bidder or any member of a joint venture may result in disqualifying the Bidder.

⁴ The Employer may use this information to seek further information or clarifications in carrying out its due diligence.

	Eligibility and Qu	alification Criteria		Complianc	e Requirements		Documentation
	Calliant	Subject Requirement	C'IE4'4	Joint Venture (existing or intended)			Submission
No.	Subject		Requirement Single Entit	Single Entity	All members Combined	Each Member	At least one Member
		commitments .					
		(ii) The Bidders shall also demonstrate, to the satisfaction of the Employer, that it has adequate sources of finance to meet the cash flow requirements on works currently in progress and for future contract commitments.	Must meet requirement	Must meet requirement	N/A	N/A	
		(iii) The audited balance sheets or, if not required by the laws of the Bidder's country, other financial statements acceptable to the Employer, for the last 3 years shall be submitted and must demonstrate the current soundness of the Bidder's financial position and indicate its prospective long-term profitability.	Must meet requirement	N/A	Must meet requirement	N/A	
3.2	Average Annual Construction Turnover	Minimum average annual construction turnover of 700,000 Euro calculated as total certified payments received for contracts in progress and/or completed within the last 3years, divided by 3 years.	Must meet requirement	Must meet requirement	N.A	Must meet 60 % of the requirement	Form FIN – 3.2
4. Ex	perience						
4.1 (a)	General Construction Experience	Experience under construction contracts in the role of prime contractor, JV member, subcontractor, or management contractor for at least the last 5 years, starting 01 July 2015.	Must meet requirement	N/A	Must meet requirement	N/A	Form EXP – 4.1

	Eligibility and Qu	alification Criteria		Compliance	e Requirements		Documentation
No.	Subject	Requirement	Single Entity	Joint V All members Combined	enture (existing or inte Each Member	At least one Member	Submission Requirements
4.2 (a)	Specific Construction & Contract Management Experience Specific Experience	i) A minimum number of (2) similar contract specified below that has been satisfactorily and substantially completed as a prime contractor, joint venture member management contractor or sub-contractor between 1 June 2015 & bid submission deadline: At least (2) contract of minimum value 700,000 Euro. The similarity of the contract shall be based on the following: physical size, complexity, methods/technology. For the above and any other contracts [substantially completed and under implementation] as prime contractor, joint venture member, or subcontractor between 01 June 2015 and Application submission deadline, a minimum construction experience in the following key activities successfully completed sources in the following sey activities successfully completed Asphalt. Patch damaged Asphalt areas. Adjustment of Manholes surface with Asphalt finish level.	Must meet requirement Must meet requirements	Must meet requirement ⁷ Must meet requirements	N/A	N/A	Form EXP 4.2(a)

⁵ Substantial completion shall be based on 80% or more works completed under the contract.

⁶ For contracts under which the Bidder participated as a joint venture member or sub-contractor, only the Bidder's share, by value, shall be considered to meet this requirement.

⁷ In the case of JV, the value of contracts completed by its members shall not be aggregated to determine whether the requirement of the minimum value of a single contract has been met. Instead, each contract performed by each member shall satisfy the minimum value of a single contract as required for single entity. In determining whether the JV meets the requirement of total number of contracts, only the number of contracts completed by all members each of value equal or more than the minimum value required shall be aggregated.

⁸ Volume, number or rate of production of any key activity can be demonstrated in one or more contracts combined if executed during same time period.

4. Key Personnel

The Bidder must demonstrate that it will have a suitably qualified (and in adequate numbers) minimum Key Personnel, as described in the table below, that are required to perform the Contract.

The Bidder shall provide details of the Key Personnel and such other Key Personnel that the Bidder considers appropriate, together with their academic qualifications and work experience. The Bidder shall complete the relevant Forms in Section IV, Bidding Forms.

The Contractor shall require the Employer's consent to substitute or replace the Key Personnel (reference the Particular Conditions of Contract 9.1).

Key Personnel

Item No.	Position/specialization	Min. Relevant academic qualifications	Minimum years of relevant work experience
1	Project Manager and Site Engineer. (Full time)	 Bachelor degree in Civil Engineering or other related fields. 	7
2	Foreman. (Full time)	Diploma degree in Civil Engineering or other related fields.	5
3	Surveyor. (Full time)	Certification in the field.	3
4	Health and Safety Engineer Supervisor. (Full time)	Bachelor degree in related fields.	5

5. Equipment

The Bidder must demonstrate that it will have access to the key Contractor's equipment listed hereafter:

Item	Equipment Type and Characteristics	Minimum Number
No.		required
1	Excavator wheel loader (950 or approved equivalent)	1
2	JCB Digger or equivalent	2
3	Finisher	1
4	Grader	1
5	Steel wheel Roller not less 10 Tons for asphalt	1
6	Steel wheel Roller for not less than 13 Ton for basecoarse	1
7	Pneumatic wheel Roller not less than 15 Ton	1
8	Truck mounted water tank	1
9	Truck Mounted equipment for MC Spraying	1
10	Trucks	2
11	Bobcat and Bomag 120 or equivalent	1
12	Warning Lighting Signs for Safety (Large Size)	1
13	Night Shifts Lighting	1
14	Surveying instruments	2

The Bidder shall provide further details of proposed items of equipment using the relevant Form in Section IV.

Section IV - Bidding Forms

Table of Forms

Letter of Bid	46
Bill of Quantities	48
Forms of Bid Security	53
Form of Bid Security - Bank Guarantee	53
Technical Proposal	55
Technical Proposal Forms	55
Equipment	59
Site Organization	
Method Statement	60
Mobilization Schedule	60
Construction Schedule	
ESHS Management Strategies and Implementation Plans "N/A"	61
Code of Conduct: Environmental, Social, Health and Safety (ESHS) "N/A"	62
Others	67
Bidder's Qualification	68
Form ELI -1.1: Bidder Information Form	69
Form ELI -1.2: Information Form for JV Bidders	
Form CON – 2: Historical Contract Non-Performance, Pending Litigation and Litigatio 71	_
Form CCC: Current Contract Commitments / Works in Progress	
Form FIN – 3.1: Financial Situation and Performance	
Form FIN - 3.2: Average Annual Construction Turnover	
Form FIN - 3.3: Financial Resources	
Form EXP - 4.1: General Construction Experience	
Form EXP - 4.2(a): Specific Construction and Contract Management Experience	
Form FXP - 4.2(h): Construction Experience in Key Activities	70

Letter of Bid

INSTRUCTIONS TO BIDDERS: DELETE THIS BOX ONCE YOU HAVE COMPLETED THE DOCUMENT The Bidder must prepare this Letter of Bid on stationery with its letterhead clearly showing the Bidder's complete name and business address.

Note: All italicized text is to help Bidders in preparing this form.

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

RFB No.: MDPIII-CII-0821062-01

To: Ramallah Municipality

- (a) **No reservations:** We have examined and have no reservations to the bidding document, including Addenda issued in accordance with ITB 8;
- (b) **Eligibility**: We meet the eligibility requirements and have no conflict of interest in accordance with ITB 4;
- (c) **Bid-Securing Declaration:** We have not been suspended nor declared ineligible by the Employer based on execution of a Bid-Securing Declaration or Proposal-Securing Declaration in the Employer's Country in accordance with ITB 4.7;
- (d) Conformity: We offer to execute in conformity with the bidding document the following Works: Rehabilitation of Internal roads Ramallah City. The work includes Milling the upper layer of Asphalt, patching/reconstructing the damaged areas and asphalting the roads.
- (e) **Bid Price**: The total price of our Bid, excluding any discounts offered in item (f) below is: [insert the total price of the Bid in words and figures, indicating the currency];
- (f) **Discounts:** The discounts offered and the methodology for their application are:
 - (i) The discounts offered are: [Specify in detail each discount offered.]
 - (ii) The net price after application of discounts is: [[insert the net price of the Bid after discount in words and figures, indicating currency]
- (g) **Bid Validity Period:** Our Bid shall be valid for a period specified in BDS ITB 18.1 of days from the date fixed for the Bid submission deadline in accordance with the bidding document, and it shall remain binding upon us and may be accepted at any time before the expiration of that period;
- (h) **Performance Security:** If our Bid is accepted, we commit to obtain a performance security in accordance with the bidding document;
- (i) **One Bid Per Bidder:** We are not submitting any other Bid(s) as an individual Bidder or as a subcontractor, and we are not participating in any other Bid(s) as a Joint Venture member, and meet the requirements of ITB 4.3, other than alternative Bids submitted in accordance with ITB 13;
- (j) **Suspension and Debarment**: in case the contract is financed by the World Bank, we, along with any of our subcontractors, suppliers, consultants, manufacturers, or service providers for any part of the contract, are not subject to, and not controlled by any entity or individual that is subject to, a temporary suspension or a debarment imposed by the World Bank Group in accordance with the Agreement for Mutual Enforcement of Debarment Decisions between the World Bank and other development banks. In case the contract is financed by

a financing donor, other than the World Bank, we have not been included in the sanctions list of the UN, EU and the financing donor. Further, we are not ineligible under the Employer's Country laws or official regulations or pursuant to a decision of the United Nations Security Council;

- (k) **State-owned enterprise or institution:** [select the appropriate option and delete the other] [We are not a state-owned enterprise or institution] / [We are a state-owned enterprise or institution but meet the requirements of ITB 4.6];
- (1) **Commissions, gratuities and fees:** We have paid, or will pay the following commissions, gratuities, or fees with respect to the Bidding process or execution of the Contract: [insert complete name of each Recipient, its full address, the reason for which each commission or gratuity was paid and the amount and currency of each such commission or gratuity]

Name of Recipient	Address	Reason	Amount

(If none has been paid or is to be paid, indicate "none.")

- (m) **Binding Contract**: We understand that this Bid, together with your written acceptance thereof included in your Letter of Acceptance, shall constitute a binding contract between us, until a formal contract is prepared and executed;
- (n) **Not Bound to Accept:** We understand that you are not bound to accept the lowest evaluated cost Bid, the Most Advantageous Bid or any other Bid that you may receive; and
- (o) **Fraud and Corruption:** We hereby certify that we have taken steps to ensure that no person acting for us or on our behalf engages in any type of Fraud and Corruption; and
- (p) **Adjudicator:** We accept the appointment of [insert name proposed in Bid Data Sheet] as the Adjudicator. [or] We do not accept the appointment of [insert name proposed in Bid Data Sheet] as the Adjudicator, and propose instead that [insert name] be appointed as Adjudicator, whose daily fees and biographical data are attached.

Name of the Bidder: *[insert complete name of person signing the Bid]

Name of the person duly authorized to sign the Bid on behalf of the Bidder:**[insert complete name of person duly authorized to sign the Bid]

Title of the person signing the Bid: [insert complete title of the person signing the Bid]

Signature of the person named above: [insert signature of person whose name and capacity are shown above]

Date signed [insert date of signing] **day of** [insert month], [insert year]

- *: In the case of the Bid submitted by joint venture specify the name of the Joint Venture as Bidder
- **: Person signing the Bid shall have the power of attorney given by the Bidder to be attached with the Bid

Bill of Quantities

Preambles

- A. 1. These Bills of Quantities are to be read in conjunction with the Tender Conditions of Contract, agreement, Specifications, and Drawings. The various documents making up the contract shall be deemed to be mutually explanatory. The method of measurement followed shall be the "principles of measurement (international) for works of construction "amended to suit local practice.
 - 2. Quantities stated in the Bill of Quantities are approximate and not to be considered as limiting for extending the amount of work to be carried out and/or materials to be supplied by contractor.
 - 3. Payments due under the contract shall be determined by applying the unit rates to the quantities executed for the respective items, in accordance with the BOQ and contract.
 - 4. The Units of Measurements symbols:
 - m which refers to linear meter.
 - m² which refers to square meter.
 - m³ which refers to cubic meter.
 - No. which refers to number.
 - L.S. which refers to lump sum.
 - 5. The municipality is not be responsible for any delay in work caused by other parties, such as service enterprises, "water Authority, electricity company, telecommunications company, etc.", and the contractor is not entitled to any due claim as a result of their delay, and the duration of the delay will be considered-if it affects the critical path of the project according to the approved work plan-as an extension of time for the contracted project duration only.
- B. The contractor shall be deemed to have:
 - 1. Revised all the tender documents, inspected and examined the site and it's surroundings. He shall also be deemed to have taken into account the form and nature of the site, the extent and nature of the work and materials necessary for the completion of the works, the means of communication with and access to the site, the accommodation he may require and in general to have obtained for himself all necessary information as to the risks, contingencies and any other circumstances influencing and affecting his tender.
 - 2. Satisfied himself before submitting his tender as to the correctness and sufficiency of the tender and of the rates and prices stated in the bill of quantities or price schedule, where shall, save where otherwise provided, cover all his obligations under the contract.
 - 3. Determined his price on the basis of his own calculations, operations and estimates. And he shall, at no additional charge, carry out any work that is the subject of any item whatsoever in his tender for which he indicates neither a unit price nor a lump sum.

- C. The Bill of Quantities tendered rates **include** the costs of all works carried out for the following items -with no claim of separate payment for this work-:
 - 1. The construction of junctions, access roads or access to properties, etc.
 - 2. Transport.
 - 3. Providing all required safety measures on site and maintain all necessary diversions, temporary roads signs with posts, fencing, and lighting especially at night hours working all according to project supervisor.
 - 4. The adjustment of all service manholes and grills to Asphalt finish level.
 - 5. Selecting sites outside the right-of-way for the use of his plant, equipment, site offices if required, residences, Temporary Works or any other uses which are essential during the execution of the Contract. The Contractor shall take the necessary measures for using these sites and shall be responsible for all expenses that may become due in return for such use.
 - 6. Safely maintaining traffic during construction.
 - 7. Protecting from damage the existing utilities below and above ground such as water lines, drains, sewer pipes, service connections, cables, valve boxes, light poles, pylons, telephone poles and any other services within the project limits.
 - 8. Keeping the site and the adjacent roads/ surrounding areas clean from project waste "i.e all waste/surplus materials and other rubbish resulting from the works shall be transferred outside the site to authorized locations approved from the Municipality and as directed by the project supervisor.
- D. The item Unit price shall include the following issues, noting that the work is to be constructed in phases according to an approved plan from project Supervisor within the contractual execution period, "working hours could be at night for some activities".
 - 1. Sewage manholes works:
 - All activities needed to execute work as reinforced concrete required for leveling work, fixation, rings, iron sheets "صاح" of not less than 3mm width to be used temporarily for paving above manholes opening etc.
 - The removal of the old replaced covers from site to the stores of Ramallah municipality-Industrial Zone.

2. Road works:

- All activities needed to execute the work in phases according to the approved plan as method of work, time frame and resources / per activity for each proposed section, No. of machines, tools, etc.
- Submitting a recent job mix design for the Asphalt from an approved lab —to be approved from project supervisor.

3. Patching Work:

- All related work -like cutting, excavation, adjusting/replacing existing basecoarse level to required level, applying prime coat.
- Item Unit rate to be measured is for Aspahlt work only (Measurement will be for asphalt weight only)

Project Name : Rehabilitation of Internal roads -Ramallah City Bill of Quantity 1-1 : Road Work

Item	Item Description	Unit	Quantity	Unit Price Euro	Amount Euro
1.1	Asphalt Milling: Milling of existing asphalt up to 2-3cm depth. The price includes: milling around existing manholes and beside existing curb stone, removal and disposal of all milled asphalt, debris, unsuitable and surplus materials to places authorized by the municipality and as approved by the Supervisor Engineer. All according to specifications, drawings, and directions of Project Supervisor.	m ²	25,200		
1.2	Excavation/Embankment: Excavation in any sort of earth, rock, or asphalt from natural ground level to the finished sub grade level. The price includes: *Embankment with suitable materials "from project excavations or imported from outside the site" for fill areas in layers not to exceed 25cm after compaction), *removal of excess/unsuitable excavated materials to dumpsite places approved by Municipality. All according to specifications, drawings, and directions of Project Supervisor. (Note: Suitable Excavated materials shall be crushed to be used for embankment of the road, will not be paid for as Embankment Material)	m ³	3,700		
1.3	Base course: Furnishing crushed aggregate base course material class A, 20cm thick after compaction (CBR=100), (degree of compaction =100%) the price includes: mixing, spreading on sub-grade, compacting and finishing, all tests required. All according to specifications, drawings, and directions of Project Supervisor. Measurement is for the projected horizontal plan of the working area".	m ²	9,300		
1.4	Asphalt Works: Furnishing, spreading and compacting 6cm thick after compaction bituminous wearing course (3/4 inch). The Price includes: *furnishing and applying bituminous tack coat (RC-70 or RC-250) or equivalent (rate of application 0.50 kg/m2). Between asphalt layers, *mechanical trimming and cleaning of existing pavement, also The price include Furnishing and applying bituminous prime coat (MC-70) or equivalent (rate of application 1.2 kg/m2) to previously constructed sub grade, sub-base or aggregate base course road paved shoulders All tests required. All according to specifications, drawings and directions of Project Supervisor.(degree of compaction =98%).	\mathbf{m}^2	27,100		
	Total to be carried to next page				

Bill of Quantities 1-2: Road Work

Item	Item Description	Unit	Quantity	Unit Price Euro	Amount Euro
	Subtotal from previous page				
1.5	As item No.1.4 but by using Asphalt with basalt aggregate (3/4 inch) for steep slope roads.	m ²	4,900		
1.6	Asphalt patching: Replace damaged areas in existing asphalt using manual and/or mechanical machine, the price includes: cutting, excavation, adjusting/compacting existing base coarse level to required level, replacing existing base coarse layer with 20cm layer after compaction, prime coat, 5-6cm hot asphalt mix wearing course (3/4 inch),disposal of unsuitable and surplus materials. All according to specifications, drawings and directions of Project Supervisor.	Ton	1,020		
1.7	Asphalt Levelling course: As item No 1.6 but with varying thickness not exceeding 4cm of hot asphalt mix bituminous thin course (1/2 inch), to be placed above the existing Asphalt -to compensate for irregularities in the Asphalt surface- prior to placing the top Bituminous wearing course surface, or to any places as directed by the Project Supervisor.	m ²	25,100		
1.8	Side walk and Medians Curbstone: Supplying and erecting pre-cast concrete curbstone for sidewalks and medians (100x25x17/20/10) with all related works of excavations, leveling, embankment, laying of concrete under the curbstones (10x27cm –B250) and a rear (10x10cm) concrete box, including also expansion taints and all necessary works, all according to specification, drawings and directions of the project supervisor.	m.r	700		
1.9	Interlock Tiles: Supplying and erecting precast concrete interlock Tiles 20*10*6cm thick "compressive strength of 50N/mm²" for sidewalks, on and including 50mm -after compaction-simsemia, Pointing with sea sand, bedding and 150mm thick -after compaction-basecourse layer, the price includes: *Excavation and leveling of its surface mechanically to the design level, *spreading simsemia bedding and base coarse layer *leveling of ground, treating it with water to achieve a field density of 98% of Modified proctor, *Edge beams where required to confine sidewalk (20*20*40cm) all as specification, drawings and instructions of Project Supervisor.	m ²	1250		
	Total to be carried to next page				

Item	Item Description	Unit	Quantity	Unit Price Euro	Amount Euro
	Subtotal from previous page				
1.10	Manhole Adjusting Levels: Supply and install the following items required for the Rehabilitation of the existing wastewater manholes, the price includes: benching, cutting of the existing slabs and walls, adjusting manhole level with the finished asphalt level, material certifications and testing. All according to specifications, drawings and directions of the Engineer.				
1.10 .1	Heavy duty cast iron covers (40 ton) ø 60cm clear size and original Stamped with alphabet R.M to replace the existing manhole covers, the price also includes all necessary work to install the manhole covers.	No.	20		
1.10. 2 1. 2.	Precast manhole top slab (40 ton) to replace the existing damaged manholes with diameters of: Dia 1.0 m Dia 1.25 m	No. No.	3 3		
1.10. 3 1. 2.	Precast manhole ring to replace the existing damaged manholes with diameters of: Dia 1.0 m Dia 1.25 m	No.	3 3		
Tota	I Amount including VAT (Euro)				
Disc	ount in % (if any) =				
Tota	I Amount in numbers including VAT (Euro) =				
Tota	I amount in Words including VAT (Euro):				
uthoi	rized Signature:	•••••	•••••	•••••	•••••
ame a	and Title of Signatory:	•••••	•••••	• • • • • • • • • • • • • • • • • • • •	•••••
ame (of Bidder:	•••••	•••••	• • • • • • • • • • • • • • • • • • • •	•••••
	SS				
el:	Jawwal:	Fax:	•••••	• • • • • • • • • • • • • • • • • • • •	••••

Forms of Bid Security

Form of Bid Security - Bank Guarantee

[Guarantor letterhead or SWIFT identifier code]

Beneficiary:

Ramallah Municipality

Request for Bids No: MDPIIICII-0821062-01

Date: [Insert date of issue]

BID GUARANTEE No.: [Insert guarantee reference number]

Guarantor: _[Insert name and address of place of issue, unless indicated in the letterhead]

We have been informed that [insert name of the Bidder, which in the case of a joint venture shall be the name of the joint venture (whether legally constituted or prospective) or the names of all members thereof] (hereinafter called "the Applicant") has submitted or will submit to the Beneficiary its Bid (hereinafter called "the Bid") for the execution of [insert description of contract] under Request for Bids No. [insert number] ("the RFB").

Furthermore, we understand that, according to the Beneficiary's conditions, Bids must be supported by a Bid guarantee.

At the request of the Applicant, we, as Guarantor, hereby irrevocably undertake to pay the Beneficiary any sum or sums not exceeding in total an amount of [insert amount in letters] (insert amount in numbers) upon receipt by us of the Beneficiary's complying supported by the Beneficiary's statement, whether in the demand itself or a separate signed document accompanying or identifying the demand, stating either that the Applicant:

- (a) has withdrawn its Bid during the period of Bid validity specified by the Applicant in the Letter of Bid ("the Bid Validity Period"), or any extension thereto provided by the Applicant; or
- (b) having been notified of the acceptance of its Bid by the Beneficiary during the period of Bid validity, (i) fails to execute the contract agreement or (ii) fails to furnish the performance security and, if required, the Environmental, Social, Health and Safety (ESHS) Performance Security, in accordance with the Instructions to Bidders ("ITB") of the Beneficiary's bidding document.

This guarantee will expire: (a) if the Applicant is the successful Bidder, upon our receipt of copies of the contract agreement signed by the Applicant and the performance security and, if required, the Environmental, Social, Health and Safety (ESHS) Performance Security, issued to the Beneficiary in relation to such contract agreement; and (b) if the Applicant is not the successful Bidder, upon the

earlier of (i) our receipt of a copy of the Beneficiary's notification to the Applicant of the results of the Bidding process; or (ii) twenty-eight days after the end of the Bid Validity Period.

Consequently, any demand for payment under this guarantee must be received by us at the office indicated above on or before that date.

This guarantee is subject to the Uniform Rules for Demand Guarantees (URDG) 2010 Revision, ICC Publication No. 758.

[signature(s)]

Note: All italicized text is for use in preparing this form and shall be deleted from the final product.

Technical Proposal

Technical Proposal Forms

- Key Personnel Schedule
- Equipment
- Site Organization
- Method Statement
- Mobilization Schedule
- Construction Schedule
- ESHS Management Strategies and Implementation Plans (N/A)
- Code of Conduct (ESHS) (N/A)
- Appendix 1: Contractor's Environmental and Social Conditions Statement
- Appendix 2: Contractor's Acknowledgement of Environmental and Social Compliance and Penalties Enforcement
- Others

FORM PER -1

Key Personnel Schedule

Bidders should provide the names and details of the suitably qualified Key Personnel to perform the Contract. The data on their experience should be supplied using the Form PER-2 below for each candidate.

Key Personnel

1.	Title of position: Project Manager and Site Engineer.		
	Name of candidate:		
	Duration of appointment:	[insert the whole period (start and end dates) for which this position will be engaged]	
	Time commitment: for this position:	[insert the number of days/week/months/ that has been scheduled for this position]	
	Expected time schedule for this position:	[insert the expected time schedule for this position (e.g. attach high level Gantt chart]	
2.	Title of position: Forema	an.	
	Name of candidate:		
	Duration of appointment:	[insert the whole period (start and end dates) for which this position will be engaged]	
	Time commitment: for this position:	[insert the number of days/week/months/ that has been scheduled for this position]	
	Expected time schedule for this position:	[insert the expected time schedule for this position (e.g. attach high level Gantt chart]	
3.	Title of position: Survey	or.	
	Name of candidate:		
	Duration of appointment:	[insert the whole period (start and end dates) for which this position will be engaged]	
	Time commitment: for this position:	[insert the number of days/week/months/ that has been scheduled for this position]	
	Expected time schedule for this position:	[insert the expected time schedule for this position (e.g. attach high level Gantt chart]	
4.	Title of position: Health	and Safety Engineer.	
	Name of candidate:		
	Duration of appointment:	[insert the whole period (start and end dates) for which this position will be engaged]	
	Time commitment: for this position:	[insert the number of days/week/months/ that has been scheduled for this position]	
	Expected time schedule for this position:	[insert the expected time schedule for this position (e.g. attach high level Gantt chart]	

Form PER-2:

Resume and Declaration

Key Personnel

Name of Bidde	er	
Position [#1]:	[title of position from Form PER-1]	
Personnel information	Name:	Date of birth:
	Address:	E-mail:
	Professional qualifications:	
	Academic qualifications:	
	Language proficiency: [language	ge and levels of speaking, reading and writing skills]
details	Address of employer:	
	Telephone:	Contact (manager / personnel officer):
	Fax:	
	Job title:	Years with present employer:

Summarize professional experience in reverse chronological order. Indicate particular technical and managerial experience relevant to the project.

Project	Role	Duration of involvement	Relevant experience
[main project details]	[role and responsibilities on the project]	[time in role]	[describe the experience relevant to this position]

Declaration

I, the undersigned Key Personnel, certify that to the best of my knowledge and belief, the information contained in this Form PER-2 correctly describes myself, my qualifications and my experience.

I confirm that I am available as certified in the following table and throughout the expected time schedule for this position as provided in the Bid:

Commitment	Details
Commitment to duration of contract:	[insert period (start and end dates) for which this Key Personnel is available to work on this contract]
Time commitment:	[insert the number of days/week/months/ that this Key Personnel will be engaged]

I understand that any misrepresentation or omission in this Form may:

- (a) be taken into consideration during Bid evaluation;
- (b) my disqualification from participating in the Bid;
- (c) my dismissal from the contract.

Date: (day month year):	
Date. (day month year).	
Countersignature of authorized representative of the Bidder:	
Signature:	
Date: (day month year):	

Signature:

Equipment

The Bidder shall provide adequate information to demonstrate clearly that it has the capability to meet the requirements for the key equipment listed in Section III (Evaluation and Qualification Criteria). A separate Form shall be prepared for each item of equipment listed, or for alternative equipment proposed by the Bidder. The Bidder shall provide all the information requested below, to the extent possible. Fields with asterisk (*) shall be used for evaluation.

Type of Equipment*				
Equipment Information	Name of manufacturer,	Model and	power rating	
	Capacity*	Year of ma	nufacture*	
Current Status	Current location		2	
	Details of current commitments			
Source	Indicate source of the equipment ☐ Owned ☐ Rented	☐ Leased	☐ Specially manufactured	

The following information shall be provided only for equipment not owned by the Bidder.

Owner	Name of owner Address of owner	
	Telephone	Contact name and title
	Fax	Telex
Agreements	Details of rental / lease / manufacture	agreements specific to the project

Site Organization

[insert Site Organization information]

Method Statement

[insert Method Statement]

Mobilization Schedule

[insert Mobilization Schedule]

Construction Schedule

[insert Construction Schedule]

ESHS Management Strategies and Implementation Plans "N/A"

(ESHS-MSIP)

The Bidder shall submit comprehensive and concise Environmental, Social, Health and Safety Management Strategies and Implementation Plans (ESHS-MSIP) as required by ITB 11.1 (i) of the Bid Data Sheet. These strategies and plans shall describe in detail the actions, materials, equipment, management processes etc. that will be implemented by the Contractor, and its subcontractors.

In developing these strategies and plans, the Bidder shall have regard to the ESHS provisions of the contract including those as may be more fully described in the following:

- 1. [the Works Requirements described in Section VII];
- 2. [Environmental and Social Impact Assessment (ESIA)];
- 3. [Environmental and Social Management Plan (ESMP)];
- *4.* [Resettlement Action Plan (RAP)];
- 5. [Consent Conditions (regulatory authority conditions attached to any permits or approvals for the project)]; and
- 6. [specify any other relevant document/s]

Code of Conduct: Environmental, Social, Health and Safety (ESHS) "N/A"

The Bidder shall submit the Code of Conduct that will apply to the Contractor's employees and subcontractors as required by ITB 11.1 (i) of the Bid Data Sheet. The Code of Conduct shall ensure compliance with the ESHS provisions of the contract, including those as may be more fully described in the following:

- 1. [the Works Requirements described in Section VII];
- 2. [Environmental and Social Impact Assessment (ESIA)];
- 3. [Environmental and Social Management Plan (ESMP)];
- 4. [Consent Conditions (regulatory authority conditions attached to any permits or approvals for the project)]; and
- 5. [specify any other relevant document/s]

In addition, the Bidder shall submit an outline of how this Code of Conduct will be implemented. This will include: how it will be introduced into conditions of employment/engagement, what training will be provided, how it will be monitored and how the Contractor proposes to deal with any breaches.

Appendix 1: Contractor's Environmental and Social Conditions Statement

Contractor's name and address on letterhead

Contractor's Environmental and Social Conditions Statement

I hereby acknowledge that I have read and understood the requirements of the ESMP attached to the Bidding Document.

Furthermore I acknowledge that any costs for meeting the conditions and requirements of the ESMP or other requirements expressed in the Bill of Quantities are included in the Bid Price.

If awarded the Contract, I will appoint Mr. ----- to ensure that Environmental and social conditions are met and complied with and to receive all environmental and social notes on behalf of the contractor

Signed	 Date:
	Contractor Name:

Appendix 2: Contractor's Acknowledgement of Environmental and Social Compliance and Penalties Enforcement

Contractor's name and address on letterhead

I acknowledge that following the award of the contract to ----- () ------ (), I am aware of environmental and social conditions and requirements that are contained in the Contract. These have been addressed in my Environmental and Social Conditions statement that was attached to the bid I submitted on -------.

I confirm my ability to undertake and comply with the conditions in the ESMP and to fulfill all requirements and aware of penalties enforcement as per stated in the Environmental Management Framework (ESMF) and the Project Environmental and Social Management Plan(ESMP), and that Mr. ----- (nominate position) has been assigned to ensure that the environmental conditions are met and he is familiar with the conditions of implementing the ESMP, where the following applies according to ESMF and Project ESMP:

Environmental and Social Liabilities of MDLF Contractors

Sectoral ESMPs is included in the tender documentation, so that potential bidders are aware of environmental and social performance standards expected from them and are able to reflect that in their bids.

This section depicts environmental compliance where breakdown for the cost of each mitigation measure noncompliance.

ESMM and provisional environmental management guidelines for construction of roads (Annex 1 and Annex 2 of ESMP); to be abide to.

To enforce the compliance of environmental and social management, contractors are responsible on:

• Complying to **health and safety requirements** where they are to provide insurance for construction labors, staff attending to the construction site, citizens for each sub-project, the insurance requirements and clauses are stated in the procurement manual and reflected in the bidding documents complying to the Palestinian labor law.

The Municipality, as an owner of construction works, will be responsible for enforcing compliance of contractor with the terms of the contract, including adherence to the ESMF and the sub-project sectorial ESMP.

The following procedures prevail, in addition to the supervisor engineer judgment:

- Deduction of environmental noncompliance is added as a clause in the Bill of Quantities (BOQ) section, referring to annex in the bidding document detailing the deduction procedures;
- Environmental penalties shall be calculated and deduction are to be included in each submitted invoice;
- Mitigation measures in Environmental and Social Monitoring Matrices (ESMM) annexed to sectoral ESMP is the reference for environmental notes and penalties;
- Each impact depicted in the ESMM if not properly mitigated to be counted an environmental/social note;

- For minor infringements and social complaints, an incident which causes temporary but reversible damage, the contractor will be given environmental and social note/ stop and alert to remedy the problem and to restore the environment. If reviewing the action by the Municipality Engineer showed that restoration is done satisfactorily no further actions will be taken;
- For social notes: the municipality engineer will stop and alert the contractor to remedy the social impact, the municipality engineer will follow the issue until solved. If contractor didn't comply to remediation request, stop will be considered under no excused delay;
- If the contractor hasn't remedied the environmental impact during this given time, the Municipality Engineer/supervisor engineer in cooperation with Local Technical Consultant will:
 - o stop the work and give the contractor an environmental and social note correlated to financial penalty according to the non-complied mitigation measure depicted in the biding document and the following procedures for National Competitive Bids and Shopping Bidding Documents;
 - The Municipality engineer after the given time frame are to review the action, if engineer sees that restoration is done satisfactorily no further actions will be taken, otherwise and if Contractor hasn't remedied the situation within 1 day any additional days of stopping work will be considered no excused delay;
- When municipality engineer issue an environmental/social note, it might depict one or more environmental penalty;
- If repeating the noncompliance and penalties approached (3-5) % of the contract value, the Municipality Engineer will raise the formal recorded environmental and social notes and the deduction history to MDLF in order to tack a legal action.

The form of the environmental/ social note:

Environmental and Social Note No ()	
Municipality	Date
Project Name	
Site Location	
Contractor	
The Environmental Note (include one or more notes referring to	ESMM)
Municipality Supervisor /Engineer	
Local Technical Consultant	
Contractor Representative on time of note	
Submitted to Contractor Representative	
Copy Submitted to MDLF on	
Hour	
Date	

Procedures for National Competitive Bids and Shopping Bidding Documents:

As mentioned above, environmental and social notes might contain one or more environmental penalty applicable for deduction.

- For social notes: stop and alert the contractor to remedy the action;
- For environmental notes: refer to the ESMP for the note to verify how many notes illustrated in the note:
- Deduction rate starts with 0.1% of contract value; and
- Deduction rate increase by 0.05% of the contract amount after each fifth note.

For National Competitive Bids:

ESMP Compliance Penalty for National Completive Bids

ESM	ESMF Compliance Penalty			
No.	Environmental and Social Note	Penalty		
1	1	Stop and alert		
2	2+3+4+5+6	Stop and deduct 0.1% of the contract amount for each mitigation measure in the environmental note. Minimum amount of deduction is 150 Euro		
3	7+8+10+11+12	Stop and deduct 0.15% of the contract amount for each mitigation measure in the environmental note Minimum amount of deduction is 225 Euro		
3+1	Next five notes	Each 5 notes + deduction would be: N= percentage of deduction of (N-1) + (0.5* percentage of deduction of (N-1)) For example: Stop /Deduct 0.1%+0.05(0.1%) of the contract amount for each mitigation measure in the environmental note. Minimum amount of deduction is 300 Euro		
5	Note +1	If penalty rate approach 5% of contract cost it is recommended to stop work and send official request to MDLF of the proposed action according to bidding documents and procurement manual		

Deduction is to be calculated by the Municipality Engineer and to be reviewed by the LTC Engineer where he is to consider the environmental Note (N), and the deduction for N.

Deduction for N= [percentage of deduction of (N-1) + (0.5* percentage of deduction of (N-1)]* contract Amount.

If Penalties Rate approach 5% of Contract cost its recommended to stop work, and send official request to MDLF of the proposed action according to bidding documents and procurement manual. Municipality can decide if a mitigation measure has a significant impact and might municipality require setting its noncompliance penalty rate based on its significance.

Signed	Date:
	Contractor Name:

Others



Bidder's Qualification

To establish its qualifications to perform the contract in accordance with Section III (Evaluation and Qualification Criteria) the Bidder shall provide the information requested in the corresponding Information Sheets included hereunder



Form ELI -1.1: Bidder Information Form

	Date:
	RFB No. and title:
	Pageofpage
Bio	dder's name
In	case of Joint Venture (JV), name of each member:
Bio	dder's actual or intended country of registration:
[in	adicate country of Constitution]
Bio	dder's actual or intended year of incorporation:
Bio	dder's legal address [in country of registration]:
Bio	dder's authorized representative information
Na	nme:
Ad	ldress:
Te	lephone/Fax numbers:
E-1	mail address:
1	Attached are copies of original documents of
	Articles of Incorporation (or equivalent documents of constitution or association), and/or documents of registration of the legal entity named above, in accordance with ITB 4.4.
	In case of JV, letter of intent to form JV or JV agreement, in accordance with ITB 4.1.
	In case of state-owned enterprise or institution, in accordance with ITB 4.6 documents establishing:
	Legal and financial autonomy
	Operation under commercial law
	• Establishing that the Bidder is not under the supervision of the Employer
2.	Included are the organizational chart, a list of Board of Directors, and the beneficial ownership.

Form ELI -1.2: Information Form for JV Bidders

(to be completed for each member of Joint Venture)

	Date:	Date:		
	RFB No. and title:			
	Page of pag	es		
Bide	lder's Joint Venture name:			
JV	member's name:			
JV	member's country of registration:			
JV	member's year of constitution:			
JV	member's legal address in country of constitution:			
JV	member's authorized representative information			
Nan	me:			
Add	dress:			
Tele	ephone/Fax numbers:			
E-m	nail address:			
1. A	Attached are copies of original documents of			
	Articles of Incorporation (or equivalent documents of constitution or association), and/or registration documents of the legal entity named above, in accordance with ITB 4.4.			
	In case of a state-owned enterprise or institution, documents establishing legal and financial autonomy operation in accordance with commercial law, and is not under the supervision of the Employer, in accordance with ITB 4.6.	,		
2. Ir	included are the organizational chart, a list of Board of Directors, and the beneficial ownership.			

Form CON – 2: Historical Contract Non-Performance, Pending Litigation and Litigation History

			:
		RFB No. and title:of	pages
Non-Perfo	ormed Contracts i	n accordance with Section III, Evaluation and Qualifica	tion Criteria
Eval	luation and Quali tract(s) not perfor	nance did not occur since 1 st January [insert year] specification Criteria, Sub-Factor 2.1. rmed since 1 st January [insert year] specified in Section	
Year	Non- performed portion of contract	Contract Identification	Total Contract Amount (current value, currency, US\$
insert vear]	[insert amount and percentage]	2	[insert amount]
Pe	ending Litigation,	in accordance with Section III, Evaluation and Qualification	ation Criteria
Fact	or 2.3.	in accordance with Section III, Evaluation and Qualific	
	ling litigation in a as indicated belov	ccordance with Section III, Evaluation and Qualification <i>v</i> .	Criteria, Sub-Factor

Year of dispute	Amount in dispute (currency)	Contract Identification	Total Contract Amount (currency), USD
		Contract Identification:	
		Name of Employer:	
		Address of Employer:	
		Matter in dispute:	
		Party who initiated the dispute:	
		Status of dispute:	
		Contract Identification:	
		Name of Employer:	
		Address of Employer:	
		Matter in dispute:	
		Party who initiated the dispute:	
		Status of dispute:	
Litiga	tion History in accorda	ance with Section III, Evaluation and Qualific	cation Criteria
□ No I	Litigation History in a	ccordance with Section III, Evaluation and Qu	
Sub-Factor 2			
-	-	dance with Section III, Evaluation and Qualifi	cation Criteria,
Year of	2.4 as indicated below. Outcome as	Contract Identification	Total Contract
award	percentage of Net	Contract Identification	Amount
[:t	Worth	Contract Identification: [indicate	(currency), USD
[insert year]	[insert percentage]	Contract Identification: [indicate complete contract name, number, and any	[insert amount]
yearj	percentages	other identification]	
		Name of Employer: [insert full name]	
		Address of Employer: [insert	
		street/city/country]	
		Matter in dispute: [indicate main issues in	
		dispute]	
		Party who initiated the dispute: [indicate	
	7//	"Employer" or "Contractor"]	
		Reason(s) for Litigation and award decision	

[indicate main reason(s)]

Form CCC: Current Contract Commitments / Works in Progress

Bidders and each member of a JV should provide information on their current commitments on all contracts that have been awarded, or for which a letter of intent or acceptance has been received, or for contracts approaching completion, but for which an unqualified, full completion certificate has yet to be issued.

Name of contract	Employer,	Value of	Estimated	Average monthly
	contact	outstanding work	completion date	invoicing over last
	address/tel/fax	(current US\$		six months
		equivalent)		(US\$/month)
1.				
2.				
3.				
4.				
5.				
etc.		7 1		

Form FIN – 3.1: Financial Situation and Performance

Bid	der's Name:	
]	Date:	
Joint Venture Member's Nam	ie	
RFB No. and title: _		
Page	of	pages

1. Financial data

Type of Financial information in	m Historic information for previousyears,				
(currency)	(amount in currency, currency, exchange rate, USD equivalent)				
	Year 1	Year 2	Year 3	Year4	Year 5
Statement of Financial Posit	ion (Informatio	on from Balan	ce Sheet)		
Total Assets (TA)					
Total Liabilities (TL)					
Total Equity/Net Worth (NW)					
Current Assets (CA)					
Current Liabilities (CL)					
Working Capital (WC)					
	Inform	ation from Inc	come Statemen	t	
Total Revenue (TR)					
Profits Before Taxes (PBT)					
		Cash Fl	ow Information	n	
Cash Flow from Operating Activities					

2. Sources of Finance

Specify sources of finance to meet the cash flow requirements on works currently in progress and for future contract commitments.

No.	Source of finance	Amount (US\$ equivalent)
1		
2		
3		

3. Financial documents

The Bidder and its parties shall provide copies of financial statements for ______ years pursuan Section III, Evaluation and Qualifications Criteria, Sub-factor 3.2. The financial statements shall:

- (a) reflect the financial situation of the Bidder or in case of JV member, and not an affiliated entity (such as parent company or group member).
- (b) be independently audited or certified in accordance with local legislation.
- (c) be complete, including all notes to the financial statements.
- (d) correspond to accounting periods already completed and audited.

75

¹ If the most recent set of financial statements is for a period earlier than 12 months from the date of bid, the reason for this should be justified.

Form FIN - 3.2: Average Annual Construction Turnover

Bido	der's Name:	
Γ	Date:	
Joint Venture Member's Name	e	
RFB No. and title: _		
Page	of	pages

		Annual turnover data (construction only)						
Year	Amount		Exchange rate	USD equivalent				
	Currency							
[indicate year]	[insert amo	ount and indicate						
Average Annual Construction Turnover *								

^{*} See Section III, Evaluation and Qualification Criteria, Sub-Factor 3.2.

Form FIN - 3.3: Financial Resources

Specify proposed sources of financing, such as liquid assets, unencumbered real assets, lines of credit, and other financial means, net of current commitments, available to meet the total construction cash flow demands of the subject contract or contracts as specified in Section III, Evaluation and Qualification Criteria.

Source of financing	Amount (US\$ equivalent)
1.	
2.	
3.	
4.	

Form EXP - 4.1: General Construction Experience

Bide	der's Name:	
I	Date:	
Joint Venture Member's Name	e	
RFB No. and title: _		
Page	of	pages

Starting Year	Ending Year	Contract Identification	Role of Bidder
		Contract name: Brief Description of the Works performed by the Bidder: Amount of contract: Name of Employer: Address:	
		Contract name: Brief Description of the Works performed by the Bidder: Amount of contract: Name of Employer: Address:	
		Contract name:	

Bidder's Name:

Form EXP - 4.2(a): Specific Construction and Contract Management Experience

	Joint Venture Member's Name						
	RI	FB No. and title: Page	of	pages			
Similar Contract No.		Info	rmation				
Contract Identification							
Award date							
Completion date							
Role in Contract	Prime Contractor □	Member in JV	Management Contractor	Sub-contractor □			
Total Contract Amount			US\$ *				
If member in a JV or subcontractor, specify participation in total Contract amount			*				
Employer's Name:							
Address: Telephone/fax number							
E-mail:							
Similar Contract No.		Info	rmation				
Description of the similarity in accordance with Sub-Factor 4.2(a) of Section III:							
1. Amount							
2. Physical size of required works items							
3. Complexity							
4. Methods/Technology							
5. Construction rate for key activities							
6. Other Characteristics							

Form EXP - 4.2(b): Construction Experience in Key Activities

		D ember's Name per ITB 34.2 a	ate:	pages
Subcontractor's Name (as per ITB 34.2 a All subcontractors for key activities must 34.3 and Section III, Qualification Criteria	t complete the in and Requiremen	formation in t ts, Sub-Factor		r ITB 34.2 and
1. Key Activity No One:				
			Information	
Contract Identification				
Award date				
Completion date				
Role in Contract	Prime N Contractor	Member in JV □	Management Contractor	Sub-contractor
Total Contract Amount			US\$	
Quantity (Volume, number or rate of production, as applicable) performed under the contract per year or part of the year	Total quantity the contract (i)	parti	centage cipation (ii)	Actual Quantity Performed (i) x (ii)
Year 1		1		
Year 2				
Year 3				
Year 4				
Employer's Name:				
Address: Telephone/fax number E-mail: Description of the key activities in accordance with Sub-Factor 4.2(b) of Section III:				
2. Activity No. Two	1			
3				

² If applicable.

Section V - Eligible Countries

Eligibility for the Provision of Goods, Works and Services in Bank- Financed Procurement

In reference to ITB 4.8, and 5.1, for the information of the Bidders, at the present time firms, goods and services from the following countries are excluded from this Bidding process:

Under ITB 4.8 (a) and 5.1 [insert a list of the countries following approval by the Bank to apply the restriction or state "none"]

Under ITB 4.8 (b) and 5.1 [insert a list of the countries following approval by the Bank to apply the restriction or state "none"]

Section VI - Fraud and Corruption

1. Purpose

1.1 The Bank's Anti-Corruption Guidelines and this annex apply with respect to procurement under Bank Investment Project Financing operations.

2. Requirements

2.1 The Bank requires that Borrowers (including beneficiaries of Bank financing); bidders (applicants/proposers), consultants, contractors and suppliers; any sub-contractors, sub-consultants, service providers or suppliers; any agents (whether declared or not); and any of their personnel, observe the highest standard of ethics during the procurement process, selection and contract execution of Bank-financed contracts, and refrain from Fraud and Corruption.

2.2 To this end, the Bank:

- a. Defines, for the purposes of this provision, the terms set forth below as follows:
 - "corrupt practice" is the offering, giving, receiving, or soliciting, directly
 or indirectly, of anything of value to influence improperly the actions of
 another party;
 - ii. "fraudulent practice" is any act or omission, including misrepresentation, that knowingly or recklessly misleads, or attempts to mislead, a party to obtain financial or other benefit or to avoid an obligation;
 - iii. "collusive practice" is an arrangement between two or more parties designed to achieve an improper purpose, including to influence improperly the actions of another party;
 - iv. "coercive practice" is 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;
 - v. "obstructive practice" is:
 - (a) deliberately destroying, falsifying, altering, or concealing of evidence material to the investigation or making false statements to investigators in order to materially impede a Bank investigation into allegations of a corrupt, fraudulent, coercive, or collusive practice; and/or 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
 - (b) acts intended to materially impede the exercise of the Bank's inspection and audit rights provided for under paragraph 2.2 e. below.

- b. Rejects a proposal for award if the Bank determines that the firm or individual recommended for award, any of its personnel, or its agents, or its sub-consultants, subcontractors, service providers, suppliers and/ or their employees, has, directly or indirectly, engaged in corrupt, fraudulent, collusive, coercive, or obstructive practices in competing for the contract in question;
- c. In addition to the legal remedies set out in the relevant Legal Agreement, may take other appropriate actions, including declaring misprocurement, if the Bank determines at any time that representatives of the Borrower or of a recipient of any part of the proceeds of the loan engaged in corrupt, fraudulent, collusive, coercive, or obstructive practices during the procurement process, selection and/or execution of the contract in question, without the Borrower having taken timely and appropriate action satisfactory to the Bank to address such practices when they occur, including by failing to inform the Bank in a timely manner at the time they knew of the practices;
- d. Pursuant to the Bank's Anti- Corruption Guidelines and in accordance with the Bank's prevailing sanctions policies and procedures, may sanction a firm or individual, either indefinitely or for a stated period of time, including by publicly declaring such firm or individual ineligible (i) to be awarded or otherwise benefit from a Bank-financed contract, financially or in any other manner;1 (ii) to be a nominated2 sub-contractor, consultant, manufacturer or supplier, or service provider of an otherwise eligible firm being awarded a Bank-financed contract; and (iii) to receive the proceeds of any loan made by the Bank or otherwise to participate further in the preparation or implementation of any Bank-financed project;
- e. Requires that a clause be included in bidding/request for proposals documents and in contracts financed by a Bank loan, requiring (i) bidders (applicants/proposers), consultants, contractors, and suppliers, and their sub-contractors, sub-consultants, service providers, suppliers, agents personnel, permit the Bank to inspect3 all accounts, records and other documents relating to the procurement process, selection and/or contract execution, and to have them audited by auditors appointed by the Bank.

_

¹ For the avoidance of doubt, a sanctioned party's ineligibility to be awarded a contract shall include, without limitation, (i) applying for pre-qualification, expressing interest in a consultancy, and bidding, either directly or as a nominated sub-contractor, nominated consultant, nominated manufacturer or supplier, or nominated service provider, in respect of such contract, and (ii) entering into an addendum or amendment introducing a material modification to any existing contract.

² A nominated sub-contractor, nominated consultant, nominated manufacturer or supplier, or nominated service provider (different names are used depending on the particular bidding document) is one which has been: (i) included by the bidder in its pre-qualification application or bid because it brings specific and critical experience and know-how that allow the bidder to meet the qualification requirements for the particular bid; or (ii) appointed by the Borrower.

Inspections in this context usually are investigative (i.e., forensic) in nature. They involve fact-finding activities undertaken by the Bank or persons appointed by the Bank to address specific matters related to investigations/audits, such as evaluating the veracity of an allegation of possible Fraud and Corruption, through the appropriate mechanisms. Such activity includes but is not limited to: accessing and examining a firm's or individual's financial records and information, and making copies thereof as relevant; accessing and examining any other documents, data and information (whether in hard copy or electronic format) deemed relevant for the investigation/audit, and making copies thereof as relevant; interviewing staff and other relevant individuals; performing physical inspections and site visits; and obtaining third party verification of information.

PART 2 – Works' Requirements

Section VII - Works' Requirements

Table of Contents

Specifications	87
Environmental, social, health and safety requirements	117
Drawings	118

Technical Specifications



1: GENERAL

Introduction

- 1- The contractor must supply a list of at least 3 laboratories, and project supervisor chooses one of them to do all the tests required. The cost of the tests is included in BOQ items (at the contractor's own expense), and the contractor should prove that he has paid the lab. dues with the final payment of the project.
- 2- On behalf of the municipality, MDLF has the right to conduct lab tests at any phase during the project implementation. These tests will be conducted by independent lab contracted by MDLF. The results of tests will be binding for all parties.
- 3- The contractor must supply and install 2 metal panels for the project on his own expenses within one week from commencement order according to the approved template, the location of the panels is determined by the project supervisor.
 - the panel should be fixed on 2galvanisedsteel pipes 3"
 - B200 concrete footing with dimensions 60*60*60cm from, the high of pipes under panel is 2.2m
 - panel dimensions 160*100 cm
 - the panel consists of galvanized steel sheets 2 mm thick, fixed on 4*4 cm steel section



The Project Supervisor who is appointed by the Owner as a Designated Contract Officer Representative shall decide all Project Supervisory questions that may arise related to: the quality or acceptability of materials furnished and work performed; the manner of performance and rate of progress of the work; the interpretation of the plans and specifications; and the acceptable fulfillment of the contract on the part of the Contractor.

AUTHORITY OF Project Supervisor

The Project Supervisor's decision shall be final with respect to all technical matters, and the Project Supervisor shall have authority to enforce and make effective those decisions and orders which the Contractor fails to carry out promptly.

The contract plans furnished consist of general drawings and show such details as are necessary to give a comprehensive idea of the construction contemplated. All authorized alterations affecting the requirements and information given on the contract plans shall be in writing.

PLANS AND WORKING DRAWINGS

The contract plans shall be supplemented by such working drawings prepared by the Contractor as are necessary to adequately control the work. The Contractor shall make no change in any working drawing after the Project Supervisor has given approval. Working drawings for any part of the permanent work shall include, but not be limited to stress sheets, anchor bolt layouts, shop details, erection plans, equipment lists and any other information specifically required elsewhere in the specifications.

Working drawings for cribs, cofferdams, false work, temporary support systems, haul bridges, centering and form work and for other temporary work and methods of construction the

Contractor proposes to use, shall be submitted when required by the specifications or ordered by the project supervisor. Working drawings shall be subject to approval insofar as the details affect the character of the finished work and for compliance with design requirements applicable to the construction when specified or called for, but details of design will be left to the Contractor who shall be responsible for the successful construction of the work.

The Project Supervisor shall approve working drawings before any work involving the drawings is performed. It is expressly understood that approval of the Contractor's working drawings shall not relieve the Contractor of any responsibility under the contract for the successful completion of the work in conformity with the requirements of the plans and specifications. Approval of working drawings shall not operate to waive any of the requirements of the plans and specifications or relieve the Contractor of any obligation there under, and defective work, materials and equipment may be rejected notwithstanding the approval.

Full compensation for furnishing all working drawings shall be considered as included in the prices paid for the contract items of work to which the drawings relate and no additional compensation will be allowed therefore.

TRENCH EXCAVATION SAFETY PLANS: Any trench 1.5m or more in depth shall not begin until the Contractor has received approval, from the Project Supervisor, of the Contractor's detailed plan for worker protection from the hazards of caving ground during the excavation of that trench, and any design calculations used in the preparation of the detailed plan for trench excavation. The detailed plan shall show the details of the design of shoring, bracing, sloping or other provisions to be made for worker protection during the excavation. The plan shall be submitted at least 5 days before the Contractor intends to begin excavation for the trench. When required by the special provisions or plans, the Contractor shall follow the sequence of operations as set forth therein. Full compensation for conforming to those requirements will be considered as included in the prices paid for the various contract items of work & no additional compensation will be allowed therefore.

CONTRACTORS WORK AREAS: The Contractor shall make all necessary arrangements, regarding any land outside the Site that may be needed as work areas. The Owner will not accept any liability in respect of such land. The Contractor shall locate and select sites outside the right-of-way for the use of his plant, equipment, site offices, residences, Temporary Works, disposal areas or any other uses that are essential during the execution of the Contract. The Contractor shall take the necessary measures for using these sites and shall be responsible for all expenses that may become due in return for such use. The Contractor shall be responsible at his own cost for safely maintaining traffic during construction by providing traffic Plan and in cooperation with the Municipality and the local police. The Contractor shall provide and maintain all necessary diversions, temporary roads signs with posts, fencing, flag men, and lighting.

ACCESS: The Contractor are to maintain safe access for all households, and facility along the work area road to ensure no socioeconomic impact.

TRAFFIC: The Contractor shall construct and remove detours and detour bridges for the use of public traffic as provided in the special provisions; as shown on the plans; or as directed by the Project Supervisor. Payment, if any, for this work will be made as set forth in the special provisions of the Contract documents.

DETOURS: The cost of repairing damage to detours caused by public traffic will not be paid for as extra work. Detours used exclusively by the Contractor for hauling materials and equipment shall be constructed and maintained by the Contractor at the Contractor's expense. The failure or refusal of the Contractor to construct and maintain detours at the proper time shall be sufficient cause for closing down the work until the detours are in satisfactory condition for use by public traffic.

Where the Contractor's hauling is causing such damage to the detour that its maintenance in a condition satisfactory for public traffic is made difficult and unusually expensive, the Project

Supervisor shall have authority to regulate the Contractor's hauling over the detour.

Unless otherwise indicated in the Contract documents, the contractor, with the approval of the Project Supervisor, may use in the proposed construction such stone, gravel, and or other material suitable in the opinion of the Project Supervisor as may be found in excavation.

SURVEYING EQUIPMENT: The Contractor shall provide for his own use and the use of the Owner on site suitable surveying instruments and other equipment for use in setting out and leveling of the works.

SETTING OUT OF WORKS: The Contractor shall set out the works and obtain approval of his setting The Contractor shall be responsible for preservation of all existing stakes, marks and monuments and if any construction stakes or marks are destroyed or disturbed, the Contractor shall replace them at his own expense. Setting out before proceeding with construction. If, in the opinion of the Project Supervisor, modification of the lines or grade is advisable, before or after survey, the Project Supervisor will issue detailed instructions to the Contractor who shall revise the setting out accordingly.

SITE CLEANING: All parts of the Site, and adjacent roads affected by the works, shall be maintained in a clean and tidy condition during progress of the works. All waste and surplus materials and other rubbish resulting from the works or otherwise, shall be cleared away at intervals as directed by the Project Supervisor. The entire site shall be delivered up on completion of the Works, in a clean, neat and presentable condition. All works prescribed in Section 1.3, except for any Work listed in the BOQ as a separate payment item, shall not be measured for direct payment, but shall be considered as subsidiary work, the costs of which will be deemed to be included in the Contract prices for pay items.

1. ROADWAY EXCAVATION

1.1 SCOPE

The Work shall consist of excavating and grading the roadway and borrow pits, including channels, parking areas, intersections, approaches, slope rounding and form benches, excavating selected material found in the roadway which is designated for specific use; excavation of slide material; and disposing of all excavated material; all in accordance with these Specifications and in conformity with the lines, grades, and dimensions shown on the Plans or as directed by the Project Supervisor.

1.2 STRIPPING AND PLACING OF TOP SOIL

Top soil shall be stripped from the roadway to the depth that in the opinion of the Project Supervisor may be deemed necessary, and the Contractor shall place the resulting material in approved waste areas or in stock piles until ready for placement or waste. Placing and shaping of top soil in the areas designated shall be considered as an inherent part of the Work under this Item, and no additional payment will be allowed therefore nor for subsequent re-handling and replacement.

1.3 EXCAVATION

The Contractor shall excavate the cuts and form embankments in **accordance** with the dimensions shown on the Plans and such further instructions, which the Project supervisor's Representative may issue from time to time. Excavated materials, if suitable, shall be used to form embankments in fill areas of roads, and where directed by the Project supervisor's Representative in the manner specified, excess or unsuitable material being disposed of as later described. Where material is required, in addition to that obtainable from excavations, to form embankments, the Contractor shall excavate suitable material from approved borrow pits or import approved material from borrow pit outside the Site at his own expense as later described. Where the sub grade is in cut and the material is not rock, the Contractor shall scarify to a depth

of 30 cms. and re-compact to a minimum of 95% of maximum density AASHTO Modified Test T-180 Method D. Where the subgrade is in rock, the Contractor shall cut 15 cm. deeper than the designed formation level, remove and replace with suitable gravelly material with 4 days soaked in CBR>20, material and compact to 95% of maximum density AASHTO to Modified Test T-180 Method D.

Where roads require filling up to the level of the bottom of base course as specified in Chapter 4.4, the excavated material arising from roads in other areas if suitable (that is giving CBR>6), shall be used, subject to the approval of the Project supervisor, in fill areas to form the sub grade as specified in Chapter 2.9. The Contractor shall include in the rates for excavation for roads, the cost of removal of excavated materials to spoil heaps, subsequent re-excavation into spoil heaps, depositing of material into road fill areas and spreading and compacting to form the sub grade or waste.

1.4 REMOVAL OF UNSUITABLE MATERIAL

When unsuitable material for embankments, roadbed, or other roadway purposes is encountered within the limit of construction, the Contractor shall excavate such material in the areas and to the grades shown on the Plans, or as directed by Project Supervisor, and backfill the areas excavated with suitable material. All solid rock or boulders found in the roadbed shall be excavated to a depth indicated on the Drawings and/or as directed by the Project supervisor All material replacing unsuitable material shall be placed and compacted in accordance with the requirements of the relevant Clause of these Specifications. Material made unsuitable by the Contractor's misuse or neglect of suitable material shall not be measured for payment and shall be replaced at the Contractor's expense.

1.5 BORROW EXCAVATION

Where excavated material is unsuitable or insufficient to form embankments and the like, the Contractor shall import material from borrow pits, designated on the Plans or from pits directed or approved by the Project supervisor's Representative. The Contractor shall provide and bear all costs for acquiring materials, all temporary access roads, fencing grading, and drainage to borrow pits and shall leave them in a safe and sanitary condition upon completion. Borrow pits shall not be within the boundaries of the Site works, and any excavation within the boundaries of the Site works shall not be measured as borrow excavation.

1.6 CHANNEL EXCAVATION

Where shown on the plans or directed by the Project supervisor's Representative, excavation shall be performed in existing water courses or designated channels to divert the flow of streams and in the formation or shaping of new drainage ditches. When approved by Project Supervisor such excavated material may be utilized for embankment construction, provided all requirements regarding moisture, compaction, etc. for embankment materials are met. If not, suitable for embankment construction, the excavated material shall be disposed of in approved waste areas.

1.7 ROCK EXCAVATION

Rock Excavation of any sort or definition shall not be measured separately but shall be treated as, excavation in any type of ground, with no allowance for over breakage nor consequent backfilling. In case where drilling and blasting must be carried out, all completed excavation lines shall be in accordance with the typical sections as regards finished grades, cut slopes and down slopes from shoulder lines.

The face of all rock slopes shall be trimmed and dragged to prevent falls after completion. Any holes or over excavation beneath the roadbed shall be filled and compacted with approved material by the Contractor at his own expense.

1.8 BLASTING

If permission for the use of explosive is given for the execution of Work, the Contractor shall exercise the utmost care not to endanger life or property including new work. Blasting shall be carried out in accordance with the rules and requirements of the authorities concerned.

Excavation of rock by blasting shall be done in such a manner as will result in the typical cross-section as shown on the Drawings. All materials to be excavated by blasting shall be line drilled or presplit on the slope line the full depth of the cut as directed by the Project supervisor's Representative. The Contractor shall be required to remove at his own expense, any material outside the authorized cross-section, which may be shattered or loosened by such blasting.

1.9 UTILIZATION OF EXCAVATED MATERIALS

All suitable material removed from the excavations shall be used, in so far as practicable, in the formation of embankments, pavement, shoulders, slopes, bedding, backfill for culverts and other structures, and for such other purposes as directed by the Project supervisor's Representative. No excavated material shall be wasted without the written authorization of the Project supervisor's Representative. Material authorized to be wasted shall be disposed of as directed, and in such manner as not to obstruct the flow characteristics of any stream or to impair the efficiency or appearance of any structure. No excavated material shall be deposited at any time in a manner that may endanger a partly finished structure by direct pressure, or overloading banks contiguous to the operations, or that may in any other way be detrimental to the completed work or to any private or third party property.

1.10 OPENING AND DRAINAGE OF EXCAVATION AND BORROW PITS

The Contractor shall notify the Project supervisor's Representative sufficiently in advance of the opening of any excavation or borrow pit. Except as otherwise permitted by the Project supervisor's Representative, borrow pits and out excavated areas shall be excavated in such a manner as will afford adequate drainage. Overburden and other waste material shall be disposed of, or shall be sued for special purposes, as directed by the Project Supervisor.

Unless otherwise provided in the Contract, the Contractor shall obtain from the owners the right to procure material from sources other than government controlled lands, shall pay all royalties, and other charges involved, and shall bear all expense of developing the sources, including right-of-way for hauling and making good on completion. All necessary clearing, and grubbing of borrow pits, the disposal and burning of the debris and wasted material there from and satisfactory drainage of the borrow pits, shall be considered as incidental operations to the borrow excavation, and shall be performed by the Contractor at no additional cost

1.11 SLIDES

The Contractor shall prevent any slide by installing proper shoring on all pits. Should any slide occur through the negligence of the Contractor, he shall at his own expense keep the excavations free from water by constructing temporary drains and sumps, supplying and maintaining all necessary pumps, remove to waste earth or other materials from such slides, and shall make the works good to the satisfaction of the Project Supervisor.

1.12 DISPOSAL OF WASTE MATERIAL

Surplus materials shall be disposed of in areas suggested by the Contractor and approved by the Project supervisor's Representative and in such a manner that no inconvenience to the public shall be occasioned thereby, and the Contractor shall pay all working, compensation or other costs arising there from.

Should the Contractor for his own convenience waste material suitable for embankment or other construction, he shall at his own expense substitute by supply, place and compact an equivalent quantity of approved material.

1.13 EXCESSIVE EXCAVATIONS

Should excavations be carried to greater depths than shown on the Plans or directed by the Project supervisor's Representative, the Contractor shall at his own expense replace the quantity over excavated with approved equal strength materials thoroughly compacted to the correct levels and dimensions to the approval of the Project supervisor's Representative. Excavation and backfilling if required carried beyond indicated slope lines on the Plans and Cross-sections shall not be measured nor any payment made therefore.

1.14 METHOD OF MEASUREMENT

Stripping Top Soil

The quantity of stripped top soil shall not be separately measured for payment. It will be measured and paid for within the general excavation. The payment for excavation shall also include re-handling, shaping or wasting as directed.

Excavation

The excavation to be paid for, shall be the measured quantity in cubic meters of all roadway and slopes excavation. Borrow excavation, channel excavation and excavation for structure shall be measured separately. The volume shall be calculated by using the average end area method or other appropriate equal method. The measurement shall be the net volume of the bulk in place before excavation to the lines and levels shown on the Drawings and shall not include material excavated without authorization beyond the designed slopes and lines, or material, which is used for purposes other than those directed.

Channel Excavation

The quantity of channel excavation to be paid for shall be the number of cubic meters of material excavated as specified above for "Excavation".

Generally

No separate payment will be made for:

- a) Earthwork support
- b) Trimming of surface to slopes, falls or gradients
- c) Rolling and compaction including watering
- d) Temporary drainage channels and the like
- e) Trimming of cut slopes or embankment slopes
- f) Final cleanout and disposal of any debits or waste
- g) Temporary signing, works or private properly protection measures.
- i) Multiple handling of suitable or top soils materials.

2. EMBANKMENT

2.1 SCOPE

This Work shall consist of the construction of embankment by providing, placing and compacting approved materials, as specified, all in accordance with these Specifications and in conformity with the lines, grades, cross-sections and dimension shown on the Plans or as directed by Project Supervisor.

2.2 MATERIALS

Material shall comply in all respects with the requirements of AASHTO Standard Specifications No. M57, except that densities shall be in accordance with Part 4 of these Specifications and classified in accordance with AASHTO Standard Specifications No. M145.

Material shall not contain roots, sod or other deleterious matters.

2.3 CLEARING, GRUBBING AND STRIPPING

Prior to placing embankment upon any area, clearing, grubbing, and stripping shall have been performed in accordance with these Specifications and in conformity with the Instructions of the Project Supervisor. The road bed to receive embankment shall be watered and compacted as specified or as directed according to Clause 2.4 below.

2.4 PREPARING GROUND SURFACE UNDER EMBANKMENTS

When embankment is to be placed upon an existing road the existing surface shall be scarified to a depth not less than 150 mm. to provide ample bond between old and new material. The new surface shall be reconditioned, regarded and compacted to receive embankment.

Where the surface is irregular or benching has been excavated, enough filling shall be placed thereon to afford a sufficient level area for carrying out compaction by regular compaction equipment.

When embankment is to be placed on other than an existing road or other hard surface, the Contractor shall scarify the surface of the existing ground to a depth of 250 mm. and re-compact. Such recompaction of the embankment shall be executed to the following densities:

- a- Over 60 cms. below sub ground a minimum of 90% of maximum density.
- b- Less than 60 cms. below subgrade a minimum of 95% of maximum density.

2.5 DRAINAGE OF EMBANKMENT AREAS

The Contractor shall carry out all such drainage work as shall be considered necessary by the Project supervisor's Representative to drain the ground prior to forming any embankment and shall remove and make good at his own expense, any filling adversely affected, which in the opinion of the Project supervisor's Representative was caused through negligence or lack of proper drainage.

2.6 GENERAL REQUIREMENTS

- a- Where embankment is to be constructed across swampy ground and will not support the weight of trucks or other hauling equipment, the lower part of the fill shall be constructed by dumping successive loads of rock in a uniformly distributed layer of a thickness not greater than necessary to support the hauling equipment while placing subsequent layers.
- b- All stump holes or surface irregularities caused by the Contractor in the area between the roadway slope lines and the outside boundary of clearing and grubbing shall be filled or otherwise corrected as directed by Project Supervisor.
- c- When necessary to dispose of surplus material, embankments may be widened uniformly and/or slopes flattened as directed by the Project supervisor's Representative.

2.7 PLACING EMBANKMENT

Embankment material shall be placed in successive horizontal layer not exceeding 250 mm. compacted thickness except that on steep hillsides of solid rock it may be placed in a single layer to the minimum elevation permitting the operation of placing and compacting equipment, the rock first having been serrated as directed by Project Supervisor to assure satisfactory stability of the embankment. Hillsides other than solid rock shall be excavated from the embankment to a sufficient distance to permit operation of placing and compacting equipment.

Where fill is placed on natural slopes having an inclination steeper than 3 horizontal to 1 vertical, the fill shall be keyed into the natural slopes. Furthermore, a toe key, at least 1.5 m. in width, shall be constructed at the toe of the fill where it meets the natural ground.

Material containing rock larger than 150 mm. in greatest dimension but in no case exceeding 300

mm. shall be placed in layers of sufficient depth to contain the maximum size rock present in the material; provided however, that in no case shall the thickness of layers before compacting exceed 600 mm. Rock may be used for embankment construction in designated area, no rock fill will be permitted in road embankment for a depth of 60 cm. below subgrade; however, where embankments are constructed of excavated material which contains a high percentage of rock, sufficient approved fine material shall be combined with the rock to fill the voids.

The layers of all fills shall be formed in such a manner that the surface of the filling as it proceeds in self-draining. The Contractor shall at his own expense maintain sufficient drainage of the work to prevent pounding and scour, and all soft mud shall be removed before proceeding with further placement of embankment material. The embankment shall be constructed well ahead of the base and paving operations in order to secure as much compaction by construction traffic as possible.

2.8 EMBANKMENT COMPACTION

2.8.1 Compaction Requirements

The Contractor shall compact the fill materials prior to placing each successive layers, and the sub grade, to the following standard of compaction of the maximum dry density.

Embankment over 60 cm. below sub grade min. 95%

0-60 cm. below sub grade min. 95%

Unless otherwise stated by Project Supervisor, all embankments shall be compacted in accordance with the following requirements: Each layer of embankment material shall be moistened or dried to the optimum moisture content for compaction, with a tolerance of minus 2% and then thoroughly compacted by rolling with tamping, vibrating, or pneumatic tired rollers to meet the above mentioned standards.

Project Supervisor may permit compaction with other types of equipment provided that use of the alternative equipment will consistently produce densities specified above. The greatest possible use of construction traffic shall be made in compaction and the Contractor shall route such plant over the entire width of the filling to secure maximum effect. In embankments containing a high percentage of rock, the Project supervisor's Representative may specify the use of vibrating rollers.

2.8.2 Field Density Tests

Field control density tests, in accordance with AASHTO T147 will be made by the Project supervisor's Representative at 150 meters intervals of the road length (for each road layer) or any part thereof and every layer of height of embankment in order to determine the degree of compaction being obtained during construction. In case density is below the required minimum the embankment layer will be compacted by additional rolling or, if needed, will be scarified to the level of the previous layer, mixed with water and re-compacted.

For embankments less than 100 m., in length a field control density test must be carried out as directed.

2.9 SUBGRADE PREPARATION

The finished sub grade immediately prior to placing subsequent material thereon shall have a relative compaction of not less than 95% of modified dry density (AASHTO T180) for a depth of 600 mm. below profile grade. The sub grade shall be smooth and uniform and true to the required grade and cross-section, and shall be within the tolerances specified in these Specifications or as shown on the Plans. The Contractor shall repair at his expense any damage to prepared sub grade caused by his operations or by use of public traffic. No base course material shall be placed upon the prepared sub grade until the sub grade is in a condition meeting the requirement specified, and is approved by Project Supervisor

2.10 TOLERANCES

The surface of the grading plane at any point shall not vary more than one cm. above or 2 cm. below the grade established by the Project supervisor Subgrade that does not conform to the above requirements shall be reshaped to conform to the specified tolerances and re-compacted, all at the Contractor's expense.

2.11 TRIMMING SLOPES

The Contractor shall trim the face of the side slopes of earth embankments and cuttings, to the dimensions, inclinations and curves shown on the Plans, remove all excess material and make good all depressions with suitable material. No sharp changes in inclination shall be left, but be rounded off, providing gradual changes to discourage erosion.

2.12 MAINTENANCE

The Contractor shall be responsible for the stability of all slopes until acceptance of the work, and shall replace any portions which have become displaced due to carelessness or negligence on his part or to damage resulting from natural causes, such as storms, etc., and not attributable, in the opinion of the Project supervisor's Representative to unavoidable movement of ground upon which the embankment is made.

2.13 PROTECTION OF STRUCTURES

In all cases, proper precautions shall be taken to ensure that the method of operation in embankment construction does not cause movement or undue strain in any adjacent or buried structure. Embankments over pipes and around culverts, arches, and bridges shall be of selected materials carefully placed and compacted, in accordance with the relevant sections for the several types of structure. Small mechanical compactors such as grog umber compactor may be needed to handle such work.

2.14 ROCK FILL SUITABLE FOR EMBANKMENT

Rock-fill type materials shall be compacted initially with a minimum of three passes of a vibratory roller. Leveling points are then established. Short lengths of steel bars hammered flush with the surface of the rockfill have been found suitable for this purpose. A level reading is taken at each leveling point on top of a moveable 30 cm square flat steel plate. A hole drilled in the center of the plate will enable a visual check to be made that the plate is located centrally over the bar each time.

Further readings are taken at the leveling points after two additional passes with the roller. If the average settlement is less than half of one per cent (0.5%) of the average compacted layer thickness, or as determined by the Engineer, the rockfill compaction test is complete.

The total number of passes of the rolling equipment necessary to obtain the required result will establish the minimum number of passes to be used on the rock embankments. The contractor shall then use this simplified procedure, that is, the equipment, rolling pattern, and number of passes, during the construction of rock embankments. However, in no case the number of passes be less than five (5).

1	Size	25% larger than 15 cm and smaller than 30 cm
		50% larger than 7.5 cm and less than 15 cm
		The size of the largest aggregate should not exceed 2/3 of the layer thickness
2	Bulk Specific	Not less than 2.25
	gravity	
3	Water	Not more than 6%
	absorption	
4	Compaction testin	g by:

	(a) Plate bearing test (ME2\ME1 <2.2 (E= Young's Modulus)						
	(b) Surveying method						
5	Filling Material	Not A-6 or A-7 soil and should not exceed 25% (AASHTO M-145))				

Excess moisture in the embankment material shall be removed by drying operations. The drying under such circumstances shall be carried on until the moisture content is such that the required density can be attained. Each layer shall be satisfactorily compacted before the next layer is placed. Compaction shall be extended to cover the subgrade width in completed cut sections under the same requirements, without additional compensation. Cut sections excavated below grade and refilled with the removed excavation or with selected soils shall be compacted in the same manner as embankments

2.15 METHOD OF MEASUREMENT

Embankment shall be measured and paid for cubic meters.

3. WATERING

3.1 SCOPE

This Work shall consist of furnishing and applying water required in the compaction of embankments, sub grades, sub base, base course, and surface courses, in accordance with these Specifications.

3.2 MATERIALS

The water used shall be clean, of drinkable quality and acceptable to the Project supervisor's Representative and as described previously.

3.3 CONSTRUCTION

Water, when required, shall be applied at the locations, in the amounts, and during the hours, including nights, as directed by Project Supervisor. An adequate water supply shall be provided by the Contractor. Water shall be mixed thoroughly with the materials to be compacted, as directed by the Project supervisor's Representative.

3.4 METHOD OF MEASUREMENT

Watering shall not be measured for direct payment.

4. BASE COURSE

4.1 SCOPE

This Work shall consist of supplying, watering, laying and compacting of the base course to the thicknesses, lines and grades required.

4.2 MATERIALS FOR BASE COURSE

Aggregate for the base course for roads, sidewalks and footpaths shall consist of crushed limestone or screened valley gravel and shall conform to AASHTO Standard Specifications M75 and M43.

Gradation

These are the graduation requirements for base courses:

class	Sieve	2"	11/2"	1"	3/4"	1/2"	3/8"	#4	#10	#40	#20
	No.										0*
A	%		100	75-100	60-90	45-80	40-70	30-65	20-40	8-20	5-10
В	Passing	100	70-100	55-85	50-80		40-70	30-60	20-50	10-30	5-12

When gradation test is carried after compaction a tolerance of 3% shall be given to #200.

- C.B.R.: C.B.R> 80% for maximum dry density of modified proctor (AASHTO-T193).
- Abrasion Ratio: as per Los Angeles test using 500 revolutions (AASHTO-T96) ≤ 45%.
- Sand equivalent: must be 30% or more (AASHTO-T176)
- Soundness: must be 12% maximum tested by sodium sulphate & 18% maximum tested by magnesium sulphate (AASHTO-T104).

The portion of aggregate, including any blended material, passing the 0.425 mm (No.40) mesh sieve shall have a liquid limit (L.L.) of not more than 25 and plasticity index (P.I) 2-6 when tested in accordance with AASHTO T 89 and T 90. In case of using cohesion less base course material, the exposed surface shall exhibit intact and coherent surface to resist water erosion and fretting, the contractor at his own expense shall ensure such property.

- Elongated and flaky particles should not exceed a maximum of 35% each.
- Maximum Dry density (g/cm3) 2.1 min.
- Clay lumps and friable particles shall not exceed 8%.
- Finished levels of base course must not be more or less than the designed levels or the levels approved by Project Supervisor.

4.3 GENERAL REQUIREMENTS FOR CRUSHED LIME STONE OR

SCREENED WADI AGGREGATE

In addition to the above requirements, crushed lime stone or screened wadi aggregate shall be uniformly graded from coarse to fine and shall have a 4-day soaked CBR not less than 80 percent, at 95% modified dry density.

The portion of the material retained on a No. 4 sieve shall be known as coarse aggregate, and that portion passing a No. 4 sieve shall be known as fine aggregate.

The material shall be free from vegetable or organic matter and clay lumps.

Coarse aggregate shall have a percentage of wear of not more than 45 in 500 revolutions as determined by AASHTO T96 (Abrasion Resistance Test by Los Angeles Abrasion Machine). For all grading, the portion passing No. 40 sieve, including blending filler, shall have a liquid limit of not more than 25 and a plasticity index of 2 - 6 as determined by AASHTO T89 and T90 respectively. In case of using cohesion less base course material, the exposed surface shall exhibit intact and coherent surface to resist water erosion and fretting, the contractor at his own expense shall ensure such property.

The material must pass the ASTM soundness test so that the decrease in weight after 5 cycles will not be more than 12 percent when sodium sulphate is used, or not more than 18 percent when magnesium sulphate is used.

4.4 BLENDING MATERIALS

If aggregate or filler in addition to that naturally present in the base course material, is necessary in order to meet the grading requirements, or for satisfactory bonding of the material, it shall be uniformly blended with the base course material at the screening and crushing plant or on the road. The material for such purpose shall be obtained from sources approved by the Project supervisor's Representative and shall be free from hard lumps.

4.5 PREPARATION OF ROADBED

Roadbed, including shoulders, shall be constructed, prepared and finished as provided under 2.8 and 2.9.

4.6 ADDING WATER

At the time the aggregate base is watered and compacted to 100 % density according to modified proctor (AASHTO-T191), it shall have a moisture content sufficient to ensure that the specified

compaction can be obtained. Such moisture shall be uniformly distributed throughout the material. If the material is too dry, water shall be added or if the material is too wet, it shall be allowed to dry to the required moisture content.

4.7 **SPREADING**

The aggregate shall be delivered to the roadbed as uniform moistures and shall be spread in one operation. Segregation shall be avoided, and the base shall be free from pockets of coarse or

Prior to commencing the construction of sub base for any paved area, the Contractor shall submit a method statement to the Project Supervisor explaining in detail and in sequence his proposed method of procedure and construction and listing the plant, equipment and labor to be used. Such submittal shall be made in sufficient time to allow for proper study and the work may not be commenced until written approval is given by the Project Supervisor.

Aggregate shall be deposited on the roadbed at a uniform quantity per linear meter, which quantity will provide the required compacted thickness within the tolerances specified in Clause 4.9 without resorting to spotting, picking-up or otherwise shifting the aggregate base material. The base material shall be spread and compacted in layers. Base placed on road approaches and

connections, intersection areas, and at locations, which are inaccessible to the spreading equipment, may be spread in layers by any means to obtain the specified results.

The aggregate shall be spread in one operation with a self-propelled or towed spreader ready for compaction or with motor grader without further shaping. The spreader shall be provided with a screen that strikes off and distributes the material to the required width and to the surface tolerance specified. The width of each spread shall not be less than a traffic lane. The screen shall be adjustable to the required cross-section. Screen action includes any cutting, crowding or other practical motion that produces a finished surface texture of uniform appearance. If the spreader leaves ridges, indentations or other objectionable marks in the surface that cannot be eliminated by rolling, or prevented by adjustments in operation, its use shall be discontinued.

4.8 **COMPACTING**

Aggregate bases, after spreading, shall be watered and compacted to not less than 100 percent of modified dry density. The finished base shall have a CBR rating of not less than 80 percent.

4.9 **TOLERANCES**

The finished cross-section of the base course shall not vary more than 1 cm. from the designed shape.

Longitudinally the surface shall be checked with a 3 meter straight edge. Irregularities in this direction shall not vary more than 1.0 cm.

4.10 TESTING

Gradation test is performed on five samples taken from the site after blending to be compared with the original gradation.

Comprehensive testing should be done on all materials delivered to the site, when sources change, or for every delivered 1000 m3.

When compaction test is done for each layer, at least 3 samples have to be taken for every road, for every 1000 m² of the layer's area, or for every 200 meter length of the road.

4.10 METHOD OF MEASUREMENT

Base course shall be measured and paid for per square meters, acceptably laid and compacted to the lines and levels shown on the Drawings and at the nominal thickness described in the Contract. The prices shall include for watering, shaping, trimming to slopes, falls, chambers etc

5. SUB BASE COURSE

5.1 SCOPE

This Work shall consist of supplying, watering, laying and compacting of the sub- base course to the thicknesses, lines and grades required.

5.2 MATERIALS FOR SUB-BASE COURSE

Aggregate for the sub-base course for roads, sidewalks and footpaths shall consist of crushed limestone or screened wadi gravel and shall conform to AASHTO Standard Specifications M75 and M43.

Gradation

Class	Sieve	21/2"	2"	11/2"	1"	1/2"	#4	#10	#40	#200
	No.									
Α	%	100	80-100	70-95	55-90	45-75	30-60	20-48	10-30	5-12
В	passing		100	80-100	60-95	47-80	30-60	20-45	10-30	5-15

^{*} When gradation test is carried after compaction a tolerance of 3% shall be given to #200.

- C.B.R.: > 40% for maximum dry density. (AASHTO-T193)
- Abrasion Ratio: as per Los Angeles test using 500 revolutions (AASHTO-T96) < 45%.
- Sand equivalent: must be 25 % or more (AASHTO-T176)
- Soundness: must be 12% maximum tested by sodium sulphate & 18% maximum tested by magnesium sulphate (AASHTO- T104).
- Liquid Limit: must not exceed 30. (AASHTO-T90)
- Plasticity Index: must be 2-8. (AASHTO-T90-T89)
- Compaction: Sub-base must be watered and compacted to 100% density according to modified proctor. (AASHTO-T191)
- Finished levels of base course: must not be more or less than the designed levels or the levels approved by Project Supervisor.
- Maximum dry density (gm/cm3): must be 2.05 minimum
- Clay lumps and friable particles: shall not exceed 10%
- Flakey and elongated particles: shall not exceed 40% for crushed rock, 45% for crushed gravel, and 50% for natural gravel.

5.3 GENERAL REQUIREMENTS FOR CRUSHED LIME STONE OR SCREENED

WADI AGGREGATE

In addition to the above requirements, crushed lime stone or screened wadi aggregate shall be uniformly graded from coarse to fine and shall have a 4-day soaked CBR not less than 80 percent, at 95% modified dry density.

The portion of the material retained on a No. 4 sieve shall be known as coarse aggregate, and that portion passing a No. 4 sieve shall be known as fine aggregate.

The material shall be free from vegetable or organic matter and clay lumps.

Coarse aggregate shall have a percentage of wear of not more than 45 in 500 revolutions as determined by AASHTO T96 (Abrasion Resistance Test by Los Angeles Abrasion Machine).

For all grading, the portion passing No. 40 sieve, including blending filler, s shall have a liquid limit of not more than 30 and a plasticity index of 2 - 8 as determined by AASHTO T89 and T90 respectively. The material must pass the ASTM soundness test so that the decrease in weight after 5 cycles will not be more than 12 percent when sodium sulphate is used, or not more than 18 percent when magnesium sulphate is used.

5.4 BLENDING MATERIALS

If aggregate or filler in addition to that naturally present in the sub-base course material, is necessary in order to meet the grading requirements, or for satisfactory bonding of the material, it shall be uniformly blended with the sub-base course material at the screening and crushing plant or on the road. The material for such purpose shall be obtained from sources approved by Project Supervisor and shall be free from hard lumps.

5.5 PREPARATION OF ROADBED

Roadbed, including shoulders, shall be constructed, prepared and finished as provided under 2.8 and 2.9.

5.6 ADDING WATER

At the time the aggregate base is watered and compacted to 100 % density according to modified proctor (AASHTO-T191), it shall have a moisture content sufficient to ensure that the specified compaction can be obtained. Such moisture shall be uniformly distributed throughout the material. If the material is too dry, water shall be added or if the material is too wet, it shall be allowed to dry to the required moisture content.

5.7 SPREADING

The aggregate shall be delivered to the roadbed as uniform moistures and shall be spread in one operation. Segregation shall be avoided, and the base shall be free from pockets of coarse or fine material. Prior to commencing the construction of sub base for any paved area, the Contractor shall submit a method statement to Project Supervisor explaining in detail and in sequence his proposed method of procedure and construction and listing the plant, equipment and labor to be used. Such submittal shall be made in sufficient time to allow for proper study and the work may not be commenced until written approval is given by the Project supervisor's Representative.

Aggregate shall be deposited on the roadbed at a uniform quantity per linear meter, which quantity will provide the required compacted thickness within the tolerances specified in Clause 4.9 without resorting to spotting, picking-up or otherwise shifting the aggregate base material.

The base material shall be spread and compacted in layers. Sub-Base placed on road approaches and connections, intersection areas, and at locations, which are inaccessible to the spreading equipment, may be spread in layers by any means to obtain the specified results.

The aggregate shall be spread in one operation with a self-propelled or towed spreader ready for compaction or with motor grader without further shaping. The spreader shall be provided with a screen that strikes off and distributes the material to the required width and to the surface tolerance specified. The width of each spread shall not be less than a traffic lane. The screen shall be adjustable to the required cross-section. Screen action includes any cutting, crowding or other practical motion that produces a finished surface texture of uniform appearance. If the spreader leaves ridges, indentations or other objectionable marks in the surface that cannot be eliminated by rolling, or prevented by adjustments in operation, its use shall be discontinued.

5.8 COMPACTING

Aggregate bases, after spreading, shall be watered and compacted to not less than 100 percent of modified dry density. The finished sub-base shall have a CBR rating of not less than 40 percent.

5.9 TOLERANCES

The finished cross-section of the sub-base course shall not vary more than 1 cm. from the designed shape.

Longitudinally the surface shall be checked with a 3 meter straight edge. Irregularities in this direction shall not vary more than 1.0 cm.

5.10 METHOD OF MEASUREMENT

Sub-base course shall be measured and paid for per cubic meter, acceptably laid and compacted to the lines and levels shown on the Drawings and at the nominal thickness described in the Contract. The prices shall include for watering, shaping, trimming to slopes, falls, chambers etc

6. ASPHALTIC (Prime Coat, Tack Coat, and Seal Coat)

6.1 SCOPE

This Work shall consist of furnishing and applying asphaltic prime coat, tack coat and seal coat as specified. In case of rehabilitation of existing roads the Contractor will carry out the milling of the existing asphalt layer.

6.2 MILLING OF ASPHALT LAYER

- The existing asphalt layer will be milled with a special machine to an average depth of not less than three centimeters (3 cm).
- The milling will modulate a new leveling of the surface of the road.
- The pavement is trimmed vertically by the curbs.
- The debris created by the milling will be removed and transported to a discharge area following the instructions of the Project supervisor
- The milled surface of the road is then cleaned thoroughly using mechanical sweeper and / or labors with brooms.

6.3 ASPHALT PATCHING

- If the pot-holes are deeper than the asphalt layers, base course will be repaired first according to the section of the road in that area to reach the level of the bottom of the asphalt, then prime coat is applied and asphalt is laid and compacted.
- If the depth of the pot-holes is equal or less than the existing asphalt, the pot holes will be required and asphalt will be laid and compacted after applying tack coats to pot-holes.
- All pot-holes must be cleaned, trimmed and dried before asphalt patching.
- The tack coat must be applied to cover completely the bottom and the sides of the holes.

6.4 LIQUID ASPHALT FOR PRIME COAT AND DOUBLE SURFACE

- Liquid asphalt for prime coat shall be medium curing grade MCO in compliance with AASHTO Standard M82 and for double surface treatment shall be as specified in 6.6 below.
- Prior to application of liquid asphalt, the Contractor must obtain written approval of the Project supervisor who will also approve the suitable application rate of liquid asphalt. The Contractor will sweep and clean the surface using air compressor and be sure that the surface is dry before application of the liquid asphalt using distributor truck of the pressure type with insulated tanks. No application of liquid asphalt is allowed in rainy, windy or dusty days. No traffic of any kind shall be allowed on any surfaces where liquid asphalt is applied.

6.4.1 Prime Coat

Bituminous material shall be (MC-70), or equivalence, and shall be applied at least twenty four hours before placing the asphaltic concrete. The rate of application will be 1-1.5 kg/m² and it will be approved by the Project supervisor.

6.4.2 Tack Coat

Bituminous material shall be RC 250 or equivalent. It will be applied between two asphaltic concrete layers (or between the scarified surface and the wearing course) and at least two hours before placing the second asphaltic concrete layer. The rate of application will be 0.2-0.5 kg/m²

and it will be approved by the Project supervisor

6.4.3 Seal Coat

Bitumen for seal coat applications shall be Rapid-Curing RC-800 Grade and or any suitable grade conforming AASHTO M-81.

Cover aggregates for bituminous seal coats shall consist of screenings of crushed stone. Gravels shall not be used for seal costs.

Flakiness Index and Elongation Index tested in accordance with BS-812 shall not exceed 25% for each of flakiness and elongation index. The percentage by weight of clay lumps & friable particles as determined by AASHTO T 112 shall not exceed 3%. Light weight aggregate of specific gravity of 2 or less shall not exceed 3% as determined by AASHTO T113.

Cover aggregates when tested in accordance with AASHTO T 27 and T11 shall conform to the gradations given in the table below.

Sieve Size Designation (Square openings)	1st Application Grading B	2nd Application Grading C
1"	100	
3/4"	90 - 100	
1/2"	20 - 55	100
3/8"	0 – 15	58 - 100
No.4	0 - 5	10 - 30
No.8	-	0 - 10
No.16		0 - 5
No. 200	0 - 0.5	0 - 0.5

GRADATION OF AGGREGATES FOR SEAL COATS

The loss in weight of aggregate after 500 revolutions, when tested in accordance with AASHTO T 96 (Los Angeles Test), shall not exceed 35%.

When tested for soundness in accordance with AASHTO T 104, the aggregates shall not show signs of disintegration and the loss by weight shall not exceed 10% in the case of the sodium sulfate test or 12% in the case of the magnesium sulfate test.

When tested for resistance to stripping in accordance with AASHTO T 182, at least 95% of the aggregate surface area shall remain coated with a bitumen film.

The material shall contain minimum 50% of sand equivalent as determined by AASHTO T 176.

6.5 AGGREGATES FOR DOUBLE SURFACE TREATMENT

Aggregate shall comply in all respects with AASHTO Standard Specifications M62 and shall be graded in accordance with the Specifications of binder and surface course.

6.6 EQUIPMENT

The equipment used by the Contractor shall include a power broom or a power blower or both; a self-propelled, pneumatic-tired roller, or steel-wheeled tandem (5 to 10 tons) or both; mechanical or self-propelled aggregate spreading equipment that can be adjusted to spread accurately the specified amounts per square meter; a pressure distributor and equipment for heating the asphaltic material. Pneumatic-tired rollers shall have a total compacting width of not less than 120 cm, and shall have minimum contact pressures of 2.8 kg/cm2 or as specified by Project Supervisor. Other equipment may be used in addition to, or in lieu of the specified equipment when approved by the Project supervisor's Representative.

The pressure distributor shall be designed and operated to distribute the asphaltic material in a

uniform spray without atomization, in the amount and between the limits of temperature specified.

It shall be equipped with a tachometer having a dial registering feet or meters of travel per minute. The dial shall be visible to the truck driver so he can maintain the constant speed required for application at the specified rate.

The pump shall be equipped with a bitumeter having a dial registering liters or gallons per minute passing through the nozzles. The dial shall be readily visible to the operator.

Means for indicating accurately the temperature of the asphaltic material at all times shall be provided. The thermometer well shall not be in contact with a heating tube. The normal width of application of the spray bar shall be not less than 360 cms. with provision for the application of lesser width when necessary. A hose and spray nozzle attachment shall be provided for applying asphaltic material to patches and areas inaccessible to the spray bar.

The distributor shall be provided with heating attachments and the asphaltic material shall be circulated during the entire heating process.

6.7 APPLICATION OF PRIME COAT

Application of the asphalt primer shall be made uniformly at the rate decided by the Project supervisor's Representative with the pressure distributor. The asphalt primer shall be applied at the temperature specified by the Project supervisor's Representative. When heating is required precautions shall be taken to avoid fire hazard.

Application shall be made when the surface is dry or slightly damp and, unless otherwise permitted by the Project supervisor's Representative, when the air temperature in the shade is not less than 10oC. After application of the asphalt primer, at least forty-eight (48) hours shall elapse further applications are made.

Before beginning application, building paper shall be spread over the surface, from the joint back, for a sufficient distance for the spray bar to begin spraying and be operating at full force when the surface to be treated is reached. After the asphalt is applied the building paper shall be removed and destroyed.

The spray bar shall be shut off instantaneously at each construction joint to assure a straight line and the full application of asphalt primer up to the joint. If necessary to prevent dripping, a drip pan shall be inserted under the nozzle when the application is stopped. A hand spray shall be used to apply primer material necessary to touch up all spots unavoidably missed by the distributor.

Following the application, the primed surface shall be allowed to dry for a period of not less than 48 hours without being disturbed or for such additional period of time as may be necessary to permit the drying out of the prime coat as not to be picked up by traffic or equipment.

The surface shall then be maintained by the Contractor until the surfacing has been placed and no traffic shall be allowed on the primed surface before placing of the double seal coat or bituminous surface before placing of the double seal coat or bituminous paving.

7- ASPHALTIC CONCRETE

7.1 General

The asphaltic concrete shall be hot asphalt produced by central mechanical asphalt mixing plant. Percentage of bituminous material will be 4-6 % by weight according to job mix formula. Unless otherwise shown on the Drawings, bitumen for binder and wearing courses construction shall be PG (68-10), or (70-10), or any other suitable grade for the climatic condition of the project

7.2 Gradation

Asphaltic Concrete shall consist of crushed course and fine aggregates, filler and bitumen and shall conform to the following gradation requirements.

The tolerances for gradation of the mixture as reached from the job mix formula on the basis of the Marshall Tests will be as follows:

Sieve Size	Maximum Variation of percentage of Material Passing
3/8" and larger	±5 %
# 4 to # 80	± 4 %
# 200	±1 %

SIEVE SIZE	PERCENT PASSING BY-WEIGHT GRADATION			
	Binder Course	Wearing Course	Thin Course*	Thin Course*
	(1")	(3/4")	(1/2")	(3/8")
1"	100	-	-	-
3/4"	70-100	100	100	
1/2"	54-82	74-95	90-100	100
3/8"	44-74	60-86		90-100
No 4	32-54	40-65	45-70	60-80
No 8	-	-	25-55	35-65
No 10	-	25-45		-
No 16	-	-	- '	-
No 20	14-30	16-30	-	-
No 30	-	-	-	-
No 40	8-23	10-22	-	-
No 50	-	-	5-20	6-25
No 80	4-15	6-15	-	-
No 100	-	-	-	-
No 200	2-8	3-8	2-9	2-10

^{*} For less than 4 cm wearing or leveling courses

7.3 Aggregates

The aggregates used in the asphaltic concrete must fulfill the following requirements:

- For the portion retained on sieve No.4, Los Angeles abrasion after 500 revolution must not be more than 35% (AASHTO T96).
- Non-plastic for material passing #40 sieve from hot bins. (AASHTO-T90-T89).
- Soundness according to (AASHTO-104), loss by weight after 5 cycles must not be more than 9% if sodium sulfate is used, and 12 % if magnesium sulfate is used.
- Flakiness Index (FI) and Elongation Index (EI) will be tested for according to British specifications (BS 812) and it must not be more than 25 % for wearing course and 30% for binder course.
- Sand equivalent according to AASHTO T-176 and it must not be less than 50%.
- Clay lumps and friable particles must not be more than 1% according to AASHTO T-112
- Loss of stability must not be more than 25 % for the asphaltic concrete
- Samples will be taken every day there is asphalting for extraction and Marshal tests to find density, % air voids, % voids in mineral aggregates (VMA), % voids filled with bitumen, stability, gradation and bitumen content.
- Stripping of aggregates uncoated with bitumen shall not be more than 5% according to AASHTO T- 182.

7.4 Application

The asphalt shall be delivered to site at $130~^{\circ}\text{C}$ to $150~^{\circ}\text{C}$. The asphalt will be dumped from the vehicles directly into the paving machine and stocking is not allowed at all.

The asphalt will be dumped from special vehicles directly into the paving machine which must be self- propelled paving machine. Placing of asphalt will start with thickness 15 - 20 % more than the required compacted thickness. The contractor will take the approval of the Project supervisor before starting paving and will coordinate with him on the paving method.

Rolling shall be accomplished by steel rollers (10 tons) and pneumatic tired rollers (10 - 15 tons). Minimum temperature at which break down rolling will be accomplished is 120° C. Asphalt layer must bear the movement of rollers so that it will not move or cracked. If rolling is delayed and the asphalted layer is cold, it will be removed and replaced.

First rolling shall be accomplished by steel roller 10 tons. Required passes will follow the instruction of the Project Supervisor .

Pneumatic tired roller to be used after that with suitable passes to reach the required density. Rolling shall begin at the low side and progress to the high side by overlapping of longitudinal trips parallel to the centerline. Also it shall begin at edge of roads towards the centerline. Prior to rolling and as often thereafter as may be necessary, each tire of the roller shall be wiped with water so that the asphalt will not cling to the tires.

When the measurement of the core from any paved section is not deficient by more than 3 mm from the specified thickness, the core will be deemed to be of the specified thickness as shown on the Drawings, full payment will be made.

Any deficiencies in the total thickness of bituminous courses more than 3mm but not more than 15% of the total thickness shall be subject to 15% reduction in the area of final (wearing) course measured for payment. Alternatively, the Contractor shall construct all at his own expense, a wearing course overlay, if practicable in the judgment of the Project Supervisor. Any such overlay shall be a minimum of 40 mm compacted thickness and to the specified standard of the course it is overlaying.

If the asphalt thickness test sample fails, the test is repeated by taking core samples within ten meters from each direction, and each sample represents half of the examined area •

Density of the finished Rehabilitation shall not be less than 98% of the Marshall density obtained in the laboratory (75 blows).

For any deviation from 98% Compaction, the contractor has the right to retest again in the next day directly after compacting the road with rubber roller for two hours. The new test is carried out by taking two samples before and after the failed sample with a distance of no more than ten meters from each direction and the sample that succeeds represents half the distance Only, in the case of failure the deduction criteria will be applied •

All thickness and density tests, including repeated tests, if any, must be conducted within 10 days from asphalt laying, and in case of failure to obtain the required compaction percentage, Deduction as following will be applied

	1 1	
up to 1% deviation	up to 2% deviation	up to 3% deviation
(from 97-97.7)	(from 96-96.9),	(from 95-95.9)
the reduction will be 10%.	, the reduction will be 20%.	, the reduction will be 35%

95% compaction of Marshal Density by using smaller rollers may be allowed if the area is narrow which makes it difficult for heavy rollers to reach and on roads with steep grade (> 15%). This will be approved by the Project Supervisor .

Before asphalt is placed after a stoppage for any reason, the old asphalted layer shall be trimmed to a vertical face by cutting the edge of asphalt and tack coat to it horizontally and vertically. The surface in the area of the joint shall not have difference more than 6mm using 6 meters straight edge.

Sufficient days before starting asphalt, the contractor will prepare a job mix formula and fix the

required bitumen content and he will not start asphalting before obtaining the written approval from the Project Supervisor. A new mix design must be prepared in any of the following cases:

- Stability decreases below the specified value.
- Average specific gravity of aggregates is beyond $\pm 0.1\%$ of the design.
- Bulk specific density of mixture is beyond ± 0.05 that of the design.
- If water absorption is beyond 1% that of the design.

The job mix formula according to Marshall Method must satisfy the following:

	U			0
Stability 1000 kgs min.	Flow 2-4 n	nm	Stiffness	500 kg/mm min
Voids in total mix:				
a) For binder course	3-6%	b) For	wearing course	3-5%
Voids filled with bitumen:				
a) For binder course	60-70%	b) For	wearing course	65-75%
V.M.A.:				
a) For binder course	12% min.	b) For	wearing course	13% min.

7.5 Tolerances

Bitumen content ± 0.3%	Level of surface ± 5mm	Thickness of asphaltic layer – 3mm
------------------------	------------------------	------------------------------------

• Bitumen Content reduction

% Required Bitumen Content	% Deviation	Reduction	
	- /+ 0.3	No reduction	
	-0.4	Reduction %4	
	-0.5	Reduction %10	
	-0.6	The layer refused	
Total Reduction	% Reduction* Represented Area *Unit price		

8- CONCRETE

8.1 Scope

This section describes and specifies work required for plain and reinforced, concrete, including formwork intended to be used for the project under the contract in accordance with the Drawings, Bills of Quantities and as directed by the Project Supervisor.

Particulars of the following shall be given:

- (1) Kind and quality of materials for concrete
- (2) Composition and mix (or strength requirements) of the concrete.

8.2. Materials for Concrete

8.2.1. Cement

Cement shall be Portland Type, originating from approved manufacturers, obtained in sealed and labeled bag, each 50kg net capacity, name and brand of the manufacturer shall plainly be identified thereon and delivered to Site in good condition. The quality of cement shall conform to the Standard Specification for PORTLAND CEMENT of ASTM Designation: C 150 - 74 Type I - for use in general concrete construction.

8.2.2 Aggregates

a- General Requirements

All aggregates shall consist of tough, hard, durable uncoated particles. The Contractor shall be responsible for the processing of this material to meet the requirements of the specifications.

Approval of aggregate quality and/or gradation shall not waive the responsibility of the Contractor to provide concrete of having the minimum strength specified.

b-Storage

Coarse and fine aggregates shall be delivered and stored separately on site in such a manner as to prevent segregation and contamination or the admixture of foreign materials. Aggregate that has become segregated or contaminated with foreign matter during storage or handling will be rejected and shall be removed and replaced with material of acceptable quality at the Contractor's expense. Aggregates of the quality and color selected shall be stored in sufficient quantity to avoid interruption of concreting work at any time.

8.2.2.1 Fine Aggregate

All fine aggregate for concrete shall conform to Standard Specification for Concrete Aggregates of ASTM Designation: C-33. It shall not contain harmful materials such as iron pyrites, coal, mica, shale, alkali, coated grains, or similar laminated materials such as soft and flaky particles, or any material, which may attack the reinforcement, in such a form and in sufficient quantity to affect adversely the strength and durability of the concrete. Fine Aggregate passing sieve No. 4 shall not contain any voided shells.

8.2.2.2 Coarse Aggregates

All coarse aggregate for concrete shall conform to Standard Specifications for Concrete Aggregates of ASTM Designation: C-33 Coarse aggregate shall consist of gravel, crushed gravel, or crushed stone, having hard, strong durable pieces, free from adherents. It shall not contain harmful materials such as iron pyrites, coal, mica, alkali, laminated materials, or any material, which may attack the reinforcement, in such a form or in sufficient quantity to affect adversely the strength and durability of the Concrete.

8.2.2.3 Combined Aggregate

Approved fine and coarse aggregate in each batch of concrete shall be combined in proportions as approved by the Project Supervisor, according to test results giving the required compressive concrete stress as specified per type of Concrete.

The combined aggregate gradation using the 3/4-in to No. 4 gradation shall be used for concrete members with reinforcement too close to permit proper placement and consolidation of the concrete. Changes from one gradation to another shall not be made during the progress of the work unless approved by the Project Supervisor. Such changes are admitted only after being proved by test results.

8.2.2.4 Aggregate of Mortar

a- General Requirements: Aggregate for mortar shall conform to the Standard Specification for Aggregate for masonry Mortar of ASTM Designation: C-144 and shall consist of hard, strong, durable uncoated mineral or rock particles, free from injurious amounts of organic or other deleterious substances.

b-Organic Impurities

Fine aggregate for mortar when subjected to the colorimetric test for organic impurities and producing color darker than the standard color shall be rejected.

8.2.3. Water

Water for mixing of concrete shall be fresh, and free from injurious amounts of oil, acid, or any other deleterious mineral and/or organic matter.

When required by the Project Supervisor the quality of the mixing water shall be determined by

the Standard Method of Test for Quality of Water to be used in Concrete, as specified in BS 3148: 1959 Tests for Water for Making Concrete.

8.3 Types of Concrete

The Types of Concrete to be used in the construction of manholes and other structural works are as shown below:

Type	Acquired strength after	Acquired strength after	Minimum quantity of cement
	7 days (kg/cm ²)	28 days (kg/cm ²)	per m ³ of concrete
B 150	125	180	220
B 200	160	230	300
B250	200	287	360
B300	240	345	360

8.4 Concrete Testing – Works

During the course of the construction of the Works, the Contractor shall make test cubes or cylinders as required by the project Supervisor. One set of cubes will normally be taken from each individual concrete member e.g. culvert invert, abutment, deck, pile pier etc. but additional cubes shall be taken as directed by the Project Supervisor. Three cubes will be tested at 7days and three cubes at 28days as the Project Supervisor directs. Should either of the cubes fall below the specified requirement the contractor shall, on the Project Supervisor's instructions, either alter the mix design and/or the method of making the concrete and controlling its quality to reduce the variability of the concrete and /or cut out and replace at his own expense concrete placed in the works on any day on which a defective cube was made if in the opinion of the Project Supervisor such concrete is likely not be capable of fulfilling its purpose.

The project Supervisor may require the contractor to cut out the defective part from the works even though test cubes made from that concrete have not failed.

The number of test samples shall be as shown in the Table:

Concrete Quantity (m ³)	Number of Samples
Up to 40	3
40 - 60	4
60 - 80	5
80 - 100	6
100 - 130	7
130 - 160	8
160 - 200	9
Above 200 – for every 50 m3 of its portion	One additional sample

8.4.1 Concrete Testing Workability

The contractor shall carry out slump and/or compacting factor tests at such frequency as the Project Supervisor's considers necessary to ensure that the workability and consistency is maintained in accordance with the specified mix or accepted min design and the trial mix. But in any case workability tests shall be carried out at least once every two hours during which concrete is being mixed.

8.5 Mixing Concrete

The concrete shall be mixed in a power driven machine of the batch type, no hand mixing being allowed. The mixer shall be large enough to admit the use of 1 cement bag of container or whole multiples of bags or containers at a time. The mixing shall continue until there is a thorough distribution of the materials and the mass is uniform in consistency and color. The period of mixing, judged from the time that all the ingredients including water are in the mixing drum shall be as ordered by the Project Supervisor's Representative but shall not be less than 2 minutes or 20 revolutions of the drum whichever is the longer.

Should there be for any reason a stoppage of greater than 30 minutes, the drum or other containers of the mixer shall be thoroughly washed and cleaned before mixing is resumed. On completion of the mixing, the concrete shall be discharged into clean board or into clean barrows etc. The method of discharge from the mixer shall be such as to cause no segregation whether partial or otherwise.

8.6 Curing of Concrete

All concrete shall be cured for a period of time required obtaining the full-specified strength, but not less than (7) consecutive days.

8.7 General Conditions

All concrete placing shall be in the presence of the Project Supervisor. The Contractor shall allow for 24 hours' notice before placing.

Pouring of concrete shall not be allowed from height. Exceeding 1.5m

Placing of concrete shall be continuous up to the completion of works, however, stoppage is allowed on construction joints only.

Concrete placing is not allowed if temperature exceeds 40 degrees Celsius and drops below 5 degrees Celsius.

Forms, shutters and reinforcing steel shall be wetted by water before concrete placing.

Concrete shall be thoroughly compacted by a mechanical vibrator. The vibration shall be of sufficient duration, but shall not be so continues such as causes segregation.

9.0 Incidentals

9.1 Precast concrete curbs

9.1.1 SCOPE: These work shall consist of furnishing and constructing concrete curbs as and where shown in the Drawings.

9.1.2 MATERIALS AND PRECAST MANUFACTURE

Concrete: Portland cement concrete shall be class 250 for all in situ and precast concrete except base course and backing concrete which shall be 200.

Mortar: Mortar shall consist of cement and fine aggregate having the same proportions used in the concrete construction.

Precast Concrete Units:

All precast units shall be manufactured to the dimension shown on the Drawings Manufacturing tolerances shall be 3mm in any one dimension. End and edge faces shall be perpendicular to the base. Each precast curb unit shall normally be 0.5m in length and this length shall be reduced to 0.25m or as directed where units are to be installed along curves of less than 10m radius.

For horizontal curves of radius less than 10m, curb units shall be manufactured to the radius shown and in such circumstances where straight elements or portions of straight elements shall not be used.

Precast concrete tiles (paving slabs) shall be 400mm by 40 mm thickness with 5mm edge level. The tile face shall be grooved in squares of size agreed by the engineer as appropriate to the tile dimensions coloring of the top layer, where required shall be achieved using mineral oxides.

Precast units shall be cast upside down in approved steel molds under conditions of controlled temperature and humidity. The Engineers approval of the samples will not be considered final and the Engineer may reject any precast units delivered to the site which do not meet the required standards.

9.1.3 CONSTRUCTION AND INSTALLATION OF PRECAST CONCRETE CURBS

- 1. The subgrade shall be excavated to the dimensions as shown in the drawings, and the surface of subgrade shall be leveled and compacted to at least 95% AASHTO T180 maximum density.
- 2. Forms for the concrete base shall be approved wood or steel. All forms shall be sufficiently strong and rigid and securely staked and braced to obtain a finished product correct to the dimensions, lines and grade required. Forms shall be cleaned and oiled before each use. If approved, forms for the concrete base may be omitted and the concrete placed directly against undisturbed excavated faces.
- 3. Base course concrete shall be placed, compacted and shaped to the sections shown on the Drawings. Concrete shall be compacted with an approved internal type vibrator or if approved, by hand spudding and tamping. Edged shall be rounded if necessary by the use of wood molding or by the use of an edger as applicable. The concrete base shall be finished to a true and even surface with a wood float. Concrete shall be membrane or water cured for at least 7 days before precast units are placed thereon.
- 4. Precast uints shall be soaked in water immediately before installation: Units shall be set accurately in position in mortar on the concrete base. Joints between precast units shall not be mortared unless otherwise shown on the Drawings. Units shall be closely spaced and every 10 m run shall be provided with an expansion joint.
- 5. Where curbs or gutters are installed on existing concrete pavement and using epoxy resin adhesive, the installation procedures shall conform to those specified for raised pavement markers in Section "Pavement Markings for Traffic".
- 6. After curbs have been installed, steel forms shall be erected and concrete backing, shall be placed as shown on the Drawings. Pavement courses shall not be laid against curbs until the concrete backing has membrane or water cured for at least 14 days.
- 7. The tolerances on alignment of completed precast shall be as specified for in situ concrete construction.
- 8. The area adjacent to completed and accepted curbs shall be backfilled with approved material to the top edges of the curbs to 95 % AASHTO T180 maximum density.

9.1.4 MEASUREMENT

Precast concrete curb shall be measured by lin.m of each type furnished, constructed or installed, completed and accepted. Measurements shall be of the front face of concrete curb or of the flow line of gutter as appropriate, and shall include measurements of concrete curbs required for steps.

9.2 PRECAST CONCRETE TILES (PAVING SLABS)

9.2.1 CONSTRUCTION AND INSTALLATION

- 1. Excavation and the placing of bedding material shall be as specified for in situ concrete paving. The surface of the completed bedding shall be dampened and base course concrete shall be placed and finished to the thickness 40 mm minimum thickness.
- 2. The base course concrete shall be water or membrane cured as specified for in situ concrete paving, for not less than 7 days before placing precast tiles.
- 3. Immediately prior to tile laying, the concrete base course shall be dampened and the on concrete tiles shall be immersed in water. Tiles shall then be laid true to line and grade on a 10 mm to 20 mm thickness of mortar joints shall be 3 mm wide.
- 4. The tolerance on smoothness of precast concrete tiled areas and removal and replacement of defective tiling, shall be as specified for in situ concrete paving .
- 5. Tiles shall be cleaned 24 to 36 hours after laying and joints shall be mortared using, if approved, a plasticizer in the mortar to improve workability and to enable the mortar to be readily smoothed and finished. As soon as the mortar has partially set, all mortar material shall be raked from the top 3 mm depth of the joint, using a grooving tool to produce a smooth circular section.
- 6. When the mortar is sufficiently set, the surface shall be sprinkled with water and covered with

plastic or nylon sheets during the curing period. The sheets shall be left in place until final hardening of the mortar, or as directed. All foreign material, wood, concrete, mortar lumps, etc., shall then be removed and the surface cleaned of staining, discoloration and other blemishes.

- 7. In cases where tiles are required to be cut at the boundaries of tiled areas, due to the presence of obstacles, poles, hydrants, etc., or in the construction of the driveways or side roads, the contractor shall cut the tiles or substitute in situ concrete of at least the same quality as the tile concrete. The Engineer will decide, after trials, on the method to be adopted. Cutting of tiles or substitution of in situ concrete shall be kept to a minimum. The contractor shall complete the areas using uncut precast tiles to the maximum extent practicable.
- 8. Where a side walk crosses the entrance to a shop or a house, etc., which is higher than the side walk, the contractor shall construct steps, formed by a curb and a complete or partial tile. Steps shall be backfilled with concrete of the same quality as specified for concrete base course.
- 9. Steps shall be constructed wherever the difference in elevation between the entrance and the side walk is more than 250 mm. The contractor shall submit for approval, prior to commencing any sidewalk construction, a list of locations where steps will be required, together with design details for their construction.
- 10. In situ concrete paving and precast concrete tiling shall be measured by sq. m furnished, constructed or installed, completed, and accepted. Measurements shall be of the surface area and no deduction shall be made for minor obstructions such as manholes, poles or similar small unpaved or untiled areas.
- 11. Concrete Tiled steps shall be measured by sq. m furnished, constructed or installed, completed, and accepted. Measurements shall be of the horizontal projection of the steps.
- 12. Excavation, backfilling, bedding, concrete base course, concrete backing, construction in and around obstacles, poles, manholes, flower beds, cutting and shaping of tiles on curves, jointing, and finishing at walls and fences, etc. shall not be measured for direct payment, but shall be considered as subsidiary works, small the costs of which will be deemed to be included in the contract prices for the pay items.
- **9.2.2 MEASUREMENT**: Precast concrete tiling shall be measured by sq.m of each type furnished, constructed or installed, completed and accepted. Measurements shall be of the surface area and no deduction shall be made for minor obstructions such as manholes, poles or similar small unpaved or untiled areas.

12. STEEL GUARDRAIL AND CONCRETE SAFETY BARRIER

12.1 DESCRIPTION

These Works shall consist of the furnishing, construction and erection of steel guardrail, concrete barriers, impact attenuators, and glare screens as and where shown on the Drawings.

12.2 MATERIALS

12.2.2 METAL BEAM GUARDRAIL

Rail elements and backup plates for W-Beam or other similar shapes of steel rail shall conform to AASHTO M 180, Class A, Type 2 galvanized. Rail elements for triple corrugated beam rail used in Guard Rail Energy Absorbing Terminal (G.R.E.A.T.) proprietary impact attenuators shall conform to AASHTO M 180, Class B. Type 2 galvanized. Rail element joints shall be fabricated to lap not less than 300 mm and be bolted.

Rail metal shall withstand a cold bend, without cracking, of 180 degrees around a mandrel of a diameter equal to 2.5 times the thickness of the sheet metal plate.

Rail elements to be erected on a radius of 45 m or less shall be shaped in the shop. The radius of curvature shall be stenciled on the back of each section of rail.

Rail elements shall be designed to be spliced at intervals not to exceed 4 m and such splices shall be made at posts, unless otherwise shown on the Drawings.

12.2.3 BOX BEAM GUARDRAIL

Rails shall be hot-formed welded and seamless carbon steel structural tube or cold-formed welded. Posts, splice tongues, and plates shall conform to ASTM A 36. Rails shall conform to ASTM A 500, Grade A or B. or ASTM A 501.

Mill transverse welds will not be permitted on rail sections. Longitudinal welds shall be made by the resistance, gas shielded arc, submerged arc or plasma arc welded process and shall be sound, free from defects, and shall not be repaired. The welded joint, in cold and hot-formed welded rail, shall have a minimum tensile strength specified for the railing when subjected to the tensile strap test specified in ASTM E8M (metric).

Rail sections for tangent runs shall be not less than 6 m in length. Rail splices shall be a minimum of 400 mm from the centerline of any post.

12.2.4 WIRE ROPE

Wire rope for cable guardrail, cable guardrail anchor terminals and metal beam guardrail anchor terminals, shall conform to AASHTO M 30, Type 11, Class A. Equivalent galvanized wire rope with a minimum breaking strength of 19,400 kg will be acceptable.

Wire rope restraining cable for G.R.E.A.T. Hi-Dro and Hi-Dri impact attenuators shall be minimum 22 mm nominal diameter galvanized wire rope conforming to ASTM A 603, Class A.

Pull out and secondary cable for Hi-Dro and Hi-Dri impact attenuators shall be minimum 9.5 mm nominal diameter galvanized wire rope conforming to ASTM A 603, Class A.;

12.2.5 POSTS AND MISCELLANEOUS HARDWARE

Unless otherwise shown on the Drawings, all steel posts, plates, angles, channels, brackets and anchor assembly units shall conform to ASTM A 36. Cold rolled post sections shall conform to ASTM A 446, Grade B.

The swaged fittings for anchor terminals shall be machined from hot rolled carbon steel conforming to ASTM A 576, Grade 1035 and shall be annealed in a manner suitable for cold swaging. A lock pin hole shall be drilled through the swage fitting head to accommodate a 7 mm, plated, spring steel pin to retain the stud in the proper position. The stud shall be steel conforming to ASTM A 449. Prior to galvanizing, a 10 mm slot for the locking pin shall be milled into the stud end. The swaged fitting, stud, and nut shall develop the full breaking strength of the wire cable.

Anchor rod eyes shall be hot forged or formed with full penetration welds. After fabrication, anchor rods with eyes that have been formed with any part of the eye below 370 degrees C during the forming operation or with eyes that have been closed by welding shall be thermally stress relieved prior to galvanizing. The completed anchor rod, after galvanizing, shall develop a strength of 23,000 kg.

Clevises shall be drop forged galvanized steel and shall develop the full specified breaking strength of the wire cable.

The concrete insert assembly for Type 4 anchor terminals (beams of corrosion resistant steel AASHTO M180) shall be fabricated as shown on the Drawings. Ferrules shall be steel conforming to ASTM A 108, Grade 12 L 14. Inserts shall be tapped to the dimensional requirements specified in ASTM A 563 for nuts receiving galvanized bolts. Insert assembly wires shall conform to ASTM A 510, Grade 1030, and have a minimum tensile strength of 686 MN/sq.m (7,000 kg/sq.crn). Welded attachment of wire to ferrule shall develop the full tensile strength of the wire.

Turnbuckles shall be steel of commercial quality and shall have a minimum breaking strength of 1,500 kg. Turnbuckles shall be galvanized in accordance with ASTM A 153. Compensating and non-compensating cable ends shall be cast steel conforming to ASTM A 27 or malleable iron conforming to the requirements of ASTM A 47M (metric). Compensating devices shall have spring constants of 8,000 kg/m plus or minus 500 kg/m and permit a travel of 150 mm plus or minus 25 mm. All elements shall be galvanized.

Cable connecting hardware shall develop the full strength of the wire rope. At all locations where the cable is connected to a cable end with a wedge type connection, one wire of the wire rope shall be crimped over the base of the wedge to hold the cable firmly in place.

Restraining chains for G.R.E.A.T. impact attenuators shall be 12 mm nominal size and shall conform to ASTM A 413, Grade 28.

Glare screen fabric shall be chain link mesh conforming to ASTM A 491 or ASTM A 392. Mesh size and wire diameter shall be as specified on the Drawings.

12.2.6 GLARE SCREENS

Posts shall be galvanized steel pipe conforming to ASTM A 153 and of the diameter shown on the Drawings. Posts shall be furnished with galvanized watertight caps.

Tension wire shall conform to ASTM A 64 1 M (metric)-Class 1, Hard Temper, with a minimum diameter of 4.5 mm.

Tension cable shall conform to ASTM A 474 or A 475, 6 mm minimum diameter, high strength grade.

All hardware shall be typical of the types shown on the Drawings and shall be galvanized in accordance with ASTM A 153.

If shown on the Drawings, the fence fabric, posts and all exposed galvanized hardware shall be coated with a minimum 0.25 mm coating of bonded PVC. PVC shall be applied by the thermal extrusion process and shall withstand a minimum exposure of 1,500 hr at 62 degrees C without any deterioration when tested in accordance with ASTM D 1499.

Slats, when required, shall be either wood or plastic and of the dimensions shown on the Drawings. Wood slats shall be treated with a suitable preservative.

Plastic slats shall be Tubular polyethylene, color pigmented material consisting of high density polyethylene and color pigments designed to retard ultraviolet penetration. The material shall have a minimum wall thickness of 0.7 mm and shall remain flexible without distortion and without becoming brittle through a temperature range of zero degrees C to 60 degrees C.

Plastic slats shall be retained in place by means of U-shaped retainer members at the bottom and top of the glare screen. Retainer members shall be of the same material as the slats.

Samples for the color of plastic slats shall be submitted for approval before use.

12.2.6 BOLTS, NUTS, AND OTHER FITTINGS

All bolts shall conform to ASTM A 307, except those designated on the Drawings as high strength which shall conform to ASTM A 325 or A 449.

All nuts shall conform to ASTM A 563, Grade A or better, except those designated on the Drawings as high strength which shall conform to ASTM A 563, Grade C or better.

12.2.7 GUARDRAIL

All of the exposed Materials For guardrail, guardrail anchor terminals, Impact attenuators, glare screen, and delineators, which consist of steel or iron shall be galvanized after fabrication unless otherwise specified. Whenever a galvanizing requirement is not included in the Specifications, it shall be in accordance with ASTM AN 123 or ASTM A 153 as appropriate.

All components shall be fabricated and galvanized for installation without additional drilling, cutting, or welding. When field modifications are approved or when minor damage to the

galvanized coating occurs, the exposed surfaced shall be repaired by thoroughly cleaning and applying 2 applications of zinc dust-zinc oxide primer.

12.3 CONSTRUCTION

12.3.1 GUARDRAIL

Guardrail shall be installed as and where shown on the Drawings. Posts shall be installed by driving plumb to the required elevations or shall; be set in concrete, as shown on the Drawings If ground conditions are such that pilot holes are necessary to prevent damage to posts during driving, all space around steel posts after driving shall be filled with dry sand or fine gravel. When posts are set in concrete, the concrete shall be placed against the excavated earth unless otherwise approved.

Continuous lengths of rail or cable shall be installed and alignment checked and adjusted before final tightening of bolts, etc. Unless otherwise specified, bolted connections shall be torqued to between 6 and 7 kg-m. Lapped rail shall be installed with exposed ends away from the stream of traffic.

12.3.2 GUARD ANCHOR

Guardrail anchor terminals shall be installed as and where shown on the Drawings. Posts, anchors and footings shall be driven or installed in concrete as required. Concrete shall be placed against the excavated earth unless otherwise approved.

Bolted connections shall be torqued as for guardrail bolts.

Cable guardrail end assemblies shall be attached to the breakaway anchor angle and turnbuckles tightened to provide the spring compression as shown on the Drawings. Backfill above the tops of concrete anchor footings shall not be placed before cables are tensioned. Cables shall be uniformly tensioned prior to bending tabs on end post caps.

12.3.3 NEW JERSEY CONCRETE BARRIERS AND TERMINAL SECTIONS

Concrete barriers shall present a smooth, continuous, uniform appearance in their final position, conforming to the horizontal and vertical lines shown on the Drawings, and shall be free of lumps, sags, or other irregularities. The top and exposed faces of the barrier shall not vary more than 6 mm between any 2 contact points when tested with a 4 m straightedge laid on the surfaces. Concrete barriers may be precast, cast in situ with fixed forms, or extruded with slip forms.

If concrete barriers are constructed by means of an extrusion machine orbit or other similar type equipment, the concrete shall be thoroughly consolidated and the exposed surfaces shall conform with the relevant requirements of "Plain & Reinforced Concrete Structures" & as specified herein. The Contractor shall furnish evidence of successful operation of the proposed extrusion machine or other equipment, by constructing a trial section of barrier or by other evidence acceptable to the Project Supervisor.

Concrete shall be fed to the extrusion machine at a uniform rate. The machine shall be operated under sufficient uniform restraint to forward motion to produce a thoroughly consolidated mass of concrete free from surface pits larger than 20 mm in diameter and requiring no further finishing. The concrete shall be of such consistency that, after extrusion, it will maintain the shape of the barrier without support. The grade for the top of the concrete barrier shall be indicated by an approved offset guideline.

The forming portion of the extrusion machine shall be readily adjustable vertically during the forward motion of the machine to conform to the predetermined grade line. A grade line gauge or pointer shall be attached to the machine in such a manner that a continual comparison can be made between the barrier being placed and other established grade line as indicated by the offset guideline. Other means of controlling barrier grade may be approved.

Expansion joints of the width shown on the plans shall be constructed in the extruded concrete by sawing through the barrier section to its full depth. If sawing is performed before the concrete has hardened, the adjacent portions of the barrier shall be firmly supported with close fitting shields. When sawing is performed after the application of curing compound, the exposed faces of the

barrier in the vicinity of the joint shall be treated with curing compound after sawing the joint. If stationary forms for concrete barriers are used, they shall be removed as soon as possible after the concrete has set sufficiently to maintain the shape of the barrier without support. The surface shall be free from pits larger than 20 mm in diameter and shall be given a final soft brush finish with strokes parallel to the line of the barriers. Finishing with a brush application of grout will not be permitted.

Concrete surfaces shall be finished as necessary to produce smooth, surfaces of uniform texture and appearance, free of bulges, depressions and other imperfections. The use of power sanders, Carborundum stones, or disks may be required to remove bulges or other imperfections.

Exposed surface of concrete barriers shall be cured by membrane curing.

12.3.4 DELINEATORS

Delineators shall be attached directly to guardrail in an approved, sect manner, as and where shown on the Drawings.

Delineators shall be attached directly to the surface of the New Jersey Barriers as and where shown on the Drawings, by use of epoxy adhesive.

12.3.5 IMPACT ATTENUATORS

Impact attenuators shall be installed as and where shown on the Drawing and in accordance with the manufacturer's recommendations and instructions. A copy of these recommendations and instructions shall be submitted to the Project Supervisor upon delivery of the impact attenuator materials and before installation commences

12.3.6 GLARE SCREENS

Glare screen fabric shall be placed on the face of the posts designate by the Project Supervisor. On curves, the fabric shall be placed on the face of the post that is on the outside of the curve. Fabric shall be stretched taut and securely fastened to posts as shown on the Drawings. Fabric shall be cut and each span attached pull and brace posts. Rolls of wire fabric shall be connected by weaving a single strand into the end of the rolls to form a continuous mesh between pull posts.

12.3.6 TESTING

Copies of all Certificates of Guarantee and test reports for al manufactured items shall be submitted to the Project Supervisor.

The Project Supervisor may request additional sample materials for testing for strength, galvanizing, or other parameters.

12.4 MEASUREMENT

Steel Guardrail, New Jersey Concrete Barrier and Glare Screen shall be measured by the linear meter furnished, installed completed and accepted. Measurements shall be based on the dimensions as shown on the Drawings and shall exclude Terminal Sections and Transition Sections that shall be measured separately.

Anchor Terminals, New Jersey Barrier Terminal Sections, New Jersey Barrier Transition Sections and impact Attenuators shall be measured by the unit of each type furnished constructed or installed, completed, and accepted.

Delineators shall be measured by the number furnished and installed by direct attachment to guardrail or on New Jersey barrier, completed and accepted.

Excavation, backfilling concrete footings and other ancillary items, shall not be measured for direct payments but shall be considered as subsidiary Work the costs of which will be deemed to be included in the Contract prices for Pay Items.

Environmental, social, health and safety requirements

"N/A"

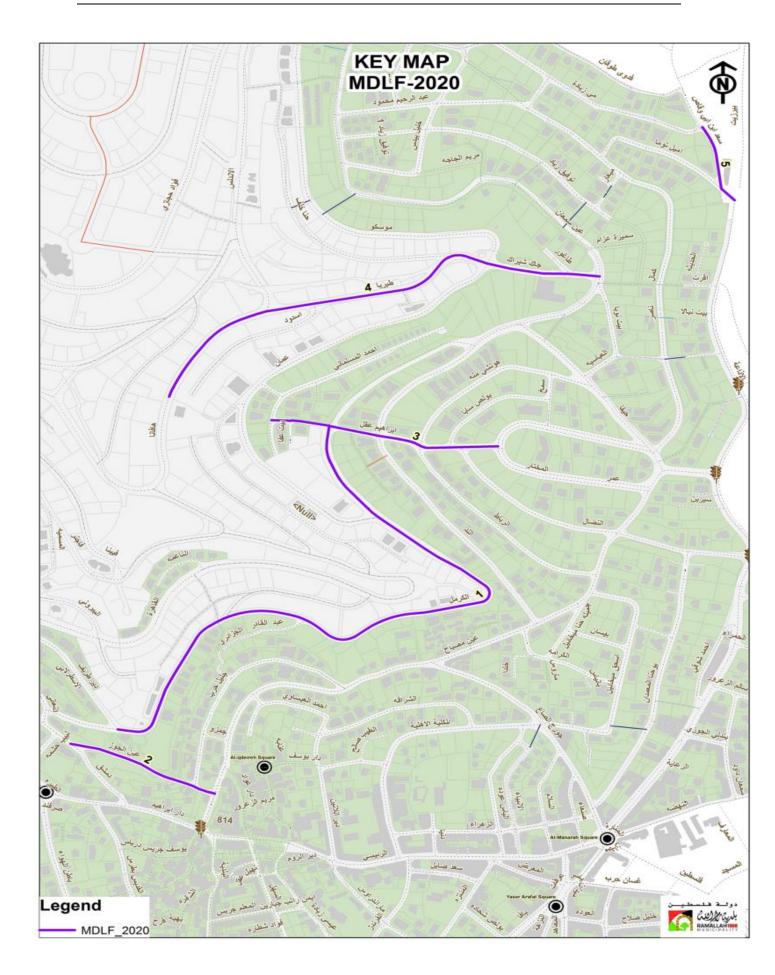
The Employer should use the services of a suitably qualified environmental, social, health and safety specialist/s to prepare the specifications for ESHS working with a procurement specialist/s.

The Employer should attach or refer to the Employer's environmental, social, health and safety policies that will apply to the project. If these are not available, the Employer should use the following guidance in drafting an appropriate policy for the Works.

Drawings "Attached in separate folder"

Table of Contents

			No.
Item	Sheet	Sheet No.	Sheets
1	Key Map	00	1
2	■ Notes	N01-N02	2
	■ Al Karmel St. (from Sta 0+00 to 1+380)	R1-S01/S10 Plan Profile R1-TS01/TS14 Typical section	10 14
	■ Ein Al Gooz St (from Sta 0+00 to 0+215)	R2-S01/02 Plan Profile R2-TS01/TS03 Typical section	2 3
	■ Ibraheem Aqel St (from Sta 0+00 to 0+449)	R3-S01/S03 Plan Profile R3-TS01/TS07 Typical section	3 7
	■ Tabariyah and Havana St (from Sta 0+00 to 0+707)	R4(A) S01/S05 R4(A) TS01//TS06 Typical section	5 6
	■ Jack Shiraq St. (from Sta 0+00 to 0+300)	R4(B) S01/S02 R4(B) TS01//TS04 Typical section	2 4
	■ Saed Ibn Adi Waqas St. (from Sta 0+00 to 0+180).	R5-S01/02 Plan Profile R5-TS01/TS05 Typical section	2 5
	■ Details N0-N08	N01 Super Elevation diagram. N02 Sidewalk and curbstone details N03 Drop curb details. N04 Medians details. N05 Pavement termination. N06 Road Works Traffic Control Devices. N07 Road works Temporary traffic Sign. N08 Sanitary Sewer Details / Manhole Raising details	8



PART 3 – Conditions of Contract and Contract Forms

Section VIII - General Conditions of Contract

These General Conditions of Contract (GCC), read in conjunction with the Particular Conditions of Contract (PCC) and other documents listed therein, should be a complete document expressing fairly the rights and obligations of both parties.

These General Conditions of Contract have been developed on the basis of considerable international experience in the drafting and management of contracts, bearing in mind a trend in the construction industry towards simpler, more straightforward language.

The GCC can be used for both smaller admeasurement contracts and lump sum contracts.

Table of Clauses

A.	General	124
1	1. Definitions	124
	2. Interpretation	
	3. Language and Law	
	4. Project Manager's Decisions	
	5. Delegation	
	5. Communications	
7	7. Subcontracting	128
	8. Other Contractors	
9	9. Personnel and Equipment	128
1	10. Employer's and Contractor's Risks	128
1	11. Employer's Risks	128
1	12. Contractor's Risks	
1	13. Insurance	129
1	14. Site Data	130
1	15. Contractor to Construct the Works	130
1	16. The Works to Be Completed by the Intended Completion Date	
1	17. Approval by the Project Manager	130
1	18. Safety	
1	19. Discoveries	
2	20. Possession of the Site	131
2	21. Access to the Site	131
2	22. Instructions, Inspections and Audits	
2	23. Appointment of the Adjudicator	
2	24. Procedure for Disputes	132
2	25. Fraud and Corruption	132
В. ′	Time Control	132
	26. Program	
	27. Extension of the Intended Completion Date	
		133
	29. Delays Ordered by the Project Manager	
	Management Meetings	
3	31. Early Warning	134
C.	Quality Control	134
3	32. Identifying Defects	13/
	33. Tests	
	34. Correction of Defects	
_	35. Uncorrected Defects	
3	55. Cheoficea Delocis	133
D.	Cost Control	135
3	36. Contract Price	135

Section V	VIII – General Conditions of Contract	123
37.	Changes in the Contract Price	
38.	Variations	135
39.	Cash Flow Forecasts	137
40.	Payment Certificates	137
41.	Payments	138
42.	Compensation Events	138
43.	Tax	139
44.	Currencies	139
45.	Price Adjustment	140
46.	Retention	140
47.	Liquidated Damages	140
48.	Bonus	141
49.	Advance Payment	
50.	Securities	
51.	Dayworks	142
52.	Cost of Repairs	142
E. Fini	ishing the Contract	
53.	Completion	142
54.	Taking Over	142
55.	Final Account	
56.	Operating and Maintenance Manuals	
57.	Termination	
58.	Payment upon Termination	
59.	Property	144
60.	Release from Performance	144
61	Suspension of Donor Loan or Credit	

General Conditions of Contract

A. General

1. Definitions

- 1.1 Boldface type is used to identify defined terms.
 - (a) The Accepted Contract Amount means the amount accepted in the Letter of Acceptance for the execution and completion of the Works and the remedying of any defects.
 - (b) The Activity Schedule is a schedule of the activities comprising the construction, installation, testing, and commissioning of the Works in a lump sum contract. It includes a lump sum price for each activity, which is used for valuations and for assessing the effects of Variations and Compensation Events.
 - (c) The Adjudicator is the person appointed jointly by the Employer and the Contractor to resolve disputes in the first instance, as provided for in GCC 23.
 - (d) Donor means the financing institution **named in the PCC**.
 - (e) Bill of Quantities means the priced and completed Bill of Quantities forming part of the Bid.
 - (f) Compensation Events are those defined in GCC Clause 42 hereunder.
 - (g) The Completion Date is the date of completion of the Works as certified by the Project Manager, in accordance with GCC Sub-Clause 53.1.
 - (h) The Contract is the Contract between the Employer and the Contractor to execute, complete, and maintain the Works. It consists of the documents listed in GCC Sub-Clause 2.3 below.
 - (i) The Contractor is the party whose Bid to carry out the Works has been accepted by the Employer.
 - (j) The Contractor's Bid is the completed bidding document submitted by the Contractor to the Employer.
 - (k) The Contract Price is the Accepted Contract Amount stated in the Letter of Acceptance and thereafter as adjusted in accordance with the Contract.
 - (1) Days are calendar days; months are calendar months.

- (m) Dayworks are varied work inputs subject to payment on a time basis for the Contractor's employees and Equipment, in addition to payments for associated Materials and Plant.
- (n) A Defect is any part of the Works not completed in accordance with the Contract.
- (o) The Defects Liability Certificate is the certificate issued by Project Manager upon correction of defects by the Contractor.
- (p) The Defects Liability Period is the period **named in the PCC** pursuant to Sub-Clause 34.1 and calculated from the Completion Date.
- (q) Drawings means the drawings of the Works, as included in the Contract, and any additional and modified drawings issued by (or on behalf of) the Employer in accordance with the Contract, include calculations and other information provided or approved by the Project Manager for the execution of the Contract.
- (r) The Employer is the party who employs the Contractor to carry out the Works, **as specified in the PCC**.
- (s) Equipment is the Contractor's machinery and vehicles brought temporarily to the Site to construct the Works.
- (t) "In writing" or "written" means hand-written, typewritten, printed or electronically made, and resulting in a permanent record;
- (u) The Initial Contract Price is the Contract Price listed in the Employer's Letter of Acceptance.
- (v) The Intended Completion Date is the date on which it is intended that the Contractor shall complete the Works. The Intended Completion Date is **specified in the PCC**. The Intended Completion Date may be revised only by the Project Manager by issuing an extension of time or an acceleration order.
- (w) Materials are all supplies, including consumables, used by the Contractor for incorporation in the Works.
- (x) Plant is any integral part of the Works that shall have a mechanical, electrical, chemical, or biological function.
- (y) The Project Manager is the person **named in the PCC** (or any other competent person appointed by the

Employer and notified to the Contractor, to act in replacement of the Project Manager) who is responsible for supervising the execution of the Works and administering the Contract.

- (z) PCC means Particular Conditions of Contract.
- (aa) The Site is the area **defined as such in the PCC**.
- (bb) Site Investigation Reports are those that were included in the bidding document and are factual and interpretative reports about the surface and subsurface conditions at the Site.
- (cc) Specification means the Specification of the Works included in the Contract and any modification or addition made or approved by the Project Manager.
- (dd) The Start Date is **given in the PCC**. It is the latest date when the Contractor shall commence execution of the Works. It does not necessarily coincide with any of the Site Possession Dates.
- (ee) A Subcontractor is a person or corporate body who has a Contract with the Contractor to carry out a part of the work in the Contract, which includes work on the Site.
- (ff) Temporary Works are works designed, constructed, installed, and removed by the Contractor that are needed for construction or installation of the Works.
- (gg) A Variation is an instruction given by the Project Manager which varies the Works.
- (hh) The Works are what the Contract requires the Contractor to construct, install, and turn over to the Employer, as **defined in the PCC**.

2. Interpretation

- 2.1 In interpreting these GCC, words indicating one gender include all genders. Words indicating the singular also include the plural and words indicating the plural also include the singular. Headings have no significance. Words have their normal meaning under the language of the Contract unless specifically defined. The Project Manager shall provide instructions clarifying queries about these GCC.
- 2.2 If sectional completion is **specified in the PCC**, references in the GCC to the Works, the Completion Date, and the Intended Completion Date apply to any Section of the Works (other than references to the Completion Date and Intended Completion Date for the whole of the Works).

- 2.3 The documents forming the Contract shall be interpreted in the following order of priority:
 - (a) Agreement,
 - (b) Letter of Acceptance,
 - (c) Contractor's Bid,
 - (d) Particular Conditions of Contract,
 - (e) General Conditions of Contract, including Appendices,
 - (f) Specifications,
 - (g) Drawings,
 - (h) Bill of Quantities, and
 - (i) any other document **listed in the PCC** as forming part of the Contract.

3. Language and Law

- 3.1 The language of the Contract and the law governing the Contract are **stated in the PCC**.
- 3.2 Throughout the execution of the Contract, the Contractor shall comply with the import of goods and services prohibitions in the Employer's Country when
 - (a) as a matter of law or official regulations, the Borrower's country prohibits commercial relations with that country; or
 - (b) by an act of compliance with a decision of the United Nations Security Council taken under Chapter VII of the Charter of the United Nations, the Borrower's Country prohibits any import of goods from that country or any payments to any country, person, or entity in that country.
- 4. Project
 Manager's
 Decisions
- 4.1 Except where otherwise specifically stated, the Project Manager shall decide contractual matters between the Employer and the Contractor in the role representing the Employer.
- 5. Delegation
- 5.1 Otherwise **specified in the PCC**, the Project Manager may delegate any of his duties and responsibilities to other people, except to the Adjudicator, after notifying the Contractor, and may revoke any delegation after notifying the Contractor.
- 6. Communications
- 6.1 Communications between parties that are referred to in the Conditions shall be effective only when in writing. A notice shall be effective only when it is delivered.

In lump sum contracts, delete "Bill of Quantities" and replace with "Activity Schedule."

7. Subcontracting

7.1 The Contractor may subcontract with the approval of the Project Manager, but may not assign the Contract without the approval of the Employer in writing. Subcontracting shall not alter the Contractor's obligations.

8. Other Contractors

8.1 The Contractor shall cooperate and share the Site with other contractors, public authorities, utilities, and the Employer between the dates given in the Schedule of Other Contractors, as **referred to in the PCC.** The Contractor shall also provide facilities and services for them as described in the Schedule. The Employer may modify the Schedule of Other Contractors, and shall notify the Contractor of any such modification.

9. Personnel and Equipment

- 9.1 The Contractor shall employ the key personnel and use the equipment identified in its Bid, to carry out the Works or other personnel and equipment approved by the Project Manager. The Project Manager shall approve any proposed replacement of key personnel and equipment only if their relevant qualifications or characteristics are substantially equal to or better than those proposed in the Bid.
- 9.2 If the Project Manager asks the Contractor to remove a person who is a member of the Contractor's staff or work force, stating the reasons, the Contractor shall ensure that the person leaves the Site within seven days and has no further connection with the work in the Contract.
- 9.3 If the Employer, Project Manager or Contractor determines, that any employee of the Contractor be determined to have engaged in Fraud and Corruption during the execution of the Works, then that employee shall be removed in accordance with Clause 9.2 above.

10. Employer's and Contractor's Risks

10.1 The Employer carries the risks which this Contract states are Employer's risks, and the Contractor carries the risks which this Contract states are Contractor's risks.

11. Employer's Risks

- 11.1 From the Start Date until the Defects Liability Certificate has been issued, the following are Employer's risks:
 - (a) The risk of personal injury, death, or loss of or damage to property (excluding the Works, Plant, Materials, and Equipment), which are due to
 - (i) use or occupation of the Site by the Works or for the purpose of the Works, which is the unavoidable result of the Works or
 - (ii) negligence, breach of statutory duty, or interference with any legal right by the Employer or by any person

employed by or contracted to him except the Contractor.

- (b) The risk of damage to the Works, Plant, Materials, and Equipment to the extent that it is due to a fault of the Employer or in the Employer's design, or due to war or radioactive contamination directly affecting the country where the Works are to be executed.
- 11.2 From the Completion Date until the Defects Liability Certificate has been issued, the risk of loss of or damage to the Works, Plant, and Materials is an Employer's risk except loss or damage due to
 - (a) a Defect which existed on the Completion Date,
 - (b) an event occurring before the Completion Date, which was not itself an Employer's risk, or
 - (c) the activities of the Contractor on the Site after the Completion Date.

12. Contractor's Risks

12.1 From the Starting Date until the Defects Liability Certificate has been issued, the risks of personal injury, death, and loss of or damage to property (including, without limitation, the Works, Plant, Materials, and Equipment) which are not Employer's risks are Contractor's risks.

13. Insurance

- 13.1 The Contractor shall provide, in the joint names of the Employer and the Contractor, insurance cover from the Start Date to the end of the Defects Liability Period, in the amounts and deductibles **stated in the PCC** for the following events which are due to the Contractor's risks:
 - (a) loss of or damage to the Works, Plant, and Materials;
 - (b) loss of or damage to Equipment;
 - (c) loss of or damage to property (except the Works, Plant, Materials, and Equipment) in connection with the Contract; and
 - (d) personal injury or death.
- 13.2 Policies and certificates for insurance shall be delivered by the Contractor to the Project Manager for the Project Manager's approval before the Start Date. All such insurance shall provide for compensation to be payable in the types and proportions of currencies required to rectify the loss or damage incurred.
- 13.3 If the Contractor does not provide any of the policies and certificates required, the Employer may effect the insurance

which the Contractor should have provided and recover the premiums the Employer has paid from payments otherwise due to the Contractor or, if no payment is due, the payment of the premiums shall be a debt due.

- 13.4 Alterations to the terms of an insurance shall not be made without the approval of the Project Manager.
- 13.5 Both parties shall comply with any conditions of the insurance policies.
- 14. Site Data
- 14.1 The Contractor shall be deemed to have examined any Site Data **referred to in the PCC**, supplemented by any information available to the Contractor.
- 15. Contractor to Construct the Works
- 15.1 The Contractor shall construct and install the Works in accordance with the Specifications and Drawings.
- 16. The Works to Be Completed by the Intended Completion Date
- 16.1 The Contractor may commence execution of the Works on the Start Date and shall carry out the Works in accordance with the Program submitted by the Contractor, as updated with the approval of the Project Manager, and complete them by the Intended Completion Date.
- 17. Approval by the Project Manager
- 17.1 The Contractor shall submit Specifications and Drawings showing the proposed Temporary Works to the Project Manager, for his approval.
- 17.2 The Contractor shall be responsible for design of Temporary Works.
- 17.3 The Project Manager's approval shall not alter the Contractor's responsibility for design of the Temporary Works.
- 17.4 The Contractor shall obtain approval of third parties to the design of the Temporary Works, where required.
- 17.5 All Drawings prepared by the Contractor for the execution of the temporary or permanent Works, are subject to prior approval by the Project Manager before this use.
- 18. Safety
- 18.1 The Contractor shall be responsible for the safety of all activities on the Site.
- 19. Discoveries
- 19.1 Anything of historical or other interest or of significant value unexpectedly discovered on the Site shall be the property of the Employer. The Contractor shall notify the Project Manager of such discoveries and carry out the Project Manager's instructions for dealing with them.

20. Possession of the Site

20.1 The Employer shall give possession of all parts of the Site to the Contractor. If possession of a part is not given by the date **stated** in the PCC, the Employer shall be deemed to have delayed the start of the relevant activities, and this shall be a Compensation Event.

21. Access to the Site

21.1 The Contractor shall allow the Project Manager and any person authorized by the Project Manager access to the Site and to any place where work in connection with the Contract is being carried out or is intended to be carried out.

22. Instructions, Inspections and Audits

- 22.1 The Contractor shall carry out all instructions of the Project Manager which comply with the applicable laws where the Site is located.
- 22.2 The Contractor shall keep, and shall make all reasonable efforts to cause its Subcontractors and subconsultants to keep, accurate and systematic accounts and records in respect of the Works in such form and details as will clearly identify relevant time changes and costs.
- 22.3 Pursuant to paragraph 2.2 e. of Appendix B to the General Conditions, the Contractor shall permit and shall cause its subcontractors and subconsultants to permit, the Donor and/or persons appointed by the Donor to inspect the Site and/or the accounts and records relating to the procurement process, selection and/or contract execution, and to have such accounts and records audited by auditors appointed by the Donor if requested by the Donor. The Contractor's Subcontractors' and subconsultants' attention is drawn to Sub-Clause 25.1 (Fraud and Corruption) which provides, inter alia, that acts intended to materially impede the exercise of the Donor's inspection and audit rights constitute a prohibited practice subject to contract termination (as well as to a determination of ineligibility pursuant to the Bank's prevailing sanctions procedures).]

23. Appointment of the Adjudicator

- 23.1 The Adjudicator shall be appointed jointly by the Employer and the Contractor, at the time of the Employer's issuance of the Letter of Acceptance. If, in the Letter of Acceptance, the Employer does not agree on the appointment of the Adjudicator, the Employer will request the Appointing Authority **designated** in the PCC, to appoint the Adjudicator within 14 days of receipt of such request.
- 23.2 Should the Adjudicator resign or die, or should the Employer and the Contractor agree that the Adjudicator is not functioning in accordance with the provisions of the Contract, a new Adjudicator shall be jointly appointed by the Employer and the Contractor. In case of disagreement between the Employer and

the Contractor, within 30 days, the Adjudicator shall be designated by the Appointing Authority **designated in the PCC** at the request of either party, within 14 days of receipt of such request.

24. Procedure for Disputes

- 24.1 If the Contractor believes that a decision taken by the Project Manager was either outside the authority given to the Project Manager by the Contract or that the decision was wrongly taken, the decision shall be referred to the Adjudicator within 14 days of the notification of the Project Manager's decision.
- 24.2 The Adjudicator shall give a decision in writing within 28 days of receipt of a notification of a dispute.
- 24.3 The Adjudicator shall be paid by the hour at the **rate specified** in the PCC, together with reimbursable expenses of the types specified in the PCC, and the cost shall be divided equally between the Employer and the Contractor, whatever decision is reached by the Adjudicator. Either party may refer a decision of the Adjudicator to an Arbitrator within 28 days of the Adjudicator's written decision. If neither party refers the dispute to arbitration within the above 28 days, the Adjudicator's decision shall be final and binding.
- 24.4 The arbitration shall be conducted in accordance with the arbitration procedures published by the institution named and in the place **specified in the PCC.**

25. Fraud and Corruption

- 25.1 The Donor requires compliance with the World Bank's Anti-Corruption Guidelines and its prevailing sanctions policies and procedures as set forth in the WBG's Sanctions Framework, as set forth in Appendix A to the GCC.
- 25.2 The Employer requires the Contractor to disclose any commissions or fees that may have been paid or are to be paid to agents or any other party with respect to the bidding process or execution of the Contract. The information disclosed must include at least the name and address of the agent or other party, the amount and currency, and the purpose of the commission, gratuity or fee.

B. Time Control

26. Program

26.1 Within the time **stated in the PCC**, after the date of the Letter of Acceptance, the Contractor shall submit to the Project Manager for approval a Program showing the general methods, arrangements, order, and timing for all the activities in the Works. In the case of a lump sum contract, the activities in the Program shall be consistent with those in the Activity Schedule.

- 26.2 An update of the Program shall be a program showing the actual progress achieved on each activity and the effect of the progress achieved on the timing of the remaining work, including any changes to the sequence of the activities.
- 26.3 The Contractor shall submit to the Project Manager for approval an updated Program at intervals no longer than the period **stated** in the PCC. If the Contractor does not submit an updated Program within this period, the Project Manager may withhold the amount **stated** in the PCC from the next payment certificate and continue to withhold this amount until the next payment after the date on which the overdue Program has been submitted. In the case of a lump sum contract, the Contractor shall provide an updated Activity Schedule within 14 days of being instructed to by the Project Manager.
- 26.4 The Project Manager's approval of the Program shall not alter the Contractor's obligations. The Contractor may revise the Program and submit it to the Project Manager again at any time. A revised Program shall show the effect of Variations and Compensation Events.

27. Extension of the Intended Completion Date

- 27.1 The Project Manager shall extend the Intended Completion Date if a Compensation Event occurs or a Variation is issued which makes it impossible for Completion to be achieved by the Intended Completion Date without the Contractor taking steps to accelerate the remaining work, which would cause the Contractor to incur additional cost.
- 27.2 The Project Manager shall decide whether and by how much to extend the Intended Completion Date within 21 days of the Contractor asking the Project Manager for a decision upon the effect of a Compensation Event or Variation and submitting full supporting information. If the Contractor has failed to give early warning of a delay or has failed to cooperate in dealing with a delay, the delay by this failure shall not be considered in assessing the new Intended Completion Date.

28. Acceleration

- 28.1 When the Employer wants the Contractor to finish before the Intended Completion Date, the Project Manager shall obtain priced proposals for achieving the necessary acceleration from the Contractor. If the Employer accepts these proposals, the Intended Completion Date shall be adjusted accordingly and confirmed by both the Employer and the Contractor.
- 28.2 If the Contractor's priced proposals for an acceleration are accepted by the Employer, they are incorporated in the Contract Price and treated as a Variation.

- 29. Delays Ordered by the Project Manager
- 29.1 The Project Manager may instruct the Contractor to delay the start or progress of any activity within the Works.
- 30. Management Meetings
- 30.1 Either the Project Manager or the Contractor may require the other to attend a management meeting. The business of a management meeting shall be to review the plans for remaining work and to deal with matters raised in accordance with the early warning procedure.
- 30.2 The Project Manager shall record the business of management meetings and provide copies of the record to those attending the meeting and to the Employer. The responsibility of the parties for actions to be taken shall be decided by the Project Manager either at the management meeting or after the management meeting and stated in writing to all who attended the meeting.
- 31. Early Warning
- 31.1 The Contractor shall warn the Project Manager at the earliest opportunity of specific likely future events or circumstances that may adversely affect the quality of the work, increase the Contract Price, or delay the execution of the Works. The Project Manager may require the Contractor to provide an estimate of the expected effect of the future event or circumstance on the Contract Price and Completion Date. The estimate shall be provided by the Contractor as soon as reasonably possible.
- 31.2 The Contractor shall cooperate with the Project Manager in making and considering proposals for how the effect of such an event or circumstance can be avoided or reduced by anyone involved in the work and in carrying out any resulting instruction of the Project Manager.

C. Quality Control

- 32. Identifying Defects
- 32.1 The Project Manager shall check the Contractor's work and notify the Contractor of any Defects that are found. Such checking shall not affect the Contractor's responsibilities. The Project Manager may instruct the Contractor to search for a Defect and to uncover and test any work that the Project Manager considers may have a Defect.
- 33. Tests
- 33.1 If the Project Manager instructs the Contractor to carry out a test not specified in the Specification to check whether any work has a Defect and the test shows that it does, the Contractor shall pay for the test and any samples. If there is no Defect, the test shall be a Compensation Event.

34. Correction of Defects

- 34.1 The Project Manager shall give notice to the Contractor of any Defects before the end of the Defects Liability Period, which begins at Completion, and is **defined in the PCC.** The Defects Liability Period shall be extended for as long as Defects remain to be corrected.
- 34.2 Every time notice of a Defect is given, the Contractor shall correct the notified Defect within the length of time specified by the Project Manager's notice.

35. Uncorrected Defects

35.1 If the Contractor has not corrected a Defect within the time specified in the Project Manager's notice, the Project Manager shall assess the cost of having the Defect corrected, and the Contractor shall pay this amount.

D. Cost Control

36. Contract Price²

- 36.1 The Bill of Quantities shall contain priced items for the Works to be performed by the Contractor. The Bill of Quantities is used to calculate the Contract Price. The Contractor will be paid for the quantity of the work accomplished at the rate in the Bill of Quantities for each item.
- **37.** Changes in the Contract Price³
- 37.1 If the final quantity of the work done differs from the quantity in the Bill of Quantities for the particular item by more than 25 percent, provided the change exceeds 1 percent of the Initial Contract Price, the Project Manager shall adjust the rate to allow for the change. The Project Manager shall not adjust rates from changes in quantities if thereby the Initial Contract Price is exceeded by more than 15 percent, except with the prior approval of the Employer.
- 37.2 If requested by the Project Manager, the Contractor shall provide the Project Manager with a detailed cost breakdown of any rate in the Bill of Quantities.

38. Variations

38.1 All Variations shall be included in updated Programs⁴ produced by the Contractor.

In lump sum contracts, replace GCC Sub-Clauses 36.1 as follows:

^{36.1} The Contractor shall provide updated Activity Schedules within 14 days of being instructed to by the Project Manager. The Activity Schedule shall contain the priced activities for the Works to be performed by the Contractor. The Activity Schedule is used to monitor and control the performance of activities on which basis the Contractor will be paid. If payment for materials on site shall be made separately, the Contractor shall show delivery of Materials to the Site separately on the Activity Schedule.

³ In lump sum contracts, replace entire GCC Clause 37 with new GCC Sub-Clause 37.1, as follows:

^{37.1} The Activity Schedule shall be amended by the Contractor to accommodate changes of Program or method of working made at the Contractor's own discretion. Prices in the Activity Schedule shall not be altered when the Contractor makes such changes to the Activity Schedule.

In lump sum contracts, add "and Activity Schedules" after "Programs."

- 38.2 The Contractor shall provide the Project Manager with a quotation for carrying out the Variation when requested to do so by the Project Manager. The Project Manager shall assess the quotation, which shall be given within seven (7) days of the request or within any longer period stated by the Project Manager and before the Variation is ordered.
- 38.3 If the Contractor's quotation is unreasonable, the Project Manager may order the Variation and make a change to the Contract Price, which shall be based on the Project Manager's own forecast of the effects of the Variation on the Contractor's costs.
- 38.4 If the Project Manager decides that the urgency of varying the work would prevent a quotation being given and considered without delaying the work, no quotation shall be given and the Variation shall be treated as a Compensation Event.
- 38.5 The Contractor shall not be entitled to additional payment for costs that could have been avoided by giving early warning.
- 38.6 If the work in the Variation corresponds to an item description in the Bill of Quantities and if, in the opinion of the Project Manager, the quantity of work above the limit stated in Sub-Clause 39.1 or the timing of its execution do not cause the cost per unit of quantity to change, the rate in the Bill of Quantities shall be used to calculate the value of the Variation. If the cost per unit of quantity changes, or if the nature or timing of the work in the Variation does not correspond with items in the Bill of Quantities, the quotation by the Contractor shall be in the form of new rates for the relevant items of work. ⁵
- 38.7 Value Engineering: The Contractor may prepare, at its own cost, a value engineering proposal at any time during the performance of the contract. The value engineering proposal shall, at a minimum, include the following;
 - (a) the proposed change(s), and a description of the difference to the existing contract requirements;
 - (b) a full cost/benefit analysis of the proposed change(s) including a description and estimate of costs (including life cycle costs) the Employer may incur in implementing the value engineering proposal; and
 - (c) a description of any effect(s) of the change on performance/functionality.

In lump sum contracts, delete this paragraph.

The Employer may accept the value engineering proposal if the proposal demonstrates benefits that:

- (a) accelerate the contract completion period; or
- (b) reduce the Contract Price or the life cycle costs to the Employer; or
- (c) improve the quality, efficiency, safety or sustainability of the Facilities; or
- (d) yield any other benefits to the Employer,

without compromising the functionality of the Works.

If the value engineering proposal is approved by the Employer and results in:

- (a) a reduction of the Contract Price; the amount to be paid to the Contractor shall be the **percentage specified in the PCC** of the reduction in the Contract Price; or
- (b) an increase in the Contract Price; but results in a reduction in life cycle costs due to any benefit described in (a) to (d) above, the amount to be paid to the Contractor shall be the full increase in the Contract Price.

39. Cash Flow Forecasts

39.1 When the Program,⁶ is updated, the Contractor shall provide the Project Manager with an updated cash flow forecast. The cash flow forecast shall include different currencies, as defined in the Contract, converted as necessary using the Contract exchange rates.

40. Payment Certificates

- 40.1 The Contractor shall submit to the Project Manager monthly statements of the estimated value of the work executed less the cumulative amount certified previously.
- 40.2 The Project Manager shall check the Contractor's monthly statement and certify the amount to be paid to the Contractor.
- 40.3 The value of work executed shall be determined by the Project Manager.
- 40.4 The value of work executed shall comprise the value of the quantities of work in the Bill of Quantities that have been completed.⁷

In lump sum contracts, add "or Activity Schedule" after "Program."

In lump sum contracts, replace this paragraph with the following: "The value of work executed shall comprise the value of completed activities in the Activity Schedule."

- 40.5 The value of work executed shall include the valuation of Variations and Compensation Events.
- 40.6 The Project Manager may exclude any item certified in a previous certificate or reduce the proportion of any item previously certified in any certificate in the light of later information.

41. Payments

- 41.1 Payments shall be adjusted for deductions for advance payments and retention. The Employer shall pay the Contractor the amounts certified by the Project Manager within 28 days of the date of each certificate. If the Employer makes a late payment, the Contractor shall be paid interest on the late payment in the next payment. Interest shall be calculated from the date by which the payment should have been made up to the date when the late payment is made at the prevailing rate of interest for commercial borrowing for each of the currencies in which payments are made.
- 41.2 If an amount certified is increased in a later certificate or as a result of an award by the Adjudicator or an Arbitrator, the Contractor shall be paid interest upon the delayed payment as set out in this clause. Interest shall be calculated from the date upon which the increased amount would have been certified in the absence of dispute.
- 41.3 Unless otherwise stated, all payments and deductions shall be paid or charged in the proportions of currencies comprising the Contract Price.
- 41.4 Items of the Works for which no rate or price has been entered in shall not be paid for by the Employer and shall be deemed covered by other rates and prices in the Contract.

42. Compensation Events

42.1 The following shall be Compensation Events:

- (a) The Employer does not give access to a part of the Site by the Site Possession Date pursuant to GCC Sub-Clause 20.1.
- (b) The Employer modifies the Schedule of Other Contractors in a way that affects the work of the Contractor under the Contract.
- (c) The Project Manager orders a delay or does not issue Drawings, Specifications, or instructions required for execution of the Works on time.
- (d) The Project Manager instructs the Contractor to uncover or to carry out additional tests upon work, which is then found to have no Defects.
- (e) The Project Manager unreasonably does not approve a subcontract to be let.
- (f) Ground conditions are substantially more adverse than could reasonably have been assumed before issuance of the Letter of Acceptance from the information issued to bidders

- (including the Site Investigation Reports), from information available publicly and from a visual inspection of the Site.
- (g) The Project Manager gives an instruction for dealing with an unforeseen condition, caused by the Employer, or additional work required for safety or other reasons.
- (h) Other contractors, public authorities, utilities, or the Employer does not work within the dates and other constraints stated in the Contract, and they cause delay or extra cost to the Contractor.
- (i) The advance payment is delayed.
- (j) The effects on the Contractor of any of the Employer's Risks.
- (k) The Project Manager unreasonably delays issuing a Certificate of Completion.
- 42.2 If a Compensation Event would cause additional cost or would prevent the work being completed before the Intended Completion Date, the Contract Price shall be increased and/or the Intended Completion Date shall be extended. The Project Manager shall decide whether and by how much the Contract Price shall be increased and whether and by how much the Intended Completion Date shall be extended.
- 42.3 As soon as information demonstrating the effect of each Compensation Event upon the Contractor's forecast cost has been provided by the Contractor, it shall be assessed by the Project Manager, and the Contract Price shall be adjusted accordingly. If the Contractor's forecast is deemed unreasonable, the Project Manager shall adjust the Contract Price based on the Project Manager's own forecast. The Project Manager shall assume that the Contractor shall react competently and promptly to the event.
- 42.4 The Contractor shall not be entitled to compensation to the extent that the Employer's interests are adversely affected by the Contractor's not having given early warning or not having cooperated with the Project Manager.
- 43.1 The Project Manager shall adjust the Contract Price if taxes, duties, and other levies are changed between the date 28 days before the submission of bids for the Contract and the date of the last Completion certificate. The adjustment shall be the change in the amount of tax payable by the Contractor, provided such changes are not already reflected in the Contract Price or are a result of GCC Clause 44.
- 44.1 Where payments are made in currencies other than the currency of the Employer's Country **specified in the PCC**, the exchange rates used for calculating the amounts to be paid shall be the exchange rates stated in the Contractor's Bid.

43. Tax

139

45. Price Adjustment

45.1 Prices shall be adjusted for fluctuations in the cost of inputs only if **provided for in the PCC.** If so provided, the amounts certified in each payment certificate, before deducting for Advance Payment, shall be adjusted by applying the respective price adjustment factor to the payment amounts due in each currency. A separate formula of the type specified below applies to each Contract currency:

 $P_c = A_c + B_c Imc/Ioc$

where:

P_c is the adjustment factor for the portion of the Contract Price payable in a specific currency "c."

A_c and B_c are coefficients⁸ specified in the PCC, representing the nonadjustable and adjustable portions, respectively, of the Contract Price payable in that specific currency "c;" and

Imc is the index prevailing at the end of the month being invoiced and Ioc is the index prevailing 28 days before Bid opening for inputs payable; both in the specific currency "c."

- 45.2 If the value of the index is changed after it has been used in a calculation, the calculation shall be corrected and an adjustment made in the next payment certificate. The index value shall be deemed to take account of all changes in cost due to fluctuations in costs.
- 46. Retention
- 46.1 The Employer shall retain from each payment due to the Contractor the proportion **stated in the PCC** until Completion of the whole of the Works.
- 46.2 Upon the issue of a Certificate of Completion of the Works by the Project Manager, in accordance with GCC 53.1, half the total amount retained shall be repaid to the Contractor and half when the Defects Liability Period has passed and the Project Manager has certified that all Defects notified by the Project Manager to the Contractor before the end of this period have been corrected. The Contractor may substitute retention money with an "on demand" Bank guarantee.
- 47. Liquidated Damages

47.1 The Contractor shall pay liquidated damages to the Employer at the rate per day **stated in the PCC** for each day that the Completion Date is later than the Intended Completion Date. The total amount of liquidated damages shall not exceed the amount **defined in the PCC.** The Employer may deduct liquidated

The sum of the two coefficients A_c and B_c should be 1 (one) in the formula for each currency. Normally, both coefficients shall be the same in the formulae for all currencies, since coefficient A, for the nonadjustable portion of the payments, is a very approximate figure (usually 0.15) to take account of fixed cost elements or other nonadjustable components. The sum of the adjustments for each currency are added to the Contract Price.

damages from payments due to the Contractor. Payment of liquidated damages shall not affect the Contractor's liabilities.

47.2 If the Intended Completion Date is extended after liquidated damages have been paid, the Project Manager shall correct any overpayment of liquidated damages by the Contractor by adjusting the next payment certificate. The Contractor shall be paid interest on the overpayment, calculated from the date of payment to the date of repayment, at the rates specified in GCC Sub-Clause 41.1.

48. Bonus

48.1 The Contractor shall be paid a Bonus calculated at the rate per calendar day **stated in the PCC** for each day (less any days for which the Contractor is paid for acceleration) that the Completion is earlier than the Intended Completion Date. The Project Manager shall certify that the Works are complete, although they may not be due to be complete.

49. Advance Payment

- 49.1 The Employer shall make advance payment to the Contractor of the amounts **stated in the PCC** by the date **stated in the PCC**, against provision by the Contractor of an Unconditional Bank Guarantee in a form and by a bank acceptable to the Employer in amounts and currencies equal to the advance payment. The Guarantee shall remain effective until the advance payment has been repaid, but the amount of the Guarantee shall be progressively reduced by the amounts repaid by the Contractor. Interest shall not be charged on the advance payment.
- 49.2 The Contractor is to use the advance payment only to pay for Equipment, Plant, Materials, and mobilization expenses required specifically for execution of the Contract. The Contractor shall demonstrate that advance payment has been used in this way by supplying copies of invoices or other documents to the Project Manager.
- 49.3 The advance payment shall be repaid by deducting proportionate amounts from payments otherwise due to the Contractor, following the schedule of completed percentages of the Works on a payment basis. No account shall be taken of the advance payment or its repayment in assessing valuations of work done, Variations, price adjustments, Compensation Events, Bonuses, or Liquidated Damages.

50. Securities

50.1 The Performance Security shall be provided to the Employer no later than the date specified in the Letter of Acceptance and shall be issued in an amount **specified in the PCC**, by a bank or surety acceptable to the Employer, and denominated in the types and proportions of the currencies in which the Contract Price is payable. The Performance Security shall be valid until a date 28 days from the date of issue of the Certificate of Completion in the

case of a Bank Guarantee, and until one year from the date of issue of the Completion Certificate in the case of a Performance Bond.

51. Dayworks

- 51.1 If applicable, the Dayworks rates in the Contractor's Bid shall be used only when the Project Manager has given written instructions in advance for additional work to be paid for in that way.
- 51.2 All work to be paid for as Dayworks shall be recorded by the Contractor on forms approved by the Project Manager. Each completed form shall be verified and signed by the Project Manager within two days of the work being done.
- 51.3 The Contractor shall be paid for Dayworks subject to obtaining signed Dayworks forms.

52. Cost of Repairs

52.1 Loss or damage to the Works or Materials to be incorporated in the Works between the Start Date and the end of the Defects Correction periods shall be remedied by the Contractor at the Contractor's cost if the loss or damage arises from the Contractor's acts or omissions.

E. Finishing the Contract

53. Completion

- 53.1 The Contractor shall request the Project Manager to issue a Certificate of Completion of the Works, and the Project Manager shall do so upon deciding that the whole of the Works is completed.
- 54. Taking Over
- 54.1 The Employer shall take over the Site and the Works within seven days of the Project Manager's issuing a certificate of Completion.

55. Final Account

55.1 The Contractor shall supply the Project Manager with a detailed account of the total amount that the Contractor considers payable under the Contract before the end of the Defects Liability Period. The Project Manager shall issue a Defects Liability Certificate and certify any final payment that is due to the Contractor within 56 days of receiving the Contractor's account if it is correct and complete. If it is not, the Project Manager shall issue within 56 days a schedule that states the scope of the corrections or additions that are necessary. If the Final Account is still unsatisfactory after it has been resubmitted, the Project Manager shall decide on the amount payable to the Contractor and issue a payment certificate.

56. Operating and Maintenance Manuals

56.1 If "as built" Drawings and/or operating and maintenance manuals are required, the Contractor shall supply them by the dates **stated** in the PCC.

- 56.2 If the Contractor does not supply the Drawings and/or manuals by the dates **stated in the PCC** pursuant to GCC Sub-Clause 56.1, or they do not receive the Project Manager's approval, the Project Manager shall withhold the amount **stated in the PCC** from payments due to the Contractor.
- **57. Termination**
- 57.1 The Employer or the Contractor may terminate the Contract if the other party causes a fundamental breach of the Contract.
- 57.2 Fundamental breaches of Contract shall include, but shall not be limited to, the following:
 - (a) the Contractor stops work for 28 days when no stoppage of work is shown on the current Program and the stoppage has not been authorized by the Project Manager;
 - (b) the Project Manager instructs the Contractor to delay the progress of the Works, and the instruction is not withdrawn within 28 days;
 - (c) the Employer or the Contractor is made bankrupt or goes into liquidation other than for a reconstruction or amalgamation;
 - (d) a payment certified by the Project Manager is not paid by the Employer to the Contractor within 84 days of the date of the Project Manager's certificate;
 - (e) the Project Manager gives Notice that failure to correct a particular Defect is a fundamental breach of Contract and the Contractor fails to correct it within a reasonable period of time determined by the Project Manager;
 - (f) the Contractor does not maintain a Security, which is required;
 - (g) the Contractor has delayed the completion of the Works by the number of days for which the maximum amount of liquidated damages can be paid, as **defined in the PCC**; or
 - (h) if the Contractor, in the judgment of the Employer has engaged in Fraud and Corruption, as defined in paragrpah 2.2 a of the Appendix A to the GCC, in competing for or in executing the Contract, then the Employer may, after giving fourteen (14) days written notice to the Contractor, terminate the Contract and expel him from the Site.
- 57.3 Notwithstanding the above, the Employer may terminate the Contract for convenience.
- 57.4 If the Contract is terminated, the Contractor shall stop work immediately, make the Site safe and secure, and leave the Site as soon as reasonably possible.
- 57.5 When either party to the Contract gives notice of a breach of Contract to the Project Manager for a cause other than those listed under GCC Sub-Clause 56.2 above, the Project Manager shall decide whether the breach is fundamental or not.

58. Payment upon Termination

- 58.1 If the Contract is terminated because of a fundamental breach of Contract by the Contractor, the Project Manager shall issue a certificate for the value of the work done and Materials ordered less advance payments received up to the date of the issue of the certificate and less the percentage to apply to the value of the work not completed, as **specified in the PCC.** Additional Liquidated Damages shall not apply. If the total amount due to the Employer exceeds any payment due to the Contractor, the difference shall be a debt payable to the Employer.
- 58.2 If the Contract is terminated for the Employer's convenience or because of a fundamental breach of Contract by the Employer, the Project Manager shall issue a certificate for the value of the work done, Materials ordered, the reasonable cost of removal of Equipment, repatriation of the Contractor's personnel employed solely on the Works, and the Contractor's costs of protecting and securing the Works, and less advance payments received up to the date of the certificate.

59. Property

59.1 All Materials on the Site, Plant, Equipment, Temporary Works, and Works shall be deemed to be the property of the Employer if the Contract is terminated because of the Contractor's default.

60. Release from Performance

- 60.1 If the Contract is frustrated by the outbreak of war or by any other event entirely outside the control of either the Employer or the Contractor, the Project Manager shall certify that the Contract has been frustrated. The Contractor shall make the Site safe and stop work as quickly as possible after receiving this certificate and shall be paid for all work carried out before receiving it and for any work carried out afterwards to which a commitment was made.
- 61. Suspension of Donor Loan or Credit
- 61.1 In the event that the Donor suspends the Loan or Credit to the Employer, from which part of the payments to the Contractor are being made:
 - (a) The Employer is obligated to notify the Contractor of such suspension within 7 days of having received the Donor's suspension notice.
 - (b) If the Contractor has not received sums due to it within the 28 days for payment provided for in Sub-Clause 40.1, the Contractor may immediately issue a 14-day termination notice.

APPENDIX A TO GENERAL CONDITIONS

Fraud and Corruption

1. Purpose

1.1 The Bank's Anti-Corruption Guidelines and this annex apply with respect to procurement under Bank Investment Project Financing operations.

2. Requirements

2.1 The Bank requires that Borrowers (including beneficiaries of Bank financing); bidders (applicants/proposers), consultants, contractors and suppliers; any sub-contractors, sub-consultants, service providers or suppliers; any agents (whether declared or not); and any of their personnel, observe the highest standard of ethics during the procurement process, selection and contract execution of Bank-financed contracts, and refrain from Fraud and Corruption.

2.2 To this end, the Bank:

- a. Defines, for the purposes of this provision, the terms set forth below as follows:
 - i. "corrupt practice" is the offering, giving, receiving, or soliciting, directly or indirectly, of anything of value to influence improperly the actions of another party;
 - ii. "fraudulent practice" is any act or omission, including misrepresentation, that knowingly or recklessly misleads, or attempts to mislead, a party to obtain financial or other benefit or to avoid an obligation;
 - iii. "collusive practice" is an arrangement between two or more parties designed to achieve an improper purpose, including to influence improperly the actions of another party;
 - iv. "coercive practice" is 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;
 - v. "obstructive practice" is:
 - (a) deliberately destroying, falsifying, altering, or concealing of evidence material to the investigation or making false statements to investigators in order to materially impede a Bank investigation into allegations of a corrupt, fraudulent, coercive, or collusive practice; and/or 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

- (b) acts intended to materially impede the exercise of the Bank's inspection and audit rights provided for under paragraph 2.2 e. below.
- b. Rejects a proposal for award if the Bank determines that the firm or individual recommended for award, any of its personnel, or its agents, or its sub-consultants, sub-contractors, service providers, suppliers and/ or their employees, has, directly or indirectly, engaged in corrupt, fraudulent, collusive, coercive, or obstructive practices in competing for the contract in question;
- c. In addition to the legal remedies set out in the relevant Legal Agreement, may take other appropriate actions, including declaring misprocurement, if the Bank determines at any time that representatives of the Borrower or of a recipient of any part of the proceeds of the loan engaged in corrupt, fraudulent, collusive, coercive, or obstructive practices during the procurement process, selection and/or execution of the contract in question, without the Borrower having taken timely and appropriate action satisfactory to the Bank to address such practices when they occur, including by failing to inform the Bank in a timely manner at the time they knew of the practices;
- d. Pursuant to the Bank's Anti- Corruption Guidelines and in accordance with the Bank's prevailing sanctions policies and procedures, may sanction a firm or individual, either indefinitely or for a stated period of time, including by publicly declaring such firm or individual ineligible (i) to be awarded or otherwise benefit from a Bank-financed contract, financially or in any other manner;1 (ii) to be a nominated2 sub-contractor, consultant, manufacturer or supplier, or service provider of an otherwise eligible firm being awarded a Bank-financed contract; and (iii) to receive the proceeds of any loan made by the Bank or otherwise to participate further in the preparation or implementation of any Bank-financed project;
- e. Requires that a clause be included in bidding/request for proposals documents and in contracts financed by a Bank loan, requiring (i) bidders(applicants/proposers), consultants, contractors, and suppliers, and their sub-contractors, sub-consultants, service providers, suppliers, agents personnel, permit the Bank to inspect³ all accounts, records and other documents relating to the procurement process, selection and/or contract execution, and to have them audited by auditors appointed by the Bank.

-

For the avoidance of doubt, a sanctioned party's ineligibility to be awarded a contract shall include, without limitation, (i) applying for pre-qualification, expressing interest in a consultancy, and bidding, either directly or as a nominated sub-contractor, nominated consultant, nominated manufacturer or supplier, or nominated service provider, in respect of such contract, and (ii) entering into an addendum or amendment introducing a material modification to any existing contract.

A nominated sub-contractor, nominated consultant, nominated manufacturer or supplier, or nominated service provider (different names are used depending on the particular bidding document) is one which has been: (i) included by the bidder in its prequalification application or bid because it brings specific and critical experience and know-how that allow the bidder to meet the qualification requirements for the particular bid; or (ii) appointed by the Borrower.

Inspections in this context usually are investigative (i.e., forensic) in nature. They involve fact-finding activities undertaken by the Bank or persons appointed by the Bank to address specific matters related to investigations/audits, such as evaluating the veracity of an allegation of possible Fraud and Corruption, through the appropriate mechanisms. Such activity includes but is not limited to: accessing and examining a firm's or individual's financial records and information, and making copies thereof as relevant; accessing and examining any other documents, data and information (whether in hard copy or electronic format) deemed relevant for the investigation/audit, and making copies thereof as relevant; interviewing staff and other relevant individuals; performing physical inspections and site visits; and obtaining third party verification of information.

APPENDIX B

Environmental, Social, Health and Safety (ESHS)

Not Applicable

Metrics for Progress Reports

[Note to Employer: the following metrics may be amended to reflect the Employer's environmental, social, health and safety policies and/or the ESHS requirements of the project. The metrics that are required should be determined by the ESHS risks of the Works and not necessarily by the scale of the Works]

Section IX - Particular Conditions of Contract

Except where otherwise specified, all Particular Conditions of Contract should be filled in by the Employer prior to issuance of the bidding document. Schedules and reports to be provided by the Employer should be annexed.

	A. General
GCC 1.1 (d)	The financing institution is: MDTF
GCC 1.1 (r)	The Employer is: Ramallah Municipality
	For payments purposes: all payments under the contract will be made to the Contractor directly by the Municipal Development and Lending Fund (MDLF) upon certification by the Employer. Accordingly, wherever indicated in the contract that the employer will pay to the Contractor means that the MDLF will pay directly to the Contractor upon certification by the Employer.
GCC 1.1 (v)	The Intended Completion Date for the whole of the Works shall be 120 calendar days from the start date.
GCC 1.1 (y)	The Project Manager is: Eng. Osama Musleh / Head of Project Department/ Ramallah Municipality.
GCC 1.1 (aa)	The Site is located at City Center and Al Eza'ah Zone and is defined in drawings No. 01-Key Map.
GCC 1.1 (dd)	The Start Date shall be The date of site possession shall be within one week from the contract signing date.
GCC 1.1 (hh)	The Works consist:
	 Milling and excavation work for roads, Excavation work should be using heavy instruments and everything needed for the execution of work: workers, technicians, instruments, tools and materials etc Patching of damaged areas in the road: Laying Base Coarse layer to adjust level
	 and/or replace damaged base coarse. Asphalt work: includes overlay above existing asphalt and for the patched area using Finisher, Rollers "Steel-Wheeled Rollers and Pneumatic-Tired Rollers according to standards".
	 Adjusting Existing manholes to be with the Asphalt finish levels. All necessary lab test. Any work required for the execution of the project.
GCC 2.2	Sectional Completions are: Not Applicable

GCC 2.3(i)	The following documents also form part of the Contract:
	 Environmental and Social Management Plan Appendix 1: Contractor's Environmental and Social Conditions Statement Appendix 2: Contractor's Acknowledgement of Environmental and Social Compliance and Penalties Enforcement
GCC 3.1	The language of the contract is English
	The law that applies to the Contract is: the law(s) in effect in parts of the West Bank and Gaza under the jurisdiction of the Palestinian Authority.
GCC 5.1	The Project Supervisor may delegate any of his duties and responsibilities.
GCC 8.1	Schedule of other contractors: Not Applicable
GCC 9.1	 Key Personnel GCC 9.1 is replaced with the following: 9.1 Key Personnel are the Contractor's personnel named in this GCC 9.1 of the Particular Conditions of Contract. The Contractor shall employ the Key Personnel and use the equipment identified in its Bid, to carry out the Works or other personnel and equipment approved by the Project Manager. The Project Manager shall approve any proposed replacement of Key Personnel and equipment only if their relevant qualifications or characteristics are substantially equal to or better than those proposed in the Bid. [Insert the name/s of each Key Personnel agreed by the Employer prior to Contract signature.] Not Applicable Code of Conduct (ESHS)
	The following is inserted at the end of GCC 9.2:
	"The reasons to remove a person include behavior which breaches the Code of Conduct (ESHS) (e.g. spreading communicable diseases, sexual harassment, gender based violence, illicit activity or crime)."
GCC 13.1	The minimum insurance amounts and deductibles shall be:
	(a) for loss or damage to the Works, Plant and Materials 750,000 Euro
	(b) For loss or damage to Equipment: must provide evidence of insurances for the equipment.
	(c) for loss or damage to property (except the Works, Plant, Materials, and Equipment) in connection with Contract 130,000 Euro

	(d) for personal injury or death:		
	(i) Of the Contractor's employees: According to the Palestinian Labor Law, no. 7 issued in 2000.		
	(ii) of other people: 100,000 Euro		
GCC 14.1	Site Data are: Not Applicable		
GCC 16.1	Not Applicable		
(add new 16.2)	ESHS Management Strategies and Implementation Plans		
,	The following is inserted as a new sub-clause 16.2:		
	"16.2 The Contractor shall not commence any Works, including mobilization and/or pre-construction activities (e.g. limited clearance for haul roads, site accesses and work site establishment, geotechnical investigations or investigations to select ancillary features such as quarries and borrow pits), unless the Project Manager is satisfied that appropriate measures are in place to address environmental, social, health and safety risks and impacts. At a minimum, the Contractor shall apply the Management Strategies and Implementation Plans and Code of Conduct, submitted as part of the Bid and agreed as part of the Contract. The Contractor shall submit, on a continuing basis, for the Project Manager's prior approval, such supplementary Management Strategies and Implementation Plans as are necessary to manage the ESHS risks and impacts of ongoing works. These Management Strategies and Implementation Plans collectively comprise the Contractor's Environmental and Social Management Plan (C-ESMP). The C-ESMP shall be approved prior to the commencement of construction activities (e.g. excavation, earth works, bridge and structure works, stream and road diversions, quarrying or extraction of materials, concrete batching and asphalt manufacture). The approved C-ESMP shall be reviewed, periodically (but not less than every six (6) months), and updated in a timely manner, as required, by the Contractor to ensure that it contains measures appropriate to the Works activities to be undertaken. The updated C-ESMP shall be subject to prior approval by the Project Manager."		
GCC 20.1	The Site Possession Date(s) shall be: 7 days from signing the contract		
GCC 23.1 & GCC 23.2	Appointing Authority for the Adjudicator: The Palestinian International Arbitration Chamber (PIAC).		
GCC 24.3	Hourly rate and types of reimbursable expenses to be paid to the Adjudicator: hourly fees of 50 Euro		
GCC 24.4	Institution whose arbitration procedures shall be used: The Palestinian Chamber for Adjudication The place of arbitration shall be: Palestine		

B. Time Control			
GCC 26.1	The Contractor shall submit for approval a Program for the Works within 14 days from the date of the Letter of Acceptance.		
GCC 26.2	ESHS Reporting: Not Applicable		
	Inserted at the end of GCC 26.2: "In addition to the progress report, the Contractor shall also provide a report on the Environmental, Social, Health and Safety (ESHS) metrics set out in Appendix B. In addition to Appendix B reports, the Contractor shall also provide immediate notification to the Project Manager of incidents in the following categories. Full details of such incidents shall be provided to the Project Manager within the timeframe agreed with the Project Manager. (a) confirmed or likely violation of any law or international agreement; (b) any fatality or serious (lost time) injury; (c) significant adverse effects or damage to private property (e.g. vehicle accident, damage from fly rock, working beyond the boundary) (d) major pollution of drinking water aquifer or damage or destruction of rare or endangered habitat (including protected areas) or species; or any allegation of sexual harassment or sexual misbehavior, child abuse, defilement, or other violations involving children		
GCC 26.3	The period between Program updates is 14 days.		
	The amount to be withheld for late submission of an updated Program is 2000 Euro.		
	C. Quality Control		
GCC 34.1	The Defects Liability Period is 365 days from the date of certificate of completion of the works.		
	D. Cost Control		
GCC 38.2	Not applicable		
	At the end of 38.2 add after the first sentence:		

	"The Contractor shall also provide information of any ESHS risks and impacts of the Variation."
GCC 38.7	If the value engineering proposal is approved by the Employer the amount to be paid to the Contractor shall be 50% of the reduction in the Contract Price.
GCC 38.7	Not Applicable
	In the first paragraph insert new sub-paragraph (d): a description of the proposed work to be performed, a program for its execution and sufficient ESHS information to enable an evaluation of ESHS risks and impacts;"
GCC 40	Not applicable
	Add new GCC 40.7:
	40.7 if the Contractor was, or is, failing to perform any ESHS obligations or work under the Contract, the value of this work or obligation, as determined by the Project Manager, may be withheld until the work or obligation has been performed, and/or the cost of rectification or replacement, as determined by the Project Manager, may be withheld until rectification or replacement has been completed. Failure to perform includes, but is not limited to the following:
	(i) failure to comply with any ESHS obligations or work described in the Works' Requirements which may include: working outside site boundaries, excessive dust, failure to keep public roads in a safe usable condition, damage to offsite vegetation, pollution of water courses from oils or sedimentation, contamination of land e.g. from oils, human waste, damage to archeology or cultural heritage features, air pollution as a result of unauthorized and/or inefficient combustion;
	(ii) failure to regularly review C-ESMP and/or update it in a timely manner to address emerging ESHS issues, or anticipated risks or impacts;
	(iii) failure to implement the C-ESMP;
	(iv) failing to have appropriate consents/permits prior to undertaking Works or related activities;
	(v) failure to submit ESHS report/s (as described in Appendix C), or failure to submit such reports in a timely manner;
	(vi) failure to implement remediation as instructed by the Engineer within the specified timeframe (e.g. remediation addressing non- compliance/s).

GCC 44.1	The currency of the Employer's country is: EURO
GCC 45.1	The Contract is not subject to price adjustment in accordance with GCC Clause 45.
GCC 46.1	The proportion of payments retained is: 10% of each payment
GCC 47.1	The liquidated damages for the whole of the Works are 0.1% of the final Contract Price per day. The maximum amount of liquidated damages for the whole of the Works is 10% of the final Contract Price.
GCC 48.1	The Bonus for the whole of the Works is [insert percentage of final Contract Price] per day. The maximum amount of Bonus for the whole of the Works is [insert percentage] of the final Contract Price. Not Applicable
GCC 49.1	The Advance Payments shall be: 10% of the total contract price and shall be paid to the Contractor no later than 14 days from the date of signing the contract against submission of bank guarantee.
GCC 50.1	Not Applicable
	An Environmental, Social, Safety and Health (ESHS) Performance Security ['shall' or 'shall not', choose either option consistent with the BDS] be provided to the Employer.] [If an ESHS Security is required, replace GCC 50.1 with the following otherwise delete.] "GCC 50.1 is replaced with the following
	The Performance Security and an Environmental, Social, Safety and Health (ESHS) Performance Security shall be provided to the Employer no later than the date specified in the Letter of Acceptance and shall be issued in an amount specified in the PCC (for GCC 50.1).
	The Performance Security shall be issued by a bank or surety acceptable to the Employer, and denominated in the types and proportions of the currencies in which the Contract Price is payable. The ESHS Performance Security shall be issued by a bank acceptable to the Employer and denominated in the types and proportions of the currencies in which the Contract Price is payable. The Performance Security and, if applicable, the ESHS Performance Security, shall be valid until a date 28 days from the date of issue of the Certificate of Completion in the case of a Bank Guarantee, and until one year from the date of issue of the Completion Certificate in the case of a Performance Bond."
GCC 50.1	The Performance Security amount is 10% of total contract price in EURO
	(a) Unconditional Bank Guarantee: 10% of total contract price in EURO.

	(b) Performance Security – Performance Bond: in the amount(s) of [insert		
	related figure(s)] percent of the Accepted Contract Amount and in the same		
	currency(ies) of the Accepted Contract Amount.Not Applicable		
	[The Bank Guarantee shall be unconditional (on demand) (see Section X, Contract Forms). The ESHS Performance Security will normally be in the amount(s) of 1% to 3%of the Accepted Contract Amount. The sum of the total "demand guarantees" (Performance Security and ESHS Performance Security) shall normally not exceed 10% of the Accepted Contract Amount. A Performance Bond is an undertaking by a bonding or insurance company (surety) to complete the construction in the event of default by the Contractor, or to pay the amount of the Bond to the Employer. An amount of 30 percent of the contract price is commonly used internationally for this type of security (see Section X, Contract Forms).]		
	E. Finishing the Contract		
GCC 56.1	The date by which operating and maintenance manuals are required is "NA"		
	The date by which "as built" drawings are required is 2 weeks after the completion of work.		
GCC 56.2	The date by which "as built" drawings are required is 2 weeks after the completion		
GCC 56.2 GCC 57.2 (g)	The date by which "as built" drawings are required is 2 weeks after the completion of work. The amount to be withheld for failing to produce "as built" drawings and/or		

Section X - Contract Forms

This Section contains forms which, once completed, will form part of the Contract. The forms for Performance Security and Advance Payment Security, when required, shall only be completed by the successful Bidder after contract award.

Table of Forms

Notification of Intention to Award	•••••	 156
Letter of Acceptance		161
Contract Agreement		 162
Performance Security - Bank Guarantee		163
Advance Payment Security		 164

Notification of Intention to Award

[This Notification of Intention to Award shall be sent to each Bidder that submitted a Bid.]

[Send this Notification to the Bidder's Authorized Representative named in the Bidder Information Form]

For the attention of Bidder's Authorized Representative

Name: [insert Authorized Representative's name]

Address: [insert Authorized Representative's Address]

Telephone/Fax numbers: [insert Authorized Representative's telephone/fax numbers]

Email Address: [insert Authorized Representative's email address]

[IMPORTANT: insert the date that this Notification is transmitted to Bidders. The Notification must be sent to all Bidders simultaneously. This means on the same date and as close to the same time as possible.]

DATE OF TRANSMISSION: This Notification is sent by: [email/fax] on [date] (local time)

Notification of Intention to Award

Employer: [insert the name of the Employer]

Project: [insert name of project]

Contract title: [insert the name of the contract]
Country: [insert country where RFB is issued]

Loan No. /Credit No. / Grant No.: [insert reference number for loan/credit/grant]

RFB No: [insert RFB reference number from Procurement Plan]

This Notification of Intention to Award (Notification) notifies you of our decision to award the above contract. The transmission of this Notification begins the Standstill Period. During the Standstill Period you may:

- a) request a debriefing in relation to the evaluation of your Bid, and/or
- b) submit a Procurement-related Complaint in relation to the decision to award the contract.

1. The successful Bidder

Name:	[insert name of successful Bidder]
Address:	[insert address of the successful Bidder]
Contract price:	[insert contract price of the successful Bid]

2. Other Bidders [INSTRUCTIONS: insert names of all Bidders that submitted a Bid. If the Bid's price was evaluated include the evaluated price as well as the Bid price as read out.]

Name of Bidder	Bid price	Evaluated Bid price (if applicable)
[insert name]	[insert Bid price]	[insert evaluated price]
[insert name]	[insert Bid price]	[insert evaluated price]
[insert name]	[insert Bid price]	[insert evaluated price]
[insert name]	[insert Bid price]	[insert evaluated price]
[insert name]	[insert Bid price]	[insert evaluated price]

3. Reason/s why your Bid was unsuccessful

[INSTRUCTIONS: State the reason/s why this Bidder's Bid was unsuccessful. Do NOT include: (a) a point by point comparison with another Bidder's Bid or (b) information that is marked confidential by the Bidder in its Bid.]

4. How to request a debriefing

DEADLINE: The deadline to request a debriefing expires at midnight on [insert date] (local time).

You may request a debriefing in relation to the results of the evaluation of your Bid. If you decide to request a debriefing your written request must be made within three (3) Business Days of receipt of this Notification of Intention to Award.

Provide the contract name, reference number, name of the Bidder, contact details; and address the request for debriefing as follows:

Attention: [insert full name of person, if applicable]

Title/position: [insert title/position] **Agency**: [insert name of Employer]

Email address: [insert email address]

Fax number: [insert fax number] delete if not used

If your request for a debriefing is received within the 3 Business Days deadline, we will provide the debriefing within five (5) Business Days of receipt of your request. If we are unable to provide the debriefing within this period, the Standstill Period shall be extended by five (5) Business Days after the date that the debriefing is provided. If this happens, we will notify you and confirm the date that the extended Standstill Period will end.

The debriefing may be in writing, by phone, video conference call or in person. We shall promptly advise you in writing how the debriefing will take place and confirm the date and time.

If the deadline to request a debriefing has expired, you may still request a debriefing. In this case, we will provide the debriefing as soon as practicable, and normally no later than fifteen (15) Business Days from the date of publication of the Contract Award Notice.

5. How to make a complaint

Period: Procurement-related Complaint challenging the decision to award shall be submitted by midnight, [insert date] (local time).

Provide the contract name, reference number, name of the Bidder, contact details; and address the Procurement-related Complaint as follows:

Attention: [insert full name of person, if applicable]

Title/position: [insert title/position] **Agency**: [insert name of Employer] **Email address**: [insert email address]

Fax number: [insert fax number] delete if not used

At this point in the procurement process, you may submit a Procurement-related Complaint challenging the decision to award the contract. You do not need to have requested, or received, a debriefing before making this complaint. Your complaint must be submitted within the Standstill Period and received by us before the Standstill Period ends.

Further information:

For more information see the <u>Procurement Regulations for IPF Borrowers (Procurement Regulations)[https://policies.worldbank.org/sites/ppf3/PPFDocuments/Forms/DispPage.aspx?docid =4005]</u> (Annex III). You should read these provisions before preparing and submitting your complaint. In addition, the World Bank's Guidance "<u>How to make a Procurement-related Complaint</u>" [http://www.worldbank.org/en/projects-operations/products-and-services/brief/procurement-new-framework#framework] provides a useful explanation of the process, as well as a sample letter of complaint.

In summary, there are four essential requirements:

- 1. You must be an 'interested party'. In this case, that means a Bidder who submitted a Bid in this bidding process, and is the recipient of a Notification of Intention to Award.
- 2. The complaint can only challenge the decision to award the contract.
- 3. You must submit the complaint within the period stated above.
- 4. You must include, in your complaint, all of the information required by the Procurement Regulations (as described in Annex III).

6. Standstill Period

On behalf of the Employer:

DEADLINE: The Standstill Period is due to end at midnight on [insert date] (local time).

The Standstill Period lasts ten (10) Business Days after the date of transmission of this Notification of Intention to Award.

The Standstill Period may be extended as stated in Section 4 above.

If you have any questions regarding this Notification please do not hesitate to contact us.

Signature:	
Name:	
Title/position:	
Telephone:	

NOTIFICATION OF AWARD Letter of Acceptance

[on letterhead paper of the Employer]

[date]
To: [name and address of the Contractor]
Subject: [Notification of Award Contract No]
This is to notify you that your Bid dated [insert date] for execution of the
You are requested to furnish the Performance Security within 28 days in accordance with the Conditions of Contract, using for that purpose the of the Performance Security Form included in Section X - Contract Forms, of the bidding document.
[Choose one of the following statements:]
We accept that
[or]
We do not accept that
Authorized Signature:
Name and Title of Signatory:
Name of Agency:
Attachment: Contract Agreement

Contract Agreement

THIS AGREEMENT made the day of , between [name of the Employer] (hereinafter "the Employer"), of the one part, and [name of the Contractor] (hereinafter "the Contractor"), of the other part:
WHEREAS the Employer desires that the Works known as [name of the Contract] should be executed by the Contractor, and has accepted a Bid by the Contractor for the execution and completion of these Works and the remedying of any defects therein,
The Employer and the Contractor agree as follows: 1. In this Agreement words and expressions shall have the same meanings as are respectively assigned to them in the Contract documents referred to.
2. The following documents shall be deemed to form and be read and construed as part of this Agreement. This Agreement shall prevail over all other Contract documents.
(a) the Letter of Acceptance
 (b) the Letter of Bid (c) the addenda Nos(if any) (d) the Particular Conditions (e) the General Conditions of Contract, including appendix; (f) the Specification (g) the Drawings (h) Bill of Quantities; 30 and (i) any other document listed in the PCC as forming part of the Contract; 3. In consideration of the payments to be made by the Employer to the Contractor as specified in this Agreement, the Contractor hereby covenants with the Employer to execute the Works and to remedy defects therein in conformity in all respects with the provisions of the
Contract.
4. The Employer hereby covenants to pay the Contractor in consideration of the execution and completion of the Works and the remedying of defects therein, 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 in accordance with the laws of [name of the borrowing country] on the day, month and year specified above.
Signed by: Signed by:
for and on behalf of the Employer for and on behalf the Contractor in the presence of:
Witness, Name, Signature, Address, Date Witness, Name, Signature, Address, Date

162

 $^{^{30}\,}$ $\,$ In lump sum contracts, delete "Bill of Quantities" and replace with "Activity Schedule."

Performance Security - Bank Guarantee

[Guarantor letterhead or SWIFT identifier code]

Beneficiary: [insert name and Address of Employer]

Date: _ [Insert date of issue]

PERFORMANCE GUARANTEE No.: [Insert guarantee reference number]

Guarantor: [Insert name and address of place of issue, unless indicated in the letterhead]

We have been informed that _ [insert name of Contractor, which in the case of a joint venture shall be the name of the joint venture] (hereinafter called "the Applicant") has entered into Contract No. [insert reference number of the contract] dated [insert date] with the Beneficiary, for the execution of _ [insert name of contract and brief description of Works] (hereinafter called "the Contract").

Furthermore, we understand that, according to the conditions of the Contract, a performance guarantee is required.

At the request of the Applicant, we as Guarantor, hereby irrevocably undertake to pay the Beneficiary any sum or sums not exceeding in total an amount of [insert amount in figures] (_______) [insert amount in words],¹ such sum being payable in the types and proportions of currencies in which the Contract Price is payable, upon receipt by us of the Beneficiary's complying demand supported by the Beneficiary's statement, whether in the demand itself or in a separate signed document accompanying or identifying the demand, stating that the Applicant is in breach of its obligation(s) under the Contract, without the Beneficiary needing to prove or to show grounds for your demand or the sum specified therein.

This guarantee shall expire, no later than the Day of, 2 cdot 2, and any demand for payment under it must be received by us at this office indicated above on or before that date.

This guarantee is subject to the Uniform Rules for Demand Guarantees (URDG) 2010 Revision, ICC Publication No. 758, except that the supporting statement under Article 15(a) is hereby excluded.

[signature(s)]

Note: All italicized text/ footnotes is for use in preparing this form and shall be deleted from the final product.

The Guarantor shall insert an amount representing the percentage of the Accepted Contract Amount specified in the Letter of Acceptance, less provisional sums, if any, and denominated either in the currency(ies) of the Contract or a freely convertible currency acceptable to the Beneficiary.

Insert the date twenty-eight days after the expected completion date as described in GC Clause 53.1. The Employer should note that in the event of an extension of this date for completion of the Contract, the Employer would need to request an extension of this guarantee from the Guarantor. Such request must be in writing and must be made prior to the expiration date established in the guarantee. In preparing this guarantee, the Employer might consider adding the following text to the form, at the end of the penultimate paragraph: "The Guarantor agrees to a one-time extension of this guarantee for a period not to exceed [six months] [one year], in response to the Beneficiary's written request for such extension, such request to be presented to the Guarantor before the expiry of the guarantee."

Advance Payment Security

Demand Guarantee

[Guarantor letterhead or SWIFT identifier code]

Beneficiary: [Insert name and Address of Employer]

Date: [Insert date of issue]

ADVANCE PAYMENT GUARANTEE No.: [Insert guarantee reference number]

Guarantor: [Insert name and address of place of issue, unless indicated in the letterhead]

We have been informed that [insert name of Contractor, which in the case of a joint venture shall be the name of the joint venture] (hereinafter called "the Applicant") has entered into Contract No. [insert reference number of the contract] dated [insert date] with the Beneficiary, for the execution of [insert name of contract and brief description of Works] (hereinafter called "the Contract").

Furthermore, we understand that, according to the conditions of the Contract, an advance payment in the sum [insert amount in figures] () [insert amount in words] is to be made against an advance payment guarantee.

At the request of the Applicant, we as Guarantor, hereby irrevocably undertake to pay the Beneficiary any sum or sums not exceeding in total an amount of [insert amount in figures] (_______) [insert amount in words]¹ upon receipt by us of the Beneficiary's complying demand supported by the Beneficiary's statement, whether in the demand itself or in a separate signed document accompanying or identifying the demand, stating either that the Applicant:

- (a) has used the advance payment for purposes other than the costs of mobilization in respect of the Works; or
- (b) has failed to repay the advance payment in accordance with the Contract conditions, specifying the amount which the Applicant has failed to repay.

A demand under this guarantee may be presented as from the presentation to the Guarantor of a certificate from the Beneficiary's bank stating that the advance payment referred to above has been credited to the Applicant on its account number [insert number] at [insert name and address of Applicant's bank]..

164

The Guarantor shall insert an amount representing the amount of the advance payment and denominated either in the currency(ies) of the advance payment as specified in the Contract, or in a freely convertible currency acceptable to the Employer.

The maximum amount of this guarantee shall be progressively reduced by the amount of the advance payment repaid by the Applicant as specified in copies of interim statements or payment certificates which shall be presented to us. This guarantee shall expire, at the latest, upon our receipt of a copy of the interim payment certificate indicating that ninety (90) percent of the Accepted Contract Amount, less provisional sums, has been certified for payment, or on the [insert day] day of [insert month], 2 [insert year], whichever is earlier. Consequently, any demand for payment under this guarantee must be received by us at this office on or before that date.

This guarantee is subject to the Uniform Rules for Demand Guarantees (URDG) 2010 Revision, ICC Publication No. 758, except that the supporting statement under Article 15(a) is hereby excluded.

[signature(s)]

Note: All italicized text (including footnotes) is for use in preparing this form and shall be deleted from the final product.

Insert the expected expiration date of the Time for Completion. The Employer should note that in the event of an extension of the time for completion of the Contract, the Employer would need to request an extension of this guarantee from the Guarantor. Such request must be in writing and must be made prior to the expiration date established in the guarantee. In preparing this guarantee, the Employer might consider adding the following text to the form, at the end of the penultimate paragraph: "The Guarantor agrees to a one-time extension of this guarantee for a period not to exceed [six months][one year], in response to the Beneficiary's written request for such extension, such request to be presented to the Guarantor before the expiry of the guarantee."

PART 4 - Environmental and Social Management Plan





Municipal Development and Lending Fund (MDLF)

Municipal Development Program (MDP) Phase III

Environmental and Social Management Plan (ESMP) For Roads Rehabilitation Sub-projects

Municipality: Ramallah Municipality

Sub-Project Title: Rehabilitation of Internal Roads-Ramallah City

This ESMP is part 4 of bidding document, contractors obliged to respect and implement mitigation measures mentioned or unforeseen under municipality supervision and MDLF monitoring.

Attention: where EHSE applicable to bidding document and where Environmental Warranty is required, then financial provision under section 6 is not applicable and EHSE regulations governs.

List of Abbreviations

EA Environmental Assessment

EIA Environmental Impact Assessment EQA Environment Quality Authority

ESHS Environment Social Health and Safety

ESIA Environmental and Social Impact Assessment ESMP Environmental and Social Management Plan

ESMF Environmental and Social Management Framework

ES Environmental Screening

IEE Initial Environmental Examination

LALAP Land acquisition and Livelihood Action Plan LALPF Land acquisition and Livelihood Framework

LGU Local Government Unit LTC Local Technical Consultant

MDLF Municipal Development and Lending Fund

MDP Municipal Development Program

MoH Ministry of Health

MoLG Ministry of Local Government

MoTA Ministry of Tourism and Antiquities
PCBS Palestinian Central Bureau of Statistics

PEAP Palestinian Environmental Assessment Policy

PEL Palestinian Environmental Law PNA Palestinian National Authority

PRDP Palestinian Reform and Development Plan

RoW Right of Way WB World Bank

Contents

1.	General
2.	Sub-Project Description
3.	Environmental and Social Legal Framework
4.	Environmental and social screening of the Roads Rehabilitation and Maintenance Sub-project
5.	Sectorial Environmental and Social Management Plan
6.	Environmental and Social Liabilities of MDLF Contractors
7.	Environmental and Social Monitoring and Complaints Mechanism177.
	7.1 Environmental and Social Monitoring
Annex	xes to ESMP
	x 1: Environmental and Social Management and Monitoring Plan Matrix for Roads bilitation and Maintenance Sub-Project
Annex in Roa	x 2: Environmental Management Guidelines for Contractors (provisional to Construction ads)
Anne	x 3: Environmental and Social Management Checklist

1. General

Municipal Development Program Phase III

MDPIII is continuation and built on MDPII challenges, success and lessons learned, where under MDPII during cycle I and cycle II the MDLF has supported the municipalities to implement several sectoral sub-projects. Environmental and social management was integrated into construction management of the sub-projects. Annex 10 summarizes the MDPII project.

MDP Phase III Objective

MDPIII aims to enhance the institutional capacity of municipalities in West Bank and Gaza for more accountable and sustainable service delivery.

The Program host four components:

Component 1: Municipal Performance and Service Delivery. MDPIII is the third municipal development project to support and incentivize improvements in the development of municipal management capacity. Previous MDPs financed municipal infrastructure and service delivery through the provision of basic block and performance-based grants, and provided demand-driven capacity development support for municipalities. This approach was very innovative at design and has shown to be highly effective. The proposed MDPIII would continue this overall approach while focusing more on improving financial sustainability and accountability in municipal service provision. Like MDPI and MDPII, municipal performance will be measured through Key Performance Indicators (KPIs), yet these have been substantially revised to reflect a greater focus on the sustainability of municipal services. Performance measurements will encompass three main areas for reform: i) Financial Performance and Sustainability, ii) Institutional Performance, and iii) Transparency, Accountability and Participation.

Component 2: Capacity development

Component 3. Joint Municipal Projects

Component 4: Project Implementation Support and Management

MDP Phase III component 1 and component 3 will finance investments or activities that are within the legal mandate of municipalities as per the Local Authorities Law of 1997 or revision thereof.

Sub-projects under MDPIII aims to enhance the municipal services when environmental and social impacts are properly mitigated during design, construction and operational stages. Considering that sub-projects falls within but not limited to the following sectors:

- Water and wastewater services:
- Solid Waste Management
- Road Rehabilitation and Maintenance Services
- Public Facilities
- Electricity and energy project

For Road Rehabilitation and Maintenance Services; the project finance: Goods and works for construction, maintenance, rehabilitation and reconstruction of new/existing internal roads, including traffic signs, road line demarcations, safety rails, traffic signals, street lighting, sidewalks, road maintenance tools and equipment; vehicle insurance (the latter only in Gaza).

2. Sub-Project Description

The project consists of the rehabilitation work of different main internal roads in the city, the length of the roads is around 3.4Km with an asphalt width between 8-10m as follows:

No.	Road Name	location	Length	Av.Asphalt	Road ROW
			m	width	m
1.	Ein AL Gouz St.	Old city	300	8	12
2.	AL Karmel St.	Ein Al korzom	1,420	10	14-22
3.	Ibraheem Aquel St.	Hay Al Jabal	450	10	10-16
4.	Jack Shiraaq, Tabareya, Havana St.	Ein Al korzom	1,045	10	16-18
5.	Saed Ibn Abi Waqas St.	Hay Dar Jerious	180	8	10

The rehabilitation of these roads will provide a service infrastructure with high quality; raise the safety level on roads, in addition to the contribution to the economic development in the city. In order to achieve the project aims, the following activities should be executed:

- Mill of the upper layer of Asphalt up to 2cm depth.
- Patching of damaged area in the road.
- Adjusting the service manhole levels in the working area.
- Asphalting of road.
- Guard rails where required.
- Interlock tile for sidewalks and medians where required.

3. Environmental and Social Legal Framework

This Project is considered one of the projects that are to be implemented in full compliance with the national and local legislation, including laws, regulations, and standards governing environmental management, social protection, and preservation of cultural heritage applied by the Palestinian National Authority, and in full compliance with the Palestinian Environmental Law (PEL) No. (7), year 1999. In addition to the revised Palestinian Basic Law of 2003, the Jordanian Law No. 79 of 1966 The Cities, the Villages and Buildings Regulating Law, and the Buildings and Regulation Bylaw for Local Authorities No. 5 for 20.

Other related laws

For public health and identified as reference for pest control, first is Palestinian Public Health Law No 20, second the Palestinian Environmental Law considers pesticides (pest control products) as a hazardous waste that shall be disposed safely. Where Article (14) Pesticides and Fertilizer states that "The Ministry, in coordination with the specialized agencies shall designate the environmental conditions for the import, distribution, manufacturing, use, and store of pesticides, substances, and agri-chemical fertilizers, which may pose hazards to the environment." The MDLF at stage of receiving the project application are to ensure including material accredited by Ministry of Health and World Health Organization.

Jordanian Heritage law No. 51 for the year 1966, that manage case of accidental findings of any antiquities or PCRs.

The Program is complying to the World Bank:

- Environmental Assessment Policy OP 4.01,
- OP/BP 4.11 Physical Cultural Resources.
- OP/BP 4.12 Involuntary Resettlement
- OP/BP 4.09 Pest management.
- OP7.50 International Waterways

The following depicts definition of CRP, Involuntary Resettlement, Voluntary Land Donations and Willing Selling Willing Buying:

Cultural Heritage and Physical Cultural Resources

The definition of PCRs include any movable or immovable objects, sites, structures, groups of structures, and natural features and landscapes that have archaeological, paleontological, historical, architectural, religious, aesthetic, or other cultural significance. PCRs may be located in urban or rural settings, and may be above or below ground, or under water. Their cultural significance may be at the local, provincial or national level, or within the international community. MDLF will not finance any sub-project that might trigger OP 4.11.

In case of accidental findings of any antiquities or PCRs that might occur during the implementation of the sub-projects, the contractor must notify MDLF and the municipality immediately. According to the applicable Jordanian Heritage law No. 51 for the year 1966, Article 15 MDLF must stop the contractor and notify the related Authority (Ministry of Tourism and Antiquities, or MoTA) within 3 days to take the necessary actions.

In other words, the contractor is responsible for familiarizing themselves with the following "Chance Finds Procedures" in case culturally valuable materials are uncovered during excavation:

- Stop work immediately following the discovery of any materials with possible archeological, historical, paleontological, or other cultural value; announce findings to project manager; and notify relevant authorities;
- Protect artifacts as well as possible using plastic covers; implement measures to stabilize the area, if necessary, to properly protect artifacts;
- Prevent and penalize any unauthorized access to the artifacts; and
- Restart construction works only upon the authorization of the relevant authorities.
- Control access to site where finding occurred

Involuntary Resettlement

In principles any project that is outside the master plan that is considered public domain, is not eligible for financing. However, given that all municipalities are involved with different capacity and given the number and types of projects the OP 4.12 is triggered. Any subprojects that could trigger the involuntary resettlement policy (OP 4.12) will follow procedures depicted in the LALPF. At the same time, the respective negative list stated in OM defines the criteria for the exclusion of the subproject maybe impact land or livelihoods.

Considering that Municipality when submitting a project proposal/appraisal to MDLF would have accomplished all legal requirements acquired by and respecting the revised Palestinian Basic Law of 2003, the Jordanian Law No. 79 of 1966 The Cities, the Villages and Buildings Regulating Law, and the Buildings and Regulation Bylaw for Local Authorities No. 5 for 20.

(i) Voluntary Land Donation (VLD) 31

In cases where there is voluntary land donation, defined as when people or communities agree to voluntarily provide land in exchange for benefits or services related to the project, the below requirements must be met:

- 1. The act of donation is undertaken without coercion, manipulation, or any form of pressure on the part of public or traditional authorities;
- 2. The potential donor is aware that refusal or to say no is an option without any consequences, and that right of refusal is specified in the donation document the donor will sign.

³¹ VLD procedures are accepted by Ministry of Local Government

- 3. Land to be donated must be identified by the municipality in coordination with the community for the project that have been selected; the impacts of proposed activities on donated land must be fully explained to the donor;
- 4. The donor may negotiate compensation (in full or in part) or alternative forms of benefits as a condition for donation
- 5. Donation of land cannot occur if it requires any household relocation;
- 6. For community or collective land, donation can only occur with the consent of the individuals owners of the land.
- 7. Verification must be obtained from each person donating land (either through proper documentation or through confirmation by at least two witnesses);
- 8. The implementing agency establishes that the land to be donated is free of encumbrances or encroachment and registers the donated land in an official land registry;
- 9. Voluntary land donation will not be permitted in cases of site-specific infrastructure as community pressure could be too onerous for a person to refuse, thus removing the power of choice.³²
- 10. In case that the donated land were not used for it is agreed purpose then the municipality needs to have a written agreement from the land donor that they agree to use the land for the new purpose, otherwise the municipality will return the land to the owner.
- 11. There should be no coercion, manipulation or pressure from the community or public or traditional authorities for individuals to voluntary donate land.
- 12. The proportion of land that may be donated cannot exceed the area required to maintain the donor's livelihood or that of his/her household. Documentation for VLD provided below should be sufficient to verify this.
- 13. The infrastructure must not be site-specific.
- 14. The person who donates the land should have access to project level grievance mechanism.
- 15. The donor should be provided with the information for such grievance mechanism.

Willing-Seller, Willing-Buyer

For land purchase through willing-seller willing-buyer approach, land acquisition must occurs by mutual agreement in exchange for a notarized purchase contract based on the market price at the date of acquisition. In addition, these questions should be answered and documented:

- If the owner of the land refuses to sell, will the municipality search for another plot of land? Yes/No
- Is the owner free of municipality or social pressure to refuse to sell? Yes/No
- Is the owner made aware of his/her refusal to sell? Yes/No
- Will the owner continue to live in current place of residence (will not relocate)? Yes/No
- Is the land free of any renters, users, squatters or encroachers? Yes/No
- Is the land free of any competing claims of ownership? Yes/No
- Can the owner negotiate for price? Yes/No
- Is the owner made aware that he/she can negotiate for price? Yes/No
- Does the owner have access to a project level grievance mechanism? Yes/No
- Is the owner made aware of such grievance mechanism? Yes/No
- Is there documentation reflecting the understandings above, signed by the owner? Yes/No

Finally, prior to land purchase process, the municipality council shall take an official decision in the municipality intention to purchase certain land, then municipality should obtain MoLG district office approval after checking: (1) allocation in the budget abundance, (2) The MoLG to create

³²In cases of site-specific infrastructure it is recommended to use land under ownership of municipalities in exceptional cases willing-buyer willing-seller if adequate measures are put in place to avoid coercion.

committee to evaluate the land market value, the committee shall represent MoLG, Ministry of Finance (MOF), LGU, and the Land Authority. (3) After that, the municipality will take decision, through the council official meeting, regarding the estimate and proceed with the purchase.

4. Environmental and social screening of the Roads Rehabilitation and Maintenance Subproject

The ESMF and LALPF defined the environmental and Social Screening and Assessment for MDPIII project:

MDPIII was screened to fall under Category B of the EA, where the majority of the sub projects were of small-scale and of rehabilitative nature, The projects' impact relate mainly to enhance the sustainability of municipal services. These subprojects have minor environmental and social impact during construction stages with low to high risk potential, and are mostly mitigated utilizing basic environmental measures and health and safety procedures. The screening will exclude subprojects that falls under category "A" of the Palestinian environmental policy and the WB EA policy OP 4.01 or any sub-project that might trigger the WB OP 4.11 specific to PCR. MDPIII sub-projects are also expected to fall under the same category at which rigorous environmental and social screening was done for this sub-project and a LALAP or simplified LALAP has been prepared and implemented in case the sub-project triggered the Involuntary Resettlement Policy.

Environmental and Social Assessment

The Road rehabilitation and maintenance subproject is mainly aiming to provide safe access to citizens, reduce or prevent dust, improve storm water drainage, minimize disturbances and obstacles, and ensure road safety, although construction and operating stages of the project life is expected to cause temporary negative impacts to the citizens or the surrounding environment where this Sectorial Road Rehabilitation and Maintenance Sectors ESMP is prepared to mitigate and manage any potential environmental and social impact the sub-project activities could cause to the surrounding environment or the citizens during the sub-project construction and operation. The construction phase will cause negative impact mainly the dust emissions, nuisance, potential risk traffic accidents, temporary interruption of underground public services, potential risk of accidents where work and safety signs are not installed, potential closer of facilities or household entrances, dumping work residues into RoW or nearby lands, potential closure of street through different activities, potential disturbance of vehicles and pedestrian movement, and/or any other unforeseen environmental and social potential impact might rise due improper construction management.

5. Sectorial Environmental and Social Management Plan

The **objective** of the ESMP is to cater to the environmental and social needs of the MDP in a simple, responsive and cost effective manner that will not necessarily overload or impede the project cycle.

The ESMP outlines the measures needed to address the issues identified in the ESMF. Moreover, the ESMP demonstrates proposed monitoring activities that encompass all major impacts and identify how they will be integrated into project supervision.

Road Projects has positive environmental impact aiming to reduce or prevent dust, improve drainage, minimize disturbances and obstacles and ensure road safety, especially in roads close to schools and markets. Pavement and sidewalks add positively to the people's attitude towards preserving these assets and therefore keeping their localities clean and safe. The potential environmental and social impacts can be summarized as follows:

- Dust and gas emissions;
- Noise:
- Water (wastewater, surface water discharge, storm water);
- Natural resource, forests and biodiversity areas;
- PCRs, such as archeological places;
- Construction waste;
- Accidental risks;
- Vulnerable aesthetic;
- Loss of vegetation; and
- Land use

The road projects include construction and/or rehabilitation of roads. It may also include improvement of roads by adding signs, lighting, etc. the following table presents the ESEM for road maintenance projects. Rehabilitation of the roads will increase the traffic volume and result noise and dust emission. The gases that will be emitted from the cars will affect the air quality. Accidental risks and workers health and safety will be impacted. The water courses and wadis will be also impacted if the drainage systems of the roads are changed

Main Environmental Impacts due to road maintenance and upgrading projects

No.	Environmental and Social Common and	Impact			
	Environmental and Social Component	Positive	No Impact	Negative	
1.	Air Quality and Gas emissions			X	
2.	Groundwater Quality		X		
3.	Community Water Supply		X		
4.	Public Health and Services	X			
5.	Workers Health and Safety			X	
6.	Noise Reduction			X	
7.	Cultural and Heritage	X			
8.	Socio-economic (Employment & Poverty Alleviation)	X			
9.	Accidental risks			X	
10.	Water Courses and Wadis			X	
11.	Forests and Biodiversity Areas			X	
12.	Aesthetic	X			
13.	Waste Reduction			X	
14.	Land Use	X			

Activities associated with Construction and Operation

Both construction and operation phases involve activities that can be associated with impacts on the surrounding environment and society, which need to be closely monitored by project team and the assigned Technical Consultant. The significant environmental and social impacts of activities on natural resources, air quality, cultural and heritage resources in addition to impact on socio-economic conditions during construction and operation of roads rehabilitation and maintenance project are detailed and related in the following tables, noting that during construction; excavation and earthwork and construction of infrastructure (i.e. base course, pavement) is the main task of any sub-project and would have negative impact. Although the roads project will enhance the socio-economic conditions post implementation, proper operation require proper traffic management and safety

Construction Activities and Potential Impacts

	Significant Environmental and Social Issues					
Project Construction Activities	Agricultural Resources	Water Resources	Air Quality	Cultural & Historical Resources	Socio-economic Conditions	
Demolition			X	X	X	
Removal of Existing Infrastructur	•			X	X	
Heavy Machinery Operation			X	X	X	
Construction of Infrastructure		X	X	X	X	
Excavations and Earthwork	X	X	X	X	X	
Waste Disposal (solid, liquid, hazardous, etc.)	X	X	X		X	
Wastewater Disposal	X	X	X		X	
Transportation			X	X	X	
Accidents & Unplanned Events	X	X	X	X	X	

Operational Activities and Potential Impacts

	Significant Environmental and Social Issues					
Project Construction Activities	Agricultural Resources	Water Resource	Air Quality	Cultural & Historical Reso	Socio-economi Conditions	
Transportation			X		X	
Water Supply		X				
Solid Waste Collection and Disposal	X	X	X		X	
Wastewater Collection and Disposal	X	X	X		X	
Production and Investments	X				X	
Accident and Unplanned Events	X	X	X	X	X	
Overall Project Development	X	X	X	X		

Therefore, **Annex 1- Environmental and Social Monitoring Matrix** is prepared for the Roads rehabilitation and maintenance at which the contractor is responsible of

- The Contractor shall be responsible for the safety of all activities and personnel on the site.
- The Contractor shall comply with the ESMP appended to Contract Documents
- The contractors shall follow up on its implementation in addition to the preservation of the archeological assets during implementation and the coordination with archeological department when required.
- In case of the contractor non-compliance, the Environmental Liabilities to Contractor and bidding documents conditions govern.
- In case a LALAP or simplified LALAP has been prepared and implemented, the contractor shall be aware of the social responsibility.
- Where ESHS applies; the contractor shall abide to the requirements stated in the ESHS section and utilize this ESMP to prepare the required contractor ESMP.

Safeguard Risks Associated with Subprojects

The expected safeguard risks by the MDP investments (Roads rehabilitation and maintenance Projects) is mainly Potential impacts are of short term, low to medium magnitude and of low risk, however should be mitigated through proper implementation of ESMP.

Potential risk of roads projects to trigger the involuntary resettlement policy has been mitigated through preparation of Land Acquisition and Livelihood Framework.

MDP investments	No risk	Low risk	High risk	
Transportation, Communication	and Energy			
Tertiary and secondary level roads		X		
Primary level culverts and bridges			X	
Footpaths		X		
Retaining walls		X		

6. Environmental and Social Liabilities of MDLF Contractors

Sectoral ESMPs is included in the tender documentation, so that potential bidders are aware of environmental

and social performance standards expected from them and are able to reflect that in their bids.

This section depicts environmental compliance where breakdown for the cost of each mitigation measure noncompliance.

ESMM and provisional environmental management guidelines for construction of roads (Annex 1 and Annex 2); to be abide to.

Attention: where EHSE applicable to bidding document and where Environmental Warranty is required, then financial provision under this section doesn't apply where EHSE regulations governs.

To enforce the compliance of environmental and social management, contractors are responsible on:

• Complying to **health and safety requirements** where they are to provide insurance for construction labors, staff attending to the construction site, citizens for each sub-project, the insurance requirements and clauses are stated in the procurement manual and reflected in the bidding documents complying to the Palestinian labor law.

The Municipality, as an owner of construction works, will be responsible for enforcing compliance of contractor with the terms of the contract, including adherence to the ESMF and the sub-project sectorial ESMP.

The following procedures prevail, in addition to the supervisor engineer judgment:

- Deduction of environmental noncompliance is added as a clause in the Bill of Quantities (BOQ) section, referring to annex in the bidding document detailing the deduction procedures;
- Environmental penalties shall be calculated and deduction are to be included in each submitted invoice;
- Mitigation measures in Environmental and Social Monitoring Matrices (ESMM) annexed to sectoral ESMP is the reference for environmental notes and penalties;

- Each impact depicted in the ESMM if not properly mitigated to be counted an environmental/social note;
- For minor infringements and social complaints, an incident which causes temporary but reversible damage, the contractor will be given environmental and social note/ stop and alert to remedy the problem and to restore the environment. If reviewing the action by the Municipality Engineer showed that restoration is done satisfactorily no further actions will be taken;
- For social notes: the municipality engineer will stop and alert the contractor to remedy the social impact, the municipality engineer will follow the issue until solved. If contractor didn't comply to remediation request, stop will be considered under no excused delay;
- If the contractor hasn't remedied the environmental impact during this given time, the Municipality Engineer/supervisor engineer in cooperation with Local Technical Consultant will:
 - stop the work and give the contractor an environmental and social note correlated to financial penalty according to the non-complied mitigation measure depicted in the biding document and the following procedures for National Competitive Bids and Shopping Bidding Documents;
 - The Municipality engineer after the given time frame are to review the action, if engineer sees that restoration is done satisfactorily no further actions will be taken, otherwise and if Contractor hasn't remedied the situation within 1 day any additional days of stopping work will be considered no excused delay;
 - When municipality engineer issue an environmental/social note, it might depict one or more environmental penalty;
 - If repeating the noncompliance and penalties approached (3-5) % of the contract value, the Municipality Engineer will raise the formal recorded environmental and social notes and the deduction history to MDLF in order to tack a legal action.

The form of the environmental/social note:

Environmental and Social Note No ()						
Municipality	Date					
Project Name						
Site Location						
Contractor						
The Environmental Note (include one or more notes referring	g to ESMM)					
Municipality Supervisor / Engineer						
Local Technical Consultant						
Contractor Representative on time of note						
Submitted to Contractor Representative						
Copy Submitted to MDLF on						
Hour						
Date						

Procedures for National Competitive Bids and Shopping Bidding Documents:

As mentioned above, environmental and social notes might contain one or more environmental penalty applicable for deduction.

- For social notes: stop and alert the contractor to remedy the action;
- For environmental notes: refer to the ESMP for the note to verify how many notes illustrated in the note:
- Deduction rate starts with 0.1% of contract value; and
- Deduction rate increase by 0.05% of the contract amount after each fifth note.

For National Competitive Bids:

ESMP Compliance Penalty for National Completive Bids

ESMF	ESMF Compliance Penalty					
No.	Environmental and Social Note	Penalty				
1	1	Stop and alert				
2	2+3+4+5+6	Stop and deduct 0.1% of the contract amount for each mitigation measure in the environmental note. Minimum amount of deduction is 150 Euro				
3	7+8+10+11+12	Stop and deduct 0.15% of the contract amount for each mitigation measure in the environmental note Minimum amount of deduction is 225 Euro				
3+1	Next five notes	Each 5 notes + deduction would be: N= percentage of deduction of (N-1) + (0.5* percentage of deduction of (N-1)) For example: Stop /Deduct 0.1%+0.05(0.1%) of the contract amount for each mitigation measure in the environmental note. Minimum amount of deduction is 300 Euro				
5	Note +1	If penalty rate approach 5% of contract cost it is recommended to stop work and send official request to MDLF of the proposed action according to bidding documents and procurement manual				

Deduction is to be calculated by the Municipality Engineer and to be reviewed by the LTC Engineer where he is to consider the environmental Note (N), and the deduction for N.

Deduction for N= [percentage of deduction of (N-1) + (0.5* percentage of deduction of (N-1)]* contract Amount.

If Penalties Rate approach 5% of Contract cost its recommended to stop work, and send official request to MDLF of the proposed action according to bidding documents and procurement manual.

Municipality can decide if a mitigation measure has a significant impact and might municipality require setting its noncompliance penalty rate based on its significance.

7. Environmental and Social Monitoring and Complaints Mechanism7.1 Environmental and Social Monitoring

Environmental and social monitoring will be an integral part of MDLF's managing work in the course of the project implementation. The MDLF (Environmental and Social Officers and or LTCs) and Municipality Supervision Engineers will be responsible to ensure that contractors works are familiar with ESMF and instruct workers/personnel on the compliance with the ESMF and the project sector ESMP.

The concerned municipality will conduct regular on-site supervision of civil works to verify contractors' adherence to the requirements set out in ESMPs following Environmental and Social Liabilities of MDLF Contractors. MDLF consultants or teams conduct supervisory and environmental and social monitoring visits.

Reporting of the status of environmental and social performance under the MDP cycle to include overview of deviations/violations of ESMPs encountered over the report period, instructions given to

the contractors for addressing noncompliance and identified issues, and follow-up actions on the revealed outstanding matters.

For monitoring and evaluation, MDLF experts utilize Checklist attached in **Annex 3** to facilitate comparing environmental and social mitigation measures recorded in the appraisal stage and what is implemented on ground.

Further details regarding social safeguards monitoring is depicted in the Land Acquisition and Livelihood Action Plan, which the municipality are to implement, MDLF are to monitor.

7.2 Complaints Mechanism

The Palestinian Council Resolution No. 60 in 2009 and the amendment of 2015 mandating the development of a complaints mechanism is forcing for municipality / MoLG applies for Municipal Development Program Phase III.

The municipality are to ensure availability of documentation of complaints and responses, timely responses, a log of all complaints received-date received, date responded to, type of response, etc.

The proposed procedure that municipality will follow through the implementation of MDPIII project:

Complaints procedures depend on the nature of complaint submitted by citizens. Some complaints are submitted to the municipality, and then submitted to the concerned department or person in charge to resolve the matter. In cases where the municipality are unable to resolve the complaint, it will then be transferred to the regional directorate or to the Ministry of Local Government (MoLG) either through the project coordinator, or the citizens themselves. The process reads as follows:

- 1- Citizen submits their complaint to the municipality.
- 2- The entity which receive the complaint shall reply to it either solving the problem of the complaint or informing the person making the complaint that they are studying the complaint and they will reply to the complaint on a specific date (the reply shall be in time less than 28 days). In the event the concerned Directorate provided a negative response or was unable to provide feedback, the citizen may then make a complaint to the Complaints Department at the MoLG, as follows:
 - a. Submit a written complaint annexed to it all required documents concerning the complaint if found. Citizen must receive a copy of the receipt.
 - b. The Complaints unit pursues with the complaint following the procedures.
 - c. Citizen must receive a written response regarding their complaint within one (1) week at minimum.

Accepting or Rejecting the Complaint

- 1. Employee in charge of handling the complaint must inform the complainant about the accepting or rejecting of the complaint within three (3) days at most, since the submission of the complaint.
- 2. In the event the employee in charge of handling the complaint submitted the complaint to a specialized complaint unit, the unit must also submit an accepting or rejecting of the complaint within three (3) days at most.
- 3. In the event the complaint was accepted, the complainant will receive an officially-stamped Review Card with the following data:
- a. Complainant's Name or Their Legal Representative
- b. Complainant Address
- c. Complaint Title

- d. Review Date
- e. List Annexes Submitted with the Complaint

Means of Communicating to the Complaints Department:

- 1. Directly contacting the MoLG
- 2. Contacting Hotline
- 3. Contacting the website of the MoLG
- 4. Provide a written complaint as stated in the system

The municipality should report to the MDLF of all the complaints through continuous recording in the weekly reports and/ or through site visits, so that the MDLF and/ or the LTC will intervene to solve the issue if the municipality was not able to solve or mitigate it.

The LTC are to monitor that complaints has been solved, and to report it to MDLF

Annexes to ESMP

- 1. Annex 1: Environmental and Social Management and Monitoring Plan Matrix for Roads Rehabilitation and Maintenance Subproject
- 2. Annex 2: Environmental Management Guidelines for Contractors (provisional to Construction in Roads)
- 3. Annex 3: Environmental and Social Management Checklist for Small Construction and Rehabilitation Activities (*used by LTC and MDLF*)

Annex 1: Environmental and Social Management and Monitoring Plan Matrix for Roads Rehabilitation and Maintenance Sub-Project

Phase	Impact	Mitigation Measure	Operation / Responsibility	Supervision	Monitoring
	Dust generated by construction activities.	Monitor the excavations. Applying (spraying) water where possible. Avoid work during windy days. Covering the construction area very well. Covering the transportation trucks Monitoring and maintaining equipment in a good working from emissions or fumes. Disposal the smells causes by safety ways Ensure spraying water directly when need to ensure safe vegetation cover around area	Consultant and Contractor	Municipality and Supervision Engineer	MDLF
	Odor emissions	Avoid removal of any old pipe unless otherwise is completely empty; Transfer the removed old pipes to the landfill immediately (or to any place upon the request of the Municipality Engineer). Replacement of Pipes should be carried out within short time as houses will not be able to close their wastewater connections for long time.	Contractor	Municipality and Supervision Engineer	MDLF
Coı	Complaints	Contractor shall inform the municipality and MDLF of any complaints send for him from citizens.	Contractor	Municipality and Supervision Engineer	MDLF
Construction	Noise	Proper activity scheduling working hours and days and respecting normal working hours 8:00 am – 4:00 pm Monitoring and maintaining equipment in a good working from mechanical vibration, creaking and squeaking. Shutting down equipment when it is not directly in use. Avoid using high noise machinery. Commitment to project period	Consultant and Contractor	Municipality and Supervision Engineer	MDLF
	Increasing the concentration of pollutants and noise.	Proper scheduling and working hours and of any risky activities.	Consultant and Contractor	Municipality	MDLF
		Traffic regulation signs and Traffic calming measures.	Contractor & Consultant	Municipality & Supervision Engineer	MDLF
	Increase the risk of	Use signs to control speed limit.	Contractor	Municipality & Supervision Engineer	MDLF
	accidents during	Provision of adequate notification procedures for any road closures	Contractor & Consultant	Municipality & Supervision Engineer	MDLF
	construction.	The contractor shall nominate a flagman on road junction for providing safe access for pedestrians and residents and adjust cars speed.	Contractor and Consultant	Municipality and Supervision Engineer	MDLF
		Ensure proper traffic plan implementation when requested	Contractor & Consultant	Municipality & Supervision Engineer	MDLF
	Closure of households, facilities entrances	Provide safe access for all households, and facility along the work area road to ensure no socioeconomic impact. The contractor shall find alternative street if possible, and divide the construction streets to sections, to avoid shutting off all rehabilitation streets. Explain alternative street for road users and increase traffic alarming signs	Contractor and Consultant	Municipality and Supervision Engineer	MDLF

Phase	Impact	Mitigation Measure	Operation / Responsibility	Supervision	Monitoring
		Contractor shall share the construction and water cut program with municipality, residents and farmers at area. Ensure trench excavations safety plans. close all of it directly after finish work prepared prior safety plan for commencement of works ensure provide at least on safe passage for entrances to each house.			
	Traffic congestion at certain sections due roads detours	Ensure placing proper road and safety signs, and proper coordination with local authorities and police where needed Ensure proper traffic plan implementation when requested, Contractor shall submit a traffic plan and the municipality should approve it prior the construction works.	Contractor and Consultant	Municipality and Supervision Engineer	MDLF
	Land Use (Property Rights)	Avoid any use of private land during construction as any impact on land required LALAP, except of presence of legal document between contractor and citizen to use the land for short time. Contractor shall not use any land around street for any purpose	Consultant and Contractor	Municipality and Supervision Engineer	MDLF
	Loss of aesthetic features due to illegal dumps.	Cleaning and removal of wastes or deposits to landfills or designated areas. Clean the waste directly after finish daily work Proper plans for disposing off broken pipes, manholes and other waste to be included in the contract documents.	Consultant and Contractor	Municipality and Supervision Engineer	MDLF
ConstructiHon	Health and Safety of Workers	Dump at proper and approved sites. Workers commitment to ohs (vests, gloves, safety shoes, mask HD wearing apparel, helmet and others It is the responsibility of the contractor to provide the PPE and not the worker. Provide a first aid box close to the construction site Workers commitment to Health and Safety Guidelines Do not employ workers under the age of 18 Contractor should provide a safe place for workers for rest and have a lunch. All workers should be covered by a valid insurance. Commitment to Ministry of Health guidelines for Covid-19 Epidemic Provide sanitary lavatory for workers	Consultant &Contractor	Municipality & Supervision Engineer	MDLF
	Potential accidental break of water, wastewater, telecommunication, electricity or other utilities service	Survey of existing facilities during the design. The contractor consults relevant utilities, agencies or companies to survey lines locations and to to speed up repair of any broken line during construct. Contractor should maintain any of properties/water/wastewater pipes which were harmed due to construction works immediately. The contractor is required to store spare parts for maintenance in the construction site for quick action.	Consultant and Contractor	Municipality & Supervision Engineer	MDLF
	Construction waste generated.	Proper plans for disposing off construction waste including waste into municipality approved landfill. Removal of construction waste as soon as possible; Storage of work materials onsite is conditional to the approval of the supervisor engineer.	Consultant and Contractor	Municipality	MDLF

Phase	Impact	Mitigation Measure	Operation / Responsibility Supervision		Monitoring
		For other generated as generated from used machinery (used oil) and in case of spill ensure to contain the spill, cover with sand or sawdust, in addition to cleanup of the affected surfaces should commence directly noting that its to be included in the contract documents. Further recommendations include: Use of new vehicles and machinery, Ensure that oil changing process occurs in garage or proper an safe usage of oil if used in site			
	Any other potential of accidental environmental and social impact	Mitigation measure requested by municipality engineer pursuing to ESMP and guidelines to contractors for road projects. Provide proper safety tools and procedures including medical masks, gloves and sanitizers to prevent spreading of Covid-19. Prevent children under 18 years old from working on the project or any of its related activities.	Contractor	Municipality	MDLF
	Due to obstruction, traffic concentration will be transferred to other streets causing traffic congestions.	Monitor the use of traffic signs, safety measures and tools. Provision of adequate notification procedures for any detours and road closures in coordination with municipality Comply to traffic plan when required by the contract	Consultant and Contractor	Municipality & Supervision Engineer	MDLF
Con	Noise generation during construction activities.	 Construction management of working hours Proper maintained and serviced vehicles. 	Consultant and Contractor	Municipality & Supervision Engineer	MDLF
Construction	Potential uncover and damage of archaeological remains.	Additional survey for potential sites Monitoring of site excavation.	Consultant and Contractor	Municipality & Supervision Engineer	MDLF/ MoAT
on	Side soil and erosion.	Check the slope and compaction of the shoulder, proper curbstone to prevent erosion, construct retaining wall in certain places.	Consultant and Contractor	Municipality & Supervision Engineer	MDLF
	Uprooting of trees.	A void cutting trees if it does not make a real obstacle. Some trees may be trimmed. Once required during construction, LALAPF shall be followed Planting new trees.	Consultant and Contractor	Municipality & Supervision Engineer	MDLF
P	Long-term traffic increase.	Traffic signs to reduce the traffic (one-way sign) and traffic calming signs.	Municipality	Municipality & Supervision Engineer	- Municipality
st-c	Increase the risk of accidents.	Traffic regulation signs and traffic calming measures.	Municipality	Municipality	- Municipality
Post-construction	Cumulative increase in dust and gas emissions because of more traffic movement.	Control the traffic speed. Maintain vegetation cover. Regular checks of vehicle.	Municipality		Municipality -
	Maintenance of new assets (roads and associated wastewater and storm drainage networks)	Prepare an annual maintenance plan as well as setting an allocation for the necessary financial resources in the annual budget.	Municipality	MoLG	- Municipality
	Loss of aesthetic due to the increase in the built up area around the new road	Proper design of landscaping for the area and around the road which may include some plantation activities.	Municipality	Municipality	Municipality

Annex 2: Environmental Management Guidelines for Contractors (provisional to Construction in Roads)

Purpose

The purpose of these environmental management guidelines for contractors is to define minimum standards of construction practice acceptable to the MDLF.

Roads

In order to carry out the rehabilitation works, it may be necessary to close or divert certain specified roads, either permanently or temporarily during the construction period. The contractor should arrange diversions for providing alternative route for transport and/or pedestrians.

After breaking up, closing or otherwise interfering with any street or footpath to which the public has access, the Contractor shall make such arrangements as may be reasonably necessary so as to cause as little interference with the traffic in that street or footpath during construction of the rehabilitation works as shall be reasonably practicable.

Wherever the rehabilitation works interfere with existing public or private roads or other ways over which there is a public or private right of way for any traffic, the Contractor shall construct diversion ways wherever possible.

Movement of Trucks and Construction Machinery

The Contractor moving solid or liquid construction materials and waste shall take strict measures to minimize littering of roads by ensuring that vehicles are loaded in such a manner as to prevent falling off or spilling of construction materials and by sheeting the sides and tops of all vehicles carrying mud, sand, other materials and debris.

Traffic Safety Measures

The Contractor shall provide, erect and maintain such traffic signs, road markings, barriers and traffic control signals and such other measures as may be necessary for ensuring traffic safety around the rehabilitation site. The Contractor shall not commence any work that affects the public motor roads and highways until all traffic safety measures necessitated by the work are fully operational.

Access across the Construction Site and to Frontages

In carrying out the rehabilitation works, the Contractor shall take all reasonable precautions to prevent or reduce any disturbance or inconvenience to the owners, tenants or occupiers of the adjacent properties, and to the public generally. The Contractor shall maintain any existing right of way across the whole or part of the rehabilitation site and public and private access to adjoining frontages in a safe condition and to a standard not less than that pertaining at the commencement of the contract. If required, the Contractor shall provide acceptable alternative means of passage or access to the satisfaction of the persons affected.

Protection of the Existing Installations

The Contractor shall properly safeguard all buildings, structures, works, services or installations from harm, disturbance or deterioration during the concession period. The Contractor shall take all necessary measures required for the support and protection of all buildings, structures, pipes,

cables, sewers and other apparatus during the concession period, and to repair any damage occurs in coordination with Municipality and concerned authorities.

Noise and Dust Control

The Contractor shall take all practicable measures to minimize nuisance from dust and noise from the rehabilitation sites. This includes:

- Respecting normal working hours in or close to residential areas;
- Maintaining equipment in a good working order to minimize extraneous noise from mechanical vibration, creaking and squeaking, as well as emissions or fumes from the machinery;
- Shutting down equipment when it is not directly in use.

Regarding Dust control, contractor is asked to provide a water tanker, and apply water spraying when required to minimize the impact of dust.

Waste Disposal

The Contractor must agree with the municipality about arrangements for construction waste disposal. The municipality shall designate a dumping site or landfill for the disposal of solid waste. .

Protection of Trees And Other Vegetation

The Contractor shall avoid loss of trees and damage to other vegetation wherever possible. Adverse effects on green cover within or in the vicinity of the rehabilitation site shall be minimized.

Clearance of Rehabilitation Site On Completion

The Contractor shall clear up all working areas both within and outside the rehabilitation site and accesses as work proceeds and when no longer required for the carrying out of the Rehabilitation works. All surplus soil and materials, sheds, offices and temporary fencing shall be removed, post holes filled and the surface of the ground restored as near as practicable to its original condition.

Site Construction Safety and Insurance

Further to enforcing the compliance of environmental management, contractors are responsible on providing insurance for construction labors, staff attending to the construction site, citizens for each sub-project, the insurance requirements and clauses are stated in the bidding documents complying to the labor law.

Annex 3: Environmental and Social Management Checklist							
Municipality:							
Project Name:							
Date:							
#	Impact to check	Yes	No	Remarks	Safeguards / Mitigation measure/s carried on		
1	Noise/alarm generation						
2	Dust spreading out						
3	Odor emission						
4	Traffic problems (hindering, detours, closureetc.)						
5	Solid Waste Services problems						
6	Sewerage Services problems						
7	Water Services problems						
8	Green cover negatively affected						
9	Pedestrians' safety endangered						
10	Electricity services problems						
11	Landscape / aesthetic element/s deteriorated		-				
12	Natural Resources negatively affected						
13	Biodiversity & Wildlife threatened						
14	Recreational sites negatively affected						
15	Heritage and archaeological sites negatively affected						
16	Agricultural activities negatively affected						
17	Industrial utilities negatively affected						
18	Workers safety and health considered						
19	Workers commitment to OHS (vests, gloves, HD wearing apparel etc)						
20	Working machines suitability						
21	Additional Impact (Add it)						
22.					Comments:		
• • • • • • •			• • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •			
23.	23. Recommendations:						
				•••••			

Environmental Specialist Signature Date