

INVITATION TO BID

Supply, lay & compacting of asphaltic concrete wearing course at Al Jabalain byway road, Al Jabalain Locality of White Nile State, Sudan

e-Tendering Event ID: 0000004517

ITB No.: ITB/KRT/19/043

Project: UNHABITAT

Country: Sudan

Issued on:2 October 2019

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SECTION 1. LETTER OF INVITATION

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

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

Section 1: This Letter of Invitation

Section 2: Instruction to Bidders

Section 3: Bid Data Sheet (BDS)

Section 4: Evaluation Criteria

Section 5: Schedule of Requirements and Technical Specifications

Section 6: Returnable Bidding Forms

- e Form A: Bid Submission Form
- Form B: Bidder Information Form
- 5 Form C: Joint Venture/Consortium/Association Information Form
- o Form D: Qualification Form
- Form E: Format of Technical Bid (including Implementation plan and Technical compliance sheet)
- o Form F: Price Schedule (including BOQ)
- o Form G: Form of Bid Security
- o Form H: Drawings
- o Form I: Sample Contract

If you are interested in submitting a Bid in response to this ITB, please prepare your Bid in accordance with the requirements and procedure as set out in this ITB and submit it by the Deadline for Submission of Bids set out in Bid Data Sheet by logging into the following link:

https://etendering.partneragencies.org

Event ID: SDN10-0000004517

In case your company is not registered in the e-Tendering Module, please use the following temporary username and password to register your company/firm:

Username: event.quest Password: why2change

Bidders who will be registered on the e-Tendering will be able to download the complete bidding documents from the e-Tendering website at: https://etendering.partneragencies.org. Bidders can download the complete tender documentation from the e-Tendering upon registration.

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

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

Note: UNDP is undertaking the procurement process on behalf of UNHABITAT. In the entire document, UNDP shall read UNHABITAT. Issued by Approved by:

Name: Selma Zarroug Title: Procurement Associate

Date: October 2, 2019

Name: Mehdi Khalili Kulluk

Title: Head of Procurement Date: October 2, 2019

1TB/KRT/19/043 - Supply Tay & compacting of asphaltic concrete wearing course at Al Jabalain

SECTION 2. INSTRUCTION TO BIDDERS

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

3.2	It is the Bidder's responsibility to ensure that its employees, joint venture
	members, sub-contractors, service providers, suppliers and/or their employees
	meet the eligibility requirements as established by UNDP.

4. Conflict of Interests

- 4.1 Bidders must strictly avoid conflicts with other assignments or their own interests, and act without consideration for future work. Bidders found to have a conflict of interest shall be disqualified. Without limitation on the generality of the above, Bidders, and any of their affiliates, shall be considered to have a conflict of interest with one or more parties in this solicitation process, if they:
 - a) Are or have been associated in the past, with a firm or any of its affiliates which have been engaged by UNDP to provide services for the preparation of the design, specifications, Terms of Reference, cost analysis/estimation, and other documents to be used for the procurement of the goods and services in this selection process;
 - b) Were involved in the preparation and/or design of the programme/project related to the goods and/or services requested under this ITB; or
 - c) Are found to be in conflict for any other reason, as may be established by, or at the discretion of UNDP.
- 4.2 In the event of any uncertainty in the interpretation of a potential conflict of interest, Bidders must disclose to UNDP, and seek UNDP's confirmation on whether or not such conflict exists.
- 4.3 Similarly, the Bidders must disclose in their Bid their knowledge of the following:
 - a) If the owners, part-owners, officers, directors, controlling shareholders, of the bidding entity or key personnel who are family members of UNDP staff involved in the procurement functions and/or the Government of the country or any Implementing Partner receiving goods and/or services under this ITB; and
 - b) All other circumstances that could potentially lead to actual or perceived conflict of interest, collusion or unfair competition practices.

Failure to disclose such an information may result in the rejection of the Bid or Bids affected by the non-disclosure.

4.4 The eligibility of Bidders that are wholly or partly owned by the Government shall be subject to UNDP's further evaluation and review of various factors such as being registered, operated and managed as an independent business entity, the extent of Government ownership/share, receipt of subsidies, mandate and access to information in relation to this ITB, among others. Conditions that may lead to undue advantage against other Bidders may result in the eventual rejection of the Bid.

B. PREPARATION OF BIDS

General Considerations

- 5.1 In preparing the Bid, the Bidder is expected to examine the ITB in detail. Material deficiencies in providing the information requested in the ITB may result in rejection of the Bid.
- 5.2 The Bidder will not be permitted to take advantage of any errors or omissions in the ITB. Should such errors or omissions be discovered, the Bidder must notify the UNDP accordingly.

6. Cost of Preparation of Bid

6.1 The Bidder shall bear all costs related to the preparation and/or submission of the Bid, regardless of whether its Bid is selected or not. UNDP shall not be

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

- a copy of the Bid Security in their bid and the original of the Bid Security must be sent via courier or hand delivery as per the instructions in BDS.
 12.5 The Bid Security may be forfeited by UNDP, and the Bid rejected, in the event of any, or combination, of the following conditions:
 a) If the Bidder withdraws its offer during the period of the Bid Validity specified in the BDS, or;
 - b) In the event the successful Bidder fails:
 - i. to sign the Contract after UNDP has issued an award; or
 - ii. to furnish the Performance Security, insurances, or other documents that UNDP may require as a condition precedent to the effectivity of the contract that may be awarded to the Bidder.

13. Currencies

- 13.1 All prices shall be quoted in the currency or currencies indicated in the BDS. Where Bids are quoted in different currencies, for the purposes of comparison of all Bids:
 - a) UNDP will convert the currency quoted in the Bid into the UNDP preferred currency, in accordance with the prevailing UN operational rate of exchange on the last day of submission of Bids; and
 - b) In the event that UNDP selects a Bid for award that is quoted in a currency different from the preferred currency in the BDS, UNDP shall reserve the right to award the contract in the currency of UNDP's preference, using the conversion method specified above.

14. Joint Venture, Consortium or Association

- 14.1 If the Bidder is a group of legal entities that will form or have formed a Joint Venture (JV), Consortium or Association for the Bid, they shall confirm in their Bid that: (i) they have designated one party to act as a lead entity, duly vested with authority to legally bind the members of the JV, Consortium or Association jointly and severally, which shall be evidenced by a duly notarized Agreement among the legal entities, and submitted with the Bid; and (ii) if they are awarded the contract, the contract shall be entered into, by and between UNDP and the designated lead entity, who shall be acting for and on behalf of all the member entities comprising the joint venture.
- 14.2 After the Deadline for Submission of Bid, the lead entity identified to represent the JV, Consortium or Association shall not be altered without the prior written consent of UNDP.
- 14.3 The lead entity and the member entities of the JV, Consortium or Association shall abide by the provisions of Clause 9 herein in respect of submitting only one Bid.
- 14.4 The description of the organization of the JV, Consortium or Association must clearly define the expected role of each of the entities in the joint venture in delivering the requirements of the ITB, both in the Bid and the JV, Consortium or Association Agreement. All entities that comprise the JV, Consortium or Association shall be subject to the eligibility and qualification assessment by UNDP.
- 14.5 A JV, Consortium or Association in presenting its track record and experience should clearly differentiate between:
 - a) Those that were undertaken together by the JV, Consortium or Association; and

	 Those that were undertaken by the individual entities of the JV, Consortium or Association.
	14.6 Previous contracts completed by individual experts working privately but who are permanently or were temporarily associated with any of the member firms cannot be claimed as the experience of the JV, Consortium or Association or those of its members, but should only be claimed by the individual experts themselves in their presentation of their individual credentials
	14.7 JV, Consortium or Associations are encouraged for high value, multi-sectoral requirements when the spectrum of expertise and resources required may not be available within one firm.
15. Only One Bid	15.1 The Bidder (including the individual members of any Joint Venture) shall submit only one Bid, either in its own name or as part of a Joint Venture.
	 15.2 Bids submitted by two (2) or more Bidders shall all be rejected if they are found to have any of the following: a) they have at least one controlling partner, director or shareholder in common; or b) any one of them receive or have received any direct or indirect subsidy from the other/s; or c) they have the same legal representative for purposes of this ITB; or
	 d) they have the same legal representative for purposes of this fit, of they have a relationship with each other, directly or through common third parties, that puts them in a position to have access to information about, or influence on the Bid of another Bidder regarding this ITB process; e) they are subcontractors to each other's Bid, or a subcontractor to one Bid also submits another Bid under its name as lead Bidder; or some key personnel proposed to be in the team of one Bidder participates in more than one Bid received for this ITB process. This condition relating to the personnel, does not apply to subcontractors being included in more than one Bid.
16. Bid Validity Period	16.1 Bids shall remain valid for the period specified in the BDS, commencing on the Deadline for Submission of Bids. A Bid valid for a shorter period may be rejected by UNDP and rendered non-responsive.
	16.2 During the Bid validity period, the Bidder shall maintain its original Bid without any change, including the availability of the Key Personnel, the proposed rates and the total price.
17. Extension of Bid Validity Period	17.1 In exceptional circumstances, prior to the expiration of the Bid validity period, UNDP may request Bidders to extend the period of validity of their Bids. The request and the responses shall be made in writing, and shall be considered integral to the Bid.
	17.2 If the Bidder agrees to extend the validity of its Bid, it shall be done without any change to the original Bid.
	17.3 The Bidder has the right to refuse to extend the validity of its Bid, in which case, the Bid shall not be further evaluated.
18. Clarification of Bid (from the Bidders)	18.1 Bidders may request clarifications on any of the ITB documents no later than the date indicated in the BDS. Any request for clarification must be sent in writing in the manner indicated in the BDS. If inquiries are sent other than specified channel, even if they are sent to a UNDP staff member, UNDP shall have no

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

Hard copy (manual) submission

- 22.4 Hard copy (manual) submission by courier or hand delivery allowed or specified in the BDS shall be governed as follows:
 - a) The signed Bid shall be marked "Original", and its copies marked "Copy" as appropriate. The number of copies is indicated in the BDS. All copies shall be made from the signed original only. If there are discrepancies between the original and the copies, the original shall prevail.
 - (b) The Technical Bid and Price Schedule must be sealed and submitted together in an envelope, which shall:
 - i. Bear the name of the Bidder;
 - ii. Be addressed to UNDP as specified in the BDS; and
 - iii. Bear a warning not to open before the time and date for Bid opening as specified in the BDS.

If the envelope with the Bid is not sealed and marked as required, UNDP shall assume no responsibility for the misplacement, loss, or premature opening of the Bid.

Email and e Tendering submissions

- 22.5 Electronic submission through email or e-Tendering, if allowed as specified in the BDS, shall be governed as follows:
 - a) Electronic files that form part of the Bid must be in accordance with the format and requirements indicated in BDS;
 - b) Documents which are required to be in original form (e.g. Bid Security, etc.) must be sent via courier or hand delivered as per the instructions in BDS.
- 22.6 Detailed instructions on how to submit, modify or cancel a bid in the e-Tendering system are provided in the e-Tendering system Bidder User Guide and Instructional videos available on this link: http://www.undp.org/content/undp/en/home/operations/procurement/busine ss/procurement-notices/resources/

23. Deadline for Submission of Bids and Late Bids

23.1 Complete Bids must be received by UNDP in the manner, and no later than the date and time, specified in the BDS. UNDP shall only recognise the actual date and time that the bid was received by UNDP.UNDP shall not consider any Bid that is received after the deadline for the submission of Bids.

24. Withdrawal, Substitution, and Modification of Bids

- 24.1 A Bidder may withdraw, substitute or modify its Bid after it has been submitted at any time prior to the deadline for submission.
- 24.2 Manual and Email submissions: A bidder may withdraw, substitute or modify its Bid by sending a written notice to UNDP, duly signed by an authorized representative, and shall include a copy of the authorization (or a Power of Attorney). The corresponding substitution or modification of the Bid, if any, must accompany the respective written notice. All notices must be submitted in the same manner as specified for submission of Bids, by clearly marking them as "WITHDRAWAL" "SUBSTITUTION," or "MODIFICATION"
- 24.3 e-Tendering: A Bidder may withdraw, substitute or modify its Bid by Cancelling, Editing, and re-submitting the Bid directly in the system. It is the responsibility of the Bidder to properly follow the system instructions, duly edit and submit a substitution or modification of the Bid as needed. Detailed instructions on how to cancel or modify a Bid directly in the system are provided in the Bidder User Guide and Instructional videos.

25. Bid Opening	 24.4 Bids requested to be withdrawn shall be returned unopened to the Bidders (only for manual submissions), except if the bid is withdrawn after the bid has been opened. 25.1 UNDP will open the Bid in the presence of an ad-hoc committee formed by UNDP of at least two (2) members. 25.2 The Bidders' names, modifications, withdrawals, the condition of the envelope labels/seals, the number of folders/files and all other such other details as UNDP may consider appropriate, will be announced at the opening. No Bid shall be rejected at the opening stage, except for late submissions, in which case, the Bid shall be returned unopened to the Bidders. 25.3 In the case of e-Tendering submission, bidders will receive an automatic
_	notification once the Bid is opened.
D. EVALUATION OF	FBIDS
26. Confidentiality	26.1 Information relating to the examination, evaluation, and comparison of Bids, and the recommendation of contract award, shall not be disclosed to Bidders or any other persons not officially concerned with such process, even after publication of the contract award.
	Any effort by a Bidder or anyone on behalf of the Bidder to influence UNDP in the examination, evaluation and comparison of the Bids or contract award decisions may, at UNDP's decision, result in the rejection of its Bid and may subsequently be subject to the application of prevailing UNDP's vendor sanctions procedures.
27. Evaluation of Bids	27.1 UNDP will conduct the evaluation solely on the basis of the Bids received.
	 Evaluation of Bids shall be undertaken in the following steps: a) Preliminary Examination including Eligibility b) Arithmetical check and ranking of bidders who passed preliminary examination by price. c) Qualification assessment (if pre-qualification was not done) a) Evaluation of Technical Bids b) Evaluation of prices Detailed evaluation will be focussed on the 3 - 5 lowest priced bids. Further higher priced bids shall be added for evaluation if necessary
28. Preliminary Examination	28.1 UNDP shall examine the Bids to determine whether they are complete with respect to minimum documentary requirements, whether the documents have been properly signed, and whether the Bids are generally in order, among other indicators that may be used at this stage. UNDP reserves the right to reject any Bid at this stage.
29. Evaluation of Eligibility and Qualification	 29.1 Eligibility and Qualification of the Bidder will be evaluated against the Minimum Eligibility/Qualification requirements specified in the Section 4 (Evaluation Criteria). 29.2 In general terms, vendors that meet the following criteria may be considered qualified: a) They are not included in the UN Security Council 1267/1989 Committee's
	list of terrorists and terrorist financiers, and in UNDP's ineligible vendors' list;

	 b) They have a good financial standing and have access to adequate financial resources to perform the contract and all existing commercial commitments, c) They have the necessary similar experience, technical expertise, production capacity, quality certifications, quality assurance procedures and other resources applicable to the supply of goods and/or services required; d) They are able to comply fully with the UNDP General Terms and Conditions of Contract; e) They do not have a consistent history of court/arbitral award decisions against the Bidder; and f) They have a record of timely and satisfactory performance with their clients.
30. Evaluation of Technical Bid and prices	30.1 The evaluation team shall review and evaluate the Technical Bids on the basis of their responsiveness to the Schedule of Requirements and Technical Specifications and other documentation provided, applying the procedure indicated in the BDS and other ITB documents. When necessary, and if stated in the BDS, UNDP may invite technically responsive bidders for a presentation related to their technical Bids. The conditions for the presentation shall be provided in the bid document where required.
31. Due diligence	31.1 UNDP reserves the right to undertake a due diligence exercise, aimed at determining to its satisfaction, the validity of the information provided by the Bidder. Such exercise shall be fully documented and may include, but need not be limited to, all or any combination of the following:
	 a) Verification of accuracy, correctness and authenticity of information provided by the Bidder; b) Validation of extent of compliance to the ITB requirements and evaluation criteria based on what has so far been found by the evaluation team; c) Inquiry and reference checking with Government entities with jurisdiction on the Bidder, or with previous clients, or any other entity that may have done business with the Bidder; d) Inquiry and reference checking with previous clients on the performance on on-going or completed contracts, including physical inspections of previous works, as deemed necessary; e) Physical inspection of the Bidder's offices, branches or other places where business transpires, with or without notice to the Bidder; f) Other means that UNDP may deem appropriate, at any stage within the selection process, prior to awarding the contract.
32. Clarification of Bids	32.1 To assist in the examination, evaluation and comparison of Bids, UNDP may, at its discretion, request any Bidder for a clarification of its Bid.
	32.2 UNDP's request for clarification and the response shall be in writing and no change in the prices or substance of the Bid shall be sought, offered, or permitted, except to provide clarification, and confirm the correction of any arithmetic errors discovered by UNDP in the evaluation of the Bids, in accordance with the ITB.
	32.3 Any unsolicited clarification submitted by a Bidder in respect to its Bid, which is not a response to a request by UNDP, shall not be considered during the review and evaluation of the Bids.
33. Responsiveness of Bid	33.1 UNDP's determination of a Bid's responsiveness will be based on the contents of the bid itself. A substantially responsive Bid is one that conforms to all the terms, conditions, specifications and other requirements of the ITB without

	material deviation, reservation, or omission.
	33.2 If a bid is not substantially responsive, it shall be rejected by UNDP and may not subsequently be made responsive by the Bidder by correction of the material deviation, reservation, or omission.
34. Nonconformities, Reparable Errors and Omissions	34.1 Provided that a Bid is substantially responsive, UNDP may waive any non-conformities or omissions in the Bid that, in the opinion of UNDP, do not constitute a material deviation.
	34.2 UNDP may request the Bidder to submit the necessary information or documentation, within a reasonable period, to rectify nonmaterial nonconformities or omissions in the Bid related to documentation requirements. Such omission shall not be related to any aspect of the price of the Bid. Failure of the Bidder to comply with the request may result in the rejection of its Bid.
	34.3 For the bids that have passed the preliminary examination, UNDP shall check and correct arithmetical errors as follows:
	 if there is a discrepancy between the unit price and the line item total that is obtained by multiplying the unit price by the quantity, the unit price shall prevail and the line item total shall be corrected, unless in the opinion of UNDP there is an obvious misplacement of the decimal point in the unit price; in which case, the line item total as quoted shall govern and the unit price shall be corrected;
	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.
	34.4 If the Bidder does not accept the correction of errors made by UNDP, its Bid shall be rejected.
E. AWARD OF CON	TRACT
35. Right to Accept, Reject, Any or All Bids	35.1 UNDP reserves the right to accept or reject any bid, to render any or all of the bids as non-responsive, and to reject all Bids at any time prior to award of contract, without incurring any liability, or obligation to inform the affected Bidder(s) of the grounds for UNDP's action. UNDP shall not be obliged to award the contract to the lowest priced offer.
36. Award Criteria	36.1 Prior to expiration of the period of Bid validity, UNDP shall award the contract to the qualified and eligible Bidder that is found to be responsive to the requirements of the Schedule of Requirements and Technical Specification and has offered the lowest price.
37. Debriefing	37.1 In the event that a Bidder is unsuccessful, the Bidder may request for a debriefing from UNDP. The purpose of the debriefing is to discuss the strengths and weaknesses of the Bidder's submission, in order to assist the Bidder in improving its future Bids for UNDP procurement opportunities. The content of other Bids and how they compare to the Bidder's submission shall not be discussed.

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

	and-sanctions.html
46. Other Provisions	46.1 In the event that the Bidder offers a lower price to the host Government (e.g. General Services Administration (GSA) of the federal government of the Unite States of America) for similar goods and/or services, UNDP shall be entitled to the same lower price. The UNDP General Terms and Conditions shall have precedence.
	46.2 UNDP is entitled to receive the same pricing offered by the same Contractor i contracts with the United Nations and/or its Agencies. The UNDP General Term and Conditions shall have precedence.
	46.3 The United Nations has established restrictions on employment of (former) UI staff who have been involved in the procurement process as per bulleti ST/SGB/2006/15 http://www.un.org/en/ga/search/view_doc.asp?symbol=ST/SGB/2006/15&refe
	er

SECTION 3. BID DATA SHEET

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

BDS No.	Ref. to Section.2	Data	Specific Instructions / Requirements
1	7	Language of the Bid	English
2	N/A	Title of Goods/Services/Work Required:	Supply, lay & compacting of asphaltic concrete wearing course at Al Jabalain byway road, Al Jabalain Locality of White Nile State, Sudan
3	N/A	Submitting Bids for Parts or sub-parts of the Schedule of Requirements (partial bids)	Not Permitted
4	20	Alternative Bids	Shall not be considered
5	21	Pre-Bid conference	Will not be conducted
6	16	Bid Validity Period	90 days
7	13	Bid Security	Not Required
8	41	Advanced Payment upon signing of contract	Not Applicable
13	42	Liquidated Damages	Will be imposed as follows: Percentage of contract price per day of delay: 0.33% Max. number of days of delay 30 days, after which UNDP may terminate the contract.
14	40	Performance Security	Not Required
15	12	Currency of Bid	☑ Local Currency (SDG); or☑ United States Dollars (USD)

			 Method for Currency Conversion: UN Operational Exchange Rate prevailing on closing date of submission of Bids. Notes: The contract will be signed in the currency selected by the bidder and does not carry any contract price variations due to currency devaluation. In case of selection of USD, Bank account in US\$ is to be provided. All USD and SDG payments should be done via bank transfer or depositing to Company bank account.
16	31	Deadline for submitting requests for clarifications/ questions	4 days before the submission deadline
17	31	Contact Details for submitting clarifications/questions	Focal Person in UNDP: Roweida Mohamed, Procurement Analyst, UNDP, Sudan E-mail address: selma.zarroug@undp.org and copying: mehdi.khalili@undp.org Any delay in UNDP's response shall be not used as a reason for extending the deadline for submission, unless UNDP determines that such an extension is necessary and communicates a new deadline to the Proposers
18	18, 19 and 21	Manner of Disseminating Supplemental Information to the ITB and responses/clarifications to queries	
19	23	Deadline for Submission	17 th October 2019 @ 14:00 Hours (Sudan, Khartoum local time (GMT +2:00 Hours) Note: Date and time visible on the main screen of the event (on the ETendering portal) will be final and prevail over any other closing time indicated elsewhere, in case they are different. The correct bid closing time is as indicated in the E-Tendering portal and system will not accept any bid after that time. It is the responsibility of the bidder to make sure bids are submitted within this deadline. UNDP will not accept any bid that is not submitted directly to the system. Try to submit your bid a day prior or well before the closing time. Do not wait until last minute. If you face any issue submitting your proposal at the last minute, UNDP may not be able to assist.
20	22	Allowable Manner of Submitting Bids	⊠ e-Tendering

21	22	Bid Submission Address	https://etendering.partneragencies.org
			Event ID: SDN10- 0000004517
22	22	Electronic submission requirements	 ☑ Format: PDF files (Preferred) ☑ File names must be maximum 60 characters long and must not contain any letter or special character other than from Latin alphabet/keyboard. ☑ All files must be free of viruses and not corrupted. If you are uploading a large number of files (ex. 15 or more), please zip the files into a ZIP folder and upload the folder instead of each file individually. You can upload several ZIP folders, but if you do this, please note that the total size of each ZIP folder uploaded cannot exceed 50MB.
23	25	Date, time and venue for the opening of bid	In the case of e-Tendering submission, bidders will receive an automatic notification once their Bids are opened.
24	N/A	Expected date for commencement of Contract	November 17, 2019
25	N/A	Maximum expected duration of contract	2 Months
26	35	UNDP will award the contract to:	☑ One Bidder
27	39	Type of Contract	Contract for Civil Works http://www.undp.org/content/undp/en/home/procurement/business/how-we-buy.html
28		Criteria for the Award and Evaluation of Bid	 Award Criteria: ✓ Non-discretionary "Pass" or "Fail" rating on the detailed contents of the Schedule of Requirements and Technical Specifications ✓ Compliance to the qualification requirements (Form B).
			Evaluation Criteria: It will consist of 3 stages, namely stage of Eligibility; Preliminary Evaluation; and Bid Evaluation.
			 Stage 1: Eligibility: ✓ First, bids will be checked for their eligibility. If requested documents are not available with the bids, the bid will be disqualified at the stage of eligibility check.
			Stage 2: Preliminary evaluation:
			The following document will be reviewed: ✓ Certificate of Incorporation/ Business Registration;
			✓ Company profile;
			 ✓ Document establishing and evidencing five (5) years' working experience in the construction field relevant to this ITB; ✓ List of similar contracts in nature, complexity and value over the past

	I		
			3 years; ✓ List of ongoing contracts with completion ratio; ✓ Latest Audited Financial Statement (Income statement and Balance Sheet) including Auditor's report for the last three years (2016, 2017 and 2018); ✓ Construction Work Schedule for the Project; ✓ Bid Submission Form, completed and signed; ✓ Bid Security; ✓ CVs of the Engineers, and other technical staff proposed to be deployed to the project; ✓ List of required equipment; ✓ Price Schedule and Priced BOQ, completed and signed; ✓ Joint Venture (JV) Certificate or confirmation to establish JV in the case where two or more companies apply to single bid
			 Stage 3: Bid Evaluation Criteria: ✓ Minimum number of years of experience in Construction field: 5 years; ✓ Minimum number of projects with similar contract value successfully completed as Main Contractor over the past 3 years [2 projects]; ✓ Statement of Satisfactory Performance from the Top (2 Two] Clients for similar project size and contract value for the last three years; ✓ Full compliance of Bid to the Technical requirements and BOQ; ✓ Sound and good standing of financial status: (minimum acceptable Current Ratio 1.0); ✓ Minimum average annual turnover of US\$200,000 in the last 3 years (2016, 2017 and 2018); ✓ Suitability of Construction Work Schedule; ✓ Suitability and technical qualification of the technical personnel proposed to the project in relation to their qualification and years of experiences; ✓ Relevance and efficiency of List of the Machinery and equipment owned by bidder/and Proposed for the Contract execution. ✓ Current Ratio not less than 1.0.
29		UNDP Contract Terms and Conditions that will apply	UNDP General Terms and Conditions for Works http://www.undp.org/content/undp/en/home/procurement/business/how-we-buy.html
	39	Conditions for Determining Contract Effectivity	Contract is considered effective only upon occurrence of all the below events: ✓ Signature of the Contract by both parties; ✓ UNDP's approval of plans, drawings, samples, methods of statement etc.; ✓ UNDP's Handover of Site to Contactor;
30		Post qualification Actions	At the discretion of UNDP, it may conduct the <u>post qualification</u> <u>actions</u> using one or more; or all of the actions indicated below: ✓ Assessment of Contractors current workload for ongoing projects. ✓ Verification of accuracy, correctness and authenticity of the information provided by the bidder on the legal, technical and financial documents submitted;

31	Required Documents that must be Submitted to Establish Qualification of Bidders (In "Certified True Copy" form only	 ✓ Inquiry and reference checking with Government entities with jurisdiction on the bidder, or any other entity that may have done business with the bidder; ✓ Inquiry and reference checking with other previous clients on the quality of performance on ongoing or previous contracts completed; ✓ Ocular Inspections/Visits to the previously completed projects for other clients; ✓ Ocular Inspection of current Office, equipment possessed, and ongoing construction sites handled by the company ✓ Company Profile, including printed brochures on services being provided; ✓ Certificate of Incorporation/ Business Registration; ✓ Document establishing and evidencing five (5) years' working experience in the field of construction relevant to this ITB in terms of value and nature. ✓ Latest Audited Financial Statement (Income statement and Balance Sheet) including Auditor's report for the last three years; ✓ CVs of the Engineers, and other technical staff proposed to be deployed to the project; ✓ List of previous similar works completed during the last three years only; ✓ Statement of Satisfactory Performance from the Top 3 Clients; ✓ List of machineries and equipment as per the ITB requirements; ✓ Construction Work Schedule for the project; ✓ Form B: Bidder Information Form ✓ Form B: Bidder Information Form ✓ Form D: Qualification Form ✓ Form E: Format of Technical Bid (including Implementation plan and Technical compliance sheet). ✓ Form F: Price Schedule Form (Mandatory) Note: ✓ In the case where two or more companies willing apply to single bid as the Joint Venture (JV) must provide the Supporting documents for each of participating companies and submit Joint Venture (JV) Certificate or confirmation to establish JV.
32	Other Information Related to the ITB	 ✓ Bidders are free to choose the currency of bid (USD or SDG). The currency of bid will be the currency of contract. It is up to the bidders to manage the cash withdrawal from their bank. ✓ Bidders willing to apply as the Joint Venture (JV) must indicate in the bid that it is a JV undertaking; and provide the legally registered JV certificate in case of selection but before contract signing in accordance with section 5 of this ITB. One of the partners MUST be Local representative to cater for the services that may be necessary during the defect liability period.

Preliminary Examination of the Bids

Instruction to Bidders (Examples of Bid Rejection)

The bidding documents contain the full list of instructions relevant to each particular bid and should be followed carefully.

Bids have been rejected at the submission stage or found to be technically noncompliant due to errors in presentation and failure to follow bidding instructions.

Below are some of the more common examples of why bids are rejected by UNDP:

- 1. Bid does not include the signed and stamped Bid Submission Form (Form A).
- 2. Bid is not signed as per the instructions in the ITB.
- 3. Not all sufficient documents have been provided.
- 4. Documents provided are not in English or Arabic (as applicable).
- 5. Documents provided do not directly address each point of the evaluation criteria.
- 6. The Bidder failed to read the minutes of the bidders' conference and to include the relevant points in their bid.
- 7. Bid is more like a brochure for the firm without specifically addressing the specific evaluation criteria of the ITB and TOR.
- 8. Bid does not offer goods or services which have been specifically requested by UNDP in the Terms of Reference/ Scope of Works
- 9. The bidder proposes a major deviation to ITB Technical Requirement and Specification.
- 10. The Bidder failed to consult the UNDP website before the deadline for bid submission and did not see the changes to the ITB/TOR listed there which need to be incorporated in the bid.
- 11. The bidder declines or proposes a major deviation to UNDP General Conditions of Contract.

SECTION 4. EVALUATION CRITERIA

Preliminary Examination Criteria

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

- Appropriate signatures
- Power of Attorney
- Minimum Bid documents provided
- Bid Validity
- Priced BOQs as per the format requested in Form F.

Minimum Eligibility and Qualification Criteria

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

If the Bid is submitted as a Joint Venture/Consortium/Association, each member should meet the minimum criteria, unless otherwise specified.

Subject	Criteria	Document Submission requirement
ELIGIBILITY		
Legal Status	Vendor is a legally registered entity.	Form B: Bidder Information Form
Eligibility	Vendor is not suspended, nor debarred, nor otherwise current ratio to the se identified as ineligible by any UN Organization or the World Bank Group or any other international Organization in accordance with ITB clause 3.	Form A: Bid Submission Form
Conflict of Interest	No conflicts of interest in accordance with ITB clause 4.	Form A: Bid Submission Form
Bankruptcy	Has not declared bankruptcy, is not involved in bankruptcy or receivership proceedings, and there is no judgment or pending legal action against the vendor that could impair its operations in the foreseeable future.	Form A: Bid Submission Form
Certificates and Licenses	 Certificate of Registration of the business, including Articles of Incorporation, or equivalent document if Bidder is not a corporation. Interested firms must have obtained appropriate permission/registration from relevant Cooperation or governmental body to provide the legal status to operate in Sudan; Official appointment as local representative, if Bidder is submitting a Bid on behalf of an entity located outside the country. Provide the legally registered JV certificate in case of selection but before contract signing in accordance with section 5 of this ITB. One of the partners MUST be Local 	Form B: Bidder Information Form

	· ·		for the services that may be ect liability period.	
QUALIFICATION				
History of Non- Performing Contracts ¹	·			Form D: Qualification Form
Litigation History	No consister against the Bi	•	court/arbitral award decisions ast 3 years.	Form D: Qualification Form
Previous Experience	Minimum 5 y field or relev		ant experience in Construction his ITB	Form D: Qualification Form
	Minimum 2 contracts (road construction/maintenance) of similar value, nature and complexity implemented over the last 3 years as Main Contractor			Form D: Qualification Form
	(For JV/Consortium/Association, all Parties cumulatively should meet the requirement).			
	Statement of Satisfactory Performance from the Top [two] Clients in terms of Contract Value for the last two years			Submitted Statement of Satisfactory documents
Financial Standing	Minimum annual average turnover of USD 200,000 in the last 3 years (2016, 2017 and 2018). (For JV/Consortium/Association, all Parties cumulatively		Form D: Qualification Form, and Audited financial statements	
	should meet the requirement). Bidder must demonstrate the current soundness of its financial standing and indicate its prospective long-term profitability.		Form D: Qualification Form	
	Current ratio should not be less than 1.0			
	(For JV/Consortium/Association, all Parties cumulatively should meet the requirement).			
Technical Evaluation	compliance o	The technical bids shall be evaluated on a pass/fail basis for compliance or non-compliance with the technical specifications identified in the bid document.		
Proposed Staff The bidder shall submit CVs of the below proposed personnel:		Vs of the below proposed key	Form E: Technical Bid Form Format for CV of	
		of the Tech	nical Staff required:	Proposed Key Personnel
	Category/ Edu	ucation alification	Minimum Year of experience in the Similar Construction Project	
	Pavement deg	E or Bachelor's gree in Civil gineering.	10 years of experience at least for engineers with BSC in civil /architecture engineering.	
	Engineer		• 7 years of experience for Master in civil /architecture Engineering.	

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

	Materials Engineer Civil Engineering OR Diploma Degree in Civil Engineering OR Diploma Degree in Civil Engineering OR Minimum 5 years' experience after bachelor's degree in Clean Engineering OR Minimum 7 years' experience after Diploma's Degree from Institution or Civil Engineering Surveyors Surveyor Diploma Degree from Institution of land surveying materials inspector Asphalt foreman High school diploma Degree after Diploma's Degree after Diploma's Degree after Diploma's Degree after Diploma's Degree S years experience after Diploma's Degree after Diploma's Degree S years paving experience with at least 2 years' of that experience as a Foreman	e e
Completion of Works	2 Months	Form E: Technical Bid Form
Financial Evaluation	Detailed analysis of the price schedule based requirements listed in Section 5 and quoted for by bidders in Form F. Price comparison shall be based on the landed princluding transportation, insurance and the total cost ownership (including consumption, installat commissioning, training, etc., where applicable) Comparison with budget/internal estimates, as well as, wo other bidder's price in relation to unit price.	ice, of ion,
Equipment	# Equipment Required Qty 1 Excavator 1 2 Loader 1 3 padfoot compactor 1 4 Motor grader 1 5 Water Trucks 2 6 asphalt compactor with dynamic vibration system of double drum	Form E: Technical Bid Form Format for list of equipment

SECTION 5A: SCHEDULE OF REQUIREMENTS AND TECHNICAL SPECIFICATIONS

Statement of Works (SoW)

Supply, lay & compacting of asphaltic concrete wearing course at Al Jabalain byway road, Al Jabalain Locality of White Nile State, Sudan ITB/KRT/19/043

The Contractor/s is required to perform/execute the Civil Works for the Supply, lay & compacting of asphaltic concrete wearing course at Al Jabalain byway road, Al Jabalain Locality of White Nile State, Sudan, as part of UN- Habitat Emergency Support to hosting communities affected by South Sudanese refugees in White Nile State – SUDAN. The project will be supplement through the Bill of Quantities, Drawings, technical Specifications, UNDP guidance's and UN- Habitat supervising Engineer

The road is a narrow urban road which links east bank of the White Nile River and old market with Al Jabalain highway road. The road serves the light traffic in the area and hosting communities affected by South Sudanese refugees in Al Jabalain locality in White Nile state.

Project Background:

The project aims to mitigate the risk of conflicts, Particularly, a large number and unexpected influx of South Sudanese refugees fled into Sudan, the highest number of the refugees are in White Nile State that is located to the south of Khartoum State.

The continuous arrival of South Sudanese refugees has severely resulted to rapid social instability between the refugees and hosting communities because of the deterioration of access to basic services. White Nile State has already been under severe pressures that provoking potential conflicts between two groups. 79.8 percent of the population do not have access to adequate and safe sanitation and hygiene in White Nile State. It became an emergency to improve key market infrastructure including improvement of access roads, sanitation and hygienic, and ensure safe display of commodities to prevent outbreak of AWD..

Project Location:

The locality of the Al Jabalain is located in the southern part of the White Nile state and on the east bank of the White Nile River between latitudes 30: 13-12. And long lines 32.48-33.15 and bounded by the North of Rabak, Sennar from East and El Salam locality from West.

Works specifications:

BITUMINOUS CONSTRUCTION: the application of a bitumen prime and tack coat to be applied on a prepared pavement layer. A prime coat means a thin layer of low viscosity bituminous binder applied to an absorbent non-bituminous surface. If the prime coat is to be trafficked, it shall be covered with binding material. A tack coat means a thin layer of bituminous binder applied to a bituminous surface.

MATERIAL:

SCOPE: All material sources and the quality of materials proposed for use in the works shall be approved prior to procurement or processing material from such sources. Inspection, sampling, testing and re-testing as necessary, shall be at the contractor's expenses.

SAMPLING AND TESTING OF AGGREGATE:

- In order to ascertain the properties of aggregate materials, the contractor shall submit for testing and approval, representative samples of all materials intended for corporation in the works, prior to starting quarry operations, the samples shall be taken by contractor in the presence of the Director of works.
- Tests performed by the contractor shall utilized in assessing the locations, extent of deposits and quantities
 of materials which will conform to the specifications when properly processed. All testing as carried out by
 the contractor shall in no way obviate the need for further testing by Director of works or his representative.
 Approval of specific sources of materials shall not be construed as final approval and acceptance of
 materials from such sources.
- Unsatisfactory materials whether in place or not, shall be removed promptly from the site.
- The contractor shall furnish all necessary material, labor, tools, and equipment and transport required by the Director of works or his representative for such inspections.

AGGREGATES FOR BITUMINOUS PAVING MIXES:

- 1. Aggregate for use in bituminous, binder and wearing courses, shall consist of crushed stone.
- 2. coarse aggregate shall be the fraction of crushed aggregate material retained on 4.75 mm (No. 4) sieve. Fine aggregate shall be the fraction of crushed aggregate material passing 4.75 mm (No. 4) sieve. Mineral filler shall be added when the combined grading of course and fine aggregates is deficient in material passing 0.075 mm (No. 200) sieve.
- 3. The material from hot bins passing the number 40 sieve (0.425 mm) when tested in accordance with AASHTO T90 shall be non-plastic.
- 4. Aggregate shall not contain gypsum more than 1% and the course fraction of the aggregate shall not contain more than: 5% chert and flint for aggregate to be used in the Wearing course. 5% chert and flint for aggregate to be used in the Binder course.
- 5. Aggregates shall be of uniform quality, free from decomposed stone, organic matter, shale.
- 6. The percentage by weight of friable particles, clay lumps, and other deleterious matter shall not exceed 1% as determined by AASHTO T112.
- 7. Aggregate particles shall be clean, hard, durable and sound. Crushing shall result in a product such that, for particles retained on 4.75 mm (No. 4) sieve, at least 90% by weight shall have 2 or more fractured faces.
- 8. The flakiness index and the elongation index test should be conducted in accordance with BS 812, the following are the maximum limits: Wearing Course & Binder Course: Flakiness Index F.I = 2530 Elongation Index E.I. = 2530
- 9. Aggregates shall be washed if directed, to remove any clay lumps, organic matter, adherent dust or clay films or other extraneous or deleterious matter that may prevent or detract from proper adhesion of bitumen to the aggregate particles.
- 10. Material filler shall consist of fine divided mineral matter such as limestone dust if added separately; hydrated lime; other non-plastic mineral filler, free from clay and organic impurities; or Portland cement, conforming to AASHTO M17.
- 11. The mineral aggregate for the base course shall be of such size that the percentage composition by weight as determined by laboratory screens, will conform to the grading specified in the following tables. Grading of the aggregate shall be determined by ASTM C 117 and C 136.

Aggregate Grading (asphalt base layer of 3/4" aggregate size)

Pavement	Sieve Size (square opening)	Percentage by Weight Passing Square Mesh Sieve
	11/2"	-
	1" (25.4 mm)	100
	¾" (19.0 mm)	70 - 100
	½" (12.5 mm)	53 - 90
Base	3/8" (9.5 mm)	40 - 80
	No. 4 (4.85 mm)	30 - 56
	No. 8 (2.36 mm)	23 - 38
	No. 20 (1.18 mm)	13 - 27
	No. 50 (0,300 mm)	5 - 17
	No. 80 (0,150 mm)	4 - 14
	No. 200 (0,075 mm)	2 - 8
	Bitumen content by weight of total mix (%)	4-6

Aggregate Grading (asphalt wearing layer of 1/2" aggregate size)

Sieve	Percentage by Weight Passing Sieves
1½"	-
1" (25.4 mm)	100
3/4" (19.0 mm)	90 - 100
½" (12.5 mm)	71 - 90
3/8" (9.5 mm)	56 - 80
No. 4 (4.25 mm)	35 - 65
No. 8 (2.36 mm)	23 - 49

No. 20 (1.18 mm)	14 - 43	I
No. 50 (0,300 mm)	5 - 19	
No. 80 (0,150 mm)	4 - 15	
No. 200 (0,075 mm)	2 - 8	
Bitumen content by weight of total mix (%)	4 - 6	

Aggregate Grading (asphalt wearing layer of 3/8" aggregate size)

Sieve	Percentage by Weight Passing Sieves	
½"(12.52 mm)	100	
3/8" (9.53 mm)	90-100	
No. 4 (4.75 mm)	60-80	
No. 8 (2.36 mm)	35-65	
No. 50 (0.300 mm)	6-25	
No. 200 (0.075 mm)	2-10	
Bitumen content by weight of total mix (%)	4-6	

- 12. The loss in weight of aggregate after 500 revolutions, when tested in accordance with AASHTO T96, shall not exceed 35%. Ratio of wear loss = Abrasion Rev.500after Abrasion Rev.100after is less than or equal 25.
- 13. When tested for soundness in accordance with AASHTO T104 the coarse aggregate (retained on No. 4 sieve) shall not show signs of disintegration and the loss by weight after 5 cycles shall not exceed 9%in the case of the sodium sulphate test and 12% in the case of the magnesium sulphate test.
- 14. When tested for resistance to stripping in accordance with the AASHTO T-182 at least 95% coated particles should be achieved. Scandinavian test shall be carried out and at last 60% of the coarse aggregate surfaces area shall remain coated with a bitumen film especially for exposed surfaces otherwise anti stripping agent must be added to achieve the required coating.
- 15. The material shall contain minimum 50% sand equivalent. Test sample shall be taken from hot bins

HEATING OF BITUMEN:

- 1- Heating equipment shall be of an approved type. Any method of heating that introduces free steam or moisture into the bitumen will not be approved.
- 2. Bitumen shall not be heated more than 170c. materials heated in excess of this temperature will be rejected and shall not be used in the works.
- 3. Heating of bitumen shall be uniform and under control at all times, to the specified temperature. The circulation system shall be of adequate size to insure proper and continuous circulation of bitumen during the entire operating period.
- 4. Thermometers of adequate range (calibrated in 2 degrees c increments) for accurately measuring the temperature of the bitumen, shall be located so as to be readily visible and shall be kept clean and working order at all times.

BITUMINOUS PRIME AND TACK COATS:

SCOPE This work shall consist of furnishing and applying and MC cutback bitumen prime coat to a previously constructed aggregate base course and applying tack coat on Asphalt or concrete surfaces all as and where shown on the Drawings.

MEDIUM CURING CUTBACK BITUMEN

- 1. MC-70 cutback bitumen for prime coat shall be used as recommended by ASTM D2399-83 for open and tight surface, and RC-70 should be used as tack coat.
- 2. All surfaces to receive either prime or tack coats shall conform with the specified tolerances and compaction requirements and shall be properly cleaned and finally approved before applying any bitumen material
- 3. Application of prime and tack coats shall be performed only when the surface to be treated is sufficiently moist and atmospheric temperature is above 15 c. There should be no fog, rain, strong winds, dusty conditions, or dust storms.
- 4. The surface of all structures shall be protected in an approved manner during the equipment operation. The contractor shall be responsible for making good any staining or damage of the structures to the satisfaction of the Director of works or his representative
- 5. Traffic shall not be permitted to surfaces after they have been cleaned and prepared for prime coat application.
- 6. The contractor shall maintain prime or tack coats until it is covered by the subsequent pavement course. Any area where the coats have been damaged shall be cleaned of all loose material and re-applied at the contractor's expense.
- 7. Applying temperature of MC- 70 shall be 45-80c.
- 8. Areas to be primed shall be including 200 mm widths outside the edge of the permanent line.
- 9. Application rate for prime coat shall be 1 lit/sq.m and tack coat application shall be 0.5 lit/sq.
- 10. Asphalt pavement shall not be placed on prime coat before 24 hours, and no traffic is allowed to pass on prime coat.

BITUMINOUS COURSES:

SCOPE: This work shall consist of the general requirements of furnishing materials, mixing at a central mixing plant, spreading and compacting bituminous courses.

JOB MIX AND PROJECT MIXES:

- 1. The contractor shall submit his proposed Job Mix Formula for approval, at least 30 days prior to beginning production. Therefore, samples from materials use in the preparing mix design (aggregates and bitumen) shall be sent to specialized laboratories to be tested for final approval of mix design.
- 2. The Job Mix Formula be established by the contractor, under the supervision of the Director of works or his representative, in the field laboratory Mix design procedures shall conform with the Marshall method of mix design. All trial mixes shall be prepared and tested by the contractor in the presence of the Director of works or his representative.
- 3. The Job Mix Formula shall specify a combination of mineral aggregates including filler and bitumen in such proportions as to produce a Job Mix which is within the limits of the specified gradation and bitumen content ranges and which meets the Marshall test requirements. It shall also stipulate the mixing temperature at discharge from the mixer which, unless otherwise directed, shall be 170 CD.
- 4. The Marshall test procedure shall be used to determine the percentage of bitumen to be incorporated in the mix. The Job Mix Formula shall take into consideration the absorption of bitumen into the aggregates. Air voids shall be calculated in accordance with the procedure given in the Asphalt Institute Manual, MS-2.
- 5. When compacting specimens on accordance with the Marshall test procedure, the number of blows applied with the compaction hammer shall be 75 on each test.

- 6. In order to meet the requirements, an approved additive such as Portland cement, hydrated lime or liquid antistrip agent, may be required in the Job Mix. Portland cement shall meet the requirements of ASTM M 85. Hydrated lime shall meet the requirements of ASTM C207, Type N. Cement or hydrated lime will normally be required in the approximate range of 2- 3% by weight of the aggregates and shall be added at the cold feed in dry or slurry form as directed. Liquid antistripping agent, if needed will normally be required in the approximate range of 0.6-1.0% by weight of the bitumen, or according to the manufacturer's specifications.
- 7. Upon receipt of approval of the Job Mix Formula, the Contractor shall adjust his mixing plant to proportion the individual aggregates, mineral filler and bitumen to produce a final project mix within the limits given in Table shown with respect to the Job Mix gradation: -

Sieve Designation (square openings)	Specified Tolerances
9.5 mm (3/8 in.) and above	± 5.0%
4.75 mm (No. 4)	± 4.0%
2.36 mm (No. 8)	± 4.0%
1.18 mm (No. 16)	± 4.0%
0.600 mm (No. 30)	± 4.0%
0.300 mm (No. 50)	± 4.0%
0.150 mm (No. 100)	± 4.0%
0.75 mm (No. 200)	± 1.5%
Bitumen Content	± 0.3%
Temperature of Mix on	± 5 C° of the specified

- 8. Conformance to graduation requirements will be determined on the extracted aggregate in accordance with AASHTO T 30. The bitumen content shall be determined in accordance with AASHTO T 164.
- 9. The participation of the Director of works or his representative in the preparation of the Job Mix Formula shall in no way relieve the Contractor of responsibility for producing project mixes meeting the specified requirements.
- 10. At the commencement of the contract one copy of the ASTM, AASHTO and Manuals MS-2 MS3, MS and MS22 shall be furnished by the contractor for use by Director of works or his representative.

SPREADING AND FINISHING EQUIPMENT:

1. Bituminous course shall be spread and finished using approved type, self-contained, power propelled pavers of sufficient capacity. Pavers shall be provided with electronically controlled vibratory screed or strike-off assembly and shall be capable of spreading and finishing the course of bituminous mix to the proper thickness and in lane widths applicable to the typical cross sections shown on the Drawings.

- 2. The pavers shall employ mechanical devices such as equalizing runners, straightedge runners, evener arms or other compensating devices, to maintain trueness of grade and confine the edges of the mix to true lines without the use of stationary side forms. Joint levelling devices shall be provided for smoothing adjusting longitudinal joints between lanes.
- 3. The paver shall be equipped with receiving hopper having sufficient capacity for a uniform spreading operation. The hopper be equipped with a distribution system to place the mix uniformly in front of the full length of the screed.
- 4. The screed or strike-off assembly and extensions shall effectively produce a finished surface of the required evenness and texture without tearing, shoving, or grouting the mix.
- 5. The paver shall be capable of being operated at forward speeds consistent with satisfactory laying of the mix. Speed shall be fully adjustable
- 6. The Contractor shall make available, for reference by the Director of works or his representative, the manufacturer's instruction and operating manuals for each paver intended for use

SURFACE PREPARATION.

- 1. When the bituminous mix is to be placed on a base, course the surface shall be prepared to meet the appropriate specified compaction and surface tolerance requirements. The surface shall then be primed as specified "Bituminous Prime Coat". No bituminous mix shall be laid on a prime coat until it has been inspected and approved.
- 2. Broken, soft, or unstable areas of aggregate base course shall be removed and replaced. The areas shall be excavated to a depth as directed and refilled with the specified bituminous mix.

DELIVERY, SPREADING AND FINISHING:

a) Delivery of Mix to Site

- 1. A sufficient number of haul vehicles shall be provided so that adequate supplies of mix are delivered to ensure that continuous paving will be achieved.
- 2. Hauling equipment for aggregates and bituminous mixes shall consist of vehicles having dump bodies suitable for dumping materials in a windrow or in spreader boxes. The bodied shall be so constructed that their volume measurement can be accurately determine. They shall be constructed and maintained such that loss of materials during hauling operations will not occur. Dump controls shall be capable of operation from the driver's seat.
- 3. Hauling equipment for hot bituminous mixes shall have tight, clean, smooth metal beds which are periodically thinly coated with a lime solution or other approved material to prevent adherence of the mix. All hauling units shall be equipped with a canvas or other approved type cover which shall be used to cover the hot material upon loading at the mixing plant and shall not be removed until the mix is discharged into the paver.
- 4. The dispatching of the hauling vehicles to the site shall be so scheduled that all material delivered is placed at least 90 minutes before sunset to allow sufficient time for compaction. Delivery of material shall be at a uniform rate and in an amount well within the capacity of the paving and compacting equipment.
- 5. The mix at delivery to the paver shall be not more than 10C below discharge temperature at the mixing plant. The minimum temperature for the commencement of breakdown rolling is 120 C. Mix loads of temperature less than 120C shall not be accepted, and the load shall be disposed of and another load used. If their consistent failure to meet the temperature requirement the Director of works or his representative shall

order paving operations to stop until suitable measures are taken by the Contractor to ensure that temperature requirements are met.

6. Each haul vehicle shall be weight after each loading at the mixing plant and accurate records shall be kept of the gross weight and net weight of each load, for each vehicle dates and time of loading.

b) Setting Out Reference Line:

- 1. The Contractor shall survey the centerline profile and crown of the existing surface or base and determine a reference grade line which will be submitted for approval. A reference line of wire or suitable cord shall be installed at a uniform grade parallel to the approved reference grade line such that conformance with the required geometric, surface tolerance and minimum thickness requirements shall be ensured.
- 2. The reference line shall be maintained taut and free from sags at all times during spreading and initial compacting operations.
- 3. A wire or cord reference line shall be installed on both sides of the paver for the initial bituminous course being laid. Thereafter only one reference line will normally be required, if the paver is equipped with adequate automatic super elevation control.

c) Spreading and Finishing:

- 1. Bituminous mixes shall be laid only when the air temperature is at least 5 degrees C or above when the existing surface is free from moisture, and when the weather is not foggy, rainy, dusty or excessively windy (particularly at low temperatures).
- 2. After completion of surface preparation, the bituminous mix shall be spread and finished true to crown and grade by approved automatically controlled bituminous pavers. The mix may be spread and finished by approved hand methods only where the Director of works or his representative determines that machine methods are impracticable. Hand methods include heated hand tampers of at least 10 kg weight and approved type mechanical (vibratory) tampers.
- 3. The paver shall spread the bituminous mix without tearing the surface and shall strike a finish that is smooth, true to cross section, uniform in density and texture and free from hollows, transverse corrugations and other irregularities.
- 4. The paver shall be operated at a speed which gives the best results for the type of paver being used and which coordinates satisfactorily with the rate of delivery of the mix to the paver. A uniform rate of placement shall be achieved without repeated intermittent operation of the paver.
- 5. The mix shall be delivered to the paver in time to permit completion of spreading, finishing and compaction of the mix during daylight hours.
- 6. If during laying, the paver is repeatedly delayed because of lack of mix or if the paver stands at one location for an extended period, resulting in the (unrolled) mat under and adjacent to the rear of the spreader falling below the minimum temperature for breakdown rolling, the affected portion of mat shall be cut out and discarded and a transverse joint shall be constructed. Paving shall not recommence until the Director of works or his representative is satisfied that paving will proceed without interruptions.
- 7. Contact surfaces of curbing, gutters, manholes, and similar structures shall be painted with a thin, uniform coating of tack coat material. The bituminous mixture shall be placed uniformly high near the contact surfaces so that after compaction it will be 10 mm above the edge of such structure.
- 8. If during the paving operations, it is found that the spreading and finishing equipment in operation leaves in the pavement surface tracks or indented areas or other objectionable irregularities that are not

satisfactorily corrected by the scheduled operations, the use of the equipment shall be discontinued, until faults are corrected to the approval of the Director of works or his representative. If this is not possible, other satisfactory spreading and finishing equipment shall be provided by the Contractor.

- 9. Transverse joints in succeeding layers shall be offset by at least 2 m. Longitudinal joints shall be offset at least 150 mm.
- 10. Bituminous mix shall be spread in one or more layers so that, after rolling, the nominal thickness of each layer of the compacted bituminous material does not exceed 2 to 3 times maximum size of aggregate. This maximum thickness may be increased slightly when such increase is more appropriate to total pavement thickness and provided the Director of works or his representative determines that such increased thickness will not be detrimental to the quality of the finished bituminous course, and the Contractor can show that the required density is attained throughout the layer thickness.
- 11. Transitions and structure approaches shall meet the design criteria for geometric, the surface tolerance specifications, and shall not be visually discontinuous or abrupt in appearance.

d) Joints and Edges:

- 1. All joints between old and new pavements or between successive days' work shall be as to ensure thorough and continuous bond between the old and new material.
- 2. Before placing fresh mix against previously laid, the contact surface shall be cut back to a near vertical face, and shall be sprayed or painted with a thin uniform coat of tack coat material. Longitudinal joints shall be made by overlapping the paver screed on the previously laid material (cut back as necessary) and depositing a sufficient amount of fresh mix so that the joint formed will be smooth and tight.
- 3. Unsupported edges of bituminous layers shall be rolled immediately following the rolling of the longitudinal joint. The material along the unsupported edge may, if approved, be raised slightly by hand methods, to ensure that the full weight of the roller will bear fully on the edge material
- 4. On completion, the longitudinal edges of bituminous pavement shall be true to the width and alignment as shown on the Drawings. The edges shall be cut back if necessary, prior to rolling, additional mix placed manually in a longitudinal strip adjoining each pavement edge, and the edge rolled down to a neat 3:1 (H: V) slope.
- 5. Transverse joints shall be carefully constructed and thoroughly compacted to provide a smooth riding surface. Joints shall be straight-edged and string-lined to assure smoothness and true alignment

e) Compaction:

- 1. After spreading and strike-off, and as soon as the mix conditions permit the rolling to be performed without excessive shoving or tearing, the mixture shall be thoroughly and uniformly compacted, using approved types, sizes and number of rollers. rolling shall not be prolonged to the point where cracks appear or shoving or displacement occur.
- 2. All rollers shall be self-propelled vibratory steel wheel, 2-axle tandem steel-tired and pneumatic-tired types, in proper operating condition, capable of reversing without backlash or tearing of the surface, and shall be operated at numbers of rollers required is 3, of which one must be pneumatic type. The Contractor shall select a suitable method and pattern of rolling that will achieve the required compaction, to Director of works or his representative approval.

- 3. Prior to use on Site of pneumatic-tired rollers, the Contractor shall furnish, for reference and retention by the Director of works or his representative, manufacturers' charts or tabulations showing the contact areas and contact pressures for the full range of tire inflation pressures and for the full range of tire loading for each type and size of compactor tire to be used. The Contractor shall ensure that tire pressures are maintained at all times in conformity with such charts or tabulations. The maximum allowable tolerances shall be plus or minus 35 KN/sq. (5 psi).
- 4. Rollers should move at a slow but uniform speed, generally with the drive roll or wheels nearest the paver.
- 5. Minimum temperature of the mat at which rolling shall be allowed to start is 120c.
- 6. Breakdown rolling shall be consisting of 3 complete coverage unless otherwise directed Rolling shall be longitudinal, and over lapping on successive trips by at least one half the width of the rear wheels.
- 7. To prevent adhesion of the mix to the rollers, the wheels shall be kept lightly moistened with water. Excessive use of water will not be permitted.
- 8. The initial or breakdown rolling shall be followed by intermediate rolling involving 3 coverages with pneumatic-tired rollers unless otherwise specified.
- 9. Finishing rolling shall then be carried out by means of tendem power steel rollers unless otherwise designated. If specified density is not achieved, changes shall be made in size and number of rollers being used to ensure the compaction requirements are met.
- 10. The compacted density shall be equal to or more than 97% and 98% for binder course and wearing course, respectively, of average Marshall bulk specific gravity for each day's production unless otherwise directed by the Director of works or his representative.
- 11. Any mix that becomes loose, broken, mixed with foreign material, or which does not conform in all other respects with the specified requirements, shall be removed, replaced with suitable materials and properly finished.

1. Minimum Tests Required					
Work item	Tests at Source of material	Frequency of tests	Tests at road site	Frequency o tests	
1- Materials used in Asphalt mix (at Batching plant)	1- Specific gravity and water absorption 2- Abrasion test 3- Chert content 4- Clay lumps and friable materials 5- Flaky and elongayed particles 6- Soundness	- Test for each source - When materials quality changes - As requested			
2- Materials used in Asphalt mix (from hot bins)	1- Gradation 2- Specific gravity and water absorption 3- Plasticity index 4-Sand equivalent 5- Stripping with	- Test for each source - when materials quality changes - As requested			

	asphalt			
3- Asphalt mix design (At batching plant)	Complete mix design in accordance with American Asphalt Institute (MS2) Loss of stability	-For each project -When materials quality changes -When results are not consistent with the mix design results - As requested		
Asphalt 1- S 2- F 3- cont 4- A 5- agggt 6- dens	At Batching plant 1- Stability 2- Flow 3- Extraction (binder content and gradation) 4- Air voids 5- Voids in mineral aggregates 6- Daily Marshall density	- Test each 3 working days - Test for each batching plant - As requested	Behind spreader 1- Stability 2- Flow 3-Extraction (binder content and gradation 4-Air voids 5- Voids in mineral aggregates 6-Marshall density	-Test each working day - Test for each batch - As requested
	7-Loss of Stability	- Once a week - As requested	7- Road density and thickness (after final compaction	- Test each 200 lin.m. per lane - As requested
			8-Loss off stability	- Once a week - As requested

- 2. The Marshall bulk specific gravity shall be determined in accordance with AASHTO T 166 or AASHTO T 275. The Marshall specimens shall be prepared from the same material used in construction, taken from samples of fresh bituminous mix at the mixing plant or from trucks delivering mix to the site. Oven heating for up to 30 minutes to maintain the heat of the sample is permissible.
- 3. The bulk specific gravity of the mix as placed and compacted in situ shall be determined from 100 mm nominal diameter core samples, or slab samples cut from compacted layer on the road at locations designated by the Director of works or his representative who may require additional tests to determine limits of areas deficient in density, or for recheck.
- 4. Samples for in situ bulk specific gravity determinations shall be taken in sets of 2 from each pavement location. Minimum frequency of sampling for each bituminous layer shall be one set/lane/500 m, with a minimum of one set per day of placing bituminous layers.
- 5. The Contractor shall, cut the samples with an approved core drill in the presence of the Director of works or his representative. the equipment shall be capable of cutting the mixture without shattering the edges or otherwise disturbing the density of the specimen. The contractor shall fill and compact all test holes at his own expense.

f) Surface Tolerances:

- 1. The fully compacted and completed bituminous course shall conform to the lines, grades and cross sections as shown on the Drawings.
- 2. The elevations of the finished course shall be checked by the Contractor in the presence of the Director of works or his representative at maximum intervals of 25 and at intermediate points as directed.
- 3. When the finished surface is tested with a 3 m long straightedge, placed parallel to, or at right angles to the centerline, the maximum deviation of the surface from the test edge between any 2 contact points shall not exceed the tolerances specified for each type of bituminous course laid.
- 4. All areas which exceed the specified tolerances shall be corrected by removing the defective sections of bituminous course and reconstructing them or, if approved, by adding new material and recompacting and finishing to the specified standard or increasing the thickness of the succeeding course.
- 5. The tolerances specified for evenness of finished surfaces for all types of bituminous course, shall not invalidate the tolerances specified for construction thickness and elevations of such courses.
- g) Determination of Thickness of Course:
- 1. Cylinder core samples shall be taken as specified for in situ bulk specified gravity core samples.
- 2. Thickness of bituminous course shall be determined by average caliper measurement of cores, rounded upwards to the nearest mm.
- 3. Paved sections to be measured separately shall consist of each 300-lin. m section in each traffic lane. The last section in each traffic lane shall be 300 m plus the fractional part of 300 m remaining. Other areas such as intersections, entrances, etc. Shall be measured as one section and the thickness of each shall be determined separately. Small irregular unit areas may be included as part of another section.
- 4. One core shall be taken from each section by the Contractor at approved locations and in the presence of the Director of works or his representative. When the measurement of the core from any paved section is not deficient by more than 5 mm from the specified thickness, the core will be deemed to be of the specified thickness as shown on the Drawings.
- 5. When the measurement of the core from any paved section is deficient by more than 5 mm but not more than 20 mm, 2 additional cores spaced at not less than 100 m shall be taken and used together with the first core to determine the average thickness of such section.
- 6. When the measurement of the core from any paved section is less than the specified thickness by more than 20 mm, the average thickness of such section shall be determined by taking additional cores at not less than 5 m intervals parallel to the centerline in each direction from the affected location until, in each direction, a core is taken which is not deficient by more than 20 mm. Exploratory cores for deficient thickness will not be used in average thickness determinations.
- 7. Any deficiencies in the total thickness of bituminous courses shall be subject to a proportional reduction in the area of (wearing) course measured for payment. Alternatively, the Contractor shall construct all at his own expense, a wearing course overlay, if practicable in the judgement of the Director of works or his representative. Any such overlay shall be a minimum of 40 mm compacted thickness and to the specified standard of the course it is overlaying.
- 8. If the deficiency in total asphalt layers thickness is from 0 -3 mm, full payment will be made, on condition that deficiencies are not found in more than 10% of the total project. Deficiencies exceeding 3 mm shall be left to the substantial handing -over procedure.

h) **Measurement:**

- Bituminous course shall be measured by squ.m for furnished, paved compacted, tested and approved areas placed according to drawing.
- Any correction, tests, samples, etc. shall not be measured for direct payment

BITUMINOUS BINDER AND WEARING COURS:

SCOPE These works shall consist of furnishing materials, mixing at mixing plant, spreading and compacting bituminous binder and wearing course on an approved aggregate base course as and where shown in the Drawings.

MATERIALS: 1. Materials shall conform with relevant requirements of section" Materials" mentioned before. 2. Unless otherwise shown on Drawings, bitumen for binder and wearing course construction shall be 60/70 penetration graded bitumen.

JOB MIX AND PROJECT MIX:

- 1. The Job Mix formula shall be established by the contractor in accordance with the procedure and requirements of section "Bituminous Course" mentioned before.
- 2. The Job Mix for bituminous binder and wearing courses shall conform to the following composition limits, as shown in Table:

Property Medium-Light		
	Binder	Wearing
Marshall Stability at 60c (kg)	800	900
Flow (mms)	2-4	2-4
Voids in Mineral aggregate (WA)	13(-1)	14(-1)
Air Voids (%)	4-5	3-5
Stiffness (kg/mm)		400 (Min)
* Loss of stability (%)		25 (Max)
Asphalt Content (% in weight)	4.5-6	5-7

- ☐ This test to be carried out in accordance with AASHTO T 165-82.
- After the Job Mix Formula has been established and approved, all subsequent mixes shall conform to it within the allowable tolerances.

b) Equipment:

Plant and equipment for mixing, hauling, placing and compacting bituminous binder courses and wearing course materials, shall conform with the relevant requirements of section "Bituminous Course".

c) Surface Preparation:

Preparation of surface upon which bituminous binder course and the bituminous wearing course mixes are to be laid, and the use of prime coat, shall be appropriate to type and condition of such surface and shall conform with the relevant requirements of section "Bituminous Courses".

d) Delivery, Spreading and Finishing:

General: The delivery, spreading and finishing of bituminous mixes for binder and wearing courses shall conform with the relevant requirements of Section "Bituminous Course" and with the following particular requirements.

Rollers: 1. Initial breakdown rolling shall be carried out by use of 2 dual-drum steel-wheeled rollers each of minimum weight 7,000 kg. These rollers shall be purpose made for compaction of hot bituminous courses.

- 2. Intermediate rolling shall be carried out by of at least 2 self-propelled, tandem pneumatic smooth-tired rollers each capable of exerting contact pressures of up to 690 kN/sq.m (100 psi) and ballast- adjustable to ensure uniform wheel loading.
- 3. Final rolling shall be carried out by use 2, 2-axle tandem, steel-tired rollers each of minimum weight 10.000 kg, capable of exerting contract pressures of up to 65 kg/cm (350 lb/in.)
- Standard of Compaction: The compacted density of the bituminous wearing course shall be not less than 98% of the average Marshall bulk density for each day's production.
- e) Sampling and Testing: Sampling and testing shall conform with the relevant requirements of Section "Bituminous Course".
- h) Surface Tolérances:
- 1. Surface tolerances shall conform with the relevant requirements of Section "Bituminous Course ", and with the following particular requirements.
- 2. The tolerances on elevations of the final bituminous wearing course surface shall not be greater than 10 mm.
- 3. When the finished wearing course surface is tested with a 3 m long straightedge, placed parallel to, or at right angles to the centerline, the maximum deviation of the surface from the testing edge between any 2 contact points shall not exceed 5.0 mm.
- I) Determination of Thickness:
- 1. Procedures for determining the average compacted thickness of bituminous binder and wearing course shall conform with the relevant requirements of Section" Bituminous Courses" and the following particular requirements.
- 2. Cores for thickness measurements of binder course shall be used to determine if changes are necessary in the constructed thickness of the wearing course and thickness deficiencies in the binder course.

j) Measurement:

- 1. Bituminous binder course and bituminous wearing course shall be measured by sq.m. of mix finished, spread, compacted, completed and accepted. Measurements shall be of the areas and thickness as shown on the drawings.
- 2. Deficiencies in thickness of wearing course shall, unless an overlay is constructed at contractor's expense, result in proportion only of the wearing course area being measured for payment. Proportions shall be determined in accordance with the thickness deficiencies and area proportions mentioned in section "Bituminous Course".
- 3. Bituminous Prime coat and Tack coat shall be measured as prescribed in "Bituminous Prime and Tack Coats". 4. All other items shall not be measured for direct payment as prescribed in section "Bituminous Course".

Qualifications of the Required Technical Staff:

Staff Category/ Title	Minimum Education Qualification	Minimum Year of experience in the Similar Construction Project
Senior Pavement and Highway Engineer	MSE or Bachelor's degree in Civil Engineering.	10 years of experience at least for engineers with BSC in civil /architecture engineering.
		7 years of experience for Master in civil /architecture Engineering.
Materials Engineer	Bachelor's Degree in Civil Engineering OR	 Minimum 5 years' experience after bachelor's degree in Civil Engineering OR
	Diploma Degree in Civil Engineering	Minimum 7 years' experience after Diploma's Degree
Quantity Surveyor	Diploma Degree from Institution or Civil Engineering Surveyors	Minimum 5 years' experience after Diploma's Degree
Surveyor	Diploma Degree from Institution of land surveying	3 years' experience after Diploma's Degree
materials inspector	High school diploma Degree	Minimum 5 years' experience after Diploma's Degree
Asphalt foreman	High school certificate	 5 years paving experience with at least 2 years' of that experience as a Foreman

Required Key Machineries:

- (a) Bitumen Distributors: Bitumen distributors shall be truck mounted and shall have sufficient power to maintain uniform speeds for the proper application of the binder.
- (b) Chip-spreaders: Mechanical chip-spreaders shall be capable of spreading the chippings uniformly over variable widths, from 0.5 to 3.5 m, at the rates specified. The number and output of chip-spreaders shall be sufficient to ensure that chippings are spread immediately after the bituminous binder has been applied. Chip-spreaders shall be checked and calibrated before starting any work or when required by the Engineer.
- (c) Rollers: The main rolling shall be carried out with self-propelled pneumatic tyred rollers, having a wheel-load of more than 2 tons. The tyres shall be smooth and their pressure shall be more than 0.4 N/mm2. Where approved by the Engineer steel-wheeled rollers shall be used in tandem with pneumatic tyred rollers after all excess chippings have been removed and insufficiently chipped areas have been chipped over. Only steel-wheeled rollers weighing less than 8 tons (total weight) shall be accepted.
- (d) Miscellaneous Equipment: Sufficient trucks and loading machinery shall be employed to ensure an adequate, prompt and continuous supply of chippings. Rubber tyred mechanical rotary brooms towed by or mounted on rubber tyred vehicles shall be provided. Tractor toed air compressor with sufficient length of hose pipes and air jet nozzle shall be provided to ensure sufficient cleaning of surface to be sprayed with bituminous layers.

Terms of Payment:

UNDP will make payment according to the following Milestones:

- Monthly interim payment through payment of 90% of the actual executed works shall be paid within 30 days upon UNDP's acceptance of the works; and
- 10% retention money will be returned upon Certificate of Final Completion (Completion of Defects Liability Period) inclusive executing the outstanding snag list, if any.

Duration of the Project:

2 (Two) Months starting from the date that the Contractor given access to site.

SECTION 5B: OTHER RELATED REQUIREMENTS

Further to the Schedule of Requirements in the preceding Table, Bidders are requested to take note of the following additional requirements, conditions, and related services pertaining to the fulfillment of the requirements: [check the condition that applies to this ITB, delete the entire row if condition is not applicable to the goods being procured]

Exact Address of Delivery/Installation Location	Al Jabalain byway road, Al Jabalain Locality of White Nile State, Sudan
Mode of Transport Preferred	NA NA
UNDP Preferred Freight Forwarder, if any	N/A
Distribution of shipping documents (if using freight forwarder)	N/A
Customs, if required, clearing shall be done by:	Contractor
Ex-factory / Pre-shipment inspection	N/A
Inspection upon delivery	As per BOQs.
Installation Requirements	As per BOQs
Testing Requirements	As per BOQs
Scope of Training on Operation and Maintenance	N/A
Commissioning	N/A
Warranty Period/Defect Liability	6 months upon handover of site
Local Service Support	N/A
Technical Support Requirements	As per BOQs
Defect Liability period	☑ If, within 6 months after the substantial completion of works, any defects are discovered in the normal course of usage, the Contractor shall remedy the defects at their own cost
Payment Terms (max. advanced payment is 20% as per UNDP policy)	 Monthly interim payment through payment of 90% of the actual executed works shall be paid within 30 days upon UNDP's acceptance of the works; and 10% retention money will be returned upon Certificate of Final Completion (Completion of Defects Liability Period) inclusive executing the outstanding snag list, if any.
Conditions for Release of Payment	☑ Certification of payment from the UNDP Engineer
All documentations, including catalogues, instructions and operating manuals, shall be in this language	English and/or Arabic

SECTION 6: RETURNABLE BIDDING FORMS / CHECKLIST

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

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

Technical Bid:

Have you duly completed all the Returnable Bidding Forms?	
Form A: Bid Submission Form (Mandatory)	
Form B: Bidder Information Form	
 Form C: Joint Venture/Consortium/ Association Information Form (Mandatory) if applicable. 	
Form D: Qualification Form	
Form E: Format of Technical Bid and Technical Compliance Sheet	
From G: Form of Bid Security (Mandatory)	
Have you provided the required documents to establish compliance with the evaluation criteria in Section 4?	

Price Schedule:

■ Form F: Price Schedule Form (Mandatory)	
---	--

Form A: Bid Submission Form

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

We, the undersigned, offer to supply the goods and related services required for [Insert Title of Civil Works] in accordance with your Invitation to Bid No. [Insert ITB Reference Number] and our Bid. We hereby submit our Bid, which includes this Technical Bid and Price Schedule.

Our attached Price Schedule is for the sum of [Insert amount in words and figures and indicate currency].

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

- a) is not under procurement prohibition by the United Nations, including but not limited to prohibitions derived from the Compendium of United Nations Security Council Sanctions Lists;
- b) have not been suspended, debarred, sanctioned or otherwise identified as ineligible by any UN Organization or the World Bank Group or any other international Organization;
- c) have no conflict of interest in accordance with Instruction to Bidders Clause 4;
- d) do not employ, or anticipate employing, any person(s) who is, or has been a UN staff member within the last year, if said UN staff member has or had prior professional dealings with our firm in his/her capacity as UN staff member within the last three years of service with the UN (in accordance with UN post-employment restrictions published in ST/SGB/2006/15);
- e) have not declared bankruptcy, are not involved in bankruptcy or receivership proceedings, and there is no judgment or pending legal action against them that could impair their operations in the foreseeable future;
- f) undertake not to engage in proscribed practices, including but not limited to corruption, fraud, coercion, collusion, obstruction, or any other unethical practice, with the UN or any other party, and to conduct business in a manner that averts any financial, operational, reputational or other undue risk to the UN and we embrace the principles of the United Nations Supplier Code of Conduct and adhere to the principles of the United Nations Global Compact.

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

We offer to supply the goods and related services in conformity with the Bidding documents, including the UNDP General Conditions of Contract and in accordance with the Schedule of Requirements and Technical Specifications.

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

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

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

Name:	 	 	
Title:	 	 	
Date:	 	 	
Signature:		 	

[Stamp with official stamp of the Bidder]

Form B: Bidder Information Form

Legal name of Bidder	[Complete]
Legal address	[Complete]
Year of registration	[Complete]
Bidder's Authorized Representative Information	Name and Title: [Complete] Telephone numbers: [Complete] Email: [Complete]
Are you a UNGM registered vendor?	\square Yes \square No If yes, [insert UGNM vendor number]
Are you a UNDP vendor?	☐ Yes ☐ No If yes, [insert UNDP vendor number]
Countries of operation	[Complete]
No. of full-time employees	[Complete]
Quality Assurance Certification (e.g. ISO 9000 or Equivalent) (If yes, provide a Copy of the valid Certificate):	[Complete]
Does your Company hold any accreditation such as ISO 14001 or ISO 14064 or equivalent related to the environment? (If yes, provide a Copy of the valid Certificate):	[Complete]
Does your Company have a written Statement of its Environmental Policy? (If yes, provide a Copy)	[Complete]
Does your organization demonstrates significant commitment to sustainability through some other means, for example internal company policy documents on women empowerment, renewable energies or membership of trade institutions promoting such issues	[Complete]
Is your company a member of the UN Global Compact	[Complete]
Contact person that UNDP may contact for requests for clarifications during Bid evaluation	Name and Title: [Complete] Telephone numbers: [Complete] Email: [Complete]
List of Documents Attached with Bid	[Complete]

Form C: Joint Venture/Consortium/Association Information Form

Nam	ne of Bidder:	[Insert Name of Bi	dder]			Date:	Select date
ITR r	reference:	[Insert ITB Reference Number]					
1101	ciciciicc.	[III] THE INCIDENCE	ee rvamberj	l			
	completed and ure/Consortium/	returned with your	r Bid if the	Bid is su	ıbmitted as	a Joint	
No			address,	_	pe of go	tion of responsibilities (in oods and/or services to be performed	
1	[Complete]				[Complete]		
2	[Complete]				[Complete]		
3	[Complete]				[Complete]		
the e	event a Contract is ract execution) ave attached a co	opy of the below re		ocument			rtner, which details the likely pers of the said joint venture
□ Le	tter of intent to t	form a joint venture	OR	יע 🗆	V/Consortiu	m/Assoc	ciation agreement
		at if the contract is a y liable to UNDP for					Consortium/Association shal Contract.
Nam	ne of partner:			Name	of partner:		
Signature:		Signature:					
Date	o:			Date:			
Nam	ne of partner:			Name	of partner: _		
Sign	ature:			Signat	:ure:		
Date:			Date:				

Form D: Eligibility and Qualification Form

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

If JV/Consortium/Association, to be completed by each partner.

History of Non- Performing Contracts

□Non-perf	orming contracts did	d not occur during the last 3 years			
☐ Contract	☐ Contract(s) not performed in the last 3 years				
Year	Non- performed portion of contract	Total Contract Amount (current value in US\$)			
		Name of Client: Address of Client: Reason(s) for non-performance:			

Litigation History (including pending litigation)

	•		
□ No litiga	tion history for the l	ast 3 years	
☐ Litigation	n History as indicate	d below	
Year of	Amount in	Contract Identification	Total Contract Amount
dispute	dispute (in US\$)		(current value in US\$)
		Name of Client:	
		Address of Client:	
		Matter in dispute:	
		Party who initiated the dispute:	
		Status of dispute:	
		Party awarded if resolved:	

Previous Relevant Experience

Please list only previous similar assignments successfully completed in the last 3 years.

List only those assignments for which the Bidder was legally contracted or sub-contracted by the Client as a company or was one of the Consortium/JV partners. Assignments completed by the Bidder's individual experts working privately or through other firms cannot be claimed as the relevant experience of the Bidder, or that of the Bidder's partners or sub-consultants, but can be claimed by the Experts themselves in their CVs. The Bidder should be prepared to substantiate the claimed experience by presenting copies of relevant documents and references if so requested by UNDP.

Project name & Country of Assignment	Client & Reference Contact Details	Contract Value	Period of activity and status	Types of activities undertaken

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

☐ Attached are the Statements of Satisfactory Performance from the Top 3 (three) Clients or more.

Financial Standing

Annual Turnover for the last 3 years	Year Year Year	USD USD USD
Latest Credit Rating (if any), indicate the source		

Financial information (in US\$ equivalent)	Historic information for the last 3 years		
	2016	2017	2018
	Information from Balance Sheet		
Total Assets (TA)			
Total Liabilities (TL)			
Current Assets (CA)			
Current Liabilities (CL)			
	Information from Income Statement		
Total / Gross Revenue (TR)			
Profits Before Taxes (PBT)			
Net Profit			
Current Ratio			

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

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

Form E: Format of Technical Bid

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

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

SECTION 1: Bidder's qualification, capacity and expertise

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

SECTION 2: Scope of Supply, Technical Specifications, and Related Services

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

- 2.1 A detailed description of how the Bidder will deliver the required goods and services, keeping in mind the appropriateness to local conditions and project environment. Details how the different service elements shall be organized, controlled and delivered.
- 2.2 Explain whether any work would be subcontracted, to whom, how much percentage of the requirements, the rationale for such, and the roles of the proposed sub-contractors and how everyone will function as a team.
- 2.3 The bid shall also include details of the Bidder's internal technical and quality assurance review mechanisms.
- 2.4 Implementation plan including a Gantt Chart or Project Schedule indicating the detailed sequence of activities that will be undertaken and their corresponding timing.
- 2.5 Demonstrate how you plan to integrate sustainability measures in the execution of the contract.

Technical Compliance Sheet ITB/KRT/19/043

Supply, lay & compacting of asphaltic concrete wearing course at Al Jabalain byway road, Al Jabalain Locality of White Nile State, Sudan

Note: Bidders Must Fill and submit the Bid Technical Compliance Sheet with their bid.

Bidder Name:

	Description	Compliant	Reasons for Non- compliance	UNDP Comments
		(Y/N)	Deviation	
1.	Minimum number of 5 years of experience in			
	Construction field			
2.	Full compliance of Bid to ITB Technical Requirements			
	stated in the BOQ			
3.	Bid Validity: 90 days			
4.	Minimum number of (2) similar projects (road			
	construction/maintenance) in nature, complex and			
	value completed by the Bidder in the past 3 years (as			
	Main contractor)			
5.	Minimum average annual turnover of US\$ 200,000 in			
	the last 3 years (2016,2017 and 2018):			
6.	Sound Financial Stand (minimum acceptable Current			
	Ratio 1.0)			
7.	Suitability and technical qualification of the key			
	personnel proposed to the project in relation to their			
	qualification and years of experiences;			
8.	Suitability Construction Work Schedule for the project;			
9.	Acceptance of Payment Terms			
10.	List of Minimum equipment required			
11.	Acceptance of all Provisions of the UNDP General			
	Terms and Conditions and Special Conditions.			

Format for CV of Proposed Key Personnel

Name of Personnel	[Insert]
Position for this assignment	[Insert]
Nationality	[Insert]
Language proficiency	[Insert]
Education/	[Summarize college/university and other specialized education of personnel member, giving names of schools, dates attended, and degrees/qualifications obtained.]
Qualifications	[Insert]
Professional certifications	 [Provide details of professional certifications relevant to the scope of goods and/or services] Name of institution: [Insert] Date of certification: [Insert]
Employment Record/ Experience	[List all positions held by personnel (starting with present position, list in reverse order), giving dates, names of employing organization, title of position held and location of employment. For experience in last five years, detail the type of activities performed, degree of responsibilities, location of assignments and any other information or professional experience considered pertinent for this assignment.]
	[Insert]
	[Provide names, addresses, phone and email contact information for two (2) references]
References	Reference 1: [Insert]
	Reference 2: [Insert]

,	ne best of my knowledge and belief, the data provided above correct riences, and other relevant information about myself.
 Signature of Personnel	Date (Day/Month/Year)

FORM F: Price Schedule Form

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

BOQs are Attached separately to this ITB as Annex (A).

Instruction to Bidders:

- 1. Bidders shall select the currency of their Bid (either USD or SDG).
- 2. Bidders shall submit their Priced Bill of Quantities as attachments and upload into the e-Tendering using the following format:
 - a. BOQs in Spread sheet files (excel); and again
 - b. Same BOQs (signed and stamped) as PDF Files
- 3. Bid Price submitted through e-Tendering shall correspond to the total of each location, line-by-line; the Bidder is required to prepare the Price Schedule as indicated in the Instruction to Bidders.
- 4. Bidders shall price for each Item in the Bill of Quantities (BOQ) as templated Missing of pricing any item in the BoQ will lead to disqualify the whole offer of the respective site, Bidders should ensure to offer for all items).
- 5. Where there is a discrepancy between the unit price and the total amount derived from the multiplication of the unit price and the quantity, the unit price as quoted shall govern. If there is an obvious gross misplacement of the decimal point in the unit price, the total amount as quoted shall govern and the unit price shall be corrected accordingly.
- 6. UNDP reserves the right to omit any item considered not necessary without any compensation to the successful bidder.

Summary of Price Schedule:

#	Description	Total Cost (please insert currency)
1	Furnishing, spreading and compacting asphaltic concrete wearing course 50mm, including all tests required. All according to specifications, drawings and directions of the Engineer. All layers shall be spread and compacted in a similar manner. - Aggregate shall consist of clean, sound, durable pieces of crushed stone, free from adherent coatings and free from an excess of dust, dirt, organic matter, gypsum or other objectionable foreign matter. The weighted average magnesium sulfate soundness, as determined by AASHTO standard method T104-99 shall not exceed 15% and the percentage of wear, as determined by AASHTO standard method T96-99 shall not exceed 40%, for aggregate grading sieve size and percent passing by weight please see table 5/1 of SUDAN Asphalt road general specification. - the bituminous binder shall be a proprietary cut-back bitumen, subject to the approval of the Engineer's which meets the requirements of AASHTO M81-96 for rapid and medium curing types respectively as shown in attached specifications. - Furthermore, see specifications in handbook BITUMINOUS CONSTRUCTION - UNDP	
	Total Bid Price (all inclusive)	

Name of Bidder:	
Authorised signature:	
Name of authorised signatory:	
Functional Title:	

FORM G: Form of Bid Security Not Applicable

Bid Security must be issued using the official letterhead of the Issuing Bank. Except for indicated fields, no changes may be made on this template.

To: UNDP

[Insert contact information as provided in Data Sheet]

WHEREAS [Name and address of Bidder] (hereinafter called "the Bidder") has submitted a Bid to UNDP dated Click here to enter a date. to execute civil works for (hereinafter called "the Bid"):

AND WHEREAS it has been stipulated by you that the Bidder shall furnish you with a Bank Guarantee by a recognized bank for the sum specified therein as security if the Bidder:

- a) Fails to sign the Contract after UNDP has awarded it;
- b) Withdraws its Bid after the date of the opening of the Bids;
- c) Fails to comply with UNDP's variation of requirement, as per ITB instructions; or
- d) Fails to furnish Performance Security, insurances, or other documents that UNDP may require as a condition to rendering the contract effective.

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

NOW THEREFORE we hereby affirm that we are the Guarantor and responsible to you, on behalf of the Bidder, up to a total of [amount of guarantee] [in words and numbers], such sum being payable in the types and proportions of currencies in which the Price Bid is payable, and we undertake to pay you, upon your first written demand and without cavil or argument, any sum or sums within the limits of [amount of guarantee as aforesaid] without your needing to prove or to show grounds or reasons for your demand for the sum specified therein.

This guarantee shall be valid up to 30 days after the final date of validity of bids.

[Stamp with official stamp of the Bank]

SIGNATURE AND SEAL OF THE GUARANTOR BANK

Signature:	
Name:	
Title:	
Date:	
Name of Bank	
Address	

FORM H: Drawings

Drawings are attached as Annex B

FORM I: Sample Contract including UNDP General Terms and Conditions

Dear Sir/Madam,
The United Nations Development Programme (hereinafter referred to as "UNDP"), Country Office in Suda
wishes to engage Company. Ltd, duly incorporated under the Laws of Sudan (hereinafter referred to as the
'Contractor") in order to perform the Construction Works of, i
Contract:

1. Contract Documents:

Date _____

- 1.1 This Contract is subject to the UNDP General Conditions for Civil Works, attached hereto as Annex I. The provisions of such Annex shall control the interpretation of this Contract and in no way shall be deemed to have been derogated by the contents of this letter and any other Annexes, unless otherwise expressly stated under section 4 of this letter, entitled "Special Conditions".
- 1.2 The Contractor and UNDP also agree to be bound by the provisions contained in the following documents, which shall take precedence over one another in case of conflict in the following order:
 - a) this letter.
 - b) UNDP General Conditions for Civil Works, attached hereto as Annex I;
 - c) The Special Conditions, attached hereto as Annex II;
 - d) Technical Specifications and Drawings, attached hereto as Annex V;

 - f) Performance Bank Guarantee form of, not attached but will provided by the contractor before work commencement;
- 1.3 All the above shall form the Contract between the Contractor and UNDP, superseding the contents of any other negotiations and/or agreements, whether oral or in writing, pertaining to the subject of this Contract.

2. **Obligations of the Contractor:**

- 2.1 The Contractor shall commence work within Five (5 working days) from the date on which he shall have been given the notice to commence from the Engineer, and shall perform and substantially complete the Works within 12 weeks in accordance with the Contract. The Contractor shall provide all materials, supplies, labour and other services necessary to that end.
- 2.2 The Contractor shall submit to the Engineer the work schedule referred to in Clause 13 of the General Conditions by no more than 5 working days following signature of the contract. In the absence of the work schedule UNDP Engineer hold the right to stop the works.
- 2.3 The Contractor represents and warrants the accuracy of any information or data provided to UNDP for the purpose of entering into this Contract, as well as the quality of the Works foreseen under this Contract in accordance with the highest industrial and professional standards.
- 2.4 The contractor shall provide the services of a qualified and experienced Site Engineer to supervise the technical works, subject to the certification of UNDP.
- 2.5 The contractor shall apply the highest industry standard professionalism applicable for the civil works to ensure quality of the workmanship and material to be used for the construction. Furthermore, it is the responsibility of the contractor to maintain the quality of material, including cement, reinforced iron and aggregates to be used. Maximum care shall be taken to protect construction material against the weather conditions such as rain and excessive heat etc.

3. **Price and payment:**

- 3.2 The price of this Contract is not subject to any adjustment or revision because of price or currency fluctuations or the actual costs incurred by the Contractor in performance of the Contract.

3.3 **Payment Terms:**

3.3.1 Invoices shall be submitted by the Contractor to the Engineer upon achievement of the corresponding milestone and for the following amounts:

#	Milestones	% of the Total Cost	Total Amount (USD)	When
1				
2				

- 3.3.2 UNDP shall effect payment of the invoices after receipt of the certificate of payments issued by the Engineer, approving the amount contained in the invoice. The Engineer may make necessary corrections to that amount, in which case UNDP may effect payment for the amount so corrected. The Engineer may also withhold invoices if the work is not performed at any time in accordance with the terms of the Contract or if the necessary insurance policies or performance security are not valid and/or in order. The Engineer shall process the invoices submitted by the Contractor within 15 days of their receipt.
- 3.3.3 Payments effected by UNDP to the Contractor shall be deemed neither to relieve the Contractor of its obligations under this Contract nor as acceptance by UNDP of the Contractor's performance of the Works.
- 3.3.4 Payment of the final invoice shall be effected by UNDP after issuance of the Certificate of Substantial Completion by the Engineer.
- 3.3.5 The advance payment shall be made upon the signature of the contract by both parties; such amount is contingent upon receipt and acceptance by UNDP of a bank guarantee for the full amount of the advance payment issued by a Bank and in a form acceptable to UNDP.
- 3.3.6 In order to obtain the advance payment, the Contractor must forward to UNDP the payment request and the performance guarantee in accordance with article 37 of Instructions to Bidders and article 10 of the General Conditions of Contract for Civil Works. The total amount of advance payment shall be repaid by means of deductions from the instalments as indicated in the payment schedule.

4. Special Conditions:

4.1 **Liquidated Damage:**

4.1.1 According to Clause 45 of the General Conditions, the liquidated damages for delay shall be (0.7%) percentage of contract price per day of delay, once the delay reaches the maximum limit equivalent to 14 days, (or 10% of contract value) whichever comes first, UNDP may terminate the contract at its own discretion.

4.2 **Defects Liability.**

4.2.1 Any damage resulted from defect in execution by the Contractor on the executed Works during the defects liability period should be repaired by the contractor and at his own expense and during a week after receiving a notice in writing from the Employer; and if the Contractor does not repair these damages during the above specified period, then UNDP does these repairs at the expense of the contractor, which shall be deducted from due sums against

the Guarantee or Retention money at the discretion of UNDP.

4.2.2 The Contractor warrants and represents that the Goods and Materials delivered under this Contract are unencumbered by any third party's title or other property rights, including, but not limited to, any liens or security interests. Unless otherwise expressly provided in this Contract, title in and to the Goods shall pass from the Contractor to UNDP upon delivery of the Goods and their acceptance by UNDP in accordance with the requirements of this Contract.

4.3 **Defect Liability Period:**

- 4.3.1 Defect liability period for this contract shall be 12 months after the substantial completion of the works and handover of the project to UNDP. In the event if any damage is sustained to the building or any part thereof constructed within the scope of this contract shall be immediately rectified by the contractor upon notification by UNDP. UNDP will rectify the damage and deduct the monies from the performance guarantee or retention money if Contractor fails to adhere to timely rectification of damage, if any.
- 4.3.2 The liability insurance referred to in clause 23 of the General Conditions shall be the sole responsibility of the contractor for an amount of 5% of the price of the contract per occurrence, with number of occurrences unlimited.

4.4. Performance Guarantee.

- 4.4..1 The Performance Guarantee referred to in Clause 10 of the General Conditions shall be submitted by the Contractor for an amount of 10% of the Contract Price.
- 4.4.2 The Performance Guarantee shall be submitted by the Contractor within fourteen (14) days of the Contract signature.
- 4.4.3 The Performance Guarantee shall be issued by a reputable bank and MUST BE in the form provided in Annex VI.
- 4.4.4 The proceeds of the Performance Guarantee shall be payable to UNDP as compensation for any defects, outstanding items or loss resulting from the Supplier's failure to complete its obligations under the contract.
- 4.4.5 The Performance Guarantee shall be returned to the Contractor within 30 days after the issuance of the Certificate of Final Completion by the Engineer, including any warranty obligation.

5. Contract Effective Date

- a) This Contract shall become effective at such time as all of the following conditions have been met:
- i) The Contract has been signed by both UNDP and the Contractor.
- ii) The Performance Guarantee has been received and accepted by UNDP.
- iii) The Contractor shall have informed the UNDP, the effective date of mobilization in preparation for performance of the Works under the Contract.
- iv) UNDP shall notify the Contractor of the effective date of Contract no later than fourteen (14) days after the attainment of whichever is the last of (i) or (ii) above.

6. Contractor's Equipment:

- (a) The Contractor shall, upon request by the UNDP, at any time in relation to any item of Contractor's Equipment that has been hired, provide the agreement for such hire which shall include the name, address of the owner and the cost of such hire.
- (b) The Contractor shall whenever required by UNDP produce evidence satisfactory to the Engineers of the ownership of any Contractor's Equipment, Temporary Works or Materials or of the agreement under which the same has been hired or required.

7. Security and Safety:

7.1 The Contractor shall indemnify, hold and save harmless, and defend, at its own expense, the United Nations, including UNDP, its officials, agents, servants and employees from and against all suits, claims, demands, and liability of any nature or kind, including their costs and expenses, arising out of the services provided by the Contractor pursuant to this Contract. This provision shall extend, inter alia, to claims and liability in the nature of workmen's compensation, products liability and liability arising out of the use of patented inventions or devices,

- copyrighted material or other intellectual property by the Contractor, its employees, officers, agents, servants or sub-contractors. The obligations under this Article do not lapse upon termination of this Contract.
- 7.2 The responsibility for the safety and security of the Contractor and its personnel and Property, and of UNDP's property in the Contractor's custody, rests with the Contractor.
- 7.3 With the given situation in Sudan, the Contractor understands and agrees that: (i) the Works are to be carried out under harsh and hostile conditions; and (ii) UNDP has no control over such conditions and cannot protect or secure the Contractor from such conditions. In carrying out the services, the Contractor shall assume the risks associated with such conditions and UNDP shall have no liability therefore.

7.4 The Contractor shall:

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

8. Audit and Investigations:

- 8.1 UNDP reserves the right to verify whether such a plan is in place, and to suggest modifications to the plan when necessary. Failure to maintain and implement an appropriate security plan as required hereunder shall be deemed a breach of this contract. Notwithstanding the foregoing, the Contractor shall remain solely responsible for the security of its personnel and for UNDP's property in its custody as set forth in paragraph 4.12 above
- 8.2 Each invoice paid by UNDP shall be subject to a post-payment audit by auditors, whether internal or external, of UNDP or the authorized agents of the UNDP at any time during the term of the Contract and for a period of three (3) years following the expiration or prior termination of the Contract. The UNDP shall be entitled to a refund from the Contractor for any amounts shown by such audits to have been paid by the UNDP other than in accordance with the terms and conditions of the Contract. Should the audit determine that any funds paid by UNDP have not been used as per contract clauses; the company shall reimburse such funds forthwith. Where the company fails to reimburse such funds, UNDP reserves the right to seek recovery and/or to take any other action as it deems necessary.
 - 8.3 The Contractor acknowledges and agrees that, at any time, UNDP may conduct investigations relating to any aspect of the Contract, the obligations performed under the Contract, and the operations of the Contractor generally. The right of UNDP to conduct an investigation and the Contractor's obligation to comply with such an investigation shall not lapse upon expiration or prior termination of the Contract. The Contractor shall provide its full and timely cooperation with any such inspections, post-payment audits or investigations. Such cooperation shall include, but shall not be limited to, the Contractor's obligation to make available its personnel and any documentation for such purposes and to grant to UNDP access to the Contractor's premises. The Contractor shall require its agents, including, but not limited to, the

Contractor's attorneys, accountants or other advisers, to reasonably cooperate with any inspections, post-payment audits or investigations carried out by UNDP hereunder.

9 Anti-terrorism:

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

10 Submission of invoices

- One original and one copy of every invoice shall be submitted by mail by the Contractor for each payment under the Contract to the Engineer's address specified in clause 10.3 below.
- 10. 2 Invoices submitted by fax or email shall not be accepted by UNDP.
- 10.3 Address to Submit the Invoice:

11. Entry into force and Time Limits:

- 11.1 The Contract shall enter into force upon its signature by both parties and in conformity with Clause 5 above.
- 11.2 The Contractor shall commence the works within (5) days from date of receipt of notice to proceed from UNDP Engineer and shall complete the works within the following 12 weeks.

12. 12.1	<u>Time and manner of payment</u> Invoices shall be paid within thirty (30) days from the date of receipt by UNDP of such invoice. UNDP shall make			
	every effort to accept an invoice or advise the Contractor of its non-acceptance within a reasonable time from the date of its receipt. The payment procedures shall be in consistency with payment terms (clause 3.3.1 above).			
12.2				
12.2	All payments shall be made by UNDP to the following Bank account of the Contractor:			
	Bank Name:			
	Account No.:			
	Name of Account Holder:			
13. 13.1	Modifications: Any modification to this Contract shall require an amendment in writing between both parties duly signed by the authorized representatives of the Contractor and UNDP.			
14.	<u>Notifications</u>			
14.1 F	For the purpose of notifications under the Contract, the addresses of UNDP and the Contractor are as follows: or the UNDP :			
	Mr			
	E-mail: E-mail:			
	Phone:			
]	For the Contractor:			
	Mr			
	E-mail: E-mail:			
	Phone:			
14.2	UNDP shall communicate as soon as possible to the Contractor after the signature of the contract, the address of the Civil Engineer of the UNDP Project funded by DDR for the purposes of communication with the Engineer under the Contract.			
	If the above terms and conditions meet with your agreement as typed in this letter and in the Contract Documents, please initial every page of this letter and its attachments and return to this office one original of this Contract, duly signed and dated.			
	Sincerely Yours,			
	Deputy Country Director			
	(Operations)			
	Company LTD.			
Agre	ed and Accepted:			

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Name:

Title:

Signature:	
Date:	

General Conditions of Contract for Civil Works

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1. DEFINITIONS

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

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

2. SINGULAR AND PLURAL

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

3. HEADINGS OR NOTES

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

4. LEGAL RELATIONSHIPS

The Contractor and the sub-contractor(s), if any, shall have the status of an independent contractor vis-à-vis the

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

5. GENERAL DUTIES/POWERS OF ENGINEER

- a) The Engineer shall provide administration of Contract as provided in the Contract Documents. In particular, he shall perform the functions hereinafter described.
- b) The Engineer shall be the Employer's representative vis-à-vis the Contractor during construction and until final payment is due. The Engineer shall advise and consult with the Employer. The Employer's instructions to the Contractor shall be forwarded through the Engineer. The Engineer shall have authority to act on behalf of the Employer only to the extent provided in the Contract Documents as they may be amended in writing in accordance with the Contract. The duties, responsibilities and limitations of authority of the Engineer as the Employer's representative during construction as set forth in the Contract shall not be modified or extended without the written consent of the Employer, the Contractor and the Engineer.
- c) The Engineer shall visit the Site at intervals appropriate to the stage of construction to familiarize himself generally with the progress and quality of the Works and to determine in general if the Works are proceeding in accordance with the Contract Documents. On the basis of his on-site observations as an Engineer, he shall keep the Employer informed of the progress of the Works.
- d) The Engineer shall not be responsible for and will not have control or charge of construction means, methods, techniques, sequences or procedures, or for safety precautions and programs in connection with the Works or the Temporary Works. The Engineer shall not be responsible for or have control or charge over the acts or omissions of the Contractor (including the Contractor's failure to carry out the Works in accordance with the Contract) and of Sub-contractors or any of their agents or employees, or any other persons performing services for the Works, except if such acts or omissions are caused by the Engineer's failure to perform his functions in accordance with the contract between the Employer and the Engineer.
- e) The Engineer shall at all times have access to the Works wherever and whether in preparation or progress. The Contractor shall provide facilities for such access so that the Engineer may perform his functions under the Contract.
- f) Based on the Engineer's observations and an evaluation of the documentation submitted by the Contractor together with the invoices, the Engineer shall determine the amounts owed to the Contractor and shall issue Certificates for Payment as appropriate.
- g) The Engineer shall review and approve or take other appropriate action upon the Contractor's submittals such as Shop Drawings, Product Data and Samples, but only for conformity with the design concept of the Works and with the provisions of the Contract Documents. Such action shall be taken with reasonable promptness so as to cause no delay. The Engineer's approval of a specific item shall not indicate approval of an assembly of which the item is a component.
- h) The Engineer shall interpret the requirements of the Contract Documents and judge the performance thereunder by the Contractor. All interpretations and orders of the Engineer shall be consistent with the intent of and reasonably inferable from the Contract Documents and shall be in writing or in the form of drawings. Either party may make a written request to the Engineer for such interpretation. The Engineer shall render the interpretation necessary for the proper execution of the Works with reasonable promptness and in accordance with any time limit agreed upon. Any claim or dispute arising from the interpretation of the Contract Documents by the Engineer or relating to the execution or progress of the Works shall be settled as provided in Clause 71 of these General Conditions.
- i) Except as otherwise provided in the Contract, the Engineer shall have no authority to relieve the Contractor of any of his obligations under the Contract nor to order any work involving delay in completion of the Works or any extra payment to the Contractor by the Employer, or to make any variations to the Works.
- j) In the event of termination of the employment of the Engineer, the Employer shall appoint another suitable professional to perform the Engineer's duties.

- k) The Engineer shall have authority to reject work which does not conform to the Contract Documents. Whenever, in his opinion, he considers it necessary or advisable for the implementation of the intent of the Contract Documents, he will have authority to require special inspection or testing of the work whether or not such work be then fabricated, installed or completed. However, neither the Engineer's authority to act nor any reasonable decision made by him in good faith either to exercise or not to exercise such authority shall give rise to any duty or responsibility of the Engineer to the Contractor, any subcontractor, any of their agents or employees, or any other person performing services for the Works.
- 1) The Engineer shall conduct inspections to determine the dates of Substantial Completion and Final Completion, shall receive and forward to the Employer for the Employer's review written warranties and related documents required by the Contract and assembled by the Contractor, and shall issue a final Certificate for Payment upon compliance with the requirements of Clause 47 hereof and in accordance with the Contract.
- m) If the Employer and Engineer so agree, the Engineer shall provide one or more Engineer's Representative(s) to assist the Engineer in carrying out his responsibilities at the site. The Engineer shall notify in writing to the Contractor and the Employer the duties, responsibilities and limitations of authority of any such Engineer's Representative(s).

6. CONTRACTOR'S GENERAL OBLIGATIONS/RESPONSIBILITIES

6.1. Obligation to Perform in Accordance with Contract

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

6.2 Responsibility for Site Operations

The Contractor shall take full responsibility for the adequacy, stability and safety of all site operations and methods of construction, provided that the Contractor shall not be responsible, except as may be expressly provided in the Contract, for the design or specification of the Permanent Works or of any Temporary Works prepared by the Engineer.

6.3. Responsibility for Employees

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

6.4. Source of Instructions

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

6.5. Officials Not to Benefit

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

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

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

6.7. Confidential Nature of Documents

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

7. ASSIGNMENT AND SUBCONTRACTING

7.1. Assignment of Contract

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

7.2. Subcontracting

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

7.3. Assignment of Subcontractor's Obligations

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

8. DRAWINGS

8.1. Custody of drawings

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

8.2. One copy of Drawings to be kept on Site

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

8.3. Disruption of Progress

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

9. WORK BOOK

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

Every order shall be dated and signed by the Engineer and the Contractor, in order to account for its receipt.

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

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

10. PERFORMANCE SECURITY

a) As guarantee for his proper and efficient performance of the Contract, the Contractor shall on signature of the Contract furnish the Employer with a Performance Security issued for the benefit of the Employer. The amount and character of such security (bond or guarantee) shall be as indicated in the Contract.

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

11. INSPECTION OF SITE

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

12. SUFFICIENCY OF TENDER

The Contractor shall be deemed to have satisfied himself before tendering as to the correctness and sufficiency of his Tender for the construction of the Works and of the rates and prices, which rates and prices shall, except in so far as it is otherwise provided in the Contract, cover all his obligations under the Contract and all matters and things necessary for the proper execution and completion of the Works.

13. PROGRAMME OF WORK TO BE FURNISHED

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

14. WEEKLY SITE MEETING

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

15. CHANGE ORDERS

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

16. CONTRACTOR'S SUPERINTENDENCE

The Contractor shall provide all necessary superintendence during the execution of the Works and as long thereafter as the Engineer may consider necessary for the proper fulfillment of the Contractor's obligations under the Contract. The Contractor or a competent and authorized agent or representative of the Contractor approved in writing by the Engineer, which approval may at any time be withdrawn, shall be constantly on the site and shall devote his entire time to the superintendence of the Works. Such authorized agent or representative shall receive on behalf of the Contractor directions and instructions from the Engineer. If the approval of such agent or representative shall be withdrawn by the Engineer, as provided in Clause 17(2) hereinafter, or if the removal of such agent or representative

shall be requested by the Employer under Clause 17(3) hereinafter, the Contractor shall as soon as it is practicable after receiving notice of such withdrawal remove the agent or representative from the Site, and replace him by another agent or representative approved by the Engineer. Notwithstanding the provision of Clause 17(2) hereinafter, the Contractor shall not thereafter employ, in any capacity whatsoever, a removed agent or representative again on the Site.

17. CONTRACTOR'S EMPLOYEES

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

18. SETTING-OUT

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

19. WATCHING AND LIGHTING

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

20. CARE OF WORKS

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

21. INSURANCE OF WORKS, ETC.

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

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

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

22. DAMAGE TO PERSONS AND PROPERTY

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

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

23. LIABILITY INSURANCE

23.1. Obligation to take out Liability Insurance

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

23.2. Minimum Amount of Liability Insurance

Such insurance shall be effected with an insurer and in terms approved by the Employer, which approval shall not be unreasonably withheld, and for at least the amount specified in the contract. The Contractor shall, whenever required

by the Employer or the Engineer, produce to the Engineer the policy or policies of insurance and the receipts for payment of the current premiums.

23.3. Provision to Indemnify Employer

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

24. ACCIDENT OR INJURY TO WORKMEN

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

b) Insurance Against Accident, etc., to Workmen

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

25. REMEDY ON CONTRACTOR'S FAILURE TO INSURE

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

26. COMPLIANCE WITH STATUTES, REGULATIONS, ETC.

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

27. FOSSILS, ETC.

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

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

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

29. INTERFERENCE WITH TRAFFIC AND ADJOINING PROPERTIES

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

30. EXTRAORDINARY TRAFFIC AND SPECIAL LOADS

- a) The Contractor shall use every reasonable means to prevent any of the roads or bridges communicating with or on the routes to the Site from being damaged by any traffic of the Contractor or any of his sub-contractors and, in particular, shall select routes, choose and use vehicles and restrict and distribute loads so that any such extraordinary traffic as will inevitably arise from the moving of plant and material from and to the Site shall be limited as far as reasonably possible and so that no unnecessary damage may be occasioned to such roads and bridges.
- b) Should it be found necessary for the Contractor to move any load of Constructional Plant, machinery, reconstructed units or parts of units of work, or other thing, over part of a road or bridge, the moving whereof is likely to damage any such road or bridge unless special protection or strengthening is carried out, then the Contractor shall before moving the load on to such road or bridge, save insofar as the Contract otherwise provide, be responsible for and shall pay for the cost of strengthening any such bridge or altering or improving any such road to avoid such damage, and the Contractor shall indemnify and keep the Employer indemnified against all claims for damage to any such road or bridge caused by such movement, including such claim as may be made directly against the Employer, and shall negotiate and pay all claims arising solely out of such damage.

31. OPPORTUNITIES FOR OTHER CONTRACTORS

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

32. CONTRACTOR TO KEEP SITE CLEAN

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

33. CLEARANCE OF SITE ON SUBSTANTIAL COMPLETION

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

34. LABOUR

34.1 Engagement of Labour

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

34.2Supply of Water

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

34.3 Alcoholic Drinks or Drugs

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

34.4Arms and Ammunition

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

34.5Holiday and Religious Customs

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

34.6Epidemics

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

34.7Disorderly Conduct, etc.

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

34.8Observance by Sub-Contractors

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

34.9Legislation applicable to Labour

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

35 RETURNS OF LABOUR, PLANT, ETC.

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

36 MATERIALS, WORKMANSHIP AND TESTING

36.1 Materials and Workmanship

- a) All materials and workmanship shall be of the respective kinds described in the Contract and in accordance with the Engineer's instructions and shall be subjected from time to time to such tests as the Engineer may direct at the place of manufacture or fabrication, or on the Site or at all or any of such places. The Contractor shall provide such assistance, instruments, machines, labour and materials as are normally required for examining, measuring and testing any work and the quality, weight or quantity of any materials used and shall supply samples of materials before incorporation in the Works for testing as may be selected and required by the Engineer. All testing equipment and instruments provided by the Contractor shall be used only by the Engineer or by the Contractor in accordance with the instructions of the Engineer.
- b) No material not conforming with the Specifications in the Contract may be used for the Works without prior written approval of the Employer and instruction of the Engineer, provided always that if the use of such material results or may result in increasing the Contract Price, the procedure in Clause 48 shall apply.

36.2Cost of Samples

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

36.3Cost of Tests

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

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

37 ACCESS TO SITE

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

38 EXAMINATION OF WORK BEFORE COVERING UP

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

39 REMOVAL OF IMPROPER WORK AND MATERIALS

39.1Engineer's power to order removal

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

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

39.2Default of Contractor in carrying out Engineer's Instructions

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

40 SUSPENSION OF WORK

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

41 POSSESSION OF SITE

41.1Access to Site

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

41.2 Wayleaves, etc.

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

41.3Limits of the Site

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

42 TIME FOR COMPLETION

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

43 EXTENSION OF TIME FOR COMPLETION

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

44 RATE OF PROGRESS

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

45 LIQUIDATED DAMAGES FOR DELAY

a) If the Contractor shall fail to complete the Works within the time for completion prescribed in the Contract, or any extended time for completion in accordance with the Contract, then the Contractor shall pay to the Employer the

sum specified in the Contract as liquidated damages, for the delay between the time prescribed in the Contract or the extended time for completion, as the case may be, and the date of substantial completion of the Works as stated in the Certificate of Substantial Completion, subject to the applicable limit stated in the Contract. The said sum shall be payable by the sole fact of the delay without the need for any previous notice or any legal proceedings, or proof of damage, which shall in all cases be considered as ascertained. The Employer may, without prejudice to any other method of recovery, deduct the amount of such liquidated damages from any monies in its hands due or which may become due to the Contractor. The payment or deduction of such damages shall not relieve the Contractor from his obligation to complete the Works or from any other of his obligations and liabilities under the Contract.

b) If, before the time for completion of the whole of the Works or of a Section of the Works, a Certificate of Substantial Completion has been issued for any part or Section of the Works, the liquidated damages for delay in completion of the remainder of the Works or of that Section may, for any period of delay after the date stated in such Certificate of Substantial Completion, and in the absence of alternative provisions in the Contract, be reduced in the proportion which the value of the part or Section so certified bears to the total value of the whole of the Works or Section, as applicable. The provisions of this Sub-Clause shall only apply to the rate of liquidated damages and shall not affect the limit thereof.

46 CERTIFICATE OF SUBSTANTIAL COMPLETION

46.1 Substantial Completion of the Works

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

46.2 Substantial Completion of Sections or Parts of the Works

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

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

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

47 DEFECTS LIABILITY

47.1 Defects Liability Period

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

the date of completion of that Section or part as stated in the relevant Certificate. The expression "the Works" shall, in respect of the Defects Liability Period, be construed accordingly.

47.2 Completion of Outstanding Work and Remedying of Defects

During the Defects Liability Period, the Contractor shall finish the work, if any, outstanding at the date of the Certificate of Substantial Completion, and shall execute all such work of repair, amendment, reconstruction, rectification and making good defects, imperfections, shrinkages or other faults as may be required of the Contractor in writing by the Engineer during the Defects Liability Period and within fourteen (14) days after its expiration, as a result of an inspection made by or on behalf of the Engineer prior to expiration of the Defects Liability Period.

47.3 Cost of Execution of Work of Repair, etc.

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

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

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

47.5 Certificate of Final Completion

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

48 ALTERATIONS, ADDITIONS AND OMISSIONS

1 VARIATIONS

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

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

2 Variations Increasing Cost of Contract or altering the Works.

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

3 ORDERS FOR VARIATIONS TO BE IN WRITING

No variations shall be made by the Contractor without an order in writing from the Engineer. Variations requiring the written approval of the Employer under paragraph (2) of this Clause shall be made by the Contractor only upon

written order from the Engineer accompanied by a copy of the Employer's approval. Provided that, subject to the provisions of the Contract, no order in writing shall be required for any increase or decrease in the quantity of any work where such increase or decrease is not the result of an order given under this Clause but is the result of the quantities exceeding or being less than those stated in the Bill of Quantities.

4 VALUATION OF VARIATIONS

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

49 PLANT, TEMPORARY WORKS AND MATERIALS

1 PLANT, ETC., EXCLUSIVE USE FOR THE WORKS

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

2 Removal of Plant, etc.

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

3 EMPLOYER NOT LIABLE FOR DAMAGE TO PLANT

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

4 OWNERSHIP OF PAID MATERIAL AND WORK

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

5 EQUIPMENT AND SUPPLIES FURNISHED BY EMPLOYER

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

50 APPROVAL OF MATERIALS ETC., NOT IMPLIED

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

51 MEASUREMENT OF WORKS

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

52 LIABILITY OF THE PARTIES

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

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

3 UNFULFILLED OBLIGATIONS

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

4 CONTRACTOR RESPONSIBLE

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

53 AUTHORITIES

- 1 The Employer shall have the right to enter upon the Site and expel the Contractor therefrom without thereby voiding the Contract or releasing the Contractor from any of his obligations or liabilities under the Contract or affecting the rights and powers conferred on the Employer and the Engineer by the Contract in any of the following cases:
- (a) If the Contractor is declared bankrupt or claims bankruptcy or court protection against his creditors or if the Contractor is a company or member of a company which was dissolved by legal action;
- (b) If the Contractor makes arrangements with his creditors or agrees to carry out the Contract under an inspection committee of his creditors;
- (c) If the Contractor withdraws from the Works or assigns the Contract to others in whole or in part without the Employer's prior written approval;
- (d) If the Contractor fails to commence the Works or shows insufficient progress to the extent which in the opinion of the Engineer will not enable him to meet the target completion date of the Works;
- (e) If the Contractor suspends the progress of the Works without due cause for fifteen (15) days after receiving from the Engineer written notice to proceed;
- (f) If the Contractor fails to comply with any of the Contract conditions or fails to fulfill his obligations and does not remedy the cause of his failure within fifteen (15) days after being notified to do so in writing;
- (g) If the Contractor is not executing the work in accordance with standards of workmanship specified in the Contract;
- (h) If the Contractor gives or promises to give a present or loan or reward to any employee of the Employer or of the Engineer.

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

2 EVALUATION AFTER RE-ENTRY

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

value of the materials whether unused or partially used and the value of construction equipment and any part of the Temporary Works.

3 PAYMENT AFTER RE-ENTRY

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

54 URGENT REPAIRS

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

55 INCREASE AND DECREASE OF COSTS

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

56 TAXATION

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

57 BLASTING

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

58 MACHINERY

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

59 TEMPORARY WORKS AND REINSTATEMENT

The Contractor shall provide and maintain all temporary roads and tracks necessary for movement of plant and materials and clear same away at completion and make good all works damaged or disturbed. The Contractor shall submit drawings and full particulars of all Temporary Works to the Engineer before commencing same. The Engineer may require modifications to be made if he considers them to be insufficient and the Contractor shall give

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

60 PHOTOGRAPHS AND ADVERTISING

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

61 PREVENTION OF CORRUPTION

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

62 DATE FALLING ON HOLIDAY

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

63 NOTICES

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

64 LANGUAGE, WEIGHTS AND MEASURES

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

65 RECORDS, ACCOUNTS, INFORMATION AND AUDIT

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

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

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

66 FORCE MAJEURE

Force majeure as used herein means Acts of God, war (whether declared or not), invasion, revolution, insurrection or other acts or events of a similar nature or force.

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

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

67 SUSPENSION BY THE UNDP

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

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

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

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

68 TERMINATION BY THE UNDP

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

Upon termination of this Contract:

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

69 TERMINATION BY THE CONTRACTOR

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

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

70 RIGHTS AND REMEDIES OF THE UNDP

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

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

71 SETTLEMENT OF DISPUTES

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

1 NOTIFICATION

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

2 CONSULTATION

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

3 CONCILIATION

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

4 ARBITRATION

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

72 PRIVILEGES AND IMMUNITIES

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

73 SECURITY

The Contractor shall:

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

UNDP reserves the right to verify whether such a plan is in place, and to suggest modifications to the plan when necessary. Failure to maintain and implement an appropriate security plan as required hereunder shall be deemed a breach of this contract. Notwithstanding the foregoing, the Contractor shall remain solely responsible for the security of its personnel and for UNDP's property in its custody as set forth in paragraph 4.1 above.

74 AUDIT AND INVESTIGATIONS

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

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

75 ANTI-TERRORISM

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