



ROADS AND FLEET MANAGEMENT DEPARTMENT

TENDER NO. KWS/OT/R&F/39/2018–2019

REHABILITATION OF KILAGUNI AIRSTRIP

IN

TSAVO WEST NATIONAL PARK

May 2019

(Open to All)

**HEAD, ROADS AND FLEET MANAGEMENT,
KENYA WILDLIFE SERVICE,
P.O.BOX 40241 – 00100 ,
NAIROBI**

**DIRECTOR GENERAL,
KENYA WILDLIFE SERVICE,
P.O.BOX 40241 – 00100 ,
NAIROBI**

TABLE OF CONTENTS**SECTION I: INVITATION TO TENDER I****SECTION II: INSTRUCTIONS TO TENDERERS 1****SECTION III: APPENDIX TO INSTRUCTIONS TO TENDERERS 19****SECTION IV: EVALUATION AND QUALIFICATION CRITERIA 25****SECTION IV (A): QUALIFICATION CRITERIA 26****SECTION V (A) - CONDITIONS OF CONTRACT PART I: GENERAL CONDITIONS OF CONTRACT
42****SECTION V (B) - CONDITIONS OF CONTRACT PART II: (CONDITIONS OF PARTICULAR
APPLICATION)43****SECTION VI: TECHNICAL SPECIFICATIONS 100****SECTION 7: TECHNICAL SPECIFICATIONS 101****SECTION VIII: TENDER DRAWINGS (VOL. II) 139****SECTION IX: BILLS OF QUANTITIES 140****SECTION X: STANDARD FORMS 154****SECTION XI: SCHEDULE OF SUPPLEMENTARY INFORMATION 159**

SECTION I: INVITATION TO TENDER



**Address: P.O.BOX 40241-00100
Nairobi**

INVITATION FOR TENDER

Tender Reference No. KWS/OT/R&F/39/2018-2019

Tender Name: Rehabilitation Of Kilaguni Airstrip

Kenya Wildlife Service now invites eligible contractors to bid for the Works. Eligible contractors are those registered as road works contractors by the National Construction Authority (NCA) **Category 5 and above with current practising license** for the maintenance work for the above road in the **Tsavo West National Park**. The works are to be funded through the GoK Development vote

SCOPE OF WORK

The scope of works shall be as described in the tender document.

QUALIFICATION FOR TENDERING MANDATORY REQUIREMENTS

Eligible bidders must also submit the following among other eligibility requirements listed in the instruction to bidders;

- i) Certified Copy of Certificate of Incorporation/Business Registration name under the Companies Act.
- ii) A certified current copy of form CR12 for limited companies issued by the Registrar of Companies that clearly indicates the ownership of the companies (not older than 12 months).
- iii) Copy of a valid Tax Compliance Certificate from Kenya Revenue Authority (KRA) as at the date of tender closing.
- iv) Current annual NCA practicing licence for the specified category.
- v) A declaration that the bidder will not engage in any corrupt or fraudulent practice.
- vi) A declaration that the bidder or her sub-contractors are not debarred from participating in procurement proceedings by Public Procurement Regulatory Authority.
- vii) Original Tender Security **of Kshs 800,000 (Eight hundred Thousand Shillings only)** issued in Kenya shillings or a freely convertible currency and in the form of bank guarantee

or an insurance guarantee from insurance companies approved by PPRA / deposit taking microfinance institutions, SACCO societies, Youth Enterprise Development Fund or Women Enterprise Development Fund.

- viii) The Tender Security shall be in the **standard format** provided in the tender document and valid for a period of 120 days from the date of tender opening.
- ix) Bidders and their respective directors **can submit up to a maximum of two bids**, but from the **same national park or reserve**. Bidders and their respective directors submitting bids for **different parks and Reserves shall be disqualified..**
- x) There shall be **MANDATORY** organized **pre-tender site visit on 18th June 2019**. Bidders shall assemble at **Mtito Andei Gate of Tsavo West National park at 8.00am**
- The attendance register and certificate of site visit shall be signed at the end of the pre-tender site visit by the bidder and witnessed by the KWS representative on the date of organized site visit.
 - Every bidder shall be represented by one person bearing a letter from the company authorizing them to represent the company in the pretender site visit. **One (1)** person shall only represent one company. The letter shall be in the official company letter head giving name and National Identification / Passport No. of the representative who shall be required to present their original identification during the pre-tender site visit.
- xi) Bidders having ongoing works with KWS that **have not been substantially completed** will not be eligible for bidding in this tender and will be disqualified.
- xii) The bidders shall comply with all the instructions of the tender and submit **a complete set of tender document as per the instruction to bidders Clause 12 and also ensure that all the forms required are properly filled for completeness**
- xiii) All the pages of bid document **MUST be serialized sequentially from cover page to the last page**. Bidders who fail to comply with this criterion will be disqualified.

Tender documents containing detailed specifications can be downloaded for free at our website; www.kws.go.ke.

Communication in regard to the tender must be in writing through email address: hps@kws.go.ke.

All clarifications and/or amendments will be published in KWS website and tenderers are required to check for any addendums or amendments in the course of the bidding period prior to the closing date.

The complete tenders enclosed in sealed envelopes clearly marked with the appropriate **Tender Number and Road Name** shall be submitted to:

**Director General,
Kenya Wildlife Service,
KWS, Headquarters, Langata Road,
P. O. Box 40241-00100,
NAIROBI, KENYA**

Or to be deposited in the Tender Box on Ground Floor, Main Reception on or **before 10.00am on Thursday, June 27, 2019.**

Opening of the Tenders will take place immediately thereafter in the KWS Conference Room in the presence of bidders representatives who wish to attend.

DIRECTOR GENERAL

SECTION II: INSTRUCTIONS TO TENDERERS

SECTION II: INSTRUCTIONS TO BIDDERS

TABLE OF CONTENTS

A.	GENERAL	3
	1. Scope Of Bid	3
	2. Source of Funds	3
	3. Eligible Bidders	3
	4. Qualification of the Bidder	4
	5.....	5
	6. Cost of Bidding	5
	7. Site Visit	5
B.	BIDDING DOCUMENTS	5
	8. Content of Bidding Documents	5
	9. Clarification of Bidding Documents	6
	10. Amendment of Bidding Documents	6
C.	PREPARATION OF BIDS	7
	11. Language of Bid	7
	12. Documents Comprising the Bid	7
	13. Bid Prices	7
	14. Currencies of Bid and Payment	8
	15. Bid Validity	8
	16. Bid Security	8
	17. Alternative Proposals by Bidders	9
	18. Pre-Bid Meeting	10
	19. Format and Signing of Bid	10
D.	SUBMISSION OF BIDS	11
	20. Sealing and Marking of Bids	11
	21. Deadline for Submission of Bids	11
	22. Late Bids	11
	23. Modification and Withdrawal of Bids	11
E.	BID OPENING AND EVALUATION	12
	24. Bid Opening	12
	25. Process to Be Confidential	13
	26. Clarification of Bids and Contacting the Employer	13
	27. Examination of Bids and Determination of Responsiveness	13
	28. Correction of Errors	14
	29. Conversion to Single Currency for Comparison of Bids	14
	30. Evaluation and Comparison of Bids	15
F.	AWARD OF CONTRACT	16
	31. Award	16
	32. Employer's Right to Accept Any Bid and to Reject Any or All Bids	16
	33. Notification of Award	17
	34. Signing of Agreement	17

35. Performance Security	17
36. Disputes Review Method	18
37. Corrupt & Fraudulent Practices	18

SECTION 4: CONDITIONS OF BID AND INSTRUCTIONS TO BIDDERS**A. GENERAL**

- 1. Scope Of Bid**
 - 1.1 The Employer, as defined in the Conditions of Contract, Part II and Appendix to Form of Bid, hereinafter referred to as “the Employer,” wishes to receive bids for the construction of Works, as described in Section 1, Clause 102 of the Special Specifications (Location and extent of the works).
 - 1.2 The successful bidder will be expected to complete the Works within the period stated in the Appendix to Form of Bid from the date of commencement of the Works.
 - 1.3 Throughout these bidding documents, the terms “bid” and “tender” and their derivatives (“bidder/tenderer”, “bid/tendered,” “bidding/tendering,” etc.) are synonymous, and day means calendar day. Singular also means plural.
- 2. Source of Funds**
 - 1.4 The source of funding is the Government of Kenya Development Vote through the Kenya Wildlife Service.
- 3. Eligible Bidders**
 - 3.1 This invitation to bid is open to all Bidders including all members of a joint venture and all subcontractors of a bidder) who are legally registered or incorporated in the Republic of Kenya as of the time of tender submission. Registration with NCA as road Contractor is mandatory.
 - 3.2 Bidders shall not have a conflict of interest. Bidders shall be considered to have conflict of interest, if is affiliated with a firm or entity
 - (i) That has provided consulting services related to the Works to either the Employer during the preparatory stages of the Works or of the Project of which the Works form a part,
 - (ii) That has been hired (or is proposed to be hired) by the Employer as an Engineer for the contract.
 - 3.3 Bidders shall provide such evidence of their continued

eligibility satisfactory to the Employer as the Employer shall reasonably request.

3.4A bidder shall be pre-qualified for the contract as notified by the Employer. All tenderers qualified must meet the eligibility requirements stated in the appendix to Instruction to Tenderers (ITT).

4. Qualification of the Bidder

4.1 Bidders shall, as part of their bid,:

- (a) Submit a written power of attorney authorizing the signatory of the bid to commit the bidder; and
- (b) Update any information submitted with their applications for prequalification, which has changes, and update in any case the information indicated in the Bidding Data, and continue to meet the minimum threshold criteria set out in the prequalification documents.

As a minimum, bidders shall update the following information:

- (a) Evidence of access to lines of credit and availability of other financial resources
- (b) Financial predictions for the current year and the two following years, including the effect of known commitments
- (c) Work commitments acquired since prequalification.
- (d) Current litigation information, and
- (e) Availability of critical equipment.

4.2 Bids submitted by a joint venture of two or more firms as partners shall comply with the following requirements:

- (a) The bid shall include all the information listed in Sub-Clause 4.1 above.
- (b) The bid and, in case of a successful bid, the Agreement shall be signed so as to be legally binding on all partners.
- (c) One of the partners shall be nominated as being in charge and this authorization shall be evidenced by

submitting a power of attorney signed by legally authorized signatories of all the partners.

- (d) The partner in charge shall be authorized to incur liabilities and receive instructions for and on behalf of any and all partners of the joint venture and the entire execution of the contract including payment shall be done exclusively.
- (e) All partners of the joint venture shall be liable jointly and severally for the execution of the contract in accordance with the contract terms, and a statement to this effect shall be included in the authorization mentioned under Sub-clause 4.2 (c) above as well as in the bid and in the Agreement, in case of successful bid, and
- (f) A copy of the agreement entered into by the joint venture partners shall be submitted with the bid.

4.3 Bidders shall also submit proposals of work methods and schedule in sufficient details to demonstrate the adequacy of the bidders' proposals to meet the technical specifications and the completion time referred to in Sub-clause 1.2 above.

5.

6. Cost of Bidding

6.1 The bidder shall bear all costs associated with the preparation and submission of its bid and the Employer will in no case be responsible or liable for those costs regardless of the conduct or outcome of the bidding process.

7. Site Visit

7.1 The bidder is advised to visit and examine the Site of Works and its surroundings and obtain for itself on its own responsibility all information that may be necessary for preparing the bid and entering into a contract for construction of the Works. The costs of visiting the Site shall be at the bidder's own expense.

7.2 The bidder and any of its personnel or agents will be

granted permission by the Employer to enter upon its premises and lands for the purpose of such visit, but only upon the express condition that the bidder, its personnel, and agents will release and indemnify the Employer and its personnel and agents from and against all liability in respect thereof, and will be responsible for death or personal injury, loss of or damage to property, and any other loss, damage, costs, and expenses incurred as a result of the inspection.

7.3 The Employer will conduct a mandatory pre-tender Site visit concurrently with the pre-bid meeting referred to in Clause 18 on the date specified in the Invitation to Tender on site.

7.4 The bidder's representative should be technically qualified with at least a degree in civil engineering. He must also be one of the key people listed in the schedule of key personnel.

B. BIDDING DOCUMENTS

8. Content of Bidding Documents

8.1 The bidding documents are those stated below and should be read in conjunction with any Addenda issued if any in accordance with Clause 11 below.

1. Invitation to Tender
2. Instructions to Tenderers
3. Appendix to Instructions to Tenderers
4. Evaluation and Qualification Criteria
5. Conditions of Contract, Part I and Part II
6. Standard Specifications
7. Special Specifications
8. Drawings
9. Bills of Quantities
10. Standard Forms
11. Schedules of Supplementary Information

12. Tender addenda [tender notices as issued]

8.2 The bidder is expected to examine carefully all instructions, conditions, forms, terms, specifications and drawings in the bidding documents. Failure to comply with the requirements of bid submission will be at the bidder's own risk. Bids that are not substantially responsive to the requirements of the bidding documents will be rejected.

9. Clarification of Bidding Documents

9.1 A prospective bidder requiring any clarification of the bidding documents may notify the Employer in writing or by email at the Employer's address indicated in the Appendix to the Form of Bid. The Employer will respond to any request for clarification that he receives earlier than fourteen (14) days prior to the deadline for submission of bids. Copies of the Employer's response will be forwarded to all purchasers of the bidding documents, including a description of the inquiry but without identifying its source.

10. Amendment of Bidding Documents

10.1 At any time prior to the deadline for submission of bids, the Employer may amend the bidding documents by issuing Addenda.

10.2 Any Addendum thus issued shall be part of the bidding documents pursuant to Sub-clause 9.1 above and shall be communicated in writing or by cable to all purchasers of the bidding documents.

Prospective bidders shall promptly acknowledge receipt of each Addendum by cable to the Employer.

10.3 To give prospective bidders reasonable time in which to take an Addendum into account in preparing their bids, the Employer, in accordance with Clause 21.2, may extend as necessary the deadline for submission of bids.

C. PREPARATION OF BIDS

11. Language of Bid

11.1 The bid, and all correspondence and documents related to the bid exchanged by the Bidder and the Employer, shall be written in English Language. Supporting documents and printed literature furnished by the bidder may be in another

language provided they are accompanied by an accurate translation of the relevant passages in the above stated language, in which case, for purposes of interpretation of the bid, the English Language shall prevail.

**12. Documents
Comprising
the Bid**

12.1 The bid submitted by the bidder shall comprise the following: duly filled-in Form of Bid and Appendix to Form of Bid, Bid Security, priced Bill of Quantities, alternative offers where invited, and any information or other materials required to be completed and submitted in accordance with the Instructions to Bidders embodied in these bidding documents. The documents in this bidding process shall be filled in without exception, subject to extensions thereof in the same format and to the provisions of Sub-clause 16.2 regarding the alternative forms of bid security.

13. Bid Prices

13.1 Unless stated otherwise in the bidding documents, the Contract shall be for the whole Works as described in Sub-clause 1.1, based on the unit rates and prices in the Bill of Quantities submitted by the bidder.

13.2 The bidder shall fill in rates and prices for all items of the Works described in the Bill of Quantities. Items against which no rate or price is entered by the bidder will not be paid for by the Employer when executed and shall be deemed covered by the rates for other items and prices in the Bill of Quantities.

13.3 All duties, taxes (excluding VAT), and other levies payable by the Contractor under the Contract, or for any other cause, as of the date 28 days prior to the deadline for submission of bids, shall be included in the rates and prices and the total Bid Price submitted by the bidder.

13.4 Unless otherwise provided in the Bidding Data and Conditions of Particular Application, the rates and prices quoted by the bidder are subject to adjustment during the performance of the Contract in accordance with the provisions of Clause 70 of the Conditions of Contract. The bidder shall furnish the indices and weightings in the

Appendix to Form of Bid for the price adjustment formulae, and shall submit with its bid such other supporting information as required under Clause 70 of the Conditions of Contract. The Employer may require the bidder to justify its proposed weightings.

14. Currencies of Bid and Payment

14.1 The currency (ies) of the bid shall be in Kenya Shillings.

15. Bid Validity

15.1 Bids shall remain valid and open for acceptance for a period of 120 Days from the specified date of bid opening stated under Clause 21 below.

15.2 In exceptional circumstances, prior to expiry of the original bid validity period, the Employer may request that the bidders extend the period of validity for a specified additional period. The request and the responses thereto shall be made in writing or by cable. A bidder may refuse the request without forfeiting its bid security. A bidder agreeing to the request will not be required or permitted to modify its bid, but will be required to extend the validity of its bid security for the period of the extension and in compliance with Clause 16 below in all respects.

15.3 In the case of contracts in which the Contract Price is fixed (not subject to price adjustment), if the period of bid validity is extended beyond eight weeks, the amounts payable in local and foreign currency to the bidder selected for award, shall be increased by applying to both the local and foreign currency component of the payments, respectively, the factors specified in the Bidding Data or in the request for extension, for the period of delay beyond eight weeks after the expiry of the initial bid validity, up to the notification award. Bid evaluation will be based on the bid prices without taking into consideration the above correction.

16. Bid Security

16.1 The bidder shall furnish, as part of its bid, a Bid Security

in the amount stipulated in the Appendix to the Form of Bid in the currency of the Employer's country, or the equivalent amount in a freely convertible currency.

16.2 The bid security shall be in the form of a bank guarantee from a reputable bank selected by the bidder and located in any eligible country. The format of the bank guarantee shall be in accordance with the form of bid security included in Section 3 of this Volume I bidding document. Bid security shall remain valid for a period of 30 days beyond the original validity period for the bid, and beyond any period of extension subsequently requested under Sub-clause 15.2 above.

16.3 Any bid not accompanied by an acceptable bid security shall be rejected by the Employer as non-responsive. The bid security of a joint venture must be in the name of the joint venture submitting the bid.

16.4 The bid securities of unsuccessful bidders will be returned as promptly as possible, but not later than 30 days after the expiration of the period of bid validity.

16.5 The bid security of the successful bidder will be returned when the bidder has signed the Agreement and furnished the required performance security.

16.6 The bid security may be forfeited:

- (a) If the bidder withdraws its bid, except as provided in Sub-clause 23.2 below
- (b) If the bidder does not accept the corrections of its Bid Price, pursuant to Sub-clause 28.2 below.
- (c) In the case of a successful bidder, if it fails within the specified time limit to
 - (i) Sign the Agreement, or
 - (ii) Furnish the required Performance Security.

17. Alternative Proposals by Bidders

17.1 When alternative times for completion are explicitly invited, a statement to that effect will be included in the Bidding Data Sheet and Conditions of Contract, as will the method of evaluating different times for completion.

17.2 Except as provided under Clause 17.3 below, bidders

wishing to offer technical alternatives to the requirements of the bidding documents must first price the Employer's design as described in the bidding documents and shall further provide all information necessary for a complete evaluation of the alternatives by the Employer, including drawings, design calculations, technical specifications, breakdown of prices, and proposed construction methodology and other relevant details. Only the technical alternatives, if any, of the lowest evaluated bidder conforming to the basic technical requirements shall be considered by the Employer.

17.3 When bidders are permitted to submit alternative technical solutions for specified parts of the Works, such parts shall be described in Section 8, Technical Specifications.

18. Pre-Bid Meeting

18.1 The bidder's designated representative is invited to attend a pre-bid meeting, which, if convened, will take place at the venue and time in the letter of Invitation to Bid.

18.2 The purpose of the meeting will be to clarify issues and to answer questions on any matter that may be raised at that stage.

18.3 The bidder is requested, as far as possible, to submit any questions in writing or by cable, to reach the Employer not later than one week before the meeting. It may not be practicable at the meeting to answer questions received late, but questions and responses will be transmitted in accordance with Sub-clause 18.4 below.

18.4 Minutes of the meeting, including the text of the questions raised and the responses given, together with any responses prepared after the meeting, will be transmitted without delay to all purchasers of the bidding documents. Any modification of the bidding documents that may become necessary as a result of the pre-bid meeting shall be made by the Employer exclusively through the issue of an Addendum pursuant to Clause 10.1 above

and not through the minutes of the pre-bid meeting.

18.5 Non-attendance at the pre-bid meeting will not be a cause for disqualification of a bidder.

19. Format and Signing of Bid

19.1 The bidder shall prepare one original of the documents comprising the bid as described under Clause 8 of these Instructions to Bidders, bound with the section containing the Form of Bid and Appendix to Form of Bid, and clearly marked 'original'. In addition, the bidder shall submit copies of the bid, in the number specified in the Bidding Data and Appendix to Form of Bid and clearly marked 'copies'. In the event of discrepancy between them, the original shall prevail.

19.2 The original and all copies of the bid shall be typed or written in indelible ink (in the case of copies, photocopies are also acceptable) and shall be signed by a person or persons duly authorized to sign on behalf of the bidder, pursuant to Sub-clauses 4.1 (a) or 4.2 (c) above, as the case may be. All pages of the bid where entries or amendments have been made shall be initialled by the person or persons signing the bid.

19.3 The bid shall contain no alterations, omissions, or additions, unless such corrections are initialled by the person or persons signing the bid.

D. SUBMISSION OF BIDS

20. Sealing and Marking of Bids

20.1 The bidder shall seal the original and each copy of the bid in separate envelopes, duly marking the envelopes as "original" and 'copies'. The envelopes shall then be sealed in an outer envelope.

20.2 The inner and outer envelopes shall:

- (a) Be addressed to the Employer at the address provided in the Appendix to Form of Bid

(b) Bear the name and identification number of the Contract.

(c) Provide a warning not to open before the time and date for bid opening, as specified in the Letter of invitation to bid.

20.3 In addition to the identification required under Sub-clause 20.2 above, the inner envelopes shall indicate the name and address of the bidder to enable the bid to be returned unopened in case it is declared “late” pursuant to Clause 22.1 below, and for matching purposes under Clause 23 below.

20.4 If the outer envelope is not sealed and marked as above, the Employer will assume no responsibility for the misplacement or premature opening of the bid. If the outer envelope discloses the bidder’s identity, the Employer will not guarantee the anonymity of the bid submission, but this shall not constitute grounds for rejection of the bid.

21. Deadline for Submission of Bids

21.1 Bids must be received by the Employer at the address specified under Sub-clause 20.2, not later than the time and date stipulated in the Letter of invitation to Bid.

21.2 The Employer may, in exceptional circumstances and at its discretion, extend the deadline for submission of bids by issuing an Addendum in accordance with Sub-clause 10.1 above, in which case all rights and obligations of the Employer and the bidders previously subject to the original deadline will thereafter be subject to the deadline as extended.

22. Late Bids

22.1 Any bid received by the Employer after the deadline for submission of bids prescribed under Sub-clause 21.1 will be returned to the bidder unopened.

23. Modification and Withdrawal of Bids

23.1 The bidder may modify, substitute, or withdraw its bid after bid submission, provided that written notice of the modification or withdrawal is received by the Employer prior to the deadline for submission of bids.

23.2 The bidder’s modification, substitution, or withdrawal

notice shall be prepared, sealed, marked, and delivered in accordance with the provisions of Clause 20 above, with the outer and inner envelopes additionally marked 'modification' or "withdrawal," as appropriate.

23.3 No bid may be modified by the bidder after the deadline for submission of bids, except in accordance with Sub-clause 28.2 below.

23.4 Except as provided under Sub-clause 23.2 above, withdrawal of a bid during the interval between the deadline for submission of bids and expiration of the period of bid validity specified under Clause 15 above may result in the forfeiture of the bid security pursuant to Sub-clause 16.7 above.

E. BID OPENING AND EVALUATION

24. Bid Opening

24.1 The Employer will open the bids, including withdrawals and modification made pursuant to Clause 23 above, in the presence of bidders' designated representatives who choose to attend, at the time, date and location stipulated in the Letter of Invitation to Bid. The bidders' representatives who would be present shall sign a register evidencing their attendance.

24.2 Envelopes marked "withdrawal" and 'substitution' shall be opened first, and the name of the bidder shall be read out. Bids for which an acceptable notice of withdrawal has been submitted pursuant to Clause 23 above shall not be opened.

24.3 The bidders' names, the bid prices, including any alternative Bid Price or deviation, any discounts, bid modifications and withdrawals, the presence (or absence) of bid security, will be announced by the Employer at the opening. Further, other details as the Employer, at its discretion, may consider appropriate, shall also be announced and recorded. Subsequently, all envelopes marked 'modification' shall be opened and submission therein read out in appropriate detail. No bid shall be rejected at bid opening except for late bids pursuant to Clause 22 above.

-
- 24.4 Bids not opened and read out at bid opening shall not be considered further for evaluation, irrespective of the circumstances. In particular, any discount offered by a bidder which is not read out at the bid opening shall not be considered further for evaluation.
- 24.5 The Employer shall prepare minutes of the bid opening, including the information disclosed during the bid opening to those present in accordance with Sub-clause 24.3 above.
- 25. Process to Be Confidential**
- 24.6 Information relating to the examination, clarification, evaluation, and comparison of bids, and recommendations for the award of a contract, shall not be disclosed to bidders or any other persons not officially concerned with such process until the award to the successful bidder has been announced. Any effort by a bidder to influence the Employer's processing of bids or award decisions may result in the rejection of the bidder's bid.
- 26. Clarification of Bids and Contacting the Employer**
- 24.7 To assist in the examination, evaluation, and comparison of bids, the Employer may, at its discretion, ask any bidder for clarification of its bid, including breakdowns of unit rates. The request for clarification and the response shall be in writing or by cable, but no change in the price or substance of the bid shall be sought, offered, or permitted except as required to confirm the correction of arithmetic errors discovered by the Employer in the evaluation of the bids in accordance with Clause 28 below.
- 24.8 Subject to Sub-clause 26.1, no bidder shall contact the Employer on any matter relating to its bid from the time of the bid opening to the time the contract is awarded. If the bidder wishes to bring additional information to the notice of the Employer, he should do so in writing.
- 24.9 Any efforts by the bidder to influence the Employer in the Employer's bid evaluation, the bid comparison or contract award decisions may result in the rejection of the bidder's bid.
- 27. Examination of Bids and Determination of**
- 27.1 Prior to the detailed evaluation of bids, the Employer will determine whether each bid (a) has been properly signed; (b) is accompanied by the required securities; (c) is substantially responsive to the requirements of the bidding

Responsiveness

documents as set out in the Bidding Documents and (d) provides any clarification and/or substantiation that the Employer may require to determine responsiveness pursuant to Sub-clause 28.2 below. Furthermore, the bidder shall, if required, provide substantiation that the Employer may require, pursuant to Sub-clause 14.5 above.

27.2 A substantially responsive bid is one that conforms to all the terms, conditions, and specifications of the bidding documents without material deviation or reservation. A material deviation or reservation is one (a) which affects in any substantial way the scope, quality, or performance of the Works; (b) which limits in any substantial way, inconsistent with the bidding documents, the Employer's rights or the bidder's obligations under the contract; or (c) whose rectification would affect unfairly the competitive position of other bidders presenting substantially responsive bids.

27.3 If a bid is not substantially responsive, it will be rejected by the Employer and may not subsequently be made responsive by correction or withdrawal of the non-conforming deviation or reservation.

28. Correction of Errors

28.1 Bids determined to be substantially responsive will be checked by the Employer for any arithmetic errors. Errors will be corrected by the Employer as follows:

(a) Where there is a discrepancy between the amounts in figures and in words, the amount in words will govern, and

(b) Where there is a discrepancy between the unit rate and the line item total resulting from multiplying the unit rate by the quantity, the unit rate as quoted will govern, unless in the opinion of the Employer there is an obviously gross misplacement of the decimal point in the unit rate, in which case the line item total as quoted will govern and the unit rate will be corrected.

28.2 The amount stated in the bid will be adjusted by the Employer in accordance with the above procedure for the correction of errors and, with the concurrence of the bidder, shall be considered as binding upon the bidder. If the bidder does not accept the corrected amount of bid, its bid will be rejected, and the bid security may be forfeited in accordance

with Sub-clause 16 above.

29. Conversion to Single Currency for Comparison of Bids

**Option 1:
To be used
with Clause 14,
Option A**

29.1 For comparison of bids, the Bid Price shall first be broken down into the respective amounts payable in various currencies by using the exchange rates specified by the bidder in accordance with Sub-clause 14.3 above.

29.2 In the second step, the Employer will convert the amounts in various currencies in which the Bid Price is payable (excluding Provisional Sums but including Day works where priced competitively) to either:

(a) The currency of the Employer's country at the selling rates established for similar transactions by the authority specified in the Contract on the date stipulated in the Bidding Data, or

(b) A currency widely used in international trade, such as the US. Dollar, stipulated in the Bidding data, at the selling rate of exchange published in the international press as stipulated in the Bidding Data on the date stipulated in the Bidding Data, for the amounts payable in foreign currency; and, at the selling exchange rate established for similar transactions by the same authority specified under Clause 29.2 (a) above on the date specified in the Bidding Data for the amount payable in the currency of the Employer's country.

**Option 2:
To be used
with Clause 14,
Option B**

29.3 The Employer will convert the amounts in various currencies in which the Bid Price is payable (excluding Provisional Sums but including Day works where priced competitively) to either:

- (a) The currency of the Employer's country at the selling rates established for similar transactions by the authority specified in the Bidding Data on the date stipulated in the Bidding Data; or
- (b) A currency widely used in international trade, such as the US. Dollar, stipulated in the Bidding data, at the selling rate of exchange published in the international press as stipulated in the Bidding Data on the date stipulated in the Bidding Data, for the amounts payable in foreign currency; and, at the selling exchange rate established for similar transactions by the same authority specified in Clause 29.2(a) above on the date specified in the Bidding Data for the amount payable in the currency of the Employer's country.

**30. Evaluation and
Comparison of
Bids**

30.1 The Employer will evaluate and compare only the bids determined to be substantially responsive in accordance with Clauses 27 and 28 above.

30.2 In evaluating the bids, the Employer will determine for each bid the Evaluated Bid Price by adjusting the Bid Price as follows:

- (a) Making any correction for errors pursuant to Clause 28 above.
- (b) Excluding Provisional Sums and the provision, if any, for contingencies in the Summary Bill of Quantities, but including Day works, where priced competitively.
- (c) Converting the amount resulting from applying (a) to (b) above to a single currency in accordance with Clause 29 above.
- (d) Making an appropriate adjustment on sound technical and/or financial grounds for any other quantifiable acceptable variations, deviations, or alternative offers.
- (e) Making an allowance for varying times for completion offered by bidders, if permitted in the Bidding Data and in the manner prescribed therein; and

30.3 The Employer reserves the right to accept or reject any

variation, deviation, or alternative offer. Variations, deviations, alternative offers, and other factors that are in excess of the requirements of the bidding documents shall not be taken into account in bid evaluation.

- 30.4 The estimated effect of the price adjustment provisions of the Conditions of Contract, applied over the period of execution of the Contract, shall not be taken into account in bid evaluation.
- 30.5 If the bid, which results in the lowest Evaluated Bid Price, is seriously unbalanced or front loaded in relation to the Employer's budget of the items of work to be performed under the Contract, the Employer may require the bidder to produce detailed price analyses for any or all items of the Bill of Quantities, to demonstrate the internal consistency of those prices with the construction methods and schedule proposed. After evaluation of the price analyses, taking into consideration the schedule of estimated Contract payments, the Employer may require that the amount of the performance security set forth under Clause 35 below be increased at the expense of the bidder to a level sufficient to protect the Employer against financial loss in the event of default of the successful bidder under the Contract.

F. AWARD OF CONTRACT

- 31. Award** 31.1 Subject to Clause 33 below, the Employer will award the Contract to the bidder whose bid has been determined to be substantially responsive to the bidding documents and who has offered the lowest Evaluated Bid Price pursuant to Clause 30 above, provided that such bidder has been determined to be (a) eligible in accordance with the provisions of Sub-clause 3.1 above and (b) qualified in accordance with the provisions of Clause 4 above.
- 32. Employer's Right to** 32.1 The Employer reserves the right to accept or reject any bid, and to annul the bidding process and reject all bids, at any time prior to award of Contract, without thereby

- Accept Any Bid and to Reject Any or All Bids** incurring any liability to the affected bidder or bidders or any obligation to inform the affected bidder or bidders of the grounds for the Employer's action.
- 33. Notification of Award** 33.1 Prior to expiration of the period of bid validity prescribed by the Employer, the Employer will notify the successful bidder in a letter stating that his bid has been accepted. This letter (hereinafter and in the Conditions of Contract called the "Letter of Acceptance") shall specify the sum that the Employer will pay the Contractor in consideration of the execution and completion of the Works and the remedying of any defects therein by the Contractor as prescribed by the Contract (hereinafter and in the Conditions of Contract called "the Contract Price").
- 34. Signing of Agreement** 34.1 At the same time that the Employer notifies the successful bidder that his bid has been accepted, the Employer will send the bidder the Agreement in the form provided in the bidding documents, incorporating all agreements between the parties.
34.2 Within 28 days of receipt of the Agreement, the successful bidder shall sign the Agreement and return it to the Employer, together with the required performance security.
- 35. Performance Security** 35.1 Within 14 days of receipt of the Letter of Acceptance from the Employer, the successful bidder shall furnish to the Employer a performance security in the form stipulated in the Bidding Data and the Conditions of Contract. The form of performance security provided in Section 7 of the bidding documents may be used or some other form acceptable to the Employer.
35.2 If it is stipulated in the Contract that the performance security is to be provided by the successful bidder in the form of a bank guarantee, it shall be issued either at the bidder's option, by a bank located in the country of the

Employer or by a foreign bank through a correspondent bank located in the country of the Employer, or (b) with the prior agreement of the Employer directly by a foreign bank acceptable to the Employer.

35.3 If it is stipulated in the Bidding Data that the performance security may also be provided in the form of a bond, it shall be issued by a bonding or insurance company that has been determined by the successful bidder to be acceptable to the Employer.

35.4 Failure of the successful bidder to comply with the requirements of Clause 35 above shall constitute a breach of Contract, cause for annulment of the award, forfeiture of the bid security and any such other remedy the Employer may take under the Contract, and the Employer may resort to awarding the Contract to the next ranked bidder.

**36. Disputes
Review Method**

36.1 The method of dispute resolution is indicated in the Bidding Data. If the selected method is a Dispute Review Board or Disputes Review Expert, the Employer proposes the person named in the Bidding Data to be appointed as Board member. If the Bidder disagrees with this proposal, the bidder should state so in the bid. If the Employer and the selected bidder cannot agree to the appointment of the two initial Board members, then the appointments will be made by the Appointing Authority designated in the Conditions of Contract at the request of either party.

**37. Corrupt &
Fraudulent
Practices**

37.1 The Employer requires the bidders/suppliers/contractors to observe the highest standard of ethics during the procurement and execution of such contracts. In pursuance of this policy, the Employer:

(a) Defines, for the purposes of this provision, the terms set forth below as follows:

(i) "Corrupt practice" means the offering, giving, receiving, or soliciting of anything of value to influence the action of a public official in the

procurement process or in contract execution, and
(ii) "Fraudulent practice" means a misrepresentation of facts in order to influence a procurement process or the execution of a contract to the detriment of the Employer.

(b) Will reject a proposal for award if it determines that the Bidder recommended for award has engaged in corrupt or fraudulent practices in competing for the Contract in question.

(c) Will declare a firm ineligible, either indefinitely or for a stated period of time, to be awarded the Contract if it at any time determines that the firm has engaged in corrupt or fraudulent practices in competing for, or in executing, the Contract.

37.2 Furthermore, bidders shall be aware of the provision stated under Sub-clauses 26.2 and 63.5 of the Conditions of Contract.

**SECTION III: APPENDIX TO INSTRUCTIONS TO
TENDERERS**

1.1 The following appendix to instructions to tenderers shall complement or amend the provisions of the instructions to tenderers (Section II). Wherever there is a conflict between the provisions of the instructions to tenderers and the provisions of the appendix, the provisions of the appendix herein shall prevail over those of the instructions to tenderers.

1.2 Table 3.1 **Notes on the Appendix to Instructions to Tenderers**

Clause	Description
3	<p>Pursuant to clause 3 above the following shall be mandatory.</p> <p>Pursuant to clause 2.1 the following shall be mandatory.</p> <ul style="list-style-type: none"> i) Properly filled, stamped and signed Form of Bid ii) Valid Bid Security and in the standard format provided in this tender document iii) Completed Confidential Business questionnaire iv) Copy of proof of citizenship of all the director(s) in the company. v) Certified Copy of current (within the last 12 months) Form CR12. vi) Certified copies of Certificate of incorporation/registration of business name or partnership deed vii) Valid tax compliance certificate as at the time of tender opening/closing viii) Copies of Current annual NCA practicing licence from National Construction Authority as a roads contractor for NCA Category 5 and above valid as at the date of tender closing/Opening ix) Written power of attorney authorizing the signatory of the bid to commit the bidder x) Attendance of Mandatory Organized Pre-Tender Site Visit and signing of attendance register & Submission of original dully signed, stamped and signed Certificate of site Visit xi) Information on Litigation and performance history as per schedule 10 xii) Completeness of tender(All required forms including the BOQs are properly filled as per clause 12 of ITT) xiii) All the pages of bid document to be serialized sequentially from cover page to the last page.
4	<p style="text-align: center;">Qualification Requirements</p> <p>(a) Evidence of access to lines of credit and availability of other</p>

	<p>financial resources. If a line of credit is provided the letter of line of credit must be current to the last one (1) month.</p> <p>(b) Financial predictions for the current year and the two subsequent years, including the effect of known commitments,</p> <p>(c) Current financial soundness and bidder's long-term profitability, Cash flow or equivalent positive working capital</p> <p>(d) Work commitments</p> <p>(e) Availability of critical equipment Major items of construction plant and equipment proposed for use in carrying out the Contract.</p> <p>(f) The qualifications and experience of key personnel proposed for administration and execution of the contract, both on and off site.</p> <p>(g) Bidders shall also submit proposals of work execution programmed in sufficient detail to demonstrate the adequacy of the bidders' proposals to meet the technical specifications and the completion time.</p> <p>(h) Details of experience and past performance of the tenderer on the works of a similar nature and details of current work on hand and other contractual commitments as required.</p> <p>(i) Details of Non-performance of contract and any current litigation or arbitration proceedings in which the tenderer is involved as one of the parties within the last Three (3) years prior to the dead line of the tender submission, based on all information on fully settled disputes or litigation.</p>
18 & 7.3	There will be MANDATORY organized site visit as indicated in the invitation to bidders, but the bidder may make further site visit on their own to the Park where he is bidding. Each tenderer must dully fill and, sign the attendance register and have his/her site visit certificate signed by the procuring entity representative who will be conducting the organised site visit
15	Tender validity period is 90 days from the specified date of tender opening or from the extended date of tender opening in accordance with ITT clause 7.3
13	Tender security shall be Kshs. 800,000.00
16.2	Tender Security shall remain valid for a least 30 days beyond tender validity

19	<p><u>Tender Format, No of sets, Sealing and Marking of Tenders</u></p> <p>The Tender shall be bound and divided clearly in descending order as listed below</p> <ol style="list-style-type: none"> 1. Letter of Invitation to Tender 2. Instruction to Tenders 3. Appendix to Instruction to bidders 4. Form of Bid 5. Appendix to Form of Bid 6. Bid Security 7. Schedule of Supplementary Information for Eligibility <ol style="list-style-type: none"> 8-A1 Confidential Business Questionnaire 8-A2 Certificate of Incorporation/Registration 8-A3 Copy of Form CR12 8-A4 Copy of Valid Tax Compliance Certificate 8-A5 Copy of Current annual NCA practicing licence for NCA Category 5 and above 8-B Form of Power of Attorney 8-C Certificate of site. 8-D Schedule of Major Items of Plant 8-E Schedule of Key Personnel and Signed CV 8-F Schedule of Road Works Completed Satisfactorily and Certified together with completion certificates or their proof of execution 8-G Schedule of ongoing Works 8-H A declaration that the bidder will not engage in any corrupt or fraudulent practice and 8-I A declaration that the person or his or her sub-contractors are not debarred from participating in procurement proceeding 9 Schedule of Supplementary Information on Financial standings <ol style="list-style-type: none"> 9-A Audited Financial Accounts. 9-B Construction Turnover. 9-C History of Non-Performance and Ligation History 10 Work Execution Programme. 11 Priced Bill of Quantities 12 Drawings
----	---

	<p>13 Specifications</p> <p>14 Conditions of Contract.</p>
19	<p>1. Schedule of Supplementary Information on Financial standings</p> <p>8-A Audited Financial Accounts.</p> <p>8-B Construction Turnover.</p> <p>8-C Sworn affidavit on History of None Performance and Ligation History</p> <p>2. Work Execution Programme.</p> <p>3. Priced Bill of Quantities</p>
19	The format indicated above will be used without exception .Any documents not compliant will not be evaluated
19	Submit an original and a copy. A copy must be replica of the original
27	<p>Examination of and Determination of Responsiveness</p> <p>KWS's determination of a Tender's responsiveness is to be based on the contents of the Tender itself without recourse to extrinsic evidence</p>
	<p>(a) Details of experience and past performance of the tenderer The contractor must have:</p> <p>i) Successfully completed, as a prime contractor or management contractor, in the execution of at least two (2) contracts of a similar nature and comparable in complexity methods/technology or other characteristics to the proposed contract within the last Five (5) Years, each with a minimum value at least Kshs Thirty Five million (35 Million Only).</p> <p>ii) Average annual Construction Turnover of KShs.200 Million, calculated as total certified payments received for contracts in progress or completed, within the last Three [3] years in the role of contractor, subcontractor, or management contractor prior to the applications submission deadline.</p>
	<p>(b) The minimum qualification of key personnel are as listed in the qualification criteria:</p> <p>(i) Bsc Civil Engineering or equivalent with minimum Five (5) years experience in similar works for Site Agent,</p> <p>(ii) Ordinary Diploma Engineering Survey or Equivalent with</p>

	<p>minimum Five (5) years experience in similar works for the surveyor and</p> <p>(iii) Ordinary Diploma Civil Engineering/Building and Construction with minimum 5 years experience in similar works for Foreman.</p>
	<p>(c) Equipment Capabilities: The bidder should list down, the major plants and equipment's as per schedule 4 of schedule of supplementary information. – Bidder must attach evidence of ownership, Lease agreement or any hiring arrangements. Bidders with proof of ownership of own equipment's will be awarded full marks, Leasing agreement will be awarded 75 % of full marks whereas proof of hiring will be awarded 50% of the full marks</p>
	<p>(d) Cash flow statement; The bidder should demonstrate that the firm has access to or has available, liquid assets, unencumbered real assets, lines or credit, and other financial means sufficient to meet the construction cash flow for a period of 2 months, estimated at 20% of the estimated tender sum.</p>
1.5	<p>(e) Financial Capacity; Signed and stamped Audited accounts, balance sheets and computed working capital for the last three (3) years should be submitted and must demonstrate the soundness of the Applicant's financial position</p>
1.6	<p>(f) Financial position/Ratios</p> <p>The bidder's financial information will be assessed in terms of ROCE, current ratio and return on equity, and the point scale criteria on their financial position given on this basis.</p>
1.7	<p>(g) Bidders shall also submit proposals of work execution programmed in sufficient detail to demonstrate the adequacy of the bidders' proposals to meet the technical specifications and the completion time</p>
1.8	
	<p>(h) The bidder must provide most current and valid sworn affidavit within the period of tendering. A consistent history of litigation or non-performance against the Applicant may result in failure of the application</p>
	<p>(i) The pass mark shall be 75%.</p>
30, 31 and 32	<p>The total budget for these circuits is Kshs 70,791,530.46. The procurement</p>

	<p>Entity shall award to the lowest evaluated tenderer, whose tender is comparable at a margin of equal to or less than Employer's budget by 10% .The employer's budget was developed based on the G.o.K Cost Estimation Manual for Road Maintenance Works, First Revised Edition, July 2017.</p>
--	---

SECTION IV: EVALUATION AND QUALIFICATION CRITERIA

SECTION IV (A): QUALIFICATION CRITERIA

SECTION IV (A): QUALIFICATION CRITERIA

This Section contains all the factors, methods and criteria that the Employer shall use to evaluate applications. The information to be provided in relation to each factor and the definitions of the corresponding terms are included in the respective Application Forms.

Contents

5.1	Eligibility	28
5.2	Historical Contract Non-Performance	29
5.3	Financial Situation	30
5.4	Experience	31
5.5	Current Commitments	34
5.6	Personnel Capability	34

No.	Subject	Requirement	Single Entity	Joint Venture			Submission Requirements
				All Parties Combined	Each Party	One Party	
5.1 Eligibility							
5.1.1	Nationality	Nationality in accordance with ITB Sub clause 3.2.	Must meet requirement	Existing or intended JV must meet requirement	Must meet requirement	N / A	Schedules of Supplementary Information
5.1.2	Conflict of interest	No conflicts of interest as described in ITB Sub clause 3.1(a) i& ii	Must meet requirement	Existing or intended JV must meet requirement	Must meet requirement	N / A	Schedules of Supplementary Information
5.1.3	Employer Ineligibility	Not having been declared ineligible by the Employer, as described in Sub clause 3.1(a) i& ii	Must meet requirement	Existing JV must meet requirement	Must meet requirement	N / A	Schedules of Supplementary Information
5.1.4	Incorporation & Registration	Applicant required to meet conditions of ITB Clause 4. Pursuant to Clause 4, the following shall be submitted; Certified copies of; <ul style="list-style-type: none"> ▪ Certificate of Incorporation to show that the applicant is a 	Must meet requirement	Must meet requirement	Must meet requirement	N / A	Schedules of Supplementary Information

No.	Subject	Requirement	Single Entity	Joint Venture			Submission Requirements
				All Parties Combined	Each Party	One Party	
		<p>registered company and legally authorized to do business in Kenya.</p> <ul style="list-style-type: none"> ▪ Current CR12 by Registrar of Companies. ▪ Proof of registration with the National construction Authority as Category 5 and above as a Roads works Contractor ▪ Valid and current i-Tax generated Tax Compliance Certificate 					
5.2	Historical Contract Non-Performance						
5.2.1	History of Non-Performing Contracts	Non-performance of a contract did not occur within the last five (5) years prior to the deadline for application submission based on all information on fully	Must meet requirement by itself or as party to past or existing JV	N / A	Must meet requirement by itself or as party to past or existing JV	N / A	Schedules of Supplementary Information

No.	Subject	Requirement	Single Entity	Joint Venture			Submission Requirements
				All Parties Combined	Each Party	One Party	
		settled disputes or litigation. A fully settled dispute or litigation is one that has been resolved in accordance with the Dispute Resolution Mechanism under the respective contract, and where all appeal instances available to the applicant have been exhausted.					
5.2.2	Pending Litigation	All pending litigation shall in total not represent more than Fifty percent (50%) of the Applicant's net worth and shall be treated as resolved against the Applicant.	Must meet requirement by itself or as party to past or existing JV	N / A	Must meet requirement by itself or as party to past or existing JV	N / A	Schedules of Supplementary Information
5.3 Financial Situation							
5.3.1	Financial Performance	Submission of audited financial statements or if not required by the law of the applicant's country, other financial statements	Must meet requirement	N / A	Must meet requirement	N / A	Schedules of Supplementary Information

No.	Subject	Requirement	Single Entity	Joint Venture			Submission Requirements
				All Parties Combined	Each Party	One Party	
		<p>acceptable to the Employer, for the last five [5] years to demonstrate:</p> <p>a) The current soundness of the applicants financial position and its prospective long term profitability, and</p> <p>b) Capacity to have and meet the construction cash flow of minimum of at least 20% of the estimated tender sum or equivalent Working Capital.</p>	<p>(a) Must meet requirement</p> <p>(b) Must meet requirement</p>	<p>(a) N / A</p> <p>(b) Must meet requirement</p>	<p>(a) Must meet requirement</p> <p>(b) N / A</p>	<p>(a) N / A</p> <p>(b) N / A</p>	
5.3.2	Average Annual construction Turnover	Minimum average annual construction turnover calculated as total certified payments received for contracts in progress or completed, within the last three (3) years: KShs. 200 Million	Must meet requirement	Must meet requirement	Must meet	N/A	Schedules of Supplementary Information

No.	Subject	Requirement	Single Entity	Joint Venture			Submission Requirements
				All Parties Combined	Each Party	One Party	
5.4 Experience							
5.4.1	General construction Experience	Experience under construction contracts in the role of contractor, subcontractor, or management contractor for at least the last five (5) years prior to the applications submission deadline and with activity in at least six (6) months in each year	Must meet requirement	N / A	Must meet requirement	N / A	Schedules of Supplementary Information
(a)	Specific construction Experience	a) Participation as contractor, management contractor or subcontractor, in at least two (2) contracts within the last five (5) years that have been successfully and substantially completed and that are similar to the proposed works. The	Must meet requirement	Must meet requirement	N / A	Must meet requirement for one contract	Schedules of Supplementary Information

No.	Subject	Requirement	Single Entity	Joint Venture			Submission Requirements
				All Parties Combined	Each Party	One Party	
		similarity shall be based on the physical size, complexity, methods/ technology or other characteristics as described in Section 8, Special Specification					

No.	Subject	Requirement	Single Entity	Joint Venture			Submission Requirements
				All Parties Combined	Each Party	One Party	
(b)		<p>b) For the above or other contracts executed during the period stipulated in (a) above, a minimum construction experience of comparable value and complexity in at least one (1) of the following:</p> <ul style="list-style-type: none"> • Graveling and grading Projects • Culvert and drainage works • Rehabilitation of Gravel roads <p>Tenderer to submit copies of:</p> <ul style="list-style-type: none"> • Completion certificate • Taking Over Certificate • Substantial Completion Certificate of relevant work in the previous 3 years 	Must meet requirement	Must meet requirement	N / A	Must meet requirement	Schedules of Supplementary Information

No.	Subject	Requirement	Single Entity	Joint Venture			Submission Requirements
				All Parties Combined	Each Party	One Party	
No.	Subject	Requirement	Single Entity	Joint Venture			Submission Requirements
				All Parties Combined	Each Party	One Party	
5.5 Current Commitments							
5.5.1	On-going contracts	There is no limit on the total value of the on-going contracts.	Must meet requirement	Must meet Requirement	Must meet [100-/n-1]% of the requirement where n= no of joint venture members	N/A	Schedules of Supplementary Information
5.6 Personnel Capability							
5.6.1		The site staff shall possess minimum levels set below NB: Attachment of CVs and certified and commissioned by Commissioner of Oaths or a Notary Public, copies of Annual Practicing Licenses	•	•	•	•	•

No.	Subject	Requirement	Single Entity	Joint Venture			Submission Requirements
				All Parties Combined	Each Party	One Party	
		(for Engineers) and Academic Certificates for all staff is mandatory;					
	(a Site Agent)	Qualification: BSc. Civil Eng and/or equivalent <ul style="list-style-type: none"> • General Experience: 5 years • Specific Experience in similar works: 3 years 	Must meet requirements	Must meet requirements	N/A	Must meet requirements	Schedules of Supplementary Information
	Site Engineer	Qualification: BSc. Civil Eng and/or equivalent <ul style="list-style-type: none"> • General Experience: 3 years • Specific Experience in similar works: 3 years 	Must meet requirements	Must meet requirements	N/A	Must meet requirements	Schedules of Supplementary Information
	(c Site) Surveyor	Qualification: Diploma in Surveying General Experience: 5 years Specific Experience in similar works: 3 years	Must meet requirements	Must meet requirements	N/A	N/A	Schedules of Supplementary Information

No.	Subject	Requirement	Single Entity	Joint Venture			Submission Requirements
				All Parties Combined	Each Party	One Party	
	(d Foremen)	Qualification: Diploma in Civil Engineering. General Experience: 5years Specific Experience in similar works: 3 years	Must meet requirements	Must meet requirements	N/A	N/A	Schedules of Supplementary Information

***BIDDERS ARE INFORMED THAT APART FROM THE ABOVE THEY MUST MEET THE REQUIREMENTS OF THE PUBLIC PROCUREMENT AND ASSET DISPOSAL ACT, 2015**

SECTION IV (B): EVALUATION QUALIFICATION CRITERIA

This Section shall apply to tenderers whose bids have been determined to be responsive and have met all the Mandatory requirements based on the qualification Criteria as per the instruction to bidders. The information to be provided in relation to each factor and the definitions of the corresponding terms are included in the respective supplementary information Forms (Schedules). Table 4.1 summarises the post qualification score.

The Technical Evaluation Committee shall examine tender documents and score them based on their validity, accuracy and quality. Table 4-2 on the other hand illustrates how the marks will be tallied for each bidder based on their responsiveness to ITT. Where the bidder fails to meet the requirement, the bidder shall be disqualified.

Table 4.1: Post Qualification Score.

The information to be provided in relation to each factor in table 3-2 below and the definitions of the corresponding terms are included in the respective supplementary information Forms (Schedules).

Qualification Criteria			Submission Requirement	Compliance and Documentation	score
Item	No	Subject			
Contractors Capability to supervise and perform the work	1	Equipment holding	<ul style="list-style-type: none"> - Proof of ownership of the required equipment. Attach copies of logbooks and TIMS account print out from NTSA Portal confirming ownership of the Equipment. - Current authorization letter of hiring from the Ministry of Transport & Infrastructure Housing and Urban Development & Public Works, Mechanical & Transport Services Department. - Or lease agreement from reputable hiring company(s) whose equipment details must accompanied by copies of logbooks and TIMS account print out from NTSA Portal confirming ownership of the Equipment. <p><i>Bidders with proof of ownership of own equipment's will be awarded full marks, Leasing agreement will be awarded 75 % of full marks whereas proof of hiring will be awarded 50% of the full marks</i></p>	Clause 27.6 of ITT Section V, Schedule 4	20
	2	Key Personnel	Provide List of Key Site technical staff, their certified Qualification Certificates and resume. <ul style="list-style-type: none"> - General Experience (CV) - Certified copy of Qualification Certificate, 	Clause 27.5 of ITT Section V, Schedule 5	15
	3	Past relevant work	Completion certificate, Taking Over Certificate or Substantial Completion Certificate of at least two (2) contracts of a similar nature and comparable in	Clause 27.4 of ITT Section VII,	15

<i>Tender Document for Procurement of Road Maintenance Works</i>				<i>Tendering Procedures</i>	
		Experience	complexity, methods/technology and or other characteristics to the proposed contract in the last 3 years, each with a minimum value at least Kshs 20 Million Average annual Construction Turnover of KShs.100 Million, calculated as total certified payments received for contracts in progress or completed, within the last Three [3] years in the role of contractor Value of ongoing work must be < 50% of Working Capital	Schedule 6 and 7	
	4	Litigation history	Record of litigation in the previous 3 years. Attach current affidavit	Clause 27.11,27.12 of ITT Section V, Schedule 9 (4)	5
	5	Financial Capability	Bidder to provide the following : Certified audited accounts for the last Three [3] years Cash flow Statement Current financial soundness(working capital, Bank statement) Financial ratios in terms of ROCE	Clause 527.727.8, &27.9 of ITT Section V, Schedule 9(4)	15
Sub Total Score					70

Table 4.1 contractors capability to Supervise and Perform the Works Cont”					
Qualification Criteria			Submission Requirement	Compliance Requirement	Score
Item	No.	Subject			
Technical Proposal and comments	6	Mobilization Management plan	Bidder to submit the following Proposals in accordance with Clause 27.10 of ITT section VII <ul style="list-style-type: none"> i. Site lay plan out and Site Organization Chart ii. Mobilization and management plan for <ul style="list-style-type: none"> ✓ material ✓ Equipment ✓ Personnel 	Section V, Schedule 10	5
	7	Quality and Quantity Management	Bidder to submit the following Proposals in accordance with Clause 27.10 of ITT section VII <ul style="list-style-type: none"> • Methodology work execution • Proposals on material testing • Proposal on measurements • Photograph plan 	Section VII, Schedule 10	9
	8	Working Schedule and Projected Cash flow.	Bidder to submit the following Proposals in accordance with Clause 27.10 of ITT section VII <ul style="list-style-type: none"> • Signed work programme chart • Signed Cash flow plan during the contract period. 	Section VII, Schedule 10	4
	9	Work safety management	Bidder to submit the following Proposals in accordance with Clause 27.10 of ITT section VII the following shall be provided; <ul style="list-style-type: none"> • Proposals on traffic control • workers safety & • accident prevention 	Section VII, Schedule 10	6
	10	Environmental and social management	Bidder to submit the following Proposals in accordance with Clause 27.10 of ITT section VII <ul style="list-style-type: none"> • Proposal on environmental impact and social mitigation measures and Management plan • Proposal on safety, security and other cross cutting issues 	Section VII, Schedule 10	6
Sub Total Score					30
GRANT TOTAL TECHNICAL SCORE					100

Bidders whose shall score 75% and above shall proceed to financial evaluation stage.

Table 4.2: Technical Score Sheet									
Technical Evaluation of Tender No.....in National Park.									
Required References to be submitted in Tendering Forms from Tender for evaluation as indicated in section III (A)					Evaluated score for Each Bidder				
Item	Sub-Items	No Reqd	Distributed Score	Maxi Score	X	Y	Z		
Contractor's Capability to Execute Works	Equipment holding	Concrete Mixers and Vibrator	1	1	20				
		6 X 4 tippers payload 16 – 20 tones	4	2					
		Water tankers (18,000 – 20,000lbs. capacity)	2	1					
		Excavator/Wheeled loaders (2m3)	1	1					
		Motor graders (93 - 205kW)	1	5					
		Crawler Dozer (D6 and above) or	1	2					
		Bitumen Distributer	1	3					
		Chip Spreader	1	3					
		Pneumatic Roller	1	1					
		Self propelled single drum vibrating (10 tons)	1	1					
	Key staff	Site Agent	Minimum Qualification BSc in Civil Eng		1	15			
			Exp. 5 Yrs and above		3				
			Signed CV		1				
		Site Engineer	Minimum Qualification BSc in Civil Eng		1				
			Exp. 3 Yrs and above		2				
			Signed CV		1				
		Forman	Minimum Dip in Civil Eng		1				
			Exp.5Yrs and above		1				
			Signed CV		1				
		Surveyor	Dip. Cert in Survey and above		1				
Exp.5Yrs and above			1						
Signed CV			1						
Past relevant work	Completion Certificate for at least two similar Works @ Kshs 35M	> 2no. Project		10	15				
	Average construction turnover. Of over 200M	Over last 5 years		5					
Sworn affidavit on Contractual misconduct and litigation				2	2				
Financial capability	Certified audited accounts for the last Three (3) yrs	2015-2018 (3Years)		5	18				
		2015-2017 (2 Years)		2					
		2015-2016(1 Years)		1					
	Financial ratios in terms of ROCE		5						
Proof of bidders access to financial resources e.g. Bank Statement current 6 months or current Line of credit within the last one month-(20% of tender sum)				8					
Mobilization management plan	Site lay plan out and material mobilization			1	6				
	Site Organization Chart			1					
	Equipment management plan			2					
	Personnel mobilization			2					
Quality and quantity management	Methodology statement			4	10				
	Proposals on material testing			2					
	Proposals on measurements			1					
	Photographic plan			1					
Work scheduling	Work Programme charts			2	4				
	Cash flow plan			2					
Work safety	Traffic control, and accident prevention			2	5				
Technical Proposal (Work Execution					10				

<i>Tender Document for Procurement of Road Maintenance Works</i>		<i>Tendering Procedures</i>				
Programme)	management	Workers safety	3			
	Environmental and social management		6	5		
Total Score				100		

SECTION V: CONDITIONS OF CONTRACT

SECTION V (A) - CONDITIONS OF CONTRACT PART I: GENERAL CONDITIONS OF CONTRACT

The Conditions of Contract, Part I: General Conditions shall be those forming Part I of the “Conditions of Contract for Works of Civil Engineering construction,” fourth edition 1987, reprinted in 1992 with further amendments, prepared by the Fédération Internationale des Ingénieurs-Conseils (FIDIC). These Conditions are subject to the variations and additions set out in Part II hereof entitled “Conditions of Particular Application.”.

Copies of the FIDIC Conditions of Contract can be obtained from:

FIDIC Secretariat
P.O. Box 86
1000 Lausanne 12
Switzerland
Facsimile: 41 21 653 5432
Telephone: 41 21 653 5003

SECTION V (B) - CONDITIONS OF CONTRACT PART II: (CONDITIONS OF PARTICULAR APPLICATION)

The following Conditions of Particular Application shall supplement the General Conditions of Contract. Whenever there is a conflict, the provisions herein shall prevail over those in the General Conditions of Contract. The Particular Condition is preceded by the corresponding clause number of the General Conditions to which it relates.

TABLE OF CONTENTS

Clause and Description

Page

DEFINITIONS AND INTERPRETATION 49

1.1 Definitions 49

1.6 Gender Specific Words 49

ENGINEER AND ENGINEER'S REPRESENTATIVE 49

2.1 Engineer's Duties and Authority 49

ASSIGNMENT AND SUBCONTRACTING 50

4.1 Subcontracting 50

CONTRACT DOCUMENTS 51

5.1 Language and Law 51

5.2 Priority of Contract Documents 51

6.6 Metric Units 52

6.7 Intent of Drawings and Specifications 52

6.8	Design, Drawings and Specifications Prepared by the Contractor	52
6.9	Submissions of Designs and Drawings	52
6.10	As-Built Drawings	52
7.4	Drawings for Temporary Works	53
7.5	Size of Drawings	53
7.6	Submission to the Engineer	53
	GENERAL OBLIGATIONS	53
8.1	Contractors General Responsibilities	53
8.3	General Requirements	54
10.1	Performance Security	55
10.2	Period of Validity of Performance Security	55
10.3	Claims under Performance Security	55
10.4	Cost of Performance Security	55
11.1	Inspection of Site	55
11.2	Access to Data	56
14.1	Programme to be submitted	56
14.2	Revised Programme	58
14.3	Cash Flow Estimate to be Submitted	58
15.1	Contractor's Superintendence	59
15.2	Contractor's Agent or Representative	59
16.2	Engineer at Liberty to Object	59
16.3	Language Ability of Superintending Staff	59
16.4	Employment of Local Personnel	59
17.1	Setting Out	59
17.2	Notice to Engineer	60
19.1	Safety, Security and Protection of the Environment	60
20.4	Employer's Risks	62
21.1	Insurance of Works and Contractor's Equipment	63
21.2	Scope of Cover	63
21.4	Exclusions	63
21.5	Insurance of Goods	64
23.1	Third Party Insurance (Including Employer's Property)	64
23.2	Minimum Amount of Insurance	64

25.1	Evidence of Terms of Insurance	64
25.5	Source of Insurance	64
25.6	Insurance Notices	64
25.7	Insurance in Kenya	64
25.8	Notification to Insurers	64
26.2	Compliance with Statutes, Regulations	65
26.3	Inspection and Audit by the Funding Agency	65
28.2	Royalties	65
29.2	Passage and Control of Traffic	65
29.3	Reinstatement and Compensation for Damage to Persons or Property	65
29.4	Protection of Existing Works and Services	65
29.5	Protection of Survey Beacons	66
30.2	Transport of Contractor's Equipment or Temporary Works	66
30.5	Complying with State Laws and Regulations	67
30.6	Effects of other Concurrent construction Projects	67
34.2	Labour Regulations	67
34.3	Engagement of Local Labour	67
34.4	Rates of Wages and Conditions of Labour	67
34.5	Repatriation of Labour	67
34.6	Housing for Labour	68
34.7	Accident Prevention Officer	68
34.8	Health and Safety	68
34.9	Life Saving Appliances and First Aid Equipment	68
34.10	Measures against Insect and Pest Nuisance	68
34.11	Epidemics	68
34.12	Burial of the Dead	69
34.13	Supply of Foodstuffs	69
34.14	Supply of Water	69
34.15	Alcoholic Liquor or Drugs	69
34.16	Arms and Ammunition	69
34.17	Festivals and Religious Customs	69
34.18	Disorderly Conduct	69
34.19	Records of Labour	69

34.20	Trade Unions	70
34.21	Default in payment of Wages	70
34.22	Breach and Removal from List	70
34.23	Observance by Subcontractors	70
35.2	Maintenance of Records	70
35.3	Reporting of Accidents	70
	MATERIALS, PLANT AND WORKMANSHIP	70
36.1	Quality of Materials, Equipment, Supplies, Plant, and Workmanship	70
	COMMENCEMENT AND DELAYS	71
41.1	Commencement of Works	71
41.2	Definition of Commencement	71
42.1	Possession of Site and Access Thereto	71
42.4	Possession of Site and Access thereto	71
45.1	Restriction on Working Hours	71
45.2	Overtime Hours	72
47.2	Reduction of Liquidated Damages	72
47.3	Currency of Liquidated Damages	72
	DEFECTS LIABILITY	72
49.2	Completion of Outstanding Work and Remedying Defects	72
49.5	Defects Liability Period Replacements	72
	ALTERATIONS, ADDITIONS AND OMISSIONS	73
52.1	Valuation of Variation	73
52.2	Power of Engineer to Fix rates	73
52.3	Daywork	73
	PROCEDURE FOR CLAIMS	74
53.1	Notice of Claims	74
	CONTRACTOR'S EQUIPMENT, TEMPORARY WORKS AND MATERIALS	74
54.1	Contractor's Equipment, Temporary Works and Materials	74
54.2	Employer not Liable for Damage	74
54.5	Conditions of Hire of Contractor's Equipment	74
54.9	Contractor's Responsibilities for Licenses	74
54.10	Equipment and Plant	74
	MEASUREMENT	75

55.1	Quantities	75	
55.2	Bill of Quantities with no Rates	75	
56.1	Works to be measured	75	
57.1	Method of Measurement	76	
	PROVISIONAL SUMS	76	
58.4	Prime Cost Sum	76	
	NOMINATED SUBCONTRACTORS	76	
59.5	Certification of Payment to Nominated Subcontractors	76	
	CERTIFICATES AND PAYMENTS	76	
60.1	Advance Payment	76	
60.2	Interim Payment Certificate	77	
60.4	Payment of Certificates	79	
60.5	Retention Money	79	
60.6	Currency of Payment	80	
60.7	Overdue Payments	80	
60.8	Correcting and Withholding	80	
60.9	Completion by Sections	80	
60.10	Statement at Completion	80	
60.11	Final Statement	80	
60.12	Discharge	81	
60.13	Final Payment Certificate	81	
60.14	Cessation of Employer's Liability	81	
62.1	Defects Liability Certificate	81	
	REMEDIES	81	
63.1	Default of Contractor	81	
63.2	Valuation of Date of Expulsion	82	
63.	Valuation of Date of Expulsion	82	
63.4	Assignment of Benefit of Agreement	82	
63.5	Corrupt or Fraudulent Practices	82	
	SPECIAL RISKS	82	
65.2	Special Risks	83	
65.4	Projectile, Missile	83	
65.9	Special Risks	83	

SETTLEMENT OF DISPUTES	83
67.1 Dispute Review Expert	83
67.2 Amicable Settlement	84
67.3 Arbitration	84
67.4 Failure to Comply with Recommendations	85
NOTICES	85
68.1 Notices to Contractor	85
68.2 Notices to Employer and Engineer	85
DEFAULT OF EMPLOYER	85
69.1 Default of Employer	85
69.3 Payment on Termination	86
69.4 Contractor's Entitlement to Suspend Work	86
69.6 Suspension of Funding Agency Loan	86
70 CHANGES IN COST AND LEGISLATION	87
CURRENCY AND RATES OF EXCHANGE	87
72.2 Currency Proportions	87
ADDITIONAL CLAUSES	88
73.1 Foreign Taxation	88
73.2 Local Taxation	88
73.3 Income Tax on Staff	88
73.4 Duties on Contractor's Equipment	88
73.5 Declaration against Waiver	89
73.6 Employer's Officials	89
74.1 Illegal Payments	89
75.1 Termination of Contract for Employer's Convenience	89
76.1 Restriction on Eligibility	89
77.1 Joint and Several Liability	90
78.1 Details to be Confidential	90
78.2 Drawings and Photographs of the Works	90
79.1 Official Visitors	90
80.1 Substantial Completion of the Works	90
81.1 Monthly Site Meetings	90
81.2 Minutes of Site Meetings	91

82.1	Legal Provisions	91
83.1	Noise and Disturbance	91
83.2	Pollution	91
	ANNEX A: - DISPUTE REVIEW REGULATIONS AND PROCEDURES	94
	Disputes Settlement Procedures	94
	Disputes Review Expert's Declaration of Acceptance	138

CONDITIONS OF CONTRACT PART II (CONDITIONS OF PARTICULAR APPLICATION)

NOTES:

The Conditions of Particular Application (Conditions of Contract, Part II) modify and compliment like-numbered clauses in the General Conditions of Contract (Conditions of Contract, Part I). Both parts shall be read together, with the Conditions of Particular Application prevailing in case of conflict or discrepancy. Clauses of the General Conditions of Contract not specifically modified and supplemented shall remain in effect.

DEFINITIONS AND INTERPRETATION

1.1 Definitions

- (a) (i) The “Employer” shall be The DIRECTOR GENERAL, KENYA WILDLIFE SERVICE.
- (ii) The “Engineer” shall be The HEAD ROADS AND FLEET MANAGEMENT or any other competent person appointed by the Employer, and notified to the Contractor, to act in replacement of the Engineer.
- (b) (i) Insert in line 2 after “the Bill of Quantities”, the following, “the rates entered by the Contractor (whether or not such rate be employed in computation of the Contract Price)”.
- (ii) The word “Tender” and its derivatives are synonymous with the word ‘Bid,’ and its derivatives, and the words ‘Tender Documents’ with ‘Bidding Documents’. The words “Appendix to Tender” and the words “Appendix to Bid” shall have the same meaning as the words ‘Appendix to the Form of Bid’.”

Add the following paragraph at the end of Subclause 1.1 (f) (vii):

The aforesaid includes lands waters, river beds and other places on, under, in through which the Works are to be carried out including all offices, workshops or places where materials are to be stored or used for the purposes of the Contract. It also includes quarries; borrow pits, stock pile areas and spoil areas”

Add Subclause 1.1 (g) (v):

Dates shall be construed in accordance with the Gregorian Calendar.

Add the following Subclause 1.6:

1.6 Gender Specific Words

Wherever in the Contract Documents the word 'man' or 'men' is used directly or as a suffix it means 'woman' or 'women' also. The Word 'he' includes 'she' also.

ENGINEER AND ENGINEER'S REPRESENTATIVE

2.1 Engineer's Duties and Authority

With reference to Sub-Clause 2.1(b): Add the following

The Engineer shall obtain specific approval of the Employer before taking any of the following actions specified in the General Conditions of Contract:

- (a) Consenting to the sub-letting of any part of the Works under Clause 4.
- (b) Certifying additional cost determined under Clause 12
- (c) Determining an extension of time under Clause 44
- (d) Issuing a variation under Clause 51 except:
 - (i) In an emergency situation as reasonably determined by the Engineer, or
 - (ii) if such variation would increase the Contract Price by less than the amount stated in the Appendix to Bid.
- (e) Certifying payment if the Contract Price will be exceeded
- (f) Authorising the use of provisional sums in excess of the monetary limit for variations
- (g) Issuing any Taking-over Certificate
- (h) Certifying additional payment/costs under Clause 65;
- (i) Issuing a Defects Liability Certificate under Clause 62
- (j) Fixing rates or prices under Clause 52.

Notwithstanding the provisions set out above, to obtain approval of the employer, if in the opinion of the Engineer, an emergency occurs affecting the safety of life or of the Works or of adjoining property, he may, without relieving the Contractor of any of his duties and responsibilities under the Contract, instruct the Contractor to execute all such work or to do all such things as may, in the opinion of the Engineer, be necessary to abate or reduce the risk. The Contractor shall forthwith comply, despite

the absence of approval of the Employer, with any such instruction of the Engineer. The Engineer shall determine an addition to the Contract Price, in respect of such instruction, in accordance with Clause 52 and shall notify the Contractor accordingly, with a copy to the Employer.”

ASSIGNMENT AND SUBCONTRACTING

4.1 Subcontracting

Delete the second and third sentence and substitute:

All Solar Street lighting Works shall be executed by a Nominated Subcontractor to be appointed by the Client.

In addition no single subcontract may be for more than 10 percent of the Contract Price nor shall the sum of all subcontracts exceed 25 percent of the Contract price. No one subcontractor may be awarded subcontracts to a total value greater than 10 percent of the Contract Price. All subcontracts greater than 2 percent of the Contract Price are to have the prior consent of the Engineer. The Contractor shall however, not require such consent for purchases of materials or to place contracts for minor details or for any part of the Works of which the manufacturer or supplier is named in the Contract. Any such consent shall not relieve the Contractor from any liability or obligation under the Contract and he shall be responsible for the acts, defaults and neglects of any subcontractor, his agents, servants or workmen as fully as if they were the acts, defaults or neglects of the Contractor, his agents, servants or workmen.

Add the following:

The Engineer should satisfy whether:

- (a) The circumstances brought out warrant such subcontracting; and
- (b) The subcontractors so proposed for the Work possess the necessary experience, qualifications and equipment for the job proposed to be entrusted to them in proportion to the quantum of work to be subcontracted.

If the contractor proposes payments to be made directly to that subcontractor, this should be subject to specific authorization by the Contractor so that such consent does not relieve him from any liability or obligations under the contract.

CONTRACT DOCUMENTS

5.1 Language and Law

- (a) The language governing this Contract shall be English.

The “Ruling Language” which shall be used to interpret this Contract shall be English. Communication between the Contractor and Engineer or Engineer’s representative shall be in English.

- (b) The laws applicable to this Contract shall be the laws of the Republic of Kenya. Except to the extent otherwise provided by the Contract, the Kenyan courts shall have exclusive jurisdiction to hear and to determine all actions and proceedings in connection with and arising out of the Contract and the Contractor shall submit to the jurisdiction of Kenyan courts for the purpose of any such actions and proceedings.

5.2 Priority of Contract Documents

Delete the documents listed as (1) to (6) and substitute with the following:

- (1) The Contract Agreement (if completed)
- (2) The Letter of Acceptance
- (3) Minutes of Pre-Contract Award Discussion
- (3) Bid and Appendix to Form of Bid
- (4) The Conditions of Contract, Part II; Conditions of Particular Application
- (5) The Conditions of Contract, Part I; General Conditions of Contract
- (6) The Special Specifications
- (7) The Standard Specifications for Road and Bridge construction , Ministry of Transport and Communications, 1986
- (8) Clarifications and Rectifications accepted by the Employer
- (9) The Drawings
- (10) The Priced Bill of Quantities
- (11) Schedules and other documents forming part of the Contract.

Add to Clause 6 the following Subclauses 6.6 to 6.10:

6.6 Metric Units

All units used in the Contract shall be metric and for measurement of angles the 360 degrees circles systems shall be used

6.7 Intent of Drawings and Specifications

The intent of Drawings and Specifications is to describe the details for the complete construction and maintenance of the Works which the Contractor undertakes to perform in accordance with the terms of the Contract.

Where the Drawings or Specifications describe portions of the Works in general terms, but not in complete detail, it is understood that only materials and workmanship of the first quality are to be used. First quality refers to the quality as approved by the Engineer.

Unless otherwise specified, the Contractor shall furnish all labour, material, tools, equipment and incidentals, and do all the work involved in executing the Contract in a satisfactory and workman-like manner.

6.8 Design, Drawings and Specifications Prepared by the Contractor

No payment will be made to the Contractor for undertaking any kind of design work, preparation of drawings and specification, other than that specifically required by the terms of the Contract. Payment for design work, preparation of drawings and specifications, specifically required by the terms of the Contract shall be deemed to be included in the Rates and Lump Sums entered in the Bill of Quantities.

6.9 Submissions of Designs and Drawings

All detailed working drawings/shop drawings, design calculations and fabrication drawings for Temporary Works (such as formwork, staging, centring, scaffolding, specialized constructional, handling and launching equipment and the like) as well as bar bending and cutting schedules for reinforcement, material lists for structural fabrication including detailed drawings for templates, end anchorage and temporary support details for pre-stressing cables shall be prepared by the Contractor at his own cost and forwarded in triplicate to the Engineer at least six weeks in advance of actual constructional requirements. The Engineer will check and return one copy of the same for the Contractor's use with amendments, if any, noted in red ink. Such approval shall not relieve the Contractor of any of his responsibilities in connection with temporary works.

The Contractor will supply four copies of the approved drawings for the Engineer's use. The cost of preparing all such items of work shall be deemed to have been included in the respective rates/prices quoted by the Contractor in the Bill of Quantities.

6.10 As-Built Drawings

On completion of the Works, the Contractor shall arrange to furnish to the Employer two (2) bound sets of all "As Built" drawings for every component of the Works at his own cost, all such copies being on Polyester film of quality to be approved by the Engineer or his Representative and digitized copy (2 No.) in a Compact Discs (CDs) of quality approved by the Engineer or his Representative. The Taking-over Certificate of the Works, as per the provisions of Clause 48.1 herein, shall not be issued by the Engineer in the event of the Contractor's failure to furnish the aforesaid "As Built" drawings for the entire works."

Add to Clause 7 the following Subclauses 7.4 to 7.6:

7.4 Drawings for Temporary Works

Drawings for Temporary works to be carried out by the Contractor shall be submitted to the Engineer for approval.

Working drawings of concrete structures consisting of such details as may be reasonably required for the successful execution of the work and which are not included in the plans furnished by the Employer, shall be prepared by the Contractor. Three sets of working drawings shall be submitted to the Engineer for approval.

7.5 Size of Drawings

All drawings submitted by the Contractor shall for convenience in filing be as far as possible of a uniform size, and not more than 1010 mm x 680 mm. The drawings shall be numbered and dated, and shall include the title of the Contract at the bottom of the drawing followed by the title of the drawing. All drawings shall have the appropriate scales drawn on them and notes shall be in English. All amendments to such drawings shall be noted and dated on the drawing.

7.6 Submission to the Engineer

Whenever the Contractor is required to submit to the Engineer proposals, details, drawings, calculations information, literature, materials, test report and certificates, the Engineer will consider each submission and, if appropriate, will reply to the Contractor in accordance with the relevant provision of the Conditions of Contract. Unless a defined period of time is stated in the contract, each submission shall be made by dates to be agreed with the Engineer having regard to the approved programme and the need to give the Engineer adequate time to consider each submission.

The approval of the Engineer of any submission shall not relieve the Contractor of his responsibilities under the Contract.

GENERAL OBLIGATIONS

Add to Subclause 8.1 the following:

8.1 Contractors General Responsibilities

- (a) Within 28 days after receipt of the Engineer's Order to Commence the Works, the Contractor shall establish an office at the Site duly equipped for the Contractor's representative and his superintending personnel.

The Contractor shall maintain this office throughout the Contract period. The said office shall be the legal domicile of the Contractor, and all correspondence sent to this office shall be deemed to have been sent to the Contractor's head office.

- (b) A foreign Contractor or a Kenya-foreign joint venture, if not registered in Kenya under the applicable laws of Kenya, shall undertake registration upon receipt of the Letter of Acceptance and prior to signing of the Contract.

Add to Clause 8 the following Subclause 8.3:

8.3 General Requirements

- (a) Materials delivered to the site by Contractor or materials made available or supplied by the Employer shall be used solely for the execution of the Works.
- (b) The Contractor shall minimise the pollution of and disturbance of lands, roads and other places on and around the Site. No trees or other vegetation shall be removed except to the extent necessary for the works.
- (c) The Contractor shall comply with the current Government regulations with regard to the transport, storage and use of explosives and radioactive materials and use of radio communication equipment.
- (d) The Contractor shall take all reasonable precautions:
 - (i) In connection with any rivers, streams, waterways, drains, water courses, lakes and the like to prevent as a consequence of the works, silting, erosion of beds and banks and pollution of the

water that may adversely affect the quality or appearance thereof or cause injury or death to human, animal or plant life.

- (ii) In connection with underground water resources, including percolating water, to prevent any interference as a consequence of the work with the supply to or abstraction from such sources and to prevent pollution of water that may adversely affect the quality thereof.
- (e) The Contractor shall provide, maintain and remove on completion of the Works, settling lagoons and other facilities to minimise pollution due to the Contractor's operations including but not limited to quarrying, aggregate washing, concrete mixing and grouting.
- (f) The Contractor shall provide, maintain and remove on completion of the Works, fencing around the site installations including housing, camps, offices and laboratories, providing free access to the Employer, the engineer, other Contractors and any other persons entitled to such access and provide appropriate security measures on such access roads.
- (g) All buildings erected by the Contractor upon the site and camp sites, and the layout of the buildings and the sites, shall comply with the Laws of the country and all local By-laws in so far as they are applicable.
- (h) The Contractor shall be absolutely and solely responsible for the safety and security of Temporary Works or other works and for the Plant and Contractor's Equipment in connection therewith which may be erected or provided for the execution of the Contract Works.

This provision shall be applicable to all temporary Works, Plant and Contractor's Equipment whenever provided and erected by the Contractor or his Subcontractor(s) for the purpose of or in connection with the Contract Works.

- (i) The contractor shall keep in close contact with the police, Labour officers and all other officials as appropriate regarding their requirements for the control of workmen, restricted area permits or other matters and shall provide all assistance and facilities which may be required by such officials in the execution of their duties.

10.1 Performance Security

Replace the text of Subclause 10.1 with the following:

The Contractor shall provide security for his proper performance of the Contract to the Employer within 28 days after the receipt of the Letter of Acceptance. The Performance Security shall be as stipulated in the Appendix to the Form of Bid. The Performance Security shall normally be in the currency or currencies requested for payment by the Contractor and in the same proportions as those requested for payment in the Contract. The Contractor shall notify the Engineer when providing the Performance Security to the Employer.

The Performance Security shall be a bank guarantee which shall be issued either:

- (a) By a bank located in Kenya or a foreign bank through a correspondent established and reputable bank located in Kenya or;

Without limitation to the provisions of the preceding paragraph, whenever the Engineer determines an addition to the Contract Price as a result of a change in cost and/or legislation or as a result of a variation amounting to more than 25 percent of the portion of the Contract Price payable in a specific currency, the Contractor, at the Engineer's written request, shall promptly increase the value of the Performance Security in that currency by an equal percentage.

The performance security of a joint venture shall be in the name of the joint venture.

10.2 Period of Validity of Performance Security

The performance security shall be valid until a date 28 days from the date of issue of the Taking-Over Certificate for the last section in case of partial handover. The security shall be returned to the Contractor within 28 days of expiration.

10.3 Claims under Performance Security

Delete sub-clause 10.3

Add the following Subclause 10.4:

10.4 Cost of Performance Security

The cost of complying with the requirements of this clause shall be borne by the Contractor.

11.1 Inspection of Site

Add the words “and the Contractor shall be deemed to have based his tender on all the aforementioned” after the words “affect his tender”.

Delete the last paragraph completely and replace with the following:

The Employer in no way guarantees completeness nor accuracy of the soil, materials, subsurface and hydrological information made available to the Contractor at the time of bidding or at any other time during the period of the Contract, and the Contractor shall be responsible for ascertaining for himself all information as aforesaid for the execution of Works and his bid shall be deemed to have been priced accordingly.

Add a new Subclause 11.2:

11.2 Access to Data

Data made available by the Employer in accordance with Subclause 11.1 shall be deemed to include data listed elsewhere in the Contract as open for inspection at the address stipulated in Appendix to the Form of Bid.

14.1 Programme to be submitted

Delete Subclause 14.1 and replace with the following:

The time within which the Programme shall be submitted shall be twenty eight (28) days .This detailed Programme shall be based upon the programme submitted by the Contractor as part of his bid and shall, in no material manner, deviate from the said programme.

The Contractor shall allow in his Programme for the following 11 public holidays per calendar year in Kenya upon which the Contractor shall not be permitted to work:

- New Year’s Day (1st January)
- Good Friday
- Easter Monday
- Labour Day (1st May)
- Madaraka Day (1st June)
- Idd-UI-Fitr
- Mashujaa Day (20th October)
- Jamhuri Day (12th December)
- Christmas Day (25th December)

- Boxing Day (26th December)

The Contractor should also allow per calendar year for a further two (2) unspecified public holidays which may be announced by the Government of Kenya with no prior notification, and upon which he shall not be permitted to work.

The Programme shall be submitted in two copies in the form of a Critical Path Method Network (CPM Network) showing the order of procedure and description of the construction methods and arrangements by which he proposes to carry out the Works. In addition, the aforesaid critical path programme should be supplemented by:

- (i) A Gantt/time-bar chart detailing each construction activity, showing for each construction activity; the periods of construction activity planned; the percentage completion anticipated per month; the total estimated quantity of work; the average monthly production planned, and
- (ii) A detailed work method statement in respect of each construction activity. It should also be supplemented by a time-bar chart of the same programme. The programme shall be coordinated with climatic, groundwater and other conditions to provide for the completion of the works in the order and by the time specified. The Programme shall be revised at quarterly intervals and should include a chart of the principal quantities of the forecast for execution monthly.

The detailed work method statement of each particular construction activity shall list by category/type and quantity the labour, skilled labour, supervisors, plant, equipment and materials to be employed on the particular construction activity; together with: the estimated average daily production anticipated, the estimated equipment availability and utilisation factor anticipated and a detailed step description of the way in which resources are to be utilised to achieve the required rate of construction/production.

The Contractor's attention is particularly drawn to the need to familiarise himself with customs procedures in connection with importation and to allow sufficient time in its programme for these to be completed.

During the execution of Works, the Contractor shall submit to the Engineer detailed particulars of any proposed amendments to the arrangements and methods submitted in accordance to the foregoing.

If details of the Contractor's proposals for Temporary Works are required by the Engineer for his own information the Contractor shall submit such detail within fourteen days of being requested to do so.

The various operations pertaining to the Works shall be carried out in such a progressive sequence so as to achieve a continuous and consecutive output of fully completed road works inclusive of bridge works and culverts within the time limits specified in the Contract.

The Contractor shall, wherever required by the Engineer, also provided in writing for information a detailed description of the arrangements and methods which the Contractor proposes to adopt for the execution of any particular part of the Works as directed by the Engineer.

Progress reporting by the Contractor should be supported on a monthly basis with an up-to-date analysis of the progress including a statement on items which are or are about to become critical to the Progress of Works, along with proposals on how the Contractor intends to address the situation.

The consent by the Engineer on any programme shall have no contractual significance other than that the Engineer would be satisfied if the work is carried out according to such programme, and that the Contractor undertakes to carryout the work in accordance with the programme, nor shall it limit the right of the Engineer to instruct the Contractor to vary the programme should circumstances make this necessary. The above shall not be taken to limit the right of the Contractor to claim for damage or extension of time to which he may be fairly entitled to in terms of the General Conditions of the Contract for delay or disruption of his activities.

Notwithstanding the General Conditions of Contract Clause 14.1, the programme to be submitted for the execution of the Works shall, in addition to the programme of pure construction activities, include an alleviation programme for Site staff and labour in respect of Sexually Transmitted Disease (STD) including HIV/AIDS. The STD and HIV/AIDS alleviation programme shall indicate when, how and what cost the Contractor plans to satisfy the requirements of Subclause 19.1 herein and the related Technical Specifications. For each component, the programme shall detail the resources to be provided or utilized and any related sub-contracting proposed. The programme shall also include provision of a detailed cost estimate with supporting documentation.

14.2 Revised Programme

Add the following at the end of this subclause:

The Contractor shall, when instructed by the Engineer, amend, correct or modify the Programme of the Works so as to take into account any delays and/or advances and modifications designs or for other reasons considered necessary by the Engineer.

If, during the progress of the work, the quantities of work performed per month fall below those shown in the Programme, or if the sequence of operations is altered, or if the Programme is deviated from in any other way, the Contractor shall, within two weeks after being notified by the Engineer, submit a revised Programme necessary to ensure completion of the Works or any part thereof within the Time for Completion, or any extended time granted pursuant to Clause 43 and Clause 44 of the General Conditions of Contract or so as to take into account any delays or advances or for other reasons considered necessary by the Engineer without prejudice to the Employer's right under Clause 63 of the General Conditions of Contract.

Any proposal to increase the tempo of work must be accompanied by positive steps to increase production by providing more labour and plant on Site, or by using the available labour and plant in a more efficient manner.

Should the Employer request and the Contractor undertake to finish the whole or part of the Works ahead of the time originally required by the Contract, payment for accelerating the work shall only be made if agreed to beforehand in writing and according to the terms of such agreement.

If the Programme is to be revised by reason of the Contractor falling behind his Programme, he shall produce a revised Programme showing the modifications to the original Programme to complete the Works within the time as defined in Clause 43 of the General Conditions of Contract.

The Employer shall have the right to withhold payment at any time if the Contractor fails to submit the contractual construction programmes in accordance with Subclause 14.1 above or revise construction programmes due to his negligence, failure or omission.

14.3 Cash Flow Estimate to be Submitted

The time limit within which a detailed cash flow estimate is to be submitted shall be twenty eight (28) days.

In preparing the estimates, the Contractor shall make provision for Advance payment, repayment of advance, retention, payment for services provided by the Employer and timing implications of Clause 60 Certificates and Payments.

A schedule of Payments for both local and foreign currency expected to be made to the Contractor by the Employer, shall be provided.

The cash flow estimate submitted with the bid shall be revised each time the construction Programme is submitted, and revised, under Subclauses 14.1 and 14.2 above.

15.1 Contractor's Superintendence

Add the following at the end of the first paragraph of Subclause 15.1:

The Contractor shall, within seven (7) days of receipt of the Engineer's Order to Commence the Works, inform the Engineer in writing, the name of the Contractor's representative and the anticipated date of his arrival on Site.

Add the following Subclause 15.2:

15.2 Contractor's Agent or Representative

The Contractor's agent or representative on the Site shall be an Engineer registered by the Engineer's Registration Board of Kenya in accordance with the Laws of Kenya cap. 530 or have equivalent status approved by the Engineer and shall be able to read, write and speak English fluently.

16.2 Engineer at Liberty to Object

At the end of this clause add "by a competent substitute approved by the Engineer at the Contractor's own expense".

Add the following Subclauses 16.3 and 16.4:

16.3 Language Ability of Superintending Staff

A reasonable proportion of the Contractor's superintending staff shall have a working knowledge of the language specified in the Appendix to Form of Bid pursuant to Subclause 5.1(a), or the Contractor shall have available on site at all times a number of competent interpreters, as required by the Engineer, to ensure proper transmission of instructions and information.

16.4 Employment of Local Personnel

The Contractor is encouraged to the extent practicable and reasonable, to employ staff and labour with appropriate qualifications who are Kenyan citizens.

17.1 Setting Out

The following additional paragraph shall apply to the provisions of the Subclause 17.1:

- (d) The checking of all the setting-out of the proposed works relative to existing ground features, to be undertaken prior to the commencement of fabrication of structural steelworks for superstructures. This preparation is to include providing the facility for the Engineer to undertake a timely check on this setting-out and alerting the Engineer to any likely problems foreseen.

The contractor shall give to the Engineer not less than 48 hours of notice of his intention to set out or give layout for any part of the works so that timely assignment can be made for checking the same.

Add the following new Subclause 17.2:

17.2 Notice to Engineer

The Contractor shall give to the Engineer not less than 48 (Forty eight) hours notice of his intention to set out or give levels for any part of the works so that timely arrangement may be made for checking or issuing instructions. He shall indicate therein by which date the information, if any, is required by him.”

19.1 Safety, Security and Protection of the Environment

Add Subclauses 19.1 (d), (e), (f), (g), (h), (i), (j), (k), (l) and (m) and the subsequent text as follows:

- (d) Notwithstanding the Contractor’s obligation under Subclauses 19.1 (a), (b) and (c) of the Conditions of Contract, the Contractor shall carry out, without limitation, the following measures with a view to reducing or eliminating adverse environmental effects by the site Works:
 - (i) All quarries, borrow pits, diversions and detours shall be filled and landscaped, as far as practical, to their original condition after extraction of construction material.
 - (ii) Soil erosion and sedimentation due to the surface runoff or water from culverts or other drainage structures should be avoided by putting in place proper erosion control measures.

- (iii) Long traffic diversion roads shall be avoided so as to minimise the effect of dust on the surrounding environment. In any case, all diversions shall be kept damp to reduce dust.
 - (iv) Haulage routes shall be kept as short as possible and watered as necessary.
 - (v) Spillage of oil, fuel, and lubricants shall be avoided. If spilt, they shall be collected and disposed of in such a way that they do not adversely affect the natural environment.
 - (vi) Rock blasting near settlement areas shall be properly coordinated with the relevant officers of the Kenya government in an attempt to minimise levels of noise pollution and community interference.
- (e) The formulation and enforcement of an adequate safety programme shall be the obligation of the Contractor with respect to all the works under this Contract, regardless of whether performed by the Contractor or his Subcontractors. The Contractor shall, within 14 days after commencement of the Works, meet the Engineer to present and discuss his plan for the establishment of such safety measures as may be necessary to provide against accidents, unsafe acts, and so forth.

Within 28 days after commencement of the Works, the Contractor shall submit a written safety, security and environmental protection programme to the Engineer covering the overall works and based on the laws and regulations of Kenya. In addition, he shall prepare special safety programmes for blasting and handling of explosives as may be stipulated in the Specifications.

- (f) The Contractor shall take all due precautions to avoid soil and water contamination by spillage of oil, grease, fuel and paint in the equipment yard, workshop or the site of works. Lubricants should be recycled.
- (g) The Contractor shall install pollution control device in his asphalt plant.
- (h) The Contractor shall implement re-plantation and grading of steep slopes in quarries and borrow pits to prevent disfiguration of landscape.
- (i) The Contractor shall implement compensatory afforestation plan to counteract destruction of vegetation when required to do so by the Engineer. The Contractor shall pay proper attention to the aspect of borrow pit drainage to prevent formation of stagnant pools of water and

incidence of mosquito vectors. All borrow pits will be provided with efficient drains which shall be connected to the natural outfalls.

- (j) Notwithstanding implementation of any other provision contained in the Conditions of Contract, the failure on the part of the Contractor or his staff in the cases listed below will be considered default on the part of the Contractor and will attract the terms of Subclause 63.1 for remedies.
- Poor sanitation and solid waste in the workers camp
 - Possible transmission of communicable diseases, including HIV/AIDS, between local people and the Contractor's workers
 - Poaching by the Contractor's workers
 - Illegal invasion of indigenous people by the Contractor's labour.
- (k) All lights provided by the Contractor shall be screened so as not to interfere with any signal light on the railways or with any traffic or signal lights of any local or other authority.
- (l) The Contractor shall be deemed to be in possession of, and ensure that the Contractor's personnel are fully aware of, relevant safety regulations.
- (m) The Contractor shall ensure that all equipment, tools and other items used in accomplishing the Works, whether purchased, rented or otherwise provided by the Contractor are in safe, sound and good condition for performing the intended function.

Notwithstanding the terms of Clause 19.1 of the General Conditions of Contract, the Contractor shall throughout the contract (including the Defects Liability Period):

- (i) Conduct Information, Education and Consultation (IEC) campaign, at least every other month, addressed to all the Site staff and labour (including all Contractor's Employees, all Subcontractors and Consultant's employees, and all truck drivers and crew marketing deliveries to Site) and to the immediate local communities, concerning the dangers and impact of Sexually Transmitted Diseases (STD) in general and HIV/AIDS in particular;

- (ii) Provide male or female condoms for all Site staff and labour as appropriate; and
- (iii) Provide for STD and HIV/AIDS professional screening, diagnosis, counselling and full treatment(except that in the case of HIV/AIDS cases treatment shall be limited to referral to a dedicated national or regional HIV/AIDS programme)of all Site staff and labour.

Amend Subclause 20.4 to read as follows:

20.4 Employer's Risks

The Employer's risks are:

- (a) Insofar as they directly affect the execution of the Works in Kenya where the Permanent Works are to be executed:
 - (i) War and hostilities (whether war be declared or not), invasion, act of foreign enemies
 - (ii) Rebellion, revolution, insurrection, or military or usurped power, or civil war
 - (iii) Ionising radiations, or contamination by radioactivity from any nuclear fuel, or from any nuclear waste from the combustion of nuclear fuel, radioactive toxic explosive or other hazardous properties of any explosive nuclear assembly or nuclear component thereof;
 - (iv) Pressure waves caused by aircraft or other aerial devices travelling at sonic or supersonic speeds
 - (v) Riot, commotion or disorder, unless solely restricted to the employees of the Contractor or of his Subcontractors and arising from the conduct of the Works.
- (b) Loss or damage due to the use or occupation by the Employer of any section or part of the Permanent Works, except as may be provided for in the Contract

- (c) Loss or damage to the extent that it is due to the design of the Works, other than any part of the design provided by the Contractor or for which the Contractor is responsible, and
- (d) Any operation of the forces of nature (insofar as it occurs on the Site) which an experienced contractor:
 - (i) Could not have reasonably foreseen, or
 - (ii) Could reasonably have foreseen, but against which he could not reasonably have taken at least one of the following measures:
 - i. Prevent loss or damage to physical property from occurring by taking appropriate measures, or
 - ii. Insure against such loss or damage.”

21.1 Insurance of Works and Contractor’s Equipment

Delete the first sentence of this clause and replace with the following:

“Prior to commencement of the Works the Contractor shall, without limiting his or the Employer’s obligations and responsibilities under Clause 20, insure to the satisfaction of the Employer.”

Add the following words at the end of subparagraph (a) and immediately before the last word of subparagraph (b):

“it being understood the insurance shall provide for compensation to be payable in the types and proportions of the currencies required to rectify the loss or damage incurred.”

In Subclause 21.1(b), delete the words “or as may be specified in Part II of these Conditions”.

21.2 Scope of Cover

- (a) Delete the words “from the start of Work at the Site” and substitute with the words “from the first working day after the commencement date”

Add the following Subclause 21.2 (c):

- (c) It shall be the responsibility of the Contractor to notify the insurance company of any change in the nature and extent of the Works and to ensure the adequacy of the insurance coverage at all times during the period of the Contract.

Amend Subclause 21.4 to read as follows:

21.4 Exclusions

There shall be no obligation for the insurances in Subclause 21.1 to include loss or damage caused by the risks listed under Subclause 20.4 subparagraphs (a) (i) to (v) above.

Add the following Subclause 21.5:

21.5 Insurance of Goods

The Contractor shall insure or cause to be insured all imported goods financed out of the proceeds of the Contract against marine and other hazards incidental to the acquisition, transportation and delivery thereof to the place of use or installation and where appropriate against all usual risks pertaining to the construction of the Works.

23.1 Third Party Insurance (Including Employer's Property)

Add the following at the beginning of this Subclause:

Prior to commencement of the Works ...

23.2 Minimum Amount of Insurance

Add the following at the end of this subclause:

... with no limits to the number of occurrences

25.1 Evidence of Terms of Insurance

Insert the words "as soon as practicable after the respective insurances have been taken out but in any case" before the words "prior to the start of Work at the Site"

Add the following Subclauses 25.5 to 25.8:

25.5 Source of Insurance

The Contractor shall be entitled to place all insurance relating to the Contract (including, but not limited to, the insurance referred to in Clauses 21, 23, and 24) with insurers from Kenya which has been determined to be acceptable to the Employer.

25.6 Insurance Notices

Each policy of insurance effected by the Contractor for the purpose of the Contract shall include a provision to the effect that the Insurer shall have a duty to give notice in writing to the Contractor and Employer of the date when a premium becomes payable not more than thirty (30) days after the giving of such notice.

25.7 Insurance in Kenya

The risks against which the Contractor is obliged to insure under the Contract shall be insured through established and reputable companies approved by the Employer and located in Kenya and any cover against risks which the Contractor may enjoy shall be insured in Kenya by an approved Kenyan Insurance Company in respect of the Contractor's obligations under the Contract.

25.8 Notification to Insurers

It shall be the responsibility of the Contractor to notify the insurers under any of the insurances referred or event which by the terms of such insurances are required to be so notified and the Contractor shall indemnify and keep indemnified the Employer against all losses, claims, demands, proceedings, costs, charges and expenses whatsoever arising out of or in consequence of any default by the Contractor in complying with the requirements of this subclause whether as a result of avoidance of such insurance or otherwise.

Add the following Subclauses 26.2 and 26.3

26.2 Compliance with Statutes, Regulations

The Employer will repay or allow to the Contractor all such sums as the Engineer shall certify to have been properly payable and paid by the Contractor in respect of such fees, provided always that, without prejudice to Subclause 26.1, nothing contained in this sub clause shall be deemed to render the Employer liable to all claims which may be considered to fall within the provisions of Subclause 22.1.

26.3 Inspection and Audit by the Funding Agency

The Contractor shall permit the funding agency to inspect the Contractor's accounts and records relating to the performance of the Contract and to have them audited by auditors appointed by the agency, if so required by the agency.

28.2 Royalties

Add the following at the end of Subclause 28.2:

The Contractor shall also be liable for all payments or compensation, if any, that are levied in connection with the dumping of part or all of any such material."

Add the following Subclauses 29.2 to 29.5:

29.2 Passage and Control of Traffic

The Contractor's attention is drawn to Specifications covering the Passage and Control of Traffic and in particular to the requirement for the submission of a detailed Programme for Passage of Traffic as required following the award of the Contract.

In case any operation connected with traffic which necessitates diversion, obstruction or closure of any road, railway or any other right of way, the approval of the Engineer or the Engineer's Representative and the concerned authorities shall be obtained well in advance by the Contractor.

29.3 Reinstatement and Compensation for Damage to Persons or Property

The Contractor shall reinstate all properties whether public or private which are damaged in consequence of the construction and maintenance of the Works to a condition at least equal to that prevailing before his first entry on them.

If in the opinion of the Engineer the Contractor shall have failed to take reasonable and prompt action to discharge his obligations in the matter of reinstatement, the Engineer will inform the Contractor in writing of his opinion, in which circumstances, the Employer reserves the right to employ others to do the necessary work of reinstatement and to deduct the cost thereof from any money due or to become due to the Contractor.

The Contractor shall promptly refer to the Employer all claims, which may be considered to fall within the provisions of Clause 22.1.

29.4 Protection of Existing Works and Services

The Contractor shall acquaint himself with the position of all existing services, such as sewers, surface water drains, cables for electricity, data and telephone, telephone and lighting poles, water mains, and the like before commencing any excavation or other works likely to affect the existing services.

The Contractor will be held liable for all damage to roads, irrigation ditches, mains pipes, electric cables, lines or services of any kind caused by him or his subcontractors in the execution of the Works. The Contractor must make good any damage without delay and, if necessary, carry out any further work ordered by the Engineer or Engineer's Representative, all at the Contractor's cost. Where work is to be carried out in the vicinity of overhead power lines, the Contractor shall ensure that all persons working in such areas are aware of the relatively large distance that high voltage electricity can "short" to earth when crane, or other large masses of steel, are in the vicinity of power lines. The Contractor's attention is drawn to appropriate standards which gives safe clearances for the various voltages.

The Contractor shall be held responsible for damage to existing works or services, and shall indemnify the Employer against any claims in this respect (including consequential damages). The Contractor shall be responsible for the reinstatement of the services, so affected, to the satisfaction of the Engineer.

In all cases where such works or services are exposed, they shall be properly shored, hung up or otherwise protected. Special care must be exercised in filling and compaction of the grounds under mains and cable. The exposed water meters, stopcock boxes and similar items shall be left uncovered.

As soon as any such existing works or services or structures are encountered on, over, under, in or through the Site during the performance of the Contract, the Contractor shall make a record of the location and description of such service or structure and shall send the same forthwith to the Engineer.

Installations adjacent to the Works shall be kept securely in place until the work is completed and shall then be made as safe and permanent as before.

Notwithstanding the foregoing requirements, and without reducing the Contractor's responsibility, the Contractor shall inform the Engineer immediately if any existing works or services are located, exposed or damaged.

29.5 Protection of Survey Beacons

The Contractor shall not remove, damage, alter or destroy in any way plot beacons. Should the Contractor consider that any beacons will be interfered with by the Work he shall notify the Engineer who, if he considers it necessary, will make arrangements for the removal and replacement of the beacons.

30.2 Transport of Contractor's Equipment or Temporary Works

Add the following at the end of this subclause.

If it is found necessary for the Contractor to move one or more loads of heavy constructional plant and equipment, materials or pre-constructed units of work over roads, highways, bridges on which such oversized and overweight items are not normally allowed to be moved, the Contractor shall obtain prior permission from the concerned authorities. Payments for complying with the requirements, if any, for protection of or strengthening of the roads, highways or bridges shall be made by the Contractor and such expenses shall be deemed to be included in his Contract Price.

Add the following Subclauses 30.5 and 30.6.

30.5 Complying with State Laws and Regulations

Nothing contained above shall excuse the Contractor or any of his Subcontractor(s) from complying with state laws regulating traffic on highways and bridges.

30.6 Effects of other Concurrent construction Projects

The Contractor shall be deemed to have fully familiarised himself with planned construction operations or any other concurrent construction projects in Kenya which may have any material effect on the Contractor's own operations. In particular, the Contractor shall be deemed to have allowed for the effects of other concurrent construction contract(s) on any necessary transportation operations in connection with the Contract(s).

LABOUR

Add the following Subclauses 34.2 to 34.23

34.2 Labour Regulations

The Contractor and his Subcontractors shall, at all times, during the Contract period abide fully by the governing local laws and regulations.

The Contractor shall be responsible for making all arrangements for and shall bear all costs relating to recruitment, obtaining of all necessary visas, permits or other official permission for movements of staff and labour.

34.3 Engagement of Local Labour

The Contractor is encouraged to the extent practicable and reasonable to employ staff and labour with the required qualifications and experience from sources within Kenya, particularly in the vicinity of the Site.

34.4 Rates of Wages and Conditions of Labour

The Contractor shall pay rates of wages and observe conditions of labour not less favourable than those established for the trade or industry where the work is carried out. In the absence of any rates of wages or conditions of labour so established, the Contractor shall pay rates of wages and observe conditions of labour which are not less favourable than the general level of wages and conditions observed by other employers whose general circumstances in the trade or industry in which the Contractor is engaged are similar.

34.5 Repatriation of Labour

The Contractor shall be responsible for the return to the place where they were recruited or to their domicile of all such persons as he recruited and employed for the purposes of or in connection with the Contract, and shall maintain such persons as are to be so returned in a suitable manner until they shall have left the site or, in the case of persons who are not nationals of and have been recruited outside the Republic of Kenya shall have left Kenya or the site, as appropriate.

34.6 Housing for Labour

Save insofar as the Contract otherwise provides, the Contractor shall provide and maintain such accommodation and amenities as he may consider necessary for all his staff and labour, employed for the purposes of or in connection with the Contract, including all fencing, water supply (both for drinking and other purposes), electricity supply, sanitation, cookhouses, fire prevention and fire-fighting equipment, cookers, refrigerators, furniture, and other requirements in connection with such accommodation or amenities. On completion of the Contract, unless otherwise agreed with the Employer, the temporary camps or housing provided by the Contractor shall be removed and the site reinstated to its original condition, all to the approval of the Engineer.

34.7 Accident Prevention Officer

The Contractor shall have on his staff on Site an officer dealing only with questions regarding the safety and protection against accidents of all staff and labour. This officer shall be qualified for this work and shall have the authority to issue instructions and shall take protective measures to prevent accidents.

34.8 Health and Safety

Due precautions shall be taken by the Contractor, and at his own cost, to ensure the safety of his staff and labour and, in collaboration with and to the requirements of the local health authorities, to ensure that medical staff, first aid equipment and stores, sick bay and suitable ambulance services are available at the camps, housing, and on the Site at all times throughout the period of the Contract and that suitable arrangements are made for the prevention of epidemics and for all necessary welfare and hygiene requirements. Workers shall always be transported using vehicles that meet the current transport regulations.

34.9 Life Saving Appliances and First Aid Equipment

The Contractor shall provide and maintain upon the Works sufficient, proper and efficient life-saving appliances and first-aid equipment to the approval of the Engineer. The appliances and equipment shall be available for use at all times.

34.10 Measures against Insect and Pest Nuisance

The Contractor shall at all times take the necessary precautions to protect all staff and labour employed on the Site from insect nuisance, rats, and other pests and reduce the dangers to health and the general nuisance caused by the same. The Contractor shall provide his staff and labour with suitable prophylactics for the prevention of malaria, and shall take steps to prevent the formation of stagnant pools of water. He shall comply with all the regulations of the local health authorities in these respects and shall in particular arrange to spray thoroughly with approved insecticide all buildings erected on the Site. Such treatment shall be carried out at least once a year or as instructed by the Engineer. The Contractor shall warn his staff and labour of the dangers of bilharzias and wild animals.

34.11 Epidemics

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

34.12 Burial of the Dead

The Contractor shall make any necessary arrangements for the transport, to any place as required for burial, of any of his expatriate employees or members of their families who may die in Kenya. The Contractor shall also be responsible, to the extent required by the local regulations, for making any arrangements with regard to burial of any of his local employees who may die while engaged upon the Works.

34.13 Supply of Foodstuffs

The Contractor shall arrange for the provision of a sufficient supply of suitable food at reasonable prices for all his staff, labour, and subcontractors for the purposes of or in connection with the Contract.

34.14 Supply of Water

The Contractor shall, so far as is reasonably practicable, having regard to local conditions, provide on the Site an adequate supply of drinking and other water for the use of the Engineer and his staff, the Contractor's staff and labour.

34.15 Alcoholic Liquor or Drugs

The Contractor shall not, otherwise than in accordance with the Statutes, Ordinances, and Government Regulations or Orders for the time being in force, import, sell, give, barter, or otherwise dispose of any alcoholic liquor or drugs, or permit or suffer any such importation, sale, gift, barter, or disposal by his subcontractors, agents, staff, or labour.

34.16 Arms and Ammunition

The Contractor shall not give, barter, or otherwise dispose of, to any person or persons, any arms or ammunition of any kind or permit or suffer the same as aforesaid.

34.17 Festivals and Religious Customs

The Contractor shall, in all dealings with his staff and labour, have due regard to all recognised festivals, days of rest, and religious and other customs.

34.18 Disorderly Conduct

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

34.19 Records of Labour

The Contractor shall keep proper wages books, in the language stipulated in the Appendix to the Form Bid, pursuant to Sub-Clause 5.1 (a) showing the time worked and wages paid to all employees in and about the execution of the Works, together with such other records as are required by any Statute, Ordinance, Law, Regulation or Bye-Law in force in Kenya governing the employment of labour. He shall be bound, whenever required, to produce such wages books and other records for the inspection of any persons authorized by the Engineer.

34.20 Trade Unions

The Contractor shall recognize the freedom of his employees to be members of trade unions.

34.21 Default in payment of Wages

In the event of default in payment of wages of any workmen employed on the Contract, and if a claim thereafter is filed in the office of the Engineer and satisfactory

proof thereof is furnished, the Employer shall be notified forthwith and may, failing payment of such claim by the Contractor, arrange the payment out of monies at any time payable under the Contract and the amount so paid shall be deemed payment to the Contractor under the Contract.

34.22 Breach and Removal from List

Should the Contractor or any subcontractor be found to be in breach of any of the provisions of Clause 34, the Employer may recommend to the Government for his removal from the list of approved Contractors.

34.23 Observance by Subcontractors

The Contractor shall be responsible for the observance by his subcontractor of the foregoing provisions.

Add the following Subclauses 35.2 and 35.3:

35.2 Maintenance of Records

The Contractor shall maintain such records and make such reports concerning safety, health and welfare of persons and damage to property as the Engineer may prescribe from time to time.

35.3 Reporting of Accidents

The Contractor shall report to the Engineer details of any accident as soon as possible after its occurrence. In the case of any fatality or serious accident, the Contractor shall, in addition, notify the Engineer immediately by the quickest available means. The Contractor shall also notify the relevant authority (ies) whenever such report is required by the law of Kenya.

MATERIALS, PLANT AND WORKMANSHIP

Rename Subclause 36.1 as below.

36.1 Quality of Materials, Equipment, Supplies, Plant, and Workmanship

Add the following paragraph at the end of this subclause.

The Contractor is encouraged, to the extent practicable and reasonable, to use materials, Contractor's Equipment, Plant, and supplies from sources within Kenya.

COMMENCEMENT AND DELAYS

41.1 Commencement of Works

Replace the words “as soon as reasonably possible” with the words “on Site within 28 days”.

Add the following subclause:

41.2 Definition of Commencement

For the purposes of this subclause, the Works shall be deemed to have commenced when all of the following conditions are satisfied:

- (a) The approved competent and authorized agent or representative of the Contractor is resident in the project area and is giving his whole time to the superintendence of the Works.
- (b) The provision by the Contractor of evidence that all insurances required by the Contract are in force.
- (c) The Contractor has an established an office in the project area with postal address for receipt of correspondence.
- (d) The principal items of constructional plant have been brought to Site and put to work in the execution of the permanent Works.

42.1 Possession of Site and Access Thereto

At the end of Subclause 42.1, add the following:

The Contractor shall bear all costs and charges for such lands as the Contractor may reasonably require for camps, offices, workshops, diversion roads, borrow pits, and quarries and any additional facilities outside the site required by him for the purpose of works.

Add the following subclause:

42.4 Possession of Site and Access thereto

The Contractor shall not enter any part of the Site until he has requested and received permission to do so from the Employer or the Engineer.

The Contractor shall not use any portion of the Site for any purpose not connected with the Works.

45.1 Restriction on Working Hours

Delete Subclause 45.1 and substitute with the following:

If the Contractor requests for permission to work by day and night and if the Engineer shall grant such permission, the Contractor shall not be entitled to any additional payment for so doing.

All such work at night shall be carried out without unreasonable noise or other disturbance and the Contractor shall indemnify the Employer from and against any liability for damages on account of noise or other disturbance created while carrying out night work and from against all claims, demands, proceeding, costs, charges and expenses whatsoever in regard or in relation to such liability. In addition, the Contractor shall be required to provide, for any work carried out by night or recognised days of rest, adequate lighting and other facilities, so that the work is carried out safely and properly.

45.2 Overtime Hours

Working hours shall be observed by the Contractor as stipulated in the Labour Laws of Kenya. However when deemed necessary to expedite the Works, overtime, night time or holiday working may be allowed by the Engineer in accordance with the provisions of Subclause 46.1. The Contractor, in these cases, shall pay all costs of the Engineer and his staff for such overtime, night time or holiday working at site as stipulated under Subclause 46.1 of the General Conditions of Contract.

47.2 Reduction of Liquidated Damages

The following supplements this subclause.

There shall be no reduction in the amount of liquidated damages in the event that a part or a section of the Works within the Contract is certified as completed before the whole of the Works comprising that Contract.

No bonus for early completion of the Works shall be paid to the Contractor by the Employer.

The sum stated in the Appendix to Form of Bid as liquidated damages shall be increased by a sum equivalent to any amount payable by the Employer to the Contractor under clause 70.1 in respect of an increase in costs in such period that would not have been incurred by the Contractor if the Works had been completed by the due date for completion prescribed by Clause 43.

Add the following Subclause 47.3:

47.3 Currency of Liquidated Damages

Liquidated damages shall be paid by the Contractor to the Employer in the types and proportions of currencies as shall be payable to the Contractor under the Contract.

DEFECTS LIABILITY

49.2 Completion of Outstanding Work and Remedying Defects

Add at the end of this subclause the following sentence:

Any work ordered to be executed under this subclause shall be carried out at a time and in a manner as directed by the Engineer so as to interfere as little as possible with the operations of the Employer or of other contractors and no extension(s) of the defects liability period will be allowed for the execution of this work.

Add Subclause 49.5 as follows:

49.5 Defects Liability Period Replacements

The provisions of this clause shall apply to all replacements or renewals of Plant and equipment to be provided with respect to the utilities under the Contract, carried out by the Contractor to remedy defects and damages as if the replacements and renewals had been taken over on the date they were completed. The Defects Liability Period for the Works shall be extended by a period equal to the period during which the Works cannot be used by reason of the defect or damage. If only part of the Works is affected the Defects Liability Period shall be extended only for that part.

ALTERATIONS, ADDITIONS AND OMISSIONS

52.1 Valuation of Variation

Add the following final sentences to this subclause:

The agreement, fixing or determination of any rates or prices as aforesaid shall include any foreign currency and the proportion thereof.

Where the Contract provides for the payment of the Contract Price in more than one currency, and varied work is valued at, or on the basis of, the rates and prices set out in the Contract, payment for such varied work shall be made in the proportions of various currencies specified in the Appendix to Form of Bid for payment of the Contract Price. Where the Contract provides for payment of the Contract Price in more than one currency, and new rates or prices are agreed, fixed, or determined as stated above, the amount or proportion payable in each of the applicable currencies shall be specified when the rates or prices are agreed, fixed, or determined, it being understood that in specifying these amounts or proportions the Contractor and the

Engineer (or, failing agreement, the Engineer) shall take into account the actual or expected currencies of cost (and the proportions thereof) of the inputs of the varied work without regard to the proportions of various currencies specified in the Appendix to Form of Bid for payment of the Contract Price.

52.2 Power of Engineer to Fix rates

Add a final sentence to the first paragraph as follows:

Where the Contract provides for the payment of the Contract Price in more than one currency, the amount or proportion payable in each of the applicable currencies shall be specified when the rates or prices are agreed, fixed, or determined as stated above, it being understood that in specifying these amounts or proportions the Contractor and the Engineer (or, failing agreement, the Engineer) shall take into account the actual or expected currencies of cost (and the proportions thereof) of the inputs of the varied work without regard to the proportions of various currencies specified in the Appendix to Form of Bid for payment of the Contract Price.

52.3 Daywork

Add the following at the end of this subclause:

The Work so ordered shall immediately become part of the Works under the Contract. The Contractor shall, as soon as practicable after receiving the Daywork Order from the Engineer undertake the necessary steps for due execution of such Work. Prior to commencement of any work to be done on a Daywork basis, the Contractor shall give a notice to the Engineer stating the exact time of such commencement.

PROCEDURE FOR CLAIMS

53.1 Notice of Claims

Add the following at the end of this subclause:

The Contractor shall also state the references of the Contract Clauses and Subclauses on which he has based his claims.

CONTRACTOR'S EQUIPMENT, TEMPORARY WORKS AND MATERIALS

For the purpose of these subclauses, the term "Equipment" shall be read as "Contractor's Equipment" where the context so requires.

54.1 Contractor's Equipment, Temporary Works and Materials

Amend Subclause 54.1 as follows:

Line 5; add "written" between "the" and "consent".

Add a final sentence to this subclause as follows:

The Contractor shall every month give to the Engineer a statement showing the amount of plant and Contractor's equipment, which has been brought to the Site.

54.2 Employer not Liable for Damage

Delete this subclause entirely.

54.5 Conditions of Hire of Contractor's Equipment

Delete this subclause entirely.

Add Subclauses 54.9 and 54.10 as follows:

54.9 Contractor's Responsibilities for Licenses

The Contractor shall obtain his own information with regard to the granting of import and export licenses for materials, equipment and plant. The Contractor shall bear all expenses for Plant, Materials, Equipment and Maintenance required for the completion and maintenance of the works and shall be deemed to have satisfied himself with regard to all his liabilities under the laws and regulations governing the granting of these licenses. The Contractor shall ensure that requests for import and export licenses are submitted in sufficient time to clear all formalities before the said licenses are required.

54.10 Equipment and Plant

The Contractor shall identify each piece of his equipment, other than hand tools, by means of an identification number plainly stencilled or stamped on the equipment at a conspicuous location, and shall furnish to the Engineer a list giving the description of each piece of equipment and its identification number. In addition, the make, model number and empty gross weight of each unit of compaction equipment shall be plainly stamped or stencilled in a conspicuous place on the unit. The gross weight shall be either the manufacturer's rated weight or the scale weight. The make, model, serial number and manufacturer's rated capacity of each scale shall be clearly stamped on the load-receiving element and its indicator or indicators. All meters shall be similarly identified, rated and marked.

MEASUREMENT

55.1 Quantities

Add the following to this subclause:

The quality and quantity of the Work included in the Contract Price shall be deemed to be that which is set out in the Contract Bill of Quantities. The Bill of Quantities, unless otherwise expressly stated therein, shall be deemed to have been prepared in accordance with the principles of the latest edition of the Civil Engineering Standard Method of Measurement.

Any error in description or in quantity or any omission of items from the Contract Bill of Quantities or Specifications shall not vitiate this Contract but shall be corrected and deemed to be a variation required by the Engineer. Subject to the foregoing, any error whether arithmetical or not in the computation of the Contract Price shall be deemed to have been accepted by the parties hereto.

The Contract Price shall not be adjusted or altered in any way whatsoever otherwise than in accordance with the express provisions of these conditions.

Add the following new sub clause:

55.2 Bill of Quantities with no Rates

Any item of Work described in the Bill of Quantities for which no rate or price has been entered in the Contract shall be considered as included in other rates and prices in the Contract and will not be paid for separately by the Employer.

56.1 Works to be measured

Delete Subclause 56.1 and replace with the following:

The Contractor shall prepare and submit to the Engineer all necessary field notes and other records taken and computations made for the purpose of quantity measurements, of which the forms shall be approved by the Engineer, for the monthly progress payment under Clause 60. The measurement of work quantities made by the Contractor shall be verified and certified by the Engineer based on the above mentioned documents.

The Contractor shall furnish all personnel, equipment and materials to make such surveys and computations as necessary to determine the quantities of work performed. Unless otherwise prescribed in the specifications or the drawings, all measurements for payment shall be made by the dimensions, lines and grades as

shown on the drawings or by direct survey of which the methods shall be approved by the Engineer.

The documents submitted for measurement and payment shall become the property of the Employer and shall be used to the extent necessary to determine the monthly progress payment to be made to the Contractor under the Contract. Direct survey, if conducted, shall be subject to checking and verification by the Engineer and all errors in the said survey work and related computations as found during such checking shall be immediately corrected by the Contractor.

In case of any disagreement on an item of measurement, the Engineer's opinion will prevail during the assessment of the statement for monthly interim payments. Should the Contractor consider himself entitled to any form of claim with respect to the disagreement in measurement, the procedure for such is detailed under Clause 53 of the Conditions of Contract.

57.1 Method of Measurement

Delete this subclause and substitute with the following:

The Works shall be measured net with deductions made in accordance with the principles of the latest edition of the Civil Engineering Standard Method of Measurement. All measurements shall be given in metric (SI) units.

PROVISIONAL SUMS

Add the following Subclause 58.4:

58.4 Prime Cost Sum

Wherever an item in the Bill of Quantities has been referred to as a "P.C. Sum" (Prime Cost Sum), that item shall be construed as a Provisional sum and the provisions of Subclauses 58.1 to 58.3 will apply.

NOMINATED SUBCONTRACTORS

59.5 Certification of Payment to Nominated Subcontractors

Add the following paragraph at the end of Subclause 59.5:

If the Engineer desires to secure final payment to any nominated subcontractor before final payment is due to the Contractor and if such subcontractor has satisfactorily indemnified the Contractor against any latent defects, the Engineer may, in an interim certificate, include an amount to cover the said final payment, and thereupon the Contractor shall pay to such nominated subcontractor the amount so certified. Upon such final payment, the amount named in the Appendix to Form of Bid as Limit of Retention Money shall be reduced by the sum which bears the same

ratio to the amount as does the subcontract and subcontractor shall be discharged from all liability for the Work, materials or goods executed or supplied by such subcontractor under the Contract to which the payment relates.

CERTIFICATES AND PAYMENTS

Delete Subclauses 60.1 to 60.10 entirely and substitute with the following:

60.1 Advance Payment

In the event that an Advance Payment is granted, the following shall apply:

- (a) On signature of the Contract, the Contractor shall at his request, and without furnishing proof of expenditure, be entitled to an advance of up to maximum of 10% (ten percent) of the original amount of the Contract Sum. The advance shall not be subject to retention money.
- (b) No advance payment may be made before the Contractor has submitted proof of the establishment of deposit or of a directly liable guarantee satisfactory to the Employer in the amount of the advance payment. The guarantee shall be in the same currency as the advance.
- (c) Amortization of the advance shall be effected by deductions from monthly interim payments.
- (d) Amortization of the lump sum advance shall be made by deductions from the Interim payments and where applicable from the balance owing to the Contractor.

The amortization shall begin when the amount of the sums due under the Contract reaches 20% of the original amount of the Contract. It shall have been completed by the time 80% of this amount is reached.

The amount to be amortized by way of successive deductions shall be calculated by means of the formula:

$$R = \frac{A(X1 - X11)}{80 - 20}$$

Where:

R = Amount to be amortized

A = Amount of the advance which has been granted

X1 = Amount of proposed cumulative payments as a percentage of the original amount of the Contract. This figure will exceed 20% but not exceed 80%.

X11 = Amount of the previous cumulative payments as a percentage of the original amount of the Contract. This figure will be below 80% but not less than 20%.

With each amortization, the counterpart of the directly liable guarantee may be reduced accordingly.

60.2 Interim Payment Certificate

The Contractor shall submit to the Engineer, in the manner required by the Engineer after the end of each month a statement showing the estimated total value of permanent Work properly executed and materials or goods for permanent works brought to Site up to the end of the previous month (if the value shall justify the issue of an interim certificate) together with any adjustments under Clause 70 and any outstanding claims and sums the Contractor considers may be due to him. The Contractor shall amend or correct his estimate as directed by the Engineer and the latter shall not accept it until he is satisfied that it is fair and reasonable. With respect to the said materials and goods, no payment for them shall be made unless:

- (i) The materials are in accordance with the specifications for the Works.
- (i) The materials have been delivered to Site and are properly stored and protected against loss, damage or deterioration.
- (ii) The Contractor's record of the requirements, orders, receipts and use of materials are kept in a form approved by the Engineer, and such records are available for inspection by the Engineer.
- (iii) The Contractor has submitted a statement of his cost of acquiring and delivering the materials and goods to the Site, together with such documents as may be required for the purpose of evidencing such cost.
- (ii) The materials are to be used within a reasonable time.

The Contractor will be paid on the certificate of the Engineer the amount due to him on account of the estimated total value of the permanent Work executed up to the end of the previous month together with such amount (not exceeding 75% of the value) as the Engineer may consider proper on account of materials and goods for permanent Work delivered by the Contractor on Site and in addition, such amount as the Engineer may consider fair and reasonable for any Temporary Works for which separate amounts are provided in the Bill of Quantities, all of which shall be subject to a retention of the percentage named in the Appendix to Form of Bid until the amount retained (hereinafter and in all Contract documents called the "Retention

Money”) shall reach the “Limit of Retention Money” named in the said Appendix to the Form of Bid. Provided always that no interim certificate shall be issued for a sum [such sum always being the net amount thereof after all deductions for retention etc) less than that named in the Appendix to Form of Bid as “Minimum Amount of Interim Certificate” at one time.

Within 14 days after receiving a statement from the Contractor as aforesaid, and subject to the Contractor having made such further amendments and corrections as the Engineer may require, the Engineer shall issue a Certificate of Payment to the Employer showing the amount due, with a copy to the Contractor.

The Engineer shall not unreasonably withhold certifying an Interim Payment Certificate and where there is a dispute regarding an item for payment, the Engineer may delete this disputed item from the Interim Payment Certificate and certify the remainder for payment provided the said payment is in accordance with the preceding paragraph. In cases of difference in opinion as to the value of any item, the Engineer’s view shall prevail.

60.3 Final Account and Final Payment Certificate

As soon as possible after the issue of Taking - Over Certificate or the termination of the Contract and not later than the time of issue of Defects Liability Certificate, the Contractor shall prepare and submit to the Engineer (with a copy to the Employer), a Statement of Final Account showing in detail the total value of work done in accordance with the Contract together with all sums paid in previous payments. Within thirty (30) days after receipt of such further information as may be reasonably required from the Contractor for its verification, the Engineer shall check the said statement, prepare and submit a Final Payment Certificate to the Employer (with a copy to the Contractor).

The Final Payment Certificate shall state:

- (a) The (final) total value of all Work executed in accordance with the Contract
- (b) After giving credit to the Employer for all amounts previously paid to the Contractor, the balance, if any, due from the Employer to the Contractor or the Contractor to the Employer, as the case may be.

Unless the Contractor notifies the Engineer of his objection to the Final Payment Certificate within twenty eight [28] days of delivery thereof, he shall be deemed to have agreed that he accepts the total Contract Price as set out in the Final Payment

Certificate as full settlement for all work executed under the Contract including any claims, variations and omissions thereof.

However, a Final Certificate of Payment shall not be conclusive:

- (i) To the extent that fraud or dishonesty relates to or affects any matter dealt with in the Certificate, or
- (ii) If any arbitration or court proceedings under the Contract have been commenced by either party before the expiry of 90 days after the issue of the Final Certificate of Payment.

60.4 Payment of Certificates

Payment upon each of the Engineer's Certificates for Interim Payments shall be made by the Employer within the time stated in the Appendix to Form of Bid from the date of the Engineer's signature and issue of each Certificate of Payment to the Employer.

Payment upon the Engineer's Final Payment Certificate shall be made by the Employer within the time stated in the Appendix to Form of Bid from the date of issue of the Final Certificate of Payment signed by the Engineer and countersigned by the Contractor or his authorised agent or representative.

Payments to the Contractor by the Employer shall be made in the currencies in which the Contract Price is payable into a bank account or accounts nominated by the Contractor.

Making of a payment by the Employer shall be considered to have been duly executed on the day that the Employer has issued a cheque.

60.5 Retention Money

One half of the retention money shall become due upon the issue of a Taking – Over Certificate and shall be paid to the Contractor when the Engineer shall certify in writing that the last section of the whole of the Works has been substantially completed and the other half shall be paid to the Contractor after the expiration of the Defects Liability Period and the issue of a Certificate under Clause 62. Provided always that if such time there shall remain to be executed by the Contractor any Works ordered during such period pursuant to Clauses 49 and 50 thereof, the Employer shall be entitled to withhold payment [until the completion of such Works] of so much of the second half of the Retention Money as shall in the opinion of the Engineer represent the Costs of the Works so remaining to be executed. Provided further that in the event of different Defects Liability Periods having become

applicable to different parts of the Works pursuant to clause 48 hereof the expression “expiration of the Defect Liability Period” shall for the purpose of this subclause be deemed to mean the expiration of the latest of such periods.

60.6 Currency of Payment

The Contract price shall be stated in Kenya Shillings. All payments to the Contractor shall be made in Kenya shillings.

60.7 Overdue Payments

Unless otherwise stated in the Appendix to the Form of Bid interest shall be paid on the overdue amounts and the interest to be paid shall be based on the rates of the Central Bank of Kenya 28 days prior to the opening of the bids.

60.8 Correcting and Withholding

The Engineer may by any interim certificate or through the final account make any correction or modification to any previous certified sum and shall have authority, if any work or part thereof is not being carried out to his satisfaction, to omit or reduce the value of such work in any Interim Payment Certificate.

60.9 Completion by Sections

If a Taking-Over Certificate shall be issued for any section or part of the Works separately, the payments herein provided for on or after issue of such a Certificate shall be made in respect of such section or part and references to the Contract Price shall mean such part of the Contract Price as shall in the absence of agreement be apportioned thereto by the Engineer.

60.10 Statement at Completion

Not later than 14 days after the issue of the Taking-Over Certificate in respect of the whole of the works, the Contractor shall submit to the Engineer a statement at completion showing in detail and in a form approved by the Engineer:

- (a) The final value of all work executed in accordance with the Contract up to the date stated in such Taking-Over Certificate.
- (b) Any further sums which the Contractor considers to be due; and
- (c) An estimate of amounts, which the Contractor considers, will become due to him under the Contract.

Estimated amounts at Completion shall be shown separately in the Statement. The Contractor shall amend and correct the Statement as directed by the Engineer who shall issue a Certificate at Completion to be processed in accordance with Subclause 60.4.

60.11 Final Statement

Not later than 56 days after the issue of the Defects Liability Certificate, the Contractor shall submit to the Engineer for consideration a draft final statement with supporting documents showing in detail and in the form approved by the Engineer:

- (a) The final value of all work executed in accordance with the Contract, and
- (b) Any further sums which the Contractor considers to be due to him.

If the Engineer disagrees with or cannot verify any part of the draft final statement, the Contractor shall submit such further information as the Engineer may reasonably require and shall make such changes in the draft as may be required.

60.12 Discharge

Upon submission of the Final Statement, the Contractor shall give to the Employer, with a copy to the Engineer, a written discharge confirming that the total of the Final Statement represents full and final settlement of all monies due to the Contractor arising out of or in respect of the Contract. Provided that such discharge shall become effective only after payment under the Final Payment Certificate issued pursuant to Subclause 60.14 has been made and the Performance Security referred to in Subclause 10.1 has been returned to the Contractor.

60.13 Final Payment Certificate

Upon acceptance of the Final Statement as given in Subclause 60.12, the Engineer shall prepare a Final Payment Certificate which shall be delivered to the Contractor's authorized agent or representative for his signature. The Final Payment Certificate shall state:

- (a) The final value of all work executed in accordance with the Contract
- (b) After giving credit to the Employer for all amounts previously paid by the Employer, the balance, if any, due from the Employer to the Contractor or the Contractor to the Employer as the case may be

Final Certificate shall be issued for any sum due to the Contractor even if such is less than the sum named in the Appendix to the Form of Bid.

60.14 Cessation of Employer's Liability

Unless the Contractor notifies the Engineer of his objection to the Final Certificate within 14 (fourteen) days of delivery thereof he shall be deemed to have agreed that he accepts the total Contract Price as set out in the Final Certificate as full

settlement for all work executed under the Contract including any variations and omissions thereof.

62.1 Defects Liability Certificate

Delete the last sentence of this subclause beginning “Provided that the issue..... in Sub-Clause 60.3”.

REMEDIES

63.1 Default of Contractor

Delete the last paragraph of this subclause and substitute with the following:

then the Employer may, after giving 14 days’ notice to the Contractor, enter upon the Site and expel the Contractor therefrom without thereby avoiding 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 or the Engineer by the Contract, and may himself complete the Works or may employ any other contractor to complete the Works. The Employer or such other contractor may use for such completion so much of the Contractor’s Equipment, Plant, Temporary Works and materials, which have been deemed to be reserved exclusively for the execution of the Works, under the provisions of the Contract, as he or they may think proper, and the Employer may, at any time, sell any of the said Contractor’s Equipment, Temporary Works and unused Plant and materials and apply the proceeds of sale in or towards the satisfaction of any sums due or that may become due to him from the Contractor under the Contract.”

63.2 Valuation of Date of Expulsion

Modify the heading of Subclause 63.2 by substituting “Valuation at Date of Termination” for “Valuation at Date of Expulsion.” In Subclause 63.2, delete the word “termination” on the second and fifth lines and substitute “expulsion”.

63. Valuation of Date of Expulsion

Modify the heading of Subclause 63.3 by substituting “Payment after Expulsion” for “Payment after Termination.” In Subclause 63.3, delete the words “terminates the Contractor’s employment” on the first line and substitute “shall enter and expel the Contractor”.

63.4 Assignment of Benefit of Agreement

In Subclause 63.4, delete the word “termination” on the second line, and substitute “expulsion”.

Add the following at the end of this subclause:

But on the terms that a supplier or subcontractor shall be entitled to make any reasonable objection to any further assignment thereof by the Employer and the Employer may pay the supplier or subcontractor for any such materials supplied or Works executed under such agreement, whether the same be assigned as aforesaid or not, before or after the said determination, the amount due by such arrangement in so far as it has not already been paid by the Contractor.

Add the following subclause 63.5:

63.5 Corrupt or Fraudulent Practices

If in the judgment of the Employer the Contractor has engaged in corrupt or fraudulent practices, in competing for or in executing the Contract, then the Employer may, after having given 14 days notice to the Contractor, terminate the Contractor's employment under the Contract and expel him from the Site, and the provisions of Clause 63 shall apply as if such expulsion had been made under Subclause 63.1.

For the purpose of this Subclause:

“corrupt practice” means the offering, giving, receiving or soliciting of anything of value to influence the action of a public official in the procurement process or in contract execution.

“fraudulent practice” means a misrepresentation of facts in order to influence a procurement process or the execution of a contract to the detriment of the Borrower, and includes collusive practice among bidders (prior to or after bid submission) designed to establish bid prices at artificial non-competitive levels and to deprive the Employer of the benefits of free and open competition.

SPECIAL RISKS

Subclause 65.2 is amended to read as follows:

65.2 Special Risks

The Special Risks are the risks defined under paragraph (a), subparagraphs. (i) to (v) of Subclause 20.4 of the Conditions of Contract”.

65.4 Projectile, Missile

Delete “whenever and wherever occurring” under line 2 and add “on or near the site” after “explosive of war” under line 3.

Add Subclause 65.9 as follows:

65.9 Special Risks

- (a) In the event of the Employer unilaterally ordering the final cessation of performance of the Contract for reasons not specified elsewhere in the Conditions of Contract the Contract shall be considered to be frustrated and the Contractor shall be indemnified as provided for under Clause 65.1.
- (b) In the event of the Employer ordering the adjournment of the Contract before or after commencement of the Works for reasons not specified elsewhere in the Conditions of Contract, the Contractor shall be entitled to indemnity for any injury which he may have suffered as a consequence of such adjournment.

The Engineer shall award the Contractor payment of such sum as in his opinion shall be reasonable giving regard to all material and relevant factors including the Contractor's on costs and overheads, and the nature of the instruction to adjourn the Contract.

SETTLEMENT OF DISPUTES

67.1 Dispute Review Expert

If any dispute arises between the Employer and the contractor in connection with, or arising out of, the Contract or the execution of the Works, whether during the execution of the works or after their completion and whether before or after the repudiation or other termination of the Contract, including any disagreement by either party with any action, inaction, opinion, instruction, determination, certificate, or valuation of the Engineer, the matter in dispute shall, in the first place, be referred to the Disputes Review Expert ('DRE'). including any disagreement by either party with any action, inaction, opinion, instruction, determination, certificate, or valuation of the Engineer, the matter in dispute shall, in the first place, be referred to the Disputes Review Board ('the Board').

The DRE shall take up his functions after having signed a DRE's Declaration of Acceptance as required by the DRE's Rules and Procedures (which along with the Declaration of Acceptance, are attached to these Conditions of Particular application as Annex A).

The DRE shall be a person experienced with the type of construction involved in the works and with the interpretation of contractual documents and shall be selected by agreement between the Employer and the Contractor. If the DRE is not selected within 28 days of the date of the Letter of Acceptance, then upon the request of either or both parties the DRE shall be selected as soon as practicable by the Appointing Authority specified in the Appendix to Form of Bid.

In the event of death, disability, or resignation of the DRE, the latter shall be replaced by agreement between the Employer and the Contractor. Any replacement made by the parties shall be completed within 28 days after the event giving rise to

the need for a replacement, failing which the replacement shall be made by the same international appointing authority as above.

Either the Employer or the Contractor may refer a dispute to the DRE in accordance with the provisions of the DRE's Rules and Procedures, attached to these Conditions of Particular Application.

The Recommendation of the DRE shall be binding on both parties, who shall promptly give effect to it unless and until the same shall be revised, as hereinafter provided, in an arbitral award. Unless the Contract has already been repudiated or terminated, the Contractor shall continue to proceed with the Works in accordance with the Contract.

If either the Employer or the Contractor is dissatisfied with any Recommendation of the DRE, or if the DRE fails to issue his Recommendation within 56 days after he has received the written Request for Recommendation, then either the Employer or the Contractor may, within 14 days after his receipt of the Request for Recommendation, or within 14 days after the expiry of the said 56-days period, as the case may be, give notice to the other party, with a copy for information to the Engineer, of his intention to commence arbitration, as hereinafter provided, as to the matter in dispute. Such notice shall establish the entitlement of the party giving the same to commence arbitration, as hereinafter provided, as to such dispute and, subject to Subclause 67.4, no arbitration in respect thereof may be commenced unless such notice is given.

If the DRE has issued a Recommendation to the Employer and the Contractor within the said 56 days and no notice of intention to commence arbitration as to such dispute has been given by either the Employer or the Contractor within 14 days after the parties received such Recommendation from the DRE, the Recommendation shall become final and binding upon the Employer and the Contractor.

Whether or not it has become final and binding upon the Employer and the Contractor, a Recommendation shall be admissible as evidence in any subsequent dispute resolution procedure, including any arbitration or litigation having any relation to the dispute to which the Recommendation relates.

All Recommendations that have become final and binding shall be implemented by the parties forthwith. Such implementation shall include any relevant action of the Engineer.

67.2 Amicable Settlement

Subclause 67.2 is deleted without a change in the numbering of the other subclauses of Clause 67.

Subclause 67.3 is deleted and substituted with the following subclause:

67.3 Arbitration

Any dispute, in respect of which the recommendation, if any, of the DRE has not become final and binding, shall be finally settled by arbitration under the UNCITRAL

Arbitration Rules. For the purposes of this subclause, the Arbitrator shall be a person to be agreed between the parties or failing agreement, the Arbitrator shall be appointed by the appointing Authority designated in the Appendix to the Form of Bid.

Arbitration shall take place in NAIROBI, Kenya. The language of all arbitration proceedings shall be in English. The cost of arbitration shall be apportioned by the Arbitrator according to his findings.

“The Arbitrator shall be appointed by the Chairman, Chartered Institute of Arbitrators (Kenya Chapter) unless the appointment is agreed by the parties within 7 (seven) days of the notice to adjudication.

Neither party shall be limited in the proceedings before such tribunal to the evidence nor did arguments put before the DRE for the purpose of obtaining his recommendation pursuant to subclause 67.1. No Recommendation shall disqualify the DRE from being called as a witness and giving evidence before the arbitrator(s) on any matter whatsoever relevant to the dispute.

Arbitration may be commenced prior to or after completion of the Works, provided that the obligations of the Employer, the Engineer, the Contractor, and the DRE shall not be altered by reason of the arbitration being conducted during the progress of the Works.

Delete Subclause 67.4 and substitute with the following:

67.4 Failure to Comply with Recommendations

Where neither the Employer nor the Contractor has given notice of intention to commence arbitration of a dispute within the period stated under Subclause 67.1 and the related Recommendation has become final and binding, either party may, if the other party fails to comply with such Recommendation and without prejudice to any other right it may have, refer the failure to arbitration in accordance with Subclause 67.3.

NOTICES

68.1 Notices to Contractor

Add the following at the end of this subclause:

Notwithstanding the foregoing, the Contractor shall either maintain an address close to the Works or appoint an agent residing close to the Works for the purpose of receiving notices to be given to the Contractor under the terms of the Contract. This obligation shall be terminated upon the issue of the Certificate of Completion.

68.2 Notices to Employer and Engineer

Delete the words “nominated for that purpose in Part II of these Conditions” in this subclause and substitute with “given in the Appendix to Form of Bid”.

DEFAULT OF EMPLOYER

Under Subclause 69.1, 69.4 and 69.5, substitute “Subclause 60.4 for “Subclause 60.10”.

69.1 Default of Employer

In Subclause 69.1 (a), delete the words “28 days” in the second sentence and substitute with the words “60 days”.

Delete Subclause 69.1 (d).

69.3 Payment on Termination

Delete from “, but in addition to the payments specified...” to the end of the Subclause.

69.4 Contractor’s Entitlement to Suspend Work

Delete the words ‘28 days’ and substitute with ‘60 days’.

Delete sub-clause 69.4 (b) and substitute with the following:

the amount of such cost, which shall be added to the Contract Price. However, the costs due to idle time for plant, equipment and labour shall not be included in the said costs and shall be borne by the Contractor.

Add to Subclause 69.4 as follows:

Without prejudice to the Contractor’s entitlement to interest under Subclause 60.7 (of these Conditions of Particular application) and to terminate under Subclause 69.1, the Contractor may suspend work or reduce the rate of work within 56 days after notification by the Foreign Funding Agency to the Kenya Government that the Financier has suspended disbursements from its loan, which finances in whole or in part the execution of the Works.

Add Subclause 69.6 as follows:

69.6 Suspension of Funding Agency Loan

In the event that the Foreign Funding Agency suspends the loan or credit to the Employer from which part of the payments to the Contractor are being made:

-
- (a) The Employer shall notify the Contractor, with a copy to the Engineer, of such suspension within 7 days of having received the suspension notice from the Funding Agency, provided that:
 - (i) The Employer shall state in such notification whether sufficient funds in the appropriate currencies are expected to be available to the Employer to continue making payments to the Contractor beyond a date 60 days after the date of the Funding Agency's notification of the suspension, and
 - (ii) If such funds are not expected to be available, the Employer shall immediately inform the Engineer to instruct the Contractor to suspend progress of the Works pursuant to Subclause 40.1 of the General Conditions of Contract.

 - (b) If the Contractor has not received sums due to him upon the expiration of the 14 days from the time when the Foreign Funding Agency's loan or credit, from which part of the payments to the contractor is being made under Interim Certificates, is suspended, the Contractor may, without prejudice to the Contractor's entitlement to interest under Subclause 60.7, immediately take one or both of the following actions:
 - (i) Suspend work or reduce the rate of work, and/or
 - (ii) Terminate his employment under the Contract by giving notice to the Engineer. Such termination shall take effect 14 days after giving of the notice.

70 CHANGES IN COST AND LEGISLATION

Delete Clause 70 in its entirety, and substitute by 70.1 – 70.8 (inclusive):

70.1 Price Adjustment “The amounts payable to the Contractor, in various currencies pursuant to Sub-Clause 60.1, shall be adjusted in respect of the rise or fall in the cost of labour, Contractor's Equipment, Plant, materials, and other inputs to the Works, by comparing the Basic Rates at tendering stage and the current prevailing market prices.

70.2 Other Changes in Cost To the extent that full compensation for any rise or fall in costs to the Contractor is not covered by the provisions of this or other Clauses in

the Contract, the unit rates and prices included in the Contract shall be deemed to include amounts to cover the contingency of such other rise or fall of costs.

70.8 Subsequent Legislation

If, after the date 28 days prior to the latest date for submission of bids for the Contract, there occur in the country in which the Works are being or are to be executed changes to any National or State Statute, Ordinance, Decree, or other Law or any regulation or by-law of any local or other duly constituted authority, or the introduction of any such State Statute, Ordinance, Decree, Law, regulation or by-law which causes additional or reduced cost to the Contractor, other than under the preceding sub-clauses of this clause, in the execution of the Contract, such additional or reduced cost shall, after due consultation with the Employer and the Contractor, be determined by the Engineer and shall be added to or deducted from the Contract Price and the Engineer shall notify the Contractor accordingly, with a copy to the Employer. Notwithstanding the foregoing, such additional or reduced cost shall not be separately paid or credited if the same shall already have been taken into account in any inputs to the Price Adjustment in accordance with the provisions of Sub-Clauses 70.1.

CURRENCY AND RATES OF EXCHANGE**72.2 Currency Proportions**

Delete the words from “prevailing, as determined by the Central Bank...” to the end of the subclause and substitute with “stated by the Contractor in the standard forms, included with his Original Bid.”

Add Subclause 72.4 as follows:

ADDITIONAL CLAUSES**73.1 Foreign Taxation**

The prices bid by the Contractor shall include all taxes, duties, and other charges imposed outside Kenya on the production, manufacture, sale, and transport of the Contractor’s Equipment, Plant, materials, and supplies to be used on or furnished under the Contract, and on the services performed under the Contract.

73.2 Local Taxation

The prices bid by the Contractor shall include all customs duties, import duties, business taxes, and income and other taxes that may be levied in accordance with

the laws and regulations, being on the date 28 days prior to the latest date for submission of bids, in Kenya, on the Contractor's Equipment, Plant, materials, and supplies (permanent, temporary and consumables) acquired for the purpose of the Contract and on the services performed under the Contract. Nothing in the Contract shall relieve the Contractor from his responsibility to pay any tax that may be levied in Kenya on profits made by him in respect of the Contract.

73.3 Income Tax on Staff

The Contractor's staff and labour will be liable to pay personal income taxes in Kenya in respect of such of their salaries and wages as are chargeable under the laws and regulations for the time being in force, and the Contractor shall perform such duties in regard to such deductions thereof as may be imposed on him by such laws and regulations.

73.4 Duties on Contractor's Equipment

Notwithstanding the provisions of Subclause 73.2, the Contractor's Equipment, including essential spare parts therefore, imported by the Contractor for the sole purpose of executing the Contract shall be temporarily exempt from the payment of import duties and taxes upon initial importation, provided the Contractor shall post with the customs authorities at the port of entry and approved export bond or bank guarantee, valid until the time of completion of the Contract plus six months, in an amount equal to the full import duties and taxes which would be payable on the assessed imported value of such Contractor's Equipment and spare parts, and callable in the event that the Contractor's Equipment is not exported from Kenya on completion of the Contract plus six months.

A copy of the bond or bank guarantee endorsed by the customs authorities shall be provided by the Contractor to the Employer upon the importation of individual items of Contractor's Equipment and spare parts. Upon export of individual items of Contractor's Equipment or spare parts, or upon completion of the Contract, the Contractor shall prepare, for approval by the customs authorities, an assessment of the residual value of the Contractor's equipment and spare parts to be exported, based on the depreciation scale(s) and other criteria used by the customs authorities for such purposes under the provisions of the applicable law. Import duties and taxes shall be due and payable to the customs authorities by the Contractor on:

- (a) The difference between the initial imported value and the residual value of the Contractor's Equipment and spare parts to be exported; and
- (b) The initial imported value of that Contractor's Equipment and spare parts remaining in Kenya after completion of the Contract.

Upon payment of such dues within 28 days of being invoiced, the bond or bank guarantee shall be reduced or released accordingly; otherwise the security shall be called in the full amount remaining.

For equipment imported by the Contractor for the sole use of the Engineer and which will revert to the ownership of the Employer, import duties and taxes shall be paid upon initial importation.

73.5 Declaration against Waiver

The condoning by the Employer of any breach or breaches by the Contractor or any authorized subcontractor of any of the stipulations and Conditions contained in the Contract shall in no way prejudice or affect or be construed as a waiver of the Employer's rights, powers and remedies under the Contract in respect of any breach or breaches as aforesaid.

73.6 Employer's Officials

No official of the Employer or the Engineer or the Engineer's Representative or anyone of their respective staffs or their employees shall be in any way personally bound or liable for the acts or obligations of the Employer under the Contract or answerable for default or omission in the observance or performance of any of the acts, matters or things which are herein contained.

74.1 Illegal Payments

If the Contractor, or any of his Sub-Contractors, agents or servants gives or offers to give to any person any payment, gift, gratuity or commission as an inducement or reward for doing or forbearing to do any action in relation to the Contract or any other contract with the Employer, or for showing or forbearing to show favour or disfavour to any person in relation to the Contract or to any other contract with the Employer, then the Employer may enter upon the Site and the Works and expel the Contractor and the provisions of Clause 63 hereof shall apply as if such entry and expulsion had been made pursuant to that Clause.

75.1 Termination of Contract for Employer's Convenience

The Employer shall be entitled to terminate this Contract at any time for the Employer's convenience after giving 56 days prior notice to the Contractor, with a copy to the Engineer. In the event of such termination, the Contractor:

- (a) Shall proceed as provided in Subclause 65.7, and
- (b) Shall be paid by the Employer as provided in Subclause 65.8.

76.1 Restriction on Eligibility

- (a) Any Plant, materials, or services which will be incorporated in or required for the Works, as well as the Contractor's Equipment and other supplies, shall have their origin in any of the countries and territories eligible under the Foreign Financier's Rules for Procurement.
- (b) For the purposes of this clause, 'origin' means the place where the materials and equipment were mined, grown, produced, or manufactured or from which the services are provided.
- (c) The origin of goods and services is distinct from the nationality of the supplier.

77.1 Joint and Several Liability

If the Contractor is a joint venture of two or more persons, all such persons shall be joint and severally bound to the Employer for the fulfilment of the terms of the Contract and shall designate one of such persons to act as a leader with authority to bind the joint venture. The composition or the constitution of the joint venture shall not be altered without the prior consent of the Employer.

78.1 Details to be Confidential

The Contractor shall treat the details of the Contract as private and confidential, save insofar as may be necessary for the purposes thereof, and shall not publish or disclose the same or any particulars thereof in any trade or technical paper or elsewhere without the previous consent in writing of the Employer or the Engineer. If any dispute arises as to the necessity of any publication or disclosure for the purpose of the Contract the same shall be referred to the Employer whose determination shall be final.

78.2 Drawings and Photographs of the Works

The Contractor shall not disclose details of drawings furnished to him and works on which he is engaged without the prior approval of the Engineer in writing. No photograph of the work or any part thereof or equipment employed thereon shall be taken or permitted by the Contractor to be taken by any of his employees or any employees of his Subcontractors without the prior approval of the Engineer in writing and no such photographs shall be published or otherwise circulated without the approval of the Engineer in writing.

79.1 Official Visitors

The Contractor shall at all times when authorized by the Engineer give free and undisputed access of all facilities to any authorized employee of the Kenya Government or other authorized person wishing to view or inspect any part of the Site or Works or the materials therein.

80.1 Substantial Completion of the Works

The Contractor shall note that the Engineer reserves the right to certify the Works to be “substantially completed” in accordance with the provisions of Clause 48 of the General Conditions of Contract, unless the following portions of the Works are completed according to the Specifications:

- (a) Works up to and including the bituminous wearing courses,
- (b) All drains and drainage structures including bridges,
- (c) Construction of the shoulders,
- (d) Finishing of medians and slopes of cuts and fills and
- (e) Reinstatement and environmental treatment of quarries and borrow pits.

81.1 Monthly Site Meetings

The Contractor or his authorised representative shall attend monthly meetings on the site with representatives of the Employer and the Engineer at dates and times to be determined by the Engineer. Such meetings will be held for evaluating the progress of the Contract and for discussion of matters pertaining to the Contract which any of the parties represented may wish to raise. Such meetings are not intended for discussing matters concerning the normal day-to-day running of the Contract.

The Contractor shall prepare and submit to the Resident Engineer one week before the meeting a monthly report in the format approved by the Engineer giving all the information and details regarding its accomplishment against the prevailing approved programme.

81.2 Minutes of Site Meetings

Agreements recorded in the Minutes of the Site Meetings are binding to all parties, if objections to the minutes have not been given in due time.

The Minutes of the Site Meetings shall be issued within 7 days and shall be numbered consecutively. Minutes shall be deemed to have been received by the Contractor unless the Contractor gives notice at the following meeting that the Minutes were not received.

Any objections to the Minutes of the Site Meetings shall at the latest be raised at the succeeding Site Meeting or presented to the Engineer in writing not later than 2 weeks after the meeting. If the Contractor at this time has not received the Minutes of the Site Meeting, the objection must be given in writing to the Engineer not later than 2 working days after the subsequent receipt of the said Minutes.

82.1 Legal Provisions

The Contractor shall keep himself fully conversant with the latest enactment's, provisions and regulations of all legislative and statutory bodies, and, in all respects and at all times, shall comply with such enactment's, provisions and regulations in regard to executing the Contract.

83.1 Noise and Disturbance

All works shall be carried out without unreasonable noise and disturbance. The Contractor shall indemnify and keep indemnified the Employer from and against any liability for damages on account of noise or other disturbances created while or in carrying out the work and from and against all claims, demands, proceedings, damages, costs, charges and expenses whatsoever in regard to or in relation to such liability.

83.2 Pollution

Subject, and without prejudice, to any other provision of the Contract and the law of the land and its obligations as applicable, the Contractor shall take all reasonable precautions in connection with:

- (a) The rivers, streams, waterways, drains, water-course, lakes, reservoirs and the like to prevent:
 - (i) Silting
 - (ii) Erosion of their beds and banks, and
 - (iii) Pollution of the water so as to affect adversely the quality or appearance thereof or cause injury or death to animal and plant life.

- (b) The underground water resources including percolating water to prevent:
 - (i) Any interference with the supply to or obstruction from such sources, and
 - (ii) Pollution of the water which may adversely affect the quality thereof.

The Contractor shall further comply with any and all laws, rules and regulations of governmental agencies having jurisdiction which now exist or which may be promulgated during the course of the works contracted for herein, relating to the control, regulation and prevention of pollution. Not by way of limitation of the foregoing, but in furthermore thereof, the Contractor shall use the highest prevailing and approved standards of care and diligence to prevent and to take care of all waste, oil, water and other waste materials that may accumulate and be caused by the Contractor's operations and performance of this Contract so as to prevent

pollution of any nature or kind resulting from the Works performed under this Contract.

ANNEX A

DISPUTE REVIEW REGULATIONS AND PROCEDURES

ANNEX A: - DISPUTE REVIEW REGULATIONS AND PROCEDURES

Disputes Settlement Procedures

(See Clause 67 of the Conditions of Particular Application)

1. Except for providing the services required hereunder, the DRE shall not give any advice to either party or to the Engineer concerning conduct of the Works. The DRE shall:
 - (a) Have no financial interest in any party to the Contract, or the Engineer, or a financial interest in the Contract, except for payment for his services.
 - (b) Have had no previous employment by, or financial ties to, any party to the Contract, or the Engineer, except for fee-based consulting services on other projects, all of which must be disclosed in writing to both parties prior to selection for the position of DRE.
 - (c) Have disclosed in writing to both parties prior to selection as DRE any and all recent or close professional or personal relationships with any director, officer, or employee of any party to the Contract, or the Engineer, and any and all prior involvement in the project to which the Contract relates.
 - (d) Not, while serving as DRE, be employed whether as a consultant or otherwise by either party to the Contract, or the Engineer, except as a DRE, without the prior consent of the parties.
 - (e) Not, while serving as DRE, engage in discussion or make any agreement with any party to the Contract, or with the Engineer, regarding employment whether as a consultant or otherwise either after the Contract is completed or after service as DRE is completed.
 - (f) Be and remain impartial and independent of the parties and shall disclose in writing to the Employer, the Contractor, and the Engineer, any fact or circumstance that might be such as to cause either the Employer or the Contractor to question the continued existence of the impartiality and independence required of a DRE; and
 - (g) Be fluent in the language of the Contract; English
2. Except for his participation in DRE's activities as provided in the Contract and in this Agreement, none of the Employer, the Contractor, or the

Engineer shall solicit advice or consultation from the DRE on matters dealing with the conduct of the Works.

3. The Contractor shall:

- (a) Furnish to the DRE a copy of all documents that the latter may request. These shall include Contract documents, progress reports, variation orders, and other documents pertinent to the performance of the Contract.
- (b) In cooperation with the Employer, coordinate the Site visits of the DRE, including conference facilities, and secretarial and copying services.

4. The DRE shall begin his activities following the signing of a DRE's Declaration of Acceptance, and he shall terminate these activities as set forth below:
 - (a) The DRE shall terminate his regular activities when either:
 - (i) The Defects Liability Period referred to in Subclause 49.1 (or, if there are more than one, the Defects Liability Period expiring last) has expired, or
 - (ii) The Employer has expelled the Contractor from the Site pursuant to Subclause 63.1, and when, in either case, the DRE has communicated to the parties and the Engineer his Recommendations on all disputes previously referred to him.
 - (b) Once the DRE has terminated his regular activities as provided by the previous paragraph, the DRE shall remain available to process any dispute referred to him by either party. In case of such a referral, the DRE shall receive payments as provided in Paragraphs 7 (a) (ii), (iii) and (iv) below.
5. The DRE shall not assign or subcontract any of his work under these Rules and Procedures. However, the DRE may in his/her discretion decide to seek independent expert advice on a particular specialized issue to assist in reaching a Recommendation, and the cost of obtaining any such expert opinion(s) shall be shared equally by the Employer and the Contractor in accordance with the procedure specified in paragraph 7 (d) below.
6. The DRE is an independent contractor and not an employee or agent of either the Employer or the Contractor.
7. Payments to the DRE for his services shall be governed by the following provisions:
 - (a) The DRE will receive payments as follows:
 - (i) A retainer fee per calendar month equivalent to three times the daily fee established from time to time for arbitrators under the Administrative and Financial Regulations of the International Centre for Settlement of Investment Disputes (the ICSID Arbitrator's Daily Fee), or such other retainer as the Employer and Contractor may agree in writing. This retainer shall be considered as payment in full for:

- (i.1) Being available, on seven days' notice, for Site visits requested by either party.
 - (i.2) Being conversant with all project developments and maintaining relevant files.
 - (i.3) All office and overhead expenses such as secretarial services, photocopying, and office supplies (but not including telephone calls, faxes, and telexes) incurred in connection with the duties as a DRE.
 - (i.4) All services performed hereunder except those performed during the days referred to in paragraph (ii) below.
 - (ii) A daily fee equivalent to the ICSID Arbitrator's Daily Fee or such other daily fee as the Employer and Contractor may agree in writing. This daily fee shall only be payable in respect of the following days and shall be considered as payment in full for:
 - (ii.1) Each day up to a maximum of two days of travel time in each direction for the journey between the DRE's home and the Site.
 - (ii.2) Each day on Site.
 - (iii) Expenses in addition to the above shall be all reasonable and necessary travel expenses (including less than first-class air fare, subsistence, and other direct travel expenses) as well as the cost of telephone calls, faxes, and telexes incurred in connection with the duties as DRE shall be reimbursed against invoices. Receipts for all expenses in excess of US\$ 25.00 (U.S. Dollars Twenty Five) shall be provided.
 - (iv) Reimbursement of any taxes that may be levied in Kenya on payments made to the DRE (other than a national or permanent resident of Kenya) pursuant to Paragraph 8.
- (b) Escalation. The retainer and fees shall remain fixed for the period of the DRE's term.
 - (c) Phasing out of monthly retainer fee. Beginning with the next month after the Taking-Over Certificate referred to in Clause 48 (or, if there are more than one, the one issued last) has been issued, the DRE

shall receive only one-third of the monthly retainer fee. Beginning with the next month after the Board has terminated its regular activities pursuant to paragraph 4 (a) above, the DRE shall no longer receive any monthly retainer fee.

- (d) Payments to the DRE shall be shared equally by the Employer and the Contractor. The Contractor shall pay the DRE's invoices within 30 calendar days after receipt of such invoices and shall invoice the Employer (through the monthly statements to be submitted in accordance with Subclause 60.2 of the Conditions of Contract) for one-half of the amounts of such invoices. The Employer shall pay such Contractor's invoices within the time period specified in the construction Contract for other payments to the Contractor by the Employer.
- (e) Failure of either the Employer or the Contractor to make payment in accordance with this Agreement shall constitute an event of default under the Contract, entitling the non-defaulting party to take the measures set forth, respectively, under Clause 63 or Clause 69.
- (f) Notwithstanding such event of default, and without waiver of rights therefrom, in the event that either the Employer or the Contractor fails to make payment in accordance with these Rules and Procedures, the other party may pay whatever amount may be required to finance the activities of the DRE. The party making such payments, in addition to all other rights arising from such default, shall be entitled to reimbursement of all sums paid in excess of one-half of the amount required to finance the activities of the DRE plus all costs of obtaining such sums.

8. DRE Site Visits:

- (a) The DRE shall visit the Site and meet with representatives of the Employer and the Contractor and the Engineer at regular intervals, at times of critical construction events, at the written request of either party, and in any case not less than three times in any period of 12 months. The timing of Site visits shall be as agreed among the Employer, the Contractor, and the DRE, but failing agreement shall be fixed by the DRE.
- (b) Site visits shall include an informal discussion of the status of the construction of the Works, an inspection of the Works, and the review

of any Requests for Recommendation made in accordance with Paragraph 10 below. Site visits shall be attended by personnel from the Employer, the Contractor, and the Engineer.

- (c) At the conclusion of each Site visit, the DRE shall prepare a report covering his activities during the visit and shall send copies to the parties and to the Engineer.

9. Procedure for Dispute Referral to the DRE:

- (a) If either party objects to any action or inaction of the other party or the Engineer, the objecting party may file a written Notice of Dispute to the other party with a copy to the Engineer stating that it is given pursuant to Clause 67 and stating clearly and in detail the basis of the dispute.
- (b) The party receiving the Notice of Dispute will consider it and respond in writing within 14 days after receipt.
- (c) This response shall be final and conclusive on the subject, unless a written appeal to the response is filed with the responding party within seven days after receiving the response. Both parties are encouraged to pursue the matter further to attempt to amicably settle the dispute.
- (d) When it appears that the dispute cannot be resolved without the assistance of the DRE, or if the party receiving the Notice of Dispute fails to provide a written response within 14 days after receipt of such Notice, either party may refer the dispute to the DRE by written Request for Recommendation to the DRE. The Request shall be addressed to the DRE, with copies to the other party and the Engineer, and it shall state that it is made pursuant to Clause 67.
- (e) The Request for Recommendation shall state clearly and in full detail the specific issues of the dispute to be considered by the DRE.
- (f) When a dispute is referred to the DRE, and the DRE is satisfied that the dispute requires his assistance, the DRE shall decide when to conduct a hearing on the dispute. The DRE may request that written documentation and arguments from both parties be submitted to him before the hearing begins. The parties shall submit insofar as possible agreed statements of the relevant facts.
- (g) During the hearing, the Contractor, the Employer and the Engineer shall each have ample opportunity to be heard and to offer evidence.

The DRE's Recommendations for resolution of the dispute will be given in writing to the Employer, the Contractor, and the Engineer as soon as possible and in any event not less than 56 days after receipt by the DRE of the written Request for Recommendation.

10. Conduct of Hearings:

- (a) Normally hearings will be conducted at the Site, but any location that would be more convenient and still provide all required facilities and access to necessary documentation may be utilized by the DRE.
 - (b) The Employer, the Engineer, and the Contractor shall be given the opportunity to have representatives at all hearings.
 - (c) During the hearings, the DRE shall not express any opinion concerning the merit of the respective arguments of the parties.
 - (d) After the hearings are concluded, the DRE shall formulate his Recommendations and shall submit them in writing, together with an explanation of his reasoning, to both parties and to the Engineer. The Recommendations shall be based on the pertinent Contract provisions, applicable laws and regulations, and the facts and circumstances involved in the dispute.
11. In all procedural matters, including the furnishing of written documents and arguments relating to disputes, Site visits and conduct of hearings, the DRE shall have full and final
12. After having been selected, the DRE shall sign two copies of the following declaration and make one copy available each to the Employer and to the Contractor:

SECTION VI: TECHNICAL SPECIFICATIONS

SECTION 7: TECHNICAL SPECIFICATIONS

SECTION 7: TECHNICAL SPECIFICATIONS

TABLE OF CONTENTS

Clause and Description	Page
100 GENERAL 104	
101 LOCATION AND EXTENT OF SITE	104
102 EXTENT OF CONTRACT	104
102.1 SCOPE OF WORK	104
103 DRAWINGS	105
104 PROGRAMME FOR EXECUTION OF THE WORKS	105
105 ORDER OF EXECUTION OF THE WORKS	105
106 CERTIFICATE OF COMPLETION	105
107 METHOD OF CONSTRUCTION	106
108 NOTICE OF OPERATIONS	106
109 HEALTH, SAFETY AND ACCIDENTS	106
110 USE OF EXPLOSIVES	106
111 PROTECTIONS OF EXISTING WORKS AND SERVICES	107
112 DIVERSION OF SERVICES	107
113 LIAISON WITH GOVERNMENT OFFICIALS AND POLICE	108
114 PROVISION OF LAND	108
115 WATER SUPPLY	108
116 INFORMATION FROM EXPLORATORY BORING AND TEST PITS	108
117 PUBLICITY SIGNBOARDS	108
118 PROVISION OF VEHICLES	109
119 MISCELLANEOUS ACCOUNTS	109
120 PAYMENT OF OVERTIME FOR ENGINEER'S JUNIOR STAFF	109
121 LIQUIDATED DAMAGES	110
122 PROTECTION OF THE ENVIRONMENT	110
123 OFF SITE ENVIRONMENTAL MEASURES	111
200 SITE CLEARANCE AND TOP SOIL STRIPPING 112	
201 SITE CLEARANCE	112
300 EARTHWORKS 112	
301 GENERAL	112
302 CLASSIFICATION OF EXCAVATION	112
303 STRIPPING OF TOP SOIL	113
303.1 STRIPPING	113
303.2 DISPOSAL	113
304 EXCAVATION	113
304.1 GENERAL	113
304.2 MECHANICAL EXCAVATION	113
304.3 ROCK EXCAVATION	114

305	EXCAVATION FOR FOUNDATIONS	114
306	TRENCH EXCAVATION FOR PIPE LAYING	114
307	BACKFILLING OF EXCAVATIONS	115
308	HARDCORE FILLING	116
309	BORROW PITS	116
310	REINSTATEMENT OF SURFACES	116
400	CONCRETE WORKS	116
401	MATERIALS FOR ROCKFILL	117
401.1	LEVELLING OF CONCRETE FOR BOTTOM SLAB INCLUDING FORMWORK COST	118
401.2	REINFORCEMENT BARS FOR WALLS AND SLABS	120
401.3	FORMWORK FOR VERTICAL WALLS AND SLABS	122
401.4	CONCRETE WORKS TO VERTICAL WALLS AND SLABS	124
401.5	CONCRETING WORK	128
401.6	CONCRETE CLASS 30/20	129
401.7	CONCRETE CLASS 35/20	129
401.8	MEASUREMENT AND PAYMENT	129
402	MIXING CONCRETE	129
403	MOULD OIL	130
404	HOLES FOR PIPES AND CAST-IN ITEMS	130
405	PIPES THROUGH WATER RETAINING WALLS	130
406	REMOVAL OF FORMWORK	131
500	PIPE WORKS	132
501	SLUICE VALVES	132
502	PRECAST CONCRETE COVERS	132
503	HANDLING AND STORAGE OF MATERIALS	132
504	TRANSPORT OF PIPES	133
505	STORAGE OF PIPES	133
506	PIPE TRENCH WIDTH	133
507	PIPE LAYING AND JOINTING	133
507.1	GENERAL	133
507.2	PVC PIPES	134
507.3	STEEL PIPES	135
508	CONCRETE MANHOLES AND VALVE CHAMBERS	135
509	TESTING	135
510	BACKFILLING TRENCHES	135
511	MANHOLES	135
512	CHAIN LINK FENCING	135
513	GATES	135
600	DAY WORKS	135
601	SCOPE	136
602	STANDARDS	136
603	MEASUREMENT AND PAYMENTS	136
700	ENVIRONMENTAL MANAGEMENT PLAN	137

100 GENERAL

In the absence of any definite provisions on any particular issue in this Technical Specifications, reference may be made to the latest codes and specifications of Kenya Bureau of Standards (KeBS), BS, ASTM, AASHTO. Where these are silent, the construction and completion of the works shall conform to sound engineering practice as approved by the Engineer and in case of any dispute arising out of the interpretation of the above, the decision of the Engineer shall be final and binding on the Contractor.

Where reference is made in the Contract to specific standards codes to be met by the materials, plant, and other supplies to be furnished, and work performed or tested, the provisions of the latest current edition or revision of the relevant standards as on the date of the bid and codes/design manual in effect shall apply, unless otherwise expressly stated in the contract. Where such standards and codes/design manual are national, or relate to a particular country or region, other internationally recognised standards which ensure a substantially equal or higher performance than the standards and codes/design manual specified will be accepted subject to the Engineer's prior review and written approval. The difference between the standards specified and the proposed alternative standards must be fully described in writing by the Contractor and submitted to the Engineer at least 28 days prior to the date when the Contractor desires the Engineer's approval. In the event that the Engineer determines that such proposed deviations do not ensure substantially equal performance, the Contractor shall comply with the standards specified in the documents.

101 Location and Extent of Site

The project is located in Tsavo West National Park.

Drawings and all relevant details pertaining to the associated works shall be issued during construction of the main works; however drawings for tendering purposes and the quantities for these works are incorporated in the Tender Documents.

The site of the permanent works shall be within and around the Tsavo West National Park.

102 Extent of Contract

The works under this contract comprise the Rehabilitation of the existing Bitumen/Gravel standard Airstrip and Taxiway approximately 1.6KM long.

102.1 Scope of Work

The scope of the work shall include but not limited to the following:

1. Facilitation of the Supervision Staff
2. Earth works
3. Excavation for Structures
4. Culvert and drainage works.
5. Natural gravel sub bases and bases
6. Cement And Lime Treated Sub grade, Sub base And Base
7. Grading and Gravelling
8. Bituminous Surface Treatment And Surface Dressing
9. Concrete works(Drift works)
10. Miscellaneous Bridge works
11. Any other activity not listed above but deemed to be necessary by the Engineer shall be carried out subject to Engineer's formal instructions and within the mode of payment stipulated either by day works or on measured basis.

103 Drawings

The drawings provided for bidding purpose shall be as contained in the Bid documents. The complete book of drawings shall be issued during the construction period. The Engineer may from time to time, in order to enable satisfactory completion of works, revise, amend, or supersede any of these drawings. It shall be the Contractor's responsibility to construct the works in conformity with the latest revision and amendment to the drawings provided that the Engineer has given the Contractor in writing such reasonable prior notices of intention to revise, amend, or supersede as the nature of the intended change required and relevant drawings have been issued to the Contractor.

104 Programme for Execution of the Works

The Contractor shall provide the works programme, required under Clause 14.1 of the Conditions of Contract, within 28 days of receipt of the Engineer's Order to commence work.

The programme shall be coordinated with climatic and other conditions to provide for the completion of the works in the order and by the time specified.

The Contractor shall carry out the Works of the Contract in accordance with the programme agreed with the Engineer, but he shall in no manner be relieved by the Engineer's approval of the programme, of his obligation to complete the works in the prescribed order and by the prescribed completion date and he shall from time to time review his progress and make such amendments to his rate of execution of the works as may be necessary to fulfil his obligations.

The Contractor shall allow in his programme for construction of trial sections and carrying out tests upon them as directed by the Engineer in accordance with the provisions of Clause 129 of the Standard Specification. The time for completion of the Contract shall not be extended because of the time taken to carry out tests and evaluate trial sections.

105 Order of Execution of the Works

Generally, the Contractor shall commence the works in a manner that will ensure orderly completion at each site.

106 Certificate of Completion

Wherever the "Certificate of completion" and "Period of Maintenance" are stated in the specification, these shall be read respectively as the "Taking Over Certificate" and "Defects Liability Period".

The Taking-Over Certificate for these works shall be issued upon application by the Contractor under Clause 48.2 of the Conditions of Contract on substantial completion of the construction works. The Defect Liability Certificate will be issued after the end of the Defects Liability Period.

Release of Retention Money will be on issuance of the said certificates.

107 Method of construction

The submission of the work programmes, Order of Work and the General Description of works shall be consistent in presentation and content when handed over for the Engineer's approval and in accordance with programmes and schedules as stated in Clause 14.1 of Conditions of Contract.

Notwithstanding any contrary provision contained in the last paragraph of Clause 108 of the Standard Specification, the Engineer's normal working hours shall be

defined as 8:00 a.m. to 5:00 p.m. on weekdays, including lunch break from 1.00 p.m. to 2.00 p.m. and 8:00 a.m. to 1:00 p.m. on Saturdays, with Sunday being set aside as a day of rest. If the contractor wishes to execute permanent works outside these hours, he shall request for and obtain written permission from the Engineer at least one full working day in advance to enable the Engineer to make necessary provision for the supervision of such work. The contractor shall meet any costs arising thereof.

108 Notice of Operations

It shall be the Contractor's responsibility to notify the Engineer when any items of the Works scheduled are completed and ready for approval, and the contractor shall give a notice of one full working day to allow control tests to be performed.

109 Health, Safety and Accidents

In accordance with the Laws of Kenya, the Contractor shall make all necessary arrangements for awareness programmes for public health education and particularly for HIV/AIDS as detailed under Section 26 of this specification.

In addition, the Contractor shall ensure that adequate security is provided by the KWS for all persons authorised to work on the works within the protected area.

110 Use of Explosives

The Contractor shall not use explosives without prior written consent of the Engineer. Where the use of explosives is so provided or ordered or authorised, the Contractor shall comply with the requirements of the following beside the law of the land as applicable:

- (a) The Contractor shall at all times make full liaison with and inform well in advance and obtain such permission as is required from all Government Authorities, public bodies and private parties whatsoever concerned or affected or likely to be concerned or affected by blasting operations.
- (b) The Contractor shall pay all license fees and charges, which may be, required for storage of explosives or in respect of any other matters whatsoever.
- (c) The contractor shall be solely responsible for provision, supply, handling, storage and transportation of all explosive ancillary materials and stores and all other things of every kind whatsoever required for blasting operations and shall not delegate or subcontract these activities without the approval of Engineer.

- (d) Before the beginning of the Defects Liability Period the Contractor shall remove all unused explosives from the site on completion of the Works or which are ordered by the Engineer, and submit to the Engineer written confirmation of compliance with the instruction.
- (e) The Contractor shall submit to the Engineer monthly returns detailing the quantity of explosives brought to the site together with the quantities used during the month and the location and quantity of rock blasted.

111 Protections of Existing Works and Services

The cost of determining the location of the existing services together with making good or repairing of any damage caused all to the satisfaction of the Engineer shall be included in the tender rates by the Contractor.

Any damage to, or interference with, existing utilities, caused by the Contractor's operations during the progress of the Works, shall be deemed to be the responsibility of the Contractor who shall undertake to make good at his own expense any damage so caused to the existing underground utilities or other features. The Contractor shall be liable in respect of all claims arising from such damages or interference that may occur.

The Contractor shall be responsible for arranging in liaison with the relevant authorities as soon as the requirements are known for the moving of or alterations to services including power lines, telephone lines, data cables, water mains, sewers and surface water drains which are affected by the works. The arrangements for such moving or alteration shall be subject to the agreement of the Engineer and the relevant authorities.

112 Diversion of services

- (a) The Contractor shall acquaint himself with the position of all existing services including sewers, water pipes, underground drains, cable for electricity and telephone lines, telephone and lighting poles before commencing any excavation or other work likely to affect these existing services.
- (b) The Contractor shall pay any charges arising from the moving of such services for which Provisional Sums have been included in the Bill of Quantities. Subject to the agreement of the Engineer and upon production of receipts, the Contractor shall be reimbursed in Interim Certificates the net cost of such moving or alteration plus the percentage

inserted in the Bill of Quantities for all costs and profits in making the payments.

- (c) The Contractor shall be entirely responsible for and shall repair at his own cost, any services that may be damaged by his plant, equipment or personnel for not following the laid down procedure of locating and shifting services or damage that may occur subsequent to alteration of such services. The Contractor shall indemnify the Employer against claims arising from damages to existing services or works.

113 Liaison with Government Officials and Police

In addition to the requirements of maintaining liaison with County and National Government Officials, the Kenya Police Service and Kenya Wildlife Service, the Contractor shall be responsible for acquainting himself with all current and valid ordinances or regulations which may affect the work.

The Contractor's attention is also drawn to his obligations with regard to inspection and examination of the site as stipulated under Clause 11 of the Conditions of Contract.

114 Provision of land

All requirements of land for deviations, quarries, stockpiles, spoil areas and borrow pits when not in the road reserve but required for the construction purposes shall be approved by the Engineer, but the Contractor will make necessary arrangements with the property owners concerned and pay all charges arising thereof on or before completion of the Contract. However, the Employer shall not provide any land for the Quarries, stockpiles, spoil areas and borrow pits and access roads there to.

The Contractor shall remove all temporary works and shall restore all such land to the condition in which it was immediately prior to the occupation thereof as is reasonable and practicable. No separate payment shall be made to the Contractor on account of these items and the contractor shall make due allowances for them in his rates elsewhere.

Any encroachment of the dam area, for example by kiosks, shall be brought to the Engineer's attention by the Contractor at the earliest opportunity.

115 Water Supply

The Contractor at his own cost shall obtain necessary permissions from the relevant Government authorities and private parties to draw water from natural sources and private sources respectively.

116 Information from Exploratory Boring and Test Pits

- (a) The Materials Report prepared by the Employer does not form part of the bid documents. However, the report will be made available for the Contractor's verification only and any conclusions in regard to suitability of material, location of borrow pits and material quantities made by the Contractor based on this information, will be his own responsibility.

117 Publicity Signboards

At the commencement of works, the Contractor shall provide and erect publicity signboards at locations along the proposed Project Roads and enroute as instructed by the Engineer. The signboards shall comply with the requirements and detail shown in the Book of Drawings. Any amendments to the details in the Book of Drawings, prior to the signboards being erected, shall be with the approval of the Engineer.

118 Provision of vehicles

The Contractor shall when instructed, provide and maintain in good working condition for the exclusive use of the Engineer and his staff throughout the Contract, the following types and numbers of brand new vehicles. The Engineer shall approve the type of vehicles and confirm the number of each type to be provided. The Contractor shall insure the vehicles comprehensively for any licensed drivers and shall provide competent drivers during normal working hours and whenever required by the Engineer.

Should any vehicle supplied not be in roadworthy condition, the Contractor shall provide an acceptable equivalent replacement vehicle until such a time as the original vehicle is repaired to the satisfaction of the Engineer and returned for use.

Double Cabin pick up Vehicles should be Four Wheel Drive (4WD), with power assisted steering, Double wishbone independent suspension at front axle and rigid axle with leaf springs at rear and diesel propelled engine minimum capacity 2,500 cc. The vehicles should be fitted with other accessories below:

- i) Spare tyre and wheel jack;
- ii) FM radio and CD player;
- iii) Power Windows;
- iv) Full Air-conditioning;
- v) Immobilizer and antitheft security system;
- vi) Driver and passenger SRS Airbags;

- vii) Lockable fibreglass body at the back.

All vehicles to be supplied will be brand new or odometer reading 0 – 60,000km, right hand drive, with air-conditioner and power steering as described below.

Ownership of the vehicles supplied to the Engineer shall revert to the Contractor upon completion of construction.

119 Miscellaneous Accounts

The Contractor maybe instructed by the Engineer to make payments of general miscellaneous accounts for such items as stationary, stores and equipment and miscellaneous supervision personnel and claims or the Engineer may direct the Contractor to purchase or pay for the above. The Contractor will be paid on a prime cost basis plus a percentage for overheads and profits under appropriate items in the Bills of Quantities.

120 Payment of Overtime for Engineer's Junior Staff

If the Contractor wishes to execute the works on regular basis outside the Engineer's normal working hours as given in Clause 108, over a prolonged period, the Engineer may if he deems it necessary, employ additional supervisory staff for which the required salaries shall be in full by the contractor through the Engineer's office. In addition, the Contractor shall provide the required accommodation for such staff at his own cost. The Contractor shall not be reimbursed any of this cost.

121 Liquidated Damages

Liquidated Damages at the rate indicated in the Appendix to Form of Bid shall apply in the event of the work not being completed within the time for completion plus any extension of time which may be determined by the Engineer. The limit of liquidated damages shall be as indicated in the Appendix to Form of Bid.

122 Protection of the Environment

Further to the requirements of Sub-clause 19.1 of the Conditions of Contract, the Contractor shall be responsible for the following measures to protect the environment.

- (a) Compliance with national and local statutes and regulations relating to protection of the environment. The Contractor will be responsible for

familiarizing himself with all existing national and local legislation in this regard.

- (b) All construction activities shall be carried out using the best possible means to reduce environmental pollution such as noise, dust and smoke. All vehicles and plant shall be regularly serviced in accordance with the manufacturer's recommendations to ensure that they operate efficiently and without excessive noxious emissions. The Engineer will have the authority to instruct the Contractor to temporarily cease operations and/or remove from the site vehicles or plant which do not comply with this requirements, until such time that he is satisfied that the best practicable means to reduce environmental pollution to a minimum are being used.
- (c) The Contractor shall at all times maintain all sites under his control in a clean and tidy condition and shall provide appropriate and adequate facilities for the temporary storage of all waste prior to disposal.
- (d) The Contractor shall be responsible for the safe transportation and disposal of all waste generated as a result of his activities in such a manner as will not give rise to environmental pollution in any form or hazard to human or animal health. In the event of any third party being employed to dispose of waste, the Contractor shall be considered to have discharged his responsibilities under this Clause from the time at which waste leaves sites under his control, providing that he has satisfied himself that the proposed transportation and disposal arrangements are such as will not give rise to pollution or health hazard.
- (e) The Contractor shall be responsible for the provision of adequate sanitary facilities for his workforce, and that of his subcontractors at all construction and ancillary sites. The Contractor shall not allow the discharge of any untreated sanitary waste to ground water or any water of ground surface watercourse.
- (f) All concrete and asphalt plants shall be operated and maintained in accordance with the original manufacturers specifications and manuals, and in such a manner as to minimize emissions of hydro-carbons and particulate if in the opinion of the Engineer the operation of such plant is causing or is likely to cause nuisance or health problems to the site staff or the general public. The Contractor shall carry out such work as is necessary to reduce emissions to an acceptable level within a time-scale agreed with the Engineer.

- (g) The Contractor shall regularly spray with water all exposed dirt surfaces to reduce dust levels.
- (h) The Contractor shall take all responsible measures, at all sites under his control to prevent spillage and leakage of material likely to cause pollution of water resources. Such measures shall include but not be limited to the provisions of bunds around fuel and oil storage facilities and provision of oil and grease traps for servicing and fuelling areas. Prior to construction of such facilities the Contractor shall submit details of pollution prevention measures to the Engineer for his approval.
- (i) The Contractor shall be responsible for ensuring that exposed surfaces are re-vegetated as construction progresses all to the satisfaction of the Engineer.
- (j) The removal of trees shall be kept to the minimum necessary to accommodate the permanent works. Prior to the removal of any trees the contractor shall inform the Engineer of the intended operation and obtain the permission of the Engineer for the removal of the trees. If any tree is removed without permission the Contractor shall replace it with an approved tree at no additional cost to the Employer.
- (k) The Contractor shall ensure that fires, except for controlled fires for burning rubbish, do not start within the Site or in the environs thereto as a result of the works or from the actions of his employees. The burning of waste, such as vehicle tyres causing noxious emissions is prohibited. The contractor shall have available at all times trained fire-fighting personnel provided with adequate fire-fighting equipment to deal with all fires. The contractor shall additionally at all times provide sufficient fire protection and fighting equipment locally to parts of the works which constitutes particular fire hazards.

No separate payment shall be made in respect of this Clause 142 and the Contractor shall be deemed to have allowed in his general rates and prices for the costs of complying with the requirements of this clause.

123 Off Site Environmental Measures

The Employer and the National Environmental Management Authority (NEMA) may order certain environmental measures to be carried out which are off the road and not specifically covered under these provisions. The Contractor shall carry out such works with equipment, labour and plant provided under the Contract or shall make

such arrangements for specialized works to be carried out by a specialized subcontractor.

The Contractor shall be paid for all direct expenses under a Provisional Sum in the Bill of Quantities and a percentage (%) for his handling costs and profits.

200 SITE CLEARANCE AND TOP SOIL STRIPPING

201 Site Clearance

Site clearance is not required over the paved width of the existing road and shoulders. No measurements and payment for site clearance will be made for this width. The remaining area within the road reserve including the sides of the existing embankments and cutting should be cleared as instructed by the Engineer. This operation shall also include the removal of selected trees as directed by the Engineer. The Contractor shall provide paint and all the assistance the Engineer may require to mark the trees which should not be removed during site clearance.

The Contractor shall take care not to uproot or damage trees which are within the road reserve but outside the construction width. After the contractor has staked out the extent of the road, the Engineer with assistance of the Contractor shall mark out the trees to be removed. After removal the trunk and branches of these trees shall be cut into pieces not more than 2.0 m in length, transported and neatly stored at the nearest Ministry of Roads camp at a position to be indicated by the Engineer. Payment for this work shall be as detailed in the Bill of Quantities. The rate inserted by the Contractor for this work shall include the cost of complying with all the requirements of this clause.

300 EARTHWORKS

301 General

Excavation shall be made to such lengths, depths and inclinations as may be necessary for the construction of the works or as shown on the drawings or as the Engineer may direct.

302 Classification of Excavation

The Engineer or his Representative and the Contractor or his Representative shall be present during classification of materials.

Where the terms "rock excavation" and "common excavation" or "excavation" are used in these specifications, the following definitions shall apply.

Rock Excavation includes all solid rock in place which cannot be removed until loosened by blasting, barring, wedging, and all boulders or detached pieces of solid rock more than 0.25 cubic metres in volume. Solid rock under this class is defined as sound rock of such hardness and texture that it cannot be loosened or broken down by hand- drifting picks.

All materials containing more than 50% by volume of boulders exceeding 0.25 cubic metres in volume shall be classified as rock excavation.

Common Excavation includes all material other than rock excavation: including, but not restricted to earth, gravel, and also such hard and compact material as hardpan, cemented gravel, and soft or disintegrated rock together with all boulders or detached pieces of solid rock not exceeding 0.5 cubic metre in volume.

303 Stripping of Top Soil

303.1 Stripping

Stripping shall consist of removing, transporting and disposing of topsoil, stumps, roots, buried logs, debris, humus and similar objectionable matter. Areas to be stripped are all areas required for the permanent constructional works, borrow-pits and embankment fills.

The limits of stripping shall extend 2 metres beyond the limits of excavation or toes of fills. The depth of stripping shall normally be 0.2m, but deeper stripping might be needed to remove stumps.

303.2 Disposal

Materials from stripping suitable as topsoil shall be spread in approved areas. All other non-combustible materials shall be buried in approved disposal area; covered with a minimum of 0.5m of excavation spoil. These disposal areas shall be left with neatly graded surfaces and stable slopes that assure drainage. Alternatively, the non-combustible material shall be removed from the area by the contractor.

304 Excavation

304.1 General

All open cut excavation shall be performed in accordance with this section to the lines, grades and dimensions shown on the drawings or as directed by the Engineer. The Engineer reserves his right to at any time during the progress of the work to vary the slopes or dimensions of the excavations from those previously specified.

Any damage to the works due to the contractor's operations, including shattering of the material beyond the required excavation lines, shall be repaired at the expense of and by the contractor. All excess excavations and over-excavation shall be filled

with compacted concrete grade 10 furnished and placed at the expense of and by the contractor.

All excavation for structure foundations shall be performed in the dry.

If excavations are carried out in roads, footpaths, separators, or within 5m of buildings, the contractor is requested to execute the work in a way that will minimise damage and disturbances.

304.2 Mechanical Excavation

- a) A mechanical excavator shall be employed only if the sub-soil is suitable and will allow timbering of trenches or other excavations to be kept sufficiently closed up to ensure that no slips fall or disturbance of the ground takes place or there are no pipes, cables, mains or other services or property which may be disturbed or damaged by its use.
- b) When mechanical excavators are used, a sufficient depth of material shall be left over the bottom of the excavation to ensure that the ground at finished excavation level is not damaged or disturbed in any way. The excavations shall then be compacted by hand to the finished levels required.

304.3 Rock Excavation

The contractor shall trim all rock faces in cuttings according to the dimensions shown on the drawings and upon completion leave them safe from rock falls to the satisfaction of the Engineer.

305 Excavation for Foundations

- a) The bottom and side slopes of common material upon or against which concrete is to be placed shall be finished accurately to the established lines and grades, and loose materials on surfaces so prepared shall be moistened with water and tamped or rolled with suitable tools and equipment to form a firm foundation for the concrete structure. If, at any point, material is excavated beyond the established excavation lines, then the over-excavation resulting voids shall be filled with consolidated concrete grade 10 at the contractor's expense. If the excavation is carried out in advance, a protective layer of 150mm

thickness shall be left above the foundation level until immediately before the contractor is ready to pour the blinding concrete.

- b) The bottom and side slopes of rock material upon or against which concrete is to be placed shall be excavated to the required dimensions as shown on the drawings or established by the Engineer. No material will be permitted to extend within the neat lines of the structure. If at any point in the rock material, material is excavated beyond the limits required to receive the structure, the additional excavation shall be filled solidly with concrete grade 10

306 Trench Excavation for Pipe Laying

All surface material including top soil which differs in any nature whatsoever from the sub-strata shall in every case be carefully set aside and stored separately from other excavated material. No extra claim will be allowed for setting aside surface matter or topsoil for later use.

Trench excavation shall be carried out with great care, true to line and gradient and as near as practicable to the size required for construction of the permanent work. Nowhere shall the external dimensions of the excavations be less than the dimensions of the permanent work shown on the drawings or as directed by the Engineer.

If the bottom of the excavation becomes weathered prior to pipe laying, due to fault of the contractor, the weathered soil shall be replaced with suitable compacted material to the original formation level at the contractor's expense. The pipe trench shall be excavated to a depth of 150mm below the invert level of the pipe and refilled with sand, gravel or other selected materials free from stones and well rammed in order to provide a smooth bed for the pipes.

Excavation for pipe trenches shall be of sufficient depth to give a minimum cover of 200mm over the top of the pipe. Where pipes/sewers cross under roads, minimum cover shall be 900mm, or such cover as may be directed by the Road Authority.

Where the pipeline is required to be laid at depth, which does not satisfy the minimum cover conditions set out above, the ground surfaces shall be brought up to the required level by banking the backfill or as directed by the Engineer.

No pipes shall be laid and no excavation filled in or covered with concrete until the formation has been inspected and permission to proceed with the work obtained.

Where P.V.C. are being laid, the bottom of the trench must be completely free from stones, and a smooth bed of fine material must be provided. Where the bed of the trench for pipes is excavated in rock, it must be excavated to a depth of not less than 100mm below the bottom of the pipe, and refilled with selected fine granular material to make a smooth bed for the pipe.

The width of the trench to be excavated will depend on the size and type of pipe being laid. Sufficient width must be excavated to allow the pipe to be correctly bedded and aligned, and to allow for the joints to be correctly made.

Any excavated material stored on site for backfilling or other purposes shall be deposited alongside the excavation at a minimum distance of 0.5m in such a manner that it will cause no damage and as little inconvenience as possible.

Any instruction given by the Engineer will be directed to the provision of stronger support than that proposed by the contractor, and will be given only when, in the opinion of the Engineer, the support proposed by the contractor is insufficient.

Where timber has been used in excavations any such timber left in position shall be at the expense of the contractor except where the Engineer has ordered the timber to be left in place or if any timber should be left in place with the prior approval of the Engineer. the timber approved or ordered to be left in place will be paid for at the rates entered in the Bills of Quantities.

For the purpose of this clause, the words "timber" and "timbering" shall be construed to include trench sheeting and steel or concrete sheet, piling or any other means adopted by the contractor for supporting excavations.

307 Backfilling of Excavations

The backfilling of excavations shall be commenced as soon as practicable after the permanent works have been tested where so required and inspected and approved by the Engineer. In particular, the back filling of trenches shall be carried out expeditiously to reduce lengths of trenches open at any one time.

Backfilling shall be executed with selected materials in 150mm layers (300mm layers of a mechanical hammer are used) each layer being well rammed and watered to obtain the maximum compaction. Care shall be taken to ensure that no stone or other material, which could damage pipes or other work, is placed within 300mm of such work.

As soon as P.V.C are laid and jointed in their final positions, they should be protected from possible damage by carefully backfilling of fine granular material brought up to about 150mm over the top of the pipe, for the full width of the trench, and well compacted.

Joints must be left open for inspection until the pressure test is completed.

Backfilling over steel pipes shall be generally as described above, except that the initial protective filling around the pipe is not necessary.

308 Hardcore Filling

Hardcore fill shall consist of clean hard broken stone or rubble with measurements not below 200mm and not exceeding 500mm in any one direction with sufficient murrum added to fill the interstices. The hardcore shall be well packed, rammed and where possible rolled with a 5 ton roller. Where rolling is impossible, compaction shall be by hand or by mechanical tampers. Before any concrete is laid on hardcore, the hardcore shall be levelled and blinded with fine stone chipping, rolled and watered as necessary. Hardcore filling is measured after compaction.

309 Borrow Pits

Fill material which is required in addition to that provided by excavation shall be obtained from borrow pits to be located by the contractor and provided by the Contractor but subject to the approval of the Engineer.

310 Reinstatement of Surfaces

Generally, all trenches and backfilled excavations shall be reinstated to equal surfaces as before excavation.

Trenches in any existing road shall be refilled to the level of natural soil below the road with sub-soil in 75mm layers, each layer being carefully tamped with rammers. The remaining top layer shall be filled to the road surface with materials equal in type, quantity and compaction to materials used for the existing road.

The trench shall then be left to settle for 30 days. At the expiration of this period, the surface shall be made up to level and tamped or rolled to the approval of the Engineer, who will decide on the particular surfacing employed in accordance with the existing surface of the road.

Before expiration of the maintenance period, the contractor shall make good any defaults in reinstatements.

400 CONCRETE WORKS

401 Materials for Rockfill

This work shall consist of placing selected approved material of 250 mm minimum diameter on the foundation put after excavation to receive levelling concrete in accordance with these specifications and in conformity with the lines, grades and cross sections shown on the Drawings as directed by the Engineer.

(a) Materials

Selected rock: The selected rock boulders to be placed for this work shall be hard, sound and durable quarry stones as approved by the Engineer. Samples of the stone to be used shall be submitted to and approved by the Engineer before any stone is placed.

The maximum size of the stone boulders shall be 300 mm.

(b) Construction Method

After completion of the structural excavation the surface of the loose soil shall be levelled and compacted. Then the stone of the above sizes shall be placed in one layer of 250 mm over the compacted bed where the bottom slab will rest. Coarse sand shall spread to fill up the voids in the stone boulders, and compaction with vibratory compactors should be performed to make this layer dense whereon a concrete of levelling course shall be placed.

(c) Measurement and Payment

Measurement for the bedding materials shall be made in cubic metres for the completed and accepted work, measured from the dimension shown on the Drawings, unless otherwise directed by the Engineer.

Payment for the bedding Materials for Levelling Concrete Works shall be full compensation for furnishing and placing all materials, all labour equipment, tools and all other items necessary for proper completion of

the work in accordance with the Drawings and specifications and as directed by the Engineer.

It shall also meet the following requirements.

Test	Test Method	Requirement
Fineness Modulus	AASHTO M6	2.0-3.5
Sodium Sulphate Soundness loss on 5 cycles	AASHTO T104	10% Max.
Friable particles content	AASHTO T112	1% Max.
Test for organic impurities	AASHTO T21	Lighter than standard
Sand equivalent	AASHTO T17	75% Min.
Fraction passing 75 micron sieve	AASHTO T27	5% by weight max. (10% max. for crusher dust)

The coarse aggregate shall conform to the following quality requirements:

Test	Test Method	Requirement
Sodium Sulphate Soundness loss on 5 cycles	AASHTO 104	12% max.
Los Angeles Abrasion	AASHTO T96	40% Max.
Content of Friable Particles	AASHTO T112	1% by weight Max.
Soft Fragments and Shale	AASHTO M80	Max. 5% by weight
Flaky Pieces	BS 812	20% Max.
Elongated pieces	BS 812	20% Max.
Combined quantity of chlorides calculated as sodium chloride and sulphates as sodium sulphate	ASTM D1411	1000 ppm, Max.

The water for mixing and curing concrete shall not contain solids and impurities more than the following permissible limits:

Impurities	Permissible Limits
Organic, mg/l	200
Inorganic, mg/l	3000
Sulphates (as SO ₄), mg/l	500
Chlorides (as Cl), for plain cement concrete work and 1000 mg/l for reinforced concrete work mg/l	2000

The pH value of work shall generally be between 6 and 8.

(iii) Limits for Total Chemical Impurities in concrete

For reinforced concrete work the total chemical impurities collected from aggregates, cement, admixtures and water shall not exceed the following limits:

Impurities	Permissible limits of undesirable chemicals in concrete in percentage by weight of cement
Chlorides (as Cl ion), (%)	0.06
Sulphates (as SO ₃), (%)	4.0

401.1 Levelling of Concrete for Bottom Slab Including Formwork Cost

This work shall consist of placing and levelling lean or blinding concrete Class 15/20 over the prepared bed of stone boulders in the foundation for bottom slab and wing walls in accordance with these specifications and in conformity with the lines, grades, thickness and typical cross-sections shown on the drawings unless otherwise directed by the Engineer.

(a) Materials for levelling concrete

Requirement for the concrete class 15/20 is specified as follows:

Design compressive strength, 28 days : 15 N/mm²
 Maximum size of coarse aggregate : 20 mm

Maximum cement content : 300 kg/m³
 Maximum water/cement ratio of 50% with slump of 80 mm

(b) Construction Method

The bed of stone boulders upon which the levelling concrete will be placed shall be smooth, compacted and true to the grades and cross-section shall be set to the required lines and grades.

(c) Measurement and payment

Measurement for levelling concrete (Class 15/20) shall be made in cubic metres completed and accepted levelling concrete work measured in place and which has been executed in accordance with the drawings and the Specifications.

Payment for this work shall include furnishing and placing all materials, labour, equipment and tools, and other incidentals to specifications and as directed by the Engineer.

401.2 Reinforcement Bars for Walls and Slabs

This work shall consist of furnishing, fabricating and placing in the concrete of the bottom slab, top slab, median wall, sidewalls, wing walls and aprons, reinforcing bars of the quality, type and size in accordance with these specifications and in conformity with the requirements shown on the Drawings.

(a) Material

Reinforcement bars shall be deformed and shall meet the requirements of British Standard BS 4461, unless otherwise called for on the drawings or approved by the Engineer.

No reinforcement bar shall be delivered without a certificate guaranteeing the yield stress. The reinforcement bars shall be kept off the ground, free from dirt, oil, grease, or avoidable rust and stored within a building or provided with suitable covers.

If it is necessary for the Engineer to ascertain the quality of the reinforcement bars, the Contractor shall test the reinforcement bars, at his own expense, by the means as directed by the Engineer.

(b) Construction Method

(i) Bar Bending Schedule

The Engineer shall provide the Contractor with bending schedules showing the location types, sizes, bending dimensions and cut lengths of the reinforcement bars required to be fixed in the works.

(ii) Cutting and bending

Qualified men shall be employed for the cutting and bending and proper application shall be provided for such work.

Bars shall be cut and bent cold to the dimensions indicated and with equipment and methods approved by the Engineer.

Stirrups and tie bars shall be bent around a pin having a diameter not less than 15 times the minimum diameter of the bars. Bends of other bars, where full tension in the bar may occur, shall be made around a pin having a diameter not less than 7.5 times the bar diameter as shown on the drawing.

Reinforcing bars shall be accurately formed to the shapes and dimensions indicated on the Drawings, and shall be fabricated in a manner that will not be injurious to the materials.

(c) Placing

Reinforcing bars shall be accurately placed in proper position so that they are firmly held during placing of concrete.

Bars shall be tied at all intersections by using annealed iron wire 0.9 m or larger diameter or suitable clips.

Distances from the formwork shall be maintained, corrected by means of metal hangers, metal blocks, metal supports or other supports approved by the Engineer.

The Engineer shall inspect the formwork and reinforcement bars after placing. When a long time has elapsed after placing reinforcement bars, they shall be cleaned and inspected again by the Engineer before casting concrete.

(d) Splicing and Joint

When it is necessary to splice reinforcement bars at points, position and methods of splicing shall be determined based on strength calculations and approved by the Engineer.

In lapped splices, the bars shall be lapped by the required length, and wired together at several points by using annealed iron wire larger than 0.9 mm.

When a long time has elapsed after placing reinforcement bars, they shall be cleaned and inspected again by the Engineer before placing concrete.

(e) Joint

Exposed reinforcement bars intended for bonding with future extensions shall be effectively protected from injury and corrosion.

Oxyacetylene welding joint of reinforcing steel shall be carried out only if authorized by the Engineer in writing.

(f) Measurement and Payment

Bending and installation of reinforcement bars of piers and abutments shall be measured in terms of tonnes. The length of steel bar of each size will be shown on the drawings in which the bar length for splicing is excluded. In computing the weight to be measured, the theoretical weights of bars of the cross-section shown on the Drawings or authorized shall be used. These weights are given in the table below.

Bar Type and the Nominal Diameter in Millimetres	Weight of Bar in Kilograms per 12 m length of bar
Y10	7.40
Y12	10.66
Y16	18.95
Y20	29.60
Y25	46.30
Y32	75.80

401.3 Formwork for Vertical Walls and Slabs

This work shall consist of all temporary moulds for forming the concrete for culvert walls and slabs together with all temporary construction required for their support. Unless otherwise directed by the Engineer all formwork shall be removed on completion of the walls and slabs.

(a) Materials

Formwork shall be made of Marine Board or metal and shall conform to the shape, lines and dimensions shown on the Drawings.

All timber shall be free from holes, loose material, knots, cracks, splits and warps or other defects affecting the strength or appearance of the finished structure.

Release agents shall be either neat oils containing a surface activating agent, cream emulsions, or chemical agents to be approved by the Engineer.

(b) Construction Method

(i) Formworks

Formwork shall be designed to carry the maximum loads, which may be imposed and so be rigidly constructed as to prevent deformation due to load, drying and wetting, vibration and other causes. After formwork has been set in correct location it shall be inspected and approved by the Engineer before the concrete is cast.

If requested, the Contractor shall submit to the Engineer working drawings of the formwork and also calculations to certify the rigidity of the formwork.

Unless otherwise described in the Contract, all form joints for exposed surfaces of concrete shall form a regular pattern with horizontal and vertical lines continuous throughout each structure and all construction joints shall coincide with these horizontal and vertical lines. PVC pipes of 50 mm diameter for weep holes shall be arranged as shown on the Drawings.

Unless otherwise specified, formwork shall be designed to form chamfers at all external corners whether or not such chamfers are shown on the Drawings to prevent cracks and other damage from arising.

The inside surface of forms shall be cleaned and coated with a releasing agent to prevent adhesion of the concrete. Release agents shall be applied strictly in accordance with the manufacturer's detailed instructions. The release agent shall be applied to the formwork prior to erection. Release agent must not come into contact with reinforcement. Immediately before concrete is cast, the formwork shall be thoroughly cleaned and freed from sawdust, shavings, dust, mud or other debris by hosing with water. Temporary openings shall be provided in the formwork to drain away the water and rubbish.

(ii) Scaffolding

All scaffolding required to support the formwork shall be designed and constructed to provide necessary rigidity and support the loads without appreciable deflection or deformation.

Details, plans and structural and flexural calculations for scaffolding shall be submitted to the Engineer for approval, but in no case shall the Contractor be relieved of his responsibility for the results obtained by use of these details.

(iii) Removal of formwork

The time at which the formwork is removed shall be the Contractor's responsibility and the formwork shall not be removed until the concrete strength has reached the strength to the approval of the Engineer

(c) Measurement and Payment

No measurement shall be allowed for formwork of temporary construction joints.

Payment for the formwork shall be incidental to the pay items of particular grade of concrete for furnishing, erecting, jointing all the formwork for the concrete including furnishings and applying release

agent, and construction of the required scaffolding to support the formwork all conforming to the shape, lines, grade and dimensions of the structure as shown on the Drawings, all in accordance with the Drawings and as directed by the Engineer.

401.4 **Concrete Works to Vertical Walls and Slabs**

This work shall consist of furnishing, mixing, delivering and placing of the concrete for the construction of culvert walls and slabs in accordance with these specifications and in conformity with the requirements shown on the Drawings.

Concrete class 25/20 shall be used for Culvert walls and slabs.

(a) **Concrete Materials**

(i) **Cement:**

Cement shall be of Portland type and shall conform to the requirements of BS 12 or equivalent.

The Contractor shall select only one type or brand of cement. Changing of the type or brand of cement will not be permitted without a new mix design approved by the Engineer. All cement is subject to the Engineer's approval. However, approval of cement by the Engineer shall not relieve the Contractor of his responsibility to furnish concrete of the specified compressive strength requirements.

Conveyance of cement by jute bags shall not be permitted. Storage in the Contractor's silo or storehouse shall not exceed more than two (2) months and age of cement after manufacture at mill shall not exceed more than four (4) months. The Contractor shall submit to the Engineer for his approval the result of quality certificate prepared by the manufacturer.

Whenever it is found out that cement has been stored too long, moist or caked, the cement shall be rejected and removed from the project.

(b) **Aggregates**

Fine and coarse aggregates must be clean, hard, strong and durable, and free from absorbed chemicals, clay coating or materials in amounts that could affect hydration, bonding, strength and durability of concrete.

Grading of aggregates shall conform to the requirements in the tables below.

(i) Grading of Fine Aggregate

Sieve Size (mm)	Percentage by Weight Passing
10	100
5	89 – 100
2.5	60 – 100
1.2	30 – 100
0.6	15 – 54
0.3	5 – 40
0.15	0 – 15

(ii) Grading of Coarse Aggregates

Size Coarse Aggregate	Amounts finer than each standard sieve percentage by weight								
	40	30	25	20	15	10	5	2.5	
	100	-	-	90 - 100	-	-	30 - 69	0 - 10	-

Other requirements for aggregates are as detailed below.

(iii) **Fine Aggregates**

Fitness Modulus, AASHTO	M – 6
Sodium Sulphate Soundness, AASHTO T104:	Max. 10% loss
Content of Friable Particles AASHTO 112:	Max 1% by weight
Sand Equivalent, AASHTO T176:	Min. 75

(iv) **Coarse Aggregate**

Abrasion, AASHTO T96	Max 405 loss
----------------------	--------------

<i>Tender Document for</i>	<i>Procurement of Road Maintenance Works</i>	<i>Tendering Procedures</i>
	Soft Fragment and shale, AASHTO M80:	
	This and elongated Pieces, AASHTO M80:	Max. 15%

(v) **Water**

All sources of water to be used with cement shall be approved by the Engineer. Water shall be free from injurious quantities of oil, alkali, vegetation matter and salt as determined by the Engineer.

(vi) **Admixture**

Only admixture, which have been tested and approved in the site laboratory through trial mixing for design proportion shall be used. Before selection of admixture, the Contractor shall submit to the Engineer the specific information or guarantees prepared by the admixture supplier. The Contractor shall not exclude the admixture from concrete proportions.

Chemical admixtures where permitted shall conform to the requirements of AASHTO M194. Unless otherwise specified, only Type A (Water reducing), Type B (Retarding), Type D (Water reducing and retarding), Type F (Water reducing, high range) or Type G (Water reducing, high range and retarding) shall be used.

Admixtures containing Chloride ion (Cl) in excess of one percent by weight of the admixture shall not be used in reinforced concrete.

A Certificate of Compliance signed by the manufacturer of the admixture shall be furnished to the Engineer for each shipment of the material used in the works.

(c) **Concrete class 25/20**

Concrete Class 25/20 shall be used for culvert walls and slabs. The requirements of concrete Class 25/20 are provided as follows unless otherwise the Engineer will designate any alteration.

Design compressive strength, 28 days:	25N/mm ²
Maximum size of coarse aggregates:	20 mm
Maximum water/cement ratio of 45% with slump of 80 mm	

(d) **Proportioning Concrete**

The Contractor shall consult with the Engineer as to mix proportions at least thirty (30) days prior to beginning the concrete work. The actual mix proportions of cement, aggregates, water and admixture shall be determined by the Contractor under supervision of the Engineer in the site laboratory.

The contractor shall prepare the design proportions which has 120% of the strength requirement specified for the designated class of concrete.

No class of concrete shall be prepared or placed until its job-mix proportions have been approved by the engineer.

(e) **Concrete Work**

(i) **Batching**

Batching shall be conducted by weight with accuracy of:

Cement	:	0.5 %
Aggregate	:	0.5 %
Water and Admixture	:	1 %

Equipment should be capable of measuring quantities within these tolerances for the smallest batch regularly used as well as for larger batches.

The accuracy of batching equipment should be checked every month in the presence of the Engineer and adjusted when necessary.

(ii) **Mixing and delivery**

Slump of mixed concrete shall be checked and approved at an accuracy of +25 mm against designated slump in these specifications.

(iii) **Concrete in hot weather**

No concrete shall be placed when the ambient air temperature is expected to exceed thirty three degrees Celsius (33°C) during casting operations.

(iv) **Concreting at night**

No concrete shall be mixed, placed or finished when natural light is insufficient, unless an adequate approved artificial lighting system is operated; such night work is subject to approval by the Engineer.

(v) **Placing**

In preparation of the placing of concrete, the interior space of formwork shall be cleaned and approved by the Engineer prior to casting concrete. All temporary members except tie bars to support formwork shall be removed entirely from the formwork and not buried in the concrete. The use of open and vertical chute shall not be permitted unless otherwise directed by the engineer.

The Contractor shall provide a sufficient number of vibrators to properly compact each batch immediately after it is cast in the formwork.

(f) **Measurement and Payment**

Measurement for the Concrete Works Class 25/20 of culvert walls and slabs shall be made in cubic metres for the walls and slabs actually constructed, measured from their dimensions shown on the drawings. Payment for the Concrete Works (Class 25/20) of culvert walls and slabs shall be the full compensation for furnishings all materials of the concrete mixing, delivering, placing and curing the concrete, equipment and tools, labour and other incidentals necessary for the completion of the work in accordance with the Drawings and these specifications and as directed by the Engineer.

401.5 Concreting Work

(a) **Batching**

Batching shall be conducted by weight with accuracy of

Cement:	1/2 %
Aggregate:	1/2 %
Water and Admixture:	1%

Equipment should be capable of measuring quantities within these tolerances for the smallest batch regularly used as well as for larger batches.

The accuracy of batching equipment should be checked every month in the presence of the Engineer and adjusted when necessary.

(a) Mixing and Delivery

Slump of mixed concrete shall be checked and approved against designated slump in these specifications. The time elapsing from when the water is added to the mix until the concrete is deposited in place at the site of the work shall not exceed thirty (30) minutes in case that the concrete is hauled in non agitator type trucks or carriers, or more than sixty (60) minutes in case that it is hauled in truck mixers or other carriers with agitators.

(b) Concrete in Hot Weather

No concrete shall be placed when the ambient air temperature is expected to exceed thirty three degrees Celsius (33°C) during casting operations.

(c) Concreting at Night

No concrete shall be mixed, placed or finished when natural light is insufficient unless an adequate approved artificial lighting system is operated, and such night work is subjected to approval by the Engineer.

(d) Placing

In preparation of the casting of concrete, the interior space of formwork shall be cleaned and approved by the Engineer prior to casting concrete. All temporary members except tie bars to support formwork shall be removed entirely from the formwork and not buried in concrete. The use of open and vertical chute shall not be permitted unless otherwise directed by the Engineer. The Contractor shall provide a sufficient number of vibrators to properly compact each concrete batch immediately after it is cast in the formwork.

401.6 Concrete class 30/20

Concrete Class 30/20 shall be used for in situ beams and deck slabs. The requirements of concrete Class 30/20 are as detailed below unless otherwise the Engineer will designate any alteration.

Design compressive strength, 28 days: 30N/mm²

Maximum size of coarse aggregates: 20 mm

Minimum cement content: 300 kg/m³, and

Maximum water/cement ratio of 45% with slump of 80 mm

401.7 Concrete class 35/20

Concrete Class 35/20 shall be used for in situ beams and deck slabs. The requirements of concrete Class 35/20 are as detailed below unless otherwise the Engineer will designate any alteration.

Design compressive strength, 28 days: 35N/mm²
Maximum size of coarse aggregates: 20 mm
Minimum cement content: 300 kg/m³, and
Maximum water/cement ratio of 45% with slump of 80 mm

401.8 Measurement and Payment

Measurement for the Concrete Works for beams and deck slabs shall be made in cubic metres for the walls and slabs actually constructed, measured from their dimensions shown on the Drawings. Payment for the concrete works of beams and deck slabs shall be full compensation for furnishing all materials of the concrete mixing, delivering, placing and curing the concrete, equipment and tools, labour and other incidentals including form F3 type, necessary for the completion of the work in accordance with the Drawings and these specifications and as directed by the Engineer.

402 Mixing Concrete

Mixed concrete from the central mixing plant shall be transported in truck mixers, truck agitators, or other approved containers. The time elapsing from the time water is added to the mix until the concrete is deposited in place at the site of the work shall not exceed 30 minutes when the concrete is hauled in non-agitating trucks, or more than 90 minutes when hauled in truck mixers or truck agitators.

Where concrete is supplied from a central plant, there shall be sufficient transporting equipment to ensure continuous delivery at the rate required. The rate of delivery shall be such as to provide for the proper handling, casting, and finishing of the concrete. The method of delivery and handling the concrete shall be in a way which will facilitate casting with a minimum of re-handling and without damage to the structure or the concrete. The methods of delivery and handling for each site shall be approved by the Engineer. The Engineer may suspend the mixing and casting of concrete at any site for which he considers the Contractor's delivery equipment inadequate until such a time as the Contractor provides additional approved delivery equipment.

Concrete shall be allowed to be placed only when the Engineer or his representative is present at the site and has previously checked and approved in writing the positioning, fixing and condition of the reinforcement, and the alignment and suitability of the formwork.

Concrete shall be placed so as to avoid segregation of the materials and displacement of the reinforcement. When casting involves dropping the concrete by more than 1.5 metres, it shall be conveyed through sheet metal troughs, chutes or other approved pipes. The chutes, troughs and pipes shall be kept clean and free from coating of hardened concrete by thoroughly washing with water after each operation.

403 Mould Oil

All faces of formwork that will come in contact with wet concrete shall be treated with approved mould oil or other coating to prevent adherence to the concrete. Such coatings shall be insoluble in water, non-staining, nor injurious to the concrete, shall not become flaky and shall not be removable by rain or wash-water. Liquids that retard the setting of cement shall only be applied to the shuttering when approved. Mould oils and similar coatings shall be kept free from contact with the reinforcement.

404 Holes for Pipes and Cast-in Items

The Contractor shall be responsible for the setting out and fixing of all pipes and holes, pockets and chases for pipes. Sleeves are to be accurately set out and cast in and cutting away in completed concrete work is to be minimized.

Details of all holes etc. required in a structural work for services must be submitted to the

Engineer who will assess the necessity for extra trimming reinforcement.

No opening, holes, chases, etc, are to be formed in the concrete without the approval of the Engineer and details of fixtures or fixings to be cast in must be approved.

405 Pipes through Water Retaining Walls

Pipes passing through water retaining walls and floors shall, wherever possible, be built into the structure in-situ. Shuttering shall be formed closely to the outside of the pipe, and concrete shall be placed and compacted thoroughly round the pipe.

Pipes, bolts and other steel items cast into the concrete in water retaining structures must not in any way be in contact with the steel reinforcement.

When not possible to build in place, pipes shall pass through preformed holes. Holes shall be formed with formwork which shall be stripped cleanly and without shock to the concrete. As soon as the shuttering is tripped, the hole shall be thoroughly wire brushed to expose the aggregate. The hole shall be as neat as possible to allow the pipe to be passed through the wall, while the corners shall be chamfered or rounded.

The pipe shall be set and the hole filled up as soon as possible. Immediately before filling, the hole shall be continuously soaked so as to saturate the concrete, and the surface coated with a stiff mix of 1:1 sand grout. Shutters shall be fixed true to the faces of the wall, and stiff mix of concrete packed in until the hold is completely filled, particulate care to be taken to ensure that the spaces beneath the invert of the pipes and beneath the slopping soffit of the hole are completely filled. Shuttering shall be stripped as soon as possible and filling rubbed smooth. The filling and the surrounding concrete shall be kept wet for 7 days after filling.

406 Removal of Formwork

All formwork shall be left in position until the concrete has attained sufficient strength to be self-supporting. The Contractor shall be responsible for the safe removal of the formwork without shock or vibration - which would damage the concrete.

Any work showing sign of damage through premature removal of formwork or through premature loading shall be entirely reconstructed at the contractor's expense. The Engineer may delay the time of removal of formwork if necessary. Subject to the above, the minimum

500 PIPE WORKS

501 Sluice Valves

Sluice valves shall comply with BS 5163, PN 10. They shall be flanged in accordance with BS 4772, PN 10.

502 Precast Concrete Covers

Concrete covers to be manufactured according to the detailed drawings.

503 Handling and Storage of Materials

The method of transportation, handling and storing of pipes and fittings shall be in accordance with the manufacturer's recommendations.

Pipes, valves, specials and other materials shall be handled, moved, lifted or lowered with the least possible impact. Handling equipment shall be of approved type. In slinging pipes, only flat slings shall be used and the use of chain slings, hooks or other devices working on scissors or grab principles shall not be permitted. Pipes shall be slung from two or more points as the Engineer may direct and the slinging, lifting and lowering shall be in the hands of a competent and experienced man. Care shall be taken to keep pipes and fittings clean and free from soil, mud, dirty water, solvents chemicals etc.

Subject to the requirements of inspection before acceptance, protective bolsters, caps or discs on the ends of flanges of pipes or specials shall not be removed until the pipes or

specials are about to be lowered into the trench. Every precaution shall be taken to prevent damage to internal linings of external coatings.

Pipes in storage shall be supported clear of the ground on approved supports and adequately braced to prevent rolling. They shall not be stacked more than four tiers high without the approval of the Engineer.

Materials of different classification shall be stored separately.

All pipes and associated material shall at all times be protected from sun and weather to the satisfaction of the Engineer.

No valves shall be lifted by the spindle.

No valves, fittings or specials shall be stacked more than one tier high without the permission of the Engineer, and they shall not be stored in a dirty place or condition and shall not be allowed to become embedded in earth, sand, stone, aggregate, water, fuel, or any other deleterious matter.

Valves and their ancillary equipment shall be protected before and after erection against collapse of earthworks, falls of materials, concrete and cement droppings, wood and other matter.

Shortly before the laying or fixing any valve, pipe or fitting the contractor shall in the presence of the Engineer or his representative carefully examine each valve, pipe and fittings during loading, unloading, handling, storage and transportation. All damage and all defects revealed by this examination shall be repaired and remedied by the contractor.

504 Transport of Pipes

The full length of the pipe shaft shall rest on the loading area of the lorry. Overhanging of pipes, to prevent sagging and deformation shall be avoided. Rough handling and dragging of pipes and fittings shall be avoided.

505 Storage of Pipes

PVC pipes shall not be stored on each other to a height exceeding 1.5m. Pipes shall be staggered to prevent the sockets to rest on the shaft of the pipes. The first tier shall be placed on a well drained layer of sand. All pipes and fittings shall be protected from sunlight by use of tarpaulins. Grass cover will not be accepted.

506 Pipe Trench Width

The minimum trench width shall be according to the detailed drawings, corresponding to the specified depth.

507 Pipe Laying and Jointing

507.1 General

All laying and jointing of pipes except jointing of PVC pipes shall be in conformity with CP 301 and CP 2010.

The bottom of the trench or surface of the bed shall be finished to a smooth even surface at the correct level to permit the barrel of the pipe to rest on the surface throughout its whole length between joint and sling holes. If considered necessary by the Engineer, fine screened material shall be placed and consolidated in the trench bottom to provide such a bed. The bottom of the trench and pipe bed shall be inspected by the Engineer, and only when passed as satisfactory shall pipe laying commence.

Each pipe shall be laid accurately to line, level and gradient so that, except where otherwise directed, the finished pipe line shall be in a straight line both in horizontal and vertical plans.

The levels and gradients shown on the drawing shall be rigidly adhered to unless otherwise ordered by the Engineer.

Where lines of pipe are to be constructed, the contractor shall provide and fix, at such points as may be directed, properly painted and securely positioned sight rails, the levels and positions of which shall be examined and checked by the Engineer before the rails are used and as often thereafter as may be necessary.

There shall at no time be less than three sight rails in position on each length of pipeline under construction to any one gradient, and the sight rails shall be situated vertically above the line of pipes or immediately adjacent thereto.

Pipes shall be lowered singly into the trench, brought to the correct alignment and inclination bedded throughout their length, and properly jointed strictly in accordance with the manufacturer's instructions. Unless otherwise approved by the Engineer, pipes shall be laid in an upstream direction and the socket of the pipes shall face upstream and every pipe shall be concentric with the previous.

Notwithstanding any flexibility provided in pipe joints, pipes must be securely positioned to prevent movement during and after the making of a joint. On screw and socket joints threads shall be coated with an approved tape to ensure water tightness.

Long radius curves in the pipeline shall be negotiated by deflections taken up in the joints or pipes of one or more lengths of pipes. The deflection at each of the various types of joint of pipes used in the works shall not exceed the manufacturer's specifications.

The contractor shall take care that all pipes and couplings are clean and free of foreign matter before subsequent sections are jointed.

The contractor shall obtain from the manufacturer or other approved supplier the necessary tackle required for the proper jointing of the pipes.

The contractor shall make himself and his employees acquainted with and comply with the instructions issued by the manufacturers of the various types of proprietary joints and couplings for incorporation in the works. The contractor shall be responsible for obtaining copies of such instructions.

Pipes shall not be cut without the permission of the Engineer. The cut shall be made with an approved mechanical pipe cutter and the edges of the cut shall be clean, true and square. Threading of steel pipes shall be done with an approved device.

Subject to the permission of the Engineer, pipes shall be covered over with approved fill material upon successful completion of laying and joining. Joints shall be left exposed until completion of the pressure test.

Adequate precautions shall be taken by way of back-filling or other means to anchor each pipe securely to prevent flotation of the pipeline in the event of the trench being flooded

507.2 PVC Pipes

The pipes shall be laid on smooth soil and must never be surrounded with concrete. The soil must not contain hard lumps.

In road reserves, all PVC pipes should be protected by concrete slabs, when the distance from road surface to top of pipe is less than 1200mm.

507.3 Steel Pipes

Steel pipes and fittings shall conform to the relevant BS or KBS standards.

508 Concrete Manholes and Valve Chambers

Manholes shall be constructed to the specified standard and size at designated points.

509 Testing

A water test shall be applied for all the works completed to ascertain its functionality before it is approved.

Precautions should be taken by strutting or otherwise to prevent any movement of the pipeline during the test.

510 Backfilling Trenches

All trenches should be refilled to the required level and ensure that no pipes and or any other fittings are exposed.

511 Manholes

Manholes shall be constructed along pipe lines where control valves chambers and other fittings have been designed to be installed.

The manholes shall be constructed in accordance with drawings of typical and special manholes. Manholes of pre-cast concrete rings to be carried out as per BS 556.

512 Chain Link Fencing

The chain link fencing shall be supplied in rolls of 2130mm (7feet) width and shall be with 65mm mesh of 12 1/2 gauges, fitted to 4 rows of line wires with binding wire at 130mm centres. The cranked top of the posts shall be fitted with 3 strands of 12 1/2 gauge barbed wire with four point barbs at 150mm centres. All members of the fencing shall be hot dip galvanized.

513 Gates

If not otherwise stated, gates shall be 4metres wide double leaf gates, made from 40mm galvanized steel tube frame (medium class) with 8 gauge galvanized weld mesh to the frame. Bracing, hinges, tower bolts and locking arrangement shall be as shown on the drawing or of other approved type. The top of the gates shall be fitted with 3 strands of 12 1/2 gauge barbed wire.

600 DAY WORKS

601 Scope

This specification covers instructions that may be issued by the Engineer as additional or substituted work to be executed on a day work basis by the Contractor or by his sub-contractors.

602 Standards

All codes and standards mean the latest. Where not specified otherwise the installation shall generally follow this Technical Specifications

603 Measurement and Payments

Measurement and payment for all day works items shall be in accordance with the items listed in the Bill of Quantities, the preamble to Bill of quantities and the specifications above and cover the payment of plant, labour and materials for work executed in accordance with the Engineer's instructions.

700 ENVIRONMENTAL MANAGEMENT PLAN

The Contractor shall implement the Environmental Management Plan (EMP) measures (Matrix Tables to be developed both for construction and maintenance and use phases), enhancement measures as directed by the Engineer. He shall submit the report on compliance with the Environmental Mitigation measures periodically to the Engineer. The Engineer will review the compliance submitted by the Contractor.

Disputes Review Expert’s Declaration of Acceptance

WHEREAS

- (a) A construction Contract (the Contract) for the **REHABILITATION OF KILAGUNI AIRSTRIP IN TSAVO WEST NATIONAL PARK; TENDER No.: KWS/OT/R&F/39/2018-2019** project has been signed on[fill in date] between the KENYA WILDLIFE SERVICE (the Employer) and[name of Contractor] (the Contractor);
- (b) Clause 67 of the Conditions of Particular Application of the construction Contract provides for the selection of a Disputes Review Expert (DRE);
- (c) The undersigned has been selected to serve as the DRE;

NOW THEREFORE, the undersigned DRE hereby declares as follows:

- 1. I accept the selection as a DRE and agree to serve in this capacity and to be bound by the provisions of Clause 67 of the Conditions of Contract and the Disputes Review Expert’s Rules and Procedures attached to these Conditions of Contract.
- 2. With respect to paragraph 1 of said Disputes Review Expert’s Rules and Procedures, I declare that I have:
 - (a) No financial interest of the kind referred to in Subparagraph (a);
 - (b) Had no previous employment nor financial ties of the kind referred to in Subparagraph (b); and
 - (c) Made to both parties any disclosures that may be required by Subparagraphs (b) and (c).

DISPUTES REVIEW EXPERT

Signature:

.....

Name:(print name of
DRE)

Date:

SECTION VIII: TENDER DRAWINGS (VOL. II)

SECTION IX: BILLS OF QUANTITIES

PREAMBLE TO BILL OF QUANTITIES

1. The Bill of Quantities shall form part of the Contract documents and is to be read in conjunction with Instructions to Bid, Conditions of Contract, Specifications and Drawings.
2. The brief description of the items in the Bill of Quantities is purely for the purpose of identification, and in no way modifies or supersedes the detailed description given in the Conditions of Contract and specification for the full direction and description of work and materials.
3. The Quantities set forth in the Bill of Quantities are estimated and provisional representing substantially the work to be carried out and given to provide a common basis for bidding and comparing the bids. There is no guarantee to the Contractor that he will be required to carry out all the quantities of work indicated under any one particular item or group of items in the Bill of Quantities. The basis of payment shall be the Contractor's rates and the quantities of work actually done in fulfillment of his obligation under the Contract.
4. The prices and rates inserted in the Bill of Quantities will be used for valuation of the work executed and the Engineer will measure the whole of the works executed in accordance with this Contract. A price or rate shall be entered in link against every item in the Bill of Quantities with the exception of items which already have provisional sums affixed thereto. The bidders are reminded that no "nil" or "included" rates or "lump-sum" discounts will be accepted. The rates for various items should include discount if any. Bidders who fail to comply with this will be disqualified.
5. Provisional Sums (including Day works) in the Bill of Quantities shall be expended in whole or part at the discretion of the Engineer in accordance with Subclause 52.4 and Clause 58 of the Conditions of Contract.
6. The price and rates entered in the Bill of Quantities shall, except insofar as it is otherwise provided in the Contract, include all constructional plants to be used, labour, insurance, supervision, compliance, testing, materials, erection, maintenance of works overhead and profit, taxes and duties together with the general risks, liabilities and obligations set out or implied in the Contract, transport, electricity and telephone, water, use and replenishment of all consumables, including those required under the Contract by the Engineer and his staff.

7. Errors will be corrected by the Employer for any arithmetic error in computation or summation as stipulated under Clause 28 of the Instructions to Bidders.
8. The Bill of Quantities, unless otherwise expressly stated therein, shall be deemed to have been prepared in accordance with the principle of the latest edition of the Civil Engineering Standard Method of Measurement (CESMM)
9. "Authorised" "Directed" or "Approved" shall mean the authority, direction or approval of the Engineer.
10. Unless otherwise stated, all measurement shall be net on the finished work carried out in accordance with the details shown on the drawings or instructed, with no allowance for extra cuts or fills, waste or additional thickness necessary to obtain the minimum finished thickness or dimensions required in this Contract. Any work performed in excess of the requirements of the plans and specifications will not be paid for, unless ordered in writing by the Engineer.
11. Hard/rock materials in this Contract, shall be defined as the material which, in the opinion of the Engineer, require blasting, or the use of metal wedges and sledge hammers, or the use of compressed air drilling for their removal, and which cannot be extracted by ripping with a dozer tractor of at least 150 brake horse power (112 kilowatt) with a single rear-mounted hydraulic ripper Boulders of more than 0.2 m³ occurring in soft materials shall be classified as hard material
12. Soft materials shall be all material other than hard material as defined under Item (11) above.

The units of measurement and abbreviations tabulated below are used herein:

Unit	Abbreviation
Number	No
Millimetre	mm
Square millimetre	mm ² / sq mm
Metre	m
Square metre	m ² / sq m
Cubic metre	m ³ / cu m
Hectare	ha
Kilogramme	kg
Lump sum	LS
Prime Cost	PC
Tonne	Tonne
Metric ton (1000 kg)	t / tonne
Degrees centigrade	°C
Hour	h / Hr
Week	wk
Month	nth
Horsepower	HP

Kilowatt

KW

TENDER NO KWS/OT/R&F/39/2018-2019					
REHABILITATION OF KILAGUNI AIRSTRIP					
BILL NO. 1-GENERAL ITEMS					
Item	Description of Work Item	Unit	Quantity	Rate	Amount (Kshs)
01-50-013	Allow for provision of security for contractor's staff during construction	KS	1	120,000.00	120,000.00
01-50-014	Extra over item 01-50-013 for contractors overheads and profits	%	100,000.00		
01-54-007	Allow a prime cost sum for Environmental Mitigation	PC SUM	1	200,000.00	200,000.00
01-54-008	Allow a prime cost sum for Environmental Mitigation	%	200,000.00		
01-80-010	Allow a prime cost of sum for material testing as directed by the Engineer	PC SUM	1	150,000.00	150,000.00
01-80-011	Extra over item 01-80-010 for contractors overheads and profits	%	150,000.00		
01-80-016	Provide and erect publicity signs as directed by the Engineer	NO.	1		
01-80-017	Provide fuel and maintain with driver, a serviceable, 4WD double cabin for exclusive use by the Engineer inclusive of the first 4,000km per vehicle month in accordance with special specification.	V/ Months	6		
01-80-018	Extra over 01-80-017 for mileage over 4,000km	Km	1,800.00		
01-80-026	Allow a prime cost sum for the RE's miscellaneous account.	PC Sum	1	150,000.00	150,000.00
01-80-027	Extra Over 01-80-026 for profits and overheads	%	150,000.00		
01-80-030	Allow a prime cost for attendance to the RE,s supervisory staff including overtime	PC SUM	1	570,000.00	570,000.00
01-80-031	Include percentage of PC sum in item 01-80-030 for contractors overhead and profit	%	570,000.00		
01-80-034	Allow a prime cost sum for HIV/AIDS awareness on site	PC SUM	1	50,000.00	50,000.00
01-80-035	Include percentage of PC sum in item 01-80-034 for contractors	%	50,000.00		

<i>Tender Document for Procurement of Road Maintenance Works</i>			<i>Tendering Procedures</i>		
	overhead and profit				
01-80-057	Provide and maintain Engineer's Survey equipment as listed in the appendix to this Item	KS	1	200,000.00	200,000.00
Total Carried Forward to Summary page					

<i>Tender Document for Procurement of Road Maintenance Works</i>		<i>Tendering Procedures</i>
	Total Carried Forward to Summary page	

<i>Tender Document</i>	<i>for Procurement of Road Maintenance Works</i>	<i>Tendering Procedures</i>
Total Carried Forward to Summary Page		

<i>Tender Document</i>	<i>for Procurement of Road Maintenance Works</i>			<i>Tendering Procedures</i>
	Total Carried Forward to Summary Page			

<i>Tender Document for Procurement of Road Maintenance Works</i>					<i>Tendering Procedures</i>
	Total Carried Forward to Summary Page				

<i>Tender Document for Procurement of Road Maintenance Works</i>					<i>Tendering Procedures</i>
	Total Carried Forward to Summary Page				

TENDER NO KWS/OT/R&F/39/2018-2019					
REHABILITATION OF KILAGUNI AIRSTRIP					
BILL NO. 15- BITUMINOUS SURFACE TREATMENT AND SURFACE DRESSING					
Item	Description of Work Item	Unit	Quantity	Rate	Amount (Kshs)
15-92-001	Prepare surface of the Airstrip, provide and Spray MC 30 cut-back bitumen as prime coat to runway, shoulders and parking bays at rate 0.8-1.2 lts/m ² as prime coat	L	29055		
15-92-002	Prepare the surface of the airstrip to receive the binders, provide, heat and spray 80/100 pen grade bitumen for 1st and 2nd seal on runway, on shoulders and parking bays at rate of 0.9-1.2 lts/m ²	L	58500		
15-60-004	1st seal pre-coated chippings class 3 nominal size 10/14mm (spray rate: 110-130 m ² /m ³)	M ³	250		
15-60-002	2nd seal pre-coated chippings class 3 nominal size 3/6mm (spray rate: 70-100 m ² /m ³)	M ³	330		

<i>Tender Document for Procurement of Road Maintenance Works</i>				<i>Tendering Procedures</i>
	Total Carried Forward to Summary Page			

TENDER NO KWS/OT/R&F/39/2018-2019					
REHABILITATION OF KILAGUNI AIRSTRIP					
BILL NO. 20- AIRSTRIP FURNITURE					
Item	Description of Work Item	Unit	Quantity	Rate	Amount (Kshs)
20-50-004	Supply and install concrete Edge marker slabs size 12000x600x150mm at 100m interval on either size of the runway.	NO	28		
20-50-005	Provide and install windsock complete with assembly as directed by the engineer	NO	1		

SUMMARY PAGE OF BILL OF QUANTITIES

REHABILITATION OF KILAGUNI AIRSTRIP		
BILL NO	DESCRIPTION	Amount (Kshs)
1	GENERAL ITEMS	
4	SITE CLEARANCE	
5	EARTHWORKS	
7	EXCAVATION AND FILLING FOR STRUCTURES	
8	CULVERT AND DRAINAGE WORKS	
12	NATURAL GRAVEL SUB BASES AND BASES	
14	CEMENT AND LIME TREATED SUB GRADE, SUB BASE AND BASE	
15	BITUMINOUS SURFACE TREATMENT AND SURFACE DRESSING	
20	MISCELLEANEOS AND BRIDGE WORKS	
A	Sub-Total 1	
B	Add 16%VAT	
C	Sub Total 2(A+B)	
D	Add 10% Contingency (0.1xC)	
	Grand Total Carried Forward to Form of tender (D+C)	

SECTION X: STANDARD FORMS

FORM OF TENDER

(NOTE: The Appendix forms part of the Bid. Bidders are required to fill all the blank spaces provided in this Form of Bid and Appendix)

{Name of Contract & Contract No.}

.....}:

TO: The Director General
Kenya Wildlife Service
P. O. Box 40241-00100,
NAIROBI

Dear Sir/Madam,

1. Having examined the Instructions to Bidders, Conditions of Contract, Specifications, Bills of Quantities, and Drawings for the execution of the above named works we, the undersigned, offer to construct and install such works and remedy any defects therein in conformity with the said Bills of Quantities, Conditions of Contract, Specifications and Drawings for the sum of

(Insert amount in words)

.....

.....

.....

.....

(Insert amount in Figures).....

as specified in the Appendix to Form of Bid or such other sums as may be ascertained in accordance with the said Conditions.

2. We undertake, if our bid is accepted, to commence the works within twenty-eight (28) days of receipt of the Engineer’s Order to Commence, and to complete and deliver the whole of the works comprised in the contract within the time stated in the Appendix to Form of Bid.
3. If our bid is accepted we will, when required, obtain the guarantee of a Bank or other sureties (to be approved by you) to be jointly and severally bound with us in a sum not exceeding 10% of the above named sum for the due performance of the contract under the terms of a Bond to be approved by you.
4. We agree to abide by this bid for the period of one hundred and twenty (120) days from the date fixed for receiving the same and it shall remain binding upon us and may be accepted at any time before the expiration of that period.
5. We understand that you are not bound to accept the lowest or any bid you may receive.
6. On the basis of our previous experience we are fully experienced and competent in the type of work included in this BID and we have adequate financial resources to carry out the works described within the period for completion. We are in a position to fulfil the contract for which we have Bided.

Dated this Day of 20

Signature:.....in the capacity of

.....

Duly authorized to sign bids on behalf of (Name of Bidder)

.....

.....

.....

(Address of Bidder):.....

(Name of Witness):.....

(Signature of Witness):

(Address of Witness):

(Occupation of Witness):

.....

APPENDIX TO INSTRUCTION TO TENDER

(This appendix forms part of the bid)

DESCRIPTION	Conditions of Contract Clause	DETAILS
Bid Security		Kshs. 800,000.00
Employer	1.1 (a) (i)	Director General Kenya Wildlife Service P. O. Box 40241-00100 NAIROBI
Engineer	1.1 (a) (ii)	Head Roads and Fleet Management Kenya Wildlife Service P. O. Box 40241-00100 NAIROBI
Engineer's Authority to Issue Variations	2.1(d)(ii)	15% of the Contract Price
Contract Documents	5.1 (a)	The language of the contract is English
	5.1 (b)	The law in force is that of the Republic of Kenya
Amount of Performance Security (Unconditional Bank Guarantee)	10.1	The performance security shall be in the form of an unconditional bank guarantee in the amount of Ten per cent (10%) of the Contract Price
Programme to be submitted	14.1	Not later than 21 (twenty one) days after issuance of Order to Commence
Cash Flow Estimate submitted	14.3	Not later than 21 (twenty one) days after issuance of Order to Commence
Minimum Amount of Third Party Insurance	23.2	0.3% of the Contract Price
Period for commencement, from Engineer's Order to Commence	41.1	Not later than 28 (Twenty Eight) days after Notice of Order to Commence
Time for Completion	43.1	Nine (9) Months for Construction Work
Amount of Liquidated Damages	47.1	0.02% of the Contract Price per day
Limit of Liquidated Damages	47.1	10% (ten per cent) of the Contract Price.
Taking over of Sections or Parts	48.2(a)	Applicable as per the Stipulation of Clause 107 of the Special Specifications.
Defects Liability Period	49.1	Six (6) Months

<i>Tender Document for Procurement of Road Maintenance Works</i>		<i>Tendering Procedures</i>
Advance Payment	60.1	
Minimum Amount of Interim Payment Certificates	60.2	20% of the contract sum
Percentage of Retention Money	60.2	5% (ten per cent) of each Interim Payment Certificates
Limit of Retention Money	60.2	5 (Five) per cent of the Contract Price
Time within which payment to be made after Interim Payment Certificate signed by Engineer	60.4	90 days
Currency of Payment	60.6	Kenya Shillings only
Appointer of Arbitrator	67.3	The Chairman, Chartered Institute of Arbitrators (Kenya)
Notice to Employer and Engineer	68.2	<p>The Employer's address is: DIRECTOR GENERAL KENYA WILDLIFE SERVICES P. O. BOX 40241-00100 NAIROBI, Kenya</p> <p>Tel. +254 020 2609233/4</p> <p>Email: kws@kws.go.ke, Web: www.kws.go.ke</p> <p>The Engineer's address is: HEAD ROADS AND FLEET MANAGEMENT KENYA WILDLIFE SERVICES P. O. BOX 40241-00100 NAIROBI, Kenya</p> <p>Tel. +254 020 2609233/4</p> <p>Email: kws@kws.go.ke, Web: www.kws.go.ke</p>
Price Adjustment	70.1	This contract shall not be subject to Price Adjustment

<i>Tender Document for Procurement of Road Maintenance Works</i>		<i>Tendering Procedures</i>

Signature of Bidder.....

Date

**SECTION XI: SCHEDULE OF SUPPLEMENTARY
INFORMATION**

STANDARD FORMS&SCHEDULES OF SUPPLEMENTARY INFORMATION

STANDARD FORMS 161

3.1 BANK GUARANTEE FOR ADVANCE PAYMENT (UNCONDITIONAL) 162

3.2 FORM OF BANK BID SECURITY 164

3.3 LETTER OF ACCEPTANCE 166

3.4 FORM OF AGREEMENT 167

3.5 PERFORMANCE BANK GUARANTEE (UNCONDITIONAL) 169

3.6 FORM OF LETTER OF NOTIFICATION OF AWARD 170

SCHEDULES OF SUPPLEMENTARY INFORMATION 171

3.7 SCHEDULE 1: CONFIDENTIAL BUSINESS QUESTIONNAIRE 172

3.8 SCHEDULE 2: REGISTRATION, COMPLIANCE AND STATUTORY DOCUMENTS 174

3.9 SCHEDULE 3: FORM OF WRITTEN POWER OF ATTORNEY 175

3.10 SCHEDULE 4: CERTIFICATE OF BIDDER'S PRE-TENDER SITE VISIT 176

3.11 SCHEDULE 5: MAJOR ITEMS OF CONSTRUCTION PLANT AND EQUIPMENT 177

**3.12 SCHEDULE 8: COMPLETED CIVIL WORKS CARRIED OUT BY THE BIDDER IN THE
LAST FIVE YEARS 182**

3.13 SCHEDULE 9: PROJECTS CURRENTLY IN PROGRESS 183

3.14 FINANCIAL STANDING 184

3.15 OTHER SUPPLEMENTARY INFORMATION 185

3.16 DECLARATION FORM 186

STANDARD FORMS

3.1 BANK GUARANTEE FOR ADVANCE PAYMENT (UNCONDITIONAL)

To:
DIRECTOR GENERAL,
KENYA WILDLIFE SERVICE
P.O. Box 40241-00100
NAIROBI

_____ (Date)

Ladies & Gentlemen,

Ref: REHABILITATION OF KILAGUNI AIRSTRIP IN TSAVO WEST NATIONAL PARK; TENDER No.: KWS/OT/R&F/39/2018-2019

In accordance with the provisions of the Conditions of Contract of the above-mentioned Contract, We, _____ [name and Address of Contractor] (hereinafter called “the Contractor”) shall deposit with _____ [name of Employer] a bank guarantee to guarantee his proper and faithful performance under the said Contract in an amount of KShs. _____ [amount of Guarantee in figures] Kenya Shillings _____ [amount of Guarantee in words].

We, _____ [bank or financial institution], as instructed by the Contractor, agree unconditionally and irrevocably to guarantee as primary obligator and not as Surety merely, the payment to _____ [name of Employer] on his first demand without whatsoever right of objection on our part and without his first claim to the Contractor, in the amount not exceeding Kshs _____ [amount of Guarantee in figures] Kenya Shillings _____ [amount of Guarantee in words], such amount to be reduced periodically by the amounts recovered by you from the proceeds of the Contract.

We further agree that no change or addition to or other modification of the terms of the Contract or of the Works to be performed there under or of any of the Contract documents which may be made between _____ [name of Employer] and the Contractor, shall in any way release us from any liability under this guarantee, and we hereby waive notice of any such change, addition or modification.

No drawing may be made by you under this guarantee until we have received notice in writing from you that an advance payment of the amount listed above has been paid to the Contractor pursuant to the Contract.

This guarantee shall remain valid and in full effect from the date of the advance payment under the Contract until _____
(name of Employer) receives full payment of the same amount from the Contract.

Yours faithfully,

Signature and Seal _____

Name of the Bank or financial institution _____

Address _____

Date _____

Witness:

Name: _____

Address: _____

Signature: _____

Date: _____

3.2 FORM OF BANK BID SECURITY

Note: The bidder shall complete only this Form of Bank guarantee. No other Form of Bid Bond or any other forms of security will be accepted. Bidders who fail to comply with this requirement will be disqualified.

WHEREAS [Name of bidder]

.....
.....

(herein after called “the Bidder”) has submitted his bid dated

for the **REHABILITATION OF KILAGUNI AIRSTRIP IN TSAVO WEST NATIONAL PARK; TENDER No.: KWS/OT/R&F/39/2018-2019**

hereinafter called “the bid”

KNOW ALL MEN by these presents that we [Name of Bank]

.....

of [Name of Country]

.....

having our registered offices at

.....

(hereinafter called the Bank) are bound unto the DIRECTOR GENERAL, KENYA WILDLIFE SERVICE (hereinafter called “The Employer”) in the sum of

(in words KShs).....

.....(In figures KShs)
.....

for which payment will be well and truly made to the said Employer the Bank binds itself, its successors and assigns by these presents.

Signed for the said Bank thisday of
.....20.....

THE CONDITIONS of this obligation are:

1. If the bidder withdraws his Bid during the period of bid validity specified by the Bidder on the Bid Form; or
2. If the Bidder refuses to accept the correction of errors in his bid; or
3. If the Bidder having been notified of the acceptance of his bid by the Employer during the period of Bid Validity
 - (i) Fails or refuses to execute the Form of Agreement in accordance with the Instructions to Bidders when required or
 - (ii) Fails or refuses to furnish the Performance Security, in accordance with the Instructions to Bidders.

We undertake to pay to the Employer up to the above amount upon receipt of his first written demand, without the Employer having to substantiate his demand, provided that in his demand the Employer will note that the amount claimed by him is due to him owing to the occurrence of any of the above conditions, specifying the occurred condition or conditions.

This guarantee will remain in force up to and including thirty (30) days after the date of expiration of the bid validity, as stated in the Instructions to Bidders.

At the request of the Employer the Bid validity period may be extended by mutual agreement between the Employer and the Bidder and we undertake to extend the validity of this surety accordingly without you having to inform us of such an extension of the Bid validity period if within this period the Bidder has been notified of the acceptance of his Bid. This Surety shall remain valid up to the time the Contract Agreement has been executed.

AUTHORIZED SIGNATURE OF THE BANK

.....

NAME OF SIGNATORY

..... DATE.....

TITLE OF SIGNATORY

NAME OF THE WITNESS

SIGNATURE OF THE WITNESS DATE
.....

ADDRESS OF THE WITNESS

3.3 LETTER OF ACCEPTANCE

[Letter head paper of the Employer]

_____ [date]

To: _____ [name of
the Contractor]

_____ [address of
the Contractor]

Dear Sir,

This is to notify you that your Bid dated _____ for the
execution of **REHABILITATION OF KILAGUNI AIRSTRIP IN TSAVO WEST
NATIONAL PARK; TENDER No.: KWS/OT/R&F/39/2018-2019** for the
Contract Price of
Kshs. _____ [amount in
figures] Kenya
Shillings _____ (amount in
words) in accordance with the Instructions to Bidders is hereby accepted.

You are hereby instructed to proceed with the execution of the said Works in
accordance with the Contract documents.

Authorized Signature

.....

Name and Title of Signatory

.....

Attachment: Agreement

3.4 FORM OF AGREEMENT

THIS AGREEMENT, made the _____ day of _____ 20_____ between the DIRECTOR GENERAL, KENYA WILDLIFE SERVICE, P. O. BOX 40241-00100, NAIROBI, KENYA (hereinafter called “the Employer”) of the one part AND _____ of [or whose registered office is situated at]

_____ (hereinafter called “the Contractor”) of the other part.

WHEREAS THE Employer is desirous that the Contractor executes **REHABILITATION OF KILAGUNI AIRSTRIP IN TSAVO WEST NATIONAL PARK; TENDER No.: KWS/OT/R&F/39/2018-2019** (hereinafter called “the Works”) located in Tsavo West National Park and the Employer has accepted the bid submitted by the Contractor for the execution and completion of such Works and the remedying of any defects therein for the Contract Price of Kshs.

_____ [Amount in figures],
Kenya Shillings _____ [Amount in words].

NOW THIS AGREEMENT WITNESSETH as follows:

1. In this Agreement, words and expressions shall have the same meanings as are respectively assigned to them in the Conditions of Contract hereinafter referred to.
2. The following documents shall be deemed to form and shall be read and construed as part of this Agreement:
 - (i) Letter of Acceptance
 - (ii) Form of Bid and Appendix to Form of Bid
 - (iii) Conditions of Contract, Part I
 - (iv) Conditions of Contract, Part II
 - (v) Specifications

- (vi) Drawings
- (vii) Priced Bill of Quantities

All aforesaid documents are hereinafter referred to as "The Contract".

3. In consideration of the payment to be made by the Employer to the Contractor, the Contractor hereby covenants with the Employer to execute, complete and maintain the works in conformity in all respects with the provisions of the Contract.
4. The Employer hereby covenants to pay the Contractor in consideration of the execution, completion and maintenance of the works the Contract Price at the times and in the manner prescribed by the Contract.

IN WITNESS WHEREOF the parties hereto have caused their respective common seals to be hereto affixed (or have hereunto set their respective hands and seals) on the day and year first above written.

SIGNED AND DELIVERED

By the said Employer:

(DIRECTOR GENERAL, KENYA WILDLIFE SERVICE)

For and on behalf of the said Employer.

In the presence of:

(Name and Designation of Witness)

.....

(Signature of Witness)

.....

(Address of witness)

By the said Contractor:

In the presence of:

.....
(Name and Designation of Witness)

.....
(Signature of Witness)

.....
(Address of witness)

3.5 PERFORMANCE BANK GUARANTEE (UNCONDITIONAL)

To:
DIRECTOR GENERAL
KENYA WILDLIFE SERVICE
P. O. BOX 40241-00100
NAIROBI

Dear Sir,

WHEREAS _____ (hereinafter called “the Contractor”) has undertaken, in pursuance of Contract No. _____ to execute **REHABILITATION OF KILAGUNI AIRSTRIP IN TSAVO WEST NATIONAL PARK; TENDER No.: KWS/OT/R&F/39/2018-2019** (hereinafter called “the Works”);

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

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

NOW THEREFORE we hereby affirm that we are the Guarantor and responsible to you, on behalf of the Contractor, up to a total of Kshs.

_____ (amount of Guarantee in figures) Kenya
Shillings _____

_____ (amount of Guarantee in words), and we undertake to pay you, upon your first written demand and without cavil or argument, any sum or sums within the limits of Kenya Shillings

_____ (amount of Guarantee in words) as aforesaid without your needing to prove or to show grounds or reasons for your demand for the sum specified therein.

We hereby waive the necessity of your demanding the said debt from the Contractor before presenting us with the demand.

We further agree that no change, addition or other modification of the terms of the Contract or of the Works to be performed there under or of any of the Contract documents which may be made between you and the Contractor shall in any way

3.6 FORM OF LETTER OF NOTIFICATION OF AWARD

(Letter Head of the Employer)

To:
.....
.....

RE: Bid No.....

Tender Name: REHABILITATION OF KILAGUNI AIRSTRIP IN TSAVO WEST NATIONAL PARK; TENDER No.: KWS/OT/R&F/39/2018-2019

This is to notify that the contract (s) stated below under the above mentioned Bid have been awarded to you.

.....
.....
.....

1. Please acknowledge receipt of this letter of notification signifying your acceptance.
2. The contract/contracts shall be signed by the parties within 30 days of the date of this letter but not earlier than 14 days from the date of the letter.
3. You may contact the officer(s) whose particulars appear below on the subject matter of this letter of notification of award.

(FULL PARTICULARS):

HEAD ROADS AND FLEET MANAGEMENT
KENYA WILDLIFE SERVICES
P. O. BOX 40241-00100
NAIROBI, Kenya

Tel. +254 020 2609233/4

Email: kws@kws.go.ke, Web: www.kws.go.ke

.....
SIGNED DIRECTOR GENERAL

SCHEDULES OF SUPPLEMENTARY INFORMATION

3.7 SCHEDULE 1: CONFIDENTIAL BUSINESS QUESTIONNAIRE

This Confidential Business Questionnaire of the Government of Kenya shall be completed by the Tenderer or by each member of a Joint venture if the Tenderer is a Joint-venture.

You are requested to give the particulars indicated in Part 1 and either Part 2 (a), 2(b) or 2(c) whichever applies to your type of business. You are also advised that it is a serious offence to give false information on this Form.

Part 1 - General:

Business Name:

Location of Business Premises

Plot No.Street/Road.....

Postal Address.....Tel No.....

Email Address.....

Nature of Business.....

Current Trade License No.Expiring Date

Maximum value of Business which you can handle at any one time: Kshs.

Name of your bankers:.....

Branch.....

Part 2(a) - Sole Proprietor:

Name in full.....

.....

Age.....

.....

Nationality *.....Country of Origin.....

.....

***Attach Copy of Citizenship (Compulsory).**

Part 2(b) - Partnership:

Give details of partners as follows:

Name	Nationality	Citizenship Details*	Shares
1.	1.....		1.....
2.....	2.....	2.....	2.....
...

Note: Attach proof of citizenship (Compulsory) and Certified Copy of Form CR12 (Compulsory)

Part 2(c) – Registered Company

Give details of partners as follows:

Private or
Public.....

State the Nominal and Issued Capital of the Company

Nominal Shares (Kshs) Issued Shares (Kshs)
.....

Give details of all directors as follows:

Name	Nationality	Citizenship Details*	Shares

Note: Attach proof of citizenship (Compulsory) and Certified Copy of Form CR12 (Compulsory).

Part 2 (d) Interest in the Firm:

Are there any person / persons in Kenya Wildlife Service who has interest in this firm? Mark in the box alongside as necessary.

Yes	No

If YES please specify

Date:..... Signature of Tenderer.....
.....

3.8 SCHEDULE 2: REGISTRATION, COMPLIANCE AND STATUTORY DOCUMENTS

Please attach the following documents and any other requested in this schedule after this page

- i) Certified copy of Certificate of Incorporation
- ii) Attach copy of the current Form CR12 certified by the Registrar of Companies
- iii) Attach valid proof of citizenship of the Firm's Shareholders
- iv) Certified copy of valid i-Tax generated KRA Tax Compliance Certificate
- v) Certified copy of proof of registration with the National Construction Authority (NCA) in Category 5 and above as a roads contractor.

3.9 SCHEDULE 3: FORM OF WRITTEN POWER OF ATTORNEY

The Tenderer shall state here below the name(s) and address of his representative(s) who is/are authorized to receive on his behalf correspondence in connection with the Tender.

.....
.....

(Name of Tenderer's Representative in block letters)

.....

.....(Address of
Tenderer's Representative)

..... (Signature of

Tenderer's Representative)

Alternate:

.....

(Name of Tenderer's Representative in block letters)

.....

..... (Address of Tenderer's Representative)

.....

..... (Signature of Tenderer's Representative)

*To be filled by all Tenderers.

** Affix company seal.

3.10 SCHEDULE 4: CERTIFICATE OF BIDDER’S PRE-TENDER SITE VISIT

1. This is to certify that [Name/s]
.....

Being the authorized representative/Agent of [Name of Tenderer]
.....
.....

participated in the organised inspection pre-tender site inspection of the works for the **REHABILITATION OF KILAGUNI AIRSTRIP IN TSAVO WEST NATIONAL PARK; TENDER No.: KWS/OT/R&F/39/2018-2019**

held on.....Day of.....20.....
.....

- 2. Having studied the tender document, I carefully examined the site to make myself familiar with the local conditions likely to influence the works and cost thereof.
- 3. I further certify that I am satisfied with the description of the works and I understand perfectly the scope of the works as specified and implied in the performance of the contract

Signed and Stamped.....
.....
(Tenderer’s Representative)
.....
.....

(Name and Designation of Procurement Entity’s Representative)

NOTE: This form is to be completed at the time of the organized site visit by only authorised representative of the Bidder. Each Bidder representative shall

Identity himself/herself by way of letter of introduction at the date of the site visit.

3.11 SCHEDULE 5: MAJOR ITEMS OF CONSTRUCTION PLANT AND EQUIPMENT

The Tenderer must indicate the mandatory minimum number plant and equipment required by the Employer for the execution of the project that the tenderer must make available for the Contract.

Only reliable plant in good working order, and suitable for the work should be considered by the company to be necessary for undertaking the project together with proof ownership

Item No.	Equipment Details	Minimum Number Required for the Contract	No of Equipment Owned by the	No. of equipment to be hired/pur	No. of equipment to be made available	Date of Arrival on Project (Days
A	Concrete Equipment					
	(i) Mobile concrete & Concrete vibrators	1				
B	Transport (Tippers, dumpers, water tankers)					
	(i) 6 X 4 tippers payload	4				
	(ii) Water tankers (18,000	2				
C	Earth – Moving Equipment					
	(i) Wheeled loaders	1				
	(ii) Motor graders (93	1				
	(iii) D6 dozer	1				
D	Excavators					
	(i) Hydraulic crawler mounted (7 – 10 tonnes) – 0.25 – 0.4 m3 SAE	1				
E	Rollers					
	(i) Self-propelled single drum vibrating (various	1				
	(ii) Pneumatic Roller	1				
F	Bitumen Machines					
	(i) Bitumen Distributor	1				
	(ii) Chipping	1				

The tenderer should attached proof of ownership or authorized letter of hire. *Bidders with proof of ownership of own equipment's will be awarded full marks, Leasing agreement will be awarded 75 % of full marks whereas proof of hiring will be awarded 50% of the full marks*

Any tenderer that submits fake logbook(s)/lease agreement(s) shall have their names forwarded to Public Procurement Oversight Authority (PPOA) for

Debarment/Blacklisting.

I certify that the above information is correct.

Signature of Tenderer:..... Date:
.....

Name of Signatory:
.....

SCHEDULE 6: KEY PERSONNEL***i. Key Personnel proposed by Tenderer***

The Tenderer shall list in this schedule the in-house professional and technical personnel he will employ, list of their current workload together with their qualifications, experience, position held and nationality.

Name of Key	Designation		Required
A	Site Agent	Qualification	BSc in Civil Engineering/Equivalent
		General Experience	At least 5 yrs
		CV	Provide CV current to the Month of Tender
		Qualification Certificate	Certified copy of Qualification Certificate
		Availability	Specify
B	Site Engineer	Qualification	BSc in Civil Engineering/Equivalent
		General Experience	At least 3 yrs
		CV	Provide CV current to the Month of Tender
		Qualification Certificate	Certified copy of Qualification Certificate
		Availability	Specify
C	Foreman	Qualification	Dip in Civil Engineering or Equivalent
		General Experience	At least 5 yrs
		CV	Provide CV current to the Month of Tender
		Qualification Certificate	Certified copy of Qualification Certificate
		Availability	Specify
D	Surveyor	Qualification	Dip in Land Survey or Equivalent
		General Experience	At least 5 yrs
		CV	Provide CV current to the Month of Tender
		Qualification Certificate	Certified copy of Qualification Certificate
		Availability	Specify

ii. Other Site Personnel

The Tenderer shall list in this schedule the qualified operators and skilled labours he will from the Contractor's site office to direct and execute the work together with their qualifications, experience, position held, salary scale and condition of employment.

(a). Skilled Labour

Name of staff	Designation		Required	Actual
	Grader Operator	General Experience	At least 3 yrs	
		Copy of Certificate	Certified copy of Certificate	
	Roller Operator	General Experience	At least 3 yrs	
		Copy of Certificate	Certified copy of Certificate	
	Wheel loader/ excavator	General Experience	At least 3 yrs	
		Copy of Certificate	Certified copy of Certificate	

(b). Semi-Skilled Labour

Name of Staff	Designation		Required	Actual
	Mason	General Experience	At least 3 yrs	
		Copy of Certificate	Certified copy of Certificate	
	Still fixer	General Experience	At least 3 yrs	
		Copy of Certificate	Certified copy of Certificate	
	Carpenter	General Experience	At least 3 yrs	
		Copy of Certificate	Certified copy of Certificate	

I certify that the above information is correct.

Signature of Tenderer:Date:

.....

The CV's for each of the proposed key personnel are presented in the format indicated below.

Format of CV of Proposed Personnel (use the same format for all other required staff)

Proposed Position		
Personnel information	Name of Personnel	Date of birth
	Professional qualifications	
	Years of Experience	Years with present employer
Present employment	Present Employer's Name:	
	Job Title	
	Name of Contact person (Supervisor)	Telephone No E-mail
From	To	(Summarize professional experience, in reverse chronological order. Indicate particular technical and managerial experience relevant to the Company / Project / Position / Role in project

Signature of Proposed Staff.....Date:
.....

Note: Use the above template in submitting the CVs and attach Certified Copies of Qualification Certificates

SCHEDULE 7: LOCAL LABOUR BASIC RATES

The rates inserted in this schedule will be those used in determining changes in cost of local labour market.

LABOUR CATEGORY	MONTH/SHIFT/HOUR	UNIT	RATE (KShs)
Skilled Labour			
1.			
2.			
3.			
Semi-Skilled Labour			
1.			
2.			
3.			
Unskilled Labour			

NOTE: Categories to be generally in accordance with those used by the Kenya Building Construction Engineering and Allied Trade Workers Union and Ministry of labour

I certify that the above information is correct.

Signature of tenderer:

Date:.....

3.12 SCHEDULE 8: COMPLETED CIVIL WORKS CARRIED OUT BY THE BIDDER IN THE LAST FIVE YEARS

DESCRIPTION OF WORKS AND CLIENT	TOTAL VALUE OF WORKS (KSHS)*	CONTRACT PERIOD (YEARS)	YEAR COMPLETED
A. Non-completed Works			
B. Completed Works			
C. Specific construction Experience			

I certify that the above Civil Works were successfully carried out and completed by ourselves.

.....
(Signature)

.....
(Date)

*** Attach valid completion certificates/Taking over certificates for the above works. Note that the procuring entity may contact the client issuing the above certificates to confirm their authenticity**

3.13 SCHEDULE 9: PROJECTS CURRENTLY IN PROGRESS

DESCRIPTION OF WORK AND CLIENT	CONTRACT PERIOD	DATE OF COMMENCEMENT	DATE OF COMPLETION	TOTAL VALUE OF WORKS (KSHS.)	PERCENTAGE COMPLETED TO DATE

I certify that the above Civil Works are being carried out by ourselves and that the above information is correct.

.....
(Signature)

.....
(Date)

3.14 FINANCIAL STANDING

- 1 Submit copies of audited profit and loss statements and balance sheet for the last five calendar years and estimated projection for the next two years with certified English translation where appropriate.
- 2 Give turnover figures for each of the last three (3) financial years. Quote in millions and decimal thereof.

	Year	Year	Year
	KShs.	KShs.	KShs.
Road works			
Other civil Engineering works			
Other (specify)			
Total			

SUMMARY OF ASSETS AND LIABILITIES OF THE AUDITED FINANCIAL STATEMENTS OF THE LAST THREE (3) FINANCIAL YEARS.

	Year	Year	Year
	KShs.	KShs.	KShs.
1. Total Assets			
2. Current Assets			
3. Bank Credit Line Value			
4. Total Liabilities			
5. Current Liabilities			
6. Net Worth (1-4)			
7. Working capital (2+3-4)			

(a) Name/Address of Commercial Bank providing credit line

.....

(b) Total amount of credit line KShs.....

Attach certified copies of financial bank statements of the last three (3) months.

Attach a certified copy of Undertaking of the Bank providing the credit.

3.15 OTHER SUPPLEMENTARY INFORMATION

1. Financial reports for the last five years, balance sheets, profit and loss statements, auditors' reports etc. List them below and attach copies.

.....

2. Evidence of access to financial resources to meet the qualification requirements. Cash in hand, lines of credit etc. List below and attach copies of supporting documents

.....

3. Name, address, telephone, telex, fax numbers of the Bidder's Bankers who may provide reference if contacted by the Employer.

.....

4. Information on current litigation in which the Bidder is involved.

OTHER PARTY (IES)	CAUSE OF DISPUTE	AMOUNT INVOLVED (KSHS)

<i>Tender Document for Procurement of Road Maintenance Works</i>	<i>Tendering Procedures</i>

I certify that the above information is correct.

.....
(Signature)

.....
(Date)

3.16 DECLARATION FORM

Date:

To:

DIRECTOR GENERAL
KENYA WILDLIFE SERVICE
P. O. BOX 40241-00100
NAIROBI

The Bidder (name and address)

.....
.....
.....
.....

..... declares the following:

- (a) Has not been debarred from participating in public procurement.
- (b) Has not been involved in and will not be involved in corrupt and fraudulent practices regarding public procurement.

.....
(Signature)

.....
(Date)

Official Stamp:.....

(To be signed by authorized representative and officially stamped)