

THE REPUBLIC OF KENYA  
NATIONAL IRRIGATION BOARD

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626.8  
(676.2)

# **BURA IRRIGATION SETTLEMENT PROJECT Bura West Phase I**

## **Contract Nr15/B Supply of Major Plant**

INTRODUCTION  
INSTRUCTIONS FOR TENDERING  
FORM OF CONTRACT AGREEMENT  
CONDITIONS OF CONTRACT  
SPECIFICATION

Project Consultant

**SIR M MACDONALD & PARTNERS LIMITED**  
Demeter House, Cambridge CB1 2RS, United Kingdom

Sub Consultant

**HUNTING TECHNICAL SERVICES LIMITED**  
Elstree Way, Borehamwood, Herts WD6 1SB, United Kingdom

JULY 1982

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# BURA IRRIGATION SETTLEMENT PROJECT

Bura West Phase 1

Contract No 15/B

## SUPPLY OF MAJOR PLANT

### INTRODUCTION

Tenders are invited for the supply to the National Irrigation Board of the Lots of Goods listed below:-

| Lot No | Item Description      | Quantity |
|--------|-----------------------|----------|
| 15/B/1 | Drag Line             | 1        |
| 15/B/2 | Hydraulic Excavator   | 3        |
| 15/B/3 | wheeled Loader        | 1        |
| 15/B/4 | Bulldozer             | 1        |
| 15/B/5 | Motor Grader          | 2        |
| 15/B/6 | Smooth wheeled Roller | 1        |
| 15/B/7 | Back Loader           | 1        |

### INTRODUCTION

# BURA IRRIGATION SETTLEMENT PROJECT

Bura West Phase 1

Contract Nr 15/B

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| 15/B/1 | Drag Line             | 1        |
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| 15/B/3 | Wheeled Loader        | 1        |
| 15/B/4 | Bulldozer             | 1        |
| 15/B/5 | Motor Grader          | 2        |
| 15/B/6 | Smooth Wheeled Roller | 1        |
| 15/B/7 | Low Loader            | 1        |

## INSTRUCTIONS FOR TENDERING

Definitions of some of the terms used in these instructions, e.g. Site, will be found in Clause 1 of the Conditions of Contract.

### Tender Dossier

A The tender dossier, namely the documents issued to prospective tenderers, comprises two copies of this bound document which includes:-

- introduction
- Instructions for Tendering
- Form of Contract Agreement
- Conditions of Contract
- Specification

### Part Tenders

B Tenders are invited for one or more of the Lots in the Contract but tenders for part of a Lot are not invited.

## INSTRUCTIONS FOR TENDERING

### Summary of Documents to be Submitted in Tender

C The Tender Documents to be submitted shall include:-

- (1) one signed and dated copy of this bound document
- (2) the tender deposit
- (3) the original and two copies of each of the following:
  - (a) a separate proforma invoice for delivery of the major plant to Site
  - (b) separate priced lists for delivery to Site of "fast moving" and "slow moving" spare parts and special tools
  - (c) a separate proforma invoice for reception, assembly, and commissioning of major plant at Site stating time required from delivery of each component
  - (d) a separate proforma invoice for training (Lots Nr 15/B/1, 2, 3, 4 and 5 only).Proforma invoices for delivery of Goods shall show separately itemised lists of the major plant, each item separately priced, the several prices for freight and insurance, the time for delivery to Site, and the amounts required in foreign and Kenyan currencies.
- (4) proposed conditions of sale subject to those in this bound document
- (5) details of the Defects Liability Period

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  - (d) a separate proforma invoice for training (Lots Nr 15/B/1, 2, 3, 4 and 5 only).

Proforma invoices for delivery of Goods shall show separately itemised lists of the major plant, each item separately priced, the several prices for freight and insurance, the time for delivery to Site, and the amounts required in foreign and Kenyan currencies.

- (4) proposed conditions of sale subject to those in this bound document
- (5) details of the Defects Liability Period

- Lot Kenya Shillings
- (6) references describing financial and technical capability
  - (7) certificate from manufacturer empowering the Tenderer, if he is other than the manufacturer, to submit tenders and negotiate contracts using his goods
  - (8) the name, address, and details of facilities offered by the Tenderer in Kenya especially in respect of post-contract services
  - (9) full specification of the Goods to be supplied including descriptive literature and drawings and any specific reports or information called for in the Specification
  - (10) the written undertaking of the proposed guarantor to provide the Performance Guarantee in the event of the Tenderer being awarded the Contract
  - (11) shipping specification (where applicable).

All documents shall be in English or accompanied by adequate English translations. Any page on which prices have been entered by the Tenderer must be signed by a person authorised by the Tenderer to sign tenders on his behalf.

**Eligibility to Tender**

D Tenders will only be considered for Goods supplied from member countries of the World Bank or Switzerland or Taiwan. Tenderers must have, or be established agents in Kenya.

**Currency of Proforma Invoices**

E The currency of the proforma invoices shall be that of the Tenderer's own country or of another member country of the World Bank or Switzerland or Taiwan widely used in international trade.

**Addenda and Obscurities**

F Tenderers must state any doubt or obscurity in the requirements of the tender dossier in writing to the Purchaser with a copy to the Purchaser's Representative. Clarification will be sent in the form of a formal Addendum which will be distributed to each Tenderer who has purchased the tender dossier. Such Addenda will become part of the tender dossier.

**Tender Deposit**

G Tenders must be accompanied by a tender deposit of not less than the amounts listed as follows for each individual tender -

Tenderer technically Kenya Shillings capable of undertaking the Contract.

15/B/1 45 000

Submission of 15/B/2 60 000

K. Tender 15/B/3 20 000

15/B/4 20 000

Tenderer 15/B/5 30 000

FOR BU 15/B/6 20 000

TENDER 15/B/7 20 000

which may be in the form of a bank deposit receipt in the name of the Purchaser or a confirmed irrevocable letter of credit in favour of the Purchaser or a letter of guarantee from a bank incorporated in Kenya. The deposit will be held as a guarantee of the good faith of the Tenderer and will be returned to the successful Tenderer when he has provided the Performance Guarantee, or to unsuccessful tenderers 150 days from the latest day fixed for delivery of tenders.

At any time before expiry of the validity of the tender deposit, if the same shall be in the form of a letter of guarantee or a letter of credit, the Employer may by notice in writing delivered to or sent by registered post to the Tenderer request the Tenderer to extend the validity thereof, and if the Tenderer shall fail to make such extension or if the tender deposit shall be in the form of a bank deposit and the Tenderer requests the return of the bank deposit receipt after the expiry of the said 150 days the Employer may at his discretion treat the tender as having been withdrawn by the Tenderer, but otherwise the tender shall remain binding on the Tenderer and may be accepted at any time unless withdrawn by the Tenderer after expiry of the said 150 days.

### Performance Guarantee

H Tenderers will be required to supply a Performance Guarantee which is acceptable to the Purchaser as provided for in Clause 10 of the Conditions of Contract. The Form of Performance Guarantee given hereinafter is an indication of the type of security which will be required.

The Tenderer shall submit with his Tender the written undertaking of the proposed guarantor to provide the guarantee in the event of the Tenderer being awarded the Contract.

### References

J Tenderers shall submit the names of those to whom they have supplied goods of a similar kind to that required under the Contract and which have been in successful use in circumstances similar to those for which the Goods are intended (preferably in Kenya) for at least two years, to whom the Purchaser and/or his Representative may refer.

Tenderers shall also provide the names of others to whom the Purchaser and/or his Representative may refer with a view to establishing that the

Tenderer is technically and financially capable of undertaking the Contract. The ability of the Tenderer's established agent in Kenya to provide spare parts, maintenance workshops, field service, and customer training facilities will be taken into consideration. whose agents offer these facilities will be preferred.

### Submission of Tenders

K Tenders shall be submitted to the Purchaser to arrive not later than 12.00 noon on the latest day fixed for delivery of tenders.

Tenders shall be enclosed in a strong sealed parcel addressed to the Tenderer himself. This parcel shall itself be enclosed in a second strong plain sealed wrapping which shall conspicuously bear the words "TENDER FOR BURA PROJECT CONTRACT Nr 15/B SUPPLY OF MAJOR PLANT. NOT TO BE OPENED BEFORE THE MEETING FOR THE OPENING OF TENDERS", but which shall bear no mark indicating the identity of the Tenderer and which shall be addressed to the Purchaser.

### Formal Contract

### Opening of Tenders

P After acceptance of his Tender the Tenderer will be required to enter L Tenders will be opened publicly at 12.00 noon on the latest day fixed for delivery at the office of the Purchaser in Nairobi. The representatives of Tenderers may attend. At the opening the names of Tenderers will be announced in the order of opening and the Tender Sums in ascending order but no further details will be made public.

Late tenders will not be considered unless no other tenders have been received.

### Adjudication of Tenders

M For the purpose of comparing tenders

- (1) the Purchaser will consider such factors as efficiency and compatibility of the Goods, availability of service and spare parts, amounts of expenditure required in foreign currencies,
- (2) any amounts required in foreign currency will be converted to Kenya Shillings at the official selling price of the Bank of Kenya for that currency prevailing on the first day of the month preceeding that in which the tenders are to be submitted,
- (3) if the Tenderer should require any payment by way of a letter of credit, the costs of establishing, confirming and disbursing from such letter of credit will be at the expense of the Tenderer and will therefore not be considered in the comparison of tenders,
- (4) the Purchaser will consider the time for delivery assembly and commissioning and such guarantees as the Tenderer may offer for delivery,
- (5) other things being equal the Tenderers who offer the longer Defect Liability Periods will be preferred
- (6) tenders will not be considered which offer goods without evidence of proven experience of operation in conditions similar to those of the Bura Irrigation Settlement Project

- (7) the ability of the Tenderer's established agent in Kenya to provide spare parts, maintenance workshops, field service, and customer training facilities will be taken into consideration. Tenderers whose agents offer these facilities will be preferred.

FORM OF PERFORMANCE GUARANTEE

**Special Tools and Spare Parts**

Reference is made to Clause H of the Instructions for Tendering and Clause N Priced lists of recommended "fast moving" and "slow moving" spare parts for two years operation, and special tools to enable all maintenance to be undertaken by the Purchaser shall be submitted with the Tender. The Purchaser may order at his own discretion any of the spare parts and special tools. The value of the items ordered will not exceed 30% of the Tender Sum.

**Formal Contract**

Sir,  
P After acceptance of his Tender the Tenderer will be required to enter into a formal contract in the terms stated in the Form of Contract Agreement attached hereto. Failure to enter into a formal contract when requested will constitute grounds for forfeiture of the tender deposit referred to in Clause G of these Instructions.

..... for the sum of .....  
.....  
on the occasion of Contract No 15/B Supply of Major Plant forming part of the Bura Irrigation Settlement Project as per Agreement concluded between them and the ..... (hereinafter called 'the Purchaser') and we undertake to pay the said amount to the Purchaser on demand and without notice or any other condition or restriction. The said amount shall be at the disposal of the Purchaser from this date until the date of expiry of the Defects Liability Period in accordance with the said Contract or such earlier time as the said Purchaser shall voluntarily cancel or surrender the same. No claim under this guarantee shall be accepted if not presented to us in writing on or before the said expiry date and this deed of guarantee shall be automatically cancelled and shall become null and void without previous notice or any other legal or official formality if no such claim is submitted within the period as aforesaid.

Yours faithfully,

(An approved Insurance Company or Bank)

**AN ACCEPTABLE  
FORM OF PERFORMANCE GUARANTEE**

(Reference is made to Clause H of the Instructions for Tendering and Clause 10 of the Conditions of Contract.)

To:

Sir,

We . . . . . hereby  
guarantee . . . . .  
(hereinafter called 'the Contractor') financially, for the sum of . . . . .  
. . . . . ( . . . . . )  
on the occasion of Contract Nr 15/B Supply of Major Plant forming part of  
the Bura Irrigation Settlement Project as per Agreement concluded between  
them and the . . . . . (hereinafter  
called 'the Purchaser') and we undertake to pay the said amount to the  
Purchaser on demand and without notice or any other condition or restriction.  
The said amount shall be at the disposal of the Purchaser from this date until  
the date of expiry of the Defects Liability Period in accordance with the said  
Contract or such earlier time as the said Purchaser shall voluntarily cancel or  
surrender the same. No claim under this guarantee shall be accepted if not  
presented to us in writing on or before the said expiry date and this deed of  
guarantee shall be automatically cancelled and shall become null and void  
without previous notice or any other legal or official formality if no such  
claim is submitted within the period as aforesaid.

Yours faithfully,

(An approved Insurance Company or Bank)

## FORM OF CONTRACT AGREEMENT

THIS AGREEMENT is made the . . . . day of . . . . . 19 . . . .

BETWEEN The National Irrigation Board of P.O. Box 30372, Nairobi, Kenya  
(hereinafter called the "Purchaser") of the one part and . . . . .

. . . . . (hereinafter called the "Contractor") of the other part.

WHEREAS the Purchaser is desirous of purchasing certain Goods for the Project known as the Bura Irrigation Settlement Project and has accepted a Tender by the Contractor for the supply of Goods and Provision of training (Lots Nr 15/1/1, 2, 3, 4 and 5 only) all in accordance with the Contract, namely -

| Lot Nr | Item Description | Quantity |
|--------|------------------|----------|
|--------|------------------|----------|

## FORM OF CONTRACT AGREEMENT

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 be read and construed as part of this Agreement viz:-

- (a) The Conditions of Contract.
- (b) The Contractor's Conditions of Sale.
- (c) The Proforma Invoices.
- (d) Addenda Nr....to Nr....inclusive.
- (e) The Specification.
- (f) The Contractor's details of the Goods.
- (g) The Purchaser's Letter of Intent (if any) as subsequently confirmed by the Contractor as acceptable to him.
- (h) The Purchaser's Letter of Acceptance of Tender.

J. In/

3. In consideration of the payments to be made by the Purchaser to the Contractor as hereinafter mentioned the Contractor hereby covenants with the Purchaser to supply **FORM OF CONTRACT AGREEMENT** Nr 15/B/1, 2, 3, 4 and 5 only) in conformity in all respects with the provisions of the Contract.

THIS AGREEMENT is made the . . . . day of . . . . . 19 . . . . .  
BETWEEN The National Irrigation Board of P.O. Box 30372, Nairobi, Kenya  
(hereinafter called the "Purchaser") of the one part and . . . . .

. . . . . (hereinafter called the "Contractor") of the other part.

WHEREAS the Purchaser is desirous of purchasing certain Goods for the Project known as the Bura Irrigation Settlement Project and has accepted a Tender by the Contractor for the supply of Goods and Provision of training (Lots Nr 15/B/1, 2, 3, 4 and 5 only) all in accordance with the Contract, namely -

| Lot Nr | Item Description | Quantity |
|--------|------------------|----------|
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- (f) The Contractor's details of the Goods.
- (g) The Purchaser's Letter of Intent (if any) as subsequently confirmed by the Contractor as acceptable to him.
- (h) The Purchaser's Letter of Acceptance of Tender.

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3. In consideration of the payments to be made by the Purchaser to the Contractor as hereinafter mentioned the Contractor hereby covenants with the Purchaser to supply the Goods and provide training (Lots Nr 15/B/1,2, 3, 4 and 5 only) in conformity in all respects with the provisions of the Contract.

4. The Purchaser hereby covenants to pay the Contractor in consideration of the supply of Goods and provisions of training (Lots Nr 15/B/1,2, 3, 4 and 5 only) the amounts due at the times and in the manner all as prescribed by the Contract.

IN WITNESS whereof the representatives of the parties hereto have hereunto set their respective hands the day and year first mentioned above.

FOR AND ON BEHALF OF THE PURCHASER

In the capacity of      CONDITIONS OF CONTRACT

Witness

FOR AND ON BEHALF OF THE CONTRACTOR

In the capacity of

Witness

## CONDITIONS OF CONTRACT

The Conditions of Contract shall be the Conditions of Sale accompanying this Tender, together with such amendments or other conditions as shall have been agreed in writing between the Purchaser and the Contractor prior to the date of the Contract Agreement and the following conditions. Where there is a conflict between the following conditions and any other conditions the following shall prevail:-

### Clause 1 - Definitions

In construing the Contract the following words shall have the meanings herein assigned to them unless there is something in the subject matter or context inconsistent with such constructions:-

The "Purchaser" shall mean the National Irrigation Board of P.O. Box 30372, Nairobi, Kenya.

The "Purchaser's Representative" shall mean the person or persons appointed by The National Irrigation Board, and communicated to the Contractor.

## CONDITIONS OF CONTRACT

The "Contractor" shall mean the Tenderer whose Tender has been accepted by the Purchaser.

"Site" shall mean the maintenance workshop of the Purchaser at the Rural Centre, Sura.

"Goods" shall mean the agricultural plants, tools, pumps, sprayers, and any equipment and any other items of equipment as specified herein and in the Introduction.

"Lot" shall mean a category into which the Goods are divided and numbered.

### Clause 2 - Delivery

The Contractor shall at his own cost, arrange for the safe, speedy and commissioning) the Goods to the Site, under special conditions, and to be completed within the delivery period set forth hereunder, which shall commence on the date of receipt by the Contractor of the Purchaser's Letter of Acceptance of Tender.

The delivery period for any Lot or lots comprising a Lot shall be 8 months.

### Clause 3 - Assembly and Commissioning

The Contractor shall receive and check the Goods delivered to the Site and shall inform the Purchaser's Representative when he considers a consignment of agricultural plant ready for commissioning, when the Purchaser's Representative is satisfied that each item of the Goods in the consignment is in good working order he shall issue a certificate showing

the date (the Commissioning Date) on which the consignment was commissioned.

## CONDITIONS OF CONTRACT

When the Purchaser's Representative is satisfied that all the spares have been delivered he shall issue a certificate to that effect.

The Conditions of Contract shall be the Conditions of Sale accompanying the Tender, together with such amendments or other conditions as shall have been agreed in writing between the Purchaser and the Contractor prior to the date of the Contract Agreement and the following conditions. Where there is a conflict between the following conditions and any other conditions the following shall prevail:-

In accordance with the import regulations of the Government of Kenya in

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The "Purchaser's Representative" shall mean the person or persons appointed by The National Irrigation Board, and communicated to the Contractor.

The "Contractor" shall mean the Tenderer whose Tender has been accepted by the Purchaser.

"Site" shall mean the mechanical workshop of the Purchaser at the Rural Centre, Bura.

"Goods" shall mean the agricultural plant, special tools, spares, ancillary equipment and any other items of equipment as detailed herein and in the Introduction.

"Lot" shall mean a category into which the Goods are divided and numbered.

### Clause 2 - Delivery

The Contractor shall at his own cost deliver (including assembly and commissioning) the Goods to the Site. Such delivery shall be completed within the delivery period(s) given below which shall commence on the date of receipt by the Contractor of the Purchaser's Letter of Acceptance of Tender.

The delivery period for any Lot or any combination of Lots shall be 8 months.

### Clause 3 - Assembly and Commissioning

The Contractor shall receive and check the Goods delivered to the Site and shall inform the Purchaser's Representative when he considers a consignment of agricultural plant ready for commissioning. When the Purchaser's Representative is satisfied that each item of the Goods in the consignment is in good working order he shall issue a certificate showing

the date (the Commissioning Date) on which the consignment was commissioned.

When the Purchaser's Representative is satisfied that all the spares have been delivered he shall issue a certificate to that effect.

The Contractor shall be responsible, inter alia, for the provision of all labour and crange required for assembly and commissioning.

#### **Clause 4 - Inspection**

In accordance with the import regulations of the Government of Kenya in force from time to time the Contractor shall arrange inspection by the Societe Generale de Surveillance or their accredited agents in the country of origin of imported Goods and shall provide the Purchaser with this inspection certificate. Such inspection and certification shall be at the cost of the Contractor.

The Purchaser shall also have the right to inspect the Goods to be supplied at the manufacturer's works, and where applicable to witness conformance tests on the main parts of the Goods. Such inspection shall be at the cost of the Purchaser. The conformance tests themselves shall be at the cost of the Contractor who shall supply the necessary equipment for such testing.

#### **Clause 5 - Insurance**

Insurance shall be in the joint names of the Purchaser and Contractor and shall be effected by the Contractor and shall include cover until the Commissioning Date for each consignment of Goods to the full value of such consignment plus 10% against damage or loss however caused.

The risks against which the Contractor is to insure under the Contract shall be insured through an approved insurance company in Kenya and any cover against risks which the Contractor may enjoy under a global policy of insurance shall be reinsured in Kenya by a Kenyan insurance company in respect of the Contractor's obligations under the Contract.

#### **Clause 6 - Currency**

Payment shall be made in the currency used by the Contractor in his Tender.

The Purchaser warrants that foreign exchange facilities will be made available for the purchase and import by the Contractor of the Goods. All foreign exchange facilities shall be in accordance with the rules and regulations of the Central Bank of Kenya in force from time to time.

The Contractor shall make expenditure in foreign currency for the purpose of the Contract only for goods produced in or services procured from member countries of the World Bank or Switzerland or Taiwan.

Where the Contractor requires letters of credit to be established by the Purchaser these will be provided by the Purchaser at the cost of the Contractor on terms of withdrawal appropriate to the Conditions of Payment.

The terms of the letter of credit facilities shall be to the approval of the Purchaser and shall incorporate a provision that disbursements under the facilities shall only be made on the Payment Certificate of the Purchaser's Representative given in accordance with Clause 7 hereof. Disbursements shall be at the rates of exchange registered in the official records of the Central Bank of Kenya as ruling on the first day of the month preceding the month in which Tenders were submitted.

Payments in Kenyan currency shall be made by the Purchaser within 45 days from the date of the Purchaser's Representative's Payment Certificate.

The Purchaser's Representative shall not be responsible for any payments to be made by the Purchaser under the terms of the Contract.

#### **Clause 7 - Conditions of Payment**

The Purchaser's Representative shall certify by means of a Payment Certificate as follows:-

(a) In respect of provision of Goods:-

(i) On delivery  
95% of the value of a consignment of Goods delivered to Site.

(ii) On the Commissioning Date  
95% of the reception, assembly and commissioning costs in respect of the Goods.

(iii) Twelve months after the Commissioning Date the remaining 5% of each of the above values and costs.

(b) In respect of training (Lots Nr 15/B/1, 2, 3, 4 and 5 only) :-

(i) the commitment fee when the training mechanic is on the Site

(ii) the retention fee monthly in arrears.

No payment in respect of training shall be made in relation to time prior to the first Commissioning Date.

#### **Clause 8 - Variations in Price**

Tenderers may submit their own variation of price formulae with their tender for approval. Unless otherwise stated in the Tender and agreed prior to the Contract, the rates and prices stated on the proforma invoice shall be subject to variation only if:-

(a) variations in the quantity of the Goods ordered exceed 10%, or

(b) variations in specification of the Goods to be supplied are ordered by the Purchaser

Should the number of expatriate staff be deemed to be unavailing the Contractor shall immediately remove him from the Site and provide a suitable person in his place at no extra cost to the Purchaser. The

#### **Clause 9 - Defects Liability**

The Contractor shall be responsible for the performance of the Goods to the requirements of the Contract. The Contractor shall be responsible for making good any defects which may become evident during the Defects Liability Period other than those due to maloperation by the Purchaser or due to fair wear and tear. The Defects Liability Period shall commence on the Commissioning Date and shall be of the duration stated in the Contract, which shall not be less than six months.

#### **Clause 10 - Performance Guarantee**

The Contractor shall provide within 21 (twenty-one) days of receipt of the letter of acceptance from the Purchaser the guarantee of an Insurance Company or Bank to be bound with the Contractor in a sum for the due performance of the Contract under the terms of a Guarantee. The said Insurance Company or Bank and the terms of the said Guarantee shall be such as shall be approved by the Purchaser and the provision of such Guarantee and the cost of the Guarantee shall be at the expense in all respects of the Contractor. The amount of the Guarantee shall be not less than 10% of the accepted Tender Sum.

The validity of the Performance Guarantee shall not expire before the end of the Defects Liability Period.

#### **Clause 11 - Training**

The requirements in respect of training concern Lots Nr 15/B/1, 2, 3, 4 and 5 only.

The requirements in respect of training are given in Clause 9 of the Specification. The Contractor's expenses in respect of training shall be covered by the charges for his Kenyan or expatriate staff which shall be separately detailed in terms of :-

- (a) a commitment fee to cover all the Contractor's costs in positioning staff on Site and repatriation on completion (if applicable), and
- (b) a retention fee payable in respect of time spent in Kenya for the purpose of training including statutory holidays and Sundays, but excluding leave outside Kenya. For expatriate staff time will count from the day before arrival in Kenya to the day after departure from Kenya.

These fees shall cover all the requirements specified and shall include for the costs of all wages and salaries, travel expenses, food and accommodation for the Contractor's expatriate personnel, other than for the provision of housing or tented accommodation and transport at the Site which will be the responsibility of the Purchaser. The Contractor will not be responsible for any payment to the trainees themselves.

Should the member of expatriate staff be deemed to be unsuitable the Contractor shall immediately remove him from the Site and provide a suitable person in his place at no extra cost to the Purchaser. The decision of the Purchaser's Representative shall be deemed to be final in all matters relating to this Clause.

SPECIFICATION

GENERAL

## SPECIFICATION

### GENERAL

#### Brief Description of Requirements

1. The duties of the Contractor in the execution of the Contract include the supply, assembly and commissioning of the Goods all as detailed herein and listed in the Introduction.

#### Assembly and Commissioning

2. The Goods shall be delivered new. Assembly and commissioning at the Site shall be to full working order.

The initial charges of fuel, oil, grease, electrolyte and similar materials necessary for the correct setting to work and operation of the Goods shall always be included.

#### Manuals, Drawings, etc.

### SPECIFICATION

#### GENERAL

3. The Contractor shall provide two copies of an operating and maintenance manual for each item of agricultural plant. The Contractor shall also provide one copy per five items of agricultural plant of each of the following -

- (a) spare parts catalogue
- (b) lubrication chart
- (c) workshop manual
- (d) drawings (where necessary for maintenance and repair).

#### Language and Units

4. All manuals, catalogues, charts, drawings, name plates, markings etc. shall be in English. The system of measurement used throughout, including the graduation of any gauges or meters, shall be the S.I. system.

#### Packing

5. The Contractor shall pack, mark and, as necessary, protect the Goods for delivery, unloading, handling, storage in the open, and transport to Site.

Attention shall be given to the protection of parts which are liable to deteriorate in the climatic conditions prevailing in Kenya, and the form of packaging shall be such that no damage to the Goods shall result from normal handling or prolonged storage in the open.

Small parts shall be boxed and suitably marked on the outside. Larger parts shall be protected as necessary and shall be suitably marked and listed. Unless otherwise approved, consignments shall conform to the requirements of the Kenyan Highway Authorities.

## SPECIFICATION

Each separate crate or box shall contain a packing list, a duplicate of which shall be sent separately to the Dura Project Coordinator, National Irrigation Board, P.O. Box 302, Nairobi. I.e. separate from and additional to any agreed distribution of copies of dispatching or shipping documents.

### GENERAL

#### Brief Description of Requirements

1 The duties of the Contractor in the execution of the Contract include the supply, assembly and commissioning of the Goods all as detailed herein and listed in the Introduction.

**Assembly and Commissioning**

2 The Goods shall be delivered new. Assembly and commissioning at the Site shall be to full working order.

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Small parts shall be boxed and suitably marked on the outside. Larger parts shall be protected as necessary and shall be suitably marked and listed. Unless otherwise approved, consignments shall conform to the requirements of the Kenyan Highway Authorities.

The Contractor shall confirm to the Purchaser's Representative as soon as possible. Each separate crate or box shall contain a packing list, a duplicate of which shall be sent separately to the Bura Project Coordinator, National Irrigation Board, P.O. Box 30372, Nairobi, i.e. separate from and additional to any agreed distribution of copies of dispatching or shipping documents.

The packing list shall state the following:-

- (a) crate or box identification numbers
- (b) order number
- (c) for each part contained in it: part number, description, quantity, balance of order outstanding.

For Goods delivered via Mombasa in addition to the normal dangers of damage during shipment to Mombasa and during handling in the port area, the Goods may be delayed on the quayside for some time.

The additional dispatching or shipping mark shall be:- BURA WEST CONTRACT 15/B

On delivery to Site the packing materials shall become the property of the Purchaser.

**Ambient Conditions**

6 The Site is at the Rural Centre at Bura, which is located on the west bank of the Tana River approximately 450 km from Nairobi and 400 km from Mombasa by road as shown in Figure Nr 1.

The average shade temperature where the Goods are required to operate may vary between 20 degC and 40 degC over the year. There are usually two rainy seasons from March to May and October to December. The total annual rainfall averages about 480 mm, but there are large variations in annual totals and in monthly totals for the same month of different years.

The soils are predominantly sandy clay texture which when wet becomes very plastic, and when dry, very dusty. The area is subject to prolonged steady winds which carry airborne dust and grit.

Without prejudice to the successful functioning of the Goods under the ambient conditions stated above, the Goods shall be designed to work under the following tropical climate conditions:-

Surrounding air temperature 0 degC - 40 degC

Relative humidity Max 95%

Altitude 100 m above sea level.

### Inspection and Tests

7 The Purchaser's right to inspect under the terms of Clause 4 of the Conditions of Contract may be exercised by the Purchaser's Representative or by an inspector to be designated by the Purchaser or the Purchaser's Representative.

The Contractor shall confirm to the Purchaser's Representative as soon as possible after receipt of the Letter of Acceptance of the Contract the delivery date and shall give him and the designated inspector (if any) at least 15 clear working days notice in writing that the Goods are ready for inspection or that tests are ready for witnessing.

Inspection at the manufacturer's works shall include the visual inspection of the Goods to be supplied and witnessing conformance tests of moving parts.

Visual inspection will include checking:-

- (a) compliance with the Specification and the Contractor's undertaking in respect of description, quality and quantity
- (b) suitability of packing.

Where not otherwise specified, conformance tests will be limited to those required by the appropriate British or other equivalent approved national or international standards.

### **Interchangeability of Components**

8 All Goods to be supplied by the same manufacturer shall be as far as possible of the same series and model with interchangeable components.

### **Training**

9 The Contractor shall provide training for employees of the Purchaser in the operation, maintenance and repair of the following lots (Lots Nr 15/B/1, 2, 3, 4, and 5).

The intention of the requirement for training is that at the conclusion of the period of training the staff seconded by the Purchaser shall be fully capable of operating and maintaining the hydraulic excavators for their normal functions and in accordance with the manufacturer's recommendations.

Training shall be the immediate responsibility of an experienced Kenyan or expatriate mechanic who shall be appointed for the purpose of training for an initial period of one month with the option of monthly extension at the request of the Purchaser to a maximum of three months, which shall be continuous and shall commence on the Purchaser's direction within one month after the Commissioning Date for the first consignment of Goods.

In addition to on-site training the Contractor shall provide suitable maintenance training courses at the premises of his Kenya agent, or other approved location. A two week course for two mechanics for each type of plant supplied shall be provided as a minimum requirement. Where multiple items of plant are supplied details of the duration and numbers of courses provided shall be submitted by the Contractor for approval.

The Contractor shall, two months prior to delivery of the Goods submit to the Purchaser for his approval the curriculum vitae (CV) of the proposed mechanic, together with a training programme which identifies separately

the levels of training the Contractor considers necessary. In addition, the Contractor shall detail the numbers and grades of employees he considers suitable for training as a cadre for the operation, maintenance and repair of the hydraulic excavators, together with their appropriate educational attainments and age-range.

SPECIFICATION

PARTICULAR

## LOT No 15/8/1 - DRAGLINE

### Type

L81 The dragline is required to act as both a dragline and a crane and shall be supplied with suitable attachments to perform either function.

The Contractor shall have stated in his tender the crane capacity obtainable with the basic dragline configuration at 75% tipping load.

### Engine

L82 The engine shall be a four stroke water cooled diesel engine with power take-off clutch developing between 100 and 120 hp at the flywheel at about 2 000 rpm. Oil and coolant radiators, and fuel oil and air filters shall be suitable for tropical use. Starting shall be by 24 volt direct electric starting from heavy duty batteries.

The engine shall be fitted with an engine hour meter.

### Dragline Attachments

#### SPECIFICATION

#### PARTICULAR

- L83 Two buckets are required
- (a) a standard bucket of capacity 0.8 to 1.2 cubic metres, and
  - (b) a perforated bucket of capacity 1.0 to 1.4 cubic metres.

The job length shall be at least 12 metres and not more than 22 metres.

### Crane Attachments

L84 The attachments shall incorporate -

- (a) standard low A-frame
- (b) pendulum safe load indicator
- (c) lifting block with up to 6 falls of rope for maximum duty
- (d) automatic power boom lowering
- (e) power load lowering
- (f) jib stops.

### Controls

L85 All controls shall be air-controlled from an engine operated air compressor.

### Superstructure

L86 The superstructure shall incorporate a fully enclosed cab.

## LOT Nr 15/B/1 - DRAGLINE

### Type

**1.01** The dragline is required to act as both a dragline and a crane and shall be supplied with suitable attachments to perform either function.

The Contractor shall have stated in his tender the crane capacity obtainable with the basic dragline configuration at 75% tipping load.

### Engine

**1.02** The engine shall be a four stroke water cooled diesel engine with power take-off clutch developing between 100 and 130 hp at the flywheel at about 2 000 rpm. Oil and coolant radiators, and fuel oil and air filters shall be suitable for tropical use. Starting shall be by 24 volt direct electric starting from heavy duty batteries.

The engine shall be fitted with an engine hour meter.

### Dragline Attachments

**1.03** Two buckets are required -

- (a) a standard bucket of capacity 0.8 to 1.2 cubic metres, and
- (b) a perforated bucket of capacity 1.0 to 1.4 cubic metres.

The jib length shall be at least 12 metres and not more than 22 metres.

### Crane Attachments

**1.04** The attachments shall incorporate -

- (a) standard low A-frame
- (b) pendulum safe load indicator
- (c) lifting block with up to 6 falls of rope for maximum duty
- (d) automatic power boom lowering
- (e) power load lowering
- (f) jib stops.

### Controls

**1.05** All clutches shall be air-controlled from an engine operated air compressor.

### Superstructure

**1.06** The superstructure shall incorporate a fully enclosed cab.

## Tracks

1.07 The length over crawlers shall be not less than 4 metres. The width of shoes shall be not less than 0.75 metres.

## Type

**Gradability** The excavator shall be crawler mounted fitted with hydraulic backhoe equipment with a ground level reach of 10 metres and a digging

1.08 The dragline must be able to climb a 25% gradient.

## Other Requirements

1.09 The dragline shall be equipped with sufficient lighting to enable it to track and operate at night.

A manufacturer's tool kit shall be supplied.

The engine shall be fitted with an engine hour meter.

## Buckets

2.03 The excavator shall be provided with the following types of bucket -

- (a) one standard earth moving bucket.
- (b) one side ditch cleaning bucket.
- (c) one V-line trench forming bucket.

The minimum size of bucket shall be 0.5 cubic metres and the maximum size shall be the largest size compatible with the engine hp.

## Superstructure

2.04 The superstructure shall incorporate a fully enclosed cab and front and working lights.

## Tracks

2.05 The overall length of tracks shall be between 3.5 and 4 metres, driven by sprocket drive from hydraulic motors.

## Gradability

2.06 The excavator shall be able to climb a 30% gradient fully equipped.

## Other Requirements

2.07 A manufacturer's tool kit shall be provided.

## LOT № 15/B/2 - HYDRAULIC EXCAVATOR

### Type

2.01 The excavator shall be crawler mounted fitted with hydraulic backhoe equipment with a ground level reach of 10 metres and a digging depth of 7 metres.

### Engine

2.02 The engine shall be a four stroke water cooled diesel engine developing between 90 and 120 hp at the flywheel at about 2 000 rpm. Oil and coolant radiators, and fuel, oil and air filters shall be suitable for tropical use. Starting shall be by 24 volt direct electric starting from heavy duty batteries.

The engine shall be fitted with an engine hour meter.

### Buckets

2.03 The excavator shall be provided with the following types of bucket -

- (a) one standard earth moving bucket
- (b) one side ditch cleaning bucket
- (c) one V-line trench forming bucket.

The minimum size of bucket shall be 0.5 cubic metres and the maximum size shall be the largest size compatible with the engine hp.

### Superstructure

2.04 The superstructure shall incorporate a fully enclosed cab and front end working lights.

### Tracks

2.05 The overall length of tracks shall be between 3.5 and 4 metres, driven by sprocket drive from hydraulic motors.

### Gradability

2.06 The excavator shall be able to climb a 30% gradient fully equipped.

### Other Requirements

2.07 A manufacturer's tool kit shall be provided.

## LOT Nr 15/B/3 WHEELED LOADER

3.09 Plant and vehicles using the public highway must conform to the Traffic Act (Laws of Kenya, CAP 403) Part IV - Construction, Equipment and Use of Vehicles, 1978 and subsequent amendments.

### Type

3.01 The wheeled loader shall be diesel powered, pneumatic tyred, with a hydraulically operated loading bucket.

### Engine

3.02 The engine shall be a four stroke water cooled diesel engine developing between 90 and 110 hp at the flywheel at about 2 000 rpm. Oil and coolant radiators, and fuel, oil and air filters shall be suitable for tropical use. Starting shall be by 24 volt direct electric starting from heavy duty batteries.

The engine shall be fitted with an engine hour meter.

### Loader Bucket

3.03 A general purpose bucket of 1.5 cubic metres capacity shall be provided.

The bucket shall be capable of discharging at 45deg at a minimum height of 2.5 metres.

### Transmission

3.04 The transmission shall be power shift transmission with all wheel drive.

### Tyres

3.05 The tyres shall be heavy duty 12 ply traction type tyres with tubes. An extra tyre and tube shall be provided.

### Brakes

3.06 The brakes shall act on all wheels and be air/hydraulic actuated. There shall be a manually applied parking brake.

### Steering

3.07 Steering shall be through centre point frame articulation.

### Sun Protection

3.08 The operator's seat shall have a metal roof for protection against the sun.

**Kenya Traffic Act**

LOT No 15/B/A - BULLDOZER

**3.09** Plant and vehicles using the public highway must conform to the Traffic Act (Laws of Kenya, CAP 403) Part IV - Construction, Equipment and Use of Vehicles, 1978 and subsequent amendments.

**Other Requirements** 4.01 The requirement is a track type tractor with straight bulldozer type blade and a hydraulic tilt cylinder.

**3.10** A manufacturer's tool kit shall be provided.

**Engine**

The wheeled loader shall have a rear mounted heavy duty tow bar connection. The engine shall be a four stroke water cooled diesel engine developing between 130 and 150 hp at the flywheel at about 2000 rpm. Oil and coolant radiators, and fuel, oil and air filters shall be suitable for tropical use. Starting shall be by 24 volt direct electric starting from heavy duty batteries.

The engine shall be fitted with an engine hour meter.

**Transmission**

4.03 The transmission shall be direct drive sliding gear type transmission.

**Tracks**

4.04 The track shall be welded and lubricated on lifetime lubricated rollers and idlers.

**Sun protection**

4.05 The tractor shall have a metal roof over the operator's position for protection from the sun.

**Other requirements**

4.06 A manufacturer's tool kit shall be provided.

A swinging drawbar shall be attached.

## LOT No 15/B/4 - BULLDOZER

### Type

**4.01** The requirement is a track type tractor with straight bulldozer blade incorporating tilt cylinder.

### Engine

**4.02** The engine shall be a four stroke water cooled diesel engine developing between 130 and 150 hp at the flywheel at about 2 000 rpm. Oil and coolant radiators, and fuel, oil and air filters shall be suitable for tropical use. Starting shall be by 24 volt direct electric starting from heavy duty batteries.

The engine shall be fitted with an engine hour meter.

### Transmission

**4.03** The transmission shall be direct drive sliding gear type transmission.

### Tracks

**4.04** The track shall be sealed and lubricated on lifetime lubricated rollers and idlers.

### Sun protection

**4.05** The tractor shall have a metal roof over the operator's position for protection from the sun.

### Other requirements

**4.06** A manufacturer's tool kit shall be provided.

A swinging drawbar shall be attached.

**5.01** Plant and vehicles using the public highway must conform to the Traffic Act (Laws of Kenya, CAP 403) Part IV - Construction, Equipment and Use of Vehicles, 1978 and subsequent amendments.

### Other Requirements

**5.02** A manufacturer's tool kit shall be supplied.

The grader shall be equipped with a heavy duty towbar.

## LOT LOT Nr 15/B/5 - MOTOR GRADER

### Type

5.01 The requirement is for a motor grader with a hydraulically operated blade with sideshift and a blade length of about 3.5 metres for medium duty road maintenance work.

### Engine

5.02 The engine shall be a four stroke water cooled diesel engine developing between 140 and 160 hp at the flywheel at about 2 000 rpm. Oil and coolant radiators, and fuel, oil and air filters shall be suitable for tropical use. Starting shall be by 24 volt direct electric starting from heavy duty batteries.

The engine shall be fitted with an engine hour meter.

### Transmission

5.03 The transmission shall be power shift transmission with drive to the four rear wheels only.

### Tyres

5.04 Six 14.00 x 24 x 10 ply heavy duty traction tyres with tubes shall be supplied together with an extra tyre and rim.

### Brakes

5.05 The brakes shall act on all rear wheels and be air/hydraulically actuated. There shall be a manually operated parking brake.

### Sun Protection

5.06 The operator's position shall have a metal roof for sun protection.

### Kenya Traffic Act

5.07 Plant and vehicles using the public highway must conform to the Traffic Act (Laws of Kenya, CAP 403) Part IV - Construction, Equipment and Use of Vehicles, 1978 and subsequent amendments.

### Other Requirements

5.08 A manufacturer's tool kit shall be supplied.

The grader shall be equipped with a heavy duty towbar.

**LOT N° 15/B/6 - SMOOTH WHEEL ROLLER**

Type

7.01 The low loader shall consist of a 6 x 4 wheel drive towing unit and  
**6.01** A diesel powered smooth three wheel roller is required for maintenance of unsealed roads.

Towing unit

**Dimensions and Weight**

7.02 The towing unit shall have 6 x 4 wheel drive with an engine brake  
**6.02** Minimum working width 1.5 m  
Required turning radius 4.5 m  
Roll diameter 1.5 m approx  
Nominal working weight 5 000 kg

Carrying Capacity

**Engine**

7.03 The roller shall have a rated carrying capability up to 30 000 kg on  
**6.03** The engine shall be a four stroke water cooled diesel engine developing adequate power for continuous roller operation at Site conditions. Oil and coolant radiators, and fuel, oil and air filters shall be suitable for use in ambient conditions in accordance with Clause 6 of the General Specification.

7.04 The engine shall be fitted with an hours run counter and road speed indicator and 24 V battery electric starting system.

**Transmission**

7.05 The trailer shall be provided with a heavy duty towing unit and  
**6.04** The transmission shall provide not less than 2 forward and 2 reverse speeds in the range 0 - 60 m/min.

**Seated Control**

7.06 The trailer shall be connected to the towing unit by means of a fifth wheel coupling and when this is not engaged the trailer shall be supported at the front by two substantial jacks, one at each side, capable of supporting the trailer when fully loaded.  
**6.05** The machine shall be fitted with an operators seat providing comfortable support and good visibility with easy access to all controls. A sun canopy shall be provided.

**Kenya Traffic Act**

7.07 A 10 tonne graded hard sprayed wire rope winch with pawl and  
**6.06** The roller must conform to the Traffic Act (Laws of Kenya, CAP 403) Part IV - Construction, Equipment and Use of Vehicles, 1978 and subsequent Amendments.

**Other Requirements**

7.08 Hydraulic braking shall be provided for the trailer from the towing unit and the trailer shall also incorporate a parking brake.  
**6.07** A manufacturers tool kit shall be supplied. The machine shall be fitted with a heavy duty hitch point.

## LOT Nr 15/B/7 - LOW LOADER

### Securing Points

#### Type

7.01 The low loader shall consist of a 6 x 4 wheel drive towing unit and a low bed trailer towed through a fifth wheel coupling.

### Spare Wheels

#### Towing unit

7.02 The towing unit shall have 6 x 4 wheel drive with an engine brake horse power sufficient to operate under arduous tropical conditions. The unit shall be right-hand drive with suitable controls. The unit shall be fitted with a heavy duty towing hook.

### Carrying Capacity

7.03 The trailer shall have a load carrying capability up to 30 000 kg on second class roads. The trailer shall accommodate machines up to 5 m long on the carry deck with overwidth of excavator tracks up to 3.6 metres. The overwidth shall be accommodated by side extensions to the trailer platform, on both sides, with outriggers and extra decking.

### Loading

7.04 Machines will be loaded over the beaver tail at the back of the trailer which shall be provided with hinged and forward folding ramps.

### Fifth Wheel Coupling

7.05 The trailer shall be connected to the towing unit by means of a fifth wheel coupling and when this is not engaged the trailer shall be supported at the front by two substantial jacks, one at each side, capable of supporting the trailer when fully loaded.

### Winch

7.06 A 10 tonne geared hand operated wire rope winch with pawl and ratchet shall be positioned at the front elevated deck of the trailer to assist in the loading of machines over the beaver tail. The rope shall be 19 mm steel rope with end hook. A spare reel of rope shall be supplied.

### Kenya Traffic Act

7.07 Plant and vehicles using the public highway must conform to the Traffic Act (Laws of Kenya, CAP 403) Part IV - Construction, Equipment and Use of Vehicles, 1978 and subsequent amendments.

### Braking

7.08 Hydraulic braking shall be provided for the trailer from the towing unit but the trailer shall also incorporate a parking brake.

## **Securing Points**

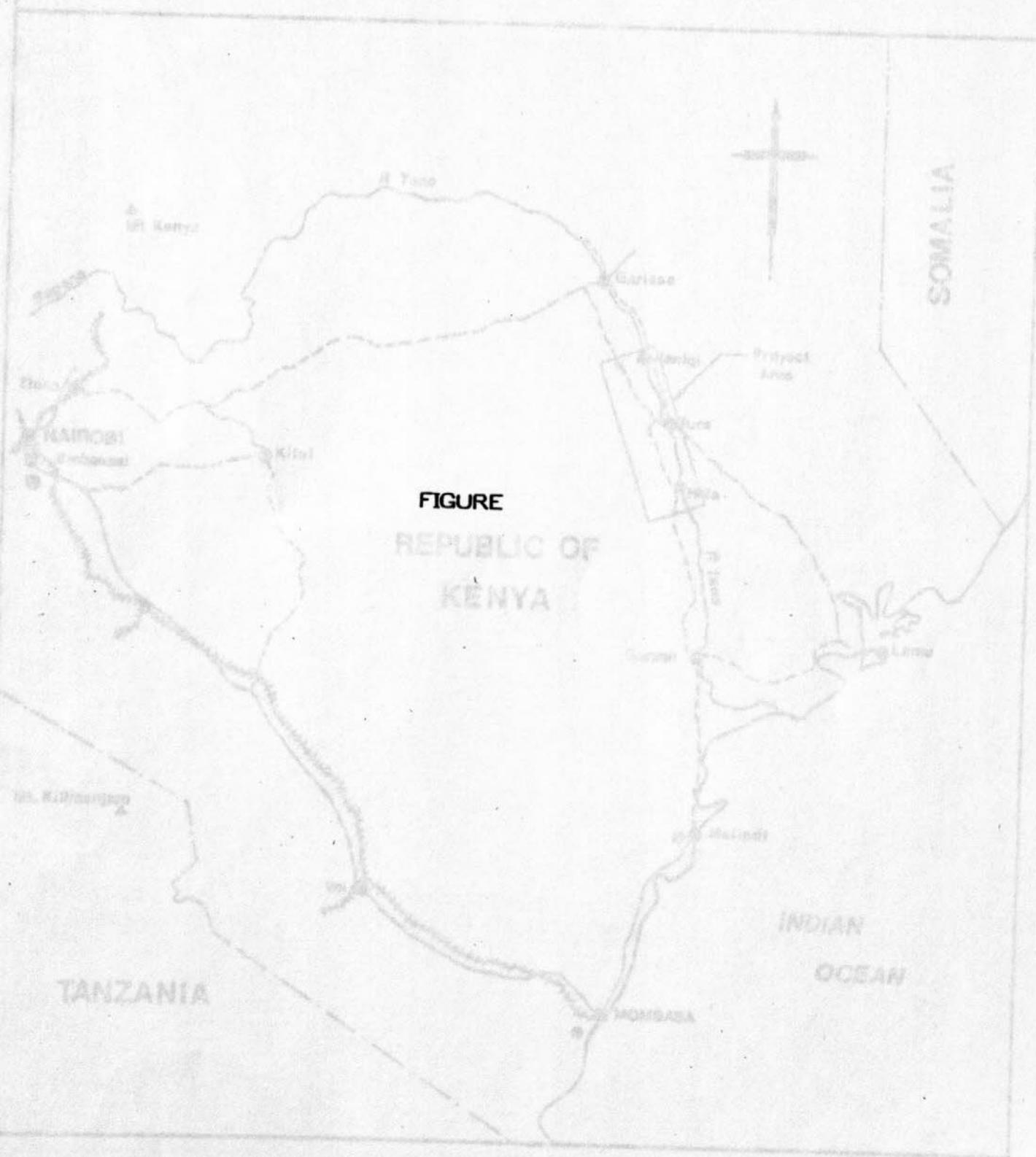
**7.09** Securing connections shall be provided on the loading deck and a selection of typical anchorage equipment shall be supplied.

## **Spare Wheels**

**7.10** At least one spare wheel and tyre shall be provided for each type of wheel and tyre which is fitted to the trailer or towing unit and a complete set of wheel changing equipment shall be provided.

FIGURE

# PROJECT LOCATION MAP FOR BURA IRRIGATION SETTLEMENT PROJECT

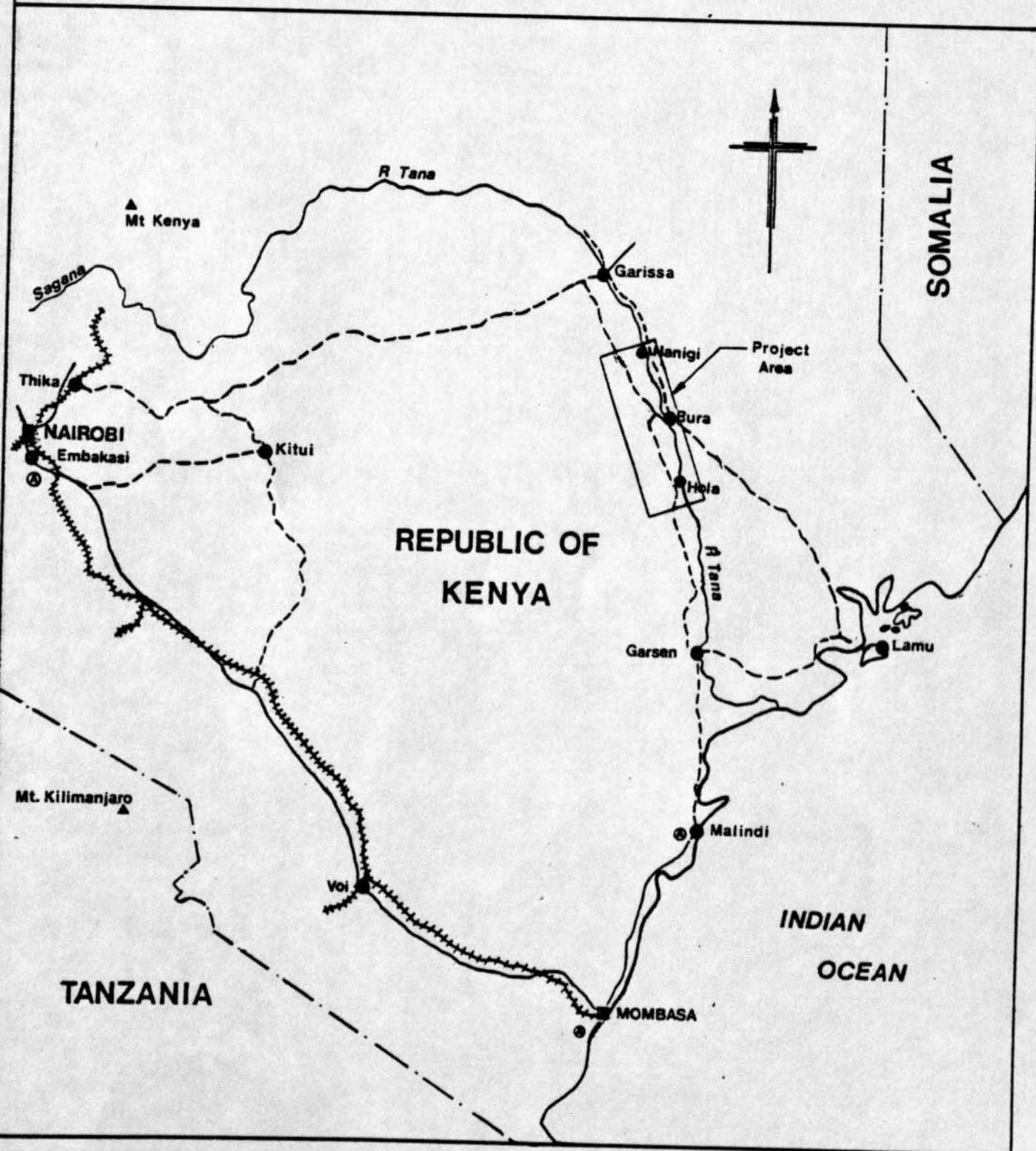


**FIGURE**  
**REPUBLIC OF**  
**KENYA**

-  Tarmac Road
-  Earth Road
-  Railway (metre gauge)
-  Airport



# PROJECT LOCATION MAP FOR BURA IRRIGATION SETTLEMENT PROJECT



- Tarmac Road
- - - - Earth Road
- +++++ Railway (metre gauge)

⊙ Airport

SCALE





THE REPUBLIC OF KENYA  
NATIONAL IRRIGATION BOARD

**BURA IRRIGATION  
SETTLEMENT PROJECT  
Bura West Phase I**

**Contract Nr 15/C  
Supply of Minor Plant and Vehicles**

INTRODUCTION  
INSTRUCTIONS FOR TENDERING  
FORM OF CONTRACT AGREEMENT  
CONDITIONS OF CONTRACT  
SPECIFICATION

Project Consultant

**SIR M MACDONALD & PARTNERS LIMITED**  
Demeter House, Cambridge CB1 2RS, United Kingdom

Sub Consultant

**HUNTING TECHNICAL SERVICES LIMITED**  
Elstree Way, Borehamwood, Herts WD6 1SB, United Kingdom

JULY 1982



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# **BURA IRRIGATION SETTLEMENT PROJECT Bura West Phase I**

## **Contract Nr 15/C Supply of Minor Plant and Vehicles**

INTRODUCTION  
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JULY 1982



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INTRODUCTION



# BURA IRRIGATION SETTLEMENT PROJECT

Bura West Phase 1

Contract No 15/C

## SUPPLY OF MINOR PLANT AND VEHICLES

### INTRODUCTION

Tenders are invited for the supply to the National Irrigation Board of the Lots of Goods listed below:-

| Lot No  | Item Description                             | Quantity |
|---------|--|----------|
| 15/C/1  | General Purpose Grader                       | 2        |
| 15/C/2  | Self-propelled Vibrating Roller              | 1        |
| 15/C/3  | Concrete Mixer                               | 4        |
| 15/C/4  | <b>INTRODUCTION</b><br>Mobile Air Compressor | 1        |
| 15/C/5  | Centrifugal Pump                             | 3        |
| 15/C/6  | Flat Truck 7 Ton                             | 3        |
| 15/C/7  | Tipping Truck 6 cum                          | 8        |
| 15/C/8  | Flat Truck with Hoist                        | 1        |
| 15/C/9  | Sewage Disposal Tanker                       | 2        |
| 15/C/10 | 4WD LWB Station Wagon                        | 11       |
| 15/C/11 | 4WD LWB Pick-up                              | 36       |
| 15/C/12 | Utility Pick-up                              | 11       |
| 15/C/13 | Motor Cycles                                 | 52       |
| 15/C/14 | Bicycle                                      | 200      |



# BURA IRRIGATION SETTLEMENT PROJECT

Bura West Phase 1

Contract Nr 15/C

## SUPPLY OF MINOR PLANT AND VEHICLES

### INTRODUCTION

Tenders are invited for the supply to the National Irrigation Board of the Lots of Goods listed below:-

| Lot Nr  | Item Description                | Quantity |
|---------|---------------------------------|----------|
| 15/C/1  | General Purpose Dumper          | 2        |
| 15/C/2  | Self-propelled Vibrating Roller | 1        |
| 15/C/3  | Concrete Mixer                  | 4        |
| 15/C/4  | Mobile Air Compressor           | 1        |
| 15/C/5  | Centrifugal Pump                | 3        |
| 15/C/6  | Flat Truck 7 Ton                | 3        |
| 15/C/7  | Tipping Truck 6 cu.m            | 8        |
| 15/C/8  | Flat Truck with Hoist           | 1        |
| 15/C/9  | Sewage Disposal Tanker          | 2        |
| 15/C/10 | 4WD LWB Station Wagon           | 11       |
| 15/C/11 | 4WD LWB Pick-up                 | 30       |
| 15/C/12 | Utility Pick-up                 | 11       |
| 15/C/13 | Motor Cycles                    | 52       |
| 15/C/14 | Bicycle                         | 200      |

BURIA IRRIGATION SETTLEMENT PROJECT  
 Buria West Phase I  
 Contract No. I/JC  
 SUPPLY OF MINOR PLANT AND VEHICLES

INTRODUCTION

Tenders are invited for the supply to the National Irrigation Board of the Lots of Goods listed below-

| Lot No | Item Description                | Quantity |
|--------|---------------------------------|----------|
| 151C1A | General Purpose Clumper         | 2        |
| 151C1B | Self-propelled Vibrating Roller | 1        |
| 151C1C | Concrete Mixer                  | 4        |
| 151C1D | Mobile Air Compressor           | 1        |
| 151C1E | Centrifugal Pump                | 3        |
| 151C1F | Flat Truck 7 Ton                | 3        |
| 151C1G | Tipping Truck 5 cum             | 8        |
| 151C1H | Flat Truck with Hoist           | 1        |
| 151C1I | Sewage Disposal Tanker          | 2        |
| 151C1J | 4WD LWB Station Wagon           | 11       |
| 151C1K | 4WD LWB Pick-up                 | 20       |
| 151C1L | Utility Pick-up                 | 11       |
| 151C1M | Motor Cycle                     | 22       |
| 151C1N | Bicycle                         | 200      |

## INSTRUCTIONS FOR TENDERING

Definitions of some of the terms used in these instructions, e.g. Site, will be found in Clause 1 of the Conditions of Contract.

### Tender Dossier

A The tender dossier, namely the documents issued to prospective tenderers, comprises two copies of this bound document which includes:-

- Introduction
- Instructions for Tendering
- Form of Contract Agreement
- Conditions of Contract
- Specification

### Part Tenderers

B Tenderers are invited for one or more of the Lots in the Contract but tenders for part of a Lot are not invited.

## INSTRUCTIONS FOR TENDERING

Summary of Documents to be Submitted in Tender

1 The Tender Documents to be submitted shall include -

- (1) one signed and dated copy of this bound document
- (2) the tender deposit
- (3) the original and two copies of each of the following -
  - (a) a separate proforma invoice for delivery of the minor plant and vehicles to Site
  - (b) separate priced lists for delivery to Site of "fast moving" and "slow moving" spare parts and special tools
  - (c) a separate proforma invoice for reception, assembly, and post-assembly of minor plant and vehicles at Site stating time required from delivery of each consignmentProforma invoices for delivery of Goods shall show separately itemized lists of the minor plant and vehicles, each item separately priced, the several prices for freight and insurance, the time for delivery to Site, and the amounts required in foreign and sterling currencies.
- (4) proposed conditions of sale subject to those in this bound document
- (5) details of the Defects Liability Period
- (6) references describing financial and technical capability



(7) certificate from manufacturer empowering the Tenderer, if he is other than the manufacturer, to submit tenders and negotiate contracts.

## INSTRUCTIONS FOR TENDERING

Definitions of some of the terms used in these instructions, e.g. Site, will be found in Clause 1 of the Conditions of Contract.

### Tender Dossier

(8) full specification of the Goods to be supplied including descriptive literature and drawings and any specific reports or information called for in the Specification.

**A** The tender dossier, namely the documents issued to prospective tenderers, comprises two copies of this bound document which includes:-

- Introduction
- Instructions for Tendering
- Form of Contract Agreement
- Conditions of Contract
- Specification

### Part Tenders

(11) All documents to be in English or accompanied by adequate English translations. Any page on which prices have been entered by the Tenderer must be signed by a person authorised by the Tenderer to sign tenders on behalf of the Tenderer.

**B** Tenders are invited for one or more of the Lots in the Contract but tenders for part of a Lot are not invited.

### Summary of Documents to be Submitted in Tender

**C** The Tender Documents to be submitted shall include -

- (1) one signed and dated copy of this bound document
- (2) the tender deposit
- (3) the original and two copies of each of the following -
  - (a) a separate proforma invoice for delivery of the minor plant and vehicles to Site
  - (b) separate priced lists for delivery to Site of "fast moving" and "slow moving" spare parts and special tools
  - (c) a separate proforma invoice for reception, assembly, and commissioning of minor plant and vehicles at Site stating time required from delivery of each consignment

Proforma invoices for delivery of Goods shall show separately itemised lists of the minor plant and vehicles, each item separately priced, the several prices for freight and insurance, the time for delivery to Site, and the amounts required in foreign and Kenyan currencies.

- (4) proposed conditions of sale subject to those in this bound document
- (5) details of the Defects Liability Period
- (6) references describing financial and technical capability

# INSTRUCTIONS FOR TENDERING

Definitions of some of the terms used in these instructions, e.g. Site, will be found in Clause 1 of the Conditions of Contract.

## Tender Dossier

A The tender dossier, namely the documents issued to prospective tenderers, comprises two copies of this board document which includes:-

- Introduction
- Instructions for Tendering
- Form of Contract Agreement
- Conditions of Contract
- Specification

## Part Tender

B Tenderers are invited for one or more of the Lots in the Contract but tenders for part of a Lot are not invited.

## Summary of Documents to be Submitted in Tender

C The Tender Documents to be submitted shall include -

- (1) one signed and dated copy of this board document
- (2) the tender deposit
- (3) the original and two copies of each of the following -
  - (a) a separate proforma invoice for delivery of the minor plant and vehicles to Site
  - (b) separate priced lists for delivery to Site of "rest moving" and "slow moving" spare parts and special tools
  - (c) a separate proforma invoice for reception, assembly, and commissioning of minor plant and vehicles at Site stating time required from delivery of each consignment
  - (d) Proforma invoices for delivery of Goods shall show separately itemised lists of the minor plant and vehicles, each item separately priced, the several prices for freight and insurance, the time for delivery to Site, and the amounts required in foreign and Kenya currencies.
- (4) proposed conditions of sale subject to those in this board document
- (5) details of the Defects Liability Period
- (6) references describing financial and technical capability

- (7) certificate from manufacturer empowering the Tenderer, if he is other than the manufacturer, to submit tenders and negotiate contracts using his goods
- (8) the name, address, and details of facilities offered by the Tenderer in Kenya especially in respect of post-contract services
- (9) full specification of the Goods to be supplied including descriptive literature and drawings and any specific reports or information called for in the Specification
- (10) the written undertaking of the proposed guarantor to provide the Performance Guarantee in the event of the Tenderer being awarded the Contract
- (11) shipping specification (where applicable).

All documents shall be in English or accompanied by adequate English translations. Any page on which prices have been entered by the Tenderer must be signed by a person authorised by the Tenderer to sign tenders on his behalf.

#### **Eligibility to Tender**

D Tenders will only be considered for Goods supplied from member countries of World Bank or Switzerland or Taiwan.

Tenderers must have, or be, established agents in Kenya.

#### **Currency of Proforma Invoices**

E The currency of the proforma invoices shall be that of the tenderer's own country or of another member country of the World Bank or Switzerland or Taiwan widely used in international trade.

#### **Addenda and Obscurities**

F Tenderers must state any doubt or obscurity in the requirements of the tender dossier in writing to the Purchaser with a copy to the Purchaser's Representative. Clarification will be sent in the form of a formal Addendum which will be distributed to each Tenderer who has purchased the tender dossier. Such Addenda will become part of the tender dossier.

#### **Tender Deposit**

G Tenders must be accompanied by a tender deposit of not less than the amounts listed as follows for each individual tender -

| Lot    | Kenya Shillings |
|--------|-----------------|
| 15/C/1 | 1 000           |
| 15/C/2 | 1 000           |
| 15/C/3 | 1 000           |

- (1) certificates from manufacturer empowering the Tenderer, if he is other than the manufacturer, to submit tenders and negotiate contracts using his goods
  - (2) the name, address, and details of facilities offered by the Tenderer in Kenya especially in respect of post-contract services
  - (3) full specification of the Goods to be supplied including descriptive literature and drawings and any specific reports or information called for in the specification
  - (10) the written undertaking of the proposed guarantor to provide the Performance Guarantee in the event of the Tenderer being awarded the Contract
  - (11) shipping specification (where applicable).
- All documents shall be in English or accompanied by adequate English translations. Any page on which prices have been entered by the Tenderer must be signed by a person authorized by the Tenderer to sign tenders on his behalf.

**Eligibility to Tender**

Tenders must have, or be, established agents in Kenya.

Tenders will only be considered for Goods supplied from member countries of World Bank or Switzerland or Taiwan.

**Currency of Proforma Invoices**

The currency of the proforma invoice shall be that of the tenderer's own country or of another member country of the World Bank or Switzerland or Taiwan widely used in international trade.

**Abstracts and Certificates**

Tenderers must state any doubt or ambiguity in the requirements of the tender dossier in writing to the Purchaser with 4 days to the Purchaser's Representative. Clarification will be sent in the form of a formal Abstract, which will be distributed to each Tenderer who has purchased the tender dossier. Such Abstracts will become part of the tender dossier.

**Tender Deposit**

Tenders must be accompanied by a tender deposit of not less than the amounts listed as follows for each individual tender -

| Lot   | Kenya Shillings |
|-------|-----------------|
| 1/C/1 | 1 000           |
| 1/C/2 | 1 000           |
| 1/C/3 | 1 000           |

Lot Kenya Shillings

|         |       |
|---------|-------|
| 15/C/4  | 1 000 |
| 15/C/5  | 500   |
| 15/C/6  | 1 000 |
| 15/C/7  | 3 000 |
| 15/C/8  | 500   |
| 15/C/9  | 1 000 |
| 15/C/10 | 2 000 |
| 15/C/11 | 5 000 |
| 15/C/12 | 2 000 |
| 15/C/13 | 2 000 |
| 15/C/14 | 500   |

which may be in the form of a bank deposit receipt in the name of the Purchaser or a confirmed irrevocable letter of credit in favour of the Purchaser or a letter of guarantee from a bank incorporated in Kenya. The deposit will be held as a guarantee of the good faith of the Tenderer and will be returned to the successful Tenderer when he has provided the Performance Guarantee, or to unsuccessful tenderers 150 days from the latest day fixed for delivery of tenders.

At any time before expiry of the validity of the tender deposit, if the same shall be in the form of a letter of guarantee or a letter of credit, the Employer may by notice in writing delivered to or sent by registered post to the Tenderer request the Tenderer to extend the validity thereof, and if the Tenderer shall fail to make such extension or if the tender deposit shall be in the form of a bank deposit and the Tenderer requests the return of the bank deposit receipt after the expiry of the said 150 days the Employer may at his discretion treat the tender as having been withdrawn by the Tenderer, but otherwise the tender shall remain binding on the Tenderer and may be accepted at any time unless withdrawn by the Tenderer after expiry of the said 150 days.

#### Performance Guarantee

H Tenderers will be required to supply a Performance Guarantee which is acceptable to the Purchaser as provided for in Clause 10 of the Conditions of Contract. The Form of Performance Guarantee given hereinafter is an indication of the type of security which will be required.

The Tenderer shall submit with his Tender the written undertaking of the proposed guarantor to provide the guarantee in the event of the Tenderer being awarded the Contract.

| Lot    | Kenya Shillings |
|--------|-----------------|
| 151C1A | 1 000           |
| 151C1B | 200             |
| 151C1C | 1 000           |
| 151C1D | 2 000           |
| 151C1E | 200             |
| 151C1F | 1 000           |
| 151C1G | 2 000           |
| 151C1H | 2 000           |
| 151C1I | 2 000           |
| 151C1J | 2 000           |
| 151C1K | 200             |

which may be in the form of a bank deposit receipt in the name of the Purchaser or a confirmed irrevocable letter of credit in favour of the Purchaser or a letter of guarantee from a bank incorporated in Kenya. The deposit will be held as a guarantee of the good faith of the Tenderer and will be returned to the successful Tenderer when he has provided the Performance Guarantee, or to unsuccessful tenderers 150 days from the latest day fixed for delivery of tenders.

At any time before expiry of the validity of the tender deposit, if the same shall be in the form of a letter of guarantee or a letter of credit, the Employer may by notice in writing delivered to or sent by registered post to the Tenderer request the Tenderer to extend the validity thereof, and if the Tenderer shall fail to make such extension or if the tender deposit shall be in the form of a bank deposit and the Tenderer requests the return of the bank deposit receipt after the expiry of the said 150 days the Employer may at his discretion treat the tender as having been withdrawn by the Tenderer, but otherwise the tender shall remain binding on the Tenderer and may be accepted at any time unless withdrawn by the Tenderer after expiry of the said 150 days.

#### Performance Guarantee

If Tenderers will be required to supply a Performance Guarantee which is acceptable to the Purchaser as provided for in Clause 10 of the Conditions of Contract, the Form of Performance Guarantee given heretofore is an indication of the type of security which will be required.

The Tenderer shall submit with his Tender the written undertaking of the proposed guarantor to provide the guarantee in the event of the Tenderer being awarded the Contract.

## References

J Tenderers shall submit the names of those to whom they have supplied goods of a similar kind to that required under the Contract and which have been in successful use in circumstances similar to those for which the Goods are intended (preferably in Kenya) for at least two years, to whom the Purchaser and/or his Representative may refer.

Tenderers shall also provide the names of others to whom the Purchaser and/or his Representative may refer with a view to establishing that the Tenderer is technically and financially capable of undertaking the Contract.

## Submission of Tenders

K Tenders shall be submitted to the Purchaser to arrive not later than 12.00 noon on the latest day fixed for delivery of tenders.

Tenders shall be enclosed in a strong sealed parcel addressed to the Tenderer himself. This parcel shall itself be enclosed in a second strong plain sealed wrapping which shall conspicuously bear the words "TENDER FOR BURA PROJECT CONTRACT N<sup>o</sup> 15/C SUPPLY OF MINOR PLANT AND VEHICLES. NOT TO BE OPENED BEFORE THE MEETING FOR THE OPENING OF TENDERS", but which shall bear no mark indicating the identity of the Tenderer and which shall be addressed to the Purchaser.

## Opening of Tenders

L Tenders will be opened publicly at 12.00 noon on the latest day fixed for delivery at the office of the Purchaser in Nairobi. The representatives of Tenderers may attend. At the opening the names of Tenderers will be announced in the order of opening and the Tender Sums in ascending order but no further details will be made public.

Late tenders will not be considered unless no other tenders have been received.

## Adjudication of Tenders

M For the purpose of comparing tenders

- (1) the Purchaser will consider such factors as efficiency and compatibility of the Goods, availability of service and spare parts, amounts of expenditure required in foreign currencies,
- (2) any amounts required in foreign currency will be converted to Kenya Shillings at the official selling price of the Bank of Kenya for that currency prevailing on the first day of the month preceeding that in which the tenders are to be submitted,
- (3) if the Tenderer should require any payment by way of a letter of credit, the costs of establishing, confirming and disbursing from such letter of credit will be at the expense of the Tenderer and will therefore not be considered in the comparison of tenders,

J. Tenderers shall submit the names of those to whom they have supplied goods of a similar kind to that required under the Contract and which have been in successful use in circumstances similar to those for which the Goods are tendered (especially in Kenya) for at least two years, to whom the Purchaser and/or his Representative may refer.

Tenderers shall also provide the names of others to whom the Purchaser and/or his Representative may refer with a view to establishing that the Tenderer is technically and financially capable of undertaking the Contract.

Submission of Tenders

K. Tenders shall be submitted to the Purchaser to arrive not later than 12.00 noon on the latest day fixed for delivery of tenders.

Tenders shall be enclosed in a strong sealed parcel addressed to the Tenderer himself. The parcel shall itself be enclosed in a second strong plain sealed wrapping which shall conspicuously bear the words "TENDERS FOR BIURA PROJECT CONTRACT NO. DVC SUPPLY OF MINOR PLANT AND VEHICLES NOT TO BE OPENED BEFORE THE MEETING FOR THE OPENING OF TENDERS", but which shall bear no mark indicating the identity of the Tenderer and which shall be addressed to the Purchaser.

Opening of Tenders

L. Tenders will be opened publicly at 12.00 noon on the latest day fixed for delivery at the office of the Purchaser in Nairobi. The representatives of Tenderers may attend. At the opening the names of Tenderers will be announced in the order of opening and the Tender Book in ascending order but no further details will be made public.

Late tenders will not be considered unless no other tenders have been received.

Adjudication of Tenders

M. For the purpose of comparing tenders

- (1) the Purchaser will consider such factors as efficiency and compatibility of the Goods, availability of service and spare parts, amount of expenditure required in foreign countries,
- (2) any amounts required in foreign currency will be converted to Kenya Shillings at the official selling price of the Bank of Kenya for that currency prevailing on the first day of the month preceding that in which the tenders are to be submitted,
- (3) if the Tenderer should require any payment by way of a letter of credit, the costs of establishing, maintaining and discharging from such letter of credit will be at the expense of the Tenderer and will therefore not be considered in the comparison of tenders.

- (4) the Purchaser will consider the time for delivery assembly and commissioning and such guarantees as the Tenderer may offer for delivery,
- (5) other things being equal the Tenderers who offer the longer Defect Liability Periods will be preferred
- (6) tenders will not be considered which offer goods without evidence of proven experience of operation in conditions similar to those of the Bura Irrigation Settlement Project
- (7) the ability of the Tenderer's established agents in Kenya to provide spare parts, maintenance workshops, field service, and customer training facilities will be taken into consideration. Tenderers whose agents offer these facilities will be preferred

### Special Tools and Spare Parts

N Priced lists of recommended "fast moving" and "slow moving" spare parts for two years operation, and special tools to enable all maintenance to be undertaken by the Purchaser shall be submitted with the Tender. The Purchaser may order at his discretion any of the spare parts and special tools. The value of the items ordered will not exceed 30% at the Tender Sum.

### Formal Contract

P After acceptance of his Tender the Tenderer will be required to enter into a formal contract in the terms stated in the Form of Contract Agreement attached hereto. Failure to enter into a formal contract when requested will constitute grounds for forfeiture of the tender deposit referred to in Clause G of these Instructions.

Yours faithfully,

(An approved Insurance Company or Bank)

- (4) The Purchaser will consider the time for delivery assembly and commissioning and such guarantees as the Tenderer may offer for delivery.
- (5) Other things being equal the Tenderers who offer the longer Defect Liability Periods will be preferred.
- (6) Tenderers will not be considered which offer goods without evidence of proven experience of operation in conditions similar to those of the Kona Irrigation Settlement Project.
- (7) The ability of the Tenderer's established agents in Kenya to provide spare parts, maintenance workshops, field service, and customer training facilities will be taken into consideration. Tenderers whose agents offer these facilities will be preferred.

**Special Tools and Spare Parts**

In Priced list of recommended "fast moving" and "slow moving" spare parts for two years operation, and special tools to enable all maintenance to be undertaken by the Purchaser shall be submitted with the Tender. The Purchaser may order at his discretion any of the spare parts and special tools. The value of the items ordered will not exceed KSh 200 at the Tender sum.

**Formal Contract**

9. After acceptance of his Tender the Tenderer will be required to enter into a formal contract in the terms stated in the Form of Contract Agreement attached hereto. Failure to enter into a formal contract when requested will constitute grounds for forfeiture of the tender deposit referred to in Clause 8 of these instructions.

**AN ACCEPTABLE  
FORM OF PERFORMANCE GUARANTEE**

(Reference is made to Clause H of the Instructions for Tendering and Clause 10 of the Conditions of Contract.)

To:

Sir,

We . . . . . hereby  
guarantee . . . . .  
(hereinafter called 'the Contractor') financially, for the sum of . . . . .  
. . . . . ( . . . . . )  
on the occasion of Contract Nr 15/C Supply of Minor Plant and Vehicles  
forming part of the Bura Irrigation Settlement Project as per Agreement  
concluded between them and the . . . . .  
. . (hereinafter called 'the Purchaser') and we undertake to pay the said  
amount to the Purchaser on demand and without notice or any other condition  
or restriction. The said amount shall be at the disposal of the Purchaser from  
this date until the date of expiry of the Defects Liability Period in  
accordance with the said Contract or such earlier time as the said Purchaser  
shall voluntarily cancel or surrender the same. No claim under this guarantee  
shall be accepted if not presented to us in writing on or before the said  
expiry date and this deed of guarantee shall be automatically cancelled and  
shall become null and void without previous notice or any other legal or  
official formality if no such claim is submitted within the period as aforesaid.

Yours faithfully,

(An approved Insurance Company or Bank)



## FORM OF CONTRACT AGREEMENT

THIS AGREEMENT is made the . . . . day of . . . . . 19 . . . .  
BETWEEN The National Irrigation Board of P.O. Box 30372, Nairobi, Kenya  
(hereinafter called the "Purchaser") of the one part and . . . . .  
. . . . .  
. . . . . (hereinafter called the "Contractor") of the other part.

WHEREAS the Purchaser is desirous of purchasing certain Goods for the  
Project known as the Dura Irrigation Settlement Project and has accepted a  
Tender by the Contractor for the supply of Goods all in accordance with the  
Contract, namely -

| Lot No. | Item Description | Quantity |
|---------|------------------|----------|
|---------|------------------|----------|

## FORM OF CONTRACT AGREEMENT

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 be read and  
construed as part of this Agreement viz:-

- (a) The Conditions of Contract.
- (b) The Contractor's Conditions of Sale.
- (c) The Proforma Invoices.
- (d) Addenda No. . . . . to No. . . . . inclusive.
- (e) The Specification.
- (f) The Contractor's details of the Goods.
- (g) The Purchaser's Letter of Intent (if any) as subsequently  
confirmed by the Contractor as acceptable to him.
- (h) The Purchaser's Letter of Acceptance of Tender.



FORM OF CONTRACT AGREEMENT (cont.)

3. In consideration **FORM OF CONTRACT AGREEMENT** the Purchaser to the Contractor as hereinafter mentioned the Contractor hereby covenants with the Purchaser to supply the Goods in conformity in all respects with the provisions of the Contract.

THIS AGREEMENT is made the . . . . day of . . . . . 19 . . . .

BETWEEN The National Irrigation Board of P.O. Box 30372, Nairobi, Kenya (hereinafter called the "Purchaser") of the one part and . . . . .

. . . . .

. . . . . (hereinafter called the "Contractor") of the other part.

IN WITNESS whereof the representatives of the parties hereto have hereunto set their respective hands the day and year first mentioned above.

WHEREAS the Purchaser is desirous of purchasing certain Goods for the Project known as the Bura Irrigation Settlement Project and has accepted a Tender by the Contractor for the supply of Goods all in accordance with the Contract, namely -

FOR Lot Nr ON BEHALF OF THE Item Description Quantity

In the capacity of

Witness

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.

FOR AND ON BEHALF OF THE CONTRACTOR

2. The following documents shall be deemed to form and be read and construed as part of this Agreement viz:-

- (a) The Conditions of Contract.
- (b) The Contractor's Conditions of Sale.
- (c) The Proforma Invoices.
- (d) Addenda Nr....to Nr....inclusive.
- (e) The Specification.
- (f) The Contractor's details of the Goods.
- (g) The Purchaser's Letter of Intent (if any) as subsequently confirmed by the Contractor as acceptable to him.
- (h) The Purchaser's Letter of Acceptance of Tender.

Witness

3. In/



FORM OF CONTRACT AGREEMENT (cont).

3. In consideration of the payments to be made by the Purchaser to the Contractor as hereinafter mentioned the Contractor hereby covenants with the Purchaser to supply the Goods in conformity in all respects with the provisions of the Contract.

4. The Purchaser hereby covenants to pay the Contractor in consideration of the supply of Goods the amounts due at the times and in the manner all as prescribed by the Contract.

IN WITNESS whereof the representatives of the parties hereto have hereunto set their respective hands the day and year first mentioned above.

FOR AND ON BEHALF OF THE PURCHASER

In the capacity of

Witness

FOR AND ON BEHALF OF THE CONTRACTOR

In the capacity of

Witness

7. In consideration of the payments to be made by the Purchaser to the Contractor as hereinafter mentioned the Contractor hereby covenants with the Purchaser to supply the Goods in conformity in all respects with the provisions of the Contract.

8. The Purchaser hereby covenants to pay the Contractor in consideration of the supply of Goods the amount due at the times and in the manner all as prescribed by the Contract.

IN WITNESS whereof the representatives of the parties herein have hereunto set their respective hands the day and year first mentioned above.

FOR AND ON BEHALF OF THE PURCHASER

In the capacity of

Witness

FOR AND ON BEHALF OF THE CONTRACTOR

In the capacity of

Witness

## CONDITIONS OF CONTRACT

The Conditions of Contract shall be the Conditions of Sale accompanying the Tender, together with such amendments or other conditions as shall have been agreed in writing between the Purchaser and the Contractor prior to the date of the Contract Agreement and the following conditions. Where there is a conflict between the following conditions and any other conditions the following shall prevail:-

### Class 1 - Definitions

In construing the Contract the following words shall have the meanings herein assigned to them unless there is something in the subject matter or context inconsistent with such construction:-

The "Purchaser" shall mean the National Irrigation Board of P.O. Box 3072, Nairobi, Kenya.

The "Purchaser's Representative" shall mean the person or persons appointed by The National Irrigation Board, and communicated to the Contractor.

### CONDITIONS OF CONTRACT

The "Contractor" shall mean the Tenderer whose Tender has been accepted by the Purchaser.

"Site" shall mean the mechanical workshop of the Purchaser at the Rural Centre, Bura.

"Goods" shall mean the minor plant and vehicles, special tools, spares, auxiliary equipment and any other items of equipment as detailed herein and in the Introduction.

"Lot" shall mean a category into which the Goods are divided and numbered.

### Class 2 - Delivery

The Contractor shall at his own cost deliver (including assembly and commissioning) the Goods to the Site. Such delivery shall be completed within the delivery period given below which shall commence on the date of receipt by the Contractor of the Purchaser's Letter of Acceptance of Tender.

The delivery period for any Lot or any combination of Lots together shall be 9 months.

### Class 3 - Assembly and Commissioning

The Contractor shall receive and check the Goods delivered to the Site and shall inform the Purchaser's Representative when he considers a consignment of minor plant and vehicles ready for commissioning. When the Purchaser's Representative is satisfied that each item of the Goods in the consignment is in good working order he shall issue a certificate



showing the data (the Commissioning Data) on which the consignment was commissioned.

## CONDITIONS OF CONTRACT

when the Purchaser's Representative is satisfied that all the spares have been delivered he shall issue a certificate to that effect.

The Conditions of Contract shall be the Conditions of Sale accompanying the Tender, together with such amendments or other conditions as shall have been agreed in writing between the Purchaser and the Contractor prior to the date of the Contract Agreement and the following conditions. Where there is a conflict between the following conditions and any other conditions the following shall prevail:-

### Clause 1 - Definitions

In construing the Contract the following words shall have the meanings herein assigned to them unless there is something in the subject matter or context inconsistent with such construction:-

The "Purchaser" shall mean the National Irrigation Board of P.O. Box 30372, Nairobi, Kenya.

The "Purchaser's Representative" shall mean the person or persons appointed by The National Irrigation Board, and communicated to the Contractor.

The "Contractor" shall mean the Tenderer whose Tender has been accepted by the Purchaser.

"Site" shall mean the mechanical workshop of the Purchaser at the Rural Centre, Bura.

"Goods" shall mean the minor plant and vehicles, special tools, spares, ancillary equipment and any other items of equipment as detailed herein and in the Introduction.

"Lot" shall mean a category into which the Goods are divided and numbered.

### Clause 2 - Delivery

The Contractor shall at his own cost deliver (including assembly and commissioning) the Goods to the Site. Such delivery shall be completed within the delivery period given below which shall commence on the date of receipt by the Contractor of the Purchaser's Letter of Acceptance of Tender.

The delivery period for any Lot or any combination of Lots together shall be 8 months.

### Clause 3 - Assembly and Commissioning

The Contractor shall receive and check the Goods delivered to the Site and shall inform the Purchaser's Representative when he considers a consignment of minor plant and vehicles ready for commissioning. When the Purchaser's Representative is satisfied that each item of the Goods in the consignment is in good working order he shall issue a certificate

## CONDITIONS OF CONTRACT

The Conditions of Contract shall be the Conditions of Sale accompanying the Tender, together with such amendments or other conditions as shall have been agreed in writing between the Purchaser and the Contractor prior to the date of the Contract Agreement and the following conditions. Where there is a conflict between the following conditions and any other conditions the following shall prevail:-

### Clause 1 - Definitions

In construing the Contract the following words shall have the meanings herein assigned to them unless there is something in the subject matter or context inconsistent with such construction:-

The "Purchaser" shall mean the National Irrigation Board of P.O. Box 20372, Nairobi, Kenya.

The "Purchaser's Representative" shall mean the person or persons appointed by the National Irrigation Board, and communicated to the Contractor.

The "Contractor" shall mean the Tenderer whose Tender has been accepted by the Purchaser.

"Site" shall mean the mechanical workshop of the Purchaser at the Rural Centre, Gura.

"Goods" shall mean the minor plant and vehicles, special tools, spares, ancillary equipment and any other items of equipment as detailed herein and in the instruction.

"Lot" shall mean a category into which the Goods are divided and numbered.

### Clause 2 - Delivery

The Contractor shall at his own cost deliver (including assembly and commissioning) the Goods to the Site. Such delivery shall be completed within the delivery period given below which shall commence on the date of receipt by the Contractor of the Purchaser's Letter of Acceptance of Tender.

The delivery period for any Lot or any combination of Lots together shall be 8 months.

### Clause 3 - Assembly and Commissioning

The Contractor shall receive and check the Goods delivered to the Site and shall inform the Purchaser's Representative when he considers a consignment of minor plant and vehicles ready for commissioning. When the Purchaser's Representative is satisfied that each item of the Goods in the consignment is in good working order he shall issue a certificate

showing the date (the Commissioning Date) on which the consignment was commissioned.

When the Purchaser's Representative is satisfied that all the spares have been delivered he shall issue a certificate to that effect.

The Contractor shall be responsible, inter alia, for the provision of all labour and crange required for assembly and commissioning.

#### **Clause 4 - Inspection**

In accordance with the import regulations of the Government of Kenya in force from time to time the Contractor shall arrange inspection by the Societe Generale de Surveillance or their accredited agents in the country of origin of imported Goods and shall provide the Purchaser with this inspection certificate. Such inspection and certification shall be at the cost of the Contractor.

The Purchaser shall also have the right to inspect the Goods to be supplied at the manufacturer's works, and where applicable to witness conformance tests on the main parts of the Goods. Such inspection shall be at the cost of the Purchaser. The conformance tests themselves shall be at the cost of the Contractor who shall supply the necessary equipment for such testing.

#### **Clause 5 - Insurance**

Insurance shall be in the joint names of the Purchaser and Contractor and shall be effected by the Contractor and shall include cover until the Commissioning Date for each consignment of Goods to the full value of such consignment plus 10% against damage or loss however caused.

The risks against which the Contractor is to insure under the Contract shall be insured through an approved insurance company in Kenya and any cover against risks which the Contractor may enjoy under a global policy of insurance shall be reinsured in Kenya by a Kenyan insurance company in respect of the Contractor's obligations under the Contract.

#### **Clause 6 - Currency**

Payments shall be made in the currency or currencies used by the Contractor in his Tender.

The Purchaser warrants that foreign exchange facilities will be made available for the purchase and import by the Contractor of the Goods. All foreign exchange facilities shall be in accordance with the rules and regulations of the Central Bank of Kenya in force from time to time.

The Contractor shall make expenditure in foreign currency for the purpose of the Contract only for goods produced in or services procured from member countries of the World Bank or Switzerland or Taiwan.

Where the Contractor requires letters of credit to be established by the Purchaser these will be provided by the Purchaser at the cost of the Contractor on terms of withdrawal appropriate to the Conditions of Payment.

Contractor on terms of withdrawal appropriate to the Conditions of Payment.  
Where the Contractor requires letters of credit to be established by the member countries of the World Bank or International Finance Corporation of the Contract only for goods produced in or services produced from the Contractor shall make expenditure in foreign currency for the purpose of foreign exchange facilities shall be in accordance with the rules and regulations of the Central Bank of Kenya in force from time to time.  
The Purchaser warrants that foreign exchange facilities will be made available for the purchase and import by the Contractor of the Goods. All Payments shall be made in the currency of contracts used by the Contractor in his Tender.

Clause 6 - Currency

The risks against which the Contractor is to insure under the Contract shall be insured through an approved insurance company in Kenya and any cover against risks which the Contractor may enjoy under a global policy of insurance shall be retained in Kenya by a Kenyan insurance company in respect of the Contractor's obligations under the Contract.  
The risks against which the Contractor is to insure under the Contract shall be effected by the Contractor and shall include cover until the Commissioning Date for each consignment of Goods to the full value of such consignment plus 10% against damage or loss however caused.  
Insurance shall be in the joint names of the Purchaser and Contractor and shall be effected by the Contractor and shall include cover until the Commissioning Date for each consignment of Goods to the full value of such consignment plus 10% against damage or loss however caused.

Clause 5 - Insurance

The Purchaser shall also have the right to demand the Goods to be supplied at the manufacturer's works, and where applicable to witness conformance tests on the main parts of the Goods. Such inspection shall be at the cost of the Purchaser. The contractor tests themselves shall be at the cost of the Contractor who shall supply the necessary equipment for such testing.

The Purchaser shall also have the right to demand the Goods to be supplied at the manufacturer's works, and where applicable to witness conformance tests on the main parts of the Goods. Such inspection shall be at the cost of the Purchaser. The contractor tests themselves shall be at the cost of the Contractor who shall supply the necessary equipment for such testing.

Clause 4 - Inspection

The Contractor shall be responsible, inter alia, for the provision of all labor and change required for assembly and commissioning.

When the Purchaser's Representative is satisfied that all the goods have been delivered he shall issue a certificate to that effect.

showing the date (the Commissioning Date) on which the consignment was commissioned.

The terms of the letter of credit shall be to the approval of the Purchaser and shall incorporate a provision that disbursements under the facilities shall only be made on the Payment Certificate of the Purchaser's Representative given in accordance with Clause 7 hereof. Disbursements shall be at the rates of exchange registered in the official records of the Central Bank of Kenya as ruling on the first day of the month preceding the month in which Tenders were submitted.

Payments in Kenyan currency shall be made by the Purchaser within 45 days from the date of the Purchaser's Representative's Payment Certificate.

The Purchaser's Representative shall not be responsible for any payments to be made by the Purchaser under the terms of the Contract.

#### **Clause 7 - Conditions of Payment**

The Purchaser's Representative shall certify by means of a Payment Certificate as follows:-

In respect of provision of Goods:-

- (i) On delivery  
95% of the value of a consignment of Goods delivered to Site.
- (ii) On the Commissioning Date  
95% of the reception, assembly and commissioning costs in respect of the Goods.
- (iii) Twelve months after the Commissioning Date the remaining 5% of each of the above values and costs.

#### **Clause 8 - Variations in Price**

Tenderers may submit their own Variation of Price Formulae with their Tender for approval. Unless otherwise stated in the Tender and agreed prior to the Contract, the rates and prices stated on the proforma invoice shall be subject to variation only if:-

- (a) variations in the quantity of the Goods ordered exceed 10%, or
- (b) variations in specification of the Goods to be supplied are ordered by the Purchaser

#### **Clause 9 - Defects Liability**

The Contractor shall be responsible for the performance of the Goods to the requirements of the Contract. The Contractor shall be responsible for making good any defects which may become evident during the Defects Liability Period other than those due to maloperation by the Purchaser or due to fair wear and tear. The Defects Liability Period shall commence on the Commissioning Date and shall be of the duration stated in the Contract, which shall not be less than six months.

The terms of the letter of credit shall be to the approval of the Purchaser and shall incorporate a provision that disbursements under the facilities shall only be made on the Payment Certificate of the Purchaser's Representative given in accordance with Clause 7 hereof. Disbursements shall be at the rate of exchange registered in the official records of the Central Bank of Kenya as ruling on the first day of the month preceding the month in which Tenders were submitted.

Payments in Kenyan currency shall be made by the Purchaser within 45 days from the date of the Purchaser's Representative's Payment Certificate.

The Purchaser's Representative shall not be responsible for any payments to be made by the Purchaser under the terms of the Contract.

**Clause 1 - Conditions of Payment**

The Purchaser's Representative shall certify by means of a Payment Certificate as follows:-

In respect of provision of Goods:-

- (i) On delivery 75% of the value of a consignment of Goods delivered to Site.
- (ii) On the Commissioning Date 95% of the reception, assembly and commissioning costs in respect of the Goods.
- (iii) Twelve months after the Commissioning Date the remaining 5% of each of the above values and costs.

**Clause 2 - Variations in Price**

Tenders may submit their own Variation of Price Formulae with their Tender for approval. Unless otherwise stated in the Tender and agreed prior to the Contract, the rates and prices stated on the proforma invoice shall be subject to variation only if:-

- (a) variation in the quantity of the Goods ordered exceed 10% or
- (b) variation in specification of the Goods to be supplied are ordered by the Purchaser

**Clause 3 - Defects Liability**

The Contractor shall be responsible for the performance of the Goods to the requirements of the Contract. The Contractor shall be responsible for making good any defects which may become evident during the Defects Liability Period other than those due to misoperation by the Purchaser or due to fair wear and tear. The Defects Liability Period shall commence on the Commissioning Date and shall be of the duration stated in the Contract, which shall not be less than six months.

## Clause 10 - Performance Guarantee

The Contractor shall provide within 21 (twenty-one) days of receipt of the letter of acceptance from the Purchaser the guarantee of an Insurance Company or Bank to be bound with the Contractor in a sum for the due performance of the Contract under the terms of a Guarantee. The said Insurance Company or Bank and the terms of the said Guarantee shall be such as shall be approved by the Purchaser and the provision of such Guarantee and the cost of the Guarantee shall be at the expense in all respects of the Contractor. The amount of the Guarantee shall be not less than 10% of the accepted Tender Sum.

The validity of the Performance Guarantee shall not expire before the end of the Defects Liability Period.

SPECIFICATION

GENERAL



## SPECIFICATION

### GENERAL

#### Brief Description of Requirements

1 The duties of the Contractor in the execution of the Contract include the supply, assembly and commissioning of the Goods all as detailed herein and listed in the introduction.

#### Assembly and Commissioning

2 The Goods shall be delivered new. Assembly and commissioning at the Site shall be to full working order.

The initial charges of fuel, oil, grease, electrolyte and similar materials necessary for the correct setting to work and operation of the Goods shall always be included.

#### Manuals, Drawings, etc.

### SPECIFICATION

3 The Contractor shall provide two copies of an operating and maintenance manual for each minor plant and vehicles. The Contractor shall also provide one copy per five items of minor plant and vehicles of each of the following -

- (a) spare parts catalogue
- (b) lubrication chart
- (c) workshop manual
- (d) drawings (where necessary for maintenance and repair).

#### Language and Units

4 All manuals, catalogues, charts, drawings, name plates, markings etc. shall be in English. The system of measurement used throughout, including the graduation of any gauges or meters, shall be the S.I. system.

#### Packing

5 The Contractor shall pack, mark and, as necessary, protect the Goods for delivery, unloading, handling, storage in the open, and transport to Site.

Attention shall be given to the protection of parts which are liable to deteriorate in the climatic conditions prevailing in Kenya, and the form of packaging shall be such that no damage to the Goods shall result from normal handling or prolonged storage in the open.

Small parts shall be boxed and suitably marked on the outside. Larger parts shall be protected as necessary and shall be suitably marked and listed. Unless otherwise approved, consignments shall conform to the requirements of the Kenyan Highway Authorities.



## SPECIFICATION

Each separate crate or box shall be accompanied by a packing list, a duplicate of which shall be sent separately to the Bura Project Coordinator, National Irrigation Board, P.O. Box 30372, Nairobi, i.e. separate from and additional to any agreed distribution of despatching or shipping documents.

### GENERAL

The packing list shall state the following:-

#### Brief Description of Requirements

1 The duties of the Contractor in the execution of the Contract include the supply, assembly and commissioning of the Goods all as detailed herein and listed in the Introduction.

#### Assembly and Commissioning

2 The Goods shall be delivered new. Assembly and commissioning at the Site shall be to full working order.

The initial charges of fuel, oil, grease, electrolyte and similar materials necessary for the correct setting to work and operation of the Goods shall always be included.

#### Manuals, Drawings, etc.

3 The Contractor shall provide two copies of an operating and maintenance manual for each item of minor plant and vehicles. The Contractor shall also provide one copy per five items of minor plant and vehicles of each of the following -

- (a) spare parts catalogue
- (b) lubrication chart
- (c) workshop manual
- (d) drawings (where necessary for maintenance and repair).

#### Language and Units

4 All manuals, catalogues, charts, drawings, name plates, markings etc. shall be in English. The system of measurement used throughout, including the graduation of any gauges or meters, shall be the S.I. system.

#### Packing

5 The Contractor shall pack, mark and, as necessary, protect the Goods for delivery, unloading, handling, storage in the open, and transport to Site.

Attention shall be given to the protection of parts which are liable to deteriorate in the climatic conditions prevailing in Kenya, and the form of packaging shall be such that no damage to the Goods shall result from normal handling or prolonged storage in the open.

Small parts shall be boxed and suitably marked on the outside. Larger parts shall be protected as necessary and shall be suitably marked and listed. Unless otherwise approved, consignments shall conform to the requirements of the Kenyan Highway Authorities.

## List Description of Requirements

1 The duties of the Contractor in the execution of the Contract include the supply, assembly and commissioning of the Goods as detailed herein and listed in the Introduction.

## Assembly and Commissioning

2 The Goods shall be delivered new, Assembly and commissioning at the site shall be to full working order.

The initial charges of fuel, oil, grease, electrolyte and similar materials necessary for the correct setting to work and operation of the Goods shall always be included.

## Manuals, Drawings, etc.

3 The Contractor shall provide two copies of an operating and maintenance manual for each item of minor plant and vehicles. The Contractor shall also provide one copy per five items of minor plant and vehicles of each of the following -

- |     |  |
|-----|--|
| (a) | spare parts catalogue                                  |
| (b) | lubrication chart                                      |
| (c) | workshop manual  |
| (d) | drawings (where necessary for maintenance and repair). |

## Language and Units

4 All manuals, catalogues, charts, drawings, name plates, markings etc. shall be in English. The system of measurement used throughout, including the graduation of any gauges or meters, shall be the S.I. system.

## Packaging

5 The Contractor shall pack, mark and, as necessary, protect the Goods for delivery, unloading, handling, storage in the open, and transport to site.

Attention shall be given to the protection of parts which are liable to deteriorate in the climatic conditions prevailing in Kenya, and the form of packaging shall be such that no damage to the Goods shall result from normal handling or prolonged storage in the open.

Small parts shall be boxed and suitably marked on the outside. Larger parts shall be protected as necessary and shall be suitably marked and listed. Unless otherwise approved, components shall conform to the requirements of the Kenyan Highway Authorities.

Each separate crate or box shall contain a packing list, a duplicate of which shall be sent separately to the Bura Project Coordinator, National Irrigation Board, P.O. Box 30372, Nairobi, i.e. separate from and additional to any agreed distribution of copies of dispatching or shipping documents.

The packing list shall state the following:-

- (a) crate or box identification numbers
- (b) order number
- (c) for each part contained in it: part number, description, quantity, balance of order outstanding.

For Goods delivered via Mombasa in addition to the normal dangers of damage during shipment to Mombasa and during handling in the port area, the Goods may be delayed on the quayside for some time.

The additional dispatching or shipping mark shall be:-

BURA WEST CONTRACT 15/C

On delivery to Site the packing materials shall become the property of the Purchaser.

### **Ambient Conditions**

6 The Site is at the Rural Centre at Bura, which is located on the west bank of the Tana River approximately 450 km from Nairobi and 400 km from Mombasa by road as shown in Figure Nr 1.

The average shade temperature where the Goods are required to operate may vary between 20degC and 40degC over the year. There are usually two rainy seasons from March to May and October to December. The total annual rainfall averages about 480 mm, but there are large variations in annual totals and in monthly totals for the same month of different years.

The soils are predominantly sandy clay texture which when wet becomes very plastic, and when dry, very dusty. The area is subject to prolonged steady winds which carry airborne dust and grit.

Without prejudice to the successful functioning of the Goods under the ambient conditions stated above, the Goods shall be designed to work under the following tropical climate conditions:-

Surrounding air temperature 0degC - 40degC  
Relative humidity Max.95%  
Altitude 100 m above sea level.

### **Inspection and Tests**

7 The Purchaser's right to inspect under the terms of Clause 4 of the Conditions of Contract may be exercised by the Purchaser's Representative or by an inspector to be designated by the Purchaser or the Purchaser's Representative.

The Contractor shall confirm to the Purchaser's Representative as soon as possible after receipt of the Letter of Acceptance of the Contract the

Each separate crate or box shall contain a packing list, a duplicate of which shall be sent separately to the State Project Coordinator, National Irrigation Board, P.O. Box 3077, Nairobi, i.e. separate from and additional to any agreed distribution of copies of despatching or shipping documents.

The packing list shall state the following:-

- (a) state of box identification number
- (b) order number
- (c) for each part contained in its part number, description, quantity, balance of order outstanding.

For Goods delivered via Mombasa in addition to the normal danger of damage during shipment to Mombasa and during loading in the port area, the Goods may be delayed on the quayside for some time.

The additional despatching or shipping mark shall be:-

**SIKA WEST CONTRACT 1970**

On delivery to Site the packing materials shall become the property of the Purchaser.

**Ambient Conditions**

4. The Site is at the Rural Centre at Sika, which is located on the west bank of the Tana River approximately 450 km from Nairobi and 400 km from Mombasa by road as shown in Figure No. 1.

The average shade temperature where the Goods are required to operate may vary between 20degC and 30degC over the year. There are usually two rainy seasons from March to May and October to December. The total annual rainfall averages about 450 mm, but there are large variations in annual totals and in monthly totals for the same month of different years.

The soils are predominantly sandy clay textures which when wet become very plastic, and when dry, very dusty. The area is subject to prolonged steady winds which carry abundant dust and grit.

Without prejudice to the successful functioning of the Goods under the ambient conditions stated above, the Goods shall be designed to work under the following tropical climate conditions:-

Surrounding air temperature 0degC - 40degC  
Relative humidity Max. 95%  
Altitude 100 m above sea level.

**Inspection and Tests**

7. The Purchaser's right to inspect under the terms of Clause 4 of the Conditions of Contract may be exercised by the Purchaser's Representative or by an inspector to be designated by the Purchaser or the Purchaser's Representative.

The Contractor shall continue to the Purchaser's Representative as soon as possible after receipt of the latter of Acceptance of the Contract the

delivery date and shall give him and the designated inspector (if any) at least 15 clear working days notice in writing that the Goods are ready for inspection or that tests are ready for witnessing.

Inspection at the manufacturer's works shall include the visual inspection of the Goods to be supplied and witnessing conformance tests of moving parts.

Visual inspection will include checking:-

- (a) compliance with the Specification and the Contractor's undertaking in respect of description, quality and quantity
- (b) suitability of packing.

Where not otherwise specified, conformance tests will be limited to those required by the appropriate British or other equivalent approved national or international standards.

### **Interchangeability of Components**

8 All Goods to be supplied by the same manufacturer shall be as far as possible of the same series and model with interchangeable components.

PARTICULAR

delivery date and shall give him and the designated inspector (any) at least 12 clear working days notice in writing that the Goods are ready for inspection or that tests are ready for witnessing.

Inspection at the manufacturer's works shall include the visual inspection of the Goods to be supplied and witnessing conformance tests of moving parts.

Visual inspection will include checking:-

- (a) compliance with the Specification and the Contractor's undertaking in respect of description, quality and quantity
- (b) suitability of packing.

Where not otherwise specified, conformance tests will be limited to those required by the appropriate British or other equivalent approved national or international standards.

#### Interchangeability of Components

8 All Goods to be supplied by the same manufacturer shall be as far as possible of the same series and model with interchangeable components.

Type

L.01 The requirement is for a diesel powered forward tip general purpose dumper with two wheel drive.

Engine

L.02 The engine shall be a hand start four stroke diesel engine, air cooled with an engine operating speed of preferably not more than 2500 rpm developing between 8 and 10 hp. The engine shall be fitted with a tropical air filter of the oil-bath type.

Skp

L.03 The carrying capacity shall be between 1000 kg and 1500 kg payload with gravity operated forward tip.

Transmission

**SPECIFICATION**

L.04 The transmission shall incorporate a heavy duty gearbox for not less than 3 forward gears and **PARTICULAR** gear through a dry plate clutch.

Braking

L.05 Braking shall be by foot operated internal expanding drum brakes to the front wheels and a transmission lock parking brake.

Steering

L.06 The dumper shall be steered through recirculatory ball type steering to the rear wheels.

Wheels and tyres

L.07 The front tyres shall be rough terrain pattern of not less than 7.50 x 16 and 6 ply rating.

The rear tyres shall be not less than 6.00 x 16 ribbed pattern and 6 ply rating.

Other Requirements

L.08 A manufacturer's tool kit and spare drive wheel and tyre shall be provided.

SPECIFICATION  
PARTICULAR

## Type

**1.01** The requirement is for a diesel powered forward tip general purpose dumper with two wheel drive. The roller shall be self-propelled, pedestrian controlled with two rolls.

## Engine

**1.02** The engine shall be a hand start four stroke diesel engine, air cooled with an engine operating speed of preferably not more than 2500 rpm developing between 8 and 10 hp. The engine shall be fitted with a tropical air filter of the oil-bath type.

## Skip

**1.03** The carrying capacity shall be between 1000 kg and 1500 kg payload with gravity operated forward tip.

## Transmission

**1.04** The transmission shall incorporate a heavy duty gearbox for not less than 3 forward gears and one reverse gear through a dry plate clutch.

## Braking

**1.05** Braking shall be by foot operated internal expanding drum brakes to the front wheels and a transmission lock parking brake.

## Steering

**1.06** The dumper shall be steered through recirculatory ball type steering to the rear wheels.

## Wheels and tyres

**1.07** The front tyres shall be rough terrain pattern of not less than 7.50 x 16 and 6 ply rating.

The rear tyres shall be not less than 6.00 x 16 ribbed pattern and 6 ply rating.

## Other Requirements

**1.08** A manufacturer's tool kit and spare drive wheel and tyre shall be provided.

Type

1.01 The requirement is for a diesel powered forward or general purpose dumper with two wheel drive.

Engine

1.02 The engine shall be a hand start four stroke diesel engine, air cooled with an engine operating speed of between 1800 and 2200 rpm developing between 8 and 10 hp. The engine shall be fitted with a tropical air filter of the oil-bath type.

Wheels

1.03 The carrying capacity shall be between 1000 kg and 1500 kg payload with gravity operated forward or.

Transmission

1.04 The transmission shall incorporate a heavy duty gearbox for not less than 3 forward gears and one reverse gear through a dry plate clutch.

Braking

1.05 Braking shall be by foot operated internal expanding drum brakes on the front wheels and a transmission lock parking brake.

Steering

1.06 The dumper shall be steered through recirculatory ball type steering to the rear wheels.

Wheels and Tyres

1.07 The front tyres shall be rough terrain pattern of not less than 7.50 x 16 and 6 ply rating. The rear tyres shall be not less than 6.00 x 16 ribbed pattern and 6 ply rating.

Other Requirements

1.08 A manufacturer's tool kit and spare drive wheel and tyre shall be provided.

# LOT № 15/C/2 - SELF-PROPELLED VIBRATING ROLLER

## Type

**2.01** The requirement is for a general purpose vibrating roller for compaction of all types of fill and surfaces. The roller shall be self-propelled, pedestrian controlled with two rolls.

## Engine

**2.02** The engine shall be a hand start four stroke diesel engine, air cooled with an engine operating speed of preferably not more than 2500 rpm. The engine shall be fitted with a tropical air filter of the oil-bath type.

## Dimensions and Weight

**2.03** The operating weight shall be not less than 500 kg, and the roller centrifugal force shall not be less than 10 kN on each roll. The roller shall be capable of compacting fill in layers of 200 to 300 mm loose lift. Rollers which are able to do this with the least number of passes will be preferred.

The roll width shall be within the range 700 to 1000 mm, with semi-clear sides capable of operating in restricted areas such as trenches.

## Gradability

**2.04** The roller shall be capable of climbing gradients of 30%.

## Other Requirements

**2.05** A manufacturer's tool kit shall be supplied.

## Water Tank

**3.05** The high level water tank shall discharge the water into the revolving mixing drum through a metered control valve by gravity.

## Chassis

**3.06** The mixer shall be set on a substantial chassis frame mounted solidly on two axles for towing, with corner jacks for working stability.

The front axle shall be on a turntable mounting connected to a tow bar.

Type

2.01 The requirement is for a general purpose vibrating roller for compaction of all types of fill and surfaces. The roller shall be self-propelled, propulsion controlled with two rolls.

Engines

2.02 The engine shall be a hand start four stroke diesel engine, air cooled with an engine operating speed of preferably not more than 1500 rpm. The engine shall be fitted with a tropical air filter of the oil-bath type.

Dimensions and Weight

2.03 The operating weight shall be not less than 200 kg, and the roller centrifugal force shall not be less than 10 kN on each roll. The roller shall be capable of compacting fill in layers of 200 to 300 mm loose lift. Rollers which are able to do this with the least number of passes will be preferred.

The roll width shall be within the range 700 to 1000 mm, with semi-disk sides capable of operating in restricted areas such as trenches.

Stability

2.04 The roller shall be capable of climbing gradients of 30%.

Other Requirements

2.05 A manufacturer's tool kit shall be supplied.

3.07 Adequate guards shall be incorporated and the engine protected by Type towing.

3.01 The mixer shall be a diesel powered non-tilt concrete mixer with loading skip and water tank to produce a discharge of 0.25 cubic metres of mixed materials.

### Engine

3.02 The engine shall be a hand start four stroke diesel engine, air cooled with an engine operating speed of preferably not more than 2500 rpm. The engine shall be fitted with a tropical air filter of the oil-bath type.

This engine shall power the drum rotation and the raising of the loading skip.

### Mixing Drum

3.03 The mixing drum shall be non-tilting and discharge from the drum shall be obtained by the travel of the discharge chute into the mixing drum during rotation.

The drum shall revolve by an integral roller track supported by four idling rollers and shall be driven by pinion drive on to the drum gear through a clutch.

### Loading Skip

3.04 The loading skip shall be raised and lowered by a cable winch powered by the engine.

The skip shall be open shaped to take 0.4 cubic metres of dry materials tapering into a closed chute which allows discharge into the mixing drum when the skip is raised.

### Water Tank

3.05 The high level water tank shall discharge the water into the revolving mixing drum through a metered control valve by gravity.

### Chassis

3.06 The mixer shall be set on a substantial chassis frame mounted solidly on two axles for towing, with corner jacks for working stability.

The front axle shall be on a turntable mounting connected to a tow bar.

Type

2.01 The mixer shall be a diesel powered non-till concrete mixer with loading skip and water tank to produce a discharge of 0.22 cubic metres of mixed material.

Engine

2.02 The engine shall be a hand start four stroke diesel engine, air cooled with an engine operating speed of preferably not more than 2500 rpm. The engine shall be fitted with a tropical air filter of the oil bath type.

This engine shall power the drum rotation and the raising of the loading skip.

Mixing Drum

2.03 The mixing drum shall be non-lifting and discharge from the drum shall be obtained by the travel of the discharge chute into the mixing drum during rotation.

The drum shall revolve by an inverted roller track supported by four idling rollers and shall be driven by pinion drive on to the drum gear through a clutch.

Loading Skip

2.04 The loading skip shall be raised and lowered by a cable winch powered by the engine.

The skip shall be open topped to take 0.4 cubic metres of dry material tapering into a closed chute which allows discharge into the mixing drum when the skip is raised.

Water Tank

2.05 The right hand water tank shall discharge the water into the revolving mixing drum through a metered control valve by gravity.

Chassis

2.06 The mixer shall be set on a substantial chassis frame mounted solidly on two axles for towing, with corner jacks for working capability.

The front axle shall be on a swivelling mounting connected to a tow bar.

## Other Requirements AIR 157C/4 - MOBILE AIR COMPRESSOR

**3.07 Adequate guards shall be incorporated and the engine protected by a cowling.**

**A manufacturer's tool kit shall be supplied.**

### Engine

3.07.1 The engine shall be a four stroke water cooled diesel engine, 30 hp and include a flywheel, and fuel, oil and air filters shall be included in the initial set. Starting shall be by direct electric starting from heavy duty battery.

The engine shall be fitted with an engine hour meter.

### Compressor and Attachments

3.07.2 The compressor shall be of the single stage rotary screw type of not less than 7 cubic metres capacity output at 1 bar. The compressor shall include an air receiver with not less than two outlets controlled by two valves. A safety valve and drain valve shall be fitted.

Air flow shall be regulated by an air-actuated valve and engine speed control unit.

The following attachments shall be provided for use with the compressor:

- (a) one heavy duty 1/2" diameter (3/4" diameter) air chisel  
one breaker stone  
one chisel stone  
one coarse buffer  
one fine stone.
- (b) one heavy duty pneumatic square pass  
four iron points  
two angles  
one chisel.
- (c) one pneumatic pick pass  
six iron points.
- (d) six iron roller chains of 27 pin - alluminium compressor hose together with fittings for use with equipment.

### Wheel Fitting

3.07.3 The compressor shall have a single axle with pneumatic tyres of 6.00 x 16 size and 5 ply rating, and be provided with swivel, adjustable wheel ends, semi-elliptic leaf springing, handbrake and overrun braking on the highway wheel.

2.67 Adequate guards shall be incorporated and the engine protected by a cowling.

A manufacturer's tool kit shall be supplied.

4.25 A manufacturer's tool kit shall be supplied.

### **Type**

**4.01** The mobile air compressor shall be diesel powered and mounted on a fast towing chassis, complete with pneumatic tools and hoses.

### **Engine**

**4.02** The engine shall be a four stroke water cooled diesel engine. Oil and coolant radiators, and fuel, oil and air filters shall be suitable for tropical use. Starting shall be by direct electric starting from heavy duty batteries.

The engine shall be fitted with an engine hour meter.

### **Compressor and Attachments**

**4.03** The compressor shall be of the single stage rotary screw type of not less than 3 cubic metres/minute output at a pressure of 7 bar. The compressor shall deliver to an air receiver with not less than four outlets controlled by gate valves. A safety valve and drain valve shall be fitted.

Air flow shall be regulated by an unloader valve and engine speed control unit.

The following attachments shall be provided for use with the compressor -

- (a) one heavy duty breaker (incorporating a lubricating oil reservoir) plus  
six breaker steels  
one chisel steel  
one tarmac cutter  
one clay spade,
- (b) one heavy duty pneumatic spader plus  
four moil points  
two spades  
one chisel,
- (c) one pneumatic pick plus  
six moil points,
- (d) six ten metre lengths of 20 mm connecting compressor hose together with fittings for the above equipment.

### **Trailer Mounting**

**4.04** The compressor shall have a single axle with pneumatic tyres of 6.50 x 16 size and 8 ply rating, and be provided with drawbar, adjustable jockey wheel, semi-elliptic leaf springing, handbrake and overrun braking for fast highway towing.

4.01 The mobile air compressor shall be diesel powered and mounted on a fast towing chassis, complete with pneumatic tools and hoses.

Engine

4.02 The engine shall be a four stroke water cooled diesel engine. Oil and coolant radiators, and fuel, oil and air filters shall be suitable for tropical use. Starting shall be by direct electric starting from heavy duty batteries.

The engine shall be fitted with an engine hour meter.

Compressor and Attachments

4.03 The compressor shall be of the single stage rotary screw type of not less than 3 cubic metres output at a pressure of 7 bar. The compressor shall deliver to an air receiver with not less than four outlets controlled by gate valves. A safety valve and drain valve shall be fitted.

Air flow shall be regulated by an unloader valve and engine speed control unit.

The following attachments shall be provided for use with the compressor -

- (a) one heavy duty breaker (incorporating a lubricating oil reservoir) plus six breaker sockets, one chrome steel, one tapered outlet, one clay spade,
- (b) one heavy duty pneumatic spader plus four tool points, two spades, one chisel,
- (c) one pneumatic pick plus six tool points,
- (d) six ten metre lengths of 20 mm diameter compressor hose together with fittings for the above equipment.

Trailer mounting

4.04 The compressor shall have a single axle with pneumatic tyres of 6.25 x 16 size and B ply rating, and be provided with drawbar, adjuster jockey wheel, semi-elliptic leaf springing, handbrake and overrun braking for fast highway towing.

## Other Requirements

TYPE 15/C/3 - CENTRIFUGAL PUMP - 75 MM# SIZE

4.05 A manufacturer's tool kit shall be supplied.

### Type

5.01 The requirement is for a double axle trailer mounted 75 mm outlet centrifugal water pump powered by a diesel engine.

### Pump

5.02 The water pump shall be self-priming and capable of handling dirty water with size of solids up to 15 mm. Maximum output shall be not less than 50 cubic metres per hour with a head of up to 10 metres. Maximum total head at between 15 and 20 metres with appropriate outputs up to 50 cubic metres per hour. The pump shall have a self-lubricating mechanical seal.

### Engine

5.03 The engine shall be a hand start four stroke diesel engine, air cooled with an engine operating speed of preferably not more than 2500 rpm. The engine shall be fitted with a tropical air filter of the oil-bath type.

### Mounting

5.04 The pump unit shall be mounted on 4 wheel trailer fitted with solid rubber tyres with tow bar.

### Hoses

5.05 Hoses shall be of the wire-wound non-collapseable type.

The suction hoses shall be 6 m long with one end connecting to the pump and with the other end provided with a connected intake strainer.

The delivery hose shall be in three parts, each 10 m in length with all coupling connections to be identical.

### Other Requirements

5.06 A manufacturer's tool kit shall be supplied.



## LOT № 15/C/5 - CENTRIFUGAL PUMP - 75 MM SIZE

### Type

5.01 The requirement is for a double axle trailer mounted 75 mm outlet centrifugal water pump powered by a diesel engine.

### Pump

5.02 The water pump shall be self-priming and capable of handling dirty water with size of solids up to 15 mm. Maximum output shall be not less than 50 cubic metres per hour with a head of up to 10 metres. Maximum total head at between 15 and 20 metres with appropriate outputs up to 30 cubic metres per hour. The pump shall have a self-lubricating mechanical seal.

### Engine

5.03 The engine shall be a hand start four stroke diesel engine, air cooled with an engine operating speed of preferably not more than 2500 rpm. The engine shall be fitted with a tropical air filter of the oil-bath type.

### Mounting

5.04 The pump unit shall be mounted on 4 wheel trailer fitted with solid rubber tyres with tow bar.

### Hoses

5.05 Hoses shall be of the wire-wound non-collapsible type.

The suction hoses shall be 6 m long with one end connecting to the pump and with the other end provided with a connected intake strainer.

The delivery hose shall be in three parts, each 10 m in length with all coupling connections to be identical.

### Other Requirements

5.06 A manufacturer's tool kit shall be supplied.

Type

2.01 The requirement is for a double shaft centrifugal pump mounted 75 mm outlet centrifugal water pump powered by a diesel engine.

Pump

2.02 The water pump shall be self-priming and capable of handling dirty water with size of solids up to 15 mm. Maximum output shall be not less than 50 cubic metres per hour with a head of up to 10 metres. Maximum total head at between 15 and 20 metres with associated output up to 30 cubic metres per hour. The pump shall have a self-lubricating mechanical seal.

Engine

2.03 The engine shall be a four stroke diesel engine, 4700 rpm. The engine shall be fitted with a radial air filter of the oil-bath type. The engine operating speed of preferably not more than 1500 rpm. The engine shall be a four stroke diesel engine, 4700 rpm.

Mounting

2.04 The pump unit shall be mounted on a steel trailer fitted with solid rubber tyres with low bar.

Hoses

2.05 Hoses shall be of the wire-wound non-collapsible type. The suction hose shall be 6 m long with one end connecting to the pump and with the other end provided with a connected intake strainer. The delivery hose shall be in three parts, each 10 m in length with all coupling connections to be identical.

Other Requirements

2.06 A manufacturer's tool kit shall be supplied.

## LOT NR 15/C/6 - FLAT TRUCK 7 TONNES

### Type

**6.01** The requirement is for a flat deck load carrying drop side body type truck with a gross vehicle weight of not less than 12 tonnes, suitable for tropical use.

### Engine

**6.02** The engine shall be a six cylinder diesel engine within the range 100 - 130 BHP, water cooled, with oil, fuel, and air filters, and oil and coolant radiators suitable for tropical use.

### Details

**6.03** The truck shall conform to the following particular requirements -

- power assisted steering
- right hand drive
- 4 x 2 drive with single speed rear axle
- wheelbase in the range 3.75 - 4.00 metres
- payload not less than 7 tonnes
- additional rear helper springs
- twin tyres on rear axle
- 9.00 x 20 x 14 ply tyres with tubes (no tubeless tyres)
- heavy duty battery
- towing point at front and rear
- fan cooled cab but no heater
- the body shall have detachable dropsides and rear flap with adequate securing points.

### Kenya Traffic Act

**6.04** Plant and vehicles using the public highway must conform to the Traffic Act (Laws of Kenya, CAP 403) Part IV - Construction, Equipment and Use of Vehicles, 1978 and subsequent amendments.

### Other Requirements

**6.05** A spare wheel, tyre and tube, wheel changing equipment, jack, and manufacturer's tool kit shall be provided.

Types

6.01 The requirement is for a flat truck load carrying drop side body type truck with a gross vehicle weight of not less than 12 tonnes, suitable for tropical use.

Engine

6.02 The engine shall be a six cylinder diesel engine within the range 100 - 130 BHP, water cooled, with oil, fuel, and air filter, and oil and coolant radiators suitable for tropical use.

Details

6.03 The truck shall conform to the following particular requirements -

- power assisted steering
- right hand drive
- 4 x 2 drive with single speed rear axle
- wheelbase in the range 2.75 - 4.00 metres
- payload not less than 7 tonnes
- additional rear height struts
- two tyres on rear axle
- 2.00 x 10 x 14 ply tyres with studs (no lubesless tyres)
- heavy duty battery
- towing point at front and rear
- fan cooled cab but no heater
- the body shall have detachable dropides and rear flap with adequate securing points.

Kenya Traffic Act

6.04 Print and vehicles using the public highway must conform to the Traffic Act (Law of Kenya, CAP 403) Part IV - Construction, Equipment and Use of Vehicles, 1978 and subsequent amendments.

Other Requirements

6.05 A spare wheel, tyre and tube, wheel changing equipment, jack and manufacturer's tool kit shall be provided.

**Type**

7.01 The requirement is for a rear tipping truck of 6 cubic metres capacity with a gross vehicle weight of not less than 12 tonnes, suitable for tropical use.

**Engine**

7.02 The engine shall be a six cylinder diesel engine within the range 100 - 130 BHP, water cooled, with oil, fuel, and air filters, and oil and coolant radiators suitable for tropical use.

**Details**

7.03 The truck shall conform to the following particular requirements -

- power assisted steering
- right hand drive
- 4 x 2 drive with single speed rear axle
- wheelbase in the range 3.75 - 4.00 metres
- payload not less than 7 tonnes
- additional rear helper springs
- twin tyres on rear axle
- 9.00 x 20 x 14 ply tyres with tubes (no tubeless tyres)
- heavy duty battery
- towing point at front and rear
- fan cooled cab but no heater
- single ram all steel reinforced tipping body with top hinged and detachable tailgate and a protective canopy over cab

**Kenya Traffic Act**

7.04 Plant and vehicles using the public highway must conform to the Traffic Act (Laws of Kenya, CAP 403) Part IV - Construction, Equipment and Use of Vehicles, 1978 and subsequent amendments.

**Other Requirements**

7.05 A spare wheel, tyre and tube, wheel changing equipment, hydraulic jack, and tool kit shall be provided.

1.01 The requirement is for a rear tipping truck of 6 cubic meters capacity with a gross vehicle weight of not less than 15 tonnes, suitable for typical use.

1.02 The engine shall be a six cylinder diesel engine within the range 100 - 130 BHP, water cooled, with oil and air filters, and oil and constant radiators suitable for tropical use.

1.03 The truck shall conform to the following particular requirements -

- power assisted steering
- right hand drive
- 4 x 2 drive with single speed rear axle
- wheelbase in the range 2.75 - 4.00 metres
- payload not less than 7 tonnes
- additional rear wheel springs
- twin tyres on rear axle
- 2100 x 20 x 14 ply tyres with tubes (no tubeless tyres)
- heavy duty battery
- lowering point at front and rear
- fan cooled cab but no heater
- single rear all steel reinforced tipping body with top hinged and telescopic tailgate and a protective canopy over cab

Some trucks are

1.04 Plans and details using the public highway must conform to the Traffic Act (Law of Kenya) CAP 403 Part IV - Construction, Equipment and Use of Vehicles, 12B and subsequent amendments.

Other Requirements

1.05 A spare wheel, tyre and tube, wheel chocking equipment, hydraulic jack, and tool kit shall be provided.

## Kenya The LOT NR 15/C/8 - TRUCK 7T FLAT WITH CARGO CRANE

8.00 Plant and vehicles using the public highway must conform to the Traffic Act (Laws of Kenya, CAP 403) Part IV - Construction, Equipment and Use of Vehicles, 1978 and subsequent amendments.

### Type

8.01 The requirement is for a flat deck load carrying drop side body type truck with a gross vehicle weight of not less than 12 tonnes fitted with cargo crane and suitable for tropical use.

8.01 A spare wheel, tyre and tube, wheel changing equipment, jack, and manufacturer's tool kit shall be provided.

### Engine

8.02 The engine shall be a six cylinder diesel engine within the range 100 - 130 BHP, water cooled, with oil, fuel, and air filters, and oil and coolant radiators suitable for tropical use.

A power take-off shall provide power for the hydraulic pump to operate the cargo crane.

### Details

8.03 The truck shall conform to the following particular requirements -

- power assisted steering
- right hand drive
- 4 x 2 drive with single speed rear axle
- wheelbase in the range 3.75 - 4.00 metres
- payload not less than 7 tonnes
- additional rear helper springs
- twin tyres on rear axle
- 9.00 x 20 x 14 ply tyres with tubes (no tubeless tyres)
- heavy duty battery
- towing point at front and rear
- fan cooled cab but no heater
- the body shall have detachable dropsides and rear flap with adequate securing points.

### Cargo Crane

8.04 The cargo crane shall be fitted between the front of the truck body and the driving cab.

The articulated boom shall be hydraulically powered with a lifting capacity of not less than 3000 kg at 1.75 metres radius and 500 kg at 7 metres radius.

The controls shall be positioned at both sides of the vehicle to give speed and directional control for all crane motions through 360 degrees of slewing.

Jack legs shall be provided at both sides of the truck.

Type

8.01 The requirement is for a flat deck carrying drop side body type truck with a gross vehicle weight of not less than 12 tonnes fitted with cargo crane and suitable for tropical use.

Figure

8.02 The engine shall be a six cylinder diesel engine within the range 100 - 130 BHP, water cooled, with oil, fuel, and air filters, and oil and coolant radiators suitable for tropical use.

A power take-off shall provide power for the hydraulic pump to operate the cargo crane.

Details

8.03 The truck shall conform to the following particular requirements -

- power assisted steering
- right hand drive
- 4 x 2 drive with single speed rear axle
- wheelbase in the range 7.5 - 8.0 metres
- payload not less than 7 tonnes
- additional rear helper springs
- twin tyres on rear axle
- 325 x 20 x 14 ply tyres with tubes (no tubeless tyres)
- heavy duty battery
- lowering point at front and rear
- fan cooled and hot no heater
- the body shall have detachable sides and rear flap with adequate securing points.

Cargo Crane

8.04 The cargo crane shall be fitted between the front of the truck body and the driving cab.

The articulated boom shall be hydraulically powered with a lifting capacity of not less than 2000 kg at 1.75 metres radius and 500 kg at 7 metres radius.

The controls shall be positioned at both sides of the vehicle to give speed and directional control for all crane motions through 360 degrees of slewing.

Jack legs shall be provided at both sides of the truck.

**Kenya Traffic Act** OT No 15/C/9 SEWAGE DISPOSAL TANKER

**8.05** Plant and vehicles using the public highway must conform to the Traffic Act (Laws of Kenya, CAP 403) Part IV - Construction, Equipment and Use of Vehicles, 1978 and subsequent amendments.

9.01 The requirement is for a truck mounted tanker of 5 000 litres capacity and an 80 mm self priming sewage pump with pto drive from the engine. It shall be suitable for emptying septic tanks and for operation on macram and earth roads in a tropical environment.

**Other Requirements**

**8.06** A spare wheel, tyre and tube, wheel changing equipment, jack, and manufacturer's tool kit shall be provided.

**Engine**

9.02 The engine shall be a six cylinder diesel engine within the range 100 - 130 hp, water cooled with oil, fuel and air filters and oil and coolant radiators suitable for tropical use.

**Details**

9.03 The truck shall conform to the following particular requirements :-

- Power assisted steering
- Right hand drive
- 4 x 2 drive with single speed rear axle
- Wheel base in the range 3.75 - 4.00 metres
- Pay load 7 tonnes nominal
- 9.00 x 20 x 14 ply tyres (not tubeless)
- Twin tyres on rear axle
- Additional rear helper springs
- Heavy duty battery
- Towing point at front and rear
- Fan cooled cab but no heater

**Tanker and Pump**

9.04 The truck shall be fitted with a rigid steel vortex tank, of 5 000 litres nominal capacity, mounting points shall be heavily reinforced. The tank shall be fitted with internal baffles, top access manhole, access ladder, filling and discharge connections arranged so the contents can be discharged under gravity or pumped out. Discharge/drain valves fitted with hose couplings. The pump shall be a self priming type with 80 mm suction and discharge connections suitable for handling sewage containing solids and grit. The pump shall be driven from the truck engine via pto. It shall be engaged by the operator with the truck stationary.

**Kenya Traffic Act**

9.05 Plant and vehicles using the public highway must conform to the Traffic Act (Laws of Kenya, CAP 403) Part IV - Construction, Equipment and Use of Vehicles, 1978 and subsequent amendments.



## Other Requirements: LOT Nr 15/C/9 SEWAGE DISPOSAL TANKER

9.00 Storage racks for 80 mm reinforced suction and discharge hose complete with couplings in 4 x 3 m lengths. Mounted clean water tank 20 litres capacity for operator hand washing.

9.01 The requirement is for a truck mounted tanker of 5 000 litres capacity and an 80 mm self priming sewage pump with pto drive from the truck. The unit shall be suitable for emptying septic tanks and for operation on murrum and earth roads in a tropical environment.

### Engine

9.02 The engine shall be a six cylinder diesel engine within the range 100 - 130 bhp, water cooled with oil, fuel and air filters and oil and coolant radiators suitable for tropical use.

### Details

9.03 The truck shall conform to the following particular requirements :-

- Power assisted steering
- Right hand drive
- 4 x 2 drive with single speed rear axle
- Wheel base in the range 3.75 - 4.00 metres
- Pay load 7 tonnes nominal
- 9.00 x 20 x 14 ply tyres (not tubeless)
- Twin tyres on rear axle
- Additional rear helper springs
- Heavy duty battery
- Towing point at front and rear
- Fan cooled cab but no heater

### Tanker and Pump

9.04 The truck shall be fitted with a rigid steel vented tank, of 5 000 litres nominal capacity, mounting points shall be heavily reinforced. The tank shall be fitted with internal baffles, top access manhole, access ladder, filling and discharge connections arranged so the contents can be discharged under gravity or pumped out. Discharge/drain valves fitted with hose couplings. The pump shall be a self priming type with 80 mm suction and discharge connections suitable for handling sewage containing solids and grit. The pump shall be driven from the truck engine via pto. It shall be engaged by the operator with the truck stationary.

### Kenya Traffic Act

9.05 Plant and vehicles using the public highway must conform to the Traffic Act (Laws of Kenya, CAP 403) Part IV - Construction, Equipment and Use of Vehicles, 1978 and subsequent amendments.



## Other Requirements NR 15/C/88 - L.W.B. STATION WAGON

9.06 Storage racks for 80 mm reinforced suction and discharge hose complete with couplings in 4 x 3 m lengths. Mounted clean water tank 20 litres capacity for operator hand washing.

10.01 The requirement is for a station wagon type vehicle with four wheels. A spare wheel, tyre and tube, wheel changing equipment, jack and manufacturers tool kit shall be provided. A set of manhole tee keys and pipe coupling spanners shall be provided.

### Engine

10.02 The engine shall be a four cylinder diesel engine of not less than 2.25 litres capacity, fitted with tropical radiator, air filter, and oil filter.

### Details

10.03 The vehicle shall conform to the following particular requirements -

- station wagon body
- power assisted steering (optional)
- right hand drive
- high and low ratio gearbox
- heavy duty on/off highway tyres
- rear hinged door
- tropical roof
- 7 seats (minimum)
- light colour
- roof rack
- towing conviction at the rear.

### Kenya Traffic Act

10.04 Plant and vehicles using the public highway must conform to the Traffic Act (Laws of Kenya, CAP 403) Part IV - Construction, Equipment and Use of Vehicles, 1978 and subsequent amendments.

### Other Requirements

10.05 A manufacturer's tool kit, spare wheel and tyre, jack, and wheel changing equipment shall be provided.



**Type**

**10.01** The requirement is for a station wagon type vehicle with four wheel drive, long wheel base, good ground clearance, fitted with diesel engine and suitable for use in a tropical climate.

**Engine**

**10.02** The engine shall be a four cylinder diesel engine of not less than 2.25 litres capacity, fitted with tropical radiator, air filter, and oil filter.

**Details**

**10.03** The vehicle shall conform to the following particular requirements -

- station wagon body
- power assisted steering (optional)
- right hand drive
- high and low ratio gearbox
- heavy duty on/off highway tyres
- rear hinged door
- tropical roof
- 7 seater (minimum)
- light colour
- roof rack
- towing connection at the rear.

**Kenya Traffic Act**

**10.04** Plant and vehicles using the public highway must conform to the Traffic Act (Laws of Kenya, CAP 403) Part IV - Construction, Equipment and Use of Vehicles, 1978 and subsequent amendments.

**Other Requirements**

**10.05** A manufacturer's tool kit, spare wheel and tyre, jack, and wheel changing equipment shall be provided.



**Type**

**11.01** The requirement is for a pick-up type vehicle with four wheel drive, long wheel base, good ground clearance, fitted with diesel engine and suitable for use in a tropical climate.

**Engine**

**11.02** The engine shall be a four cylinder diesel engine of not less than 2.25 litres capacity, fitted with tropical radiator, air filter, and oil filter.

**Details**

**11.03** The vehicle shall conform to the following particular requirements -

- pick-up type body with open back
- right hand drive
- high and low ratio gearbox
- heavy duty on/off highway tyres
- drop tailgate
- 1000 kg load capacity
- enclosed cab with tropical roof and three seats
- load carrying frame to carry long loads over the cab
- load securing points
- towing connections front and rear.

**Kenya Traffic Act**

**11.04** Plant and vehicles using the public highway must conform to the Traffic Act (Laws of Kenya, CAP 403) Part IV - Construction, Equipment and Use of Vehicles, 1978 and subsequent amendments.

**Other Requirements**

**11.05** A manufacturer's tool kit, spare wheel and tyre, jack, and wheel changing equipment shall be provided.



**Type**

**12.01** The requirement is for a pick-up type vehicle with two wheel drive, diesel engine, good ground clearance, suitable for use in a tropical climate.

**Engine**

**12.02** The engine shall be a four cylinder diesel engine not less than 2.25 litres capacity, fitted with tropical radiator, air filter, and oil filter.

**Details**

**12.03** The vehicle shall conform to the following particular requirements -

- pick-up type body with open back
- right hand drive
- drop tailgate
- 1000 kg load capacity
- comfortable well ventilated cab with three seats
- load carrying frame to carry long loads over the cab
- load securing points.

**Kenya Traffic Act**

**12.04** Plant and vehicles using the public highway must conform to the Traffic Act (Laws of Kenya, CAP 403) Part IV - Construction, Equipment and Use of Vehicles, 1978 and subsequent amendments.

**Other Requirements**

**12.05** A manufacturer's tool kit, spare wheel and tyre, jack, and wheel changing equipment shall be provided.



## LOT NR 15/C/13 - MOTORCYCLE

LOT Nr 15/C/14 - BICYCLE

### Type

**13.01** The requirement is for a standard type motorcycle suitable for operation on murrum or earth roads.

### Engine

**13.02** The engine shall be a two or four stroke single cylinder air cooled petrol engine of 125 cc rated capacity with a kick start. The engine shall be suitable for tropical use.

### Details

**13.03** The motorcycles shall conform to the following particular requirements -

- not less than three gears
- brakes to both wheels
- ignition key
- generator
- dual beam headlamp, horn, stop and tail lamp
- heavy duty suspension
- cross-country type tyres
- dual seat
- speedometer
- chain guard
- stand

### Kenya Traffic Act

**13.04** Plant and vehicles using the public highway must conform to the Traffic Act (Laws of Kenya, CAP 403) Part IV - Construction, Equipment and Use of Vehicles, 1978 and subsequent amendments.

### Other Requirements

**13.05** A manufacturer's tool kit for each motorcycle and one spare tyre with two spare tubes shall be supplied for every five motorcycles.

12.01 The requirement is for a standard type motorcycle suitable for operation on main or earth roads.

12.02 The engine shall be a two or four stroke single cylinder air cooled petrol engine of 125 cc rated capacity with a kick start. The engine shall be suitable for tropical use.

12.03 The motorcycles shall conform to the following particular requirements -

- not less than three gears
- brakes to both wheels
- ignition key
- generator
- dust beam headlamp, horn and tail lamp
- heavy duty suspension
- cross-country type tyres
- dust seal
- speedometer
- chain guard
- chain

Kenya Traffic Act

12.04 Plans and vehicles using the public highway must conform to the Traffic Act (Law of Kenya CAP 403) Part IV - Construction, Equipment and Use of Vehicles, 1978 and subsequent amendments.

Other Requirements

12.05 A manufacturer's tool kit for each motorcycle and one spare tyre with two spare tubes shall be supplied for every five motorcycles.

## LOT Nr 15/C/14 - BICYCLE

### Type

**14.01** The requirement is for a standard bicycle suitable for operation on murrum or earth roads.

### Details

**14.02** The bicycle shall incorporate the following :-

Heavy duty tubular steel frame

Single speed with free wheel hub

Rod brakes to both wheels

Wheel/tyre size 26 inches x 1 3/8 inches

Tyres and tubes suitable for off road use

Rear carrier and side stand

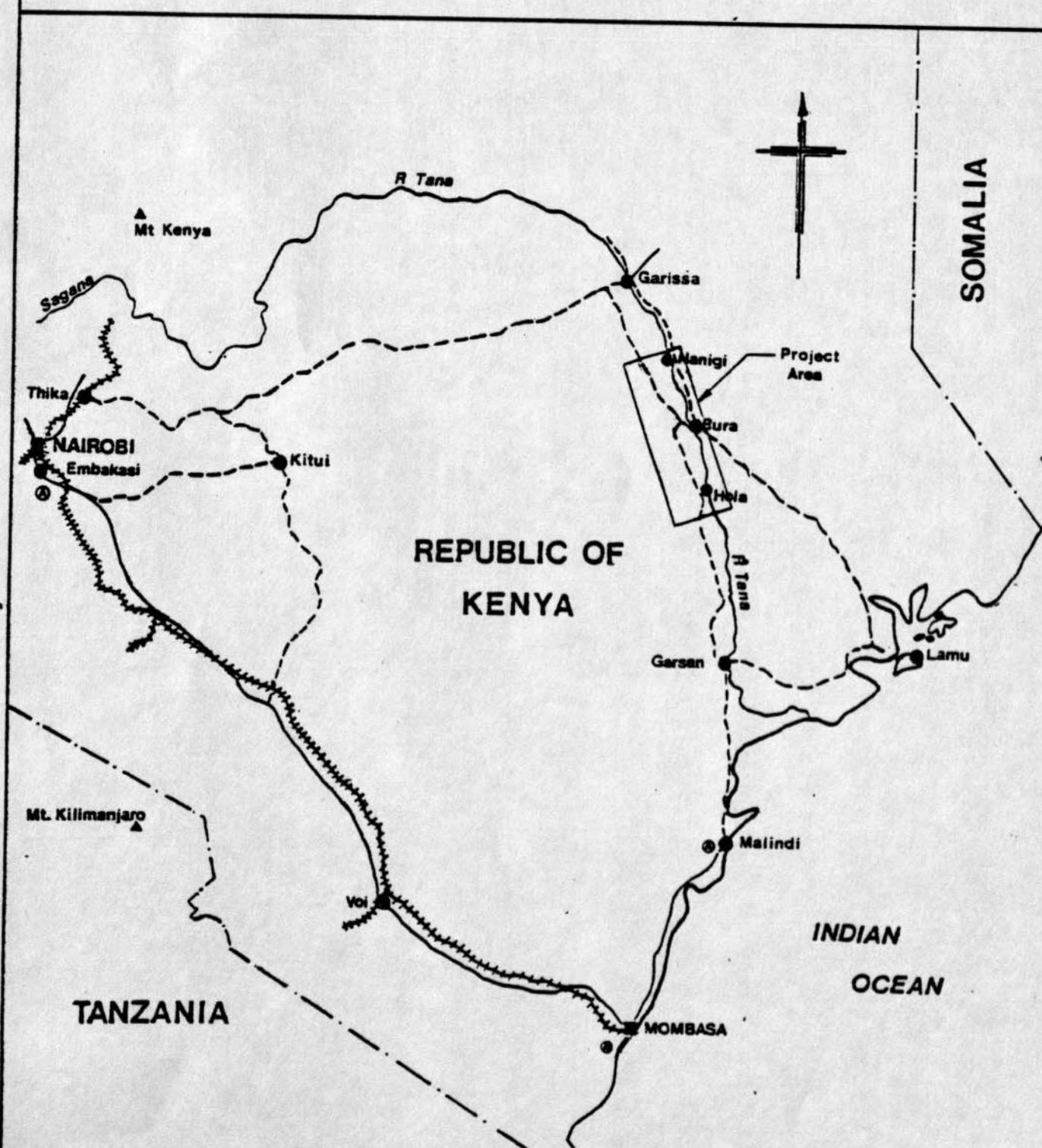
Chain guard and mudguards with rear reflector

### Other Requirements

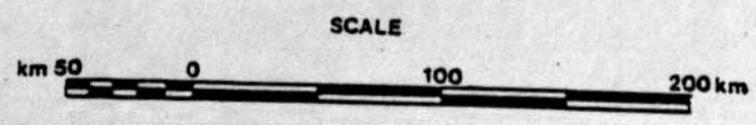
**14.03** A manufacturers tool kit including spanner, puncture repair kit and hand pump shall be provided for each machine. One spare tyre with two spare tubes shall be supplied for every five bicycles. A padlock and chain complete with two keys shall be provided for each machine.



# PROJECT LOCATION MAP FOR BURA IRRIGATION SETTLEMENT PROJECT



- Tarmac Road
- - - Earth Road
- ⊕ Airport
- ⊕⊕⊕⊕⊕⊕ Railway (metre gauge)



PROJECT LOCATION MAP  
FOR BURA IRRIGATION SETTLEMENT PROJECT

