Kingdom of Lesotho

Roads Directorate

a

Bidding Document

for the

Procurement of Works

OPEN COMPETITIVE

Subject of Procurement: The Plant and Design Build of the rehabilitation of The Maseru Private Siding Railway Track.

Procurement Reference Number: RD/DD/5-A

Date of Issue: 20th July 2026

Tender Closing Date: 27th August 2026

ROADS DIRECTORATE

Re-Invitation for Bids

BID NOTICE UNDER OPEN COMPETITIVE BIDDING

Procurement Reference No.: RD/DD/5-A

Procurement: The Plant and Design Build of the Rehabilitation of The Maseru Private Siding Railway Track in Maseru District

1. The Roads Directorate has set aside funds and invites Bids from Local and International Railway Maintenance Contractors meeting the post Bid qualifications as set out in the Bid Document, for **the Plant and Design Build of the Rehabilitation of The Maseru Private Siding Railway Track in Maseru District.**
2. Bidding shall be conducted through **Open Competitive Bidding** in accordance with the **Public Procurement Act 2023**, the Public Procurement Regulations, and the provisions of the Bidding Documents.
3. Interested eligible bidders may obtain further information and inspect the Bidding Documents at the address given in paragraph 9(a) during normal working hours from **08:00 hours to 16:30 hours**, Monday to Friday.
4. The Bidding Document is not for sale (downloaded from www.rd.org.ls)
5. Bids must be delivered to the address specified in paragraph 9(c) **on or before 27 August 2026 at 10:00 a.m.** Each bid shall be accompanied by a **Bid Security of One Hundred Thousand Maloti (LSL 100,000.00)** in the form specified in the Bidding Documents. The Bid Security shall remain valid for the period specified in the Bidding Documents.
6. Late bids shall not be accepted.
7. Bids will be opened publicly at the address specified in paragraph 9(d) on **27 August 2026 at 10:30 a.m.** in the presence of bidders' representatives who choose to attend.

8. **A Non-Compulsory site visit and pre-tender briefing, at the tender's own cost, have been organized on 06 August 2026**. Prospective Bidders are requested to assemble at the Maseru Industrial Area at the Railway Level Crossing next to Builder's City Hardware Store & Lesotho Flour Mills (29º17'45.73''S, 27º28'44.52''E) by **09:30 a.m**. The site inspection tour shall commence at 10.00 A.M. and shall be followed by the "question and answer" session (pre-bid conference) to be held following the inspection visit at the end of the tour.

9. For the purpose of requesting clarifications regarding this bidding process, prospective bidders may contact the **Procurement Manager (Acting)** through the following email address: **Email:** manoelin@rd.org.ls **Copy (Cc):**molefitm@rd.org.ls, mahlomaholob@rd.org.ls, ntserel@rd.org.ls, matsoetlanet@rd.org.ls

10. Requests for clarification shall be submitted in writing within the period specified in the Bid Data Sheet. The Procuring Entity shall respond to all requests for clarification in accordance with the provisions of the Instructions to Bidders.

11. (a) Address for inspection of Bidding Documents: Roads Directorate Headquarters, Corner State and Lepoqo Roads, Industrial Area, Maseru, Lesotho

12. (b) Address for obtaining Bidding Documents: Procurement Office (Room G11), Roads Directorate Headquarters, Corner State and Lepoqo Roads, Industrial Area (Opposite Browns Cash & Carry), Maseru, Lesotho.

13. (c) Address for submission of Bids: Tender Box situated near Procurement Office (Room G11), Roads Directorate Headquarters, Corner State and Lepoqo Roads, Industrial Area, Maseru, Lesotho, Telephone: (+266) 2222 9000 / 5222 9000.

14. (d) Address for Bid Opening: Roads Directorate Headquarters, Ground Floor Boardroom, Corner State and Lepoqo Roads (Opposite Browns Cash & Carry).

15. Planned Procurement Schedule

Activity	**Date**
Publish Invitation to Bid	29 July 2026
Issue of Bidding Documents	29 July 2026
Non-Compulsory Pre-bid Meeting / Site Visit	06 August 2026
Deadline for Bid Submission	27 August 2026 (10:00 a.m.)
Bid Opening	27 August 2026 (10:30 a.m.)
Bid Evaluation	Within 10 working days after bid opening
Notice of Intended Award	Within 5 working days after Procurement Committee approval
Contract Signature	After expiry of the standstill period in accordance with the Public Procurement Act, 2023

Authorised by:

Signature: N. Manoeli
Name: Ntaba Manoeli
Position: Procurement Manager (a.i)
For and on behalf of the Roads Directorate

The Roads Directorate reserves the right to accept or reject any or all bids for reasons it may not necessarily advance.

Table of Contents

PART 1 – Bidding Procedures 1
Section I. Instructions to Bidders 2
Section II. Bid Data Sheet 26
Section III. Evaluation and Qualification Criteria 32
Section IV. Bidding Forms 56
Section V. Eligible Countries 102

PART 2 –Works Requirements 104
Section VII. Works Requirements 105

PART 3 – Conditions of Contract and Contract Forms 280
Section VIII. General Conditions (GC) 281
Section IX. Particular Conditions (PC) 282
Section X. Contract Forms 301

PART 1 – BIDDING PROCEDURES

Section I. Instructions to Bidders

Table of Clauses

A. General **4**
1. Scope of Bid **4**
2. Source of Funds **4**
3. Corrupt and Fraudulent Practices **4**
4. Eligible Bidders **5**
5. Eligible Materials, Equipment, and Services **8**

B. Contents of Bidding Documents **9**
6. Sections of Bidding Documents **9**
7. Clarification of Bidding Documents, Site Visit, Pre-Bid Meeting **10**
8. Amendment of Bidding Documents **11**

C. Preparation of Bids **11**
9. Cost of Bidding **11**
10. Language of Bid **11**
11. Documents Comprising the Bid **11**
12. Letter of Bid and Schedules **12**
13. Alternative Bids **12**
14. Bid Prices and Discounts **13**
15. Currencies of Bid and Payment **14**
16. Documents Comprising the Technical Proposal **14**
17. Documents Establishing the Qualifications of the Bidder **14**
18. Period of Validity of Bids **14**
19. Bid Security **15**
20. Format and Signing of Bid **17**

D. Submission and Opening of Bids **17**
21. Sealing and Marking of Bids **17**
22. Deadline for Submission of Bids **18**
23. Late Bids **18**
24. Withdrawal, Substitution, and Modification of Bids **18**
25. Bid Opening **18**

E. Evaluation and Comparison of Bids **20**
26. Confidentiality **20**
27. Clarification of Bids **20**
28. Deviations, Reservations, and Omissions **20**

29. Determination of Responsiveness **21**
30. Nonmaterial Nonconformities **21**
31. Correction of Arithmetical Errors 22
32. Conversion to Single Currency 22
33. Margin of Preference 22
34. Evaluation of Bids 24
35. Comparison of Bids 24
36. Qualification of the Bidder 24
37. Employer's Right to Accept Any Bid, and to Reject Any or All Bids 24

F. Award of Contract 24
38. Award Criteria 24
39. Notification of Award 25
40. Signing of Contract 25
41. Performance Security 25

Section I. Instructions to Bidders

A. General

1. Scope of Bid

1.1. The Employer, as **indicated in the BDS**, issues this Bidding Document for the procurement of the Works as specified in Section 6 (Works Requirements). The name, identification, and number of contracts of this bidding are **provided in the BDS**.

1.2. Throughout this Bidding Document:

(a) the term "in writing" means communicated in written form and delivered against receipt;

(b) except where the context requires otherwise, words indicating the singular also include the plural and words indicating the plural also include the singular; and

(c) "day" means calendar day.

(d) "Bid", "Bidder" and "Bid document" shall have the same meaning as "Tender", "Tenderer" and "Tender document."

2. Source of Funds

2.1. The Government of the Kingdom of Lesotho (hereinafter called "Government") has allocated financing (hereinafter called "funds") toward the cost of the project **named in the BDS**. The Government intends to apply a portion of the funds to eligible payments under the contract(s) for which these Bidding Documents are issued.

3. Fraud and Corruption

3.1 The Government requires that Bidders, Suppliers, Contractors and Consultants under Government-financed contracts, observe the highest standard of ethics during the procurement and execution of such contracts. In pursuance of this policy, the Government:

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

(i) "corrupt practice" is the offering, giving, receiving or soliciting, directly or indirectly, of anything of value to influence improperly the actions of a public official in the procurement process or in contract execution

(ii) "fraudulent practice" means a mis-representation or omission of facts in order to influence a procurement process or the execution of a contract

(iii) "collusive practice" means a scheme or arrangement between two or more bidders, with or without the knowledge of the Government, designed to establish bid prices at artificial, not competitive levels;

(iv) "coercive practice" means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in a procurement process, or affect the execution of a contract;

(b) will reject a proposal for award if it determines that the bidder recommended for award has, directly or through an agent, engaged in corrupt, fraudulent, collusive, coercive or obstructive practices in competing for the contract in question;

(c) will cancel the contract if it determines at any time that representatives of the Government or of a beneficiary of the funds engaged in corrupt, fraudulent, collusive, or coercive practices during the procurement or the execution of that contract;

(d) will sanction a firm or an individual, at any time, including declaring such firm or individual ineligible, either indefinitely or for a stated period of time to be awarded a Government-financed contract if at any time determines that they have, directly or through an agent, engaged in corrupt, fraudulent, collusive or coercive practices in competing for, or in executing, a Government-financed contract, and

(e) will have the right to require that a provision be included in Bidding Documents and in contracts financed by the Government, requiring bidders, suppliers , contractors and consultants to 1permit the Government to inspect their accounts and records and other documents relating to the Bid submission and contract performance and to have them audited by auditors appointed by the Government.

4. Eligible Bidders

4.1 A Bidder may be a *natural person*, private entity, or government-owned entity—subject to ITB 4.5—or any combination such entities supported by a letter of intent to enter into an agreement or under an existing agreement in

the form of a joint venture or association (JV). In the case of a joint venture or association:

(a) **Unless otherwise specified in the BDS,** all partners shall be jointly and severally liable, and

(b) the JV shall nominate a Representative who shall have the authority to conduct all business for and on behalf of any and all the partners of the JV during the bidding process and, in the event the JV is awarded the Contract, during contract execution

4.2 A Bidder, and all parties constituting the Bidder, shall have the nationality of an eligible country as defined under the provisions of the Lesotho Public Procurement Act, 2023. A Bidder shall be deemed to have the nationality of a country if the Bidder is a citizen or is constituted, or incorporated or registered, and operates in conformity with the provisions of the laws of that country. This criterion shall also apply to the determination of the nationality of proposed subcontractors or suppliers for any part of the Contract including related services.

4.3 A Bidder shall not have a conflict of interest. All Bidders found to have a conflict of interest shall be disqualified. A Bidder may be considered to have a conflict of interest with one or more parties in this bidding process, if:

(a) they have controlling partners in common; or

(b) they receive or have received any direct or indirect subsidy from any of them; or

(c) they have the same legal representative for purposes of this bid; or

(d) they have a relationship with each other, directly or through common third parties, that puts them in a position to have access to information about or influence on the Bid of another Bidder, or influence the decisions of the Employer regarding this bidding process; or

(e) a Bidder participates in more than one bid in this bidding process. Participation by a Bidder in more than one Bid will result in the disqualification of all Bids in which the party is involved. However, this does not

limit the inclusion of the same subcontractor in more than one bid; or

(f) a Bidder participated as a consultant in the preparation of the design or technical specifications of the contract that is the subject of the Bid; or

(g) a Bidder was affiliated with a firm or entity that has been hired (or is proposed to be hired) by the Employer or Government as Engineer for this contract.

4.4 A firm that is under a declaration of ineligibility by the Government in accordance with ITB 3 and ITB 19.8. at the date of the deadline for bid submission or thereafter, shall be disqualified

4.5 Government-owned enterprises in the *Employer'*s country shall be eligible only if they can establish that they are legally and financially autonomous and operate under commercial law, and that they are not a dependent agency of the *Employer*.

4.6 Bidders shall provide such evidence of their continued eligibility satisfactory to the *Employer*, as the *Employer* shall reasonably request.

4.7 Firms shall be excluded if:

(a) as a matter of law or official regulation, the Government's country prohibits commercial relations with that country; or

(b) by an act of compliance with a decision of the United Nations Security Council taken under Chapter VII of the Charter of the United Nations, the Government's country prohibits any import of goods or contracting of works or services from that country or any payments to persons or entities in that country.

4.8 Bidders shall be post-qualified for the Contract as notified by the Employer.

4.9 Bidders shall, as part of their bid:

(a) submit a written power of attorney authorizing the signatory of the bid to commit the bidder, and

(b) submit with their applications full and complete information in Section III for post-qualification analysis comprising:

5.1 General information

5.2 General experience record

5.3 Joint venture summary

5.4 Particular experience record

5.5 Details of contracts of a similar nature and complexity

5.6 Current contract commitments / Works in progress

5.7 Personnel capabilities

5.8 Financial capabilities

5.9 Litigation history

5. Eligible Materials, Equipment and Services

5.10 The materials, equipment and services to be supplied under the Contract shall have their origin in eligible source countries as defined in ITB 4.2 above and all expenditures under the Contract will be limited to such materials, equipment, and services. At the Employer's request, Bidders may be required to provide evidence of the origin of materials, equipment and services.

5.11 For purposes of ITB 5.1 above, "origin" means the place where the materials and equipment are mined, grown, produced or manufactured, and from which the services are provided. Materials and equipment are produced when, through manufacturing, processing, or substantial or major assembling of components, a commercially recognized product results that differs substantially in its basic characteristics or in purpose or utility from its components.

B. Contents of Bidding Document

6. Sections of Bidding Document

6.1 The Bidding Document consist of Parts *1, 2,* and *3,* which include all the Sections indicated below, and should be read in conjunction with any Addenda issued in accordance with ITB 8.

PART 1 Bidding Procedures
Section I - Instructions to Bidders (ITB)
Section II - Bid Data Sheet (BDS)
Section III - Evaluation and Qualification Criteria
Section IV - Bidding Forms
Section V - Eligible Countries

PART 2 Requirements
Section VI - Works Requirements

PART 3 Conditions of Contract and Contract Forms
Section VII - General Conditions (GC)
Section VIII - Particular Conditions (PC)
Section IX – Annex to the Particular Conditions-Contract Forms

6.2 The Invitation for Bids issued by the *Employer* is not part of the Bidding Document.

6.3 The *Employer* is not responsible for the completeness of the Bidding Document and their Addenda, if they were not obtained directly from the source stated by the *Employer* in the Invitation for Bids.

6.4 The Bidder is expected to examine all instructions, forms, terms, and specifications in the Bidding Document. Failure to furnish all information or documentation required by the Bidding Document may result in the rejection of the bids.

7. Clarification of Bidding Document, Site Visit, Pre-Bid Meeting

7.1 A prospective Bidder requiring any clarification of the Bidding Document shall contact the *Employer* in writing at the *Employer*'s address **indicated in the BDS** or raise his inquiries during the pre-bid meeting if provided for in accordance with ITB 7.4. The *Employer* will respond in writing to any request for clarification, provided that such request is received no later than (14) days prior to the deadline for submission of bids. The *Employer* shall forward copies of its response to all Bidders who have acquired the Bidding Document in accordance with ITB 6.3, including a description of the inquiry but without identifying its source. Should the *Employer* deem it necessary to amend the Bidding Document as a result of a request for clarification, it shall do so following the procedure under ITB 8 and ITB 22.2.

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

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

7.4 The Bidder's designated representative is invited to attend a pre-bid meeting, if **provided for in the BDS**. The purpose of the meeting will be to clarify issues and to answer questions on any matter that may be raised at that stage.

7.5 The Bidder is requested, as far as possible, to submit any questions in writing, to reach the *Employer* not later than one week before the meeting.

7.6 Minutes of the pre-bid meeting, including the text of the questions raised, without identifying the source, and the responses given, together with any responses prepared after the meeting, will be transmitted promptly to all Bidders who have acquired the Bidding Document in accordance with ITB 6.3. Any modification to the Bidding Document that may become necessary as a result of the pre-bid meeting shall be made by the *Employer* exclusively through the issue of an addendum pursuant to ITB 8 and not through the minutes of the pre-bid meeting.

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

8. Amendment of Bidding Document

8.1 At any time prior to the deadline for submission of bids, the *Employer* may amend the Bidding Document by issuing addenda.

8.2 Any addendum issued shall be part of the Bidding Document and shall be communicated in writing to all who have obtained the Bidding Document from the *Employer* in accordance with ITB 6.3.

8.3 To give prospective Bidders reasonable time in which to take an addendum into account in preparing their bids, the *Employer* may, at its discretion, extend the deadline for the submission of bids, pursuant to ITB 22.2

C. Preparation of Bids

9. Cost of Bidding

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

10. Language of Bid

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

11. Documents Comprising the Bid

11.1 The Bid shall comprise the following:

(a) Letter of Bid;

(b) completed schedules as required, including priced Bill of Quantities, in accordance with ITB 12 and 14; the priced bill of copy shall be submitted as a hard copy as well as electronically on flash drive in Excel format. Should there be any discrepancies between hard copy and electronic copy, the rates and prices quoted in the hard copy shall prevail.

(c) Bid Security in accordance with ITB 19;

(d) alternative bids, if permissible, in accordance with ITB 13;

(e) written confirmation authorizing the signatory of the Bid to commit the Bidder, in accordance with ITB 20.2;

(f) documentary evidence in accordance with ITB 17 establishing the Bidder's qualifications to perform the contract;

(g) Technical Proposal in accordance with ITB 16;

(h) Any other document required in the BDS.

The Bidder shall ensure that the bid documents are neatly bound in files in the sequence listed above, utilizing the documentation issued electronically on Flash Disk.

11.2 In addition to the requirements under ITB 11.1, bids submitted by a JV shall include a copy of the Joint Venture Agreement entered into by all partners. Alternatively, a Letter of Intent to execute a Joint Venture Agreement in the event of a successful bid shall be signed by all parties and submitted with the bid, together with a copy of the proposed agreement.

12. Letter of Bid and Schedules

12.1 The Letter of Bid, Bill of Quantities, shall be prepared using the relevant forms in Section *IV* (Bidding Forms). The forms must be completed without any alterations to the text, and no substitutes shall be accepted. All blank spaces shall be filled in with the information requested.

13. Alternative Bids

13.1 Unless otherwise **indicated in the BDS**, alternative bids shall not be considered.

13.2 When alternative times for completion are explicitly invited, a statement to that effect will be **included in the BDS**, as will the method of evaluating different times for completion.

13.3 Except as provided under ITB 13.4 below, Bidders wishing to offer technical alternatives to the requirements of the Bidding Document must first price the *Employer*'s design as described in the Bidding Document and shall further provide all information necessary for a complete evaluation of the alternative by the *Employer*, including drawings, design calculations, technical specifications, breakdown of prices, and proposed construction methodology and other relevant details. Only the technical alternatives, if any, of the highest evaluated Bidder conforming to the basic technical requirements shall be considered by the *Employer*.

13.4 When **specified in the BDS**, Bidders are permitted to submit alternative technical solutions for specified parts of

the Works. Such parts will be **identified in the BDS** and described in Section *VI Works* Requirements.

14. Bid Prices and Discounts

14.1 The prices and discounts quoted by the Bidder in the Letter of Bid and in the Schedules shall conform to the requirements specified below.

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

14.3 The price to be quoted in the Letter of Bid shall be the total price of the Bid, excluding any discounts offered.

14.4 The Bidder shall quote any unconditional discounts, and the methodology for their application shall be quoted in the Letter of Bid, in accordance with ITB 12.1.

14.5 Unless otherwise **provided in the BDS** and the Conditions of Contract, the prices quoted by the Bidder shall be fixed. If the prices quoted by the Bidder are subject to adjustment during the performance of the Contract in accordance with the provisions of the Conditions of Contract.

14.6 If so indicated in ITB 1.1, bids are invited for individual contracts or for any combination of contracts (packages). Bidders wishing to offer any price reduction for the award of more than one Contract shall specify in their bid the price reductions applicable to each package, or alternatively, to individual Contracts within the package. Price reductions or discounts shall be submitted in accordance with ITB 14.4, provided the bids for all contracts are submitted and opened at the same time.

14.7 All duties, taxes, and other levies payable by the Contractor under the Contract, or for any other cause, as of the date 28 days prior to the deadline for submission of bids, shall be included in the rates and prices and the total bid price submitted by the Bidder.

15. Currencies of Bid and Payment

15.1 The currency(ies) of the bid shall be as **specified in the BDS**.

15.2 Bidders may be required by the Employer to justify, to the Employer's satisfaction, their local and foreign currency

requirements, and to substantiate that the amounts included in the prices shown in the appropriate form(s) of Section IV, in which case a detailed breakdown of the foreign currency requirements shall be provided by Bidders.

16. Documents Comprising the Technical Proposal

16.1 The Bidder shall furnish a Technical Proposal including a statement of work methods, equipment, personnel, schedule and any other information as stipulated in Section *IV* (Bidding Forms), in sufficient detail to demonstrate the adequacy of the Bidders' proposal to meet the work requirements and the completion time.

17. Documents Establishing the Qualifications of the Bidder

17.1 To establish its qualifications to perform the Contract in accordance with Section *III* (Evaluation and Qualification Criteria) the Bidder shall provide the information requested in the corresponding information sheets included in Section *IV* (Bidding Forms).

17.2 Domestic Bidders, individually or in joint ventures, applying for eligibility for domestic preference shall supply all information required to satisfy the criteria for eligibility as described in ITB 33.

18. Period of Validity of Bids

18.1 Bids shall remain valid for the period **specified in the BDS** after the bid submission deadline date prescribed by the *Employer*. A bid valid for a shorter period shall be rejected by the *Employer* as nonresponsive.

18.2 In exceptional circumstances, prior to the expiration of the bid validity period, the *Employer* may request Bidders to extend the period of validity of their bids. The request and the responses shall be made in writing. If a bid security is requested in accordance with ITB 19, it shall also be extended for twenty eight (28) days beyond the deadline of the extended period. A Bidder may refuse the request without forfeiting its bid security. A Bidder granting the request shall not be required or permitted to modify its bid, except as provided in ITB 18.3.

18.3 In the case of fixed price contracts, if the award is delayed by a period exceeding fifty-six (56) days beyond the expiry of the initial bid validity, the Contract price shall be adjusted by a factor specified in the request for extension. Bid evaluation shall be based on the Bid Price without taking into consideration the above correction.

19. Bid Security

19.1 Unless otherwise **specified in the BDS**, the Bidder shall furnish as part of its bid, in original form, either a Bid Securing Declaration

or a bid security **as specified in the BDS**. In the case of a bid security, *the amount shall be* ***as specified in the BDS***.

19.2 The bid security shall be a demand guarantee at the Bidder's option, in any of the following forms.

(a) an unconditional bank guarantee

(b) an irrevocable letter of credit

(c) a cashier's or certified cheque; or

(d) another security indicated in the BDS

from a reputable source from an eligible country. If the bid security furnished by the Bidder is in the form of a bond issued by an insurance or bonding institution located outside the Employer's Country, it shall have a correspondent financial institution located in the Employer's Country to make it enforceable. The bid security shall be submitted either using the Bid Security Form included in Section IV, Bidding Forms, in the case of a bank guarantee, or in another substantially similar format approved by the Employer prior to bid submission. In either case, the form must include the complete name of the Bidder. The bid security shall be valid for twenty-eight days beyond the original validity period of the bid, or beyond any period of extension if requested under ITB 18.2

19.3 Any bid not accompanied by an enforceable and *substantially* compliant bid security, if one is required in accordance with ITB 19.1, shall be rejected by the *Employer* as nonresponsive.

19.4 The bid security of unsuccessful Bidders shall be returned as promptly as possible upon the successful Bidder's furnishing of the performance security pursuant to ITB 41.

19.5 The bid security of the successful Bidder shall be returned as promptly as possible once the successful Bidder has signed the Contract and furnished the required performance security.

19.6 The bid security may be forfeited:

(a) if a Bidder withdraws its bid during the period of bid validity specified by the Bidder on the Letter of Bid, except as provided in ITB 18.2 or

(b) if the successful Bidder fails to:

(i) sign the Contract in accordance with ITB 40; or

(ii) furnish a performance security in accordance with ITB 41.

19.7 The Bid Security of a *JV* shall be in the name of the *JV* that submits the bid. If the *JV* has not been constituted into a legally-enforceable *JV,* at the time of bidding, the Bid Security shall be in the names of all future partners as named in the letter of intent mentioned in ITB 4.1.

19.8 If a bid security is **not required in the BDS**, and

(a) if a Bidder withdraws its bid during the period of bid validity specified by the Bidder on the Letter of Bid Form, except as provided in ITB 18.2, or

(b) if the successful Bidder fails to: sign the Contract in accordance with ITB 40; or furnish a performance security in accordance with ITB 41;

the Government of Lesotho may**, if provided for in the BDS,** declare the Bidder disqualified to be awarded a contract by the Employer for a period of time **as stated in the BDS**.

20. Format and Signing of Bid

20.1 The Bidder shall prepare one original of the documents comprising the bid as described in ITB 11 and clearly mark it "ORIGINAL". Alternative bids, if permitted in accordance with ITB 13, shall be clearly marked "ALTERNATIVE". In addition, the Bidder shall submit copies of the bid in the number **specified in the BDS,** and clearly mark each of them "COPY." In the event of any discrepancy between the original and the copies, the original shall prevail.

20.2 The original and all copies of the bid shall be typed or written in indelible ink and shall be signed by a person duly authorized to sign on behalf of the Bidder. This authorization shall consist of a written confirmation as **specified in the BDS** and shall be attached to the bid. The name and position held by each person signing the authorization must be typed or printed below the signature.

20.3 Any amendments such as interlineations, erasures, or overwriting shall be valid only if they are signed or initialled by the person signing the bid.

D. Submission and Opening of Bids

21. Sealing and Marking of Bids

21.1 The Bidder shall enclose the original and each copy of the Bid, including alternative bids, if permitted in accordance with ITB 13, in separate sealed envelopes, duly marking the envelopes as "ORIGINAL", "ALTERNATIVE" and "COPY." These envelopes containing the original and the copies shall then be enclosed in one single envelope.

21.2 The inner and outer envelopes shall:

(a) bear the name and address of the Bidder;

(b) be addressed to the Employer as **provided in the BDS** pursuant to ITB 22.1;

(c) bear the specific identification of this bidding process indicated in accordance with ITB 1.1; and

(d) bear a warning not to open before the time and date for bid opening.

21.3 If all envelopes are not sealed and marked as required, the *Employer* will assume no responsibility for the misplacement or premature opening of the bid.

22. Deadline for Submission of Bids

22.1 Bids must be received by the *Employer* at the address and no later than the date and time **indicated in the BDS**. When so specified in the BDS, bidders shall have the option of submitting their bids electronically. Bidders submitting bids electronically shall follow the electronic bid submission procedures **specified in the BDS.**

22.2 The *Employer* may, at its discretion, extend the deadline for the submission of bids by amending the Bidding Document in accordance with ITB 8, in which case all rights and obligations of the *Employer* and Bidders previously subject to the deadline shall thereafter be subject to the deadline as extended.

23. Late Bids

23.1 The *Employer* shall not consider any bid that arrives after the deadline for submission of bids, in accordance with ITB 22. Any bid received by the *Employer* after the deadline for submission of bids shall be declared late, rejected, and returned unopened to the Bidder.

24. Withdrawal, Substitution, and

24.1 A Bidder may withdraw, substitute, or modify its bid after it has been submitted by sending a written notice, duly signed by an

Modification of Bids

authorized representative, and shall include a copy of the authorization in accordance with ITB 20.2, (except that withdrawal notices do not require copies). The corresponding substitution or modification of the bid must accompany the respective written notice. All notices must be:

(a) prepared and submitted in accordance with ITB 20 and ITB 21 (except that withdrawal notices do not require copies), and in addition, the respective envelopes shall be clearly marked "WITHDRAWAL," "SUBSTITUTION," "MODIFICATION;" and

(b) received by the Employer prior to the deadline prescribed for submission of bids, in accordance with ITB 22.

24.2 Bids requested to be withdrawn in accordance with ITB 24.1 shall be returned unopened to the Bidders.

24.3 No bid may be withdrawn, substituted, or modified in the interval between the deadline for submission of bids and the expiration of the period of bid validity specified by the Bidder on the Letter of Bid or any extension thereof.

25. Bid Opening

25.1 The *Employer* shall open the bids in public at the address, date and time **specified in the BDS** in the presence of Bidders` designated representatives and anyone who choose to attend. Any specific electronic bid opening procedures required if electronic bidding is permitted in accordance with ITB 21.1, shall be as **specified in the BDS**.

25.2 First, envelopes marked "WITHDRAWAL" shall be opened and read out and the envelope with the corresponding bid shall not be opened, but returned to the Bidder. No bid withdrawal shall be permitted unless the corresponding withdrawal notice contains a valid authorization to request the withdrawal and is read out at bid opening. Next, envelopes marked "SUBSTITUTION" shall be opened and read out and exchanged with the corresponding bid being substituted, and the substituted bid shall not be opened, but returned to the Bidder. No bid substitution shall be permitted unless the corresponding substitution notice contains a valid authorization to request the substitution and is read out at bid opening. Envelopes marked "MODIFICATION" shall be opened and read out with the corresponding bid. No bid modification shall be permitted unless the corresponding modification notice contains a valid authorization to request the modification and is read

out at bid opening. Only envelopes that are opened and read out at bid opening shall be considered further.

25.3 All other envelopes shall be opened one at a time, reading out: the name of the Bidder and the Bid Price(s), including any discounts and alternative bids and indicating whether there is a modification; the presence of a bid security or Bid securing Declaration, if required; and any other details as the *Employer* may consider appropriate. Only discounts and alternative offers read out at bid opening shall be considered for evaluation. No bid shall be rejected at bid opening except for late bids, in accordance with ITB 23.1.

25.4 The *Employer* shall prepare a record of the bid opening that shall include, as a minimum: the name of the Bidder and whether there is a withdrawal, substitution, or modification; the Bid Price, per contract if applicable, including any discounts and alternative offers; and the presence or absence of a bid security, if one was required. The Bidders' representatives who are present shall be requested to sign the record. The omission of a Bidder's signature on the record shall not invalidate the contents and effect of the record. A copy of the record shall be distributed to all Bidders.

E. Evaluation and Comparison of Bids

26. Confidentiality

26.1 Information relating to the examination, evaluation, comparison, and recommendation of contract award, shall not be disclosed to Bidders or any other persons not officially concerned with such process until information on Contract award is communicated to all Bidders.

26.2 Any attempt by a Bidder to influence the Employer in the evaluation of the bids or Contract award decisions may result in the rejection of its bid.

26.3 Notwithstanding ITB 26.2, from the time of bid opening to the time of Contract award, if any Bidder wishes to contact the *Employer* on any matter related to the bidding process, it may do so in writing.

27. Clarification of Bids

27.1 To assist in the examination, evaluation, and comparison of the bids, and qualification of the Bidders, the *Employer* may, at its discretion, ask any Bidder for a clarification of its bid. Any clarification submitted by a Bidder that is not in response to a

request by the *Employer* shall not be considered. The *Employer*'s request for clarification and the response shall be in writing. No change in the prices or substance of the bid shall be sought, offered, or permitted, except to confirm the correction of arithmetic errors discovered by the *Employer* in the evaluation of the bids, in accordance with ITB 31.

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

28. Deviations, Reservations, and Omissions

28.1 During the evaluation of bids, the following definitions apply:

(a) "Deviation" is a departure from the requirements specified in the Bidding Document;

(b) "Reservation" is the setting of limiting conditions or withholding from complete acceptance of the requirements specified in the Bidding Document; and

(c) "Omission" is the failure to submit part or all of the information or documentation required in the Bidding Document.

29. Determination of Responsiveness

29.1 The *Employer*'s determination of a bid's responsiveness is to be based on the contents of the bid itself, as defined in ITB 11.

29.2 A substantially responsive bid is one that meets the requirements of the Bidding Document without material deviation, reservation, or omission. A material deviation, reservation, or omission is one that,

(a) if accepted, would:

(i) affect in any substantial way the scope, quality, or performance of the Works specified in the Contract; or

(ii) limit in any substantial way, inconsistent with the Bidding Document, the Employer's rights or the Bidder's obligations under the proposed Contract; or

(b) if rectified, would unfairly affect the competitive position of other Bidders presenting substantially responsive bids.

29.3 The *Employer* shall examine the technical aspects of the bid submitted in accordance with ITB 16, Technical Proposal, in particular, to confirm that all requirements of Section 6 (*Works* Requirements) have been met without any material deviation, reservation or omission.

29.4 If a bid is not substantially responsive to the requirements of the Bidding Document, it shall be rejected by the *Employer* and may not subsequently be made responsive by correction of the material deviation, reservation, or omission.

30. Nonconformities, Errors, and Omissions

30.1 Provided that a bid is substantially responsive, the *Employer* may waive any non-conformities in the bid that do not constitute a material deviation, reservation or omission.

30.2 Provided that a bid is substantially responsive, the *Employer* may request that the Bidder submit the necessary information or documentation, within a reasonable period of time, to rectify nonmaterial nonconformities in the bid related to documentation requirements. Requesting information or documentation on such nonconformities shall not be related to any aspect of the price of the bid. Failure of the Bidder to comply with the request may result in the rejection of its bid.

30.3 Provided that a bid is substantially responsive, the *Employer* shall rectify quantifiable nonmaterial nonconformities related to the Bid Price. To this effect, the Bid Price may be adjusted, for comparison purposes only, to reflect the price of a missing or non-conforming item or component. The adjustment shall be made using the methods indicated in Section III (Evaluation and Qualification Criteria).

31. Correction of Arithmetical Errors

31.1 Provided that the bid is substantially responsive, the *Employer* shall correct arithmetical errors on the following basis:

(a) only for unit price contracts, if there is a discrepancy between the unit price and the total price that is obtained by multiplying the unit price and quantity, the unit price shall prevail and the total price shall be corrected, unless in the opinion of the Employer there is an obvious misplacement of the decimal point in the unit price, in which case the total price as quoted shall govern and the unit price shall be corrected;

(b) if there is an error in a total corresponding to the addition or subtraction of subtotals, the subtotals shall prevail and the total shall be corrected; and

(c) if there is a discrepancy between words and figures, the amount in words shall prevail, unless the amount expressed in words is related to an arithmetic error, in which case the amount in figures shall prevail subject to (a) and (b) above.

31.2 If the Bidder that submitted the highest evaluated bid does not accept the correction of errors, its bid shall be disqualified.

32. Conversion to Single Currency

32.1 For evaluation and comparison purposes, the currency(ies) of the bid shall be converted into a single currency as **specified in the BDS**.

33. Margin of Preference

33.1 ***unless otherwise specified in the* BDS**, a margin of preference shall not apply.

34. Evaluation of Bids/Bids

34.1 The *Employer* shall use the criteria and methodologies listed in this Clause. No other evaluation criteria or methodologies shall be permitted.

34.2 To evaluate a bid, the *Employer* shall consider the following:

(a) the bid price, excluding Provisional Sums and the provision, if any, for contingencies in the Summary Bill of Quantities, but including Daywork items, where priced competitively;

(b) price adjustment for correction of arithmetic errors in accordance with ITB 31.1;

(c) price adjustment due to discounts offered in accordance with ITB 14.3;

(d) converting the amount resulting from applying (a) to (c) above, if relevant, to a single currency in accordance with ITB 32;

(e) adjustment for nonconformities in accordance with ITB 30.3;

(f) the evaluation factors indicated in Section III (Evaluation and Qualification Criteria);

34.3 The estimated effect of the price adjustment provisions of the Conditions of Contract, applied over the period of execution of the Contract, shall not be taken into account in bid evaluation.

34.4 If this Bidding Document allows Bidders to quote separate prices for different contracts, and to award multiple contracts to a single Bidder, the methodology to determine the lowest evaluated price of the contract combinations, including any discounts offered in the Letter of Bid, is

specified in Section III (Evaluation and Qualification Criteria).

34.5 If the bid, which results which resulted with the highest evaluated bid, is seriously unbalanced, front loaded or substantially below updated estimates in the opinion of the *Employer*, the *Employer* may require the Bidder to produce detailed price analyses for any or all items of the Bill of Quantities, to demonstrate the internal consistency of those prices with the construction methods and schedule proposed. After evaluation of the price analyses, taking into consideration the schedule of estimated Contract payments, the Employer may require that the amount of the performance security be increased at the expense of the Bidder to a level sufficient to protect the Employer against financial loss in the event of default of the successful Bidder under the Contract.

35. Comparison of Bids

35.1 The *Employer* shall compare all substantially responsive bids in accordance with ITB 34.2 to determine the bid with the highest evaluated bid.

36. Qualification of the Bidder

36.1 The *Employer* shall determine to its satisfaction whether the Bidder that is selected as having submitted the highest evaluated and substantially responsive bid meets the qualifying criteria specified in Section III (Evaluation and Qualification Criteria).

36.2 The determination shall be based upon an examination of the documentary evidence of the Bidder's qualifications submitted by the Bidder, pursuant to ITB 17.1.

36.3 An affirmative determination of qualification shall be a prerequisite for award of the Contract to the Bidder. A negative determination shall result in disqualification of the bid, in which event the *Employer* shall proceed to the next bid with the highest evaluated bid to make a similar determination of that Bidder's qualifications to perform satisfactorily.

37. Employer's Right to Accept Any Bid, and to Reject Any or All Bids

37.1 The *Employer* reserves the right to accept or reject any bid, and to annul the bidding process and reject all bids at any time prior to contract award, without thereby incurring any liability to Bidders. In case of annulment, all bids submitted and specifically, bid securities, shall be promptly returned to the Bidders.

F. Award of Contract

38. Award Criteria

38.1 *Subject to ITB 37.1,* the *Employer* shall award the Contract to the Bidder whose offer has been determined to be a bid with the highest combined score and is substantially responsive to the Bidding Document, provided further that the Bidder is determined to be qualified to perform the Contract satisfactorily.

39. Notification of Award

39.1 Prior to the expiration of the period of bid validity, the *Employer* shall notify the successful Bidder, in writing, that its bid has been accepted. The notification letter (hereinafter and in the Conditions of Contract and Contract Forms called "the Letter of Acceptance") shall specify the sum that the Employer will pay the Contractor in consideration of the execution and completion of the Works (hereinafter and in the Conditions of Contract and Contract Forms called "the Contract Price") and the requirement for the Contractor to remedy any defects therein a prescribed by the Contract. At the same time, the Employer shall also notify all other Bidders of the results of the bidding.

39.2 Until a formal contract is prepared and executed, the notification of award shall constitute a binding Contract.

39.3 The Employer shall promptly respond in writing to any unsuccessful Bidder who, after notification of award in accordance with ITB 39.1, requests in writing the grounds on which its bid was not selected.

40. Signing of Contract

40.1 Promptly upon notification, the *Employer* shall send the successful Bidder the Contract Agreement.

40.2 Within twenty-eight (28) days of receipt of the Contract Agreement, the successful Bidder shall sign, date, and return it to the *Employer*.

41. Performance Security

41.1 Within twenty-eight (28) days of the receipt of notification of award from the *Employer*, the successful Bidder shall furnish the performance security in accordance with the conditions of contract, subject to ITB 34.5, using for that purpose the Performance Security Form included in Section IX (Contract Forms), or another form acceptable to the *Employer*. If the performance security furnished by the successful Bidder is in the form of a bond, it shall be issued by a bonding or insurance company that has been determined by the successful Bidder to be acceptable to the *Employer*. A foreign institution providing a bond shall have a correspondent financial institution *located in the Employer's Country.*

41.2 Failure of the successful Bidder to submit the above-mentioned Performance Security or to sign the Contract Agreement shall constitute sufficient grounds for the

annulment of the award and forfeiture of the bid security. In that event the *Employer* may award the Contract to the next Bidder with highest evaluated Score whose offer is substantially responsive and is determined by the *Employer* to be qualified to perform the Contract satisfactorily.

Section II – Bid Data Sheet (BDS)

A. Introduction

ITB 1.1	The Employer is: The Ministry of Public Works and Transport - Roads Directorate represented by the Director General, from the Roads Directorate; P. O. Box 194, Maseru 100, LESOTHO.
ITB 1.1	The identification number of the bidding process is: **RD/DD/5-A**
ITB 2.1	The name of the Project is: **THE PLANT AND DESIGN BUILD OF THE REHABILITATION OF THE MASERU PRIVATE SIDING RAILWAY TRACK.**
ITB 4.5	The Employer's Country is The Kingdom of Lesotho
ITB 4.1(a)	The individuals or firms in a JV shall be jointly and severally liable.

B. Bidding Documents

ITB 7.1	For **clarification purposes** only, the Employer's address is: Attention: Mr. Ntaba Manoeli - Procurement Manager (Acting) **Postal Address:** Ministry of Public Works and Transport Roads Directorate P. O. Box 194 Maseru 100 Lesotho **Physical Address:** Ministry of Public Works and Transport Procurement Section, Ground Floor (Room G11) Roads Directorate Corner State and Lepoqo Roads Industrial Area (Opposite Browns Cash and Carry) City: Maseru ZIP Code: 100 Country: Lesotho Telephone: +266 22 229000/52229000 Electronic mail address: manoelin@rd.org.ls Cc: molefitm@rd.org.ls, mahlomaholob@rd.org.ls, ntserel@rd.org.ls, matsoetlanet@rd.org.ls Requests for clarification should be received by the Employer no later than: 7 days

ITB 7.4	A Pre-Bid meeting will take place at the following date, time and place: Date: **06th August 2026** Time: Immediately after the site visit Place: Maseru Industrial Area (Railway level crossing next to Builder's City & Lesotho Flour mills) A site visit conducted by Roads Directorate shall commence at 10:00 am from The Maseru Industrial Area (at the railway level crossing below Builder's City)

C. Preparation of Bids

ITB 10.1	The language of the bid is: English
ITB 11.1 (b)	The following schedules shall be submitted with the bid: None
ITB 11.1 (h)	The Bidder shall submit with its bid the following additional documents: A comprehensive and concise Environmental and Social Management Strategies and Implementation Plans (ES-MSIP)
ITB 13.1	Alternative bids shall not be permitted.
ITB 13.2	Alternative times for completion shall not be permitted.
ITB 13.4	Alternative technical solutions shall be permitted for the following parts of the Works: Not Applicable
ITB 15.1	The currency(ies) of the bid shall be as follows: **Lesotho Loti (LSL)**
ITB 18.1	The bid validity period shall be: **90 days.**
ITB 19.1	The Bidder shall furnish a bid security in the amount of **LSL 100 000.00 in a form described in ITB 19.2**
ITB 19.3 (d)	Applicable.
ITB 20.1	In addition to the original of the bid, the number of copies is: 6 and 2 Flash drives (Technical must have 3 copies and 1 Flash disk, Financial must have 3 copies and 1 Flash disk)

ITB 20.2	The written confirmation of authorization to sign on behalf of the Bidder shall consist of: Company's Board Resolution or Power of Attorney

D. Submission and Opening of Bids

ITB 22.1	For **bid submission purposes** only, the Employer's address is: Attention: The Procurement Manager **Postal Address:** Ministry of Public Works and Transport Roads Directorate P. O. Box 194 Maseru 100 Lesotho **Physical Address:** Procurement Section, Ground Floor (Room G11) Roads Directorate Corner State and Lepoqo Roads Industrial Area (Opposite Browns Cash and Carry) City: Maseru ZIP Code: 100 Country: Lesotho Telephone: +266 5222 9000/22229000 Electronic mail address: N/A **The deadline for bid submission is:** Date: **27th August 2026** Time: 10:00 am (local Time)
ITB 25.1	The bid opening shall take place at: Ministry of Public Works and Transport, Roads Directorate Headquarters Ground Floor Board Room Street Address: Moshoeshoe Road Floor/Room number: Ground Floor, **Board Room** City: Maseru Country: Lesotho Date: **27th August 2026** Time: 10:30 am (local time)
ITB 25.1	If electronic bid submission is permitted in accordance with ITB 21.1, the specific bid opening procedures shall be: **Not applicable**

E. Evaluation and Comparison of Bids

ITB 32.1	The currency that shall be used for bid evaluation and comparison purposes to convert all bid prices expressed in various currencies into a single currency is: **N/A**
ITB 33.1	***A margin of preference shall not apply in this Tender.***

Section III. Evaluation and Qualification Criteria

This Section contains all the criteria that the Employer shall use to evaluate bids and qualify Bidders. In accordance with ITB 35 and ITB 36, no other factors, methods or criteria shall be used. The Bidder shall provide all the information requested in the forms included in Section IV, Bidding Forms.

A. Evaluation Process

Evaluation shall be undertaken sequentially in the following stages:

1. Preliminary Examination;
2. Administrative Compliance;
3. Detailed Technical Evaluation and Qualification Assessment;
4. Financial Comparison; and
5. Recommendation for Award.

Failure at any stage shall result in the bid not being considered further.

1. Preliminary Examination (Pass/Fail)

The Procuring Entity shall verify that each bid complies with the eligibility requirements prescribed in ITB Clause 4.

The Bidder shall submit the following documents.

Requirement	**Evaluation**
Valid Trading Licences / or equivalent from country of origion	Pass/Fail
Valid Tax Clearance Certificate / or equivalent from country of origion	Pass/Fail
Signed Bid Submission Form	Pass/Fail
Original Bid Security	Pass/Fail
Priced Bill of Quantities	Pass/Fail
Power of Attorney	Pass/Fail
Bid Validity (90 Days)	Pass/Fail

Joint Ventures shall additionally submit:

- Joint Venture Agreement;
- Powers of Attorney;
- Individual eligibility documents for each partner.

2. Administrative Compliance (Pass/Fail)

The Procuring Entity shall determine whether the Bid is administratively compliant in accordance with ITB Clause 11.

The following shall be verified:

- Properly signed Bid;
- Correct Bid Security;
- Complete pricing schedules;
- Proper authorization;
- Compliance with submission requirements.

Only bids passing the Preliminary and Administrative stages shall undergo technical evaluation. The Procuring Entity shall determine whether the Bid is substantially responsive to the Employer's Requirements.

3a. Qualification Assessment (Pass/Fail)

Factor	Historical Contract Non-Performance					
Sub-Factor	Criteria					**Documentation Required**
	Requirement	**Bidder**				
		Single Entity	**Joint Venture, Consortium or Association**			
			All partners combined	**Each partner**	**At least one partner**	
History of non-performing contracts	Non-performance of a contract shall not have occurred within the last five (5) years prior to the deadline for bid submission, based on all information on fully settled disputes or litigation. A contract shall be considered non-performing where it was terminated by the Employer due to the Contractor's default or where the Performance Security was called for reasons attributable to the Contractor.	Must meet requirement by itself or as partner to past or existing JV	N / A	Must meet requirement by itself or as partner to past or existing JV	N / A	Form 1
Pending Litigation	The total value of all pending litigation against the Bidder shall not exceed M500,000.00 (Five Hundred Thousand Maloti) and shall be treated as resolved against the Bidder for the purpose of evaluation.	Must meet requirement by itself or as partner to past or existing JV	N / A	Must meet requirement by itself or as partner to past or existing JV	N / A	Form 1

Part 1: Section 3 Evaluation Methodology and Criteria

Factor	**Financial Situation**					
Sub-Factor	Criteria					**Documentation Required**
	Requirement	**Bidder**				
		Single Entity	**Joint Venture, Consortium or Association**			
			All partners combined	**Each partner**	**At least one partner**	
Historical Financial Performance	The Bidder shall submit audited financial statements, or if not required by the laws of the Bidder's country, other financial statements acceptable to the Employer, for the last five (5) financial years. The financial statements shall demonstrate the current soundness of the Bidder's financial position and indicate its prospective long-term profitability.	Must meet requiremen t	N / A	Must meet requirement	N / A	Form 2 and audited financial statements
Average Annual Turnover	The Bidder shall demonstrate a minimum average annual turnover of **M4,000,000.00 (Four Million Maloti)**, calculated from the total certified payments received for construction contracts in progress or completed during the last five (5) financial years immediately preceding the bid submission deadline.	Must meet requiremen t	Must meet requirement	Must meet 40% (Forty Percent) of the requirement	Must meet At least percent 70% (Seventy Percent) of the requiremen t	Form 3 and audited financial statements

Factor	**Financial Situation**					
Sub-Factor	Criteria					**Documentation Required**
	Requirement	**Bidder**				
		Single Entity	**Joint Venture, Consortium or Association**			
			All partners combined	**Each partner**	**At least one partner**	
Financial Resources	The Bidder shall demonstrate access to sufficient financial resources, including liquid assets, unencumbered real assets, lines of credit, or other financial means (excluding contractual advance payments), to satisfy a minimum cash-flow requirement of M500,000.00 (Five Hundred Thousand Maloti) and to meet the cash-flow demands of this Contract after considering its existing contractual commitments.	Must meet requiremen t	Must meet requirement	Must meet requirement	Must meet **25%** of the requiremen t.	Form 4 and line of credit

Part 1: Section 3 Evaluation Methodology and Criteria

Factor	**Experience**					
Sub-Factor	*Criteria*					***Documentation Required***
	Requirement	***Bidder***				
		Single Entity	***Joint Venture, Consortium or Association***			
			All partners combined	***Each partner***	***At least one partner***	
General Experience	The Bidder shall demonstrate a minimum of five (5) years' experience as a contractor, subcontractor, or management contractor in civil engineering, railway, or similar infrastructure projects immediately preceding the bid submission deadline. Evidence shall include completed qualification forms together with copies of contracts and Certificates of Completion, Certificates of Substantial Completion, or Employer References.	Must meet requiremen t	N / A	Must meet requirement	N / A	Form 16 and Certificates of Completion or Substantial Completion
Specific Experience	The Bidder shall demonstrate successful completion of at least two (2) railway maintenance, rehabilitation, railway construction, permanent way, or comparable civil engineering infrastructure contracts within the five (5) years immediately preceding the bid submission deadline. Each contract shall have been completed or substantially completed (minimum	Must meet requiremen t	Must meet requirements for all characteristics	N / A	Must meet requirement for one characteristi c	Form 5 and Certificates of Completion or Substantial Completion

Factor	**Experience**					
Sub-Factor	*Criteria*					***Documentation Required***
	Requirement	***Bidder***				
		Single Entity	***Joint Venture, Consortium or Association***			
			All partners combined	***Each partner***	***At least one partner***	
	seventy percent (70%) completion) and shall be comparable to the proposed Works in terms of scope, scale, technical complexity, construction methodology, and contract value.					

Part 1: Section 3 Evaluation Methodology and Criteria

Factor	**Experience**					
Sub-Factor	*Criteria*					***Documentation Required***
	Requirement	***Bidder***				
		Single Entity	***Joint Venture, Consortium or Association***			
			All partners combined	***Each partner***	***At least one partner***	
Specific Experience continued	For the contracts submitted under Sub-Factor Specific Experience, or other contracts successfully executed within the last ten (10) years immediately preceding the bid submission deadline, the Bidder shall demonstrate successful experience in the following key activities: such as perway construction, track installation, ballast works, rail welding, drainage, testing and commissioning, and associated planning and maintenance services. Evidence shall be supported by contracts, Completion Certificates, and/or Employer References.	Must meet requirements	Must meet requirements	N / A	Must meet requirements	Form 5 and copies of the contracts providing the scope of the works

3b. Technical Responsiveness

Only bids passing the Preliminary, Administrative, and Qualification assessment stages shall undergo technical evaluation.

The Procuring Entity shall determine whether the Bid is substantially responsive to the Employer's Requirements.

Under the technical evaluation, the bidder must meet a minimum threshold of 80% technical score on average and a further minimum threshold of 80% on each technical evaluation criteria (Organizational Experience, Experience of key personnel, Project approach and methodology and Project program (work plan) / Project Schedule) shown in the table below to qualify for financial evaluation.

Bidders scoring below the threshold on technical evaluation will be considered non-responsive and will thus be disqualified and their financial proposals will be returned unopened.

The final score of the evaluated proposal shall be a combination of both the technical and the financial scores at the ratio of 70:30 for technical and financial respectively.

The assessment shall include:

Evaluation area	Weight	Technical Criteria and Scoring

Part 1: Section 3 Evaluation Methodology and Criteria

<u>Organizational Experience</u> Track record on similar type of projects previously executed – Railway (Perway) works **1. Railway (Perway) related works**. N.B. Provide for each successfully completed project/s in the following sequence: **1. Letter of Award** on a letterhead of the client, signed and dated by an official from the client. Copy of an appointment letter/s (on a company letterhead), description of the project, Client name, Client contact (i.e., email and office number), Project start date, project end date, contract value inclusive of VAT. **2. The Certificate of Completion** on a letterhead of the client, signed and dated by an official from the client. Attach completion certificates signed by client indicating the value (if applicable) and type of work performed.	40	Score will be based on any similar (maintenance, rehabilitation or new construction) successfully executed and completed projects: *0:* Not submitted information/No response = 0 points *1:* 1 similar project with certificate of completion = 8 points. *2:* 2 similar projects with certificates of completion = 16 points. *3:* 3 similar projects with certificates of completion = 24 points. *4:* 4 similar projects with certificates of completion = 32 points. *5:* 5 or more similar projects with certificate of completion = 40 points. NB: A minimum of 80% shall be attained for the bidder to be evaluated further
<u>Experience of key personnel</u> (Based on CVs submitted) 1. Project or Contract Manager (Civil). 2. Construction Health and Safety Manager. 3. Perway – Track Inspector / Master. 4. Perway – Track Welder 5. Pest Control Operator	20	In this section, 5 key professional team members stated on the left each with 5 years' experience is now evaluated. Score will be allocated as follows: 0: No submission/Non-compliance = 0 points 1: Listed one (1) key staff team members with minimum of 5-years related experience on submitted CV's = 4 points 2: Listed two (2) key staff team members with minimum of 5-years related experience on submitted CV's = 8 points

(N.B. Provide copies of original qualifications and certificates of professional bodies. The copies must be certified by commissioner of oath. The date on the stamp shall be three months or less old, before the closing date of the tender. If the qualification has been awarded in other language either than English, please provide official translation of qualifications. NB: The minimum experience for each key staff member is 5 years. and signed CVs for each personnel to be submitted		3: Listed three (3) – four (4) key staff team members with minimum of 5-years related experience on submitted CV's = 16 points 4: Listed all five (5) key staff team members with minimum of 5-years related experience on submitted CV's = 18 points 5: Listed minimum six (6) or more key staff team members with minimum 5-years related experience. = 20 points NB: A minimum of 80% shall be attained for the bidder to be evaluated further
<u>Project Approach and Methodology</u> Provide detailed technical approach / methodology that is aligned to the scope of work/ highlighting the risk/s and mitigation measures associated with working within the Rail environment Technical approach and methodology must demonstrate the understanding of the project scope of work in accordance with the following elements: 1. Identification of risks and mitigation, 2. Work breakdown of activities, measurements & assessment, 3. Pre-handover quality inspection, 4. Quality assurance, 5. Material handling and storage process, 6. Hand tools 7. Plant and equipment 8. Transportation and Post quality inspection 9. Works Completion	20	The points for the project approach and methodology will be allocated as follows: 0: No methodology or unrelated/ Irrelevant information provided = 0 points 1: Methodology detailing less than five (5) elements in line with the scope of work provided = 4 points. 2: Methodology detailing 6 - 7 elements in line with the scope of work = 8 points. 3: Methodology detailing 8 -9 elements in line with the scope of work 16 = points. 4: Methodology detailing 10 elements in line with the scope of work = 18 points 5: Methodology detailing 11 and more elements in line with the scope of work = 20 points NB: A minimum of 80% shall be attained for the bidder to be evaluated further

10. Site Establishment 11. Snag list and close out NB: The elements listed above are not exhaustive. At least a minimum of 10 elements should be provided and discussed		
<u>Project program (work plan)/ Project Schedule</u> NB. Provide a detailed project program / Schedule that is aligned to the scope of work highlighting the following elements: 1. Estimated start and finish dates 1. Major milestones 2. Critical path and estimated duration 3. Logic to reach works completion 4. Work plan or project schedule also contains information on execution integration and redundancy for unforeseen delays or occurrences	20	Score will be allocated for MS Project, Primavera or equivalent generated Schedule provided and scores will be allocated as follows: 0: No submission/ Non-compliance = 0 Points 1: Inadequate/ unrelated project schedule provided = 4 points 2: Project schedule provided but no detailed activities indicated = 8 points 3: Project schedule provided with activities indicated on the program aligned with the preferred duration of the project = 16 points 4: Project schedule provided with activities indicated on the program aligned with preferred duration of the project, showing the sequence of activities (i.e., baseline and critical path) = 18 points 5: Project schedule provided with activities indicated on the program aligned with preferred duration of the project, showing the sequence of activities (i.e., baseline and critical path), clear understanding of the scope of work and site challenges addressed = 20 points NB: A minimum of 80% shall be attained for the bidder to be evaluated further
TOTAL	**100**	

Contractor's Representative and Key Personnel

The Bidder must demonstrate that it will have suitably qualified key personnel with qualifications and experience described below.

The Bidder shall provide details of the Key Personnel and such other Key Personnel that the Bidder considers appropriate to perform the Contract as per the Perway Track Maintenance Manual, together with their academic qualifications and work experience. The Bidder shall complete the relevant Forms in Section IV, Bidding Forms.

No work shall commence before this Perway team is complete and arrangements for this team must be made prior to the commencement of the works to minimise delays.

The bidder will be required to provide qualified and experienced professional staff with the following key professional expertise:

1. Project or Contract Manager (Civil).
2. Construction Health and Safety Manager.
3. Perway – Track Inspector / Master.
4. Perway – Track Welder
5. Pest Control Operator

DETAILS OF THE MINIMUM QUALIFICATIONS FOR THE TECHNICAL STAFF LISTED

1. PROJECT OR CONTRACT MANAGER

   The desired minimum qualifications for the Project or Contract Manager are as follows:

   - BSc Degree/B-Tech Degree in Civil Engineering.
   - ECSA registration as a Professional Engineer (Pr. Eng)/Technologist (Pr. Tech Eng).
   - A minimum of 5 years' experience post professional registration in the Built Environment field of study with a minimum of five (5) years relevant Project Management experience in similar project disciplines in the Built Environment.
   - Project Management qualification and a minimum of 5 years' experience in Project Management.
   - South African Council for the Project and Construction Management Professions (SACPCMP) professional registration certification (or equivalent) or Project Management Professional (PMP) Certification with a minimum of five (5) years relevant post certification practical experience.

2. CONSTRUCTION HEALTH AND SAFETY MANAGER

The desired minimum qualifications for the Health and Safety Manager are as follows:

- BSc Degree/ B-Tech Degree/Diploma in Safety Management (or equivalent).
- A minimum of 5 years post-graduate experience in Health and Safety including Construction Management experience with 5 years post professional registration.
- South African Council for the Project and Construction Management Professions (SACPCMP) professional registration certification (or equivalent).

3. PERWAY – TRACK INSPECTOR / MASTER

The desired minimum qualifications for the Perway Track Inspector / Master are as follows:

- Recognised Track Inspector / Master qualification.
- A minimum of 5 years' experience.
- A minimum of 5 years of leadership experience on similar or related projects.

4. PERWAY – TRACK WELDER

The desired minimum qualifications for the Perway – Welder are as follows:

- Recognised Perway – Welder qualification.
- A minimum of 5 years' working experience.

5. PEST CONTROL OPERATOR

- A minimum of 5 years' working experience.
- Relevant qualifications in pest control.
- Registration as Pest Control Operator with the Department of Agriculture, Land Reform and Rural Development (Act No. 36 of 1947) or equivalent.

4. Financial Evaluation

Only bids passing all previous stages shall be subjected to financial Evaluation.

The evaluated bid price shall include:

- Priced Bill of Quantities;
- Corrections of arithmetic errors in accordance with the ITB.

The following shall be excluded:

- Provisional Sums;
- Contingencies.

As provided in the Bid Data Sheet, **no margin of domestic preference shall apply**.

As previously stated bids will be evaluated for both technical and financial capabilities at the ratio of **70 : 30** respectively. The threshold for the technical proposals shall be **80%**. The Financial Proposals of bidders who have scored below the threshold will be returned unopened to the respective bidder.

The criteria for the Financial Evaluation is as detailed below.

Financial Proposals:
The Corrected financial proposals shall be evaluated and ranked in accordance with the following formula;

FS = 100 x FL/FC,

Where;
FS = Financial score of bidder
FL = Lowest Corrected bid price (of bidder that has passed the technical evaluation)
FC = Corrected bid price of bidder under consideration

Final Combined Score = [0.7 x Technical Score] + [0.3 x Financial Score], the contract shall be awarded to the Bidder with the highest combined score and is substantially responsive to the Bidding Document, provided further that the Bidder is determined to be qualified to perform the Contract satisfactory as per ITB 38.

5. Recommendation for Award

The contract shall be awarded to the bidder that:

- is eligible;
- is administratively compliant;
- is substantially technically responsive;
- satisfies all qualification requirements, and
- submits the **highest combined scoring and responsive bid**.

Section IV. Bidding Forms

Table of Forms

Letter of Bid **57**

Bill of Quantities **59**
Daywork Schedule 67
Schedule of Daywork Rates: 1. Labour 67
Schedule of Daywork Rates: 2. Materials 68
Schedule of Daywork Rates: 3. Contractor's Equipment 69

Technical Proposal **70**
Site Organization 71

Method Statement 72
Mobilization Schedule 73
Construction Schedule 73
ES Management Strategies and Implementation Plans 75

Form 6 Equipment 77

Personnel 78
Form 11 78
Form 7 82
Form 12 86
Form 13 87
Form 1 88
Form 2 90
Form 4 91
Form 3 92

Bidders Qualification 93
Form 14 94
Form 15 96
Form 16 97
Form 5 98

Form of Bid Security 100

Form of Bid-Securing Declaration 101

Letter of Bid

Date: _____

Invitation for Bid No.: RD/DD/5-A

To: Ministry of Public Works and Transport Roads Directorate
PO Box 194
Maseru, 100
LESOTHO

We, the undersigned, declare that:

(a) We have examined and have no reservations to the Bidding Documents, including Addenda issued in accordance with Instructions to Bidders (ITB 8)_____;

(b) We offer to execute in conformity with the Bidding Document the following Works:;

(c) The total price of our Bid, excluding any discounts offered in item (d) below is (inclusive of VAT):

(d) The discounts offered and the methodology for their application are:: _____ _____;

(e) Our bid shall be valid for a period of _____ days from the date fixed for the bid submission deadline in accordance with the Bidding Document, and it shall remain binding upon us and may be accepted at any time before the expiration of that period;___

(f) If our bid is accepted, we commit to obtain performance security in accordance with the Bidding Document;

(g) We, including any subcontractors or suppliers for any part of the contract, have or will have nationalities from eligible countries, in accordance with ITB-4.2;

(h) We, including any subcontractors or suppliers for any part of the contract, do not have any conflict of interest in accordance with ITB-4.3;

(l) We are not participating, as a Bidder or as a subcontractor, in more than one bid in this bidding process in accordance with ITB-4.3, other than alternative offers submitted in accordance with ITB-13; We, including any of our subcontractors or suppliers for any part of the contract, have not been declared ineligible by the Employer, under the Employer's

country laws or official regulations or by an act of compliance with a decision of the United Nations Security Council;

(j) We are not a government owned entity/ We are a government owned entity but meet the requirements of ITB-4.5;

Name of Recipient	Address	Reason	Amount
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

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

(k) We understand that this bid, together with your written acceptance thereof included in your notification of award, shall constitute a binding contract between us, until a formal contract is prepared and executed; and

(l) We understand that you are not bound to accept the bid f bid or any other bid that you may receive.

(o) We hereby certify that we have taken steps to ensure that no person acting for us or on our behalf will engage in any type of fraud and corruption.

Name of the Bidder*_____
Name of the person duly authorized to sign the Bid on behalf of the Bidder**_____

Title of the person signing the Bid_____

Signature of the person named above_____

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

Bill of Quantities

Sample Bill of Quantities

A. Preamble

1. For the purposes of this Bill of Quantities, the following words shall have the meanings hereby assigned to them:

   Unit : The unit of measurement for each item of work as defined in the Standard Specifications or the Project Specifications

   Quantity : The number of units of work for each item

   Rate : The payment per unit of work at which the Tenderer tenders to do the work
   Amount : The product of the quantity and the rate tendered for an item

   Lump sum : An amount tendered for an item, the extent of which is described in the Schedule of Quantities, the Specifications or elsewhere, but of which the quantity of work is not measured in units.

2. This Bill of Quantities forms part of the Contract Documents and must be read in conjunction with all the other documents comprising the Contract Documents.

3. The quantities set out in the Bill of Quantities are approximate quantities. The quantities of work accepted and certified for payment, and not the quantities given in the Bill of Quantities, will be used to determine payments to the Contractor.

   The validity of the Contract shall in no way be affected by differences between the quantities in the Bill of Quantities and the quantities certified for payment. Work will be valued at the rates or lump sums tendered, subject only to the provisions of the Conditions of Contract, paragraphs 10 and 11 of this preamble, and the Standard Specifications.

4. The bid rates and lump sums shall include full compensation for overheads, profits, incidentals, duties, levies, taxes (except VAT), and for the completed items of work as specified, all in accordance with the Standard Specifications. Full compensation for

completing and maintaining (during the maintenance period) the work specified in the Standard Specifications and Project Specifications, and for the risks, obligations and responsibilities specified in the Conditions of Contract, Particular Conditions of Contract, Standard Specifications and Project Specifications, shall be deemed collectively provided for in the payment items in the Bill of Quantities, except that the quantities in the Bill of Quantities are approximate quantities only.

5. The Bidder shall fill in a rate against the items where the words "rate only" appear in the amount column. Although no work is foreseen under these items and no quantities are consequently given in the quantity column, the tendered rates shall apply should work under these items actually be required. Bidders are referred to the provisions of paragraph 11 of this preamble.

   The Bidder shall fill in a rate or a lump sum for each item where this is provided for, even where no quantities are given. Items in the Bid (including "rate only" items) against which no rate or lump sum has been entered will not be paid for when the work is executed, as payment for such work will be deemed covered by other rates or lump sums in the Bill of Quantities.

   If the Bidder has tendered a rate but omitted the amount, or vice versa, the missing amount or rate will, if possible, be determined in conjunction with the Bidder from the available data, and the Bidder must confirm his acceptance of these amounts and rates.

   If the Bidder groups a number of items together and tenders one lump sum for such group of items, this single tendered lump sum shall apply to that group of items and not to each individual item. Or, should he indicate against any item that full compensation for such item has been included in another item, the rate for the item included in another item shall be deemed nil.

   The bid lump sums and rates shall be valid irrespective of any change in the quantities during execution of the Contract.

6. Work executed will be measured for payment in accordance with the methods described in the Contract Documents under the various payment items, notwithstanding any custom to the contrary.

7. The amount of work or the quantities of materials stated in the Bill of Quantities shall not restrict or extend the amount of work to be done or the quantities of materials to be supplied by the Contractor.

   The quantities of materials or the amount of work listed in the Bill of Quantities shall not be regarded as authorization for the Contractor to order materials or to execute work. The

Contractor shall obtain the Engineer's detailed instructions for all work before ordering any materials or executing work or making arrangements in this regard.

8. The short descriptions of the payment items in the Bill of Quantities are given to identify the items and to provide specific details. Reference shall inter alia be made to the Standard Specifications, Project Specifications, General Conditions of Contract and Particular Conditions of Contract for more detailed information regarding the extent of the work entailed under each item.

9. Reference must be made to the General Conditions of Contract regarding Provisional Sums and Prime Cost Sums.

10. Subject to the conditions stated in paragraph 11 below, the rates and lump sums filled in by the Bidder in the Bill of Quantities shall be final and binding for submitting the Bid and may not be adjusted should there be any mistakes in the extensions thereof and in the total sums appearing in the Bid. Should there be discrepancies between the Bid Sum and the correctly extended and totalled Bill of Quantities, the rates will be deemed correct, and the Employer will have the right to make such adjustments to the Bid Sum as he deems necessary to reconcile the total of the Bill of Quantities with the Bid Sum.

    In such an event the Contractor will be consulted but failing agreement between the parties, the decision of the Employer will be final and binding. Adjustment of the Bid Sum will take place only after acceptance of the Bid, but prior to the signing of the Contract. In their own interests Bidders should make doubly sure of the correctness of their tendered rates, the extensions and the Bid Sum.

11. A Bid may be rejected if the unit rates or lump sums for some of the items in the Bill of Quantities are unreasonable or out of proportion in the opinion of the Employer, and if the Bidder fails to adjust the unit rates or lump sums for such items within a period of seven (7) days of having been notified in writing by the Employer to make such adjustments.

12. The units of measurement indicated in the Bill of Quantities are metric units.

    The following abbreviations may appear in the Bill of Quantities:

Mm	=	millimetre
M	=	metre
km	=	kilometre
km-pass	=	kilometre-pass
m^2	=	square metre
m^2-pass	=	square metre-pass
ha	=	hectare
m^3	=	cubic metre
m^3-km	=	cubic metre-kilometre
kW	=	kilowatt

kN = kilonewton
kg = kilogram
t = ton (1 000 kg)
% = per cent
MN = meganewton
MN-m = meganewton-metre
MPa = megapascal
PC Sum = Prime Cost Sum
Prov Sum = Provisional Sum
No = Number

13. All rates and sums of money quoted in the Bill of Quantities shall be in Loti and whole cents. Fractions of a cent shall be discarded.

14. The Bid amount shall be inclusive of the lump sums, provisional sums, 10% contingency and 15% VAT

Bill of Quantities

Bill No. 1: General Items

Please refer to the Bills of Quantities attached to hereto;

THE PLANT AND DESIGN BUILD OF THE REHABILITATION OF THE MASERU PRIVATE SIDING RAILWAY TRACK IN MASERU DISTRICT

GENERAL REQUIREMENTS AND PROVISIONS

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT M
12.00	GENERAL REQUIREMENTS AND PROVISIONS				
B12.03	(a) Provision for Training & Internship	Prov Sum	1.00	500,000.00	500,000.00
	(b) Handling costs and profit in respect of subitem B12.03(a)	%	500,000.00		
B12.04	(a) (i) Provision for Professional Staff for carrying out the design/ planning of works:	Lump Sum	1.00		

	(ii) Reimbursables costs with respect to design/ planning by profession personnel	Lump Sum	1.00		
B12.05	(a) (i) Provision for DAB	Prov Sum	1.00	100,000.00	100,000.00
	(ii) handling costs and profit in respect of subitem B12.05(a)	%	100,000.00		
B12.06	Provision for Project Liason Forum	Prov Sum	1.00	50,000.00	50,000.00
	(ii) handling costs and profit in respect of subitem B12.06(a)	%	50,000.00		
B12.07	Contract boards as per Contractor's drawing approved by the Engineer	No	2.00		
TOTAL CARRIED TO SUMMARY					650,000.00

\Roads Directorate \ Bill of quantities

THE PLANT AND DESIGN BUILD OF THE REHABILITATION OF THE MASERU PRIVATE SIDING RAILWAY TRACK IN MASERU DISTRICT

CONTRACTOR'S ESTABLISHMENT ON SITE AND GENERAL OBLIGATIONS

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT M
13.00	**CONTRACTOR'S ESTABLISHMENT ON SITE AND GENERAL OBLIGATIONS**				
13.01	Contractor's general obligations				
	(a) Fixed obligations	L/Sum	1.00		0.00
	(b) Value-related obligations	L/Sum	1.00		0.00
	(c) Time-related obligations	Month	6.00		0.00
	[NB. The combined total tendered for subitems (a), (b) and (c) shall not exceed 15% of the total Bid Price before Taxes etc.]				
TOTAL CARRIED TO SUMMARY					0.00

\Roads Directorate \ Bill of quantities

THE PLANT AND DESIGN BUILD OF THE REHABILITATION OF THE MASERU PRIVATE SIDING RAILWAY TRACK IN MASERU DISTRICT

ACOMMODATION, TRANSPORT, COMPUTERS, PPE & MISCELLANEOUS ITEMS FOR THE ENGINEER'S SITE PERSONNEL

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT M
14.00	**ACOMMODATION, TRANSPORT, COMPUTERS & MISCELLANEOUS ITEMS FOR THE ENGINEER'S SITE PERSONNEL**				
B14.01	(a) Provision for Engineer's Accommodation, Transport, Computers, PPE, and Miscellaneous items	Prov Sum	1.00	1,000,000.00	1,000,000.00
	(b) Handling costs and profit in respect of subitem B14.01(a)	%	1,000,000.00		
TOTAL CARRIED TO SUMMARY					1,000,000.00

\Roads Directorate \ Bill of quantities

THE PLANT AND DESIGN BUILD OF THE REHABILITATION OF THE MASERU PRIVATE SIDING RAILWAY TRACK IN MASERU DISTRICT

SITE SAFETY, HEALTH AND ENVIRONMENTAL MANAGEMENT

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT M
19.00	SITE SAFETY, HEALTH AND ENVIRONMENTAL MANAGEMENT				
PS19.01	(a) Carryout monthly HIV/AIDS and trafficking In persons (TIP) awareness gatherings for employees and communities around the construction camps. Provide information in the form of phamphles regarding the voluntary testing of construction workers and counciling, support and care, in language largely understood by construction workers	Prov Sum	1.00	30,000.00	30,000.00
	(b) Handling costs and profit in respect of subitem PS19.01(a)	%	30,000.00		

TOTAL CARRIED TO SUMMARY					30,000.00

The Bid Amount shall be inclusive of the **lump sums**, **provisional sums**, **10% contingency** and **15% VAT**

The attached Bill of Quantities (BOQ) represents the minimum scope of works as defined by the Employer's initial requirements. Bidders are required to use this BOQ as a baseline. However, because this is a Design & Build contract, each bidder must review, augment, and enhance the attached BOQ with any additional items, quantities, activities, or components necessary to complete the planning and execution/construction, ensure functionality, comply with applicable codes, and meet the Employer's Performance Specifications. The submitted priced BOQ shall therefore be the bidder's complete and sufficient BOQ, not merely a copy of the attached one.

Daywork Schedule

General

1. Reference should be made to Sub-Clause 13.5 of the General Conditions. Work shall not be executed on a daywork basis except by written order of the Engineer. Bidders shall enter basic rates for daywork items in the Schedules, which rates shall apply to any quantity of daywork ordered by the Engineer. Nominal quantities have been indicated against each item of daywork, and the extended total for Daywork shall be carried forward as a Provisional Sum to the Summary Total Bid Amount.

Daywork Labour

2. In calculating payments due to the Contractor for the execution of daywork, the hours for labour will be reckoned from the time of arrival of the labour at the job site to execute the particular item of daywork to the time of return to the original place of departure, but excluding meal breaks and rest periods. Only the time of classes of labour directly doing work ordered by the Engineer and for which they are competent to perform will be measured. The time of gangers (charge hands) actually doing work with the gangs will also be measured but not the time of foremen or other supervisory personnel.

3. The Contractor shall be entitled to payment in respect of the total time that labour is employed on daywork, calculated at the basic rates entered by the Contractor in the **Schedule of Daywork Rates: 1. Labour,** together with an additional percentage payment on basic rates representing the Contractor's profit, overheads, etc., as described below:

   (a) The basic rates for labour shall cover all direct costs to the Contractor, including (but not limited to) the amount of wages paid to such labour, transportation time,

overtime, subsistence allowances, and any sums paid to or on behalf of such labour for social benefits in accordance with Government of Lesotho law. The basic rates will be payable in local currency only.

(b) The additional percentage payment to be quoted by the bidder and applied to costs incurred under (a) above shall be deemed to cover the Contractor's profit, overheads, superintendence, liabilities, and insurances and allowances to labour, timekeeping, and clerical and office work, the use of consumable stores, water, lighting, and power; the use and repair of stagings, scaffolding, workshops, and stores, portable power tools, manual plant, and tools; supervision by the Contractor's staff, foremen, and other supervisory personnel; and charges incidental to the foregoing.

Daywork Materials

4. The Contractor shall be entitled to payment in respect of materials used for daywork (except for materials for which the cost is included in the percentage addition to labour costs as detailed heretofore), at the basic rates entered by the Contractor in the **Schedule of Daywork Rates: 2. Materials,** together with an additional percentage payment on the basic rates to cover overhead charges and profit, as follows:

   (a) the basic rates for materials shall be calculated on the basis of the invoiced price, freight, insurance, handling expenses, damage, losses, etc., and shall provide for delivery to store for stockpiling at the Site. The basic rates shall be stated in local currency and payment will be made in the local currency

   (b) the additional percentage payment shall be quoted by the bidder and applied to the equivalent local currency payments made under (a) above. Payments under this item will be made in local currency.

   (c) the cost of hauling materials for use on work ordered to be carried out as daywork from the store or stockpile on the Site to the place where it is to be used will be paid in accordance with the terms for Labour and Construction in this schedule.

Daywork Contractor's Equipment

5. The Contractor shall be entitled to payments in respect of Contractor's Equipment already on Site and employed on daywork at the basic rental rates entered by the Contractor in the **Schedule of Daywork Rates: 3. Contractor's Equipment.** Said rates shall be deemed to include due and complete allowance for depreciation, interest, indemnity.

6. In calculating the payment due to the Contractor for Contractor's Equipment employed on daywork, only the actual number of working hours will be eligible for payment, except that where applicable and agreed with the Engineer, the travelling time from the part of the Site where the Contractor's Equipment was located when ordered by the Engineer to

be employed on daywork and the time for return journey thereto shall be included for payment.

7. The basic rental rates for Contractor's Equipment employed on daywork shall be stated in local currency and payments will be in local currency.

Technical Proposal

- Site Organization
- Method Statement
- Mobilization Schedule
- Construction Schedule
- Environmental and Social Management Strategies and Implementation Plans
- Equipment
- Key Personnel Schedule
- Others

Site Organization

The Tenderer shall show here in Organogram form the organisation of his Design and site personnel showing clearly designated duties and responsibilities and the chain of command throughout the structure. Tenderer must also include the CV's and certified educational certificates of the respective personnel shown in the organogram.

Method Statement

The Tenderer shall provide here a detailed description of how the Works are to be undertaken. The description shall include, in particular, for:

Design/ planning and Reporting

The Tenderer shall provide details of carrying out the design/ planning of the works, reporting and submission of documents.

Site Establishment of Contractor's Camps

The Tenderer shall provide details of the intended location and extent of his campsites for offices, and the location of the offices for the Engineer's staff.

Traffic Control Program:

The Tenderer shall provide a detail Method Statement on traffic control program and system which will be followed in directing and controlling vehicle traffic while constructing the railway track at level crossings so as to allow vehicle flow at all times along the road.

Work Scheduling and Execution:

The Tenderer shall provide full details of carrying out the works. Also to be included here is the manner of dealing with procurement of the construction materials, identification and mining and or sourcing of materials from sources within the project vicinity (if applicable), safe cartage of the materials, minimising environmental and social impacts (appropriate mitigation measures) and all other incidentals necessary for the effective carrying out of the construction activities.

The Methodology and the work plan must relate to the works programme submitted with the tender.

Mobilization and Construction Schedule

The Tenderer shall provide here his proposed programme for construction of the Works within the Time for Completion given in the data sheet and appendix to form of tender. The programme shall be presented in the form of a bar chart showing main construction activities with associated groups of construction equipment listed. Tenderers to attach well detailed programme preferably generated by Microsoft Project, Primavera or equivalent softwares as per Form 8.1 & 8.2

The Tenderer shall demonstrate that he has sufficient plant, equipment and trained personnel to complete the Works in accordance with his Programme.

FORM 8.1: OUTLINE WORKS PROGRAMME CHART

LIST OF ACTIVITIES	***TIME IN MONTHS***										
	1	***2***	***3***	***4***	***5***	***6***	***7***	***8***	***….***	***18***	

FORM 8.2: MOBILIZATION PROGRAMME FOR EQUIPMENT

ITEM DESCRIPTION	***WEEK***							
Equipment	***0.5***	***1.0***	***1.5***	***2.0***	***2.5***	***3.0***	***3.5***	***4.0***

ES Management Strategies and Implementation Plans

(ES-MSIP)

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

In developing these strategies and plans, the Bidder shall have regard to the ES provisions of the contract including those as may be more fully described in the Works Requirements described in Section VII.

FORM 10: SCHEDULE OF PROPOSED SUB-CONTRACTORS

Tenderers are to give below names and details of work to be performed by any sub-contractors they propose to employ. Written agreements with sub-contractors to be submitted with tender. The sub-contractors shall be approved by the Employer before contract award.

Name	Country of origin	Work to be performed	Scheduled total value of items covered by subcontract

The Contractor is permitted to subcontract at least 10% of the works however the Contractor is not allowed to sub-contract more than 50% of the works.

Form 6: Equipment

There is no minimum requirement for key plant and equipment. However, the Bidder shall provide adequate information to demonstrate clearly that it has the capability to meet the requirements of the scope of work by listing all equipment they understand is required to execute all the works.

Item of equipment		
Equipment information	Name of manufacturer	Model and power rating
	Capacity	Year of manufacture
Current status	Current location	
	Details of current commitments	
Source	Indicate source of the equipment ☐ Owned ☐ Rented ☐ Leased ☐ Specially manufactured	

Omit the following information for equipment owned by the Bidder.

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

Personnel

Form 11

Contractor's Representative and Key Personnel Schedule

Bidders should provide the names and details of the suitably qualified Contractor's Representative and Key Personnel to perform the Contract. The data on their experience should be supplied using the Form 7 below for each candidate.

Contractor' Representative and Key Personnel

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

	Expected time schedule for this position:	[*insert the expected time schedule for this position (e.g. attach high level Gantt chart*]
4.	**Title of position:** Perway – Track Welder	
	Name of candidate:	
	Duration of appointment:	[*insert the whole period (start and end dates) for which this position will be engaged*]
	Time commitment: for this position:	[*insert the number of days/week/months/ that has been scheduled for this position*]
	Expected time schedule for this position:	[*insert the expected time schedule for this position (e.g. attach high level Gantt chart*]
5.	**Title of position:** Pest Control Operator	
	Name of candidate	
	Duration of appointment:	[*insert the whole period (start and end dates) for which this position will be engaged*]
	Time commitment: for this position:	[*insert the number of days/week/months/ that has been scheduled for this position*]
	Expected time schedule for this position:	[*insert the expected time schedule for this position (e.g. attach high level Gantt chart*]
6.	**Title of position:**	
	Name of candidate	
	Duration of appointment:	[*insert the whole period (start and end dates) for which this position will be engaged*]
	Time commitment: for this position:	[*insert the number of days/week/months/ that has been scheduled for this position*]
	Expected time schedule for this position:	[*insert the expected time schedule for this position (e.g. attach high level Gantt chart*]
7	**Title of position:**	
	Name of candidate	
	Duration of appointment:	[*insert the whole period (start and end dates) for which this position will be engaged*]
	Time commitment: for this position:	[*insert the number of days/week/months/ that has been scheduled for this position*]
	Expected time schedule for this position:	[*insert the expected time schedule for this position (e.g. attach high level Gantt chart*]
	Title of position:	
	Name of candidate	
	Duration of appointment:	[*insert the whole period (start and end dates) for which this position will be engaged*]
	Time commitment: for this position:	[*insert the number of days/week/months/ that has been scheduled for this position*]

	Expected time schedule for this position:	[*insert the expected time schedule for this position (e.g. attach high level Gantt chart*]
8	**Title of position:**	
	Name of candidate	
	Duration of appointment:	[*insert the whole period (start and end dates) for which this position will be engaged*]
	Time commitment: for this position:	[*insert the number of days/week/months/ that has been scheduled for this position*]
	Expected time schedule for this position:	[*insert the expected time schedule for this position (e.g. attach high level Gantt chart*]
9	**Title of position:**	
	Name of candidate	
	Duration of appointment:	[*insert the whole period (start and end dates) for which this position will be engaged*]
	Time commitment: for this position:	[*insert the number of days/week/months/ that has been scheduled for this position*]
	Expected time schedule for this position:	[*insert the expected time schedule for this position (e.g. attach high level Gantt chart*]
10	**Title of position:**	
	Name of candidate	
	Duration of appointment:	[*insert the whole period (start and end dates) for which this position will be engaged*]
	Time commitment: for this position:	[*insert the number of days/week/months/ that has been scheduled for this position*]
	Expected time schedule for this position:	[*insert the expected time schedule for this position (e.g. attach high level Gantt chart*]
11	**Title of position:**	
	Name of candidate	
	Duration of appointment:	[*insert the whole period (start and end dates) for which this position will be engaged*]
	Time commitment: for this position:	[*insert the number of days/week/months/ that has been scheduled for this position*]
	Expected time schedule for this position:	[*insert the expected time schedule for this position (e.g. attach high level Gantt chart*]
12	**Title of position:**	
	Name of candidate	
	Duration of appointment:	[*insert the whole period (start and end dates) for which this position will be engaged*]
	Time commitment: for this position:	[*insert the number of days/week/months/ that has been scheduled for this position*]
	Expected time schedule for this position:	[*insert the expected time schedule for this position (e.g. attach high level Gantt chart*]
13	**Title of position:**	
	Name of candidate	
	Duration of appointment:	[*insert the whole period (start and end dates) for which this position will be engaged*]
	Time commitment: for this position:	[*insert the number of days/week/months/ that has been scheduled for this position*]

	Expected time schedule for this position:	[*insert the expected time schedule for this position (e.g. attach high level Gantt chart*]
14	**Title of position:**	
	Name of candidate	
	Duration of appointment:	[*insert the whole period (start and end dates) for which this position will be engaged*]
	Time commitment: for this position:	[*insert the number of days/week/months/ that has been scheduled for this position*]
	Expected time schedule for this position:	[*insert the expected time schedule for this position (e.g. attach high level Gantt chart*]
15	**Title of position:**	
	Name of candidate	
	Duration of appointment:	[*insert the whole period (start and end dates) for which this position will be engaged*]
	Time commitment: for this position:	[*insert the number of days/week/months/ that has been scheduled for this position*]
	Expected time schedule for this position:	[*insert the expected time schedule for this position (e.g. attach high level Gantt chart*]

Form-7:
Resume and Declaration
Contractor's Representative and Key Personnel

Name of Bidder

Position [#*1*]: [*title of position from Form PER-1*]		
Personnel information	**Name:**	**Date of birth:**

	Address:	**E-mail:**
	Professional qualifications:	
	Academic qualifications:	
	Language proficiency:*[language and levels of speaking, reading and writing skills]*	
details		
	Address of employer:	
	Telephone:	**Contact (manager / personnel officer):**
	Fax:	
	Job title:	**Years with present employer:**

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

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

Declaration

I, the undersigned *[insert either "Contractor's Representative" or "Key Personnel" as applicable]* , certify that to the best of my knowledge and belief, the information contained in this Form PER-2 correctly describes myself, my qualifications and my experience.

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

Commitment	**Details**
Commitment to duration of contract:	*[insert period (start and end dates) for which this Contractor's Representative or Key Personnel is available to work on this contract]*
Time commitment:	*[insert period (start and end dates) for which this Contractor's Representative or Key Personnel is available to work on this contract]*

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

(a) be taken into consideration during Bid evaluation;

(b) result in my disqualification from participating in the Bid;

(c) result in my dismissal from the contract.

Name of Contractor's Representative or **Key Personnel: [*insert name*]**

Signature: _____

Date: (day month year): _____

Counter signature of authorized representative of the Bidder:

Signature: _____

Date: (day month year): _____

Form 12

Bidder Information Form

Date: _____
Contract No: _____
Page _____of _____pages

Bidder's name
In case of Joint Venture (JV), name of each member:
Bidder's actual or intended country of registration: *[indicate country of Constitution]*
Bidder's actual or intended year of incorporation:
Bidder's legal address [in country of registration]:
Bidder's authorized representative information Name: _____ Address: _____ Telephone/Fax numbers: _____ E-mail address: _____
1. Attached are copies of original documents of ¨ Articles of Incorporation (or equivalent documents of constitution or association), and/or documents of registration of the legal entity named above, in accordance with ITB 4.3. ¨ In case of JV, letter of intent to form JV or JV agreement, in accordance with ITB 4.1. ¨ In case of Government-owned enterprise or institution, in accordance with ITB 4.5 documents establishing: • Legal and financial autonomy • Operation under commercial law • Establishing that the Bidder is not dependent agency of the Employer 2. Included are the organizational chart, a list of Board of Directors, and the beneficial ownership.

Form 13

Bidder's JV Information Form

(to be completed for each member of Bidder's JV)

Date: _____
Contract No: _____
Page _____ of _____ pages

Bidder's JV name:
JV member's name:
JV member's country of registration:
JV member's year of constitution:
JV member's legal address in country of constitution:
JV member's authorized representative information Name: _____ Address: _____ Telephone/Fax numbers: _____ E-mail address: _____
1. Attached are copies of original documents of ¨ Articles of Incorporation (or equivalent documents of constitution or association), and/or registration documents of the legal entity named above, in accordance with ITB 4.3. ¨ In case of a Government-owned enterprise or institution, documents establishing legal and financial autonomy, operation in accordance with commercial law, and absence of dependent status, in accordance with ITB 4.5. 2. Included are the organizational chart, a list of Board of Directors, and the beneficial ownership.

Form 1

Historical Contract Non-Performance, Pending Litigation and Litigation History

Bidder's Name: _____
Date: _____
JV Member Name_____
Contract No: _____
Page _____of _____pages

Non-Performed Contracts in accordance with Section III, Evaluation Criteria and Qualifications			
¨ Contract non-performance did not occur since 1st January *[insert year]* specified in Section III, Evaluation Criteria and Qualifications, Sub-Factor 2.1. ¨ Contract(s) not performed since 1st January *[insert year]* specified in Section III, Evaluation Criteria and Qualifications, requirement 2.1			
Year	**Non-performed portion of contract**	**Contract Identification**	**Total Contract Amount (current value, currency, exchange rate and US$ equivalent)**
		Contract Identification: Name of Employer: Address of Employer: Reason(s) for non-performance:	
Pending Litigation, in accordance with Section III, Evaluation Criteria and Qualifications			
¨ No pending litigation in accordance with Section III, Evaluation Criteria and Qualifications, Sub-Factor 2.3. ¨ Pending litigation in accordance with Section III, Evaluation Criteria and Qualifications, Sub-Factor 2.3 as indicated below.			

Year of dispute	Amount in dispute (currency)	Contract Identification	Total Contract Amount
		Contract Identification: _____ Name of Employer: _____ Address of Employer: _____ Matter in dispute: _____ Party who initiated the dispute: ____ Status of dispute: _____	

Form 2

Historical Financial Performance

Bidder's Name: _____
Date: _____
JV Member Name_____
Contract No: _____
Page _____of _____pages

1. Financial data

Type of Financial information in (currency)	**Historic information for previous _____*years,* _____ (amount in currency, currency, exchange rate, USD equivalent)**				
	Year 1	Year 2	Year 3	Year4	Year 5
Statement of Financial Position (Information from Balance Sheet)					
Total Assets (TA)					
Total Liabilities (TL)					
Total Equity/Net Worth (NW)					
Current Assets (CA)					
Current Liabilities (CL)					
Working Capital (WC)					
Information from Income Statement					
Total Revenue (TR)					
Profits Before Taxes (PBT)					
Cash Flow Information					

Cash Flow from Operating Activities					

Form 4

Financial Resources

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

No.	Source of finance	Amount (LSL)
1		
2		
3		

Form 2

Historical Financial Performance 2

The Bidder and its parties shall provide copies of financial statements for *5* years pursuant Section III, Evaluation and Qualifications Criteria, Sub-factor 3.2. The financial statements shall:

(a) reflect the financial situation of the Bidder or in case of JV member, and not an affiliated entity (such as parent company or group member).

(b) be complete, including all notes to the financial statements.

(c) correspond to accounting periods already completed.

¨ Attached are copies of financial statements[1] for the _____years required above; and complying with the requirements

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

Form - 3

Average Annual Construction Turnover

Bidder's Name: _____
Date: _____
JV Member Name_____
Contract No: _____
Page _____of _____pages

	Annual turnover data (construction only)		
Year	**Amount** **Currency**	**Exchange rate**	**LSL**
[indicate year]	*[insert amount and indicate currency]*		
Average Annual Construction Turnover *			

* See Section III, Evaluation and Qualification Criteria, Sub-Factor 2.7.

Form – 15:

Current Contract Commitments / Works in Progress

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

Current Contract Commitments					
No.	**Name of Contract**	**Employer's Contact Address, Tel, Fax**	**Value of Outstanding Work [Current LSL Equivalent]**	**Estimated Completion Date**	**Average Monthly Invoicing Over Last Six Months [LSL/month)]**
1					
2					
3					
4					
5					

Form - 16

General Construction Experience

Bidder's Name: _____
Date: _____
JV Member's Name_____
Contract No: _____
Page _____of _____pages

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

Form – 5

Specific Construction and Contract Management Experience

Bidder's Name: _____
Date: _____
JV Member's Name_____
Contract No: _____
Page _____of _____pages

Similar Contract No.	**Information**			
Contract Identification				
Award date				
Completion date				
Role in Contract	Prime Contractor ¨	Member in JV ¨	Management Contractor ¨	Sub-contractor ¨
Total Contract Amount			LSL	
If member in a JV or sub-contractor, specify participation in total Contract amount				
Employer's Name:				
Address: Telephone/fax number E-mail:				

Form EXP – 5 (cont.)
Specific Construction and Contract Management Experience (cont.)

Similar Contract No.	Information
Description of the similarity in accordance with Sub-Factor 4.2(a) of Section III:	
1. Amount	
2. Physical size of required works items	
3. Complexity	
4. Methods/Technology	
5. Construction rate for key activities	
6. Other Characteristics	

Form of Bid Security

(Demand Guarantee)

_____ [Bank's Name, and Address of Issuing Branch or Office]

Beneficiary: Ministry of Public Works and Transport
Roads Directorate
PO Box 194
Maseru, 100
Lesotho

Date: _____

BID GUARANTEE No.: _____

We have been informed that _____ (hereinafter called "the Applicant") has submitted or will submit to the Beneficiary its bid (hereinafter called "the Bid") for the execution of _____ under Invitation for Bids No. RD/DD/5-A ("the IFB").

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

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

(a) has withdrawn its Bid prior to the Bid validity expiry date set forth in the Applicant's Letter of Bid, or any extended date provided by the Applicant; or

(b) having been notified of the acceptance of its Bid by the Employer during the period of bid validity, (i) fails or refuses to execute the Contract Agreement or (ii) fails or refuses to furnish the performance security, in accordance with the ITB. and, if required, the

This guarantee will expire: (a) if the Bidder is the successful Bidder, upon our receipt of copies of the contract signed by the Bidder and the performance security issued to you upon the instruction of the Bidder; and (b) if the Bidder is not the successful Bidder, upon the earlier of (i) our receipt of a copy your notification to the Bidder of the name of the successful Bidder; or (ii) twenty-eight days after the expiration of the Bidder's bid.

Consequently, any demand for payment under this guarantee must be received by us at the office on or before that date.
This guarantee is subject to the Uniform Rules for Demand Guarantees, International Chamber of Commerce (ICC) Publication No. 458.

_____
[signature(s)]

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

Section V. Eligible Countries

Eligibility for the Provision of Goods, Works and Non Consulting Services

1. The Government of Lesotho permits firms and individuals from all countries to offer goods, works and services for Government-financed projects. As an exception, firms of a Country or goods manufactured in a Country may be excluded if:

(a) as a matter of law or official regulation, the Kingdom of Lesotho prohibits commercial relations with that Country, provided that the Government is satisfied that such exclusion does not preclude effective competition for the supply of the Goods or Works required, or

(b) by an Act of Compliance with a Decision of the United Nations Security Council taken under Chapter VII of the Charter of the United Nations, the Kindgom of Lesotho prohibits any import of goods from that Country or any payments to persons or entities in that Country.

2. For the information of bidders, at the present time firms, goods and services from the following countries are excluded from this bidding:

(a) With reference to paragraph (a) above:
No counties are prohibited.

(b) With reference to paragraph (b) above:
No countries are prohibited

PART 2 –WORKS REQUIREMENTS

Section VII. Works Requirements

Contents

Scope of Works.....106

Specification.....120

Environmental and Social (ES) requirements.....283

Drawings.....287

Supplementary Information.....288

Scope of Works

PART A GENERAL

A1 MISCELLANEOUS

The Standard Specifications that form part of this Contract have been written to cover all phases of work normally required for railway perway contracts and may therefore cover items of work not applicable to this particular Contract.

The Project Specifications form an integral part of the Contract Documents, supplement the Standard Specifications, and take precedence in the event of discrepancies with the Standard Specifications, the Drawings or the Bill of Quantities.

In the Scope of Works and the Specifications the words Tender, Tenderer and tendered shall have the meaning as Bid and Bidder as applicable.

DESCRIPTION OF THE WORKS

INTRODUCTION

The Government of the Kingdom of Lesotho (GOL) has allocated funds towards implementation of the rehabilitation and maintenance of the Maseru branch railway section under Maseru private siding No. 543047. A portion of these funds has been set aside for the procurement of a Railway Maintenance Contractor who shall be responsible for the “design and execution of works” in accordance with FIDIC Conditions of Contract for Plant and Design Build.

LOCATION

The project is located on the western side of the Maseru City in Lesotho specifically in the Maseru industrial area. The project starts at the eastern end of the exchange yard and extends eastwards to the Lesotho flour mills.

Figure 1: Project Location

Figure 2: Site Locality Map

This contract covers approximately 2.3 km of railway track between the exchange yard (on the side of the Maseru Bridge Border Post) and Lesotho Flour mills (to the east) in Maseru. This also includes 10 private sidings, 10 turnouts and 8 siding turnouts and 2 stop blocks.

SCOPE OF SERVICES

The scope of work entails the full rehabilitation of the rail network of approximately 2288m conventional track, 10 private sidings, 2 level crossings, 10 turnouts and 8 siding turnouts and 2 stop blocks. All works shall conform with clauses, drawings, specifications, and conditions pertaining to this contract.

Over and above the items indicated above special attention shall be given to the following:

- The broken/damaged rail on level crossing NR 1.
- The formation that has collapsed near points NR1.
- The single slip points with the points blade must be repaired in front of Lesotho Flour Mills siding.
- All the rotten sleepers and loose fishplates with the missing fastinings. Wooden sleepers are to be replaced with concrete sleepers as much as possible.

Phase 1: Design

The Consultant is expected to carry out field investigations and surveys (including an extensive track condition audit assessment). The Consultant shall design the rehabilitation of the rail perway such that the completed work conforms to A – standard and is compliant to all relevant standards and specifications.

The tenderer is instructed to identify all possible defects and design as extensively as possible for the rehabilitation of the rail network. The tendered price will not be a determining factor if the tenderer has designed for the least identified defects (non-conformance to standards).

Phase 2: Construction

The Contractor shall be responsible for execution of the works. The Contractor may sub-contractor some of the works as specified in the Instruction to Bidders. Upon the completion of works the Contractor shall handover the work to the Client.

Phase 3: Post Construction

During the Defect Notification Period the Contractor shall remedy the defects and maintain the railway track to acceptable standards.

Timelines and deliveries

The estimated duration of the assignment is ***six (6) Months,*** covering all the phases after signing of the contract (s) with the Roads Directorate.

Phase 1 and 2: These phases shall commence *one* week after the date of award of contract and shall last for ***six (6) months***

Phase 3: This phase shall commence on the date of award of Taking- Over Certificate and shall last for ***twelve (12) months*** warranty period till the issuance of completion certificate, submission of completion, As-Build Drawings and maintenance manuals.

No	Deliverable	Time frame	Soft copy + Bound Copies
Phase 1 and 2	Inception report	S + 2 weeks	1 + 6
	Report of Field investigations and surveys (including a track condition audit report)	S + 4 weeks	1 +6
	Draft Design/ planning Report	S + 6 weeks	1 + 6
	Final Design/ planning Report	S + 8 weeks	1+ 6
	Progress Report	Monthly	1 + 6
Phase 3	As-built drawings/ maintenance manuals	During Defects Notice Period/ Maintenance Period	1 + 6

Inception report: - The report shall include initial findings, detailed work program, staffing and methodology

Report of Field investigations and surveys: - The Contractor shall prepare and provide the Client with a report on completed engineering and other field surveys. The report shall include at least the following:

a) Graphical presentation of a layout.
b) Graphical and numerical presentation of the results.
c) Results of geotechnical investigation.
d) Results of testing of construction materials.
e) Photo documents from field surveys.
f) Analyses of data and conclusions.

Draft Final Design/ Planning Report: The draft final design/ planning report package shall present, Specifications, Summaries, Explanatory Notes, Bill of Quantities, Cost Estimates, Google Maps, Performance Specifications as well as minutes of Contractors meetings with stakeholders' consultation. The Draft Final Design report should have at least the following contents:

a) Executive summary
b) Introduction
c) Description of Project
d) Surveys, Investigations and Instrumental Testing
e) Detailed Geometric design including private sidings, turnouts, level crossings and signage
f) Drainage
g) Environmental and Social Management Plan
h) Summary of recommended design

Final Design/ Planning Report: - The final design report package shall present the previous reports incorporating all revisions deemed necessary arising from comments received from the Client. The layout provided for Draft Design Report shall be maintained and improved where necessary

Completion Report: - Upon the issuance of the Taking Over certificate, the Contractor shall prepare the As-Built Drawings and maintenance manuals. The drawings shall be submitted to the Engineer for review and approval. Upon approval, the drawings shall be submitted to the Roads Directorate.

COMMENCEMENT OF SERVICES AND TIME DURATION

Commencement of Services shall be within 28 days of issuance of Letter of Acceptance.

OBLIGATIONS OF THE EMPLOYER

The Employer shall provide the following support:

- ***Documents and Reports***

  Roads Directorate shall provide to the Contractor all such documents, data and reports (if available) and relevant to the planned study and where necessary, assist with obtaining information from third parties. The Consultant shall be responsible for the correct interpretation and dissemination of the data and information gathered. All such documents, data and information shall be treated as confidential and shall not be used for any other purposes not related to the present study.

- ***Liaison***

  The Roads Directorate shall facilitate liaison with other Government Ministries and Departments and other related agencies and organizations which the Contractor may wish to consult or contact during the course of this work. However, the Contractor is free to consult or contact any one of these organizations or agencies without involving Roads Directorate, if it so wishes.

- ***Visas, work and residence permits etc…***

  It is the responsibility of the successful Contractor to meet the entry and residential requirements of Lesotho. The Roads Directorate will facilitate the process of meeting these requirements by issuing relevant introduction letters but shall not be responsible for securing any permits.

SUPPORT TO BE PROVIDED BY THE CONTRACTOR

The Contractor shall provide accommodation, transport, computers and other such miscellaneous items that will enable the Engineer (and his/her assistants) to perform his/her duties. This will be accommodated for by a provisional sum provided by the Employer.

OBLIGATIONS OF THE CONTRACTOR

The Contactor shall be responsible for carrying out all design and implement under the work requirements and its accordance with the duties of the "Contractor" based on FIDIC Conditions of Contract for Plant and Design Build, First Edition 1999.

COUNTERPART TRAINING

The Roads Directorate may attach some of its staff to the Contractor during the design and execution of the planned assignment. The Contractor shall be expected to provide suitable "on-the-job" training programme and exposure. All remuneration and associated costs to this exercise shall be borne by Roads Directorate.

Specification

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

Scope of Specifications

The Specifications comprise:

All work must be carried out as per the standardized specification documents for perway as follows:

Specification/Standard	Description
SANS 1200A	Civil Engineering Construction: General
SANS 1200D	Civil Engineering Construction: Earthworks
SANS 1200NB	Railway sidings (Trackwork)
SANS 1200DN	Earthworks (Railway sidings)
SANS 3000 series	Railway Safety Management
SATS S406	Specification for stone
TRANSNET LIMITED S410	Specification for railway earthworks
SPOORNET E:10	Specification for rail trackwork
SPOORNET E:10/1	Laying of rails
SPOORNET E:10/2	Laying of sleepers
SPOORNET E:10/4	Ballasting and tamping
SPOORNET E:10/6B	Building & replacement of turnouts, slips & diamond crossings
SPOORNET E: 10/8	Field welding and corrective grinding of battered rail joints, skid marks and rail crown damage
SPOORNET E:10/9	Slewing and alignment
SPOORNET E:10/11	Surveying setting out of track alignment & referencing
SPOORNET E:10/13	Ballast cleaning
SPOORNET E:10/5	De-stressing of rails
SPOORNET E:10/7	Field welding of rail joints or THERMITREX code of practice
SPOORNET E:10/12	Installation of insulated rail joints
SPOORNET E:10/13	Miscellaneous

TRANSNET	TRACK WELDING MANUAL (BBB8341 Version 5)(March 2011
TRANSNET	Manual for Track Maintenance (2012)
TRANSNET	Work Codes as per chapter 15 of the Manual for Track Maintenance (2012)
TRANSNET	MICA Manual (BBB8266 Version 2) (Aug 2010)
THERMITREX	Welding code

TECHNICAL SPECIFICATIONS
MATTERS RELATING TO THE STANDARD SPECIFICATIONS

REPLACING/LAYING OF RAILS

- The contractor will be responsible for supplying all material required to successfully complete this project.
- The supplied material must conform to quality standards, and all substandard material will not be accepted.
- The contractor shall be responsible for establishing the site.
- The contractor shall be responsible for the reconstruction of formation works where necessary as per the railway formation standards.
- The contractor shall be responsible for screening, supplying and offloading ballast as per the railway ballast standards.
- The contractor shall be responsible for all thermit rail installation work including thermit welding and tamping.
- The Contractor shall be responsible for all rail related welding, cutting and exothermic welding.
- The contractor shall be responsible for all consumables that conform with the Relevant Railway Standards and Lesotho standards (if any) required for Welding activities.
- The contractor shall be responsible for all rail joints X-rays and the results must be provided to the Engineer or his/her delegated assistant for evaluation and approval before payment.
- All rail joints X-rayed must comply with the railway standards.
- The contractor shall carry out work as specified in the “TRACK MAINTENANCE MANUAL”.

MEASUREMENT OF QUALITY OF CONSTRUCTION

All work shall conform to A-standard and the following measurements of quality of construction shall be required:

- The contractor shall measure and record for each length of rail replaced, and all measurements required to determine the standard of construction. A hard copy of all these measurements shall be made available to the Engineer or his/her delegated assistant on completion of the work for evaluation purposes.
- Measurement for the vertical alignment shall be made with a correct track-gauge or equivalent equipment with approved void meters.
- Deviations from the straight line (slack) shall be determined visually by means of measuring the depth of the slack with a correct track gauge and measurements shall be taken along the top of the rail, before and after the points of deviation.
- Measurement for the horizontal alignment shall be made with a nylon line on the running side of the reference rail at the two points 10m apart and a feeler gauge calibrated at 1mm intervals.
- Deviation on the straight track between the two points 10m apart must be measured by inserting the feeler gauge between the nylon line and the rail at the center of the deviation. The number of sleeper spaces between the beginning and end of the deviation must be recorded.
- Curved track shall be marked out at 5m intervals, and each mark shall become a measuring station. Measuring and ordering the offset at each station from the 10m chord strung across alternative stations shall determine the Track Standards.
- The measuring stations specified above shall be numbered consecutively on the flange of the left-hand rail with white chalk for each section being evaluated and shall be prefixed with the letter A as per the track manual.
- Ballast standards shall be determined by:
- Opening and measuring actual ballast depth where directed by the Engineer or his/her delegated assistant.
- The ballast profile shall be measured by approved means along the track and recorded.

INSTALLATION OF SLEEPERS

This specification covers the installation of concrete sleepers

- The Contractor shall do the work as directed by the Project and in accordance with the specifications set out in this tender/contract document.
- The contractor shall always be required to supply adequate and competent supervision.
- It is accepted that work will be done by hand labour (manually). The bidder may submit alternative methods for the required work to be done.
- The completion date of a workplace will be as soon as the work has been completed to the satisfaction of the Project Manager/Engineer or his/her delegated assistant.
- The work shall be carried out in such a way that the track is in A – Standard.
- All ballast will be cased/boxed into the satisfaction of the Project Manager/ Engineer or his/her delegated assistant.
- Sleepers laid must be kept square to the rails.
- Sleepers must be tamped to the A – Standard.
- Special attention must be paid to joints and adjacent sleepers at rail joints.
- Sleeper’s fastenings must be kept tight.

- The contact areas of clips and rail flanges must be kept free of lubricant.
- Where this has been done, rail seats should be cleaned with white spirits and the pads renewed.
- If a hard deposit of rubber is built up on the rail seat in the recess of concrete sleepers with Fist B or C fastenings; this must be cleared away before a new pad is inserted.
- Concrete sleepers must not be damaged when being handled.
- Damaged sleepers must not be placed into the track as it will not be accepted by the client.
- **Sleepers are to be laid and packed in a 1 to 4 sequence, thus there must always be three packed sleepers on both sides of the sleeper being removed. Before traffic is permitted over the track which laid on newly inserted concrete sleepers, the sleepers must be packed to within the B-standard to ensure adequate and even bearing.**
- **The track must be kept within the B-standard by the contractor at his cost up to three weeks after the sleepers have been replaced, according to The Manual for Track Maintenance.**
- **After a six-week period of establishment, the contractor will again tamp the track to the A standard according to The Manual for Track Maintenance.**
- **E-clips and Fist clips must be applied or removed only by means of a Pan Puller or Fist lever respectively.**
- **Work shall only be done within Temperature Ranges allowed in the Manual for Track Maintenance**
- **The contractor is always responsible for the safety of the track and his/her workers until the site is handed back to the Roads Directorate.**

STANDARD OF WORK

- The Contractor shall monitor and evaluate measurements of the layout and shall ensure compliance with the specified standards of workmanship and accuracy during installation of the sleepers.
- The Contractor will have to ensure he/she is familiar with the Specification for Railway Track work (Laying of Sleeper) and the Manual of Track Maintenance.
- The Contractor will be responsible for:
- Laying of Sleepers to comply with railway specification.
- Leaving the track in a standard B for Lesotho Rail to allow for the safe passage of trains after the occupation.
- Leaving the track in the A-standard at the end of the project.

METHOD AND PROCEDURES
GENERAL

- Sleepers shall be laid at right angles to the track centre line on straight track and radially on curves.

- Sleeper spacing shall be in accordance with Railway Track work (Laying of Sleeper) and the Manual of Track Maintenance for the nominal spacing specified in the Project Specification.
- When re-sleepering is to be done prior to re-railing, the position of the rail joints in jointed track shall be established beforehand.
- Special attention shall be given to the spacing of the joint and adjacent sleepers to ensure that it is as specified.
- The contact areas of clips and rail flanges shall be cleaned of lubricant and foreign matter before installation.
- Proprietary fastenings and those using multi-coil spring washers shall be tightened in accordance with the manufacturer's instructions or as directed by the Engineer or his/her delegated assistant.

CONCRETE SLEEPERS AND FASTENINGS

- Various makes of concrete sleepers and different types of fastenings shall not be mixed in the track.
- The Contractor shall obtain sleeper clip combinations and details of sleeper fastenings from the Project Manager/Engineer or his/her delegated assistant and shall check that the combinations and fastenings do, in fact, give the required gauge before proceeding to use the material.
- Concrete sleepers with Fist A type fastenings shall not be used as joint sleepers at fishplates joints.
- Drilling of holes and driving of nails and bolts into concrete sleepers is not permitted.
- Before traffic is permitted over track laid on newly inserted concrete sleepers, the sleepers shall be packed.

RE-SLEEPERING

- Re-sleepering under long-welded rails may be done at any temperature below the maximum of the following ranges:
- A range on track laid with steel sleepers,
- B range on track laid with wood sleepers,
- C range on track laid with concrete sleepers.
- All ranges are specified in Railway Track work (Laying of Sleeper) and the Manual of Track Maintenance at least eight sleepers on both sides of any sleeper being removed shall be properly boxed in and tamped.
- When re-sleepering under rails of 36m length or shorter, at least four sleepers on both sides of any sleeper being removed shall be properly boxed in and tamped.
- Re-sleepering shall not be done when the rail temperature exceeds the upper limit of temperature range C as per the Railway Track work (Laying of Sleeper) and the Manual of Track Maintenance.

- Sleepers under lock bars and safety bars, and sleepers to which any bond or signaling apparatus is attached, shall not be disturbed unless the Engineer or his/her delegated assistant is present and has given his/her consent.

RE-SPACING OF SLEEPERS

- Where the sleeper spacing is not in accordance with what is specified in Railway Track work (Laying of Sleeper) and the Manual of Track Maintenance for the nominal spacing specified in the Project Specification, the Contractor shall respace the sleepers.
- Respacing of sleepers shall only be done within the same temperature limits and while the same number of sleepers on both sides are properly boxed in and tamped as specified above (Re-sleepering), hereof for re-sleepering.
- The Contractor shall open the track to move a sleeper to be respaced to the correct position, loosen the sleeper fastenings, move the sleeper to the correct spacing, fasten the sleeper fastenings and pack the sleeper.
- Additional sleepers shall be inserted where necessary to ensure that the distance between packed sleepers does not exceed three times the nominal sleeper spacing.

INSTALLATION OF RAIL LUBRICATORS
SPECIFICATION OF PROPOSED WORK PROCESSES

- The Contractor shall do the work as directed by the Engineer or his/her delegated assistant and in accordance with the specifications set out in this tender/contract document.
- The contractor is responsible for the installation of new rail lubricators as per the client requirements.
- It is accepted that work will be done by hand labour (manually).
- The workplace will be as directed by the Engineer or his/her delegated assistant.
- The work shall be carried out in such a way that the track is not moved from its original position.
- All ballast shall be cased to the satisfaction of the Engineer or his/her delegated assistant.
- Ballast shall not be contaminated.
- Substandard work will not be accepted.

STANDARD OF WORK

- The Contractor shall monitor and evaluate measurements of the installation and shall ensure compliance with the specified standards of workmanship and accuracy during installation of the rail lubricators.
- The Contractor will have to ensure he/she is familiar with the Railway Track work and the Manual of Track Maintenance.
- The Contractor shall be responsible for:

- Installation of the rail lubricators to comply with the specifications and instructions given by the Project Manager/Engineer or his/her delegated assistant.

FIELD WELDING AND GRINDING OF RAILS MANUFACTURED CROSSINGS, WHEEL-SPIN BURNS, BATTERED ENDS, REMOVAL OF ULTRASONIC DEFECTS BY MEANS OF EXOTHERMIC WELDING AND GRINDING OF OVERLAPS ON TURNOUTS

This contract and specifications cover:

- Field welding and grinding of Rail manufactured crossings,
- Welding and grinding of skid marks,
- Welding and grinding of battered ends,
- Repair of ultra-sonic defects by means of exothermic welding of rail joints (48kg, 57kg and 60kg),
- Grinding of overlaps on turnouts.
- All contractors are required to give satisfactory evidence of previous experience regarding on-track welding and grinding, as it will form part of the evaluation criteria during the process of awarding the contract.

WORK SUPERVISION AND PROTECTION ON SITE

- The Contractor shall provide a fully qualified Track Inspector/Master with valid Track Inspector/Master certificate to properly supervise the execution of the work.
- The Contractor shall also provide a Technical Supervisor (welding) for welding work supervision.
- It is the responsibility of the contractor to provide security on site for equipment, material, and personnel for the duration of the contract.

ENVIRONMENTAL AND SOCIAL SPECIFICATIONS

This section covers the Contractor's obligations to ensure that construction impact on the environment is minimised and that it complies with the requirements as set out in the Environmental & Social Management Plan (ESMP), Document Number: "508819-1000-NN-REP-Environmental & Social Management Plan-0004".

The basis of these Environmental & Social Specifications is the items discussed as Mitigation Measures of the ESMP (Section 6). All Mitigation Measures identified in the ESMP are to be adhered to by the Contractor. The items presented in these Specifications either provide clarification on the Contractor's requirements stated in the ESMP or make reference to the respective items in the ESMP. Each of the items in these Specifications shall contain a payment item based on the requirements of the ESMP.

The Contractor shall take full responsibility for protecting the environment and eliminating or minimising the negative impacts of construction on the environment. Environmental management is concerned not only with the final results of the Contractor's operations to carry out the Works, but also with the control of how the operations are carried out. It is thus a requirement that the Contractor shall comply with the environmental requirements on an ongoing basis. Nothing specified herein shall relieve the Contractor of any obligations or responsibilities in this regard.

The Contractor shall implement environmental and social management, in line with various statutory regulations and the Record of Decision (RoD) (Document Number: "*Record of Decision to be finalised before document can be issued for tender*"), the Environmental and Social Management Plan (ESMP) for this Contract (Document Number: "508819-1000-NN-REP-Environmental & Social Management Plan-0004"), and this Specifications document.
An Environmental Performance Guarantee of 5% of the contract value shall be deposited by the Contractor with the Engineer. This fund shall be used in the event of penalties or rehabilitation costs for non-conformance or contraventions of the ESMP. The balance shall be given back to the Contractor at Contract Closure.

GENERAL REQUIREMENTS

The Environmental obligations payment items shall not be less than 5% of the accepted contract amount and the pricing must be balanced between all items.

The Contractor shall plan and execute all his activities taking full cognisance of the requirements of the Environmental and Social Management Plan (ESMP). The Contractor shall arrange a start-up meeting with the Engineer and Employer to confirm communication channels, reporting, approvals and schedule of activities.

If this item is zero rated or marked as "included" it will not alleviate the contractor of complying with all requirements of this payment item.

MANAGEMENT SYSTEM ESTABLISHED IN CONTRACTOR'S ORGANIZATION

(a) Services and Infrastructure

The Contractor shall be responsible for the bulk infrastructure for his construction activities, construction camp site and accommodation areas. The Contractor shall at all times and for the entire duration of the Contract be responsible for the maintenance of the infrastructure. A waste water treatment plant, the management of clean storm water and treatment of dirty storm water shall form part of the Contractor's obligations.

A detailed engineering design shall be undertaken by an engineer. Drawings and specifications of these designs shall be submitted for approval. The design shall also include a maintenance manual, spare equipment and schedule of maintenance to be implemented by the Contractor for the duration of construction.

All equipment shall be maintained in a good working order to minimise breakdowns, leakages and spillages.

All equipment mobilised to Site shall be inspected for leaks and wear and tear on hoses, pipes, etc. Equipment may only be mobilised to work once these inspections and any requisite repairs have been carried out.

Machinery shall also similarly be inspected daily prior to commencing work. Equipment that is temporally demobilised, but remains on Site shall be parked on an impervious surface, or drip trays shall be placed under the fuel and oil tanks.

(b) Temporary Services & Facilities

Temporary pipelines, powerlines, telephone lines and other temporary services and facilities shall be located in a manner which will cause the least disturbance and disfigurement to the environment. Power lines shall be suspended below insulators and be of such design as to prevent the electrocution of birds to the greatest extent possible.

All fuel storage tanks shall be bunded to 110% of the total storage capacity. Fuel dispensing areas and workshop areas shall be provided with concrete hard standing draining to oil separators. This will also apply to other areas with pollution potential.

The Contractor shall provide all fuel required for his operations within bunded areas. The Contractor shall provide an indication of the quantity of fuel required for his construction activities Any fuel stored shall comply with the requirements of the relevant Lesotho Environmental regulations and any other regulations, as well as the following:

• All liquid fuels and oils should be stored in suitable above ground storage or in tanks with lids, which will be kept firmly shut and under lock and key in a ventilated area at all times;

• In case of above storage tanks, written permission shall be obtained from Chief Fire Officer for insulation;

• Areas around fuel tanks are to be bunded as per the requirements of local legislation;

• Above ground fuel tanks will be at least 3.5 meters from buildings and any other combustible or flammable materials;

• Tanks will not be used for the storage of liquids other than those with a flash point in excess of 40ºC;

• All storage tanks shall be removed after construction;

• The rated capacity of tanks shall provide sufficient capacity to permit expansion of the product as a result of temperature variations;

• Only empty and externally clean tanks may be stored on bare ground – empty but externally dirty tanks shall be sealed and stored where the ground has be protected;

• Any electrical or petrol-driven pumps shall be equipped and positioned so as not to cause any danger of ignition of the product;

• If fuel is dispensed from 210 litres drums, the proper dispensing equipment will be used to minimize spill potential. This equipment shall be stored in waterproof container when not in use; and

• Fuel storage tanks and drums will not be over-filled;

• Used storage containers must be pierced and treated as hazardous waste;

• The gradient of the ground must slope away from environmentally sensitive areas;

• Access to facilities to and around the site must be adequate to allow supply vehicles to enter and leave easily;

• Fire protection, security, and general services facilities in the area, including the fire services response time;

• Good housekeeping e.g. the removal of flammable materials such as rubbish, dry vegetation, and oil-soaked soil;
• In the interest of security, the facility shall be so enclosed as to prevent unauthorised access;

• The minimum distances between containers shall be as prescribed in local legislation;

• A slope of at least 1:100 away from the tank shall be provided for at least 15m or the distance to the bund wall toe, whichever is less;

• The volumetric capacity of the bunded area will be a minimum of 110% of the volume of the largest tank. To allow for the volume occupied by the tanks, the capacity of the bunded area that encloses more than one tank shall be calculated after the volume of all tanks, other than the largest tank, below the height of the bund wall has been deduced;

• The wall of the bunded area shall be of earth or concrete, and shall be designed to be liquid tight and withstand a full hydrostatic head of water;

• Earthen walls of height 1m or more shall have flat section, not less than 0.6m wide at the top. The slope of an earthen wall shall not exceed the angle of repose of material of which the wall is constructed;

• The wall height of the bunded area shall be restricted to 1.8 m;

• The minimum distance between a tank and the toe of an interior bund wall shall be at least 1.5 m;

• Each bunded area that contains two or more vertical tanks shall be subdivided at least by the intermediate bund wall or by drainage channels, to prevent spills from one tank from endangering adjacent tanks within that bunded area;

• Where provision is made for the draining water from bunded areas, such drains shall be so controlled as to prevent flammable or combustible products from entering natural water courses or storm water drainages. Under fire conditions, the controls of such drainage shall be accessible from outside the bunded area;

• No storage of combustible materials shall be permitted in any bunded area;

• Suitable drainage facilities shall be provided to deal with surface water and to dispose of firefighting water. The water used to control a fire shall be of an acceptable quality (free from hydrocarbons, solvents, alcohol and any additives) before the water is passed into drains; and

• Suitable and adequate supplies of absorbents shall be available at all time to control and absorb any spillages.

Vehicle cleaning shall be undertaken in designated wash bays, which have an impermeable floor and are bunded to contain runoff and direct in onto a sump. Oil and diesel will be skimmed off the sump water and recycled or disposed of in the correct manner.
Vehicles worked on outside the wash bays will have portable drip trays placed under them to catch oil and diesel which may leak from the vehicles.

All infrastructure shall appropriately deal with stormwater to minimise erosion.

ENVIRONMENTAL LICENSES AND PERMITS

The Contractor shall be responsible for obtaining the necessary water use permits, e.g. water abstraction for potable or for construction purposes, effluent disposal, changes in a watercourse, etc., from the Lesotho Ministry of Water. Similarly, the Contractor shall obtain the necessary authorisation in the form of a permit or licence from the Department of Mines and Geology prior to the use any borrow areas or quarries.

Typical permits that may be required by the Contractor prior to commencement of construction phase activities are summarised below. This list may not be exhaustive and there may be others that the Contractors may be required to obtain.

TABLE B9104/1: TYPICAL PERMITS AND LICENCES

Project Activity	Key Legislation	Key Provisions
Transport and storage of hazardous waste	Basel Convention (South Africa Department of Environmental Affairs process for the export of hazardous wastes to South Africa to be followed)	Permit from the DoE
Sewerage works construction	Lesotho Water Act 15 of 2008	Construction permit
Water Treatment Works	Lesotho Water Act 15 of 2008	Construction permit
Dams and reservoirs	Lesotho Water Act 15 of 2008	Construction permit
Mining or quarrying	Mines and Minerals Act, No 4 of 2005	Mineral Right (for quarries)
Blasting & explosives	Mines and Minerals Act, No 4 of 2005	Permit from police

In addition, as stated in the ESMP, the following documents are applicable to this project:

- Lesotho Constitution
- Environmental Act 2008
- Water Act 2008
- Local Government Act 1997 and Local Government Amendment Act 2004
- Land Act (No.8 of 2010)
- Mines and Mineral Act (No.4 of 2005)
- Weeds Eradication Act No. 18 of 1999
- Sanitary Services and Refuse Removal Regulations of 1972
- The Labour Act, 2024 (Act No. 3 of 2024)
- Roads Act (No. 24 of 1969)
- Workmen's Compensation Act, No.13 of 1977
- Road Traffic Act 1981
- Anti-Trafficking in Persons Act (No.1 of 2011)
- National Heritage Resources Act (No.2 of 2012)
- Lesotho HIV/AIDS Policy (2006)
- Lesotho, Occupational Safety and Health Act, 2024

METHOD STATEMENTS

The Contractor shall compile Method Statements (MS) to address issues at a site level for use by management and construction staff involved in the works. The Method Statements shall indicate how the Contractor will manage all the significant environmental aspects associated

with the Contract with a view to address and minimise the environmental impacts of the work, to ensure continuous monitoring of environmental performance, and continual improvement in environmental performance throughout the duration of the Contract.

As a minimum, the Contractor shall compile Method Statements for the following activities:

• Site clearing
• Site layout and establishment
• Hazardous substances
• Welding
• Herbicide (pest control)
• Cement and concrete batching
• Traffic accommodation
• Solid waste control system
• Wastewater control system
• Erosion remediation and stabilisation
• Fire control and emergency procedures
• Alien vegetation clearing programme
• Vegetation rehabilitation plan
• Borrow pits management (if applicable)

All Method Statements shall be submitted to the Engineer for review and approval prior to the commencement of construction. Copies of all approved Method Statements must be maintained on site and made available to the Employer and the Department of Environment for review, if requested.

Method Statements must be submitted at least 20 working days prior to date on which approval is required to the Project Engineer. The Project Engineer must in turn accept or reject the Method Statement within 10 working days of receipt.

Failure to submit a Method Statement may result in suspension of the activity concerned until such time as a Method Statement has been submitted and approved.

An approved Method Statement shall not absolve the Contractor from any of his obligations or responsibilities in terms of the contract. However, any damage caused to the environment through activities undertaken without an approved Method Statement shall be rehabilitated at the Contractor’s expense.

ENVIRONMENTAL AWARENESS TRAINING

The Contractor shall ensure that all of his employees and those of his subcontractors attend Environmental Awareness Training. This training shall form part of the normal induction process for employees. The Environmental Awareness Training shall be planned to ensure that attendees:

• Acquire a basic understanding of the key environmental features within the project area and its immediate environs;

• Are made aware of any other environmental matters of importance as deemed necessary by the Engineer;

• Environmental and social requirements of the Project and how these will be implemented and monitored on site;

• Contents and relevant requirements of Project activities and their management contained within the specification and ESMP;

• Environmental and social sensitivities of the Project Area;

• Procedures to be followed in the event of non-compliance with the environmental and social requirements;

• Protocols and channels of communication for engaging with communities in the Project Area; and

• Procedures for responding to the media, unauthorised visitors to the site, and enquiries from the public.

All site personnel shall have basic knowledge of the following:

• What is the environment;

• Why the environment needs to be protected and conserved;

• How construction activities affect the environment;

• Required response to emergencies and spills;

• Waste management;

• Use of energy and water; and

• Use of resources.

Information posters shall be put up in worker eating or recreation areas depicting typical prohibited activities that should be complied with on and off site. The initial training shall be held within 28 days after the Commencement Date, and subsequent training courses shall be arranged for new employees coming onto Site after the initial training course. The environmental training should include, but not be limited to, the following:

• Awareness-raising of how different construction activities can impact on the environment, why it is important to avoid environmental damage and what steps can be taken to mitigate the impacts of construction activities;

• Identification of possible archaeological or historical objects and the requirement to notify the CLO, Environmental Control Officer (ECO) or Engineer if such an object is found, and to be informed of "no go" areas, e.g. of cultural heritage sites, springs, etc.;

• General conduct on site such as noise levels, e.g. shouting and hooting, alcohol consumption, drug use, toilet behaviour, littering, no firearms, no pets, no harvesting of firewood/plants, no poaching or fishing, no trespassing or damage to property, no throwing of cigarette butts or glass into the veld, etc.;

• Responsible handling of chemicals and spills, and the correct disposal of chemical containers and other waste objects;

• Emergency procedures and incident reporting;

• Location of fire-fighting equipment and its use; and

• Prevention of uncontrolled fires and restrictions on making fires in undesignated areas.

Provision should also be made for quarterly refresher courses to be undertaken during the course of the Contract where relevant topics, such as emergency response drills, can be communicated.
All visitors to the Site shall also be made aware of the specific environmental management requirements on the Project.

The Contractor shall maintain a matrix of training requirements for various levels of employees, an environmental training record (which will include signed attendance records) and will assess the success of this training; all in agreement with the Engineer.

HIV/AIDS & TRAFFICKING IN PEOPLE EDUCATION & AWARENESS

The Contractor shall prepare and implement an awareness campaign regarding HIV/AIDS and trafficking in people, to the approval of the Engineer. This programme shall be focused on the following:

• Raising awareness amongst the Contractor's employees through appropriate training;

• Implementing channels of communication that would allow anonymous reporting of incidents, if any;

• Implementing appropriate procedures and disciplinary action including immediate dismissal, reporting of incidents to local authorities, etc., if an employee (or the Contractor) is found to be involved, in any way whatsoever, in human trafficking;

• Provide an HIV/AIDS Awareness Programme for personnel on site within two weeks of arrival and to repeat at intervals not exceeding six months;

• Make condoms complying with the requirements of ISO 4074 available to employees at readily accessible points on site;

• Place and maintain HIV/AIDS awareness posters of at least A1 size in areas well used by construction workers or provide workers with a pamphlet in the relevant language;

• Encourage HIV/Sexually Transmitted Infections (STI) testing;

• Provide information on counselling, support and care of those who are infected; and

• Report on actions take about HIV/AIDS education and awareness programme.

A suitable NGO may also be contracted to undertake this campaign

COMMUNITY CONSULTATION AND DISCLOSURE

The community consultation process should ensure an ongoing process of community participation running in parallel with activities during the preconstruction and construction phases. The following will be required as a minimum:

• Establishing processes and procedures to effectively address all complaints received from the community;

• Establishing and maintaining a system of records which provides full documentation of complaints handling;

• Timeously and effectively addressing all complaints received;

• Timeously informing affected parties of disruptive activities;
• Acknowledging all complaints within 14 days of receipt; and

• Responding effectively to all complaints within 30 days unless additional information and/or clarification is required.

The Contractor shall open and maintain a Complaint Register and an Incidents Register in which all complaints and incidents received from the communities must be recorded.

The following information must be recorded in the Complaints Register:

• The name and contact detail of the complainant (if not anonymous);
• The date, time and nature of the complaint;
• The response and investigation undertaken; and
• What actions were taken and who the person responsible for the action was;

The following must be recorded in the Incidents Register:
• The name of the person/s involved in the incident;

• The date, time and nature of the incident;

• The response and reason for the incident; and

• The actions that were taken to resolve the incident.

SOCIO & ECONOMIC MANAGEMENT

The Contractor shall be responsible to source their unskilled and semi-skilled labourers by providing the following as a minimum:

• Transparent recruiting processes – guided by the Roads Directorate recruitment policy;

• Transparent management and open communications;

• Equal opportunities for both genders;

• Participatory planning and cooperation with local authorities and communities;

• Maximise employment opportunities for local communities;

• Encourage optimal use of existing skills and development of new ones;

• Encourage preference of local labour, awarding of sub-contracts to eligible local contractors and formation of joint ventures with local companies;

• Minimise disputes over job opportunities;

• Recognise the facilitating role of the relevant local community structures;

• Encourage Contractors to accept, within reason, suitably qualified and physically fit labour recommended by local community structures; and

• Encourage Contractor to engage/develop skills transfer programmes and train local labour.

CONSTRUCTION SITE LAYOUT PLAN

The Contractor shall present a proposed layout plan to the Engineer for approval prior to commencement of construction activities. The plan shall make provisions for each of the following requirements:

• Materials, soil stockpile areas, fuels, chemical storage areas, concrete batching areas, and vehicle maintenance areas shall be located away from environmentally sensitive areas and protected from storm water runoff, fire and access by unauthorised persons;

• The placement of buildings and equipment will be done to minimise the footprint and visual impact of the sites;

• Down-light will be used at night and the Contractor shall ensure that lighting on site does not interfere with communities or cause a reasonably avoidable disturbance to the surrounding communities or other users of the area;

• Appropriate fire suppression equipment and trained personnel shall be available on-site during construction;

• Locate and clearly indicate convenient access routes, temporary loading and packing areas, and turning circles so that vehicle movement can be confirmed to these areas; and

• Locate temporary waste bins and skips so that they are easily accessible for removal.

Any site occupied by the Contractors' employees shall comply with the demarcations in the site layout plan(s) and in the Management System prepared by the Contractors for site demarcation.

The Contractor shall ensure that all his employees are aware of the requirement to obtain authorisation from the Employer through the Engineer to gain access to new access facilities such as an access road. The necessary compensation process must have been completed prior to the use of newly acquired land.

SITE ESTABLISHMENT

The Contractor shall prepare Management Systems that include a camp layout plan showing environmentally sensitive areas and their protection, building construction methods, water and sanitation arrangements, waste disposal, areas for environmentally hazardous activities, and security measures, amongst others.

Temporary site building footprints are to be rehabilitated and vegetated, to the standard set by the Engineer and as outlined in the site establishment Management System when construction is complete. A Management System detailing proposed reinstatement and rehabilitation

measures shall be prepared by the Contractor. Siting of construction works should be prepared such to avoid vegetation trampling, increased erosion potential and complaints from affected communities.

As part of the site establishment, the Contractor shall appoint a suitably qualified Contractor's Environmental Control Officer (ECO) and a suitably qualified Community Liaison Officer (CLO).

SITE REHABILITATION

The Contractor shall prepare a Rehabilitation Management Plan to address the following:

• Clear the site of any inert waste and rubble, including surplus rock, foundations and batching plants aggregates, welding by-products. After the material has been removed, the site shall be re-instated and rehabilitated;

• Load and haul excess spoil and inert rubble to fill in burrow pits or to dump sites indicated or approved by the Engineer's Environmental Monitoring Manager (EMM);

• Subject to approval by the Engineer in consultation with the Contractor's Environmental Control Officer (ECO), certain areas may be utilised for the disposal of inert building rubble;

• Remove from site all domestic waste and dispose of in the approved manner at a municipal waste disposal site;

• Cordon off areas that are under rehabilitation as no-go areas using danger tape;

• Re-vegetation must match the vegetation type, which previously existed, unless otherwise indicated in the Contract or specified by the Engineer;

• Control invasive plant species and weeds by means of extraction, cutting or other approved methods;

• The Contractor shall remove all visible weeds from the placement area and from the topsoil before replacing the topsoil;

• Topsoil shall be spread evenly over the surface. The final prepared surface shall not be smooth, but furrowed to follow the natural contours of the land;

• Where sodding is required, light scarification shall be carried out to contain the sods;

• Work areas will be rehabilitated as soon as possible after completion of construction activities in an area, to minimize the potential for erosion and maximize the establishment time after re-vegetation; and

• Prior to initiating the rehabilitation programme, the Contractor will remove all remnants of building materials, concrete foundations, and other debris from site.

SITE ACCESS

The Contractor shall not permit unauthorised pedestrian or vehicular access into the fenced, off-limits areas and shall be responsible for immediate repair of any breaches in the fencing. Clearing for permanent fencing shall be limited to the removal of shrubs within 1 m of the fence line. No grass cover and topsoil is to be removed within the fence alignment. The Contractor shall erect safety fences around electrical and mechanical equipment before the equipment is connected to any electrical supply.

Signs in English and Sesotho shall be attached to the perimeter fence at intervals not greater than 300 m advising that unauthorised entry is prohibited and that the site may be dangerous to trespassers. Additional signs shall be erected at focal points of potential access to the Site. The signs shall be maintained in a readable condition for the duration of the Works by the Contractor.

The Contractor shall be responsible for all site visitors, who shall be record in a register and require authorisation by the Contractor prior to the visit.

CONSTRUCTION WORKERS' ACCOMMODATION

The Contractor shall ensure adequate accommodation, ablution facilities, acceptable potable water supply, etc. are provided for his workers to avoid overcrowding and comply with the requirements of the applicable laws. The Contractor shall also ensure that adequate and suitable site offices are provided for office, storage and welfare facilities for the construction workforce. All cost related to Construction Workers' Accommodation is deemed to be include in the BOQ: Contractors establishment on site and general obligations.

SITE DEMARCATION

The Contractor shall discuss with the Engineer his construction layout plan, which is clearly demarcated. The plan will indicate construction areas, hauling and access routes, and storage and laydown area. Throughout the period of construction, the Contractor shall restrict his activities to within the designated areas as indicated on the clearly demarcated construction layout plan.

TOPSOIL MANAGEMENT

The Contractor shall devise a Soil Conservation and Stockpiling plan for approval by the Engineer. The plan shall include the following information:
• Stockpile sizes, layout and form;

• Means of erosion (wind and water) prevention for stockpiles

• The rehabilitation measures to be taken for the area occupied by the stockpile;

• A schedule of soil replacement for areas where work has been completed; and

• Details of temporary or permanent soil stabilising and reinforcement works.

Topsoil is regarded as the uppermost 15 cm of the soil profile irrespective of how fertile or infertile it may appear to be. Clearing and excavations will need to be conducted in stages, preferably only when that portion of land is to be developed. During the life of stockpiles, the following measures will be taken:

• Stockpiles will be positioned and sloped to create the least visual impact;

• Stockpiles will not be allowed underneath trees or against the trunks of trees;

• Stockpiles will be constructed and maintained to avoid erosion of the material and contamination of the surrounding environment;

• Stockpiles will be kept free of all alien vegetation;

• The heights of stockpiles should be minimized as far as possible to reduce wind entrainment and stockpiles should be located as far away from sensitive receptors as possible

• Windbreaks should be erected around stockpiles where possible in order to reduce wind entrainment of dust emissions;

• Once stockpile have been removed, the following measures will be taken:

• The site will be re-instated to its original condition;

• No foreign material generated and /or deposited during construction will remain on site;

• Topsoil must not be stored in or near sensitive areas;

• Stockpiled topsoil shall not be compacted; and

• The Contractor will implement measures to prevent topsoil from being blown away or washed away.

STORMWATER & EROSION CONTROL

The Contractor shall compile a Stormwater Management Plan for approval by the Engineer, which shall include proposals for protection against stormwater damage, containment of flows, and rehabilitation measures should any damage arise. The stormwater plan should show the

location of stormwater channels, silt traps, dispersive measures, sedimentation ponds, and any other special measures to control or collect water flow. Sedimentation ponds should be sized to contain a 1:10 year rainfall event and lined to prevent soil contamination, if necessary, e.g. wash bay area.

All activities involving pumping or release of water must ensure water is dispersed in such a way as to avoid soil erosion.

Any runnels or erosion channels that develop during construction must be backfilled and compacted and measures taken to prevent further scouring.

Cleared areas likely to be subject to erosion from heavy rainfall events or stormwater flows should be stabilised with e.g. mulch, straw or geofabric until they can be revegetated or are constructed upon.

The Contractor shall include in the design of his protection measures prevention of erosion resulting from his actions on the Site. The Contractor shall take appropriate and active measures to prevent erosion resulting from his works, operations and activities which shall be agreed with the Engineer even when such potential erosion may take place or occur beyond the limits of the Site because of the actions of the Contractor. Such measures shall include properly constructed watercourses, energy dissipaters and establishment of temporary vegetation, to counter erosion and avoid discharges into rivers, watercourses, wetlands, agricultural lands, local community water reservoirs, etc.

BATCHING PLANT MANAGEMENT

The Contractor must locate the Batching Plant so that the site operation has a minimal impact on the environment and neighbouring communities. Highly alkaline wastewater, dust emissions and noise are the key potential impacts associated with Batching Plants:

• Potential pollutants in wastewater include cement, sand, aggregates, admixtures and petroleum products. These substances can adversely affect the environment by increasing soil and water ph and increasing the turbidity of waterways. Increased turbidity results in less light entering an aquatic environment. This in turn affects the rate of photosynthesis by plants, and reduces the visibility of aquatic organisms. Turbidity and petroleum products can also clog fish gills, smother bottom feeding flora and fauna and generally decrease the amenity of an area.

• Dust from cement, sand and aggregates is a pollutant. Fine dust particles can enter neighbouring premises and adversely affect community wellbeing. Dust must be controlled so there are no significant emissions during the transport, storage and handling of materials or from the Plant.

• Noise is a form of pollution and a potential source of conflict between the operators of a Batching Plant and the local community. Noise emissions must be managed as carefully as other discharges from the site. Owing to the potential for noise from a Batching Plant to affect

the nearby villagers, the Contractor should prioritise liaising with the local communities so that they are aware of, and resolve, noise issues.

The Contractor must ensure that the Batching Plant site is in an area where it will not pose a hazard to the environment or to the amenities of local communities.

BULK SERVICES

The Contractor shall ensure that no work relating to the establishment of bulk services commences before the responsible entities are notified and the necessary environmental and other permissions are in place, e.g. water use permit (should additional water be abstracted for construction purposes), effluent discharge permit etc.

The Contractor shall locate bulk services to comply with the site layout plans (i.e. it should be located away from sensitive locations, maximum distance from surrounding communities, etc.).

EMERGENCY PROCEDURES, FIRST AID & EMERGENCY CONTACT NUMBERS

The Contractor shall prepare an Emergency Response Plan and/or an Emergency Preparedness Response Procedure that should include information describing, but not be limited to, the following aspects:

• Identifying responsible person(s) authorised to set the emergency procedures in motion;

• Measures to ensure the safety of employees both on and off-site;

• Arrangements for providing early warning of an incident to local authorities;

• Training of personnel for emergency response and the human resources required to manage a response to an incident;

• Display key Contractors' contact names and their contact numbers at the construction Site and contact details for local and national emergency response authorities; and

• Compile a list of potential resources available for the restoration and clean-up of the environment following a major accident.

• The Contractor shall identify suitable individuals that can be trained and used as first aid officers on site (levels 1 to 3). Training of these individuals should ideally take place during the pre-construction phase of the project to ensure that qualified first aid officers are on site once construction commences.

AIR QUALITY & DUST MANAGEMENT

(1) Dust

A dust control programme shall be implemented by the Contractor to maintain a safe working environment, minimise nuisance for surrounding residential areas, prevent damage to the natural vegetation of the area and protect topsoil.

The Contractor shall take appropriate measures to minimise the generation of dust as a result of his works, operations and activities to the satisfaction of the Engineer.

The Contractor shall prepare and submit a Dust Control Method Statement to the Engineer within 28 days after the Commencement Date. As a minimum, the statement should address the following:

• Schedule of spraying water on unpaved roads paying due attention to control of runoff;

• Utilising dust binding agents, or chemical dust suppressants as part of the water spraying to reduce water use for dust suppression;

• Speed limits for vehicles on unpaved roads and minimisation of haul distances;

• Measures to ensure that material loads are properly covered during transportation;

• Schedule for wheel cleaning and measures to clean up public roads that may be soiled by construction vehicles;

• Minimisation of the area disturbed at any one time and protection of exposed soil against wind erosion;

• Location of material stockpiles taking into consideration prevailing wind directions and location of sensitive receptors;

• Controlled blasting techniques to minimise dust and fly rock during blasting;

• Adherence to the dust loads and protective gear stipulated in the Occupational Health and Safety Act; and

• Reporting mechanism and action plan in case of excessive wind and dust conditions.

The control measures shall also include regular and effective treatment of gravel access roads and working areas, use of dust extractors on drilling equipment or wet drilling, water sprays on aggregate crushing and screening plants, etc.

(2) Vehicle Emissions

Vehicles and equipment emitting noticeable fumes will not be permitted to continue working on Site. Vehicle emissions shall be monitored on a regular and on-going basis in order to ensure

that vehicles and equipment working on Site comply with legislated requirements. Vehicle emissions shall be monitored by the Contractor using a suitable portable monitoring equipment, e.g. an aerosol monitor and gas detectors.

TABLE B9119/1 EMISSION STANDARDS

Pollutant	Averaging Period	WHO Guideline Value (µg/m³)	SANS Limits (1929:2011) (µg/m³)	SANS Target (1929:2011) (µg/m³)
SO2	24-hr max.	125	125	125
	1 hr ave.		350	350
	10-min ave.	500 Pa	500	500
NO2	1-yr mean	40	40	40
	1-hr max.	200	200	200

NOISE MANAGEMENT

The Contractor shall comply with all requirements regarding noise management as follows:

• Construction site yards and other noisy fixed facilities should be located well away from noise sensitive areas adjacent to the development sites;

• Where possible, stationary noisy equipment should be encapsulated in acoustic covers, screens or sheds. Proper sound insulation can reduce noise by up to 20dBA. Portable acoustic shields should be used in the case where noisy equipment is not stationary;

• Construction activities and particularly the noisy ones, are to be contained to reasonable hours during day and early evening;

• With regard to unavoidable very noisy construction activities in the vicinity of noise sensitive areas, the Contractor should liaise with local residents on how best to minimize the impact;

• Machines in intermittent use should be shut down in the intervening periods between work or throttled down to a minimum; and

• Construction staff working in areas where the 8-hour ambient noise levels exceed 75dBA should wear ear protection.
Having due regard for local communities and dwellings, the Contractor shall restrict any of his operations which result in undue noise disturbance to those communities and dwellings to the hours of 06:00 to 18:00 on weekdays or otherwise as agreed with the Engineer.

The Contractor shall not use sound amplification equipment on Site unless in emergency situations.

The Contractor shall ensure that environmental awareness and training for all employees includes the need to minimise noise.

The Contractor shall provide all his equipment with suitable silencers such that the noise level in habituated areas and dwellings adjacent to the work areas will not increase by more than 7 dB (A) Leq 60 above residual background baseline sound levels.

BLASTING MANAGEMENT

The Contractor shall ensure that blasting be limited to between 5:00 am and 10:00pm, and that communities must be notified in advance of all blasting.

BORROW PITS & QUARRIES

Not applicable.

WATER MANAGEMENT

The Contractor shall comply with all requirements regarding water management as follows:

• All earth moving vehicles shall be put on preventative maintenance schedule to ensure that equipment is in a good working order to prevent the leakages of oil and diesel;

• An inspection programme shall be implemented to ensure that all machinery is inspected on a daily basis to ensure optimally functioning of equipment;

• Refuelling of equipment shall occur in designated areas by trained people;

• Bunding areas shall be provided for bulk storage of diesel, fuel, and oils which shall contain 110% of the volumes stored;

• Spill kits shall be readily available to clean up spillages;

• Drivers and operators shall be trained to use spill kits and contain spillages to the smallest possible areas;

• Contaminated soil shall be removed to a demarcated area for rehabilitation and replaced where necessary once rehabilitated;

• Drip trays shall be used when dispensing fuels or oils from earthmoving equipment outside any demarcated areas for maintenance;

• Dedicated drums must be emptied into containers for removal by an approved contractor to be recycled;

• Waste manifests and safe disposal certificates must be filed as proof of safe disposal;

• No discharge of pollutants will be allowed in any water resources;

• Contain spillages to the smallest possible area;

• Clean and dirty water will be separated whenever possible;

• Clean water must be kept clean and not be part of or enter the dirty water system at any point in time;

• Runoff from bulk storage areas, contaminated areas shall pass through an oil separator prior to release or reuse of the water;

• Vegetation shall be used for filtration purposes and to drain the water in order to promote infiltration;

• Parking areas shall be designed to promote the infiltration of water instead of concentrating and conveying it away from the area;

• Topsoil stockpiles will be rehabilitated as soon as possible to prevent the increase in turbidity;

• Stockpiles shall be shaped in such a way that it will not be higher than 3m with side slopes of 45 degrees, be free draining and do not impound water;

• Runoff from the topsoil stockpiles shall be detained in order to support growth of vegetation;

• A monitoring programme will be implemented whereby the vegetation of the stockpiles in terms of their basal cover and species diversity is monitored;

• If it is noticed that the vegetation on the stockpiles is not sustainable and suitable, necessary actions will be taken to rectify the situation;

• Construction of the infrastructure shall not be delayed once vegetation is cleared;

• Land clearing shall be kept to smallest possible footprint;

• Overland discharges shall not result in erosion;

• Soil erosion protection measures will be employed where necessary;

• Where cleared areas are not being used they must be rehabilitated

• Clean storm water shall be diverted away from any excavations;

• No silt laden water shall be discharged directly to the environment;

• All construction shall take place within the identified footprint;

• No temporary structures shall be established outside the footprint area

• Bund area shall have a facility such as a valve or sump to drain or remove clean storm water; and

• Contaminated water shall be pumped into a container for removal by an approved service provider.

In addition, The Contractor shall keep records of all water quality monitoring results and measurements for the duration of the Contract. These records shall be submitted in an agreed format to the Engineer, on a monthly basis or when requested by the Engineer, and shall be accompanied with action plans for improvement where standards are not met.

The Contractor will take all possible measures to minimize water use on site and this will include monitoring of pipes for leaks, closing taps when not in use, efficient use of water for washing of plant and recycling water as much as possible.

HAZARDOUS MATERIALS MANAGEMENT

The Contractor shall comply with all requirements regarding hazardous materials management as follows:

• Material Safety Data Sheets (MSDSs) shall be available on site for all hazardous substances to be used on site;

• Storage areas shall be roofed with impervious material;

• Hazardous chemicals or potentially hazardous chemicals used during construction shall be stored in secondary containers and all relevant MSDSs shall be available on site;

• The relevant emergency procedures relevant to particular chemicals used on site, as per the MSDSs and supplier's guidelines, will be followed in the event of emergency; and

• The Contractor shall prevent discharge of any pollutants such as cement, concrete, lime, chemicals, fuels and oils into nay water sources and adequate storm water control measures will be implemented where these substances are handled.

The Contractor shall also be responsible for investigating the options for solid waste disposal in South Africa, as there are no hazardous landfill sites in Lesotho. On selection of a suitable site for disposal, the Contractor shall lodge an application with the South African Department of Environmental Affairs, which shall include the following documentation:

• Cover letter indicating the type of waste, quantity, country of origin, reason for the export;

• Notification document completed in full;

• Safety Data sheet;

• Liability insurance (indicating the validity period);

• Sales Contract/Agreement; and

• Waste Management License/operating certificate of the receiving facility.

Protocols for the transport of the hazardous waste across the border and through South Africa shall be complied with.

WASTE MANAGEMENT

The Contractor shall identify a location for disposal of construction waste (should a large volume of waste be generated) and compile an Environmental Method Statement indicating how this waste will be managed throughout the Project. The Method Statement for waste management must indicate where waste will be temporarily stored prior to final disposal, the proposed locations of skips, prevention of wind-blown litter, etc.
The Contractor shall be responsible for refuse and waste control in accordance with the requirements of these Specifications, specifically also in relation to the following:

• The management of solid waste on Site shall be strictly controlled and monitored. Only approved waste disposal methods shall be allowed;

• Littering shall be prohibited;

• The quantities of waste generated on Site shall be minimised;

• Labelled recycling bins shall be used, and waste separated where possible. In addition, a recycled-material collection schedule shall be established, and the bins shall be collected regularly;

• Eating areas for the construction staff shall be designated and supplied with waste bins to control litter;

• No on-site burying or dumping or unauthorised burning of any waste materials, vegetation, litter or refuse shall occur;

• Bins provided will be sufficient to store the solid waste produced on a daily basis;

• The bins should be emptied at least once a day;

• Waste from bins may be temporarily stored on Site in a central waste area that is weatherproof and scavenger-proof and which the Engineer has approved;

• All solid waste shall be disposed of off-site, at an approved licenced landfill site. The Contractor shall supply the Engineer with a certificate of disposal. Alternatively, the Contractor shall establish a waste incineration facility; and

• Waste shall be separated into domestic waste, building/construction rubble, scrap metal, oil and grease and hazardous waste and dealt with in the following manner:

(1) Domestic Waste

Metal refuse bins to BS 792 or equivalent plastic refuse bins, all with lids, shall be provided by the Contractor for all buildings. Refuse shall be collected and removed from all facilities on the Site at least twice per week. Domestic waste shall be transported to the approved refuse disposal site off-site in covered containers or covered trucks. The following mitigation measures shall be in place regarding domestic waste:

• A refuse control system will be established for the removal of domestic waste;

• The Contractor will ensure that the site is kept clean and tidy at all times;

• Littering will not be allowed on site;

• The excavation and use of rubbish pit on site if forbidden;

• Burning of rubbish is forbidden;

• Timber, metal, oil, paper, bricks, tyres, batteries and any other major recyclable waste will be stored in safe, secure areas;

• A separate oil container will be used to ensure that oil waste is contained;

• Maintenance and domestic refuse will be collected in appropriate bins for recycling or sent to a landfill site at regular intervals for disposal;

(2) Organic Waste

Refuse from food preparation and eating areas shall be collected and removed daily. Organic waste shall be disposed of as per domestic waste.

(3) Building/Construction Waste

Inert building/construction rubble shall be disposed of by burying it in the designated spoil dump, at a site approved by the Engineer. The following mitigation measures shall be in place regarding construction waste:

• Spoil from excavations will be disposed of in an approved area by the Engineer's Environmental Monitoring Manager (EMM) in consultation with the DoE.

• Construction waste will be recycled or re-used in the construction process;

• Disposal site – disposal record will be kept;

• Waste will not be buried and/or bunt on site; and

• Where waste is to be transported by truck, it will be covered appropriately.

(4) Scrap Metal

Scrap metal shall be disposed of off-site for recycling (except railway profiles/sections).

(5) Used Oil and Grease

Used oil and/or grease shall be removed from Site and sold to an approved used oil recycling company.

(6) Hazardous Waste

All hazardous waste shall be disposed of in an approved hazardous waste disposal site and a disposal certificate supplied to the Engineer. The following mitigation measures shall be in place regarding hazardous waste:

• Used oil, lubricants, and cleaning material from maintenance vehicles and machinery shall be collected in a holding tank and sent back to the supplier;

• Water and oil will be separated in an oil trap. Oils collected in this manner will be retained in a safe holding tank and removed from site by a specialist oil recycling company for disposal at approved waste disposal site for toxic/hazardous material.
• Oil collected by a mobile servicing unit will be stored in the service unit's sludge tank and discharged into the safe holding tank for collection by the specialist oil recycling company; and

• All used filter materials shall be stored in a secure bin for disposal off site.

(7) Waste Management Plan

The Contractor shall develop an appropriate waste management plan for approval by the Engineer. In particular this plan shall indicate how waste will be minimised through re-use and recycling.

(8) Waste Management Facility

Wherever waste is temporarily accumulated for separation prior to final disposal or incineration, the Contractor shall establish a suitably bunded facility with impervious floor. Temporary holding areas shall have a steel roof structure to prevent rainwater from entering the area and generating leachate or contaminated stormwater. A wooden (or other acceptable material) fence shall be provided to these areas to prevent windblown refuse.

The temporary facilities shall conform to *inter alia* the following specifications:

• Designs and shop detail drawings for these facilities shall be submitted for review and approved by an engineer prior to fabrication commencing;

• Roof sheeting shall be galvanised IBR profile;

• Roof purlins shall be galvanised cold rolled lipped channels;

• All other steelwork shall be hot rolled sections of Grade S355JR or equal;

• All loadings shall comply with SANS 10160

• All steelwork shall be designed in accordance with SANS 10162 Part 1;

• All reinforced concrete works shall be designed in accordance with SANS 10100 Part 1 and Part 2;

• All steelwork shall be painted in accordance with specification;

• All bolts to be Grade 8.8;

• Screening fence to be constructed from wood; and
• A hardstand surface is to be constructed that is raised off the natural ground level. The type of surface is to be discussed with the Engineer prior to construction commencing.

A dedicated, bunded facility shall be provided for all hazardous waste.

(9) Waste Incinerator

Should the Contractor opt to establish a waste incineration facility on Site, it shall be a containerised waste incinerator of appropriate capacity, which meets the requirements of:

• Section 44 of the Environment Act;

• Listed Activities and Associated Minimum Emission Standards Identified in Terms of Section 21 of the South African National Environmental Management: Air Quality Act (Act 39 of 2004); and in particular the

• Standards contained in Category 8, Sub-category 8.1 Thermal treatment of General and Hazardous Waste.

The ash remaining from the incineration of general waste may be disposed of at a general landfill site.

(10) Requirements of the Basel Convention

The Contractor shall ensure that all the requirements of the Basel Convention on the export of hazardous waste are adhered to at all times when hazardous waste is removed from Site.

(11) Ablution Facility

The following mitigation measures shall be in place regarding ablution facilities:

• Ablution facilities provided will include shelter, toilets and washing facilities;

• Toilets will be provided at the preferred ratio of 1 toilet per 15 workers, but not less than 1 toilet per 30 workers;

• Sanitation facilities shall be located 100m of any point of work, but not closer than 50 m from any water body;

• All temporary/portable toilets shall be secured to the ground to prevent them toppling due to wind or any other cause;

• Entrances to toilets will be adequately screened from public view;

• Only approved portable chemical toilets will be provided at work areas;

• Ablution facilities provided shall be maintained in a hygienic stake and serviced regularly to ensure proper operation;

• No spillage will be allowed when the toilets are cleaned or serviced;

• The contents of chemical toilets will be removed to an approved disposal site – no discharge into the environment or burying of sewage must be allowed;

• Toilets will be serviced and cleaned on the last construction day before the builder's holiday; and

• Wash areas shall be placed and constructed in such a manner so as to ensure that no pollution occurs.

FIRE CONTROL

Prior to the commencement of any construction work, an approved Site Fire Safety Plan must have been prepared by the Contractor and approved by the Engineer. The person responsible for the fire safety management system and inspections must ensure that a Fire Safety Risk Assessment (FSRA) is undertaken and is reviewed and updated regularly as construction proceeds. This document forms a key element of the site fire safety plan and should be developed prior to construction commencing. The plan, as a minimum, must adhere to all of the following requirements:

• The organisation and responsibilities for fire safety;

• Arrangements for recording fire safety training;

• General site precautions, fire detection and alarm systems, temporary emergency lighting and portable fire extinguishers;

• The locations of designated smoking areas;

• The requirements for a hot work permit regime;

• Location, construction and maintenance of temporary buildings and temporary accommodation.

• An effective evacuation plan and fire-fighting procedures;

• Instructions given to those on site of the required actions in case of fire;

• Security measures to minimise the risk of arson;

• Procedure for the storage and control of waste materials;

• Procedure for the storage and control of flammable liquids and compressed gases; and

• Procedure for the storage and control of explosives.

BIODIVERSITY MANAGEMENT

Landform disturbance: Bridge piers will be built either side of the river to support the bridge. Excavation for the foundations of the piers may result in significant movement of soil.

Soil erosion and siltation of watercourses: The disturbance of soil in and around the bridge piers will results in unconsolidated and unvegetated soil around these areas. Unless this soil is

protected (e.g. with erosion control blankets, or vegetated soon after placement), there is a risk that it could be washed into the river, thus adding to sedimentation of the river.

Removal of riparian vegetation: Riparian vegetation may need to be removed at the position where the footings of the bridge are to be constructed. Although it appears that these positions are well outside the river, care needs to be taken to ensure that removal of vegetation does not affect rare of valuable vegetation. It appears from satellite imagery that there is little if any natural woody vegetation left along the riverbanks, and that there are extensive invasive alien woodlands that have established along the river. Therefore, the impact on natural riparian vegetation is likely to be small to negligible.

Compaction and trampling of soil: The crane that will need to transport the bridge and place it will need to travel approximately 1.5km from the nearest public tar road to the site. Due to its weight, it can trample soil during its movement. If this happens during the wet season, the trampling can be significant, resulting in soil compaction and deep ruts. The impact on people's livelihoods could be significant if agricultural lands / cultivated fields are affected. It is unknown at this stage of the planning process in which season construction will take place. If construction does happen during the wet season, the construction team will need to take appropriate steps to prevent and mitigate compaction and trampling. The Contractor shall comply with all requirements regarding biodiversity management as follows:

• All waste, with special mention of excess quarry and spoils and remaining building material, should be removed from the site on completion of the project;

• Soil erosion and alien or weed control, need to be strictly managed on site;

• Adequate stormwater management must be incorporated into the design of the proposed development in order to prevent soil erosion;

• As far as is possible, implement concurrent rehabilitation in order to limit degradation of soil biota;

• Ongoing alien and invader control within impacted areas should be maintained;
• Rip and aerate all compacted soils in order to allow for plant establishment and growth. Areas that need to be ripped should be identified by the Engineer's Environmental Monitoring Manager (EMM);

• All informal fires on the property should be prohibited;

• The contractor must report problem animals or vermin to the Engineer;

• Ensure that domesticated and livestock animals belonging to the local community are kept away from the construction works;

• No hunting or trapping wild or domesticated animals is permitted;

• The contractor may under no circumstances make use of pesticide or poison to control unwanted animals without permission from the Pest Control Operator or considering alternative measures;

• The Contractor must regularly undertake checks of the surrounding natural vegetation, in fences and along game paths to ensure no traps have been set. Remove and dispose of any snares or traps found on or adjacent to the site;

• Where there is a potential problem area that may be contributing to pest infestation, it must be inspected by the ECO and the Pest Control Operator must make recommendations that should be implemented;

The removal, damage and disturbance of indigenous flora is prohibited.
The use of herbicides is prohibited unless approved by the Pest Control Officer.
No domestic pets or livestock are permitted on Site.

PROTECTION OF RIVERS, STREAMS AND WATERCOURSES

Roads and tracks shall not indiscriminately be cut through rivers and stream banks, but shall be designed as part of the overall site layout, and constructed in a way that limits stream bank erosion and siltation.

All rivers, streams and watercourses shall be protected from direct or indirect spills of pollutants such as garbage, sewage, cement, oils, fuels, chemicals, aggregate tailings, wash and waste water or organic material resulting from the Contractor's activities. In the event of a spill prompt action shall be taken to clear polluted or affected areas.

The Contractor shall not work within river floodlines, streams, watercourses and wetlands without the written approval of the Engineer as required for the execution of the work.

ENVIRONMENTAL MONITORING

All environmental monitoring for water quality, dust and noise, shall be carried out by the Contractor under the direction of an appropriately qualified professional service provider. In this regard, the Contractor shall submit to the Engineer, for approval, a detailed terms of reference for the appointment of the professional service provider.

The professional service provider shall meet minimum professional requirements in terms of the following:

• Qualifications;

• Professional registration;

• Experience and track record; and

• Demonstrated proficiency in the use of relevant monitoring and sampling equipment

The professional service provider shall provide guidance on the following, specifically with regard to environmental monitoring for water quality, dust and noise, to the approval of the Engineer:

• Equipment requirements and tolerances for detection limits;

• Confirmation of laboratory accreditation, capacity, delivery and performance within reasonable timeframes; and

• Environmental monitoring reporting and analysis.

The professional service provider shall review and sign off environmental monitoring reports and analyses, where required to do so by the Engineer.

(a) Dust

Dust monitoring shall be carried out by the Contractor in accordance with the South African National Environmental Management Air Quality Act (Act No.39 of 2004). The monitoring shall determine the existing dust fallout levels at selected positions at borrow areas, and along site access roads and haul roads. As a minimum, samples shall be taken at the same sampling sites used by, and tested for the same parameters as tested by the Engineer, to establish the air quality baseline. The exact number and location of individual dust collectors shall be established in consultation with the Engineer. The Contractor shall allow for a minimum of 10 monitoring sites.

Dust levels on Site shall not exceed 15% above the ambient.

Where communities, business establishments or concentrations of homesteads are located in the proximity of site access roads, haul roads and/or borrow pits, the monitoring of PM10 dust particles shall also be conducted by the Contractor in order to determine the potential health impact of the fine dust on the receptors in accordance with South African SANS 1929:2004: Ed 1.1 standard.
The method for sampling will be according to ASTM D1739, Standard Method for Collection and Analysis of Windblown Dust Deposition.

The Contractor shall provide, maintain and regularly calibrate dust measurement equipment.
The Contractor shall keep records of all dust level measurements for the duration of the Contract. These records shall be submitted in an agreed format to the Engineer, on a monthly basis or when requested by the Engineer. The records shall provide calculated average values for each month and shall be accompanied with action plans for improvement where standards are not met.

• **(b) Air Emissions**

Monitoring of air emissions from the waste incinerator stack shall be in accordance with the requirements of South African Government Gazette 893 dated 22 November 2013 Category 8, Sub category 8.1, Thermal Treatment of General and Hazardous Waste.

The Contractor shall keep records of all air emission monitoring results and measurements for the duration of the Contract. These records shall be submitted in an agreed format to the Engineer, on a monthly basis or when requested by the Engineer, and shall be accompanied with action plans for improvement where standards are not met.

(c) Water Quality

The Contractor shall keep records of all water quality monitoring results and measurements for the duration of the Contract. These records shall be submitted in an agreed format to the Engineer, on a monthly basis or when requested by the Engineer, and shall be accompanied with action plans for improvement where standards are not met. For standards refer to and Section B1219, table B1219/1 and section B1404, table B1404/1.

(d) Noise Levels

Noise monitoring on Site shall be carried out on a monthly basis with respect to Land Use, Health, Annoyance and Speech Communication, in accordance with SANS 10103:2008, Measurement and Rating of Environmental Noise.

The Contractor shall provide and maintain equipment to measure noise levels on Site. This monitoring equipment will comply with the following international standards:

• IEC 651 & 804, Integrating Sound Level Meters; and

• IEC 942 – Sound Calibrators.

Typically, the sound measuring instruments to be used would be a 01dB SIP95 Data-logging Precision Impulse Integrating Sound Level Meter and Calibrator or similar, to the approval of the Engineer. The Contractor shall calibrate the noise monitoring equipment as required and maintain records of calibration.
The Contractor shall provide for this purpose, for the sole use of the Engineer, the same equipment as that which will be used by the Contractor.

Noise measurement will be required at the established monitoring sites used by the Engineer to establish the noise baseline. The exact number and location of individual collectors shall be established in consultation with the Engineer. The Contractor shall allow for a minimum of 10 monitoring sites. Noise measurements shall comprise 4 to 6 measurements of 10 minutes each at evenly spread intervals over the course of a day for each monitoring site.

The Contractor shall keep records of all noise level measurements for the duration of the Contract. These records shall be submitted in an agreed format to the Engineer, on a monthly

basis or when requested by the Engineer, and shall be accompanied with action plans for improvement where standards are not met.

LOCAL LABOUR RECRUITMENT GUIDELINE

The Contractor shall be responsible to source their unskilled labourers using recruitment systems as per the "*Ministry of Public Works and Transport Roads Directorate, Guidelines for Recruitment of Workers*", provided in Annexure A of this Specifications document. All cost related to local recruitment is deemed to be include in the BOQ: Contractors establishment on site and general obligations.

B26 SECTION B9200: HEALTH AND SAFETY SPECIFICATIONS
B9201 SCOPE

A systematic process is deployed for the effective integration of Occupational Health & Safety (H&S) requirements into contract management activities and to fulfil all obligations in relation to H&S.
Effective management of H&S matters on railway track perway demands the inclusion of H&S requirements that addresses the following:
• • Identify H&S hazards and risks as early as possible with the correct understanding of the magnitude and scope of the construction risks. Reducing and managing the associated risks using the hierarchy of control.
• • Involving H&S professionals and staff with the necessary experience and competence.
• • Setting emergency response and contingency plans in place to respond to incidents and the effect on business continuity.
• • Improving on H&S performance. Specific KPI's for the project are set.

(a) Purpose of this Section

The purpose of this project specific H&S Specification is to describe the minimum requirements for all personnel working on the construction of this project, in order to achieve the primary H&S objective that all activities are completed with zero harm.

This H&S Specification is created using a risk based approach considering:

• Legislative requirements

• A baseline project H&S risk assessment

• Employer's H&S management system requirements

• The Engineer's requirements, and

• The scope of work

This document is to be read and understood in conjunction with:

• The project specific technical specifications including geotechnical reports

• The project specific scope of works

This H&S Specification applies to all personnel working on the project including the Employer, Engineer and other Consultants, Principal Contractor(s), Contractors and Suppliers engaged to perform work under a contract of works / services. This H&S specification apply until final completion of all works under the project.
Compliance to the legal requirements by all personnel working on the project shall not be limited to the contents of this H&S Specification. For that purpose, not all legal requirements have been repeated in this document. It is the responsibility of each Contractor to know, understand and comply with all the relevant legal requirements.

(b) Reference Documents

All personnel working on this project, including the Employer, Principal Contractor(s) and Contractors, must, in addition to Health and Safety requirements specified in this Specification, also comply with the duties placed on them under the following:

• The Constitution of Lesotho

• Lesotho legislation

o The Labour Act, 2024 (Act No. 3 of 2024) and associated Regulations

o Occupational Safety and Health Act, 2024

o Labour Code (Construction Safety) Regulations 2002

o Environment Act 10 of 2008

o Explosives Proclamation of 1958 (amended)

o Mine Safety Act 4 of 1981

o Lesotho Government Gazette published 6 May 2020 - Public Health (COVID-19) Regulations, 2020

• South Africa Legislation

o Occupational Health and Safety Act 85 of 1993

o Mine Health and Safety Act 29 of 1996

o Disaster Management Act 57 of 2002: Declaration of a National State of Disaster: COVID-19

o Direction by the Minister of Employment and Labour in terms of Regulation 4 (10) of the Regulations R480 of 29 April 2020

• Any other applicable legislation

Note: While the South African OHS legislation is not enforceable in Lesotho, the requirements as contained in the Occupational Health and Safety Act 85 of 1993, Mine Health and Safety Act 29 of 1996 and their Regulations, and the Disaster Management Act 57 of 2002 will be enforced on this project where referenced as required, and as a good practice.

(c) Termination & Suspension of Contract

All personnel working on this project must agree that the provisions of this document are not negotiable, and any relevant contravention of the Occupational Health and Safety law is a material and substantial breach of Contract.

No person must cause, permit, or tolerate a hazardous, unsafe, unhealthy or environmentally unsound condition or activity over which it has control at the site.

If a Contractor becomes aware of any hazardous, unsafe, unhealthy or environmentally unsound condition, including a violation of any of the H&S requirements, he must immediately notify the Engineer's representative. Thereafter, appropriate steps must be taken, where necessary and as agreed between the Engineer and the Contractor, to remove from site, eliminate, terminate, mitigate, and/or rectify the identified condition. If remedial action is not implemented within the agreed time, the Contractor has the responsibility to stop work related to the identified condition.

Should the Principal Contractor observe an unsafe act or become aware of an unsafe act, he must direct the relevant Contractor to cease, or not to proceed with, the unsafe work. Each Contractor must at their own cost and risk, modify its method of work in order to work safely to the satisfaction of the Principal Contractor.

Where any Contractor is identified to be performing work where the H&S controls are not implemented as required, the relevant Contractor shall be in breach of this Specification and of his Contract penalties may apply for any deviations found.

Continued non-compliance to legislation and project H&S requirements may result in termination or suspension of contract for the contractor or replacement of individuals in terms of the project specific disciplinary procedure and the contractual requirements.

(d) Definitions & Acronyms

Standard terms and acronyms as defined in local legislation will apply. For project-specific H&S terms and definitions, refer to table below:

TABLE B9201/1: DEFINITIONS & ACRONYMS

Terms/Abbreviations	Definitions
ALARP	As low as reasonably practicable
All Injury Frequency Rate (AIFR)	$AIFR = \frac{No\ of\ (LTI\ + RWI +\ MTI + DI + FAI)\ x\ 200{,}000}{Exposure\ hours}$
Authorised Person	A competent person that has been authorised in writing to undertake specific duties he/she has been authorised with
Competent Person	Any person having the knowledge, training, experience and qualifications specific to the work or task being performed.
Construction Site	An area that is defined by signage and boundaries as an area where construction work as defined under the legislation, occurs
Contractor	Means an employer who performs construction work and includes principal contractor and sub-contractor.
COVID-19	A respiratory illness caused by a new novel coronavirus strain called SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2). It is transmitted chiefly by contact with infectious respiratory droplets or with objects or surfaces contaminated by the causative virus. It is characterized especially by fever, cough, and shortness of breath and may progress to pneumonia and respiratory failure.
Danger	Anything which may cause injury or damage to persons or property

Terms/Abbreviations	Definitions
Days Lost	The number of working days lost due to lost time injuries, with reference to the definition for a lost time injury
Daily Safe Task Instruction (DSTI)	A pre-start documented risk assessment technique conducted daily by individual work teams prior to commencement of any work and involves the participation of all team members.
Disabling Injury (DI)	A disabling injury is an injury that can result in temporary partial disablement, temporary total disablement, permanent disablement or serious disfigurement after all medical treatment and rehabilitation has taken place. It disables a person from performing the tasks s/he was doing during the normal execution of his work and includes partial use of a limb or losing part of a limb
Disabling Injury Frequency Rate (DIFR)	$DIFR = \frac{No\ of\ DIs\ x\ 200{,}000}{Exposure\ Hours}$
Emergency	An emergency is any abnormal and dangerous and/or environmentally threatening situation needing prompt action to control, correct and return to a safe condition. Types of emergencies include: - fire - explosion - chemical spills - gas leak (toxic or flammable) - natural events - impact events - civil disturbances - external events, e.g. loss of services or emergency in a neighbouring facility - significant discharge / spillage – medical / health emergency
First Aid Injury / Case	A work-related injury which under normal circumstances can be treated by the injured employee or by a first aider. This usually includes application of non-prescription medicines e.g. antiseptic ointment and a small wound dressing. If the treatment that is given by a medical practitioner amounts only to that described in this definition, the case will remain a FAC provided that there are no professional medical costs involved.
Hazard	A source of or exposure to danger
Hazardous Materials	Hazardous materials are chemical, toxic, flammable, corrosive, asphyxiant, radioactive, pyrophoric, explosive, endothermic / exothermic / cryogenic, carcinogenic, mutagenic or otherwise capable of causing harm to people
Hot Work	Any work which may introduce a source of ignition into an area in which flammable or combustible materials may be stored or handled or be present
H&S	Health and Safety
ICAM	Incident Cause Analysis Method, a Specific incident investigation technique
Incident	An occurrence causing injury, illness, plant, property, or environmental damage, and includes a near-miss
Lost Time Injury (LTI)	A lost time injury occurs when a person is injured in the execution of their duties and as a result of this injury is unable to perform their regular duties for one full shift or more following the day on which the injury was incurred, whether a scheduled work day or not
Lost Time Injury Frequency Rate (LTIFR)	$LTIFR = \frac{No\ of\ LTIs\ x\ 200{,}000}{Exposure\ Hours}$ Lost time injury severity rate (SR) $SR = \frac{No\ of\ lost\ shifts\ x\ 200{,}000}{Exposure\ Hours}$

Terms/Abbreviations	Definitions
MSDS – Material Safety Data Sheet	Key source of documentation for H&S information for a substance. Includes precautions of use, hazard information, first aid requirements etc. The format is prescribed in the Hazardous Chemical Substances Regulations
Medical Treatment Injury (MTI)	An incident which does not result in death, permanent impairment or temporary or total disablement, but which requires the affected person to receive medical treatment, excluding first aid. The person rendering the treatment must be a medical practitioner like a doctor, medical nurse or paramedic
Medical Treatment Injury Frequency Rate (MTIFR)	$MTIFR = \frac{No\ of\ MTIs\ x\ 200{,}000}{Exposure\ Hours}$
Near miss	An occurrence having the potential of causing injury, disease, plant, property, or environmental damage which must be reported forthwith to the immediate Supervisor.
PPE	Personal protective equipment
Planned Task Observation (PTO)	A PTO is an on-site interaction with an individual or team to verify competence and understanding of H&S and technical responsibilities in the carrying out of tasks. This is conducted by comparing behaviour of the individual or team with the requirements of the relevant task's method statement, risk assessment and safe work procedure.
Principal Contractor	Means a contractor appointed in writing by the Employer, with control over the construction phase of a project involving more than one contractor. They are to plan, manage, monitor and coordinate health and safety during the construction phase.
Reasonably Practicable	Means practicable having regard to- The severity and scope of the hazard or risk concerned; the state of knowledge reasonably available concerning that hazard or risk and of any means of removing or mitigating that hazard or risk; The availability and suitability of means to remove or mitigate that hazard or risk; and The cost of removing or mitigating that hazard or risk in relation to the benefits deriving therefrom
Recordable Injury	All injuries classified as: - first aid injuries, - medical treatment injuries, - lost time injuries / lost workday cases, - restricted work cases, - loss of consciousness cases, - disabling injuries, and - fatalities.
Recordable injury frequency rate (RIFR)	$RIFR = \frac{No\ of\ RIs\ x\ 200{,}000}{Exposure\ Hours}$
Recordable case rate (RCR)	RCR is the recordable cases as well as the hours worked for the period (This Period Total TPT = total hours for the month) will be recorded as per the formula below.

Terms/Abbreviations	Definitions
	$RCR = \frac{No\ of\ RC's\ x\ 16666}{Total\ hours\ for\ the\ month}$
Restricted Work Injury (RWI)	An injury that results in an employee reporting to work on their next scheduled day/shift, but being unable to carry out their range of normal duties and are assigned to alternate or restricted duties, shall be recorded as an RWI Emphasis is on the inability to perform their range of normal work duties over a normal work shift and assignment of restricted or alternate duties will assist in determining if the injury is to be recorded as an RWI
Risk	The probability that injury or damage will occur
Risk Assessment	A program to determine any risk associated with any hazard at a construction site, in order to identify the steps needed to remove, reduce or control such hazard
Safe	Free from any hazard
Safe Work Procedure (SWP)	A safe work procedure describes the minimum controls and requirements applicable on the project
Visible Felt Leadership (VFL)	A process of formal and recorded H&S interactions between management and work force to implement and promote the H&S culture of the project.

H&S MANAGEMENT SYSTEM FRAMEWORK, POLICIES AND STANDARDS

(a) H&S Policies

The Employer is committed to the planning, implementation and maintenance of an effective H&S system. The Principle Contractor and other contractors should align their policy, approach and management system accordingly.

(b) Fatal Risk Control

Each Contractor shall demonstrate by means of a procedure how fatal risks will be managed through:

• The identification, evaluation and control thereof (i.e. a permit system).

• Alignment of the emergency response plan.

(c) Contractor H&S Management System (HSMS)

Contractors HSMS shall align itself with the requirements of this H&S Specification, the project H&S Policy and the project baseline risk assessment.

STRUCTURE AND RESPONSIBILITIES

(a) Organisational Structure

Each Contractor must provide an organisational chart that shows the H&S functions and key line management positions which have H&S responsibilities.

Each Contractor shall make the required and necessary appointments for the construction phase. Appointment shall be in writing and clearly state the responsibilities and duration of the appointment.

Copies of appointments must be submitted to the Engineer together with detailed CV's that clearly reflect qualifications, training, experience and knowledge. Previous work experience needs to clearly indicate the responsibilities and relevant H&S legal appointments the person held.

All appointments will be approved by the Engineer and any changes of appointees or appointments must be communicated to the Engineer and agreed upon before being implemented or changed. The Engineer reserves the right to conduct interviews with proposed appointees.

Note: Temporary works designer will be a professionally registered engineer or equivalent. Excavation competent persons will have a qualification in the geotechnical field.

The table below lists mandatory appointments, which its specific roles and responsibilities are outlines in detail in Appendix A. South African legislation references are provided to assist with context, duties and ease of reference.

TABLE B9203/1 LIST OF MANDATORY APPOINTMENTS

Appointment	Appointment
Project Manager	OHS Act 16.2
Construction Manager – full-time on site	Construction Regulation 8(1)
Construction Supervisors	Construction Regulation 8(7)
Project H&S Manager	Construction Regulation 8(5)
Project H&S Officer	Construction Regulation 8(5)
First Aider	General Safety Regulation 3(4)
Firefighting personnel	Construction Regulations 29(I)
Risk Assessor	Construction Regulation 9
Incident Investigator	General Administrative Regulations 9
H&S Representatives	OHS Act 17
Sub-Contractors and suppliers	Construction Regulation 8(1)
Internal COVID-19 Compliance Officer	Direction by the Minister of Employment and Labour in terms of Regulation 4 (10) of the Regulations R480 of 29 April 2020

The following competent persons listed below shall be appointed by the contractor in writing, where applicable. The Contractor must indicate in the H&S Plan, which of these listed appointments are applicable to the construction work in question. The list below indicates the

minimum requirements and is not exhaustive. South African legislation references are provided to assist with context, duties and ease of reference.

TABLE B9203/2 LIST OF APPLICABLE APPOINTMENTS

Appointment	Appointment
Assistant Construction manager	Construction Regulation 8(1)
Confined space competent person	General Safety Regulation 5(1)
Construction vehicle / mobile plant competent person (operator)	Construction Regulation 23(1)(d)
Construction Welfare Facilities Supervisor (Camp Manager)	Construction Regulation 30
Temporary electrical installation competent person	Construction Regulation 24(c)
Electrical machinery operator (including portable electrical tools)	Construction Regulation 24(e)
Excavation competent person	Construction Regulation 13(1)(a)
Fall protection competent person	Construction Regulation 10(1)(a)
Ladder inspector	General Safety Regulation 13(a)
Hazardous chemical substances Supervisor	Construction Regulation 25
Scaffolding competent person	Construction Regulation 16(1)
Scaffolding inspector	Construction Regulation 16
Scaffolding erector	Construction Regulation 16
Explosives Manager / Competent person	Explosives Regulation 12 and Construction Regulation 13(2)(k)
Housekeeping Supervisor	Construction Regulation 27
Stacking and storage competent person	Construction Regulation 28
Machinery Competent Person	General Machinery Regulation 2(1)
Lifting Supervisor/ Rigger / Master rigger	Driven Machinery Regulations
Lifting tackle competent person (inspector)r	Driven Machinery Regulation 18(10) (e)
Bulk mixing plant competent person	Construction Regulation 20(1)
Bulk mixing plant operator	Construction Regulation 20(2)
Hand tools	
Traffic Officer	

Copies of signed appointment letters and the proof of competency must be provided in the H&S file.

No work involving any of the listed appointments may be performed without the knowledge and approval of an appointed competent person.

(b) H&S Personnel Resourcing

H&S personnel appointed to the project will have the necessary core competencies, skills and experience to effectively manage all aspects of H&S on the project. Contractors shall ensure their H&S personnel are appointed as follows:

• Principal Contractor:

A full-time Construction Health and Safety Manager that shall have at minimum the following:

- A minimum of 5 years post-graduate experience in Health and Safety including Construction Management experience with 5 years post professional registration.
- BSc Degree/ B-Tech Degree/D in Safety Management.
- South African Council for the Project and Construction Management Professions (SACPCMP) professional registration certification (or at least acceptance of application).
- Sound knowledge of the Occupational H&S Act and Regulations (e.g. Legal Liability)
- Sound knowledge of Hazard Identification and Risk Management Processes (e.g. HIRA)
- Sound knowledge of incident investigation processes and their causation phenomena (e.g. RCAT / TCAM / etc.)
- Auditing and inspection training

Full-time H&S Officers at the ratio of 1:50 and that shall have at minimum the following:

- years relevant experience as a H&S Officer of which 3 years' experience to be on similar construction projects
- Successful completion of a H&S Supervisors Training Course (e.g. IRCON)
- Sound knowledge of the Occupational H&S Act and Regulations (e.g. Legal Liability)
- Sound knowledge of Hazard Identification and Risk Management Processes (e.g. HIRA)
- Sound knowledge of incident investigation processes and their causation phenomena (e.g. RCAT / TCAM / etc.)
- One or more of COMSOC 2, NEBOSH certificate, SAMTRAC or equivalent certificates

- Auditing and inspection training
- Proof of SACPCMP registration of the H&S Officer must be provided.

- Contractors:

The same qualifications and ratio apply regarding H&S Officers, but where more than one H&S Officer is appointed, one must be appointed as a H&S Manager. The H&S Manager's abovementioned qualifications and experience will apply.

The Engineer will evaluate all Contractor's organograms, CV's and resourcing during the tender evaluation stage and reserves the right to require the appointment of additional H&S staff.

Where a significant portion of work is contracted, a H&S Manager shall be appointed.

All key appointments will be approved by the Engineer and any changes of appointees or appointments must be communicated to the Engineer and agreed upon before being implemented. The Engineer reserves the right to conduct interviews with proposed key appointees.

(c) General Resourcing

Each Contractor shall ensure that where work is conducted over multiple fronts, adequate control is maintained over all disciplines including OHS, environment, social and quality.

(d) Authority to Stop Work

All project personnel have the authority to place H&S considerations above other priorities. This extends to the authority of not doing something, unless it can be done safely, without posing risk to themselves, others or the environment.

This authority must be communicated to all project personnel at project inductions and regularly reinforced during group gatherings, toolbox and pre-start meetings. The Contractor must provide proof in his induction content that this authority is addressed.

Everyone has the right to complete an Incident Report, identifying any activity that they consider unsafe.

H&S LEGAL AND OTHER REQUIREMENTS

The Employer / Engineer shall appoint a Contractor / contractors, who may in turn appoint other contractors.

• Contractors' primary legal obligations are to:

• Comply with all relevant H&S legislation

• Comply with any specific obligations imposed on duty holders

• Comply with all contractual requirements for H&S

• Comply with relevant industry standards and codes of practice contingent with the scope of works

• Consider the lessons learned and recommendations from various authorities with respect to the scope of works

B9205 H&S PERFORMANCE MEASUREMENT

(a) Targets and Key Performance Indicators

H&S KPIs have been established for the project to ensure that both lagging and leading indicators are being measured and tracked. The Table below defines the KPIs for the project. The Principal Contractor shall communicate status of KPI's to the Engineer and other stakeholders monthly with incidents being reported forthwith.

The Principal Contractor will review the project statistics at the end of each reporting period

TABLE B9205/1: H&S KPI'S

Indicator Type	Criteria	Responsibility	Measure
Leading indicators	External audit of specific project H&S management system	Principal Contractor	Within 30 days of mobilisation and then annually 90% compliance
	Internal self-audit (monthly)	Principal Contractor	> 90% compliance score to be achieved
	Audit of Contractors	Principal Contractor	> 85% compliance score to be achieved - Contractors achieving <80% = stop work
	Training needs analysis and compliance All applicable staff	Employer, Engineer, Principal Contractor and Contractors	Achieve 90% compliance with identified training requirements within 2 months of mobilization Achieve 100% compliance with identified requirements by the end of the 3rd month *Statutory training requirements to be at 100% at all times.*
	Contractor H&S audits	Engineer / Engineer's representative	Within 30 days of mobilization and then monthly
	H&S management plan review	Contractor	Six-monthly
	Planned Task Observations (PTO's)	Contractor	100% execution of scheduled PTO's
	Safety interactions	Consultants Contractor	100% execution of scheduled interactions
	Pre-start meetings / Daily Safe Task Instructions (DSTI's)	Contractor	For each work team before each task commences
	Tool box talks	Contractor	Weekly

Indicator Type	Criteria	Responsibility	Measure
	Contract H&S committee meetings	Contractor	Monthly
	Method statements, Risk assessments and Safe Work Procedures	Contractor	All tasks at all times
	Hazard and near miss reporting.	All personnel	100% of all near misses reported
	Deviation Register	Contractor	Maintained daily - 100% of critical actions closed out by nominated date - Weekly reporting of status
	Suggestions and initiative schemes implemented	Contractor	Monthly suggestion topic rewarded
	Repeat significant deviations (with the potential for medical treatment or worse)	Contractor	Nil repeat significant deviations
	Repeat significant incidents (with a classification of medical treatment or worse)	Contractor	Nil repeat significant incidents
Lagging indicators	Fatalities or serious disabling, immobilization injury	All stakeholders	0
	Disabling injury frequency rate (DIFR)	All stakeholders	0
	Lost time injury frequency rate (LTIFR)	All stakeholders	0
	Medical treatment injury frequency rate (MTIFR)	All stakeholders	≤0.5
	Total recordable injury frequency rate – All injuries	All stakeholders	≤1.5
	Recordable Case Rate	All stakeholders	≤1
	Occupational illness	All stakeholders	Zero
	Property damage (PD)	All stakeholders	≤2 per month for project

H&S COMMUNICATION AND CONSULTATION

(a) External Communication

External communication is any communication across the boundaries of the Project, including communication:

• To and from any regulatory authorities

• To external stakeholders, including the community

• To and from parent organisations

• To project sponsor/s

The Engineer will establish, maintain, and provide the initial contact point for communication and reporting requirements with external stakeholders.

(b) Internal Communication

The communication of H&S matters occurs via the Principal Contractor's Construction Manager and the Project Manager.

The Construction Manager will ensure that appropriate communication and consultation processes are established and maintained to facilitate effective consultative mechanisms involving workers, Contractors, staff and H&S representatives.

The following table shows the consultation and communication mechanisms that will be utilised on the project. All consultation and communication mechanisms shall be documented, and attendance registers / proof shall be kept where necessary.

TABLE B9206/1 CONSULTATION AND COMMUNICATION MECHANISMS

Strategy	Purpose	Participants	Frequency
DSTI's	Forum for planning of daily site activities, opportunity to discuss H&S hazards, risks, previous incidents, changes to work / areas. Opportunity for workers to ask questions.	All contractor personnel	Every shift
Toolbox talks	Discussion on site H&S performance and presentation of H&S topics.	All contractor personnel	Daily
Contractors H&S meeting	The project progress meeting shall include the discussion of the project's H&S performance, including incidents and audit outcomes, the suitability of the project's H&S system arrangements and to provide strategic direction. The identification of opportunities for improvement to ensure a continuation of the level of effectiveness of their own HSMPs and control of risks associated with forthcoming activities. Incident prevention and strategies to achieve zero harm.	Management and H&S staff	Weekly / Monthly
H&S committee	To discuss H&S performance, issue resolutions, improvements.	Representatives from all key stakeholders including elected H&S representatives and management representatives	Monthly

Strategy	Purpose	Participants	Frequency
H&S interactions (Visible Felt Leadership)	To have a positive safety interaction with workers in order to reinforce the correct culture.	Contractors' Construction Manager, Supervisors, Project Managers, Engineer, Employer and other line management.	According to approved schedule
H&S notice boards - Principal Contractor to supply at site offices & laydown areas, eating areas and camp sites	To display and communicate H&S related information Reports of significant incidents H&S alerts Milestones in H&S performance Emergency preparedness information Policies Traffic management plans *(list is not exhaustive)*	Contractors	To be updated as information is provided
H&S alerts	To communicate incidents, near misses and hazards that has occurred.	Issue to all project personnel	As made available
Safety stand downs	To enable the project manager and other relevant leaders to address the workforce group.	All project personnel including all Contractors.	As required. Following significant events To celebrate success

(c) Safety Moment

Every formal meeting with 4 or more attendees shall commence with sharing a safety moment. A safety moment is a process whereby relevant H&S information is shared with the group as a constant reminder of the implemented safety culture. Examples can be work related or not.

(d) Disciplinary Actions

Non-conformance with project H&S requirements may result in disciplinary action which may include removal from the project. The following violation categories shall be used:

• Minor safety violation:

o The violation is likely to cause physical harm, or equipment damage.

• Major safety violation:

o The violation involves imminent danger to a staff member, others, equipment damage or work stoppage.

Incidents involving but not limited to the following issues shall warrant escalation of the agreed project disciplinary procedure which will be drafted by the Contractor for this project:

• Fatal risks identified on the project (specific fatal risk controls identified through the Bow-ties)

• Drug and alcohol abuse at the worksite

• Violence

• Breaching of isolation and tagging procedures

• Tampering / misusing or damaging of safety equipment

• Speeding

• Any breach where a blatant disregard of H&S requirements is demonstrated (e.g. ignoring "no-go" items on checklists

• Repeat high risk / serious deviations

• Horse-play

• Spreading of infectious disease – e.g. COVID-19

Instant removal (post investigation) shall apply for a deliberate high-risk action / unsafe behaviour.

Contractors will also be required to have their own disciplinary procedures and shall submit these procedures for review and approval by the Engineer.

(e) Visible Felt Leadership (VFL)

A positive safety culture will be a focal point for the successful delivery of the project H&S management program.

It is intended to have all Contractors implement and control the correct leadership behaviour that recognises both safe and at-risk behaviours. The program shall include but not be limited to:

• Routine in-field safety interactions and conversations with project personnel at their workplace to discuss safe and at-risk work practices as they apply to the work being undertaken

• Immediate recognition of safe behaviours

• Immediate agreement on what corrective actions are required to address at risk behaviours.

The purpose of VFL is to influence:

• A high level of H&S awareness amongst the site workforce and management

• Regular recognition and praise for safe practices

• Immediate modification of at risk behaviours

The management levels required to participate in VFL's (safety interactions) are the Contractors' Construction Manager, Supervisors, Project Managers, other line management, as well as the Engineer and Employer Management. This will be according to a schedule that each Contractor is responsible to include as part of their HSMP.

(f) Reward and Incentive Schemes

In their health and safety management plan, Contractors must propose a non-monetary reward and incentive schemes in support of the Contract safety culture and H&S performance improvements. The reward and the schemes must be designed and implemented so that H&S is not compromised in favor of maximising any material or financial reward.

HAZARD IDENTIFICATION AND RISK MANAGEMENT

H&S risk management is a systematic method of identifying H&S hazards and existing controls which are then assessed (qualitatively or quantitatively) to evaluate the level of risk relating to a particular hazard and to determine the best control method to achieve a consistent tolerable or "as low as reasonably practical" (ALARP) level of risk for each hazard across the project. The site Health and Safety Officer shall have the authority to, if considered necessary, halt the execution of work on site and prohibit access by personnel.

Hazard identification and risk management at various levels and stages of a project are:

• Level 1: Baseline risk assessment and risk register

• Level 2: Task specific risk assessment and coupled to safe work procedures

• Level 3: Continues / pre-task hazard assessment (DSTI's)

• Level 4: Issue based risk assessments (e.g. after incidents)

• Level 5: Specialised studies (e.g. Hazop's)

The format of the risk assessment and rating matrix shall conform to at least the following standard:

• Clear task identification and unique risk assessment number

• Clear individual task steps breakdown listed

• Each task step is assessed to identify the associated hazards – refer to definition of hazard in this document

• Each hazard or combination of hazards are assessed to identify what can go wrong or cause resulting incidents

• For each of the resulting potential incidents, identify and describe all potential consequences

• Each consequence must be rated separately

• Use at least 5x5 matrix (inclusive of likelihood and consequence) to rate the risk

• At least 4 risk categories shall be identifiable, namely low, moderate, high and extreme

• High ratings shall indicate high risk, and low rating a low risk

(a) Level 1: Baseline Risk Assessment

Each Contractor shall ensure that all operations and activities applicable to the project are covered by a formal high-level Baseline Risk Assessment process where potential hazards are identified, analysed, evaluated, controls implemented (applying the hierarchy of controls) and communicated to relevant parties involved. Consideration should be given to the project Baseline Risk Assessment.

Each Baseline Risk Assessment shall be reviewed regularly by each of the relevant Contractor during the life of the project and will remain the higher-level document pertaining to identification of hazards.

(b) Level 2: Task Specific Risk Assessments

A task specific risk assessment is the examination of steps within a given job or task, identification of hazards associated with the task and evaluation of controls applying the hierarchy of controls.

Task specific risk assessments must be developed by work crews for all work-related task. Provided there are no changes to the work group, work process, work environment or to plant or equipment a risk assessment may remain valid for the duration of the project but must be reviewed daily by the work group (via the DSTI process).

The outcome of the task specific risk assessment needs to be communicated to relevant parties (communication attendance register) and copies available on site at all times where the work is performed.

The nominated responsible people must identify tasks for analysis and conduct task-specific risk assessments with their teams relevant to the tasks or activities. Each task shall have its own risk assessment. If an existing task risk assessment is being used, it shall be reviewed in detail prior to being reapplied.

The appointed Risk Assessment Competent Person must facilitate risk assessments, not perform them on his own. Task Risk Assessments must be signed off by the Risk Assessment Competent Person and relevant construction management and supervisor appointees.

Each Contractor shall maintain a register of approved risk assessments. No work shall commence without a Principal Contractor reviewed risk assessment.

Risk assessments that are not approved during the health and safety plan approval stage shall be submitted to the Engineer for review and approval 14 days prior to commencement of the activity.

The Principal Contractor will provide the necessary training to own staff and for the Contractors to correctly conduct task risk assessments.

(c) Level 3: Continuous Risk Assessments / DSTI's

A Daily Safe Task Instruction (DSTI) is a simple and effective tool for the management of hazards and risks within the workplace. It enables Supervisors, work teams and individual employees to quickly assess a situation for hazards and to introduce controls to make the situation safe. A DSTI's is based on a simple checklist / evaluation tool that is completed prior to commencing work. It can be made task specific, rather than using a generic one for all activities.

All Contractors will be trained in the use of the DSTI's as part of the project induction. The DSTI shall be completed on a daily basis prior to commencing work related tasks. Due consideration must be given to changes in the work environment e.g. terrain, weather and health hazards when conducting the DSTI's.

Where a DSTI identifies a hazard or risk not previously identified in a risk assessment, the Supervisor or nominated person shall ensure the existing risk assessment is amended and revised as necessary.

(d) Level 4: Issue-based Risk Assessment

An issue-based risk assessment will be conducted as soon as an issue arise. They are appropriate for the management of change in the workplace, for example:

• When a near-miss incident occurred

• New machinery / equipment is introduced into the workplace

• Processes or procedures change

• New knowledge regarding a chemical substance comes to light, to name a few

The same technique and approach are applied as when task specific risk assessments are conducted. The outcomes of all issue-based assessments will be incorporated into the baseline risk assessment. Relevant task specific risk assessments need to be drafted or updated where relevant.

(e) Level 5: Specialised Studies

Specialised studies must be facilitated by a specialist risk person utilising specialist risk management tools and methods. This can typically include critical H&S risks, strategic business management, project risk workshops, Hazop studies, Hazcon studies, change management and safety in design issues where controls are required to achieve ALARP and / or approval to proceed must be given by the authorised competent person.

A Contractor will be instructed to convene the relevant risk workshop / studies.

(f) Potential Hazards / Near Miss Reporting

All identified potential hazards and near misses will be reported, in addition to the hazard identification and risk assessment processes already described, using a form specifically drafted for this purpose by the Contractor. The form must be customised / adjusted to suit project specific needs. The form can be filled in by any person, signed off by the relevant Supervisor and submitted to the Principal Contractor's Construction Manager. Action items arising that need a follow up will be transferred to the Deviation Register for tracking, close out and if required, for verification.

(g) Risk Assessment Reviews

Each Contractor shall conduct and document risk reviews to support their planning process. Planned review dates can be included in the Risk Assessment Register.

(h) Constructability Risk Reviews

The project H&S specialist and / or the site health and safety manager shall attend all planned constructability reviews.

Contractor H&S personal as well as the construction supervisor shall be required to attend the constructability review as well.

(i) Construction Vehicle, Mobile Plant and Equipment Risk Assessments

To ensure an item of plant is fit for its purpose, Contractors shall develop or obtain documented hazard identification, risk assessment and risk control processes for all construction vehicles and mobile plant (including hire equipment and lifting machines) as follows:

• Before first use at the project site

• After major service

• After modification

• Before use in an unusual operating mode

Such risk assessments must be undertaken by suitably qualified and experienced persons, documented and records retained by the Contractors. Risk assessments for equipment mobilising to the project site shall consider:

• Loading & off-loading of the equipment

• Entanglement of lifting slings or other loose items in moving parts

• Crushing or striking by moving or falling objects

• Cutting or stabbing by sharp objects

• High pressure fluids

• Electrical shock or burns

• Earth leakage devices

• Burns from hot or cold surfaces

• Slips, trips and falls

• Ergonomic design of access and egress (three points of contact to be maintained)

• Seating (including operator safety restraints)

• Vibration

• Noise

• Exhaust fumes

• Operating instruction and warning signage

• Functionality of safety devices

• Compliance to legal requirements

During the assessment of risks, the identification of hazards shall consider:

• When operating under normal operations

• Abnormal or unusual operations

• Maintenance and servicing operations

• Decommissioning of plant or equipment

Particular attention will be given to documented plant and equipment risk assessments when developing control measures to manage procurement, operations, servicing, maintenance and replacement / decommissioning of plant and equipment.

Each Contractor shall ensure that plant and equipment risk assessments are recorded and retained in their respective registers at the project site, and made available to all persons and for audit purposes.

The Engineer reserves the right to have any of the Contractors remove items of plant from the project site that does not comply with the requirements of this H&S Specification.

All plant and equipment need to be inspected and approved by the Principal Contractor's GMR (2) appointee prior to being brought onto the premises. The process and documentation to be used to form part of the Principal Contractor's HSMP and File. This will apply to all construction vehicles, mobile plant, and machinery, lifting machines, equipment and specialised tools.

A dossier containing the following information shall be available for and kept with each respective construction vehicle, mobile plant, lifting machine, crane or similar plant:

• Updated and signed risk assessment and safe work procedure

• Copy of latest inspection report

• Permit issued by workshop (where applicable)

• Maintenance plan / schedule

• Test certificate (where applicable)

• Pressure test certificate (where applicable)

• Comprehensive report in the case of lifting machine

• Rope certificate in the case of lifting machine

• 3, 6 and 12 monthly inspection in the event of slings, chains, hooks, or similar

METHOD STATEMENTS AND SAFE WORK PROCEDURES

Each Contractor shall compile method statements as described below. Method statements will be accompanied by all relevant risk assessments, safe work procedures and planned task observations (PTO's).

Method statements and safe work procedures that are not approved during the health and safety plan approval stage shall be submitted to the Engineer for review 14 days prior to commencement of the activity.

Method statements shall be developed for all tasks, and shall include:

• Specific sequential steps / instructions on how to perform the task

• Reference to required plant, tools and equipment

• Potential hazards

• Control measures relating to hazards

• Reference to safe work procedures and risk assessments for that specific task

• Reference to applicable legal appointments

The following activities shall be addressed in method statements:

• Clear & Grub

• Site establishment

• Location of underground services

• Making excavations

• Work within excavations

• Opening up of and working within previously backfilled excavations

- Working at heights
- Work in confined spaces
- Work underneath power lines
- Blasting
- Hot work
- Lifting operations
- Loading / off-loading heavy loads
- Cut & Fill operations
- Paving
- Welding
- Re-ballasting
- Re-sleepering
- All temporary works
- Construction of culverts
- Steel fixing
- Pouring of concrete
- Work within traffic accommodation
- Construction of retaining wall
- All maintenance activities

The Contractor shall compile safe work procedures for all activities that will be conducted, as described below.

Safe work procedures shall include reference to:

- The specific method statement/s
- Control measures to mitigate or reduce risk

• Supervisory requirements, including level and frequency

• Responsibilities of competent persons

• Responsibilities of legal appointees
• Required personal protective equipment

• Required plant, tools and equipment

• Inspection regime relating to plant, tools and equipment

• Relevant risk assessments and the task specific PTO (planned task observation)

• Medical certificates of fitness (specific requirements to be referenced)

• Emergency management procedure, and any special arrangements required for the task

WORK PERMITS

Contractors shall develop and implement a "Permit to Work" system for all high-risk work, which must be approved by the employer before its implementation. Persons who may issue Permits to Work should be properly trained in hazard identification, assessment and control. The Issuer of the Permit to Work should ensure that the persons assigned to perform the work are qualified and properly trained. All hazards and control measures should be explained to the persons assigned to the job prior to the commencement of the work. Subsequently, precautions and personal protective equipment must be understood and used by the workers. The "Permit to Work" system must ensure that all foreseeable risks are considered and that the required control measures to complete the job safely have been implemented before the job can proceed.

High risk work includes the following, but are not limited to:

• Hot work

• Confined Space Work

• Work at heights

• Excavation work

• Radiation / radioactive material

• Explosive Power Tool Use

- Blasting work
- High Voltage work
- Work in a hazardous area
- Welding

OPERATIONAL CONTROL

The following table lists (but not limits) those activities for which safe work procedures will be required. It also refers to supporting documents relating to that safe work procedure.

(a) Operational Control - Health

TABLE B9210/1 OPERATIONAL CONTROL – HEALTH

SWP Topic	Scope / Summary	Supporting Documents
Blasting Explosives	The purpose of this SWP is to establish the minimum H&S requirements for the management of blasting and explosives. This SWP applies to all activities that may involve the management of explosives as part of blasting activities. The focus of the explosives aspect of the procedure is the management of risks associated with use of the explosives. A permit system must be incorporated.	Blast Management Plan Form
Hazardous chemical substances	This SWP applies to all activities related to where the contractor is storing, handling, managing a carrying out work involving dangerous goods or hazardous chemical substances. All intended dangerous goods or hazardous chemicals need to be evaluated in terms of their MSDS and the results included in the relevant risk assessments and SWP's. Give attention to specialized PPE. All dangerous goods & hazardous chemicals need to be approved by the appointed competent person via the Approval Application Form. No carcinogenic or mutagenic substance will be allowed on the project. Dangerous goods / Hazchem storage areas need to be inspected weekly. Identified training needs are to be included in the training needs analysis.	MSDS Approval Application Form Medical surveillance plan
Construction Camps	This SWP applies to all activities related to construction / site camps and will include the following: • Water for general use, drinking and cooking • Sanitation and wastewater treatment • General hygiene • Food safety • Appropriate signage (potable vs non-potable)	Facilities Hygiene Checklist Food Safety Checklist
Dust Management	This SWP applies to all activities that generate or has the potential to generate dust. Dust suppression measures.	Dust Management Plan Form

SWP Topic	Scope / Summary	Supporting Documents
Ergonomic risk factors	The purpose of this SWP to manage and control all activities that involve ergonomic risk factors. This includes but is not limited to: • Pushing, pulling, lifting and carrying of loads • Using pneumatic, petrol, electric, percussive and high-water pressure hand tools • Operating earth-moving plant and driving trucks over uneven ground • Leaning on a vibrating surface • Repetitive movements	Tasks Risk Assessment Form
Fatigue Management Abnormal working hours	The purpose of this SWP is to establish the minimum H&S requirements for managing fatigue related to project activities. These include, but are not limited to work that requires: • Normal scheduled activities • Intense concentration or manual activity, • Shift work, • Night work, • Driving vehicles	Fatigue Hazard Checklist Monthly Labour Return Form
Fitness for Work	The purpose of this SWP is to ensure that workers perform their activities in a fit state.	Risk profile and medical fitness certificates
Hot Work, Cutting and Welding, Brazing	This SWP applies to all activities involving hot work, cutting and welding carried out. This document must reference the confined space safe work procedure. A permit system must be incorporated.	Hot Work Permit Welding Fume Assessment Form
Noise Management and Hearing Conservation	This SWP applies to all plant, systems and work areas where there is a risk of hearing loss from noise exposure. Examples include but are not limited to: Operation of noisy plant Working in an area where there is noisy plant Workers / Contractors who have to pass through noisy areas	Hearing conservation plan
Occupational Hygiene and Infectious disease (COVID-19) management	The purpose is to ensure the workers maintains a working environment that is safe and without risks to the health of workers and to take such steps as may be reasonably practicable to eliminate or mitigate occupational hygiene hazards or potential hazards. To ensure that workers on site are not exposed to diseases that are harmful to their health. To curb the spread of infectious diseases, specifically COVID-19. The following must be addressed: • Assessment pf potential exposure • Symptoms screening plan • Education and training	Management Plan Assessment of potential exposure Health Monitoring and Symptoms screening plan and register PPE issue Register Medical Surveillance and Testing plan

SWP Topic	Scope / Summary	Supporting Documents
	• Healthy and safe work practices – hand washing and sanitizing, cleaning of surfaces • Health Care Support on site – managing confirmed and suspected cases on site • Minimizing exposure – social distancing, screens, separation of workforce and work area • PPE	
Personal Protective Equipment	This SWP applies to all activities where personal protective equipment is required on the project. It provides guidance on the selection, use, training and maintenance of personal protective equipment.	Project Personal Protective Equipment Register
Working Outdoors or in Hot or Cold Environments	This SWP applies to all activities where workers are involved in working outdoors or in hot or cold environments including: • Work in hot climatic conditions • Work in cold climatic conditions and night work	Working in Hot or Cold Environment Form
Poisonous insects, animals and plants	The purpose of this SWP is to address the hazards and establish control and emergency requirements.	Assessment of potential exposure
Radio Frequency Exposure	This SWP applies to all areas that present a risk to the health of workers and the Contractor through radio frequency exposure and will address susceptible employee groups specifically.	Assessment of potential exposure Medical surveillance plan Health Monitoring Plan Form

(b) Operational Control - Safety

TABLE B9210/2 OPERATIONAL CONTROL – SAFETY

SWP Topic	Scope / Summary	Supporting Documents
Access Control	The purpose of this SWP establishes the minimum requirements for project personnel and vehicles accessing the work site along the entire alignment. It also covers initial access permits to a new area / front and should consider all relevant disciplines especially environmental and social requirements. It shall also regulate the control of public and animals, as well as designated entrances, flag personnel and arrangements over weekends and holidays. Standard operating procedure to be implemented for landings (on landing strip).	Workplace Inspection Checklist Access permit
Access Roads	This SWP applies to all activities relating to access roads and shall include construction and/or use and maintenance of: • Access roads to site • Standard gravel roads • Basic farm roads It shall also consider inaccessibility to certain locations due to natural terrain and distances to be travelled to borrow pits, water being sourced over long distances due to drought conditions, temporary access roads to power lines, installation and potential excavators, pumping of water ponding, and traffic accommodation.	Access Permit
Barriers, Signage and Delineation	The purpose of this SWP is to establish H&S requirements for when carrying out design and installation of barriers, signage and delineation.	Barriers, Signage and Delineation Checklist
Construction Camp Management	The purpose of this SWP establishes the minimum H&S associated with occupying a project camp. This SWP shall include fire safety rules, protection from wild animals, prohibition of weapons and security and water and sanitation. All personal sensitivities based on gender, culture, religion and social background must be respected at all times.	Camp Set-up Checklist
Confined spaces	This SWP applies to all activities where a person may enter a confined space. Diesel fumes should enjoy special emphasis as well as removing a certain amount of floor tiles to eliminate confined spaces. The Contractor must introduce a permit system.	[RD1] Confined space classification form [RD2] Project confined space register [RD3] Confined space permit to work O2 instrument calibration and testing
Construction vehicles and mobile plant.	This SWP applies to all activities relating to the management and operation of construction vehicles and mobile plant. Roll-over protection shall be required for all construction vehicles.	Powered Mobile Plant pre-mobilisation Checklist and Register, Pre-Start Inspection Checklist

SWP Topic	Scope / Summary	Supporting Documents
	Injury to the personnel or the general public remains a risk and must be managed all the times.	[RD4] Risk Assessment and movement plan form
Cranes and hoists	[RD5] This SWP applies to all activities relating to the management and operation of cranes and hoists. [RD6] The following is required: • Only appropriately qualified personnel may operate a crane. • At least one additional person must be present to monitor the location of the crane load and provide movement cues. • No person may be allowed under the path of the crane load unless absolutely necessary to perform the lifting operation. • Only duly certified lifting slings may be used. The Contractor must keep a register of slings and must inspect slings in accordance with legal requirements. • All rigging must be done by a qualified and suitably experienced rigger. • The Contractor must comply with all legal requirements.	[RD7] Crane and hoist pre-mobilisation checklist [RD8] Crane and hoist pre-start inspection checklist [RD9] Hoist pre-start inspection checklist [RD10] Crane and hoist register template [RD11] Lifting plan template form [RD12] Vehicle-powered mobile plant Movement plan template form
Drugs and Alcohol Management	The focus of the procedure is the management of drugs and alcohol, and the applicable minimum standards, testing methods and management of results.	Project Drug and Alcohol Testing Program Form
Electrical Portable Power Tool Use	This SWP applies to all activities relating to the management and use of electrical portable power tools.	Electrical Portable Power Tool Register
Excavation and Trenching	This SWP applies to all excavation, trenching, digging and ground penetration activities. Limited space for control measures such as shoring should be considered. A permit system must be incorporated. Existing services to be identified. Excavations to be conducted by hand until existing services have been identified.	Excavation and Trenching Permit Inspections checklists
Explosive power tool use	This SWP applies to all activities where explosive power tools (EPT) are operated. Examples of when explosive power tools may be used include fixing formwork to concrete, suspending ceilings, fixing conduits, and fixing steel decking to structural steel.	Explosive power tool use
Facilities and First Aid Provisions	This SWP applies to all requirements when planning for facilities and first aid provisions.	First Aid Risk Assessment Form
Fire Prevention and Response	The purpose of this SWP is to establish the minimum H&S requirements to prevent fire. This procedure must be aligned to the site emergency response procedure.	Project Fire Fighting Equipment Plan Checklist Emergency and First Aid Inspection Checklist

SWP Topic	Scope / Summary	Supporting Documents
Fixed Ladders Steps and Elevated Walkways	This SWP applies to all activities relating to the design, installation and / or use of fixed ladders, steps and elevated walkways.	Prevention of Falls and Falling Objects SWP Permit to Work SWP
Heavy-vehicle operation	This SWP applies to all activities relating to the management and operation of all heavy vehicles.	[RD13] Heavy-vehicle pre-start inspection checklist [RD14] Lifting plan template form [RD15] Vehicle and PMP movement plan template form Heavy-vehicle register
Isolation, lock-out, and tag-out	[RD16] The purpose of this SWP is to control hazards associated with working on live systems, and to control energy sources, before accessing an area or using equipment. This SWP applies to all activities that involve the isolation, lock-out, and tag-out of energy sources (electrical lock-out) and movement lock-out. The Contractor must implement shutdown protocol during installation of electrical equipment. Shutdown and lock-out may be done only by the Employer or personnel authorised by the Employer. The Contractor must introduce a permit system and consider using back-up generators.	[RD17] Isolation management plan register
Journey Management	The purpose of this SWP is to control the hazards related to travelling long distance / time. This SWP applies to all driving activities that are carried out as part of the project and are > 2 hours in duration.	Journey Management Plan Template Form
Lifting equipment	The purpose of this SWP is to ensure the proper use and maintenance of lifting equipment. The SWP applies to all activities relating to the management, operation, and use of lifting equipment, including cherry pickers and boom lifts.	Pre-start lifting equipment checklist
Light Vehicle Use	The purpose of this SWP is to control all activities relating to the management and use of light vehicles as part of the project. Roll-over protection will be required for all construction vehicles. The use of motorbikes/quadbikes will be prohibited. 4x4 training of contractor's personnel	Driver Handbook Drug and Alcohol Policy Operational Practice – Travel Policy Light Vehicle Pre-Start Inspection Checklist
Low-voltage electrical work and testing	The purpose of this SWP is to control all activities relating to the management and operation of low-voltage (LV) electrical work and testing activities.	LV earthing and testing equipment register
Materials Loading and Unloading	The purpose of this SWP is to control the following materials loading and unloading activities Loading and Unloading of all materials and equipment onsite Safe operation of all lifting equipment to achieve the above	Materials Loading and Unloading Checklist Pre-Delivery Checklist

SWP Topic	Scope / Summary	Supporting Documents
	Safe operations with loading and unloading areas	
Mobilisation and Site Establishment	The purpose of this SWP is to address the minimum H&S requirements, and outline the required standards for workers and the Contractor when managing and undertaking mobilisation and site Establishment activities.	Project Risk Register Safety Management Plan Template
Natural weather occurrences	The purpose of this SWP to address the hazards and establish minimum control requirements for natural weather occurrences.	Assessment of potential hazards
On-site Refuelling, Servicing and Maintenance	The purpose of this SWP to address the hazards and establish minimum control requirements for re-fueling, servicing and maintenance of vehicles and plant. Re-fueling includes the following: At a fixed or mobile location where minor storage of fuels are present (e.g. diesel) At a fixed location where fuel is stored in a bulk storage tank (diesel storage tanks) At locations on a project site where fuel is stored in mobile bulk storage tanks	Dangerous Goods and Hazardous Chemicals Register
Portable ladders and work platforms	This SWP applies to all activities relating to the use of portable ladders and work platforms.	Portable ladder and work platform inspection checklist
Radio frequency Interference	This SWP applies to all equipment, plant, vehicles, WAS sub-element components, electrical and electronic devices etc. which may cause RFI's and will include equipment and plant to be approved prior to start of construction, permits and toolbox talks.	Permits Toolbox talk records
Prevention of Falls and Falling Objects Working at heights	This SWP applies to all working at heights activities carried out on the project whenever work is performed above a permanent floor level, and / or the situation exists where tools, equipment or anything else can fall or be dropped from any height. It covers requirements for: • Designing, constructing, using, inspecting, servicing, and disposing of work platforms • Falling into manholes, trenches, etc. • Doing SWPs or risk assessments for all work done at heights • Implementing control measures using a hierarchy of controls • Using fall-prevention, fall-restraint, and fall-arrest equipment The Contractor must implement a permit system	Personal Fall Protection Equipment Register Working at Height Permit
Scaffolding, formwork, support work, and other temporary works.	This SWP applies to activities involved in the design, installation, use, and removal of scaffolding, formwork, support work, and other temporary works.	Prevention of falls and falling objects SWP
Project site security	This SWP applies to all activities relating to project site security and possible interference by animals on site. Security procedures must be approved by the Engineer.	Project site security risk assessment form

SWP Topic	Scope / Summary	Supporting Documents
Access by community Access by domestic or farm animals	Site security personnel must implement relevant security procedures.	Assessment of potential hazards
Steel-fixing and structural steel works	This SWP applies to all activities relating to steel-fixing and structural steel works on the Contract.	Assessment of potential hazards
Temporary Electrical Installations	This SWP applies to all activities relating to the management and operation of temporary electrical installations. This include installations in the construction camps.	Temporary Electrical Equipment Register COC
Traffic Management/ Man machine Interface	This SWP applies to all activities that may involve the interaction of vehicles, plant, workers and pedestrians. The focus of the procedure is the management of risks associated with ensuring that traffic hazards are adequately identified and controlled, and that obligations associated with the use of public roads, and any roads associated with access to and on site.	Traffic Management Checklist Traffic Control Plan Inspection Checklist
Transport and Restraint of Plant and Supplies	This SWP applies to all activities that may involve the transport of plant and supplies. The focus of the procedure is the management of risks associated with ensuring that adequate load restraints are used for all loads, and that obligations associated with the use of public roads, and any roads associated with access to the site.	Transport and Restraint of Plant and supplies Inspection Checklist
Working Alone and or in Remote Locations	This SWP applies to all activities carried out alone and / or in remote locations as part of the project.	Journey Management Plan Form Check In / Out Form
Working near a Body of Water	This SWP applies to all activities that involve working near a body of water, such as: Dredging to prepare for the erection of a structure Working adjacent, above, within or near dams, a water storage tank, boreholes etc.	Pre-Start Working on, Over or Near a Body of Water Checklist
Working Near Overhead Power Lines	This SWP applies to all activities relating to work near an overhead power line, including: Overhead electric distribution lines on poles, transmission lines on towers Dedicated overhead electric lines used by public transport authorities (e.g. tramways and railways) Privately owned overhead electric lines The use of dummy lines shall be incorporated into this SWP	Work Near Overhead Powerlines Risk Assessment Template Form Vehicle and Powered Mobile Plant Movement Plan Template Form

INCIDENT MANAGEMENT

All incidents and near misses must be reported immediately to the Contractor's Supervisor and the Principal Contractor's H&S Officer in particularly if there is:

• An actual lost time or medically treated injury

• An incident that had obvious potential to be a lost time or medically treated injury

• A recordable spill on an unsealed area

• State reportable incidents

• A major event

The H&S Officer and Supervisor will notify the H&S Manager and Construction Manager who will notify the Engineer, who will then inform the Employer's representative of incidents.

Whilst all reported incidents will be investigated, the level of investigation depends on the severity / potential severity of the incident. The following table describes the severity level and the corresponding investigation level.

TABLE B9211/1 LEVEL OF INVESTIGATION GUIDE

SEVERITY/POTENTIAL SEVERITY LEVEL OF THE INCIDENT	GUIDE	LEVEL OF INVESTIGATION
Low - A spill less than 50 L and no threat to water body	First aid cases Medical treatment cases	5 Why or similar
Medium - A spill between 51 - 1000 L and not threat to water body.	Less serious Lost time incidents	TapRoot / ICAM or similar
High - A spill above 1000 L and has entered or threatening water body.	Lost time incidents, disabling injury/ illness and fatalities	TapRoot / ICAM or similar

All incidents will be recorded in the project's electronic incident register in order to draw trends from the information. The register will be the source for statistical monthly reports. The Principal Contractor's H&S Manager / Officer will maintain the register. All Contractors are required to keep their own records and statistics as well. However, Contractors are required to produce information and statistics in accordance with the project requirements.
A flow chart detailing the incident investigation process shall be provided as part of the Principal Contractor HSMP.

(a) Reporting to Authorities

The following Incidents have to be reported to the regulator:

• Fatality and all other incidents referred to in Section 24 & Section 25 of the OHS Act.

Incidents reportable to the regulator are of serious nature and should follow the protocol below:

• Make safe the area immediately to prevent further injury or incident

• Paramedics notified if injured parties are involved

• Barricade area off to prevent entry or disturbance of incident site

• Engineer notified (a telephone call will suffice) followed by written confirmation

• Preliminary investigation report submitted within 12 hours of occurrence

• Completed investigation report submitted within 7 days of occurrence

• For all high / critical incidents a taproot / ICAM investigation will be conducted

B9212 CORRECTIVE AND PREVENTATIVE ACTION

Corrective and preventative actions can be triggered by the following activities.

• Incidents

• Inspections

• Audits

• Meetings

• Risk assessments

All actions items will be captured and managed in a central action register / deviation register. This register is the responsibility of the Principal Contractor. Progress of actions will be reviewed weekly by the Contractor's construction management team facilitated by their H&S Manager / Officer.

(a) H&S Improvement Planning

The project strives to objectives and targets in order to achieve the goal of ZERO HARM. Where, in the opinion of the Engineer or Employer that certain aspects of H&S are in need of improvement, an improvement plan shall be compiled by the Contractor to address the situation.

An example is included in appendix B.

The improvement plan shall be drafted with the involvement of at least the following:

• Project Manager

• Construction manager

• Relevant discipline competent person

• H&S manager

• Relevant discipline Supervisor

The method of communicating the contents of the improvement plan to the project shall be provided in the Principal Contractor's HSMP.

INJURY MANAGEMENT

The Principal Contractor shall provide an injury management plan for the project that will include consideration for the following:

• First aid plan

• Response personnel, including paramedics

• Equipment, supplies / location for each project

• Ambulance / first response vehicle

• Communication requirements

• Emergency number / process

• Escalation process (hospital)

• Medical treatment

    o Plan to engage local medical and health providers.

    o Workers compensation process.

    o Notifications.

o Suitable duties plan and injury management plan.

DOCUMENT AND RECORDS MANAGEMENT

All H&S documents and records will be managed and maintained to the requirements of the approved project document control management plan and in accordance with legislative and management system (ISO 9001) document retention requirements.

Safe work procedures, standard operating procedures and relevant documents must be developed by a team of competent personal, including the relevant supervisor for that activity, and be signed off by the construction manager, relevant supervisor and contractor H&S manager before they are submitted to the Engineer for review or approval.

The Engineer shall ensure that records are maintained, are current and are distributed to the project personnel and other interested parties as required.

Project records will be maintained as a minimum for the following, but not limited to:

• Health and Safe work procedures

• All levels of Risk assessments

• Method Statements

• Safe Work Procedures

• Project induction training records

• Medical fitness certificates

• Minutes of H&S committee meetings

• Minutes of all meetings with a H&S component

• Pre-start meeting minutes

• Toolbox meeting minutes

• H&S information issued

• H&S issue resolution records

• H&S monitoring results and audit reports

• Statutory reporting

• Project monthly report
• Health and Safety action closeouts

• Fit for work results

• Incident investigations and statistics

• Daily COVID-19 clinical symptoms screening and temperature measurements

• Statutory appointments.

• Proof of competencies.

• Mandatory agreements.

• Inspection checklists and registers

OCCUPATIONAL HEALTH AND RELATED ASPECTS

(a) Pre-Site Access Medical

All Contractors shall ensure all personnel working under their control at the project site have successfully completed a pre-employment medical prior to commencing work on the site. The pre-employment medical shall be conducted by a suitably qualified occupational health practitioner and shall be specific to the nature of the work the individual will undertake and must include:

• Big-5 drug test

• Audiometric testing

• Lung function test

• Physical examination

• Appropriate pre-employment medical questionnaires

• COVID-19

• Vaccination and inoculation against infectious disease – based on the local and regional Health Ministry's advice

• Any other pathogenic microorganisms causing infectious disease – based on the local and regional Health Ministry's advice

At the conclusion of a person's work contract or involvement in terms of this project, an exit medical must be conducted. The cost thereof will be borne by each individual Employer.

(b) Fitness for Work

All Contractors will implement a fitness for duty program that addresses the possible effects of the following aspects in relation to safe conduct of work:

• General level of personal fitness and / or medical conditions that need to be managed

• The consumption of alcohol and illicit drugs

• The use of other drugs (prescription, pharmaceutical or illicit)

• Fatigue

• Stress

• COVID-19

All Contractors shall document and implement a fitness for duty program in line with these requirements and are to ensure that personnel under their control and authority comply with their fitness for duty program.

All Contractors shall document and implement a process to manage personnel using non-prescribed and prescribed medication that may affect performance whilst operating plant or equipment or undertaking tasks at the project site.

(c) Fatigue Management

All Contractors shall consider H&S issues in relation to employee / shift handovers when scheduling work shifts and hours of work and shall implement an effective process for the review and approval of all work required outside of the framework of the Lesotho Legislation. Each Contractor shall perform a fatigue risk assessment on their proposed roster and submit them to the Engineer for review.

(d) Drugs and Alcohol

Contractors shall require that all persons working on or visiting the project:

• Have a blood alcohol content (BAC) of 0.00, and

• Have a urine concentration of drugs at or below the cut off levels for tested drug classes.

The use, consumption and/or possession of alcohol and/or narcotic drugs by any person granted access to site is strictly prohibited at all times and under all circumstances. All personnel entering the project site could be exposed to a drug and alcohol testing programs.
Contractors shall develop and implement a procedure to manage drugs and alcohol, including the management of positive drug and alcohol test results for their area of responsibility.

Contractors shall take measures to ensure that all personnel entering the site do not at any time, take or work under the influence of any illicit drugs or alcohol. The measures to be taken by the Contractors to confirm this shall include:

• 100% of all staff tested daily for alcohol

• Testing for drugs and alcohol of personnel following their involvement in an incident

• Testing for drugs and alcohol of such personnel on reasonable suspicion

• Unannounced random testing for drugs and alcohol

• Self-assessment (voluntary) testing facilities for drugs and alcohol

The Contractors shall ensure that:

• The workplace collection and testing for drug and alcohol is done by personnel trained to do so

• A register of all drugs and alcohol testing that occurs at the site is maintained

• Drug and alcohol testing results are reported to the Principal Contractor as part of the weekly H&S performance reporting process and shall include:

- o Weekly and project to date count of drug tests completed.
- o Weekly and project to date count of alcohol breath tests completed.
- o Weekly and project to date count of positive drug test results.
- o Weekly and project to date count of positive alcohol test results.

• Where camp accommodation is provided, the contractor shall develop responsible service of alcohol guidelines for the serving and consumption of alcohol.

(e) Occupational Hygiene

Each Contractor shall ensure that adequate procedures and controls are in place to manage personnel exposure to known atmospheric contaminants in the occupational environment as described in statute legislation.

The Contractors shall document and implement a process to ensure:

• Initial assessment of potential exposure by conducting a risk assessment on all potentially hazardous substances in accordance with Hazardous Chemical Substances 5.
• Hygiene monitoring is conducted to confirm or otherwise the presence of contaminants, or other agents that may affect the H&S of personnel and where identified implement an ongoing monitoring program

• Personnel are not exposed to a substance or mixture in a concentration that exceeds the exposure standard defined by legislation and other published exposure standards.

• The results of health monitoring are provided to those to which they relate.

• Records of health monitoring conducted are maintained in compliance with legislative requirements.

• Implement physical barriers where 1.5 meters can't be achieved between work stations (offices)

• Workplaces must be well ventilated by natural or mechanical means to reduce the pathogenic microorganisms environmental load, e.g. SARS-CoV-2

• All work surfaces, tools and equipment must be disinfected before work begins and during the working period

• All commonly touched surfaces, tools, equipment and shared areas must be regularly cleaned and disinfected

• The clock-in system is implemented in such a way to limit the spread of pathogenic microorganisms

• Maintain good housekeeping including cleaning / disinfecting contaminated work areas with approved detergent / disinfectant

• Ablution facilities to be provide with running water

(f) Personal Hygiene

Contractors shall ensure that personnel under their control maintain high standards of hygiene, cleanliness and waste removal in connection with the performance of their work and ensure:

• All work areas are maintained in a clean and tidy state and waste materials are promptly and appropriately disposed of.

• Adequate toilet and ablution facilities are provided in accordance with legislative requirements and ensure that personnel have ready access to such facilities.

• Hand wash stations available, accessible and promoted (clean water and soap / 70% alcohol based hand sanitisers)

• All site visitors to sanitise / wash hands on entry (reception areas and security guard house)

• Only paper towels are provided to dry hands after washing – the use of fabric towels is prohibited

• As far as practicable work process must enable a safe distance between persons

• Limit workforce within shifts, and rotate shifts (where possible, including lunch breaks)

• Limit the number of workers sharing accommodation to achieve 2 meters space between person

• Arrangements to ensure social distance and minimise exposure associated with transportation of workers

• Provide masks, face shields, gloved, and any other relevant PPE to all workers (train on the correct use and maintenance).

Persons in control of the camps shall develop procedures to ensure camp accommodation; facilities and meal rooms are kept in a clean and tidy manner, to the requirements and satisfaction of any legislative requirements.

(g) Dust and Air Pollutant Management

Offices must be kept ventilated by natural or mechanical means to reduce air contaminants. Where reasonably practicable, an effective local extraction ventilation system with high-efficiency particulate air HEPA filters which its vents do not feedback in through open windows must be provided. Filters must be cleaned and replaced in accordance with the manufacturer's instructions by a competent person.

Contractors shall be responsible for the continued control of dust arising from his operations. Each Contractor shall inform the Principal Contractor's Construction Manager and the Engineer 48 hours in advance of anticipated 'unavoidable' dust generating activities. Contractors shall take all reasonable measures to minimize the generation of dust as a result of construction activities to the satisfaction of the Engineer. Appropriate dust suppression measures include:

• Erection of dust screens

• Spraying or dampening with water

• Using a commercial dust binder

• Reducing road speed

• Reduce exposed soil

• Sweeping of road

If the conditions are such that a Contractor cannot satisfactorily dampen the dust, then the Contractor must halt operations until such time as the conditions are more suitable for lower dust generating construction.

Sweeping and damping of all haul and access road must be ongoing and special attention must be given to specific area from the entrance to construction site area. Areas that are to have the topsoil stripped for construction purposes must be limited and only stripped when work is about to take place.

A Safe Work Procedure detailing how dust will be managed for different operations on the site must be submitted to the Engineer for his approval before any work that could result in dust being generated is undertaken.

(h) Eating Areas

Contractors shall provide a shaded structure to serve as an eating area. The structure should be suitable for use during adverse weather such as rain. Contractors shall allocate designated eating area/s, subject to the approval of the Engineer.

At meal times all workers must eat in designated eating areas. These areas shall be well demarcated and shall not be within 100m of any “no go” areas, any major drainage systems or adjacent to dangerous areas. Sufficient bins as specified shall be present in these areas. All disposable food packaging must be disposed of in the bins after every meal.

(i) Drinking Water

Contractors shall provide an adequate supply of clean drinking water in refillable enclosed containers where it cannot be obtained directly from a main supply. A contractor shall mark drinking water clearly as such (especially where there is a significant risk of people drinking non-drinking water).

(j) Speed Restrictions

The Principal Contractor shall set a speed limit for site, which shall not exceed 30km/h. Contractors shall ensure that all persons in their employ and all those that are visiting the site are aware and comply with the site speed restriction(s).

All persons must always follow the traffic rules, wear their seat belt, keep within speed limits, and do not use hand held phones while driving. Pedestrians must always stand clear of mobile equipment.

(k) Smoking

Contractors shall not permit smoking at the site except within designated smoking areas selected in accordance with applicable laws, rules, regulations, policies, hazards present at the site and any direction given by the Engineer.

(l) HIV/Aids

Each Contractor will implement an HIV/AIDS awareness programme, aligned with the Principal Contractor's approved programme. This will include voluntary counselling and testing (VCT) of individuals, HIV/AIDS awareness training and access to ongoing support for affected individuals. The Contractor shall arrange for, provide a suitable venue, and instruct all employees to attend the HIV awareness programme; ensuring that their employees and their subcontractor employees are aware of this programme.

The Contractor shall, as soon as a construction employee camp is established and populated, and throughout the contract (including the defects notification period):

• Conduct information, education and communication campaigns, at least every other month, addressed to all the project site employees (including all subcontractors' personnel and all truck drivers and crew making deliveries to site for construction activities) and to the immediate local communities, concerning the risks, dangers and impact, and appropriate avoidance behaviour with respect to, of sexually transmitted diseases (STDs) - or sexually transmitted infections (STIs) in general and HIV/AIDS in particular;

• Provide male or female condoms for all employees, as appropriate, free of charge;

• Provide for voluntary STI and HIV/AIDS screening, diagnosis, counselling and referral to a dedicated national STI and HIV/AIDS programme, (unless otherwise agreed) of all employees; and

• Monitor outcomes, in collaboration with national HIV/AIDS authorities.

The STI, STD and HIV/AIDS alleviation programme shall indicate when, how and at what cost the contractor plans to satisfy the requirements of this H&S Specification. For each component, the programme shall detail the resources to be provided or utilised and any related sub-contracting proposed. The programme shall also include provision of a detailed cost estimate with supporting documentation; the HIV/AIDS awareness requirements should be identified as separate items/activities and be included in the Bills of Quantities, or in activity schedules as a single item or a group of items.

(m) HIV/Aids Reporting

The contractor shall prepare and attach to his claims for payment a brief report which outlines how the actions taken by the contractor in the period for which payment is claimed satisfy the

requirements and a schedule which lists the names, identity numbers and trade/occupation of all construction employees exposed to the programme. Payment to the contractor for preparation and implementation of this programme shall not exceed the provisional sum dedicated for this purpose.

(n) COVID-19 Management

On 7 January 2020, 'Severe Acute Respiratory Syndrome Coronavirus 2' (SARS-CoV-2) was confirmed as the causative agent of 'Coronavirus Disease 2019' (COVID-19). The majority of the case-patients initially identified were dealers and vendors at a seafood, poultry and live wildlife market in China. Since then, the virus has spread to more than many countries, and has been declared a pandemic by the World Health Organization (WHO)

COVID-19 is a respiratory illness caused. It is characterized especially by loss of taste and smell, fever, cough, shortness of breath, and may progress to pneumonia and respiratory failure, and multi-organ failure, septic shock, and blood clots.

The time from exposure to onset of symptoms is typically around five days but may range from two to fourteen days.

It is transmitted chiefly by contact with infectious respiratory droplets or with objects or surfaces contaminated by the infectious virus. Most often it is via droplets produced by coughing, sneezing and talking.

The droplets usually fall to the ground or onto surfaces rather than travelling through air over long distances. Less commonly, people may become infected by touching a contaminated surface and then touching their face. It is most contagious during the first three days after the onset of symptoms, although spread is possible before symptoms appear, and from people who do not show symptoms.

The standard method of diagnosis is by real-time reverse transcription polymerase chain reaction (rRT-PCR) from a nasopharyngeal swab.

According to the World Health Organization, there are no available vaccines nor specific antiviral treatments for COVID-19.

Recommended measures to prevent infection include:

• Frequent hand washing

• Maintaining physical distance from others (especially from those with symptoms)

• Quarantine and isolation (for both symptomatic and asymptomatic suspected cases)

• Observing coughing and sneezing etiquette (covering with elbow / tissue then dispose)

• Keeping hands away from the face (unless post immediate wash)

• Wearing a cloth mask to prevent / limit the spread of infectious droplets.

The Contractor must provide a project specific COVID-19 Safe Work Procedure, which is based on the Lesotho Government Gazette published 6 May 2020 - Public Health (COVID-19) Regulations, 2020, and addresses the following aspects, but not limited to:

• Compilation of COVID-19 Policy

• Compilation of project specific COVID19 risk assessment

• Identification of COVID-19 high risk activities, such as transportation and commonly used equipment

• Social distancing measures during meetings, toolbox talks, induction training, general training, taking into account a 1.5 m separation rule

• The implementation of personal hygiene facilities to ensure that personal hygiene and hand wash facilities are available at all workplaces on site

• Regular cleaning of commonly used areas and facilities

• Type and frequency of COVID-19 specific awareness and training of all persons on site regarding social distancing and personal hygiene, risk assessments and safe work procedures

• Identification of vulnerable employees (those with underlying health conditions and those over 60 years old) and ways to manage staff who fall in this category

• Procedure to measure staff body temperature and COVID-19 symptom screening when they report for work

• Transport arrangements for all provided transport to and from site, as well as on site to reduce COVID-19 transmissions

• Sanitising of vehicles, method and frequency

• Investigation of staff whom had been in close contact with staff that have tested positive for COVID-19

• Quarantine procedures should this become necessary after a staff member tested positive for COVID-19

• Distribution of all COVID-19 mitigation measures to visitors, Employer, Engineer, laboratory, sub-consultants and any other service provider who visits site

• Measures for staff rest and eating areas, focussing on social distancing
• Measures for staff accommodation to prevent COVID-19 infection

• Provision of additional eating areas to facilitate social distancing, where relevant

• Type and distribution of PPE specific for COVID-19,

• Provide each of its employees, free of charge, with a minimum of two cloth masks, for the employee to wear while at work and while commuting to and from work; and require any other worker to wear masks in the workplace

• Should community participation be a contractual obligation - steps, methodology or arrangements to address this aspect taking into account government restrictions on gatherings

• Access control measures of visitors relating to their travel history

• Emergency plan to include local Health Ministry office and COVID-19 testing facility contact details

• All work surfaces and equipment are disinfected before work begins, regularly during the working period and after work ends

• All areas such as toilets, common areas, door handles, shared electronic equipment are regularly cleaned and disinfected

The COVID-19 safe work procedure must be submitted for approval to the Engineer as part of the project health and safety management plan.

(o) Health Promotions

The project will implement health promotion programs that raise awareness to healthy lifestyle. As a minimum the project will obtain, disseminate and display health a fitness information to raise awareness to health issues. The project will aim to select health promotion programs to coincide with national health programs.

The project health promotion programs are intended to function as a collaborative approach involving all persons on the project.

H&S AUDITS, INSPECTIONS AND OTHER INTERACTIONS

(a) Planned H&S Audits and Inspections

Inspections and audits required on the site are:

• Informal daily site inspections
• Formal site inspections

• Principal Contractor self-audits

• H&S Agent Audits

• Contractor Audits

• Health and Safety Interactions

The Contractor must arrange for inspections and audits of plant and equipment, work methods, tools used, storage facilities and maintenance activities, housekeeping, access and egress, contingency systems, competencies of staff, PPE, behaviour, risk assessment, safe work procedure reviews, etc. The Contractor must ensure that formal site inspections and audits are planned, scheduled, and executed accordingly.

The Contractor must capture all information on deviation, rectification, and remedial actions that result from inspections and audits in a deviation register for tracking and close-out. The Contractor is responsible for the deviation register and must require all their H&S personnel to provide or capture the necessary information accordingly.

TABLE B9216/1 MONITORING PLAN

	Conducted by	Construction Pre-start	Daily	Weekly	Monthly	Three Monthly	6-monthly
Contractor's Site Inspection: Construction Manager/ Assistant Construction Manager, Safety Representatives and H&S personal	Principal Contractor Contractor		X	X			
Engineer Inspections: Project Manager, Resident Engineer, Inspectors, H&S staff	Principal Contractor		X	X			
Safety Interactions: Management, Middle Management, Supervisors, H&S staff	Principal Contractor Contractor		X				
Contractor Procedures Audit: Contractor H&S Advisor	Principal Contractor Contractor				X		
Contractor H&S Management Systems Audit: Engineer's H&S Advisor, Contractor Management and H&S personnel	Engineer's H&S Advisor Contractor	X					X
RA and SWP Reviews Construction Supervisors and H&S personal (According to schedule)	Contractor					X	X
H&S Agent Audits	Agent				X		
Contractor Audits: H&S personnel	Principal Contractor				X		
PTO (According to schedule)	Principal Contractor Contractor		X				

(b) Planned Task Observations

Contractors shall have a schedule for conducting Planned Task Observations (PTO's) to be done by the Construction Manager, Construction Supervisors, specific Competent Persons appointed and H&S personnel. The Principal Contractor's PTO's must also include his Contractor's work.

Conducting PTO's must be covered in the project's induction (purpose etc.), but a separate training schedule must be held for the relevant person who will conduct PTO's. The format of a PTO must follow the same detailed headings / aspects of the respective task's risk assessment and safe work procedure. Therefore, no generic PTO's will be allowed.

(c) H&S Issues Raised through Audits, Inspections and other Interactions

Inspections and audits will cover but not be limited to plant and equipment, work methods, tools used, storage facilities and maintenance activities, housekeeping, access & egress, contingency systems, competencies of staff, PPE, behaviour, risk assessment and safe work procedure reviews etc. Formal site inspections and audits shall be planned, scheduled and executed accordingly.

All information regarding the deviation, the rectification and remedial actions resulting from inspections and audits shall be captured on a Deviation Register for tracking and close-out.

The minimum headings to be included in the Deviation Register are: area, Construction Supervisor's name, potential incident category work stopped or not, risk type (origin of the risk e.g. procedure not followed or unsafe act etc.), responsible person, dates, close-out / status.

(d) Independent Audits

The Principal Contractor will conduct a yearly independent audit on his HSMS and the application thereof on this project.

(e) Reporting

The Principal Contractor shall report project statistics including the leading indicators on a regular basis. See also Leading Indicators.

The following items listed in the below table shall be maintained and reported weekly on a Monday by the Contractor, for the previous week. The information will include those of the contractors and suppliers.

TABLE B9216/2 WEEKLY STATISTICS REPORTING

General	Lag Indicators	Lead Indicators
Staffing levels	Equipment / plant damage incidents	Number of safety interactions completed
Hours worked	First aid injuries	Trends from DSTI's & inspections
LTI free hours	Medical treatment injury (MTI)	New RA / SWP's developed
	Restricted work injury (RWI)	RA / SWP's reviewed
	Lost time injuries (LTI)	Near misses reported
	Environmental incidents	Number of PTO's conducted
		Fitness for work testing results (alcohol)
		Number of VFL's conducted

The items listed in the below table shall be maintained and reported monthly by the Principal Contractor to the Engineer, on the 5th working day of each month.

TABLE B9216/3 MONTHLY STATISTICS REPORTING

General	Lag Indicators	Lead Indicators
Staffing levels	Equipment / plant damage incidents	Number of safety interactions completed
Hours worked	First aid injuries	Trends from DSTI's & inspections
LTI free hours	Medical treatment injury (MTI)	New RA / SWP's developed
	Restricted work injury (RWI)	RA / SWP's reviewed
	Lost time injuries (LTI)	Near misses reported
	Environmental incidents	Number of PTO's conducted
	Non-conformance / non-compliance where disciplinary action is required	Fitness for work testing results (alcohol)
		Number of VFL's conducted
		Audit results (self-audit)
		Updated training needs analysis
		Toolbox Talks conducted
		H&S committee meetings
		Deviation register status
		Repeat significant deviations
		Repeat significant incidents
		Suggestions / initiative schemes

Delays in submission of reports can result in delay of payment. See also H&S targets and key performance indicators.

TRAINING AND COMPETENCY

(a) Training Needs Analysis

Each Contractor will complete a training needs analysis (TNA) and skills matrix of their professional staff, trades and other employees who will be involved in the project. All Contractors are required to make their TNA available to the Engineer or H&S Agent for audit and inspection purposes as required. Further employee training needs may be determined in accordance with an individual's changed responsibilities, changed duties or changed location. The type of training (which will form part of the TNA) includes, but will not be limited to, the following:

• Contractor specific induction

• Scaffolding erection and safe working at heights including harness fitting and fall resistant system – accredited training

• Waste management training module

• Environmental management

• Manual handling training

• Equipment / operator competencies – accredited training

• Emergency response training

• Leadership training

• Advanced and off-road driver training – accredited training

• Skills upgrading and refresher training

• Electrical power tool operation – accredited training

• Workplace procedures and safe operating procedures relevant to the work

• Work permits procedures.

• First aid – accredited

• Fire safety awareness use of firefighting equipment – accredited training

• Fitness for Work

• Hazard identification and hazard awareness
• Conducting DSTI's

• Conducting PTO's

• Legal liability (Supervisory and management level) – accredited training

• Region or country specific diseases training – COVID-19

Where SETA accredited training is available, these will be used.

Note: The Excavation Competent Person will be required to have a qualification in the geotechnical field.

(b) Training and Competency Register

Each Contractor will maintain a training and competency register (matrix) that will indicate all current information / competencies of all employees. This register is to be made available to the appointed competent person for audit and inspection purposes as required. Each employee will also have a personal dossier that will contain all relevant information such as:

• Copy of ID.

• Legal appointment letters with relevant proof of training and or competencies.

• Medical fitness certificate.

• Proof of other relevant training such as site-specific induction according to the TNA.

• Proof of PPE issued.

Dossiers will be kept at the site office and will be available at all times.

(c) Personnel Selection, Competency and Training

All Contractors including the Engineer shall ensure that all site personnel hold current and relevant qualifications for the work they are required to perform and that the records are maintained and available on site.

Competency assessments shall be conducted all Contractors where competencies are not evident or where a person only has experience but no formal training / qualifications.

Contractors shall ensure personnel do not commence any task or work until has the Engineer has reviewed the competency assessments. Where possible all personnel will be trained and verified for competency as per their training needs analysis and competency register before mobilisation to site.

(d) Training before Approval to Mobilise to Site

The table below identifies the competency, training and other requirements prior a person commencing work on the project. As part of the mobilisation process the Contractor shall comply with the below mandatory requirements for this project and it will form part of the TNA

Competency and awareness requirements for Contractor personnel shall be described in the Contractor's HSMP. As part of the mobilisation process, the Principal Contractor will submit the qualifications, competencies as well as evidence to the Engineer for acceptance before mobilisation to site can take place. Each Contractor will submit the qualifications, competencies as well as evidence of the verification of the competencies to the Principal Contractor for acceptance before mobilisation to site can take place.

TABLE B9217/1 MANDATORY REQUIREMENTS FOR MOBILISATION

	Legal Liability H&S training	Incident Investigation	HIRA	Supervisor H&S training less than 5 yrs old	Conducting PTO's	Conducting Safety Interactions	Project H&S Induction
Project Manager	Y	Y	Y	Y		Y	Y
Construction Manager(s)	Y	Y	Y	Y		Y	Y
Supervisors	Y	Y	Y	Y	Y	Y	Y
Project Engineer	Y		Y			Y	Y
H&S personnel	Y	Y	Y		Y	Y	Y
All Workers			Y			Y	Y

(e) Site Induction and Orientation

Prior to entering any work area, personnel will be required to complete the project specified induction(s) and training related to their tasks, scope of work and duration of intended stay on site.

All personnel are classified into two categories, namely:

• Project Visitors – those personnel intending to visit the site for a period of less than 16 hours and do not undertake any physical work activity, will undergo a project visitor's induction. A site visitor always need to report to the Contractor's site office. If a person intends to visit site for more than 7 times a year he will not be regarded as a visitor but need to comply with the full project mobilisation requirements (medical, project induction, specific additional training etc.).

• Project Personnel – all personnel required to undertake any physical work activity at the project site for a period of more than 16 hours or personnel required to undertake non-physical work activity for periods of more than 24 hours per visit, will undergo a project specific induction which will be held at specific times allocated. Bookings for the induction must be managed by the Contractor. Project personnel need to comply with all other mobilisation requirements.

Re-inductions will take place:

• At the discretion of the Engineer or the H&S Agent,

• After being on leave (or absent) for 10 working days or more, or

• After major incidents.

The project specific induction is only valid for a maximum period of 12 months.

(f) Training Records

Records pertaining to the qualifications of any person mobilised on the project will be contained in his / her personal dossier and shall be made available to the Engineer on request. The records shall be readily accessible.

EMERGENCY PREPAREDNESS AND RESPONSE

The Principal Contractor is responsible to draft the project emergency response plan (ERP) and it needs to address all potential risks and provide suitable responses to assure well-being of all personnel. The plan must identify, by risk assessment, all potential emergency situations and mitigation strategies associated with potential emergency situations for the project.

The Emergency Response Plan (ERP) must include consideration for the following aspects:

• First aid / medical response during an emergency

• Establish effective communication procedure and systems / equipment

• Snake Bite Management

• Emergency response training

• Meet the requirements set out in the legislation

• Fire response

• Evacuation (out of site, region and country)
• Assembly points

• Rescue / response to remote location incident

• Escalation to crisis management plan

• Severe weather threat

• Vehicle incident response

• Environmental threat response

• Bomb / terrorist threat response

• Project integrity & recovery

• Political community unrest / protests

• Identify the positions of those responsible for operation of the ERP, in the event of an emergency

• Identify requirements and procedures for accessing personnel and equipment resources during an emergency

• Identify adequate equipment and resources for responding to credible emergencies

• Outline procedures for interfacing with the Principal Contractor and the Employer to ensure transfer of emergency response and management to the Employer at appropriately defined severity levels.

• Specify a process for periodic updates of the plan to incorporate lessons learned from previous incidents and exercises

• Identify measures to be undertaken to prevent or reduce the risk of an emergency, including emergency response training that involves local emergency service groups wherever practicable

• Post emergency management

(a) Contractors Emergency Response Plans

Contractors shall use the project emergency response plan drafted by the Principal Contractor, as their own. Where additional emergencies are identified these need to be incorporated into the project emergency response plan.

(b) Emergency Response Testing

The Principal Contractor will perform adequate emergency response drills and exercises to facilitate the practicing of the site ERP and supporting response and rescue arrangements to ensure it is able to provide adequate response during an emergency situation.

Testing of the emergency response process will be completed through a collaborative approach involving the Engineer and Contractors.

The Principal Contractor must indicate in his HSMP the scope and management of the drills and exercises. Within one month of mobilisation the Principal Contractor will conduct the first drill and thereafter at intervals not exceeding 6 months. Proper records of the drill exercise will be kept.

(c) Medical Services

Contractors shall ensure that appropriate first aid, medical care facilities and qualified personnel are provided at or near the project site where work under the contract is being performed. The appropriate first aid and medical care services shall be determined in accordance with statutory legislation and the risk assessments. Contractors must ensure the availability of immediate emergency medical treatment.

Contractor shall:

• Maintain a register of first aid kits and contents.

• Inspect first aid and medical care facilities provided monthly by a competent person.

• Maintain records of all persons treated for work related injuries (incident register).

CONTRACTOR AND SUPPLIER MANAGEMENT

(a) Procurement

Health and Safety will be incorporated into the project's procurement and contract management activities. This H&S Specification will be contained in all contractual documents and procurement specifications. The Principal Contractor is required to provide this H&S Specification to all its intended contractors and suppliers.

(b) Contractor Management

The Contractor needs to clearly define in his HSMP how its contractors and suppliers will be managed. The Contractor has the right and the responsibility to provide templates and the

necessary training to its contractors and suppliers that would not have the necessary H&S maturity. Under no circumstances must a Contractor be allowed to use complete documents (e.g. HSMP, risk assessments etc.) of the Principal Contractor as their own.

Even small localised contractors and suppliers must be trained and mentored regarding H&S requirements so that these small contractors and suppliers can take ownership of their own H&S. The training requirements identified for contractors and suppliers must form part of the training needs analysis.

A Contractor is responsible for ensuring all of its contractors meet the requirements applicable to itself in relation to its contractors' work in this document, the Principal Contractor's HSMP, their own HSMP and legislation.

The Contractor shall ensure that all project H&S requirements are communicated to their employees, contractors, suppliers and visitors along with the relevant contents of the Contractor's H&S processes and procedures prior to commencement of work or visits to site.
A Contractor shall provide an organisational chart that clearly delineates the roles and responsibilities of Managers, Supervisors, employees and sub-Contractors in regard to their HSMP and this standard and describe the system by which managers and Supervisors will be held responsible and accountable for H&S.

(c) Contractor Selection

Contractors are the key to positive project H&S performance - therefore they will be required to demonstrate their workforce's capabilities and competencies to perform work on the project as well as the provision of adequate resources.

The Principal Contractor must indicate in his HSMP how contractors and suppliers will be selected based on their H&S knowledge and maturity and which documentation will be required from them during tender phase. They also need to indicate what the H&S "BOQ" will comprise of in order to ensure that Contractors have made sufficient provision for H&S requirements.

The Principal Contractor need to facilitate a tender briefing meeting during which the H&S requirements must also be highlighted. Should tender clarification meetings take place, the Principal Contractor must provide H&S input to these.

The Principal Contractor must provide in his HSMP a "go-no-go" checklist with which to evaluate each Contractors H&S documentation before allowing them to mobilise to site.

(d) Contractor Kick-Off Meetings

After the Contractor has been approved to commence activities but prior to mobilising to the project site each Contractor's management representative and safety professional(s) will attend

an H&S kick-off meeting with members of the Principal Contractor. Minutes of the meeting are to be kept.
The Principal Contractor is to indicate in his HSMP the proposed agenda for such an H&S kick-off meeting.

Once mobilised to site, it is expected that each Contractor with his sub-Contractors will conduct its own kick-off meetings on a scheduled basis and as the need arises, for each separate phase of the project. Contractor kick-off meetings can be attended by the Engineer or any of his representatives or the H&S Agent as the need arises.

(e) Visitors to Project / Contractor Facilities

All personnel, including the Employer who are required or intend to visit site for the purpose of meetings, inspections, discussions or testing of materials and equipment, shall:

• Notify the Principal Contractor's Construction Manager of the intended visit

• Wear the correct PPE as assigned (safety shoes, long sleeved trousers & shirts, hard hat and safety goggles) and any additional item the Principal Contractor might require

• Report to the Principal Contractor's relevant site office before going to site

• Where appropriate produce a Take 5 or DSTI or similar regarding their task

• Carry out a vehicle pre-start inspection

• On arrival undergo a visitor's induction

• Sign in on the visitors register and wait for their escort

• Be escorted at all times while on the project site

• Prior to leaving the project, return visitors pass and sign out on the visitors register

• Be subjected to alcohol breathalyser tests

The Principal Contractor must indicate in his HSMP how these minimum requirements and any additional requirements he feels is necessary will be communicated to visitors and managed properly.

(f) Contractor Monitoring

The Principal Contractor will monitor the compliance of its contractors and suppliers against their own plans as wells as against the project H&S requirements. The Principal Contractor will develop and implement an audit schedule to monitor the compliance. The results will be documented in a written report including any required corrective actions. Corrective actions

will be communicated formally and recorded in the project's deviation register. The Contractor must indicate in his HSMP what actions will be taken against contractors or supplier not achieving a pre-determined minimum compliance score.

For further details see H&S audits, inspections and other interactions of this H&S Specification.

All sub-Contractors and suppliers will be required to:

• Strictly observe all subcontract conditions regarding H&S - in particular, adhering to the HSMP, and following any safety instructions issued by the Project Manager, Construction Manager, Supervisors, Project Engineers or Project Safety personnel.

• Provide competent supervision for their employees and where required on the project, ensure that Supervisors have the required qualifications and written authority prior supervising any personnel on the project.

• Ensuring all Contractor personnel are formally inducted and orientated to the site.

• Provide general industry specific inductions and safety training for their employees, and all necessary PPE and general safety equipment.

• Ensure that all personnel and equipment go through the project's mobilisation process.

• Ensure that all chemicals and hazardous substances have gone through the Principal Contractor's chemical approval process.

• Comply with the reporting procedures for hazards, accidents and incidents, and ensure their employees comply with those procedures.

• Maintain their plant, vehicles and equipment, and ensure their employees are holders of the relevant certificates of competency.

• Provide H&S data to the Principal Contractor's H&S Manager, as and when requested.

• Encourage active participation in the site H&S committee.

• Comply with the primary obligations imposed on them by the relevant binding H&S Act and Regulations by ensuring:

• The H&S of their employees, and their own H&S; and

• That the H&S of others and the environmental conditions are not affected by the way in which they conduct their work activities.

MANAGEMENT OF CHANGE

The impact of change on H&S risks will be documented by the Principal Contractor and communicated to all its staff as well as those of its contractors or supplier. A change management plan will be in place which encompasses the requirements of the project site.
The Principal Contractor is required to ensure that changes are identified, analysed systematically, authorised by an appropriate authority, and implemented in a manner that does not present an unacceptable risk to the construction / commissioning workforce, the environment or the community.

The potential changes identified should be those that if these changes occur, could result in incidents.

Examples of change:

• New equipment, materials, products or a change of equipment configuration (new model or different type manufacturer).

• Design or construction changes not approved by the design engineer.

• Abnormal changes in workplace conditions (road speeds, road works, and high-risk activities).

• Changed job method (requires different tools and work method etc.).

• Commissioning new plant (unfamiliar with process and function etc.).

• Staff replacements – clear handover if changes in key staff occur or during periods of leave.

• Deviation from safe work procedures especially during re-work.

MANAGEMENT REVIEW

The Principal Contractor is required to conduct regular reviews of at least:

• Its own HSMS and how it is applied on the project,

• the applicability of key documents such as the HSMP, the Fall Protection Plan, the Emergency Response Plan etc.,

• Risk assessments and safe work procedures.

Regular audits either done internally by the Principal Contractor or the H&S Agent will examine the continued suitability of the project's H&S management system and procedures.
The Principal Contractor must indicate in his HSMP the type of documents that will be reviewed regularly and the frequency of the reviews. The review process will also apply to the Contractors H&S documentation.

APPENDIX A: ROLES AND RESPONSIBILITIES

The minimum roles and responsibilities listed here do not constitute the extent of the wording that should be included in any applicable appointment letter but should serve as a guideline when drafting applicable appointment letters.

The roles and responsibilities as set out here will apply to the Principal Contractors and Contractors where any of these are applicable.

Project Manager

The Project Manager has the overall responsibility for ensuring overall health, safety and environmental performance of the project. The Project Manager is the key person to and is responsible for:

• Ensure the development of the HSMP, associated procedures, forms and the like, their authorisation, issue and review.

• Actively promote H&S as a value for all persons on site, and at all times and incorporate health, safety and security in to all aspects of management.

• Be accountable for the provision of adequate H&S resources, services, facilities and initiatives to effectively implement and manage the H&S program.

• Ensure clear lines of responsibility and accountability for health, safety and security, in part by including responsibility and authority for health, safety and security in all appropriate job descriptions.

• Facilitate the participation of persons with appropriate construction, operational and / or technical knowledge and skill to provide H&S input into design meetings / workshops as well as H&S risk assessments.

• In conjunction with Construction Manager, develop a specific focus on consideration of H&S risks in the project procedures.

• Ensure that provisions requesting information on sub-Contractors' HSMPs, risk assessments and clauses governing health, safety and environment, are drafted and incorporated in all tender documentation and subcontracts, respectively.

• Regularly review the H&S performance of the project, including the monthly H&S report and identify and implement corrective action for negative trends identified.

• Develop and implement an audit program that provides independent advice to management on the integrity of the ongoing implementation of the HSMP.

• Establish and maintain current information on the relevant legislation, Codes of Practice and the like.

• Establish key performance indicators for subordinates and undertake at least 6 monthly performance appraisals to highlight performance and address improvement opportunities.

Construction Manager

The Construction Manager is responsible for:

• Where required undertake and comply with the statutory roles and responsibilities of the duty holder for the project site.

• Promote and facilitate cooperation on health, safety and environmental issues amongst sub-Contractors and between sub-Contractors and all personnel.

• In conjunction with the Project H&S Manager, ensuring that health, safety and environment remains a value for all persons on site throughout the duration of the project.

• Include health, safety and environment as an agenda item at all site management meetings.

• Establish a site H&S committee, ensure their regular meetings and attend them.

• Facilitate the participation of persons with appropriate construction, operational and / or technical knowledge and skill to provide H&S input into design meetings / workshops and risk assessment.

• Ensure that risk workshops are planned well ahead of the delivery, adequately resourced, executed and any actions are closed out prior the delivery of the works.

• In conjunction with the project H&S Manager develop H&S documentation for ensuring that H&S issues are adequately identified and documented so that they can be managed during the construction and later phases.

• Ensure that appropriate communication and consultation processes are established and maintained with employees and sub-Contractors, e.g. safety committees, toolbox talks etc.

• Ensure that emergency procedures are developed and maintained for sites in conjunction with relevant external emergency services agencies and major sub-Contractors.

• Assign to appropriate Supervisors responsibility for any additional work or administrative procedures (including risk assessments).

• In conjunction with the Procurement Manager give specific consideration to health, safety and environment when selecting sub-Contractors.
• Assign responsibility for, and personally conducting, hazard inspections, and accident and incident investigations, and ensuring corrective or preventative action is taken to remedy any deficiencies, and following-up such action to completion.

• Ensure a positive reporting culture, hazards, incidents, etc., by all project personnel.

• Ensure that the project training needs analysis is conducted and that all site personnel undertake the required induction and safety training as identified.

• Nominate a person or persons for supervising complex lifts and inspecting cranes and lifting gear whenever a lifting study or critical lifting study is required.

• Together with the Project Manager regularly review the H&S performance of the project including the monthly H&S reports and counteract any unwanted trends with corrective actions.

• Ensure all site personnel receive current information on amendments to any H&S related Act and regulation, and subordinate legislation.

• Undertake formal Supervisor orientation one on one with every Supervisor, superintendent and manager and ensure Contractors comply with Supervisor orientation requirements

Construction Supervisors

Supervisors are responsible for the H&S security of persons working under their supervision or work team. Specifically, in their work areas, they will:

• Ensure their own and sub-Contractor's employees are provided with, and trained in the correct use and maintenance of, personal protective clothing and equipment.

• Conduct hazard inspections, participate in accident and incident investigations and ensure that preventative and corrective action is taken to remedy any deficiencies.

• Conduct regular inspections of their work area and document the inspection on the project specific forms / templates.

• Conduct daily pre-start and tool box talks for or with their sub-Contractor's employees.

• Attend safety coordination meetings.

• Review (in consultation with the work team) risk assessments for all work activities, modify where necessary to reflect the specific requirements of the activity and ensure all persons in the team are fully briefed on how to do the job safely as per the safe work procedures.

• Ensure that high standards of housekeeping are established and maintained in their work area.
• Ensure H&S records are up to date.

• Act consistently with the acceptable behaviour requirements of the project.

• Conduct safety interactions and PTO's as scheduled.

Construction Employees and Sub-contractors

All construction workers, whether employees of the Principal Contractor or of sub-Contractors, will be required to:

• Undertake a site-specific induction prior to commencing work on the site and attend all scheduled safety training sessions.

• Follow their Supervisors' instructions with respect to H&S on the site (if at all uncertain as to what action to take to ensure health, safety and security in their area, they should seek direction from their Supervisor or the Construction Manager).

• Report all actual and potential hazards, accidents and incidents to their Supervisor.

• Not engage in any prescribed occupation (as described in the relevant regulation) unless they hold the relevant certificate and have been appointed in writing by the Construction Manager.

• Keep their amenities and work areas clean and tidy, and

• Observe the following obligations imposed on employees by:

• Complying with instructions given for the purpose of health, safety and environment,

• Use personal protective clothing and equipment provided by their employer, and use it as instructed,

• Not to wilfully or recklessly interfere with or misuse anything provided for health, safety and security on the site,

• Not to wilfully place at risk the health, safety and security of any person on the site,

• Not to wilfully injure himself or herself, and

• Behave in a manner that does not put any person or property at risk.

Site H&S Manager

A H&S Manager is a resource to the project team and in particular the Construction and Project Manager allowing them to execute their responsibilities under the law and their HSMP. On behalf of the Project Manager and the Construction Manager, the Project Site H&S Manager will:

• Develop, update and administer the HSMP and any other relevant H&S documentation

• Ensure that all Contractors submit method statements, risk assessments and safe work procedures of all activities identified in the HSMP for approval prior to commencement of the activity.

• Conduct scheduled and random measuring and monitoring of sub-Contractors' compliance with the HSMP, the Contractor's HSMP and all related documentation, and advice the Construction Manager of any sub-standard performance.

• Conduct scheduled and random inspections and advice the Construction Manager of any sub-standard performance.

• Assist the relevant line Manager or Supervisor in accident and incident investigations, and ensure that preventative and corrective action is taken to remedy any deficiencies. In particular the Project Site H&S Manager ensures that the investigation follows the required process such as TapRoot or ICAM.

• Monitor trends in site incidents and provide statistical reports to the Construction and Project Manager.

• Provide H&S related input to the monthly project reports to the Engineer.

• Conduct regular H&S awareness campaigns amongst all contract personnel on site.

• Facilitate the development of H&S consultation arrangements with employees and sub-Contractors, including the safety committee(s).

• Convene safety coordination meetings.

• Prepare and conduct site-specific inductions for all employees commencing work on the project.

• Ensure that any H&S issues requiring the attention of the Construction Manager, Project Manager or Engineer are brought to their attention in a timely manner.

• Provide general health, safety and environmental advice to the Project and Construction Managers, and sub-Contractors.

• Review any safety personnel nominated by Contractors and forward any concern to the Construction and Contracts Manager.

• Liaison with statutory authorities on all matters relating to H&S on site.

• Liaison with stakeholder groups on safety issues as requested.

Site H&S Officer

As directed by the Site H&S Manager, the H&S Officer is responsible for assisting the Site H&S Manager to implement responsibilities and accountabilities delegated to the Site H&S Manager.

First Aid Attendants

The First Aid Attendants are responsible for:

• Ensure first aid supplies are adequate (in particular, in the first aid station and first aid kits),

• Provide first aid treatment in the event of incidents,

• Provide first aid treatment to workers with minor injuries or illnesses, and

• Notify the Site H&S Manager daily of all work-related injuries and illnesses.

Firefighting personnel / marshals

The firefighting personnel are responsible for:

• Ensure firefighting equipment are adequate (in particular, fire extinguishers).

• Transfer basic firefighting knowledge and understanding to the workforce.

• Provide firefighting service and assistance in the case of a fire.

• Report and fight fires according to training received.

• Inspect firefighting equipment regularly and report deficiencies.

H&S Representatives

Employees may negotiate with their employer about workplace H&S representatives for the workplace regarding the manner of appointment and number needed). The Principal Contractor will encourage all work areas / Contractors to facilitate the election of a representative by their

employees for their work area. Where a representative is elected he or she will be eligible to attend the safety committee and execute their functions as listed in the OHS Act.

Contracts Manager
The Contracts Manager is responsible to:

• In conjunction with the Project Manager, Construction Manager and Site H&S Manger for the project, give specific consideration to health, safety and environment when selecting sub-Contractors (including ensuring that sub-Contractors provide relevant and adequate information on H&S with their tenders) including a HSMP, lead and lag indicator demonstrating the Contractor's H&S performance as well as evidence that adequate resources have been budgeted for to support the H&S function a required in this HSMP.

APPENDIX B: H&S IMPROVEMENT PLAN

Internal Context	External Context
Engineer / Employer's Agent responsibility	**Employer expect an ingrained H&S culture**

	Key Objectives (to get us where we want to be)	Key Performance Indicator (timing in months)	Measure (Review)
1	Behaviour and attitude change	Decrease in number of unsafe acts and number of related deviations (12 months)	Monthly feedback on progress
2	Increase compliance levels	Decrease in number of deviations and near miss incidents (3)	Monthly feedback on progress
3	Facilitate ownership for H&S with key contractors' management	Visible coaching leadership (1)	Monthly feedback on progress
4	Implement control measures for high risk activities	Verification of implemented control measures (1)	Monthly feedback on progress

#	Actions / Strategies (to achieve objectives)	Responsibility	Due	Status	Comments
1a	Design and implement an incentive program for Supervisor level.				Idea identified, will be implemented next year, Employer requested that no campaigns should be started or implemented for this remaining year
1b	Design and implement an incentive program for worker / labourer level.				Same as above, subject to go-ahead from Employer
1c.	Implement a "positive feedback / well done" interaction during any PTO/CTO as well as "what do you think you/we can improve on".				
2a.	Contractor to identify 5 tasks generating most deviations – retrain workers via TT's and give proof of re-training.				
2b.	Contractor's PTO / CTO during following week to address these 5 tasks.				

#	Actions / Strategies (to achieve objectives)	Responsibility	Due	Status	Comments
3a.	Contractor to conduct PTO's / CTO's according to contract (Supervisors and above) – quality to be checked.				All PTO / CTO submitted to the Employer on a CD, and transmittal kept
3b.	Contractors' management to conduct weekly VF's and walk-abouts.				Take part in daily walks on site.
3c.	Pledge signing workshop				Use the Employer format, liaise with the Employer to conduct workshop
4a.	Present short training session for excavation competent persons – get approval.				
4b.	Practical emergency procedures to be drafted as "TT's".				
4c.	Practical emergency procedures (as TT's) to be communicated (practically).				Excavation rescue still outstanding, could not be done due to wet soil conditions, rescue format drafted and discussed with all as a TT, proof of attendance supplied.

Drawings

Supplementary Information

PART 3 – CONDITIONS OF CONTRACT AND CONTRACT FORMS

Section VIII. General Conditions (GC)

Yellow Book:

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The Conditions of Contract are the "General Conditions" which form part of the "Conditions of Contract for Plant and Design Build ("Yellow book") First edition 1999" published by the Federation Internationale Des Ingenieurs – Conseils (FIDIC).

An original copy of the above FIDIC publication i.e. "*General Conditions" which form part of the "Conditions of Contract for Plant and Design Build*" must be obtained from FIDIC.

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Section IX. Particular Conditions (PC)

The following Particular Conditions shall supplement the GC. Whenever there is a conflict, the provisions herein shall prevail over those in the GC.

Particular Conditions

Part A – Appendix to Bid

Conditions	Sub-Clause	Data
Employer's name and address	1.1.2.2 &1.3	Ministry of Public Works and Transport Roads Directorate PO Box 194 Maseru, 100
Engineer's name and address	1.1.2.4 & 1.3	
Contractor's name & Address	1.1.2.3 &1.3	
Time for Completion	1.1.3.3	182 days
Defects Notification Period	1.1.3.7	365 days (one year)
Sections	1.1.5.6	*Not Applicable*
Electronic transmission system	1.3	• E-mail
Governing Law	1.4	Law of the Kingdom of Lesotho
Ruling language	1.4	English
Language for communications	1.4	English
Time for access to the Site	2.1	Twenty-eight (28) days after Commencement Date
Performance Security	4.2	A Bank Guarantee in the amount of 10% of the Accepted Contract Amount and in the same currency(ies) of the Accepted Contract Amount in Lesotho Loti.

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Conditions	Sub-Clause	Data
		The Bank Guarantee shall be from the local banks registered with the Central Bank of Lesotho
Normal working hours	6.5	Sunrise to sunset, Monday to Saturday excluding public/declared holidays.
Delay damages for the Works	8.7 & 14.15(b)	LSL50 000 per day.
Maximum amount of delay damages	8.7	Ten (10) % of the final Contract Price.
Provisional Sums	13.5.(b)(ii)	As quoted in the Bill of Quantities
Currencies of payment	14.15	100% in Lesotho Loti
Adjustments for Changes in Cost	13.8	Contract price adjustment is not applicable.
Total advance payment	14.2	Ten (10)% Percentage of the Accepted Contract Amount payable in Lesotho Loti in one single instalment after 28 days
Number and timing of instalments	14.2	One
Currencies and proportions	14.2	Lesotho Loti (100%)
Percentage of Retention	14.3	Ten (10)%
Limit of Retention Money	14.3	7.5% of the Accepted Contract Amount
Plant and Materials	14.5(c)(i)	Plant and Materials for payment when delivered to the Site Sleepers, steel and Ballast
Minimum Amount of Interim Payment Certificates	14.6	LSL 1 000 000.00
Maximum total liability of the Contractor to the Employer	17.6	The product of one time the Accepted Contract Amount
Periods for submission of insurance:	18.1	

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Conditions	Sub-Clause	Data
a. evidence of insurance.		Twenty-eight (28) days
b. relevant policies		Twenty-eight (28) days
Maximum amount of deductibles for insurance of the Employer's risks	18.2(d)	(a) for the Works, Plant and Materials: LSL50 000.00 (b) for loss or damage to Equipment: LSL150 000.00 (c) for loss or damage to property (except the Works, Plant, Materials, and Equipment) in connection with Contract: LSL75 000.00 (d) for personal injury or death: (i) of the contractor's employees: LSL500 000.00 (ii) of other people: LSL500 000.00
Minimum amount of third party insurance	18.3	10 million Loti for any single claim, the number of claims being unlimited during the Construction and Defects Notification Period
Date by which the DB shall be appointed	20.2	28 days after the Commencement Date
The DB shall be comprised of	20.2	One sole Member
List of potential DB sole members	20.2	None
Appointment (if not agreed) to be made by	20.3	President of SAICE
Rules of arbitration	20.6(a)	Arbitration Act of Lesotho

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Table: Summary of Sections (if any)

Description of parts of the Works that shall be designated a Section for the purposes of the Contract (Sub-Clause 1.1.73)	Value: Percentage* of Accepted Contract Amount (Sub-Clause 14.9)	Time for Completion (Sub-Clause 1.1.84)	Delay Damages (Sub-Clause 8.8)

*These percentages shall also be applied to each half of the Retention Money under Sub-Clause 14.9

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Part B - Special Provisions

1 CLAUSE 1 GENERAL PROVISIONS

1.1 Subclause 1.1.1 The Contract

ADD THE FOLLOWING SUBCLAUSE:

"1.1.1.11 'Bid' shall have the same meaning as 'Tender'."

1.2 Subclause 1.2 Interpretation

AT THE END OF SUBCLAUSE 1.2, INSERT:

"In these Conditions, provisions including the expression 'Cost plus reasonable profit' require this profit to be one-twentieth (5%) of this Cost."

1.3 Subclause 1.6 Contract Agreement

REPLACE THE SECOND SENTENCE:

“The Contract Agreement …” WITH THE FOLLOWING: “The Contract Agreement shall be based on the forms included in Section VIII of this Project Document."

1.4 Subclause 1.12 Confidential Details

ADD THE FOLLOWING PARAGRAPH AFTER THE FIRST PARAGRAPH:

"The Contractor shall treat the details of the Contract as private and confidential, except to the extent necessary to carry out obligations under it or to comply with applicable Laws. The Contractor shall not publish, permit to be published, or disclose any particulars of the Work in any trade or technical paper, or elsewhere without previous agreement of the Employer."

2 CLAUSE 3 THE ENGINEER

2.1 Subclause 3.1 Engineer's Duties and Authority

"The Engineer shall obtain the specific approval of the Employer before taking action under the following Subclauses of these Conditions:

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(a) Subclause 13.1 – Right to vary

(b) Subclause 8.4 – Extension of Time for Completion."

2.2 ADD THE FOLLOWING SUBCLAUSE 3.6:

“3.6 Management Meetings

"The Engineer or the Contractor's Representative may require the other to attend a management meeting in order to review the arrangements for future work. The Engineer shall record the business of management meetings and supply copies of the record to those attending the meeting and to the Employer, in the record, and responsibilities for any actions to be taken shall be in accordance with the Contract."

4 CLAUSE 4 THE CONTRACTOR

4.2 Subclause 4.2 Performance Security

AT THE END OF THE SECOND PARAGRAPH OF SUBCLAUSE 4.2, INSERT:

"If the Performance Security is in the form of a bank guarantee, it shall be issued either (a) by a bank located in the Country, or (b) directly by a foreign bank acceptable to the Employer. If the Performance Security is not in the form of a bank guarantee, it shall be furnished by a financial entity registered, or licensed to do business, in the Country."

4.4 Subclause 4.4 Subcontractors

ADD THE FOLLOWING AT THE END OF THIS SUBCLAUSE:

"Where practicable, the Contractor shall give a fair and reasonable opportunity for contractors from the Country to be appointed as Subcontractors.

The Contractor shall ensure that the requirements imposed on the Contractor by Sub-Clause 1.12 [Confidential Details] apply equally to each Sub-contractor."

6 CLAUSE 6 STAFF AND LABOUR

6.2 Subclause 6.7 Health and Safety

ADD THE FOLLOWING AT THE END OF THIS SUBCLAUSE:

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"HIV-AIDS Prevention. The Contractor shall conduct an HIV-AIDS awareness programme via an approved service provider, and shall undertake such other measures as are specified in this Contract to reduce the risk of the transfer of the HIV virus between and among the Contractor's personnel and the local community, to promote early diagnosis and to assist affected individuals.

The Contractor shall throughout the Contract (including the Defects Notification Period):

(i) conduct information, education and consultation communication (IECC) campaigns, at least every other month, addressed to all the Site staff and labour (including all the Contractor's employees, all Subcontractors and Consultants' employees, and all truck drivers and crew making deliveries to Site for construction activities) and to the immediate local communities, concerning the risks, dangers and impact, and appropriate avoidance behaviour with respect to, of sexually transmitted diseases (STD) - or sexually transmitted infections (STI) in general and HIV/AIDS in particular;

(ii) provide for STI and HIV/AIDS screening, diagnosis, counselling and referral to a dedicated national STI and HIV/AIDS programme (unless otherwise agreed) of all Site staff and labour.

The Contractor shall include in the programme to be submitted for the execution of the Works under Subclause 8.3 an alleviation programme for Site staff and labour and their families in respect of sexually transmitted infections (STI) and sexually transmitted diseases (STD) including HIV/AIDS. The STI, STD and HIV/AIDS alleviation programme shall indicate when, how and at what cost the Contractor plans to satisfy the requirements of this Subclause and the related specification. For each component, the programme shall detail the resources to be provided or utilized and any related sub-contracting proposed. The programme shall also include provision of a detailed cost estimate with supporting documentation. Payment to the Contractor for preparation and implementation of this programme shall not exceed the Provisional Sum dedicated for this programme."

4.2 ADD THE FOLLOWING SUBCLAUSES:

"6.12 Measures against Insect and Pest Nuisance

The Contractor shall at all times take the necessary precautions to protect all staff and labour employed on the Site from insect and pest nuisance, and to reduce their danger to health. The Contractor shall provide suitable prophylactics for the Contractor's Personnel and shall comply with all the regulations of the local health authorities, including use of appropriate insecticide.

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6.13 Alcoholic Liquor or Drugs

The Contractor shall not, otherwise than in accordance with the Laws of the Country, import, sell, give, barter or otherwise dispose of any alcoholic liquor or drugs, or permit or allow importation, sale, gift, barter or disposal by Contractor's Personnel.

6.14 Arms and Ammunition

The Contractor shall not give, barter or otherwise dispose of to any person, any arms or ammunition of any kind, or allow Contractor's personnel to do so.

6.15 Festivals and Religious Customs

The Contractor shall respect the Country's recognised festivals, days of rest and religious or other customs."

13 CLAUSE 13 VARIATIONS AND ADJUSTMENTS

13.1 Subclause 13.8 Adjustments for Changes in Cost

REPLACE THIS SUBCLAUSE WITH THE FOLLOWING:

"The value of certificates issued in terms of Subclause 14.6 [Issue of Interim Payment Certificates] (excluding the value of those special materials specified in the Appendix to Bid) shall not be subject to adjustment for changes in cost.

Price adjustments for variations shall be made in the manner set out in the Contract Price Adjustment Schedule attached to these Particular Conditions."

15 CLAUSE 15 TERMINATION BY EMPLOYER

15.2 Subclause 15.5 Employer's entitlement to Termination

INSERT AT THE END OF SUBCLAUSE 15.5:

"The Employer shall also pay to the Contractor the amount of any other loss or damage resulting from this termination."

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B: GENERAL CONDITIONS OF DISPUTE BOARD AGREEMENT

1. Definitions

Each “Dispute Board Agreement” is a tripartite agreement by and between:

(a) the “Employer”;

(b) the “Contractor”; and

(c) the “Member” who is defined in the Dispute Board Agreement as being:

(i) the sole member of the "DB" and, where this is the case, all references to the “Other Members” do not apply, or

(ii) one of the three persons who are jointly called the “DB” (or “Dispute Board”) and, where this is the case, the other two persons are called the “Other Members.”

The Employer and the Contractor have entered (or intend to enter) into a contract, which is called the "Contract" and is defined in the Dispute Board Agreement, which incorporates this Appendix. In the Dispute Board Agreement, words and expressions which are not otherwise defined shall have the meanings assigned to them in the Contract.

2. General Provisions

Unless otherwise stated in the Dispute Board Agreement, it shall take effect on the latest of the following dates:

(a) the Commencement Date defined in the Contract,

(b) when the Employer, the Contractor and the Member have each signed the Dispute Board Agreement, or

(c) when the Employer, the Contractor and each of the Other Members (if any) have respectively each signed a dispute board agreement.

This employment of the Member is a personal appointment. At any time, the Member may give not less than 70 days’ notice of resignation to the Employer and to the Contractor, and the Dispute Agreement shall terminate upon the expiry of this period.

3. Warranties

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The Member warrants and agrees that he/she is and shall be impartial and independent of the Employer, the Contractor and the Engineer. The Member shall promptly disclose, to each of them and to the Other Members (if any), any fact or circumstance which might appear inconsistent with his/her warranty and agreement of impartiality and independence.

When appointing the Member, the Employer and the Contractor relied upon the Member's representations that he/she is:

(a) experienced in the work which the Contractor is to carry out under the Contract,

(b) experienced in the interpretation of contract documentation, and

(c) fluent in the language for communications defined in the Contract.

4. General Obligations of the Member

The Member shall:

(a) have no interest financial or otherwise in the Employer, the Contractor or Engineer, nor any financial interest in the Contract except for payment under the Dispute Board Agreement;

(b) not previously have been employed as a consultant or otherwise by the Employer, the Contractor or the Engineer, except in such circumstances as were disclosed in writing to the Employer and the Contractor before they signed the Dispute Board Agreement;

(c) have disclosed in writing to the Employer, the Contractor and the Other Members (if any), before entering into the Dispute Board Agreement and to his/her best knowledge and recollection, any professional or personal relationships with any director, officer or employee of the Employer, the Contractor or the Engineer, and any previous involvement in the overall project of which the Contract forms part;

(d) not, for the duration of the Dispute Board Agreement, be employed as a consultant or otherwise by the Employer, the Contractor or the Engineer, except as may be agreed in writing by the Employer, the Contractor and the Other Members (if any);

(e) comply with the annexed procedural rules and with Subclause 20.4 of the Conditions of Contract;

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(f) not give advice to the Employer, the Contractor, the Employer's Personnel or the Contractor's Personnel concerning the conduct of the Contract, other than in accordance with the annexed procedural rules;

(g) not while a Member enter into discussions or make any agreement with the Employer, the Contractor or the Engineer regarding employment by any of them, whether as a consultant or otherwise, after ceasing to act under the Dispute Board Agreement;

(h) ensure his/her availability for all site visits and hearings as are necessary;

(i) become conversant with the Contract and with the progress of the Works (and of any other parts of the project of which the Contract forms part) by studying all documents received which shall be maintained in a current working file;

(j) treat the details of the Contract and all the DB's activities and hearings as private and confidential, and not publish or disclose them without the prior written consent of the Employer, the Contractor and the Other Members (if any); and

(k) be available to give advice and opinions, on any matter relevant to the Contract when requested by both the Employer and the Contractor, subject to the agreement of the Other Members (if any).

5. General Obligations of the Employer and the Contractor

The Employer, the Contractor, the Employer's Personnel and the Contractor's Personnel shall not request advice from or consultation with the Member regarding the Contract, otherwise than in the normal course of the DB's activities under the Contract and the Dispute Board Agreement. The Employer and the Contractor shall be responsible for compliance with this provision, by the Employer's Personnel and the Contractor's Personnel respectively.

The Employer and the Contractor undertake to each other and to the Member that the Member shall not, except as otherwise agreed in writing by the Employer, the Contractor, the Member and the Other Members (if any):

(a) be appointed as an arbitrator in any arbitration under the Contract;

(b) be called as a witness to give evidence concerning any dispute before arbitrator(s) appointed for any arbitration under the Contract; or

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(c) be liable for any claims for anything done or omitted in the discharge or purported discharge of the Member's functions, unless the act or omission is shown to have been in bad faith.

The Employer and the Contractor hereby jointly and severally indemnify and hold the Member harmless against and from claims from which he is relieved from liability under the preceding paragraph.

Whenever the Employer or the Contractor refers a dispute to the DB under Subclause 20.4 of the Conditions of Contract, which will require the Member to make a site visit and attend a hearing, the Employer or the Contractor shall provide appropriate security for a sum equivalent to the reasonable expenses to be incurred by the Member. No account shall be taken of any other payments due or paid to the Member.

6. Payment

The Member shall be paid as follows, in the currency named in the Dispute Board Agreement:

(a) a retainer fee per calendar month, which shall be considered as payment in full for:

(i) being available on 28 days' notice for all site visits and hearings;

(ii) becoming and remaining conversant with all project developments and maintaining relevant files;

(iii) all office and overhead expenses including secretarial services, photocopying and office supplies incurred in connection with his duties; and

(iv) all services performed hereunder except those referred to in sub-paragraphs (b) and (c) of this Clause.

The retainer fee shall be paid with effect from the last day of the calendar month in which the Dispute Board Agreement becomes effective; until the last day of the calendar month in which the Taking-Over Certificate is issued for the whole of the Works.

With effect from the first day of the calendar month following the month in which the Taking-Over Certificate is issued for the whole of the Works, the retainer fee shall be reduced by one third. This reduced fee shall be paid until the first day of the calendar month in which the Member resigns or the Dispute Board Agreement is otherwise terminated.

(b) a daily fee which shall be considered as payment in full for:

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(i) each day or part of a day up to a maximum of two days' travel time in each direction for the journey between the Member's home and the site, or another location of a meeting with the Other Members (if any);

(ii) each working day on Site visits, hearings or preparing decisions; and

(iii) each day spent reading submissions in preparation for a hearing.

(c) all reasonable expenses including necessary travel expenses (air fare in less than first class, hotel and subsistence and other direct travel expenses) incurred in connection with the Member's duties, as well as the cost of telephone calls, courier charges, faxes and telexes: a receipt shall be required for each item in excess of five percent of the daily fee referred to in sub-paragraph (b) of this Clause;

(d) any taxes properly levied in the Country on payments made to the Member (unless a national or permanent resident of the Country) under this Clause 6.

The retainer and daily fees shall be as specified in the Dispute Board Agreement. Unless it specifies otherwise, these fees shall remain fixed for the first 24 calendar months, and shall thereafter be adjusted by agreement between the Employer, the Contractor and the Member, at each anniversary of the date on which the Dispute Board Agreement became effective.

If the parties fail to agree on the retainer fee or the daily fee, the appointing entity or official named in the Contract Data shall determine the amount of the fees to be used.

The Member shall submit invoices for payment of the monthly retainer and air fares quarterly in advance. Invoices for other expenses and for daily fees shall be submitted following the conclusion of a site visit or hearing. All invoices shall be accompanied by a brief description of activities performed during the relevant period and shall be addressed to the Contractor.

The Contractor shall pay each of the Member's invoices in full within 56 calendar days after receiving each invoice and shall apply to the Employer (in the Statements under the Contract) for reimbursement of one-half of the amounts of these invoices. The Employer shall then pay the Contractor in accordance with the Contract.

If the Contractor fails to pay to the Member the amount to which he/she is entitled under the Dispute Board Agreement, the Employer shall pay the amount due to the Member and any other amount which may be required to maintain the operation of the DB; and without prejudice to the Employer's rights or remedies. In addition to all other rights arising from this

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default, the Employer shall be entitled to reimbursement of all sums paid in excess of one-half of these payments, plus all costs of recovering these sums and financing charges calculated at the rate specified in Subclause 14.8 of the Conditions of Contract.

If the Member does not receive payment of the amount due within 70 days after submitting a valid invoice, the Member may (i) suspend his/her services (without notice) until the payment is received, and/or (ii) resign his/her appointment by giving notice under Clause 7.

7. Termination

At any time: (i) the Employer and the Contractor may jointly terminate the Dispute Board Agreement by giving 42 days' notice to the Member; or (ii) the Member may resign as provided for in Clause 2.

If the Member fails to comply with the Dispute Board Agreement, the Employer and the Contractor may, without prejudice to their other rights, terminate it by notice to the Member. The notice shall take effect when received by the Member.

If the Employer or the Contractor fails to comply with the Dispute Board Agreement, the Member may, without prejudice to his other rights, terminate it by notice to the Employer and the Contractor. The notice shall take effect when received by them both.

Any such notice, resignation and termination shall be final and binding on the Employer, the Contractor and the Member. However, a notice by the Employer or the Contractor, but not by both, shall be of no effect.

8. Default of the Member

If the Member fails to comply with any of his obligations under Clause 4 (a) - (d) above, he shall not be entitled to any fees or expenses hereunder and shall, without prejudice to their other rights, reimburse each of the Employer and the Contractor for any fees and expenses received by the Member and the Other Members (if any), for proceedings or decisions (if any) of the DB which are rendered void or ineffective by the said failure to comply.

If the Member fails to comply with any of his obligations under Clause 4 (e) - (k) above, he shall not be entitled to any fees or expenses hereunder from the date and to the extent of the non-compliance and shall, without prejudice to their other rights, reimburse each of the Employer and the Contractor for any fees and expenses already received by the Member, for

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proceedings or decisions (if any) of the DB which are rendered void or ineffective by the said failure to comply.

9. Disputes

Any dispute or claim arising out of or in connection with this Dispute Board Agreement, or the breach, termination or invalidity thereof, shall be finally settled by institutional arbitration. If no other arbitration institute is agreed, the arbitration shall be conducted under the Rules of Arbitration of the International Chamber of Commerce by one arbitrator appointed in accordance with these Rules of Arbitration.

C: PROCEDURAL RULES

Unless otherwise agreed by the Employer and the Contractor, the DB shall visit the site at intervals of not more than 140 days, including times of critical construction events, at the request of either the Employer or the Contractor. Unless otherwise agreed by the Employer, the Contractor and the DB, the period between consecutive visits shall not be less than 70 days, except as required to convene a hearing as described below.

The timing of and agenda for each site visit shall be as agreed jointly by the DB, the Employer and the Contractor, or in the absence of agreement, shall be decided by the DB. The purpose of site visits is to enable the DB to become and remain acquainted with the progress of the Works and of any actual or potential problems or claims, and, as far as reasonable, to endeavour to prevent potential problems or claims from becoming disputes.

Site visits shall be attended by the Employer, the Contractor and the Engineer and shall be co-ordinated by the Employer in co-operation with the Contractor. The Employer shall ensure the provision of appropriate conference facilities and secretarial and copying services. At the conclusion of each site visit and before leaving the site, the DB shall prepare a report on its activities during the visit and shall send copies to the Employer and the Contractor.

The Employer and the Contractor shall furnish to the DB one copy of all documents which the DB may request, including Contract documents, progress reports, variation instructions, certificates and other documents pertinent to the performance of the Contract. All communications between the DB and the Employer or the Contractor shall be copied to the other Party. If the DB comprises three persons, the Employer and the Contractor shall send copies of these requested documents and these communications to each of these persons.

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If any dispute is referred to the DB in accordance with Subclause 20.4 of the Conditions of Contract, the DB shall proceed in accordance with Subclause 20.4 and these Rules. Subject to the time allowed to give notice of a decision and other relevant factors, the DB shall:

(a) act fairly and impartially as between the Employer and the Contractor, giving each of them a reasonable opportunity of putting his case and responding to the other's case, and

(b) adopt procedures suitable to the dispute, avoiding unnecessary delay or expense.

The DB may conduct a hearing on the dispute, in which event it will decide on the date and place for the hearing and may request that written documentation and arguments from the Employer and the Contractor be presented to it prior to or at the hearing.

Except as otherwise agreed in writing by the Employer and the Contractor, the DB shall have power to adopt an inquisitorial procedure, to refuse admission to hearings or audience at hearings to any persons other than representatives of the Employer, the Contractor and the Engineer, and to proceed in the absence of any party who the DB is satisfied received notice of the hearing; but shall have discretion to decide whether and to what extent this power may be exercised.

The Employer and the Contractor empower the DB, among other things, to:

(a) establish the procedure to be applied in deciding a dispute,

(b) decide upon the DB's own jurisdiction, and as to the scope of any dispute referred to it,

(c) conduct any hearing as it thinks fit, not being bound by any rules or procedures other than those contained in the Contract and these Rules,

(d) take the initiative in ascertaining the facts and matters required for a decision,

(e) make use of its own specialist knowledge, if any,

(f) decide upon the payment of financing charges in accordance with the Contract,

(g) decide upon any provisional relief such as interim or conservatory measures, and

(h) open up, review and revise any certificate, decision, determination, instruction, opinion or valuation of the Engineer, relevant to the dispute.

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The DB shall not express any opinions during any hearing concerning the merits of any arguments advanced by the Parties. Thereafter, the DB shall make and give its decision in accordance with Subclause 20.4, or as otherwise agreed by the Employer and the Contractor in writing. If the DB comprises three persons:

(a) it shall convene in private after a hearing, in order to have discussions and prepare its decision;

(b) it shall endeavour to reach a unanimous decision: if this proves impossible the applicable decision shall be made by a majority of the Members, who may require the minority Member to prepare a written report for submission to the Employer and the Contractor; and

(c) if a Member fails to attend a meeting or hearing, or to fulfil any required function, the other two Members may nevertheless proceed to make a decision, unless:

(i) either the Employer or the Contractor does not agree that they do so, or

(ii) the absent Member is the chairman and he/she instructs the other Members not to make a decision.

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Section X. Contract Forms

Table of Forms

Notification of Award **231**

Contract Agreement **232**

Performance Security **234**

Environmental and Social (ES) Performance Security .... Error! Bookmark not defined. **307**

Advance Payment Security ..... Error! Bookmark not defined. **309**

Retention Money Security ..... Error! Bookmark not defined. **311**

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Notification of Award

LETTER OF ACCEPTANCE

[letterhead paper of the Employer]

[date]

To: *[name and address of the Contractor]*

This is to notify you that your Bid dated *[date]* for execution of the *[name of the Contract and identification number, as given in the Contract Data]* for the Accepted Contract Amount *[amount in numbers and words] [name of currency]*, as corrected and modified in accordance with the Instructions to Bidders, is hereby accepted by our Agency.

You are requested to furnish the Performance Security and an Environmental and Social (ES) Performance Security ***[Delete ES Performance Security if it is not required under the contract]*** within 28 days in accordance with the Conditions of Contract, using for that purpose one of the Performance Security Form*s* and the ES Performance Security Form, ***[Delete reference to the ES Performance Security Form if it is not required under the contract]*** included in Section X, Contract Forms, of the Bidding Documents

Authorized Signature: _____
Name and Title of Signatory: _____
Name of Agency: _____

Attachment: Contract Agreement

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Contract Agreement

THIS AGREEMENT made the _____ day of _____, _____, between _____of _____ (hereinafter "the Employer"), of the one part, and _____ of _____ (hereinafter "the Contractor"), of the other part:

WHEREAS the Employer desires that the Works known as _____ should be executed by the Contractor, and has accepted a Bid by the Contractor for the execution and completion of these Works and the remedying of any defects therein,

The Employer and the Contractor agree as follows:

1. In this Agreement words and expressions shall have the same meanings as are respectively assigned to them in the Contract documents referred to.

2. The following documents shall be deemed to form and be read and construed as part of this Agreement. This Agreement shall prevail over all other Contract documents.

(i) the Letter of Acceptance;

(ii) the Letter of Bid;

(a) the addenda Nos _____(if any);

(iii) the Particular Conditions;

(iv) the General Conditions;

(v) the Specification;

(vi) the Drawings; and

(vii) the completed Schedules and any other documents forming part of the contract.

3. In consideration of the payments to be made by the Employer to the Contractor as specified in this Agreement, the Contractor hereby covenants with the Employer to execute the Works and to remedy defects therein in conformity in all respects with the provisions of the Contract.

4. The Employer hereby covenants to pay the Contractor in consideration of the execution and completion of the Works and the remedying of defects therein, the Contract Price or such other sum as may become payable under the provisions of the Contract at the times and in the manner prescribed by the Contract.

IN WITNESS whereof the parties hereto have caused this Agreement to be executed in accordance with the laws of _____ on the day, month and year specified above.

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Signed by _____ (for the Employer)

Signed by _____ (for the Contractor)

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Performance Security

Performance Security – Demand Guarantee

Brief description of Contract .....

Name and address of Beneficiary .....

..... (whom the Contract defines as the Employer).

We have been informed that ..... (hereinafter called the "Principal") is your contractor under such Contract, which requires him to obtain a performance security.

At the request of the Principal, we (name of bank) ..... hereby irrevocably undertake to pay you, the Beneficiary/Employer, any sum or sums not exceeding in total the amount of ..... (the "guaranteed amount", say: .....) upon receipt by us of your demand in writing and your written statement stating:

(a) that the Principal is in breach of his obligation(s) under the Contract, and

(b) the respect in which the Principal is in breach.

[Following the receipt by us of an authenticated copy of the taking-over certificate for the whole of the works under Clause 10 of the conditions of the Contract, such guaranteed amount shall be reduced by .....% and we shall promptly notify you that we have received such certificate and have reduced the guaranteed amount accordingly.]2

Any demand for payment must contain your [minister's/directors']1 signature(s) which must be authenticated by your bankers or by a notary public. The authenticated demand and statement must be received by us at this office on or before (the date 70 days after the expected expiry of the Defects Notification Period for the Works) ..... (the "expiry date"), when this guarantee shall expire and shall be returned to us.

We have been informed that the Beneficiary may require the Principal to extend this guarantee if the performance certificate under the Contract has not been issued by the date 28 days prior to such expiry date. We undertake to pay you such guaranteed amount upon receipt by us, within such period of 28 days, of your demand in writing and your written statement that the performance certificate has not been issued, for reasons attributable to the Principal, and that this guarantee has not been extended.

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This guarantee shall be governed by the laws of ..... and shall be subject to the Uniform Rules for Demand Guarantees, published as number 458 by the International Chamber of Commerce, except as stated above.

Date ..... Signature(s) .....

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Performance Security – Surety Bond

Brief description of Contract .....
Name and address of Beneficiary .....
..... (together with successors and assigns, all as defined in the Contract as the Employer).
By this Bond, ... (name and address of Contractor) ..... (who is the Contractor under such Contract) as Principal and ..... (name and address of guarantor) as Guarantor are irrevocably held and firmly bound to the Beneficiary in the total amount of ..... (the "Bond Amount", say: .....) for the due performance of all such Principal's obligations and liabilities under the Contract. [Such Bond Amount shall be reduced by .....% upon the issue of the taking-over certificate for the whole of the works under Clause 10 of the conditions of the Contract.]3
This Bond shall become effective on the Commencement Date defined in the Contract.
Upon Default by the Principal to perform any Contractual Obligation, or upon the occurrence of any of the events and circumstances listed in Sub-Clause 15.2 of the conditions of the Contract, the Guarantor shall satisfy and discharge the damages sustained by the Beneficiary due to such Default, event or circumstances.4 However the total liability of the Guarantor shall not exceed the Bond Amount.
The obligations and liabilities of the Guarantor shall not be discharged by any allowance of time or other indulgence whatsoever by the Beneficiary to the Principal, or by any variation or suspension of the works to be executed under the Contract, or by any amendments to the Contract or to the constitution of the Principal or the Beneficiary, or by any other matters, whether with or without the knowledge or consent of the Guarantor.

Any claim under this Bond must be received by the Guarantor on or before ……. (the date six months after the expected expiry of the Defects Notification Period for the Works) ..... (the "Expiry Date"), when this Bond shall expire and shall be returned to the Guarantor.
The benefit of this Bond may be assigned subject to the provisions for assignment of the Contract, and subject to the receipt by the Guarantor of evidence of full compliance with such provisions.
This Bond shall be governed by the law of the same country (or other jurisdiction) as that which governs the Contract. This Bond incorporates and shall be subject to the Uniform Rules for Contract Bonds, published as number 524 by the International Chamber of Commerce, and words used in this Bond shall bear the meanings set out in such Rules.
Wherefore this Bond has been issued by the Principal and the Guarantor on (date) .....

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Signature(s) for and on behalf of the Principal …….

Signature(s) for and on behalf of the Guarantor……

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Advance Payment Security
Demand Guarantee

_____ [Bank's Name, and Address of Issuing Branch or Office]

Beneficiary: Government of Kingdom of Lesotho

Ministry of Public Works and Transport

Roads Directorate

PO Box 194

Maseru, 100

LESOTHO

Date: _____

ADVANCE PAYMENT GUARANTEE No.: _____

We have been informed that _____ [name of Contractor] (hereinafter called "the Contractor") has entered into Contract No…… [reference number of the contract] dated _____ with you, for the execution of ……..(hereinafter called "the Contract").

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

At the request of the Contractor, we _____ [name of Bank] hereby irrevocably undertake to pay you any sum or sums not exceeding in total an amount of _____ [amount in figures] (_____) [amount in words]1 upon receipt by us of your first demand in writing accompanied by a written statement stating that the Contractor is in breach of its obligation under the Contract because the Contractor used the advance payment for purposes other than the costs of mobilization in respect of the Works.

It is a condition for any claim and payment under this guarantee to be made that the advance payment referred to above must have been received by the Contractor on its account number _____ at _____ [name and address of Bank].

The maximum amount of this guarantee shall be progressively reduced by the amount of the advance payment repaid by the Contractor as indicated in copies of interim statements or payment certificates which shall be presented to us. This guarantee shall expire, at the latest, upon our receipt of a copy of the interim payment certificate indicating that eighty (80) percent of the Contract Price has been certified for payment, or on the ___ day of _____, 2___,2 whichever is earlier.

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

This guarantee is subject to the Uniform Rules for Demand Guarantees, ICC Publication No. 458.

_____ [signature(s)]

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Retention Money Security

Demand Guarantee

_____ [Bank's Name, and Address of Issuing Branch or Office]
Beneficiary: Government of Kingdom of Lesotho
Ministry of Public Works and Transport
Roads Directorate
PO Box 194
Maseru, 100
LESOTHO
Date: _____
RETENTION MONEY GUARANTEE No.: _____
We have been informed that _____ [name of Contractor] (hereinafter called "the Contractor") has entered into Contract No…….. [reference number of the contract] dated _____ with you, for……. [name of contract and brief description of Works] (hereinafter called "the Contract").
Furthermore, we understand that, according to the conditions of the Contract, when the Taking-Over Certificate has been issued for the Works and the first half of the Retention Money has been certified for payment, payment of _____ [insert the second half of the Retention Money or if the amount guaranteed under the Performance Guarantee when the Taking-Over Certificate is issued is less than half of the Retention Money, the difference between half of the Retention Money and the amount guaranteed under the Performance Security] is to be made against a Retention Money guarantee.
At the request of the Contractor, we _____ [name of Bank] hereby irrevocably undertake to pay you any sum or sums not exceeding in total an amount of _____ [amount in figures] (_____) [amount in words]1 upon receipt by us of your first demand in writing accompanied by a written statement stating that the Contractor is in breach of its obligation under the Contract because the Contractor used the advance payment for purposes other than the costs of mobilization in respect of the Works.

It is a condition for any claim and payment under this guarantee to be made that the payment of the second half of the Retention Money referred to above must have been received by the Contractor on its account number _____ at _____ [name and address of Bank].
This guarantee shall expire, at the latest, 21 days after the date when the Employer has received a copy of the Performance Certificate issued by the Engineer. Consequently, any demand for payment under this guarantee must be received by us at this office on or before that date.
This guarantee is subject to the Uniform Rules for Demand Guarantees, ICC Publication No. 458.

_____
[signatures]

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t's bank].

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

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

_____

[signature(s)]

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