



NOTICE NO: 041 of 2025

TENDER NO: 8/2/RNM0552

NOSITHA PEDESTRIAN BRIDGE REPAIRS AND UPGRADE IN WARD 27

CIDB CLASSIFICATION 6CE OR HIGHER

Name of Tenderer:

This tender closes at 12h00 on the 27th of June 2025 at the offices of the Ray Nkonyeni Municipality located at 10 Connor Street, Port Shepstone

NO LATE SUBMISSIONS WILL BE CONSIDERED

BID AMOUNT R_____

Issued by:

RAY NKONYENI MUNICIPALITY
Department of Technical Services
 No.10 Conner Street
 Marburg
 Port Shepstone
 4240
 Tel: 039 688 2000
 Fax: 039 682 0327
 Email: vusumuzi.duma@rnm.gov.za

Prepared By:

DLAMINDLOVU CONSULTING ENGINEERS AND PROJECT MANAGERS

58 Juniper Road
 Essenwood
 Durban
 4001

Contact Name: Mr. N Ntuli
 Telephone: (033) 342 2233
 Fax: (086) 665 66691
 Email: nhlakanipho@dlami-ndlovu.co.za



PART A INVITATION TO BID

YOU ARE HEREBY INVITED TO BID FOR REQUIREMENTS OF THE RAY NKONYENI MUNICIPALITY					
BID NUMBER:	8/2/RNM0552	CLOSING DATE:	27 JUNE 2025	CLOSING TIME:	12H00
DESCRIPTION	NOSITHA PEDESTRIAN BRIDGE REPAIRS AND UPGRADE IN WARD 27				
THE SUCCESSFUL BIDDER WILL BE REQUIRED TO FILL IN AND SIGN A WRITTEN CONTRACT FORM (MBD7).					

BID RESPONSE DOCUMENTS MAY BE DEPOSITED IN THE BID BOX
SITUATED AT (STREET ADDRESS)

10 Connor Street					
Port Shepstone					
4240					
SUPPLIER INFORMATION					
NAME OF BIDDER					
POSTAL ADDRESS					
STREET ADDRESS					
TELEPHONE NUMBER	CODE		NUMBER		
CELLPHONE NUMBER					
FACSIMILE NUMBER	CODE		NUMBER		
E-MAIL ADDRESS					
VAT REGISTRATION NUMBER					
TAX COMPLIANCE STATUS	TCS PIN:		OR	CSD No:	
ARE YOU THE ACCREDITED REPRESENTATIVE IN SOUTH AFRICA FOR THE GOODS /SERVICES /WORKS OFFERED?	☐ Yes ☐ No [IF YES ENCLOSE PROOF]		ARE YOU A FOREIGN BASED SUPPLIER FOR THE GOODS /SERVICES /WORKS OFFERED?	☐ Yes ☐ No [IF YES, ANSWER PART B:3]	
TOTAL NUMBER OF ITEMS OFFERED			TOTAL BID PRICE	R	
SIGNATURE OF BIDDER			DATE		
CAPACITY UNDER WHICH THIS BID IS SIGNED					
BIDDING PROCEDURE ENQUIRIES MAY BE DIRECTED TO:			TECHNICAL INFORMATION MAY BE DIRECTED TO:		
DEPARTMENT	SUPPLYCHAIN MANAGEMENT		CONTACT PERSON	TECHNICAL SERVICES	
CONTACT PERSON	BONGANI MFENQA		TELEPHONE NUMBER	VUSUMUZI DUMA	
TELEPHONE NUMBER	039 312 8304		FACSIMILE NUMBER	039 688 2169	
E-MAIL ADDRESS	bongani.mfenga@rnm.gov.za		E-MAIL ADDRESS	Vusumuzi.duma@rnm.gov.za	

PART B TERMS AND CONDITIONS FOR BIDDING

1. BID SUBMISSION:	
1.1.	BIDS MUST BE DELIVERED BY THE STIPULATED TIME TO THE CORRECT ADDRESS. LATE BIDS WILL NOT BE ACCEPTED FOR CONSIDERATION.
1.2.	ALL BIDS MUST BE SUBMITTED ON THE OFFICIAL FORMS PROVIDED–(NOT TO BE RE-TYPED) OR ONLINE
1.3.	THIS BID IS SUBJECT TO THE PREFERENTIAL PROCUREMENT REGULATIONS, 2022, THE GENERAL CONDITIONS OF CONTRACT (GCC) AND, IF APPLICABLE, ANY OTHER SPECIAL CONDITIONS OF CONTRACT.
1.4.	THE BID OFFER MUST BE SIGNED BY A PERSON AUTHORIZED TO SIGN ON BEHALF OF THE BIDDER.
1.5.	A BIDDER WHO SUBMITTED A BID AS A JOINT VENTURE HAS INCLUDED AN ACCEPTABLE JOINT VENTURE AGREEMENT WITH HIS/HER BID.
1.6.	A BIDDER, WHO IS A JOINT VENTURE, HAS INCLUDED MBD 4, 8 & 9 FOR EACH ENTITY IN THE JOINT VENTURE / CONSORTIUM WITH HIS/HER BID
1.7.	THE BIDDER OR A COMPETENT AUTHORISED REPRESENTATIVE OF THE CONTRACTOR WHO SUBMITTED THE BID HAS ATTENDED THE COMPULSORY CLARIFICATION MEETING OR SITE INSPECTION IF APPLICABLE.
2. TAX COMPLIANCE REQUIREMENTS	
2.1	BIDDERS MUST ENSURE COMPLIANCE WITH THEIR TAX OBLIGATIONS.
2.2	BIDDERS ARE REQUIRED TO SUBMIT THEIR UNIQUE PERSONAL IDENTIFICATION NUMBER (PIN) ISSUED BY SARS TO ENABLE THE ORGAN OF STATE TO VIEW THE TAXPAYER'S PROFILE AND TAX STATUS.
2.3	APPLICATION FOR THE TAX COMPLIANCE STATUS (TCS) CERTIFICATE OR PIN MAY ALSO BE MADE VIA E-FILING. IN ORDER TO USE THIS PROVISION, TAXPAYERS WILL NEED TO REGISTER WITH SARS AS E-FILERS THROUGH THE WEBSITE WWW.SARS.GOV.ZA.
2.4	FOREIGN SUPPLIERS MUST COMPLETE THE PRE-AWARD QUESTIONNAIRE IN PART B:3.
2.5	BIDDERS MAY ALSO SUBMIT A PRINTED TCS CERTIFICATE TOGETHER WITH THE BID.
2.6	IN BIDS WHERE CONSORTIA / JOINT VENTURES / SUB-CONTRACTORS ARE INVOLVED; EACH PARTY MUST SUBMIT A SEPARATE TCS CERTIFICATE / PIN / CSD NUMBER.
2.7	WHERE NO TCS IS AVAILABLE BUT THE BIDDER IS REGISTERED ON THE CENTRAL SUPPLIER DATABASE (CSD), A CSD NUMBER MUST BE PROVIDED.
3. QUESTIONNAIRE TO BIDDING FOREIGN SUPPLIERS	
3.1.	IS THE ENTITY A RESIDENT OF THE REPUBLIC OF SOUTH AFRICA (RSA) ☐ YES ☐ NO
3.2.	DOES THE ENTITY HAVE A BRANCH IN THE RSA? ☐ YES ☐ NO
3.3.	DOES THE ENTITY HAVE A PERMANENT ESTABLISHMENT IN THE RSA? ☐ YES ☐ NO
3.4.	DOES THE ENTITY HAVE ANY SOURCE OF INCOME IN THE RSA? ☐ YES ☐ NO
3.5.	IS THE ENTITY LIABLE IN THE RSA FOR ANY FORM OF TAXATION? ☐ YES ☐ NO
IF THE ANSWER IS "NO" TO ALL OF THE ABOVE, THEN IT IS NOT A REQUIREMENT TO REGISTER FOR A TAX COMPLIANCE STATUS SYSTEM PIN CODE FROM THE SOUTH AFRICAN REVENUE SERVICE (SARS) AND IF NOT REGISTER AS PER 2.3 ABOVE.	

**NB: FAILURE TO PROVIDE ANY OF THE ABOVE PARTICULARS MAY RENDER THE BID INVALID.
NO BIDS WILL BE CONSIDERED FROM PERSONS IN THE SERVICE OF THE STATE.**

SIGNATURE OF BIDDER:.....

CAPACITY UNDER WHICH THIS BID IS SIGNED:.....

DATE:.....

Tender
General Tender Information

RAY NKONYENI MUNICIPALITY

NOTICE NO: 041 OF 2025

TENDER NO: 8/2/RNM0552

GENERAL TENDER INFORMATION

TENDER ADVERTISED	:	Thursday, 8 May 2025
ESTIMATED CIDB CONTRACTOR GRADING	:	6CE OR HIGHER
CLARIFICATION MEETING	:	10H00, Friday, 23 May 2025 (Compulsory)
VENUE FOR CLARIFICATION MEETING	:	No1 Protea Rd, Marburg, Port Shepstone, 4240 Department of Technical Services (foyer)
CLOSING DATE	:	Friday, 27 June 2025
CLOSING TIME	:	12H00
CLOSING VENUE	:	Bid Box at Municipal Offices at 10 Connor Street, Port Shepstone
INSTRUCTIONS	:	Fully completed Original Bid Documents, with two (2) copies of the original document in a sealed envelope clearly marked "Bid name and Bid number" containing the Tender Documents (completed in all respects including C.1.1 Form of Offer) p l u s any additional supporting documentation must be deposited into the bid box.

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RAY NKONYENI MUNICIPALITY

NOTICE NO: 041 OF 2025

TENDER NO: 8/2/RNM0552

T1.1 TENDER NOTICE AND INVITATION TO TENDER

Bids are hereby invited to tender for **THE NOSITHA PEDESTRIAN BRIDGE REPAIRS AND UPGRADE IN WARD 27 within** Ray Nkonyeni Municipality as specified in the under-mentioned bid document. Tenderers who are registered with the Construction Industry Development Board (CIDB) with a classification grading of **6CE or higher**, are eligible to submit a tender and will be considered for an award.

Only tenderers who comply with the functionality criteria for experience of key persons, company past performance in reinforced structural civil works ie bridge construction projects as stated in the Tender Data, are eligible to be considered for further evaluation.

Tenderers shall be required to demonstrate that they will have in their employment during the contract period the necessary personnel satisfying the requirements of the Scope of Work for labor-intensive competencies for management and supervisory personnel.

Bid documents can be downloaded for free from the e-tenders portal <https://www.etenders.gov.za/> or downloaded from Ray Nkonyeni Municipality website <http://www.rnm.gov.za/> , as from **Friday, 09 May 2025**.

A compulsory site clarification meeting will be held by the department of technical services in Marburg Boardroom Office, which is situated in No1 Protea Road, Marburg on the 23rd of May 2025 at 10h00.

Fully completed Bid documents, with **Two (2) copies** of the original document in a sealed envelope, must be clearly marked with the relevant Bid Number as follows: - **NOSITHA PEDESTRIAN BRIDGE REPAIRS AND UPGRADE IN WARD 27** The completed Bids (**Original and 2 copies**) must be deposited in the bid box, situated in the foyer of the Municipal Offices at 10 Connor Street, Port Shepstone, no later than **12:00** midday **Friday, 27 June 2025**. After closure, the tender will be opened to the public.

PRE-QUALIFICATION CRITERIA

Stage 1 : Functionality

The Functionality will comprise of the following based on the criteria indicated in the respective tender returnable: Attach all supporting documentation for the following table.

Criterion	Possible Full Points
Experience of the Bidder	20
Qualifications and experience of the Company Owner	30
Experience of Foreman	20
Total Possible Points	70

Bidders must score a minimum of 70% to pass functionality evaluation.

Stage 2: Financial Offer and Preference (Specific Goals)

The 80/20 preference point system shall be applicable during the evaluation and adjudication of this Bid proposal. Specific goals for the tender and points claimed are indicated per the table below.

The specific goals allocated points in terms of this tender	Number of points allocated. (80/20 system)		Verification Document
Local companies	10	Enterprise Located within the Ray Nkonyeni Local Municipality = 10	Company proof of address
		Enterprise Located within the Ugu District Municipality = 5	
		Enterprise Located within the KZN Province = 1	
		Enterprise Located outside of KZN Province = 0	
An EME or QSE which is at least 100% owned by black people	10	an EME or QSE which is at least 100% owned by black people = 10	CIPC: Shareholders certificate and Sworn Affidavit confirming the status of EME or QSE
		an EME or QSE which is at least 51% owned by black people = 6	
		an EME or QSE which is at 25% - 50% owned by black people = 2	
Total Points	20		

Technical enquiries may be addressed to Mr Vusumuzi Duma of Ray Nkonyeni Municipality (039) 688-2157/ Email Address: vusumuzi.duma@rnm.gov.za or Mr. Nhlakanipho Ntuli of Dlamindlovu Consulting Engineers Telephone: (031) 342 2233/ Email: nhlakanipho@dlamindlovu.co.za by no later than three (3) days before tender closure.

Procurement enquiries may be addressed to Bongani Mfenqa of Ray Nkonyeni Municipality by no later than three days before tender closure on Tel No.: 039 312 8304 or Email: bongani.mfenqa@rnm.gov.za

NOTE TO BIDDERS ON PRE- CONDITIONS OF THE BID:

- The Supply Chain Management Policy of Ray Nkonyeni Municipality will apply. The Council reserves the right not to accept the lowest bid or any bid and reserves the rights to accept the whole or part of the bid, or to reject all bids and cancel the notice to tender.
- Service providers are required to download bid documents before the clarification meeting.
- Only service providers registered in the Central Supplier Database (CSD) will be considered, attach proof of registration failure to attach will result in your bid not evaluated further.
- Members or Directors of Companies or Service Providers who are state employees are not allowed to bid or quote.
- Aggrieved unsuccessful bidders will be allowed to lodge, within fourteen (14) days of the decision or action, a written objection or complaint to the Office of the Municipal Manager through email, mm@rnm.gov.za or fax number 086 529 7195. Complaints or objections received after fourteen (14) days of the date of the notice **will not** be entertained.
- The original bid document plus TWO **extra** (02) copy must be submitted, failure to submit two copies will result in disqualification.
- Bids submitted are to be valid for a period of **120 days**.
- Joint ventures are allowed **only**:
 - If the lead partner has the higher CIDB Grading.
 - There is a proper Joint Venture Agreement indicating the lead partner.
- Sub-contractor(s) for structural steel fabrication and installation to be CIDB registered with classification of 5 SL grading.

NB: FAILURE TO SUBMIT TWO (2) COPIES WILL RESULT IN DISQUALIFICATION.

Ray Nkonyeni Municipality
Mr K.J. Zulu
Municipal Manager
10 Connor Street
P O Box 5
Port Shepstone
4240

**ALL BIDS MUST BE SUBMITTED ON THE OFFICIAL FORMS
(NOT TO BE RE-TYPED)**

NB!!!! Please attach copies of the following documents.

- **Company registration documents.**
- **Certified copy of ID documents of directors/owners/members/
shareholders.**
- **Copy of a valid TAX Compliance Certificate
Or Tax Compliance Status PIN Sheet.**
- **Declarations (MBD 4, 6.1, 8 & 9).**
- **Joint Venture Agreements**

STANDARD FORMS

THIS BID IS SUBJECT TO THE GENERAL CONDITIONS OF CONTRACT (GCC) AND, IF APPLICABLE, ANY OTHER SPECIAL CONDITIONS OF CONTRACT. THIS BID WILL BE EVALUATED AND ADJUDICATED ACCORDING TO THE FOLLOWING CRITERIA:

1. Relevant specifications
2. Value for money
3. Capability to execute the contract.
4. PPPFA & associated regulations

NB: NO BIDS WILL BE CONSIDERED FROM PERSONS IN THE SERVICE OF THE STATE

T1.2 TENDER DATA

The Employer is **RAY NKONYENI MUNICIPALITY**, represented by Mr Vusumuzi Duma (email: vusumuzi.duma@rnm.gov.za).

The following documents form part of this tender and not issued to Tenderer's, but available from the issuing bodies as applicable:

1. CIDB, "The Standard for Uniformity in Construction Procurement Annex F, Standard Conditions of Tender", Board Notice 136 of 2016 of Government Gazette 38960 of 10 July 2016.
2. GCC 2015 "General Conditions of Contract for Construction Works", Third Edition 2015 published by the South African Institute of Civil Engineering (SAICE)
3. SANS Standard Specifications for Road and Bridge Works for State Authorities 1998 (Green Book)
4. The Occupational Health and Safety Act No 85 and Amendment Act No 181 of 1993, and the Construction Regulations (2014).
5. SANS 1921 (2004) Construction and Management Requirements for Works Contracts: Part 6.
6. SANS 1914 (2002): Targeted Construction Procurement: Parts 1 – 6.
7. The Preferential Procurement Regulations of 2022,

The tender documents issued by the Employer comprise:

VOLUME 1: The Tender Document (this document), in which is bound:

The Tender

Part T1: Tendering Procedures

T1.1 Tender Notice And Invitation To Tender

T1.2 Tender Data

Part T2: Returnable Documents

T2.1 List Of Returnable Documents

T2.2 Returnable Schedules

The Contract

Part C1: Agreements and Contract Data

C1.1 Form of Offer and Acceptance

C1.2 Contract Data

C1.3 Performance Guarantee

C1.4 Occupational Health And Safety Agreement

Part C2: Pricing Data

C2.1 Pricing Instructions

C2.2 Bill Of Quantities

Part C3: Scope Of Work

C3 Scope of Works

F.1 Standard Specifications

F.2 Project Specification

F.3 Status

F.4 Project Specification Portion 1 : General

F.5 Project Specification Portion 2 : General

F.6 Particular Specification PES – Environmental Management Specification

F.7 Particular Specification PE – The Client's Preconstruction Health and Safety Plan

F.8 Particular Specification QMS – Employer's Agent's Quality Management System

C4: Site Information

C5: Drawings

Volume 1 is deemed the "Returnable Documents" which must be returned to the Employer in terms of submitting a tender offer.

Attention is drawn to the fact that verbal information, given by the Employer during site visits/clarification meetings or at any other time prior to the award of the Contract, will not be regarded as binding on the Employer. Only information issued formally by the Employer in writing to tenderers will be regarded as amending the Tender Documents.

Employer's Agent:

Dlamindlovu Consulting Engineers and Project Managers

Address:	58 Juniper Road Essenwood, Berea Durban,4001
Contact Name:	Mr. Nhlakanipho Ntuli
Telephone:	(031) 942 4327
Fax:	(086 665 6691
Email:	info@dlami-ndlovu.co.za

Only those tenderers who satisfy the following criteria are eligible to submit tenders:

A. Construction Industry Development Board (CIDB) Registration

Only those tenderers who are registered with the CIDB, or are capable of being so prior to the evaluation of submissions, in a contractor grading designation equal to or higher than a contractor grading designation determined in accordance with the sum tendered, or a value determined in accordance with Regulation 25(1B) or 25(7A) of the Construction Industry Development Regulations, for a **6CE or higher** class of construction work, are eligible to have their tenders evaluated.

B. National Treasury Central Supplier Database Registration

Only Tenderers who are eligible to be registered on the National Treasury Central Supplier (CSD) Database and have provided proof of their registration will be eligible to submit a tender offer. Proof of registration must be in the form of the Tenderers CSD registration number. Tenderers who are not registered are not precluded from submitting bids but must be registered prior to Contract Award.

In the case of Joint Venture partnerships this requirement will apply individually to each party to the Joint Venture.

Tenderers who wish to register as service providers on the CSD can register online at <https://secure.csd.gov.za/Account/Register>.

Add the following:

A compulsory site clarification meeting will be held by the department of technical services in Marburg Boardroom Office, which is situated in No1 Protea Road, Marburg on the 23rd of May 2025 at 10h00.

Tenderers should be represented at the clarification meeting by a person who is suitably qualified and experienced to comprehend the implications of the work involved.

There will be site visits after the briefing.

F2.10.3 This tender is subject to contract price adjustments.

Alternative tender does not apply.

Parts of each tender offer communicated on paper shall be submitted as an **original, plus two (2) copies**.

The tender shall be signed by a person duly authorized to do so. Tenders submitted by joint ventures of two or more firms shall be accompanied by the document of formation of the joint venture, authenticated by a notary public or other official deputed to witness sworn statements, in which is defined precisely the conditions under which the joint venture will function, its period of duration, the persons authorized to represent and obligate it, the participation of the several firms forming the joint venture, and any other information necessary to permit a full appraisal of its functioning.

The employer's address for delivery of tender offers and identification details to be shown on each tender offer packages are:

Location of tender box	:	Foyer of Ray Nkonyeni Local Municipality Offices
Physical address	:	10 Connor Street, Port Shepstone
Identification details	:	NOTICE NO: 041 OF 2025 TENDER NO: 8/2/RNM0552

Sealed tenders with the Tenderer's name and address and the **endorsement "TENDER NO: 8/2/RNM0552"** on the envelope, must be placed in the appropriate official tender box at the abovementioned address.

The closing time for submission of tender offers is **the 27th of June 2025 at 12h00**, as stated in the Tender Notice and Invitation to Tender. Telephonic, telegraphic, telex, facsimile or e-mailed tender offers will not be accepted.

The tender offer validity period is **120 days**.

A tender may be rejected as non-responsive if the tenderer fails to provide any clarification requested by the employer, or confirmation of registration with CIDB within the time for submission stated in the employer's written request for such clarification or confirmation. A tender may be rejected if the unit rates or lump sums for some of the items in the bills/schedules of quantities are, in the opinion of the Employer, unreasonable or out of proportion, and the tenderer fails, within the time stated in writing by the Employer to justify any specific rates or lump sums (i.e. to provide a financial breakdown of how such rates or sums were obtained) or to adjust the unit rates or lump sums for such items while retaining the total of the prices unchanged.

The tenderer is required to submit the following certificates with the tender:

A. Certificate of Contractor Registration (CIDB)

Either certified copy of the Certificate of Contractor Registration issued by the Construction Industry Development Board or of the Application Form for registration in terms of the Construction Industry Development Board Act (Form F006).

Where a tenderer satisfies CIDB contractor grading designation requirements through joint venture formation, such tenderers must submit the Certificates of Contractor Registration respectively for each partner.

B. Tax compliance pin

Tenderers shall be registered and in good standing with the South African Revenue Services (SARS) and shall submit/append documentary evidence/proof in the form of an original or certified copy of valid Tax compliance pin issued by SARS. Failure to provide a valid Tax compliance pin will result in the tender being rejected.

Each party to a Consortium/Joint Venture shall submit a separate Tax compliance pin.

C. Company Registration

Certified Copies of company registration documents.

Each party to a Consortium/Joint Venture shall submit separate company registration documents.

D. Ownership

Proof of Preference Points Claimed

Each party to a Consortium/Joint Venture shall submit separate certified copies in the above regard.

Respond to a request for clarification received up to seven (7) working days before the tender closing time stated in the Tender Data and notify all tenderers who drew procurement documents.

The time and location for opening of the tender offers is:

Time : **12H00, 27 June 2025**

Location : **Tender Box, Foyer of Ray Nkonyeni Local Municipality Offices, 10 Connor Street, Port Shepstone**

Tenders will be opened immediately after closing time for tenders at **12H00**.

F.3.8.2 Tenders will be considered non-responsive if:

- the tenderer has not completed and/or signed the Offer portion of C1.1 Form of Offer and Acceptance.
- the tenderer does not comply with the Contractor's CIDB grading designation specified in above.
- The tenderer has failed to clarify or submit any supporting documentation within the time for submission stated in the employer's written request.

The procedure for evaluation of responsive Bid Offers will be **METHOD 4: (Financial Offer, preference, and quality (functionality))** with 80/20 Preference Points System. Score quality, rejecting all Bid Offers that fail to score the minimum number of points for quality stated in the Bid Data. The total score awarded will be the addition of the two scores for price and preference.

The following formula will be used in Calculation of Percentage for Functionality

$$PS = \frac{(So \times Ap)}{Ms}$$

Where:

- *Ps = percentage scored for functionality by Bid/proposal under consideration*
- *So = total score of bid/proposal under consideration*
- *Ms = Maximum possible score*
- *Ap = percentage allocated for functionality*

Score the financial offers of remaining responsive tender offers using the following formula:

$$Nf = W1 \times [1 - (P - P_m) / P_m]$$

Where:

- $W1 = 80$ for financial values up to R 50, 000, 000.00 (inclusive of VAT) of all responsive tenders received:
- P_m = the value of the comparative offer of the most favorable tender.
- P = the value of the comparative offer under consideration.

F.3.11.8. Scoring Preferences

Up to **20 points** (for financial values up to R 50, 000, 000.00), will be awarded to bidders who complete the preference schedule and who are found to be eligible for the preference claimed.

- The applicable preference point system for this tender is the 80/20 preference point system.

Points for this tender (even in the case of a tender for income-generating contracts) shall be awarded for:

- Price; and
- Specific Goals.

The maximum points for this tender are allocated as follows:

	POINTS
PRICE	80
SPECIFIC GOALS	20
Total points for Price and SPECIFIC GOALS	100

Failure on the part of a tenderer to submit proof or documentation required in terms of this tender to claim points for specific goals with the tender, will be interpreted to mean that preference points for specific goals are not claimed.

The organ of state reserves the right to require of a tenderer, either before a tender is adjudicated or at any time subsequently, to substantiate any claim in regard to preferences, in any manner required by the organ of state.

F.3.11.9. Scoring Quality

Tenderers are to submit information in respect of the following criteria upon which they will be scored for Quality. Failure to submit the relevant information will/or may result in zero scores.

The quality will comprise scores for the following based on criteria indicated in the respective tender returnable:

- A maximum of **30 points** will be awarded for relevant qualifications and demonstrated experience of the Company Owner
- A maximum of **20 points** will be awarded for qualifications and demonstrated experience of the proposed Site Foreman.
- A maximum of **20 points** will be awarded for demonstrated experience with respect to undertaking construction of bridge structures to the value more than R5 million.

Score quality, rejecting all tender offers that fail to score the minimum number of **70% (49 out of 70)** of the points for quality stated in the tender data. Point system for functionality will be as per the table below:

DETAILED BREAKDOWN OF QUALITY POINTS		
Criteria 1 Company Owner with at least a minimum qualification of a National Diploma (NQF6) or qualification equivalent in Civil Engineering or built environment		30
If Company Owner has NQF level 6 (National Diploma) or Higher with 10 years' or more experience and has completed bridge building or similar projects	30	
If Company Owner has NQF level 6 (National Diploma) or Higher with 5 to 9 years' experience and has completed bridge building or similar projects	20	
If Company Owner has NQF level 6 (National Diploma) or Higher with 4 years' or less experience in construction of bridge building or similar projects	10	
If Company Owner does NOT have NQF level 6 (National Diploma) or Higher or does NOT have experience in construction of bridge building or similar projects regardless of other experience or No response	0	
Note: Verification method will be based on attached proof of company registration, CV with Certified Copy of Qualification, and traceable reference. Qualifications obtained from outside South Africa to be accompanied by SAQA certification.		
Criteria 2 Site Foreman (SF) personnel with at least a minimum experience in Civil Project		20
If SF has 10 years' or more experience and has completed bridge building or similar projects	20	
If SF has 5-9 years' experience and has completed bridge building or similar projects	10	
If SF has 1-4 years' experience and has completed bridge building or similar projects	5	
If SF has NOT completed bridge building or similar projects in last 3 years, regardless of other experience and NO response	0	
Note: Verification method will be based on attached CV With Certified traceable References		
Criteria 3: Relevant Experience - The company has successfully completed other projects of similar nature in past five years.		
5 or more projects in the construction of bridge structures to the value of more than R5 million	20	20
4 Projects in the construction of bridge structures to the value of more than R5 million	16	
3 Projects in the construction of bridge structures to the value of more than R5 million	12	
2 Projects in the construction of bridge structures to the value of more than R5 million	8	
1 Projects in the construction of bridge structures to the value of more than R5 million	4	
0 or No Projects in the construction of bridge structures to the value of more than R5 million	0	
Note: Verification method will be based on attached Appointment letters and Completion Certificates for the same projects of more than R 5 million		
TOTAL EVALUATION POINTS SCORE FOR QUALITY		70

F.3.13 Acceptance of tender offer

Tender offers will only be accepted if:

- a) the tenderer has in his or her possession an original valid Tax Clearance Certificate issued by the South African Revenue Services or has made arrangements to meet outstanding tax obligations
- b) the tenderer is registered with the Construction Industry Development Board in an appropriate contractor grading designation, by tender closing date;
- c) the tenderer is not in arrears for more than 3 months with the municipal rates and taxes and municipal services charges;
- d) the tenderer or any of its directors is not listed on the Register of Tender Defaulters in terms of the Prevention and Combating of Corrupt Activities Act of 2004 as a person prohibited from doing business with the public sector;
- e) the tender has not
 - i) abused the Employer's Supply Chain Management System; or
 - ii) failed to perform on any previous contract and has been given a written notice to this effect; and
- f) has completed the Compulsory Enterprise Questionnaires and there are no conflicts of interest which may impact on the tenderer's ability to perform the contract in the best interest of the employer or potentially compromise the tender process.

Provide Copies of the Contract

The number of paper copies of the signed contract to be provided by the employer is one original plus one original duplicate.

The specific goals allocated points in terms of this tender	Number of points allocated. (80/20 system)		Verification Document
Local companies	10	Enterprise Located within the Ray Nkonyeni Local Municipality = 10	Company proof of address
		Enterprise Located within the Ugu District Municipality = 5	
		Enterprise Located within the KZN Province = 1	
		Enterprise Located outside of KZN Province = 0	
An EME or QSE which is at least 100% owned by black people	10	an EME or QSE which is at least 100% owned by black people = 10	CIPC: Shareholders' certificate and Sworn Affidavit confirming the status of EME or QSE
		an EME or QSE which is at least 51% owned by black people = 6	
		an EME or QSE which is at 25% - 50% owned by black people = 2	
Total Points	20		

APPENDIX: STANDARD CONDITIONS OF TENDER

(As contained in Annexure F of Board Notice 86 of 2010: Standards for Uniformity in Construction Procurement)

F.1 General

F.1.1 Actions

F1.1.1. The employer and each tenderer submitting a tender offer shall comply with these conditions of tender. In their dealings with each other, they shall discharge their duties and obligations as set out in F.2 and F.3, timeously and with integrity, and behave equitably, honestly and transparently, comply with all legal obligations and not engage in anticompetitive practices.

F1.1.2. The employer and the tenderer and all their agents and employees involved in the tender process shall avoid conflicts of interest and, where a conflict of interest is perceived or known, declare any such interest in their tender submissions. Employees, agents and advisors of the employer shall declare any conflict of interest to whoever is responsible for overseeing the procurement process at the start of any deliberations relating to the procurement process or as soon as they become aware of such conflict and abstain from any decisions where such conflict exists or recuse themselves from the procurement process, as appropriate.

Note 1) A conflict of interest may arise due to a conflict of roles which might provide an incentive for improper acts in some circumstances. A conflict of interest can create an appearance of impropriety that can undermine confidence in the ability of the person to act properly in his or her position even if no improper acts result.

2) Conflicts of interest in respect of those engaged in the procurement process include direct, indirect or family interests in the tender or outcome of the procurement process and any personal bias, inclination, obligation, allegiance or loyalty which would in any way affect any decision taken.

F.1.1.3 The employer shall not seek, and a tenderer shall not submit a tender without having a firm intention and the capacity to proceed with the contract.

F.1.2 Tender Documents

The documents issued by the employer for the purpose of a tender offer are listed in the tender data.

F.1.3 Interpretation

F.1.3.1 The tender data and additional requirements contained in the tender schedules that are included in the returnable documents are deemed to be part of these conditions of tender.

F.1.3.2 These conditions of tender, the tender data and tender schedules which are only required for tender evaluation purposes, shall not form part of any contract arising from the invitation to tender.

F.1.3.3 For the purposes of these conditions for the calling for expressions of interest, the following definitions apply:

(a) **conflict of interest** means any situation in which

- i) someone in a position of trust has competing professional or personal interest which make it difficult to fulfil his or her duties impartially;
- ii) an individual or organisation is in a position to exploit a professional or official capacity in some way for their personal or corporate benefit; or
- iii) incompatibility or contradictory interests exist between an employee and the organisation which employs that employee.

(b) **comparative offer** means the tenderer's financial offer after the factors of non-firm prices, all unconditional discounts and any other tendered parameters

that will affect the value of the financial offer have been taken into consideration

- (c) **corrupt practice** means the offering, giving, receiving or soliciting of anything of value to influence the action of the employer or his staff or agents in the tender process; and
- (d) **fraudulent practice** means the misrepresentation of the facts in order to influence the tender process or the award of a contract arising from a tender offer to the detriment of the employer, including collusive practices intended to establish prices at artificial levels
- (e) **Organisation** means a company, firm, enterprise, association or other legal entity, whether incorporated or not, or a public body
- (f) **Quality (functionality)** means the totality of features and characteristics of a product or service that bear on its ability to satisfy stated or implied needs.

F.1.4 Communication and employer's agent

Each communication between the employer and a tenderer shall be to or from the employer's agent only, and in a form that can be read, copied and recorded. Writing shall be in the English language. The employer shall not take any responsibility for non-receipt of communications from or by a tenderer. The name and contact details of the employer's agent are stated in the tender data.

F.1.5 The employer's right to accept or reject any tender offer

F.1.5.1 The employer may accept or reject any variation, deviation, tender offer, or alternative tender offer, and may cancel the tender process and reject all tender offers at any time before the formation of a contract. The employer shall not accept or incur any liability to a tenderer for such cancellation and rejection, but will give reasons for such action upon written request to do so.

F.1.5.2 The employer may not subsequent to the cancellation or abandonment of a tender process or the rejection of all tender offers re-issue a tender covering substantially the same scope of work within a period of six months unless only one tender was received and such tender was returned unopened to the tenderer.

F.1.6 Procurement Procedures

F.1.6.1 General

Unless otherwise stated in the tender data, a contract will, subject F.3.13, be concluded with the tenderer who in terms of F.3.11 is the highest ranked or the tenderer scoring the highest number of tender evaluation points, as relevant, based on the tender submissions that are received at the closing time for tenders.

-
- F.1.6.1.1** At the conclusion of each round of negotiations, tenderers shall be invited by the Employer to make a fresh tender offer, based on the same evaluation criteria, with or without adjusted weightings. Tenderers shall be advised when they are to submit their best and final offer.
- F.1.6.1.2** The contract shall be awarded in accordance with the provisions of F.3.11 and F.3.13 after tenderers have been requested to submit their best and final offer.
- F.2 Tenderer's obligations**
- F.2.1 Eligibility**
- F.2.1.1** Submit a tender offer only if the tenderer complies with the criteria stated in the tender data and the tenderer, or any of his principals, is not under any restriction to do business with employer.
- F.2.1.2** Notify the Employer of any proposed material change in the capabilities or formation of the tendering entity (or both) or any other criteria which formed part of the qualifying requirements used by the Employer as the basis in a prior process to invite the tenderer to submit a tender offer and obtain the Employer's written approval prior to do so prior to the closing time of tenders.
- F.2.2 Cost of tendering**
- Accept that the employer will not compensate the tenderer for any costs incurred in the preparation and submission of a tender offer, including the costs of any testing necessary to demonstrate that aspects of the offer satisfy requirements.
- F.2.3 Check documents**
- Check the tender documents on receipt for completeness and notify the employer of any discrepancy or omission.
- F.2.4 Confidentiality and copyright of documents**
- Treat as confidential all matters arising in connection with the tender. Use and copy the documents issued by the employer only for the purpose of preparing and submitting a tender offer in response to the invitation.
- F.2.5 Reference documents**
- Obtain, as necessary for submitting a tender offer, copies of the latest versions of standards,

attached but which are incorporated into the tender documents by reference.

F.2.6 Acknowledge addenda

Acknowledge receipt of addenda to the tender documents, which the employer may issue, and if necessary apply for an extension to the closing time stated in the tender data, in order to take the addenda into account.

F.2.7 Site visit and clarification meeting

Attend, where required, a site visit and clarification meeting at which tenderers may familiarize themselves with aspects of the proposed work, services or supply and raise questions. Details of the meeting(s) are stated in the tender data.

F.2.8 Seek clarification

Request clarification of the tender documents, if necessary, by notifying the employer at least five working days before the closing time stated in the tender data.

F.2.9 Insurance

Be aware that the extent of insurance to be provided by the employer (if any) may not be for the full cover required in terms of the conditions of contract identified in the contract data. The tenderer is advised to seek qualified advice regarding insurance.

F.2.10 Pricing the tender offer

F.2.10.1 Include in the rates, prices, and the tendered total of the prices (if any) all duties, taxes (except Value Added Tax (VAT), and other levies payable by the successful tenderer, such duties, taxes and levies being those applicable 14 days before the closing time stated in the tender data.

F.2.10.2 Show VAT payable by the employer separately as an addition to the tendered total of the prices.

F.2.10.3 Provide rates and prices that are fixed for the duration of the contract and not subject to adjustment except as provided for in the conditions of contract identified in the contract data.

F.2.10.4 State the rates and prices in Rand unless instructed otherwise in the tender data. The conditions of contract identified in the contract data may provide for part payment in other currencies.

F.2.11 Alterations to documents

Not make any alterations or additions to the tender documents, except to comply with instructions issued by the employer, or necessary to correct errors made by the tenderer. All signatories to the tender offer shall initial all such alterations. Erasures and the use of masking fluid are prohibited.

F.2.12 Alternative tender offers

F.2.12.1 Unless otherwise stated in the tender data, submit alternative tender offers only if a main tender offer, strictly in accordance with all the requirements of the tender documents, is also submitted. The alternative tender offer is to be submitted with the main tender offer together with a schedule that compares the requirements of the tender documents with the alternative requirements the tenderer proposes.

F.2.12.2 Accept that an alternative tender offer may be based only on the criteria stated in the tender data or criteria otherwise acceptable to the employer.

F.2.13 Submitting a tender offer

F.2.13.1 Submit one tender offer only, either 15 as a single tendering entity or as a member in

-
- joint venture, to provide the whole of the works, services or supply identified in the contract data, unless stated otherwise in the tender data.
- F.2.13.2** Return all returnable documents to the employer after completing them in their entirety, either electronically (if they were issued in electronic format) or by writing in black ink.
- F.2.13.3** Submit the parts of the tender offer communicated on paper as an original plus the number of copies stated in the tender data, with an English translation of any documentation in a language other than English, and the parts communicated electronically in the same format as they were issued by the employer.
- F.2.13.4** Sign the original and all copies of the tender offer where required in terms of the tender data. The employer will hold all authorized signatories liable on behalf of the tenderer. Signatories for tenderers proposing to contract as joint ventures shall state which of the signatories is the lead partner whom the employer shall hold liable for the purpose of the tender offer.
- F.2.13.5** Seal the original and each copy of the tender offer as separate packages marking the packages as "ORIGINAL" and "COPY". Each package shall state on the outside the employer's address and identification details stated in the tender data, as well as the tenderer's name and contact address.
- F.2.13.6** Where a two-envelope system is required in terms of the tender data, place and seal the returnable documents listed in the tender data in an envelope marked "financial proposal" and place the remaining returnable documents in an envelope marked "technical proposal". Each envelope shall state on the outside the employer's address and identification details stated in the tender data, as well as the tenderer's name and contact address.
- F.2.13.7** Seal the original tender offer and copy packages together in an outer package that states on the outside only the employer's address and identification details as stated in the tender data.
- F.2.13.8** Accept that the employer shall not assume any responsibility for the misplacement or premature opening of the tender offer if the outer package is not sealed and marked as stated.
- F.2.13.9** Accept that tender offers submitted by facsimile or email will be rejected by the Employer, unless stated otherwise in the tender data.
- F.2.14** **Information and data to be completed in all respects**
- Accept that tender offers, which do not provide all the data or information requested completely and in the form required, may be regarded by the employer as non-responsive.
- F.2.15** **Closing time**
- F.2.15.1** Ensure that the employer receives the tender offer at the address specified in the tender data not later than the closing time stated in the tender data. Proof of posting shall not be accepted as proof of delivery. The employer shall not accept tender offers submitted by telegraph, telex, facsimile or e-mail, unless stated otherwise in the tender data.
- F.2.15.2** Accept that, if the employer extends the closing time stated in the tender data for any reason, the requirements of these conditions of tender apply equally to the extended deadline.
- F.2.16** **Tender offer validity**
- F.2.16.1** Hold the tender offer(s) valid for acceptance by the employer at any time during the validity period stated in the tender data after the closing time stated in the tender data.
- F.2.16.2** If requested by the employer, consider extending the validity period stated in the tender data for an agreed additional period.

Provide clarification of a tender offer in response to a request to do so from the employer during the evaluation of tender offers. This may include providing a breakdown of rates or prices and correction of arithmetical errors by the adjustment of certain rates or item prices (or both). No change in the competitive position of tenderers or substance of the tender offer is sought, offered or permitted.

F.2.18 Provide other material

F.2.18.1 Provide, on request by the employer, any other material that has a bearing on the tender offer, the tenderer's commercial position (including notarized joint venture agreements), preferencing arrangements, or samples of materials, considered necessary by the employer for the purpose of a full and fair risk assessment. Should the tenderer not provide the material, or a satisfactory reason as to why it cannot be provided, by the time for submission stated in the employer's request, the employer may regard the tender offer as non-responsive.

F.2.18.2 Dispose of samples of materials provided for evaluation by the employer, where required.

F.2.19 Inspections, tests and analysis

Provide access during working hours to premises for inspections, tests and analysis as provided for in the tender data.

F.2.20 Submit securities, bonds, policies, etc.

If requested, submit for the employer's acceptance before formation of the contract, all securities, bonds, guarantees, policies and certificates of insurance required in terms of the conditions of contract identified in the contract data.

F.2.21 Check final draft

Check the final draft of the contract provided by the employer within the time available for the employer to issue the contract.

F.2.22 Return of other tender documents

If so instructed by the employer, return all retained tender documents within 28 days after the expiry of the validity period stated in the tender data.

F.2.23 Certificates

Include in the tender submission or provide the employer with any certificates as stated in the tender data.

F.3 The employer's undertakings

F.3.1 Respond to requests from the tenderer

F.3.1.1 Respond to a request for clarification received up to five working days prior to the tender closing time stated in the Tender Data and notify all tenderers who drew procurement documents.

F.3.1.2 Consider any request to make material change in the capabilities or formation of the tendering entity (or both) or any other criteria which formed part of the qualifying requirements used to prequalify a tenderer to submit a tender offer in terms of a previous procurement process and deny any such request if as a consequence:

- joint venture fails to meet any of the collective or individual qualifying requirements.
- b) The new partners to a joint venture were not prequalified in the first instance, either as individual firms or as another joint venture; or
 - c) In the opinion of the Employer, acceptance of the material change would compromise the prequalification process.

F.3.2 Issue Addenda

If necessary, issue addenda that may amend or amplify the tender documents to each tenderer during the period from the date of the Tender Notice until seven days before the tender closing time stated in the Tender Data. If, as a result a tenderer applies for an extension to the closing time stated in the Tender Data, the Employer may grant such extension and will then notify it to all tenderers who drew documents.

F.3.3 Return late tender offers

Return tender offers received after the closing time stated in the Tender Data, unopened, (unless it is necessary to open a tender submission to obtain a forwarding address), to the tenderer concerned.

F.3.4 Opening of tender submissions

F.3.4.1 Open valid tender submissions in the presence of tenderers' agents who choose to attend at the time and place stated in the tender data. Tender submissions for which acceptable reasons for withdrawal have been submitted will not be opened.

F.3.4.2 Announce at the opening held immediately after the opening of tender submissions, at a venue indicated in the tender data, the name of each tenderer whose tender offer is opened, the total of his prices, preferences claimed and time for completion, if any, for the main tender offer only.

F.3.4.3 Make available the record outlined in F.3.4.2 to all interested persons upon request.

F.3.5 Non-disclosure

Not disclose to tenderers, or to any other person not officially concerned with such processes, information relating to the evaluation and comparison of tender offers, the final evaluation price and recommendations for the award of a contract, until after the award of the contract to the successful tenderer.

F.3.6 Grounds for rejection and disqualification

Determine whether there has been any effort by a tenderer to influence the processing of tender offers and instantly disqualify a tenderer (and his tender offer) if it is established that he engaged in corrupt or fraudulent practices.

F.3.8.1 Determine, on opening and before detailed evaluation, whether each tender offer properly received:

- (a) meets the requirements of these Conditions of Tender,
- (b) has been properly and fully completed and signed, and
- (c) is responsive to the other requirements of the tender documents.

F.3.8.2 A responsive tender is one that conforms to all the terms, conditions, and specifications of the tender documents without material deviation or qualification. A material deviation or qualification is one which, in the Employer's opinion, would:

- detrimentally affect the scope, quality, or performance of the works, services or supply identified in the Scope of Work,
- change the Employer's or the tenderer's risks and responsibilities under the contract, or
- affect the competitive position of other tenderers presenting responsive tenders, if it were to be rectified.

Reject a non-responsive tender offer and not allow it to be subsequently made responsive by correction or withdrawal of the non-conforming deviation or reservation.

F.3.9 Arithmetical errors

F.3.9.1 Check responsive tender offers for arithmetical errors between amounts in words and amounts in figures. Where there is a discrepancy between the amounts in figures and in words, the amount in words shall govern.

F.3.9.2 Check the highest ranked tender or tenderer with the highest number of tender evaluation points after the evaluation of tenders in accordance with F.3.11 for :

- a) The gross misplacement of the decimal point in the unit rate,
- b) Omissions made in completing the pricing schedule or bills of quantities or
- c) Arithmetic errors in
 - Line-item totals resulting from the product of unit rate and a quantity in bills of quantities or schedule of prices; or
 - The summation of the prices.

F3.9.2 Notify the tenderers of all errors or omissions that are identified in the tender offer and invite the tenderer to either confirm the tender offer as tendered or accept the corrected total of prices.

F.3.9.3 Where the tenderer elects to confirm the tender offer as tendered, correct the errors as follows:

- a) If bills of quantities or pricing schedules apply and there is an error in the line item total resulting from the product of the unit rate and the quantity, the line item total as quoted shall govern, and the unit rate will be corrected. Where there is an obviously gross misplacement of the decimal point in the unit rate, the line item total as quoted shall govern and the unit rate shall be corrected.
- b) Where there is an error in the total of the prices either as a result of other corrections required by this checking process or in the tenderer's addition of prices, the total of the prices shall govern and the tenderer will be asked to revise selected item prices (and their rates if a bill of quantities applies) to achieve the tendered total of the prices.

Consider the rejection of a tender offer if the tenderer does not correct or accept the correction of his arithmetical errors in the manner described above.

F.3.10 Clarification of a tender offer

Obtain clarification from a tenderer on any matter that could give rise to ambiguity in a contract arising from the tender offer.

F.3.11 Evaluation of tender offers

F3.11.1 General

Appoint an evaluation panel of not less than three persons. Reduce each responsive tender offer to a comparative offer and evaluate them using the tender evaluation methods and associated evaluation criteria and weightings that are specified in the tender data.

	POINTS
PRICE	80
SPECIFIC GOALS	20
Total points for Price and SPECIFIC GOALS	100

The 80/20 preference point system for acquisition of services, works or goods up to Rand value of R50 million

- 1) (a)(i) The following formula must be used to calculate the points for price in respect of tenders(including price quotation) with a rand value equal to, or above R 30 000 and up to Rand value of R 50 000 000 (all applicable taxes included):

$$P_s = 80 \left(1 - \frac{(P_t - P_{\min})}{P_{\min}} \right)$$

Where

P_s = Points scored for comparative price of tender or offer under consideration; P_t = Comparative price of tender or offer under consideration; and

$P_{\min}$ = Comparative price of lowest acceptable tender or offer.

- (4)(a)(ii) An employer of state may apply the formula in paragraph (i) for price quotations with a value less than R30 000, if and when appropriate:

F.3.11.6 Decimal places

Score price, preference and functionality, as relevant, to two decimal places.

F.3.11.7 Scoring Price

Score price of remaining responsive tender offers using the following formula:

$$N_{FO} = W_1 \times A$$

where:

N_{FO} is the number of tender evaluation points awarded for price.

W_1 is the maximum possible number of tender evaluation points awarded for price as stated in the Tender Data.

A is a number calculated using the formula and option described in Table F.1 as stated in the Tender Data.

Table F.1: Formulae for calculating the value of A

Formula	Comparison aimed at achieving	Option 1 ^a	Option 2 ^a
1	Highest price or discount	$A = (1 + (P - P_m)) P_m$	$A = P / P_m$
2	Lowest price or percentage	$A = (1 - (P - P_m)) P_m$	$A = P_m / P$
^a P_m is the comparative offer of the most favorable comparative offer. P is the comparative offer of the tender offer under consideration.			

F.3.11.8 Scoring preferences

Confirm that tenderers are eligible for the preferences claimed in accordance with the provisions of the tender data and reject all claims for preferences where tenderers are not eligible for such preferences. Calculate the total number of tender evaluation points for preferences claimed in accordance with the provisions of the tender data.

F.3.11.9 Scoring functionality

Score each of the criteria and sub criteria for quality in accordance with the provisions of the Tender Data.

Calculate the total number of tender evaluation points for quality using the following formula:

$$NQ = W_2 \times SO / MS$$

where:

SO is the score for quality allocated to the submission under consideration;

MS is the maximum possible score for quality in respect of a submission; and

W_2 is the maximum possible number of tender evaluation points awarded for the quality as stated in the tender data

F.3.12 Acceptance of tender offer

Accept the tender offer, if in the opinion of the employer, it does not present any risk and only if the tenderer:

- is not under restrictions, or has principals who are under restrictions, preventing participating in the employer's procurement,
- can, as necessary and in relation to the proposed contract, demonstrate that he or she possesses the professional and technical qualifications, professional and technical competence, financial resources, equipment and other physical facilities, managerial capability, reliability, experience and reputation, expertise and the personnel, to perform the contract,
- has the legal capacity to enter into the contract,
- is not insolvent, in receivership, under Business Rescue as provided for in chapter 6 of the Companies Act, 2008, bankrupt or being wound up, has his affairs administered by **a court or a** judicial officer, has suspended his business activities, or is subject to legal proceedings in respect of any of the foregoing,
- complies with the legal requirements, if any, stated in the tender data, and
- is able, in the opinion of the employer, to perform the contract free of conflicts of interest.

F.3.13 Prepare contract documents

F.3.13.1 If necessary, revise documents that shall form part of the contract and that were issued by the employer as part of the tender documents to take account of:

- a) addenda issued during the tender period,
- b) inclusion of some of the returnable documents, and
- c) other revisions agreed between the employer and the successful tenderer.

F.3.13.2 Complete the schedule of deviations attached to the form of offer and acceptance, if any.

F.3.14 Complete adjudicator's contract

Unless alternative arrangements have been agreed or otherwise provided for in the contract, arrange for both parties to complete formalities for appointing the selected adjudicator at the same time as the main contract is signed.

F.3.15 Provide copies of the contracts

Provide to the successful tenderer the number of copies stated in the Tender Data of the signed copy of the contract as soon as possible after completion and signing of the form of offer and acceptance.

F.3.16 Provide written reasons for actions taken

Provide upon request written reasons to tenderers for any action that is taken in applying these conditions of tender but withhold information which is not in the public interest to be divulged, which is considered to prejudice the legitimate commercial interests of tenderers or might prejudice fair competition between tenderers.

F3.19 Transparency in the procurement process

F3.19.1 The CIDB prescripts require that tenders must be advertised and be registered on the cidb i.Tender system.

F3.19.2 The employer must adopt a transparency model that incorporates the disclosure and accountability as transparency requirements in the procurement process.

F3.19.3 The transparency model must identify the criteria for selection of projects, project information template and the threshold value of the projects to be disclosed in the public domain at various intervals of delivery of infrastructure projects.

F3.19.4 The client must publish the information on a quarterly basis which contains the following information:

- Procurement planning process
- Procurement method and evaluation process
- Contract type
- Contract status
- Number of firms tendering
- Cost estimate
- Contract title
- Contract firm(s)
- Contract price

- Contract scope of 22 work

- Contract start date and duration
- Contract evaluation reports

- F3.19.5** The employer must establish a Consultative Forum which will conduct a random audit in the implementation of the transparency requirements in the procurement process.
- F3.19.6** Consultative Forum must be an independent structure from the bid committees.
- F3.19.7** The information must be published on the employer's website.
- F 3.19.8** Records of such disclosed information must be retained for audit purposes.

Alpha-numerics associated with the Contractor Grading Designations

TABLE G: CONTRACTOR GRADING DESIGNATIONS AND ASSOCIATED PARAMETERS

Contractor Grading Designation	Tender Value Range designation	Maximum Value of Contract that a Contractor is considered capable of performing (R)
1 (class of construction works)	1	500 000
2 (class of construction works)	2	1 000 000
3 (class of construction works)	3	3 000 000
4 (class of construction works)	4	6 000 000
5 (class of construction works)	5	10 000 000
6 (class of construction works)	6	20 000 000
7 (class of construction works)	7	60 000 000
8 (class of construction works)	8	200 000 000
9 (class of construction works)	9	No limit

Part T2: Returnable Documents

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RAY NKONYENI MUNICIPALITY

NOTICE NO: 041 OF 2025

TENDER NO: 8/2/RNM0552

T2.1 LIST OF RETURNABLE DOCUMENTS

The tenderer must complete and return documents A1 to A21; B1 to B2; C1.1 and C3 as listed below as part of his/her tender submission:

SCHEDULE	DESCRIPTION	PAGE
	Returnable documents required for tender evaluation purposes	
Schedule A	Documents incorporated in this tender document that must be completed and signed by all tenderers	
A1	Authority To Sign Documents	28
A2	Letter Of Good Standing with Workmen's Compensation Commissioner	29
A3	Certificate Of Authority for Joint Ventures	30
A4	Schedule Of Work Carried Out by The Tenderer	31
A5	Current And Recent Projects for Ray Nkonyeni Municipality (RNM/MBD5.2)	33
A6	Schedule Of Construction Plant	34
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A8	Schedule Of Estimated Monthly Expenditure Form – Past Experience (RNM/MBD5.1)	37
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A10	Pricing Schedule – Firm Prices (Purchases) (RNM/MBD3.1)	40
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A16	Declaration Of Interest(Rnm/Mbd 4)	54
A17	Declaration Of Bidder's Past Supply Chain Management Practices (Rnm/Mbd 8)	55
A18	Certificate Of Independent Tender Determination (Rnm/Mbd 9)	59
A19	Form Concerning Fulfilment Of The Construction Regulations	60
A20	Preference Points Claim Form In Terms Of The Preferential Procurement Regulations 2022 (Rnm/Mbd 6.1)	64
A21	Tenderer's Participation in Job Creation Using Local Labour	68
Schedule B	Additional Documents to be provided by the Tenderer and attached to his/her tender	
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Schedule C	Other Documents that will form part of The Contract	
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C1.3	Performance Guarantee	85
C1.4	Occupational Health and Safety Agreement	88
C2	Pricing Data and Bill of Quantities	91
C	Scope of Work	105

NB: TENDERERS MUST COMPLETE THESE DOCUMENTS / DATA SHEETS / FORMS IN BLACK INK

RAY NKONYENI MUNICIPALITY

NOTICE NO: 041 OF 2025

TENDER NO: 8/2/RNM0552

T2.2 RETURNABLE SCHEDULES

A1. AUTHORITY TO SIGN DOCUMENTS

Signatories for firms must establish their authority thereto by attaching a duly signed and dated copy of the relevant resolution of the ⁽¹⁾ Directors/Partners/Members to this form, or by the completion of this form.

RESOLUTION

By resolution of the ⁽¹⁾ Board of Directors / Partners / Members passed at a meeting held on..... (Date),
at (Place)

..... (Name of signatory)

whose signature appears below, has been duly authorized to sign all documents in connection with the Tender for.

TENDER NO: 8/2/RNM0552 and any contract which may arise therefrom on behalf of:-

.....
(Name Of Tenderer in Block Capitals)

SIGNED ON BEHALF OF THE FIRM (Director/Partner/Member): -

1.

NAME

SIGNATURE

DATE

2.

NAME

SIGNATURE

DATE

3.

NAME

SIGNATURE

DATE

SIGNATURE OF AUTHORISED SIGNATORY:

NAME

SIGNATURE

DATE

Tenderers are to note that failure to comply with ²⁶ this requirement will render their tender invalid.

RAY NKONYENI MUNICIPALITY

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**A2. LETTER OF GOOD STANDING WITH WORKMEN'S COMPENSATION
COMMISSIONER**

RAY NKONYENI MUNICIPALITY

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TENDER NO: 8/2/RNM0552

A3. CERTIFICATE OF AUTHORITY FOR JOINT VENTURES

This Returnable Schedule is to be completed only if Tenderer is a joint venture.

We, the undersigned, are submitting this tender offer in joint venture and hereby authorize.

Mr/Ms....., authorized signatory of the company, close corporation or partnership..... acting in the capacity of lead partner, to sign all documents in connection with the tender offer and any contract resulting from it on our behalf.

NAME OF FIRM	ADDRESS	DULY AUTHORISED SIGNATORY
Lead partner		Signature :..... Name :..... Designation :.....
		Signature :..... Name :..... Designation :.....
		Signature :..... Name :..... Designation :.....
		Signature :..... Name :..... Designation :.....

Note:

A copy of the Joint Venture Agreement clearly showing the percentage contribution of each partner to the Joint Venture shall be appended to this Schedule.

RAY NKONYENI MUNICIPALITY

NOTICE NO: 041 OF 2025

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A4. SCHEDULE OF WORK CARRIED OUT BY THE TENDERER

Tenderers shall insert in the Schedule hereunder details of work successfully carried out by them of a similar nature to that for which their tender is submitted. The tenderer's relevant experience must be supported by appointment letters and completion certificates for at least five (5) projects.

Failure to complete this Schedule and submit both appointment letters and completion certificates will result into tenderer scoring zero (0). It will be taken to indicate that the Tenderer has no experience in this class of work.

COMPLETED CONTRACTS				
Employer (Name, Tel, Fax, Email)	Consulting Employer's Agent (Name, Tel, Fax, Email)	Nature Of Work	Value of Work R(M)	Date Completed
Name:				
Tel :				
Fax :				
Email :				
Name:				
Tel :				
Fax :				
Email :				
Name:				
Tel :				
Fax :				
Email :				
Name:				
Tel :				
Fax :				
Email :				
Name:				
Tel :				
Fax :				
Email :				

SIGNED BY/ON BEHALF OF TENDERER:

NAME

SIGNATURE

DATE

CURRENT CONTRACTS				
Employer (Name, Tel, Fax, Email)	Consulting Employer's Agent (Name, Tel, Fax, Email)	Nature Of Work	Value of Work R(M)	Anticipated Completion Date
Name:				
Tel :				
Fax :				
Email :				
Name:				
Tel :				
Fax :				
Email :				
Name:				
Tel :				
Fax :				
Email :				
Name:				
Tel :				
Fax :				
Email :				
Name:				
Tel :				
Fax :				
Email :				
Name:				
Tel :				
Fax :				
Email :				

If there is insufficient space above, the tenderer may append additional sheets.

Number of additional sheets appended by the tenderer to this Schedule (If nil, enter NIL)

SIGNED BY/ON BEHALF OF TENDERER:

NAME

SIGNATURE

DATE

RAY NKONYENI MUNICIPALITY

NOTICE NO: 041 OF 2025

TENDER NO: 8/2/RNM0552

A5. CURRENT AND RECENT PROJECTS FOR RAY NKONYENI MUNICIPALITY (RNM/MBD5.2)

Tenderers must furnish hereunder details of similar works/service, which they have satisfactorily completed in the past. The information shall include a description of the Works, the Contract value and name of Employer.

CURRENT PROJECTS			
PROJECT NAME	AWARDED AMOUNT	CONTRACT START DATE	ANTICIPATED / ACTUAL COMPLETION DATE
TOTAL AMOUNT OF PROJECTS CURRENTLY UNDERTAKEN FOR RAY NKONYENI MUNICIPALITY			R

SIGNED BY/ON BEHALF OF TENDERER:

NAME

SIGNATURE

DATE

TENDER NO: 8/2/RNM0552

RAY NKONYENI MUNICIPALITY

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A7. SCHEDULE OF ESTIMATED MONTHLY EXPENDITURE

The tenderer shall state his estimated expenditure indicating the values of each monthly claim in terms of Clause 6.10 of the General Conditions of Contract, which he/she estimates will arise based on his/her preliminary programme and tendered rates, in the table below. ***The total of the monthly amounts shall be equal to the tender sum.***

MONTH	VALUE
1	R
2	R
3	R
4	R
5	R
6	R
7	R
8	R
9	R
10	R
11	R
12	R
SUBTOTAL	R
CONTINGENCIES (10%)	R
SUBTOTAL	R
VAT (15%)	R
TOTAL (INCLUDING VAT @ 15%)	R

SIGNED BY/ON BEHALF OF TENDERER:

NAME

SIGNATURE

DATE

RAY NKONYENI MUNICIPALITY

NOTICE NO: 041 OF 2025

TENDER NO: 8/2/RNM0552

A8. SCHEDULE CONTRACT FORM – PAST EXPERIENCE (RNM/MBD5.1)

Bidders must furnish hereunder details of similar works / service, which they have satisfactorily completed in the past. The information shall include a description of the works, the contract value, and the name of the employer.

Employer	Nature of Works	Value of Work	Duration and Completion Date	Employer's Contract No

If there is insufficient space above, the tenderer may append additional sheets.

Number of additional sheets appended by the tenderer to this Schedule (If nil, enter NIL)

SIGNED BY/ON BEHALF OF TENDERER:

NAME

SIGNATURE

DATE

RAY NKONYENI MUNICIPALITY

NOTICE NO: 041 OF 2025

TENDER NO: 8/2/RNM0552

A9. DETAILS OF KEY PERSONNEL

Tenderers shall set out in the Schedule hereunder details of the experience of the Site Agent and Site Foreman in work of a similar nature to that for which this Tender is submitted.

Failure to complete this Schedule may result in the Tender not being considered.

CONTRACT MANAGER				
NAME:			NQF LEVEL:	
Contract and Client	Nature Of Work	Position Held	Value Of Work	Year Completed

SITE AGENT				
NAME:			NQF LEVEL:	
Contract and Client	Nature Of Work	Position Held	Value Of Work	Year Completed

SITE FOREMAN				
NAME:			NQF LEVEL:	
Contract and Client	Nature Of Work	Position Held	Value Of Work	Year Completed

If there is insufficient space above, the tenderer may append additional sheets.

Number of additional sheets appended by the tenderer to this Schedule (If nil, enter NIL)

Tenderers are to attach (to this page) CV and certified copies of Qualifications and the relevant NQF Qualifications for the following personnel:

1. ***Site Agent***
2. ***Site Foreman***

SIGNED BY/ON BEHALF OF TENDERER:

NAME

SIGNATURE

DATE

RAY NKONYENI MUNICIPALITY

NOTICE NO: 041 OF 2025

TENDER NO: 8/2/RNM0552

A10. PRICING SCHEDULE – FIRM PRICES (PURCHASES) (RNM/MBD3.1)

NOTE: ONLY FIRM PRICES WILL BE ACCEPTED. NON-FIRM PRICES (INCLUDING PRICES SUBJECT TO RATES OF EXCHANGE VARIATIONS) WILL NOT BE CONSIDERED

IN CASES WHERE DIFFERENT DELIVERY POINTS INFLUENCE THE PRICING, A SEPARATE PRICING SCHEDULE MUST BE SUBMITTED FOR EACH DELIVERY POINT

Refer to part C2 : Pricing data and Bill of Quantities

Name of Bidder..... Bid Number.....

Closing Time

Closing Date

OFFER TO BE VALID FOR **120 DAYS** FROM THE CLOSING DATE OF BID.

SIGNED BY/ON BEHALF OF TENDERER:

--

NAME

--

SIGNATURE

--

DATE

RAY NKONYENI MUNICIPALITY

NOTICE NO: 041 OF 2025

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A11. SCHEDULE OF DAYWORK RATES

This Daywork Schedule will be used at the discretion of the Employer for valuation of extra work which cannot conveniently be valued at rates submitted in the Bill of Quantities. All price rates shall be exclusive of VAT.

The rates entered for labour and materials shall be exclusive of overhead charges and profit, site supervision of staff, insurance, holidays with pay and use and maintenance of small hand tools and non-mechanical plant, travelling allowances, other emoluments, and allowances. Provision will be made for the insertion of percentages to cover all these items which are henceforth termed "on-costs", consumable stores, maintenance, etc.

In the case of plant, no "on-costs" item is provided. The rate entered shall include any of the above "on-costs" which are pertinent and shall include profit, operator's costs, consumable stores, maintenance, depreciation, etc.

Failure to complete this Schedule may result in the Tender not being considered.

A. LABOUR

Normal Working Time:

1	Labourers	R.....	per hour plus	%	"On-Cost"
2	Gangers	R.....	per hour plus	%	"On-Cost"
3	Tradesmen	R.....	per hour plus	%	"On-Cost"
4	Other				
	(a).....	R.....	per hour plus	%	"On-Cost"
	(b).....	R.....	per hour plus	%	"On-Cost"
					

Overtime

1	Labourers	R.....	per hour plus	%	"On-Cost"
2	Gangers	R.....	per hour plus	%	"On-Cost"
3	Tradesmen	R.....	per hour plus	%	"On-Cost"
4	Other				
	(a).....	R.....	per hour plus	%	"On-Cost"
	(b).....	R.....	per hour plus	%	"On-Cost"
					

B. PLANT

DESCRIPTION	TYPE	ESTABLISHMENT AND DISESTABLISHMENT COST	RATE PER HOUR	
			WORKING	STANDING
Trucks and ADTs				
Bulldozers				
Excavators				
Tractor & Trailer				
Loaders				
Graders				
Tractor – Loader – Backhoe				
Water Pumps and Leadings				
Compressor including Hammers and Hoses				
Other				

C. MATERIAL

The Tenderer shall state here the percentage “On-costs” that should be added to the nett cost of materials:

..... %

SIGNED BY/ON BEHALF OF TENDERER:

NAME

SIGNATURE

DATE

RAY NKONYENI MUNICIPALITY

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A12. RECORD OF ADDENDA TO TENDER DOCUMENTS

We confirm that the following communications received from the Employer before the submission of this tender offer, amending the tender documents, have been taken into account in this tender offer:

No.	Date	Title or Details
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		
11.		
12.		
13.		

If there is insufficient space above, the tenderer may append additional sheets.

Number of additional sheets appended by the tenderer to this Schedule (If nil, enter NIL)

SIGNED BY/ON BEHALF OF TENDERER:

NAME

SIGNATURE

DATE

RAY NKONYENI MUNICIPALITY

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A13. COMPANY REGISTRATION DOCUMENTS

Tenderers are to attach certified copies of company registration documents (e.g., CK Documents) to this page.

SIGNED BY/ON BEHALF OF TENDERER:**NAME****SIGNATURE****DATE**

RAY NKONYENI MUNICIPALITY

NOTICE NO: 041 OF 2025

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A14. IDENTITY DOCUMENTS OF SHAREHOLDERS/DIRECTORS/ MEMBERS

Tenderers are to attach certified copies of ID Documents of Members/Directors to this page.

SIGNED BY/ON BEHALF OF TENDERER:**NAME****SIGNATURE****DATE**

RAY NKONYENI MUNICIPALITY**NOTICE NO: 041 OF 2025****TENDER NO: 8/2/RNM0552****A15. JOINT VENTURE DISCLOSURE FORM****GENERAL**

- i) All the information requested must be filled in the spaces provided. If additional space is required, additional sheets may be used and attached to the original documents.
- ii) A copy of the joint venture agreement must be attached to this form, in order to demonstrate the Affirmable, Joint Venture Partner's share in the ownership, control, management responsibilities, risks and profits of the joint venture, the proposed joint venture agreement must include specific details relating to:
 - a. the contributions of capital and equipment
 - b. work items to be performed by the Affirmable Joint Venture Partner's own forces.
 - c. work items to be performed under the supervision of the Affirmable Joint Venture Partner.
- iii) Copies of all written agreements between partners concerning the contract must be attached to this form including those, which relate to ownership options and to restrictions/limits regarding ownership and control.
- iv) ABE partners must complete ABE Declaration Affidavits.
- v) The joint venture must be formalised. All pages of the joint venture agreement must be signed by all the parties concerned. A letter/ notice of intention to formalise a joint venture once the contract has been awarded will not be considered.
- vi) Should any of the above not be complied with, the joint venture will be deemed null and void and will be considered non-responsive.

1. JOINT VENTURE PARTICULARS

- a) Name.....
- b) Postal address.....
.....
.....
- c) Physical address
.....
.....
- d) Telephone
- e) Fax

2. IDENTITY OF EACH NON-AFFIRMABLE JOINT VENTURE PARTNER

- 2.1(a) Name of Firm
- Postal Address.....
- Physical Address
- Telephone.....
- Fax.....

Contact person for matters pertaining to Joint Venture Participation Goal requirements:

.....

2.2(a) Name of Firm

Postal Address.....

Physical Address

Telephone.....

Fax.....

Contact person for matters pertaining to Joint Venture Participation Goal requirements:

.....
(Continue as required for further non-Affirmable Joint Venture Partners)

3. IDENTITY OF EACH AFFIRMABLE JOINT VENTURE PARTNER

3.1(a) Name of Firm

Postal Address.....

Physical Address

Telephone.....

Fax.....

Contact person for matters pertaining to Joint Venture Participation Goal requirements:

.....

3.2(a) Name of Firm

Postal Address.....

Physical Address

Telephone.....

Fax.....

Contact person for matters pertaining to Joint Venture Participation Goal requirements:

.....

3.3(a) Name of Firm

Postal Address.....

Physical Address

Telephone

Fax.....

Contact person for matters pertaining to Joint Venture Participation Goal requirements:

.....

4. **BRIEF DESCRIPTION OF THE ROLES OF THE AFFIRMABLE JOINT VENTURE PARTNERS IN THE JOINT VENTURE**

.....

.....

.....

5. **OWNERSHIP OF THE JOINT VENTURE**

a) Affirmable Joint Venture Partner ownership percentage(s) %

b) Non-Affirmable Joint Venture Partner ownership percentage(s) %

c) Affirmable Joint Venture Partner percentages in respect of : *

i) Profit and loss sharing

ii) Initial capital contribution in Rands

(*Brief descriptions and further particulars should be provided to clarify percentages).

iii) Anticipated on-going capital contributions in Rands.

iv) Contributions of equipment (specify types, quality, and quantities of equipment) to be provided by each partner.

.....

.....

.....

6. **RECENT CONTRACTS EXECUTED BY PARTNERS IN THEIR OWN RIGHT AS PRIME CONTRACTORS OR AS PARTNERS IN OTHER JOINT VENTURES**

	NON-AFFIRMABLE JOINT VENTURE PARTNERS	PARTNER NAME
a)		
b)		
c)		
d)		
e)		

	AFFIRMABLE JOINT VENTURE PARTNERS	PARTNER NAME
a)		
b)		
c)		
d)		
e)		

7. CONTROL AND PARTICIPATION IN THE JOINT VENTURE

(Identify by name and firm those individuals who are, or will be, responsible for, and have authority to engage in the relevant management functions and policy and decision making, indicating any limitations in their authority e.g., co-signature requirements and Rand limits).

a) Joint Venture cheque signing

.....

.....

.....

b) Authority to enter into contracts on behalf of the Joint Venture

.....

.....

.....

c) Signing, co-signing and/or collateralising of loans

.....

.....

.....

d) Acquisition of lines of credit

.....

.....

.....

e) Acquisition of performance bonds

.....

.....

.....

f) Negotiating and signing labour agreements

.....

.....

.....

8. MANAGEMENT OF CONTRACT PERFORMANCE

(Fill in the name and firm of the responsible person).

a) Supervision of field operations

.....

- b) Major purchasing

.....

- c) Estimating

.....

- d) Technical management

.....

9. MANAGEMENT AND CONTROL OF JOINT VENTURE

- a) Identify the “managing partner”, if any,

.....

.....

.....

.....

- b) What authority does each partner have to commit or obligate the other to financial institutions, insurance companies, suppliers, subcontractors and/or other parties participating in the execution of the contemplated works?

.....

.....

.....

.....

- c) Describe the management structure for the Joint Venture’s work under the contract.

MANAGEMENT FUNCTION / DESIGNATION	NAME	PARTNER*

(Fill in “ex Affirmable Joint Venture Partner” or “ex non-Affirmable Joint Venture Partner”.

10. PERSONNEL

- a) State the approximate number of operative personnel (by trade/function/discipline) needed to perform the Joint Venture work under the Contract.

TRADE/FUNCTION/ DISCIPLINE	NUMBER EX AFFIRMABLE JOINT VENTURE PARTNERS	NUMBER EX NON- AFFIRMABLE JOINT VENTURE PARTNERS

(Fill in "ex Affirmable Joint Venture Partner" or "ex non-Affirmable Joint Venture Partner").

- b) Number of operative personnel to be employed on the Contract who are currently in the employ of partners.
- (i) Number currently employed by Affirmable Joint Venture Partners
.....
- (ii) Number currently employed by the Joint Venture
.....
- c) Number of operative personnel who are not currently in the employ of the respective partner and will be engaged on the project by the Joint Venture
.....
- d) Name of individual(s) who will be responsible for hiring Joint Venture employees.
.....
.....
- e) Name of partner who will be responsible for the preparation of Joint Venture payrolls.
.....
.....

11. CONTROL AND STRUCTURE OF THE JOINT VENTURE

Briefly describe the manner in which the Joint Venture is structured and controlled.

.....

.....

.....

.....

.....

The undersigned warrants that he/she is duly authorised to sign this Joint Venture Disclosure Form and affirms that the foregoing statements are true and correct and include all material information necessary to identify and explain the terms and operations of the Joint Venture and the intended participation of each partner in the undertaking.

The undersigned further covenants and agrees to provide the Employer with complete and accurate information regarding actual Joint Venture work and the payment therefore, and any proposed changes in any provisions of the Joint Venture agreement, and to permit the audit and examination of the books, records, and files of the Joint Venture, or those of each partner relevant to the Joint Venture, by duly authorised representatives of the Employer.

Signature

Duly authorised to sign on behalf of

Name.....

Address

Telephone.....

Date.....

Signature

Duly authorised to sign on behalf of

Name.....

Address

Telephone.....

Date.....

Signature

Duly authorised to sign on behalf of

Name.....

Address

Telephone.....

Date.....

Signature

Duly authorised to sign on behalf of

Name.....

Address

Telephone.....

Date.....

(Continue as necessary)

RAY NKONYENI MUNICIPALITY

NOTICE NO: 041 OF 2025

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A16. DECLARATION OF INTEREST**(RNM/MBD 4)**

(Please circle the applicable answer)

1. No bid will be accepted from persons in the service of the state¹.
2. Any person, having a kinship with persons in the service of the state, including a blood relationship, may make an offer or offers in terms of this invitation to bid. In view of possible allegations of favouritism, should the resulting bid, or part thereof, be awarded to persons connected with or related to persons in service of the state, it is required that the bidder or their authorised representative declare their position in relation to the evaluating/adjudicating authority.
3. In order to give effect to the above, the following questionnaire must be completed and submitted with the bid.
 - 3.1. Full Name of Tenderer or his or her representative:
 - 3.2. Identity Number:
 - 3.3. Position occupied in the Company (director, trustee, shareholder², member):
 - 3.4. Registration number of company, enterprise, close corporation, partnership agreement or trust:
.....
 - 3.5. Tax Reference Number:
 - 3.6. VAT Registration Number:
 - 3.7. The names of all directors / trustees / shareholders members, their individual identity numbers and state employee numbers must be indicated in paragraph 4 below.
 - 3.8. Are you presently in the service of the state? **YES / NO**
 - 3.8.1. If yes, furnish particulars.
.....

¹SCM Regulations: "in the service of the state" means to be –

- (a) a member of –
 - (i) any municipal council.
 - (ii) any provincial legislature; or
 - (iii) the national Assembly or the national Council of provinces.
- (b) a member of the board of directors of any municipal entity.
- (c) an official of any municipality or municipal entity.
- (d) an employee of any national or provincial department, national or provincial public entity or constitutional institution within the meaning of the Public Finance Management Act, 1999 (Act No.1 of 1999).
- (e) a member of the accounting authority of any national or provincial public entity; or
- (f) an employee of Parliament or a provincial legislature.

²Shareholder" means a person who owns shares in the company and is actively involved in the management of the company or business and exercises control over the company.

- 3.9. Have you been in the service of the state for the past twelve months?..... **YES / NO**
- 3.9.1. If yes, furnish particulars.....
.....

.....

3.10. Do you, have any relationship (family, friend, other) with persons in the service of the state and who may be involved with the evaluation and or adjudication of this bid? **YES / NO**

3.10.1. If so, furnish particulars:

.....

.....

3.11. Are you, aware of any relationship (family, friend, other) between a bidder and any persons in the service of the state who may be involved with the evaluation and or adjudication of this bid? **YES / NO**

3.11.1. If so, furnish particulars:

.....

.....

.....

3.12. Are any of the company's directors, managers, principal shareholders, or stakeholders in service of the state? **YES / NO**

3.12.1. If so, furnish particulars:

.....

.....

.....

3.13. Are any spouse, child or parent of the company's directors, managers, principal shareholders, or stakeholders in service of the state? **YES / NO**

3.13.1. If so, furnish particulars:

.....

.....

4. Full details of directors / trustees / members / shareholders.

Full Name	Identity Number	State Employee Number

5. CERTIFICATION

I,.....THE UNDERSIGNED CERTIFY THAT THE INFORMATION FURNISHED ON THIS DECLARATION FORM IS CORRECT.

I ACCEPT THAT THE COUNCIL MAY ACT AGAINST ME SHOULD THIS DECLARATION PROVE TO BE FALSE.

SIGNATURE**DATE****CAPACITY****NAME OF BIDDER**

RAY NKONYENI MUNICIPALITY

NOTICE NO: 041 OF 2025

TENDER NO: 8/2/RNM0552

A17. DECLARATION OF BIDDER'S PAST SUPPLY CHAIN MANAGEMENT PRACTICES (RNM/MBD 8)

- 1 This Municipal Bidding Document must form part of all bids invited.
- 2 It serves as a declaration to be used by municipalities and municipal entities in ensuring that when goods and services are being procured, all reasonable steps are taken to combat the abuse of the supply chain management system.
- 3 The bid of any bidder may be rejected if that bidder, or any of its directors have:
 - a) abused the municipality's / municipal entity's supply chain management system or committed any improper conduct in relation to such system.
 - b) been convicted for fraud or corruption during the past five years.
 - c) willfully neglected, reneged on, or failed to comply with any government, municipal or other public sector contract during the past five years; or
 - d) been listed in the Register for Tender Defaulters in terms of section 29 of the Prevention and Combating of Corrupt Activities Act (No 12 of 2004).
- 4 In order to give effect to the above, the following questionnaire must be completed and submitted with the bid.

Item	Question	Yes	No
4.1	Is the bidder or any of its directors listed on the National Treasury's Database of Restricted Suppliers as companies or persons prohibited from doing business with the public sector? (Companies or persons who are listed on this Database were informed in writing of this restriction by the Accounting Officer/Authority of the institution that imposed the restriction after the <i>audi alteram partem</i> rule was applied). The Database of Restricted Suppliers now resides on the National Treasury's website (www.treasury.gov.za) and can be accessed by clicking on its link at the bottom of the home page.	☐	☐
4.1.1	If so, furnish particulars:		
4.2	Is the bidder or any of its directors listed on the Register for Tender Defaulters in terms of section 29 of the Prevention and Combating of Corrupt Activities Act (No 12 of 2004)? The Register for Tender Defaulters can be accessed on the National Treasury's website (www.treasury.gov.za) by clicking on its link at the bottom of the home page.	☐	☐
4.2.1	If so, furnish particulars:		
4.3	Was the bidder or any of its directors convicted by a court of law (including a court of law outside the Republic of South Africa) for fraud or corruption during the past five years?	☐	☐

Item	Question	Yes	No
4.3.1	If so, furnish particulars:		
4.4	Does the bidder or any of its directors owe any municipal rates and taxes or municipal charges to the municipality / municipal entity, or to any other municipality / municipal entity, that is in arrears for more than three months?	☐	☐
4.4.1	If so, furnish particulars:		
4.5	Was any contract between the bidder and the municipality / municipal entity or any other organ of state terminated during the past five years on account of failure to perform on or comply with the contract?	☐	☐
4.5.1	If so, furnish particulars:		

CERTIFICATION

I, THE UNDERSIGNED (FULL NAME)

CERTIFY THAT THE INFORMATION FURNISHED ON THIS DECLARATION FORM IS TRUE AND CORRECT.

I ACCEPT THAT, IN ADDITION TO CANCELLATION OF A CONTRACT, ACTION MAY BE TAKEN AGAINST ME SHOULD THIS DECLARATION PROVE TO BE FALSE.

SIGNATURE	DATE

POSITION

NAME OF BIDDER

RAY NKONYENI MUNICIPALITY

NOTICE NO: 041 OF 2025

TENDER NO: 8/2/RNM0552

A18. CERTIFICATE OF INDEPENDENT TENDER DETERMINATION (RNM/MBD 9)

1. This Municipal Bidding Document (MBD) must form part of all bids¹ invited.
2. Section 4 (1) (b) (iii) of the Competition Act No. 89 of 1998, as amended, prohibits an agreement between, or concerted practice by, firms, or a decision by an association of firms, if it is between parties in a horizontal relationship and if it involves collusive bidding (or bid rigging).² Collusive bidding is a *pe se* prohibition meaning that it cannot be justified under any grounds.
3. Municipal Supply Regulation 38 (1) prescribes that a supply chain management policy must provide measures for the combating of abuse of the supply chain management system, and must enable the accounting officer, among others, to:
 - (a) take all reasonable steps to prevent such abuse.
 - (b) reject the bid of any bidder if that bidder or any of its directors has abused the supply chain management system of the municipality or municipal entity or has committed any improper conduct in relation to such system; and
 - (c) cancel a contract awarded to a person if the person committed any corrupt or fraudulent act during the bidding process or the execution of the contract.
4. This MBD serves as a certificate of declaration that would be used by institutions to ensure that, when bids are considered, reasonable steps are taken to prevent any form of bid-rigging.
5. In order to give effect to the above, the attached Certificate of Bid Determination (MBD 9) must be completed and submitted with the bid:

¹ Includes price quotations, advertised competitive bids, limited bids, and proposals.

² Bid rigging (or collusive bidding) occurs when businesses, that would otherwise be expected to compete, secretly conspire to raise prices, or lower the quality of goods and / or services for purchasers who wish to acquire goods and / or services through a bidding process. Bid rigging is, therefore, an agreement between competitors not to compete.

(RNM/MBD 9)

CERTIFICATE OF INDEPENDENT TENDER DETERMINATION

I, the undersigned, in submitting the accompanying tender:

(Tender Number and Description)

in response to the invitation for the tender made by:

(Name of Municipality/ Municipality Entity)

do hereby make the following statements that I certify to be true and complete in every respect:

I certify, on behalf of.....that:
(Name of Bidder)

1. I have read, and I understand the contents of this Certificate.
2. I understand that the accompanying bid will be disqualified if this Certificate is found not to be true and complete in every respect.
3. I am authorized by the bidder to sign this Certificate, and to submit the accompanying bid, on behalf of the bidder.
4. Each person whose signature appears on the accompanying bid has been authorized by the bidder to determine the terms of, and to sign, the bid, on behalf of the bidder.
5. For the purposes of this Certificate and the accompanying bid, I understand that the word "competitor" shall include any individual or organization, other than the bidder, whether or not affiliated with the bidder, who:
 - (a) has been requested to submit a bid in response to this bid invitation.
 - (b) could potentially submit a bid in response to this bid invitation, based on their qualifications, abilities or experience; and
 - (c) provides the same goods and services as the bidder and/or is in the same line of business as the bidder.
6. The bidder has arrived at the accompanying bid independently from, and without consultation, communication, agreement or arrangement with any competitor. However, communication between partners in a joint venture or consortium³ will not be construed as collusive bidding.
7. In particular, without limiting the generality of paragraphs 6 above, there has been no consultation, communication, agreement or arrangement with any competitor regarding:
 - (a) prices.
 - (b) geographical area where product or service will be rendered (market allocation).
 - (c) methods, factors or formulas used to calculate prices.
 - (d) the intention or decision to submit or not to submit, a bid.
 - (e) the submission of a bid which does not meet the specifications and conditions of the bid; or
 - (f) bidding with the intention not to win the bid.
8. In addition, there have been no consultations, communications, agreements or arrangements with any competitor regarding the quality, quantity, specifications and conditions or delivery particulars of the products or services to which this bid invitation relates.

Part T2: Returnable Documents

RETURNABLE SCHEDULES

9. The terms of the accompanying bid have not been, and will not be, disclosed by the bidder, directly or indirectly, to any competitor, prior to the date and time of the official bid opening or of the awarding of the contract.
10. I am aware that, in addition and without prejudice to any other remedy provided to combat any restrictive practices related to bids and contracts, bids that are suspicious will be reported to the Competition Commission for investigation and possible imposition of administrative penalties in terms of section 59 of the Competition Act No. 89 of 1998 and or may be reported to the National Prosecuting Authority (NPA) for criminal investigation and or may be restricted from conducting business with the public sector for a period not exceeding ten (10) years in terms of the Prevention and Combating of Corrupt Activities Act No. 12 of 2004 or any other applicable legislation.

SIGNATURE	DATE
POSITION	NAME OF BIDDER

³ Joint venture or Consortium means an association of persons for the purpose of combining their expertise, property, capital, efforts, skill and knowledge in an activity for the execution of a contract.

RAY NKONYENI MUNICIPALITY

NOTICE NO: 041 OF 2025

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A19. FORM CONCERNING FULFILMENT OF THE CONSTRUCTION REGULATIONS

In terms of regulation 4(3) of the Construction Regulations, 2014 (hereinafter referred to as the Regulations), promulgated 07 February 2014 in terms of Section 43 of the Occupational Health and Safety Act, 1993 (Act No 85 of 1993) the Employer shall not appoint a contractor to perform construction work unless the Contractor can satisfy the Employer that his/her firm has the necessary competencies and resources to carry out the work safely and has allowed adequately in his/her tender for the due fulfilment of all the applicable requirements of the Act and the Regulations.

1. I confirm that I am fully conversant with the Regulations and that my company has (or will acquire/procure) the necessary competencies and resources to timeously, safely and successfully comply with all of the requirements of the Regulations. (Tick)

YES	
NO	

2. Proposed approach to achieve compliance with the Regulations (Tick)

Own resources, competent in terms of the Regulations (refer to 3 below)	
Own resources, still to be hired and/or trained (until competency is achieved)	
Specialist subcontract resources (competent) - specify:	
.....	
.....	
.....	
.....	
.....	
.....	

3. Provide details of proposed key persons, competent in terms of the Regulations, who will form part of the Contract team as specified in the Regulations (CVs to be attached):

.....

.....

.....

4. Provide details of proposed training (if any) that will be undergone:

.....

.....

.....

.....

5. Potential key risks identified and measures for addressing risks:

.....

.....

.....

.....

Part T2: Returnable Documents

RETURNABLE SCHEDULES

6. I have fully included in my tendered rates and prices (in the appropriate payment items provided in the Schedule of Quantities) for all resources, actions, training and any other costs required for the due fulfilment of the Regulations for the duration of the construction and defects repair period.

(Tick)

YES	
NO	

SIGNED BY/ON BEHALF OF TENDERER:

--

NAME

--

SIGNATURE

--

DATE

RAY NKONYENI MUNICIPALITY

NOTICE NO: 041 OF 2025

TENDER NO: 8/2/RNM0552

A20. PREFERENCE POINTS CLAIM FORM IN TERMS OF THE PREFERENTIAL PROCUREMENT REGULATIONS 2022 (RNM/MBD 6.1)

This preference form must form part of all tenders invited. It contains general information and serves as a claim form for preference points for specific goals.

NB: BEFORE COMPLETING THIS FORM, TENDERERS MUST STUDY THE GENERAL CONDITIONS, DEFINITIONS AND DIRECTIVES APPLICABLE IN RESPECT OF TENDER AND PREFERENTIAL PROCUREMENT REGULATIONS, 2022.

1. GENERAL CONDITIONS

1.1 The following preference point systems are applicable to all tenders:

- the 80/20 system for acquisition of goods or services for Rand value equal to or above R30 000 and up to R50 000 000 (all applicable taxes included); and

1.2 The applicable preference point system for this tender is the 80/20 preference point system.

1.3 The 80/20 preference point system will be applicable in this tender. The lowest/ highest acceptable tender will be used to determine the accurate system once tenders are received.

1.4 Points for this tender (even in the case of a tender for income-generating contracts) shall be awarded for:

- (a) Price; and
- (b) Specific Goals.

1.5 To be completed by the organ of state:

The maximum points for this tender are allocated as follows:

	POINTS
PRICE	80
SPECIFIC GOALS	20
Total points for Price and Specific Goals	100

1.6 Failure on the part of a tenderer to submit proof or documentation required in terms of this tender to claim points for specific goals with the tender, will be interpreted to mean that preference points for specific goals are not claimed.

1.7 The organ of state reserves the right to require of a tenderer, either before a tender is adjudicated or at any time subsequently, to substantiate any claim in regard to preferences, in any manner required by the organ of state.

2. DEFINITIONS

- (a) **“tender”** means a written offer in the form determined by an organ of state in response to an invitation to provide goods or services through price quotations, competitive tendering process or any other method envisaged in legislation.
- (b) **“price”** means an amount of money tendered for goods or services and includes all applicable taxes less all unconditional discounts.
- (c) **“Rand value”** means the total estimated value of a contract in Rand, calculated at the time of bid invitation, and includes all applicable taxes.
- (d) **“tender for income-generating contracts”** means a written offer in the form determined by an organ of state in response to an invitation for the origination of income-generating contracts through any method envisaged in legislation that will result in a legal agreement between the organ of state and a third party that produces revenue for the organ of state, and includes, but is not limited to, leasing and disposal of assets and concession

- contracts, excluding direct sales and disposal of assets through public auctions; and
 (e) “The Act” means the Preferential Procurement Policy Framework Act, 2000 (Act No. 5 of 2000).

3. FORMULAE FOR PROCUREMENT OF GOODS AND SERVICES

3.1 POINTS AWARDED FOR PRICE

3.1.1 THE 80/20 PREFERENCE POINT SYSTEMS

A maximum of 80 points is allocated for price on the following basis:

80/20

$$Ps = 80 \left(1 - \frac{Pt - P_{min}}{P_{min}} \right)$$

Where?

- Ps = Points scored for comparative price of tender under consideration
 Pt = Price of tender under consideration
 Pmin = Price of lowest acceptable tender

3.2 FORMULAE FOR DISPOSAL OR LEASING OF STATE ASSETS AND INCOME GENERATING PROCUREMENT

3.2.1 POINT AWARDED FOR PRICE

A maximum of 80 points is allocated for price on the following basis:

80/20

$$Ps = 80 \left(1 + \frac{Pt - P_{max}}{P_{max}} \right)$$

Where?

- Ps = Points scored for comparative price of tender under consideration
 Pt = Price of tender under consideration
 Pmax = Price of highest acceptable tender

4. POINTS AWARDED FOR SPECIFIC GOALS

- 4.1 In terms of Regulation 4(2); 5(2); 6(2) and 7(2) of the Preferential Procurement Regulations, preference points must be awarded for specific goals stated in the tender. For the purposes of this tender the tenderer will be allocated points based on the goals stated in Table 1 below as may be supported by proof/ documentation stated in the conditions of this tender:
- 4.2 In cases where organs of state intend to use Regulation 3(2) of the Regulations, which states that, if it is unclear whether the 80/20 or 90/10 preference point system applies, an organ of state must, in the tender documents, stipulate in the case of—
- (a) an invitation for tender for income-generating contracts, that either the 80/20 or 90/10 preference point system will apply and that the highest acceptable tender will be used to determine the applicable preference point system: or
 - (b) any other invitation for tender, that either the 80/20 or 90/10 preference point system will apply and that the lowest acceptable tender will be used to determine the applicable preference point system,

Then the organ of state must indicate the points allocated for specific goals for 80/20 preference point system.

Table 1: Specific goals for the tender and points claimed are indicated per the table below.

Note to tenderers: The tenderer must indicate how they claim points for each preference point system.)

The specific goals allocated points in terms of this tender	Number of points allocated. (80/20 system)		Verification Document	Number of points claimed (80/20 system) (To be completed by the tenderer)
Local companies	10	Enterprise Located within the Ray Nkonyeni Local Municipality = 10	Company proof of address	
		Enterprise Located within the Ugu District Municipality = 5		
		Enterprise Located within the KZN Province = 1		
		Enterprise Located outside of KZN Province = 0		
An EME or QSE which is at least 100% owned by black people	10	an EME or QSE which is at least 100% owned by black people = 10	CIPC: Shareholders certificate and Sworn Affidavit confirming the status of EME or QSE	
		an EME or QSE which is at least 51% owned by black people = 6		
		an EME or QSE which is at 25% - 50% owned by black people = 2		
Total Points	20			

5. DECLARATION WITH REGARD TO COMPANY/FIRM

5.1 Name of company/firm:.....

5.2 Company registration number:.....

5.3 TYPE OF COMPANY/ FIRM

- ☐ Partnership/Joint Venture / Consortium
- ☐ One person business/sole propriety
- ☐ Close corporation
- ☐ Public Company
- ☐ Personal Liability Company
- ☐ (Pty) Limited
- ☐ Non-Profit Company
- ☐ State Owned Company

[TICK APPLICABLE BOX]

5.4 Total number of years the company/firm has been in business:.....

5.5 I/we, the undersigned, who is / are duly authorized to do so on behalf of the company/firm, certify that the points claimed, based on the specific goals as advised in the tender, qualifies the company/ firm for the preference(s) shown and I/ we acknowledge that:

- i) The information furnished is true and correct.
- ii) The preference points claimed are in accordance with the General Conditions as indicated in paragraph 1 of this form.
- iii) In the event of a contract being awarded as a result of points claimed as shown in paragraphs 1.4 and 4.2, the contractor may be required to furnish documentary proof to the satisfaction of the organ of state that the claims are correct.

- iv) If the specific goals have been claimed or obtained on a fraudulent basis or any of the conditions of contract have not been fulfilled, the organ of state may, in addition to any other remedy it may have –
- (a) disqualify the person from the bidding process.
 - (b) recover costs, losses, or damages it has incurred or suffered as a result of that person's conduct.
 - (c) cancel the contract and claim any damages which it has suffered as a result of having to make less favorable arrangements due to such cancellation.
 - (d) recommend that the bidder or contractor, its shareholders, and directors, or only the shareholders and directors who acted on a fraudulent basis, be restricted by the National Treasury from obtaining business from any organ of state for a period not exceeding 10 years, after the *audi alteram partem* (hear the other side) rule has been applied; and
 - (e) forward the matter for criminal prosecution.

WITNESSES

1.

2.

.....
SIGNATURE(S) OF BIDDERS(S)

DATE:

ADDRESS

.....

.....

RAY NKONYENI MUNICIPALITY

NOTICE NO: 041 OF 2025

TENDER NO: 8/2/RNM0552

B1. CIDB CONTRACTOR REGISTRATION CERTIFICATE

A Certificate of Contractor's Registration issued by the Construction Industry Development Board (CIDB) shall be attached to this page.

Where a tenderer satisfies CIDB Contractor grading designation requirements through joint venture formation, such tenderers must submit the Certificates of Contractor Registration in respect of each partner.

Alternatively furnish the CIDB registration no. and details in the space provided. This information will be verified with the CIDB via the CIDB website. It is the tenderer/contractor's responsibility to ensure that their details are displayed on the CIDB website. If in joint venture, details of all members require to be furnished.

Name of Contractor or Joint Venture	CIDB registration No.	Category and class of registration, e.g., 6GB

My/Our failure to submit the certificate(s) or furnish the required details, with my / our tender document will lead to the conclusion that I am / we are not registered with the CIDB and therefore not eligible to tender.

SIGNED BY/ON BEHALF OF TENDERER:**NAME****SIGNATURE****DATE**

RAY NKONYENI MUNICIPALITY**NOTICE NO: 041 OF 2025****TENDER NO: 8/2/RNM0552****B2. TAX PIN REQUIREMENTS****(RNM/MBD2)**

It is a condition of bid that the taxes of the successful bidder must be in order, or that satisfactory arrangements have been made with South Africa Revenue Services (SARS) to meet the bidder's tax obligation.

In order to meet the requirements bidders are required to complete in full the attached TCP1 "Application for a Tax compliance pin" and submit it to any SARS branch office nationally. The Tax compliance pin Requirements are also applicable to foreign bidders / individuals who wish to submit bids.

SARS will then furnish the bidder with a Tax compliance pin that will be valid for a period of 1 (one) year from date of approval / issue.

The Certified copy of a tax certificate with a pin number **must** be submitted together with the bid.

In the bids where consortia / joint ventures / sub-contractors are involved; each party must submit a separate Tax compliance pin.

Copies of the TCP "Application for a "Tax compliance pin" forms are available from any SARS branch office nationally or on the website www.sars.gov.za

Applications for the Tax compliance pin may also be made via eFiling. In order to use this provision, taxpayers will need to register with SARS as eFilers through the website www.sars.gov.za.

SIGNED BY/ON BEHALF OF TENDERER:**NAME****SIGNATURE****DATE**

Part C1: Agreements and Contract Data

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C1.1. Form of Offer and Acceptance

A. Offer

The Employer, identified in the Acceptance signature block, has solicited offers to enter into a contract in respect of the following works:

**TENDER NO: 8/2/RNM0552
NOSITHA PEDESTRIAN BRIDGE REPAIRS AND UPGRADE IN WARD 27**

The tenderer, identified in the offer signature block below, has examined the documents listed in the tender data and addenda thereto as listed in the Returnable Schedules, and by submitting this offer has accepted the conditions of tender.

By the representative of the tenderer, deemed to be duly authorized, signing this part of this Form of Offer and Acceptance, the tenderer offers to perform all of the obligations and liabilities of the contractor under the contract including compliance with all its terms and conditions according to their true intent and meaning for an amount to be determined in accordance with the Conditions of Contract identified in the Contract Data.

THE OFFERED TOTAL OF THE PRICES INCLUSIVE OF VALUE ADDED TAX IS:

.....
..... RAND (in words).

R..... (in figures)

This offer may be accepted by the Employer by signing the Acceptance part of this Form of Offer and Acceptance and returning one copy of this document to the tenderer before the end of the period of validity stated in the Tender Data, whereupon the Tenderer becomes the party named as the Contractor in the Conditions of Contract identified in the Contract Data.

This quote/tender is valid for the period of **120 days**.
These prices quoted are firm and escalation will be stated separately.

HAS A CERTIFIED COPY OF A TAX CERTIFICATE WITH A PIN NUMBER BEEN ATTACHED? YES/NO

I/We certify that the abovementioned information is correct and that we have due knowledge of the requirements of this Bid and have examined the document, Form of Bid, Specifications and requirements. We further agree that this Bid and the acceptance thereof by Council shall constitute a legal binding contract.

SIGNED ON BEHALF OF/BY THE TENDERER:

NAME	SIGNATURE
CAPACITY	DATE

Name and address of Organisation:

.....
.....
.....

Telephone:.....Fax:.....Email:

SIGNED BY WITNESS:

NAME	SIGNATURE	DATE

A. Acceptance

By signing this part of this Form of Offer and Acceptance, the Employer identified below accepts the Tenderer's offer. In consideration thereof, the Employer shall pay the Contractor the amount due in accordance with the Conditions of Contract identified in the Contract Data. Acceptance of the tenderer's offer shall form an Agreement between the Employer and the Tenderer upon the terms and conditions contained in this Agreement and in the Contract that is the subject of this Agreement.

The terms of the contract are contained in:

Part C1: Agreement and Contract Data (which includes this Agreement)

Part C2: Pricing Data

Part C3: Scope of Work

Part C4: Site Information

Part C5: Drawings

and drawings and documents or parts thereof, which may be incorporated by reference into Parts C1 to C4 above.

Deviations from and amendments to the documents listed in the Tender Data and any addenda thereto as listed in the Returnable Documents as well as any changes to the terms of the Offer agreed by the Tenderer and the Employer during this process of offer and acceptance, are contained in the Schedule of Deviations attached to and forming part of this Agreement. No amendments to or deviations from said documents are valid unless contained in this schedule which must be duly signed by the authorised representative(s) of both parties.

The tenderer shall within two weeks of receiving a completed copy of this Agreement, including the Schedule of Deviations (if any), or when or just after this Agreement comes into effect, contact the employer's agent (whose details are given in the Contract Data) to arrange the delivery of any bonds, guarantees, proof of insurance and any other documentation to be provided in terms of the Conditions of Contract identified in the Contract Data. Failure to fulfil any of these obligations in accordance with those terms shall constitute a repudiation of this agreement.

Notwithstanding anything contained herein, this Agreement comes into effect on the date when the tenderer receives one fully completed original copy of this document, including the Schedule of Deviations (if any). Unless the tenderer (now Contractor) within five days of the date of such receipt notifies the Employer in writing of any reason why he cannot accept the contents of this Agreement, this Agreement shall constitute a binding contract between the parties.

SIGNED ON BEHALF OF/BY THE EMPLOYER:

NAME	SIGNATURE
CAPACITY	DATE

RAY NKONYENI MUNICIPALITY
No 10 Conner Street
Port Shepstone
4240

SIGNED BY WITNESS:

NAME	SIGNATURE	DATE

Schedule of Deviations

Notes:

1. The extent of deviations from the tender documents issued by the Employer prior to the tender closing date is limited to those permitted in terms of the Conditions of Tender.
2. A tenderer's covering letter shall not be included in the final contract document. Should any matter in such letter, which constitutes a deviation as aforesaid, become the subject of agreements reached during the process of Offer and Acceptance, the outcome of such Agreement shall be recorded here.
3. Any other matter arising from the process of Offer and Acceptance either as a confirmation, clarification or change to the tender documents and which it is agreed by the Parties becomes an obligation of the Contract shall also be recorded here.
4. Any change or addition to the tender documents arising from the above Agreements and recorded here shall also be incorporated into the final draft of the Contract.

1. Subject
Details
.....
.....
.....
2. Subject
Details
.....
.....
.....
3. Subject
Details
.....
.....
.....
4. Subject
Details
.....
.....
.....

By the duly authorised representatives signing this Schedule of Deviations, the Employer and the Tenderer agree to and accept the foregoing Schedule of Deviations as the only deviations from and amendments to the documents listed in the Tender Data and addenda thereto as listed in the Returnable Documents, as well as any confirmation, clarification, or changes to the terms of the offer agreed by the Tenderer and the Employer during this process of offer and acceptance.

It is expressly agreed that no other matter whether in writing, oral communication or implied during the period between the issue of the tender documents and the receipt by the Tenderer of a completed signed copy of this Agreement shall have any meaning or effect in the contract between the parties arising from this Agreement.

SIGNED ON BEHALF OF/BY THE TENDERER:

NAME	SIGNATURE
CAPACITY	DATE

SIGNED BY WITNESS:

NAME	SIGNATURE	DATE

SIGNED ON BEHALF OF/BY RAY NKONYENI MUNICIPALITY:

NAME	SIGNATURE
CAPACITY	DATE

SIGNED BY WITNESS:

NAME	SIGNATURE	DATE

CONFIRMATION OF RECEIPT

The Tenderer, (now Contractor), identified in the Offer part of this Agreement hereby confirms receipt from the Employer, identified in the Acceptance part of this Agreement, of one fully completed original copy of this Agreement, including the Schedule of Deviations (if any) today:

the (day) of (month)..... (year)

at..... (place)

SIGNED ON BEHALF OF/BY THE CONTRACTOR:

NAME

SIGNATURE

CAPACITY

SIGNED BY WITNESS:

NAME

SIGNATURE

C1.2. Contract Data

Part 1: Contract Data Provided by the Employer

C1.2.1 CONDITIONS OF CONTRACT

C1.2.1.1 GENERAL CONDITIONS OF CONTRACT

This Contract will be based on the "General Conditions of Contract for Construction Works, Third Edition, 2015", issued by the South African Institution of Civil Engineer's (abbreviated title: "GCC 2015").

It is agreed that the only variations from the GCC 2015 are those set out hereafter under "C3.2.1.2 SPECIAL CONDITIONS OF CONTRACT".

C3.2.1.2 SPECIAL CONDITIONS OF CONTRACT

C3.2.1.2.1 GENERAL

These Special Conditions of Contract (SCC) form an integral part of the Contract. The Special Conditions of Contract shall amplify, modify or supersede, as the case may be, the General Conditions of Contract 2015 to the extent specified below, and shall take precedence and shall govern.

The clauses of the Special Conditions hereafter are numbered "SCC" followed in each case by the number of the applicable clause or subclause in the General Conditions of Contract 2015, and the applicable heading, or (where a new special condition that has no relation to the existing clauses is introduced) by a number that follows after the last clause number in the General Conditions, and an appropriate heading.

C3.2.1.2.2 AMENDMENTS TO THE GENERAL CONDITIONS OF CONTRACT

The following are variations to the General Conditions of Contract for Construction Works, Third Edition(2015)

Ref. Clause

SCC1.	Definitions, Interpretations and General Provisions
SCC1.1.1.1	Re-word the sub-clause as follows: "Agreed" means agreed by the Employer, or the Employer's Agent acting on behalf of the Employer and the Contractor.
SCC1.2	Delivery of Notices Add the following to the sub-clause:
SCC1.2.3	Sent by facsimile or e-mail or any like communication
SCC1.2.4	Posted to the addressee and delivered by the Postal Authorities
SCC1.2.5	Delivered by a courier
SCC4.7	Fossils, etc Add the words "or traditional importance (such as burial sites)" between the words "interest" and "discovered" in the second line
SCC4.6	Copyright Delete the second paragraph in its entirety. (4.6.2)

Ref. Clause

SCC7.6.3. Removal of Improper Work and Materials

Add new sub-clause 7.6.3.3

Where the Employer's Agent considers that either or both sub-clauses above apply to an event of a serious nature, he shall have the right to involve the Employer in the matter, In which case he will arrange a joint meeting between the Employer, the Employer's Agent and the Contractor before giving any instructions to the Contractor"

SCC4.4 Subcontracting

The successful Contractor may be required to subcontract some items that have been identified by the Engineer to local subcontractors from **Ray Nkonyeni Municipality** Jurisdiction. Failure to find suitable subcontractors in this region will lead to recruiting from the required subcontractors from the Ugu District Jurisdiction.

a) Further be advised that the applicable labour rate for local labour shall be as

per the Department of Labour rate determination.

Add new sub-clause 4.4.8

The Contractor shall be required to fill in all posts for unskilled labourers, first from the Ray Nkonyeni Municipality Area and Ugu District Jurisdiction respectively.

Add new sub-clause 4.4.9

The Contractor shall enforce clause 4.4.8 on all his subcontractors and be liable for compliance.

Add new sub-clause 4.4.10 r

Notwithstanding Clause 4.4.7, the Contractor shall request a list of subcontractors from the Ray Nkonyeni Municipality and Ugu District Municipality Data Base for selection and identifying suitable subcontractors. All subcontractors including the local unregistered subcontractors should be assessed by the Contractor for suitability for the Works, as the Contractor shall remain liable for the same.

Add new sub-clause 4.4.11

Facilitation of all the above clauses must be done in liason with the Employer's Agent and relevant Social Facilitation Structures put in place.

C3.2.1.2.2 AMENDMENTS TO THE GCC 2015

SCC 6.8.2 Application of Contract Price Adjustment Factor

Add the following to the end of subclause 6.8.2:

“Referring to the “CONTRACT PRICE ADJUSTMENT SCHEDULE” on page 93 of the GCC 2015, delete the four consecutive paragraphs describing the symbols “L”, “P”, “M” and “F” respectively, and replace them with the following:

“L” is the “Labour Index” and shall be the Consumer Price Index for the province and applicable area as stated in the Contract Data as published in Table 14 of the “Additional tables” of the Statistical release P0141 of Statistics South Africa.

“P” is the “Plant Index” and shall be the Producer Price Index for “Civil Employer’s Agenting plant” as published in Table 4 of the Statistical release P0151 of Statistics South Africa.

“M” is the “Materials Index” and shall be the Producer Price Index for the “Building and construction – Civil Employer’s Agenting” industry as published in Table 3 of the Statistical release P0151 of Statistics South Africa.

“F” is the “Fuel Index” and shall be the Producer Price Index for “Diesel fuel – Coast and Witwatersrand” as published in Table 4 of the Statistical release P0151 of Statistics South Africa.”

C3.2.2: CONTRACT DATA (Applicable to this contract)

PART A: DATA PROVIDED BY THE EMPLOYER

The following contract specific data are applicable to this contract.

REFERENCE	CONTRACT SPECIFIC DATA PROVIDED BY THE EMPLOYER
1.	GENERAL
Clause 1.1.1.13:	The Defects Liability Period is 12 months .
Clause 1.1.1.14:	The time for Completing the Contract is 12 Months from the Commencement Date, including non-working days and special non-working days.
Clause 1.1.1.26:	Pricing Strategy: The Contract is to be a Re-measurement Contract.
Clause 1.1.1.15:	Name of Employer: Ray Nkonyeni Municipality
Clause 1.1.1.16:	Name of Employer's Agent: Dlamindlovu Consulting Engineers
Clause 1.2.1.2:	Address of Employer's Agent: 58 Juniper Road Essenwood Durban 4001 Email nhlakanipho@dlami-ndlovu.co.za Telephone: 033 342 2233 Fax No.: 086 665 6691
3.	EMPLOYER'S AGENT
Clause 3.1.3:	The Employer's Agent is required to obtain the specific approval of the Employer for any expenditure in excess of the Contract Price.

REFERENCE	CONTRACT SPECIFIC DATA PROVIDED BY THE EMPLOYER
5.	TIME AND RELATED MATTERS
Clause 5.3.1:	The Contractor shall commence executing the Works within 28 days of the Commencement Date. The documents required before commencement with Works execution are: • Health and Safety Plan (Refer to Clause 4.3) • Initial Programme (Refer to Clause 5.6) • Security (Refer to Clause 6.2) • Insurance (Refer to Clause 8.6) • Form C1.4 'Agreement in terms of Section 37(2) of the Occupational Health and Safety Act No. 85 of 1993' to be signed by the Contractor and the Employer (refer to Clause 4.3 of the GCC 2015 and to paragraph E9. CONTRACTOR'S RESPONSIBILITIES in Part E of C3.3 Particular Specifications in the project specifications) • Cash Flow in correlation with programme • Environmental Management Plan • Proof of current vendor license with RAY NKONYENI Municipality
Clause 5.3.2:	The above-mentioned documentation required before commencement with Works execution is to be submitted within 14 days of the Commencement Date.
Clause 5.8.1	The non-working days are Sundays. The special non-working days are the construction industry year end break and the following statutory public holidays as declared by National Government: New Year's Day, Human Rights Day, Good Friday, Family Day, Freedom Day, Workers' Day, Youth Day, National Women's Day, Heritage Day, Day of Reconciliation, Christmas Day and the Day of Goodwill. The construction industry year end break commences on the first working day after 15 December and ends on the first Tuesday after 5 January of the following year.
Clause 5.13.1:	The penalty for failing to complete the Works is 0,005% of the total Tender Sum per day, up to a maximum limit of twenty-five thousand rand per day (R25000,00 per day).
Clause 5.16.3:	The latent defects period is 10 years.

REFERENCE	CONTRACT SPECIFIC DATA PROVIDED BY THE EMPLOYER
6.	PAYMENT AND RELATED MATTERS
Clause 6.2.1:	The security to be provided by the Contractor shall be: 10% of the Accepted Contract Price.
Clause 6.5.1.2.3:	The percentage allowance to cover overhead charges is 15%.
Clause 6.8.2:	The value of the certificates issued shall be adjusted in accordance with the Contract Price Adjustment Schedule.
Clause 6.8.3:	Price adjustments for variations in the costs of special materials are IS PERMITTED
Clause 6.10.1.5:	The percentage advance on materials not yet built into the Permanent Works is 80%.
Clause 6.10.3:	The percentage retention on the amounts due to the Contractor is 10%. A Retention Money Guarantee is not permitted.
8.	RISKS AND RELATED MATTERS
Clause 8.6.1.1.2:	The value of materials supplied by the Employer to be included in the insurance sum is <u>nil</u> .
Clause 8.6.1.1.3:	The amount to cover professional fees for repairing damage and loss to be included in the insurance sum is <u>nil</u> .
Clause 8.6.1.2:	Special Risks Insurance issued by SASRIA is required.
Clause 8.6.1.3:	The limit of indemnity for liability insurance is <u>R10 000 000,00 (five million rands only)</u> for any single liability claim. Liability insurance shall include spread of fire risk.
10.	CLAIMS AND DISPUTES
Clause 10.4.2, 10.7.1:	Failing Amicable Settlement, unresolved Disputes shall be referred to Arbitration.

PART B: DATA PROVIDED BY THE TENDERER

The following contract specific data are applicable to this contract.

REF. CLAUSE No	DATA BY TENDERER
1.1.1.9	Name of Tenderer:
1.2.1.2	Address of Contractor:
	<u>Physical:</u> <u>Postal:</u>
	<u>E-mail:</u> <u>Telephone No:</u> <u>Fax No:</u>

I certify that I have the appropriate authority to furnish the above-mentioned information and that the above information is correct at the time of completion.

SPECIAL MATERIALS SCHEDULE

Price variation of special materials*	6.8.3																			
<table border="1"> <thead> <tr> <th>Type of Special Material</th><th>Unit</th><th>Rate or Price*</th></tr> </thead> <tbody> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> </tbody> </table>	Type of Special Material	Unit	Rate or Price*																	
Type of Special Material	Unit	Rate or Price*																		
Rate or price for base month of*	6.8.2																			

Name:	Signature:
Designation:	Date:
Company Name:	

C1.3. Performance Guarantee

GUARANTOR DETAILS AND DEFINITIONS

"Guarantor": means:

Physical address:

"Employer" means: **RAY NKONYENI MUNICIPALITY**

"Contractor" means:"

"Works" means:

"Site" means:

"Contract": means: The Agreement made in terms of the Form of Offer and Acceptance and such amendments or additions to the Contract as may be agreed in writing between the parties.

"Contract Sum" means: The accepted amount inclusive of tax of

R.....

Amount in words:.....

.....

"Guaranteed Sum" means: The maximum aggregate amount of R

Amount in words:.....

.....

"Expiry Date" means:.....

CONTRACT DETAILS

Employer's Agent issues: Interim Payment Certificates, Final Payment Certificate and the Certificate Completion of the Works as defined in the Contract.

PERFORMANCE GUARANTEE

1. The Guarantor's liability shall be limited to the amount of the Guaranteed Sum.
2. The Guarantor's period of liability shall be from and including the date of issue of this Performance Guarantee and up to and including the Expiry Date or the date of issue by the Employer's Agent of the Certificate of Completion of the Works or the date of payment in full of the Guaranteed Sum, whichever occurs first. The Employer's Agent and/or the Employer shall advise the Guarantor in writing of the date on which the Certificate of Completion of the Works has been issued.
3. The Guarantor hereby acknowledges that:
 - 3.1. any reference in this Performance Guarantee to the Contract is made for the purpose of convenience and shall not be construed as any intention whatsoever to create an accessory obligation or any intention whatsoever to create a suretyship.
 - 3.2. its obligation under this Performance Guarantee is restricted to the payment of money.
4. Subject to the Guarantor's maximum liability referred to in 1, the Guarantor hereby undertakes to pay the Employer the sum certified upon receipt of the documents identified in 4.1 to 4.3:
 - 4.1. A copy of a first written demand issued by the Employer to the Contractor stating that payment of a sum certified by the Employer's Agent in an Interim or Final Payment Certificate has not been made in terms of the Contract and failing such payment within seven (7) calendar days, the Employer intends to call upon the Guarantor to make payment in terms of 4.2.

- 4.2. A first written demand issued by the Employer to the Guarantor at the Guarantor's physical address with a copy to the Contractor stating that a period of seven (7) days has elapsed since the first written demand in terms of 4.1 and the sum certified has still not been paid.
- 4.3. A copy of the aforesaid payment certificate which entitles the Employer to receive payment in terms of the Contract of the sum certified in 4.
5. Subject to the Guarantor's maximum liability referred to in 1, the Guarantor undertakes to pay to the Employer the Guaranteed Sum or the full outstanding balance upon receipt of a first written demand from the Employer to the Guarantor at the Guarantor's physical address calling up this Performance Guarantee, such demand stating that:
- 5.1. the Contract has been terminated due to the Contractor's default and that this Performance Guarantee is called up in terms of 5; or
- 5.2. a provisional or final sequestration or liquidation court order has been granted against the Contractor and that the Performance Guarantee is called up in terms of 5; and
- 5.3. the aforesaid written demand is accompanied by a copy of the notice of termination and/or the provisional/final sequestration and/or the provisional liquidation court order.
6. It is recorded that the aggregate amount of payments required to be made by the Guarantor in terms of 4 and 5 shall not exceed the Guarantor's maximum liability in terms of 1.
7. Where the Guarantor has made payment in terms of 5, the Employer shall upon the date of issue of the Final Payment Certificate submit an expense account to the Guarantor showing how all monies received in terms of this Performance Guarantee have been expended and shall refund to the Guarantor any resulting surplus. All monies refunded to the Guarantor in terms of this Performance Guarantee shall bear interest at the prime overdraft rate of the Employer's bank compounded monthly and calculated from the date payment was made by the Guarantor to the Employer until the date of refund.
8. Payment by the Guarantor in terms of 4 or 5 shall be made within seven (7) calendar days upon receipt of the first written demand to the Guarantor.
9. Payment by the Guarantor in terms of 5 will only be made against the return of the original Performance Guarantee by the Employer.
10. The Employer shall have the absolute right to arrange his/her affairs with the Contractor in any manner which the Employer may deem fit and the Guarantor shall not have the right to claim his/her release from this Performance Guarantee on account of any conduct alleged to be prejudicial to the Guarantor.
11. The Guarantor chooses the physical address as stated above for the service of all notices for all purposes in connection herewith.
12. This Performance Guarantee is neither negotiable nor transferable and shall expire in terms of 2, where after no claims will be considered by the Guarantor. The original of this Guarantee shall be returned to the Guarantor after it has expired.
13. This Performance Guarantee, with the required demand notices in terms of 4 or 5, shall be regarded as a liquid document for the purposes of obtaining a court order.
14. Where this Performance Guarantee is issued in the Republic of South Africa, the Guarantor hereby consents in terms of Section 45 of the Magistrate's Courts Act No 32 of 1944, as amended, to the jurisdiction of the Magistrate's Court of any district having jurisdiction in terms of Section 28 of the said Act notwithstanding that the amount of the claim may exceed the jurisdiction of the Magistrate's Court.

SIGNED AT:.....

GUARANTOR (1)

SIGNATURE

DATE

CAPACITY

--

GUARANTOR (2)

--

SIGNATURE

--

DATE

--

CAPACITY

--

WITNESS (1)

--

SIGNATURE

--

WITNESS (2)

--

SIGNATURE

C1.4. Occupational Health and Safety Agreement

AGREEMENT MADE AND ENTERED INTO BETWEEN RAY NKONYENI MUNICIPALITY (HEREINAFTER CALLED THE "EMPLOYER") AND

.....
(Contractor/Mandatory/Company/CC Name)

IN TERMS OF SECTION 37(2) OF THE OCCUPATIONAL HEALTH AND SAFETY ACT, ACT No. 85 OF 1993 AS AMENDED.

I,

Representing....., as an employer in its own right, do hereby undertake to ensure, as far as is reasonably practicable, that all work will be performed, and all equipment, machinery or plant used in such a manner as to comply with the provisions of the Occupational Health and Safety Act (OHSA) and the Regulations promulgated thereunder.

I furthermore confirm that I am/we are registered with the Compensation Commissioner and that all registration and assessment monies due to the Compensation Commissioner have been fully paid or that I/We are insured with an approved licensed compensation insurer.

COID ACT Registration Number:

OR Compensation Insurer: Policy No.:

I undertake to appoint, where required, suitable competent persons, in writing, in terms of the requirements of OHSA and the Regulations and to charge him/them with the duty of ensuring that the provisions of OHSA and Regulations as well as the Council's Special Conditions of Contract, Way Leave, Lock-Out and Work Permit Procedures are adhered to as far as reasonably practicable.

I further undertake to ensure that any subcontractors employed by me will enter into an Occupational Health and Safety Agreement separately, and that such subcontractors comply with the conditions set.

I hereby declare that I have read and understand the appended Occupational Health and Safety Conditions and undertake to comply therewith at all times.

I hereby also undertake to comply with the Occupational Health and Safety Specification and Plan.

Signed at on the day of 20.....

SIGNED BY/ON BEHALF OF CONTRACTOR - MANDATORY

--

NAME

--

SIGNATURE

--

DATE

SIGNED BY WITNESS:

--

NAME

--

SIGNATURE

--

DATE

Signed at on the day of 20.....

SIGNED BY/ON BEHALF OF RAY NKONYENI MUNICIPALITY

NAME	SIGNATURE	DATE

SIGNED BY WITNESS:

NAME	SIGNATURE	DATE

Occupational Health and Safety Conditions

1. The Chief Executive Officer of the Contractor shall assume the responsibility in terms of Section 16(1) of the Occupational Health and Safety Act (as amended). Should the Contractor assign any duty in terms of Section 16(2), a copy of such assignment shall immediately be provided to the representative of the Employer as defined in the Contract.
2. All work performed on the Employer's premises shall be performed under the supervision of the construction supervisor who understand the hazards associated with any work that the Contractor performs on the site in terms of Construction Regulations 2014.
3. The Contractor shall appoint a Competent Person who shall be trained on any occupational health and safety aspect pertaining to them or to the work that is to be performed.
4. The Contractor shall ensure that he familiarises himself with the requirements of the Occupational Health and Safety Act and that he/she, his/her employees, and any sub-contractors, comply with them.
5. Discipline in the interests of occupational health and safety shall be strictly enforced.
6. Personal protective equipment shall be issued by the Contractor as required and shall be worn at all times where necessary.
7. Written safe work procedures and appropriate precautionary measures shall be available and enforced, and all employees shall be made conversant with the contents of these practices.
8. No substandard equipment/machinery/articles or substances shall be used on the site.
9. All incidents referred to in terms of Section 24 of the Occupational Health and Safety Act shall be reported by the Contractor to the Department of Labour and the Employer.
10. The Employer hereby obtains an interest in the issue of any formal inquiry conducted in terms of Section 32 of the Occupational Health and Safety Act and into any incident involving a Contractor and/or his/her employees and/or his/her sub-contractor/s.
11. No use shall be made of any of the Employer's machinery/plant/equipment/substance/personal protective equipment or any other article without prior arrangement and written approval.
12. No alcohol or any other intoxicating substance shall be allowed on the site. Any person suspected of being under the influence of alcohol or any other intoxicating substance shall not be permitted access to or allowed to remain on the site.
13. Prior to commencement of any work, verified copies of all documents mentioned in the agreement, must be presented to the Employer.

Part C2: Pricing Data and Bill of Quantities

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C2.1. Pricing Instructions

1. Measurement and payment shall be in accordance with the relevant provisions of the Standards South Africa's Standardized Specifications for Civil Employer's Agenting Construction SANS 1200.
2. The units of measurement described in the Bill of Quantities are metric units. Abbreviations used in the Bill of Quantities are as follows:

%	=	per cent	m ² .pass	=	square metre-pass
h	=	hour	m ³	=	cubic metre
ha	=	hectare	m ³ .km	=	cubic metre-kilometre
kg	=	kilogram	MN	=	meganewton
kℓ	=	kilolitre	MN.m	=	meganewton-metre
km	=	kilometre	MPa	=	megapascal
km-pass	=	kilometre-pass	No.	=	number
kPa	=	kilopascal	Prov sum	=	Provisional sum
kW	=	kilowatt	P C sum	=	Prime Cost sum
ℓ	=	litre	sum	=	lump sum
m	=	metre	t	=	ton (1 000 kg)
mm	=	millimetre	W/day	=	Work day
m ²	=	square metre			

3. Unless otherwise stated, items are measured net in accordance with the drawings, and no allowance is made for waste.
4. The prices and rates to be inserted in the Bill of Quantities are to be the full inclusive prices for the work described under the items. Such prices and rates shall cover all costs and expenses that may be required in accordance with the provisions of the Scope of Work, and shall cover the cost of all general risks, liabilities, and obligations set forth or implied in the Contract Data, as well as overhead charges and profit. These prices shall be used as a basis for assessment of payment for additional work that may have to be carried out.
5. It will be assumed that prices included in the Bill of Quantities are based on Acts, Ordinances, Regulations, By-laws, International Standards and National Standards that were published 28 days before the closing date for tenders. (Refer to www.sabs.co.za or www.iso.org for information on standards).
6. Where the Scope of Work requires detailed drawings and designs or other information to be provided, all costs associated therewith are deemed to have been provided for and included in the unit rates and sum amount tendered for such items.
7. An item against which no price is entered will be considered to be covered by the other prices or rates in the Bill of Quantities. A single lump sum will apply should a number of items be grouped together for pricing purposes.
8. The quantities set out in the Bill of Quantities are approximate and do not necessarily represent the actual amount of work to be done. The quantities of work accepted and certified for payment will be used for determining payments due and not the quantities given in the Bills of Quantities.
9. Reasonable compensation will be received where no pay item appears in respect of work required in the Bills of Quantities in terms of the Contract and which is not covered in any other pay item.
10. The short descriptions of the items of payment given in the Bill of Quantities are only for the purposes of identifying the items. More details regarding the extent of the work entailed under each item appear in the Scope of Work.
11. Descriptions in the Bill of Quantities are abbreviated and comply generally with those in the SANS 1200 Standardised Specifications.
12. The tenderer must complete the schedule of quantities in full. Items against which no price is entered are to be considered as incomplete and invalidate the tender. Items against which **N/A, left blank** or – (dash) is entered are to be considered as incomplete and will also invalidate the tender. Items against which **Nil or zero (0)** is entered are to be considered to be fully priced and the tenderer will provide the items in questions as specified at zero (0) or **Nil** price.
13. Rates are to be inserted in **BLACK ink**. Any amendments must be neatly crossed and initialled. The use of correction ink is **NOT** permitted.
14. The Tenderer shall also 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.

A Tenderer is **NOT PERMITTED** to group a number of items together and tender one sum for such group of items. **IF THIS IS DONE IT WILL RENDER THE TENDER INVALID.**

15. The quantities of work as measured and accepted and certified for payment in accordance with the Conditions of Contract, and not the quantities stated 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.
16. **Ordering of materials** are not to be based on the Bill of Quantities, but only on information issued for construction purposes.

C2.2. BILL OF QUANTITIES

ITEM	DESCRIPTION	UNIT	LI	QTY	RATE	AMOUNT
C1.2	GENERAL REQUIREMENTS AND PROVISIONS					
C1.2.1	Environmental Management:					
C1.2.1.1	Monitoring of compliance with and reporting on the EMP	Months		8		R -
C1.2.5	Safety:					
C1.2.5.1	Health and safety plan	Lump Sum		1		R -
C1.2.5.2	Implementation of health and safety plan	month		8		R -
B.C1.2.13	Provision for a Resident Engineer					
(a)	Wages, salary, allowances, etc	Prov Sum		1	720 000	R 720 000
(b)	Handling costs and profit in respect of subitem B.C1.2.13 (a) above	%		720 000		
B.C1.2.16	Provision for Geotechnical Investigation					
(a)	Geotechnical site investigations, laboratory studies, reports, etc	Prov Sum		1	350 000,00	R 350 000
(b)	Handling costs and profit in respect of subitem B.C1.2.16 (a) above	%		350 000		

Part C2: Pricing Data

BILL OF QUANTITIES

B.C1.2.17	Provision for Environmental Investigation					
(a)	Environmental assessments, specialist studies, water use license application, etc	Prov Sum		1	320 000	R 320 000
(b)	Handling costs and profit in respect of subitem B.C1.2.17 (a) above	%		320 000		
C1.2.8	Dayworks					
C1.2.8.1	Personnel					
	a) Unskilled	hr		20		R -
	b) Semi-Skilled	hr		15		R -
	c) Skilled	hr		15		R -
	d) Foreman	hr		12		R -
C1.2.8.2	Construction equipment					
	(a) Motor grader (CAT 140G or similar approved)	`		12		R -
	(b) Vibratory roller, self-propelled, min. 99kW	hr		12		R -
	(c) Pedestrian roller, min. 40kN	hr		12		R -
	(d) 10 m3 Tipper truck	hr		12		R -
	(e) Front end Loader, min. 111kW	hr		12		R -
	(f) TLB, min. 71 kW	hr		12		R -
	(g) Excavator, min.213 kW	hr		12		R -
	(h) 10000L water tanker	hr		12		R -
	(i) Tractor-trailer (43kw-3ton min.)	hr		12		R -
C1.2.8.3	Vehicles					
	(a) Light Delivery Vehicle (LDV)	hr		50		R -
	(b) Flat-bed truck	hr		50		R -
PSC1.2.10	Community Participation					
PSC1.2.10.1	Prime cost sum for community Participation (CLO)	Prov Sum		1	64 000	

Part C2: Pricing Data

BILL OF QUANTITIES

PSC1.2.10.2	Handling costs and profit in respect of item C1.2.10.1 above	%		64000		R	-
							R

ITEM	DESCRIPTION	UNIT	LI	QTY	RATE	AMOUNT
C1.3	CONTRACTOR'S ESTABLISHMENT ON SITE AND GENERAL OBLIGATIONS					
C1.3.1	The contractor's general obligations:					
C1.3.1.1	Fixed obligations	Lump Sum		1		R -
C1.3.1.2	Value-related obligations	Lump Sum		1		R -
C1.3.1.3	Time-related obligations	Month		8		R -
C1.3.2	Contract sign boards	m2		6		R -
						R -

ITEM	DESCRIPTION	UNIT	LI	QTY	RATE	AMOUNT
C1.4	FACILITIES FOR THE ENGINEER					
C1.4.1	Site accommodation					
C1.4.1.1	Offices and conference room	m2		32		R -
C1.4.1.7	Ablution units	No		2		R -
C1.4.3	Items measured by number					
C1.4.3.2	Office Chairs	No		10		R -
C1.4.3.5	Office Desks complete with drawers and locks	No		1		R -
C1.4.3.8	Conference table	No		1		R -
C1.4.3.31	Rain Gauge	No		1		R -
C1.4.3.37	First Aid Kit	No		1		R -
C1.4.5	Services at site offices, laboratories and site accommodation					
	The provision for water electricity sewage, septic tanks, and sewage and rubbish removal, cleaning services and maintainance					
C1.4.5.1	Fixed costs	Lump Sum		1		R -
C1.4.5.2	Running costs	month		8		R -
						R -

ITEM	DESCRIPTION	UNIT	LI	QTY	RATE	AMOUNT
C1.5	ACCOMMODATION OF TRAFFIC					
C1.5.1	Accommodation of pedestrian and non-motorised traffic:					
C.1.5.1.1	Accommodation of pedestrian and non-motorised traffic	month		8,00		R -
C1.5.2	Accommodation of vehicular traffic	month		8,00		R -
C1.5.7.1	Delineators including mounting bases and ballast:					
	(b) Double sided, reversible left or right (800mm x 200mm)	No		10		R -
C1.5.7.2	Traffic cones, minimum height 750 mm	No		6		R -
C1.5.7.3	Flagmen	man-shift		1		R -
C1.5.7.5	Provision of illuminated traffic signs:					
	(c) Illuminated road sign - R & TR series	No		4		R -
						R -

ITEM	DESCRIPTION	UNIT	LI	QTY	RATE	AMOUNT
C1.6	CLEARING AND GRUBBING					
C1.6.1.1	Clearing with machines and some hand labour where necessary	ha		0,55		R -
						R -

ITEM	DESCRIPTION	UNIT	LI	QTY	RATE	AMOUNT
C3.1	DRAINS					
C3.1.1	Excavation for open drains:					
	Excavating all material situated within the following depth ranges below the surface level using conventional methods:					
C3.1.1.1	(a) 0m to 1.5m	m3		100		R -
C3.1.1.2	Extra over sub-item C3.2.1.1 for excavation in hard or boulder material, irrespective of depth	m3		20		R -
						R -

ITEM	DESCRIPTION	UNIT	LI	QTY	RATE	AMOUNT
C3.2	CULVERTS					
C3.2.1	Excavation for culvert structures:					
C3.2.1.1	Excavating in all material situated within the following depth ranges below the surface level:					
	(a) 0m to 1.5m	m ³		196		R -
C3.2.1.4	Extra over sub-item C3.2.1.1 for excavation in hard or boulder material, irrespective of depth	m ³		39		R -
C3.2.2	Backfilling:					
C3.2.2.1	Using the excavated material	m ³		91		R -
C3.2.3	Concrete pipe culverts:					
C3.2.3.1	On Class C bedding (type 100D and 750mm diameter)	m		140		R -
C3.2.16	Brickwork (Engineering bricks):					
C3.2.16.2	230 mm thick	m ²		4		R -
C3.2.19	Accessories:					
C3.2.19.1	Manhole frames (description and reference to drawing)	No		3		R -
C3.2.19.4	Manhole covers or gratings (type, load bearing and SANS specification indicated)	No		3		R -
						R -

ITEM	DESCRIPTION	UNIT	LI	QTY	RATE	AMOUNT
C3.3	CONCRETE KERBING AND CHANNELING, ASPHALT BERMS, CHUTES, DOWNPIPES, AS WELL AS CONCRETE, STONE PITCHED AND GABION LININGS FOR OPEN DRAINS					
C3.3.8	Linings for open drains:					
C3.3.8.1	Cast in situ concrete lining (20Mpa), V-drain	m ³		66		R -
C3.3.8.2	ClassU2 surface finish to cast in situ concrete (V-drain)	m ²		443		R -
C3.3.9	Formwork to cast in situ concrete lining for open drains (Class F2 surface finish):					
C3.3.9.2	To sides with formwork on both internal and external faces	m ²		1 329		R -
C3.3.12	Reinforcement:					
C3.3.12.3	Welded steel fabric	kg		90		R -
						R -

ITEM	DESCRIPTION	UNIT	LI	QTY	RATE	AMOUNT
C4.2	CUT MATERIALS					
C4.2.3	Excavating of materials in cuttings, material obtained from					
C4.2.3.1	Soft excavation	m3		3 200		R -
C4.2.3.2	Boulder excavation class A	m3		1 600		R -
C4.2.3.4	Hard excavation (other than by blasting)	m3		960		R -
C4.2.7	Removal of unsuitable stable cut material to spoil					
C4.2.7.1	In layer thicknesses of 200 mm and less	m3		1 240		R -
						R -

ITEM	DESCRIPTION	UNIT	LI	QTY	RATE	AMOUNT
C4.4	COMMERCIAL MATERIALS					
C4.4.2	Commercial materials identified by the Contractor from commercial, private or other non-commercial suppliers					
C4.4.2.1	Pavement layer material:					
(a)	Type G2 material	m3		332		R -
(b)	Type G5 material	m3		332		R -
(c)	Type G7 material	m3		332		R -
C4.4.7	Sampling and material testing by a commercial laboratory for the stabilisation designs					
C4.4.7.1	Cost of sampling and material testing	Prov Sum		1		R -
C4.4.7.2	Handling cost and profit in respect of item C4.4.7.1	%				-
						R -

ITEM	DESCRIPTION	UNIT	LI	QTY	RATE	AMOUNT
C5.1	ROADBED					
C5.1.1	Roadbed construction and compaction					
C5.1.1.1	Compaction of in-situ material to 90% of MDD	m3		332		R -
C5.1.5	In-situ treatment of roadbed in hard material:					
C5.1.5.1	In-situ treatment by ripping	m3		332		R -
						R -

ITEM	DESCRIPTION	UNIT	LI	QTY	RATE	AMOUNT
C5.2	FILL	m3		2 055		R -
C5.2.2	Fill construction					
C5.2.2.1	Normal fill material in compacted layer thicknesses of 200 mm and less:					
(b)	Compacted to 93% MDD					
						R -

ITEM	DESCRIPTION	UNIT	LI	QTY	RATE	AMOUNT
C5.3	ROAD PAVEMENT LAYERS					
C5.3.2	Construction of pavement layers					
C5.3.2.1	Construction of layers using conventional construction methods:					
(b)	Upper Gravel G7 subgrade layer (150mm) compacted to 95% of MDD	m3		665		R -
(h)	Upper Gravel G5 subbase layer (150mm) compacted to 97% of MDD	m3		459		R -
(w)	Upper Gravel G2 base layer (150mm) compacted to 90% of MDD	m3		332		R -
						R -

ITEM	DESCRIPTION	UNIT	LI	QTY	RATE	AMOUNT
C6.1	PAVER LAID CONCRETE LAYERS					
C6.1.1	Construction of trial section					
C6.1.1.2	Mechanical construction (25Mpa Concrete wearing course 150mm thick)	m2		3 060		R -
C6.1.4	Texturing and curing the concrete pavement					
C6.1.4.3	Curing					
	(b) Labour enhanced construction	m2		3 060		R -
C6.1.6	Joints					
C6.1.6 .1	Expansion Joints complete	m		28		R -
C6.1.7	Steel reinforcement in concrete pavements					
C6.1.7.3	Welded steel fabric (395 Ref.)	kg		410		R -
						R -

ITEM	DESCRIPTION	UNIT	LI	QTY	RATE	AMOUNT
C11.1 C11.1.2 C11.1.2.2	PITCHING, STONework AND PROTECTION AGAINST EROSION	m²		65		R -
	Stone pitching					
	Grouted stone pitching with mortar					
						R -

ITEM	DESCRIPTION	UNIT	LI	QTY	RATE	AMOUNT
C11.2	NON-STRUCTURAL GABIONS					
C11.2.1	Foundation trench excavation:					
C11.2.1.2	Excavating all material situated within the following depth ranges below the surface level					
a)	0m to 1.5m	m ³		54		R -
b)	Exceeding 1.5m and up to 3.0m	m ³		18		R -
C11.2.1.2	Extra over sub-item C11.2.1.1 for excavation in hard material, irrespective of depth	m ³		24		R -
C11.2.2	Surface preparation for bedding the gabions boxes and mattress	m ²		40		R -
C11.2.3	Gabions boxes and mattresses:					
C11.2.3.1	PVC Coated class a galvanised hexagonal terra mesh (3,0 m x 1,0 m x 1,0 m)	m ³		95		R -
C11.2.3.3	Reno Mesh Mattresses (4,0 m x 2,0 m x 0,15)	m ³		2		R -
C11.2.4	Geotextile (Bidim U14 or similar)	m ²		100		R -
						R -

ITEM	DESCRIPTION	UNIT	LI	QTY	RATE	AMOUNT
C11.4	ROAD RESTRAINT SYSTEMS					
C11.4.1	Erecting of guardrails at 1.9 m spacing:					
C11.4.1.1	Complete galvanized system compliant to SANS 1350:					
	(a) On timber posts	m		295		R -
	(d) Extra over C11.4.1.1(a) for excavating holes of posts using labour enhanced methods (soft and intermediate)	m		295		R -
C11.4.1.2	Terminal sections for 3,81 guardrails comprising of:					
	(a) End wings to SANS 1350	No		2		R -
C11.4.6	Reflective plates:					
C11.4.6.1	Steel plates	No		133		R -
						R -

ITEM	DESCRIPTION	UNIT	LI	QTY	RATE	AMOUNT
C13.1	FOUNDATIONS					
C13.1.2	Additional foundation investigations					
C13.1.2.1	Additional foundation investigations	PC sum		1		R -
C13.1.2.2	Handling costs and profit in respect of item C13.1.2.1	%				R -
C13.1.3	Excavation:					
C13.1.3.1	Excavation in soft material situated within the following successive depth ranges:					
	(i) 0m up to 1.5m	m ³		40		R -
C13.1.3.2	Extra over subitem C13.1.3.1 for excavation in hard material irrespective of depth	m ³		8		R -
C13.1.3.4	Extra over subitem C13.1.3.1 for excavation by hand	m ³		6		R -
C13.1.6	Access and Drainage					
C13.1.6.1	Access	Lump Sum		1		R -
C13.1.7	Backfill to excavation utilising:					
C13.1.7.1	Material from excavation	m ³		40		R -
C13.1.7.2	Imported material	m ³		40		Rate only
C13.1.9	Fill within a restricted area (extra over item C5.2.2)	m ³		20		R -
C13.1.10	Overhaul in excess of 1.0km on excavated and on material imported for backfill, foundation fill and fill for caissons.	m ³ -km		100		R -

Part C2: Pricing Data

BILL OF QUANTITIES

C13.1.14	Foundation fill consisting of:					
C13.1.14.1	Rock fill	m ³		0		Rate only
C13.1.14.5	Concrete blinding (75mm thick, class 15/19)	m ³		3		R -
C13.1.16	Establishment on site for drilling of holes and grouting of rock fissures (100 mm dia. percussion drilling):	Lump Sum		1		R -
C13.1.20	Dowel bars					
C13.1.20.1	Drilling and preparation of holes (100 mm dia. for Y25 anchor bars at foundations and caissons, 2m deep into bedrock)	m		300		R -
C13.1.20.2	Supply and installation of dowel bars (High tensile bars, Y25 galvanised rock anchors 2200 mm long grouted into 30 mm diameter holes 1500 mm into rock)	kg		1 525		R -
						R -

ITEM	DESCRIPTION	UNIT	LI	QTY	RATE	AMOUNT
C13.2	FALSEWORK, FORMWORK AND CONCRETE FINISH					
C13.2.2	Vertical formwork to provide (class F1 surface finish to): (i) Foundations (ii) Abutments (iii) piers	m ² m ² m ²		40 10 56		R R R -
C13.2.3	Horizontal formwork to provide (class of finish indicated as F1 surface finish to): (i) Concrete walkway (i) Concrete wearing course	m ² m ²		22 207		R R -
C13.2.5	Permanent formwork:					
C13.2.5.2	Of (2mm thick Bond-Lok for Concrete deck)	m ²		100		R -
						R -

ITEM	DESCRIPTION	UNIT	LI	QTY	RATE	AMOUNT
C13.3 C13.3.1 C13.3.1.1	STEEL REINFORCEMENT FOR STRUCTURES					
	Reinforcement for:					
	(Description of portion of structure to which applicable):					
	a) Abutments ii) High-Yield steel bars, hot rolled deformed	t		8,69		R -
	b) Pier i) High-Yield steel bars, hot rolled deformed	t		11,12		R -
	c) Deck and walkway i) Welded mesh fabric ref:617	m ²		122		R -
	d) Galvanized Expanded Metal Mesh Flatex 346/VE, VITEX 20 -3HF	m ²		134		R -
						R -

ITEM	DESCRIPTION	UNIT	LI	QTY	RATE	AMOUNT
C13.4	CONCRETE FOR STRUCTURES					
C13.4.1	Cast in situ concrete					
	a) Class 30/19 in abutments	m ³		70		R -
	b) Class 30/19 in piers	m ³		20		R -
	c) Class 30/19 in Approach Slab	m ³		3		R -
	d) Deck slab (Class 30/19 concrete)	m ³		10		R -
	e) Walkway Concrete (Class 20/19)	m ³		30		R -
	f) Class 30/19 in bases	m ³		18		R -
C13.4.7	No-fines concrete (class NF):					
C13.4.7.2	Precast:					
	a) Precast Staircase complete as shown on the drawings	No		10		R -
						R -

ITEM	DESCRIPTION	UNIT	LI	QTY	RATE	AMOUNT
C13.6	BEARINGS					
C13.6.1	Bearings:					
C13.6.1.1	Bearings (Elastomeric bearings, 200 x 150 x 2(10) with 16mm thick Plate on top to receive 2xM20 Bolts)	No		12		R -
C13.6.1.2	Provision of Engineering drawings of proprietary bearings and certification after installation, by an ECSA Registered Professional Engineer or Technologist.	Lump Sum		1		R -
C13.6.3	Bearing strips (two layers of 3-ply roofing felt)	m ²		10		R -
						R -

Part C2: Pricing Data

BILL OF QUANTITIES

ITEM	DESCRIPTION	UNIT	LI	QTY	RATE	AMOUNT
C13.7	JOINTS					
C13.7.1	Expansion joints:					
C13.7.1.1	Construction joint	m		48		R -
C13.7.2	Filled Joints:					
C13.7.2.1	10mm wide movement joints filled with jointed	m		36		R -
C13.7.4	Sealing of joints with:					
C13.7.4.1	Sealant	m		90		R -
						R -

ITEM	DESCRIPTION	UNIT	LI	QTY	RATE	AMOUNT
C13.9	STRUCTURAL STEELWORK FOR MINOR STRUCTURES					
C13.9.1	Structural Steel:					
C13.9.1.1	Manufacture, Supply and Installation on site Grade 350W structural steel bridge structure and all components comprising Grade 8.8 bolt connections, HDB, bearing plates and bolts, bracings all complete as per drawing	t		12,0		R -
C13.9.2	Anchor bolts:					
C13.9.2.1	M 24 10.8 complete with anchor plate nuts and washers as detailed on the drawing	kg		360		R -
C13.9.3	Corrosion protection:					
C13.9.3.1	Galvanising: (a) Bridge Structure - Minimum mean thickness of 85 micros, galvanized in accordance with SABS ISO 1461:1999	t		12,0		R -
C13.11.2	Miscellaneous Metalwork					
	Manufacture, Supply and Install 51500mm x 1200mm high stainless steel curved balustrade (bright satin finished) for Sub-Contractors package to be CIDB registered under SL Grading	Sum		1		R -
						R -

ITEM	DESCRIPTION	UNIT	LI	QTY	RATE	AMOUNT
C14.3	DEMOLITION AND REMOVAL OF STRUCTURAL CONCRETE AND STEELWORK					
C14.3.1	Demolition of concrete members or elements:					
C14.3.1.2	Partial member or element (Spalled and damaged surfaces on Abutments, Decks, Piers and Walkway)	m ³		25		R -
C14.3.3	Demolition of structural steel structures, members or elements (location and description)					
C14.3.3.2	Partial member or element (Structural steel members)	ton		3,6		R -
						R -

ITEM	DESCRIPTION	UNIT	LI	QTY	RATE	AMOUNT
C20.1	TESTING MATERIALS AND JUDGEMENT OF WORKMANSHIP					
C20.1.1	Special tests on elastomeric bearings	No		12		R -
C20.1.2	Special Tests requested by the engineer:					
C20.1	(a) Other special tests requested by the engineer	Prime Cost		1	400 000	R 400 000
	(i) Handling costs and profit in respect of subitem PSC20.1.5.1 above	%		400 000		R -
						R

	SUMMARY	
Section	DESCRIPTION	AMOUNT
C1.2	GENERAL REQUIREMENTS AND PROVISIONS	
C1.3	CONTRACTOR'S SITE ESTABLISHMENT AND GENERAL OBLIGATIONS	
C1.4	FACILITIES FOR THE ENGINEER	
C1.5	ACCOMMODATION OF TRAFFIC	
C1.6	CLEARING AND GRUBBING	
C3.1	DRAINS	
C3.2	CULVERTS	
C3.3	CONCRETE KERBING AND CHANNELING, ASPHALT BERMS, CHUTES, DOWNPIPES, AS WELL AS CONCRETE, STONE PITCHED AND GABION LININGS FOR OPEN DRAINS	
C4.2	CUT MATERIALS	
C4.4	COMMERCIAL MATERIALS	
C5.1	ROADBED	
C5.2	FILL	
C5.3	ROAD PAVEMENT LAYERS	
C5.4	STABILISATION	
C6.1	PAVER LAID CONCRETE LAYERS	
C11.1	PITCHING, STONEMASONRY AND PROTECTION AGAINST EROSION	
C11.2	NON-STRUCTURAL GABIONS	
C11.4	ROAD RESTRAINT SYSTEMS	
C13.1	FOUNDATIONS	
C13.2	FALSEWORK, FORMWORK AND CONCRETE FINISH	
C13.3	STEEL REINFORCEMENT FOR STRUCTURES	
C13.4	CONCRETE FOR STRUCTURES	
C13.6	BEARINGS	
C13.7	JOINTS	
C13.9	STRUCTURAL STEELWORK FOR MINOR STRUCTURES	
C14.3	DEMOLITION AND REMOVAL OF STRUCTURAL CONCRETE AND STEELWORK	
C20.1	TESTING MATERIALS AND JUDGEMENT OF WORKMANSHIP	
	SUB-TOTAL (a)	
	CONTINGENCIES (10%)	
	SUB-TOTAL (b)	
	ADD 15% VAT	
	TOTAL AMOUNT CARRIED TO TENDER AMOUNT	

SIGNED BY/ON BEHALF OF TENDERER

NAME

SIGNATURE

DATE

COMPANY STAMP

Declaration

(In respect of completeness of Tender)

RAY NKONYENI MUNICIPALITY
10 Connor Street
Port Shepstone
4240

I/we, the undersigned, do hereby declare that these are the properly priced Bill of Quantities forming Part C2.2 of this Contract Document comprising 26 pages which includes the Bill of Quantities comprising 20 pages in consecutive order upon which my/our tender for the **TENDER NO: 8/2/RNM0552**

has been based.

SIGNED BY/ON BEHALF OF TENDERER

NAME

SIGNATURE

DATE

Part C3: Scope of Work

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F.1 STANDARD SPECIFICATIONS

The standard specifications on which this contract is based are Standards South Africa's Standardized Specifications for Civil Employer's Agenting Construction SABS 1200.

Although not bound in nor issued with this Document, the following Sections of the Standardized Specifications of SABS 1200 shall form part of this Contract:

AA	1986	:	GENERAL
AB	1986	:	EMPLOYER'S AGENT'S OFFICE
C	1980	:	SITE CLEARANCE (As amended 1982)
D	1988		EARTHWORKS (As amended 1990)
DA	1988	:	EARTHWORKS (Small Works)
DB	1989	:	EARTHWORKS(Pipe Trenches)
DK	1984	:	GABIONS AND PITCHING
DM	1981		EARTHWORKS (ROADS, SUBGRADE)
GA	1982	:	CONCRETE (Small Works)
LB	1983		BEDDING (Pipes)
LE	1982		STORMWATER DRAINAGE
M	1996		ROADS (GENERAL)
ME	1981		SUBBASE
MF	1981		BASE
MF	1996		BASE (LIGHT PAVEMENT STRUCTURES)
MH	1996		ASPHALT BASE AND SURFACING
MK	1983		KERBING AND CHANNELLING
MM	1984		ANCILLARY ROADWORKS
MJ	1984		SEGMENTED PAVING
LG	1983		PIPE JACKING

The following SANS specifications are also referred to in this document and the Contractor is advised to obtain them from Standards South Africa (a division of SABS) in Pretoria.

SANS 1921 (2004): Construction and Management Requirements for Works Contracts

Part 1: General Employer's Agenting and Construction Works; and

Part 2: Accommodation of Traffic on Public Roads Occupied by the Contractor.

F.2 PROJECT SPECIFICATIONS

The project specification is covered in the following sections:

ITEM	DESCRIPTION
F.5.1	STATUS
F.5.2	PROJECT SPECIFICATION PORTION 1 - GENERAL
PS-1	Project Description
PS-2	Overview and Details of Contract
PS-3	Description of Site and Access
PS-4	Nature of Ground and Subsoil Conditions
PS-5	Construction and Management Requirements
PS-6	Construction Programme
PS-7	Site Facilities Available
PS-8	Site Facilities Required
PS-9	Existing Services
PS-10	Requirements for Accommodation of Traffic
PS-11	Occupational Health and Safety
PS-12	Adverse Weather Conditions
PS-13	Site Meetings and Reporting
	PROJECT SPECIFICATION PORTION 2
PSA	General
PSD	Earthworks
PSDB	Earthworks (Pipe Trenches)
PSG/PSGA	Concrete (Small Works)
PSLB	Bedding (Pipes)
PSLE	Stormwater Drainage
	PARTICULAR SPECIFICATIONS
PA	Brickwork and Plaster
PB	Carpentry, Joinery and Ironmongery
PC	Painting
PES	Environmental Specification
PE	The Client's Pre-Construction and Health Plan

F.3 STATUS

The Project Specification, consisting of two parts, forms an integral part of the contract and supplements the Standard Specifications.

Part A contains a general description of the works, the site and the requirements to be met.

Part B contains variations, amendments and additions to the Standardized Specifications and, if applicable, the Particular Specifications.

In the event of any discrepancy between a part or parts of the Standardized or Particular Specifications and the Project Specification, the Project Specification shall take precedence. In the event of a discrepancy between the Specifications, (including the Project Specifications) and the drawings and / or the Bill of Quantities, the discrepancy shall be resolved by the Employer's Agent before the execution of the work under the relevant item.

F.4 PROJECT SPECIFICATION PORTION 1: SABS 1200 PS: GENERAL

PS-1 PROJECT DESCRIPTION

PS-1.1 Employer's objectives

This contract is for the Nositha Pedestrian Bridge Repairs and Upgrade in ward 27 in Nositha under the Ray Nkonyeni Municipality area of jurisdiction. The construction work for the project is the ***"Nositha Pedestrian Bridge Repairs and Upgrade in ward 27"***.

The description of the contract contained in the Scope of Work is merely an outline of the Contract Works and shall not limit the work to be carried out by the Contractor under this Contract. Details of some of the major items are given in this section and approximate detailed quantities for each type of work to be carried out in accordance with the Contract Documents are included in the Bill of Quantities.

PS-1.2 Overview of the Works

The project is in ward 27. The existing pedestrian bridge structure has collapsed and is unsuitable for rehabilitation and requires it to be demolished and constructed into new works.

PS-1.3 Extent of the Works

The work that is to be carried out under the contract is as provided for in the Bill of Quantities, Drawings and project particular specifications. However, if during construction conditions are found to differ from those anticipated, the Employer's Agent reserves the right to modify the scope of the work to suit the prevailing conditions and circumstances. Variations introduced in this manner will be dealt with in accordance with the General Conditions of Contract 2015.

The work to be undertaken by the Contractor includes, but is not limited to, the following:

- (a) Demolishing the existing bridge structure on site and carting away debris to the nearby sanitary landfill site.
- (b) Bulk excavation works for bridge pier and abutments.
- (c) Provision of drainage facilities to divert the stream where necessary and to dewater the foundation excavations for the bridge piers and abutments footings.
- (d) Construction of the reinforced concrete piers and abutments
- (e) Installation of stainless-steel bridge structure on the pier and abutments including safety cage on both sides.
- (f) Construction of reinforced concrete slab on the bridge steel structure as a walkway including approaches to the bridge.
- (g) Construction of gabion protection where necessary.
- (h) Stone pitching on approaches to bridge abutments
- (i) Reinstatement of existing concrete walkways on either side of the bridge damaged during execution of construction works.
- (j) Site clearing and cleaning on completion of the work.
- (k) Construction of access road

A typical general arrangement detail of the proposed bridge is included in Drawing No. J161 – D01

PS-1.3.1 General

The following general items will be included in the contract:

- The establishment is on site of the Contractor's campsite.
- Provision of offices for the Employer's Agent's site personnel. It is not required to establish a site laboratory for the Employer's Agent's site personnel, as it is envisaged that the acceptance control be undertaken by an established commercial laboratory in Durban. The contractor remains responsible for his production control testing as required per the standard (plus any special) project specifications.
- The supply of plants, labour, tools, equipment and materials necessary to complete the work.
- Setting out of the work.
- Accommodation of traffic and maintaining temporary deviations;

- Clearing and grubbing of the site;
- Landscaping and finishing off of the site on completion of the works.

PS-1.3.2 Storm Water drainage:

Stormwater Drainage work will include diverting of river flow as necessary to effect construction works and rehabilitation works on completion of the works

PS-1.3.3 Earthworks, Concrete Works and Steelworks

Bulk excavation work will be undertaken for the abutments on either side of the river and for the center pier. Foundation works will be prepared in accordance with the geotechnical investigation's recommendations.

- Reinforced concrete works will be undertaken for the following structures:
- Left and right-hand side abutments
- Centre pier and bridge deck walkway
- Walkways at both approaches to the bridge
- Stone pitching around the bridge structure
- Construction of gabion protection where necessary

Steelworks will consist of welded structural steel trusses for the bridge deck including a fall protection steel cage.

PS-1.4 Employer's Agent

PS-1.4.1 Employer's design

The following design inputs were used to arrive at the design solutions as set out in this contract document:

- The project is situated in a climatic area that can be described as moderate with a Weinert N-value of 2.0. This is the limit defining the boundary between moderate and wet, i.e. N-value of 2.0.
- The designs have been undertaken in accordance with the requirements for limit state, ultimate and serviceability during operation.
- The materials have been selected on the basis of the following:
 - Constructability (ease of construction)
 - Availability of materials,
 - Suitability, durability and reliability for intended use
 - Aesthetics

PS-1.4.2 Design Brief and procedures

Any design required to be carried out by the contractor shall be in accordance with the Standard and Special Specifications applicable to this contract as set out in Section C3: Scope of Works.

PS-1.4.3 Drawings

Refer to Part C5 of this tender document

PS-2 OVERVIEW AND DETAILS OF CONTRACT

In order to allow competition and opportunities for available reinforced concrete work and gabion installations may be undertaken through a nominated subcontract as part of this contract. The subcontract may be done through a call for competitive quotations.

Labour Intensive works comprise the activities described in SANS 1921-5, Earthworks Activities which are to be performed by hand, and its associated specification data. Such work shall be constructed using local workers who are temporarily employed in terms of this Scope of Work.

PS-3 DESCRIPTION OF SITE AND ACCESS

PS-3.1 Access

The proposed site is 44mins drive from the Ray Nkonyeni Municipality offices. You exit the Ray Nkonyeni Municipality heading north, join the N2 and travel for 22km, off ramp to R61 in Margate/Port Edward. Keep right and stay on R61. Take exit 33 towards uVongo and sharp right onto Wingate Ave. after 2.6km turn left, turn right, after 1.1km turn another right and a slight right after 500m. Turn right, continue straight then slight right. The coordinates of the bridge site are as follows:

Project Name	Coordinates	
	Latitude	Longitude
Nositha Pedestrian Bridge - WARD 27	30°49'25.06"S	30°19'59.16"E

The google earth image below shows the location of the roads.



Fig 1: The location of Nositha Pedestrian Bridge

PS-3.2 Limitations

In arriving at his rates the tenderer/contractors must take note of the following limitations that characterize the site of the bridge. These must be taken into account in pricing and during construction of the bridge.

- The contractor's activities shall be restricted to the bridge construction site.
- The contractor's insurances a shall have to cover potential damage to private property as access passes in close proximity to houses etc
- The project is urgent and the tenderer/contractor must complete the works as soon as possible. An estimated construction period of **12 MONTHS** has been allowed. Tenderers will be allowed to tender other competitive periods by indicating so in the section of alternatives and amendments in the returnable.

PS-4 NATURE OF GROUND AND SUBSOIL CONDITIONS

For details of nature of ground and subsoil conditions are provided as part of this document.

PS-5 CONSTRUCTION AND MANAGEMENT REQUIREMENTS

PS-5.1 General

The Contractor is referred to SANS 1921: 2004: Construction and Management Requirements for

Works Contracts, Part 1: General Employer's₁₀₉ Agenting and Construction Works, and Part 2:

Accommodation of Traffic on Public Roads. These specifications shall be applicable to the contract under consideration and the Contractor shall comply with all requirements relevant to the project.

Certain aspects however require further attention as described hereafter.

PS-5.2 Quality Assurance (QA) *(Read with SANS 1921 – 1: 2004 clause 4.4)*

The Contractor will be solely responsible for the production of work that complies with the Specifications to the satisfaction of the Employer's Agent. To this end it will be the full responsibility of the Contractor to institute an appropriate Quality Assurance (QA) system on site. The Employer's Agent will audit the Contractor's quality assurance (QA) system on a regular basis to verify that adequate independent checks and tests are being carried out and to ensure that the Contractor's own control is sufficient to identify any possible quality problems which could cause a delay or failure.

The Contractor shall ensure that efficient supervisory staff, the required transport, instruments, equipment and tools are available to control the quality of his own workmanship in accordance with his QA-system. His attention is drawn to the fact that it is not the duty of the Employer's Agent or the Employer's Agent's representative to act as foreman or surveyor.

The Employer's Agent's Quality Management System that will be used during Construction in conjunction with the contractor's Quality Assurance System on site is detailed under section, **PARTICULAR SPECIFICATIONS QMS.**

PS-5.3 Management and disposal of water *(Read with SANS 1921 - 1: 2004 clause 4.6)*

The Contractor shall pay special attention to the management and disposal of water and stormwater on the site. It is essential that all completed works or parts thereof are kept dry and properly drained. Claims for delay and for repair of damage caused to the works as a result of the Contractor's failure to properly manage rain and surface water, will not be considered.

PS-5.4 Disposal of spoil or surplus material *(Read with SANS 1921 - 1: 2004 clause 4.10)*

The Contractor shall dispose all surplus and unsuitable material in legal spoil areas identified by the Employer's Agent. These spoiling areas will be within 5km distance from the site. No overhaul will be paid for disposing of unsuitable material in the designated areas within 5km from the site.

PS-5.5 Testing *(Read with SANS 1921 – 1: 2004 clause 4.11)*

PS-5.5.1 Process control

The Contractor shall arrange for all tests required for process control to be done by a laboratory acceptable to and approved by the Employer's Agent.

The Contractor may establish his own laboratory on site or he may employ the services of an independent commercial laboratory. Whatever method is used, the Contractor must submit the results of tests carried out on materials and workmanship when submitting work for acceptance by the Employer's Agent. The costs for these tests shall be deemed to be included in the relevant rates and no additional payment will be made for testing as required.

PS-5.5.2 Acceptance control

The process control test results submitted by the Contractor for approval of materials and workmanship may be used by the Employer's Agent for acceptance control. However, before accepting any work, the Employer's Agent may have further control tests carried out by a laboratory of his choice. The cost of such additional tests will be covered by a provisional sum provided in the schedule of quantities, but tests that failed to confirm compliance with the specifications, will be for the account of the Contractor.

PS-5.6 Survey beacons *(Read with SANS 1921 - 1: 2004 clause 4.15)*

The Contractor shall take special precautions to protect all permanent survey beacons or pegs such as bench-marks, stand boundary pegs and trigonometrical beacons, regardless whether such beacons or pegs were placed before or during the execution of the Contract. If any such beacons or pegs have

been disturbed by the Contractor or his employees, the Contractor shall have them replaced by a registered land surveyor at his own cost.

PS-5.7 Existing Services *(Read with SANS 1921 - 1: 2004 clause 4.17)*

The Contractor shall make himself acquainted with the position of all existing services before any excavation or other work likely to affect the existing services is commenced.

The Contractor will be held responsible for any damage to known existing services caused by or arising out of his operations and any damage shall be made good at his own expense. Damage to unknown services shall be repaired as soon as possible and liability shall be determined on site when such damage should occur.

PS-5.8 Management of the environment *(Read with SANS 1921 - 1: 2004 clause 4.19)*

The Contractor shall pay special attention to the following:

(a) Natural Vegetation

The Contractor shall confine his operation to as small an area of the site as may be practical for the purpose of constructing the works.

Only those trees and shrubs directly affected by the works and such others as the Employer's Agent may direct in writing shall be cut down and stumped. The natural vegetation, grassing and other plants shall not be disturbed other than in areas where it is essential for the execution of the work or where directed by the Employer's Agent.

(b) Fires

The Contractor shall comply with the statutory and local fire regulations. He shall also take all necessary precautions to prevent any fires. In the event of fire the Contractor shall take active steps to limit and extinguish the fire and shall accept full responsibility for damages and claims resulting from such fires which may have been caused by him or his employees.

PS-5.9 Overhaul

No payment will be made for overhaul on this contract unless provision is made thereof in specific items.

PS-5.10 Security

The Contractor shall provide security watchmen for the contract as he deems fit at no extra cost for the Employer. The Contractor must ensure that all his employees as well as the employees of his subcontractors are able to identify themselves as members of the construction team.

PS-6 CONSTRUCTION PROGRAMME

PS-6.1 Preliminary programme

The Contractor shall include with his tender a preliminary programme on the prescribed form to be completed by all Tenderers. The programme shall be in the form of a simplified bar chart with sufficient details to show clearly how the works will be performed within the time for completion as stated in the Contract Data.

The Contractor shall be deemed to have allowed fully in his tendered rates and prices as well as in his programme for all possible delays due to normal adverse weather conditions and special non-working days as specified in the Special Conditions of Contract, in the Project Specifications and in the Contract Data.

In addition, intermittent disruptions will include for the Employer's Agent's inspections at the following stages:

Level control inspections and compaction tests after roadbed preparation and/or subgrade earthworks
Level control inspections and compaction tests after subbase and base construction.

No additional payments, other than through scheduled items, will be made for these stoppages/disruptions/constraints.

Tenderers are to note that design mixes may be required for materials used in the construction of "Concrete Pavement Surfacing". In his programming, the tenderer must make allowance for this. No additional costs will be allowed for this testing except through scheduled items

The completion period of the contract is to be tendered by the tenderer and is expected not to exceed **12 MONTHS**.

PS-6.2 Programme in terms of Clause 5.6 of the General Conditions of Contract

It is essential that the construction programme, which shall conform in all respects to Clause 5.6 of the General Conditions of Contract 2015, be furnished within the time stated in the Contract Data. The preliminary programme to be submitted with the tender shall be used as basis for this programme. The Contractor's attention is also drawn to clause 5.7.3 of the General Conditions of Contract 2015.

PS-7 SITE FACILITIES AVAILABLE

PS-7.1 Contractor's camp site and depot (*Read with SANS 1921 - 1: 2004 clause 4.14*)

The Contractor will be permitted to locate his offices, storage facilities, workshops, latrines, etc, on a site approved by the Employer's Agent, in liaison with the community and the owners of farms traversed by the contract or any other appointed representatives. Temporary buildings and fencing are to be neat and presentable, and the surrounding areas must at all times be kept in a neat, clean and orderly condition. The Contractor must not cut down or damage any trees nor make any excavation without the written permission of the Employer's Agent and will be required to restore the site to its original condition on completion of the Works.

All buildings and latrines shall be in accordance with the Local Authority and State Health regulations and shall be kept in a clean, sanitary condition to the satisfaction of the Employer's Agent.

PS-7.2 Accommodation of Employees

No employees except for security guards will be allowed to sleep or be accommodated on the site in urban areas.

No housing is available for the Contractor's employees and the Contractor shall make his own arrangements to house his employees and to transport them to site.

No informal housing or squatting will be allowed.

The Contractor shall provide the necessary ablution facilities at his camp site and the site of the works for the use of his employees. Chemical toilets only will be allowed where temporary facilities have to be provided.

PS 7.3 Source of Water Supply

The Contractor shall make his own arrangements for the supply of water for construction purposes. The source of water shall be subject to the approval of the Employer's Agent.

Should the contractor's source of water be Ugu District Municipality, the contractor will be required to ensure that the water account with Ugu District Municipality is in good standing prior to the issue of completion certificate. The Employer's Agent will withhold any payments until arrears are cleared with Ugu District Municipality.

PS 7.4 Source of Power Supply

The power supply authority is Eskom. The Contractor will be required to make his own arrangements with, and pay all the requisite connection and consumption charges to Eskom for whatever temporary power supplies he may require for his use on the site and his tender will be held to include for all such costs and charges.

PS-8 SITE FACILITIES REQUIRED FOR THE EMPLOYER'S AGENT

PS 8.1 Temporary/Permanent Offices

The Contractor is to provide a temporary furnished office for use by the Employer's Agent. The offices should be able to accommodate one full time Employer's Agent's Representative and two assistants. A layout of the Employer's Agent's office plan is provided as Drawing J1163 – D05.

PS 8.2 Laboratory Facilities

The Contractor will not be required to provide a testing laboratory on site for use by the Employer's Agent.

PS 8.3 Sanitary Facilities

All latrines shall conform to the requirements of the Local Authority and shall be subject to approval by the Employer's Agent. All sanitary fees and charges due under the Local Authority or State Health Regulations or bylaws shall be paid by the Contractor. Throughout the progress of the contract, all latrines shall be maintained by the Contractor in a clean, sanitary condition to the satisfaction of the Employer's Agent

PS 8.4 Parking Facilities

The Contractor will be required to provide one covered parking for the Employer's Agent.

PS 8.5 Employer's Agent's Transport

The Contractor will not be required to provide transport for the Employer's Agent's staff.

PS 8.6 Security

The Contractor will be responsible for providing adequate security for the Works and for the site establishment. All costs associated with the provision of security staff shall be borne by the Contractor and should be allowed for in the rates tendered for items in the Schedule of Quantities. No additional payments will be made for security measures taken during the contract period, other than through the schedule items in the Schedule of Quantities.

PS 8.7 Survey Equipment

The contractor shall provide the following survey equipment to the Employer's Agent throughout the duration of the contract:

- A dumpy level
- Measuring tape
- An assistant, when required, assist the Employer's Agent to operate survey equipment, when provided

PS 8.8 Contract staff to assist the Employer's Agent

The following staff will be recruited by the contractor to assist the Employer's Agent in carrying out his services:

Description of Staff	No. Required	Remarks
Environmental and Occupational Health & Safety Monitoring	One	Provisional sum provided for appointments as directed by the Employer's Agent. Personnel directed by and report to Employer's Agent
Community Liaison Officer	One	
Independent Inspectors (one each) for the following: - Welding and galvanising of steelworks - Geotechnical inspections	One	

PS-9 GENERAL SITE FACILITIES REQUIREMENTS

PS 9.1 Existing Services

PS 9.1.1 Care, Damage and Protection

Known services will be indicated in the tender and contract documents. The Contractor will be responsible for identifying all services with the relevant Service Providers.

The Contractor shall familiarize himself with all services and expose them at the start of the Contract to verify their position and establish their depths.

No additional payment will be made to the Contractor for identifying and locating services. Therefore the Contractor will have to include the costs thereof in the scheduled items in the Schedule of Quantities.

Any information regarding existing services is given in good faith and without guarantee.

PS 9.1.2 Blasting

No blasting will be permitted within 10 m of any structure, pipeline or service unless the Contractor can satisfy the Employer's Agent that his proposed blasting methods and controls are such that no damage will be caused to the adjoining structure, pipeline or service. In any event the Employer's Agent will require the Contractor to plan and execute each blast in such a manner as to ensure that no damage will be caused to any structure, pipeline or service. In addition, the Employer's Agent will require vibro-recordings to be taken at no additional cost to the Employer. No blasting is to be carried out in Eskom servitudes or wayleaves unless the Eskom authorities have been advised in writing three weeks prior to blasting. Where blasting is done adjacent to Eskom power lines, the Contractor shall arrange for a representative of Eskom to be present prior to and during any blast.

PS 9.1.3 Environmental Aspects

The Contractor will be required to plan and undertake his work in a manner that minimises its impact on the natural environment. Trees and other vegetation shall, wherever possible, be left undisturbed. Trees that are marked by the Employer's Agent shall not be damaged and in the event of the Contractor doing so, a penalty will be deducted from monies due to the Contractor.

Every effort shall be made by the Contractor to prevent pollution of the adjacent areas and river and to reduce the noise, dust and fumes emanating from his construction activities.

PS 9.1.4 Dealing with Water

Where necessary, the Contractor shall construct temporary drainage channels to divert ground water from his excavation and excess water must be pumped out.

No compensation for any variation of the actual conditions during construction from the data given will be considered. Neither will additional compensation be considered for data omitted or inaccurately given.

The rates tendered shall allow for the requirements of this clause and all incidentals.

PS 9.2 Servitudes and Rights of Way

The Employer will, where necessary, obtain permanent servitudes and rights of way along the road routes indicated on the tender drawings. New servitudes will only be registered after completion of the Works.

PS 9.3 Dealing with Damaged Services

In the event of any service being damaged or accidentally disconnected for any reason, the Contractor shall immediately contact the relevant authority for instruction and shall report the occurrence of the incident. The damage is to be repaired as soon as possible to the approval of the Employer's Agent and the authority. The Contractor will be held responsible for paying all costs incurred by the authority or himself as a result of each such incident, where relevant.

PS 9.4 Accommodation of Traffic

The Contractor shall ensure the safe and expeditious passage of traffic at all times and shall provide all necessary temporary road traffic signs, barricades, flagmen, etc to safeguard the travelling public. Any detours or bypasses constructed by the Contractor shall be adequately signposted, as per the South African Road Traffic Signs Manual, and maintained in such a manner as to provide safe and easy passage of traffic.

PS 9.5 Spoil Material

No indiscriminate spoiling of material will be allowed. All surplus or unsuitable material shall be spoiled, levelled and spread in designated areas as directed by the Employer's Agent. All haul will be regarded as freehaul up to a maximum of 5km radius.

PS 9.6 Finishing and Tidying and Defects Liability Period

On no account must rubble and spoil materials, other materials, equipment or unfinished operations be allowed to accumulate in such a manner as to unnecessarily impede the activities of other Contractors or Authorities.

Finishing and tidying must not simply be left until the end of the construction period. The Contractor will be entitled, subject to prior agreement with the Employer's Agent and within reasonable limits, to request that work in a particular area and/or work of a particular discipline, be inspected for partial completion. The specified defects liability period in respect of any specific section of the Works shall commence on the date on which the relevant section is accepted by the Employer's Agent as being completed, i.e. fully commissioned, including finishing and tidying.

On completion of the Contract the Contractor shall ensure that all materials used in the construction of the temporary Site office, workshop and storage yard are removed from Site. Waste materials such as construction debris and soil contaminated with oil and fuel are to be disposed of at the solid waste disposal site used approved by the Employer's Agent. Prior to the handover of the Site to the Employer, the Contractor and the Employer's Agent will conduct a post construction audit to determine if any additional measures that are to be taken. The Completion Certificate will only be issued after this stage.

PS 9.7 Employee Accommodation

Refer to Subclause 3.2.1 of Section A of Part 2 and Subclause 1.2.1 of Section A of Part 3 of SABS 0120.

The Contractor shall conform in all respects with the provisions of any Act, Regulations or By-Law of the Ray Nkonyeni Municipality, which may be applicable to employee accommodation. Save for a security guard on active duty, no employees may be housed on Site or the Contractor's campsite after normal working hours.

PS 9.8 Employment of Local Labour

The Employer has determined that 100% of the Contractor's unskilled labour force shall be made up from the local community. A labour sub-committee (of a Project Steering Committee) comprising representatives of the community and other stakeholders will be responsible for the recruitment of all local labour. The Contractor will be required to provide details of the numbers of semi-skilled and unskilled workers he will require, together with their anticipated starting dates. The PSC through its labour sub-committee will then make this labour available to the Contractor.

A minimum of 50% of the local labour shall comprise of women and, where appropriate, disabled labour shall be employed. It is a requirement that tenderers acquaint themselves fully with requirements for registration with Unemployment Insurance Fund.

The Employer requires that the successful contractor registers all labour with the Unemployment Insurance Fund. The local labour rate has been determined at R196 per day per labourer (based on a 8 hour working day at R24.50/hour) or R196.00 per task. The task for excavation by hand has been agreed at 2,4 m³/day (e.g. 0,76 m x 1,0 m x 3,15 m).

During project execution, the successful contractor will be required to provide progress reports indicating to what level these requirements have been met.

PS 9.9 Frequency of Labour Wages Payments

The contractor will be required to pay labour on a fortnightly/monthly basis

PS 9.10 Training and Capacity Building

During project execution, it is the desire of the Employer that an identified number of community members receive appropriate level of non accredited training in either roadworks activities or construction management activities. Within 14 days of appointment, the successful contractor will be required to provide, together with his method statement, a proposal for consideration by the Project Steering Committee for activities in which the community members can receive training. This proposal will be considered by the Project Steering Committee after which the Contractor will be given an instruction on the training to provide. Training will be provided to local labour that is already in the employ of the contractors as per clause PS 9.8. It must be noted that the Contractor will be required to pay the labour based on their daily rates indicated in PS 9.8.

The contractor will be required to provide a training diary and report indicating the following to be updated monthly:

- Details of persons receiving training
- What areas there have been trained in
- Performance of the trainees
- Further training still to be done

Should the contractor fail to provide this training, the Employer reserves the right to seek training from alternative sources. In that case, the cost of the training sought will be deductible from any monies due to the contractor.

PS 9.11 PORTION OF WORK CONSTRUCTED USING LABOUR INTENSIVE METHODS

The Ray Nkonyeni Municipality intends to use all construction contracts as a tool for creating employment opportunities for the local communities. It is therefore imperative that, as far as possible, work is done using the labour pool recruited in accordance PS9.9. As a minimum, the following activities are to be undertaken using labour intensive methods:

PS-9.11.1 Labour-intensive construction methods

Labour-intensive construction shall mean the economically efficient employment of as great a portion of local labour as is technically feasible to₁₁₆produce a standard of construction as demanded by

the specifications with completion by the Due Completion Date, where local labour is the primary resource, supported by plant for activities that cannot be carried out feasibly by labour only.

Labour-intensive construction activities are to be planned as task-based work as a general rule. A task means a fixed quantity of work, to be performed to a clearly defined quality. Task-based work means work in which a worker is paid a fixed rate for performing a task, which is clearly defined in terms of quantity and quality. Typically a particular task can be completed within a working day.

Appropriate portions of the Works included in the Contract shall be carried out using labour-intensive construction methods.

Except where the use of plant is essential in order, in the opinion of the Employer's Agent, to meet the specified requirements by the Due Completion Date, or where the use of plant is essential as a result of occupational health and safety considerations, the Contractor shall use only hand tools and equipment in the construction of those portions of the Works that are required in terms of these Project Specifications to be constructed using labour-intensive construction methods.

Such portions of the Works shall be constructed utilizing only the local labour of the Contractor and/or the local labour of subcontractors, supplemented by the Contractor's key personnel to the extent necessary and unavoidable, unless otherwise instructed by the Employer's Agent and in accordance with the further provisions of the relevant sections of Part B of the Project Specifications.

Subject to considerations of occupational health and safety, and subject to the nature of the in situ materials being such that they can be excavated efficiently by hand, the portions of the Works to be carried out under supervision using labour-intensive construction methods, designated as LI items in the bill of quantities, include, but are not limited to, the following:

- Erection of the contractor's and Employer's Agent's site establishment facilities;
- Provision of domestic services at the site establishment facilities;
- Provision of flagmen and labour for erecting traffic accommodation facilities;
- Clearing of the Site;
- Excavation for structures and open drains up to 1,5 m deep where the depth of the water table permits such excavation to be carried out safely, and the subsequent backfilling thereof;
- Bedding, selected fill, backfilling and compaction of all trenches for prefabricated culverts irrespective of depth, but assisted by mechanical compaction equipment in order to achieve the specified densities;
- Transportation and spoiling of all trench materials, where the disposal site is located within 20 metres of the source;
- Mixing and placing of concrete for the channel and backing to the prefabricated kerbs;
- Mixing and placing of concrete for concrete lined drains and sidewalks;
- Mixing and placing of concrete for minor drainage structures and road furniture structures;
- Mixing and placing of concrete for concrete edge beams at gravel road access points;
- Installation of prefabricated kerbs;
- Construction of all brickwork required for drainage structures and manholes;
- Erection of falsework and formwork;
- Fixing of reinforcement;
- Spreading of offloaded earthworks materials to the extent scheduled;
- Spreading of offloaded layerworks materials to the extent scheduled;
- Spreading of stabilising agent;
- Maintenance patching of surfacing;
- Slurry seal surfacing;
- Excavation for and construction of stone pitching, and subsequent backfilling;
- Excavation for and construction of gabion boxes and mattresses, and subsequent backfilling;
- Dismantling / erection of fences;
- Excavation and subsequent backfilling for guardrail;
- Dismantling / erection of guardrail;
- Excavation and subsequent backfilling for road signs;
- Dismantling / erection of road signs;
- Spreading of topsoil;
- Planting of grass cuttings, grass sodding and hand sowing of grass seeds; and
- Cleaning and tidying up of the Site.

Compiler to add to / remove from the list above in accordance with the specific requirements of this contract.

In respect of those portions of the Works which are not listed above, the construction methods adopted and the plant utilized shall be at the discretion of the Contractor, provided always that the construction methods adopted and the plant utilized by the Contractor are appropriate in respect of the nature of the Works to be executed and the standards to be achieved in terms of the Contract.

PS-10 REQUIREMENTS FOR ACCOMMODATION OF TRAFFIC

PS-10.1 General

The Contractor will be responsible for the safe and easy passage of public traffic past and on sections of roads of which he has occupation or where work has to be done near traffic.

Accommodation of traffic, where applicable shall comply with SANS 1921-2: 2004: Construction and Management Requirements for Works Contracts, Part 2: Accommodation of Traffic on Public Roads occupied by the Contractor. The Contractor shall obtain this specification from Standards South Africa if accommodation of traffic will be involved on any part of the construction works.

PS-10.2 Basic Requirements

The travelling public shall have the right of way on public roads, and the Contractor shall make use of approved methods to control the movement of his equipment and vehicles so as not to constitute a hazard on the road.

The Contractor shall ensure that all road signs, barricades, delineators, flagmen and speed controls are effective and that courtesy is extended to the public at all times.

Failure to maintain road signs, warning signs or flicker lights, etc, in a good condition shall constitute ample reason for the Employer's Agent to suspend the work until the road signs, etc, have been repaired to his satisfaction.

The Contractor may not commence constructional activities affecting existing roads before adequate provision has been made to accommodate traffic in accordance with the requirements of this document and the South African Road Traffic Signs Manual.

The Contractor shall construct and maintain all temporary drainage works necessary for temporary deviations.

The Contractor shall provide and grant access to persons whose properties fall within or adjoin the area in which he is working.

PS-10.3 Traffic Safety Officer

Where warranted by traffic conditions on or near the site, the Contractor shall nominate a suitable member of his staff as traffic safety officer to be responsible for the arrangement and maintenance of all the measures for the accommodation of traffic for the duration of the project. Duties of the traffic safety officer shall be as set out in SANS 1921 Part 2 and shall also be in compliance with the Occupational Health and Safety Act No 85 of 1993 and the Construction Regulations 2003.

PS-10.4 Payment

The Contractor's tendered rates for the relevant items in the Bill of Quantities shall include full compensation for all possible additional costs which may arise from this, and no claims for extra payment due to inconvenience as a result of the modus operandi will be considered.

Items that may be considered for payment are specified in SABS 1200 Standardized Specifications and the related project specification

PS-11 OCCUPATIONAL HEALTH AND SAFETY (Read with SANS 1921 - 1: 2004 clause 4.14)

PS-11.1 General statement

It is a requirement of this contract that the Contractor shall provide a safe and healthy working environment and to direct all his activities in such a manner that his employees and any other persons, who may be directly affected by his activities, are not exposed to hazards to their health and safety. To this end the Contractor shall assume full responsibility to conform to all the provisions of the Occupational Health and Safety Act No 85 and Amendment Act No 181 of 1993, and the OHS Act 1993 Construction Regulations 2003 issued on 18 July 2003 by the Department of Labour.

For the purpose of this contract the Contractor is required to confirm his status as mandatary and employer in his own right for the execution of the contract by entering into an agreement with the Employer in terms of the Occupational Health and Safety Act by executing the Agreement form C1.2.4 included in Section C1: Agreements and Contract Data.

PS-11.2 Health and Safety Specifications and Plans to be submitted at tender stage

(a) Employer's Health and Safety Specification

The Employer's Health and Safety Specification will be included in the tender documents as part of the Project Specifications.

(b) Tenderer's Health and Safety Plan

The successful Tenderer shall, on receipt of notification that he has been awarded the contract, submit without delay his own documented Health and Safety Plan for the execution of the work under the contract. His Health and Safety Plan must at least cover the following:

- (i) a proper risk assessment of the works, risk items, work methods and procedures in terms of Regulations 7 to 28;
- (ii) pro-active identification of potential hazards and unsafe working conditions;
- (iii) provision of a safe working environment and equipment;
- (iv) statements of methods to ensure the health and safety of subcontractors, employees and visitors to the site, including safety training in hazards and risk areas (*Regulation 5*);
- (v) monitoring health and safety on the site of works on a regular basis, and keeping of records and registers as provided for in the Construction Regulations;
- (vi) details of the Construction Supervisor, the Construction Safety Officers and other competent persons he intends to appoint for the construction works in terms of Regulation 6 and other applicable regulations; and
- (vii) details of methods to ensure that his Health and Safety Plan is carried out effectively in accordance with the Construction Regulations 2003.

The Contractor's Health and Safety Plan will be subject to approval by the Employer, or amendment if necessary, before commencement of construction work. The Contractor will not be allowed to commence work, or his work will be suspended if he had already commenced work, before he has obtained the Employer's written approval of his Health and Safety Plan.

Time lost due to delayed commencement or suspension of the work as a result of the Contractor's failure to obtain approval for his safety plan, shall not be used as a reason to claim for extension of time or standing time and related costs

PS-11.3 Cost of compliance with the OHS Act Construction Regulations

The rates and prices tendered by the Contractor shall be deemed to include all costs for conforming to the requirements of the Act, the Construction Regulations and the Employer's Health and Safety Specification as applicable to this contract. Should the Contractor fail to comply with the provisions of the Construction Regulations, he will be liable for penalties as provided in the Construction Regulations and in the Employer's Health and Safety Specification.

Items that may qualify for remuneration will be specified in the Safety Specifications included or in the Project specifications.

PS-12 ADVERSE WEATHER CONDITIONS

In terms of Clause 5.12 of the General Conditions of Contract 2015, extension of time will be considered for **abnormal rainfall**. The numbers of days per month on which work is expected not to be possible as a result of **normal rainfall**, and for which the Contractor shall make provision in his tendered rates, prices and programme, are listed in Table PS-12.1 hereafter. Only the number of days lost as a result of adverse weather conditions, exceeding the number of days listed in Table PS-12.1, will qualify for consideration of extension of time.

During the execution of the Works, the Employer's Agent's Representative will certify a day lost due to abnormal rainfall and adverse weather conditions only:

- if no work was possible on the relevant working day on any item which is on the critical path according to the latest approved construction programme; or
- if less than 30% of the work force and plant on site could work during that specific working day.

Extension of time as a result of abnormal rainfall and adverse weather conditions shall be calculated monthly being equal to the number of working days certified by the Employer's Agent's Representative as lost due to rainfall and adverse weather conditions, less the number of days allowed for as in Table PS-12.1, which could result in a negative figure for certain months. The total extension of time as a result of abnormal climatic conditions for which the Contractor may apply, shall be the cumulative algebraic sum of the monthly extensions. Should the sum thus obtained be negative, the extension of time shall be taken as nil."

TABLE PS-12.1: Expected Number of Working Days Lost Per Month Due to Normal Rainfall

MONTH	Expected number of working days lost as result of normal rainfall
January	*5
February	5
March	4
April	1
May	1
June	1
July	1
August	2
September	3
October	4
November	
December	5
TOTAL	32 days

(The figures in Table PS-12.1 are based on information obtained from the Weather Bureau, Department of Environment Affairs, Durban. The average monthly rainfall figures quoted, are included for information only, and shall not be taken into consideration for calculation of extension of time. The number of working days lost for December and January allows for the builders' holidays from 11 December to 4 January.)

PS-13 SITE MEETINGS AND REPORTING

The Contractor will be required to attend site meetings organised by the Employer's Agent. In these meetings he (the Contractor) will be required to provide progress reports and other reports to monitor the outputs of the contractor, as may be required from time to time, to be presented in a format prescribed by the Employer's Agent. The frequency of such meetings will be monthly, as a minimum. However the frequency can be reviewed, depending on the progress of the contract.

The Employer will be present at such meetings.

F.5 PROJECT SPECIFICATION PORTION 2 - SABS 1200 PSA: GENERAL

PSA- 1 INTRODUCTION

In certain clauses the standard, standardized and particular specifications allow a choice to be specified in the project specifications between alternative materials or methods of construction and for additional requirements to be specified to suit a particular contract. Details of such alternative or additional requirements applicable to this contract are contained in this part of the project specifications. It also contains additional specifications required for this particular contract.

The number of each clause and each payment item in this part of the project specifications consists of the prefix PS followed by a number corresponding to the number of the relevant clause or payment item in the standard specifications. The number of a new clause or payment item, which does not form part of a clause or a payment item in the standard specifications and which is included here, is also prefixed by PS, but followed by a new number which follows on the last clause or item number used in the relevant section of the standard specifications.

PSA-3 MATERIALS

PSA-3.1 Quality

Where there is a standardization mark programme for any material, all such material supplied shall bear the official standardization mark.

Alternative materials or equipment proposed by the Contractor shall be tested. The test, as well as the materials or equipment, shall be approved by the Employer's Agent prior to any such materials or equipment being built into the works and all costs involved in testing shall be deemed to be included in the rates tendered.

PSA-3.3 Applicable Standards for Cement (*Additional Subclause*)

The standard cement specifications SABS 471, SABS 626, SABS 831 and SABS 1466, referred to in clause 3.3, have been withdrawn and are replaced by the new SANS 50197-1 and -2: Common cements, and SANS 50413-1 and -2: Masonry cement. These specifications will be applicable to this contract, and the descriptions and types of cements specified, will be based on the designations as defined in these specifications.

PSA-4. PLANT

PSA-4.2 Contractor's Office, Stores and Services

The Contractor's camp shall be kept neat and clean at all times and all surplus or rejected material shall be removed from the site.

PSA-5 CONSTRUCTION

PSA 5.1 Survey

PS A 5.1.1 Setting Out Of The Works

Substitute the first sentence in A 5.1.1 with the following:

"Setting out of the works is the sole responsibility of the Contractor and shall be done from survey beacons identified by the Employer's Agent. The Contractor shall, within two (2) weeks after the site has been handed over to him, confirm himself that the survey beacons are correct. Any discrepancy shall immediately be reported in writing to the Employer's Agent. Any costs or subsequent costs arising from discrepancies, which had not been reported to the Employer's Agent within the aforementioned period, shall be the sole responsibility of the Contractor. A grid of final terrace levels over the site of the works will be issued to the Contractor at the commencement of

the contract and it is the Contractors responsibility to preserve all setting out pegs based on this information as given for the duration of the contract.”

PS A 5.4 Protection Of Overhead And Underground Services

Add the following paragraph :

”The Contractor shall as soon as possible after handing over of the site, commence with the detection of existing services, continue with it without interruption, and finalise it at least 7 days before excavation starts at that particular section.”

PSA-5.8 Ground and access to works

Add the following:

On completion of operations the Contractor shall restore the ground surface, wherever it may have been disturbed, to its original condition by filling in all ruts with material similar to the material within the rut and levelling the ground and, where necessary, planting grass and shrubs as may be required. Any boundary fences which have been removed or damaged by his operations and activities shall be repaired and/or reinstated at the Contractor’s expense”.

PSA-5.9 Accommodation of Traffic *(additional subclause)*

Where construction work has to be carried out on or near public roads, the Contractor shall deal with traffic as specified in SANS 1921-2 (2004): Construction and Management Requirements for Works Contracts, Part 2 : Accommodation of Traffic on Public Roads occupied by the Contractor. The Contractor is also referred to Project Specification PS-9.

PSA-8. MEASUREMENT AND PAYMENT

PSA-8.3 Scheduled fixed-charge and value-related items

PSA-8.3.2 Establishment of Facilities on the Site

PSA-8.3.2.1 Facilities for the Employer’s Agent

Add the following additional sub-items:

(d) Carports *(state number)* Unit : Sum

The tendered rate shall cover all costs as specified in Subclause 8.3.2.3 of SABS 1200 A (and 5.5 of SABS 1200 AB to provide these facilities as specified in Clauses PSAB-3.2, 3.3 and 4.2if applicable).

PSA-8.3.2.2 Facilities for Contractor

For this contract the facilities for the Contractor will not be measured and paid for separately as itemised in Subclause 8.3.2.2. The subitems (a) to (j) will be consolidated into one item and payment under item PSA-8.3.2.2 shall be deemed to cover all these subitems.

PSA-8.4 Scheduled time-related items

PSA-8.4.2 Operation and maintenance of Facilities on Site

PSA-8.4.2.1 Facilities for Employer’s Agent

Add the following additional subitems:

(e) Carports Unit : Sum
(f) Survey instruments Unit : Sum

The rates tendered shall cover all costs as specified in Subclause 8.4.2.3 of SABS 1200 A and 5.5 of SABS 1200 AB to operate and maintain these facilities as specified in Clauses PSAB-3.2, 3.3 and 4.2.

PSA-8.4.2.2 Facilities for Contractor

Consolidate subitems (a) to (j) of Clause 8.4.2.2 into one item as in PSA-8.3.2.2. Payment under PSA-8.4.2.2 shall be deemed to cover subitems (a) to (j).

F.5.1 PROJECT SPECIFICATION PORTION 2 -SABS 1200 PSD: EARTHWORKS

PSD EARTHWORKS

The Contractor is referred to SANS 1921 - 5: Earthworks activities which are to be performed by hand

PSD-3 MATERIALS

PSD-3.1 Classification for excavation purposes

PSD-3.1.2 Classes of excavation

The classes of excavation in clause 3.1.2 shall in general apply to all excavations where use is made of conventional methods and plant and equipment.

Where labour-intensive methods applicable to targeted labour are specified, soft excavations shall be defined as follows:

"PSD-3.1.2(a) Soft excavation

Soft excavation for labour-intensive work where excavations are to be carried out by hand methods, shall be excavation in material that can be efficiently removed and loaded with picks, shovels and other hand tools by an average able-bodied person or group of persons. Soft excavation shall include small boulders that can be removed by hand methods.

Soft excavation can be further broken down by introduction of an additional class such as "Soft Excavation Class A", which is excavation defined as soft, but which can only be excavated with difficulty.

The criteria for classifying Soft Excavation Class A shall be as follows:

Granular material: - dense material with high resistance to penetration by the point of a geological pick; several blows are required for removal of material; 7 to 15 blows of the dynamic cone penetrometer are required to penetrate 100 mm; and

Cohesive materials - stiff to very stiff material requiring 6 to 8 blows of the dynamic cone penetrometer to penetrate 100 mm, where:

"stiff" material can be indented by thumbnail; slight indentation produced by pushing a geological pick point into the soil; cannot be moulded by fingers; and where:

"very stiff" material can be indented by thumbnail with difficulty; slight penetration of point produced by blow of geological pick.

Where soft excavation class A material is encountered, it shall be measured and paid for as an extra over soft excavation.

PSD-5 CONSTRUCTION

PSD-5.1 Precautions

PSD-5.1.1 Safety

PSD-5.1.1.2 Safeguarding of excavations

- ***Add the following subparagraph:***

- “(g) The Contractor or his agent or his representative shall **not** require or allow any person to work under unsupported overhanging material or in an excavation which is more than 1,5 m deep, and any excavation which has not been adequately supported or braced if there is a danger of the overhanging material or the sides of the excavation collapsing. The support, shoring or bracing to be designed and constructed by the Contractor, shall be strong and sturdy enough to support the sides of the excavation in question.”

PSD-5.2.2.1 Excavations for general earthworks and for structures

- **Add the following additional subparagraph:**

- “(f) The Contractor shall so plan his cut-to-fill operations that all excavated material is used in the manner that is most appropriate.

The Contractor shall conserve all suitable surplus material and he shall not borrow, spoil or waste any material unnecessarily. If excavated material designated for a particular purpose become contaminated, is incorrectly used or becomes unavailable through injudicious planning of excavation operations, the Contractor shall replace the contaminated material and make good any shortfall with material of quality at least equal to that of the said selected material.

Where selection of excavated material is required, the method of excavation shall be so arranged as to avoid double handling. Wherever possible excavated material shall be placed in its final position without being stockpiled. If stockpiling is unavoidable, materials intended for different uses shall be stockpiled separately

F.5.2 PROJECT SPECIFICATION PORTION 2 - SABS 1200 PSDB: EARTHWORKS (PIPE TRENCHES)

PSDB-5 CONSTRUCTION

PSDB- 5.1 Precautions

PSDB-5.1.5 Trench Excavations (additional subclause)

The precautions for excavations as specified in Clause 5.1.1 of Section 1200 D, 1200 DA, and the relevant clauses in PSD and PSDA, shall also apply to all trench excavations.

The Contractor shall take all the steps necessary to ensure that no person is required or allowed to work in a trench or any other unsupported overhanging excavation which is more than 1,5 m deep, and any excavation which has not been adequately supported, shored or braced if there is any danger whatsoever of the sides of the excavation collapsing. The support, shoring or bracing to be designed and constructed by the Contractor, shall be strong and sturdy enough to support the sides of the excavation in question.

F.5.3 PROJECT SPECIFICATION PORTION 2 - SABS 1200 GA: CONCRETE (SMALL WORKS)

PSG/PSGA-3 MATERIALS

PSG/PSGA-3.2 Cement

PSG/PSGA-3.2. 1 Applicable specifications

The standard cement specifications SABS 471, SABS 626, SABS 831, SABS 1466 and SABS 1491, have been withdrawn and are replaced by SANS 50197-1: Common cements, and SANS 50413-1: Masonry cement. These specifications will be applicable to this contract and the descriptions and types of cements, where specified, will be based on the designations as defined in these specifications.

PSG/PSGA-5.4.1.4 Prescribed mix concrete

Add the following :

“The structural concrete in this contract shall comply with the following specification.

- The minimum 28 day strength shall be as specified in drawings
- The maximum water/cement ration shall be 0.42
- The minimum cement content shall be 400 kg/m³
- The cement used must be extended with a minimum of 30% Fly Ash or 50% GGBS

A detailed mix design by an approved concrete testing laboratory before any concrete is poured in the works and provision shall be made by the contractor for the cost of the design in his rates.

PSG/PSGA-8 MEASUREMENT AND PAYMENT

PSG/PSGA-8.1 Measurement and Rates

PSG/PSGA-8.1.2 Reinforcement

Replace subclause 8.1.2.2 with the following:

“Mild steel and high tensile steel will be measured by mass for the diameters or range of diameters as scheduled.”

Welded mesh will be scheduled separately for each type and mass per square metre of mesh.”

Replace subclause 8.1.2.3 with the following:

“PSGA-8.1.2.3 The unit rate for steel bars shall cover the cost of supply, cutting, bending, placing in position, and fixing of the reinforcing and supporting steel scheduled. The rate shall also include the provision of all spacer devices and binding wire, as well as the cost of tests in terms of SANS 920.”

“The unit rate for welded mesh shall cover the supply, cutting and placing of mesh, as well as the cost of all waste due to laps.”

F.5.4 PROJECT SPECIFICATION PORTION 2- SABS 1200 LB: BEDDING (PIPES)

PS LB 3.3 BEDDING

Add the following to LB 3.3:

All pipes shall be classified as rigid pipes and shall be laid on a Class C bedding except sub soil drainage, which shall be classified as flexible pipes.

LB 5 CONSTRUCTION

LB 5.1 General

PS LB 5.1.4 Compacting

Substitute "90 % of mod AASHTO" in LB 5.1.4 with "93 % of mod AASHTO (100 % for sand)".

LB 8 MEASUREMENT AND PAYMENT

LB 8.2 Scheduled Items

PS LB 8.2.2.4 From stockpile (provisional)

- a) Selected granular material Unit : m³
- b) Selected fill material Unit : m³

The rate shall cover the cost of obtaining, handling and transport regardless the distance, of the required bedding material from the stockpile, the delivery thereof at positions that are spaced along the trench in such a way as suits the working method of the Contractor, as well as the removal of material displaced by this importation within the free-haul distance.

F.5.5 PROJECT SPECIFICATION PORTION 2 - SABS 1200 LE: STORMWATER DRAINAGE

LE 3 MATERIALS

PS LE 3.1.1 Material for Subsoil Drainage

PS LE 3.1.1.1 Pipes

Pipes for subsoil drainage shall be uPVC pipes complying with the requirements of SABS 791, but shall be perforated or slotted.

The size of perforations in perforated pipes shall in all cases be 8 mm in diameter $\pm$ 1,5 mm and the number of perforations per metre shall be not less than 26 for 110 mm pipes and 52 for 160 mm pipes. Perforations shall be spaced in two rows for 110 mm pipes and in three rows for 160 mm pipes.

Slotted pipes shall have a slot width of 8 mm $\pm$ 1,5 mm. The arrangement of slots shall be subject to the Employer's Agent's approval, but the total slot area shall be not less than that presented for perforations.

Pipes without slots or perforations required for conveying ground water from the subsoil drainage proper to the point of discharge, shall be uPVC pipes as specified above.

PS LE 3.1.1.2 Crushed-stone

Crushed-stone in subsoil drains shall be 19 mm single-sized stone complying with the grading requirements of stone for concrete in SABS 1083.

PS LE 3.1.1.3 Geotextile Blanket

The geotextile blanket around subsoil drains shall comply with the requirements of PS DK 3.1.4 in all respects.

PS LE 3.1.1.4 Sand

Sand obtained from approved commercial sources shall be clean, hard and durable and shall comply with the following grading requirements:

D15 : 0,2 mm to 0,4 mm

D85 : 1,2 mm to 4,7 mm

LE 5 CONSTRUCTION
LE 5.1 Trench Bottom

PS LE 5.1.3 Unsuitable Founding Conditions

Substitute "90 % of MAASHTO maximum density" in LE 5.1.3 with "90 % of MAASHTO maximum density (100 % for sand)".

LE 5.2 BEDDING AND LAYING

PS LE 8.2.14 Supply and Install Subsurface Drains According to Drawings Unit : m

The length shall be measured on the centre line of the completed subsurface drain.

The rate shall cover the cost of supplying, transporting, off-loading and installing all materials as well as for cutting, wasting, overlapping and installing of the materials where applicable.

F.5.6 PARTICULAR SPECIFICATION PA - BRICKWORK AND PLASTER

PA1 SCOPE

PA1.1 This specification covers the general requirements for buildings and other masonry structures, including plastering.

PA2 INTERPRETATION

PA2.1 Other relevant Standards/Specification

This specification should be read together with SABS 1200 AA.

PA2.2 Applicable Edition of Standards

Each standard specification referred to in this specification shall be deemed to be the latest edition, applicable on the tender closing date.

PA2.3 Definitions and Symbols

For purposes of this specification, the definitions and symbols given in the National Building Regulations and Building Standards Act, 1977 (referred to further on in this specifications as "Building Act"), where applicable, shall apply. (Definitions: pages 5 to 14, Symbols : page 23.)

PA3 MATERIALS

PA3.1 Cement

Cement shall conform to the requirements of SABS 471.

PS3.2 Lime

Lime shall be of approved manufacture, well burnt and of uniform quality conforming with SABS 523.

PA3.3 Sand

Sand to be used for mortar and plaster shall comply with the requirements of SABS 1090.

PA3.4 Clay Bricks

Clay bricks must conform to SABS 227. A sample of bricks to be used for construction must be given to Employer's Agent for approval before construction bricks are delivered to site.

The contractor will be required to carry out necessary tests and provide certificates for compliance of the bricks with SABS 227. The cost of these tests will be deemed part of the scheduled rates and no additional payment will be made therefor.

Best quality Employer's Agenting bricks shall be used for all foundation and concealed situations.

PA3.5 Damp-Proofing

Material used as a damp-proof course shall conform to the requirements contained either in SABS 248 or in SABS 952. Type FV fibre-felt sheets or Type C polyethylene sheets shall be supplied under the contract.

PA3.6 Fibre Cement Sheets

Fibre cement flat sheets, minimum 15 mm thick, shall comply with the requirements of SABS 685.

PA3.7 Storage

PS3.7.1 Cement and Lime

Cement and lime stored on the site shall be properly protected against moisture to the satisfaction of the Employer's Agent.

PA4 CONSTRUCTION

PA4.1 Brickwork

Brickwork shall be well and regularly bonded, with no false headers and none but whole bricks except where legitimately required as closers. All bricks must be thoroughly dampened before laying and each brick is to be laid with full joints and pressed into its bed so as to squeeze out superfluous mortar and give a finished joint not exceeding 8 mm thick in the case of the face work or 13 mm thick in the case of plastered walls or work not exposed to view. All joints, both horizontal and vertical, notwithstanding any grade custom to the contrary, are to be filled solid with mortar for their full width and depth, each course being flushed with mortar, worked well down into all vertical joints before the succeeding course is laid. Horizontal joints and vertical joints of face work shall be pointed flush in manholes and catchpits, but shall be pointed and finished with a tooled recessed joint elsewhere. Plastered walls shall have the joints raked out to a depth not less than 13 mm and not more than

20 mm, and subsequently refilled with mortar of the same proportions as the original bedding mortar. In no circumstances may joints to be so formed as to expose any perforation in the units.

Wire ties, where required, shall be stainless steel and are to be installed at 5 per square metre.

PA4.2 Mortar

The mix proportions for the mortar are given below:

Portland cement	50 kg	
Lime		0-40 l
Sand*		200 l max.

* measured loose and damp

PA4.3 Plastering

Plaster shall be of the same proportions as the bedding mortar. Any other plaster mixes will be subject to the approval of the Employer's Agent.

PA4.4 Damp-proof Courses

The areas to be covered by damp-proof courses are indicated on the drawings. Damp-proof shall be laid on a surface which shall not contain any sharp objects which may perforate the membrane. The full width of the wall and the whole area under the floor is to be covered by the membrane and shall overlap by not less than 100 mm under the floor, and by not less than 150 mm under the wall. All joints shall be effectively sealed. Where shown on the drawing, the damp-proof course is to be stepped up one course of brickwork in the inner skin. Proper returns are to be made at all doorframes.

PA4.5 Window Sills

Windowsills shall be formed as shown on the drawings and as hereafter described:

Damp-proof sheeting shall be provided one brick course below the sill and shall be turned upwards and terminate behind the window frame to provide an efficient weather-tight seal.

All external sills and some internal sills, where shown, shall be formed in quarry tiles and other internal sills where shown are to be of fibre cement sheet minimum thickness 15 mm to SABS 685 with approximately 20 mm projection beyond the finished face of the walls.

External sills shall be laid to a 20° weathered slope while internal sills shall be laid horizontal.

All tiles shall be bedded in 3:1 cement mortar and neatly pointed.

PA4.6 Lintels with Brickwork Reinforcement

Lintels over doors, windows and openings, where ordered by the Employer's Agent, shall be reinforced with four layers of BRC brickforce, or approved equal. The latter reinforcement shall extend a minimum of 450 mm beyond any opening. All joints in the six courses of brickwork above the opening shall be fully flushed with cement mortar. Shoring to soffits of lintels shall be left in position for at least 14 days after building the lintel and the brickwork shall be kept damp with wet bags for the whole of this period.

PA4.7 Wall Vents

Ventilator openings shall be formed through walls where indicated and shall be provided with double brick terracotta louvered air bricks (fitted with plastic insect screens) both externally

and internally (where scheduled) set flush into the work and neatly pointed. Internal wall vents are to be of an approved plaster of paris type where scheduled.

PA4.8 Building in Frames, etc.

Door and window frames are to be set up, built into position, bedded and pointed in cement mortar, with any necessary cutting to brickwork, fitting and making good, as the brickwork is built up. In the case of doorframes, wrought iron right angled cramps are to be fixed to doorframes and built into brickwork at every eighth course.

Where pipes, frames, brackets or other such parts pass through or have to be set into brickwork, the bricks shall be carefully cut and fitted to maintain regularity of courses and uniformity of joints, the shaped bricks being embedded and pointed to conform with the surrounding brickwork. Where such parts have to be set into position after brickwork is built, holes shall be left wherever possible, in preference to cutting out bricks, and the work shall be subsequently made good in the manner described.

PA4.9 Floor Finishes

PA4.9.1 Granolithic Floor Screed

Granolithic shall consist of one part cement, one part sand and two parts 5 mm stone chips and oxide where required, thoroughly mixed as for concrete and placed in a layer not less than 20 mm thick, levelled or graded and trowelled to a smooth uniform surface. To ensure proper bond, the concrete surface to be covered shall be clean, roughened by chipping, flushed with water and coated with cement grout just before placing of the granolithic layer. Granolithic finish is to be steel floated with V joints in squares of 1,20 m to 1,80 m, the joints extending for the full depth of the granolithic. Joints are not required in the granolithic screed where it is to be overlaid by tiles or carpeting.

PA4.10 Chasing Walls

Where indicated by the electrical contractor, the construction contractor shall chase brickwork and concrete work to accommodate electrical conduit - such chasing shall precede plastering or rendering and on no account shall plastering or rendering be commenced until the electrical tubing has been installed. No horizontal or diagonal chases shall be permitted.

Elsewhere, electrical conduit shall either be cast into concrete or shall be run on the surface afterwards as may be directed by the Employer's Agent.

PA4.11 Weather

In any period of interruption caused by inclement weather, and at the completion of each day's bricklaying, freshly laid brickwork should be protected.

F.5.7	PARTICULAR SPECIFICATION PB - CARPENTRY, JOINERY AND IRONMONGERY WORK
PB1	SCOPE
PB1.1	This specification covers the general requirements for carpentry, joinery and ironmongery work for civil Employer's Agenting projects and the methods by which the finished work is to be measured for the purpose of payment.
PB2	INTERPRETATION
PB2.1	Other Standards/Specification This specification is to be read with SABS 1200 AA .
PB2.2	Applicable Edition of Standards Each standard specification referred to in this specification shall be deemed to be the latest edition, at the closing date of tenders for this contract.
PB3	MATERIALS
PB3.1	Timber Roof timber forming a permanent part of the work shall conform to the requirements of the relevant standard specifications SABS 563, SABS 653, SABS 876, SABS 1089 or SABS 1245. All timber other than that used for temporary works or shuttering shall be treated as specified in SABS 1288 and SABS 05, and allowed to dry thoroughly before being used.
PB3.2	Fibre Cement Sheets Fibre cement flat and corrugated sheets shall comply with the requirements of SABS 685. The flat sheets shall be minimum 15 mm thick.
PB3.3	Hardware Locks, hinges and other hardware shall be provided to doors; all ironmongery and fixings shall be chromium plated on brass except where otherwise specified.
PB3.3.1	Hinges Hardwood doors in hardwood frames are to be provided with brass butt hinges as scheduled with three hinges per leaf.
PB3.3.2	Door Locks and Furniture External door to be fitted with a night latch (to be supplied by the Employer) and a Henderson No 463 bow handle, secured with brass bolts passing through the door with nuts on the inside.
PB3.3.3	Cabin Hooks One 200 mm brass cabin hook complete with eyes to be fitted to each door including for hardwood block plugged to walls or post as scheduled.

PB4 MEASUREMENT AND PAYMENT

- PB4.1** The work will be measured and paid for in accordance with the units and rates scheduled.
- PB4.2** The tendered rates for doors are to include for the manufacture, fitting hanging and protective painting thereof.
- PB4.3** The tendered rates for ironmongery shall include for the supplying and fitting complete with non-corrosive screws and/or bolts.

F.5.8 PARTICULAR SPECIFICATION PC – PAINTING

PC1 SCOPE

- PC1.1** This specification covers the general requirements for painting, including methods of preparation of materials to be painted, cleaning, priming, undercoating and finishing, and also methods by which the finished work will be measured and paid for.

PC2 INTERPRETATION

PC2.1 Supporting Specification

This specification must be read together with SABS 1200 AA

PC2.2 Applicable Edition of Standards

Each standard specification referred to in this specification shall be deemed to be the latest edition at the tender closing date.

PC3 MATERIALS

PC3.1 Emulsion Paints for Exterior Use

Emulsion paints for exterior use shall comply with SABS 634.

PC3.2 Calcium Plumbate Primer

Calcium plumbate primer shall comply with SABS 912.

PC3.3 Undercoats for Paints

Undercoats for air-drying protective and decorative paints shall comply with SABS 681.

PC3.4 Structural Steel Paints

Structural steel paints shall comply with SABS 684.

PC3.5 Colours of Paints

Specification for colours of paints shall comply with CKS 279.

**F.6 PARTICULAR SPECIFICATION: PES – ENVIRONMENTAL
MANAGEMENT SPECIFICATION**

**EMPLOYER'S ENVIRONMENTAL MANAGEMENT SPECIFICATION FOR ENVIRONMENTAL
MANAGEMENT OF CONSTRUCTION PROJECTS**

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PS EMP ENVIRONMENTAL MANAGEMENT PLAN

The environmental management specification applicable to this contract is included in this section of these documents.

The Environmental Management Specification must be adhered to during construction. The Employer's Agent will notify the Contractor of a breach of specification and supply a time period within which remedial action will need to be carried out. Should the time period elapse then the penalty will be imposed and the sum deducted from the following month's certificate.

At the time of tender the Contractor shall nominate two people who will be responsible for ensuring that the Contractor's team and sub-contractors comply with the environmental management requirements of this contract. While the positions are only part time, these staff members will be called upon from time to time to deal with any events that are not in compliance with the specifications.

F.6 EMPLOYER'S ENVIRONMENTAL MANAGEMENT SPECIFICATION FOR ENVIRONMENTAL MANAGEMENT OF CONSTRUCTION PROJECTS

F6.1 INTRODUCTION

F.6.1.1 SCOPE

This specification is additional to the South African Bureau of Standards Standardised Specification for Civil Engineering Contracts and must be read in conjunction with the said specification.

This specification covers the principles, responsibilities and requirements generally applicable to implement effective environmental management during the execution of any construction contract. The aim of this specification is to ensure that construction activities are conducted in an environmentally and socially responsible manner.

F.6.1.2 INTERPRETATIONS

This specification contains clauses that are generally applicable to the implementation of effective environmental management on construction contracts. Interpretations of, and variations to, this specification are set out in the project specification.

F.6.1.2.1 Supporting specifications:

Reference is made to the SABS 1200 standards which are to be read in conjunction with this specification. All aspects of these SABS requirements which are relevant to environmental management during construction contracts will apply.

F.6.1.2.2 Principles

The following principles should be considered at all times during construction phase activities:

- The Environment is considered to be composed of both biophysical and social components.
- Construction is a disruptive activity and all due consideration must be given to the environment, particularly the social environment, during the execution of a project to minimise the impact on affected parties.
- Minimisation of areas disturbed by construction activities will minimise many of the construction related environmental impacts of the project and reduce rehabilitation requirements and costs.
- As minimum requirements, all relevant standards relating to international, national, provincial and local legislation, as applicable, shall be adhered to. This includes requirements relating to waste emissions (e.g. hazardous, airborne, liquid and solid), waste disposal practices, noise regulations, road traffic ordinance etc.
- All effort should be made to minimise, reclaim or recycle 'waste' material.

F.6.1.3 DEFINITIONS

For the purpose of this specification, the definitions given in SABS 1200 shall apply.

Additional definitions which shall apply to this specification are as follows:

Environmental Control Officer: Either an Employer's staff member or an Environmental Consultant assigned to the project on a part or full-time basis. The Environmental Control Officer will be part of the Project staff and will advise the Engineer on all environmental matters relating to the works, in terms of this specification and the project specification, if applicable.

Environmental Officer: Either an Employer's employee (e.g. Quality Assurance Inspector) or Consultant designated to monitor the implementation and compliance with the environmental specifications and environmental management plan on a daily basis.

Cleared surface: "surface vegetation" as referred to in SABS 1200 C 2.3 will be deemed to be any woody or herbaceous vegetation but exclude grasses, sedges, rushes and reeds. Clearing and grubbing shall for the

purpose of this specification mean the removal of all woody and herbaceous vegetation including stumps, but excluding grass and groundcover vegetation.

Engineer: Is to read Engineer or Supervisor (in the case of the NEC contract), whichever is applicable to the Contract.

Interested and Affected Parties (IAP): All persons who may be affected by the project either directly or indirectly, or who have an interest or stake in the area to be affected by the project. IAPs include landowners, tribal or local authorities, public interest groups etc.

Liquid Waste Stream: Any reagent solutions, fuels, oils, greases, contaminated run-off, sewerage and wash water, etc.

Open Trench: Open trench will, for the purpose of this specification, be deemed to include: clearing and grubbing; stripping of topsoil; trenching; placing of bedding; pipe-laying; placing of selected fill; backfilling to ground level; removing excess material; construction of cross berms to channel water (if required); and replacement of topsoil to final finished level (refer to Figure 1: Appendix A).

Progressive Reinstatement: Reinstatement of disturbed areas to topsoil profile on an ongoing basis, immediately after selected construction activities (e.g. backfilling of a trench) are completed. This allows for passive rehabilitation (i.e. natural recolonisation by vegetation) to commence. See also 'Open Trench' and 'Rehabilitation'.

Project Manager: The person responsible for co-ordinating and integrating activities across multiple, functional lines.

Rehabilitation: Rehabilitation is defined as the return of a disturbed area to a state which approximates the state (where possible) which it was before disruption. Rehabilitation for the purposes of this specification is aimed at post-reinstatement revegetation of a disturbed area and the ensurance of a stable land surface. Revegetation should aim to accelerate the natural succession processes so that the plant community develops in the desired way, i.e. promote rapid vegetation establishment.

Riparian vegetation: Vegetation occurring on the banks of a river or stream (i.e. vegetation fringing a water body). In this specification, riparian vegetation in terms of removal, storage and replacement (see F.63 17.1 and F.63 17.2), is only applied to sedge, grass, ground-cover, reed, bulrush, or herbaceous component of riparian vegetation and excludes the woody component.

Sedges: Grass-like plants growing in wetland/ marshy areas or adjacent to water.

Subsoil: Subsoil is the soil horizons between the topsoil horizon and the underlying parent rock. Subsoil often has more clay-like material than the topsoil. Subsoil is of less value to plants, in terms of nutrient (food) and oxygen supply, than topsoil. When subsoil is exposed it tends to erode fairly easily.

Timeous: At least 5 working days prior to an activity.

Topsoil: This is defined as the A horizon of the soil profile. Topsoil is the upper layer of soil from which plants obtain their nutrients for growth. It is often darker in colour, due to the organic (humic) fraction. Topsoil is deemed for the purposes of this specification as the layer of soil from the surface to the specified depth required for excavation (see F.63 5.3, relevant SABS 1200 clause and project specification). Where topsoil is referred to, it is deemed to be both the soil and grass / ground cover fraction. (see 'Cleared Surface')

Veld: This is defined for the purpose of this specification as unimproved natural vegetation areas (e.g. grasslands).

Water body: Any open body of water including streams, dams, rivers, lakes, and the sea.

Wetland: A seasonally, temporally, or permanently wet area which also may exhibit a specific vegetation community. It is often marshy in character.

Wetland Vegetation: Vegetation which is indicative of a wetland environment - for example, sedges, rushes, reeds, hydrophilic grasses and ground-covers, but for the purposes of this specification excludes woody species.

Xeriscaping: Landscaping with vegetation which has a low water usage. The objective is to conserve as much water as possible, whilst still beautifying an area (i.e. conservation and aesthetics). Concept embraces utilising indigenous as opposed to exotic plants.

F.6.1.4 ABBREVIATIONS

DWAF	: Department of Water Affairs and Forestry
ECO	: Environmental Control Officer
EMP	: Environmental Management Plan
EMPR	: Environmental Management Programme Report
EO	: Environmental Officer
IAPs	: Interested and Affected Parties
IEM	: Integrated Environmental Management
MSDS	: Material Safety Data Sheet
NEC	: New Engineer Contract or The Engineering and Construction Contract

Indicates the project specification must be referred to, to clarify the clause.

F.6.1.5 DRAWINGS

Drawings referred to in this specification are included in C4.4 Drawings of Section C4 Site Information.

F.6.1.6 FORMS

Forms referred to in this specification are attached to this environmental specification.

F.6.1.7 CONDITIONS OF CONTRACT

F.6.1.7.1 Duties and Powers of the Project Manager

The Project Manager is ultimately responsible for ensuring compliance with the environmental specification and upholding the Employer's Environmental Policy on a project.

The Project Manager:

- arranges information meetings for or consults with IAPs about the impending construction activities;
- may on the recommendation of the Engineer and /or Environmental Officer order the Contractor to suspend any or all works on site if the Contractor or his SubContractor/ supplier fails to comply with the said specifications;
- maintains a register of complaints and queries by members of the public at the site office as per attached pro-forma. This register is forwarded to the Environmental Control Officer on a monthly basis.

F.6.1.7.2 Duties and Powers of the Engineer / Supervisor (NEC)

The Engineer or Supervisor is responsible for:

- enforcing the environmental specification on site;
- monitoring compliance with the requirements of the specification;
- assessing the Contractor's environmental performance in consultation with the Environmental Officer from which a brief monthly statement of environmental performance is drawn up for record purposes;
- documenting, in conjunction with the Contractor, the state of the site prior to construction activities commencing. This documentation will be in the form of photographs or video record.

F.6.1.7.3 Duties and Powers of the Environmental Control Officer

The Environmental Control Officer:

- briefs the Contractor about the requirements of the Environmental Specification and/ or Environmental Management Plan, as applicable;

- advises the Project Manager and Engineer/ Supervisor about the interpretation, implementation and enforcement of the Environmental Specification and other related environmental matters;
- attends site meetings, as necessary;
- monitors the Constructor's compliance with this specification and the project environmental specification as applicable;
- undertakes periodic audits of the effectiveness of the environmental specifications on the site;
- communicates environmental policy issues to the Project Manager;
- provides technical advice relating to environmental issues to the Engineer/ Supervisor and Project Manager;
- reports on the performance of the project, in terms of environmental compliance.

F.6.1.7.4 Duties and Powers of the Environmental Officer

The Environmental Officer:

- attends site meetings;
- monitors the site for compliance with the Environmental Specification and EMP;
- reports on the performance of the project in terms of environmental compliance to the ECO and Project Manager as per the pro-forma attached;
- liaises with the ECO on matters of policy and those requiring clarity and advice.

F.6.1.7.5 Extent of the Contractor's Obligations

The Contractor is required to:

- provide information on previous environmental management experience and company environmental policy;
- supply method statements for all activities requiring special attention as specified and/or requested by the Project Manager, Environmental (Control) Officer and/or Engineer during the duration of the Contract;
- be conversant with the requirements of this environmental specification and the project specification as applicable;
- brief his staff about the requirements of the environmental specification;
- comply with requirements of the Environmental (Control) Officer in terms of this specification and the project specification, as applicable, within the time period specified;
- ensure any sub-Contractors/ suppliers who are utilised within the context of the contract comply with the environmental requirements of the Employer, in terms of the specifications. The Contractor will be held responsible for non-compliance on their behalf;
- bear the cost of any delays, with no extension of time granted, should he or his Sub-Contractors/ Suppliers contravene the said specifications such that the Engineer orders a suspension of work. The suspension will be enforced until such time as the offending party(ies), procedure, or equipment is corrected;
- bear the costs of any damages/ compensation resulting from non-adherence to the said specifications or written site instructions;
- comply with all applicable legislation in terms of 7.6 below;
- ensure that he informs the engineer timeously of any foreseeable activities which will require input from the Environmental (Control) Officer.

The Contractor will conduct all activities in a manner that minimises disturbance to directly affected residents and the public in general, and foreseeable impacts on the environment.

F.6.1.7.6 Compliance with Applicable Laws

The supreme law of the land is "The Constitution of the Republic of South Africa", which states:

"Every person shall have the right to an environment which is not detrimental to his or her health or well being"

Laws applicable to protection of the environment in terms of Environmental Management (and relating to construction activities) include but are not restricted to:

Animals Protection Act, Act No 71 of 1962
Atmospheric Pollution Prevention Act, No 45 of 1965
Conservation of Agricultural Resources Act, No 43 of 1983
Environmental Conservation Act, No 73 of 1989
Environmental Planning Act, Act No 88 of 1967
Fertilisers, Farm Feeds, Agricultural Remedies and Stock Remedies Act, No 36 of 1947
Forest Act, No 122 of 1984
Forest and Veld Conservation Act, Act No 13 of 1941
Hazardous Substances Act, No 15 of 1973
Lake Areas Development Act No 34 of 1975
Land Survey Act, No 9 of 1921
Minerals Act, No 50 of 1991
Mountain Catchment Act, No 63 of 1970
National Monuments Act, No 28 of 1969
National Parks Act, No 57 of 1976
National Resources Development Act, Act no 51 of 1947
Occupational Health and Safety Act, No 85 of 1993
Provincial and Local Government Ordinances and Bylaws
Soil Conservation Act, Act No 76 of 1969
Water Act, No 54 of 1956
Water Services Act No 108 of 1997
and all regulations framed thereunder and amendments there to.

F.6.1.7.7 Compliance with the Environmental Specification

The Contractor is deemed not to have complied with the Environmental Specification if:

- within the boundaries of the site, site extensions and haul/ access roads there is evidence of contravention of clauses;
- if environmental damage ensues due to negligence;
- the Contractor fails to comply with corrective or other instructions issued by the Project Manager or Engineer within a specified time,
- the Contractor fails to respond adequately to complaints from the public.

Application of a penalty clause will apply for incidents of non-compliance. The penalty imposed will be per incident. Unless stated otherwise in the project specification, the penalties imposed per incident or violation will be:

Failure to demarcate working servitudes	R1000
Working outside of the demarcated servitude	R2000
Failure to strip topsoil with intact vegetation	R1000
Failure to stockpile topsoil correctly	R500
Failure to stockpile materials in designated areas	R500
Pollution of water bodies (including increased suspended solid loads)	R1000
Failure to control stormwater runoff	R1000
Failure to provide adequate sanitation	R500
Unauthorised removal of woody vegetation	R2000
Failure to erect temporary fences	R500
Failure to provide adequate waste disposal facilities and services	R500
Failure to reinstate disturbed areas within the specified time-frame	R3000
Failure to rehabilitate disturbed areas within the specified time-frame	R3000
Any other contravention of the project specific specification	R400
Any other contravention of the particular (general) environmental specification	R300

F.6.2 SITE ESTABLISHMENT AND HOUSEKEEPING

F.6.2.1 LAYOUT

The Contractor will take into account any of the limitations identified in the project specification with regard to establishment of site, in particular the location of access routes, and establishment layout.

Notwithstanding the provision of a project specification, the Contractor will provide the Project Manager and Environmental Control Officer with a layout design of the site indicating the position of all of the following, as applicable: offices, ablution facilities, storage areas, workshops, laboratories, batching plant, particulate matter stockpile area (i.e. soil/ granular chemicals/ cement fines etc), waste disposal facilities, hazardous substances storage area, access routes, etc. This layout plan is to be submitted prior to site establishment for acceptance. Any changes to this plan require review by the Project Manager in conjunction with the ECO.

The Contractor will take into account prevailing wind directions when designing the site layout to minimise impacts due to dust, unpleasant odours etc.

The Contractor will take into account the positions of residences when designing the site layout in order to minimise noise impacts on the residents.

Site security lighting is to be positioned such that the direct beam is focused away from residential properties and does not pose a nuisance or danger to road users.

No site establishment will be allowed within 100 m of a water body or drainage channel or on a flood plain unless approved by the Environmental (Control) Officer or specified in the project specification.

F.6.2.2 SITE CLEARANCE

No trees or shrubs may be removed without the prior permission of the Environmental Officer, unless in keeping with the final site reinstatement and rehabilitation plan.

Topsoil is to be stripped from all areas where permanent or temporary structures and access roads are to be constructed. Topsoil conservation is to be in terms of clause F.6.3 5.3 of this document.

F.6.2.3 SERVICES

F.6.2.3.1 Sanitation

Portable chemical toilets are to be utilised at site unless a connection to sewer is possible or a proper septic tank system is installed. In the case of the septic tank, the installation will require the relevant approvals from the local authority and will require removal upon completion of the contract, unless otherwise directed.

Sanitation facilities will be located within 100 m from any point of work, but not closer than 50 m to a water body.

F.6.2.3.2 Solid Waste Facilities

Facilities for solid waste collection are to be provided. These are to be at least a 200 l drum and clearly identified as the point for waste disposal.

Waste is to be separated into paper, glass and metal with separate collection points for each. The Contractor will ensure that the appropriate recycling Contractors receive this waste.

The Contractor is to institute a daily litter collection programme. The collected waste is to be disposed of regularly and proportionately to its generation at a site designated for waste disposal.

No burning will be permitted on any site unless by approved incineration methods and in a low risk fire area. In the case of incineration, ash is to be co-disposed with spoil in a designated spoil dump.

No burying of waste will be allowed on any site.

F.6.2.3.3 Cooking and Heating Facilities

No open fires will be allowed anywhere on site.

Contained fires (i.e. in a fire drum) will be allowed for heating and cooking only in designated areas, in other cases cooking is restricted to gas or electrical equipment.

F.6.2.4 FUELS, HAZARDOUS SUBSTANCES AND OTHER LIQUID POLLUTANTS

F.6.2.4.1 Storage and handling

All potentially hazardous raw and waste materials are to be handled by trained staff and stored on site in accordance with manufacturer's instructions and relevant legal requirements. The product MSDS is to be lodged with the Engineer.

Storage and handling areas for fuels, lubricants, chemicals and other hazardous substances are to be paved with concrete to prevent accidental contamination of the soil. Alternatively, an impermeable liner may be placed beneath above-ground storage tanks. The integrity of the liner is to remain intact for the duration of the contract, until removal.

Open storage vessels, for example shutter lubricant drums, are to be stored under cover to prevent 'splash' contamination.

All storage areas are to be bunded (with at least sandbags) and have a peripheral collection drain, with oil interceptors (if required).

The bunded area is to be sufficiently large to contain a spillage equivalent to the volume of one container of the substances stored.

All products to be dispensed from 200 litre drums will be done so with appropriate equipment, and not dispensed by tipping of the drum.

Daily checks are to be conducted on the dispensing mechanism of above-ground storage tanks to ensure the timeous identification of faults.

Collection containers (e.g. drip trays) are to be placed under all dispensing mechanisms of hydrocarbon or hazardous liquid substances to ensure contamination from leaks and dispensing is contained.

The dispensing mechanism of diesel and petrol storage tanks is to be stored in a container when not in use.

F.6.2.4.2 Control of pollutants

A drainage diversion system is to be installed to divert runoff from areas of potential pollution, e.g. batching area, vehicle maintenance area, work shops, chemical and fuel stores, etc if applicable.

Contaminated runoff and waste water is to be directed into a collection system (e.g. sump, attenuation dam, PVC porta-ponds etc.) for treatment or collection and disposal. The final collection point (e.g. sump) is to be PVC lined.

Collected contaminated runoff/ wastewater is to be pumped out of the final collection point and disposed of at an appropriate landfill site. Sump liners are to be treated in the same manner.

The treated waste water, effluent and contaminated runoff may require analysis prior to discharge as detailed in the project specification or instructed by the Environmental Officer.

Details regarding proposed methods for treatment of pollutants are to be submitted to the Environmental (Control) Officer for acceptance upon award of the Contract.

Any spillages, irrespective of their size, are to be contained and cleaned up immediately. The Pollution Control section may provide technical assistance for clean up, if required. No spills may be hosed down into a stormwater drain or sewer.

Use of specialised cleanup techniques and/ or products may be required depending on the spill. This will be instructed by the Environmental Control Officer. These will be to the Contractor's cost.

F.6.2.5 GENERAL

Site staff are not permitted to use any open water body or other natural water source (e.g. springs) for purposes of bathing, or the washing of clothes, machinery or vehicles. Nor draw water from a spring without the permission of the community utilising that spring.

F.6.2.6 MEASUREMENT AND PAYMENT

Measurement and payment for compliance with clauses F.6.2.1 to 5 of the specification are deemed to be fully included in the Contractor's rates for fixed and time related Preliminary and General Items scheduled under SABS 1200 A or AA.

F.6.3 CONSTRUCTION

F.6.3.1 CONSTRUCTION METHODS AND PROGRAMME

F.6.3.1.1 Construction Method

The Contractor will provide method statements for construction activities (14 working days prior to the activity commencing) relating to the following environments and those listed in the project environmental specification, unless methods have been prescribed in this or the project environmental specification:

- rivers, streams, or any other open water body;
- wetlands;
- access roads (see F.6.3.13 below);
- steep slopes (i.e. steeper than 1:4) or less if friable material is present;
- indigenous bush/ forest;
- close proximity (i.e. 50 m or less) to a residential dwelling;
- drilling and/or blasting of rock.

If a construction method employed by the Contractor is not environmentally acceptable to the Employer, the Contractor may be instructed to cease the utilisation of that method in favour of a more environmentally acceptable one, proposed either by himself or the Employer.

F.6.3.1.2 Construction Programme

The Contractor will programme construction so as to minimize the impact on the environment and provide this programme to the Environmental Control Officer for perusal and acceptance at the onset of the contract period. The Environmental Control Officer is to be made aware of any amendments to the construction programme or alterations to the scope of work in order that their impacts on the environment can be assessed.

The Contractor (through the Project Manager) will ensure that all affected landowners/ authorities are advised of the proposed programme at the beginning of the contract period.

F.6.3.2 AREAS OCCUPIED / DEMARCATION OF SITE

Routes for temporary access and haul roads are to be located within the approved demarcated areas and vehicle movement is to be confined to these roads. Movement of vehicles outside the designated working areas is not permitted without authorization from the Engineer.

All construction activities are restricted to working areas designated on the drawings and/or demarcated and approved by the Engineer. Materials including spoil are stockpiled at designated areas.

Any areas disturbed outside of the demarcated areas or without permission of the Environmental (Control) Officer or Engineer will be subject to reinstatement and rehabilitation (as per F.6.4 below) to the Contractor's cost.

In terms of pipeline projects, a general maximum working servitude width of 15 m will apply for machine excavation unless otherwise indicated in the project specification. A maximum width of 6 m will apply for manual excavation. These maximum working servitude widths may vary depending on the sensitivity of the environment, as detailed in the project specification.

In sensitive biophysical environments, for example wetlands, indigenous forest / bush, pristine natural grasslands, and sensitive social environments, as defined in the project specification or by the Environmental Control Officer, the working servitude is reduced as indicated in the project specification.

The working servitude shall contain all construction related activities, including, stockpiling of materials, placing of toilets, vehicle movement areas, etc.

Demarcation of linear projects (executed with machine excavation) and features (e.g. pipelines, access roads, etc.) will be by means of wooden stakes. These stakes will be at least 1 m high, painted white and placed at least every 15 m, on either side of the linear feature, in all areas where works are occurring. Progressive movement of stakes is required as linear projects progress.

In the case of a fenced site, the boundary fences will be denoted as the outermost limit of the site, but internal areas may be demarcated with stakes as above. The site boundaries of non-fenced, but 'contained' projects are to be delineated using stakes or temporary fencing, depending on the hazard which that site poses.

F.6.3.3 SUPPLY OF WORKS FACILITIES

No water may be abstracted from water bodies for the purposes of construction, without approval of the Engineer in consultation with the Environmental Control Officer.

F.6.3.4 CLEANLINESS

SANS 1200 AD, clause 5.2.4, second sentence, is to read: "No rubbish or debris shall be deposited below the full supply level (FSL)."

F.6.3.5 SITE CLEARANCE

F.6.3.5.1 Clearance

Spoil sites will require clearing and grubbing in addition to those areas in terms of SANS 1200 C 5.1.

The site shall only be cleared immediately prior to construction activities commencing i.e. at the last practicable stage.

No trees or indigenous shrubs may be removed without the prior permission of the Environmental (Control) Officer, unless in keeping with the final site reinstatement and rehabilitation plan.

F.6.3.5.2 Disposal of materials

Material obtained from clearing and grubbing operations shall be disposed of at appropriate municipal disposal facilities. They are not to be disposed of as per Paragraph 1 of Sub-clause 3.1 of SANS 1200 C.

Wood obtained from clearing and grubbing operation remains the property of the landowner/ community and must be stacked at sites designated by relevant person. The Contractor will be required to remove and dispose of any wood from site at a designated site for vegetation disposal, should the landowner/ community not require it.

All tree trunks and branches of diameter greater than 50mm are to be cut into lengths not exceeding 2400mm.

Brush wood (i.e. < 50mm diameter) is to be disposed of, or utilised as specified in the project specification or upon instruction of the Engineer.

F.6.3.5.3 Conservation of topsoil

The Contractor is required to strip topsoil (as defined in this specification) together with grass, groundcover and sedges from all areas where permanent or temporary structures are located, construction related activities occur, and access roads are to be constructed, etc. The depth to which topsoil will be stripped shall be 200mm unless stated otherwise in the project specification.

Topsoil is to be handled twice only - once to strip and stockpile, and secondly to replace, level, shape and scarify.

Topsoil is to be replaced along the contour.

Topsoil is to be replaced by direct return (i.e. replaced immediately on the area where construction is complete), rather than stockpiling it for extended periods. This is feasible for progressive construction (e.g. pipelines), but not necessarily so for reservoirs, site establishments, dams, etc.

Topsoil stockpiles are not to exceed 2 m in height.

Topsoil stockpiles are to be maintained in a weed free condition (i.e. no 'broad-leafed' plants regarded as weeds in terms of the Conservation of Agricultural Resources Act No 43 of 1989, or those plants regarded as a 'general nuisance in the area' are to be growing on the stockpiles). The Environmental Control Officer will provide guidance as to which plants are weeds and require removal.

The stockpiles are not to be contaminated with sub-soil, or any other waste material.

Topsoil may not be compacted in any way, nor may any object be placed or stockpiled on it.

Topsoil may not be compacted in any way, nor may any object be placed or stockpiled on it.

Topsoil which is to be stockpiled for periods exceeding 4 months is to be vegetated. In summer a mixture of *Eragrostis tef* (Teff) and *Eragrostis curvula* (Weeping Lovegrass) (ratio 1:2) is to be applied at an application rate of 6 kg/ha, unless otherwise instructed in the project specification.

In winter, a mixture of *Lolium multiflorum* (Annual/Italian Rye grass) and *Eragrostis curvula* (Weeping Lovegrass) (ratio 1:1) is to be applied at an application rate of 6kg/ha (see F.6.4 5.3 for sowing times), unless otherwise instructed in the project specification. Fertiliser is to be applied as per F.6.4 5.2.

F.6.3.5.4 Cutting of trees

Any tree branches which require removal are to be properly pruned and sealant applied to the cut surface, if required.

The Contractor's attention is drawn to Sub-clause 5.2.3.3 of SANS 1200 C with respect to work in indigenous forests.

Any indigenous trees or bush which require removal in terms of the project, and which have not been identified in the project specification or EMP, are to be timeously indicated to the Environmental Officer prior to work affecting them.

F.6.3.5.5 Landscape Preservation and Conservation of Flora

Notwithstanding Clause 5.7 of SANS 1200 C, the Contractor will be required to transplant designated plants to alternative locations as specified in the project specification or identified by the Environmental Control Officer, upon the instruction of the Engineer.

Transplanting shall be undertaken by employing the following method:

Removal

- Mark the orientation of the tree/shrub (for example, the north-facing side of the trunk indicated by a small arrow made with indelible ink) trunk. Do not scratch a mark on the surface of the trunk;
- Delineate a circle from the trunk with a radius equivalent to the drip-line of the tree, or as indicated by the Environmental Control Officer on site;
- Excavate the tree with an intact rootball.

Replanting

- A hole 500mm larger in diameter than the anticipated rootball must be prepared in advance of the tree removal in order that the tree can be replanted immediately;
- The tree must be positioned as per its original orientation;
- A planting method known as 'puddling' must be employed. This method involves the addition of soil and water simultaneously to expels air from the planting hole. Place the tree in its new hole, making sure the top surface of the rootball is level with the

ground level. Place a hose pipe in the hole and leave it running whilst extra soil is added around the rootball;

- 'Compact' the tree in the hole and attach tree stays for stabilisation.

Compensatory planting of species may be required should transplantation not be feasible, as indicated in the project specification or upon instruction of the Engineer.

F.6.3.6 EARTHWORKS

F.6.3.6.1 Backfill material

With reference to SANS 1200 DB sub-clause 3.5, no material stripped or excavated which is classed, in terms of this specification, as topsoil, may be used as backfill in any excavation.

F.6.3.6.2 Excavation and backfilling

During excavation 'conservation of topsoil', as specified in F.6.3 5.3 above will apply.

Excavated material is to be stockpiled along a pipeline trench within the working servitude, unless otherwise authorised.

Surplus excavated soft, intermediate and hard rock material shall not be disposed of along the pipeline trench as indicated in SANS 1200 DB sub-clause 5.6.3 and 5.6.4, but shall be removed to a spoil site (see F.6.3.15 below) designated during the project if applicable, or agreed by the Engineer in conjunction with the Environmental Control Officer and Project Manager.

In certain cases, for example to help stabilise the disturbed area or to reinstate the natural aesthetics of an area, excess excavated intermediate and hard material may be disposed of in a designated manner along a pipeline trench, as indicated by the Environmental Control Officer and Project Manager, or in the project specification. In this case, rock material shall not exceed 250mm in maximum dimension (see F.6.4 2.1).

In terms of SANS 1200 DB 5.6.5 and SABS 1200 LB 3.4.2, deficiency of backfill material shall not be made up by excavation within the free haul distance of 0.5km of site, without the prior approval of the Engineer of the source of the material. Where backfill material is deficient, it should ideally be made up by importation from an approved borrow pit (i.e. one which operates within the ambient of an EMPR.) (See also F.6.3 14 below).

The Contractor will backfill in accordance with the requirements of progressive reinstatement.

The maximum length of open trench shall be specified in the project specification.

F.6.3.7 SAFETY

All works which may pose a hazard to humans and animals are to be adequately protected and appropriate warning signs erected. The Contractor's attention is drawn to SANS 1200 D section 5.1 in this regard.

With reference to SANS 1200 D 5.1.1.3, where blasting is required in terms of the project, the Contractor will ensure that all structures in the vicinity that could be affected by the activity will be inspected and their condition photographically recorded (as necessary), prior to blasting.

Notice of intent to blast is to be provided to landowners timeously.

Speed limits, appropriate to the vehicle driven, are to be observed at all times on access roads. Operators and drivers are to ensure that they limit their potential to endanger humans and animals at all times, by observing strict safety precautions.

F.6.3.8 PLANT

F.6.3.8.1 Silencing of plant

With reference to SABS 1200 A amend: "built up areas": to read as "all areas within audible distance of residents (albeit urban, peri-urban or rural areas)."

Appropriate directional and intensity settings are to be maintained on all hooters and sirens.

Silencer units on equipment and vehicles are to be maintained in good working order.

Construction activities are to be confined to normal working hours (07h30 - 17h00) Mondays to Saturdays, except for the activities designated to be carried out at night.

F.6.3.8.2 Appropriate use of plant

The Contractor will at all times use plant which is appropriate to the task in order to minimise the extent of damage to the environment.

F.6.3.9 DEALING WITH WATER ON WORKS

F.6.3.9.1 Disinfection of Potable Water Infrastructure

Disinfection water is to be neutralised before release of this water to the environment.

F.6.3.9.2 Discharge of water from site

Any water which is discharged from site is to comply with the relevant Water Quality Guidelines implemented by DWS.

Water discharged to the stormwater / sewer system may only be done so with the permission of the relevant local authority.

F.6.3.10 CONTROL OF EROSION

Surface erosion protection measures will be required to prevent erosion where slopes are steeper than 1:8 on all soil types.

Erosion protection measures required may include all or some of the below, as specified in the project specification or upon instruction of the Engineer in conjunction with the Environmental (Control) Officer:

- use of groundcover or grass
- construction of cut off berms (earth and/or rockpack) - these are to be angled across the contour and normally would approximate an angle of 30° from the bisector of the contour.
- placing of brush wood on bare surface;
- pegging of wattle trunks or branches along the contour;
- hard landscaping, e.g. use of Loffelstein walls, ground anchors, gabions etc.

Scour chambers are to be fitted with energy dissipaters, or the jet of water directed onto a protected (i.e. grouted stone pitching/ rock pack/ reno mattress) area to dissipate water velocity and to control and prevent erosion.

Storm water drainage measures might be required on site to control runoff and prevent erosion.

F.6.3.11 CONTROL OF POLLUTION

No waste in a solid, liquid or gaseous state shall be emitted from or spilled on the site without the approval of the Engineer.

No mixed concrete shall be deposited directly onto the ground prior to placing. A board or other suitable platform is to be provided onto which the mixed concrete can be deposited whilst it awaits placing.

Excess concrete from mixing shall be deposited in a designated area awaiting removal to an approved landfill site.

The Contractor will contain wash water from cement mixing operations, by directing the water into a sump for collection. The material contained in the sump will be removed to an appropriate landfill site.

No concrete rubble shall be present at the site.

Liquid wastes will not be disposed of to storm water drains. They may be disposed of to sewer only if permitted by (local council) legislation.

In the event of pollution of a water body (including sediment loading), the Contractor will provide alternative water supply to users of that water body until the quality of the water body is restored to its previous unpolluted state. For the sake of this clause, pollution is deemed to be a state which is substandard to the normal quality of the water body, but is not necessarily in contravention of the South African Water Quality guideline standards for a prescribed activity.

Any ancillary damages resulting from pollution of a water body will be repaired / remediated at the Contractor's cost.

Where, due to construction requirements, pollution of a water body may potentially occur, the Contractor is to ensure adequate measures (e.g. attenuation/ settlement dams / oil absorbent products) are in place to prevent pollution. A method statement is to be provided to this effect (see F.6.3 1).

F.6.3.12 CONTROL OF FIRE

The Contractor will ensure he has the necessary fire fighting equipment on site in terms of SANS 1200. This will include at least rubber beaters when working in 'veld' areas, and at least one fire extinguisher of the appropriate type when welding activities are undertaken, irrespective of the site.

F.6.3.13 USE AND MAINTENANCE OF ACCESS FACILITIES

F.6.3.13.1 Responsibility

The Project Manager [not the Contractor (SANS 1200 AD 5.3.1)] will be responsible for obtaining permission for temporary and permanent rights of way over all private property affected by project activities.

The Project Manager will ensure that the Contractor has kept a photographic record of all access facilities and that these are reinstated to a state not worse than upon commencement of the project and to the satisfaction of the landowner (not withstanding that the project's objective is not to upgrade landowners' access roads).

F.6.3.13.2 Fencing

Temporary fencing is to consist of 1.2 m bonnox fencing, or similar, suitably tensioned and supported on 1.8 m fencing standards at 3 m intervals, with all necessary straining posts and stays.

All temporary fencing as indicated by the Engineer is removed on completion of the contract.

F.6.3.13.3 New Access Roads

Any construction roads created for execution of the project are to be designed to incorporate adequate drainage and water attenuation structures.

Any access roads which incorporate 'cut and fill' aspects and/or which are to be surfaced during construction are to be authorised by the Environmental Control Officer and Project Manager. Prior to construction of the road, the Contractor will be required to provide a sketch plan of the road layout (referenced to local topographic, natural and man-made structures). Slope steepness, road width, drainage structures and their frequency will need to be documented and accompany the sketch layout.

Construction access roads may not be wider than that necessary (maximum width 4 m) for movement of vehicles in one direction only. Should two way traffic be required, points people are to control vehicle movement on the 'single lane' road or passing bays are to be used where specified in the project specification or as identified by the Engineer in conjunction with the Environmental Control Officer, unless otherwise stated in the project specification.

The cut and fill slopes of permanent roads will require grassing, as specified in the project specification or by the Environmental Control Officer, to increase stability and reduce aesthetic impacts. Hard landscaping may be required as per the project specification.

Temporary construction roads will require rehabilitation on completion of construction activities for which they were required. These roads will require rehabilitation as per F.6.4 4 or as specified in the project specification.

In the case of access 'tracks', only ripping to loosen compaction will be required unless otherwise stated by the Environmental Control Officer or project specification.

Access roads created by the project may only remain unrehabilitated on written request of the landowner, with his acceptance of the state of the road and a clause that the landowner accepts all responsibility for the road and its state.

F.6.3.13.4 Maintenance of Existing Access Roads

The Contractor will record, photographically, the state of existing roads which are to be used for access, prior to plant utilising these roads.

During the contract period, the Contractor will ensure that all existing water attenuation and drainage structures are maintained in a state in which they can optimally perform their function.

Upon completion of the construction period, the Contractor will ensure that the access roads are returned to a state not worse than prior to construction commencing.

F.6.3.14 BORROW PITS

Where the Contractor is required to import material this shall be from commercial sources or borrow areas specified in the project specification.

The Contractor may source material from alternative borrow pits provided: the site location; method of winning material and reinstatement and rehabilitation are environmentally acceptable and approved by the Environmental Control Officer.

In this regard, the Contractor shall give the Environmental Control Officer in writing, 30 days prior to opening up alternative borrow pits the following information for acceptance:

- quantities of borrow material required;
- method statement for excavation of material including depth and extent of excavation;
- anticipated 'active life' of the borrow area;
- proposal for reinstatement and rehabilitation of borrow area, including final profile;
- written approval from the landowner/ relevant authority that material may be removed from their land subject to their stated conditions, requirements, and royalties, and if the proposal is acceptable to the Environmental Control Officer.

Development and rehabilitation of borrow pit areas are likely to include the following activities (but these must not be regarded as exhaustive):

- Stripping and stockpiling of topsoil as per F.6.3 5.3 of this specification;
- Removal (to nominal depth of 500mm) and stockpiling of sub-soil;
- Infill of borrow pit with spoil material;
- Contouring of borrow pit to approximate natural topography and/ or reduce erosion impacts on the site;
- Placement of excavated subsoil over spoil material;
- Placement of stripped topsoil on subsoil;
- Grassing of topsoil in terms of clause F.6.4 4 of this specification.

The Contractor is to familiarise himself with the requirements of the Minerals Act No 50 of 1991 in terms of borrow pit development, and the requirements of the EMPR, as applicable.

F.6.3.15 SPOIL SITES

Where the Contractor is required to spoil material, spoil sites must be identified which are environmentally acceptable and approved by the ECO, unless spoil site areas have been identified in the project specification, in which case these will be the designated spoil sites.

If no spoil sites have been previously identified together with reinstatement and rehabilitation criteria, the Contractor is to provide the following information to the ECO at least 30 days prior to requiring sites to spoil material:

- the location, description of and access to alternative sites identified in order that they may be assessed;
- the quantity of material to be spoiled;
- the type of material to be spoiled (i.e. blast rock/ excavated rock/ soft shale/ subsoil etc.);
- the proposed method of spoiling;
- the proposed reinstatement and rehabilitation plan including final profile;
- written approval from the landowner/ relevant authority that material may be spoilt on land subject to their stated conditions and requirements and if the proposal is acceptable to the ECO.

Development and rehabilitation of spoil areas are likely to include the following activities (but these must not be regarded as exhaustive):

- Stripping and stockpiling of topsoil as per F.6.3 5.3 of this specification;
- Removal (to nominal depth of 500mm) and stockpiling of sub-soil;
- Placement of spoil material;
- Contouring of spoil site to approximate natural topography and/ or reduce erosion impacts on the site;
- Placement of excavated subsoil over spoil material;
- Placement of stripped topsoil on subsoil;

Grassing of topsoil in terms of clause F.6.4 4 of this specification.

F.6.3.16 NUISANCE

F.6.3.16.1 Dust

At all times the Contractor shall control dust on the site, access roads, borrow pits and spoil dumps with water, chemical soil stabilisers or temporary surfacing as specified in the project specification or upon instruction of the Engineer.

Dust control shall be sufficient so as not to have significant impacts in terms of the biophysical and social environments. These impacts include visual pollution, decreased safety due to reduced visibility, health aspects, and ecological impacts due to dust particle accumulation.

On gravel or earth roads, vehicle speeds may not exceed 30km per hour.

F.6.3.16.2 Noise

The operational layout of the construction site is to be designed to control and reduce noise from source (see clause F.6.2 1).

Machinery and vehicle silencer units are to be maintained in good working order. Offending machinery and /or vehicles will be banned from use on site until they have been repaired.

Construction activities generating output levels of 85 dB(A) or more (excessively noisy), in residential areas, are to be confined to working hours (08h00 - 17h00) Mondays to Fridays only.

'Normal' or 'noisy' working hours may only be extended with the prior written approval of the Project Manager, who has been notified, at least 7 days in advance, of the impending work requiring extension.

The Project Manager will ensure that the neighbours are timeously forewarned of imminent noisy activities.

Should community complaints be received with regard to noise generation, the Contractor will, at the discretion of the Project Manager and Environmental Control Officer, provide an independent and registered noise monitor to undertake a survey of noise output levels from site, and implement measures to reduce noise to legislated levels.

F.6.3.16.3 Visual

All site establishment components, as well as equipment, will be positioned to limit visual intrusion to neighbours (see clause F.6.2 1 above).

The type and color of roofing and cladding materials are to be selected to reduce reflection.

Security lighting (both temporary and permanent) and lighting required for specific works activities must be placed such that it is not a nuisance to residents and the general public.

F.6.3.16.4 Interference with neighbors and public

No construction staff may approach site neighbors, for whatever reason, without the knowledge and permission of the Project Manager.

Complaints from neighbors and public with regard to interference from contract staff will be regarded in a serious light, and the offender(s) may be subject to disciplinary action.

F.6.3.16.5 Disruption of Services

Disruption of services, e.g. road access, water and electricity, must be kept to a minimum at all times.

Where service disruption is unavoidable, the Contractor is to advise the Project Manager (at least 7 days in advance), who in turn will timeously warn the affected parties.

F.6.3.17 SPECIAL ENVIRONMENTS

F.6.3.17.1 Wetlands

Pipeline trenches which traverse wetlands shall be constructed as specified in the project specification. The Contractor will submit a method statement for work in wetland areas as per F.6.3 1.1

Construction may not permanently alter the surface or subsurface flow of water through the wetland.

The Contractor shall submit a method statement for review at least 14 days prior to commencing construction in a wetland.

The Contractor will remove all wetland vegetation with their root ball intact. This vegetation is to be kept moist at all times. It is to be placed in the shade and covered with moistened hessian cloth until replanting, which is to be undertaken immediately surface reinstatement is complete.

No construction materials may be stockpiled in any wetland areas.

The pre-construction profile of the wetland shall be returned to one similar as before construction, with no created "ridge or channel" features present.

F.6.3.17.2 River/ stream courses

The Contractor shall submit a method statement for review 14 days prior to commencing construction. The method statement should highlight (but not be confined to) the following issues:

- detailed plan of crossing including pipe protection works;
- how water flow will be diverted during construction (if applicable);
- containment of contaminated runoff and waste water;
- width of working servitude (if not already detailed in project specification);
- final expected profile of river/ stream banks;
- reinstatement and rehabilitation of river/ stream banks.

The Contractor will remove herbaceous riparian vegetation as indicated in the project specification or by the Environmental Control Officer, with their root ball intact. This vegetation is to be kept moist by means of placing it in the shade, covered with moistened hessian cloth until it is replanted.

The Contractor shall not modify the banks or bed of a water course unless as specified in the project specification.

Rocks for use in gabion baskets/reno mattresses may not be obtained from a water course.

The Contractor will not pollute any water body as a result of construction activities (see also F.6.3 11).

The Contractor shall not cause any physical damage to any aspects of a water course, other than those necessary to complete the works as specified and in accordance with the accepted method statement

Where a stream or river-crossing requires the diversion of water, a method statement is to be provided to the Environmental Control Officer in this regard for review.

F.6.4 REINSTATEMENT AND REHABILITATION

Scope: The intention of this section is to ensure that the condition of the areas disturbed by the project are returned to a state that approximates what they were before the project or better, within reason. The concept of progressive reinstatement is fundamental to cost effective (both financial and environmental) rehabilitation of a site. This concept must be followed at all times. Where landscaping is utilised, the concept is to utilise and restore indigenous plants to the site, in terms of the concept of xeriscaping.

Reinstatement will be required for all areas disturbed by the project. For pipeline projects, this will include the full working servitude, not just the top of actual excavation as per SANS 1200 DB (subclause 5.9.1.1)

Reinstatement and rehabilitation will ensure that all areas disturbed by the project are returned, within reason, to a state not worse than before the project commenced.

The Contractor will reinstate and rehabilitate all disturbed areas outside of the demarcated working area (as defined in terms of clause F.6.3 2 or the project specification) at his own cost and to the satisfaction of the Environmental Control Officer and Project Manager.

F.6.4.1 HOUSEKEEPING

All areas are to be cleared of rubble associated with construction. This includes the removal of surplus materials, excavation and disposal of consolidated waste concrete and concrete wash water, litter, etc. All soil contaminated by hydrocarbons, for example from leaking machines, refuelling spills etc., is to be excavated to the depth of contaminant penetration, placed in 200 litre drums and removed to an appropriate landfill site.

F.6.4.2 FINISHING

F.6.4.2.1 Final Grading

Final levels of all disturbed areas are, where feasible in terms of the project requirement, to be consistent with the natural topography of the area.

In certain instances, it will be acceptable to reinstate rock onto a works area (e.g. pipeline servitude), provided that that rock does not exceed 250mm in maximum dimension and is placed in a manner consistent with the natural surrounds as indicated by the Environmental Control Officer and Project Manager.

All drainage lines affected by construction are to be reinstated to approximate their original profile. Where this is not feasible due to technical constraints, the profile is to be agreed upon by the Environmental Control Officer and Project Manager.

All compacted (disturbed) areas (including stockpile areas) are to be ripped (along contour) to a depth of 150mm prior to the replacement of topsoil.

F.6.4.2.2 Topsoiling

Topsoil is to be replaced to a minimum depth of 100mm.

Topsoil is not to be compacted, but once replaced is to be scarified (to a depth of 50mm) consistent with the natural contour.

If insufficient topsoil is available, subsoil or similar material may be used that may be a suitable substrate after addition of soil improving substances e.g. compost, pH rectifiers (lime or gypsum) etc. Soil testing may be required at an approved facility.

F.6.4.3 REINSTATEMENT OF WATER COURSES AND WETLAND AREAS

The Contractor will ensure that water course banks are returned to their original profile unless the project specification states otherwise.

The surface reinstatement of wetland areas is to ensure that no depressions remain which could act as channels for preferential water flow thereby affecting the hydrological regime of the wetland.

The Contractor will preserve all riparian and wetland vegetation for use in rehabilitation of those environments. This vegetation is to be kept moist at all times. It is to be placed in the shade and covered with moistened hessian cloth until replanting, which is to be undertaken immediately surface reinstatement is complete.

Plants are to be, as nearly as possible, replanted in areas from which they were removed.

F.6.4.4 VEGETATION RE-ESTABLISHMENT

The Contractor will ensure that all areas disturbed by contract activities are revegetated to the specified standard.

This standard is deemed to be an 85 % cover with no areas in excess of 0.04 m² / m² remaining unvegetated. Revegetation shall match the vegetation type which previously existed (e.g. kikuyu pastures are to be returned to kikuyu pasture; veld' grass to 'veld' grass, etc.), unless stated otherwise in the project specification.

Prior to re-grassing, and if required:

- the area is to be scarified or ripped (along contour) to a depth of 50mm to loosen compaction.
- weeds present on site are to be removed.

Re-grassing, where required, will be either by means of seeding, instant turf (sods), sprigs or plugs as specified in the project specification or as specified by the ECO.

Where sprigs or plugs are utilised, they are to be planted at 200mm centres. The fertiliser shall be applied as per F.6.4 5.2. During summer, 25mm of irrigation shall be applied each week until reasonable (60%) ground cover has been obtained. During winter 15mm of irrigation shall be applied each week until reasonable (60%) ground cover has been obtained. The amount of irrigation to be applied will make up the difference between rainfall recorded on site and minimum requirement.

Where instant turf is utilised, it shall be laid as specified in the project specification. The fertiliser shall be applied as per F.6.4 5.2. During summer, 25mm of irrigation shall be applied each week until all the turf is visibly growing. During winter 15mm of irrigation shall be applied each week until all the turf is visibly growing. The amount of irrigation to be applied will make up the difference between rainfall recorded on site and minimum requirement.

Grassing shall be undertaken by a specialist grassing Sub-Contractor, unless permission is granted otherwise by the Engineer upon receipt of a written motivation from the Contractor.

The Contractor shall state in writing when the regassing operation will commence and its expected duration (dates).

Grassing in 'veld' areas is to be undertaken as per F.6.4 5 below. Cynodon dactylon species may be excluded or substituted from this mixture at the discretion of the Environmental Control Officer, or as specified in the project specification. The seed bulk may be made up with the Eragrostis tef.

F.6.4.5 "VELD GRASS" GRASSING SPECIFICATION

The area to be grassed should be estimated and converted to hectares, e.g. 100m X 100m = 10 000m² = 1ha. All fertilizer and seeding rates used in this specification are with respect to hectares.

F.6.4.5.1 Regional areas

For re-grassing three distinctive areas exist. These are defined as:

- the Coastal area (a narrow band running from the coast to ≈15km inland of the coast)
- the Coastal hinterland (a broad band (≈50km wide), generally defined as westwards of the coastal belt, and below 800m a.s.l.)
- the area above ≈ 800m a.s.l. (also called Midlands area).

F.6.4.5.2 Fertiliser

Standard 2:3:2 (N:P:K) fertiliser shall be used on all sites.

The rate of application will be:

- 200 kg/ha in the Coastal Hinterland areas, and
- 300 kg/ha in the Midlands and Coastal areas.

F.6.4.5.3 Planting times

Summer (includes Spring) is considered to be between the 1 September and 28 (29) February.

Winter (includes Autumn) is considered to be between 1 March and 31 August.

Re-grassing will be undertaken (as far as possible) in summer as germination and establishment of grasses is most effective, assuming reasonable spring rains.

Vegetation re-establishment is likely in many cases to be held off until this suitable growing season.

Hydroseeding with a winter mix will only be specified where regrassing is urgently required and cannot wait until the summer season. In this case irrigation will be required as per F.6.4 5.4 below.

F.6.4.5.4 Establishment and maintenance

During summer, 25mm of irrigation shall be applied each week until reasonable (60%) ground cover has been obtained.

During winter (where annual rye grass is specified) 15mm of irrigation shall be applied each week until reasonable (60%) ground cover has been obtained.

If rapid establishment is required, additional watering may be necessary as specified in the project specification

The amount of irrigation to be applied will make up the difference between rainfall recorded on site and the minimum requirement.

F.6.4.5.5 Grass Seed Selection and Application Rates

The specific seed selection and application rates for each of the defined areas are covered separately, as follows.

F.6.4.5.5.1 Coastal area

Summer mix (1 September - 28 February)

Grass species	Common name	General application rate (kg/ha)
Eragrostis tef	Teff	5
Eragrostis curvula	Weeping lovegrass	10
Chloris gayana	Rhodes grass	10
Digitaria eriantha	Smuts' fingergrass	5
Total		30

Winter mix (1 March - 31 August)

Grass species	Common name	General application rate (kg/ha)
Lolium multiflorum cultivar - Midmar	Annual/Italian rye grass	10
Eragrostis curvula	Weeping lovegrass	10
Chloris gayana	Rhodes grass	5
Total		25

F.6.4.5.5.2 Coastal hinterland.

Summer mix (1 September - 28 February)

Grass species	Common name	General application rate (kg/ha)
Eragrostis tef	Teff	5
Eragrostis curvula	Weeping lovegrass	10
Chloris gayana	Rhodes grass	10
Cenchrus ciliaris	Blue buffalo grass	2
Cynodon dactylon	Couch/KWeek/Star grass	10
Total		37

Winter mix (1 March - 31 August)

Grass species	Common name	General application rate (kg/ha)
Lolium multiflorum cultivar – Midmar	Annual/Italian rye grass	10
Eragrostis curvula	Weeping lovegrass	10
Chloris gayana	Rhodes grass	5
Cenchrus ciliaris	Blue buffalo grass	2
Cynodon dactylon	Couch/KWeek/Star grass	3
Total		30

F.6.4.5.5.3 Midlands area

Summer mix (1 September - 28 February)

Grass species	Common name	General application rate (kg/ha)
Eragrostis tef	Teff	4
Eragrostis curvula	Weeping lovegrass	10
Chloris gayana	Rhodes grass	10
Digitaria eriantha	Smuts' fingergrass	2
Cynodon dactylon	Couch/KWeek/Star grass	2
Paspalum notatum	Lawn paspalum	2
Total		30

Winter mix (1 March - 31 August)

Grass species	Common name	General application rate (kg/ha)
Lolium multiflorum cultivar - Midmar	Annual/Italian rye grass	10
Eragrostis curvula	Weeping lovegrass	10
Chloris gayana	Rhodes grass	5
Paspalum notatum	Lawn paspalum	2.5
Total		27.5

F.6.4.5.6 Seeding methods

Two methods are recommended, namely hydroseeding and hand-broadcasting. The required method shall be as specified in the project specification.

All seed supplied should be labelled in accordance with the Government Seed Act No. 20 of 1961 and the Contractor shall be required to produce such certification, if requested by the Engineer.

F.6.4.5.6.1 Hydroseeding

The Grassing Contractor shall be conversant with this method.

Cellulose pulp (consisting of either wood shavings, shredded straw, shredded paper or cotton waste) shall be added to the mix to be applied at a rate of 250 kg/ha.

In addition to the cellulose pulp, compost (consisting of either chicken litter, kraal manure, sugar cane filter cake or mushroom compost) shall be incorporated at a rate of 5m³/ha (≈100 X 50kg fertiliser bags/ha).

F.6.4.5.6.2 Hand-broadcasting

Fertiliser, at the appropriate rate, is to be distributed by hand in a manner to ensure that there is an even spread of fertiliser over the site. This is to be done prior to seeding.

The seed mix is to be weighed and made up in an appropriately large container which shall be stirred to ensure no settling out of the grass seed, and a uniform distribution of the different types of seed.

The seed is to be distributed by hand in a regular grid broadcasting manner to ensure that there is an even spread of grass over the entire site.

The area seeded is to be raked over once the seed and fertiliser have been applied to incorporate these elements into the topsoil.

F.6.4.5.7 General

Where there is a possibility of neighbourhood livestock grazing a rehabilitated site these should, as far as is practicable, be excluded for the first 3 months of re-grassing.

F.6.4.6 LANDSCAPING

Landscaping of the site may be required as indicated in the project specification.

Compensatory planting of trees or shrubs may be required should the transplantation of such not be successful in terms of F.6.3 5.5 or due to plants removed in terms of F.6.3 5.4

Planting of trees will be in accordance with the following method:

- All tree holes shall be square in plan;
- Tree holes shall be a minimum of 600mm by 600mm square by 700mm deep;
- Holes are to be backfilled with excavated soil in a ratio of 3:1 with compost. The compost is to be weed free and have been composted at temperatures in the order of 65°C. Where possible, any available topsoil should be placed in the hole at the level where the tree rootball will rest. A handful (half-a-cup) of each Superphosphate and 2.3.2 should be mixed into the soil-compost mix;
- The tree holes are to be backfilled to the point where the tree and its rootball are in the desired position. The tree is to be removed temporarily and the hole filled with water and allowed to drain away. This operation of watering and draining should be repeated at least four times in order that the surrounding ground and hole are thoroughly moist. The tree is then to be replaced and the remaining soil replaced;
- All trees shall be tied (using a tree tie) to a suitable timber stake planted in the ground to a depth of at least 500mm. The stake shall have a minimum diameter of 35mm and shall be at least 300mm higher than the planted tree;
- Water retaining basins of at least 500mm diameters are to be formed around each tree;
- The Contractor is to apply at least 10 litres of water per tree per fortnight for a period of at least 3 months.

The planting of shrubs will be in accordance with the tree planting method with the exception that the holes are to be a minimum of 400mm by 400mm square by 500mm deep, and that the tree stakes and ties are not required.

F.6.4.7 ALIEN PLANT CONTROL

All sites disturbed by construction activities will be monitored for colonisation by invasive alien plant species.

The Environmental Control Officer will identify those plants which require removal during both the construction and maintenance period, for the Contractor's action.

The Environmental Control Officer will provide advice as to effective methods of removal and control of alien plant species.

PUBLIC COMPLAINTS REGISTER

DATE	COMPLAINANTS NAME	DESIGNATION/ AFFILIATION	REASON FOR COMPLAINT	ACTION TAKEN	ACTION BY	ACTION BY DATE	ACHIEVED BY DATE	DATE REFERRED TO NW environmental control officer

MONITORING OF COMPLIANCE WITH ENVIRONMENTAL SPECIFICATIONS

PROJECT NAME:

.....

CONTRACT NUMBER:

.....

PROJECT MANAGER:

.....

ENGINEER'S REPRESENTATIVE / SUPERVISOR:

.....

CONTRACTOR:

.....

CONTRACT PERIOD:

.....

(including start and completion dates):

PERIOD COVERED:

.....

REPORT PREPARED BY:

.....

Signature

DATE OF SITE INSPECTIONS DURING REPORTING PERIOD:

**F.7 PARTICULAR SPECIFICATION PE- THE CLIENT'S PRE-
CONSTRUCTION AND HEALTH PLAN**

PE1. INTRODUCTION

PE1.1 Purpose and Scope

This document describes the procedure upon which the Contractor shall comply with the requirements set out in the client's Health and Safety Specification.

This document defines the Management System that is implemented by the Contractor for the management of Health and Safety on the project, which includes ensuring subcontractor compliance with the same standards.

The aim of this document is to present the safety aspects that will be controlled and managed on the project.

(a) Reference Documents

- Occupational Health and Safety Act, (Act No. 85 of 1993)
- Compensation for Occupational Injury and Diseases Act.
- Client Health and Safety Specification.
- Construction Regulations 2003.
- The Construction Kit. (CD)

PE1.2 Definitions

The following definitions will apply to the Safety Management Plan, acronyms given hereunder shall apply:

Construction / Building Work (as defined by the Occupational Health and Safety Act: Construction Regulations 2003):

Means any work in connection with –

- a) The erection, maintenance, alteration, renovation, repair, demolition or dismantling of or an addition to a building or any similar structure;
- b) The installation, erection, dismantling or maintenance of a fixed plant where such work includes the risk of a person falling;
- c) The construction, maintenance, demolition or dismantling of any bridge, dam, canal, road, railway, runway, sewer or water reticulation system or any similar civil Employer's Agenting structure; or
- d) The moving of earth, clearing of land or making of an excavation or work on any similar type of work.

Hazard Identification and Risk Assessment and Risk Control (HRA)

Means a documented plan, which identifies hazards, assesses the risks and detailing the control measures and safe working procedures, which are to be used to mitigate and control the occurrence of hazards and risks during construction or operation phases.

Site

Means the area in the possession of the Contractor for the construction of the works. Where there is no demarcated boundary it will include all adjacent areas, which are reasonably required for the activities for the Contractor and approved for such use by the Employer's Agent and/or client.

The Act

Means, unless the context indicates otherwise, the Occupational Health and Safety Act, 1993 (ACT N°. 85 of 1993) and Regulations promulgated there under. (OHSA)

Hazard

Means a source of or exposure to danger (source which may cause injury or damage to persons, or property)

Risk

Means the probability or likelihood that a hazard can result in injury or damage.

Contractor's Responsible Person (S)

Means any person appointed in writing by the Contractor to supervise construction or building work. The appointment shall be as required by the OHSA which shall stipulate health and safety responsibilities, area of responsibility and the proposed duration of the project.

Hazardous Chemical Substance (HCS)

Means any toxic, harmful, corrosive, irritant or asphyxiant substance, or a mixture or substances for which an occupational exposure limit is prescribed, or an occupational exposure limit is not prescribed, but which creates a hazard to health.

Construction Plant (TEM)

Encompasses all types of plant including but not limiting to, cranes, piling frames, boring machines, excavators, dewatering equipment and road vehicles with or without lifting equipment.

Contractor

Means "subcontractor".

Health and Safety Program

Encompasses The Contractor safety planning spreadsheet.

Health and Safety Plan (HSP)

The content of this document which will be made available on site for inspection by an inspector, Technical Officer, Agent, subcontractor, employee, registered employee organisation, health and safety representative, or member of the health and safety committee.

Health and Safety File

Describes the safety file holding all records on health and safety for the project, which shall be available at all, times for evaluation, and copy of which will be forwarded to the client upon completion of the project.

PE1.3 Responsibilities

(a) Notification of Intention to Commence Construction Work

The Provincial Director of the Department of Labour shall be notified by the appointed safety consultant to the Contractor, immediately upon receipt of the Letter of Acceptance of project commencement in accordance with the following requirements:

The demolition of a structure exceeding a height of 3 meters; or
The use of explosives to perform construction work; or
The dismantling of fixed plant at a height greater than 3 meters; or
The work exceeds 30 days or will involve more than 300 person days of construction work; and
Includes excavation work deeper than 1 meter; or
Includes working at a height greater than 3 meters above ground or a landing.

A copy of the notification letter to the Provincial Director shall be forwarded to client for their records and shall be made available to an Inspector, Project Employer's Agent or employee.

(b) Assignment of Contractor's Responsible Persons to Supervise Health and Safety on Site

The Contracts Manager and Site Agent shall ensure copies of all the appointment letters of the responsible persons appointed on site will be made available to the client and that all legal appointments shall be conducted in accordance with the requirements set out in the **OHSA** and Client specifications. The above shall also be imposed upon all subcontractors.

(c) Safety Officer Appointment

A part-time Health and Safety consultant shall be appointed upon commencement of the project.

The safety officers shall be tasked with monthly inspections of the site, the results of which shall be forwarded to the client or his appointed representative.

(d) Risk Assessment Competent Person

The Project Manager shall appoint a competent person in writing at commencement of the project to control the risk assessment process on site. A copy of the risk assessment appointment is attached with duties and responsibilities defined. **(Annexure E)**

(e) Competency for Contractor's Responsible Persons

The Project Manager acknowledges that all management personnel (responsible for health and safety) shall undergo a half-day Health and Safety Management Course, which is to be arranged and conducted by the appointed safety consultant prior to commencement of activities on site.

(f) Health and Safety Representatives

At least one (1) Health and Safety Representative shall be nominated, elected and trained to carry out his / her functions in his / her area of responsibility. This will include areas where less than fifty (50) employees are engaged in activity. Employees elected shall be designated in writing for a specific area and period of time.

The designated persons shall conduct monthly inspections within their area of responsibility, the records shall be kept for auditing and that deviations recorded are reported to the responsible supervisor within the designated persons area so that appropriate action can be taken.

The designated person/s shall be permitted to participate in the Health and Safety Committee Meetings.

PE1.4 Objectives And Targets

- Compliance with the Contractor Health and Safety Policy.
- Everyone is responsible for organising accident prevention at his or her own level on site.
- Safety training is important.
- Prevention.
- Working safely ensures your job.
- The Contractor management commits itself to the objectives and targets.
- Disabling Injury Frequency Rate (DIFR) of 2.0 or less.
- 90% compliance on monthly Health and Safety Audits.
- Compliance with the legal requirements set out in the Occupational Health and Safety Act, Act 85 of 1993, (OHSA) and Regulations.

-
- Compliance with the Client's Safety Specification for Construction.

PE1.5 Planning And Procedure

The procedures to be used for the project are to be in accordance with the Safety Manual in use in the Contractor under the guidance of the appointed safety consultant. The sub-headings covered under the Safety Manual are as follows:

- Administration
- Appointments
- Safety Committees
- Registers, checklists and permits
- Incident Management
- Emergency Planning
- Contractors
- Risk Assessments
- Audits
- Hazardous substance control
- Training
- Mining Requirements
- Roads Requirements
- Planning

PE 1.6 Implementation Of The Occupational Health And Safety Specification

The Contractor is committed to implementing client specific safety specification on the project and is committed see that this forms an integral part of the project. It is our intention to make this specification part of other Contractors and Suppliers operating procedures.

PE1. 7 Application of the Health and Safety Specification

(a) Compensation of Occupational Injuries and Diseases Act, Act No. 130 of 1993 (COIDA)

The letter of good standing will be available on site for reference purposes as proof of good standing.

The Contractor shall ensure all Sub-Contractors also comply with the above requirements defined in the COIDA.

(b) Occupational Health and Safety Policy

The COMPANY Health and Safety Policy is attached for reference purposes. **(Annexure A)**

(c) Hazard Identification Risk Assessment

The Contract Manager shall ensure the Site Agent shall prior to the commencement of any construction work perform Hazard Identification, and the assessed risks shall form part of the health and safety plan applied on site.

A copy of the HRA shall be made available for viewing to the client.

The Site Agent shall ensure that all HRA's conducted will be conveyed to all personnel and contractors through the site training program and that these training sessions will be presented by the competent person regarding the hazard and related work procedures before any work commences.

The HRA Team that will be established will comprise members as follows:

Health and Safety Representative(s),
Health and Safety Committee Member(s)
Management Representative / Site Agent

Attached in the form of **Annexure C and D**, the Hazardous Task Identification and (HTI) and format of the Risk Assessment (RA) is included.

Method statements form part of the Risk Process and will be conducted in accordance with the Risk Process described above.

Based on the activities carried out on all projects Hazard Investigation and Risk Assessments (HRA's) will be done. Examples of which are:

- Site Establishment
- Demolition works
- Excavation
- Concrete works
- Lifting operations
- Hand held tools
- Motorised Equipment

(d) Health and Safety Committee

The Project shall convene a health and safety committee meeting monthly. All members required to be in attendance shall be notified of such meeting by means of a formal agenda.

The Site Agent shall ensure an attendance register and minutes are kept for auditing purposes, and that a copy of the minutes be circulated to all members in attendance well before convening the next meeting and within 7 days, a copy of the minutes will be forwarded to the project Employer's Agent.

Members of the committee shall include the following and are not limited to:

- Safety Consultant. (When available)
- Contractor's site representative. (Supervisory level)
- Contractor's site representatives. (Operating level)
- Project Employer's Agent nominated representative. (Co-opted status)

(e) Health and Safety Training

Training of personnel is a legal requirement and a necessity and is acknowledged as such. The Training Planning Matrix shall be provided upon request.

Induction Training

Induction training shall be attended with the Client as well as the Contractor Induction program requirements and records of attendance kept to prove the same.

The Contractor Induction format is attached for reference purposes. **(Annexure E)**

Awareness Training

Weekly awareness training shall be conducted using the Contractor Toolbox Talk documents, which shall be conducted by the site supervisors. **(Annexure F)**

Competency

Training identified through the Risk Assessment Process and conducted through this process shall be kept on file as proof of competency and training. (This may include operators)

First Aid and Health & Safety Representative Training

All safety representatives elected and designated, including first aiders, shall be trained should they not already be in possession of a valid certificate of training proving competence.

(f) General Record Keeping

The Site Agent shall ensure that all the Health and Safety records, required by both the Occupational Health and Safety Act, 85 of 1993 and Regulations are kept for reference purposes and auditing.

Further to the requirements set out above, the Site Agent will also maintain records that may be defined through the risk assessment process, for auditing purposes.

In accordance with the requirements set out in the Construction Regulations 2003 and the requirement set out in Client Specification the Site Agent shall ensure that a copy of all Health and Safety records generated during the course of construction, be handed over to the Project Employer's Agent upon completion of construction.

Statistics

The Site Agent shall ensure injury and incident records (Near Hits, First Aid, Medical cases, Disabling Lost Time Incidents), training etc. referred to above are kept on site. All documents shall be made available to the client for inspection including the Department of Labour's Inspectors as required by the Occupational Health and Safety Act, 85 of 1993.

The statistics formula as listed below shall be adhered to.

DIFR (Disabling Injury Frequency Rate) DI's x 1 000 000

Man-hours

DISR (Disabling Injury Severity Rate) Days Lost x 1 000

Manhours

General Inspection, Monitoring and Reporting

The Contractor shall comply with the requirements set out by the client. We have attached a safety management plan upon which the dates of inspections and training and awareness will be entered, conducted and monitored.

The Contractor shall keep all records of inspections and investigations undertaken during the contract for the specified legal period as defined in the OHSA and Regulations.

Internal Audits

Internal audits shall be conducted a minimum once per month by the project Employer's Agent, as well as the appointed safety consultant.

The Results shall be tabled and discussed at the Health and Safety Committee meetings.

The Audits to be conducted by the appointed safety consultant shall be conducted on the audit schedule attached as per **Annexure G**.

Records of the audits shall be forwarded to the Project Employer's Agent and shall be filed on site for reference purposes.

Incentives

No incentive scheme is being identified unless required by the client.

Penalties

Non-compliance with the client safety specifications can result in work stoppages and possible expulsion from site until the problem has been remedied including costs.

(g) Emergency Procedures

The Site Agent shall make available to the Project Employer's Agent a detailed Emergency Plan to tie into the evacuation plan already in place on the client's premises.

First Aid Box and Contents

The Site Agent shall ensure that all working areas are adequately provided with first aid attendants whether there are fifty (50) employees or less engaged on the contract. The First Aid attendant shall be trained in accordance with the requirements set out in the OHSA with recognised and accredited service providers as defined above.

Proof of training attended (certificate) shall be attached to the written acceptance of appointment. It will be the first aid attendant's responsibility to ensure the contents of the first aid boxes are monitored and inspections recorded on the contents of the first aid box register.

The first aid box shall be adequately stocked by The Contractor at all times and will be accessible to all.

Accident and Incident Reporting and Investigation

Should accident investigation need to be conducted, the Project Manager shall appoint a competent person in writing to conduct the said investigation. The procedure to be followed will be in accordance with the OHSA requirement on the Annexure 1 – Recording and Investigation of Incident form.

The Site Agent shall ensure that the results of all investigations are communicated to the employees engaged through incident recall and prescribed meetings. The Site Agent shall ensure that the investigations are kept for record purposes in accordance with the prescribed requirements set out in the OHSA and the Contractor specific procedures.

Should there be an incident, the Project Employer's Agent shall be notified within 48-hours if required by the client, of the occurrence. It is acknowledged that the client reserves the right to participate in all investigations into accidents or incidents.

Hazards and Potentially Hazardous Situations

The Site Agent shall ensure that all other contractors or contractors are warned of hazardous or potentially hazardous situations, which may prevent them from effectively performing their duties, which includes the placement of adequate warning signs.

Personal Protective Equipment and Clothing

The Contractor shall comply with OHSA requirements to provide PPE.

The Site Agent shall through the Risk Assessment process identify the specific PPE needs per activity and then issue the PPE accordingly. (Reference to the OHSA General Safety Regulation 2 – Employer to provide Personal Protective Equipment)

Should PPE be lost or stolen, then the employee will be issued with a new set of PPE.

Should PPE be worn out or damaged, the user shall return the worn or damaged PPE and will be issued with a replacement set. Training in the use of this shall be provided.

Overalls and hardhats shall be identifiable. (Principal Contractor different from the contractors)

PPE shall be provided to visitors as well.

Safety Signage

The Site Agent in conjunction with the appointed safety consultant shall assess the Health and Safety Signage requirement in conjunction with the Risk Assessments conducted and will place the signage at strategic positions on the site works.

The Contractor shall also maintain the signage to ensure its effectiveness at all times and under all conditions. Signage, which cannot be repaired, shall be replaced.

Permits

The Contractor shall ensure that access to site works is restricted to construction personnel.

All attempts will be made to restrict spectator access.

Access to the site shall be by the Project Employer's Agents (Clients) authorisation on the prescribed form. (Permits and ID cards shall be issued by the client)

Special permits for hot work and isolation permits shall be applied for to the Project Employer's Agent prior to commencing with the activity.

Contractors and Suppliers

The Site Agent shall enter into an Agreement with Mandatary in terms of Section 37(2) of the Occupational Health and Safety Act, 85 of 1993, with all contractors appointed by The Contractor is entered into.

The Contracts Manager will ensure the contractors are issued with the Client Safety Specification where reasonably practicable including any the contractor pack for the project, should they not be contained in the Client Safety Specification.

The Contractor shall assist and ensure the Sub-Contractors engaged comply with all of these requirements and adhere to the requirements set out in the OHSA. Contractors will be stopped from working in the event of unsafe conditions and activities being observed.

All Sub-Contractors shall be covered by the Contractor Safety Plan and will be issued the same.

(h) Health and Safety in Practice

Excavations

The Site Agent shall ensure that all activities involving excavations, shoring, dewatering or drainage, a safe working procedure is submitted to the project Employer's Agent for approval prior to work commencing. Excavation work exceeding the specified depth as stipulated in the OHSA regulations, shall comply with the following requirements:

- a) The excavations are inspected before the shift starts, after heavy rain (inclement weather) and after any major condition which may effect the excavations stability and the findings are to be recorded and kept;
- b) All excavations regardless of the depth shall be adequately barricaded to prevent persons falling into the excavation;
- c) The safe working procedure shall be communicated to all employees who may be effected by the work; and
- d) The safe working procedures shall be enforced and maintained by the appointed excavation supervisor at all times.
- e) For high-risk activities, all personnel working in the excavation shall be attached by means of a lifeline.
- f) Material excavated shall be removed from the point of excavation.
- g) Ensure stability of adjoining structures.

Demolition

No demolition work is being envisaged on this project.

Explosives and Blasting

No blasting activities are envisaged on this project.

Stacking of Materials and Housekeeping

The Site Agent shall ensure that all stacking will be supervised by a person competent to supervise over the activities, and that clearly defined and allocated storage areas are provided for and identified, and that materials being stored within this area are stacked in accordance with sound stacking principles of sort-by-sort, access to be maintained, level surface, and the height will not exceed three times the base width.

Housekeeping shall be maintained in accordance with the client requirements at all times.

(i) Hazardous Chemical Substances

The Site Agent shall ensure the necessary training and information regarding the use and storage of HCS is provided, and that the use and storage of HCS is carried out as prescribed by the HCS Regulations.

Furthermore, the Site Agent shall ensure that all chemicals brought to site have a Material Safety Data Sheet (MSDS) and the users are made aware of the Occupational hazards and precautions that need to be taken when using the chemical.

The First Aider shall be made aware of the MSDS and how to treat HCS incidents appropriately.

Access to all HCS records shall be afforded to the project Employer's Agent at all times.

Fuel / Diesel

Bulk storage areas shall be demarcated, secured and sign posted with the relevant warning pictograms.

Bulk storage areas shall be bunded.

Re-fuelling shall be conducted in designated re-fuelling areas only.

Spill-kits shall be available at all times in these designated areas.

The surface of the bunded areas and walls shall be of impermeable material.

The bunded area shall be sloped towards a collection pit.

Asbestos

No asbestos is to be used on this Project.

(j) Plant and Machinery

Construction Plant

All plant shall comply with the OHS Act requirements in relation to operation and maintenance thereof. Service and maintenance of the vehicles shall be of a high standard at all times.

All plant shall subject to design be fitted with back-up alarms and audible indicating devices.

The Contractor shall ensure that all construction plants moving parts are adequately protected.

Pre-start inspections shall be conducted on all motorised equipment daily, deviations of such inspections shall be recorded.

Construction plant identified for use shall be operated by a trained and authorised operator.

All construction plant shall be operated under the direct supervision of a person competent to identify potential hazards in the work he is conducting.

Work involving the use of construction plant shall be conducted in accordance with an approved Risk Assessment.

The Site Agent shall ensure all operators are equipped with the necessary PPE namely; safety shoes, overall, safety glasses, and gloves.

Plant shall be fitted with an extinguisher where practicable.

Washing shall be conducted in the designated washing areas.

The Contractor shall ensure the all equipment moving to and from site is adequately secured, and that all contractors abide by this requirement.

Transport of Personnel

Safe vehicular transport shall be provided for personnel working on the project to the workplace, which shall include proper seating, side restraints and cover.
No personnel shall be permitted to travel on any plant or equipment on the site works.
Road safety principles shall be adhered to on and off site.

Vessels under Pressure (VuP) or Gas Bottles

The Contractor shall ensure they comply at all times with the requirements of Vessels under Pressure Regulations, with specific reference to the following:

Ensuring all Equipment owned and hired-in Vessels under pressure, comply with the 36-month pressure vessel inspection, and a certificate of testing is available on site.
Ensuring that all personnel who shall use this equipment are competent and trained.
Ensuring the users of this equipment are issued with the required PPE.
Ensuring the area is adequately identified as a noise area and warnings are posted.
Ensuring daily pre-start inspections are carried out on all the equipment and the findings recorded.
Ensuring the correct fire prevention and fighting equipment is available at all times.
Noise levels where possible shall be kept within reasonable operating norms.

Fire Equipment

The Site Agent shall ensure the following all fire equipment to be used on site comply with the following:

Extinguishers shall be placed in positions to ensure fast and easy access is maintained at all times.
Placement of all extinguishers shall be depicted with the required pictograms.
Extinguishers shall be serviced once annually, and after discharge or visible signs of depressurisation.
The Site Agent shall ensure all employees are adequately trained in the safe use of the extinguishers.
The Site Agent shall ensure a person is appointed to inspect the extinguishers on a monthly basis and the results of which are to be entered into a register designed for that purpose.

Hired Plant and Machinery

The Site Agent shall ensure the following criteria is adhered to when considering hired plant and machinery:

Only approved hire companies shall supply equipment to the site.
Hired plant shall be checked for safety compliance prior to being accepted for use on site.
Should hired equipment be accompanied by an operator, The Contractor shall ensure that the operators competency be verified and the operator undergo an induction training session.
The Site Agent shall ensure the operators of hired plant attend weekly toolbox talks in conjunction with The Contractor site personnel.
The Site Agent shall ensure that all operators are equipped with the required PPE before commencing work on site.

(k) Scaffolding / Working at heights / Fall Protection

Work involving scaffolding and work at heights shall comply with the requirements set out in the Construction regulations 2003 pertaining to these activities with reference to the SABS 085 code of practice.

Fall protection planning shall be done in conjunction with the risk assessment process.

All scaffold shall be erected under the control of a person trained and appointed to conduct such scaffold erection.

Falsework / Formwork for Structures

Work involving scaffolding and work at heights shall comply with the requirements set out in the Construction regulations 2003 pertaining to these activities with reference to the SABS 085 code of practice.

Lifting Machinery and Tackle

The Site Agent shall ensure that the use of Lifting Machinery and Tackle is done in accordance with the requirements of the Regulations, which include but is not limited to the following:

Lifting machinery and tackle to be used on site shall be marked with the Maximum Mass Load (MML), which is the safe limit in which the equipment may be used.

Inspections on Lifting Machines and Lifting Tackle shall be inspected once per month on the register provided and the findings recorded.

Daily pre-start checks shall also be conducted on all Lifting Machinery and Tackle.

Records shall be kept of all lifting machinery and tackle inspections and Load Tests.

Load tests shall be conducted a minimum of once per annum, and a certificate of compliance shall be kept on record.

A valid logbook shall be maintained for all lifting machinery, which will comply with a minimum six-monthly service and maintenance.

Lifting machinery shall be operated under supervision at all times with a trained banksman who shall inspect all tackle before each lift.

All lifting equipment operators shall be trained once every two years and a copy of such training shall be attached to the appointment, which is to be made on site.

The Operators shall be tested for medical fitness.

Ladders and Ladder Work

The following requirements shall be complied with regarding Ladders and Ladder work:

Ladders shall be clearly numbered, and inspected on the register provided.

A competent person shall be identified and appointed as the ladder inspector.

Where aluminium ladders cannot be used, then wooden ladders shall be straight grained, unpainted to allow for proper inspection of the grain for cracking.

Ladders shall be secured at the top and chocked at the base to prevent slipping.

Where chocking of the base is not possible, then the user shall ensure that the ladder is held in position by another employee when ascending the ladder.

Ladders shall be inspected a minimum once per month by the person appointed as the ladder inspector.

Proper storage shall be provided for all ladders when not in use.

(l) General Machinery

In accordance with General Machinery Regulation 2(1), The Contractor shall:

Ensure a competent person be appointed as defined in the above clause from the Occupational Health and Safety Act, 85 of 1993 and Regulations, to service and maintain all machinery in use on site.

The Contractor shall appoint additional competent persons to assist the competent person mentioned above in accordance with General Machinery Regulation 2(7)(a), as and when required.

The Contractor shall ensure that records are maintained of all services conducted.

(m) Lighting and Power

The Site Agent shall ensure lighting circuits and power circuits are fitted with suitable earth leakage systems in accordance with the client, which will include the following activities:

Earth leakage system will be tested monthly.

Malfunctions shall be repaired immediately or replaced.

Lighting shall be so positioned as not to interfere with construction activities.

Portable Electrical Tools / Explosive Power Tools

The Site Agent shall ensure the following procedure is adhered to regarding Portable Electrical Tools and Explosive Powered tools:

Minimum compliance with legislation.

Only competent persons shall be permitted to conduct routine and monthly inspections on the equipment.

Persons competent to inspect the equipment shall be appointed in writing.

Persons who are trained to operate such equipment shall be appointed and shall be the only authorised person to operate the equipment.

The Site Agent shall ensure operation of the equipment is in accordance with the approved Risk Assessment and Safe Working Procedure set out.

All users shall undergo regular awareness training to ensure compliance.

The Site Agent shall ensure the required PPE and clothing is provided and maintained.

(n) Public Health and Safety

In the interests of public safety, The Contractor shall ensure that all persons who may be affected by the work being conducted on site are informed and kept aware of the dangers, which may arise from the work being conducted on site.

This awareness shall be in the form of posters and inductions for visitors to site and warning signs.

(o) Night Work

Night work shall only be conducted upon approval of the project Employer's Agent, with the same safety standard being applied for these activities as with day work activities.

Facilities for Safe Keeping / eating areas

The Contractor shall ensure that adequate facility is provided for the personnel on site. The area shall be provide the following:

- Sufficient seating;
- Seating under cover;
- Protected change room;
- Toilets.
- Hand wash facility.
- Potable water.

No food preparation shall be conducted on site and designated eating areas will be made to allow adequate seating.

Waste bins shall be strategically placed and cleared regularly.

ANNEXURE A (Safety Policy)

CONTRACTOR TO PROVIDE WITH HEALTH AND SAFETY FILE AS REQUIRED

ANNEXURE B (HTI)

HAZARDOUS TASK IDENTIFICATION (HTI)												
Ser no:	INFORMATION REQUIRED	DETAILS							SIGNATURE	Key Table		
1	Name of contract:									0=	NONE	
2	Date prepared:								1=	LOW		
3	Prepared by:								2=	MEDIUM		
4	Name of person approving:								3=	HIGH		
Risk Assessment (RA) Code	LIST OF ALL STANDARD TASKS	What is the future potential that this task can cause further....								Total Score	Rating	Doc Required
		Is it a new or unusual task?	Is it a dangerous task?	Personal injury	Health risk	Impact on the environment	Property damage	Fire	Has the task caused previous injury / loss?			
RA-1	Site clearing - manual labour & small tools	1	1	1	1	1	1	1	0	7	LOW RISK	MST
RA-2	Site clearing - using mechanical means									0	LOW RISK	MST
RA-3	Site establishment - FSM erection / dismantling									0	LOW RISK	MST
RA-4	Site establishment - Container store / office offload									0	LOW RISK	MST
RA-5	Excavations - using manual labour									0	LOW RISK	MST
RA-6	Excavations using motorised plan									0	LOW RISK	MST
RA-7	Excavations - working inside < 1.5 metres									0	LOW RISK	MST
RA-8	Excavations - working inside > 1.5 metres									0	LOW RISK	MST
RA-9	Batching plants - erection / dismantle									0	LOW RISK	MST
RA-10	Batching plants - general working and operation									0	LOW RISK	MST
RA-11	Concrete mixing - using manual labour									0	LOW RISK	MST
RA-12	Concrete mixing - using mechanical means									0	LOW RISK	MST
RA-13	Concrete pours - using lifting machinery (Cranes etc)									0	LOW RISK	MST
RA-14	Concrete pours - using motorised plant (dumpers etc)									0	LOW RISK	MST
RA-15	Concrete pours - using mechanical pump									0	LOW RISK	MST
RA-16	Lifting Equipment - Tower crane erection / dismantle									0	LOW RISK	MST
RA-17	Lifting Equipment - Tower crane operation									0	LOW RISK	MST
RA-18	Lifting Equipment - Mobile crane operation									0	LOW RISK	MST
RA-19	Lifting Equipment - Telescopic handler operation									0	LOW RISK	MST
RA-20	Lifting Equipment - Forklift operation									0	LOW RISK	MST
RA-21	Lifting Equipment - using lifting tackle									0	LOW RISK	MST
RA-22	Formwork - general erection / dismantling									0	LOW RISK	MST
RA-23	Formwork - lifting and placing large panels									0	LOW RISK	MST
RA-24	Formwork - work on support decks									0	LOW RISK	MST
RA-25	Scaffolding - erect / dismantle small scaffolds < 2 m									0	LOW RISK	MST
RA-26	Scaffolding - erect / dismantle large scaffolds > 2 m									0	LOW RISK	MST
RA-27	Scaffolding - use of mobile scaffolds									0	LOW RISK	MST
RA-28	Scaffolding - dismantling of scaffolding									0	LOW RISK	MST
RA-29	Demolition - using small electric breakers									0	LOW RISK	MST
RA-30	Demolition - using compressed air breakers									0	LOW RISK	MST
RA-31	Demolition - using motorised mechanical means									0	LOW RISK	MST
RA-31	Demolition - using explosives / blasting operations									0	LOW RISK	MST
RA-33	Trades - Brickwork operations									0	LOW RISK	MST
RA-34	Trades - Plastering operations									0	LOW RISK	MST
RA-35	Trades - Painting operations									0	LOW RISK	MST
RA-36	Trades - Ceiling operations									0	LOW RISK	MST
RA-37	Trades - Roofing installations									0	LOW RISK	MST
RA-38	Trades - glazing installations									0	LOW RISK	MST
RA-39	Trades - Tiling operations									0	LOW RISK	MST
RA-40	Trades - carpentry (Doors / windows)									0	LOW RISK	MST
RA-41	Trades - Metal work (Doors / windows)									0	LOW RISK	MST
RA-42	Trades - Steel erection									0	LOW RISK	MST
RA-43	Trades - plumbing									0	LOW RISK	MST



RISK ASSESSMENT													
TASK / ACTIVITY NAME:			AREA:										
Seq No	Task Steps	Risks identified	Probability			Severity		Frequency	Risk Score	Rating	SWP Required	Immediate Action Required	Safe Working Procedure
			A	B	C	D							
1			4	4	6	14	HIGH RISK	✓					
2			6	6	6	18	HIGH RISK	✓					
3			4	4	6	14	HIGH RISK	✓					
4													
5													
6													
7													
8													
9													
10													
11													
12													
13													
14													
15													
16													
17													
18													
19													
Methods Used to Minimise Risk			Most Critical Hazards				Control Methods				RA Committee		
Engineering Risk Out			☐	Fatigue	☐	PPE Selection	☐	Codes of Practice	☐	Name:	Sign:		
Use of Specialized PPE			☐	Speed	☐	PPE Issue Records	☐	Supervisory Controls	☐				
Introduce Specialized Controls			☐	Engine Failure	☐	Signs at Area of Use	☐	Training of Personnel	☐				
Training			☐		☐	Safety Talks	☐	Training Records	☐				
			☐		☐	Safe Work Procedures	☐		☐	Approved:	Sign:		
			☐		☐				☐				
			☐		☐				☐				

A		B		C		D	
Probability an accident may occur		Severity		Hazard Frequency		Risk Score / Criticality	
6	Inevitable	6	Fatal and Permanent Dis	6	Arises every shift	14 to 18	High Risk
4	Probable	4	DLTI (50 000 - 489 999)	4	Arises every week	8 to 13	Medium Risk
2	Highly improbable	2	Medical Case (10 000 - 49	2	Arises every month	0 to 7	Low risk
0	No injury / loss	0	First Aid Case	0	Arises every year		

Probability		Severity				Frequency	
6	18	6	4	2	0	6	0
6	18	6	4	2	0	6	0
4	16	4	4	2	0	4	4
2	10	2	4	2	0	2	2
0	6	0	4	2	0	0	0

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ANNEXURE D (Safety Induction)

SAFETY INDUCTION		
OHS Act 85 of 1993 Sections 8 & 14		
Requirements: Every employer is required to take all reasonable measures to ensure that the requirements of the OHS Act, and regulations are observed. The general duties of employees are to carry out lawful instructions and to obey the Company's safety rules and procedures prepared in accordance with the provisions of the Act and Regulations. For this process to begin and to be formalized it is necessary for all employees to be formally inducted into the safety procedures and the completion thereof, formally acknowledged by both employer and employee.		
ITEM COVERED	DONE YES/NO	REMARKS
Explain Company Policy / Site Safety Rules Provide copies of same		
Explain Section 14 of the Act		
Explain the use of Personal protective Equipment and procedures. Re: Issuing and maintenance		
Explain the meaning of symbolic signs		
Explain the procedure in the event of injury		
Explain the use of facilities and toilets		
Explain the danger of moving machinery. (DUMPER, MIXER, SKILLSAW, GRINDER Etc.)		
Explain the danger of hazardous substances (PETROL, DIESEL, OIL, GAS, PAINT Etc.)		
Explain specific Job Duties and Requirements		
Introduce : Supervisor, safety Representatives, First Aider		
<i>This confirms that the above named acknowledges that he/she has been instructed in the safety items listed above and has received the necessary protective clothing / equipment to use in the performance of his/her work.</i>		
<u>INDUCTION OFFICER / TRAINER</u>		
Signature	Designation	Date
<u>ACCEPTANCE</u>		
I, _____ hereby acknowledge receipt of and accept and understand the requirements of this induction.		
Signature	Designation	Date
		

ANNEXURE E (Toolbox talks)

TOOLBOX TALKS			
TALK NO:	16	DATE:	
TALK TOPIC:	LIFTING MATERIALS BY HAND	SITE:	
TALK PRESENTED BY:			
   Lift correctly			
<u>TALK CONTENT / DISCUSSION</u>			
HOW DO I LIFT EQUIPMENT SAFELY WITHOUT INJURING MY BACK? 1. Stoop and bend the knees. 2. Keep your back straight. 3. Lift using the leg muscles. 4. Push upward with the load. 5. If the load is on a table, slide the load to the edge until you can get a firm grip under the load, and then proceed to lift as above. 6. If the load requires two or more persons to lift, then ensure the load is lifted on one side first and then the other, Ensure someone gives the command to lift so the lift occurs simultaneously. 7. Where it is practical to use a trolley, do so as it will safe guard against unnecessary injury.			
ATTENDANCE			
NAME:	SIGN:	NAME:	SIGN:

ANNEXURE F (Audit Schedule)

**PROJECT SPECIFIC OCCUPATIONAL HEALTH AND SAFETY
SPECIFICATION**

FOR

COVID-19 SITE CONDITIONS

MANAGED ON BEHALF OF

**RAY NKONYENI MUNICIPALITY
(THE “EMPLOYER”)**

KEY ROLE PLAYERS

EMPLOYER

Principal Agent:

Civil Engineer

Environmental Control Officer

Health and Safety Agent

PRINCIPAL CONTRACTOR

Contracts Manager

Site Agent

H&S Officer

Other:

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ANNEXURES

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1. LIST OF ABBREVIATIONS

BRA	Baseline Risk Assessments
BEPs	Built Environment Professionals
BoQ	Bill of Quantities
PSHSS	Project Specific Health and Safety Specifications
COIDA	Compensation of Injuries and Diseases Act
CR	Construction Regulations
DEL	Department of Employment and Labour
H&S	Health and Safety
OHS	Occupational Health and Safety Act No. 85 of 1993 (as amended)
PPE	Personal Protective Equipment
PC	Principal Contractors
SSHSS	Site Specific H&S Specification

2. DEFINITIONS

The Employer: The Ray Nkonyeni Municipality

The Act: Means, unless the context indicates otherwise, the Occupational Health and Safety Act, No. 85 of 1993 and Regulations promulgated thereunder, as amended

COVID-19: Means, the Novel Coronavirus (2019-n Cov2) which is an infectious disease caused by a virus that has previously not been scientifically identified in humans which emerged in 2019 and was declared a global pandemic by WHO in 2020

WHO: Means, The World Health Organisation

3. KEY REFERENCES

The following key references apply to the specifications:

- Occupational Health and Safety Act No. 85 of 1993 and Regulations (as amended)
- Government Gazette No. 43257 dated 29 April 2020 titled COVID-19 Occupational Health and Safety Measures in Workplaces COVID-19 (C19 OHS), 2020
- Regulation 10 (8) of the Regulations issued in Terms of Section 27 (2) of The Disaster Management Act, 2002 (ACT No. 57 of 2002).
- The Disaster Management Act, 2002 (Act No. 57 of 2002), as amended

4. INTRODUCTION

The recent Regulations promulgated under the National Disaster Management Act, and the lockdown of 26 March 2020 have closed all construction projects except for those involved with essential infrastructure services and emergency facility preparedness. The Covid-19 pandemic has catapulted the role of health and safety (H&S) into the forefront of all activities. Going forward as the lockdown is slowly lifted, the construction industry will be required to focus as never before to protect the vulnerable who are often at the forefront of any project.

Construction projects range in size and complexity, occur in rural communities and cities, where the population is dense, or there is very little activity. Irrespective of the nature of the work, workers remain exposed to the typical risks and hazards that are typical of construction. Working at heights, confined spaces, breaking, cutting and grinding to name a few. High levels of hard physical labour and long hours of work are typical, over and above the risk of contracting Covid-19. As such the Occupational Health and Safety Act No 85 of 1993 and its Regulations require to be complied with. More specifically, the Construction Regulations of 2014 remain applicable and must be adhered to in order to protect the workers.

The Construction Regulations are very specific regarding the roles of stakeholders, namely the employer, designers and contractors. Each of these categories have very specific roles and responsibilities and cover both the built environment professionals (BEPs) and contractors. Each have roles in terms of H&S as per the existing arrangements over and above their contractual and monitoring duties on a project.

This H&S specification is based on Annexure 2 (Guideline for the Construction Sector Relating to Health and Safety and COVID-19) of the Construction Sector Reactivation Protocols prepared by the Construction COVID-19 Rapid Response Task Team and dated 26 April 2020.

4.1 PURPOSE

The purpose of this specifications is to specifically manage the operations of Construction work projects during the confirmed 2020 Covid-19 Novel Corona Virus to ensure that employees are well informed and equipped to take all possible measures to prevent the spread and contain the virus as far as possible and reasonably practicable when performing their duties on site.

4.2 IMPLEMENTATION OF THE PROJECT SPECIFIC COVID-19 OCCUPATIONAL HEALTH AND SAFETY SPECIFICATIONS

These H&S specifications will form an integral part of the Contract and are in addition to Project Specific Health and Safety Specifications (PSHSS) already in place and included at tender stage. Where there is conflict of interpretation between the specifications, the Covid-19 specifications shall take precedence.

No work may commence without written approval of the revised H&S plan by the H&S Agent, or the responsible person in the MISA. Subsequent to approval, the contractor's activities on site will be monitored through regular H&S audits and Non-conformances will be issued and penalties or work stoppage will be issued where appropriate.

4.2.1 Roles And Responsibilities of Health and Safety Officers

The PC's Health and Safety Officer (HSO) will be required to undertake the following amongst other activities:

- HSO officers will ensure that they carry out the COVID 19 awareness and ensure that all employees receive the message and understand what to do and how to do it. The training awareness will include training of Security officers on what to do when receiving employees to the premises.
- HSO officers must ensure that before letting any employees inside the premises/site camp, they issue them with face masks and sanitise their hands before passing through the gate.
- Screening questionnaire will be completed before employees can be allowed to gain access to the premises.
- The Employer specifications and requirements will be implemented accordingly.
- Ensure hand sanitizer and hand soap is available at all times and issued to all including training on proper usage.
- Undertake employee awareness campaigns on how the virus is spread from one person to another and also train them on how to prevent the spreading of the virus.
- Conduct regular toolbox talks to ensure that employees are always reminded of correct behaviour and handling of PPE provided.
- Ensure that employees who are suspected to have the symptoms are isolated immediately and the Department of Health immediately notified of such. While waiting the HSO officer must ensure that the isolated victim is entirely kept away from other employees, this will help to lessen to spread the virus.

5. BASELINE RISK ASSESSMENT

5.1 SUMMARY OF RISKS IDENTIFIED DURING DESIGN AND IMPLEMENTATION

The existing Baseline Risk Assessment (BRA) will require to be amended to take into account risks related to the potential spread of the Covid-19 virus. A typical risk assessment schedule is provided in ANNEXURE A for use by the Contractor.

Examples of risk factors include but are not limited to the following:

- Lack of financial resources by Employer;
- Employer not enforcing financial resources for projects;
- Transportation, to, from and on sites;
- Manual labour for physical tasks and tasks that will not allow for social distancing;
- Workers arriving at work with a temperature or other symptoms of Covid-19;
- Management of isolating potentially infected workers, and tracing of family/contacts;
- The lack of clean ablution facilities;
- The lack of clean welfare facilities where workers congregate for lunch break;
- Lack of cleaning and hand washing facilities;
- Confined working areas;
- Too few emergency supplies, first aiders and first aid boxes;
- Sanitization of frequently used environments throughout the working day;
- The need to continually monitor site activities;
- Underlying chronic diseases and age of workers (experienced workers);
- Specialised contractors having older workers, or need to cross borders, and
- Rural projects, or small/private projects ignoring the current legislation.

5.2 RE- INTRODUCTION TO THE WORK PLACE AFTER LOCKDOWN

Employees returning to the first day of work after the lockdown to answer a wellness questionnaire with the HSO at the entrance to the main building or site camp. Upon successful completion of the questionnaire (If satisfactory) the employee will be allowed to proceed to his/ her work area. All employees will attend a mandatory re-induction (Revised induction for COVID-19 awareness including new measures to be taken).

A COVID 19 Risk assessment will be communicated to all employees to highlight activities and areas considered “hot spots”

6. SITE SPECIFIC HEALTH AND SAFETY PROCEDURES

6.1 DEMOGRAPHICS

It will be incumbent upon the PC to establish a suitable and sufficient procedures for the identification of potentially infected employees and workers, the management of exposure to the corona virus on the project, including visitors and suppliers. Including a response plan for persons suspected of being infected with or exposed the virus. The procedure is to be applicable to all levels of management and supervision, employees and local labour.

As part of this procedure, the contractor is to maintain a register of all employees and workers on the project, including sub-contractor employees and workers, keeping records of the following information as a minimum (note the NIOH document that is currently available):

6.1.1 Age of Employee

The procedure is to take cognizance of the vulnerability of older workers and make provision for additional or more frequent screening of workers above a specified age. A certificate of fitness should be available to make the worker fit for duty, and should be available on site at all times.

6.1.2 Health status

A detailed record of all current and previous health conditions, specifically those identified as creating a higher risk for contracting Covid-19, to be kept for all workers. The procedure is to make

provision for stringent testing procedures and management of exposure to the virus for workers with higher vulnerability due to underlying health conditions. Such records are confidential and will remain with the Occupational Health facility. A certificate of fitness must be available for each worker on site, including management and contractors.

6.1.3 Socio economic status / Unskilled labour

The procedure is to consider the socio-economic status and skill level of workers, taking cognizance of the fact that these may have an impact on the worker's level of exposure to the virus outside of the workplace and the risk of being asymptomatic carriers of the virus to the project/site.

6.1.4 Accommodation

Where accommodation is provided by the contractor/sub-contractor, factors to be considered in the procedure include, *inter alia*:

- Density of occupants to allow for adequate social distancing (minimum 1.5m) in sleeping and dining quarters;
- Restriction on the number of persons using the same sanitary/hygiene facilities;
- Provision of dedicated crockery and cutlery for each occupant, together with a procedure for effective cleaning and safe storage of same and a prohibition on the sharing of utensils;
- Dedicated facilities for safekeeping of personal belongings and abovementioned utensils for each person. Such facilities are to allow for total segregation of belongings and must be easy to sanitize. Provision of such facilities for safekeeping to be accompanied with a procedure for the use and sanitizing of the storage facility to reduce the risk of cross-contamination;
- Facilities for accommodation provided by the contractor to have in place stringent procedures for personal hygiene, ongoing maintenance of sanitizing and social distancing, and
- Additional rules to include a prohibition on the sharing of clothing, towels and other personal belongings, as well as the laundering of clothing for multiple persons at the same time.

6.2 ORIGIN OF LABOUR AND TRANSPORTATION

Where a return to work will necessitate travel between provinces and cities for employees and workers to return to the project, the PC is to have a procedure for, or provide transport for the return of workers to minimize the risk of exposure to the virus while in transit. While this is difficult to control by the PC, induction training needs to include such information so workers can protect themselves. Where on-site transportation is done, a policy needs to be available for how such transportation will be made safe and limit any opportunity for cross infection. If possible the PC could provide their own transportation for their workers.

Parking areas for public and private vehicles need to be considered. Hand cleaning facilities when entering gates, doors, and security entrances.

6.2.1 Public Transportation across borders/towns/cities

The contractor to source/recommend a transport service provider that complies with all travel restrictions and requirements as gazetted by the government, *inter alia*:

- Maximum occupancy of vehicles to allow for social distancing;

-
- Vehicle sanitized before passengers board;
 - Passengers provided with hand sanitizer and face masks prior to boarding;
 - Vehicle sanitized before boarding, and hand sanitizer provided to passengers prior to boarding, after each stop where passengers leave the vehicle for comfort breaks, and
 - Frequent hand sanitizing is recommended during transit.

6.2.2 Contractor provided transportation across borders/towns/cities

Where the contractor provides transportation across borders/towns/cities to assist workers to return to work, provision is to be made for an adequate number of vehicles to comply with the maximum occupancy as in (a) above, and all such vehicles provided will be subject to the same requirements as abovementioned.

Since it will not be practicable to separate belongings and luggage in either instance mentioned above, the contractor's procedures must make provision for the sanitizing of personal belongings and luggage on arrival at the final destination.

6.3 SOCIAL DISTANCING

Social distancing has been shown to be an effective method to slow down the spread of the corona virus. It will be incumbent on the contractor to ensure that the construction site and facilities are set up in such a way that it will be possible as far as is practicable to maintain the required social distancing of a minimum of 1 metre between persons when at work.

6.3.1 Tasks that require more than 1 person to complete

Where it is not possible to maintain the required distance between workers due to the nature of the work activity, e.g. curb laying, confined working areas, rebar tying, preparing wire cages, the contractor will be required to implement, maintain and enforce a procedure to adequately protect such workers against potential infection with the corona virus. This includes but is not limited to:

- Providing adequate supplies of suitable PPE such as face masks, task specific gloves, safety glasses, disposable/additional coveralls;
- PPE used during multi-person activities to be exchanged immediately after the task is completed;
- Sealed bins to be provided for disposable PPE such as masks, disposable coveralls, disposable gloves, etc.;
- Sealable bags provided to each person for keeping PPE requiring laundering, such as gloves and overalls, and
- Sanitising/washing facilities provided for immediate sanitizing of hard hats, safety glasses, shoes, safety harnesses etc. on completion of multi-person tasks.

All the above to be utilized when breaking for lunch or leaving the site, and before commencing with the next or new work activity.

6.3.2 Access/Egress of Site, Welfare Facilities, Meeting Areas

The PC is to ensure there is suitable and adequate provision to minimize the risk of persons who may be infected with Covid-19 entering the site, the spread of the virus between persons who work

on or visit the site and the risk of potentially contaminated persons leaving the site and accessing public spaces or going home to their families. To achieve this, the contractor is required to implement, inter alia the following measures:

- Persons accessing the site in groups to maintain social distancing of at least 1 metre while waiting to access the site;
- Persons waiting to access the site to be segregated from the public where required by the provision of dedicated, prominently identified public pedestrian walkways situated in such a way that social distancing is maintained between site personnel and the public;
- Screening of each person who enters the site with a no-touch infrared thermometer;
- Means of (fully) sanitizing each person and their belongings, who access and leave the site;
- Dedicated facilities for safekeeping of personal for each person. Such facilities are to allow for total segregation of belongings and must be easy to sanitize. Provision of such facilities for safekeeping to be accompanied with a procedure for the use and sanitizing of the storage facility to reduce the risk of cross-contamination;
- Toolbox talks to be conducted outdoors when possible in order for persons to maintain social distancing. Where inclement weather does not allow for this, toolbox talks to be conducted with smaller groupings of workers in a sheltered area large enough to maintain social distancing, and
- Eating areas to be set up in such a way that the maximum number of persons who will use the area at any one time are able to maintain the required social distancing of 1 metre. Should this not be practicable, meal times are to be staggered on a rotational basis to avoid contact between persons.

****This guideline is not an exhaustive list and the contractor is encouraged to develop rigorous control measures and procedures to safeguard all persons accessing or working on the site against the risk of Covid-19.***

Where possible remote means of monitoring such as use of drones or security cameras to monitor site conditions and to do site inspections could be considered.

6.4 ALCOHOL AND DRUG TESTING

Alcohol testing may only be done using single use test units, and must be disposed of in the appropriate contaminated waste. Drug testing will only be done by an occupational health facility either using urine or blood sampling. A protocol will be drawn up by the PC to manage this with the occupational health service being used.

6.5 MEDICAL SURVEILLANCE

The normal requirements of pre-placement, periodic and exit medicals will remain, with the Occupational health service providing a methodology of how they will be including factors relating to Covid-19. No lung functions or peak flows will be done until deemed safe to do so by the South African Thoracic Society.

It is preferable that occupational health service providers use a cloud-based record keeping service to ensure easy tracking and tracing. Free apps such as Square 1 is such an example.

Any person who contracts the virus may need to be reported to the Compensation Commissioner as an occupational disease where their work is to monitor and in contact with others. Such details are provided in the Compensation for Injuries and Diseases Act (COIDA).

Isolation of workers who have a temperature or any symptoms, and removal to the closest facility for testing and treatment, through the numbers provided. The PC is to ensure their policy on this includes such information.

Workers will be required to complete COVID-19 questionnaires prior to returning to site. Any worker with any symptoms is not to return to work, or notify the PC of same.

6.6 ABLUTION FACILITIES

Ablution facilities are an essential facility that must be available for workers across a site. Facilities are a high risk area and increased cleaning regimes are required to be introduced. A policy on how this will be done is required, that will cover both portable and permanent facilities. The following are considerations, which include, *inter alia*:

- Portable toilets to be provided at a 1:10 ratio
- Cleaners to continually clean and have a formal cleaning regime
- Hand washing facilities (soap and water, paper towel) to be available where possible, and if not, to provide hand sanitizer
- Induction training to educate to ensure all users are hand washing correctly
- Flush toilets preferably 1:15 unless increased cleaning regime present;
- Restrict the number of people using toilet facilities at any one time e.g. use a welfare attendant;
- Wash hands before and after using the facilities;
- Enhance the cleaning regimes for toilet facilities particularly door handles, locks and the toilet flush;
- Portable toilets should be avoided wherever possible, but where in use these should be cleaned and emptied more frequently;
- Provide suitable and sufficient rubbish bins for hand towels with regular removal and disposal that need to be managed as hazardous waste;
- Introduce staggered start and finish times to reduce congestion and contact at all times;
- Consider increasing the number or size of facilities available on site if possible, and
- Provide suitable and sufficient rubbish bins in these areas with regular removal and disposal.

6.7 SECURITY ACCESS

Public access to site is to be limited at all times, and non-essential visitors are not to be allowed entry. There is required to be staggered access at all times. The following aspects are to be included in a policy document as to how such issues will be managed, *inter alia*:

6.7.1 Staggered access to site;

The PC should consider the following:

- Introduce staggered start and finish times to reduce congestion and contact at all times;
- Monitor site access points to enable social distancing – consideration for the number of access points, either increase to reduce congestion or decrease to enable monitoring;
- 50-100mm deep trough to be placed at entrances to site. Disinfectant is to be placed in the trough and all shoes coming onto site or leaving site will be disinfected, without wetting shoes themselves;
- Remove or disable entry systems that require skin contact e.g. fingerprint scanners or biometric system;
- Require all workers to wash or clean their hands before entering or leaving the site;
- Ensure social distancing between people waiting to enter site;
- Regularly clean common contact surfaces in reception, office, access control and delivery areas e.g. scanners, turnstiles, screens, telephone handsets, desks, particularly during peak times;
- Reduce the number of people in attendance at site inductions and consider holding them outdoors wherever possible, and
- Drivers should remain in their vehicles if the load will allow it and must wash or clean their hands before unloading goods and materials.

6.8 PROCUREMENT AND STORAGE FOR COVID-19 PPE AND GENERAL SUPPLIES

The following is to be implemented by PC:

- Availability of personal protective equipment PPE is an imperative and should be available at all times. Where this is not so, the work related to the activity will be stopped until adequate supplies are available.
- Storage of PPE is to be tightly controlled, with records of issue. Damaged PPE is to be managed in the usual way, but all to be disposed of as if contaminated.

6.9 WASTE MANAGEMENT FOR COVID-19 WASTE

Waste management arrangements to be updated to include provision for the disposal of additional waste generated due to preventative measures implemented. All waste to be managed as hazardous waste.

6.9.1 Disposal of any gloves, masks

The contractor shall dispose of all used gloves and masks as hazardous waste and provide sealable bags and containers for the safe disposal of this waste.

6.9.2 Paper towels

The contractor shall provide adequate supplies of paper towels on site. At points where these towels are provided lined waste bins to be placed in order to collect all used towels and then to be disposed of in hazardous waste.

6.9.3 Disinfectant solution

The contractor to provide adequate supplies of disinfectant on site where the use of water and soap for cleaning is not practical. If disinfectant dispensers are not refilled it should be disposed with other hazardous waste.

6.9.4 Wastewater

Wastewater at washing points, toilets, and bathrooms to be contained in a drainage system that prevent surface spills. If wastewater is contained in waste buckets it must be sealed when removed and disinfected after it is cleaned.

6.10 SIGNAGE

The PC is to review all current signs and notices displayed on site. The PC is to avoid conflicting messages/notices that have been in place prior to lockdown and review according. Typical signage that can be displayed on site is shown in Figure 1

Figure 1: Typical Signage



6.10.1 Access rules

The contractor shall install additional signage with site rules specific to the prevention of spreading the COVID-19 virus at the access control points of the site.

6.10.2 Notices/Posters with protocols

Notices and posters shall be placed and installed to raise awareness and regarding protocols to be followed on site. These notices and posters shall be placed conspicuously at various points on the site including the following places:

- Entrance
- Site notice board
- Site Office
- Eating areas

-
- Next to toilets and bathrooms
 - Hand washing stations
 - Storerooms

6.11 EMERGENCY PLANNING

An updated emergency plan is to be completed that is in line with the current Regulations of the National Disaster Management Act.

6.11.1 First aid

Extra gloves, and disinfectants are to be available, first aiders are to be issued with at least FFPT2 masks should they be required to respond

6.11.2 Evacuation plans

Evacuation plans should consider social distancing.

6.11.3 Isolation of potentially infected workers

The emergency plan is to consider how anyone who arrives on site and displays any of the symptoms, or has a raised temperature.

6.12 PERSONAL PROTECTIVE EQUIPMENT (PPE)

The hierarchy of control applies with the use of PPE. Specific regard for the type and usage, training and control is to be outlined in the policies and procedures.

6.12.1 Masks

Masks are compulsory for all employees; personnel and professional team members, reducing the potential of inhaled COVID-19 droplets. For general administration purposes, for essential staff on site only, cloth masks may be worn. N95 masks are only to be worn by first aiders or high risk workers, due to the national shortage thereof.

All employees to have access to N95 or FFPT2 masks when required, only in instances of HIGH RISK OF EXPOSURE

All N95 and FFPT2 masks to be disposed with or after 1 day's use. Induction is to include training on the correct use of face masks.

Cloth face masks to be used on entering and leaving the site. It is advised that each worker is supplied with at least 3 cloth face masks. This would assist ensuring that the masks are hygienic (1 on the face; 1 in the wash and 1 as a backup).

The PC must ensure that sufficient stock is at all-time available on site. This will also have depended on the type of mask being issued.

All disposable masks are biological waste and must be properly disposed of. This must be disposed in container (locked) or in bags to be either removed as medical biological waste by registered service provider.

CLEARLY IDENTIFIABLE BINS INDICATING BIOLOGICAL WASTE TO BE PROVIDED

6.12.2 Face Shields

The principal contractor could also look at options such as full face shields for preventing spreading of virus through eyes. This would assist the employee who is doing hard physical work to breathe more easily but still protecting the mouth, eyes and nose.

Face shields should be cleaned daily before the shift and at the end of the shift. Proper cleaning agents/disinfectant must be used. Face shields should be issued to employees and no sharing is allowed.

6.12.3 Overalls

All employees must be issued with 3 overalls (1 overall wearing; 1 overall in the wash and one as the backup). This will ensure that the employee will be able to wear clean hygienic overalls. This must form part of the COVID-19 training for all employees.

6.12.4 Hand Gloves

It is preferable that surgical gloves are not worn unless indicated and workers trained in the proper use thereof. Gloves must only be used when the activity demand the wearing of specific type of hand gloves. This will be directed by the PC risk assessment.

Site office personnel need to be made aware of the risks in the office environment, this include to handling of documents and plans. These employees could be issued with the appropriate hand gloves or sufficient hand wash / sanitising facilities must be available in the site office.

6.13 CONSEQUENCE MANAGEMENT

6.13.1 Change Management

Each Principal contractor / contractors to ensure that regular information pertaining to COVID 19 and or any Health and Safety matters is distributed to ensure that required measures / controls is timeously addressed. There are various information platforms available to the Principal Contractor and or employee that can assist in keeping them informed. These include *inter alia*:

- Local Authority / Legislation
- World Health Organizations
- Health Care Departments / Health Care Professional's / Centre's / Hospitals
- Public Service Announcements – National News

Each contractor is responsible and required to keep his or her employees informed by means but not limited by conducting the following;

- Awareness campaigns -i.e. posters within work places
- Daily site task Inspections (DSTIs)
- Toolbox talks / Daily briefings
- Meetings
- Company policies / procedures / Employee Wellbeing interaction
- Company newsletters

-
- Telecommunications – Cell phones Apps / e-mail

6.13.2 Succession Planning

Employees who is performing specialize work/activities (including plant operators) must be identified. These positions must have alternative employees that could perform these activities. This could mean additional training for these employees.

Key personnel on site should also have competent alternative employees that could perform these functions when needed. Where possible administrative staff should be working from home to limit any opportunistic exposure.

It is very important to understand that the availability of certain essential products and material may not always be available and thus proper planning must be in place to ensure that the activities on site are not interrupted.

Proactive planning must be in place to ensure that the following are ordered and available:

- PPE (cloth face masks, face shields, overalls)
- Hand sanitizers with at least 60% alcohol content
- Disinfectants and cleaning materials

6.13.3 Consequences

When non-compliance activities are noted, that activity will be stopped. Should the remedial actions not take place the site will be shut down till the corrective actions have been implemented.

Employees that do not work according to the SSHSS and SSHSP must be disciplined according to the company's disciplinary codes and practices.

Supervisory employees on site must ensure compliance, and when non-conformances are noted disciplinary actions should also be followed.

PCs should note that they could be fined and even according to the Disaster Management Act, arrested.

6.14 WELFARE FACILITIES

The PC shall adapt arrangements regarding the provision of welfare facilities to be in line with Government guidelines and requirements.

6.14.1 Clean, storage for food and personal belongings

The PC to provide lockable storage for all employees on site, which shall be disinfected daily. Training and awareness to address procedures and the importance of good hygiene practice.

6.14.2 No personal belongings to be kept on site

Apart from extra clean personal clothing no other personal belongings allowed on site accept if kept in locker provided by the PC.

6.14.3 No communal drinking facilities (shared cups etc.)

The PC to provide adequate supplies of bottled water to all employees on site. Empty bottles to be disposed of as normal waste. Training and awareness to address procedures and the importance of good hygiene practice.

6.14.4 Larger meeting areas/ preferably use technology (Skype, Zoom, Microsoft teams):

The PC is to limit the number of employees at all activities to the minimum required to do the work in a safe manner. Where possible meetings must be held in open areas limited to essential personnel. Technological alternatives to be exploited for meeting attendance if possible. Training and awareness to address procedures and the importance of social distancing.

6.14.5 Eating areas

The PC is to limit the number of employees at all activities to the minimum. Stagger lunchbreaks and resting periods for work teams. Training and awareness to address procedures and the importance of good hygiene practice and social distancing.

Workers are required to stay on site once they have entered it and not use local shops.

Dedicated eating areas should be identified on site to reduce food waste and contamination.

- Break times should be staggered to reduce congestion and contact at all times.
- Hand cleaning facilities or hand sanitiser should be available at the entrance of any room where people eat and should be used by workers when entering and leaving the area;
- Workers should be asked to bring pre-prepared meals and refillable drinking bottles from home;
- Social distancing to be applied whilst eating and avoid all contact;
- Where catering is provided on site, it should provide pre-prepared and wrapped food only;
 - Payments should be taken by contactless card wherever possible;
 - Crockery, eating utensils, cups etc. should be disposable if supplied;
- Drinking water should be provided with enhanced cleaning measures of the tap mechanism introduced;
- Tables should be cleaned and disinfected between each use;
- All rubbish should be put straight in the bin and not left for someone else to clear up;
- All areas used for eating must be thoroughly cleaned at the end of each break and shift, including chairs, door handles, vending machines and payment devices.

6.15 ADEQUATE RESOURCING OF PROJECTS

The PC will be required to price for the additional H&S related items that have arisen as a result of the Covid-19 pandemic and the regulations promulgated under the Disaster Management Act 2002 (Act No. 57 of 2002), as amended. The Bill of Quantities (BoQ) provided to the PC needs to take into account the requirements that have been identified in the BRA and the SSHSS. Contractors need to be able to price for the requirements and the appropriate BEP to assess the suitability of the items and pricing thereof.

A typical example of an H&S BoQ that would be adapted is included as Annexure B. The BoQ is not exhaustive and is dependent much on the amended BRA as approved by the Employer or his Principal agent. Should risk factors change, amendments will need to be made to the BoQ.

7. CONTRACTUAL CONSIDERATIONS

7.1 GENERAL CONSIDERATIONS

Before considering the provisions of the common construction contracts in detail, the following general recommendations are made:

1. Should payment certificates not have been issued during the period of lockdown, they should be issued as soon as possible after recommencement of works, but no later than the end of May 2020.
2. The lockdown period will give rise to various typical force majeure claims and contractors will be entitled to submit extension of time claims for the period of the lockdown. These will be evaluated by the Principal Agent in accordance with the situation/conditions on site during the lockdown.
3. The Covid-19 epidemic and the continued lockdown regulations may have a further and continued impact to contractors after site re-opening. Those impacts will have to be assessed by the contractors and further claims for resulting delays to the project programmes may need to be considered.
4. Where time limits are applicable to claims and claim notifications, such time period should only be calculated from, at the earliest, the date on which the relevant construction site re-opens.
5. It is recommended that all claims arising from the lockdown be submitted and resolved as soon as possible after recommencement and well before any applicable time limits.
6. Any disputes emerging in regard to claims should be resolved expeditiously in accordance with the provisions in the contract.

7.2 APPLICABLE GENERAL CONDITIONS OF CONTRACT

The following clauses in the General condition of contract are noted which are considered applicable to the Covid-19 Lockdown:

7.2.1 GCC 2015

1. Clause 5.12.1 provides that the contractor is entitled to an extension of time for the completion of the works if "circumstances of any kind whatsoever" will delay the achievement of practical completion of the works.
2. Clause 5.12.2.4 specifically lists "any disruption which is entirely beyond the contractor's control" as a circumstance entitling the contractor to an extension of time. A contractor will accordingly be entitled to an extension of time for delays caused by the lockdown and other circumstances resulting from Covid-19.
3. In terms of clause 5.12.3, if an extension of time is granted the contractor shall be paid such additional time-related general items as are appropriate.
4. Clause 5.12.4 provides that instead of granting an extension of time, if feasible, the contractor may be requested to accelerate the rate of progress to achieve practical completion and will be paid for the costs of such acceleration.
5. A contractor may also be entitled to a claim for extension of time with adjusted value in terms of clause 5.4.3 if an instruction to commence work was issued to the contractor but the employer was unable to fulfil its obligation to give the contractor access and possession of site due to the limitations imposed during lockdown.

6. However, once the contractor has been given possession of the site, a claim under clause 5.4.3 would not be applicable.
7. Covid-19 may also fall within the definition of “excepted risk” and in particular the reference to “epidemic plague” set out in clause 8.3.1.7.
8. In terms of clause 8.3.2, the contractor is entitled to an extension of time and can recover additional costs where the contractor suffers a delay or loss directly or indirectly caused by an “excepted risk”.
9. Clause 9.1.2 read with clause 9.1.4 provides that the contractor is entitled to claim additional costs, which are not covered by the additional time-related general items, caused by “a state of emergency, riot, commotion politically motivated sabotaged acts of terrorism or disorder” and “any such event beyond the control of the contractor” that materially affects the execution of the works.
10. Clause 9.1.4 requires the contractor to notify the engineer within 14 days of becoming aware of such increase in cost.
11. In terms of clause 6.8.4 the contractor is entitled to any additional costs, which are not covered by the additional time-related general items, if at any time within 28 days before the closing of tender or thereafter, any act, ordinance, regulation or by-law is amended and this results in additional cost to the contractor.
12. In terms of clause 10, the contractor is required to submit its claim for any extension of time or additional payment as follows:
 - (a) the contractor must submit its claim to the engineer in accordance with the specified requirements, within 28 days after the circumstance or event giving rise to such claim; and
 - (b) if the event giving rise to a claim is of an ongoing nature, the contractor is additionally required to deliver updated monthly claims to the engineer and submit its final claim within 28 days after the end of the event or circumstance.
13. The parties may deliver a written notice of dispute to each other and the engineer of any dispute provided that the dispute arises from a rejected claim and it is delivered within 28 days of the event giving rise to the dispute.
14. The dispute shall be referred to adjudication unless an amicable settlement is contemplated. The parties may agree to settle any claim or any dispute amicably with the help of an impartial third party. If the other party rejects amicable settlement in writing or does not respond to the invitation within 14 days or if the amicable settlement is unsuccessful the dispute shall be referred to adjudication.
15. Either party is entitled to disagree with any decision of the Adjudication Board and refer the matter to arbitration or court proceedings, whichever is applicable in terms of the contract provided that a party disputes the adjudicator’s decision not before 28 days or after 56 days from receipt of the decision.

7.2.2 GCC 2010

1. The contract provisions are the same in effect save for clause 8.3.1.7 relating to the excepted risk which is not part of GCC 2010.
2. The contractor may also be entitled to a claim for extension of time with adjusted value and additional costs in terms of clause 5.4.3, 5.10.1 and 5.11.2 as explained above in the GCC 2015 version. These clauses have the identical operation as in the 2015 version.

3. The clause numbering and content of the GCC 2010 dispute resolution process runs parallel to that of the GCC 2015, save that the 2010 version provides that the parties may deliver a written notice of dispute to each other and the engineer of any dispute provided that the dispute arises from an **unresolved claim** (and not a rejected claim as recorded in the 2015 version).

7.2.3 NEC 3

1. Clause 60.1 defines a compensation event as:

“An event which stops the contractor completing the services or stops the contractor completing the services by the date shown on the accepted programme and:

- *which neither party could prevent;*
- *an experienced consultant would have judged at the contract date to have such a small chance of occurring that it would have been unreasonable for him to have allowed for it; and*
- *is not one of the other compensation events stated in this contract;*

2. A contractor must notify the project manager of a compensation event in accordance with clause 61.3 which provides that if the contractor has not given notice of the compensation event within eight weeks of becoming aware of the event, it will not be entitled to a change in the prices, the completion date or a key date (unless the project manager should have notified the event to the contractor but did not).
3. If the project manager does not respond to the contractor's notice timeously, it will be deemed to have accepted the existence of a compensation event.
4. If the employer does not respond to the contractor's abovementioned notice, it will be deemed to have accepted the existence of a compensation event.
5. The employer will then instruct the contractor to submit quotations which could impact the contract price and/or completion date.
6. Where the employer decides that the effects of a compensation event are too uncertain to be forecast reasonably, it must state assumptions about the event in its instruction to the contractor to submit quotations. Assessment of the event will then be based on these assumptions. If any of them is later found to have been incorrect, the employer must give notice of a correction.
7. In terms of clause 63, a delay to the completion date is assessed as the length of time that, due to the compensation event, planned completion is later than the planned completion shown on the accepted programme.
8. The NEC3 makes provision for a risk register which is “a register of the risks which are listed in the contract Data and the risks which the project manager or the contractor has notified as an early warning matter. It includes a description of the risk and a description of the actions which are to be taken to avoid or reduce the risk.”
9. It is recommended that Covid-19 and the Disaster Management Regulations and their impact be included in the Risk Register.
10. In terms of clause 16.1 the contractor and the project manager will give an early warning by notifying the other as soon as either becomes aware of any matter which could:
 - increase the total of the prices;
 - delay completion;
 - delay meeting a key date; or
 - impair the performance of the works in use.

-
11. The contractor may give an early warning by notifying the project manager of any other matter which could increase its total cost.
 12. The project manager then enters early warning matters in the risk register. Early warning of a matter for which a compensation event has previously been notified is not required.
 13. In terms of clause 16.3, the parties will then hold a risk reduction meeting in order to:
 - make and consider proposals for how the effect of the registered risks can be avoided or reduced;
 - seek solutions that will bring an advantage to those affected;
 - decide on the action to be taken in accordance with the contract; and
 - decide which risks have been avoided or have passed and can be removed from the Risk Register.
 14. The NEC3 series of contracts mandate adjudication as a dispute resolution procedure. An adjudicator is appointed by the parties in terms of an NEC Adjudicator's Contract.
 15. The adjudication procedure is included either in section 9 of the core clauses or under Option W1 (Dispute Resolution).
 16. The contracts provide that a party referring a matter to an adjudicator must do so on notice, and within the time periods specified in the adjudication table. The table refers to four categories of disputes and specifies which party may refer each category to adjudication and the timelines for doing so.
 17. Where the adjudicator's decision includes assessment of additional cost or delay caused to the contractor, he makes his assessment in the same way as a compensation event is assessed.
 18. The adjudicator's decision is binding unless and until revised by the tribunal (arbitration or litigation as selected by the parties in the contract data), alternatively it is binding if a party does not notify the other party of his intention to refer the matter to the tribunal within 4 weeks of the adjudicator's decision. The adjudicator's decision will be enforceable as a contractual obligation.
 19. The dispute may not be referred to the tribunal if the matter has not first been referred to the adjudicator.

BASIC RISK ASSESSMENT

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ANNEXURE B

TYPICAL TO COVID-19 RELATED OCCUPATIONAL HEALTH AND SAFETY BILL OF QUANTITIES

See attached BOQ

ANNEXURE C

PPE ISSUE REGISTER

LOCATION / SITE NAME: **COMPANY NAME:**

ISSUED

BY:

												ENTER NAME AND SURNAME & SIGN BELOW EACH ITEM RECEIVED
Gloves	Hard Hat	Overhaul	Safety Boots	Reflective Vest	Safety Glasses	Dust Mask	Earplugs	Safety Harness	Welding Gloves	Welding Helmet/ Glasses	Welding Apron	ENTER NAME AND SURNAME

ANNEXURE D

COVID-19 QUESTIONNAIRE & DECLARATION

Contractor Name: _____

Important : Please note that this is an individual Questionnaire.

Site/Work Area: _____

Employee Name and Surname: _____

Date: _____

Line Manager: _____

Symptomatic Screening Questionnaire	Yes	No
Have you experienced symptoms of flu or had flu in the past two weeks?		
Have you experienced any coughing or breathing abnormalities lately?		
Do you currently have a fever or have you been experiencing symptoms of a fever? (Red eyes, burning sensation)		
In the last 14 days, have you come into contact with any person that has displayed symptoms or tested positive for COVID 19?		
Have you travelled outside the borders of South- Africa lately?		
Have you been tested for COVID 19?		

Personal Commitment

1. I Will further to the above , declare any immediate changes in my health to my line manager
2. I will Adhere to all the guidelines set out by Thermaire & Ampair in the COVID 19 management plan
3. I will maintain good hygiene practices
4. I will maintain social distance from employees at all times
5. I will utilize ppe and sanitizer provided at all times.
6. I will ensure that shared equipment, as far as reasonably practicable , has been sanitized before handover to other employees.

I , _____ Declare that the document is a true statement of my current health and hereby will adhere to all guidelines set out.

Employee Signature _____

Temperature reading If available (Refer to health practioner if above 38 degrees Celsius		
Employee Cleared for entrance (Circle)	Yes	No

Questionnaire reviewed by :	
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F.8 PARTICULAR SPECIFICATION – QMS: EMPLOYER’S AGENT’S QUALITY MANAGEMENT SPECIFICATION

CONSTRUCTION QUALITY ASSURANCE PROCEDURES (CQAP)

QMS1. INTRODUCTION

The Employer’s Agent subscribes to a Quality Management System accredited by a number of certification bodies including ISO 9001 (2015).

This document/specification summarises the Quality Control Procedures used by the Employer’s Agent in the Quality Assurance and Control on site works. These procedures are to be used by Employer’s Agent’s Representative Staff (i.e. ER and his assistants) and the Contractor’s staff on the following commonly encountered sites;

- Pipelines
 - UPVC Pipelines
 - Steel Pipelines
- Reservoirs
- Building Works
- Roadworks

The procedures have been developed as “intellectual” property of the Employer’s Agent and may only be used on sites managed by the Employer’s Agent. Any other use is subject to consent/agreement with the Employer’s Agent.

All references to approval by the Employer’s Agents and/or his Representative(s) require that the Contractor (via the Site Agent) initiates the necessary request for approval). In addition the Contractor will be required to maintain a copy of all records as required by this Specification.

The application of the procedures will be agreed as appropriate between the Contractor’s Site Agent and the Employer’s Agent (or his Representative) at the commencement of construction activities,.

It will be deemed that the Contractor has incorporated in his programme and completion period and pricing, the necessary requirements to comply with this Specification fully.

1.1 Elements of Site Quality Assurance

The elements of Site Quality Assurance comprise the following:

- general elements that apply to all sites and
- site specific elements that are specific to sites and may be dependent on the type of construction.

QMS2 GENERAL ELEMENTS APPLICABLE TO ALL SITES

2.1 Construction Quality Control Organization

This section presents the requirements of key site personnel involved on construction sites, i.e. Employer’s Agent’s Representative (ER) staff and Contractor’s staff. The following quality assurance procedures for site quality assurance personnel should be followed:

2.1.1 Employer’s Agent’s Quality Assurance Personnel

The following ER staff appointments’ procedure should be followed to ensure the right superintendence on contracts:

Item	Activity	Remarks	Responsible Party	Approval by
1	Appointment of Employer's Agent for contracts	Stated in contract data	Employer's Agent	Employer
2	Supervision staffing arrangements	Proposed prior to construction work	Employer's Agent	Employer
3	Site staff	Proposal for site personnel including CV's	Employer's Agent	Employer
4	Roles	Delegation of powers by Employer's Agent	Employer's Agent	Employer's Agent

The site staff will comprise the Employer's Agent's Representative (ER) and ER's assistants (Field Officers):

(a) Employer's Agent's Representative (ER)

The ER is the primary point of contact for the Employer's Agent on all construction management issues. The ER will monitor and approve each contractor's quality submittal to ensure that the project is meeting the specifications and requirements. The ER will manage the implementation of the CQAP at the project sites with assistance from Field Officers appointed by the Employer's Agent.

(b) ER Assistants/Field Officers (FO's)

Field Officers (FOs) are responsible to the ER and support the ER's management of the CQAP. The FOs will monitor the day-to-day activities of the contractor. This includes ensuring that contractors comply with the drawings and specifications, applicable SABS standards, good workmanship, and the CQC requirements. As part of this effort, FOs will:

- conduct independent inspections to verify the quality of the work;
- participate in contractor inspections;
- review test and inspection reports; and
- ensure that the required documentation is submitted.

The FOs will be alert to detect, record, and report any deviation from the contract documents, including calling any deficient item to the attention of the ER and the contractors' Site Agents. The FOs will keep accurate and detailed records of the contractor's performance and progress, delivery of materials, and other pertinent matters, including the daily inspection report.

2.2 Contractor's Quality Assurance Personnel

The contractors are responsible for the quality control of their constructed work product as well as the necessary inspections and tests required to ensure that their work complies with the contract documents.

2.2.1 Contractor's Site Staff

The contractors' Site Agents are the primary point of contact for the Contractors on all construction management issues. The Site Agents must be full-time on site for the contractors. The Site Agents must have full authority to institute any and all actions necessary for the successful implementation of the CQC program to ensure compliance with the drawings and technical specifications.

The following procedures apply with respect to appointment of the contractor's key personnel:

Aspect	Remarks	Approval By	When
Appointment of Site Agent	As per tender for quality based evaluated tenders	Employer's Agent	Prior to commencement of construction
Appointment of Site Forepersons	As per tender for quality based evaluated tenders	Employer's Agent	Prior to commencement of construction

2.3 Site Establishment

The Employer's Agent's Representative shall inspect and approve/disapprove contractor's site establishment using Quality Procedure Form QC 01.

2.4 General

The Site Agent is required to complete the necessary 1-2 page forms requesting for approval of the following General Items. Thereafter the ER must undertake the following general items as appropriate:

1	Confirm "Permission to Occupy" has been received from the relevant authority.
2	"Handover of Site" to Contractor to be confirmed in writing.
3	Inspect and approve Site Establishment (Form QC 01).
4	Setup Site Files/Filing System.
5	Ensure a copy of the Contract Document is retained on Site by the Contractor.
6	Ensure a full set/s of approved drawings is/are retained on Site by the Contractor.
7	Maintain a Drawing Register.
8	Ensure a copy of the latest Contract Program is clearly displayed on Site.
9	Establish Quality Assurance Procedures and carry out inspections as and when required.
10	Issue Site Instructions as and when required.
11	Ensure Safety File, including Dept. of Labour notification, is up to date and on Site and all relevant regulations, including issuing of PPE, are strictly adhered to.
12	Ensure all relevant information is recorded in a daily Site Diary and counter signed.
13	Hold regular Work Meetings with the Contractor.
14	Hold regular Site Meetings with the Client, Professional Team and the Contractor.
15	Maintain a copy of the Environmental Record of Decision on Site

QMS3 SITE SPECIFIC QUALITY ASSURANCE PROCEDURES

Quality assurance inspections and testing will be used to verify the adequacy and effectiveness of the contractor's quality control program. The Employer's Agent's Quality Assurance Personnel detailed above will provide inspection and supervision within the scope of work, which includes monitoring of the following construction activities:

- Manufacture of materials
- Transporting and off-loading and storage of construction materials
- Inspection of construction activities, including:
 - Pipework
 - Steel
 - uPVC
 - Reinforced Concrete Reservoirs
 - Building Works
 - Pump stations (mechanical & electrical installations)
 - Roadworks

The Contractor will be required to formally request for inspection for any activity which he deems to be complete before proceeding to the next stage of the whole operation. Formal requests must be filled in the relevant **QC Form**.

Contractor Deficiency Correction

When material, performed work or installation is found to be deficient and/or does not meet the project specifications, the Employer's Agent's QA personnel will assure deficiency correction is implemented. In addition to results of an inspection being recorded on the relevant **QC Form**, in the event of inspection failure, the Employer's Agent's QA personnel will fill in **Form QC 008 "Failure Report"**, to record the deficiencies. A copy of this report will be handed over to the Contractor's Site Agent. The Contractor will implement corrective actions to remedy work that is not in accordance with the drawings and specifications. The corrective actions will include removal and replacement of deficient work using methods approved by the ER. Removal must be

done in a manner that does not disturb work that meets QC/QA criteria; otherwise, the disturbed material must also be removed and replaced. Replacement must be done in accordance with the corresponding technical specifications. Replacement will be subjected to the same scope of QC/QA inspection and testing as the original work. If the replacement work is not in accordance with the drawings and specifications, the replacement work will be removed, replaced, re inspected and re-tested.

Activities which specifically require approval before the next stage can proceed are as detailed in this section.

3.1 Pipework

The following procedures will be used for pipework quality assurance:

The ER is responsible for ensuring the following quality assurance procedure is followed, **as a minimum**:

1	Inspect & Approve Setting Out (Form QC 001).
2	Inspect & Approve Pipeline Trenches (Form QC 002).
3	Inspect & Approve Pipeline Bedding (Form QC 003).
4	Inspect & Approve Pipe Installation – PVC (Form QC 004B).
5	Inspect & Approve Pipeline Pressure Testing (Form QC 006).
6	Inspect & Approve Backfilling to Trenches (Form QC 007).

Copies of the Employer's Agent's forms are available for inspection at the offices of the Employer's Agent.

3.2 Reinforced Concrete Works

The ER is responsible for ensuring the following quality assurance procedure is followed, **as a minimum**:

1	Inspect & Approve Setting Out (Form QC 001).
2	Inspect & Approve Excavations (Form QC 008).
3	Inspect & Approve Backfilling to Excavations (Form QC 009).
4	Inspect & Approve Excavations prior to Blinding (Form QC 010).
5	Inspect & Approve Cast Concrete (Form QC 016).
6	Inspect & Approve Structure prior to Concreting (Form QC 015).
7	Inspect & Approve Cast Concrete (Form QC 016).
8	Inspect & Approve Backfilling to Excavations (Form QC 009).

Copies of the Employer's Agent's forms are available for inspection at the offices of The Employer's Agent cc.

3.3 Building Works

The ER is responsible for ensuring the following quality assurance procedure is followed, **as a minimum**:

1	Inspect & Approve Setting Out (Form QC 001).
2	Inspect & Approve Excavations (Form QC 008).
3	Inspect & Approve Backfilling to Excavations (Form QC 009).
4	Inspect & Approve Excavations prior to Blinding (Form QC 010).
5	Inspect & Approve Cast Concrete (Form QC 016).
6	Inspect & Approve Foundations prior to Concreting (Form QC 011).
7	Inspect & Approve Cast Concrete (Form QC 016).
8	Inspect & Approve Sub Structure Brickwork (Form QC 012).
9	Inspect & Approve Foundations prior to Surface Bed Concreting (Form QC 013).

10	Inspect & Approve Cast Concrete (Form QC 016).
11	Inspect & Approve Superstructure Brickwork (Form QC 014).
12	Ensure relevant Certificates are received/issued for the roof structure.

Copies of the Employer's Agent's forms are available for inspection at the offices of the Employer's Agent.

3.4 Roadworks

The ER is responsible for ensuring the following quality assurance procedure is followed, **as a minimum**:

1	Inspect & Approve Setting Out (Form QC 001).
2	Inspect & Approve Excavations (Form QC 008).
3	Inspect & Approve Backfilling to Excavations (Form QC 009).
4	Inspect & Approve Excavations prior to Blinding (Form QC 010).
5	Inspect & Approve Earthworks (Form QC 017).
6	Inspect & Approve Subgrade Construction (Form QC 018).
7	Inspect & Approve Pavement Layerworks/Subbase (Form QC 019).
8	Inspect & Approve Base Construction (Form QC 020).
9	Inspect & Approve Culvert Construction (Form QC 021).
10	Inspect & Approve Headwalls and Wing Walls (Form QC 022).
11	Inspect & Approve Subsoil Drainage (Form QC 023).
12	Record Site Measurement (Form QC 025)

Copies of the Employer's Agent's forms are available for inspection at the offices of the Employer's Agent.

QMS4 DOCUMENTATION

4.1 Overview

An effective CQA Plan depends largely on recognition of all construction activities that should be monitored and on assigning responsibilities for the monitoring of each activity. This is most effectively accomplished and verified by the documentation of quality assurance activities. The ER will document that quality assurance requirements have been addressed and satisfied. The ER will provide the Employer's Agent with signed descriptive remarks, data sheets, and inspection reports to verify that monitoring activities have been carried out. The ER will also maintain, at the job site, a complete file of Drawings and Technical Specifications, a CQA Plan, test procedures, daily diaries, and other pertinent documents.

4.2 Daily Site Diary

A daily construction site diary will be prepared and signed by each Site Agent and the ER. The diary will include a summary of the contractor's daily construction activities. At a minimum, the daily construction diary will include the following information:

- Date, project name, location, and other identification
- Description of weather conditions, including temperature, cloud cover, and rainfall
- Reports on any meetings held and their results
- Record of visitors to site
- Locations of construction underway during that day
- Equipment and personnel working in each activity, including subcontractors
- Descriptions of work being inspected
- Decisions made regarding approval of units of material or of work, and corrective actions to be taken
- Description of problems or delays and resolution
- Communications with contractor staff

-
- Construction activities completed and/or in progress
 - Signature of the diary preparer

The daily site diary will be routed on a daily basis to the project QC/QA files and will be maintained as part of the permanent project record.

4.3 Control of Quality Records

The ER verifies QA record accuracy and maintains copies of all quality-related documentation. This includes, but may not be limited to:

- Daily construction QA records;
- Inspection reports;
- Non-conformance (Failure) reports;
- Material receiving reports; and
- Monitoring and test data.

These records will be stored in files maintained in the project document control files. All original documents pertaining to QC information will be maintained in the project file located at the site. All records shall be available for inspection and audit, at any time, by the Employer's Agent and/or the Employer or their Agents

Part C4: Site Information

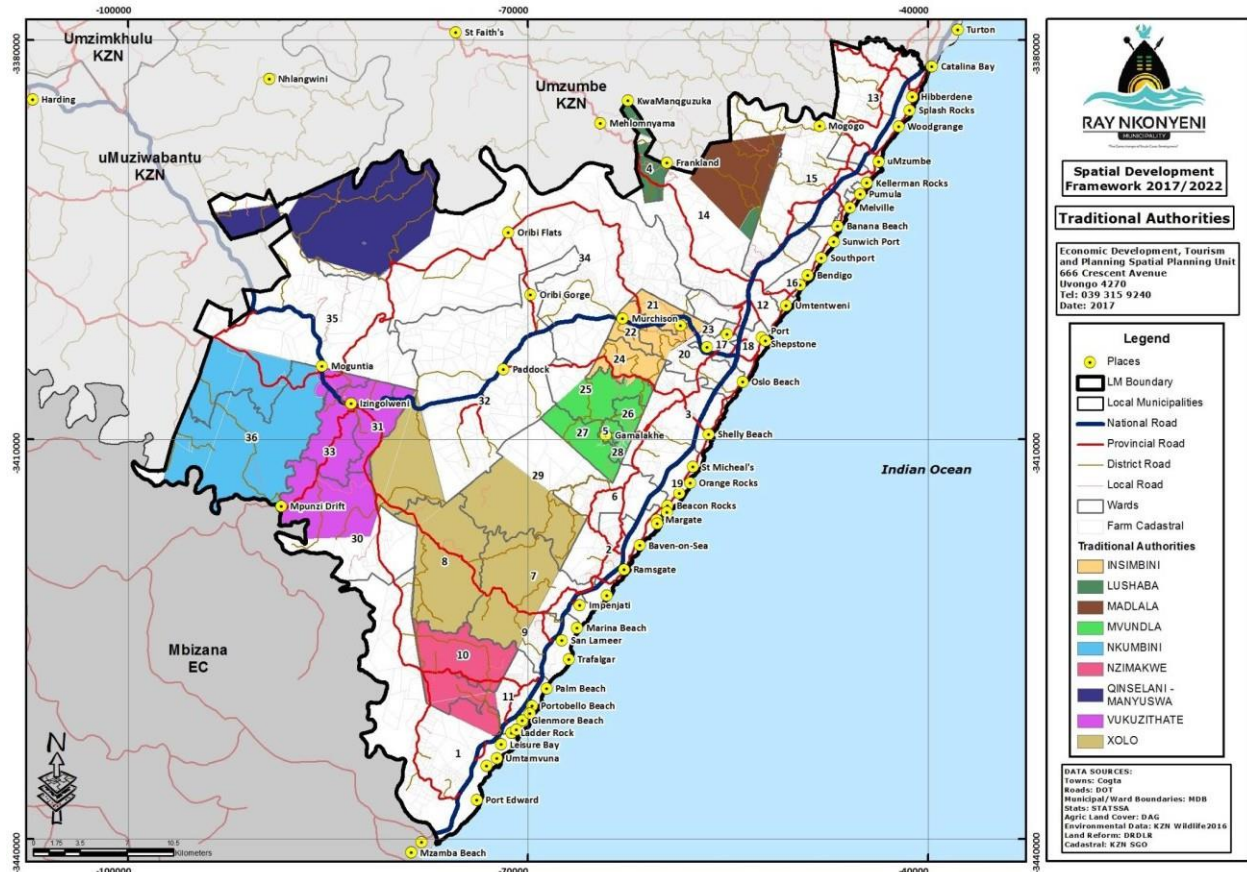
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PART C4: SITE INFORMATION

C4.1 LOCALITY PLAN

The Locality of the site is as per the attached Locality Plan.



C4.2 CONDITIONS ON SITE

A brief description of the site conditions is given under this section.

C4.2.1 Nature of Ground and Subsoil Conditions

Geotechnical investigations have been undertaken on the bridge site and are included as an Annexure to the site information.

C4.2.2 Weather Conditions

The following general weather conditions are prevalent on site

Site Conditions	Specific Details
Altitude above sea level	Maximum 230 m
Ambient temperatures	Maximum : 30°C Minimum : 4°C 24 hour Average Max : 30°C
Maximum relative humidity	100%
Environmental atmosphere	Humid with high salt content, severely corrosive.
Lightning	Severe

C4.2.3 Limitations

In arriving at his rates the tenderer/contractors must take note of the following limitations that characterise the site of the bridge. These must be taken into account in pricing and during construction of the bridge.

- The contractor's activities shall be restricted to the bridge construction site.
- The contractor's insurances shall have to cover potential damage to private properties as access passes in close proximity to houses etc

C.4.3 Geotechnical Investigations Report

PART C5 DRAWINGS

C5.1 DRAWINGS

The drawings issued to tenders as part of the tender documents must be regarded as provisional and preliminary for the tenderer's benefit to generally assess the scope of work. The drawings may be issued as a separate book of drawings or else bound in as part of this document. The work shall be carried out in accordance with the latest available revision of the drawings approved for construction (AFC).

At commencement of the contract, the Employer's Agent shall deliver to the Contractor copies of the AFC drawings and any instructions required for the commencement of the works. From time to time thereafter during the progress of the works, the Employer's Agent may issue further drawings for construction purposes as may be necessary for adequate construction, completion and defects correction of the works.

Drawings issued separately are listed in the Book of Drawings. Drawings issued as part of this volume are listed hereafter.

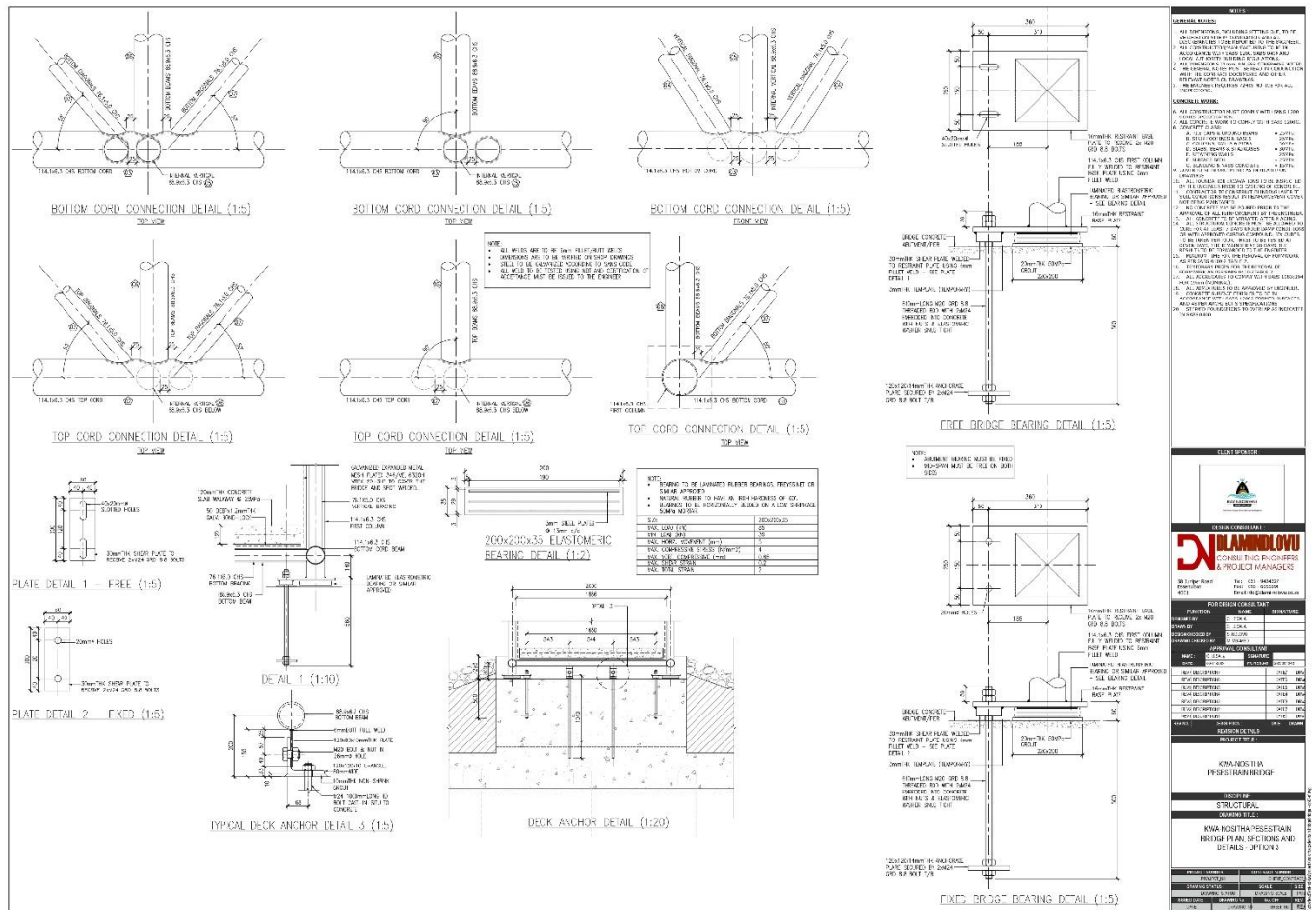
All drawings and specifications and copies thereof remain the property of the Employer, and the Contractor shall return all drawings and copies thereof to the Employer at the completion of the contract.

Tender drawings are issued separately and are listed hereunder:

LIST OF DRAWINGS

DRAWING DETAILS		TITLE
Element of Contract	Drawing N°.	Description
Project Plan	RNM001-STR-200	Concrete Layouts
	RNM001-STR-600	Pedestrian Bridge Structural Steel Layout
Access Road	RNM-002-PL-001	Road Layout







MEMBER	REINFORCEMENT						BENDING DIMENSIONS						FIXING AND NON-STANDARD BENDING DETAILS	
Position	Mark	Dia.	No. per item	No. of items	Total No.	Cutting Length	Shape Code	A	B	C	D	E/r	Mass	
BRIDGE ABUTMENT 1	01	Y 16	10	1	10	5900	55	600	400	3900	400	600	93.22	
	02	Y 16	10	1	10	4700	38	400	3900	400			74.26	
	03	Y 16	16	1	16	4400	55	600	400	2400	400	600	111.23	
	04	Y 16	16	1	16	3200	38	400	2400	400			80.90	
	05	Y 10	4	1	4	1800	83	500	350	300	300		4.44	
	06a	Y 16	11	1	11	1950	54	350	1250	350			33.89	
	06b	Y 16	11	1	11	1950	54	350	1250	350			33.89	
	06c	Y 16	11	1	11	2100	54	350	1400	350			36.50	
	06d	Y 16	11	1	11	1800	54	350	1100	350			31.28	
	06e	Y 16	11	1	11	1550	54	350	850	350			26.94	
	06f	Y 16	11	1	11	1250	54	350	550	350			21.73	
	07a	Y 16	1	1	1	5200	38	1300	2600	1300			8.22	
	07b	Y 16	1	1	1	4700	38	1050	2600	1050			7.43	
	07c	Y 16	1	1	1	4200	38	800	2600	800			6.64	
	07d	Y 16	1	1	1	3700	38	550	2600	550			5.85	
	08	Y 16	10	1	10	5000	20	5000					79.00	
	09	Y 16	11	1	11	2250	62	2100	1600	150			39.11	
BRIDGE ABUTMENT 2	01	Y 16	10	1	10	5900	55	600	400	3900	400	600	93.22	
	02	Y 16	10	1	10	4700	38	400	3900	400			74.26	
	03	Y 16	16	1	16	4400	55	600	400	2400	400	600	111.23	
	04	Y 16	16	1	16	3200	38	400	2400	400			80.90	
	05	Y 10	4	1	4	1800	83	500	350	300	300		4.44	
	06a	Y 16	11	1	11	2500	54	350	1800	350			43.45	
	06b	Y 16	11	1	11	2500	54	350	1800	350			43.45	
	06c	Y 16	11	1	11	2700	54	350	2000	350			46.93	
	06d	Y 16	11	1	11	2100	54	350	1400	350			36.50	
	06e	Y 16	11	1	11	1700	54	350	1000	350			29.55	
	06f	Y 16	11	1	11	1300	54	350	600	350			22.59	
	07a	Y 16	1	1	1	5200	38	1300	2600	1300			8.22	
	07b	Y 16	1	1	1	4900	38	1150	2600	1150			7.74	
	07c	Y 16	1	1	1	4600	38	1000	2600	1000			7.27	
	07d	Y 16	1	1	1	4300	38	850	2600	850			6.79	
	07e	Y 16	1	1	1	4000	38	700	2600	700			6.32	
	07f	Y 16	1	1	1	3700	38	550	2600	550			5.85	
	08	Y 16	10	1	10	5000	20	5000					79.00	
	09	Y 16	11	1	11	2700	62	2500	2100	200			46.93	
ANCHOR REBAR	10	Y 25	18	2	36	11000	39	10400	200	400			1524.60	
													2973.73 kg	
 58 Juniper Road Essenwood, Durban,							RAY NKONYENI MUNICIPALITY - NOSITHA PEDESTRIAN BRIDGE					Ref Drawing No.	Schedule No.	Rev.
							ABUTMENTS AND PIERS FOUNDATION REINFORCEMENT					XXXXXXX	1	0
												Date :	Detailed by :	Checked :
												5/11/2024	CL	MM