

### BID NO: ORTDM SCMU 09-22/23

### DESCRIPTION: REMEDIAL WORKS FOR KING EDWARD STREET SEWER – MAJOR REPAIRS OF THE SEWAGE PIPELINE

### **SEPTEMBER 2022**

**Prepared for:** The Municipal Manager OR Tambo District Municipality Private Bag X6043 MTHATHA 5099

Tel. No. (047) 501 6400

### **Prepared by:**

Water Services Department OR Tambo District Municipality Private Bag X6043 MTHATHA 5099

Tel. No. (047) 501 6400

NAME OF BIDDER:

CSD SUPPLIER NUMBER: \_\_\_\_\_

EMAIL ADDRESS: \_\_\_\_\_

TENDER AMOUNT: \_\_\_\_\_

**x** / √

#### PLEASE CHECK

1.	That you have read all the pages of the tender document.	
2.	That you have completed ALL the forms required to be completed in NON-ERASEABLE INK.	
3.	That your arithmetic calculation in the pricing schedule is correct.	
4.	That you have attached ALL necessary documentation relating to the Composition of the tendering entity, i.e.	
	(a) Company registration documents naming the shareholders and Directors / members of the company, close corporation etc.	
	(b) Joint venture agreement, if tendering entity is a joint venture.	
5.	That the <b>COMPLETE</b> tender document is submitted.	
6.	That the FORM OF OFFER is completed in full and signed.	
7.	That ALL returnable documents are submitted.	
8.	That ALL returnable schedules are completed and signed.	

9. Ensure that your tender is submitted by **12H00PM** on the closing date of the tender.

### BID NO.: ORTDM SCMU 09-22/23

### REMEDIAL WORKS FOR KING EDWARD STREET SEWERS

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### BID: ORTDM SCMU 09-22/23

### **REMEDIAL WORKS FOR KING EDWARD STREET SEWERS** TENDERS ARE HEREBY INVITED FOR:

#### BID NO.: ORTDM SCMU 09-22/23: REMEDIAL WORKS FOR KING EDWARD STREET SEWERS

To ensure that your Tender is not exposed to invalidation, documents are to be completed in accordance with the conditions and Tender rules contained in the Tender documents. Supporting documents must be sealed and externally endorsed **BID NO.: ORTDM SCMU 09-22/23: REMEDIAL WORKS FOR KING EDWARD STREET SEWERS** and be submitted in the open tender box, Ground Floor, OR Tambo District Municipality, Nelson Mandela Drive, Myezo Park, Mthatha, Eastern Cape, not later than **12H00pm on the 17 October 2022.** 

The lowest or any Bid will not necessarily be accepted, and the OR Tambo District Municipality reserves the right not to consider any tender not suitably endorsed or comprehensively completed as well as the right to accept a Tender in whole or part. Tenders will be adjudicated in accordance with the Supply Chain Management Policy of the OR Tambo District Municipality.

Document		Colour of
Number	Heading	pages
T1.1	Tender Notice and Invitation to Tender	White
T1.2	Tender Data	Pink
T2.1	List of Returnable Documents	Yellow
T2.2	Returnable Documents for tender evaluation purposes	Yellow
C1.1	Form of Offer and Acceptance	White
C1.2	Contract Data	White
C1.3	Operational Health & Safety Specification	White
C1.4	ORTDM Supply Chain Management Policy	White
C2.1	Pricing Instructions	Yellow
C2.2	Activity Schedule	Yellow
C3	Scope of Works	Blue
C4	Site Information / Drawings	Green

The following documents must be completed, signed (where applicable) and submitted as a complete set:



#### O.R. TAMBO DISTRICT MUNICIPALITY

### REMEDIAL WORKS FOR KING EDWARD STREET SEWERS

#### TENDER NOTICE AND INVITATION TO TENDER

Tenders are hereby invited from suitably qualified and experienced Civil Engineering contractors who are registered with the CIDB and are experienced in this nature of the works, for the Remedial Works to restore the optimum functioning of the Harrow Street Sewers in Mthatha.

Bid Number	Name and Description	CIDB Grading	Briefing session	Construction Period
ORTDM SCMU 09-22/23	REMEDIAL WORKS FOR KING EDWARD STREET SEWERS	3CE or higher	Date: 13 October 2022 Time: 10H00 Venue: O.R Tambo Hall, Government Printers, Southernwood, Mthatha	3 months

A compulsory clarification meeting with representatives of the client will take place on the date(s), time(s) and venue(s) before proceeding to site.

THE MUNICIPALITY WILL NOT REPEAT ANY MATTERS ALREADY COVERED IN THE COMPULSORY BRIEFING MEETING TO THE BIDDERS WHO ARRIVE MORE THAN 10 MINUTES LATE TO THE MEETING, NOR WILL IT ALLOW SUCH BIDDERS TO COMPLETE THE ATTENDANCE REGISTER. ANY BID RECEIVED FROM A BIDDER WHO DID NOT ATTEND THE BRIEFING MEETING AND SIGN THE ATTENDANCE REGISTER WILL NOT BE CONSIDERED.

Bid documents should be downloaded on the e-Tender website (www.etenders.gov.za) alternatively on the OR Tambo website (<u>www.ortambo.gov.za</u>).

Bids must be completed in black ink, enclosed in a sealed envelope and clearly marked with the **"Bid number, name and description"**, deposited in the Open Tender Box, Ground Floor, O. R. Tambo District Municipality Building, Nelson Mandela Drive, Myezo Park, Mthatha, Eastern Cape, not later **than 12H00pm on Monday, 17** October 2022.

It must be expressly understood that the Municipality does not accept responsibility for ensuring that bid submissions sent by courier or post, or delivered in any other way, are deposited in the Tender Box. It is therefore preferable for the bidder to ensure that its bid submission is placed in the Tender Box by its own staff or representative(s).

The Municipality reserves the right not to accept the lowest priced tender or any tender at all, or to accept the whole or part of any tender.

#### **RETURNABLE DOCUMENTS TO BE SUBMITTED WITH THE BID:**

- Original or certified copy of BBBEE certificate, or sworn affidavit confirming annual total revenue and level of black ownership if bidder is an Exempted Micro Enterprise (EME) or Qualified Small Enterprise (QSE);
- Certified copies of business registration documents, as issued by CIPC;
- Certified copy of identity documents of directors/shareholders/partners/members, as the case may be.

# NB: CERTIFICATION OF DOCUMENTS MUST NOT BE MORE THAN SIX (6) MONTHS FROM DATE CERTIFIED BY COMMISSIONER OF OATHS.

#### THE BID WILL BE REJECTED IF THE BIDDER FAILS TO:

- Complete fully the bid document or to provide the information requested, or to sign the bid at the appropriate spaces provided or next to errors, his/her/ its bid
- Fill and properly sign the form of offer.
- Attach proof of registration with CSD.
- Attach proof of registration with Construction Industry Development Board (CIDB)
- Attach proof of latest municipal rates and taxes statement of the bidder indicating that rates and taxes are not in arrears for more than 3 months.
- Attach proof of latest municipal rates and taxes statement of each company director indicating that rates and taxes are not in arrears for more than 3 months.
- Attach proof of latest municipal water and sanitation charges statement of the bidder indicating that
  rates and taxes are not in arrears for more than 3 months for bidders who reside in the O. R. Tambo
  District Municipality area.
- Attach proof of latest municipal water and sanitation charges statement of each company director indicating that rates and taxes are not in arrears for more than 3 months for bidders who reside in the O. R. Tambo District Municipality area.
- Attach confirmation of address from a ward councillor where the bidder and company directors operate and reside in a peri-urban area where no rates and taxes and service charges are not billed.
- Attach a copy of a valid lease agreement where the bidder does not own the property they are operating from.
- Attach joint Venture Agreement or Consortium Agreement signed and initialled on each page (if applicable).

#### PREFERENTIAL PROCUREMENT POLICY FRAMEWORK ACT NO 5, 2000 (PPPFA) POINTS WILL BE AWARDED AS FOLLOWS: -

Bids will be evaluated in two stages, namely:

- Stage 1 Functionality assessment
- Stage 2 Price and BBBEE Points

Item Stage 1 of Evaluation-Functionality	
Experience of key staff assigned to the contract	30

	•	Methodology	10
	٠	Availability of key plant and equipment	20
	Stage	2 of Evaluation- Price & B-BBEE	100
	•	B-BBEE	20
ĺ	•	Price	80

Tenders may only be submitted on tender documentation issued. No late, faxed, e-mailed, or other form of tender will be accepted.

**Technical enquiries:** Ms. N, Tshicilela by email: <u>ntombit@ortambodm.gov.za</u> telephone number 047 501 6502.

**All Supply Chain Management enquiries** may be directed to Mr. S. Hopa, telephone number 047 501 6449 or Email: <u>sakhiwoh@ortambodm.org.za</u> during office hours: Monday to Friday 08H00-13H00 and 13H30-16H30.

Tenders will be evaluated in terms of the Supply Chain Management policy of the O.R. Tambo District Municipality. The lowest tender will not necessarily be accepted and the Municipality reserves right to accept the whole or part of any tender or not to consider any tender not suitably endorsed. An 80/20-point system shall apply where 80 points is allocated for price and 20 points allocated for B-BBEE status level of contributor as follows:

<b>B-BBEE status level of contributor</b>	Number of points
1	20
2	18
3	14
4	12
5	8
6	6
7	4
8	2
Non-compliant contributor	0

Unincorporated Joint Ventures and Consortia will only be allocated B-BBEE points provided they submit their consolidated B-BBEE certificate and that such consolidated B-BBEE certificate is prepared for every separate tender.

#### S. MKHIZE MUNICIPAL MANAGER

 T2.2.4

 Contractor
 Witness 1

 Witness 2
 Employer

 Witness 1
 Witness 2

### BID NO.: ORTDM SCMU 09-22/23

### **REMEDIAL WORKS FOR KING EDWARD STREET SEWERS**

### T1.2 TENDER DATA

The conditions of tender are the **Standard Conditions of Tender** as contained in Annexure F of the 30 January 2009 edition of the **CIDB Standard for Uniformity in Construction Procurement**. The Standard Conditions of Tender Procurements make several references to the Tender Data for details that apply specifically to the Tender. The Tender Data shall have precedence in the interpretation of any ambiguity or inconsistency between it and the standard conditions of Tender. Each item of data given below is cross-referenced to the clause in the Standard Conditions of Tender to which it mainly applies.

Please note that the word "Client" is used in this document and referred to as "Employer" in the Standard Conditions of Tender document.

Clause	
Number	
F.1	General
F.1.1	The Employer is: O. R. Tambo District Municipality Private Bag X6043 Mthatha 5099
F.1.2	The Tender documents issued by the Employer comprise:
	TenderT1.1Tender Notice and invitation to tenderT1.2Tender DataT2.1List of Returnable DocumentsT2.2Returnable Documents for tender evaluation purposesT2.3Returnable Documents to be incorporated into the contract
	Contract
	Part 1 : Agreements and Contract dataC1.1Forms of Offer and AcceptanceC1.2Contract DataC1.3Occupational health and safety specificationC1.4O.R. Tambo District Municipality's Health and Safety SpecificationPart 2 : Pricing DataC2.1Pricing InstructionsC2.2Bill of Quantities

	Part 3 : Scope of Works
	C3.1 Description of the Works
	C3.2 Engineering
	C3.3 Procurement
	C3.4 Construction
	C3.5 Management
	Part 4: Site Information / Drawings
F1.3	Interpretation
	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 tender conditions.
F.1.4	Communication:
	Communication with all stakeholders shall be through the O.R. Tambo Municipality's PMU Manager. Communications shall be in the English language. The Employer shall not take any responsibility for non-receipt of communications from or by a tenderer.
	Contact person: Ms. N, Tshicilela; email: ntombit@ortambodm.gov.za.
F.1.5	The employer's right to accept or reject any tender offer
F.1.5.1	Reject or accept
	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 a cancellation and rejection but will give written reasons for such action upon written request to do so.
F.1.6	Procurement procedures
F.1.6.1	A contract will, subject to 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.2	Tenderer's obligations
F.2.1.1	Eligibility
	Only those tenders who are registered with CIDB and have in their employ management and supervisory staff satisfying the requirement of the scope of work for labour intensive competencies for supervisory and management staff are eligible to submit tenders.
F.2.1.2	CIDB Grading
	The required CIDB grading for this project is 3CE or Higher.
F.2.2	Cost of tendering
	Accept that the Employer will not compensate the tenderers 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.
	Check documents
F.2.3	Check the tender documents on receipt for completeness and notify the employer of any discrepancy or omission.
F.2.4	Confidentiality and copyright
	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.

#### T1.2 Tender Data

F.2.5	Reference documents		
	Obtain, as necessary for submitting a tender offer, copies of the latest versions of standards, specifications, conditions of contract and other publications, which are not attached but which are incorporated into the tender documents by reference.		
F2.6	Acknowledge Addenda		
	Acknowledge receipt of addenda to the tender documents, which the employer may issue, and if necessary apply for an extension of the closing time stated in the tender data, in order to take the addenda into account.		
F.2.7	The arrangements for a <b>compulsory clarification meeting</b> are:		
	Date:         Thursday, 13 October 2022         Location:         O.R. Tambo Municipality Hall, Southernwood, Mthatha		
	Starting time: 10h00		
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.		
F2.10	Pricing the tender		
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 South African Rand		
F2.11	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		
	Alternative offers may be submitted 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.2.13.5	The Client's address for delivery of Tender offers and identification details to be shown on each Tender offer package are:		
	<b>Location of Tender box:</b> Tender Box, Ground Floor, O.R. Tambo District Municipality Building, Nelson Mandela Drive, Myezo Park, Mthatha, Eastern Cape.		
	Physical address: O.R. Tambo House, Nelson Mandela Drive, Mthatha		
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		
	The closing times for submission of Tenders are <b>12h00pm Monday</b> , <b>17 October 2022</b> .		
F.2.15	Telephonic, telegraphic, telex, facsimile or e-mailed Bid offers will <b>not</b> be accepted.		
F.2.16	Tender offer validity		
	The Tender offer validity period is 90 Days as stated in the tender data.		

F.2.17

F.2.18

F2.20

F.2.23

Clarification of tender offer after submission The tenderer shall 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. Provide other material The tenderer shall, when requested by the Employer to do so, 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. Submit securities, bonds, policies Submit to the employer before formation of the contract, certificates of insurance required in terms of the conditions of contract identified in the contract data. The tenderer is required to submit with his tender:

#### (1) A valid Tax Verification Pin issued by the South African Revenue Services; and

- (2) Certified copy of the original of all the Companies / CC Registration documents.
- (3) Joint Venture Agreement where applicable in CIDB format (signed and initialed on each page).
- (4) Proof of registration with CIDB
  - (5) Certified copies of the original green bar-coded ID copies of Members of the companies.

#### 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 before the tender closing time stated in the Tender Data and notify all tenderers who drew procurement documents.

### 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 that tender documents are available 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, shall then notify all tenderers who drew documents.

### F.3.4 **Opening of tender submissions**

- F.3.4.1 The employer shall 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 meeting 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 and, where applicable, the total of his prices, preferences claimed and time for completion for the main tender offer only.
- F.3.4.3 The Client shall not be obliged to make available the record outlined in F.3.4.2 to any tenderer who fail to attend the tender opening.

#### F.3.6 Non-disclosure

The client shall 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.

#### T1.2 Tender Data

F.3.7	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.
F3.9	Arithmetical errors, omissions and discrepancies
F.3.9.1	Check responsive tenders for discrepancies between amounts in words and amounts in figures. Where there is a discrepancy between the amounts in figures and the amount 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 tender offers in accordance with F.3.11 for:
	a) the gross misplacement of the decimal point in any unit rate;
	b) omissions made in completing the pricing schedule or bills of quantities; or
	c) arithmetic errors in:
	<ul> <li>i) Line-item totals resulting from the product of a unit rate and a quantity in bills of quantities or schedules of prices; or</li> </ul>
	ii) The summation of the prices.
F.3.9.3	Notify the tenderer 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.3.9.4	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 shall govern and the rate shall 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 bills of quantities apply) to achieve the tendered total of the prices.
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.

Tend	ender Data			
11	Evaluation of tender offers			
	Replace the contents of the entire sub-clause with the following:			
	The procedure for evaluation of responsive tender offers will be method 2 of 2004. Financial offer & Preferences. The bid will be awarded to the bidd highest points for price and preferences combined <b>BUT</b> the prerequisite will <b>points</b> for quality (functionality), which will is explained below.	er who has scored the		
	A. First stage in evaluation: Compliance with Bid Rules and other Requirement	its		
	The bids will be checked to ensure that they comply with the bid rules and a the project document. In particular, the following documentation must be con within the bid.			
	<ul> <li>The form of Offer and Acceptance</li> <li>Audited financial statements for any tender price over R10million</li> <li>Certified company registration documents and ID of members</li> <li>Form C: Compulsory Enterprise Questionnaire</li> <li>Form D: Certificate of Authority for Signature</li> <li>Form E: Amendments, Qualifications and Alternatives</li> <li>Form H: Certificate of Good Standing</li> <li>Form I: Relevant experience</li> <li>Form J: Details of key staff and CVs</li> <li>Form M: Preference Points Claim Form in Terms of the Preferential Procu 2017</li> </ul>	rement Regulations		
	<ul> <li>All information supporting the above forms such as Curriculum Vitae of the project and their functions, details of ownership, relevant experience</li> <li>Addenda issued during the bid period, if any.</li> <li>The pricing schedule</li> </ul>			
	Failure to supply the required information will compromise the bid.			
	B. Next Stage in Evaluation: Quality / Functionality; Price & BBBEE Status Lev The next stage in the evaluation process will consist of two stages, as follows			
	STAGE 1: FUNCTIONALITY/QUALITY EVALUATION			
	The maximum score for functionality shall be 100, distributed as follows:			
	ITEM	WEIGHT		
	Functionality (see detailed criteria below)	100		
	Experience with respect to similar projects	40		

<ul> <li>Experience with respect to similar projects</li> </ul>	40
<ul> <li>Experience and qualification of key staff assigned to the contract</li> </ul>	30
Methodology	10
Availability of key plant and equipment	20

Only bidders who score *60 points or more* on stage 2 will be evaluated further and therefore eligible for award.

Tender functionality / quality	Maximum tende evaluation point
Company experience on similar projects:	40
Similar projects implies:	
<ul> <li>Greenfields sewer projects where sewer diameters are greater or equal to 300ND and longer than 1km.</li> <li>Brownfields sewer projects involving working on live sewer networks with sewer diameters greater or equal to 400ND and longer than 5km and includes managing diverted sewer flows, cleaning and refurbishing existing sewer manholes, pressure jetting existing sewers and repairing or replacing existing portions of same.</li> </ul>	
Copies of Certificate of Completion MUST be submitted with the bid. No points will be awarded where Certificates of Completion have not been submitted with the Bid. If the value of completed project is not reflected on the certificate, provide contractor's appointment or letter from the client with values.	
Tenderer has completed at least Four (4) Similar Waterborne Sewer contracts, at least two (2) Green fields and two (2) Brownfields projects to the total contract value of R 4 million. Copies of Certificate of Completion MUST be submitted with the bid. No points will be awarded where Certificates of Completion have not been submitted with the Bid.	40
Tenderer has completed at least Three (3) Similar Waterborne Sewer contracts, at least two (2) Greenfields and One (1) Brownfields projects to the total contract value of R 3 million. Copies of Certificate of Completion MUST be submitted with the bid. No points will be awarded where Certificates of Completion have not been submitted with the Bid.	25
Tenderer has completed at least Two (2) Similar Waterborne Sewer contracts, at least two (2) Greenfields projects to the total contract value of R 2 million.	10
Copies of Certificate of Completion MUST be submitted with the bid. No points will be awarded where Certificates of Completion have not been submitted with the Bid.	10
No previous Waterborne Sewer projects experience.	0
Experience and qualification of key personnel (NB no key personnel member may be assigned more than one duty). Submission of CV showing experience and projects completed to be attached. Minimum qualifications for each position are as follows: Contracts Manager = ND Civil Engineering or Equivalent and experience on at least one (1) Greenfields <u>or</u> one (1) Brownfields project. Construction Manager/Site Agent = N6 or Equivalent and experience	30
on at least one (1) Greenfields <u>and</u> one (1) Brownfields project. <b>Pipelaying Foreman</b> = N3 or Equivalent and experience on at least one (1) Greenfields <u>or</u> one (1) Brownfields project.	
<b>SHEQ Officer</b> = Minimum qualification as required by law and experience on at least one (1) Greenfields <u>or</u> one (1) Brownfields project.	
Only the persons put forward for the bid or equivalent or better alternatives, in the opinion of the Employers Agent, will be accepted to undertake the works.	

T1.2 Tender Data

10
6
6
10
10
0
20
20
15
5

#### **STAGE 2: EVALUATION FOR PRICE AND PREFERENCE (80/20)**

The procedure for Stage 2 of evaluation of responsive tenders is Method 2

#### Points Awarded for Price (Ps)

A total of 80 points will be awarded to the Tenderer with the lowest balanced price. The **other tenders will be awarded points on the ratio to benchmark price as follows** 

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

Where

Ps	=	Points scored for price of bid under consideration
Pt	=	Rand value of bid under consideration
Pmin	=	Rand value of lowest acceptable bid

#### b) Points awarded for B-BBEE Status Level of Contribution

In terms of Regulation 5 (2) and 6 (2) of the Preferential Procurement Regulations, preference points must be awarded to a bidder for attaining the B-BBEE status level of contribution in accordance with the table below:

	B-BBEE Status Level of Contributor	Number of points (80/20 system)	
	1	20	
	2	18	
	3	14	
	4	12	
	5	8	
	6	6	
	7	4	
	8	2	
	Non-compliant Contributor	0	
	The total calculated points will be rounded	d to the second decimal place.	-
F.3.13	Acceptance of tender offer		
F3.13.1	3.1 Accept the tender offer, if in the opinion of the employer, it does not present any unacceptable		acceptable
	commercial risk and only if the tenderer:		
	a) is not under restrictions, or has principals who are under restrictions, preventing participating the employer's procurement,		

#### T1.2 Tender Data

	b) 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,		
	c) has the legal capacity to enter into the contract,		
	d) is not insolvent, in receivership, 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,		
	e) complies with the legal requirements, if any, stated in the tender data, and		
	f) is able, in the opinion of the employer, to perform the contract free of conflicts of interest.		
F3.13.2	Notify the successful tenderer of the employer's acceptance of his tender offer by completing and returning one copy of the form of offer and acceptance before the expiry of the validity period stated in the tender data or agreed additional period. Providing the form of offer and acceptance does not contain any qualifying statements, it will constitute the formation of a contract between the employer and the successful tenderer as described in the form of offer and acceptance.		
F.3.14	Notice to unsuccessful tenderers		
	After the successful tenderer has acknowledged the employer's notice of acceptance, after written request, the employer will notify the tenderers that their tender offers have not been accepted on the e-tender website: <u>www.etenders.gov.za</u> , by listing the successful tender.		
F.3.15	Prepare Contract documents		
	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,		
	c) other revisions agreed between the employer and the successful tenderer, and		
	d) The schedule of deviations attached to the form of offer and acceptance, if any.		
F.3.16	Issue final contract		
	Prepare and issue the final draft of the contract to the successful tenderer for acceptance as soon as possible after the date of the employer's signing of the form of offer and acceptance (including the schedule of deviations, if any).		

### BID NO.: ORTDM SCMU 09-22/23

### **REMEDIAL WORKS FOR KING EDWARD STREET SEWERS**

### **T2.1 LIST OF RETURNABLE DOCUMENTS**

The Tenderer must complete the following returnable documents:

T2.2 Returnable Documents required for Tender evaluation purposes			
1	Form 2.2.1	General Information of the Tenderer	
2	Form 2.2.2	Authority for Signatory	
3	Form 2.2.3	Schedule of Previous Experience	
4	Form 2.2.4	Schedule of Current Projects	
5	Form 2.2.5	Declaration of Good Standing Regarding Tax	
6	Form 2.2.6	Certificate of Attendance at Site Meeting	
7	Form 2.2.7	Proposed Key Personnel	
8	Form 2.2.8	Schedule Equipment to be used	
9	Form 2.2.9	Schedule of Proposed Sub-Contractors	
10	Form 2.2.10	Financial References	

T2.3 Returnable Documents that will be incorporated into the contract		
1	Form 2.3.1	Record of Addenda to Tender Documents
2	Form 2.3.2	Procurement Form

### BID NO.: ORTDM SCMU 09-22/23

### REMEDIAL WORKS FOR KING EDWARD STREET SEWERS

### T2.2 RETURNABLE DOCUMENTS

#### **RETURNABLE DOCUMENTS REQUIRED FOR TENDER EVALUATION PURPOSES**

- Form 2.2.1 General Information of Tenderer
- Form 2.2.2 Authority of Signatory
- Form 2.2.3 Schedule of Previous Experience
- Form 2.2.4 Schedule of Current Projects
- Form 2.2.5 Declaration of good standing regarding tax
- Form 2.2.6 Registration on the Central Supplier Database
- Form 2.2.7 Certificate of Attendance at Site Meeting
- Form 2.2.8 Proposed Key Personnel
- Form 2.2.9 Schedule of Proposed Sub-consultants
- Form 2.2.10 Financial References
- Form 2.2.11 Municipal Bidding Documents (MBDs)

### FORM 2.2.1 GENERAL INFORMATION OF TENDERER

- 1. Name of Tenderer: .....
- 2. Contact details

Address:	
Tel no:	
Fax no:	
Cell no:	
E-mail address:	

#### 3. Legal entity: Mark with an X.

Sole proprietor	
Partnership	
Close corporation	
Company (Pty) Ltd	
Joint venture	

In the case of a Joint venture, provide details on joint venture members:

Joint venture member	Type of entity (as defined above)

- 7. VAT Registration number: (in case of a joint venture, provide for all joint venture members)
- 8. CIDB registration number: (in case of a joint venture, provide for all joint venture members)

# **ATTACH THE FOLLOWING DOCUMENTS HERETO**

#### 1. For Closed Corporations

Certified copies of CK1 or CK2 as applicable (Founding Statement)

2. For Companies

**Certified copies of Shareholders register** 

3. ID copies

**Certified ID Copies for members** 

4. <u>CIDB registration</u>

Proof of registration with CIDB

5. <u>CSD registration</u>

Proof of registration with Central Supplier Database

6. For Joint Venture Agreements

Copy of the Joint Venture Agreement between all the parties, as well as the certified documents in (1), and or (2) and (4) and (4) of each Joint Venture member.

7. <u>Original of certified copy of the latest municipal rates (not older than 3 months) where</u> enterprise is registered

### FORM 2.2.2 AUTHORITY OF SIGNATORY

Details of person responsible for tender pr	ocess:
Name :	
Contact number :	
Office address :	
•	npanies shall confirm their authority by attaching to this or certified copy of the relevant resolution of their case may be.
"By resolution of the board of directors pas	ssed on <i>(date)</i>
Mr	
SIGNED ON BEHALF OF THE COMPAN	Υ
IN HIS CAPACITY AS	
DATE	:
FULL NAMES OF SIGNATORY	
AS WITNESSES: 1	
2	

### FORM 2.2.2 CERTIFICATE OF AUTHORITY FOR JOINT VENTURES

This Returnable Schedule is to be completed by joint ventures.

tender offer and any contract resulting from it on our behalf.

 NAME OF FIRM
 ADDRESS
 DULY
 AUTHORISED

 SIGNATORY
 SIGNATORY
 SIGNATORY
 SIGNATORY

NAME OF FIRM	ADDRESS	SIGNATORY AUTHORISED
Lead partner		
		Signature
CIDB registration no		Name
		Designation
		Signature
CIDB registration no		Name
		Designation
		Signature
CIDB registration no		Name
		Designation
		Signature
CIDB registration no		Name
		Designation

# ATTACH HERETO THE DULY SIGNED AND DATED ORIGINAL OR CERTIFIED COPY OF AUTHORITY OF SIGNATORY ON COMPANY LETTERHEAD

### FORM 2.2.3 SCHEDULE OF PREVIOUS EXPERIENCE

Provide the following information on relevant previous experience (indicate specifically projects of similar or larger size and/or which is similar with regard to type of work).

	Value (R)	Year(s) work	Reference				
Description	VAT excluded	work executed	Name	Organisation	Tel no		

Name of Tenderer:

Date: .....

Signature :

Full name of signatory:

### FORM 2.2.4 SCHEDULE OF CURRENT PROJECTS

Provide the following information on current relevant projects. <u>This information is material to the award</u> <u>of the Contract.</u>

Description	Value (R)	Date		Reference				
Description	VAT excluded Appointed		Name	Name Organisation				

Name of Tenderer:	
Signature :	

Full name of signatory:

Date: .....

### FORM 2.2.5 DECLARATION OF GOOD STANDING REGARDING TAX

	Tender No:				
SOUTH AFRICAN REVENUE SERVICES	Closing Date:				
DECLARATION OF GOOD STANDING REGARDING TAX PARTICULARS					
TARTICOLARG					
1. Name of Taxpayer/Tenderer:					
2. Trade Name:					
3. Identification Number: (If applicable)					
4. Company / Close Corporation registration number:					
5. Income Tax reference number:					
6. VAT registration number: (If applicable)					
7. PAYE employer's registration number: (If applicable)					
8. Monetary value of Bid:					
	DECLARATION				
I, the undersigned, the above taxpayer/Bidder, hereby declare that my Income Tax, Pay-As-You-Earn (PAYE) and Value-Added-Tax (VAT) obligations of the above-mentioned taxpayer, which include the rendition of returns and payment of the relevant taxes:					
(i) Have been satisfied in terms of the relevant Acts; or					
(ii) That suitable arrangements have been Revenue,	made with the Receiver of to satisfy them.*				
SIGNATURE CAPACITY	DATE				
<u>PLEASE NOTE:</u> * The declaration (ii) cannot be made unless formal arrangements have been made with the Receiver of Revenue with regard to any outstanding revenue/outstanding tax returns.					

# **SARS TAX COMPLIANCE PIN:**

### FORM 2.2.6 REGISTRATION ON THE CENTRAL SUPPLIER DATABASE

Attach proof of registration with the Central Supplier Database. <u>This information is material to the award</u> <u>of the Contract.</u>

## ATTACH CERTIFIED PROOF OF REGISTRATION ON THE NATIONAL CENTRAL SUPPLIER DATABASE

### FORM 2.2.7 CERTIFICATE OF ATTENDANCE AT SITE MEETING

This is to certify that I,
duly authorised representative of(Tenderer)
Address:
Date:
Visited the site on
(Engineer)

I have made myself familiar with the sites and all the local conditions likely to influence the work and the cost thereof.

I further certify that I am satisfied with the description of the work and explanations given by the said Engineer and that I understand perfectly the work to be done, as specified and implied, in the execution of this contract.

REPRESENTATIVE OF EMPLOYER

REPRESENTATIVE OF TENDERER

### FORM 2.2.8 PROPOSED KEY PERSONNEL

The Tenderer shall list below the key personne1 (including first nominee and the second-choice alternate), whom he proposes to employ on the project should his Tender be accepted, both at his headquarters and on the Site, to direct and for the execution of the work, together with their CV depicting their experience, positions held, their nationalities and certified qualifications.

No	Name	Qualification	Designation	YEARS WITH CURRENT COMPANY

Name of Tenderer:

Date: .....

Signature :

Full name of signatory:

### FORM 2.2.9 SCHEDULE OF PROPOSED SUB-CONTRACTORS

NAME OF SUB-CONTRACTOR	FULL DESCRIPTION OF WORK TO BE PERFORMED BY SUB- CONTRACTORS				

Acceptance of this tender shall not be construed as approval of all or any of the listed subcontractors. Should any of the subcontractors not be approved subsequent to acceptance of the tender, this shall in no way invalidate this tender, and the tendered unit rates for the various items of work shall remain final and binding, even in the event of a subcontractor not listed above being approved by the Engineer.

Name of Tenderer: Date: .....

Signature :

Full name of signatory: .....

### FORM 2.2.10 FINANCIAL REFERENCES

#### FINANCIAL STATEMENTS

I/We agree to furnish an audited copy of the latest set of financial statements together with my/our Directors' and Auditors' report for consideration by the Client.

#### **DETAILS OF TENDERERS BANKING INFORMATION**

I/We hereby authorise the Client/Engineer to approach all or any of the following banks for the purposes of obtaining a financial reference:

BANK NAME:	
ACCOUNT NAME: (e.g. ABC Civil Construction cc)	
ACCOUNT TYPE: (e.g. Savings, Cheque etc)	
ACCOUNT NO:	
ADDRESS OF BANK:	
CONTACT PERSON:	
TEL. NO. OF BANK / CONTACT:	
How long has this account been in existence:	0-6 months       (Tick which is appropriate)         7-12 months       (Tick which is appropriate)         13-24 months       (Tick which is appropriate)         More than 24 months       (Tick which is appropriate)
Name of Tenderer:	Date:

Signature :

Full name of signatory:

# ATTACH BANK RATING LETTER

# ATTACH AUDITED FINANCIAL STATEMENTS

## FORM 2.2.11 MUNICIPAL BIDDING DOCUMENTS (MBD)

MBD 1

PART A INVITATION TO BID									
YOU ARE HEREBY INVITED TO BID FOR REQUIREMENTS OF O.R. TAMBO DISTRICT MUNICIPALITY									
BID NUMBER:									
DESCRIPTION:	REMEDIAL W	DIAL WORKS FOR KING EDWARD STREET SEWER							
BID RESPONSE D	OCUMENTS M	AY BE DEPC	DSITED IN THE BI	D BOX S	SITUATED	AT:			
TENDER BOX, G	ROUND FLOOI	R, O.R. TAME	BO DISTRICT MUI	NICIPAL	ITY BUILDI	NG			
NELSON MANDE	NELSON MANDELA DRIVE								
MYEZO PARK									
МТНАТНА									
EASTERN CAPE									
SUPPLIER INFOR	MATION	[							
NAME OF BIDDE	र								
POSTAL ADDRES	<b>SS</b>								
STREET ADDRES	S							1	
TELEPHONE NUM	<b>IBER</b>	CODE					NUMBER		
CELLPHONE NUM	CELLPHONE NUMBER								
FACSIMILE NUM	BER	CODE NUMBER							
E-MAIL ADDRESS									
VAT REGISTRATI	ON NUMBER						1	1	
TAX COMPLIANC	E STATUS	TCS PIN:					CSD No:		
B-BBEE STATUS VERIFICATION C [TICK APPLICABI	ERTIFICATE	☐ Yes ∏ No	☐ Yes LEVEL S AFFIDAV			EE STATUS L SWORN DAVIT			
[A B-BBEE STAT QUALIFY FOR PF		RIFICATION		ORN AF	FIDAVIT (I	FOR EI	NES & QSEs) I		BE SUBMITTED IN ORDER TO
ARE YOU THE AC REPRESENTATIV AFRICA FOR THE /SERVICES /WOR OFFERED?	CREDITED E IN SOUTH GOODS	□Yes □No [IF YES ENCLOSE PROOF]			ARE YOU A FOREIGN BASED SUPPLIER FO THE GOODS /SERVICES /WORKS OFFERED?		FOR	□Yes □No [IF YES, ANSWER PART B:3 ]	
TOTAL NUMBER OFFERED	OF ITEMS	TOTAL BID PRICE R				R			
SIGNATURE OF E	BIDDER	DATE							
CAPACITY UNDER WHICH THIS BID IS SIGNED									
BIDDING PROCEDURE ENQUIRIES MAY BE DIRECTED TO: TECHNICAL INFORMATION MAY BE DIRECTED TO:									
DEPARTMENT		SCM DEPARTMENT CONTACT PERSON Ms.NTOMBI TSHICILELA			S.NTOMBI TSHICILELA				
CONTACT PERSO	N	MR. SAKHIWO HOPA TELEPHONE NUMBER 047 501 6502							
TELEPHONE NUM	<b>IBER</b>	047 501 6449 FACSIMILE NUMBER N/A				A			
FACSIMILE NUM	BER	N/A E-MAIL ADDRESS <u>ntombit@ortambodm.gov.za</u>							
E-MAIL ADDRESS	5	sakhiwoh@	ortambodm.gov.	za					

# PART B TERMS AND CONDITIONS FOR BIDDING

1.	BID SUBMISSION:							
1.1.	1.1. BIDS MUST BE DELIVERED BY THE STIPULATED TIME TO THE CORRECT ADDRESS. LATE BIDS WILL NOT BE ACCEPTED FOR CONSIDERATION.							
1.2.	.2. ALL BIDS MUST BE SUBMITTED ON THE OFFICIAL FORMS PROVIDED-(NOT TO BE RE-TYPED).							
1.3.	THIS BID IS SUBJECT TO THE PREFERENTIAL PROCUREMENT POLICY FRAMEWORK AC PREFERENTIAL PROCUREMENT REGULATIONS, 2017, THE GENERAL CONDITIONS OF C AND, IF APPLICABLE, ANY OTHER SPECIAL CONDITIONS OF CONTRACT.							
	TAX COMPLIANCE REQUIREMENTS							
2.1	BIDDERS MUST ENSURE COMPLIANCE WITH THEIR TAX OBLIGATIONS.							
2.2	BIDDERS ARE REQUIRED TO SUBMIT THEIR UNIQUE PERSONAL IDENTIFICATION NUN SARS TO ENABLE THE ORGAN OF STATE TO VIEW THE TAXPAYER'S PROFILE AND TAX							
2.3	APPLICATION FOR THE TAX COMPLIANCE STATUS (TCS) CERTIFICATE OR PIN MAY A FILING. IN ORDER TO USE THIS PROVISION, TAXPAYERS WILL NEED TO REGISTER WI THROUGH THE WEBSITE <u>WWW.SARS.GOV.ZA</u> .							
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 SUBMIT A SEPARATE TCS CERTIFICATE / PIN / CSD NUMBER.	D, EACH PARTY MUST						
2.7	WHERE NO TCS IS AVAILABLE BUT THE BIDDER IS REGISTERED ON THE CENTRAL (CSD), A CSD NUMBER MUST BE PROVIDED.	SUPPLIER DATABASE						
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.	3.5. IS THE ENTITY LIABLE IN THE RSA FOR ANY FORM OF TAXATION?							
CON	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:

.....

### **DECLARATION OF INTEREST**

- 1. No bid will be accepted from persons in the service of the state<sup>1</sup>.
- 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.

		Full Name of bidder or his or her esentative:
;	3.2	Identity Number:
:	3.3	Position occupied in the Company (director, trustee, shareholder <sup>2</sup> ):
	3.4	Company Registration Number:
Ś	3.5	Tax Reference Number:
:	3.6	VAT Registration Number:
:		The names of all directors / trustees / shareholders members, their individual identity numbers and state employee numbers must be indicated in paragraph 4 below.
:		Are you presently in the service of the state?
		3.8.1 If yes, furnish particulars
	neml (i)	: "in the service of the state" means to be – ber of – any municipal council; any provincial legislature; or ) 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.

<sup>2</sup> Shareholder" 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
<ul> <li>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</li> <li>3.10.1 If yes, furnish particulars</li> </ul>
3.11 Are you, aware of any relationship (family, friend, other) between any other bidder and any persons in the service of the state who may be involved with the evaluation and or adjudication of this bid?
3.11.1 If yes, furnish particulars
<ul> <li>3.12 Are any of the company's directors, trustees, managers, principle shareholders or stakeholders in service of the state?</li></ul>
3.13 Are any spouse, child or parent of the company's directors, trustees, managers, principle shareholders or
stakeholders in service of the state?
3.14 Do you or any of the directors, trustees, managers, principle shareholders, or stakeholders of this company have any interest in any other related companies or business whether or not they are bidding for this contract?
3.14.1 If yes, furnish particulars

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

Full name	Identity number	State employee number

Signature

Data

Date

Capacity

Name of Bidder

# DECLARATION FOR PROCUREMENT ABOVE R10 MILLION (ALL APPLICABLE TAXES INCLUDED)

For all procurement expected to exceed R10 million (all applicable taxes included), bidders must complete the following questionnaire:

NO.	QUESTION	ANSWER (TICK WHIC APPLICABLE)	ANSWER (TICK WHICH RESPONSE IS APPLICABLE)		
		YES	NO		
1.	Are you by law required to prepare annual financial statements?				
1.1	If yes, submit audited annual financial statements for the past three years or since the date of establishment if established during the last 3 years.				

NO.	QUESTION	ANSWER (TICK WHICH RESPONSE IS APPLICABLE)				
		YES	NO			
2.	Do you have any outstanding undisputed commitments for municipal services towards any municipality for more than 3 months or any other service provider in respect of which payment is overdue for more than 30 days?					
2.1	If no, this serves to certify that the bidder has no undisputed commitments for municipal services towards any municipality for more than 3 months or other service provider in respect of which payment is overdue for more than 30 days.					
2.2	If yes, provide details:					

NO.	QUESTION	ANSWER (TICK WHICH RESPONSE IS APPLICABLE)			
		YES	NO		
3.	Has any contract been awarded to you by an organ of state during the past five years, including particulars of any material non-compliance or dispute concerning the execution of such contract?				
3.1	If yes, provide details:				

NO.	QUESTION	ANSWER (TICK WHICH RESPONSE IS APPLICABLE)			
		YES	NO		
4.	Will any portion of the goods of services be sourced from outside the Republic, and if so, what portion, and whether any portion of payment from the municipality is expected to be transferred outside of the Republic?				
4.1	If yes, provide details:				

# CERTIFICATION

I, THE UNDERSIGNED (NAME) ..... CERIFY THAT THE INFORMATION FURNISHED ON THIS DECLARATION FORM IS CORRECT.

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

.....

Signature

.....

Position

.....

Date

.....

Name of Bidder

#### **MBD 6.1**

# PREFERENCE POINTS CLAIM FORM IN TERMS OF THE PREFERENTIAL PROCUREMENT REGULATIONS 2017

This preference form must form part of all bids invited. It contains general information and serves as a claim form for preference points for Broad-Based Black Economic Empowerment (B-BBEE) Status Level of Contribution

# NB: BEFORE COMPLETING THIS FORM, BIDDERS MUST STUDY THE GENERAL CONDITIONS, DEFINITIONS AND DIRECTIVES APPLICABLE IN RESPECT OF B-BBEE, AS PRESCRIBED IN THE PREFERENTIAL PROCUREMENT REGULATIONS, 2017.

#### 1. GENERAL CONDITIONS

- 1.1 The following preference point systems are applicable to all bids:
  - the 80/20 system for requirements with a Rand value of up to R50 000 000 (all applicable taxes included); and
    - the 90/10 system for requirements with a Rand value above R50 000 000 (all applicable taxes included).

1.2

- (a) The value of this bid is estimated to not exceed R50 000 000 (all applicable taxes included) and therefore the 80/20 preference point system shall be applicable; or
- (b) The 80/20 preference point system will be applicable to this tender.
- 1.3 Points for this bid shall be awarded for:
  - (a) Price; and
  - (b) B-BBEE Status Level of Contributor.
- 1.4 The maximum points for this bid are allocated as follows:

	POINTS
PRICE	80
B-BBEE STATUS LEVEL OF CONTRIBUTOR	20
Total points for Price and B-BBEE must not exceed	100

- 1.5 Failure on the part of a bidder to submit proof of B-BBEE Status level of contributor together with the bid, will be interpreted to mean that preference points for B-BBEE status level of contribution are not claimed.
- 1.6 The purchaser reserves the right to require of a bidder, either before a bid is adjudicated or at any time subsequently, to substantiate any claim in regard to preferences, in any manner required by the purchaser.

#### 2. DEFINITIONS

- (a) **"B-BBEE"** means broad-based black economic empowerment as defined in section 1 of the Broad-Based Black Economic Empowerment Act;
- (b) "B-BBEE status level of contributor" means the B-BBEE status of an entity in terms of a code of good practice on black economic empowerment, issued in terms of section 9(1) of the Broad-Based Black Economic Empowerment Act;
- (c) **"bid"** means a written offer in a prescribed or stipulated form in response to an invitation by an organ of state for the provision of goods or services, through price quotations, advertised competitive bidding processes or proposals;
- (d) "Broad-Based Black Economic Empowerment Act" means the Broad-Based Black Economic Empowerment Act, 2003 (Act No. 53 of 2003);
- (e) **"EME"** means an Exempted Micro Enterprise in terms of a code of good practice on black economic empowerment issued in terms of section 9 (1) of the Broad-Based Black Economic Empowerment Act;
- (f) **"functionality"** means the ability of a tenderer to provide goods or services in accordance with specifications as set out in the tender documents.
- (g) "prices" includes all applicable taxes less all unconditional discounts;
- (h) "proof of B-BBEE status level of contributor" means:
  - 1) B-BBEE Status level certificate issued by an authorized body or person;

2)	А	sworn	affidavit	as	prescribed	by	the	B-BBEE	Codes	of	Good	Practice;
----	---	-------	-----------	----	------------	----	-----	--------	-------	----	------	-----------

- 3) Any other requirement prescribed in terms of the B-BBEE Act;
- (i) **"QSE"** means a qualifying small business enterprise in terms of a code of good practice on black economic empowerment issued in terms of section 9 (1) of the Broad-Based Black Economic Empowerment Act;
- (j) "rand value" means the total estimated value of a contract in Rand, calculated at the time of bid invitation, and includes all applicable taxes;

### 3. POINTS AWARDED FOR PRICE

### 3.1 THE 80/20 OR 90/10 PREFERENCE POINT SYSTEMS

A maximum of 80 or 90 points is allocated for price on the following basis:

 $Ps = 80 \left(1 - \frac{Pt - P\min}{P\min}\right) \qquad \text{or} \qquad Ps = 90 \left(1 - \frac{Pt - P\min}{P\min}\right)$ 

Where

Ps = Points scored for price of bid under consideration

Pt = Price of bid under consideration

Pmin = Price of lowest acceptable bid

# 4. POINTS AWARDED FOR B-BBEE STATUS LEVEL OF CONTRIBUTOR

4.1 In terms of Regulation 6 (2) and 7 (2) of the Preferential Procurement Regulations, preference points must be awarded to a bidder for attaining the B-BBEE status level of contribution in accordance with the table below:

B-BBEE Status Level of Contributor	Number of points (90/10 system)	Number of points (80/20 system)
1	10	20
2	9	18
3	6	14
4	5	12
5	4	8
6	3	6
7	2	4
8	1	2
Non-compliant contributor	0	0

#### 5. BID DECLARATION

6.

5.1 Bidders who claim points in respect of B-BBEE Status Level of Contribution must complete the following:

# B-BBEE STATUS LEVEL OF CONTRIBUTOR CLAIMED IN TERMS OF PARAGRAPHS 1.4 AND 4.1

### 6.1 B-BBEE Status Level of Contributor: . = ......(maximum of 10 or 20 points)

(Points claimed in respect of paragraph 7.1 must be in accordance with the table reflected in paragraph 4.1 and must be substantiated by relevant proof of B-BBEE status level of contributor.

### 7. SUB-CONTRACTING

7.1 Will any portion of the contract be sub-contracted?

#### (*Tick applicable box*) YES NO

- 7.1.1 If yes, indicate:
  - i) What percentage of the contract will be subcontracted.....%
     ii) The name of the sub-contractor.....%

- iii) The B-BBEE status level of the sub-contractor.....
- iv) Whether the sub-contractor is an EME or QSE

<u>(</u> Tick a	pplica	ble b	OX)	
YES		NC	)	

v) Specify, by ticking the appropriate box, if subcontracting with an enterprise in terms of Preferential Procurement Regulations,2017:

Designated Group: An EME or QSE which is at last 51% owned by:	EME	QSE
	$\checkmark$	$\checkmark$
Black people		
Black people who are youth		
Black people who are women		
Black people with disabilities		
Black people living in rural or underdeveloped areas or townships		
Cooperative owned by black people		
Black people who are military veterans		
OR		
Any EME		
Any QSE		

#### 8. DECLARATION WITH REGARD TO COMPANY/FIRM

- 8.1 Name of company/firm:.....
- 8.2 VAT registration number:....
- 8.3 Company registration number:....

#### 8.4 TYPE OF COMPANY/ FIRM

- Partnership/Joint Venture / Consortium
- One person business/sole propriety
  - Close corporation
  - Company
- □ (Pty) Limited [TICK APPLICABLE BOX]

# 8.5 DESCRIBE PRINCIPAL BUSINESS ACTIVITIES

.....

# .....

# 8.6 COMPANY CLASSIFICATION

- Manufacturer
- Supplier

8.7

- Professional service provider
- Other service providers, e.g. transporter, etc.
- [TICK APPLICABLE BOX]

MUNICIPAL INFORMATION	
Municipality where business is situated:	
Registered Account Number:	
Stand	Number:

- 8.8 Total number of years the company/firm has been in business:.....
- 8.9 I/we, the undersigned, who is / are duly authorised to do so on behalf of the company/firm, certify that the points claimed, based on the B-BBE status level of contributor indicated in paragraphs 1.4 and 6.1 of the foregoing certificate, gualifies 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 6.1, the contractor may be required to furnish documentary proof to the satisfaction of the purchaser that the claims are correct;
  - iv) If the B-BBEE status level of contributor has been claimed or obtained on a fraudulent basis or any of the conditions of contract have not been fulfilled, the purchaser 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 favourable 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.

WITNESS:	SIGNATURE(S) OF BIDDER(S)
1	DATE:
· · · · · · · · · · · · · · · · · · ·	ADDRESS:
2	

# DECLARATION OF BIDDER'S PAST SUPPLY CHAIN MANAGEMENT PRACTICES

- 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?	Yes	No
	(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 ( <u>www.treasury.gov.za</u> ) and can be accessed by		
	clicking on its link at the bottom of the home page.		
4.1.1	If so, furnish particulars:		
1.0		<b>X</b> 7	N
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	Yes	No
	of 2004)?		
	The Register for Tender Defaulters can be accessed on the National		
	Treasury's website ( <u>www.treasury.gov.za</u> ) by clicking on its link at the bottom		
	of the home page.		
4.2.1	If so, furnish particulars:		
	r r r r r r r r r r r r r r r r r r r		
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	Yes	No
	years?		
4.3.1	If so, furnish particulars:		
<b>T</b> 4.0-00	Oursetter	Yes	NIe
<b>Item</b> 4.4	Question Does the bidder or any of its directors owe any municipal rates and taxes or	Yes	No No
7.7	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:		
r. <b>T.1</b>	n so, rumon particulais.		

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?	Yes	No
4.7.1	If so, furnish particulars:		

### CERTIFICATION

I, THE UNDERSIGNED (FULL NAME) ...... CERTIFY THAT THE INFORMATION FURNISHED ON THIS DECLARATION FORM 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

# CERTIFICATE OF INDEPENDENT BID DETERMINATION

- 1 This Municipal Bidding Document (MBD) must form part of all bids<sup>1</sup> 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).<sup>2</sup> 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:

<sup>1</sup> Includes price quotations, advertised competitive bids, limited bids and proposals.

<sup>2</sup> 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.

# CERTIFICATE OF INDEPENDENT BID DETERMINATION

I, the undersigned, in submitting the accompanying bid:

# BID NO.: ORTDM SCMU 09-22/23: REMEDIAL WORKS FOR KING EDWARD STREET SEWERS

in response to the invitation for the bid made by:

# O.R. TAMBO DISTRICT MUNICIPALITY

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 consortium<sup>3</sup> 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.
- 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.

<sup>3</sup> 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.

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

# O.R. TAMBO DISTRICT MUNICIPALITY

# BID NO.: ORTDM SCMU 09-22/23

# **REMEDIAL WORKS FOR KING EDWARD STREET SEWERS**

# T2.3 RETURNABLE DOCUMENTS

RETURNABLE DOCUMENTS THAT WILL BE INCORPORATED INTO THE CONTRACT

- Form 2.3.1 Record of Addenda to Tender Documents
- Form 2.3.2 Procurement Form

# FORM 2.3.1 RECORD OF ADDENDA TO TENDER DOCUMENTS

Date	Title or Details
	Date

(Addenda received from Engineer for amendments on Tender Documentation)

Name of Tenderer:	 Date:
Signature :	
Full name of signatory:	

# O.R. TAMBO DISTRICT MUNICIPALITY

# BID NO.: ORTDM SCMU 09-22/23

# **REMEDIAL WORKS FOR KING EDWARD STREET SEWERS**

# C1 AGREEMENTS AND CONTRACT DATA

- C1.1 Form of Offer and Acceptance
- C1.2 Contract Data
- C1.3 Performance Guarantee
- C1.4 Labour Intensive Works Requirements
- C1.5 Occupational Health and Safety Specification

# FORM C1.1 FORM OF OFFER AND ACCEPTANCE

### OFFER

The Employer, identified in the Acceptance signature block, has solicited offers to enter into a contract in respect of the following works: BID NO.: ORTDM SCMU 09-22/23: REMEDIAL WORKS FOR KING EDWARD STREET SEWERS

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 Tender Schedules, and by submitting this Offer has accepted the Conditions of Tender.

By the representative of the Tenderer, deemed to be duly authorised, 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

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.

Signature(s)				
Name(s)				
Capacity				
For the tenderer	(Name ar	d address of organisat	ion)	
Name & Signature Of Witness				
	Name		Date	

# 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 1 Agreements and Contract Data (which includes this Agreement)
- Part 2 Pricing Data
- Part 3 Scope of Work
- Part 4 Site information / Drawings

Deviations from and amendments to the documents listed in the Tender Data, including the proposed key personnel and any addenda thereto listed in the Tender Schedules 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 after receiving a completed copy of this Agreement, including the Schedule of Deviations (if any), 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 at or just after the date this Agreement comes into effect. 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.

Signature(s)		
Name(s)		
Capacity		
For the tenderer	(Name and address of org	ganisation)
Name & Signature Of Witness		
	Name	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 becomes 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 5 Subject Details 6 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 Tender Schedules, as well as any confirmation, clarification or change 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.

# FOR THE TENDERER:

Signatures (s)	
Name(s)	
Capacity	
	(Name and address of Organisation)
Name & Signature	
Of Witness	Date
FOR THE EMPLOYER	
Signatures (s)	
Name(s)	
Capacity	
	(Name and address of Organisation)
Name & Signature	
Of Witness	Date

# FORM C1.2 CONTRACT DATA

# PART 1: DATA PROVIDED BY THE EMPLOYER

The contract data of this contract are:

- C1.2.1 Conditions of Contract
- C1.2.2 Data provided by the Employer
- C1.2.3 Data provided by the Contractor

#### C1.2.1 Conditions of Contract

The General Conditions of Contract for Construction Works 3<sup>rd</sup> Edition (2015) published by the South African Institution of Civil Engineering, is applicable to this contract. Copies of these conditions of contract may be obtained from the South African Institution of Civil Engineering, www.saice.org.za.

The General Conditions of Contract for Construction Works make several references to the Contract Data for specific data, which together with these conditions collectively describe the risks, liabilities, and obligations of the contracting parties and the procedures for the administration of the Contract. The Contract Data shall have precedence in the interpretation of any ambiguity or inconsistency between it and the general conditions of contract.

# C1.2.2 Data provided by the Employer

Each item of data given below is cross-referenced to the clause in the General Conditions of Contract for Construction Works to which it mainly applies.

The following contract specific data are applicable to this Contract:

CONTRACT SPECIFIC DATA

The following contract specific data, referring to the General Conditions of Contract for Construction Works, Third Edition, 2015, are applicable to this Contract:

Clause 1.1.1.13: The Defects Liability Period is **3 months.** 

Clause 1.1.1.14: The time for achieving Practical Completion is **3 Months.** 

Clause 1.1.1.15: The name of the Employer is **O. R. Tambo District Municipality** 

Clause 1.1.1.16: The name of the Employer's Agent is **Mariswe (Pty) Ltd.** 

Clause 1.1.1.26: The Pricing Strategy is a Re-measurement

Clause 1.2.1.2: The address of the Employer is:

Private Bag x 6043, Mthatha 5100.

Physical: O.R. Tambo House, Nelson Mandela Drive, Mthatha 5100.

Tel: [047] 501 6400

Clause 1.2.1.2:

The address of the Employer's Agent is:

Physical: Clevedon House, 2 Clevedon Road, Shelborne, East London 5214.

Tel: [043] 721 0186

Clause 3.1.3

The Employer's Agent shall obtain the prior approval of the Employer for the following before executing his functions and duties in terms of the following:

- Nomination of the Employer's Agent's Representative (Refer to Clause 3.3.1)
- Employer's Agent authority to delegate (Refer to Clause 3.3.4)
- Approval of the Construction Manager/Site Agent (Refer to Clause 4.12.2)
- Non-working times (Refer to Clause 5.8.1)
- Suspension of the Works (Refer to Clause 5.11.1)
- Acceleration instead of Extension of Time (Refer to Clause 5.12.4)
- Variation Orders (Refer to Clause 6.3.1)

Clause 5.3.1:

The documentation required before commencement with Works execution are:

- Approved Health and Safety Plan (Refer to Clause 4.3)
- Approved programme (Refer to Clause 5.6)
- Accepted security (Refer to Clause 6.2)
- Insurances (Refer to Clause 8.6)

• Letter of Good Standing with the Compensation Commissioner or Licensed Compensation Insurer.

Clause 5.3.2:

The time to submit the documentation required before commencement with Works execution is **14 days**.

Clause 5.4.2:

The possession of the site shall not be exclusive to the Contractor.

Clause 5.7.1:

Where the Rate of Progress falls behind the approved Programme of Works by one month, the Employer may terminate the Contract giving a **five days' notice** to remedy the situation.

Clause 5.8.1:

The non-working days are Sundays and Saturdays

- The special non-working days are:
  - (1) public holidays

(2) The year-end break commencing on as defined by SAFCEC.

Clause 5.13.1: The penalty for failing to complete the Works is **R 250.00** per calendar per day.

Clause 5.16.3: The latent defect period is **10 years**.

Clause 6.8.2: There is **no** contract price adjustment

Clause 6.5.1.2.3

The percentage allowances to cover overhead charges day works are as follows:

- 15% of gross renumeration workmen actually involved with the work
- 15% of the net cost of materials used

No allowances will be made work done, materials or plant used, where day work rates have been tendered.

Clause 6.10.1.5: The percentage advance on materials not yet built into the Permanent Works is **80%** 

Clause 6.10.3: The limit of retention money is **10%** 

Clause 8.6.1.1.2: The value of Plant and materials supplied by the Employer to be included in the insurance sum is **NIL** 

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 **15%** of the Contract Sum.

Clause 8.6.1.3: The limit of indemnity for liability insurance is **R5 million**.

Clause 10.5.3 The number of Adjudication Board Members to be appointed is **one.** 

# C1.2.3 Data to be provided by the Contractor

Clause 1.1.1.9 The name of the Contractor is: (insert legal name)

Clause 1.2.1.2 The address of the Contractor is:	
Physical address	
Postal Address	
Telephone	
Fax	
Email	

Clause 6.2.1 The security to be provided by the contractor shall be one of the following

Type of security: Note VAT is included in the contract sum and Value of works for calculating percentages	Contractor's choice. Indicate "Yes" or "no"
(1) Cash deposit of 10% of the Contract Sum plus retention of 5% of the value of the works.	
(2) Performance guarantee (note A) of 10% of the Contract Sum plus retention of 5% of the value of the works.	
(3) Retention of 20% of the value of the Works	

Tenderer's signature

Note A

The Performance Guarantee shall be of an Insurance Company listed on the Johannesburg Stock Exchange or<br/>owned by such a company, a Registered South African Bank or a recognised government sponsored, provincial<br/>developmentornationaldevelopment

# C1.3 FORM OF GUARANTEE

### PERFORMANCE GUARANTEE

For use with the General Conditions of Contract for Construction Works, Third Edition, 2015.

# **GUARANTOR DETAILS AND DEFINITIONS**

"Guarantor" means:.... Physical Address:.... "Employer" means:.... "Contractor" means:.... "Employer's Agent" 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	f tax of F	٦	 

Amount in words:	
------------------	--

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

Amount in words:....

Type of Performance Guarantee: .....

"Expiry Date" means:.....

# CONTRACT DETAILS

Engineer 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 Engineer of the Certificate of Completion of the Works or the date of payment in full of the Guaranteed Sum, whichever occurs first. The Engineer 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 Engineer 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 of 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 of 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 affairs with the Contractor in any manner which the Employer may deem fit and the Guarantor shall not have the right to claim his 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
Date
Guarantor's signatory (1)
Capacity
Guarantor's signatory (2)

# FORM C1.4 SPECIAL CONDITION OF CONTRACT PERTAINING TO THE LABOUR-INTENSIVE COMPONENT OF THE WORKS

#### Payment for the labour-intensive component of the Works

Payment for works identified in the Scope of Work as being labour-intensive shall only be made in accordance with the provisions of the Contract if the works are constructed strictly in accordance with the provisions of the Scope of Work. Any non-payment for such works shall not relieve the Contractor in any way from his obligations either in contract or in delict.

#### Applicable labour laws

The Ministerial Determination, Special Public Works Programmes, issued in terms of the Basic Conditions of Employment Act of 1997 by the Minister of Labour in Government Notice N° R63 of 25 January 2002, as reproduced below, shall apply to works described in the scope of work as being labour intensive and which are undertaken by unskilled or semi-skilled workers.

#### 1 Introduction

1.1 This document contains the standard terms and conditions for workers employed in elementary occupations on a Special Public Works Programme (SPWP). These terms and conditions do NOT apply to persons employed in the supervision and management of a SPWP.

1.2 In this document –

(a) "Department" means any department of the State, implementing agent or contractor;

(b) "**Employer**" means any department, implementing agency or contractor that hires workers to work in elementary occupations on a SPWP;

- (c) "Worker" means any person working in an elementary occupation on a SPWP;
- (d) "Elementary occupation" means any occupation involving unskilled or semi-skilled work;

(e) "**Management**" means any person employed by a department or implementing agency to administer or execute an SPWP;

- (f) "Task" means a fixed quantity of work;
- (g) "task-based work" means work in which a worker is paid a fixed rate for performing a task;
- (h) "task-rated worker" means a worker paid on the basis of the number of tasks completed;
- (i) "time-rated worker" means a worker paid on the basis of the length of time worked.

# (j) "Task rate or daily rate" = As per Government Gazette

#### 2 Terms of Work

- 2.1 Workers on a SPWP are employed on a temporary basis.
- 2.2 A worker may NOT be employed for longer than 24 months in any five-year cycle on a SPWP.
- 2.3 Employment on a SPWP does not qualify as employment as a contributor for the purposes of the Unemployment Insurance Act 30 of 1966.

### 3 Normal Hours of Work

- 3.1 An employer may not set tasks or hours of work that require a worker to work-
  - (a) More than forty hours in any week

- (b) On more than five days in any week; and
- (c) For more than eight hours on any day.
- 3.2 An employer and worker may agree that a worker will work four days per week. The worker may then work up to ten hours per day.
- 3.3 A task-rated worker may not work more than a total of 55 hours in any week to complete the tasks allocated (based on a 40-hour week) to that worker.

### 4 Meal Breaks

- 4.1 A worker may not work for more than five hours without taking a meal break of at least thirty minutes duration.
- 4.2 An employer and worker may agree on longer meal breaks.
- 4.3 A worker may not work during a meal break. However, an employer may require a worker to perform duties during a meal break if those duties cannot be left unattended and cannot be performed by another worker. An employer must take reasonable steps to ensure that a worker is relieved of his or her duties during the meal break.
- 4.4 A worker is not entitled to payment for the period of a meal break. However, a worker who is paid on the basis of time worked must be paid if the worker is required to work or to be available for work during the meal break.

#### 5 Special Conditions for Security Guards

- 5.1 A security guard may work up to 55 hours per week and up to eleven hours per day.
- 5.2 A security guard who works more than ten hours per day must have a meal break of at least one hour or two breaks of at least 30 minutes each.

### 6 Daily Rest Period

Every worker is entitled to a daily rest period of at least eight consecutive hours. The daily rest period is measured from the time the worker ends work on one day until the time the worker starts work on the next day.

# 7 Weekly Rest Period

Every worker must have two days off every week. A worker may only work on their day off to perform work which must be done without delay and cannot be performed by workers during their ordinary hours of work ("emergency work").

#### 8 Work on Sundays and Public Holidays

- 8.1 A worker may only work on a Sunday or public holiday to perform emergency or security work.
- 8.2 Work on Sundays is paid at the ordinary rate of pay.
- 8.3 A task-rated worker who works on a public holiday must be paid
  - (a) The worker's daily task rate, if the worker works for less than four hours;
  - (b) Double the worker's daily task rate, if the worker works for more than four hours.
- 8.4 A time-rated worker who works on a public holiday must be paid
  - (a) The worker's daily rate of pay, if the worker works for less than four hours on the public holiday;

(b) Double the worker's daily rate of pay, if the worker works for more than four hours on the public holiday.

#### 9 Sick Leave

- 9.1 Only workers who work four or more days per week have the right to claim sick-pay in terms of this clause.
- 9.2 A worker who is unable to work on account of illness or injury is entitled to claim one day's paid sick leave for every full month that the worker has worked in terms of a contract.
- 9.3 A worker may accumulate a maximum of twelve days' sick leave in a year.
- 9.4 Accumulated sick-leave may not be transferred from one contract to another contract.
- 9.5 An employer must pay a task-rated worker the worker's daily task rate for a day's sick leave.
- 9.6 An employer must pay a time-rated worker the worker's daily rate of pay for a day's sick leave.
- 9.7 An employer must pay a worker sick pay on the worker's usual payday.
- 9.8 Before paying sick-pay, an employer may require a worker to produce a certificate stating that the worker was unable to work on account of sickness or injury if the worker is
  - (a) Absent from work for more than two consecutive days; or
  - (b) Absent from work on more than two occasions in any eight-week period.
- 9.9 A medical certificate must be issued and signed by a medical practitioner, a qualified nurse or a clinic staff member authorised to issue medical certificates indicating the duration and reason for incapacity.
- 9.10 A worker is not entitled to paid sick-leave for a work-related injury or occupational disease for which the worker can claim compensation under the Compensation for Occupational Injuries and Diseases Act.

# 10 Maternity Leave

- 10.1 A worker may take up to four consecutive months' unpaid maternity leave.
- 10.2 A worker is not entitled to any payment or employment-related benefits during maternity leave.
- 10.3 A worker must give her employer reasonable notice of when she will start maternity leave and when she will return to work.
- 10.4 A worker is not required to take the full period of maternity leave. However, a worker may not work for four weeks before the expected date of birth of her child or for six weeks after the birth of her child, unless a medical practitioner, midwife, or qualified nurse certifies that she is fit to do so.
- 10.5 A worker may begin maternity leave
  - (a) four weeks before the expected date of birth; or
  - (b) On an earlier date
    - (i) If a medical practitioner, midwife or certified nurse certifies that it is necessary for the health of the worker or that of her unborn child; or
    - (ii) if agreed to between employer and worker; or

- (c) on a later date, if a medical practitioner, midwife or certified nurse has certified that the worker is able to continue to work without endangering her health.
- 10.6 A worker who has a miscarriage during the third trimester of pregnancy or bears a stillborn child may take maternity leave for up to six weeks after the miscarriage or stillbirth.
- 10.7 A worker who returns to work after maternity leave has the right to start a new cycle of twentyfour months employment, unless the SPWP on which she was employed has ended.

### 11 Family responsibility leave

- 11.1 Workers, who work for at least four days per week, are entitled to three days paid family responsibility leave each year in the following circumstances -
  - (a) When the employee's child is born;
  - (b) When the employee's child is sick;
  - (c) In the event of a death of
    - (i) The employee's spouse or life partner;
    - (ii) The employee's parent, adoptive parent, grandparent, child, adopted child, grandchild, or sibling.

# 12 Statement of Conditions

- 12.1 An employer must give a worker a statement containing the following details at the start of employment
  - (a) The employer's name and address and the name of the SPWP;
  - (b) The tasks or job that the worker is to perform; and
  - (c) the period for which the worker is hired or, if this is not certain, the expected duration of the contract;
  - (d) The worker's rate of pay and how this is to be calculated;
  - (e) The training that the worker will receive during the SPWP.
- 12.2 An employer must ensure that these terms are explained in a suitable language to any employee who is unable to read the statement.
- 12.3 An employer must supply each worker with a copy of these conditions of employment.

#### 13 Keeping Records

- 13.1 Every employer must keep a written record of at least the following -
  - (a) The worker's name and position;
  - (b) In the case of a task-rated worker, the number of tasks completed by the worker;
  - (c) In the case of a time-rated worker, the time worked by the worker;
  - (d) Payments made to each worker.

13.2 The employer must keep this record for a period of at least three years after the completion of the SPWP.

#### 14 Payment

- 14.1 An employer must pay all wages at least monthly in cash or by cheque or into a bank account.
- 14.2 A task-rated worker will only be paid for tasks that have been completed.
- 14.3 An employer must pay a task-rated worker within five weeks of the work being completed and the work having been approved by the manager or the contractor having submitted an invoice to the employer.

- 14.4 A time-rated worker will be paid at the end of each month.
- 14.5 Payment must be made in cash, by cheque or by direct deposit into a bank account designated by the worker.
- 14.6 Payment in cash or by cheque must take place -
  - (a) At the workplace or at a place agreed to by the worker;
  - (b) during the worker's working hours or within fifteen minutes of the start or finish of work;
  - (c) In a sealed envelope which becomes the property of the worker.
- 14.7 An employer must give a worker the following information in writing
  - (a) The period for which payment is made;
  - (b) The numbers of tasks completed or hours worked;
  - (c) The worker's earnings;
  - (d) Any money deducted from the payment;
  - (e) The actual amount paid to the worker.
- 14.8 If the worker is paid in cash or by cheque, this information must be recorded on the envelope and the worker must acknowledge receipt of payment by signing for it
- 14.9 If a worker's employment is terminated, the employer must pay all monies owing to that worker within one month of the termination of employment.

#### 15 Deductions

- 15.1 An employer may not deduct money from a worker's payment unless the deduction is required in terms of a law.
- 15.2 An employer must deduct and pay to the SA Revenue Services any income tax that the worker is required to pay.
- 15.3 An employer who deducts money from a worker's pay for payment to another person must pay the money to that person within the time period and other requirements specified in the agreement law, court order, or arbitration award concerned.
- 15.4 An employer may not require or allow a worker to -
  - (a) Repay any payment except an overpayment previously made by the employer by mistake;
  - (b) State that the worker received a greater amount of money than the employer actually paid to the worker; or
  - (c) Pay the employer or any other person for having been employed.

#### 16 Health and Safety

- 16.1 Employers must take all reasonable steps to ensure that the working environment is healthy and safe.
- 16.2 A worker must –
- (a) Work in a way that does not endanger his/her health and safety or that of any other person;
- (b) Obey any health and safety instruction;
- (c) Obey all health and safety rules of the SPWP;
- (d) Use any personal protective equipment or clothing issued by the employer;
- (e) Report any accident, near-miss incident, or dangerous behaviour by another person to their employer or manager.

### 17 Compensation for Injuries and Diseases

- 17.1 It is the responsibility of the employers (other than a contractor) to arrange for all persons employed on a SPWP to be covered in terms of the Compensation for Occupational Injuries and Diseases Act, 130 of 1993.
- 17.2 A worker must report any work-related injury or occupational disease to their employer or manager.
- 17.3 The employer must report the accident or disease to the Compensation Commissioner.
- 17.4 An employer must pay a worker who is unable to work because of an injury caused by an accident at work 75% of their earnings for up to three months. The employer will be refunded this amount by the Compensation Commissioner. This does NOT apply to injuries caused by accidents outside the workplace such as road accidents or accidents at home.

#### 18 Termination

- 18.1 The employer may terminate the employment of a worker for good cause after following a fair procedure.
- 18.2 A worker will not receive severance pay on termination.
- 18.3 A worker is not required to give notice to terminate employment. However, a worker who wishes to resign should advise the employer in advance to allow the employer to find a replacement.
- 18.4 A worker who is absent for more than three consecutive days without informing the employer of an intention to return to work will have terminated the contract. However, the worker may be re-engaged if a position becomes available for the balance of the 24-month period.
- 18.5 A worker who does not attend required training events, without good reason, will have terminated the contract. However, the worker may be re-engaged if a position becomes available for the balance of the 24-month period.

#### 19 Certificate of Service

- 19.1 On termination of employment, a worker is entitled to a certificate stating -
  - (a) The worker's full name;
  - (b) The name and address of the employer;
  - (c) The SPWP on which the worker worked;
  - (d) The work performed by the worker;
  - (e) Any training received by the worker as part of the SPWP;
  - (f) The period for which the worker worked on the SPWP;
  - (g) Any other information agreed on by the employer and worker





# **CRTANEOD STREET MUNCEPAITY**

#### GUIDELINES FOR CONTRACT ADMINISTRATION IN TERMS OF THE CONSTRUCTION REGULATIONS 2003 HEALTH & SAFETY ACT 1993

#### SECTION 1 AND 2

#### 1. PURPOSE OF THIS DOCUMENT

This document describes the procedures to be followed in the execution of Engineering Projects for OR Tambo District Municipality.

The role of all parties to the development project is described.

The document is in terms of the Construction Regulation 2003 of the Health and Safety Act 1993.

#### 2. BACKGROUND

The Minister of Labour has on 18 July 2003 under section 43 of the Occupational Health and Safety Act 1993 (Act No. 85 of 1993) published new regulations in the Government Gazette 7721, Vol. 456. They have immediate effect and are applicable to the Construction Environment.

These regulations inter alia identify the different role players and their responsibilities, particularly the role of the client, the contractor and that of the designer.

The Construction Regulations endeavour to ensure that:

- i) Hazards or potential hazards to a healthy working environment are identified.
- ii) These hazards or potential hazards are removed or minimised.
- iii) Employers and Workers are made aware of the value of safe working procedures and train themselves to work safely in potential hazardous environments or under potentially unsafe conditions.

#### GUIDELINES FOR CONTRACT ADMINISTRATION IN TERMS OF THE CONSTRUCTION REGULATIONS 2003 HEALTH & SAFETY ACT 1993 SECTION 3

#### 3. THE CLIENT

In terms of the law the client is ultimately responsible for all acts and omissions as far as health and safety is concerned on site. It should be noted that the client will be held legally responsible for every trespass of the regulations, not the designer or the contractor. The law makes provision for fines to be levied and unless the client has been indemnified by the designer or the contractor, such fines will have to be paid by the client.

Clients cannot contract out of their statutory obligations except where the law allows for it. Therefore any liability imposed upon them for statutory non-compliance, cannot be passed on to designers (consultants) or contractors.

In particular the client's responsibilities are defined as follows:

.1	To prepare a health and safety (H&S) specification for the work. This should cover the spectrum of activities handled by the client as part of his normal duties.	Clause 4(1)(a)
.2	To provide a risk assessment to the principal contractor.	Clause 4(1)(b)
.3	To appoint the principal contractor in writing.	Clause 4(1)(c)
.4	To ensure that the H&S plan is implemented.	Clause 4(1)(d)
.5	To stop any contractor executing work in an unsafe manner.	Clause 4(1)(e)
.6	To provide additional H&S information to the contractor should changes be made to the work?	Clause 4(1)(f)
.7	To ensure that the principal contractor is registered and in good standing with the workmen's compensation fund.	Clause 4(1)(h)
.8	To make sure tenderers have made provision in their offers for H&S measures.	Clause 4(1)(h)
.9	To discuss and approve the H&S plan with the principal contractor.	Clause 4(2)
.10	To keep a copy of the H&S plan of the principal contractor.	Clause 4(3)
.11	To <u>not</u> employ a contractor unless the client is reasonably satisfied that the principal contractor who is earmarked for an appointment has the necessary skills, competencies and resources to carry out the work safely.	Clause 4(4)
.12	The client can appoint an agent to handle his duties. The client can obviously also delegate some of his duties but this does not make the person responsible for such particular responsibilities as agent.	Clause 4(5)
	The client should make sure whether such responsibilities are not already part of the designer in terms of the regulations clause 9(2).	

.13 The client shall only appoint someone as his agent if he is reasonably satisfied C that such person can handle such responsibilities.

Clause 4(6)

#### OR TAMBO DISTRICT MUNICIPALITY

#### **GUIDELINES FOR CONTRACT ADMINISTRATION** IN TERMS OF THE CONSTRUCTION REGULATIONS 2003 HEALTH & SAFETY ACT 1993

#### **SECTION 4**

#### 4. THE DESIGNER

## The regulations do not use names like engineer, architect, etc. Instead the term designer has been introduced. The responsibilities of the designer are given in a sub-paragraph under the obligations of the Principal Contractor.

4.1	The regulations has a comprehensive definition of the designer and this includes:	Definitions "designer"
a) b) c) d) e) f) g) h) i)	A person preparing a design. A person checking a design. A firm preparing a design. An architect or engineer contributing to or having responsibility for a design. A building services engineer designing details of fixed plant (scaffolding or cranes). A surveyor specifying articles or drawing up specification (Quantity Surveyor). A contractor in design & build contract. A contractor designing temporary work. A interior designer, shop fitter and landscape architect.	Definitions "structure"
	The regulation also talks of "an engineer designing a structure". "Structure" is a wide concept and is given in paragraph 3.2.5.1(a) underneath.	
4.2	The designer does not automatically through an appointment become the agent of the client in terms of the regulations unless he is appointed in writing to that effect and he accepts such appointment in writing.	Clause 4(5)
4.3	The SAACE model agreement between the client and Engineer has a different meaning of the word "agent".	
	According to the model agreement of SAACE the Engineer acts as the "agent" of the client in a conventional contractual context. "Agent" in terms of the Health & Safety regulations has a totally different meaning.	
4.4	It can be derived from the regulations that the client can appoint a designer to perform certain tasks of the client on his behalf. This still does not mean that these designers become his agent in terms of clause 4(5).	Clause 4(5)
4.5	The regulations are fairly quiet regarding the functions and responsibilities of the designer except when designing of a structure. It is again assumed that the client will identify certain functions to be done by the designer on his behalf.	

4.5	.1 "Structure" in terms of the regulations means:	Definitions
(a) (b)	<ul> <li>any building</li> <li>steel or reinforced concrete structure</li> <li>railway line</li> <li>railway siding</li> <li>bridge</li> <li>waterworks</li> <li>reservoir</li> <li>pipe or pipeline</li> <li>cable</li> <li>sewer</li> <li>sewage works</li> <li>fixed vessels</li> <li>road</li> <li>drainage works</li> <li>earthworks</li> <li>earthworks</li> <li>dam</li> <li>wall</li> <li>mast</li> <li>tower</li> <li>tower crane</li> <li>batching plants</li> <li>pylon</li> <li>surface and underground tanks</li> <li>earth retaining structure</li> <li>or any structure designed to preserve or alter any natural feature and any other similar structure.</li> </ul>	
(c)	provide support or access during construction (structural engineering sector). Fixed plant to prevent people from falling 2 meters or more.	
4.5	2 The designer is in fact regarded as a person delivering designs only and unless his role is defined by the client, his role is quite limited.	Clause 9(2)
4.5	.3 The designer should inform the client and the principal contractor about anticipated dangers relating to the construction work. <u>This is in fact a Risk</u> <u>Assessment.</u>	Clause 9(2)(b)
4.5	.4 The designer (in the structural engineering context) shall further furnish to the contractor in writing:	Clause 9(2)
i) ii) iii) iv) v) vi)	A geo-technical report. The loading of the structure. The method and sequence of the construction process. He should exclude inherently dangerous methods of construction in his design. The maintenance of the structure shall be through safe procedures. He should carry out inspections.	

vi) He should carry out inspections.vii) And stop the contractor from executing work dangerously.

- viii)
- A final inspection is necessary to ensure safety of the structure. Great emphasis should be given to the ergonomic design of the structure. The engineer should also give input in the design of temporary work e.g. ix) x)
- scaffolding.

Clause 10(c)

#### GUIDELINES FOR CONTRACT ADMINISTRATION IN TERMS OF THE CONSTRUCTION REGULATIONS 2003 HEALTH & SAFETY ACT 1993

#### SECTION 5

#### 5. THE PRINCIPAL CONTRACTOR (P C) AND CONTRACTOR

The responsibilities of these parties are comprehensively stipulated in the regulations.

5.1	In general it can be seen that the responsibilities of the PC (Principal Contractor) towards his contractors is Mutatis Mutandis to the responsibilities of the Client towards the PC.	
5.2	The PC is responsible for the collecting of these contractors' safety plans and to hold them to it.	Clause 5(1) and (2)
i) ii) iii) iv) v) vi)	He should also stop his contractors should they work unsafely. He should appoint safety officers should the size of the work warrant it. He should cause a risk assessment to be executed by a competent person. Visitors to his site should undergo induction pertaining to H&S issues. He shall see to his employees induction and H&S training. The employees of the PC and his contractors shall wear visible proof of their induction training.	Clause 5(3)(d) Clause 6(6) Clause 7(1) Clause 7(8) Clause 7(7) Clause 7(9)(a)
5.3	<ul> <li>The regulations also covers the detail of:</li> <li>Fall protection</li> <li>Structures (under this heading the responsibilities of the designer of a structure is found)</li> <li>Formwork and support work</li> <li>Excavation work</li> <li>Demolition work</li> <li>Tunnelling</li> <li>Scaffolding</li> <li>Suspended platforms</li> <li>Boatswain's chairs</li> <li>Material hoists</li> <li>Batch plants</li> <li>Explosive powered tools</li> <li>Cranes</li> <li>Construction vehicles and mobile plant</li> <li>Electrical installation and machinery on construction sites</li> </ul>	Clause 8 Clause 9 Clause 10 Clause 11 Clause 12 Clause 13 Clause 14 Clause 15 Clause 16 Clause 17 Clause 18 Clause 19 Clause 20 Clause 21
	<ul> <li>Electrical installation and machinery on construction sites</li> <li>Use and storage of flammable liquids on construction sites</li> <li>Water environment</li> <li>Housekeeping on construction sites</li> <li>Stacking and storage on construction sites</li> <li>Fire precautions on construction sites</li> <li>Construction welfare facilities</li> </ul>	Clause 22 Clause 23 Clause 24 Clause 25 Clause 26 Clause 27

#### GUIDELINES FOR CONTRACT ADMINISTRATION IN TERMS OF THE CONSTRUCTION REGULATIONS 2003 HEALTH & SAFETY ACT 1993

#### SECTION 6

6. <b>APF</b>	POINTM	ENT OF THE DESIGNER	Clause 4(5)	
6	.1	The client appoints the consultant or des particular project and also for the duratic		
6.	.2	It is further important to distinguish betwee model agreement between client and en H&S regulations.		
6.	.3	The responsibilities and duties of a design that are dictated by law and/or those responses except when he is a structural engineer a case clause 9(2) applies automatically.	pectively given to him by the client,	
6.	.4	The client should only add to the respon is not automatically in his hand in terms		
6	.5	The following duties are not regarded as "structure" and will therefore require an a		
	.1 .2 .3 .4 .5	To ensure the H&S plan of the PC is imp To ensure that changes to the design an To ensure that the principal contractor is with the workmens' compensation fund. To see that the contractor registers the s Department of Labour. To discuss with the contractor the H&S p client the approval thereof.	e also incorporated in the H&S plan. registered and in good standing site as a construction site at the	Clause 4(1)(d) Clause 4(1)(e) Clause 4(1)(f) Clause 4(1)(g) Clause 4(2)
	.6 .7	To keep a copy of the H&S plan of the control the following on site:	ontractor in his possession and see	Clause 4(4)
		<ul> <li>a) To see that the principal contractor k that it is given to the client upon co</li> <li>b) To see that the principal contractor k involved with the project.</li> <li>c) To see that the principal contractor a</li> </ul>	mpletion of the contract. eeps a data base of all contractors	Clause 5(7) Clause 5(9)
		<ul> <li>c) To see that this person is dedicated</li> <li>e) To receive from the contractor his ris that for his and the clients records.</li> </ul>	to the particular project only.	Clause 6(4) Clause 7(1)

#### GUIDELINES FOR CONTRACT ADMINISTRATION IN TERMS OF THE CONSTRUCTION REGULATIONS 2003 HEALTH & SAFETY ACT 1993

#### SECTION 7

#### 7. THE ROLE OF THE CLIENT

7.1	The client shall still prepare the H&S specification in terms of clause 4(1)(a) for its global activities. The H&S specification for the particular project is assigned to the designer.	Clause 4(1)(a)
7.2	The client shall approve of the H&S plan of the contractor, but on the recommendation of the consultant/ designer.	Clause 4(2)
7.3	The client employs the Principal Contractor.	Clause 4(1)(c)
7.4	The client can appoint an agent in which case all the responsibilities of the agent in the regulations are transferred to the agent.	Clause 4(5)
7.5	The client should only appoint an agent should he have made reasonably sure that the agent can handle the responsibility.	Clause 4(6)
7.6	The client shall not appoint a contractor if he is not reasonably sure that the contractor can execute such work in a safe manner.	Clause 4(4)

#### GUIDELINES FOR CONTRACT ADMINISTRATION IN TERMS OF THE CONSTRUCTION REGULATIONS 2003 HEALTH & SAFETY ACT 1993

#### SECTION 8

#### 8. THE ROLE OF THE PRINCIPAL CONTRACTOR

The principal contractor should execute the following duties:

	1
Provide a health and safety plan.	5(1)
See that his contractors comply with the regulations.	5(2)
He should discuss the particular H&S plan.	5(5)
He should have his H&S plan available.	5(6)
He should have an H&S file available on site and hand it over to the client	.,
upon completion.	5(7)
He should not employ contractors who are not capable.	5(10)
He should have full time supervision on site.	6(1) to 6(8)
He should produce a risk assessment of the work.	7(1)
He should train his employees.	7(4)
He should introduce induction training on site.	7(7)/7(8)
All physical aspects of the regulations as in terms of the regulations.	() ()
	See that his contractors comply with the regulations. He should discuss the particular H&S plan. He should have his H&S plan available. He should have an H&S file available on site and hand it over to the client upon completion. He should not employ contractors who are not capable. He should have full time supervision on site. He should produce a risk assessment of the work. He should train his employees. He should introduce induction training on site.

#### GUIDELINES FOR CONTRACT ADMINISTRATION IN TERMS OF THE CONSTRUCTION REGULATIONS 2003 HEALTH & SAFETY ACT 1993

#### SECTION 9

#### 9. THE PROCEDURE

9.1		The Client decides to execute work and appoints a designer to administer the work.	
9.2		The scope of works and the exact duties of the designer are identified and given to him in writing.	
		The designer should affect insurance by which the client is indemnified (by the designer) for acts and omissions of the designer. This type of insurance does not form part of the normal PI insurance provided by the designer.	
		The designer prepares a contract document and ensures that this document states clearly the following:	
	.1	A risk assessment of the project and the H&S specification of the client.	
	.2	All relevant information to enable the pricing of the contract.	9(2)(a)
	.3	Items in the bill to enable the tenderer to price for the risk including insurance indemnifying the client. The document should state whether a full time safety officer is required on site.	9(2)(b)
	.4	<ul> <li>(i) Geotechnical information</li> <li>(ii) Loading of the structure – in other words all relevant technical data taking the definition of "structure" into account.</li> <li>(iii) The method and sequence of the process. This should identify the priorities of the client.</li> </ul>	9(2)(c)(i) to (iii)
	.5	Inherently dangerous procedures should be avoided in the design.	9(2)(d)
	.6	The maintenance of the structure should be considered also so that this aspect would be safe and ergonomic too.	9(2)(e)
9.3		The tenderers then respond by each giving a H&S plan based on the risk assessment of the designer.	
9.4		The client then chooses the contractor according to his procurement policy (taking into account his ability to do the work safely) and appoints him in writing via the designer.	
9.5		The chosen principal contractor then affects a detailed risk assessment and a risk management plan, based on the H&S specification.	

- 9.7 Once on site the principal contractor should register the site by means of the prescribed form and have it approved by the client/designer.
- 9.8 He should open and then maintain his H&S file through the duration of the contract.
- 9.9 He should then further adhere to the provisions of the H&S regulations.
- 9.10 He should hand over the H&S file (recommend to do that with the designer's as-built drawings).
- 9.11 The designer should stop the work if he has reason to belief that the contractor is executing work in an unsafe manner.
- 9.12 Likewise should the principal contractor stop the work of his contractor(s) should he have reason to belief that such contractor is not working safely.

#### GUIDELINES FOR CONTRACT ADMINISTRATION IN TERMS OF THE CONSTRUCTION REGULATIONS 2003 HEALTH & SAFETY ACT 1993

#### SECTION 10

#### 10. CONTRACT DOCUMENTATION

The contract documentation needs to emphasize the following points in order to comply with the Health and Safety Act 1993 and the Construction Regulations 2003.

#### A. In the Specification section

#### 1. Health and Safety Specification

The Client shall issue the Designer with his Health and Safety specification and it shall be included as such in the document.

Should the Designer be of the opinion that variations and additions be made to the specification, due to the nature of the particular project, he shall forward the proposed variation or addition to the NDM who will authorize this in writing.

#### 2. Risk Assessment

This can form part of the contract specifications.

It is necessary to identify to the contractor:

- i) The situation on site as it is with all the potential hazards and dangers involved.
- ii) The nature of the work and the situations that the average contractor would encounter during the execution of the work. The nature of the work and the expected risks should be described in particular as well as the method and the sequence of the work.
- iii) The basic safety precautions that he should take.
- iv) The Safety and Health specification of the client.
- v) To allow sufficient items in the bill of quantities for the tenderer to price for the specified H&S precautions.

#### 3. Insurance

The contractor shall affect insurance indemnifying the client against penalties levied upon the client due to the acts or omissions of the contractor in failing to comply with the provisions of the H&S regulations 2003.

The contractor shall prove to the Engineer that such insurance has been affected and maintained during the construction.

#### B. The Tender Rules

The tender rules shall contain a clause requiring the contractor to submit a H&S plan based on the risk assessment given in the contract document. It should also state that the client is bound by law <u>not</u> to appoint a contractor

should he be reasonably sure that the contractor would not be able to execute the work safely should he be appointed.

The following example is recommended.

Compliance with the Regulations of the H&S Act 2003

Tenderers are required to study the published risk assessment and provide Annexure Y his Health and Safety Plan. Generic document will be disregarded. Such H&S plan should give details regarding the tenderers intention of dealing with the risks.

Failure to submit such H&S plan will result in disqualification of the tender.

Tenderers are informed that the client is bound by law not to accept a tender should he be reasonable sure that the tenderer will not be able to execute the work safely.

#### GUIDELINES FOR CONTRACT ADMINISTRATION IN TERMS OF THE CONSTRUCTION REGULATIONS 2003 HEALTH & SAFETY ACT 1993

#### SECTION 11

#### 11. CONCLUSION

The Construction Regulations 2003 was long overdue in the South African Civil Engineering Construction Industry. Role players will now be forced to implement them and an awareness of safe working environments will be cultivated.

Clients might initially detect a contemptuous attitude particularly from contractors and even designers or consultants. This should not deter clients since acts and omissions from these parties will bring <u>clients</u> in confrontation with the law.

Contract cost will certainly escalate due to the additional specifications but this should be weighed against the value of human lives improved and saved.

The construction industry, particularly the Civil Engineering Sector, will have to accept and embrace these regulations and then seriously look at its productivity to kerb the cost of the implementation process.

#### 1.0 SCOPE

This part of the specification has the objective to assist principal contractors entering into contracts with The Employer that they comply with the Occupational Health and Safety (OH&S) Act, No 85 of 1993. Compliance with this document does not absolve the principal contractor from complying with minimum legal requirements, and the principal contractor remains responsible for the health and safety of his employees and those of his Mandataries. Principal and other contractors should therefore insist that this part of the specification from part of any contract that he may have with other contractors and/or suppliers.

This section covers the development of a health and safety specification that addresses all aspects of occupational health and safety as affected by this contract. It provides the requirements that the principal contractors and other contractors shall comply with in order to reduce the risks associated with this contract that may lead to incidents causing injury and/or ill health.

#### 2.0 GENERAL OCCUPATIONAL HEALTH AND SAFETY PROVISIONS

#### 2.1 Hazard Identification and Risk Assessment (Construction Regulation 7)

#### 2.1.1 Risk Assessments

Paragraph 4 contains a generic list of risk assessment headings that have been identified by The Employer as possibly applicable to this contract. It is, by no means, exhaustive and is offered as assistance to contractors intending to bid.

#### 2.1.2 Development of Risk Assessment

Every principal contractor performing construction work shall, before the commencement of any construction work or work associated with the aforesaid construction work and during such work, cause a risk assessment to be performed by a competent person, appointed in writing, and the risk assessment shall form part of the OH&S plan and be implemented and maintained as contemplated in Construction Regulation 5(1). The risk assessment shall include at least:

- the identification of the risks and hazards to which persons may be exposed
- the analysis and evaluation of the risks and hazards identifies
- a documented plan of safe work procedures to mitigate, reduce or control the risks and hazards that have been identified.
- a monitoring plan and
- a review plan

Based on the risk assessment, the principal contractor shall develop set site-specific OH&S rules that shall be applied to regulate the OH&S aspects of the construction. The risk assessment, together with the site-specific OH&S rules shall be submitted to The Employer before construction on site commences.

Despite the risk assessment listed in paragraph4, the principal contractor shall conduct a baseline risk assessment and the aforesaid listed risk assessment shall be incorporated into the baseline risk assessment. The baseline assessment shall further include the standard working procedures and the applicable method statements based on the risk assessments.

All variations to the scope of work shall similarly be subjected to a risk assessment process.

#### 2.1.3 Review of Risk Assessment

The principal contractor shall review the hazard identification, risk assessments and standard working procedures at each production planning and progress report meetings as the contract work develops and progresses and each time changes are made to the designs, plans and construction methods and processes. The principal contractor shall provide The Employer, other contractors and all other concerned parties with copies of any changes, alterations or amendments as contemplated in paragraph 2.1.3.

#### 2.2 Legal Requirements

A principal contractor shall, as minimum, comply with:

The Occupational Health and Safety Act and Regulations (Act 85 of 1993), an up to date copy of which shall be available on site at all times.

The Compensation or Occupational Injuries and Diseases Act (Act 130 of 1993), an up to date copy of which shall be available on site at all times.

Where work is being carried out on a "mine", the contractor shall comply with the Mines Health and Safety Act and Regulations (Act 29 of 1960) and any other OH&S requirements that the mine may specify. An up-to-date copy of the Mine's Health and Safety Act and Regulations shall be available on site at all times.

#### 2.3 Structure and Responsibilities

It is a requirement that the principal contractor, when he appoints contractors (Sub-contractors) in terms of Construction Regulations 5(3), 5(5), 5(10), and 5(12) includes in his agreement with such contractors the following:

- OH& S Act (85 of 1993), Section 37(2) agreement: "Agreement with Mandatory"
- OH&S Act (85 of 1993), Section 16(2) appointee/s as detailed in his / her/ their respective appointment forms.

#### 2.2.3 Further (Specific) Supervision Responsibilities for OH & S

The contractor shall appoint designated competent employees and/or other competent persons as required by the Act and Regulations. Below is a generic list of identified appointments and may be used to select the appropriate

appointments for this contract. The contractor shall note it is a generic list only and is intended for use as a guideline.

Ref. Section/ Regulation in OHS Act	
Batch Plant Supervisor	(Construction Regulation 6(1)
Construction Vehicles/ Mobile Plant/ Machinery Supervisor	Construction Regulation 21)
Demolition Supervisor	(Construction Regulation 12)
Drivers/Operators of Construction Vehicles/ Plant	Construction Regulation 21)
Electrical Installation and Appliances Inspector	(Construction Regulation 22)
Emergency/Security/Fire Control	(Construction Regulation 27)
Excavation Supervisor	(Construction Regulation 11)
Explosive powered Tool Supervisor	(Construction Regulation 19)
Fall Protection Supervisor	(Construction Regulation 8)
First Aider	(Construction Regulation 3)
Fire Equipment Inspector	(Construction Regulation 27)
Formwork & Support work Supervisor	(Construction Regulation 10)
Hazardous Chemical Substances Supervisor	(HCS Regulations)
Incident Investigator	(General Admin Regulation 29)
Ladder Inspector	(General Safety Regulation 13A)
Lifting Equipment Inspector	(Construction Regulation 20)
Material Hoist Inspector	(Construction Regulation 17)
OH&S Committee	(OH&S Section 19)
OH&S Officer	(Construction Regulation 6(6)
OH&S Representatives	(OHS Act Section 17)
Person Responsible for Machinery	(General Machinery Regulation 2)
Scaffolding Supervisor	(Construction Regulation 14)
Stacking & Storage Supervisor	(Construction Regulation 26)
Structures Supervisor	(Construction Regulation 9)
Suspended Platform Supervisor	(Construction Regulation 15)
Tunneling under Pressure Supervisor	(Construction Regulation 13)
Vessel under Pressure Supervisor	(Vessel under Pressure Regulations)
Working on/next to Water Supervisor	(Construction Regulation 24)
Welding Supervisor	(General Safety Regulation 9)

In addition The Employer requires that a Traffic Safety Officer be appointed (see COLTO Section 1500). The above appointments shall be in writing and the responsibilities clearly stated together with the period for which the appointment is made. This information shall be communicated and agreed with the appointees. Notice of appointments shall be submitted to The Employer. All changes shall also be communicated to the Employer.

The principal contractor or shall, furthermore, provide The Employer with an organogram of all contractors that he/she has appointed or intends to appoint and keep this list updated and prominently displayed on site. Where necessary, or when instructed by an inspector of the Department of Labour, the principal contractor shall appoint a component safety officer.

#### 2.3.3 Designation of OH&S Representatives (Section 17 of the OH&S Act)

Where the principal contractor employs more than 20 persons (including the employees of other contractors (subcontractors) he has to appoint one OH&S representatives for every 5 employees or part thereof. General Administrative Regulation 6 requires that the appointment or election and subsequent designation of the OH&S representatives be conducted in consultation with employee representatives or employees. (Section 17 of the Act and General Administrative Regulation 6 & 7). OH&S representatives shall be designated in writing and the designation shall include the area of responsibility of the person and term of the designation.

#### 2.3.4 Duties and Functions of the OH&S representatives (Section 18 of the OH&S Act)

The principal contractor shall ensure that the designated OH&S representatives conduct continuous monitoring and regular inspections of their respective areas of responsibility using a checklist and report thereon to the principal contractor. OH&S representatives shall be included in accident or incident investigations. OH&S representatives shall attend all OH&S committee meetings.

#### 2.3.5 Appointment: of OH&S Committee (Section 19 and 20 of the OH&S Act)

The principal contractor shall establish an OH&S committee, which shall meet as specified in the Regulations.

- 2.4 Administrative Controls and the Occupational Health & Safety File
- 2.4.1 The OH&S File (Construction Regulation 5(7)

As required by the Construction Regulation 5(7), the principal contractor and other contractors shall each keep an OH&S file on site. The following list is not exhaustive and shall only be used as a guide:

- Notification of construction work (Construction Regulation 3)
- Latest copy of OH&S Act (General Administrative Regulation 4)
- Proof of registration and good standing with COID Insurer (Construction Regulation 4(g)
- OH&S plan agreed with the client including the underpinning risk assessment/s and method statements (Construction Regulation 5(1)
- Copies of OH&S committee and other relevant minutes
- Designs/Drawings (Construction Regulation 5(8))
- A list of contractors (sub-contractors) including copies of the agreements between the parties and the type of work being done by each contractor (Construction Regulation 9)
- Appointment/designation forms as per paragraphs 2.1.1 and 2.1.2
- Registered as follows:
  - Accident/incident register (Annexure 1 of the General Administrative Regulations)
  - OH&S representatives' inspection register
  - Asbestos demolition and stripping register
  - Batch plant inspections
  - Construction vehicles and mobile plant inspections by controller
  - Daily inspection of vehicles, plant and other equipment by the operator/driver/user
  - Demolition inspection register
  - Designer's inspection of structures record
  - Electrical installations, equipment and appliances including portable electrical tools)
  - Excavations inspector
  - Explosive powered tool inspection, maintenance, issue and returns register (incl. Cartridges and nails
  - Fall protection inspection register
  - First aid box contents
  - Fine equipment inspection and maintenance
  - Formwork and support work inspections
  - Hazardous chemical substances record
  - Ladder inspections
  - Lifting equipment register
  - Materials hoist inspection register
  - Machinery safety inspection register (incl. Machine guards, lock-outs etc.)
  - Scaffolding inspections
  - Stacking and storage inspection
  - Inspection of structures
  - Inspection of suspended platforms
  - Inspection of tunnelling operations
  - Inspection of vessels

under

- Welding equipment inspections
- Inspection of work conducted near water
- All other applicable records including traffic safety officer reports.

The Employer will conduct an audit on the OH&S file of the principal constructor from time-to time.

#### 2.5 Notification of Construction Work (Construction Regulation 3)

The principal constructor shall, where the contract meets the requirements laid down in Construction work and use the form (Annexure A in the Construction Regulations) for the purpose. A copy shall be kept on the OH&S file and a copy shall be forwarded to The Employer for record keeping purposes.

#### 2.6 Training and Competence

The contents of all training required by the Act and Regulations shall be included in the principal contractor's OH&S plan. The principal contractor shall be responsible for ensuring that all relevant training is undertaken.

Only accredited service providers shall be used for OH&S training. The principal contractor shall ensure that his and other contractor's personnel appointed are competent and that all training required to do the work safely and without risk to health, has been completed before work commences. The principal contractor shall ensure that follow-up and refresher training is conducted as the contract progresses and the work situation changes. Records of all training must be kept on the OH&D file for auditing purposes.

#### 2.7 Consultations, Communication and Liaison

OH&S liaison between the client, the principal contractor, the other contractors, the designer and other concerned parties will be through the OH&S committee as contemplated in paragraph 2.3.5.In addition to the above, communication may be directly to the client or his appointed agent, verbally or in writing, as and when the need arises.

Consultation with the workforce on OH&S matters will be through their supervisions, OH&S representatives and the OH&S committee. The principal contractor shall be responsible for the dissemination of all relevant OH&S information to the other contractors e.g. design changes agreed with the client and the designer, instructions by the client and/or/his/her agent, exchange of information between contractors, the reporting of hazardous/dangerous conditions/situations etc. The principal contractor's most senior manager on site shall be required to attend all OH&S meetings.

#### 2.8 Checking Reporting and Corrective Actions

#### 2.8.1 Monthly Audit by Client (Construction Regulation 4(1) (d)

The Employer will conduct monthly audits to comply with Construction Regulation 4(1)(d) to ensure that the principal contractor has implemented and is maintaining the agreed and approved OH&S plan.

#### 2.8.2 Other Audits and Inspections by The Employer

The Employer reserves the right to conduct other hoc audits and inspections as deemed necessary. This will include site safety walks.

#### 2.8.3 Contractor's Audits and Inspections

The principal contracto	r is to conduct his	own monthly	internal audits	to verify	<sup>,</sup> compliances wi	ith his own OH&S
management	system	as	well	as	this	specification.

#### 2.8.4 Inspections by OH&S Representatives and other Appointees

OH&S representatives shall conduct weekly inspections of their areas of responsibility and report thereon to their foreman or supervisor whilst other appointees shall conduct inspections and report thereon as specified in their appointments e.g. vehicle and machinery drivers, operators and users must conduct daily inspections before start-up.

#### 2.8.5 Recording and Review of Inspection Results

All the results of the above mentioned inspections shall be in writing at OH&S committee meetings, endorsed by the chairman of the meeting and placed on the OH&S File.

#### 2.9 Accidents and Incident Investigation (General Administrative Regulation 9)

The principal contractor shall be responsible for the investigation of all accidents/incidents where employees and non-employees were injured to the extent that he/she/they had to be referred for medical treatment by a doctor, hospital or clinic. The results of the investigations shall be entered into an accident/incident register listed in paragraph2.4.1

The principal contractor shall be responsible for the investigation of all minor and non-injury incidents as described in Section24 (1) (b) & (c) of the Act and keeping a record of the results of such investigations including the steps taken to prevent similar accidents in future.

#### 2.10 Reporting

The principal contractor shall provide the Employer with copies of all statutory reports required in terms of the Act within 7 days of the incident occurring.

#### 3.0 OPERATIONAL CONTROL

#### 3.1 Operational Procedures

Each construction activity shall be assessed by the principal contractor so as to identify operational procedures that will mitigate against the occurrence of an incident during the execution of each activity. This specification requires the principal contractor:

- to be conversant with Regulations 8 to 29 (inclusive)
- to comply with their provisions
- to include them in his OH&S plan where relevant

#### 3.2 Emergency Procedure

Simultaneous with the identification of operational procedures (per paragraph 3.1 above), the principal contractor shall similarly identify and formulate emergency procedures in the event an incident does occur. The emergency procedures thus identified shall also be included in the principal contractor's OH&S plan.

#### 3.3 Personal & Other Protective Equipment (Section 8/15/23 of the OH&S Act)

The contractor shall identify the hazards in the workplace and deal with them. He must either remove them or, where impracticable, take steps to protect workers and make it possible for them to work safely and without risk to health under the hazardous conditions.

Personal protective equipment (PPE) should, however, be the last resort and there should always first be an attempt to apply engineering and other solutions to mitigating hazardous situations before the issuing of PPE is considered.

Where it is not possible to create an absolutely safe and healthy workplace the contractor shall inform employees regarding this and issue, free of charge, suitable equipment to protect them from any hazards being present and that allows them to work safely and without risk to health in the hazardous environment.

It is a further requirement that the contractor maintain the said equipment, that he instructs and trains the employees in the use of the equipment and ensures that the prescribed equipment is used by the employee/s.

Employees do not have the right to refuse to use/wear the equipment prescribed by the employer and, if it is impossible for an employee to use or wear prescribed protective equipment through health or any other reason, the employee cannot be allowed to continue working under the hazardous condition/s for which the equipment was prescribed but an alternative solution has to be found that may include relocating or discharging the employee.

The principal contractor shall include in his OH&S plan the PPE he intends issuing to his employees for use during construction and the sanctions he intends to apply in cases of non-conformance by his employees. Conformance to the wearing of PPE shall be discussed at the weekly inspection meetings.

#### 3.4 Other Regulations

Wherever in the Construction Regulations or this specification there is reference to other regulations (e.g. Construction Regulation 22: Electrical and Machinery on Construction Sites) the principal contractor shall be conversant with and shall comply with these regulations.

#### 3.5 Public Health and Safety (Section 9 of the OH&S Act)

The principal contractor shall be responsible for ensuring that non-employees affected by the construction work are aware of the dangers likely to arise from said construction work as well as the precautionary measures to be observed to avoid or minimize those dangers. This includes:

- Non-employees entering the site for whatever reason
- The surrounding community
- Passers-by to the site

#### 4.0 PROJECT/S SPECIC REQUIREMENTS

#### 4.1 List of Risk Assessments

- Clearing and Grubbing of the areas/site
  - Site establishment including:
    - Offices
    - Secure/safe storage foe materials and equipment
    - Ablutions
    - Sheltered eating area
    - Maintenance workshop
    - Vehicle access to the site
    - Dealing with existing structures
- Location of existing services
- Installation and maintenance of temporary construction electrical supply, lightning and equipment
- Adjacent land uses/surrounding property exposures
- Boundary and access control/public liability exposures (NB: the employer is also responsible for the OH&S of the non-employees affected by his/her work activities)
- Health risks arising from neighbouring as well as own activities and from the environment e.g. threats by dogs, bees, snakes and lightning etc.
- Exposure to noise
- Exposure to vibration
- Protection against dehydration and heat exhaustion
- Protection from wet and cold conditions

- Dealing with HIV/AIDS and other diseases
  - Use of portable electrical equipment including
    - Angle grinder
    - Electrical drilling machine
    - Still saw
- Excavation including
  - Ground/soil conditions
  - Trenching
  - Shoring
  - Drainage of trench
- Welding including
  - Arc welding
  - Gas welding
  - Flame cutting
  - Flame cutting
  - Use of LP gas torches and appliances
- Loading and offloading of truck
- Aggregate/sand and other materials delivery
- Manual and mechanical handling
- Lifting and powering operators
- Driving and operation of construction vehicles and mobile plant including.
  - Trenching machine
  - Use and storage of flammable liquids and other hazardous substances
- Layering and bedding
- Installation of pipes in pipelines
- Backfilling trenches
- Protection against flooding
- Gabion work
- Use of explosive
- Protection form overhead power lines
- As discovered by the principal contractor's hazard identification exercise
- As discovered from any inspection and audits conducted by the client of by the principal contractor or any other contractor on site
- As discovered from any accident/incident investigation

## BID NO.: ORTDM SCMU 09-22/23

## REMEDIAL WORKS FOR KING EDWARD STREET SEWERS

## C2 PRICING DATA

- C2.1 Pricing Instructions
- C2.2 Bill of Quantities

## BID NO.: ORTDM SCMU 09-22/23

## REMEDIAL WORKS FOR KING EDWARD STREET SEWERS

## FORM C2.1 PRICING INSTRUCTIONS

- 1. The Tender Data, the Scope of Work and the Drawings are to be read in conjunction with the Schedule of Quantities.
- 2. a. The Schedule comprises items covering the Consortium's profit and costs of general liabilities and of the construction of temporary and permanent Works.
  - b. Although the Tenderer is at liberty to insert a rate of his own choosing for each item in the Schedule, his attention is drawn to the fact that the tenderer has the right, under various circumstances, to payment for additional works carried out and that the Client is obliged to base his assessment of the payment to be paid for such additional work on the rates inserted in the Schedule by the tenderer.
  - c. Clause 8 of each Standardized Specification and the measurement and payment clause of each Particular Specification, read together with the relevant clause of the Project Specification, set out what ancillary or associated activities are included in the rate for the operations specified.
- 3. Descriptions in the Schedule of Quantities are abbreviated. The schedule has been drawn up generally in accordance with the latest issue of "Civil Engineering Quantities". Should any requirement of the measurement and payment clause of the applicable Standardized Specification, or the Project Specification, or the Particular Specification(s) conflict with the terms of the Schedule or, when relevant "Civil Engineering Quantities", the requirement of the Standardized, Project or Particular Specification, as applicable, shall prevail.
- 4. Unless otherwise stated, items are measured net in accordance with the Drawings, and no allowance has been made for waste.
- 5. The prices and rates to be inserted in the Schedule of Quantities are to be the full inclusive prices to the Employer for the work described under the several items. The prices and rates shall be exclusive of Value Added Tax. Such prices shall cover all costs and expenses that may be required in and for the construction of the work described, and shall cover the cost of all general risks, liabilities, and obligations set forth or implied in the documents on which the tender is based.
- 6. A price or rate is to be entered, in **BLACK INK**, against each item in the Schedule of Quantities.
- 7. In the event of the Tenderer failing to price any item it will be held that the Tenderer has made adequate allowance under other items for all labour, material and costs required for the execution, not only of the quantum of work covered by the unpriced item but also for any increase in the said quantum which undertaken may have to be during the course of the Contract.

8. An amount or rate shall be entered against each item in the Bill of Quantities, whether or not quantities are stated. An item against which no amount or rate is entered will be considered to be covered by the other amounts or rates in the Bill.

The Bidder shall also fill in a rate against the items where the words "rate only" appears in the amount column. Although no work is foreseen under these items and no quantities are consequently given in the quantity column, the bidded rates shall apply should work under these items actually be required.

- 9 The quantities set out in the schedule of quantities are only approximate quantities. The quantities of work finally accepted and certified for payment, and not the quantities given in the schedule of quantities, will be used to determine payments to the contractor.
- 10 For the purposes of this Bill of Quantities, the following words shall have the meanings hereby assigned to them:
  - Unit : The unit of measurement for each item of work as defined in the Standardized, Project or Particular Specifications
  - Quantity : The number of units of work for each item
  - Rate : The payment per unit of work at which the Bidder bids to do the work
  - Amount : The quantity of an item multiplied by the bidded rate of the (same) item
  - Sum : An amount bidded for an item, the extent of which is described in the Bill of Quantities, the Specifications or elsewhere, but of which the quantity of work is not measured in units
- 11 The units of measurement indicated in the Bill of Quantities are metric units. The following abbreviations may appear in the Bill of Quantities:

mm	=	millimetre
m	=	metre
km	=	kilometre
km-pass	=	kilometre-pass
m²	=	square metre
m²-pass	=	square metre-pass
ha	=	hectare
m³	=	cubic metre
m³-km=	cubic	metre-kilometre
kW	=	kilowatt
kN	=	kilonewton
kg	=	kilogram
t	=	ton (1 000 kg)
%	=	per cent
MN	=	mega Newton

## BID NO.: ORTDM SCMU 09-22/23

## REMEDIAL WORKS FOR KING EDWARD STREET SEWERS

## FORM C2.2 BILL OF QUANTITIES

SCHEDULE OF QUANTITIES SECTION A : PRELIMINARY AND GENERAL							
	PAYMENT						
ITEM NO.	REFERS	DESCRIPTION	UNIT	LIC	QTY	RATE	AMOUNT
	то						
A	SANS 1200 A	SECTION A : PRELIMINARY AND GENERAL					
A1	8.3	FIXED CHARGE AND VALUE RELATED ITEMS					
A1.1	8.3.1	Contractual Requirements	Sum		1		
A1.2	8.3.2	Establish Facilities on the Site					
A1.3	8.3.2.1	Facilities for Engineer (SANS 1200 AB)					
A1.3.1		a) Engineers Office	No.		0		
A1.3.2		b) Nameboard	No.		0		
A1.3.4		c) Theodolite (tachy), tripod and staff	No.		1		
A1.3.5		d) Automatic, tripod and staff	No		1		
A1.4	8.3.2.2	Facilities for Contractor					
A1.4.1		(a) Offices and storage sheds	Sum		1		
A1.4.2		(b) Workshops	Sum		1		
A1.4.3		(c) Laboratories	Sum		0		
A1.4.4		d) Living accommodation	Sum		1		
A1.4.5		(e) Ablution and latrine facilities at the site camp	Sum		1		
A1.4.6		(f) Ablution and latrine facilities at the work site	Sum		1		
A1.4.7		(g) Refuse bins at the site camp	Sum		1		
A1.4.8		(h) Refuse bins at the work site	Sum		1		
A1.4.9		(i) Tools and equipment	Sum		1		
A1.4.10 Carried for		(j) Water supplies, electric power and communications	Sum		1		

### PROJECT NO.: ORTDM SCMU 09-22/23 SEWERS

C2.2 Bill of Quantities

ITEM NO.	PAYMENT REFERS TO	DESCRIPTION	UNIT	LIC	QTY	RATE	AMOUNT
Brought fo							
A1.4.11		(k) Dealing with water	Sum		1		
A1.4.12		(I) Access	Sum		1		
A1.5		Preparation of OHS Plan & Notification of DoL	Sum		1		
A1.6.	8.3.3	Other fixed-charge obligations	Sum		1		
A1.7	8.3.4	Removal of Site Establishment	Sum		1		
A2	8.4	TIME-RELATED ITEMS					
A2.1	8.4.1	Contractual Requirements	Sum		1		
	8.4.2	Operate and maintain facilities on the Site for duration of construction, except where otherwise stated.					
A2.2	8.4.2.1	Facilities for Engineer :					
A2.2.1		a) Engineers Office	Month		0		
A2.2.2		b) Nameboards	Month		0		
A2.2.4		C Theodolite (tachy), tripod and staff	Month		3		
A2.2.5		d) Dumpy level-automatic, tripod and staff	Month		3		
A2.3	8.3.2.2	Facilities for Contractor					
A2.3.1		(a) Offices and storage sheds	Sum		1		
A2.3.2		(b) Workshops	Sum		1		
A2.3.3		(c) Laboratories / Laboratory services	Sum		1		
A2.3.4		d) Living accommodation	Sum		1		
A2.3.5		(e) Ablution and latrine facilities at the site camp	Sum		1		

ITEM NO.	PAYMENT REFERS TO	DESCRIPTION	UNIT	LIC	QTY	RATE	AMOUNT
Brought fo				•			
A2.3.6		(f) Ablution and latrine facilities at the work site	Sum		1		
A2.3.7		(g) Refuse bins at the site camp	Sum		1		
A2.3.8		(h) Refuse bins at the work site	Sum		1		
A2.3.9		(i) Tools and equipment	Sum		1		
A2.3.10		(j) Water supplies, electric power and communications	Sum		1		
A2.3.11		(k) Dealing with water	Sum		1		
A2.3.12		(I) Provide and maintain access	Sum		1		
A2.4		Compliance with Construction Regulations (OHS Act) for duration of construction	Sum		1		
A2.5	PSA 8.12.1	Compliance with SANS 1921 - 6 Part 6 HIV/AIDS Awareness.					
A2.5.1		b) Provide and maintain condom dispenser.	Sum		1		
A2.5.2		c) Provide and maintain HIV/AIDS awareness posters.	Sum		1		
A2.6.		Compliance with good environmental practice					
A2.6.1		a) Provide Designated Environmental Officer (DEO)	Sum		1		
A2.6.2		b) Providing information and Method Statements as directed by the Engineer.	Sum		1		
A2.6.3		c) Marking out of project work sites.	Sum		1		
A2.6.4		d) Provision and maintenance of fire-fighting equipment.	Sum		1		
arried for	ward						

## PROJECT NO.: ORTDM SCMU 09-22/23 SEWERS

C2.2 Bill of Quantities

ITEM NO.	PAYMENT REFERS TO	DESCRIPTION	UNIT	LIC	QTY	RATE	AMOUNT
Brought fo	rward						
A2.6.5		d) Provision of spill control equipment.	Sum		1		
A2.7	8.4.4	Company and head office overhead costs	Sum		1		
A2.8	8.4.5	Other time-related obligations	Sum		1		
A6	8.5	SUMS STATED PROVISIONALLY BY THE ENGINEER					
A6.1		a) Acceptance Control Testing by Engineer (not specified elsewhere)	PC Sum		1		15 000.0
		b) Overheads, charges and profit on item A3.3 above	%		15 000		
A6.2		a) Cell phone charges for engineer	PC Sum		1		1 000.0
		b) Overheads, charges and profit on item above	%		1 000		
A6.3	PSA 8.11	a) CLO Payments	PC Sum		1		15 000.0
		b) Overheads, charges and profit on item above	%		15 000		
A6.4	PSA 8.9	a) Additional Survey	PC Sum		1		15 000.0
		b) Overheads, charges and profit on item above	%		15 000		
A7		TEMPORARY WORKS					
A7.1	8.8.1	Provide access to all sites and maintain during the course of the contract period	Sum		1		
A7.2	8.8.2	Dealing with traffic	Sum		1		
A7.3	8.8.4	Existing Services					

	PAYMENT	RY AND GENERAL					
ITEM NO.	REFERS TO	DESCRIPTION	UNIT	LIC	QTY	RATE	AMOUNT
rought fo	rward						
A7.3.1		Excavate by hand to locate and expose existing services and to backfill excavation	m <sup>3</sup>	LI	100		
A8		DAYWORKS					
A8.1		Labour during normal working hours					
A8.1.1		Supervisor	hr		8		
A8.1.2		Pipelayer	hr		8		
A8.1.3		Bricklayer	hr		8		
A8.1.4		Unskilled labour	hr		16		
A8.1.5		Skilled labour	hr		8		
A8.1.6		Foreman	hr		8		
A8.1.7		Millwright	hr		0		
A8.2		Plant inclusive of operator, fuel, establishment on and removal from site:					
A8.2.1		TLB	hr		8		
A8.2.2		Tipper Truck (6m <sup>3</sup> )	hr		8		
A8.2.3		Wacker	hr		8		
A8.2.4		Water tanker (10 000 l)	hr		8		
A8.2.5		Plate compactor	hr		8		
A8.2.6		Pressure test pump	hr		8		
A8.2.7		Excavator (exceeding 150 kW)	hr		8		
A8.2.8		LDV	hr		16		
A8.2.9		Concrete mixer	hr		8		

SECTION B	: SEWERS						
ITEM NO.	PAYMENT REFERS TO	DESCRIPTION	UNIT	LIC	QTY	RATE	AMOUNT
в		SECTION B : SEWERS					
B1.1		Assessment					
B1.1.1	CF.04.01	Inspect and assess the entire works area with and report to the Engineer.	Sum		1		
B1.2		Repairs					
B1.2.1	SC.12.01	Decommission and removal of part of the installation (Preparation of works areas for work including, site clearance, isolating and making sewerage infrastructure elements safe, diversion of flows etc. )	Sum		1		
B1.2.2	CF 08.02	Cleaning & assessment of sewer networks					
B1.2.2.1		Clear manholes of solid debris and dispose					
		a) Up to 2.5m deep	No.		15		
		b) 2.5m to 4.5m deep	No.		15		
		b) 4.5m to 5.5m deep	No.		15		
B1.2.2.2	CF 08.02.01	Mechanical cleaning of pipelines and structures					
		a) Up to 150NB	m		200		
		b) 151NB to 300NB	m		200		
		c) 301NB to 450NB	m		200		
B1.2.2.3		Hydraulic cleaning (high pressure jetting) of pipes and structures					
		a) Up to 150NB	m		1000		
		b) 151NB to 250NB	m		750		
		c) 251NB to 450NB	m		500		

ITEM NO.	PAYMENT REFERS TO	DESCRIPTION	UNIT	LIC	QTY	RATE	AMOUNT		
Brought forward									
		d) 451NB to 700NB	m		250				
B1.2.2.4	CF 08.02.03	Provision of equipment for visual inspection (camera survey) equipment for underground pipe networks	Sum		1				
B1.2.2.5	CF 08.02.04	Use of CCTV surveillance equipment (camera survey)	m		2500				
B1.2.3	CF 08.01	Repair of sewer networks							
B1.2.3.1	CF.08.01.01	Repair of Pipelines (excavate to expose old pipe, remove damaged pipe, prepare trench bedding to receive new pipe and lay, bed & backfill new pipe)							
		a) Up to 250NB not exceeding 1.5m deep	m	LI	18				
		b) Up to 250NB : 1.5m to 2.5m deep	m	LI	18				
		c) Up to 250NB : 2.5m to 3.5m deep	m		18				
		d) Up to 250NB : 3.5m to 4.5m deep	m		18				
		e) 251NB to 500NB not exceeding 1.5m deep	m	LI	18				
		f) 251NB to 500NB : 1.5m to 2.5m deep	m	LI	18				
		g) 251NB to 500NB : 2.5m to 3.5m deep	m		18				
		h) 251NB to 500NB : 3.5m to 4.5m deep	m		18				
		i) 501NB to 900NB not exceeding 1.5m deep	m	LI	6				
		k) 501NB to 900NB : 1.5m to 2.5m deep	m	LI	6				

ITEM NO.	PAYMENT REFERS TO	DESCRIPTION	UNIT	LIC	QTY	RATE	AMOUNT
Brought forw	vard						
		I) 501NB to 900NB : 2.5m to 3.5m deep	m		6		
		m) 501NB to 900NB : 3.5m to 4.5m deep	m		6		
B1.2.3.2	CF.08.01.02	Provision of materials (supply and delivery)					
(i)		PVC pipes class 400 multi-layer to SANS 1601					
		a) 110NB	m		24		
		b) 160NB	m		24		
		c) 200NB	m		24		
		d) 250NB	m		24		
		e) 300NB	m		24		
		f) 375NB	m		12		
(ii)		Structured wall HDPe Pipe to SANS 4427 and SANS 21138 (8kN/m2)					
		a) 350NB	m		12		
		b) 400NB	m		12		
		c) 500NB	m		6		
		d) 560NB	m		0		
		e) 600NB	m		6		
		f) 700NB	m		0		
		g) 800NB	m		0		
		h) 900NB	m		0		
Carried forw	ard						-

SCHEDULE OF QUANTITIES **SECTION B : SEWERS** PAYMENT ITEM NO. REFERS DESCRIPTION UNIT LIC OTY RATE AMOUNT то Brought forward Clamp joints for structured wall (iii) HDPe pipes a) 350NB No. 8 b) 400NB No. 8 c) 500NB No. 1 d) 560NB No. 1 e) 600NB 0 No. f) 700NB No. 0 0 g) 800NB No. h) 900NB 0 No. Other fittings as approved by the (iv) Prov Sum 1 50 000.00 50 000.00 Engineer Repairs to masonry or concrete chambers and similar structures, 100 000.00 100 000.00 B1.2.3.3 Prov Sum 1 as well as other works, as approved by the Engineer Replacement of manhole covers, B1.2.3.4 CF08.01.03 grid inlets and the like a) SANS 558 Type 4 manhole No LI 10 covers b) SANS 558 Type 4 frames for No LI 10 manhole covers a) SANS 558 Type 2A manhole 10 No LI covers b) SANS 558 Type 2A frames for 10 No LI manhole covers Manholes and inspection CF 08.01.04 B1.2.3.5 chambers: Raising or lowering of existing B1.2.3.5.1 CF 08.01.04.01 manholes or inspection chambers of all types Carried forward

#### PROJECT NO.: ORTDM SCMU 09-22/23 SEWERS C2.2 Bill of Quantities

SCHEDULE OF QUANTITIES **SECTION B : SEWERS** PAYMENT ITEM NO. REFERS DESCRIPTION UNIT LIC QTY RATE AMOUNT то Brought forward (a) Raise / lower up to 0,5 m LI 5 No (b) Raise / lower exceeding 0,5 m No LI 5 up to and including 1.0m Breaking into existing sewer and CF 08.01.04.02 B1.2.3.5.2 building a new manhole 1250mm diameter manholes complete with Type 4 covers and (i) frame for depths: a) up to 1,5m No LI 2 b) 1,5m up to 2,5m LI 2 No c) 2,5m up to 3,5m No 2 d) 3,5m up to 4,5m No 1 e) 4,5m up to 5,5m No 1 1500mm diameter manholes (ii) complete with Type 4 covers and frame for depths: a) up to 1,5m LI 2 No b) 1,5m up to 2,5m 2 No LI 2 c) 2,5m up to 3,5m No d) 3,5m up to 4,5m No 1 e) 4,5m up to 5,5m No 1 B1.2.3.5.3 CF 08.01.04.03 Connect to existing sewer No 24 Test and inspection of sewer CF 08.03 B1.2.4 sections B1.2.4.1 Pressure test pipelines a) Up to 250 NB 500 m b) 251 to 450 NB 500 m Carried forward

#### PROJECT NO.: ORTDM SCMU 09-22/23 SEWERS C2.2 Bill of Quantities

SCHEDULE OF QUANTITIES SECTION B : SEWERS PAYMENT ITEM NO. REFERS DESCRIPTION UNIT LIC QTY RATE AMOUNT то Brought forward c) 451 to 600NB 500 m d) 600 to 900NB 500 m B1.2.4.2 Water tightness test manholes 30 No Recommissioning and testing of B1.2.5 SC.12.02 No 4 part of the installation Recommissioning of the complete B1.2.6 SC.12.02 Sum 1 installation TOTAL CARRIED TO SUMMARY (SECTION B)

## SCHEDULE OF QUANTITIES

### SECTION C : CONCRETE AND MASONARY WORKS

ITEM NO.	PAYMENT						
	REFERS	DESCRIPTION	UNIT	LIC	QTY	RATE	AMOUNT
	то						
С		SECTION C : CONCRETE AND MASONARY WORKS					
C1	SANS 1200 D	EARTHWORKS					
C1.1	8.3.1	Site Preparation					
C1.1.1	8.3.1.1	Clear and strip site	m²	LI	100		
C1.1.2	8.3.1.2	Remove topsoil to nominal depth of 150mm, stockpile and maintain	m²	Ц	100		
C1.2	8.3.2	Bulk Excavation					
C1.2.1		Excavate in all materials and use for embankment or backfill or dispose of as ordered for reservoir foundations	m³		50		
C1.2.2	8.3.2	Extra over for					
		a) Intermediate excavation	m³		20		
		b) Hard rock excavation	m³		20		
C1.3	8.3.3	Restricted excavation					
C1.3.1	8.3.3	Excavate for restricted foundations, footings, chambers and pipe trenches not exceeding 2m deep in all materials and use for backfill or embankment or dispose	m³	LI	20		
C1.3.2	8.3.3	Extra over for					
		a) Intermediate excavation	m³		10		
Carried forw	vard	1	1	1	I	<u> </u>	

ITEM NO. REFERS		DESCRIPTION		UNIT LIC		RATE	AMOUNT
	то						
Brought for	ward		1			I	
		b) Hard rock excavation	m³		10		
C1.4	8.3.3	Excavate and dispose of unsuitable material from bottom of excavations	m³		50		
C1.5	8.3.3.1	Make up deficiency in back-fill material (Provisional)					
		a) From other necessary excavations on site	m³		15		
		b) By importation from designated borrow pits	m³		15		
		c) By importation from commercial of off-site sources selected by the Contractor	m³		15		
C1.6	8.3.4	Importing of materials					
C1.6.1	8.3.4	Earth filling G5 granular material obtained from site or commercial sources compacted to 93% Mod. AASHTO density, unless otherwise described:	m³ 15				
C1.6.2		19 mm Aggregate material obtained from commercial source:	m³		10		
C1.7		Working against structures					
C1.7.1	8.3.5	Extra excavation in all materials to Provide working space around structure	m <sup>2</sup> 10				
C1.7.2	8.3.9	Extra over for backfill or for fill Material against structure	m³		10		

#### PROJECT NO.: ORTDM SCMU 09-22/23 SEWERS C2.2 Bill of Quantities

Carried forw	vard						
SCHEDULE	OF QUANTITIES						
		ID MASONARY WORKS					
ITEM NO.	PAYMENT REFERS	DESCRIPTION	UNIT	LIC	QTY	RATE	AMOUNT
Brought forv	TO						
Diouginiion							
C1.7.3		Extra over for 5% Cement stabilised at OMC to fill material	m³		10		
C1.8		Re-grassing					
C1.8.1	8.3.10	Replace topsoil	m²	LI	100		
C1.8.2	8.3.11	Re-grass	m²	LI	100		
C2	SANS 1200 G	CONCRETE (STRUCTURAL)					
C2.1	8.2	FORMWORK		LI			
	8.2.1	Rough vertical plane					
C2.1.1		for walls and slabs below ground level	m²		5		
	8.2.2	Smooth vertical plane					
C2.1.2		for walls above ground	m²		15		
	8.2.2	Smooth horizontal plane					
C2.1.3		Slabs above ground level	m²		15		
C2.1.4	8.2.5	Smooth narrow width (0-300mm) curved	m 10				
C2.1.5	8.2.6	Box out holes / form voids for Building in pipes and specials	No.		5		
C2.1.6	8.2.6	Box out holes / form voids for Building in manhole covers in Reservoir and chamber roof slabs	No.		5		

Carried forw	vard						
SECTION C : CONCRETE AND MASONARY WORKS PAYMENT							
ITEM NO.	REFERS	DESCRIPTION	UNIT	LIC	QTY	RATE	AMOUNT
	то						
Brought forv	ward				I		
Diougnition							
C2.2	8.3	REINFORCEMENT					
C2.2.1	8.3.1	Steel bars					
		a) Mild steel	t		0.15		
		b) High-tensile	t		0.5		
	8.3.2	c) High tensile welded mesh Ref 617	m²		15		
		d) High tensile welded mesh Ref 245	m²		15		
C2.3	8.4	CONCRETE					
	8.4.2	Blinding layer					
C2.3.1		50 mm thick blinding layer below reservoir and chamber foundation slabs	m²		10		
C2.3.1	8.4.2	No-fines Concrete strength: NF20 In filling overbreak in rock to form Drainage layer to sloping surfaces 100 mm thick	m²		5		
C2.3.2	8.4.3	Strength concrete: 30 MPa/19mm	m³		5		
C2.4	8.4.4	UNIFORMED SURFACE FINISHES		LI			
C2.4.1		Wood floated finish to blinding layer, chamber floor slabs, horizontal joints	m²		5		
Carried for	word						

SECTION C : CONCRETE AND MASONARY WORKS							
ITEM NO.	PAYMENT REFERS TO	DESCRIPTION	UNIT	LIC	QTY	RATE	AMOUNT
Brought forv	vard						
C2.4.2		Steel floated finish to reservoir roof m <sup>2</sup> 10 and floor slabs and chamber roof slabs					
C2.5	8.5	JOINTS					
C2.4.1		Complete with rubber bulb water stop (OEA)					
		a) Horizontal joint at base of reservoir	m		5		
		b) Horizontal at construction joint at intermediate level of reservoir wall	m		15		
C2.4.2		Between pipes and walls- Penetron-Penebar SW55 (OEA) Installed around pipes not exceeding 250 NB to	No.		10		
C2.4.3		Xypex – 300mm wide applied to Prepared concrete surfaces	m²		10		
C2.5		MISCELLANEOUS					
C2.5.1		PVC sheeting					
		a)50 Micron PVC sheeting of appropriate width, laid in two layers on top of the reservoir walls as a bond breaker against the roof slabs	m		15		
		b)75 Micron PVC sheeting placed as a bond breaker between reservoir base and blinding	m²		15		

#### PROJECT NO.: ORTDM SCMU 09-22/23 SEWERS C2.2 Bill of Quantities

# Carried forward SCHEDULE OF QUANTITIES SECTION C : CONCRETE AND MASONARY WORKS PAYMENT ITEM NO. REFERS DESCRIPTION UNIT LIC QTY RATE AMOUNT то Brought forward C2.5.2 50 mm Bituseal Fillet or Equivalent 15 m approved 15 C2.5.3 Yellow calcamite steps or similar No. Padlocks: 50 mm "Viro" and Keys (or C2.55.4 5 No equal approved) C2.6 BRICKWORK $m^2$ C2.6.1 220 Stock brick in stretcher bond, 20 Bagged washed both sides, exposed surfaces plastered (incl brickforce every 4<sup>th</sup> course) 230 Engineering Face Brick wall-(Incl brickforce every 4<sup>th</sup> course) $m^2$ C2.6.2 5

TOTAL CARRIED TO SUMMARY (SECTION C)						
SUMMARY OF SCHEDULES						
1 SECTION A : PRELIMINARY AND GENERAL						
2 SECTION B : SEWERS						
2 SECTION C : CONCRETE AND MASONARY WORKS						
SUBTOTAL						
CONTINGENCY (15%)						
SUBTOTAL						
Add VAT (15%)						
TENDER SUM (CARRIED FORWARD TO "FORM OF OFFER")						

# O.R. TAMBO DISTRICT MUNICIPALITY

## BID NO.: ORTDM SCMU 09-22/23

## REMEDIAL WORKS FOR KING EDWARD STREET SEWERS

# C3 SCOPE OF WORKS

- C3.1 Description of the Works
- C3.2 Engineering
- C3.3 Procurement
- C3.4 Construction
- C3.5 Management

## O.R. TAMBO DISTRICT MUNICIPALITY

## BID NO.: ORTDM SCMU 09-22/23

## REMEDIAL WORKS FOR KING EDWARD STREET SEWERS

## **C3.1 DESCRIPTION OF THE WORKS**

#### CONTENTS

- 3.1.1 EMPLOYER'S OBJECTIVES
- 3.1.2 OVERVIEW OF THE WORKS
- 3.1.3 EXTENT OF THE WORKS
- 3.1.4 LOCATION OF THE WORKS
- 3.1.5 TEMPORARY WORKS

#### 3.1.1 EMPLOYER'S OBJECTIVES

The Employer's objective is the restoration of sewage flows within the project area and the cleaning of surrounding sewers and manholes to ensure the sustained flow of sewage to the Mthatha wastewater treatment works.

#### 3.1.2 OVERVIEW OF THE WORKS

The project involves the unblocking of sewers which cannot be addressed through standard pressure jetting operations, as well as the refurbishment or replacement of existing sewerage infrastructure to ensure its optimum operation and ease of maintenance into the future.

This project therefore requires the management of sewage surcharges, cleaning and inspection of existing sewerage networks, location of blockages and/or pipe failures, repair or replacement of sewer pipeline segments and manholes, as well as the re-commissioning of the sewerage networks in and around the project area.

#### 3.1.3 EXTENT OF THE WORKS

The works to be carried out under this contract includes the following:

- Locate, open and clean / unblock some 30 No. sewer manholes along and in proximity to King Edward Street between Nepgen Avenue and the Mthatha High School Hostel, some 6No. serving the houses above Mthatha Plaza and the 4No. linking the King Edward Sewer with the Savoy Interceptor, as well as others as identified by the Employers Agent.
- Pressure jet and rod the King Edward Street sewer between these manholes, approximately 1.7km in length, using high-pressure water jetting equipment and vacuum trucks.
- Locate the position of the blockage(s) and identify the nature of same if it can't be dislodged.
- Repair and/or replace the damaged section(s) of the pipe (in 6m lengths minimum).
- Construct 10 No. new 1.5mØ sewer manholes and repair/refurbish a further 30 No. existing sewer manholes,
- Separation of sewer and stormwater pipes, and
- Repair leaks to water mains as directed by the Employers Agent.

## 3.1.4 LOCATION OF THE WORKS

The project area is Mthatha, in the vicinity King Edward Street . The project area is indicated on the drawings.

#### 3.1.5 TEMPORARY WORKS

Should temporary works be required, they will be designed by a competent professional supplied by the Contractor and shall be reviewed by the Employers Agent before commencing with any construction. The Contractor will be responsible and accountable for the design of the temporary works.

## C3.2 Engineering

## CONTENTS

- 3.2.1 DESIGN SERVICES AND ACTIVITY MATRIX
- 3.2.2 DRAWINGS

#### 3.2.1 DESIGN SERVICES AND ACTIVITY MATRIX

Description	Responsible
Concept, feasibility and overall process	Employer
Basic Engineering and detail layout to tender stage	Employer
Final design to approved for construction stage	Employer
Temporary works	Contractor
Preparation of as-built drawings	Contractor

## 3.2.2 DRAWINGS

#### a) General

The drawings listed below form part of the tender documents and shall be used for tender purposes only.

The Contractor will be supplied with an unreduced paper print of each of the drawings. These prints will be issued free of charge and the Contractor shall make any additional prints he may require at his own cost.

The contractor will supply his as-built drawings which shall be approved by the Employers Agent before a Certificate of Completion will be issued.

Only figured dimensions shall be used and drawings may not be scaled unless so instructed by the Employers Agent. The Employers Agent will supply any figured dimensions, which may have been omitted from the drawings.

The levels given on the structural drawings are subject to confirmation on site, and the Contractor shall submit all levels to the Employers Agent for confirmation before he commences any structural construction work. The Contractor shall also check all clearances given on the drawings and shall inform the Employers Agent of any discrepancies.

#### b) List of Drawings

The list of drawings for the Scope of Works designed by the Employer is detailed below.

	GENERAL
26211LW-001A	Drawings Index Sheet and Locality Map
	GENERAL ARRANGEMENTS
26211LW-002A	Layout of Existing Sewer Network
26211LW-003A	Schematic Layout indicating the Status of the Sewers (Upper)
26211LW-004A	Schematic Layout indicating the Status of the Sewers (Lower)
	STANDARD DETAILS
26211LW-005A	Sewer General Details

## C3.3 Procurement

#### CONTENTS

#### 3.3.1 GENERAL

#### 3.3.2 PREFERRENTIAL PROCUREMENT PROCEDURES

#### C3.3.1. General

The Main Contractor shall not sub-contract more than 30% of the Contract Amount of the Works. responsible.

Where the Contractor intends to sub-contract portions of the works, he shall only sub-contract to contractors who are tax compliant, registered with the CIDB and have the requisite grading for the works to be sub-contracted and have a B-BBEE level status equal to or higher than the Contractor.

The Contractor shall forward such information to the Employers Agent for approval prior to the appointment of the sub-contractor and shall report on sub-contractor expenditure on a monthly basis.

#### C3.3.2 Preferential Procurement Procedures

SANS 10396: 2003 and SANS 1914-4: 2002 (Targeted Enterprises and Targeted Labour) are applicable to this Contract.

#### C3.3.2.1 Targeted labour contract participation goal

In support of the National Department of Public Works' Expanded Public Works Programme which is aimed at alleviating poverty through the creation of temporary employment opportunities using labour intensive methodologies and practices where possible, the Employer is seeking to increase the intensity of labour, as appropriate, in all of its infrastructure sector projects.

It is a requirement of this contract, therefore, that the work be executed in such a manner so as to maximise the use of labour-intensive construction methods in order to provide low and semi-skilled temporary employment opportunities.

To this end, a minimum targeted labour contract participation goal is specified below, which shall be achieved by the Contractor in the performance of the contract, failing which, penalties as described will be applied. The Contractor is required to provide all skills training <u>where necessary</u>, so as to ensure that a minimum level of competence is achieved and maintained, such that the various activities are carried out safely and to the required standard. The cost of training shall be included in the rates for the various work activities.

#### The specified minimum targeted labour contract participation goal (CPG<sub>L</sub>) is

10 %

The minimum  $CPG_L$  is such that the Contractor will have to carry out some of the work that would normally have been undertaken using mechanised construction methods, by using labour intensive construction methods instead. It is left to the discretion of the Contractor to identify suitable work activities for the intensification of labour. The Contractor shall, within 5 working days of being requested in writing by the Employers Agent to do so, submit details of his/her plan to achieve the minimum  $CPG_L$ .

For the purposes of the requirements in respect of the participation of targeted labour, the following definitions shall apply:

**"Target area**" means the geographical area shall be within a 2.5km radius of a working front within the Site.

**"Targeted labour contract participation goal (CPG<sub>L</sub>)"** means the sum of the wages (excluding any benefits), for which the Contractor, or any of his/her sub-contractors contracts targeted labour in the performance of the contract, expressed as a percentage of the value of the contract.

**"Targeted labour**" means low and semi-skilled individuals, whose wages (excluding any benefits) do not exceed the threshold value, who reside in the target area, that are employed by the Contractor, or any of his/her sub-contractors, in the performance of the contract.

**"Threshold value**" is R350.00 per day as adjusted from time to time (excluding any benefits). The threshold value is not to be confused with any industry sector minimum wage determined in accordance with the Basic Conditions of Employment Act, 75 of 1977.

**"Value of the contract**" means the contract sum (accepted contract amount) less provisional sums, contingencies and VAT.

#### The selection and recruitment of targeted labour

Where targeted labour is to be drawn from specific local communities (defined in terms of the target area), such labour shall be identified using the relevant Sub-Council Job-Seekers Database. The Contractor shall request, via a Community Liaison Officer (if required in terms of the contract), a list of suitable candidates from the database, from which the Contractor shall make his/her final selection. The contractor shall enter into written contracts of temporary employment with all targeted labour.

Any difficulty experienced by the Contractor in identifying candidates though the Job-Seekers Database, or as regards any matter relating to the employment of targeted labour, shall be immediately referred to the Employers Agent.

#### C3.3.2.1 Minimum targeted enterprises contract participation goal

It is a requirement of this contract that enterprises located within the target area, as defined, be engaged by the Contractor for the provision of supplies, services or works necessary for the performance of this contract.

To this end, a minimum targeted enterprises contract participation goal is specified below, which shall be achieved by the Contractor in the performance of the contract, failing which, penalties as described will be applied.

#### The specified minimum targeted enterprises contract participation goal (CPG<sub>E</sub>) is

The Contractor shall engage targeted enterprises directly or indirectly in the performance of the contract to the extent that the total monetary value of such engagements (exclusive of VAT), expressed as a percentage of the value of the contract, is sufficient to achieve the specified minimum  $CPG_E$ .

For the purposes of the requirements in respect of the participation of targeted enterprises, the following definitions shall apply:

"Target area" means the geographical area of the O.R. Tambo District Municipality.

"Targeted enterprises contract participation goal (CPG<sub>E</sub>)" means the value of supplies, services or works (exclusive of VAT), for which the Contractor contracts targeted enterprises, either directly or indirectly, in the performance of the contract, expressed as a percentage of the value of the contract.

"Targeted enterprises" means any sole trader, partnership or legal entity that acts as a supplier, manufacturer, service provider or sub-contractor, and which has its base of operations in the target area.

"Value of the contract" means the contract sum (accepted contract amount) less provisional sums, contingencies and VAT.

15 %

#### Achieving the contract participation goal

The contractor may achieve the specified minimum CPG<sub>E</sub> as follows:

- a) by engaging one or more targeted enterprises to perform commercially useful functions in the performance of the contract;
- b) by engaging non-targeted enterprises, who in turn engage one or more targeted enterprises to perform commercially useful functions in the performance of the contract;
- c) by a combination of the above.

The Contractor shall, within 5 working days of being requested by the Employers Agent to do so, submit details of his/her plan to achieve the minimum  $CPG_E$ .

#### **C3.4 CONSTRUCTION**

#### CONTENTS

- 3.4.1 APPLICABALE STANDARDS
- 3.4.2 LIST OF APPLICABLE STANDARDIZED SPECIFICATIONS
- 3.4.3 LIST OF TECHNICAL AND PARTICULAR SPECIFICATIONS
- 3.4.4 PLANT AND MATERIALS
- 3.4.6 EXISTING SERVICES
- 3.4.5 EQUIPMENT
- 3.4.7 SITE ESTABLISHMENT
- 3.4.8 SITE USAGE
- 3.4.9 ALTERATIONS, ADDITIONS, EXTENSIONS AND MODIFICATIONS TO EXISTING WORKS
- 3.4.10 WATER FOR CONSTRUCTION PURPOSES
- 3.4.11 SURVEY CONTROL AND SETTING OUT OF THE WORKS
- 3.4.12 TESTS

#### C3.4.1 Applicable Standards

The standards applicable to this Contract are the SANS 1200 Standardized Specifications detailed below and the variations, amendments and additions to the SANS 1200 Standardized Specifications contained in C3.6, as well as the Technical and Particular Specifications listed below and contained in C3.7.of the document.

#### C3.4.2 List of Applicable Standardized Specifications

SANS 1220 A :	GENERAL
SANS 1200 AB :	EMPLOYERS AGENT'S OFFICE
SANS 1200 C :	SITE CLEARANCE
SANS 1200 D :	EARTH WORKS
SANS 1200 GA :	CONCRETE (SMALL WORKS)

#### C3.4.3 List of Technical and Particular Specifications

CF : SEWERAGE NETWORKS

#### C3.4.4 Plant and Materials

The Contractor is responsible to provide and/or procure all the plant, material and other resources necessary for the successful completion of the Works.

#### C3.4.5 Equipment

The Contractor is responsible to provide and/or to procure all the requisite equipment for the successful completion of the Works.

#### C3.4.6 Existing Services

All known services are indicated on the drawings and/or will be pointed out to the Contractor at the outset of the Contract, prior to works commencement in a particular area. The Contractor will however be required to search for known and/or reasonably anticipated existing services, which will be considered a known service once found.

The Contractor will be responsible to repair at his own cost, all known services damaged by the Contractor in the completion of the Works. Such repairs shall be timeously completed and to the satisfaction of the Employers Agent.

#### C3.4.7 Site Establishment

#### a) Services and Facilities Provided by the Employer

The Employer will not be responsible to provide any services and/or facilities for the Contractor.

#### b) Facilities Provided by the Contractor

The Contractor is responsible to provide all the facilities required for the due fulfilment of his obligations in terms of the Contract.

No area has specifically been identified for the establishment of a camp site. The Contractor is therefore required to identify his optimum location and establish his camp. Approval by the Employers Agent and the local community of the site, via the CLO, is required prior to the establishment of the camp site.

The Contractor may however establish a camp site at the Mthatha Waste Water Treatment Works if so required. The location of the Camp Site within the WWTW confines must however be approved by both the Employers Agent and the ORTDM operation and maintenance staff.

On completion of the works, the Contractor must rehabilitate this camp site to the satisifaction of the Employers Agent. The costs of providing the above shall be deemed to be included in the rates rendered.

#### c) Storage and Laboratory Facilities

The Contractor shall be responsible for providing his own laboratory to undertake the process control testing for which he is responsible in terms of the Contract. Alternatively, the Contractor may make arrangements for testing to be undertaken at a laboratory approved by the Employers Agent.

Acceptance testing on behalf of the Employer shall be undertaken by an independent laboratory separately appointed/approved by the Employer.

All results obtained from the Contractor's process control testing shall immediately be made available to the Employers Agent.

The costs of providing the above shall be deemed to be included in the rates rendered.

#### d) Other Facilities and Services

The Contractor shall be responsible for providing all other facilities and services required for the due fulfilment of his obligations in terms of the Contract, such as power, water, telecommunications, security services, medical, fire protection, sanitation, toilets and soild waste disposal.

The costs of providing the above, including all connections where required, shall be deemed to be included in the rates rendered.

Should the Contractor elect to establish his camp site at the Waste Water Treatment Works (WWTW), such services that are available at the WWTW will be made available to the Contractor free of charge. The Employer however accepts no responsibility as to the adequacy or reliability of these services, nor does it relieve the Contractor from ensuring the requisite sanitation and solid waste services are maintained at all times at the Camp Site.

#### e) Notice Boards

The Contractor is NOT required to provide project Notice Board. Should the Contractor wish to erect one, the format and location must be approved by the Employers Agent.

#### C3.4.8 Site Usage

The Contractor shall take all reasonable measures to establish ownership and curent usage of the land in the vininity of the Works, prior to setting out the Works and commencing with construction. All concerns or issues which may have a bearing on the construction of the Works, must be brought to the attention of the Employers Agent for resolution prior to construction.

Where the Contractor is required to work within or in close proximity to land used or owned by others, the Contractor shall act in a responsible manner, taking cognizance of the rights of others.

#### C3.4.9 Alterations, Additions, Extensions and Modifications to Existing Works

Where the Contractor is required, as part of this Contract, to connect to existing infrastructure, the Contractor shall notify the Employers Agent at least 1 day in advance of his intention to connect to the existing works, in order for the necessary notifications to the Municipality and community at large to be issued.

The Contractor is required to prove the adequacy of the new works undertaken, prior to connecting to the existing infrastructure and commissioning the combined system.

#### C3.4.10 Water for Construction Purposes

The Contractor may obtain water for construction purposes from the municipal supply networks. This supply will be provided free of charge, provided it is used in a responsible manner. These water supplies may however be remote from the works.

The Contractor must however make adequate provisions in his tender for all negotiations, connections to and transport of water for construction activities. All related costs will be deemed to be included in the rates tendered.

The Contractor will be charged for the water supplied at the going muncipla rate if, in the opinion of the Employers Agent, it is found that the Contractor is unduly wasting water.

#### C3.4.11 Survey Control and Setting Out of the Works

The Employers Agent will indicate to the Contractor the positions of the various installations, as well as the routes of all the pipelines. Thereafter, the Contractor will be responsible for all setting out of the works.

#### C3.4.12 Tests

After completion of the Works and before first delivery is taken, a full test will be carried out on the installation for a period of sufficient duration to determine the satisfactory working thereof. During this period, the installations will be inspected and the Contractor shall make good, to the satisfaction of the Employers Agent, any defects which may arise. The Contractor shall provide all instruments and equipment required for testing and any water, power and fuel required for the commissioning and testing of the installations at completion.

## C3.5 MANAGEMENT OF THE WORKS

#### CONTENTS

- 3.5.1 APPLICABLE STANDARDS
- 3.5.2 PLANNING AND PROGRAMME
- 3.5.3 METHODS AND PROCEDURES
- 3.5.4 QUALITY PLANS AND CONTROL
- 3.5.5 ENVIRONMENT
- 3.5.6 OTHER CONTRACTORS
- 3.5.7 TESTING, COMPLETION, COMMISSIONING AND CORRECTION OF DEFECTS
- 3.5.8 RECORDING OF WEATHER
- 3.5.9 MANAGEMENT MEETINGS
- 3.5.10 FORMS FOR CONTRACT MANAGEMENT
- 3.5.11 DAILY RECORDS
- 3.5.12 BONDS AND GUARANTEES
- 3.5.13 HEALTH AND SAFETY
- 3.5.14 FORMS FOR CONTRACT ADMINISTRATION

#### C3.5.1 Applicable Standards

The Contractor is referred to SANS 1921: 2004 parts 1, 2 and 3: Construction and Management Requirements for Works Contracts. These specifications shall be applicable to the Contract and the Contractor shall comply with all requirements relevant to the project.

Certain aspects however require further attention as described hereafter.

#### C3.5.2 Planning and Programme

The Contractor is required to submit for approval by the Employers Agent, within the timeframe stipulated in the Contract Data, a programme of works. The Programme shall be updated after the initial inspection of the work. The programme must clearly indicate all the main construction activities, their sequence and the critical path. The Contractor may not proceed with construction activities until such time as the programme has been approved by the Employers Agent.

The Contractor is required to report on and update the programme on a monthly basis.

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 Contract Data.

#### C3.5.3 Methods and procedures

The Contractor is required to undertake all construction activities in an orderly fashion and to maintain the cleanliness of the site during the contract period, to the satisfaction of the Employers Agent.

No blasting operations may be undertaken without the approval of the Employers Agent. The requisite documentation indicating the competence of the blaster, the approvals of the relevant authorities and the method statement for each blast, are required for approval purposes.

The Contractor shall pay special attention to the management and disposal of water, sewage and stormwater on the site and the conservation of topsoil and the rehabilitation of the site. It is essential that all completed works or parts thereof are kept dry and properly drained. Furthermore, portions of the Works must be completed and suitably rehabilitated before moving onto new portions of the Works.

The Employers Agent reserves the right to limit the number of working fronts to ensure that the above is adhered to. Claims for delay and for repair of damage caused to the works as a result of the Contractor's failure to comply with the above or to properly manage rain and surface water will not be considered.

The Contractor shall take all reasonable measures to maintain access to properties and a free flow of traffic during the construction of the works. Where it is required to disrupt access and the free flow of traffic, it must be kept to a minimum, be of short duration and adequate notice and traffic accommodation measures must be provided. Furthermore, the approval of the Employers Agent must be sought in advance of any planned disruption.

The Contractor is to undertake all reasonable measures to minimize dust, noise, water, waste and other impediments.

The Contractor is required to obtain permission from the Employers Agent prior to working outside normal working hours.

The Contractor will be obliged to comply with the QA system of the Employers Agent, which dictates the requirements pertaining to inspections required prior to covering works.

#### C3.5.4 Quality plans and control

The Contractor will be solely responsible for the production of work that complies with the Specifications to the satisfaction of the Employers Agent. To this end, it will be the full responsibility of the Contractor to institute an appropriate Quality Assurance (QA) system on site. However, the Contractor will also be required to comply with certain QA systems imposed by the Employers Agent, concerning to the approval of the permanent works or temporary works.

#### 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 Employers Agent.

The Contractor may employ the services of an independent commercial laboratory and must submit the results of tests carried out on materials and workmanship when submitting work for acceptance by the Employers 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.

#### Acceptance control

The process control test results submitted by the Contractor for approval of materials and workmanship may be used by the Employers Agent for acceptance control.

However, before accepting any work, the Employers Agent may have further control tests carried out by a laboratory of his choice. The cost of such additional tests will be covered by the Employer, but tests that failed to confirm compliance with the specifications, will be for the account of the Contractor.

#### C3.5.5 Environment

The Contractor is required to undertake the construction of the Works in such a manner so as to minimize its impact on the environment.

#### C3.5.6 Other contractors

The Contractor may not necessarily have sole access to the Site(s). The Contractor is therefore required to communicate with any other contractor as may be required, to ensure that all works are aligned and service outages are kept to an absolute minimum.

#### C3.5.7 Testing, completion, commissioning and correction of defects

It is required that the structures, equipment and pipelines undergo and comply with the requisite water tightness and pressure tests, as well as other acceptance tests as may be required, prior to the connection to any existing works. Only once the Employers Agent has satisfied himself with the

adequacy on the initial tests, will the Contractor be allowed to commission the Works. A method statement for the commissioning of the works will however be required for approval in advance of the commissioning.

Should any components of the works not meet the requirements of the initial tests, they shall be repaired by the Contractor at his own costs, and be re-tested, prior to the commissioning of the works.

#### C3.5.8 Recording of weather

It is required that a rain gauge be erected on site at an approved location and that all rainfall be recorded and agreed to on a daily basis.

#### C3.5.9 Management meetings

It is required that a suitably qualified representative of the Contractor attend monthly site meetings for the duration of the Contract.

#### C3.5.10Forms for contract management

It is required that the Contractor submit the requisite progress, plant, labour and other pertinent information on a monthly basis, in the format to be provided by the Employers Agent, for the management of the contract and reporting to the Client and any provincial and national government department as may be required.

All site instructions are to be recorded in writing in triplicate on pro-forma forms to be provided by the Employers Agent.

#### C3.5.11Daily records

It is required that a daily site diary of all plant and labour on site, and all details of work performed be maintained on site by the Contractor. Similar documentation will be maintained by the Employers Agent.

#### C3.5.12Bonds and guarantees

All bonds and guarantees required to be provide by the Contractor in undertaking his obligations in terms of this Contract, will be held in safe keeping by the Employers Agent, and returned to the Contractor as required in terms of the Contract.

#### C3.5.13Health and safety

It is a requirement of this contract that the Contractor 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 or indirectly 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 latest Construction Regulations as issued by the Department of Labour.

For the purpose of this contract, the Contractor is required to confirm his status as mandatory 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 contained in the Agreement and Contract Data.

#### Health and Safety Specifications and Plans:

(a) <u>Employer's Health and Safety Specification</u>

The Employer's Health and Safety Specification is included in C1.5 of this document.

(b) Health and Safety Plan

The Contractor shall submit his own documented Health and Safety Plan he proposes to implement for the execution of the work under the contract. His Health and Safety Plan must at least cover the following:

- 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 2014.

The Contractor's Health and Safety Plan will be subject to approval by the Employer, or amended 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.

#### C3.5.14Forms for Contract Administration

The Contractor shall complete, sign and submit with each monthly statement for payment, the following updated returns:

- a) Monthly Project Labour Report
- b) Targeted Labour Contract Participation Expenditure Report
- c) Targeted Enterprises Contract Participation Expenditure Report

The Targeted Labour Contract Participation Expenditure Report (if applicable) is required for monitoring the contractor's compliance for achieving the specified minimum targeted labour contract participation goal ( $CPG_L$ ) and, if applicable, for calculating any penalty in terms thereof.

The Targeted Enterprises Contract Participation Expenditure Report (if applicable) is required for monitoring the contractor's compliance for achieving the specified minimum targeted enterprises contract participation goal ( $CPG_E$ ) and, if applicable, for calculating any penalty in terms thereof.

#### C3.6 AMENDMENTS TO THE STANDARD SPECIFICATIONS

The following variations and additions to the SANS 1200 Standardized Specifications referred to in clause C3.4.2 will be valid for this contract. The prefix "PSA" indicates an amendment to SANS 1200 A, "PSC" to SANS 1200C etc. The numbers following these prefixes are the relevant clause numbers in SANS 1200.

#### PSA GENERAL

#### PSA 2 INTERPRETATIONS

- PSA 2.3 Definitions
  - a) General

ADD THE FOLLOWING DEFINITIONS:

"General conditions: The general conditions of contract specified for use with this contract and the contract data as applicable.

Specified: As specified in the standardized specifications, the drawings or the project specifications. Specifications shall have the corresponding meaning."

c) Measurement and payment

Replace the definitions for fixed charge, time-related charge and value-related charge with the following:

"Fixed charge: A charge that is not subject to adjustment on account of variation in the value of the contract amount or the contract time of completion

Time-related charge: A charge, the amount of which is varied in accordance with the time for completion of the work as adjusted in accordance with the provisions of the contract.

Value-related charge: A charge, the amount of which is varied pro rata the final value of the measured work executed and valued in accordance with the provisions of the contract."

#### PSA 2.4 Abbreviations

a) Abbreviations relating to standard documents

Add the following abbreviation:

"CKS : SANS Co-ordinating Specification."

#### PSA 2.8 Items In Schedule of Quantities

#### PSA 2.8.1 Principle

In the fourth line after the word "Specification" add "or in the measurement and payment clause of the standard or particular specification or section or project specification".

#### PSA 3 MATERIALS

#### PSA 3.1 Quality

ADD THE FOLLOWING:

"All manufactured materials supplied shall be new materials unless the contrary is specified. All materials specified in accordance with SANS specifications shall bear the SANS mark, whether so specified or not."

ADD THE FOLLOWING:

"The Contractor must provide the Employers Agent with at least 48 hours-notice prior to control testing being required. Furthermore, the Contractor must make provision in his programme for the undertaking, and calculation of results, of such testing. Construction of any work that depends on control testing, for which test results are not available will be undertaken at the Contractors own risk."

ADD THE FOLLOWING SUB-CLAUSE(S):

#### PSA 3.3 Ordering of Materials

The quantities set out in the schedule of quantities have been determined from calculations based on data available at the time and should therefore be considered to be only approximate quantities. The Contractor shall therefore, verify the quantities before ordering materials of any kind.

No liability or responsibility whatsoever shall be attached to the Employer for materials ordered by the Contractor except if they have been ordered in accordance with written confirmation issued by the Employers Agent.

#### PSA 4 PLANT

#### PSA 4.2 Contractor's Offices, Stores and Services

ADD THE FOLLOWING PARAGRAPH BEFORE THE FIRST PARAGRAPH:

"The Contractor's construction camp shall be fenced off and shall contain all offices, stores, workshops, testing laboratories, toilet facilities, etc. The camp shall always be kept in a neat and tidy condition.

No personnel will be allowed to reside on the site. Only night watchmen may be on the site after hours."

ADD THE FOLLOWING TO CLAUSE 4.2:

#### Storage of Materials

Rubber articles, including pipe insertion or joint rings, shall be stored in a suitable shed and kept away from sunlight, oil or grease. Living accommodation shall not be used for the storage of materials.

Large items not normally stored in a building shall be neatly stacked or laid out on suitable cleaned areas at the Site. Grass or vegetation shall not be allowed to grow long in the storage areas and the material shall be kept free of dust and mud and be protected from stormwater. Pipes shall be handled and stacked in accordance with the manufacturer's recommendations, special care being taken to avoid stacking to excessive heights and placing over hard objects.

uPVC pipes shall be protected from direct sunlight by suitable covers.

Every precaution shall be taken to keep cement dry and prevent access of moisture to it from the time it leaves the place of manufacture until it is required for use on the Site. Any bags of cement which show any degree of hydration and setting shall be removed from the Site of the Works and replaced at the Contractor's own expense.

#### PSA 5 CONSTRUCTION

#### PSA 5.1 Survey

#### PSA 5.1.1 Setting Out of the Works

SUBSTITUTE THE FIRST SENTENCE IN CLAUSE 5.1.1 WITH THE FOLLOWING:

Setting out of the works shall be done from survey pegs along the street reserve boundaries and from bench-marks as indicated on the drawings. The Contractor shall, within two (2) weeks after the site has been handed over to him, ascertain the correctness of all pegs and bench-marks. Any discrepancy shall immediately be reported in writing to the Employers Agent. Any costs or

subsequent costs arising from discrepancies which had not been reported to the Employers Agent within the aforementioned period shall be the sole responsibility of the Contractor.

#### PSA 5.1.2 Preservation and replacement of survey beacons and pegs subject to the Land Survey Act

DELETE THE WORDS "in the vicinity of boundaries" IN THE SECOND SENTENCE OF SUB-CLAUSE 5.1.2 AND REPLACE THE WORDS "under the direction of" IN THE SAME SENTENCE WITH "in consultation and liaison with".

ADD THE FOLLOWING AFTER THE SECOND SENTENCE OF SUB-CLAUSE 5.1.2:

"The Contractor and the Employers Agent shall record on the said list, their concurrence or disagreement (as the case may be) regarding the completeness and accuracy of the details recorded therein."

REPLACE THE THIRD SENTENCE OF SUB-CLAUSE 5.1.2 WITH THE FOLLOWING:

"At the completion of the Contract, the Contractor shall expose all pegs that were listed at the commencement of the construction as being in order and the Contractor shall arrange with a registered Land Surveyor for the checking of the positions of all such pegs and the replacement of those that the Land Surveyor's check reveals have become disturbed or damaged. The Contractor shall, as a precedent to the issue of the Certificate of Completion, provide to the Employers Agent, a certificate from the registered Land Surveyor, certifying that all the pegs listed at the commencement of construction in accordance with the provisions of this clause, have been checked and that those found to have been disturbed, damaged or destroyed have been replaced in their correct positions, all in accordance with the provisions of the said Act.

The costs of all checking, replacement and certification as aforesaid shall be entirely for the Contractor's account. This, with the provision always that the Contractor shall not be held liable for the cost of replacement of pegs which:

- a) cannot reasonably be re-established in their original positions by reason of the finished dimensions of the permanent works, and
- b) the Contractor can prove beyond reasonable doubt to the satisfaction of the Employers Agent, were disturbed, damaged or destroyed by others beyond his control."

#### PSA 5.2 Watching, Barricading, Lighting and Traffic Crossings

ADD THE FOLLOWING TO CLAUSE 5.2:

The Contractor shall employ competent watchmen to guard the works both day and night.

From the time work on any portion of the Works commences, until the Completion of the Works and the issue of the Certificate of Completion of the Works, the Contractor shall be responsible for protecting the property of the Municipality and all persons having business on the Site from anything dangerous or likely to cause damage or injury.

The Contractor shall take all practical precautions to avoid nuisance or inconvenience to the owners or occupiers of properties near to the Site and to the public generally whilst carrying out the Works and shall at all times keep the Site clean and in safe and satisfactory condition. Dust control shall be exercised by frequently and whenever required spraying cleared surfaces and bypasses with water.

The crossing of any tarred roads to connect to the water and sewer mains must be done in half widths, or as required by the Employers Agent.

#### PSA 5.3 Protection of Existing Structures

*REPLACE* "Machinery and Occupational Safety Act, 1983 (Act No 6 of 1983)" *WITH* "Occupational Health and Safety Act, 1993 (Act No 85 of 1993), as amended," *AND INSERT THE FOLLOWING AFTER* "(Act No. 27 of 1956)": "as amended".

#### PSA 5.4 Protection of Overhead and Underground Services

REPLACE THE HEADING AND THE CONTENTS OF SUB- CLAUSE 5.4 WITH THE FOLLOWING:

#### PSA 5.4 Location And Protection of Existing Services

#### PSA 5.4.1 Location of existing services

Before commencing with any work in an area, the Contractor shall ascertain the presence and actual position of all services which can reasonably be expected by an experienced and competent Contractor to be present on, under, over or within the Site.

Without in any way limiting his liability in terms of the Conditions of Contract in relation to damage to property and interference with services, the Contractor shall, in collaboration with the Employers Agent, obtain the most up-to-date plans as are available, showing the positions of services existing in the area where he intends to work. Neither the Employer nor the Employers Agent offers any warranty as to the accuracy or completeness of such plans and because services can often not be reliably located from plans, the Contractor shall ascertain the actual location of services depicted on such plans by means of careful inspection of the Site.

Thereafter, the Contractor shall, by the use of appropriate methodologies, carefully expose the services at such positions as are agreed to by the Employers Agent, for the purposes of verifying the exact location and position of the services.

Where the exposure of existing services involves excavation to expose underground services, the further requirements of sub-clauses 4.4 and 5.1.2.2 of SANS 1200 D (as amended) shall apply.

The aforesaid procedure shall also be followed in respect of services not shown on the plans but which may reasonably be anticipated by an experienced Contractor to be present or potentially present on the site.

All services, the positions of which have been determined as aforesaid at the critical points, shall henceforth be designated as 'known services' and their positions shall be indicated by the Contractor on a separate set of drawings, a copy of which shall be furnished to the Employers Agent without delay.

As soon as any service which has not been identified and located as described above is encountered on, under, over or within the site, it shall henceforth be deemed to be a known service and the aforesaid provisions pertaining to locating, verifying and recording its position on the balance of the site shall apply. The Contractor shall notify the Employers Agent immediately when any such service is encountered or discovered on the Site.

Whilst he is in possession of the Site, the Contractor shall be liable for all loss of or damage as may occur.

- a) known services, anywhere along the entire lengths of their routes, as may reasonably be deduced from the actual locations at which their positions were verified as aforesaid, due cognisance being taken of such deviations in line and level which may reasonably be anticipated, and
- b) any other service which ought reasonably to have been a known service in accordance with the provisions of this clause,

The Contractor shall also be liable for consequential damage in regard to (a) and (b), whether caused directly by the Contractor's operations or by the lack of proper protection.

No separate payment will be made to the Contractor in respect of his costs of providing, holding available on the Site and utilising the said detecting and testing equipment, nor for any costs incurred in preparing and submitting to the Employers Agent the Drawings as aforesaid. These costs shall be deemed included in the Contractor's other tendered rates and prices included in the Contract.

Payment to the Contractor in respect of exposing services at the positions agreed by the Employers Agent and as described above will be made under the payment items (if any) as may be provided for in the respective sections of the specifications pertaining to the type of work involved.

#### PSA 5.4.2 Protection during construction

The Contractor shall take all reasonable precautions and arrange its operations in such a manner as to prevent damage occurring to all known services during the period which the Contractor has occupation and/or possession of the Site.

Services left exposed shall be suitably protected from damage and in such a manner as will eliminate any danger arising there from to the public and/or workmen, all in accordance with the requirements of the prevailing legislation and related regulations.

Unless otherwise instructed by the Employers Agent, no services shall be left exposed after its exact position has been determined and all excavations carried out for the purpose of exposing underground services shall be promptly backfilled and compacted. In roadways, the requirements of Sub clause 5.9 of SANS 1200 DB should be observed. In other areas compaction is to be to 90% modified AASHTO density.

Before any work that involves services to any property is carried out, the Contractor shall serve notice on the resident, occupier and/or owner of every property at least 5 working days in advance of any temporary disconnection, advising the nature, time and duration. The Contractor shall comply with any additional requirements of the Local Authority.

#### PSA 5.4.3 Alterations and repairs to existing services

Unless the contrary is clearly specified in the Contract or ordered by the Employers Agent, the Contractor shall not carry out alterations to existing services. When any such alterations become necessary, the Contractor shall promptly inform the Employers Agent, who will either make arrangements for such work to be executed by the owner of the service, or instruct the Contractor to make such arrangements himself.

Should damage occur to any existing services, the Contractor shall immediately inform the Employers Agent, or when this is not possible, the relevant authority, and obtain instructions as to who should carry out repairs. In urgent cases, the Contractor shall take appropriate steps to minimise damage to and interruption of the service. No repairs of telecommunication cables or electric power lines and cables shall be attempted by the Contractor.

#### PSA 5.7 Safety

REPLACE THE CONTENTS OF SUB-CLAUSE 5.7 WITH THE FOLLOWING:

"Pursuant to the provisions of the Conditions of Contract, and without in any way limiting the Contractor's obligations there under, the Contractor shall at his own expense (except only where specific provision (if any) is made in the Contract for the reimbursement to the Contractor in respect of particular items), provide the following:

- a) Provide to its Employees on the site of the works, all safety materials, clothing and equipment necessary to ensure full compliance with the provisions of the Occupational Health and Safety Act, 1993 (Act No 85 of 1993) as amended (hereinafter referred to as the Act) at all times, and shall institute appropriate and effective measures to ensure the proper usage of such safety materials, clothing and equipment at all times;
- b) Provide, install and maintain all barricades, safety signage and other measures to ensure the safety of workmen and all persons in, on and around the site, as well as the general public;
- c) Implement on the site of the works, such procedures and systems and keep all records as may be required to ensure compliance with the requirements of the Act at all times;
- d) Implement all necessary measures so as to ensure compliance with the Act by all subcontractors engaged by the Contractor and their employees engaged on the works;
- e) Full compliance with all other requirements pertaining to safety as may be specified in the Contract.

The Employer and the Employers Agent shall be entitled, although not obliged, to make such inspections on the site as they shall deem appropriate, for the purpose of verifying the Contractor's compliance with the requirements of the Act. For this purpose, the Contractor shall grant full access

to the site of all parts of the site and shall co-operate fully in such inspections and shall make available for inspection all such documents and records as the Employer's and/or Employers Agent's representative may reasonably require.

Where any such investigations reveal, or where it comes to the Employers Agent's attention that the Contractor is in any way in breach of the requirements of the Act or is failing to comply with the provisions of this clause, the Employers Agent shall, in accordance with the provisions of clause 5.11 of the Conditions of Contract, be entitled to suspend progress on the works or any part thereof until such time as the Contractor has demonstrated to the satisfaction of the Employers Agent, that such breach has been rectified.

The Contractor shall have no grounds for a claim against the Employer for extension of time and/or additional costs if the progress on the works or any part thereof is suspended by the Employers Agent in terms of this clause, and the Contractor shall remain fully liable in respect of the payment of penalties for late completion in accordance with the provisions of clause 5.13 of the Conditions of Contract should the Contractor fail to complete the Works on or before the specified due completion date in consequence of the suspension.

Persistent and repeated breach by the Contractor of the requirements of the Act and/or this clause shall constitute grounds for the Employers Agent to act in terms of sub-clause 9.2 of the Conditions of Contract and for the Employer to cancel the Contract in accordance with the further provisions of the said clause 9.2."

ADD THE FOLLOWING SUB-CLAUSE TO CLAUSE 5:

#### "PSA 5.9 Site Meetings

The Contractor or his authorised agent will be required to attend regular site meetings, which shall normally be held once a month on dates and at times determined by the Employers Agent, but in any case, whenever reasonably required by the Employers Agent. Unless otherwise indicated in the Contract or instructed by the Employers Agent, such meetings shall be held at the Contractor's offices on the site. At such monthly meetings, matters such as general progress on the works, quality of work, problems, claims, payments, and safety shall be discussed, but not matters concerning the day-to-day running of the Contract."

#### PSA 8 MEASUREMENT AND PAYMENT

#### PSA 8.1 Measurement

- PSA 8.1.2 Preliminary and general items or section
- PSA 8.8.5 Cost of Survey in Terms of the Land Survey Act ......Unit: Sum

SUBSTITUTE A 8.8.5 WITH THE FOLLOWING:

The sum shall cover the cost of all labour, plant and material required for the searching and compilation of a list, all in accordance with the requirements as set out in clause A 5.1.2.

The cost of the Contractor's responsibility for the setting out of the Works in terms of Sub-clause 5.1.1 and the preservation and replacement of beacons and pegs subject to the Land Survey Act in terms of Sub-clause A 5.1.2 will be held to be covered by the sums tendered for other obligations under Sub-clauses 8.3.3 and 8.4.5.

#### PSA 8.9 Additional Survey

- a) As instructed by the Employers Agent ......Unit: PC Sum
- b) Overheads, changes and profit on item (a) above .....Unit: percentage (%)

#### PSA 8.10 Training Courses

- a) Cost of courses .....Unit: PC Sum
- b) Handling costs and profit on item (a) above .....Unit: percentage (%)

The tendered percentage is a percentage of the amount actually spent under sub item (a) above, which shall include full compensation for the handling costs of the Contractor, and the profit in connection with the organisation of the courses given.

#### PSA 8.11 Community Liaison Officer

- a) Cost of CLO ...... Unit: PC Sum
- b) Handling costs and profits on item (a) above .....Unit: percentage (%)

# PSA 8.12 Compliance with OHS Act and Regulations (Including the Construction Regulations 2014)

ADD THE FOLLOWING ITEMS:

#### PSA 8.12.1 Health and Safety Requirements ......Unit : Sum

The rate shall cover all costs pertaining to the provision and maintenance for the duration of the contract of the health and safety measures required in terms of Clause 5 (Principle Contractor and Contractor) of the Construction Regulations (2014) of the Occupational Health and Safety Act. No other sum shall be paid in this respect and Tenderers must therefore ensure that adequate provision has been allowed for.

#### PSAB EMPLOYERS AGENTS OFFICE

#### PSAB 3 MATERIALS

#### PSAB 3.1 Nameboards

#### REPLACE AB3.1 WITH THE FOLLOWING:

No project Nameboards are required.

#### PSAB 3.2 Office Building(s)

REPLACE AB 3.2 WITH THE FOLLOWING:

No offices are required.

#### PSAB 4 PLANT

#### PSAB 4.1 Telephone

REPLACE AB 4.1 WITH THE FOLLOWING:

The Contractor shall provide the Employers Agent's Representative with cellular phone airtime and data for his exclusive official use.

#### PSAB 5 CONSTRUCTION

#### PSAB 5.1 Nameboards

ADD THE FOLLOWING TO AB 5.1:

The nameboards shall be erected within one month after receipt of the letter of acceptance and shall be placed at the position indicated by the Employers Agent and kept in good repair for the duration of the contract and the defects liability period. Any damage to these boards shall be repaired within fourteen days. No payment shall be made in terms of the contract prior to the erection of the nameboards.

The Contractor will be permitted to erect a maximum of two of his own nameboards, in positions approved by the Employers Agent. The Employers Agent reserves the right to order the removal of these boards if they are not kept in good condition.

#### PSAB 5.5 Survey Assistants

SUBSTITUTE "two or more" IN THE FIRST SENTENCE OF AB 5.5 WITH "two".

#### PSAB 5.6 Survey Equipment

#### NEW CLAUSE

The Contractor shall provide the following tested and approved survey equipment on site for the duration of the contract and for the use of the Employers Agent whenever needed:

a) one automatic level plus tripod and staff; and

The above-mentioned equipment may by arrangement be shared between the Contractor and the Employers Agent's representative.

The Contractor shall maintain the equipment in good working order and keep it clean throughout the Contract period.

#### PSC SITE CLEARANCE (1982)

#### PSC 1 SCOPE

ADD THE FOLLOWING:

"This section also covers the removal of foreign materials such as sand, rubbish, etc. from areas within the site boundary where work must be executed by the Contractor."

#### PSC 3 MATERIAL

#### PSC 3.1 Disposal of Material

SUBSTITUTE THE FIRST SENTENCE OF C 3.1 WITH THE FOLLOWING:

Material obtained from clearing and grubbing and demolition of structures shall be disposed of at the municipal dump site or alternative dump site as approved by the Employers Agent.

#### PSC 5 CONSTRUCTION

#### PSC 5.1 Areas to be Cleared and Grubbed

ADD THE FOLLOWING:

"Pipeline routes shall be cleared to a distance of 2.0 m on both sides of the pipeline centre line.

Route pegs or markers shall not be destroyed or damaged during clearing operations."

#### PSC 5.2 Cutting of Trees

ADD THE FOLLOWING:

"The Contractor shall make all due allowance for protection of trees. NO TREE/S SHALL BE REMOVED WITHOUT PRIOR CONSENT OF THE EMPLOYERS AGENT IN CONSULTATION WITH THE EMPLOYER. Branches may not be trimmed in any way except by the Employer or his appointed agent. Damage to any tree/s, which is in the sole discretion of the Employers Agent constitutes permanent defacement of such tree/s, shall result in a penalty of R5 000 (Five Thousand Rand) per mature tree damaged.

Such penalty will be offset against monies due to the Contractor in terms of certificates issued by the Employers Agent, should such tree require to be replaced, the cost of such replacement shall be entirely for the account of the Contractor.

Penalties for the damage of smaller trees, shrubs, etc. shall be R1000.00/per tree or shrub damaged. Replacement or making good shall be entirely for the account of the Contractor.

The Contractor shall also be held accountable for damage to plants resulting from placement of fill or removal of soil, except as directed by the Employers Agent.

#### PSC 5.3 Clearing

#### ADD THE FOLLOWING:

"The tenderers attention is drawn to the fact that all items described under sub-clause 5.3 which are not separately listed in the bill of quantities must be included in the price for item PSC 8.2.1."

#### PSC 5.5 Re-clearing of Vegetation

ADD THE FOLLOWING:

"Where areas have to be re-cleared on the written instructions of the Employers Agent, such reclearing shall be carried out at the Contractor's own cost and the Contractor is advised therefore, not to clear areas at such an early stage that re-clearing may become necessary."

#### PSC 8 MEASUREMENT AND PAYMENT

#### PSC 8.1 Payment

PSC 8.1.1 Clear and grub

REPLACE THE FIRST LINE WITH THE FOLLOWING:

"The area designated by the Employers Agent to be cleared and grubbed will be measured in square metre to the nearest square metre or sum with separately scheduled items for different areas or,"

#### ADD THE FOLLOWING:

"The rate shall also include the cost of reinstating existing lawns/gardens and/or tarred surfaces in and surrounding the cleared area that are damaged during the clear and grub activity." The rate shall include the cost of buying new material where required and all liaisons with the relevant property owners.

PSC 8.2.5 Take down existing fences and re-erect after completion of the works to original state ......Unit: m

The unit of measurement will be metre and the rate will include re-erection thereof as soon as possible after construction work is completed.

#### C3.7 TECHNICAL SPECIFICATIONS

#### CF SEWERAGE NETWORKS

#### **CONTENTS**

- CF 02 STANDARD SPECIFICATIONS
- CF 03 OPERATING AND MAINTENANCE MANUALS
- CF 04 EXECUTION OF REPAIR WORK
- CF 05 TESTS AND INSPECTIONS ON COMPLETION OF REPAIR WORK
- CF 06 QUALITY ASSURANCE SYSTEM
- CF 07 MAINTENANCE TO INSTALLATION SYSTEMS AND EQUIPMENT
- CF 08 MEASUREMENT AND PAYMENT

#### CF 01 SCOPE

This specification covers all aspects regarding the general repair and maintenance of sewerage networks which may include the following installations:

- (a) Sewer pipelines and manholes
- (b) Open sewerage channels
- (c) Septic and conservancy tanks.

Where a particular specification has been included in the documents to supplement Technical Specification CF: Sewerage networks, this technical specification shall act as a guideline to the Particular Specification and, in the event of any discrepancies between the Technical Specification and the Particular Specification, the latter shall take precedence. The Contractor shall at all times adhere to this technical specification, unless otherwise specified in the applicable Particular Specification.

#### CF 02 STANDARD SPECIFICATIONS

#### CF 02.01 GENERAL STANDARD SPECIFICATIONS, REGULATIONS AND CODES

The latest edition, including all amendments up to date of tender, of the following specifications, publications and codes of practice shall be read in conjunction with this specification and shall be deemed to form part thereof:

1SANS 1200 D	-	Earthworks
SANS 1200 DB	-	Earthworks (pipe trenches)
SANS 1200 L	-	Medium-pressure pipelines
SANS 1200 LB	-	Bedding (pipes)
SANS 1200 LC	-	Cable ducts
SANS 1200 LD	-	Sewers

#### CF 02.02 OCCUPATIONAL HEALTH AND SAFETY ACT OF 1993

All regulations and statutory requirements as laid down in the latest edition of the Occupational Health and Safety Act, 1993 (Act no 85 of 1993) shall be adhered to.

#### CF 02.03 <u>MANUFACTURER'S SPECIFICATIONS, CODES OF PRACTICE AND INSTALLATION</u> <u>INSTRUCTIONS</u>

All equipment and materials shall be installed, serviced and repaired strictly in accordance with the manufacturer's specifications, instructions and codes of practice.

#### CF 02.04 MUNICIPAL REGULATIONS, LAWS AND BY-LAWS

All municipal regulations laws, by-laws and special requirements of the Local Authority shall be adhered to unless otherwise specified.

#### CF 03 OPERATING AND MAINTENANCE MANUALS

The Contractor shall, where required, at the start of the Contract, be given all available as-built information and operating and maintenance manuals.

The Contractor shall be responsible for the compilation of an inventory list and operating and maintenance manuals.

This shall be done in accordance with Additional Specification SB: Operating and Maintenance manuals.

#### CF 04 EXECUTION OF REPAIR WORK

#### CF 04.01 GENERAL

The Contractor shall investigate and inspect all areas of the installation to confirm the extent of the repair work required and shall report to the Employers Agent. The Employers Agent will thereafter demarcate any areas to be repaired and shall instruct the Contractor with regard to the repair work to be done.

At the start of the repair and maintenance contract, all the systems, installations and equipment shall be repaired as specified in the Particular Specification. This repair work shall include but not be limited to the details specified in the Particular Specification.

All repair work shall be executed using approved materials and equipment suitable to the systems and/or installations they serve.

All materials and equipment shall comply fully with the requirements as specified for each installation.

The said repair work shall be executed in accordance with the relevant codes of practice, standards, regulations, municipal laws and by-laws, manufacturer's specifications and codes of practice and all Additional and Particular Specifications included in this document.

All repair work shall be executed within the approved period for repairs to be agreed at the start of the Contract period. All new equipment, materials and systems shall be furnished with a written guarantee with a defects liability period of twelve (12) months from date of completion of repair work. These guarantees shall be furnished in favour of Amatola Water. On completion of the required and specified repair work the systems, installations and equipment shall be commissioned and handed over to the satisfaction of the Employers Agent.

Repair work items for the sewerage network and wastewater treatment works shall be categorised under the following headings:

- (a) Repair of existing pipelines and structures
- (b) Cleaning of sewerage network
- (c) Repair of fittings
- (d) Wastewater treatment.

#### CF 04.02 REPAIR OF EXISTING PIPELINES AND STRUCTURES

This section covers the work in connection with the construction of sewerage networks and associated sewerage structures such as manholes, cleaning eyes and the like. It also covers the

removal and replacement of damaged and broken pipes and sewerage structures, as well as repairs to existing pipes and structures.

#### CF 04.02.01 General

Repair work to the soil and wastewater drainage system shall be detailed in the Particular Specification and may include the following:

- (a) Replacement of damaged, broken, leaking, corroded above-ground and underground pipework and fittings;
- Replacement of damaged, broken and missing gully gratings, manhole covers and frames, cleaning eye covers, screws and bolts, inspection of eye covers, screws and bolts, end caps and vent cowls;
- (c) Repair work to damaged manholes, gullies, cleaning eyes, etc., including builder's work and benching;
- (d) Initial unblocking and cleaning of all drainage pipework, traps and gullies;
- (e) Repair of sewerage system where necessary;
- (f) Provision of additional connections to the sewerage system;
- (g) Reinstatement and making good of walls, concrete, road surfaces, etc., to an approved acceptable level where any repair and/or service work have been executed;
- (h) Video surveying of all underground drainage pipework to establish root ingress, damaged pipework, fat build-up, blockages, incorrect falls, sagging and as-built information. This survey shall be utilised to establish the extent of repair and upgrade work to be executed;
- (i) Test pipe system and equipment for leakage;
- (j) Sewerage pipes are to be sampled for corrosion and scaling. The Employers Agent will evaluate the actions to be followed if the outcome of this sampling requires attention;
- (k) Reinstatement and making good of walls, tiling, floors, concrete, finishes, holes, chases, surfaces, etc., to an acceptable level where repair and/or service work have been executed.

#### CF 04.02.02 Construction

The Employers Agent will indicate the location at which sections of pipeline are in need of repair after the appropriate surveys have been completed by the Contractor.

(a) <u>Excavation</u>

The width of the excavation shall be sufficient to allow the proper laying, bedding and backfilling of the pipelines. The width of the excavation for each type and size of pipeline shall be as specified in SANS 1200 DB.

The depth of the excavation for each type and size of pipeline shall depend on site conditions and the amount by which the excavation is to exceed the proposed level of the invert of the pipeline and shall be sufficient to allow for the type and thickness of bedding material as instructed by the Employers Agent.

Where excavation is to be carried out through asphalt premix or concrete, the asphalt/concrete shall be cut neatly and vertically with approved sawing equipment before the asphalt/concrete is removed.

Excavations shall extend such that, where possible, cut in's may be reduced by lifting adjacent pipes.

#### (b) <u>Classification of excavation</u>

All excavations shall be classified as follows for payment purposes:

(i) Hard material

Material which cannot be excavated except by drilling and blasting, or with the use of pneumatic tools or mechanical breakers and boulders exceeding 0,10 m<sup>3</sup> shall be classified as hard material.

Where more than 40 % of any material (by volume) consists of boulders each exceeding 0,10 m<sup>3</sup> in size, the material shall be classified as hard material.

(ii) Soft material

All material not classified as hard material shall be classified as soft material.

Notwithstanding the above classification, all material excavated from previously constructed fills, subgrades and subbases shall be classified as soft material.

(c) Disposal of excavated material

Where excavated material does not comply with the requirements for backfilling material as specified or is surplus to backfilling requirements, such excavated material shall be removed from the site.

Material suitable for use in the works, however, shall be used as prescribed.

(d) <u>Removal of damaged pipelines</u>

Where indicated by the Employers Agent, damaged sections of pipelines shall be completely removed and replaced.

Excavation shall be carried out as described for new pipeline installation and the excavated material shall be, if suitable, preserved for backfilling. The damaged pipe materials shall be disposed of where instructed by the Employers Agent.

(e) Pipe couplings

Repair sections shall be joined utilising existing pipe sockets and collars where possible.

Repair couplings shall be used with the approval of the Employers Agent.

(f) Laying of uPVC pipes

New sections of uPVC pipelines shall be laid on granular bed suitable for flexible pipelines as directed by the Employers Agent. The inside of the pipes shall be smooth and without any displacement and all pipes shall be laid true to line and level with a minimum slope of 2% or as directed by the Employers Agent.

#### (g) Rock foundation

Where rock, shale or hard material is encountered on the bottom of excavations a bed of fine material as required for class B bedding shall be placed before laying the pipe.

(h) <u>Concrete encasement</u>

Where instructed by the Employers Agent pipes shall be encased in concrete. All such encasing shall be done in accordance with the Employers Agent's instructions and sufficient allowance shall be made for movement joints.

(i) Extension of existing pipelines

Where existing pipelines require extension or where damaged sections are replaced, the new sections shall be placed at the same grade and, where they join the existing service, at the same level as the existing pipeline.

Existing chambers or other structures which may obstruct any new work shall be demolished and removed. The demolition and reconstruction of new structures shall be paid for under the relevant sections in the specification.

#### (j) <u>Construction in existing roads</u>

Road crossings will either be constructed utilising sufficient provision of bypass roads, or they will be done utilising the half width of the road. At all times a through route shall be maintained for all traffic.

#### (k) Repairing of leaks

Where leaks occur at pipe sockets or collars the effected section will be cut from the pipeline and repaired using repair couplings.

Where obvious leaks occur due to displaced sealing rubbers they will be replaced if the replacement can be done economically by lifting adjacent pipes.

#### (I) <u>Sewer manholes</u>

All manhole cover frames shall be cast into the concrete cover slabs.

Manholes in trafficable areas shall be provided with heavy duty covers and frames and surrounded by concrete slabs.

#### (m) <u>Steep sewers</u>

Sewer pipes in the ground with a slope steeper than 1:5 and under surface beds shall be encased in concrete.

#### (n) External sewers

The sewer outside the boundary of the building complex shall be constructed strictly in accordance with the details and specifications of the Local Authority.

#### (o) As-built services

Existing drainage invert levels and positions are to be checked against invert levels given on the drawings before work commences. The Employers Agent must be informed immediately of any discrepancy.

The Contractor shall be responsible for the compilation of as-built plans of sewerage network, showing all pipes, pipe diameters, invert levels and associated structures.

All existing services are to be located and opened before the proposed drainage work commences.

(p) Testing

The drainage system shall be tested according to the specifications laid down by the NBRI. This test shall be carried out in the presence and to the satisfaction and approval of the Employers Agent.

#### (q) <u>Ingress of foreign material</u>

During construction all pipe ends are to be suitably plugged to prevent any ingress of dirt, rubble, etc.

(r) <u>CCV surveys</u>

Modern technology video surveying equipment and detection equipment shall be utilised to establish blockage problems and positions of such problems.

#### (s) <u>Proximity to buildings</u>

Any drainage pipe within the 45° range below building foundations shall be encased in concrete or soilcrete as specified.

#### (t) Repair to existing structures

Damaged existing structures shall be demolished to the extent directed by the Employers Agent on site and the resulting debris shall be spoiled at designated sites.

The reinstatement of damaged sections shall be carried out to the same standards prescribed for new construction and shall be paid for under the relevant items scheduled for new structures.

Provision shall be made for the reinstatement of existing damaged prefabricated concrete half round channels.

#### (u) Repair to existing channels

Existing channels shall be cleaned. Broken sections of lined channels shall be repaired. Such repair work shall comprise patching of concrete and replacement of precast sections.

#### CF 04.02.03 Quality standard

Pipelines shall be laid at even gradients to the satisfaction of the Employers Agent and the applicable specifications.

#### CF 04.02.04 <u>Materials</u>

Materials and equipment to be used for repair items shall be suitable and/or adaptable to the existing installation and shall comply with the following:

(a) <u>Manhole covers</u>

Manhole covers, etc., shall have covers and frames complying with SANS 558.

(b) <u>uPVC pipe</u>

uPVC pipe shall only be used for underground installations. The pipes and fitting shall strictly conform to SANS 559. The pipes and fittings shall have a minimum crushing strength of 45 kN/m.

#### CF 04.02.05 <u>Air test for sewer and drains</u>

The following air test as specified in the NBRI information sheet X/BOU 2-34 shall be applicable to all air tests on new sewers and drains installed under the repair Contract and shall be executed by the Contractor and witnessed by the Employers Agent.

#### (a) Method of air testing

All openings in the pipeline are plugged by means of sewer testing plugs. The sewer plug at the lowest end of the pipeline is connected to an air supply hose, which is attached to a mechanically driven air blower, compressor or hand pump.

Air is pumped into the pipeline at a pressure of approximately 375 mm water gauge. The pressure is held at this level for a period of two minutes to allow the air temperature to become constant. Subsequently the air supply is closed off and the time recorded for the air pressure to drop from 250 to 125 mm water gauge. If the recorded time is less than the value given in the table below, it means that the pipeline is leaking and does not comply with

the required standards of tightness. The apparatus required for the air test is commercially available.

The following requirements have to be taken into account when performing the air test:

- (i) Air-permeable pipelines such as vitrified clay or asbestos cement should preferably be tested when moist or wet.
- (ii) The trench shall be partially backfilled before the test is carried out. This is required to stop possible temperature variations and to prevent damage to the pipeline during subsequent backfilling operations.
- (iii) The testing equipment shall be shielded from the direct rays of the sun.
- (iv)Flexible joints are recommended for sewer and drain pipelines. Good quality flexible joints are superior to cement caulked joints and they also provide the pipeline with flexibility to prevent cracking due to subsequent soil movement.
- (v) The test method is very sensitive to flaws in the pipeline, such as cracks or leaking joints. The actual positions of flaws along the pipeline can be determined by using the specialised equipment.
- (vi)If the pipeline is below the water table and subjected to external water pressure, the test method should be modified by the Employers Agent to ensure that the final pressure value is higher than that of the external water pressure acting on the lowest part of the installation.

The minimum times for pressure drop of 250 mm to 125 mm water gauge are given in table CF 04.02.05/1 below.

PIPE DIAMETER (mm)	MINIMUM TIME (min - s)	CRITICAL LENGTH OF PIPELINE (m) (58 m <sup>2</sup> internal surface area)	MINIMUM TIME(s) FOR LONGER LENGTH (L) OF PIPELINE
100	1 to 58	184,6	0,640 L
150	2 to 57	123,1	1,439 L
200	3 to 56	92,3	2,559 L
225	4 to 26	82,1	3,239 L
250	4 to 55	73,8	3,998 L
300	5 to 54	61,5	5,757 L
375	7 to 23	49,2	8,996 L
450	8 to 51	41,0	12,954 L
525	10 to 20	35,2	17,632 L
600	11 to 49	30,8	23,030 L

#### TABLE CF 04.02.05/1

#### CF 04.03 CLEANING OF SEWERAGE NETWORK

The work involved under this section is the removal of silt, debris and vegetation from within the pipelines and manholes and the general cleaning of areas where leakage has occurred. This can be done either mechanically or chemically according to the more appropriate method as specified by the Employers Agent.

#### CF 04.03.01 Construction

The Contractor shall arrange with the Employers Agent for an inspection of the pipe route before the cleaning of any pipeline sections is carried out. Based on the inspection, the Employers Agent will instruct the Contractor as to which sections of the network require cleaning.

Visual inspections utilising closed-circuit TV cameras will not be required unless deemed essential and will be specifically requested by the Employers Agent.

Sections of the pipeline may be removed for a more detailed inspection. Such sections shall be repaired as specified in Sub-clause CF 04.02.02. Sections shall only be cut from the pipeline where specifically instructed by the Employers Agent.

The method to be applied for the cleaning of the pipelines shall be chemical or mechanical. The method to be used for each section of the pipeline will be instructed by the Employers Agent.

Material removed from the culverts shall be disposed of as instructed by the Employers Agent.

Where insufficient scour values are present, the method for scouring of the pipelines shall be discussed and agreed with the Employers Agent prior to implementation.

#### CF 04.04 REPAIR OF FITTINGS

#### CF 04.04.01 Construction

The Employers Agent will indicate the fittings that are to be repaired, but these fittings shall not be limited to those specifically indicated by the Employers Agent.

Repair of the following fittings may be required:

- (a) Cleaning eyes
- (b) Permanent plug stoppers
- (c) Channel sections.

#### CF 05 TESTS AND INSPECTIONS ON COMPLETION OF REPAIR WORK

Except where otherwise provided in the Contract, the Contractor shall provide all labour, materials, power, fuel, accessories and properly calibrated and certified instruments necessary for carrying out such tests. The Contractor shall make arrangements for such tests and he shall give at least 48 hours' notice to the Employers Agent, in writing, prior to commencement of the test.

In the event of the plant or installation not passing the test, the Employer shall be at liberty to deduct from the Contract price all reasonable expenses incurred by the Employer or the Employers Agent attending the repeated test.

Whenever any installation or equipment is operated for testing or adjusting as provided for above, the Contractor shall operate the entire system for as long a period as may be required to prove satisfactory performance at all times in the occupied space served by that system for up to twenty-four hours a day continuously until the system is handed over.

The Contractor shall provide all labour and supervision required for such operation and the Employer may assign operating personnel as observers, but such observation time shall not be counted as instruction time.

After complete installation of the system all equipment shall be tested, adjusted and readjusted until it operates to the satisfaction and approval of the Employers Agent.

The Contractor shall submit certificates of tests carried out to prove the quality and proper functioning of all equipment and also certificates to be obtained from all relevant authorities and statutory bodies, etc.

#### CF 06 QUALITY ASSURANCE SYSTEM

The Contractor shall institute an approved quality assurance (QA) system which shall be submitted to the Employers Agent for approval. The records of this QA system shall be kept throughout the duration of the Contract and submitted to the Employers Agent at regular intervals as required.

#### CF 08 MEASUREMENT AND PAYMENT

#### CF.08.01 SEWERAGE NETWORKS

#### 

The unit of measurement shall be per metre length of pipe replaced. In each case the Contractor shall agree on the length of pipe to be replaced and the method of coupling the pipes.

The tendered rate shall include full compensation for cleaning and grubbing, excavation, removal of existing pipeline, dealing with water logged conditions, provision of bedding and additional backfill, bedding and back filling of replacement pipeline, cutting to length, finishing, accommodation of traffic, excavation in all materials, removal of unsuitable material from the trench and disposal of surplus materials.

The tendered rate shall include full compensation for all material, plant and labour required to temporarily by-pass (if required) the pipe section being replaced.

The provision of the materials will be measured separately under CF. 01.02.

#### CF.08.01.02 Provision of materials

(a) <u>Pipelines</u> ...... Unit: metre (m)

The unit of measurement shall be the metre of pipe replaced.

(b) <u>Fittings</u> ......Unit: number

The unit of measurement shall be the number of fittings installed.

The tendered rates shall include full compensation for all transport to the place of installation, storage, labour costs.

Separate pay items shall be listed for the pipe materials and fittings per diameter and class and for the class of bedding to be used.

#### CF.08.01.03 Replacement of manhole covers, grid inlets and the like

- (a) SANS 558 Type 4 covers, grids, etc., only ......Unit: number
- (b) SANS 558 Type 4 frames only for covers, grids, etc.: ......Unit: number
- (c) SANS 558 Type 2A covers, grids, etc., only: ......Unit: number
- (d) SANS 558 Type 2A frames only for covers, grids, etc.: ......Unit: number

The unit of measurement shall be the number of covers or frames installed.

The tendered rates shall include full compensation for procuring, furnishing and placing the new covers, grids and/or frames. The tendered rates shall also include full compensation for removing and disposing of the damaged covers, grids and/or frames from the site.

#### CF.08.01.04 Manholes and inspection chambers

CF.08.01.04.01 Raising or lowering of existing manholes or inspection chambers of all types:

- (a) Raise/lower 0 m up to and including 0,5 m ......Unit: number
- (b) <u>Raise/lower exceeding 0,5 m up to and including 1 m</u>.....Unit: number

The unit of measurement shall be the number of manholes/inspection chambers raised/lowered within the specified dimensions.

The tendered rates shall include full compensation for all excavation (including around structures), levelling, temporary timbering, shoring and strutting, for preparing the bottom of the excavation for the manhole beds, the disposal of material, dealing with subsurface or surface water, benching and for other operations necessary for completing the work as specified.

Payment shall distinguish between soft and hard material. The tendered rates shall include full compensation for transporting the excavated material from the site.

#### CF.08.01.04.02 Breaking into existing sewer and building a new manhole

- (a) <u>Precast concrete manhole:</u>
  - (1) Depth exceeding 0,5 m up to and including 1,0 m.....Unit: number
  - (2) Depth exceeding 1,0 m up to and including 1,5 m.....Unit: number
  - (3) Depth exceeding 1,5 m up to 2,0 m Unit: number

The unit of measurement shall be the number of manholes constructed within the specified dimensions.

The tendered rate shall include full compensation for excavation, building a new manhole over the sewer, breaking into the existing sewer, building the channelization under wet conditions, ensuring the water tightness of the new connection, supplying all the necessary materials, removing surplus material, all labour and equipment required to make the connection, and liaison with the local authorities. Provision for manhole covers shall be made under CF 01.03 payment.

#### CF.08.01.04.03 Connecting to existing sewer.....Unit: sum

The tendered sum shall include full compensation for excavation, making an opening in the existing manhole, installing new pipes in the new opening, for breaking out and modifying the channelization inside the manhole to suit the new pipe layout, ensuring the water tightness of the new connection, supplying all the necessary materials, removing surplus material and debris all labour and equipment required to make the connection, and liaison with the local authorities.

#### CF.08.01.04.04 <u>Repair of channels</u>.....Unit: metre (m)

The unit of measurement shall be the length of channel section repaired.

The tendered rate shall include full compensation for cleaning, patching, repairing of existing channels, irrespective of diameter and position. The rate shall also include all necessary materials, equipment and labour required.

#### CF.08.02 CLEANING OF SEWERAGE NETWORK

#### CF.08.02.01 Mechanical cleaning of sewer pipes and structures:

(a)	<u>Up to 150 mm</u>	Unit: metre
(b)	151 mm to 300 mm	Unit: metre
(c)	<u>301 mm to 450 mm</u>	Unit: metre
(d)	More than 450 mm.	Unit: metre

The unit of measurement shall be the metre of pipe cleaned, measured once along the soffit of the culvert. For multiple pipes each individual pipe shall be measured separately.

The tendered rates shall include full compensation for removing the material, for disposing of the material in an approved manner and ensuring that the material will not wash into drainage trenches.

#### **CF.08.02.02** Chemical cleaning of sewer pipes and structures:

(a)	Up to and including 150 mm	Unit: metre
(b)	151 mm to 300 mm	Unit: metre
(c)	<u>301 mm to 450 mm</u>	Unit: metre

(d) More than 450 mm.....Unit: metre

The unit of measurement shall be the metre of pipe cleaned, measured once along the soffit of the culvert. For multiple pipes each individual pipe shall be measured separately.

The tendered rates shall include full compensation for supply of chemical agents, equipment, labour and the effective application of the cleaning process.

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The tendered sum shall include full compensation for the provision of suitable equipment, such as TV surveillance equipment, torches, lights and mirrors, etc., to enable a thorough visual inspection of the pipe network.

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The unit of measurement shall be the metre of pipe inspected.

The rate shall be fully inclusive of all associated equipment and inter-pipe moves and recording equipment.

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The tendered sum shall include full compensation for all processes necessary to complete a thorough check of the sewer network including lifting and replacing manhole covers, using relevant equipment and any clearing necessary to allow the visual inspection to proceed.

#### CF.08.02.06 Demolition and removal of damaged existing structures:

- (a) <u>Plain concrete</u> ...... Unit: cubic metre (m<sup>3</sup>)
- (b) <u>Reinforced concrete</u>...... Unit: cubic metre (m<sup>3</sup>)
- (c) <u>Kerbing and channelling</u>......Unit: metre (m)
- (d) Pipework ...... Unit: metre (m)

The unit of measurement for CF.02.06(a) and (b) shall be the cubic metre of existing material demolished, determined from 70 % of the rates cubic metre capacity of the truck used to remove the material.

The unit of measurement for CF.02.06(c) and (d) shall be the metre length of kerbing and channelling or pipework removed.

The tendered rates shall include full compensation for all labour, equipment and tools for removal of the damaged sections, trimming the bedding and for loading, transporting and disposing of the material.

The reinstatement of damaged sections shall be paid for under the relevant items for constructing new structures.

#### CF.08.03 TESTS AND INSPECTIONS

(a) <u>Pressure testing of pipelines</u>.....Unit: metre

The unit of measurement shall be the length of sewer pipeline tested.

(b) <u>Testing of manholes</u> .....Unit: number

The unit of measurement shall be the number of manholes tested after repair.

The tendered rates shall include full compensation for all labour, materials, power, fuel, accessories and properly calibrated and certified instruments necessary for carrying out relevant tests as per SANS 1200. Submission of certificates from tests and equipment and any costs involved in obtaining such from relevant authorities shall also be included in the tendered sum.