

### **TENDER NO. LED 01/2023/2024**

### **CONTRACT DOCUMENT**

**FOR** 

# UPGRADING OF THE VILLIERSDORP PUBLIC TRANSPORT HUB - PHASE 3A

LED 01/2023/2024

#### (RETURNABLE DOCUMENT)

Name of Tenderer	
Address	
Telephone Number	
Fax Number	
Date	
Signature	
Construction Duration (Weeks)	
Amount (VAT Included)	

#### NOTE

■ The Form of Offer and Acceptance (C1.1) is on **page 73** of this document (see also Clause F.4.1 on **page 11)** 

## PART A INVITATION TO BID

(m								
YOU ARE HEREBY INVITED T								10.00
	023/2024	Closing THE VILLIERSD			31 May 20		Closing Time	12:00
Description: UPGRA	DING OF	INE VILLIEKSD	OKP IKA	NOF	OK I HUI	5 - PHASE 3A		
THE SUCCESSFUL BID (FORM OF OFFER AND			TO FILL	. IN	AND SIGI	N A WRITTEN	CONTRACT F	ORM MBD7
Bid Response Documents		Deposited in the E	Bid Box <b>N</b> (	0. 1	situated a	at:		
MUNICIPAL HEAD OFFI	CE							
6 PLEIN STREET CALEDON								
7230								
1230								
SUPPLIER INFORMATION	N							
NAME OF BIDDER								
POSTAL ADDRESS								
STREET ADDRESS								
TELEPHONE NUMBER		CODE				NUMBER		
CELLPHONE NUMBER								
FACSIMILE NUMBER		CODE				NUMBER		
E-MAIL ADDRESS			•				1	
VAT REGISTRATION NU	MBER							
TAX COMPLIANCE STAT	ΓUS	TCS PIN:			OR	CSD No:		
B-BBEE STATUS LEVEL		Yes			B-BBEE S	STATUS	☐ Yes	
VERIFICATION CERTIFIC					LEVEL S			
[TICK APPLICABLE BOX	J	│			AFFIDAV	11	☐ No	
[A B-BBEE STATUS LE SUBMITTED IN ORDER							EMES & QSEs	) MUST BE
1. ARE YOU THE	TO QUAL	IFT FOR PREFE	KENCE		2. ARE			
ACCREDITED		□Yes	□N			EIGN BASED	□Yes	□No
REPRESENTATIVE I	N		_			PLIER FOR		
SOUTH AFRICA FOR		[IF YES ENCLO	DSE			GOODS	[IF YES, ANS	WER PART
GOODS /SERVICES		PROOF]				VICES	B:3]	
/WORKS OFFERED?					/WOF	RED?		
3. TOTAL NUMBER OF OFFERED	ITEMS					AL BID PRICE	R	
5. SIGNATURE OF BID	DER				6. DATE			
7. CAPACITY UNDER V	_						1	
THIS BID IS SIGNED BIDDING PROCEDURE		ES MAY RE DIE	RECTED					
TO:				TE	CHNICAL	. INFORMATIO	N MAY BE DIR	ECTED TO:
DEPARTMENT	SCM			CC	NTACT F	PERSON	STALIN GOV	ENDER
CONTACT PERSON	ANNIEL	LE MARTIN				E NUMBER	028 214 3300	
TELEPHONE NUMBER	028 214				CSIMILE		028 214 4257	
FACSIMILE NUMBER	028 212			E-N	MAIL ADD	RESS	Stalin@twk.go	ov.za
E-MAIL ADDRESS	<u>annielle</u>	ma@twk.gov.za						

## PART B TERMS AND CONDITIONS FOR BIDDING

1. BID SU	BMISSION:		
	MUST BE DELIVERED BY THE STIPULATED TIME TO THE CORRECT ADI E ACCEPTED FOR CONSIDERATION.	DRESS. LATE BIDS WILL	
1.2. ALL B ONLIN	IDS MUST BE SUBMITTED ON THE OFFICIAL FORMS PROVIDED-(NO	T TO BE RE-TYPED) OR	
PREF	BID IS SUBJECT TO THE PREFERENTIAL PROCUREMENT POLICY FRAI ERENTIAL PROCUREMENT REGULATIONS, 2022, THE GENERAL CONI AND, IF APPLICABLE, ANY OTHER SPECIAL CONDITIONS OF CONTRA	DITIONS OF CONTRACT	
2. TAX C	OMPLIANCE REQUIREMENTS		
2.1 Bidder	s must ensure compliance with their tax obligations.		
	s are required to submit their unique personal identification number (pin) issu of state to view the taxpayer's profile and tax status.	ed by SARS to enable the	
	ation for the Tax Compliance Status (TCS) certificate or pin may also be mass provision, taxpayers will need to register with SARS as e-filers through the		
2.4 Foreig	n suppliers must complete the pre-award questionnaire in part B:3.		
2.5 Bidder	s may also submit a printed TCS certificate together with the bid.		
2.6 In bids where consortia / joint ventures / sub-contractors are involved, each party must submit a separate TCS Certificate/Pin/CSD number.			
	no TCS is available but the bidder is registered on the central supplier databate provided.	ase (CSD), a CSD number	
3. QUEST	IONNAIRE TO BIDDING FOREIGN SUPPLIERS		
3.1. IS THE	ENTITY A RESIDENT OF THE REPUBLIC OF SOUTH AFRICA (RSA)?	☐ YES ☐ NO	
3.2. DOES	THE ENTITY HAVE A BRANCH IN THE RSA?	☐ YES ☐ NO	
3.3. DOES	THE ENTITY HAVE A PERMANENT ESTABLISHMENT IN THE RSA?	☐ YES ☐ NO	
3.4. DOES	THE ENTITY HAVE ANY SOURCE OF INCOME IN THE RSA?	☐ YES ☐ NO	
3.5. IS THE	ENTITY LIABLE IN THE RSA FOR ANY FORM OF TAXATION?	☐ YES ☐ NO	
A TAX CO	SWER IS "NO" TO ALL OF THE ABOVE, THEN IT IS NOT A REQUIREMING STATUS SYSTEM PIN CODE FROM THE SOUTH AFRICATION OF THE SOUTH O		
	AILURE TO PROVIDE ANY OF THE ABOVE PARTICULARS MAY RENDE D BIDS WILL BE CONSIDERED FROM PERSONS IN THE SERVICE OF T		
SIGNAT	URE OF BIDDER:		
CAPACI	TY UNDER WHICH THIS BID IS SIGNED:		

#### **GENERAL TENDER INFORMATION**

TENDER ADVERTISED : 01 May 2024

**ESTIMATED CIDB CONTRACTOR GRADING** : 3CE or higher

SITE BRIEFING SESSION : Thursday, 10 May 2024 at 10h00

**VENUE FOR SITE BRIEFING SESSION** : Municipal Offices, 59 Main Road, Villiersdorp

CLOSING DATE : Friday, 31 May 2024

CLOSING TIME : 12:00

VALIDITY PERIOD : 90 Days

Theewaterskloof Municipality

CLOSING VENUE : 6 Plein Street

CALEDON 7230

TENDER BOX 1 : Tender Box No. 1 located at the main entrance to:

Theewaterskloof Municipality (Head Office)

6 Plein Street CALEDON 7230.

Insert the large envelope containing the Tender Document (which includes the Form of Offer and Acceptance) completed in all respects, plus any additional supporting documentation required, into

the tender box.

Tender
General Tender Information

#### THEEWATERSKLOOF MUNICIPALITY

### UPGRADING OF THE VILLIERSDORP PUBLIC TRANSPORT HUB - PHASE 3A LED 01/2023/2024

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### TENDER NOTICE AND INVITATION TO TENDER NO.: LED 01 / 2023/2024: UPGRADING OF THE VILLIERSDORP PUBLIC TRANSPORT HUB - PHASE 3A

The Directorate: Economic Development & Planning invites tenders for the abovementioned works, located in the Theewaterskloof Municipal jurisdiction.

Only tenderers who satisfy the eligibility criteria and responsiveness criteria stated in the Tender Conditions, Tender Data and Special Conditions of Tender are eligible to submit tenders. It is estimated that tenderers should have a CIDB minimum Construction Industry Development Board (CIDB) grading of 3 CE or higher are eligible to tender.

Tenders shall be evaluated in terms of the Preferential Procurement Regulations 2022. The value of the tender is estimated not to exceed R50 000 000-00 and therefore the 80/20 system shall be applicable. The financial offer will be scored using Formula 2 (Option 1) where the value of W1 is 80 points. Up to a maximum of 20 points for this tender will be awarded in terms of the tenderers specific goals.

A set of tender documents may be obtained from the Theewaterskloof Municipality, Supply Chain Management Department, 6 Plein Street, Caledon from **Thursday**, **02 May 2024** during office hours, Monday to Thursday, 07:45 to 13:00 and 13:45 to 16:45 and Fridays 07:45 to 13:00 and 13:45 to 15:30. The. Payment of a non-refundable tender participation fee of **R550.00** (VAT inclusive) is applicable. This is an eligibility criterion and is payable by means of electronic transfer or direct deposit only. Proof of payment of the participation fee must accompany your tender document when submitting it. Refer enquiries **only in the aforementioned regard** to Mr. Hanro September at <a href="mailto:HanroSe@twk.gov.za">HanroSe@twk.gov.za</a>

All technical enquiries must be directed to Stalin Govender, <u>StalinGo@twk.gov.za</u> Please note that no verbal queries will be entertained.

All prospective tenderers will meet at the offices of the Theewaterskloof Municipality, 59 Main Road, Villiersdorp on **Friday, 10 May 2024** at **10:00**, after which a compulsory clarification site visit with representatives of the Employer will take place to the site of the proposed services in Villiersdorp. A compulsory clarification meeting will take place at the above mentioned offices. Prospective tenderers who arrive later than **10:15** will not be allowed into the Clarification meeting. Tenderers should be represented at the site visit/clarification meeting by a person who is suitably qualified and experienced to comprehend the implications of the work involved.

The closing time for receipt of tenders is 12:00 on Friday, 31 May 2024, at Theewaterskloof Municipality, 6 Plein Street, Caledon. Tenders, in sealed envelopes, marked LED 01/2023/2024: UPGRADING OF VILLIERSDORP TRANSPORT HUB — PHASE 3A, must be placed in Tender Box No. 1, located at the main entrance of Theewaterskloof Municipality, 6 Plein Street, Caledon. Please note that the tender box is open 24/7 and that the deposit slot opening is 5 x 30 cm. Telegraphic, telephonic, telex, facsimile, electronic / email and late tenders will not be accepted. Tenders may only be submitted on the tender documentation that has been issued.

The successful tenderer must also be registered on the Centralized Supplier Database (CSD). Tenderers can register on www.csd.gov.za.

Council reserves the right to accept a tender in full, partially or not at all and is not obliged to accept the lowest tender received.

**The 80/20 preference point system** in terms of the Theewaterskloff Municipality's Preferential Procurement Policy will be applicable as follows:

Price 80 Specific goals: (20)

a) B-BBEE status level of contributor <u>10</u>
 b) promotion of local area enterprises <u>10</u>
 Total points <u>100</u>

WSE Solomons-Johannes Municipal Manager Theewaterskloof Municipality P O Box 24 Caledon 7230

Tender

#### T1.2 TENDER DATA

The Standard Conditions of Tender make several references to the Tender Data for details that apply specifically to this 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.

#### **Tender Data**

#### F.1 General

#### F.1.1 Actions

The Employer is the THEEWATERSKLOOF MUNICIPALITY, represented by the Directorate: Economic Development and Planning.

#### F.1.2 Tender Documents

The following documents form part of this tender:

**VOLUME 1:** The General Conditions of Contract for Construction Work (Third Edition) 2015 as published by the South African Institution of Civil Engineering. This publication is available and tenderers must obtain copies at their own cost from the South African Institution of Civil Engineering (SAICE), Private Bag X200, Halfway House 1685, Tel (011) 805 5947, Fax: (011) 805 5971, email: <a href="mailto:civilinfo@saice.org.za">civilinfo@saice.org.za</a>.

**VOLUME 2:** SANS 2001 The Standardized specification for civil engineering construction. This publication is available and tenderers must obtain copies at their own cost from the South African Institution of Civil Engineering (SAICE), Private Bag X200, Halfway House 1685, Tel: (011) 805 5947, Fax: (011) 805 5971, e-mail: <a href="mailto:civilinfo@saice.org.za">civilinfo@saice.org.za</a>.

**VOLUME 3:** The Tender Document (this document), in which is bound:

#### The Tender

#### Part T1: Tendering procedures

T1.1 Tender Notice and Invitation to Tender

T1.2 Tender Data

#### Part T2: Returnable Documents

T2.1 List of Returnable Documents

T2.2 Returnable Schedules

#### The Contract

#### Part C1: Agreements and Contract Data

C1.1 Form of Offer and Acceptance

C1.2 Contract Data

C1.3 Adjudicators Agreement

C1.4 Occupational Health and Safety Agreement

#### Part C2: Pricing Data

C2.1 Pricing Instructions

C2.2 Bills of Quantities

#### Part C3: Scope of work

C3.1 Description of the Works

C3.2 Specifications

#### Part C4: Health and Safety Specification

Part C5: Detail Drawings

#### F.1.4. Communication and Employer's Agent

Add the following to F1.4

It should be noted that the employer has no agent acting on his behalf for the purposes of this tender.

The employer's representatives, for this purposes of ay communication between the employer and tenderers, is:

Stalin Govender

Theewaterskloof Local Municipality

6 Plein Street, Caledon 7230

Email: StalinGo@twk.gov.za

Attention is drawn to the fact that no verbal communication will be allowed prior to the close of tenders. Only information requested and issued formally in writing to tenderers will be regarded as amending the tener documents.

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

Add the following to F.1.5

- F.1.5.3 The Employer may reject a tender if, in the opinion of the Employer, the tenderer will be unable to achieve the contract participation goal tendered, in the performance of the contract.
- F.1.6.2 Competitive negotiation procedure

A competitive negotiation procedure will not be followed.

#### F.1.6.3 Proposal procedure using the two-stage system

A two-stage system will not be followed.

#### F.2 Tenderer's Obligations

#### F.2.1 Eliqibility

Only those tenderers who substantiate their offer by providing sufficient proof, relevant to each of the following criteria and in terms of the scope of work included in this contract, are eligible to submit tenders:

- a) Must comply with a CIBD grading of 3CE or higher- Please append to Schedule 2A (Page 46).
- b) Payment of a non-refundable tender deposit of R550.00 (VAT Inclusive)- Please append to **Schedule 2L ( Page 64)**.
- c) Attendance of the compulsory clarification meeting.
- d) In order to be considered for an appointment in terms of this bid, tenderers are required to submit the completion certificates/letters of 2 construction of civil engineering contracts, with construction values of at least R 1000 000.00. Tenderers are required to list the projects in **Schedule 1H (Page 44)** and should append the Employer/Employer's Agent completion certificate/completion letter of each to **Schedule 1H (Page 44)**.

Joint ventures are eligible to submit tenders provided that:

- 1. every member of the joint venture is registered with the CIDB;
- 2. the lead partner has a contractor grading designation in the 3 CE class of construction work;
- 3. the combined contractor grading designation calculated in accordance with the Construction Industry Development Board Regulations is equal to or higher than a contractor grading designation determined in accordance with the sum tendered for a 3 CE class of construction work or a value determined in accordance with Regulation 25(1B) or 25(7A) of the Construction Industry Development Regulations

Notwithstanding the above, tenderers who are capable of being so registered prior to the evaluation of submissions may be evaluated at the sole discretion of the Employer (the evaluation of tenders shall be deemed to take place when the Employer's Bid Evaluation Committee meets to make a recommendation to the Bid Adjudication Committee).

As the Municipality does not have a Contractor Development Programme in place, Potentially Emerging Contractors may tender only in accordance with their grading designation

For alpha-numeric associated with the contractor Grading Designations see Annex G attached.

#### F.2.7 Clarification meeting

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

Add the following:

The arrangements for a compulsory site visit/ clarification meeting are as stated in the Tender notice and Invitation to Tender. Tenderers should be represented at the briefing session by a person who is suitably qualified ans experiencd to comprehend the implications of work involved.

#### F.2.12 Alternative tender offers

Add the following to F.2.12

No Alternative offiers will be considered.

#### F.2.13 Submitting a tender offer

Replace sub-clause F 2.13.2 with the following

F.2.13.2. Return all returnable documents to the employer after completing them in their entirety, by writing in non-erasable ink.

Add the following to F 2.13.3

F.2.13.3. Parts of each tender offer communicated on paper shall be submitted as an original, plus 0 (nought) copies.

Add the following after the first sentence of F.2.13.4:

F.2.13.4. The tender shall be signed by a person duly authorised to do so. Tenders submitted by joint ventures of two or more firms shall be accompanied by the document of formation of the joint venture, authenticated by a notary public or other official deputed to witness sworn statements, in which is defined precisely the conditions under which the joint venture will function, its period of duration, the persons authorised to represent and obligate it, the participation of the several firms forming the joint venture, and any other information necessary to permit a full appraisal of its functioning.

Add the following after the first sentence of F.2.13.5:

F.2.13.5. The employer's address for delivery of tender offers and identification details to be shown on each tender offer package are:

**Location of tender box:** Tender Box No. 1 at the entrance of the municipal head office **Physical address:** Theewaterskloof Municipality, 6 Plein Street, Caledon, 7230

Reference number: Tender number: LED 01/2023/2024

**Title of Tender**: Upgrading of Villiersdorp Transport Hub – Phase 3A

Sealed tenders with the Tenderer's name and address and the endorsement, "LED 01/2023/2024 Upgrading of Villiersdorp Transport Hub – Phase 3A, on the envelope, must be placed in the appropriate official tender box at the abovementioned address.

Add the following to F.2.13.6:

F.2.13.6 A two–envelope procedure will **not** be followed (F.1.6.3).

Add the following sub-clause after F.2.13.7:

F.2.13.7 By signing the offer part of C1.1 Form of Offer and Acceptance the tenderer declares that all information provided in the tender submission is true and correct.

#### F.2.15 Closing time

Add the following to F.2.15.1

F.2.15.1 The closing time for submission of tender offers is as stated in the Tender Notice and Invitation to Tender. Telephonic, telegraphic, telex, facsimile or e-mailed tender offers will not be accepted

#### F.2.16 Tender offer validity

Add the following to F.2.16.1:

F.2.16.1 The tender offer validity period is **90 days.** 

#### F.2.17 Clarification of tender offer after submission

Add the following to F.2.17:

A tender will be rejected as non-responsive if the tenderer fails to provide any clarification requested by the employer within the time for submission stated in the employer's written request for such clarification. A tender will also be rejected as non-responsive if the tenderer fails, within the time stated in writing by the Employer, to comply with the requirements of F.4.3.

#### F.2.23 Certificates

Add the following:

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

#### F.2.23.1 Certificate of Contractor registration (CIDB)

A Certificate of Contractor Registration, issued by the Construction Industry Development Board, must be submitted. Where a tenderer satisfies CIDB contractor grading designation requirements through joint venture formation, such tenderers must submit the Certificates of Contractor Registration in respect of each partner. Append to **Schedule 2A (Page 46).** 

#### F.2.23.2 Tax Clearance Certificate

Tenderers shall be registered and in good standing with the South African Revenue Services (SARS) and shall submit/append documentary evidence/proof. Append to **Schedule 2C (Page 48)**.

Each party to a Consortium/Joint Venture shall provide separate documentary evidence/proof.

#### F.2.23.3 Bargaining Council Certificates

Where applicable, a certificate of compliance issued by the relevant Bargaining Council must be submitted. Append to **Schedule 2N (Page 65– Letter of Good Standing)**. Each party to a Consortium/Joint Venture shall submit separate certificates in the above regard.

#### F.3. The Employer's undertakings

#### F.3.2 Issue Addenda

Add the following to F.3.2:

Notwithstanding any requests for confirmation of receipt of Addenda issued, the tenderer shall be deemed to have received such addenda if the employer can show proof of transmission thereof (or a notice in respect thereof) via electronic mail, facsimile or registered post.

#### F.3.4 Opening of tender submissions

Add the following to F3.4.1

F3.4.1. The time and location for opening of the tender offers is:

Time: Tenders will be opened immediately after the closing time for receipt of tenders, as stated in the Tender Notice and Invitation to Tender, or as stated in any Addendum extending the closing date.

Location: COUNCIL CHAMBERS, THEEWATERSKLOOF MUNICIPALITY, 6 PLEIN STREET, CALEDON, 7230.

Tenders will be opened immediately after the closing time for tenders at 12:00.

#### F.3.8 Test for responsiveness

Add the following to F3.8:

Tenders will be considered non-responsive if, inter alia: (This is a requirement on <u>submission</u> of tender document)

- the tenderer does not comply with the eligibility criteria listed in F2.1;
- the tenderer has failed to complete and sign the Offer portion of C1.1 Form of Offer and Acceptance in non-erasable ink;
- the tender is not in compliance with the Scope of Work (Has not signed the declaration);
- if the tenderer failed to comply to the Special Conditions of Tender contained in F4.15 (Page 11); (Has not signed the declaration):
- the tenderer has failed to comply with the pricing instruction as advertised (Has not signed the declaration); and
- The tenderer has failed to comply with clause F4.1 (a-d)(Page 11) additional conditions of tender

#### **Test for Administrative Compliance**

Tenders will be considered non-compliant if, inter alia: (These documents may be requested)

- a) The tenderer has failed to clarify or submit any supporting documentation within the time for submission stated in the employer's written request.
- b) The tenderer has failed to include, append and sign, where prompted in the Returnable Schedules, any and all additional information requested. – Excluding information related to responsive criteria.
- c) The tenderer has not submitted a municipal account of where the head office of the company is registered or in case where the premises are leased, the tenderer has not provided a copy of the lease of the premises. The successful contractor will be required to submit updated municipal accounts on a quarterly basis.

- d) The tenderer failed to submit a valid Tax Compliance Status Pin Certificate, a valid Tax Compliance Status Pin Certificate may be requested.
- e) The tenderer has failed to submit a certified valid B-BBEE certificate, QSE or EME affidavit, whereas points were claimed and a copy of certificate or affidavit was supplied, a certified valid copy of the B-BBEE certificate, QSE or EME Affidavit may be requested
- f) The tenderer has failed to submit proof of good standing with regards to COIDA, and UIF from the Department of Labour related to good standing with regards to COIDA payments. A certified copy of the proof of good standing may be requested.
- g) The tenderer has failed to submit proof of good standing with the relevant Bargaining Council (or relevant affiliation). Should such be in place, a certified copy of the proof of registration may be requested or the tenderer will be afforded the opportunity to register with such Bargaining Council.
- h) The tenderer failed to append to **Schedule 2L (Page 63)** proof of payment of the tender participation fee. Proof of payment of the tender participation fee may be requested.
- The tenderer has fail to attach the completion certificates to Schedule 1H (Page 44) Completion Certificates may be requested.

The Employer reserves the right to accept a tender offer which does not, in the Employer's opinion, materially and/or substantially deviate from the terms, conditions, and specifications of the tender documents.

#### F.3.11 Evaluation of tender offers

#### F.3.11.1 General

#### Replace F.3.11.1 with the following

Tenders shall be evaluated in terms of the Preferential Procurement Regulations 2022. The value of the tender is estimated not to exceed R50 000 000-00 and therefore the 80/20 system shall be applicable. The financial offer will be scored using Formula 2 (Option 1) where the value of W1 is 80 points. Up to a maximum of 20 points for this tender will be awarded in terms of the tender specific goals.

The procedure for the evaluation of responsive tenders is Method 2: Financial Offer and Preference

#### F.3.11.3 Method 2: Financial offer and preference

In the case of a financial offer and preferences:

- a) Score each tender in respect of the financial offer made and preferences claimed, if any, in accordance with the provisions of F.3.11.7 and F.3.11.8.
- b) Calculate the total number of tender evaluation points  $(T_{EV})$  in accordance with the following formula:

 $T_{EV} = N_{FO} + N_{P}$ 

where: *N<sub>FO</sub>* is the number of tender evaluation points awarded for the financial offer made in accordance with F 3 11 7.

 $N_P$  is the number of tender evaluation points awarded for preferences claimed in accordance with F.3.11.8.

- c) Rank tender offers from the highest number of tender evaluation points to the lowest.
- d) Recommend the tenderer with the highest number of tender evaluation points for the award of the contract, unless there are compelling and justifiable reasons not to do so.
- e) Rescore and re-rank all tenderers should there be compelling and justifiable reasons not to recommend the tenderer with the highest number of tender evaluation points, and recommend the tenderer with the highest number of tender evaluation points, unless there are compelling and justifiable reasons not to do so and the process set out in this subclause is repeated.

#### F.3.11.7 Scoring Financial Offers

Score the financial offers of remaining responsive tender offers using the following formula and Formula 2, Option 1:

 $N_{FO} = W_1 \times A$ 

where: N<sub>FO</sub> is the number of tender evaluation points awarded for the financial offer.

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

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

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

Fo	ormula	Comparison aimed at achieving Option 1 <sup>a</sup> Option 2 <sup>a</sup>						
	1	Highest price or discount	, , , , , , , , , , , , , , , , , , , ,					
		Pm						
	2	Lowest price or percentage $A = (1 - (P - Pm))$ $A = Pm/P$						
		commission/ fee Pm						
а	<sup>a</sup> Pm is the comparative offer of the most favourable comparative offer.							
	P	is the comparative offer of the tender offer under consideration.						

#### F.3.11.8 Scoring preferences

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

Calculate the total number of tender evaluation points for preferences claimed in accordance with the provisions of the tender data.

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

then the organ of state must indicate the points allocated for specific goals for both the 90/10 and 80/20 preference point system.

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

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

The specific goals allocated points in terms of this tender	Number of points Allocated (80/20 system) (To be completed by the organ of state)	Number of points claimed (80/20 system) (To be completed by the tenderer and proof thereof attached)
BBBEE (10)	LEVEL POINTS ÷ 2	
	(For example, Level 1 = 20 Points ÷ 2 = 10)	
LOCALITY (10)  (Latest Certified Municipal account/ Lease agreement in the name of the company must be attached to claim points)	Within the boundaries of Theewaterskloof Municipality  10  Within the boundaries of Overberg District  6	
	Within the boundaries of Western Cape	
	4 Outside of the boundaries of Western Cape	
	0	

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

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 (80/20 system)
1	10
2	9
3	7
4	6
5	4
6	3
7	2
8	1
Non-compliant contributor	0

Bidders who qualify as EMEs in terms of the B-BBEE Act must submit a certificate issued by an Accounting Officer as contemplated in the CCA or a Verification Agency accredited by SANAS or a Registered Auditor. Registered auditors do not need to meet the prerequisite for IRBA's approval for the purpose of conducting verification and issuing EMEs with B-BBEE Status Level Certificates.

Bidders other than EMEs must submit their original and valid B-BBEE status level verification certificate or a certified copy thereof, substantiating their B-BBEE rating issued by a Registered Auditor approved by IRBA or a Verification Agency accredited by SANAS.

A trust, consortium or joint venture, will qualify for points for their B-BBEE status level as a legal entity, provided that the entity submits their B-BBEE status level certificate.

A trust, consortium or joint venture will qualify for points for their B-BBEE status level as an unincorporated entity, provided that the entity submits their consolidated B-BBEE scorecard as if they were a group structure and that such a consolidated B-BBEE scorecard is prepared for every separate bid.

Tertiary institutions and public entities will be required to submit their B-BBEE status level certificates in terms of the specialized scorecard contained in the B-BBEE Codes of Good Practice.

A person will not be awarded points for B-BBEE status level if it is indicated in the bid documents that such a bidder intends sub-contracting more than 25% of the value of the contract to any other enterprise that does not qualify for at least the points that such a bidder qualifies for, unless the intended sub-contractor is an EME that has the capability and ability to execute the sub-contract.

A person awarded a contract may not sub-contract more than 25% of the value of the contract to any other enterprise that does not have an equal or higher B-BBEE status level than the person concerned, unless the contract is sub-contracted to an EME that has the capability and ability to execute the sub-contract.

If a valid B-BBEE certificate of EME affidavit is not attached it will be interpreted that the preference points for B-BBEE status level or contribution are not claimed.

If a valid B-BBEE certificate or EME affidavit is attached and if points is not claimed in terms of MBD 6.1 it will be interpreted that the preference points for B- BBEE status level or contribution are not claimed.

Please note that the Municipality will not request a valid B-BBEE certificate or Sworn Affidavits if such is not attached to the bidders tender at closing date of this tender.

#### F.3.13 Acceptance of tender offer

Replace F.3.13 with the following:

- a) the tenderer has in his or her possession an original valid Tax Compliance Status Pin Certitificate issued by the South African Revenue Services or has made arrangements to meet outstanding tax obligations. Where a tax clearance certificate expires during the duration of the construction period, the tenderer must provide a Valid Tax Compliance Status Pin Certitificate within 21 days;
- b) the tenderer is registered with the CIDB with an approximate category of registration;
- the tenderer is not in arrears for more than three (3) months with municipal rates and taxes and municipal service charges;
- the tenderer or any of its directors is not listed on the Register of Tender Defaulters in terms of the Prevention and Combating of Corrupt Activities Act of 2004 as a person prohibited from doing business with the public sector;
- e) the tenderer has not:
  - ) abused the Employer's Supply Chain Management System; or
  - ii) failed to pay municipal rates and taxes or service charges and such rates, taxes and charges are in arrears for more than three months;
  - iii) failed to perform on any previous contract and has been given a written notice to this effect;
- f) the tenderer has completed the Compulsory Enterprise Questionnaire and there are no conflicts of interest which may impact on the tenderer's ability to perform the contract in the best interests of the employer or potentially compromise the tender process.

Add the following to F.3.13:

#### **SCM Related Appeals**

Clause 53 of the Theewaterskloof Supply Chain Management Policy gives any person whose rights have been affected by such a decision, the right to appeal such decision within 21 days of notification of the decision.

Any tenderer wishing to exercise this right, must submit their appeal in writing to the Municipal Manager, marked for the attention of the THEEWATERSKLOOF MUNICIPALITY, 6 Plein Street, CALEDON, 7230. The format of the appeal must:

- set out the reasons for the appeal;
- state in which way the appellant's rights have been affected by the decision;

- · state the remedy sought, and
- be accompanied by a copy of the notification advising the tenderer of the decision of the Supply Chain Management Bid Adjudication Committee.

Tenderers are hereby informed also of their right to request reasons for the decision in terms of the Promotion of Administrative Justice Act (No. 3 of 2000).

The notification of the decision sent to the successful tenderer is **not** acceptance of the tender and no rights shall accrue to the successful tenderer in terms of this notification. The successful tenderer will be notified in writing after 21 days of the notification of any final decision (i.e. Acceptance) or of any developments with respect to the appeal process, and if applicable, procedures for the commencement of the work.

The consideration of appeals and if necessary, the invalidation of any decision made, shall be dealt with in terms of the Municipality's appeals process.

#### F.3.17 Provide copies of the contract

The number of paper copies of the signed contract to be provided by the Employer is one.

#### F4 Additional Conditions Of Tender

The additional conditions of tender are:

#### F4.1 Invalid Tenders

Tenders shall be considered invalid and shall be endorsed and recorded as such in the tender opening record, by the responsible official who opened the tender, in the following circumstances:

- a) if the tender offer is not submitted on the Form of Offer and Acceptance bound into this tender document (Form of Offer and Acceptance);
- b) if the tender is not completed in hand written non-erasable black ink;
- c) if the offer has not been signed;
- d) if the offer is signed, but the name of the tenderer is not stated or is indecipherable.
- e) Tenderers must complete and sign all schedules. The Company's name must not be used as signature. If the section/schedules is **NOT** signed by the person authorized to sign the tender, the Municipality will interpret that the section/schedule is not signed.

#### F4.2 Negotiations with preferred tenderers

The Employer may negotiate the final terms of a contract with tenderers identified through a competitive tendering process as preferred tenderers provided that such negotiation:

- a) does not allow any preferred tenderer a second or unfair opportunity;
- b) is not to the detriment of any other tenderer; and
- c) does not lead to a higher price than the tender as submitted.

Minutes of any such negotiations shall be kept for record purposes.

#### F4.3 General supply chain management conditions applicable to tenders

In terms of its Supply Chain Management Policy the Municipality may not consider a tender unless the provider who submitted the tender:

- a) has furnished the Municipality with that provider's:
  - full name:
  - identification number or company or other registration number; and
  - tax reference number and VAT registration number, if any;
- b) has indicated whether:
  - the provider is in the service of the state, or has been in the service of the state in the previous twelve months:
  - the provider is not a natural person, whether any of the directors, managers, principal shareholders or stakeholders is in the service of the state, or has been in the service of the state in the previous twelve months;
  - whether a spouse, child or parent of the provider or of a director, manager, share holder or stakeholder referred to above is in the service of the state, or has been in the service of the state in the previous twelve months; or
- irrespective of the procurement process followed, the Municipality is prohibited from making an award to a person:
  - · who is in the service of the state;

- if the person is not a natural person, a juristic entity of which any director, manager, principal shareholder or stakeholder is in the service of the state; or
- who is an advisor or consultant contracted with the Municipality.

In this regard, tenderers shall complete **Schedule 1A (Page 32)**, Returnable Schedules: Compulsory Enterprise Questionnaire. Failure to complete this schedule may result in the tender not being considered.

#### F4.4 Combating abuse of the Supply Chain Management Policy

In terms of the Supply Chain Management Policy, the Employer may reject the tender of any tenderer if that tenderer or any of its directors has:

- failed to pay municipal rates and taxes or municipal service charges and such rates, taxes and charges are in arrears for more than three months:
- failed, during the last five years, to perform satisfactorily on a previous contract with the Municipality or any other organ of state after written notice was given to that tenderer that performance was unsatisfactory;
- abused the supply chain management system of the Municipality or has committed any improper conduct in relation to this system;
- d) been convicted of fraud or corruption during the past five years;
- e) willfully neglected, reneged on or failed to comply with any government, municipal or other public sector contract during the past five years; or
- f) been listed with the Register of Tender Defaulters in terms of section 29 of the Prevention and Combating of Corrupt Activities Act (No 12 of 2004) or has been listed on National Treasury's database as a person or juristic entity prohibited from doing business with the public sector.

In this regard, tenderers shall complete **Schedule 2F (Page 51)**, Returnable Schedules: Declaration of Tenderers Past Supply Chain Management Practices (MBD 8). Failure to complete this schedule may result in the tender not being considered.

#### F4.5 Price variations

The Contract Price shall not be subject to any contract price adjustment, the rates and prices tendered in the bills of quantities shall be final and binding throughout the period of the contract except for imported special materials, refer to clause Clause 6.8.3: Special Materials in the Contract Data.

#### F4.7 COIDA payments

The Tenderer shall submit to Council a letter from the Department of Labour indicating his good standing with regard to COIDA payments. Complete **Schedule 2M (Page 64)** and append the letter in this regard.

#### F4.8 Registration with Bargaining Council (or relevant affiliation)

Tenderers must be registered with a relevant Bargaining Council (if such be in place) and provide the applicable Certificate of Compliance in terms of the relevant Government Gazette. Complete **Schedule 2N (Page 65)** and append the certificate (letter of good standing) in this regard.

#### F4.9 Compliance with Occupational Health and Safety Act 1993

Tenderers are to note the requirements of the Occupational Health and Safety Act No. 85 of 1993 and the Construction Regulations of 2014 issued in terms of Section 43 of the Act. The tenderer shall be deemed to have read and fully understood the requirements of the above Act and Regulations and to have allowed for all costs in compliance therewith.

The Health and Safety Plan shall cover inter-alia the following details:

- 1) Management Structure, Site Supervision and Responsible Persons including a succession plan.
- 2) Contractor's induction training programme for employees, sub-contractors and visitors to the Site.
- 3) Health and safety precautions and procedures to be adhered to in order to ensure compliance with the Act, Regulations and Safety Specifications.
- 4) Regular monitoring procedures to be performed.
- 5) Regular liaison, consultation and review meetings with all parties.
- 6) Site security, welfare facilities and first aid.
- 7) Site rules and fire and emergency procedures.

Tenderers are to note that the Contractor is required to ensure that all sub-contractors or others engaged in the performance of the contract also comply with the above requirements.

The Contractor shall prepare and maintain a Health and Safety File in respect of the project, which shall be available for inspection on Site at all times and handed over to the Employer on Final Completion of the project.

The Contractor is required to submit to the Employer the Occupational Health and Safety Agreement (included in the Contract Document) and a letter of good standing from the Compensation Commissioner, or a licensed compensation insurer, within 14 days after the Commencement Date of the contract.

#### F4.10 Eligibility with respect to expanded public works programme

This Contract does not qualify for consideration as an Expanded Public Works Programme project.

#### F4.11 Claims arising after submission of tender

No claim for any extras arising out of any doubt or obscurity as to the true intent and meaning of anything shown on the Contract Drawings or contained in the Conditions of Contract, Scope of Work and Pricing Data, will be admitted by the Employer/ Engineer after the submission of any tender and the Tenderer shall be deemed to have:

- 1) inspected the Contract Drawings and read and fully understood the Conditions of Contract.
- read and fully understood the whole text of the Scope of Work and Pricing Data and thoroughly acquainted himself with the nature of the works proposed and generally of all matters which may influence the Contract.
- 3) visited the site of the proposed works, carefully examined existing conditions, the means of access to the site, the conditions under which the work is to be done, and acquainted himself with any limitations or restrictions that may be imposed by the Municipal or other Authorities in regard to access and transport of materials and plant to and from the site and made the necessary provisions for any additional costs involved thereby.
- 4) requested the Employer or his duly authorised agent to make clear the actual requirements of anything shown on the Contract Drawings or anything contained in the Scope of Work and Pricing Data, the exact meaning or interpretation of which is not clearly intelligible to the Tenderer.

Before submission of any tender, the Tenderer should check the number of pages, and if any are found to be missing or duplicated, or the figures or writing indistinct, or if the Pricing Data contain any obvious errors, the tenderer must apply to the Employer/ Engineer at once to have the same rectified, as no liability will be admitted by the Employer/ Engineer in respect of errors in any tender due to the foregoing.

#### F4.12 Labour intensive construction/use of local labour

It is **not** a requirement of the Contract that the work be executed in such a manner as to maximise the use of labour intensive systems. Tenderers are referred to the Special Conditions Tender regarding local labour relevant to this tender, Returnable schedule 3D.

#### F4.13 UIF payments

The Tenderer shall submit to the Employer a letter from the Industrial Council indicating his or her good standing with regard to UIF payments upon being requested to do so.

#### F4.14 Requests for contract documents, or parts thereof, in electronic format

The Employer shall not formally issue tender documents in electronic format as contemplated in 2.13 and shall only issue tender documents in hardcopy. An electronic version of the issued tender documents may be made available to the tenderer, upon written request in terms of this clause, subject to the following:

- a) Electronic copies of the contract document, or parts thereof, will only be provided to tenderers who have been issued with the tender documents as contemplated in 1.2 in hardcopy.
- b) The electronic version shall not be regarded as a substitute for the issued tender documents.
- c) The Employer shall not accept tenders submitted in electronic format. Tenderers may not complete and submit a printed copy of the electronic version of the tender document or part thereof. Only those tenders that have been completed on the issued hard copy tender document shall be considered.
- d) The Employer accepts no responsibility or liability arising from any reliance on or use of the electronic version provided in terms of this clause. The Employer further does not guarantee that the electronic version corresponds with the issued tender documents in all respects. Tenderers are alerted to the fact that electronic versions of the tender documents may not reflect any notices or addenda that amend the tender document.
- e) Any non-compliance with these provisions, including effecting any unauthorised alterations to the tender document as contemplated in Tender data, shall render the tender invalid. The Employer reserves the right to take any action against such tenderer allowed in law including, in circumstances where the tender had already been awarded, the right to cancel the contract.

**Tender** 

f) In requesting the electronic version of the tender document or parts thereof, the tenderer is deemed to have read, understood and accepted all of the above conditions.

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Tenderers must sign Schedule 3D (Page 70) in the Returnable Schedules.

### Annex F (normative)

#### Standard Conditions of Tender

**NOTE:** As published in Annexure F of the CIDB Standard for Uniformity for Contruction Procurement, Board Notice 136 Government Gazette No. 38960 of 10 July 2015.

#### F.1 General

#### F.1.1 Actions

- **F.1.1.1** The employer and each tenderer submitting a tender offer shall comply with these conditions of tender. In their dealings with each other, they shall discharge their duties and obligations as set out in F.2 and F.3, timeously and with integrity, and behave equitably, honestly and transparently, comply with all legal obligations and not engage in anticompetitive practices.
- **F.1.1.2** The employer and the tenderer and all their agents and employees involved in the tender process shall avoid conflicts of interest and where a conflict of interest is perceived or known, declare any such conflict of interest, indicating the nature of such conflict. Tenderers shall declare any potential conflict of interest in their tender submissions. Employees, agents and advisors of the employer shall declare any conflict of interest to whoever is responsible for overseeing the procurement process at the start of any deliberations relating to the procurement process or as soon as they become aware of such conflict, and abstain from any decisions where such conflict exists or recuse themselves from the procurement process, as appropriate.

Note:

- A conflict of interest may arise due to a conflict of roles which might provide an incentive for improper acts in some circumstances. A conflict of interest can create an appearance of impropriety that can undermine confidence in the ability of that person to act properly in his or her position even if no improper acts result.
- 2) Conflicts of interest in respect of those engaged in the procurement process include direct, indirect or family interests in the tender or outcome of the procurement process and any personal bias, inclination, obligation, allegiance or loyalty which would in any way affect any decisions taken.
- **F.1.1.3** The employer shall not seek and a tenderer shall not submit a tender without having a firm intention and the capacity to proceed with the contract.

#### F.1.2 Tender Documents

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

#### F.1.3 Interpretation

- **F.1.3.1** The tender data and additional requirements contained in the tender schedules that are included in the returnable documents are deemed to be part of these conditions of tender.
- **F.1.3.2** These conditions of tender, the tender data and tender schedules which are only required for tender evaluation purposes, shall not form part of any contract arising from the invitation to tender.
- **F.1.3.3** For the purposes of these conditions of tender, the following definitions apply:
- a) Conflict of interest means any situation in which:
  - i) someone in a position of trust has competing professional or personal interests which make it difficult to fulfil his or her duties impartially;
  - ii) an individual or organisation is in a position to exploit a professional or official capacity in some way for their personal or corporate benefit; or
  - iii) incompatibility or contradictory interests exist between an employee and the organisation which employs that employee.

Tender

- b) comparative offer means the tenderer's financial offer after all tendered parameters that will affect the value of the financial offer have been taken into consideration in order to enable comparisons to be made between offers on a comparative basis
- c) **corrupt practice** means the offering, giving, receiving or soliciting of anything of value to influence the action of the employer or his staff or agents in the tender process; and
- d) **fraudulent practice** means the misrepresentation of the facts in order to influence the tender process or the award of a contract arising from a tender offer to the detriment of the employer, including collusive practices intended to establish prices at artificial levels
- e) **organization** means a company, firm, enterprise, association or other legal entity, whether incorporated or not, or a public body
- f) quality (functionality) means the totality of features and characteristics of a product or service that bear on its ability to satisfy stated or implied needs.

#### F.1.4 Communication and employer's agent

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

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

- **F.1.5.1** The employer may accept or reject any variation, deviation, tender offer, or alternative tender offer, and may cancel the tender process and reject all tender offers at any time before the formation of a contract. The employer shall not accept or incur any liability to a tenderer for such cancellation and rejection, but will give written reasons for such action upon written request to do so.
- **F.1.5.2** The employer may not subsequent to the cancellation or abandonment of a tender process or the rejection of all responsive tender offers re-issue a tender covering substantially the same scope of work within a period of six months unless only one tender was received and such tender was returned unopened to the tenderer.

#### F.1.6 Procurement procedures

#### F.1.6.1 General

Unless otherwise stated in the tender data, a contract will, subject 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.1.6.2 Competitive negotiation procedure

- **F.1.6.2.1** Where the tender data require that the competitive negotiation procedure is to be followed, tenderers shall submit tender offers in response to the proposed contract in the first round of submissions. Notwithstanding the requirements of F.3.4, the employer shall announce only the names of the tenderers who make a submission. The requirements of F.3.8 relating to the material deviations or qualifications which affect the competitive position of tenderers shall not apply.
- **F.1.6.2.2** All responsive tenderers, or not less than three responsive tenderers that are highest ranked in terms of the evaluation method and evaluation criteria stated in the tender data, shall be invited in each round to enter into competitive negotiations, based on the principle of equal treatment and keeping confidential the proposed solutions and associated information. Notwithstanding the provisions of F.2.17, the employer may request that tenders be clarified, specified and fine-tuned in order to improve a tenderer's competitive position provided that such clarification, specification, fine-tuning or additional information does not alter any fundamental aspects of the offers or impose substantial new requirements which restrict or distort competition or have a discriminatory effect.
- **F.1.6.2.3** At the conclusion of each round of negotiations, tenderers shall be invited by the employer to make a fresh tender offer, based on the same evaluation criteria, with or without adjusted weightings. Tenderers shall be advised when they are to submit their best and final offer.
- **F.1.6.2.4** The contract shall be awarded in accordance with the provisions of F.3.11 and F.3.13 after tenderers have been requested to submit their best and final offer.

#### F.1.6.3 Proposal procedure using the two stage-system

#### F.1.6.3.1 Option 1

Tenderers shall in the first stage submit technical proposals and, if required, cost parameters around which a contract may be negotiated. The employer shall evaluate each responsive submission in terms of the method of evaluation stated in the tender data, and in the second stage negotiate a contract with the tenderer scoring the highest number of evaluation points and award the contract in terms of these conditions of tender.

#### F.1.6.3.2 Option 2

- **F.1.6.3.2.1** Tenderers shall submit in the first stage only technical proposals. The employer shall invite all responsive tenderers to submit tender offers in the second stage, following the issuing of procurement documents.
- **F.1.6.3.2.2** The employer shall evaluate tenders received during the second stage in terms of the method of evaluation stated in the tender data, and award the contract in terms of these conditions of tender.

#### F.2 Tenderer's obligations

#### F.2.1 Eligibility

- **F.2.1.1** Submit a tender offer only if the tenderer satisfies the criteria stated in the tender data and the tenderer, or any of his principals, is not under any restriction to do business with employer.
- **F.2.1.2** Notify the employer of any proposed material change in the capabilities or formation of the tendering entity (or both) or any other criteria which formed part of the qualifying requirements used by the employer as the basis in a prior process to invite the tenderer to submit a tender offer and obtain the employer's written approval to do so prior to the closing time for tenders.

#### F.2.2 Cost of tendering

Accept that, unless otherwise stated in the tender data, the employer will not compensate the tenderer for any costs incurred in the preparation and submission of a tender offer, including the costs of any testing necessary to demonstrate that aspects of the offer complies with requirements.

#### F.2.3 Check documents

Check the tender documents on receipt for completeness and notify the employer of any discrepancy or omission.

#### F.2.4 Confidentiality and copyright of documents

Treat as confidential all matters arising in connection with the tender. Use and copy the documents issued by the employer only for the purpose of preparing and submitting a tender offer in response to the invitation.

#### F.2.5 Reference documents

Obtain, as necessary for submitting a tender offer, copies of the latest versions of standards, specifications, conditions of contract and other publications, which are not attached but which are incorporated into the tender documents by reference.

#### F.2.6 Acknowledge addenda

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

#### F.2.7 Clarification meeting

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

#### F.2.8 Seek clarification

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

#### F.2.9 Insurance

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

#### F.2.10 Pricing the tender offer

- **F.2.10.1** Include in the rates, prices, and the tendered total of the prices (if any) all duties, taxes (except Value Added Tax (VAT), and other levies payable by the successful tenderer, such duties, taxes and levies being those applicable 14 days before the closing time stated in the tender data.
- F.2.10.2 Show VAT payable by the employer separately as an addition to the tendered total of the prices.
- **F.2.10.3** Provide rates and prices that are fixed for the duration of the contract and not subject to adjustment except as provided for in the conditions of contract identified in the contract data.
- **F.2.10.4** State the rates and prices in Rand unless instructed otherwise in the tender data. The conditions of contract identified in the contract data may provide for part payment in other currencies.

#### F.2.11 Alterations to documents

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

#### F.2.12 Alternative tender offers

- **F.2.12.1** Unless otherwise stated in the tender data submit alternative tender offers only if a main tender offer, strictly in accordance with all the requirements of the tender documents, is also submitted. The alternative tender offer is to be submitted with the main tender offer together with a schedule that compares the requirements of the tender documents with the alternative requirements the tenderer proposes.
- **F.2.12.2** Accept that an alternative tender offer may be based only on the criteria stated in the tender data or criteria otherwise acceptable to the employer.
- **F.2.12.3** An alternative tender offer may only be considered in the event that the main tender offer is the winning tender.

#### F.2.13 Submitting a tender offer

- **F.2.13.1** Submit one tender offer only, either as a single tendering entity or as a member in a joint venture to provide the whole of the works, services or supply identified in the contract data and described in the scope of works, unless stated otherwise in the tender data.
- **F.2.13.2** Return all returnable documents to the employer after completing them in their entirety, either electronically (if they were issued in electronic format) or by writing legibly in non-erasable ink.
- **F.2.13.3** Submit the parts of the tender offer communicated on paper as an original plus the number of copies stated in the tender data, with an English translation of any documentation in a language other than English, and the parts communicated electronically in the same format as they were issued by the employer.
- **F.2.13.4** Sign the original and all copies of the tender offer where required in terms of the tender data. The employer will hold all authorized signatories liable on behalf of the tenderer. Signatories for tenderers proposing to contract as joint ventures shall state which of the signatories is the lead partner whom the employer shall hold liable for the purpose of the tender offer.

- **F.2.13.5** Seal the original and each copy of the tender offer as separate packages marking the packages as "ORIGINAL" and "COPY". Each package shall state on the outside the employer's address and identification details stated in the tender data, as well as the tenderer's name and contact address.
- **F.2.13.6** Where a two-envelope system is required in terms of the tender data, place and seal the returnable documents listed in the tender data in an envelope marked "financial proposal" and place the remaining returnable documents in an envelope marked "technical proposal". Each envelope shall state on the outside the employer's address and identification details stated in the tender data, as well as the tenderer's name and contact address.
- **F.2.13.7** Seal the original tender offer and copy packages together in an outer package that states on the outside only the employer's address and identification details as stated in the tender data.
- **F.2.13.8** Accept that the employer shall not assume any responsibility for the misplacement or premature opening of the tender offer if the outer package is not sealed and marked as stated.
- **F.2.13.9** Accept that tender offers submitted by facsimile or e-mail will be rejected by the employer, unless stated otherwise in the tender data.

#### F.2.14 Information and data to be completed in all respects

Accept that tender offers, which do not provide all the data or information requested completely and in the form required, may be regarded by the employer as non-responsive.

#### F.2.15 Closing time

- **F.2.15.1** Ensure that the employer receives the tender offer at the address specified in the tender data not later than the closing time stated in the tender data. Accept that proof of posting shall not be accepted as proof of delivery.
- **F.2.15.2** Accept that, if the employer extends the closing time stated in the tender data for any reason, the requirements of these conditions of tender apply equally to the extended deadline.

#### F.2.16 Tender offer validity

- **F.2.16.1** Hold the tender offer(s) valid for acceptance by the employer at any time during the validity period stated in the tender data after the closing time stated in the tender data.
- **F.2.16.2** If requested by the employer, consider extending the validity period stated in the tender data for an agreed additional period with or without any conditions attached to such extension.
- **F.2.16.3** Accept that a tender submission that has been submitted to the employer may only be withdrawn or substituted by giving the employer's agent written notice before the closing time for tenders that a tender is to be withdrawn or substituted.
- **F.2.16.4** Where a tender submission is to be substituted, submit a substitute tender in accordance with the requirements of F.2.13 with the packages clearly marked as "SUBSTITUTE".

#### F.2.17 Clarification of tender offer after submission

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.

**Note:** Sub-clause F.2.17 does not preclude the negotiation of the final terms of the contract with a preferred tenderer following a competitive selection process, should the Employer elect to do so.

#### F.2.18 Provide other material

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

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

#### F.2.19 Inspections, tests and analysis

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

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

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

#### F.2.21 Check final draft

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

#### F.2.22 Return of other tender documents

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

#### F.2.23 Certificates

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

#### F.3 The Employer's undertakings

#### F.3.1 Respond to requests from the tenderer

- **F.3.1.1** Unless otherwise stated in the Tender Data, 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.3.1.2** Consider any request to make a material change in the capabilities or formation of the tendering entity (or both) or any other criteria which formed part of the qualifying requirements used to prequalify a tenderer to submit a tender offer in terms of a previous procurement process and deny any such request if as a consequence:
- a) an individual firm, or a joint venture as a whole, or any individual member of the joint venture fails to meet any of the collective or individual qualifying requirements;
- b) the new partners to a joint venture were not prequalified in the first instance, either as individual firms or as another joint venture; or
- in the opinion of the Employer, acceptance of the material change would compromise the outcome of the prequalification process.

#### F.3.2 Issue Addenda

If necessary, issue addenda that may amend or amplify the tender documents to each tenderer during the period from the date the tender documents are available until three working 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.3.3 Return late tender offers

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

#### F.3.4 Opening of tender submissions

**F.3.4.1** Unless the two-envelope system is to be followed, 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** Make available the record outlined in F.3.4.2 to all interested persons upon request.

#### F.3.5 Two-envelope system

- **F.3.5.1** Where stated in the tender data that a two-envelope system is to be followed, open only the technical proposal of valid tenders in the presence of tenderers' agents who choose to attend at the time and place stated in the tender data and announce the name of each tenderer whose technical proposal is opened.
- **F.3.5.2** Evaluate the quality of the technical proposals offered by tenderers, then advise tenderers who remain in contention for the award of the contract of the time and place when the financial proposals will be opened. Open only the financial proposals of tenderers, who score in the quality evaluation more than the minimum number of points for quality stated in the tender data, and announce the score obtained for the technical proposals and the total price and any preferences claimed. Return unopened financial proposals to tenderers whose technical proposals failed to achieve the minimum number of points for quality.

#### F.3.6 Non-disclosure

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

#### F.3.7 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.

#### F.3.8 Test for responsiveness

- F.3.8.1 Determine, after opening and before detailed evaluation, whether each tender offer properly received:
- a) Complies with the requirements of these Conditions of Tender,
- b) has been properly and fully completed and signed, and
- c) is responsive to the other requirements of the tender documents.
- **F.3.8.2** A responsive tender is one that conforms to all the terms, conditions, and specifications of the tender documents without material deviation or qualification. A material deviation or qualification is one which, in the Employer's opinion, would:
- a) detrimentally affect the scope, quality, or performance of the works, services or supply identified in the Scope of Work.
- b) significantly change the Employer's or the tenderer's risks and responsibilities under the contract, or
- c) affect the competitive position of other tenderers presenting responsive tenders, if it were to be rectified.

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

#### F.3.9 Arithmetical errors, 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:
  - i) line item totals resulting from the product of a unit rate and a quantity in bills of quantities or schedules of prices;
     or
  - 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 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.

#### F.3.11 Evaluation of tender offers

#### **F.3.11.1 General**

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

#### F.3.11.2 Method 1: Financial offer

In the case of a financial offer:

- a) Rank tender offers from the most favourable to the least favourable comparative offer.
- b) Recommend the highest ranked tenderer for the award of the contract, unless there are compelling and justifiable reasons not to do so.
- c) Re-rank all tenderers should there be compelling and justifiable reasons not to recommend the highest ranked tenderer and recommend the highest ranked tenderer, unless there are compelling and justifiable reasons not to do so and the process set out in this subclause is repeated.

#### F.3.11.3 Method 2: Financial offer and preference

In the case of a financial offer and preferences:

- a) Score each tender in respect of the financial offer made and preferences claimed, if any, in accordance with the provisions of F.3.11.7 and F.3.11.8.
- b) Calculate the total number of tender evaluation points  $(T_{EV})$  in accordance with the following formula:

 $T_{EV} = N_{FO} + N_{P}$ 

where: *N<sub>FO</sub>* is the number of tender evaluation points awarded for the financial offer made in accordance with F 3 11.7.

 $N_P$  is the number of tender evaluation points awarded for preferences claimed in accordance with F.3.11.8.

- c) Rank tender offers from the highest number of tender evaluation points to the lowest.
- d) Recommend the tenderer with the highest number of tender evaluation points for the award of the contract, unless there are compelling and justifiable reasons not to do so.
- e) Rescore and re-rank all tenderers should there be compelling and justifiable reasons not to recommend the tenderer with the highest number of tender evaluation points, and recommend the tenderer with the highest number of tender evaluation points, unless there are compelling and justifiable reasons not to do so and the process set out in this subclause is repeated.

#### F.3.11.4 Method 3: Financial offer and quality

In the case of a financial offer and quality:

- a) Score each tender in respect of the financial offer made and the quality offered in accordance with the provisions of F.3.11.7 and F.3.11.9, rejecting all tender offers that fail to score the minimum number of points for quality stated in the tender data, if any.
- b) Calculate the total number of tender evaluation points (TEV) in accordance with the following formula:

 $T_{EV} = N_{FO} + N_{Q}$ 

where:  $N_{FO}$  is the number of tender evaluation points awarded for the financial offer made in accordance with F.3.11.7:

No is the number of tender evaluation points awarded for quality offered in accordance with F.3.11.9.

- c) Rank tender offers from the highest number of tender evaluation points to the lowest.
- d) Recommend tenderer with the highest number of tender evaluation points for the award of the contract, unless there are compelling and justifiable reasons not to do so.
- e) Rescore and re-rank all tenderers should there be compelling and justifiable reasons not to recommend the tenderer with the highest number of tender evaluation points and recommend the tenderer with the highest number of tender evaluation points, unless there are compelling and justifiable reasons not to do so and the process set out in this subclause is repeated.

#### F.3.11.5 Method 4: Financial offer, quality and preferences

In the case of a financial offer, quality and preferences:

- a) Score each tender in respect of the financial offer made, preference claimed, if any, and the quality offered in accordance with the provisions of F.3.11.7 to F.3.11.9, rejecting all tender offers that fail to score the minimum number of points for quality stated in the tender data, if any.
- b) Calculate the total number of tender evaluation points (*T<sub>EV</sub>*) in accordance with the following formula, unless otherwise stated in the Tender Data:

TEV= NFO + NP + NQ

where: *N<sub>FO</sub>* is the number of tender evaluation points awarded for the financial offer made in accordance with F.3.11.7:

 $N_p$  is the number of tender evaluation points awarded for preferences claimed in accordance with  $F_3$  11.8:

N<sub>Q</sub> is the number of tender evaluation points awarded for quality offered in accordance with F.3.11.9.

- c) Rank tender offers from the highest number of tender evaluation points to the lowest.
- d) Recommend the tenderer with the highest number of tender evaluation points for the award of the contract, unless there are compelling and justifiable reasons not to do so.
- e) Rescore and re-rank all tenderers should there be compelling and justifiable reasons not to recommend the tenderer with the highest number of tender evaluation points and recommend the tenderer with the highest number of tender evaluation points, unless there are compelling and justifiable reasons not to do so and the process set out in this subclause is repeated.

#### F.3.11.6 Decimal places

Score financial offers, preferences and quality, as relevant, to two decimal places.

#### F.3.11.7 Scoring Financial Offers

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

 $N_{FO} = W_1 \times A$ 

where: N<sub>FO</sub> is the number of tender evaluation points awarded for the financial offer.

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

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

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

Formula	Comparison aimed at achieving Option 1 <sup>a</sup> Option 2 <sup>a</sup>					
1	Highest price or discount	Highest price or discount $A = (1 + (P - Pm))$ $A = P/Pm$				
	Pm					
2	Lowest price or percentage $A = (1 - (P - Pm))$ $A = Pm/P$					
	commission/ fee Pm					
a Pm	<sup>a</sup> Pm is the comparative offer of the most favourable comparative offer.					
P	is the comparative offer of the tender offer under consideration.					

#### F.3.11.8 Scoring preferences

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

Calculate the total number of tender evaluation points for preferences claimed in accordance with the provisions of the tender data.

#### F.3.11.9 Scoring quality

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

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

 $N_Q = W_2 \times S_0 / M_S$ 

where:  $S_0$  is the score for quality allocated to the submission under consideration;

M<sub>s</sub> is the maximum possible score for quality in respect of a submission; and

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

the tender data.

#### F.3.12 Insurance provided by the employer

If requested by the proposed successful tenderer, submit for the tenderer's information the policies and/or certificates of insurance which the conditions of contract identified in the contract data, require the employer to provide.

#### F.3.13 Acceptance of tender offer

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

- a) is not under restrictions, or has principals who are under restrictions, preventing participating in the employer's procurement,
- can, as necessary and in relation to the proposed contract, demonstrate that he or she possesses the professional and technical qualifications, professional and technical competence, financial resources, equipment and other physical facilities, managerial capability, reliability, experience and reputation, expertise and the personnel, to perform the contract,
- 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.

#### F.3.14 Prepare contract documents

**F.3.14.1** If necessary, revise documents that shall form part of the contract and that were issued by the employer as part of the tender documents to take account of:

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

F.3.14.2 Complete the schedule of deviations attached to the form of offer and acceptance, if any.

#### F.3.15 Complete adjudicator's contract

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

#### F.3.16 Notice to unsuccessful tenderers

- **F.3.16.1** 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.
- **F.3.16.2** After the successful tenderer has been notified of the employer's acceptance of the tender, notify other tenderers that their tender offers have not been accepted.

#### F.3.17 Provide copies of the contracts

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

#### F.3.18 Provide written reasons for actions taken

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

#### F.3.19 Transparency in the procurement process

- F.3.19.1 The CIDB prescripts require that tenders must be advertised and be registered o the CIDB i.Tender System.
- **F.3.19.2** The employer must adopt a transparency model that incorporates the disclosure and accountability as transparency requirements in the procurement process.
- **F.3.19.3** The transparency model must identify the criteria for selection of projects, project information template and the threshold value of the projects to be disclosed in the public domain at various intervals of delivery of infrastructure projects.

F.3.19.4 The client must publish the information on a quarterly basis which contains the following information:

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

- Contract start date and duration;
- Contract evaluation reports.

**F.3.19.5** The employer must establish a Consultative Forum which will conduct a random audit in the implementation of the transparency requirements in the procurement process.

- **F.3.19.6** Consultative Forum must be an independent structure from the bid committees.
- **F.3.19.7** The information must be published on the employer's website.
- F.3.19.8 Records of such disclosed information must be retained for audit purposes.

#### **Annex G**

(normative)

#### **Alpha-numerics associated with the Contractor Grading Designations**

Table G1: Contractor grading designations and associated parameters

Contractor Grading Designation	Tender Value Range designation	Maximum value of contract that a contractor is considered capable of performing (R)
1 (class of construction works)	1	500 000
2 (class of construction works)	2	1 000 000
3 (class of construction works)	3	3 000 000
4 (class of construction works)	4	6 000 000
5 (class of construction works)	5	10 000 000
6 (class of construction works)	6	20 000 000
7 (class of construction works)	7	60 000 000
8 (class of construction works)	8	200 000 000
9 (class of construction works)	9	N/A

		LED 01	/2023/2024	
DESCRIPTION	DESIGNATION	DEFINITION	WORK TYPES	EXAMPLES
Civil Engineering Works	CE	Construction works that are primarily concerned with materials such as steel, concrete, earth and rock and their application in the development, extension, installation, maintenance, removal, renovation, alteration or dismantling of building and engineering infrastructure.	Water, sewerage, roads, railways, harbours and transport, urban development and municipal services.	Structures such as a cooling tower, bridge, culvert, dam, grand stand, road, railway, reservoir, runway, swimming pool, silo or tunnel. The result s of operations such as dredging, earthworks and geotechnical processes. Township services, water treatment and supply, sewerage networks, sanitation, soil conservation works, irrigation works, stormwater and drainage works, coastal works, ports, harbours, airports and pipelines.
Electrical Engineering Works (Infrastructure)	EP	Construction works that are primarily concerned with development, extension, installation, removal, renovation, alteration or dismantling of engineering insfrastructure:  a) Relating to the generation, transmission and distribution of electricity;  Or  b) Which cannot be classified as EB	Electrical Power generaton, transmission, control and distribution equipment ans systems	Power generation Street and area lighting Sunstations and protection systems Township reticulations Transmission Lines Supervisory control and data acquisition systems
Electrical Engineering Works (Buildings)	ЕВ	Construction works that are primarily concerned with the installation, extension, modification or repair of electrical installations in or any premises used for transmission of electricity from a point of control to a point of consumption, including any article forming part of such an installation.	All electrical equipment forming an integral and permanent part of buildings and/or structures, including any wiring, cable jointing and layig and electrical overhead line construction	Electrical installations in buildings Electrical reticulations within a plot of land (erf0 or building site Standby plant and uninterrupted power supply Verification and certification of electrical installations on premises.
General Buidling Works	GB	Construction works that:  a) Are primarily concerned with the development, extension, installation, renewal, renovation, alteration or dismantling of a permanent shelter for its occupants or contents; or  b) Cannot be categorised in terms of the definitions provided for civil engineering works, electrical engineering works, mechanical engineering works.	Buildings and ancillary works other than those categorised as being:  a) Civil engineering works b) Electrical engineering works c) Mechanical engineering works d) Specialist works	Buildings for domestic, industrial institutional or commercial occupancies. Car ports Fences other than classified as SS [SQ] Stores Walls

Tender

Mechanical Engineering works  ME  Construction works that are primarily concerned with the development, extension, installation removal, alteration, renewal of engineering infrastrucure for gas transmission and distribution solid waste disposal, heating, ventilation and colling, chemical works, metal lurgical works manufacturing, food processing and materials handling.	<ul> <li>environment of building interiors:</li> <li>a) Gas transmission and distribution systems;</li> <li>b) Pipelines</li> <li>c) Solid waste disposals</li> <li>d) Material handling, lifting machinery,</li> </ul>	Air conditioning and mechanical ventilation Boiler installations ans steam distribution Central heating Centralised hot water generation Cranes and hoists Dust and sawdust extraction Compressed air, gas and vacuum installations Conveyor and materials handling installations Continuous process systems involving chemical works, oil and gas wells, acid plants, metal lurgical machinery, equipment and apparatus, and works nessecary for the beneficiation of metals, minerals, rocks, petroeluemm and organic substances and other chemical processes. Kitchen equipment Laundry Equipment Lift installations and escalators Refrigeration and cold rooms Wste handling systems (including compactors)
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DESCRIPTION	DESIGNATION	DEFINITION	WORK TYPES EXAMPLES	
	SB		The extension, installation, repair, maintenance or renewal, or removal of asphalt	
	SC		The development, extension, installation, removal and dismantling, as relevant,	
			associated with building excavations, shaft sinking and lateral earth support.	
	SD		The development, extension, installation, repair, renewal, removal or alteration of	
			corrosion protection systems ( cathodic, anodic and ectrolytic)	
	SE	A subset of construction works identified and	Demolition of buildings and engineering insfrastructure and blasting	
	SF	defined by the Board that involves specialist	The development, extension, installation, renewal, rempval, renovation, alteration or	
Specialist Works	Si	capabilities for its execution.	dismantling of fire prevention and protection infrastructure (drencher and sprinkler	
		•	systems and fire installation)	
	SG		The development, extension, maintenance, renewal, removal, alteration or dismantling	
			as relevant landscaping, irrigation and horticulture works.	
	SI		The development, extension, maintenance, renewal, repair, removal, renovation,	
			alteration or dismantling of lifts, escaltors, travellators and hoisting machinery.	
	SJ		The development, installation, removal or dismantling as relevant of piles and other	
	SK		specialised foundations for buildings and structures.  The installation, renewal, ateration or dismantling as relevant road markings and	
	Six		signage.	
	SL		The development, extension, installation, renewal, removal, renovation, alteration or	
			dismantling of structural steelwork and scafholding.	
	SM		Timber buildings and structures	
	SN		The extension, installation, repair, maintenance, renewal, removal, renovation or	
			alteration, as relevant, of the waterproofing of basements, roofs and walls using	
	00		specialist systems.	
	SO		The development, extension, installation, renewal, removal, alteration of dismantling or	
			demolition of water installations and soil and waste water drainage associated with buildings (wet services, plumbing).	
	SQ		The development, extension, installation, repair, removal, alteration, dismantling or	
			demolition of precast concrete or steel fencing.	

Tender

### **Part T2: Returnable Documents**

		Pages
T2.1	List of Returnable Documents	32
T2.2	Returnable Schedules	32

Part T2: Returnable Documents

The following documents are to be completed and returned as they constitute the tender. Whilst many of the returnables are required for the purpose of evaluating the tenders, some will form part of the subsequent contract, as they form the basis of the tender offer. For this reason, it is very important that tenderers return **all information requested.** 

### 1. RETURNABLE SCHEDULES REQUIRED FOR TENDER EVALUATION PURPOSES (included hereafter for completion)

Schedule : 1A	Compulsory Enterprise Questionnaire	32
Schedule : 1B	Authority of Signatory	34
Schedule : 1C	Contractor's Information	36
Schedule : 1D	Schedule of Plant and Equipment available for the Contract	40
Schedule : 1E	Preliminary Programme	41
Schedule : 1F	Estimated Monthly Cash-flow	42
Schedule : 1G	Schedule of Proposed Sub-contractors	43
Schedule : 1H	Completion Certificates of Similar Tenders	45
Schedule : 1K	Estimated Local Labour to be Employed on the Contract	46

### 2. OTHER DOCUMENTS REQUIRED FOR TENDER EVALUATION PURPOSES (append to schedule in document)

Schedule : 2A	Certificate of Contractors Registration issued by the CIDB	46
Schedule : 2B	Documents of Incorporation	47
Schedule : 2C	Tax Clearance Certificate Requirements (MBD 2)	48
Schedule : 2D	Declaration of Interest (MBD 4)	49
Schedule : 2F(a)	Preference Points Claim Form in Terms of Preferential Procurement Regulations 2022– (MBD 6.1)	51
Schedule : 2H	Declaration of Bidders past supply chain practices (MBD 8)	56
Schedule : 2I	Certificate of Independent Bid Determination (MBD 9)	58
Schedule : 2J	Declaration in terms of the MFMA in terms of Municipal Rates & Services	61
Schedule : 2K	Financial Standing	62
Schedule : 2L	Proof of Payment of Tender Fee	64
Schedule : 2M	Proof of Letter of Good Standing with COIDA	65
Schedule : 2N	Proof of Registration with Relevant Bargaining Council	66
Schedule : 20	Certificate of Attendance at Clarification Meeting	67

### 3. RETURNABLE SCHEDULES THAT WILL BE INCORPORATED INTO THE CONTRACT (to be attached with submission)

Schedule: 3A	Record of Addenda to Tender Documents			
Schedule : 3B	Schedule : 3B Occupational Health and Safety Plan			
Schedule : 3C	Form of Indemnity	70		
Schedule : 3D	Special Conditions of Tender	71		

### 4. OTHER SCHEDULES AND AFFIDAVITS THAT WILL BE INCORPORATED INTO THE CONTRACT (included hereafter for completion)

C1.1:	Form of Offer and Acceptance	7	<b>'</b> 3
C1.2:	Contract Data (Part1 & Part 2)	7	<b>'</b> 8
C1.3:	Adjudicator's Agreement	8	34
C1.4:	Occupational Health and Safety Agreement	8	36
C2.1:	Pricing Instructions	9	1
C2.2 :	Bills of Quantities	9	93
C3.1.	Description of Works	10	05
C3.2.	Annexes	10	01
C3.2.1.	Health and Safety Specification by the Employer	15	50
C3.2.2.	Specifications (Health & Safety)	15	53

**Tender** 

#### SCHEDULE 1A: COMPULSORY ENTERPRISE QUESTIONNAIRE

The following particulars must be furnished. In the case of a joint venture, <b>separate</b> enterprise questionnaires in respect of each partner must be completed and submitted.											
Section 1: Name and address of enterprise:											
Section 2: VAT registration number, if any:											
Section 3: CIDB registration number, if any:											
Section 4: Particulars of sole proprietors and partners in partnerships											
Name*	Identity n	umb	er*	Perso	nal income ta	x number*					
* Complete only if sole proprietor or	partnership and att	tach	separate pa	ge if more th	an three (3) pa	artners					
Section 5: Particulars of compa	anies and close co	rpoi	rations								
Company registration number: .											
Close corporation number:											
Tax reference number: .											
Section 6: Record of service of Indicate by marking the relevant bot manager, principal shareholder or sthe last 12 months in the service of	xes with a cross, if a	npan									
□ a member of any municipal co			an employe or provincia	ee of any pro al public enti	ovincial depart ty or constituti	ment, national onal institution					
a member of any provincial le			within the r	neaning of tl	ne Public Fina (Act 1 of 199	nce					
<ul> <li>a member of the National Ass National Council of Province</li> </ul>	sembly of the		a member	of an accour	nting authority	of any national					
<ul> <li>a member of the board of dire municipal entity</li> </ul>	ectors of any	_		al public enti							
□ an official of any municipality	or municipal		legislature		nent or a provi	nciai					
entity											
If any of the above boxes are mai	rked, disclose the	follo	owing:								
Name of sole proprietor, partner, director, manager,	Name of institu					of service oriate column)					
principal shareholder or stakeholder	or organ of s	state	and positio	n held	Current	Within last 12 months					
*Insert separate page if necessary											
Section 7: Record of spouses,	children and parer	nts ir	n the service	e of the stat	te						

Tender

partne	ate by marking the relevant boxed ership or director, manager, princ ntly or has been within the last 1:	cipal shareholder o	r stakeholder in	a company or	close corpo	
	a member of any municipal cour a member of any provincial legis a member of the National Asser National Council of Province a member of the board of direct municipal entity an official of any municipality or entity	slature nbly or the ors of any	provincial pub within the me Act, 1999 (Ac a member of or provincial p	an accounting a	stitutional in	nstitution Management any national
Nan	ne of spouse, child or parent	Status of service (tick appropriate column)				
					Current	Within last 12 months
*insert	separate page if necessary					
The u	ndersigned, who warrants that h	e/she is duly autho	orized to do so o	on behalf of the	enterprise:	
ii) c p iii) c iii) c iv) c	uthorizes the Employer to obtain our tax matters are in order; onfirms that the neither the nan erson, who wholly or partly exercid Defaulters established in term onfirms that no partner, membe ontrol over the enterprise appea onfirms that I / we are not asso	ne of the enterpris cises, or may exerc as of the Prevention r, director or other rs, has within the la ciated, linked or in	e or the name cise, control oven and Combatin person, who wast five years be volved with any	of any partner, of the enterprise of Corrupt Actholly or partly elem convicted or other biding e	manager, of appears of appears of appears of appears, continued on the continue of the appears o	director or other in the Register of of 2004; or may exercise, prruption; nitting bid offers
v) (	nd have no other relationship wit ould cause or be interpreted as a confirms that the contents of this elief both true and correct.	a conflict of interes	t; and		-	
Signe	-d		Date			
Name			Position			
Enter	prise name					

 $^{\star}$  The schedule should be used where tenders are subject to the local Government: Municipal Finance Management Act

Tender

#### **SCHEDULE 1B: AUTHORITY OF SIGNATORY**

Indicate the status of the tenderer by ticking the appropriate box hereunder. The tenderer must complete the certificate set out below for the relevant category.

A Company	B Partnership	C Joint Venture	D Sole Proprietor	E Close Corporation

Certificate for Compar	у									
I,	, chairperson of the board of directors of									
board (copy attached) acting in the capacity of	taken on	20, Mr/Mswas authorized to sign all do	ocuments in							
As witnesses:										
	Signature : Sole	e owner:								
		Date :								
Certificate for Partners	•									
_	eing the key-partners in the bu	<u> </u>								
acting in the capacity of										
NAME	ADDRESS	SIGNATURE	DATE							
	<u> </u>									

**NOTE:** This certificate is to be completed and signed by all of the key-partners upon who rests the direction of the affairs of the Partnership as a whole.

**Tender** 

#### C. Certificate for Joint Venture

	, acting in the capaci	ty of lead par	tner, to sign all docur
in connection with the ten	der offer for Contract	and a	ny contract resulting f
on our behalf.			
This authorization is evide signatories of all the partr	enced by the attached power ers to the Joint Venture.	of attorney s	igned by legally autho
NAME OF FIRM	ADDRESS		AUTHORISING SIGNATURE, NAME & CAPACIT
Lead partner			
Certificate for Sole Prop		am the colo	owner of the business
I,trading as	hereby confirm that I	am the sole	owner of the busines
I,trading as	hereby confirm that I		
I,trading as	hereby confirm that I	owner:	
I,trading as	hereby confirm that I		
I, trading as  As witnesses:	hereby confirm that I Signature : Sole	owner:	
trading as	hereby confirm that I Signature : Sole	owner: Date :	
I,	hereby confirm that I Signature: Sole rporation  ng the key members in the bu	owner: Date : usiness tradir	
trading as	hereby confirm that I Signature: Sole rporation  ng the key members in the bu	owner: Date : usiness tradir	ng as
trading as	Signature: Sole  rporation  ng the key members in the bu	owner:  Date :  usiness tradir uthorize Mr/N all documen	ng asls in connection wit
trading as	Signature : Sole  rporation  ng the key members in the bu	owner:  Date :  usiness tradir uthorize Mr/M all documen	ng asls in connection wit

**NOTE:** This certificate is to be completed and signed by all of the key-members upon who rests the direction of the affairs of the Partnership as a whole.

Tender

#### **SCHEDULE 1C: CONTRACTOR'S INFORMATION**

#### COMPLETE AS FULLY AS POSSIBLE, WHERE APPLICABLE

CONTRACTORS, SUPPLIERS AND SERVICES PROVIDERS (PROFESSIONAL AND NON-PROFESSIONAL)

PART ONE		
1. NAME OF COMPANY		
2. ADDRESS: PHYSICAL		
POSTAL		
CODE	WEBSITE http	
	E-MAIL	
2.1 PHYSICAL ADDRESS IN LOCAL AREA (if applicable)		
CODE		
CONTACT PERSON (Name & Details)		
TELEPHONE		FAX
CELL PHONE		
3. SECTOR (e.g. Construction)		
3.1 NATURE OF BUSINESS 1. (e.g. Plumbing)		
2.		
4. REGISTERED AS:	CLOSE CORPORATION PT	TY LTD COMPANY CO-OPERATIVE
	OLE TRADER LT	TD COMPANY
F	PARTNERSHIP NO	OT REGISTERED

**Tender** 

4.1	REGISTERED NO. (if applicable)																						
5.	VAT REGISTRATION NO. (if applicable) (Attach certified copy)																						
5.1	RATES SERVICES ACCOUNT NO.																						
6.	ANNUAL SALES/TURNOVER (Previous finan	icial y	ear	.)			20								R								
							20								R								
							20								R								
7.	TOTAL ASSETS (Previous financial year)						20								R								
							20								R								
8.	CURRENT CONTRACTS WITH						20								R								
	COUNCIL CONTRACT NO. 1.							_] :	2.							_] ;	3.						
	DURATION																						
	APPROXIMATE VALUE	R						1		R	l.					1		R					
						I	1		1	<u></u> Г		1					Ī			1		1	_
	DATES CONTRACTS WERE SIGNED	Ш								L								L					
	PAYMENT TERMS																						
9.	PREVIOUS CONTRACTS WITH COUNCIL							7	Г							7	Г						_
	CONTRACT NO. (Last financial year only)								L							]							
	APPROXIMATE VALUE	R								R								R					
10.	NAME AND ADDRESS OF AUDITORS/ACCO	DUNT	INC	G OF	FIC	ER	S		1	ı	1	1	1	ı	1	ı		ı	ı	ı	1		<u>i</u>
	NAME																						
	ADDRESS																						
		$\frac{\square}{\square}$				I	I		I	1 1		1 T	1	I .	I	l		 	 	I		1	
	<u>_</u>																						
	CODE																						
11	PROFESSIONALS ATTACHED TO THE CON	ICED	NI V	<b>∧/I</b> ⊤∟	1 ()	141	IEIC	`^ <b>T</b>	ION	S (N	Jan	20.0	nd (	)ual	ifico	tion)							
11.	Initials Qualifications	NCER	IN V	VIII	ı Qı	JAL	.IFIC	,A I	ION	S (1	Nall	ie a	iiu C	Zuai	IIIGa			ame					
	Initials Qualifications	•													_	Sı	ırna	ame					

Tender

PART TWO  12. NAMES AND NUMBERS OF DIRECTORS/PARTNERS/MEMBERS - % SHAREHOI	LDING	
Initials Surname ID Number	Sex	% *HDI Holding
1.		YES/NO
2.		YES/NO
3.		YES/NO
4.		YES/NO
5.		YES/NO
6.		YES/NO
7.		YES/NO
8.		YES/NO
13. INDICATE ON WHICH DATE YOUR BUSINESS STARTED ITS CURRENT		
TYPE OF BUSINESS		

\*DEFINITION OF HISTORICALLY DISADVANTAGED INDIVIDUAL (HDI) MEANS A SOUTH AFRICAN CITIZEN.

- WHO, DUE TO THE APARTHEID POLICY THAT HAD BEEN IN PLACE, HAD NO FRANCHISE IN NATIONAL ELECTIONS PRIOR TO THE INTRODUCTION OF THE CONSTITUTION OF THE REPUBLIC OF SOUTH AFRICA, 1983 (ACT NO. 110 OF 1983) OR THE CONSTITUTION OF THE REPUBLIC OF SOUTH AFRICA, 1993 (ACT NO. 200 OF 1993) ("THE INTERIM CONSTITUTION") AND/OR
  - WHO IS A FEMALE; AND/OR
  - WHO HAS A DISABILITY

PROVIDED THAT A PERSON, WHO OBTAINED SOUTH AFRICAN CITIZENSHIP ON OR AFTER THE COMING INTO EFFECT OF THE INTERIM CONSTITUTION, IS DEEMED NOT TO BE A HDI.

**Tender** 

I	(FULL NAME) HEREBY CERT	TIFY THAT THE ABOVE INFOR	MATION IS TRUE AND
CORRECT	,		
SIGNATURE		DATE	
(ADDITIONAL INFORMATION MAY BE ATTA	ACHED IF NECESSARY.)		

Гender

### SCHEDULE 1D: SCHEDULE OF PLANT AND EQUIPMENT AVAILABLE FOR THE CONTRACT

The following are lists of major items of relevant equipment that I/we **presently** own or lease and will have available for this contract or will acquire or hire for this contract if my/our tender is accepted.

Quantity	Description, Size, Capacity, etc.
Attach additional pages if m	ore space is required.
Attach additional pages if m  (b) Details of major equation acceptable.	ore space is required. uipment that will be hired, or acquired for this contract if my/our ter
(b) Details of major eq	
(b) Details of major equacceptable.	uipment that will be hired, or acquired for this contract if my/our ter
(b) Details of major equacceptable.	uipment that will be hired, or acquired for this contract if my/our ter
(b) Details of major equacceptable.	uipment that will be hired, or acquired for this contract if my/our ter
(b) Details of major equacceptable.	uipment that will be hired, or acquired for this contract if my/our ter  Description, Size, Capacity, etc.

Position

**Tender** 

Name

Tenderer

#### **SCHEDULE 1E: PRELIMINARY PROGRAMME**

The tenderer shall attach a preliminary programme, to this schedule.

This programme shall be in the form of a bar chart (Gantt chart) or similar acceptable time/activity form reflecting the proposed sequence and tempo of the various activities and the quantities that will be carried out every week under each of the elements, comprising the work for this contract. The programme shall also indicate the point where the tenderer intends to commence work operations and the direction in which the work will proceed. The working hours shall be indicated.

The tenderer shall also take into account the additional requirements stated in the Project Specifications when drawing up the programme.

Details of t	he preliminary programme shall be appen	ded to this Schedu	ıle.
Number of s	sheets, appended by the tenderer to this Sch	edule	. (If nil, enter NIL).
The constru	ction duration will be (we	eks)	
Signed		Date	
Name		Position	
Tenderer			

**Tender** 

#### SCHEDULE 1F: ESTIMATED MONTHLY CASH-FLOW

The Tenderer shall state below the estimated value of work to be completed every month, based on his preliminary programme and his tendered unit rates.

The amounts for Contingencies and Contract Price Adjustment must not be included. The Tenderer must make note of any cash-flow restrictions.

	MONTH	VALUE	
	1		
	2		
	TOTAL		
Signed		Date	
Name		Position	
Tenderer			

**Tender** 

#### SCHEDULE 1G: SCHEDULE OF PROPOSED SUB-CONTRACTORS

We notify you that it is our intention to employ the following Sub-contractors to work on this contract.

If we are awarded the contract we agree that this notification does not change the requirement for us to submit the names of proposed Sub-contractors in accordance with requirements in the contract for such appointments. If there are no such requirements in the contract, then your written acceptance of this list shall be binding between us.

No.	Name and Address of Proposed Sub-contractor	Nature and Exter	nt of Work	Previous Experience with Sub-contractor
1.				
2.				
3.				
4.				
5.				
6.				
7.				
Signed			Date	
Name			Position	

**Tender** 

Tenderer

#### SCHEDULE 1H: COMPLETION CERTIFICATES OF SIMILAR PROJECTS

In order to be considered for an appointment in terms of this bid, tenderers are required to submit the completion certificates/letters of 2 construction contracts, with construction values of at least R 1000 000.00. Tenderers are required to list the projects in **Schedule 1H (Page 45)** and should append the Employer/Employer's Agent completion certificate/completion letter of each to **Schedule 1H (Page 45)**. The authenticity of information supplied will be verified and rejected if found to be false. Please also provide contact details of the Employer/ Employer's Agent/Main Contractor listed in **Schedule 1H (Page 45)**.

Municipality/Other Entity	Contact Person Name and Number	Projec Descript		Contrac	ct Value	Completion Certificate issue date
						_
Tenderers are remine	ded to attach Comple	etion certifica	ates to t	this sche	<u>dule.</u>	
SIGNATURE:			NAME	(PRINT):		
CAPACITY:			DATE:			
NAME OF FIRM:						
Number of additional pag	ges appended by the ten	derer to this So	chedule:		(If nil	enter NIL).
Signed			[	Date		
Name			F	Position		
Tenderer						

**Tender** 

#### THEEWATERSKLOOF MUNICIPALITY

### UPGRADING OF THE VILLIERSDORP PUBLIC TRANSPORT HUB - PHASE 3A LED 01/2023/2024

#### SCHEDULE 1K: ESTIMATED LOCAL LABOUR TO BE EMPLOYED ON THE CONTRACT

Description	Number				Total
Description of Task / Element / Trade	Artisans and or Skilled Labour	Semi-Skilled Labour	Labourers	Others	Labour / Task
TOTAL ESTIMATED LO	L CAL LABOUR:				

Note: Where the same labour is to be re-used on various tasks the Total Labour/Tasks and the Total Actual Labour will differ.

**Tender** 

### SCHEDULE 2A: CERTIFICATE OF CONTRACTOR REGISTRATION ISSUED BY THE CIDB

The tenderer should attach to this page a copy of the certificate of contractor registration of his/her company, close corporation or partnership issued by die CIDB. In the case of a joint venture between two or more firms, the tenderer shall attach a copy of the document of incorporation of the joint venture.

**Tender** 

#### SCHEDULE 2B: DOCUMENTS OF INCORPORATION

The tenderer must attach to this page a copy of the certificate of incorporation of his/her company, close corporation or partnership. In the case of a joint venture between two or more firms, the tenderer shall attach a copy of the document of incorporation of the joint venture.

Where the entity tendering is a Joint Venture the tender must be accompanied by a statement describing exactly what aspects of the work will be undertaken by each party to the joint venture (appended to this Schedule).

**Tender** 

#### SCHEDULE 2C: TAX CLEARANCE CERTIFICATE REQUIREMENTS

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

- In order to meet this requirement, Tenderers are required to complete in full the TCC 0001 form, "Application for a Tax Clearance Certificate" and submit it to any SARS branch office nationally. The Tax Clearance Certificate Requirements are also applicable to foreign Tenderers / individuals who wish to submit bids.
- 2. SARS will then furnish the bidder with a Tax Clearance Certificate that will be valid for a period of 1 (one) year from the date of approval.
- 3. The original Tax Clearance Certificate must be submitted together with the bid. Failure to submit the original and valid Tax Clearance Certificate will result in the invalidation of the bid. Certified copies of the Tax Clearance Certificate will not be accepted.
  - a. Tax Compliance Status (TCS) Pin as of 18 April 2016
    - i. In terms of the new Tax Compliance Status System implemented by SARS on 18 April 2016, taxpayers are now able to issue the municipality with a TCS Pin which will be used to verify a bidder's tax status online via SARS E-filing. This option will be used to verify the status of the service provider (which should be active or compliant) and will determine if the offer will be further evaluated or omitted. Service provider's status which is found inactive or non-compliant their offers will be omitted. As a result, Tenderers who are not in possession of an original Tax Clearance Certificate must issue the municipality with the following:

1.	Tax Clearance Certificated printed for SARS E	E-filing
2.	Tax Reference Number:	
3.	Tax Compliance Status Pin:	

- 4. In bids where Consortia / Joint Ventures / Sub-Contractors are involved, each party must submit a separate Tax Clearance Certificate.
- 5. Copies of the TCC 001 "Application for a Tax Clearance Certificate" form are available from any SARS branch office nationally of on the website www.sars.gov.za
- 6. Applications for the Tax Clearance Certificates may also be made via e-Filing. In order to use this provision, taxpayers will need to register with SARS as e-Filers through the website <a href="https://www.sars.gov.za">www.sars.gov.za</a>
- 7. Non-adherence to points 3 or 6 above will invalidate your offer.

**Tender** 

#### SCHEDULE 2D: DECLARATION OF INTEREST (MBD4)

- 1. No bid will be accepted from persons in the service of the state<sup>2</sup>
- 2. Any person, having a kinship with persons in the service of the state<sup>1</sup>, 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.

In ord	der to give effect to the above, the following questionnaire mu	st be completed and submitted with the bid
3.1	Full Name of bidder or his or her representative:	
3.2	Identity Number:	
3.3	Position occupied in the Company (director, trustee, shareh	older²)
3.4	Company Registration Number:	
3.5	Tax Reference Number	
3.6	VAT Registration Number:	
3.7	The names of all directors/ trustees/ shareholders members employee numbers must be indicated in paragraph 4 below	
3.8	Are you presently in the service of the state?	YES 🗆 / NO 🗆
	3.8.1 If yes, furnish particulars	
3.9	Have you been in the service of the state for the past twelve	
	3.9.1 If yes, furnish particulars	
3.10	Do you have any relationship (family, friend, other) with per service of the state and who may be involved with the eval or adjudication of this bid?	sons in the uation and/
	3.10.1 If yes, furnish particulars	

3.

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

**Tender** 

<sup>&</sup>lt;sup>2</sup> MSCM Regulations: "In the service of the state" means to be –

<sup>(</sup>a) a member of –

<sup>&</sup>lt;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.

3.11	any oth	er bidder and any per	nship (family, friend, other) betweer sons in the service of the state who aluation and or adjudication of this b	)	
	3.11.1	If yes, furnish partic	ulars		
3.12			directors, trustees, managers, keholders in service of the state?	VEC □ /N	
	3.12.1		ulars		
3.13		/ spouse, child or pare	ent of the company's directors shareholders or stakeholders		
	in servi	ce of the state?		YES 🗆 / N	
	3.13.1	If yes, furnish partic	ulars		
3.14	shareho	or any of the directors	s, trustees, managers, principle ers of this company have any companies or business whether		
	or not they are bidding for this contract				
			s contract.		
Full d	3.14.1	If yes, furnish particula			
Full d	3.14.1 I	If yes, furnish particula	ars		
Full d	3.14.1 I	If yes, furnish particula	embers/ shareholders:		
Full d	3.14.1 I	If yes, furnish particula	embers/ shareholders:		
Full d	3.14.1 I	If yes, furnish particula	embers/ shareholders:		
Full d	3.14.1 I	If yes, furnish particula	embers/ shareholders:		
Full d	3.14.1 I	If yes, furnish particula	embers/ shareholders:		
Full d	3.14.1 I	If yes, furnish particula	embers/ shareholders:		
Full d	3.14.1 I	If yes, furnish particula	embers/ shareholders:		
Full d	3.14.1 I	If yes, furnish particula	embers/ shareholders:		
Signa	3.14.1 I	If yes, furnish particula	embers/ shareholders:  Identify Number  Date		

Tender

#### THEEWATERSKLOOF MUNICIPALITY

### UPGRADING OF THE VILLIERSDORP PUBLIC TRANSPORT HUB - PHASE 3A LED 01/2023/2024

### SCHEDULE 2F (a): PREFERENCE POINTS CLAIM FORM IN TERMS OF THE PREFERENTIAL PROCUREMENT REGULATIONS 2022

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

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

#### 1. GENERAL CONDITIONS

- 1.1 The following preference point systems are applicable to invitations to tender:
  - 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 To be completed by the organ of state

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

- 1.3 Points for this tender (even in the case of a tender for income-generating contracts) shall be awarded for:
  - (a) Price; and
  - (b) Specific Goals.

#### 1.4 To be completed by the organ of state:

The maximum points for this tender are allocated as follows:

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

- 1.5 Failure on the part of a tenderer to submit proof or documentation required in terms of this tender to claim points for specific goals with the tender, will be interpreted to mean that preference points for specific goals are not claimed.
- 1.6 The organ of state reserves the right to require of a tenderer, either before a tender is adjudicated or at any time subsequently, to substantiate any claim in regard to preferences, in any manner required by the organ of state.

#### 2. **DEFINITIONS**

- (a) "tender" means a written offer in the form determined by an organ of state in response to an invitation to provide goods or services through price quotations, competitive tendering process or any other method envisaged in legislation;
- (b) "price" means an amount of money tendered for goods or services, and includes all applicable taxes less all unconditional discounts;

Tender

#### THEEWATERSKLOOF MUNICIPALITY

### UPGRADING OF THE VILLIERSDORP PUBLIC TRANSPORT HUB - PHASE 3A LED 01/2023/2024

- (c) "rand value" means the total estimated value of a contract in Rand, calculated at the time of bid invitation, and includes all applicable taxes;
- (d) "tender for income-generating contracts" means a written offer in the form determined by an organ of state in response to an invitation for the origination of income-generating contracts through any method envisaged in legislation that will result in a legal agreement between the organ of state and a third party that produces revenue for the organ of state, and includes, but is not limited to, leasing and disposal of assets and concession contracts, excluding direct sales and disposal of assets through public auctions; and
- (e) "the Act" means the Preferential Procurement Policy Framework Act, 2000 (Act No. 5 of 2000).

#### 3. FORMULAE FOR PROCUREMENT OF GOODS AND SERVICES

#### 3.3. POINTS AWARDED FOR PRICE

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

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

80/20 or 90/10

$$Ps = 80\left(1 - \frac{Pt - Pmin}{Pmin}\right)$$
 or  $Ps = 90\left(1 - \frac{Pt - Pmin}{Pmin}\right)$ 

Where

Ps = Points scored for price of tender under consideration

Pt = Price of tender under consideration
Pmin = Price of lowest acceptable tender

### 3.4. FORMULAE FOR DISPOSAL OR LEASING OF STATE ASSETS AND INCOME GENERATING PROCUREMENT

#### 3.4.1. POINTS AWARDED FOR PRICE

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

 $Ps = 80\left(1+rac{Pt-P\,max}{P\,max}
ight)$  or  $Ps = 90\left(1+rac{Pt-P\,max}{P\,max}
ight)$ 

Where

Ps = Points scored for price of tender under consideration

Pt = Price of tender under consideration

Pmax = Price of highest acceptable tender

#### 4. POINTS AWARDED FOR SPECIFIC GOALS

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

Tender

- (c) an invitation for tender for income-generating contracts, that either the 80/20 or 90/10 preference point system will apply and that the highest acceptable tender will be used to determine the applicable preference point system; or
- (d) any other invitation for tender, that either the 80/20 or 90/10 preference point system will apply and that the lowest acceptable tender will be used to determine the applicable preference point system,

then the organ of state must indicate the points allocated for specific goals for both the 90/10 and 80/20 preference point system.

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

B-BBEE status level of contributor	Number of points allocated in terms of B-BBEE score card (80/20)	Number of points allocated in terms of B-BBEE score card (90/10)
1	10	5
2	9	4.5
3	7	3
4	6	2.5
5	4	2
6	3	1.5
7	2	1
8	1	0.5
Non-Compliant contributor	0	0

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

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

The specific goals allocated points in terms of this tender	Number of points Allocated (80/20 system) (To be completed by the organ of state)	Number of points claimed (80/20 system)  (To be completed by the tenderer and proof thereof attached)
BBBEE (10)	LEVEL POINTS ÷ 2	
	(For example, Level 1 = 20 Points ÷ 2 = 10)	
LOCALITY (10) (Latest Certified Municipal	Within the boundaries of Theewaterskloof Municipality	
account/ Lease agreement in the name of the company must be	10	
attached to claim points)	Within the boundaries of Overberg District	

**Tender** 

6	
Within the boundaries of Western Cape	
4	
Outside of the boundaries of Western Cape	
0	

POINTS WILL BE ALLOCATED AS FOLLOWS		
	POINTS	
PRICE	80	
SPECIFIC PARTICIPATION GOALS		
Within the boundaries of Theewaterskloof Municipality	10	
Within the boundaries of Overberg District	6	
Within the boundaries of Western Cape	4	
Outside of the boundaries of Western Cape	0	
BBBEE SCORE CARD		
BBBEE points 10		
Total 100		

#### **DECLARATION WITH REGARD TO COMPANY/FIRM**

4.3.	Name of company/firm	
4.4.	Company registration number:	
4.5.	TYPE OF COMPANY/ FIRM	
	□ Partnership/Joint Venture / Consortium □ One-person business/sole propriety □ Close corporation □ Public Company □ Personal Liability Company □ (Pty) Limited □ Non-Profit Company □ State Owned Company □ TICK APPLICABLE BOX	
4.6.	Sub-Contractor	
4.6.1 Will any portion of the contract be sub-contracted?		
	[TICK APPLICABLE BOX]	
	YES NO	
4.6.2 If yes, indicate:		
	i) What percentage of the contract will be sub-contracted%	

**Tender** 

YES		NO		
TICK APPLICABLE BOX]				
v) Whether the sub-contractor is an EME or QSE				
ii)The I	ii)The B-BBEE status level of the sub-contractor			
i) The ı	) The name of the sub-contractor			

- 4.7. I, the undersigned, who is duly authorised to do so on behalf of the company/firm, certify that the points claimed, based on the specific goals as advised in the tender, qualifies the company/ firm for the preference(s) shown and I acknowledge that:
  - i) The information furnished is true and correct;
  - The preference points claimed are in accordance with the General Conditions as indicated in paragraph 1 of this form;
  - iii) In the event of a contract being awarded as a result of points claimed as shown in paragraphs 1.4 and 4.2, the contractor may be required to furnish documentary proof to the satisfaction of the organ of state that the claims are correct;
  - iv) If the specific goals have been claimed or obtained on a fraudulent basis or any of the conditions of contract have not been fulfilled, the organ of state may, in addition to any other remedy it may have
    - (a) disqualify the person from the tendering process;
    - 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 tenderer or contractor, its shareholders and directors, or only the shareholders and directors who acted on a fraudulent basis, be restricted 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, if deemed necessary.

	SIGNATURE(S) OF TENDERER(S)
SURNAME AND NAME: DATE:	
ADDRESS:	

**Tender** 

### SCHEDULE 2H: DECLARATION OF BIDDER'S PAST SUPPLY CHAIN MANAGEMENT PRACTICES (MBD 8)

- 1 This Municipal Bidding Document must form part of all bids invited.
- 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.
- 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).
- In order to give effect to the above, the following questionnaire must be completed and submitted with the bid.

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

**Tender** 

		220 01/2020/2024				
	Item	Question	Yes	No		
	4.4.1	If so, furnish particulars:				
	4.5	Was any contract between the bidder and the municipality / municipal e				
		other organ of state terminated during the past five years on account of	failure to			
		perform on or comply with the contract?				
	4.7.1	If so, furnish particulars:				
		,				
	а	e past five years; or				
		<ul> <li>been listed in the Register for Tender Defaulters in terms of s</li> </ul>	ection 29 of the Prev	ention and		
	2	Combating of Corrupt Activities Act (No 12 of 2004).	00	ontion and		
5	Ir	order to give effect to the above, the following questions	naire must be comp	leted and		
	S	ubmitted with the bid.				
		OFFITION				
	CERTIFICATION					
ı	THE UN	IDERSIGNED (FULL NAME)				
Ċ	ERTIFY	THAT THE INFORMATION FURNISHED ON THIS DECL	ARATION FORM T	RUE AND		
	ORREC					
I	ACCEP	T THAT, IN ADDITION TO CANCELLATION OF A CONTRA	CT, ACTION MAY E	E TAKEN		
Α	<b>GAINS</b> 1	ME SHOULD THIS DECLARATION PROVE TO BE FALSE.				
5	ignature	Date				
 P	osition	Name of Bidder				
•	Janion	Hame VI Diuuei				

#### SCHEDULE 21: CERTIFICATE OF INDEPENDENT BID DETERMINATION (MBD9)

#### CERTIFICATE OF INDEPENDENT BID DETERMINATION

- 1 This Municipal Bidding Document (MBD) must form part of all bids<sup>1</sup> invited.
- 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.
- 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;
  - 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.
- 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.
- In order to give effect to the above, the attached Certificate of Bid Determination (MBD 9) must be completed and submitted with the bid:

**Tender** 

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

<sup>&</sup>lt;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 Number and Description)	
in response to the invitation for the bid made by:	
(Name of Municipality / Municipal Entity)	
do hereby make the following statements that I certify to be true and complete in every respect:	
I certify, on behalf of:	tha
(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 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.
- 9. The terms of the accompanying bid have not been, and will not be, disclosed by the bidder, directly or indirectly, to any competitor, prior to the date and time of the official bid opening or of the awarding of the contract.
- <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

**Tender** 

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

### SCHEDULE 2J: DECLARATION IN TERMS OF THE MFMA (ACT 56 OF 2003) IN TERMS OF MUNICIPAL RATES AND SERVICES

NAME OF ENTERPRISE / TENDERER* : .	
------------------------------------	--

I the undersigned, who warrants that he/she is duly authorized to do so on behalf of the abovementioned enterprise/tenderer, do hereby declare that, to the best of my knowledge, neither the enterprise nor any of its directors, members or partners has:

- a. failed to pay municipal rates and taxes or municipal service charges and such rates, taxes and charges are in arrears for more than three months:
- b. failed, during the last five years, to perform satisfactorily on a previous contract with the Theewaterskloof Municipality or any other organ of state after written notice was given to that tenderer that performance was unsatisfactory;
- c. abused the supply chain management system of the Theewaterskloof Municipality or has committed any improper conduct in relation to this system;
- d. been convicted of fraud or corruption during the past five years;
- e. willfully neglected, reneged on or failed to comply with any government, municipal or other public sector contract during the past five years; or
- f. been listed with the Register of Tender Defaulters in terms of section 29 of the Prevention and Combating of Corrupt Activities Act (No 12 of 2004) or has been listed on National Treasury's database as a person or juristic entity prohibited from doing business with the public sector.

I acknowledge that any misrepresentation in respect of this declaration may be regarded as reason to cancel any contract arising out of this tender.

SIGNED BY ENTERPRISE/TENDERER:	
DATE:	

\* where the entity tendering is a joint venture, each party to the joint venture must sign a declaration in terms of the Municipal Finance Management Act and attach it to this schedule

DOCUMENTARY EVIDENCE IN TERMS OF GOOD STANDING WITH MUNICIPAL RATES AND TAXES AND SERVICE CHARGES SHALL BE ATTACHED TO THIS FORM.

#### **SCHEDULE 2K: FINANCIAL STANDING**

"TENDERERS MUST APPEND PROOF OF BANK GRADING TO THIS SCHEDULE"

#### **BANKING DETAILS OF COMPANY**

NAME OF ACCOUNT HOLDER	
ACCOUNT NUMBER	
BANK	
BRANCH	

COMPLETION OF	WORKS:	(WEEKS)
---------------	--------	---------

SIGNED BY TENDERER: .....

#### SCHEDULE 2L: PROOF OF PAYMENT OF TENDER PARTICIPATION FEE

The tenderer should attach to this page proof of payment of the tender participation fee.							
SIGNED BY TENDERER:							

Tender

#### SCHEDULE 2M: LETTER OF GOOD STANDING TO RELEVANT AUTHORITIES

The tenderer should attach to this page a letter from the relevant authorities indicating his good standing with regard to UIF payments and COIDA. Each party to a Joint Venture or Consortium shall submit separate documents.

Tender

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SIGNED BY TENDERER: .....

#### SCHEDULE 2N: BARGAINING COUNCIL - CERTIFICATE OF COMPLIANCE

Where applicable, a Certificate of Compliance issued by the relevant Bargaining Council should be attached to this schedule. Each party to a Joint Venture or Consortium shall submit separate documents.

Tender

Part T2: Returnable Documents

SIGNED BY TENDERER:

#### SCHEDULE 20: CERTIFICATE OF ATTENDANCE AT CLARIFICATION MEETING

This is to co	ertify that						
			(Tenderer)				
of			(address)				
was represented by the person(s) named below at the compulsory meeting held for all tenderers at							
	(location) on	(da	te), starting at				
We acknowledge that the purpose of the meeting was to acquaint ourselves with the site of the works and / or matters incidental to doing the work specified in the tender documents in order for us to take account of everything necessary when compiling our rates and prices included in the tender.							
Particulars	of person(s) attending the meeting:						
Name		Signature					
Capacity							
Name		Signature					
Capacity							
Attendance of the above persons at the meeting is confirmed by the Employer's representative, namely:							
Name		Signature					
Capacity							

#### SCHEDULE 3A: RECORD OF ADDENDA TO TENDER DOCUMENTS

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

No.	Date		Title or D	etails
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
ach additi	onal pages if m	ore space is required.		
			5.	
ned			Date	
me			Position	

Tender

#### SCHEDULE 3B: OCCUPATIONAL HEALTH AND SAFETY PLAN

#### OCCUPATIONAL HEALTH AND SAFETY ACT (Act No 85 of 1993)

Tenderers are to note the requirements of the Occupational Health and Safety Act No. 85 of 1993 and the Construction Regulations 2014 issued in terms of Section 43 of the Act. The Tenderer shall be deemed to have read and fully understood the requirements of the above Act and Regulations and to have allowed for all costs in compliance therewith.

In this regard the successful Tenderer shall prepare a Health and Safety Plan in respect of the Works in order to demonstrate the necessary competencies and resources to perform the construction work all in accordance with the Act and Regulations. Such Health and Safety Plan shall cover inter-alia the following details:

- 1. Management Structure, Site Supervision and Responsible Persons including a succession plan.
- 2. Contractor's induction training programme for employees, sub-contractors and visitors to the Site.
- 3. Health and safety precautions and procedures to be adhered to in order to ensure compliance with the Act, Regulations and Safety Specifications.
- 4. Regular monitoring procedures to be performed.
- 5. Regular liaison, consultation and review meetings with all parties.
- 6. Site security, welfare facilities and first aid.
- 7. Site rules and fire and emergency procedures.

Tenderers are to note that the Contractor is required to ensure that all sub-contractors or others engaged in the performance of the contract also comply with the above requirements.

The Tenderer shall also take into account the additional requirements stated in the Scope of Work when drawing up the Health and Safety Plan for the contract.

Number of sheets, appended by the Tenderer to this Schedule,	(If nil, enter NIL).
SIGNED BY TENDERER:	

### **SCHEDULE 3C: FORM OF INDEMNITY**

THE MUNICIPAL MANAGER, Theewaterskloof Municipality

INDEMNITY		
Given by		(Name of Company)
of		
(registered address of Company) a company incorpora Laws of the Republic of South Africa (hereinafter called		
represented herein by		
	(Name of	Representative) in his capacity as
		Designation) of the Contractor is
duly authorised hereto by a resolution dated		
To sign on behalf of the Contractor.		
WHEREAS THE CONTRACTOR has entered into a Co THEEWATERSKLOOF MUNICIPALITY (hereinafte INDEMNITY FROM THE CONTRA UPGRADING OF VILLIERSDORP T LED 01 – 20	r called the Mun CTOR FOR THE RANSPORT HU	icipality), WHO REQUIRE THIS E CONTRACT:
NOW THEREFORE THIS DEED WITNESSES that the Othe Municipality in respect of all loss or damage that meason of or in any way arising out of or caused by ope connection with the aforementioned contract; and also in Municipality in consequence of such operations, by read damage to life or property or any other cause whatsoeve that may be incurred by the Municipality in examining performance of which the Contractor binds itself according	nay be incurred a rations that may in respect of all classon of or in any er; and also in real, resisting or se	or sustained by the Municipality by be carried out by the Contractor in laims that may be made against the way arising out of any accidents or espect of all legal or other expenses
SIGNATURE:		
THUS DONE AND SIGNED for and on behalf of the Co	ntractor.	
Aton thisday subscribing witnesses.	of	20 in the presence of the
AS WITNESSES:		
1	(Designation)	
2	(Designation)	

Tender

#### SCHEDULE 3D: SPECIAL CONDITIONS OF TENDER

Bidders are required to comply with the special conditions of tender set out hereunder.

#### A. CONDITIONS APPLICABLE TO THE PROMOTION OF MUNICIPAL LOCAL AND SOCIO-ECONOMIC DEVELOPMENT

For the unskilled labour portion of this tender the Service Provider MUST employ 100% local labourers.

Contractor must comply with EPWP requirements for all unskilled labour and to supply the necessary compulsory documents to Theewaterskloof Municipality to register them.

#### Sub-contracting:

If the service provider intends making use of sub-contractors during the execution of this contract, sub-contractors must be based in the Theewaterskloof Municipal jurisdiction. The onus is in the contractor to ensure that the seclected sub-contractor is capable of performing the subcontracted work in terms of the contract.

The contractor will only be allowed to appoint a sub-contractor based outside Theewaterskloof Local Municipal area upon submission of substantive evidence proving the contrary i.e. that no local subcontractor is capable of rendering the envisaged service. In support of this, the service provider must submit substantive evidence and relevant information with its tender proposal **per Schedule 1G [Page 43].** 

For the **materials portion** of this tender, i.e. **Cement, Sand and stone**, shall be sourced from local suppliers in the Theewaterskloof Area. When invoicing proof must be provided showing that the supplier was local (way bills etc).

If service provider will be hiring plant, machinery and equipment, it must be done locally.

The service provider must provide the Municipality with a schedule of all materials purchased with an indication of materials purchased from local suppliers.

This list must be updated and submitted together with the service providers progress report and invoice

### B. CONDITIONS APPLICABLE AFTER CLOSING OF TENDER BUT BEFORE A SELECTED SERVICE PROVIDER IS ANNOUNCED (For information only)

Any additional information upon request must be submitted in writing within 48 hours of receipt.

#### C. CONDITIONS APPLICABLE AFTER AWARDING OF THE TENDER (For information only)

The service provider must provide the Municipality with a completed list of Local labourers used & Local Spending, with monthly claims.

The aforesaid list must be updated and submitted together with the service providers progress report and monthly invoice, inclusive of the following details:

- a. Salary / wages spent on local employees versus total wages / salary budget at site
- b. Number of local employees employed versus per total workforce at site
- c. Amount spent on local suppliers versus budgeted

Any amendments to the list requires prior approval from the Municipality.

The service provider must provide the Municipality with a certificate confirming payments made to the local EME sub-contractor, if applicable. This certificate must be updated and submitted together with the service providers progress report and invoice.

Any changes in sub-contractors requires prior approval from the Municipality.

### I HEREBY DECLARE THAT I WILL COMPLY WITH ALL THE SPECIAL CONDITIONS OF TENDER AS SET OUT ABOVE.

SIGNATURE:	NAME (PRINT):	
CAPACITY:	DATE:	
NAME OF FIRM:		

Tender

### Part C1: Agreements and Contract Data

		Page
C1.1	Form of Offer and Acceptance (Agreement)	73
C1.2	Contract Data	78
C1.3	Adjudicator's Agreement	84
C1.4	Occupational Health and Safety Agreement	86

#### C1.1 Form of Offer and Acceptance

#### Offer

The Employer, identified in the Acceptance signature block, has solicited offers to enter into a contract for the procurement of:

CONTRACT NO: LED 01/2023/2024:
UPGRADING OF THE VILLIERSDORP TRANSPORT HUB – PHASE 3A

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

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

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

Rand				
	(iı	n words);	; R (in figures)	1
Acceptance an stated in the to	d returning one copy of this document to	the tend	Acceptance part of this Form of Offer and derer before the end of the period of validit the party named as the Contractor in the	y
Signature(s)				
Name(s)				
Capacity				
For the Tende	rer			
	(Name and address	s of orgar	nization)	
Name and signature of witness		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 C1: Agreements and contract data (which includes this agreement)

Part C2: Pricing data
Part C3: Scope of work
Part C4: Site information

and drawings and documents or parts thereof, which may be incorporated by reference into Parts 1 to 4 above.

Deviations from and amendments to the documents listed in the tender data and any addenda thereto as 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.

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. 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 working 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.

Oignaturo(o)				
Name(s)				
Capacity				
For the Employ	yer	THEEWATERSKLOOF MUNIC Directorate: Economic Develop 6 Plein Street CALEDON 7230		anning
Name and signature of witness			Date	

Signature(s)

#### Schedule of Deviations

#### Notes:

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

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

By the duly authorised representatives signing this agreement, 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 changes to the terms of the offer agreed by the tenderer and the employer during this process of offer and acceptance.

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

For the Tenderer:
Signature(s)
Name(s)
Capacity
(Name andaddress of organization)
Name andsignature of witness
For the Employer:
Signature(s)
Name(s)
Capacity
(Name andaddress of organization)
Name andsignature

### **Confirmation of Receipt**

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

The (da	ıy)	
Of (mo	onth)	
20 (ye	ear)	
At(pla	ace)	
For the Contractor:		
	Signature	
	Name	
	Congoity	
	Capacity	
Signature and name of witness:		
	Signature	
	Name	

#### C1.2 Contract Data

#### Part 1: Contract Data Provided by the Employer

#### **GENERAL CONDITIONS OF CONTRACT**

The following standardised General Conditions of Contract:

#### **General Conditions of Contract for Construction Works 2015 (Third Edition)**

prepared by the South African Institution of Civil Engineering (SAICE) shall apply to and from the General Conditions of Contract for this contract. Copies of these conditions of contract are obtainable from the South African Institution of Civil Engineering (SAICE), Private Bag X200, Halfway House 1685, Tel: (011) 805 5947, Fax: (011) 805 5971, e-mail: <a href="mailto:civilinfo@saice.org.za">civilinfo@saice.org.za</a>.

Copies of the General Conditions of Contract are available for inspection and scrutiny at the offices of the Engineer.

The Pro-formas bound with the General Conditions of Contract 2015, on pages 96 to 116 shall not apply to this contract and shall be replaced with the documentation bound into this tender document.

The General Conditions of Contract 2015 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.

The General Conditions of Contract shall be read in conjunction with the variations, amendments and additions set out in the Contract Specific Data below. Each item of data given is cross-referenced to the clause in the General Conditions of Contract to which it mainly applies.

#### **CONTRACT SPECIFIC DATA**

The following Contract specific data are applicable to this Contract:

#### Clause 1.1.1.13:

The Defects Liability Period is 12 months.

#### Clause 1.1.1.14:

The maximum time for achieving Practical Completion is **6 weeks**, inclusive of the 14 day period referred to in Clause 5.3.2 below, and inclusive of non-working days referred to in Clause 5.8.1 below, but exclusive of special non-working days (Clause 5.8.1). Should the total Contract value not be available to complete the project the time for achieving Practical Completion will be adjusted pro rata to the Contract Value plus 2 weeks.

#### Clause 1.1.1.15

The **Employer** is the THEEWATERSKLOOF MUNICIPALITY, represented by the Directorate: Economic Development & Planning and/or such person or persons duly authorised thereto by the Employer in writing.

and is referred to in this Contract Document by the terms "Employer", "THEEWATERSKLOOF MUNICIPALITY" or "Council" as the context provides.

#### Clause 1.1.1.16

The Contract Administrator, referred to in the documents, is any member of Theewaterskloof municipality.

The name of the Contract Administrator is: Mr JC MONG

#### Clause 1.1.1.26:

The Pricing Strategy is a Re-measurement Contract.

Add the following clauses after Clause 1.1.1.34:

- 1.1.1.35 "**Drawings**" means all drawings, calculations and technical information forming part of the Contract Documents and any modifications thereof or additions thereto from time to time approved in writing by the Employer's Agent or delivered to the Contractor by the Employer's Agent.
- 1.1.1.36 "Letter of Notification" means the letters of formal notification, signed by the Employer, of the decision of the Supply Chain Management Bid Adjudication Committee sent to all tenderers. The notification of the decision does not form part of the Employer's Acceptance of the successful tenderer's Offer and no rights shall accrue.

#### Clause 1.1.1.28:

Replace with the following:

"Scope of Work" means the document(s) containing the Standard Specifications, the Project/Particular Specifications and the Drawings, that specifies and describes the Works, which are to be provided, and any other requirements and constraint relating to the manner in which the work is to be performed.

#### Clause 1.2.1.2:

The address of the Employer is: THEEWATERSKLOOF MUNICIPALITY

6 Plein Street CALEDON 7230

The address of the Engineer is: 55 Main Road

Villiersdorp 6848

E-mail address: johannesmo@twk.gov.za

#### Clause 4.3:

Add the following clause after Clause 4.3.2.:

4.3.3 The Employer and the Contractor shall enter into an agreement to complete the work required for the construction of the works in terms of the provisions of Section 37(2) of the Occupational Health and Safety Act (Act 85 of 1993) and the Construction Regulations promulgated thereunder.

An agreement is included in the Contract Document (C1.4 of Contract Data) and shall be completed and submitted to the Employer together with a letter of good standing from the Compensation Commissioner (if not insured with a Licenced Compensation Insurer). The Contractor shall ensure that any letter of good standing shall be timeously renewed in order that it remains in full force for the duration of the Contract.

#### Clause 5.3.1:

The documentation required before commencement with Works execution is:

- 1) Health and Safety Plan (Refer to Clause 4.3)
- 2) Initial programme (Refer to Clause 5.6)
- 5) Occupational Health and Safety Agreement (C1.4 of the Contract Document)
- 6) Letter of Good Standing from the Compensation Commissioner (if not insured with a Licensed Compensation Insurer)

#### Clause 5.3.2:

The time to submit the documentation required (Clause 5.3.1 above) before commencement with Works execution is 14 days.

#### Clause 5.4.2:

Access to and possession of the site shall not be exclusive to the Contractor insofar as the provisions of Clause 4.8 apply, and where ongoing use by the general public is required.

Add the following clause after Clause 5.4.3:

5.4.4 The Contractor shall bear all costs and charges for special and temporary rights of way required by him in connection with access to the Site.

#### Clause 5.8.1:

The non-working days are Sundays.

The special non-working days are:

- 1) All gazetted public holidays falling outside the year end break.
- 2) The year end breaks as recommended by the SAFCEC

Extension of time claims will be adjudicated based on a 6 (six) day working week even should the Contractor choose to work 5 (five) days per week.

#### Clause 5.12.2.2:

No extension of time will be granted in respect of any delays attributed to normal climatic conditions. Normal climatic conditions shall be deemed to include normal rainfall and associated wet conditions and materials, strong winds and extremes of temperature. However, in the event that delays to critical activities exceed the number of working days listed below for each month, then abnormal climatic conditions shall be deemed to exist, and an extension of time may be claimed in accordance with the provisions of Clause 5.12.

The number of days quoted below shall be regarded as a fair estimate of the delays to be anticipated and allowed for under normal climatic conditions where inclement weather prevents or disrupts critical work.

January	2 days	July	4 days
February	2 days	August	4 days
March	2 days	September	4 days
April	2 days	October	2 days
May	2 days	November	2 days
June	4 days	December	2 days

Claims for delays for abnormal climatic conditions shall be accompanied by substantiating facts and evidence, which shall be submitted timeously as each day or half-day delay is experienced.

It shall be further noted that where the critical path is not affected, no extension of time for <u>abnormal</u> climatic conditions or for any other reason (including days following rain events) will be entertained.

#### Clause 5.13.1:

The penalty for failing to complete the Works is **R2 500** per calendar day.

#### Clause 5.16.3:

The latent defects period is 10 (ten) years.

#### Clause 6.2.1:

The security to be provided by the Contractor shall be a performance guarantee of **10**% of the Contract Sum. The performance guarantee shall contain the wording of the document included in C1.3.

#### Clause 6.2.2:

Delete Clause 6.2.2 in its entirety.

#### Clause 6.2.3:

Delete Clause 6.2.3 in its entirety and replace with the following:

The Contractor shall ensure that the performance guarantee remains valid and enforceable until the Certificate of Completion of the Works is issued.

#### Clause 6.8.2:

Add the following to Clause 6.8.2:

The Contract Price shall **not** be subject to any contract price adjustment and the rates and prices tendered in the bill of quantities shall be final and binding throughout the period of the Contract.

#### Clause 6.8.4:

Add the following to Clause 6.8.4:

Notwithstanding the above, in the event that a public holiday is proclaimed after 28 days before the closing date for tenders, no costs other than those that can be claimed under Clause 5.12.3 shall be added to the contract price.

#### Clause 6.10.3:

Add the following to Clause 6.10.3:

Notwithstanding the provision of a performance guarantee in terms of Clause 6.2.1, interim payments to the Contractors shall be subject to retention by the Employer of an amount of **10%** of the said amounts due to the Contractor, with no limit. A guarantee in lieu of retention is not permitted.

#### Clause 6.10.4:

Add the following to clause 6.10.4:

Furthermore, payment shall be subject to the Employer being in possession of an original valid tax clearance certificate at the time payment is due (it is the responsibility of the Contractor to submit an updated original tax clearance certificate to the Municipal Supplier Management Office.

In the event that certificate expires during the construction period, the Contractor must submit a new valid certificate within 14 days after expiry of the original certificate.

Notwithstanding anything above, the Employer's Agent shall be empowered to withhold the delivery of the payment certificate until the Contractor has complied with his obligations to report in terms of GCC Clause 4.10.2 and as described in the Scope of Work.

#### Clause 8.6.1.1.2:

The value of Plant and materials supplied by the Employer to be included in the insurance sum is **R0,00** (NiI).

#### 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 **R100.000.00**.

#### Clause 8.6.1.3:

The limit of indemnity for liability insurance is R500 000.00 for any single claim – the number of claims to be unlimited during the construction and defects liability periods.

#### Clause 8.6.1.5:

In addition to the insurances required in terms of General Conditions of Contract Clauses 8.6.1.1 to 8.6.1.4 the following insurance is also required:

- a) Insurance of Construction Equipment (including tools, offices and other temporary structures and contents) and other things (except those intended for incorporation into the Works) brought onto the site for a sum sufficient to provide for their replacement.
- b) Insurance in terms of the provisions of the Compensation for Occupational Injuries and Diseases Act No. 130 of 1993.
- Motor Vehicle Liability Insurance comprising (as a minimum) "Balance of Third Party" Risks including Passenger Liability Indemnity.
- d) Where the contract involves manufacturing and/or fabrication of the works or part thereof at premises other than the Site, the Contractor shall satisfy the Employer that all materials and equipment for incorporation in the works are adequately insured during manufacture and/or fabrication. In the event of the Employer having an insurable interest in such works during manufacture or fabrication then such interest shall be noted by endorsement to the Contractor's Policies of Insurance.

#### Clause 8.6.6:

The evidence that the insurances have been effected in terms of Clause 8.6.1, shall be in the form of an insurance broker's warranty worded precisely as given in part C1.6 Insurance Broker's Warranty.

#### Clause 9.2.1:

Add the following to Clauses after Clause 9.2.1.3.8:

- 9.2.1.3.9 The Contractor committed a corrupt or fraudulent act during the procurement process or the execution of the contract.
- 9.2.1.3.10 An official or other role player committed any corrupt or fraudulent act during the procurement process or in the execution of the contract that benefited the Contractor.

#### Clause 10.5.3:

The number of ad-hoc Adjudication Board Members to be appointed is 1(one).

#### ADDITIONAL CONDITIONS OF CONTRACT

Add the following clause after clause 10

#### Clause 11: Details to be confidential

The Contractor shall treat the details of the Works comprised in this Contract as private and confidential (save in so far as may be necessary for the purposes hereof) and shall not publish or disclose the same or any particulars thereof in any trade or technical paper elsewhere without the prior written consent of the Engineer.

#### Part 2: Data provided by the Contractor

Clause 1.1.8:				
The name of the Contractor is				
Clause 1.2.2:				
The address of the Contractor is				
Physical Address:	Postal Address:			
Telephone:	Fax:			
e-mail:				
SIGNED BY TENDERER:				

#### C1.3 Adjudicator's Agreement

(For a One-Person DAB)	
Name and details of Contract	
Name and address of Employer	
Name and address of Contractor	•••
Name and address of Member	

**Whereas** the Employer and the Contractor have entered into the Contract and desire jointly to appoint the Member to act as sole adjudicator who is also called the "DAB".

#### The Employer, Contractor and Member jointly agree as follows:

- 1. The conditions of this Dispute Adjudication Agreement comprise the "General Conditions of Dispute Adjudication Agreement", which is appended to the General Conditions of the "Conditions of Contract for Construction" First Edition 1999 published by the *Fédération Internationale des Ingénieurs-Conseils* (FIDIC), and the following provisions. In these provisions, which include amendments and additions to the General Conditions of Dispute Adjudication Agreement, words and expressions shall have same meanings as are assigned to them in the General Conditions of Dispute Adjudication Agreement.
- 2. The following clauses of the General Conditions of Dispute Adjudication Agreement are amended or deleted as follows:
  - In Clause 4(i), *insert before the words*, "with the progress of the Works", "and if deemed necessary by the Employer and Contractor".
  - In Clause 6, "Payment", delete paragraph (a) and (b) and replace with the following sub-clause:
    - a) an hourly fee in respect of all time spent upon, or in connection with, the adjudication including time spent travelling.
    - b) In Clause 6 "Payment" *delete the words*, "retainer and daily" in the second paragraph commencing 'The retainer and daily fees shall be ....."
  - In Clause 6 "Payment" delete the third paragraph commencing "The Member shall submit invoices ...." / the third and fourth paragraphs commencing with 'Immediately after .... "And" Thereafter the Member ......" and replace with the following:

The Member shall submit invoices for payment of expenses and fees at the conclusion of a decision given in terms of clause 20.4 of the General Conditions. The Member may invoice for a progress payment of his daily fees if for any reason the DAB is caused to extend the time for giving its decision beyond the 42 days stated in Clause 20.4 of the General Conditions. All invoices shall be accompanied by a brief description of activities performed during the relevant period and shall be addressed to the Contractor."

With reference to the Annex, "Procedural Rules" The DAB is not required to visit the site during the course of the Works at the intervals stated in Rule 1 and further referred to in Rules 2 and 3. However, the Member at his discretion may visit the site in connection with any matter arising from the dispute referred to him.

The DAB shall not conduct any hearings in order to resolve a dispute as provided for in Rule 6 or referred to in Rule 7.

Add the following Rule 10.

"The DAB may obtain legal or technical advice after first having notified the Parties of his intention".

- 3. In accordance with Clause 6 of the General Conditions of Dispute Adjudication Agreement, the Member shall be paid an hourly fee.
- 4. In consideration of these fees and other payments to be made by the Employer and the Contractor in accordance with Clause 6 of the General Conditions of Dispute Adjudication Agreement, the Member undertakes to act as the DAB (as adjudicator) in accordance with this Dispute Adjudication Agreement.
- 5. The Employer and the Contractor jointly and severally undertake to pay the Member, in consideration of the carrying out of these services, in accordance with Clause 6 of the General Conditions of Dispute Adjudication Agreement.
- 6. This Dispute Adjudication Agreement shall be governed by the law of South Africa.

SIGNED BY:	SIGNEI	D BY:	SIGNED	BY:
who warrants that he/she authorised to sign for and behalf of the <b>Employer</b> i presence of	d on authoris	arrants that he/she is duly sed to sign for and on of the <b>Contractor</b> in the ce of	the Mem	ber in the presence of
Witness	Witness	S	Witness	
Name	Name		Name	
Address	Address	s	Address	
Date	Date		Date	

### **C1.4** Occupational Health and Safety Agreement

AGREEMENT MADE AND ENTERED INTO BETWEEN THE THEEW (HEREINAFTER CALLED THE "EMPLOYER") AND	ATERSKLOOF MUNICIPALITY
(Contractor/Mandatory/Company/CC Name	e)
IN TERMS OF SECTION 37(2) OF THE OCCUPATIONAL HEALTH AND 1993 AS AMENDED.	D SAFETY ACT, ACT No. 85 OF
I,	, representing
in its own right, do hereby undertake to ensure, as far as is reasonably performed, and all equipment, machinery or plant used in such a manner of the Occupational Health and Safety Act (OHSA) and the Regulations pr	practicable, that all work will be as to comply with the provisions
I furthermore confirm that I am/we are registered with the Compensaregistration and assessment monies due to the Compensation Commissi I/We are insured with an approved licensed compensation insurer.	
COID ACT Registration Number:	
OR Compensation Insurer:	Policy No.:
Please attach a certified copy of the COID Act certificate to this schedule.	
I undertake to appoint, where required, suitable competent persons, in wri of OHSA and the Regulations and to charge him/them with the duty of ens and Regulations as well as the Council's Special Conditions of Contract, Permit Procedures are adhered to as far as reasonably practicable.	uring that the provisions of OHSA
I further undertake to ensure that any sub-contractors employed by me will and Safety Agreement separately, and that such subcontractors comply w	
I hereby declare that I have read and understand the appended Occupation and undertake to comply therewith at all times.	onal Health and Safety Conditions
I hereby also undertake to comply with the Occupational Health and Safet	y Specification and Plan.
Signed at on the day of	20
Witness Mandato	ory
Signed at on the day of	20
	on behalf of Theewaterskloof ality

Tender Part

#### **OCCUPATIONAL HEALTH AND SAFETY CONDITIONS**

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

### OCCUPATIONAL HEALTH AND SAFETY AGREEMENT (2) and INDEMNITY FORM OCCUPATIONAL HEALTH AND SAFETY ACT 1994 (Act No 85 of 1993)

#### TO BE COMPLETED AND SIGNED BY ALL MANDATORIES

NOTE: Section 1 (1)(XXVIII) of the Act defines a "mandatory" as including an Agent, a Contractor or a Sub-contractor.

AGREEMENT MADE AND ENTERED INTO BETWEEN THEEWATERSKLOOF MUNICIPALITY
(Hereinafter referred to as the "PRINCIPAL") and

Herein represented and duly authorised by its director/official (hereinafter referred to as the MANDATORY")

**WHEREAS** the Occupational Health and Safety Act No 85 of 1993, as amended, (hereinafter called the "**ACT**") provides that the principal shall be accountable for the compliance and application of the provisions of the ACT and more specifically Section 37(2) of the Act, with regard to the execution of work of whatever nature by private independent contractor specifically engaged by the PRINCIPAL for the purpose;

AND WHEREAS the contractor, so engaged. (Hereinafter called the "MANDATORY") is statutory compelled in its/his own right as employer, to comply with the obligations prescribed by section 37(2) and other provisions of the ACT applicable to his/her employees;

**AND WHEREAS** the PRINCIPAL, has in fact engaged the services of the MANDATORY on account of the fact that the PRINCIPAL is not in the position to execute the work departmentally resulting in the MANDATORY's presence on site for the specific purpose of executing the work by means of his own employees and is bound therefore, to adhere to the obligations and provisions of Section 37(2) of the ACT;

AND NOW THEREFORE, the PRINCIPAL and the MANDATORY hereby agree as follows:

- 1. The MANDATORY hereby unconditionally accepts the responsibility and accountability for the relevant work or contract in accordance with the provisions of Section 37(2) of the ACT.
- 2. The MANDATORY undertakes to take due care that all machines, equipment and implements are in approved good order and state of repair and shall be utilised by any employee in its/his employ in a manner which fully complies with any and all relevant provisions of the ACT.
- 3. The MANDATORY hereby unconditionally grants the PRINCIPAL indemnity against any and all claims and steps that may be instituted against the PRINCIPAL on account of non- compliance with the provisions of Section 37(2) of the ACT and any other relevant provision thereof.
- 4. The MANDATORY, without encroaching upon the indemnity granted to the PRINCIPAL as per paragraph 3 hereof undertakes to inform the PRINCIPAL summarily should the MANDATORY at any time during the execution of the specific contract, for whatever reason find that he cannot comply with the provision of the ACT and afore-mentioned indemnity given to the PRINCIPAL or its/his inability to perform as per the Agreement or that compliance be detrimentally affected for whatever reason. In such an event the MANDATORY shall liaise with the PRINCIPAL, who however, reserves the right not to release the MANDATORY from the provisions of the Agreement between parties and the indemnity herein referred to unless otherwise agreed upon.

- 5. The MANDATORY hereby certifies that it/he has taken note of the addendums to this Agreement and unconditionally undertakes to comply with the provisions thereof, failing which it/he shall be fully liable for all consequential legal proceedings that may be instituted and indemnifies the PRINCIPAL against any action arising out of non-compliance with Section 37(2) of the ACT.
- 6. The MANDATORY's sole responsibility in terms of this agreement terminates when the PRINCIPAL releases the MANDATORY from his obligations under the contract.
- 7. The MANDATORY undertakes to indemnify the PRINCIPAL in the same manner herein provided for, against any claims instituted on account of non-compliance in terms of the ACT against subcontractors employed by the MANDATORY.

AS WITNESSES:	
1	
2	
2	PRINCIPAL
	for and on behalf of Theewaterkloof Municipality
THUS DONE AND SIGNED at	day of 20
	,
AS WITNESSES:	
1	
2	
<u> </u>	MANDATORY

Contractor

### Part C2: Pricing Data

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Tender

Part C2 : Pricing Data

90

#### **C2.1** Pricing Instructions

- Measurement and payment shall be in accordance with the relevant provisions of clause 8 of each of the SABS 1200 Specifications for Civil Engineering Construction referred to in the Scope of Work. The Preliminary and General items shall be measures in accordance with the provisions of SABS 1200-A, general. The SABS also indicate SANS.
- 2. The units of measurement described in the Bills of Quantities are metric units. Abbreviations used in the Bills of Quantities are as follows:

millimetre hour mm h kilogram m = metre kg ton (1 000 kg) km kilometre t  $m^2$ square metre No. number m<sup>2</sup>.pass = square metre-pass Sum lump sum ha hectare MN MegaNewton = MegaNewton-metre  $m^3$ cubic metre MN m \_ m<sup>3</sup>.km cubic metre-kilometre P C sum Prime Cost sum \_ Prov sum Provisional sum ł litr△ \_ kilolitre % per cent kł = MPa MegaPascal kW kilowatt = Quantity Qty

- Unless otherwise stated, items are measured net in accordance with the drawings, and no allowance is made for waste.
- 4. The prices and rates to be inserted in the Bills of Quantities are to be the full inclusive prices for the work described under the items. Such prices and rates shall cover all costs and expenses that may be required in accordance with the provisions of the Scope of Work, and shall cover the cost of all general risks, liabilities, and obligations set forth or implied in the Contract Data, as well as overhead charges and profit. These prices shall be used as a basis for assessment of payment for additional work that may have to be carried out.
- 5. It will be assumed that prices included in these Bills of Quantities are based on Acts, Ordinances, regulations, By-laws, International Standards and National Standards that were published 28 days before the closing date for tenders. (Refer to <a href="www.stanza.org.za">www.stanza.org.za</a> or <a href="www.iso.org">www.iso.org</a> for information on standards.
- 6. Where the Scope of Work requires detailed drawings and designs or other information to be provided, all costs associated therewith are deemed to have been provided for and included in the unit rates and sum amount tendered for such items.
- An item against which no price is entered will be considered to be covered by the other prices or rates in the Bills of Quantities. A single lump sum will apply should a number of items be grouped together for pricing purposes.
- 8. The quantities set out in the Bills of Quantities are approximate and do not necessarily represent the actual amount of work to be done. The quantities of work accepted and certified for payment will be used for determining payments due and not the quantities given in the Bills of Quantities.
- 9. Reasonable compensation will be received where no pay item appears in respect of work required in the Bills of Quantities in terms of the Contract and which is not covered in any other pay item.
- 10. The short descriptions of the items of payment given in Bills of Quantities are only for the purposes of identifying the items. More details regarding the extent of the work entailed under each item appear in the Scope of Work.
- 11. Descriptions in the Bills of Quantities are abbreviated and comply generally with those in the SABS 1200 Standardised Specifications.

Tender

12.	While the Employer has every intent to complete the full stright to reduce or increase the scope of works according to this contract, with adjustment to the agreed rates, sums or this regard. The Service Provider shall however be entitled out in terms of any adjustment to the Scope of Work or, in the reimbursement.	the dictates of the budget, or to terminate fees and without payment of any penalty in to pro-rata payment for all services carried
I HER	REBY DECLARE THAT I COMPLY WITH THE PRICING IN	ISTRUCTIONS AS SET OUT ABOVE
NAMI	E:	DATE:
SIGN	ED BY THE TENDERER:	······································

Part C2.1 : Pricing Instructions

### C2.2 Bills of Quantities

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			la=1/	<b></b>	
ITEM NO	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
1	PRELIMINARY & GENERAL				
1.1	Fixed preliminary and general charges		1		
1.2	Value related preliminary and general charges	Sum	1		
	SCHEDULED TIME RELATED ITEMS -				
1.3	Time related preliminary and general				
1.0.1	charges				
1.3.1	(a) Contract period during the normal industry	Sum	1		
4.0.0	working period	N.I.	40		
1.3.2	(b) Statutory Public Holidays	No	10		
1.3.3	(c) 15 Working days Shut down period during	Sum	1		
1.4	December and January SUMS STATED PROVISIONALLY BY				
1.4	ENGINEER				
	PRIME COST SUMS				
	(1) Additional testing of materials required				
	by Engineer:				
1.4.1	(a) Cost of testing	PCSu	1		
1.4.1	(a) Cost of testing	m	'		
1.4.1.1	(b) Charge required by Contractor on sub-item		10,000.00		
1.7.1.1	(a) above	70	10,000.00		
1.4.2	(2) As built surveys:				
1.4.2.1	(a) Cost of as built surveys and camera	PCSu	1		
	inspection	m	·		
1.5	Accommodation of traffic				
1.5.1	Cost of traffic accommodation along Taxi Rank	PCSu	1		
	hub main access	m			
1.6	PSA8.7 - DAYWORK				
1.6.1	Vehicles, plant and equipment:				
1.6.1.1	(1) Hydraulic excavator	h			Rate On
1.6.1.2	(2) Tipper truck, more than 5m <sup>3</sup>	h			Rate On
1.6.1.3	(3) Flat bed truck equipped with hydraulic	h			Rate On
	crane of more than 2 t capacity				
1.6.2	Water trucks:				
1.6.2.1	(i) Up to 12 kl capacity	h			Rate On
1.6.3	Compressors:				
1.6.3.1	(i) Up to 10m³/minute	h			Rate On
1.6.4	Concrete mixer:				
1.6.4.1	(ii) Over 400 I capacity	h			Rate On
1.6.5	Water pump:				
1.6.5.1	(i) Up to 600 l/minute capacity	h			Rate On
1.6.5.2	(ii) Up to 200 I/minute capacity	h			Rate On
1.7	Labour:				
1.7.1	Labourer	h			Rate On
1.7.2	Semi-skilled	h			Rate On
1.7.3	Skilled	h			Rate On
1.7.4	Artisan	h			Rate On
1.7.5	Gang Boss	h			Rate On
1.7.6	Chargehand	h			Rate On
		1 1.	i	1	Doto On
1.7.7	Surveyor PSA8.8 - TEMPORARY WORKS	h			Rate Onl

Tender

	Location and protection of existing services:				
1.8	Provision of detecting devices for:				
1.8.1	Water and sewer pipes	Sum	1		
1.8.2	(b) Electrical and other cables	Sum	1		
ITEM NO	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
1.9	In roadways	m³	50		
1.10	In all other areas	m³	20		
1.11	Dealing with water:				
1.11.1	(a) Dealing with subsurface water	Sum	1		
1.11.2	(b) Dealing with surface water	Sum	1		
1.11.3	Dust control	Sum	1		
1.12	STANDING TIME COST				
1.12.1	(a) Plant	Days			Rate Only
1.12.2	(b) Labour	Days			Rate Only
1.12.3	(c) Other (Specify)				
1.13	Compliance with the Occupational Health and Safety Act (Act No 85 of 1993) and Construction Regulations and specifications included in Part C5	Sum	1		
1.14	Compliance with the Environmental Management Plan and requirements.	Sum	1		

2	SITE CLEARANCE			
2.1	CLEAR SITE			
2.1.1	CLEAR AND GRUB:			
2.1.1.1	Site	m²		Rate Only
2.1.1.2	Road reserves	m²	405.0	
2.1.2	Remove and grub large trees and tree stumps of girth over and up to (including backfill)			
2.1.2.1	Over 1,0m up to and including 2,0m	No		Rate Only
2.1.2.2	Over 2,0m up to and including 3,0m	No		Rate Only
2.1.3	Dismantle and remove pipelines (not encased in concrete), electricity transmission lines, cables etc.			
2.1.3.1	110mm dia existing water mains and irrigation pipes up to 1,5m deep	m		Rate Only
2.1.3.2	100mm dia existing sewers up to 2,0m deep	m		Rate Only
2.1.3.3	100mm dia existing sewers over 2,0m up to 3,0m	m		Rate Only
2.1.3.4	Telkom overhead lines including poles	m		Rate Only
2.1.3.5	Electrical overhead lines including poles	m		Rate Only
2.1.4	Remove and reinstate existing services			
2.1.4.1	Telkom Pole	No		Rate Only
2.1.4.2	Electrical Pole	No		Rate Only
2.1.4.3	Take down existing fences	m		Rate Only
2.1.4.4	Take down and re-erect existing fences	m		Rate Only
2.1.5	Remove and dispose off site existing sewer manholes for depths:			
2.1.5.1	1,0m - 2,0m	No.		Rate Only
2.1.5.2	2,0m - 3,0m	No.		Rate Only
2.1.5.3	3,0m - 4,0m	No.		Rate Only
2.1.6	Rip and clear areas:			
2.1.6.1	Asphalt up to 30mm thick	m²	70.0	
2.1.6.2	Segmented paving	m²		Rate Only
2.1.6.3	Replant 150l trees similar to existing	No		Rate Only
2.1.6.4	Remove existing gate	No	1	

3	EARTHWORKS (ROADS, SUBGRADE)			
	As specified in SABS 1200 DM and in the project specifications			
	Treatment of roadbed:			
3.1	(a) Roadbed preparation and compaction of material to:			
3.1.1	(1) Minimum of 93% of modified AASHTO maximum density (Roads, 150mm depth))	m³	61.0	
3.2	Cut to fill:			
3.2.1	(a) In road prism, compact to 93 % of modified AASHTO maximum density (100% for sand)	m³	605.0	
3.2.2	Import G7 upper selected material from commercial sources and use as upper selected layer compacted to 95% Mod AASHTO (100% Mod AASHTO for sand)	m³	61.0	
3.2.3	Import G9 lower selected material from commercial sources and use as lower seleted layer compacted to 93% Mod AASHTO (100% Mod AASHTO for sand)	m³		Rate Only
3.3	Extra-over item 8.4.3 for excavating and breaking down material in:			
3.3.1	(a) Intermediate excavation	m³	10.0	
3.3.2	(b) Hard excavation	m³	5.0	
3.4	Cut to spoil from:			
3.4.1	(a) Soft excavation	m³	575.0	
3.4.2	(b) Intermediate excavation	m³	30.0	
3.4.3	(c) Hard excavation	m³		Rate Only
3.5	Surface finishes			
	Trimming and grading of verges			
3.5.1	Between kerb and erf boundary	m²	10.0	
3.5.2	Tie in with existing road edge	m	20.0	
3.6	Existing services that intersect or adjoin roadworks:			
3.6.1	Services that intersect roadworks:			
3.6.1.1	(1) LT Electricity Cables	No		Rate Only
3.6.1.2	(2) MV Electricity Cables	No		Rate Only
3.6.1.3	(3) Foul Sewer	No		Rate Only
3.6.1.4	(4) Stormwater Earth Channels	No		Rate Only
3.6.1.5	(5) Water Irrigation	No		Rate Only
3.6.2	Services that adjoin roadworks:			
3.6.2.1	(1) LT Electricity Cables	m		Rate Only
3.6.2.2	(2) MV Electricity Cables	m		Rate Only
3.6.2.3	(3) Foul Sewer	m		Rate Only
3.6.2.4	(4) Stormwater	m	1	Rate Only
3.6.2.5	(5) Water Irrigation	m		Rate Only
3.22	Benching into existing layerworks as per detail DWG 23175-C-004-204	m	10.0	

4	MEDIUM PRESSURE PIPELINES			
	EARTHWORKS (PIPE TRENCHES)			
	As specified in SABS 1200 DB and in the project specifications			
	Excavation:			
	Excavate in all materials for trenches, backfill,			
	compact and dispose of surplus material:			
4.1	Pipes up to 200mm dia for depths:			
4.1.1	Up to 1,5m	m	60.0	
4.2	Extra over item (a) above for:			
4.2.1	Intermediate excavation	m <sup>3</sup>	5.0	
4.2.2	Hard rock excavation	m³	5.0	
4.3	Hand excavation and backfill where directed by the Engineer			
4.3.1	Soft material	m³	5.0	
4.3.2	Intermediate material	m³	10.0	
4.3.3	Excavate and dispose of unsuitable material from trench bottom	m³	5.0	
	Excavation ancillaries:			
4.4	Make up deficiency in backfill material:			
4.4.4	(a) from other passages averagestions on site	m3	10.0	
4.4.1 4.4.2	(a) from other necessary excavations on site  © by importation from commercial sources (sand	m³ m³	10.0	+
	compacted to 100% Mod AASHTO)			
4.4.3	Compaction in road reserves	m³	30.0	
4.5	Existing services that intersect or adjoin a pipe trench:			
4.5.1	Services that intersect a pipe trench:			
4.5.1.1	LT Electricity Cables	No	1.0	
4.5.1.2	MV Electricity Cables	No	1.0	
4.5.1.3	Foul Sewer	No	1.0	
4.5.1.4	Stormwater Earth Channels	No	1.0	
4.5.1.5	Water Irrigation	No	1.0	
4.6	Services that adjoin a trench:			
4.6.1	(1) LT Electricity Cables	m	20.0	
4.6.2	(2) MV electricity cables	m	20.0	
4.6.3	(3) Foul Sewer	m	1.0	
4.6.4	(4) Stormwater	m	1.0	
4.6.5	(5) Water Irrigation	m		Rate Only
4.7	Finishing:			
4.7.1	Reinstate road surfaces complete with all courses:			
4.7.1.1	Asphalt roads	m²		Rate Only
4.8	BEDDING (PIPES)			
	As specified in SABS 1200 LB and in the project specifications			
	Provision of bedding from trench excavations			

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4.8.1	Selected Granular Material	m³	5.0	
4.8.2	Selected Fill Material	m <sup>3</sup>	5.0	
4.0.2 <b>4.9</b>	Supply only of bedding by importation:	111-	3.0	
7.3	From commercial sources:			
4.9.1	Selected granular material	m³	10.0	
4.9.1	Selected grandar material	m <sup>2</sup>	5.0	
4.9.2 <b>4.10</b>		111-	5.0	
	Encasing of pipes in concrete	3	F 0	
4.10.1	Class 15Mpa/19mm	m <sup>3</sup>	5.0	
4.11	MEDIUM PRESSURE PIPELINES			
	As specified in SABS 1200 L and in the project specifications			
	Supply, lay and bed on bedding for flexible pipes, complete with couplings:			
	PVC-U Class 12 pipes:			
4.11.1	110mm dia	m	60.0	
4.12	Extra over item 8.2.1 for the supplying, laying and bedding of Ductile Iron specials to SABS 966, complete with spigot and socket rubber ring joints fusion bonded epoxy coated internally and externally to a minimum of 250 micron:			
4.12.1	11,25 degree bends:			
4.12.1.1	110mm dia	No		Rate Only
4.12.2	22,5 degree bends:			
4.12.2.1	110mm dia	No		Rate Only
4.12.3	45 degree bends:			
4.12.3.1	110mm dia	No.		Rate Only
4.12.4	90 degree bends:			
4.12.4.1	110mm dia	No		Rate Only
4.12.5	Tees:			
4.12.5.1	110x110mm dia	No		Rate Only
4.12.6	Reducing Tees:			
4.12.6.1	160x110mm dia	No		Rate Only
4.12.7	Reducers:			
4.12.7.1	160x110mm dia	No		Rate Only
4.12.8	End caps:			
4.12.8.1	110mm dia	No	1.0	
4.12.8.2	160mm dia	No		Rate Only
4.12.9	Flanged adaptors:			
4.12.9.1	110mm dia	No	4.0	
4.12.9.1	160mm dia	No		Rate Only
4.13	Extra over item 8.2.1 for supplying, fixing and bedding flanged gate valves:			
4.13.1	110mm dia	No	1.0	
4.13.2	160mm dia	No		Rate Only
4.14	Extra over item 8.2.1 for supplying, fixing and bedding of fire hydrants including double			

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	flanged distance piece between hydrant and tee:			
4.14.1	110mm dia	No	1.0	
4.15	Extra over item 8.2.1 for supplying, fixing and bedding screwed air valves:			
4.15.1	110mm dia	No		Rate Only
4.16	Extra over item 8.2.1 for supplying, fixing and bedding flanged scour valves:			
4.16.1	110mm dia	No		Rate Only
4.16.2	Marker posts	No	5.0	
4.17	Anchor blocks / thrust blocks and pedestals:			
	Concrete:			
4.17.1	Class 25Mpa/19mm	m³	5.0	
4.18	Valve and hydrant chambers, etc.:			
4.18.1	Valve chamber complete as per dwg no 23175-C- 004-203	No	1.0	
4.18.2	Fire hydrant valve chamber complete as per dwg no 23175-C-004-201	No	1.0	
4.19	Connection to existing main supply pipe at Buitenkant Street:			
4.19.1	160mm dia PVC-U (100iameter to be conformed on site)	No	1.0	
4.20	ERF CONNECTIONS			
	As specified in SABS 1200 LF and in the project specifications			
4.20.1	250mm dia MAGFLO Bulk water meter (including chamber) complete with all valves, strainer, check valve, couplings, puddle pipes and flanges as per dwg no. 23175-C-004-202	No	1.0	
5	SUBBASE			
	As specified in SABS 1200 ME and in the project specifications			
5.1	Construct 150mm subbase (G5) with material from commercial sources and compact to 95% Mod AASHTO density	m³	61.0	
6	BASE			

	As specified in SABS 1200 MF and in the project specifications			
6.1	Construct 150mm base (G4) with material from commercial sources and compact to 98% Mod AASHTO density	m³		Rate Only
6.2	Construct 150mm base (C4) with material from commercial sources and compact to 98% Mod AASHTO density	m³	61.0	
7	SEGMENTED PAVING			

	As specified in SABS 1200 MJ and in the			
	project specifications and in accordance with			
	SANS 1058			
	Provision of anchor beams as per detail 20158-C-214:			
	Flat restraints			
7.1	Straight	m	150.0	
	Construction of paving complete:			
7.2	Supply and install 200 x 100 x 80mm, 35 Mpa			
	coarse exposed aggregate interlocker paving,			
	Herringbone pattern, colour: Grey(Including	2	405.0	
	20mm blinding layer of sand)	m²	405.0	
7.3	Cutting units to fit edge restraints for 200 x 100 x	m	150.0	
7.4	80mm road	111	130.0	
7.4	Rolling to locked up condition as specified in 5.6.2	m²	405.0	
8	KERBING AND CHANNELLING	- '''	+00.0	
0	READING AND CHANNELLING			
	As specified in SABS 1200 MK and in the			
	project specifications			
	Precast concrete kerbing:			
8.1	Barrier kerb (E1):			
8.1.1	Radius up to 4m	m		Rate Only
8.1.2	Radius over 4m up to 20m	m		Rate Only
8.1.3	Radius over 20m and straight sections	m		Rate Only
8.2	Barrier Kerb and Channel (BK2 + C1)			
8.2.1	Radius up to 4m	m		Rate Only
8.2.2	Radius over 4m up to 20m	m		Rate Only
8.2.3	Radius over 20m and straight sections	m	15.0	
8.3	Barrier kerb (Dropped BK2):			
8.3.1	Radius up to 4m	m		Rate Only
8.3.2	Radius over 4m up to 20m	m		Rate Only
8.3.3	Radius over 20m and straight sections	m	75.0	
8.4	Barrier kerb and Channel (Dropped BK2+C1):			
8.4.1	Radius up to 4m	m		Rate Only
8.4.2	Radius over 4m up to 20m	m		Rate Only
8.4.3	Radius over 20m and straight sections	m	15.0	1
	ANCILLARIES:			
8.5	TRANSITION SECTIONS BETWEEN KERBS:			
8.5.1	BK2 and BK2+C1	No	1.0	

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8.5.2	CK5 and BK2	No		Rate Only
8.5.3	CK5 and BK2 + C1	No		Rate Only
8.5.4	MK10 and BK2 + C1	No		Rate Only
8.5.5	E1 and BK2 + C1	No		Rate Only
8.5.6	E1 and BK2	No		Rate Only
8.5.7	MK10/CK5 and Street name kerb	No		Rate Only
8.5.8	Kerb markings as per standard	No		Rate Only
9	ANCILLARY ROADWORKS			
	As specified in SABS 1200 MM and in the			
	project specifications			
	PERMANENT ROADSIGNS			
9.1	Statutory signs, street names and the like,			
	supplied and erected, complete:			
9.1.1	R1 – Stop	No		Rate Only
9.1.2	R3	No	1.0	
9.1.3	R4.1	No	1.0	
9.2	ROAD MARKINGS			
	Non reflectorized paint applied at nominal rate of 0.42 l/m:			
	White lines (broken or unbroken):			
9.2.1	100mm wide	m		Rate Only
9.3.2	300mm wide	m		Rate Only
9.3.3	White characters and symbols	m²		Rate Only
9.3.4	White paint	ł		Rate Only

Tender

#### **SUMMARY OF SECTIONS**

ITEM	DESCRIPTION	AMOUNT
	CIVIL	
SCHEDULE 1	PRELIMINARY AND GENERAL	R
SCHEDULE 2	SITE CLEARANCE	R
SCHEDULE 3	EARTHWORKS (ROADS, SUBGRADE)	R
SCHEDULE 4	MEDIUM PRESSURE PIPELINES	R
SCHEDULE 5	SUBBASE	R
SCHEDULE 6	BASE	R
SCHEDULE 7	SEGMENTED PAVING	R
SCHEDULE 8	KERBING AND CHANNELLING	R
SCHEDULE 9	ANCILLARY ROADSWORKS	R
	Sub-Total 1	R
	Contingencies: Allow the sum of 10% (ten percent) of the above Sub-total for Contingencies to be spent as the Engineer may direct and to be deducted in whole or in part if not required.	
	TOTAL INCLUDING CONTINGENCIES	R
	ALLOW 15% FOR VALUE ADDED TAX	R
TOTAL CARRIED	FORWARD PART C1.1 FORM OF OFFER AND ACCEPTANCE	R

### Part C3: Scope of Work

		Pages
C3.1	Description of Works	105
C3.2	Specifications	121
C4	Health and Safety Specifications	150
C5	Detail Drawings	193

### C3.1 Description of Works

### C 3.1.1 Employer's Objectives

The work to be carried out under this contract entails the construction of the following:

Upgrading of the Villiersdorp Public Transport Hub - Phase 3A

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

### C 3.1.2 Overview of The Works

The work to be carried out in this contract will be for the upgrading of the existing Villiersdorp Public Transport Hub in Villiersdorp. The project will roll out into separate phases which will be based on available funding.

### C 3.1.3 Scope of Works

The work to be carried out under this contract consists mainly of the following:

- · Site clearance,
- Earthworks (Roads, Subgrade)
- · Medium Pressure Pipelines
- Subbase
- Base
- · Segmented Paving
- · Kerbing and Channeling
- Ancillary Roadworks

This description of the works is not necessarily complete and shall not limit the work to be carried out by the contractor under this contract. Approximate quantities of each type of work are given in the schedule of quantities.

### C 3.1.4 Description of Site and Conditions

A geotechnical investigation has not been done for the site. It is the responsibility of the contractor to ensure that he/she visits the site to access the site conditions.

### C 3.1.5 Site Access

The site can be accessed via Main Road and Buitenkant Street.

The operation of construction vehicles on existing roads or streets shall be limited to traffic with an axle load not exceeding that allowed by the Road Traffic Ordinance of the authority concerned, or any amendment thereof.

The Contractor must note that no additional payment will be made for the construction of temporary access roads to the construction sites, borrow-areas or to the spoil sites, except for payment made under payment item 8.3.2.2 of SANS 1200 A.

The Contractor shall clear any spillage caused by his activities on or near any roads, by whatever means necessary, within 24 hours after such spillage has occurred. No additional payment will be made for the clearance of spillage and all related costs will be deemed to be covered under the relevant items.

### C 3.1.6 Temporary Works

The contractor shall be responsible for designing and providing any temporary works required. Such works and the positioning thereof are to be approved by the Engineer before erection and operation on site. Such temporary works shall be removed upon completion of the works and the site of such temporary works re-instated to a condition acceptable to the environmental requirements.

### C3.2.1 Design

 a) The Employer is responsible for the design of the permanent Works as reflected in the Contract Documents unless otherwise stated.

b) The Contractor is responsible for the design of the temporary Works and their compatibility with the permanent Works.

The design responsibility per stage is summarized as follows:

Concept, feasibility and overall process: - Employer

Basic Engineering and detail layouts to tender stage: - - Employer

Final design to approved for construction stage: - Employer

Temporary works: - Contractor

Preparation of as built drawings: - Contractor

Amendments to the design, if necessary, will be issued during the construction phase.

### C 3.2.2 <u>Employer's Design</u>

All work in this contract has been designed and is specified in the document. Some provisional sums have been allowed for, of which the works will be designed and quantities together with drawings will be provided to the successful tenderer.

### C 3.2.3 Contractor's Design

Where the Contractor is to supply the design of designated parts of the permanent Works or temporary Works, he shall supply full working drawings supported by a professional engineer's design certificate.

The design of the temporary works shall be carried out in accordance with all relevant standards and codes of practice, with particular emphasis on the requirements of the OHS Act.

These drawings will have to be submitted for approval to the relevant authorities (Employer / Employer's Agent / H&S Agent/Local Authority) prior to commencement of the Works.

### C 3.2.4 Drawings

Reduced drawings form part of the tender documents and shall be used for tender purposes only.

The Contractor shall use only the dimensions stated in figures on the Drawings in setting out the Works, and dimensions shall not be scaled from the Drawings, unless required by the Employer's Agent. The Employer's Agent will, at the request of the Contractor in accordance with the provisions of the Conditions of Contract, provide such dimensions as may have been omitted from the Drawings.

The Contractor shall ensure that accurate as-built records are kept of all infrastructure installed or relocated during the contract. The position of pipe bends, junction boxes, duct ends, and all other underground infrastructure shall be given by either co-ordinates or stake value and offset. Where necessary, levels shall also be given. A marked-up set of drawings shall also be kept and updated by the Contractor. This information shall be supplied to the Employer's Agent's Representative on a regular basis and at least on a monthly basis.

All information in possession of the Contractor, required by the Employer's Agent to verify the as-built/record drawings, must be submitted to the Employer's Agent before a Certificate of Practical Completion will be issued.

The Employer reserves the right to issue amended and/or additional drawings during the Contract.

The following drawings are applicable to this contract and will form part of the contract documents.

Additional construction drawings will, in terms of the General Conditions of Contract, be issued to the Contractor by the Employer or the Employer's Agent on the commencement date and from time to time as required.

DRAWING NUMBER	DRAWING TITLE			
23175-C-001-01	Existing Services			
23175-C-002-01	Road & Parking Setting Out Plan			
23175-C-002-201	Typical Detail of Kerbs			
23175-C-004-201	Fire Hydrant with Concrete Protection Detail			
23175-C-004-202	Typical Detail of Water Meter Chamber			
23175-C-004-203	Typical Detail of Valve			
23175-C-004-204	Benching into Existing Layerworks			
23175-C-004-205	Detail of Thrust Blocks			
23175-C-004-206	Detail of Water House Connections			
23175-C-010-01	Services Layout Plan			

### **Preferential Procurement**

Tenders will be evaluated in terms of the criteria and selected method included in Part T1.2: Tender Data.

### C3.3.2 Subcontractors

The Contractor shall not subcontract more than 25% of the value of the contract to subcontractors that do not have an equal or higher B-BBEE status level than the Contractor, unless such subcontractors are exempted micro enterprises that can demonstrate to the satisfaction of the Employer's Agent that they have the capability and ability to execute the subcontract works.

Where monetary allowances for provisional sums or prime cost items have been provided in the Bills of Quantities, and where the work is to be executed/supplied by sub-contractors/suppliers then the following selection process shall be followed in respect of the required sub-contractors/suppliers:

- Where monetary allowances for provisional sums or prime cost items allowed and the monetary allowance is less than R 300 000, the Contractor shall invite three quotations from suitably qualified subcontractors/suppliers, the selection of which shall be in consultation with, and to the approval of the Employer's Agent, for the required work or items.
- Where these monetary allowances exceed R 300 000 an open tender process will have to be followed in respect of a subcontractor for this work, unless otherwise advised and approved by the Employer. In such cases where a tender process is to be followed, the tender will be issued by the Employer's Agent on behalf of the Contractor.

The quotes shall include full technical descriptions as well as a breakdown of prices, which shall be submitted to the Engineer for approval.

The evaluation of the quotation received must include a preference points system as described in C3.11 of the Tender Data

### C3.3.3 Attendance on subcontractors

Approval given in terms of subcontracting shall not relieve the Contractor of any responsibility, duty or obligation imposed upon him by the Contract, and the Contractor shall in particular be and remain solely liable and responsible for all acts, omissions, negligence or breaches of contract on the part of the assignee or any of his employees, and for all acts, omissions or negligence of any Sub- Contractor or any of his employees.

### C3.4.1 Works Specifications

All existing standards are being re-designated as South African National Standards (SANS). This will eventually result in some numbering changes to the existing standards.

The work specifications comprise some portions of the SANS 1200 Standardized Specifications for civil engineering together with project specific specifications. The Contractor must obtain his own copy of the SANS 1200 Standardised Specifications. The project specific specifications are bound in this document.

The specifications are included in Section C3.6

### C3.4.2 <u>Site Establishment</u>

Services and facilities provided by the Employer

### C3.4.2.1 Area for Contractor's site establishment

A specific area in close proximity to or on the Site of the Works will be made available by the Employer to the Contractor for the Contractor's site establishment. The specific area for the Contractor's site establishment will be identified to the Contractor by the Employer's Agent and the Contractor shall have sole use of such area, free of charge, for the duration of the Contract. The Contractor shall use this area only for the purposes of erecting his site offices, workshops, stores and other facilities required for the execution of the Contract. The Contractor shall not use the area nor allow it to be used for any purposes not directly associated with the execution of the Contract.

The Contractor shall be responsible for arranging, at his own cost, for the provision of all services he may require in the area, as well as elsewhere on the Site.

Should the Contractor deem the area made available by the Employer to be inadequate or unsuitable for the Contractor's particular needs, then the Contractor shall be at liberty to make his own arrangements with the owners of other sites which he considers are better suited to his needs; provided always that the use by the Contractor of any area other than that made available to him by the Employer shall be subject to the prior written approval of the Employer's Agent, which approval shall not be unreasonably withheld; and provided further that the Contractor shall have no claim against the Employer in respect of any costs incurred by him, either directly or indirectly in consequence of utilising any area other than that made available to him by the Employer, and

which costs exceed those costs allowed for by the Contractor in his Tender.

### Spoil Site

No designated area within the construction site boundary has been allowed for the Spoil Site, for disposal of spoil material from bulk and necessary excavations as indicated in the bill or as shown on the drawings.

### C3.4.3 <u>Site Establishment</u>

### C3.4.3.1 Facilities to be provided by the Contractor

### (i) Facilities for the Employer's Agent

No separate office for the Employer's Agent Representative is required but the contractor must provide a table, a chair and a plan cupboard in one of his offices for the exclusive use by the Employer's Agent Representative. The Employer's Agent Representative shall also be allowed the free use of the contractor's facilities

The Employer's Agent Representative shall also be allowed the free use of the necessary survey equipment and survey assistants to enable him to carry out control work as and when required.

A triplicate book to be used for site instructions must be provided by the contractor and shall at all times be kept on the site.

### (ii) Site meeting venue

The Contractor shall provide within his own site establishment facilities, a suitably furnished office or other venue capable of comfortably accommodating a minimum of fifteen (15) persons at site meetings. This is to include a large boardroom table with chairs, capable of seating these persons at site meetings. The table is to be large enough to accommodate these persons and also to display A1 sized drawings. In addition, one tea set comprising fifteen cups and saucers, fifteen teaspoons, two teapots, one sugar bowl and one milk jug shall be provided for use at these site meetings. The Employer's Agent shall be allowed free use of such venue for conducting any other meetings concerning the Contract at all reasonable times.

### (iii) Contract nameboards

The Contractor shall provide, erect and maintain two (2) contract nameboards at such positions and locations directed by the Engineer, which nameboards shall, unless otherwise specified elsewhere in the Contract, comply with the recommendations for the standard board of the Consulting Engineers South Africa of, with regard to size, painting, decorating and detail, and the requirements described hereunder. A typical detail drawing will be provided.

Each nameboard shall be made of tempered hardboard with a thickness of at least 12 mm, so braced on the reverse side as to prevent warping and shall be mounted on two or more, as necessary, firmly planted poles. The painting of the boards shall comply with the relevant requirements of CKS 193 and the colours of the paints shall be an acceptable match to the applicable colours given in SANS 109.

The Contractor shall before ordering or manufacturing any such contract nameboards, obtain the Employer's Agent written approval in respect of all names and wording to appear on the contract nameboards.

The Contractor shall keep the contract nameboards in good state of repair for the duration of the Contract and shall remove them on completion of the Contract.

### (iv) Telephone facilities

The Contractor shall, for the duration of the Contract, provide the following telephone facilities as specified hereunder, for the exclusive use of the Engineer and his staff:

### **Cellular Telephones**

The Contractor shall provide one cellular telephone and associated service contracts from a reputable cellular service provider. The Contractor shall further insure the cellular phones against loss or damage from whatever cause arising and shall ensure that all cellular phone accounts are promptly paid on the dates of payment. The Contractor shall further, at its own cost, ensure the prompt repair of all cellular phones provided under this clause, when reasonably required by the Employer's Agent.

The Contractor shall, on submission and approval of an itemized statement by the Employer's Agent, be reimbursed only the cost of the Employer's Agent's cellular telephone calls.

### (v) Site instruction book

The Contractor shall keep a triplicate book for site instructions on the Site at all times.

#### (vi) Water

The Contractor shall, at his own expense, be responsible for obtaining and distributing all water as may be required for the purposes of executing the Contract, including water for both construction purposes and domestic use, as well as for making all arrangements in connection therewith. The Contractor shall further, at his own expense, be responsible for providing all necessaries for procuring, storing, transporting and applying water required for the execution of the Contract, including but not limited to all piping, valves, tanks, pumps, meters and other plant and equipment, as well as for all work and superintendence associated therewith.

The sources of all water utilised for the purposes of the Contract shall be subject to the prior approval of the Employer's Agent, which approval shall not be unreasonably withheld.

The Contractor shall comply with all prevailing legislation in respect of drawing water from natural and other sources and shall, when required by the Employer's Agent, produce proof of such compliance. The distribution of water shall be carried out by the Contractor strictly in accordance with the applicable laws and regulations.

All water provided by the Contractor for construction purposes shall be clean, free from undesirable concentrations of deleterious salts and other materials and shall comply with any further relevant specifications of the Contract. The Contractor shall, whenever reasonably required by the Employer's Agent, produce test results demonstrating such compliance. Water provided by the Contractor for human consumption shall be healthy and potable to the satisfaction of the health authorities in the area of the Site.

No separate payment will be made to the Contractor for the obtainment, distribution and consumption of water, the costs of which will be deemed to be included in the Contractor's tendered rates.

All water usage must be metered and reported at site meetings. The water supply is not guaranteed and no claims regarding insufficient supply of water will be considered. The contractor shall be held liable for any wastage of water due to negligence. Water usage will be charged for at the standard applicable tariff.

### (vii) Electricity

The Contractor shall, at his own expense, be responsible for obtaining and distributing all electricity as he may require for the purposes of executing the Contract, including electricity for both construction purposes and domestic use, as well as for making all arrangements in connection therewith.

The distribution of electricity shall be carried out by the Contractor strictly in accordance with the applicable laws and regulations.

No separate payment will be made to the Contractor for the obtainment, distribution and consumption of electricity, the costs of which will be deemed to be in the Contractor's tendered rates and prices.

### (viii) Provision of Services, Metering and Reporting of Consumption

No separate payment will be made for the distribution and consumption of water and electricity, the cost of which will be deemed to be included in the tendered rates.

The Contractor must promptly provide the required services for the Employer's Agent not later than 21 days after the commencement date of the contract. In failing to do so, the Employer's Agent may arrange for these services directly. The cost of arranging, maintaining and providing of such facilities arranged by the Employer's Agent due to failure by the Contractor will be deducted from payments due to the Contractor.

The contractor shall pay a spot fine of R750 per service per occasion for failing to meter electricity and water consumption. The spot fine will be enforced by the Employer's Agent and will be deducted from payments due to the contractor. The fine is payable whether the contractor is obliged to pay for services or not.

### (ix) Excrement disposal

The Contractor shall, at his own expense, be responsible for safely and hygienically dealing with and disposing of all human excrement and similar matter generated on the Site during the course of the Contract, to the satisfaction of the Engineer and the responsible health authorities in the area of the site.

The Contractor shall further comply with any other requirements in this regard as may be stated in the contract. No separate payment will be made to the Contractor in respect of discharging his obligations in terms of this subclause and the costs thereof shall be deemed to be included within the Contractor's tendered Preliminary and General Items.

### C3.4.4 Permits and Wayleaves

The Contractor shall be responsible for obtaining and renewing all of the necessary wayleaves, permissions or permits applicable to working near any existing services or other infrastructure on site and shall abide by the safety conditions imposed by such wayleaves, permissions or permits.

The Contractor shall ensure that all wayleaves, permissions and permits are kept on site and are available for inspection by the relevant service authorities on demand.

The Contractor shall also ensure that any wayleaves in respect of electricity services are renewed timeously every three months.

### C3.4.5 Site Maintenance

During the progress of the work and upon its completion, the site of the works shall be kept and left in a clean and orderly condition. The contractor shall at all times store materials and equipment for which he is responsible in an orderly manner and shall keep the site free from debris and obstruction.

Public roads affected by construction activities, shall be cleaned on a daily basis by means of suitable and appropriate techniques and equipment. Due care and preventative measures must be taken by the Contractor to prevent material falling or accumulating on roads and any ingress of materials into the storm water system. No additional payment will be made for maintaining the roads and storm water system in a clean and acceptable condition. The Contractor shall be held liable for any costs incurred resulting from the Contractor not complying with this requirement and such costs shall be deducted from payments due to the Contractor.

### C3.4.6 Contractor to Engage Services of an Independent Laboratory

Notwithstanding the requirements of the Specifications pertaining to testing and quality control, the Contractor shall engage the services of an approved independent laboratory to undertake all testing of materials, the results of which tests are specified in, or reasonably to be inferred from the Contract, as to be taken into consideration by the Employer's Agent in deciding on whether the quality of materials utilised and workmanship achieved by the Contractor complies with the requirements of the specifications. The foregoing shall apply irrespective of whether the said testing is indicated in the specifications as to be carried out by the Employer's Agent or by the Contractor.

The Contractor shall be responsible for arranging with the independent testing laboratory for the timeous carrying out of all such testing specified in the contract, at not less than the frequencies and in the manner specified and arranging the test results in an orderly manner and indicating on a drawing the various test positions. The Contractor shall promptly provide the Employer's Agent with copies of the results of all such testing carried out by the independent laboratory.

For the purposes of this clause, an "independent laboratory" shall mean an "approved laboratory" (as defined in Sub-clause PSA 7.2) which is not under the management or control of the Contractor and in which the Contractor has no financial interest, nor which has any control or financial interest in the Contractor.

### C3.4.7 <u>Additional testing required by the Employer's Agent</u>

In addition to the provisions of Sub-clause C3.4.6, the Employer's Agent shall be entitled at times during the contract, to require that the Contractor arrange with the independent laboratory, to carry out any such tests, additional to those described in Sub-clause C3.4.6, at such times and at such locations in the Works as the Employer's Agent shall prescribe. The Contractor shall promptly and without delay, arrange with the independent laboratory for the carrying out of all such additional testing as required by the Employer's Agent and copies of the test results shall be promptly provided to the Employer's Agent in an acceptable format and the test positions shall be indicated by the Contractor on a drawing.

### C3.4.8 Cost of Testing and record keeping

The Contractor shall record all test results in tabular form in Excel which shall include a unique reference number, description of test, requirements/specified minimum, actual test result, date of test, position of test and Fail/Pass. Should a test indicate a failure the table shall include a reference to a further test of the rework indicating an acceptable test result (Pass).

The Contractor shall in addition on a continuous basis update a separate set of as built drawing(s) with all the test results. An updated table and drawing must be submitted the Employer's Agent on a monthly basis for

approval. All actual test results shall also be submitted to the Employer's Agent (apart from the copy forwarded on receipt from the laboratory) with the unique reference number marked on the top right corner.

### (a) Tests in Terms of Sub-clause C3.4.6

The costs of all testing carried out by the independent laboratory in accordance with the requirements of Sub-clause C3.4.6 above shall be born by the Contractor and shall be deemed to be included in the tendered rates and prices for the respective items of work as listed in the Schedule of Quantities and which require testing in terms of the specifications. No separate payments will be made by the Employer to the Contractor in respect of any testing carried out in terms of Sub-clause C3.4.6.

Where, as a result of the consistency of the materials varying or as a result of failure to meet the required specifications for the work, it becomes necessary to carry out additional tests (e.g. re-tests on rectified work and/or replacement materials), the costs of such additional testing shall be for the Contractor's account.

Should the Contractor fail to timeously arrange or undertake the required test or fail to timeously present the test results and drawing with test positions, the Employer's Agent may proceed with arranging the testing and all costs related to the arrangement of the tests, the cost of testing and any other associated costs will be deducted from payments due to the Contractor.

### (b) Additional Tests required by the Employer's Agent

The costs of any additional tests required by the Employer's Agent in terms of Sub-clause C3.4.7 shall be reimbursed to the Contractor against substitution of the Provisional Sum allowed therefore in the Schedule of Quantities; provided always that the costs of any such additional tests ordered by the Employer's Agent, the results of which indicate that the quality of the materials utilised and/or the standard of workmanship achieved is not in accordance with the specifications, shall not be reimbursable to the Contractor.

### C3.4.9 Subcontractors

All matters pertaining to subcontractors (including Nominated Subcontractors) and the work executed by them shall be dealt with directly between the Employer's Agent and the Contractor in the context of all subcontract work being an integral part of the Works for which the Contractor is responsible.

The Employer's Agent will not liaise directly with any subcontractors, nor will he issue instructions concerning the subcontract works directly to any subcontractor.

All matters arising out of the subcontract agreements shall be dealt with directly between the Contractor and the subcontractors and the Employer's Agent will not become involved.

### C3.4.10 Existing Services

Before the Contractor commences operations, he must discuss with and have the approval of the Employer, authority or owner concerned regarding the method he proposes to use for relocating or safe-guarding any services and existing works he may encounter during construction.

The positions of existing services shown on the Drawings are given in good faith and no guarantee can be given that:

- (a) these services actually are in the approximate positions indicated.
- (b) that these are the only services in the vicinity, and
- (c) that the nature and description of these services are correct.

The Contractor shall be responsible to locate and safeguard <u>any</u> existing service or works he may encounter during construction and shall obtain clearance from the Employer, authority and the Employer's Agent before commencing work in the proximity of existing services or works.

The Contractor shall be responsible for any damage to such existing services and works in the execution of this contract and shall reimburse the Employer, authority or the owner concerned for any repairs required and for damages.

The Contractor shall be responsible for immediately notifying the Employer's Agent and the authorities concerned regarding any damage caused to public services and existing works.

Any alteration to public services shall be carried out by the Authority concerned unless the Contractor is instructed otherwise.

The Contractor shall provide the necessary assistance during any operations necessary in connection with the

removal, alteration or safe-guarding of any public service.

#### Access to and Construction in Restricted Areas

Working space and access to working areas are sometimes restricted. The construction method used in these restricted areas and accessing these areas largely depends on the Contractor's Equipment. Notwithstanding, measurement and payment will be strictly according to the specified cross-sections and dimensions irrespective of the method used, and the rates and prices tendered will be deemed to include full compensation for any difficulties encountered by the Contractor while accessing and working in restricted areas. No extra payment nor any claim for payment due to these difficulties will be considered.

### C3.4.12 <u>Drawings</u>

The reduced drawings that form part of the tender documents shall be used for tender purposes only.

The Contractor will be supplied with 3 sets of paper prints to scale of each of the drawings required for construction purposes. These copies are issued free of charge and the Contractor shall make any additional copies he may require at his own cost.

### C3.4.12.1 Figured dimensions to be used

The Contractor shall use only the dimensions stated in figures on the drawings in setting out the Works and dimensions shall not be scaled from the Drawings, unless required by the Employer's Agent. The Employer's Agent will, on the request of the Contractor in accordance with the provisions of clause 5.9 of the Conditions of Contract, provide such dimensions as may have been omitted from the Drawings.

### C3.4.12.2 <u>Drawings and As-Built / Record Drawings</u>

The Contractor shall ensure that accurate as-built records and drawings are kept of all infrastructure installed, crossed, discovered or relocated during the contract. The position of pipe bends, junction boxes, duct ends and all other underground infrastructure shall be given by either co-ordinates, or stake value and offset. Levels of all services shall also be given. In addition the levels, coordinates, direction, size and type of existing services crossed or exposed must be recorded by the Contractor and be indicated on the as-built drawings. A marked-up set of drawings shall also be kept and updated by the Contractor on at least a weekly basis. This information shall be supplied to the Employer's Agent Representative on a regular basis in accordance with the Employer's Agent's requirements. Electrical services shall be indicated in red, water pipes in blue, sewers in green, storm water services in brown, Telkom services in orange, etc.

Any information in the possession of the Contractor, which the Employer's Agent requires to complete the record drawings shall be supplied to the Employer's Agent Representative before a <u>Certificate of Practical Completion</u> will be issued.

Should the Contractor fail to provide the information timeously, the Employer's Agent may arrange for additional surveys, exploratory holes, marking up of drawings, etc. to obtain and record the necessary information. All costs to obtain and record the information will be deducted from payments due to the Contractor.

### C3.4.13 Information Supplied by The Employer

Certain information contained in these contract documents, or provided separately, is being offered in good faith. However, in the circumstances pertaining to the type of information supplied, no guarantee can be given that all the information is necessarily correct or representative. More specifically this applies to all material surveys and reports and similar information, the accuracy of which is necessarily subject to the limitation of testing, sampling, the natural variation of material or formations being investigated and the measure of confidence with which conclusions can be drawn from any investigations carried out. It also applies to the positions of existing services as indicated on the drawings.

The employer accepts no liability for the correctness or otherwise of the information supplied or for any resulting damages, whether direct or consequential, should it prove during the course of the contract that the information supplied is either incorrect or not representative. Any reliance placed by the tenderer on this information shall be at his own risk.

### C3.4.14 Spoil Material

No indiscriminate spoiling of material will be allowed. All surplus material shall be spoiled at a site provided by the contractor, unless specifically scheduled otherwise in the schedule of quantities.

### C3.4.15 Non-Working Days

The contractor shall not work on Sundays or on the following statutory Public Holidays: New Year's Day, Human Rights Day, Good Friday, Family Day, Freedom Day, Workers' Day, Youth Day, National Women's' Day, Heritage Day, Day of Reconciliation, Christmas Day and Day of Goodwill.

### Samples

The contractor shall at his own cost, supply all samples that may be required. Material or work not conforming to the approved samples shall be rejected. The Employer's Agent reserves to himself the right to submit samples to any tests to ensure that the material represented by the sample conforms to the requirements of the specifications.

#### C3.4.17 Manufacturer's Instructions

The recommendations of the manufacturers of patented materials must be strictly adhered to regarding the use, mixing, application, fastening, etc. thereof except when otherwise instructed in writing by the Employer's Agent.

### C3.4.18 Proprietary Materials

Where proprietary materials are specified it is to indicate the quality or type of materials or articles required, and where the terms "or other approved" or "or approved equivalent" are used in connection with proprietary materials or articles, it is to be understood that the approval shall be at the sole discretion of the Employer's Agent.

### C3.4.19 Notices, Signs, Barricades and Advertisements

The contractor shall erect the necessary signs, notices and barricades for the duration of the contract in order to safeguard both the works and the public.

Notices, signs and barricades as well as advertisements may be used only upon approval by the Employer's Agent, and the contractor shall be responsible for their supply, erection, maintenance and ultimate removal and shall make provision for this in his tendered rates.

The Employer's Agent shall have the right to have any sign, notice or advertisement moved to another position or to have it removed from the site of the works, should it in any way prove to be unsatisfactory, inconvenient or dangerous to the general public.

Such notices, signs and barricades shall be provided and erected at the contractor's own expense.

The standard name board of the South African Association of Consulting Engineers is specified, the cost of which shall be included in the rates tendered for items PSA 8.3.1 and 8.3.2 under section 1200 A of the schedule of quantities.

### C3.4.20 <u>Setting Out of Work</u>

Reference and level beacons will be shown to the Contractor by the Employer's Agent at the commencement of the Contract and the Contractor will be responsible for transferring the datum to the Site of Works.

The Contractor shall check the condition and accuracy of all reference and level beacons and satisfy himself that they have not been disturbed and are true with regard to position and level. A beacon that has been disturbed shall not be used until its true position and level have been re-established and the new values have been certified by the Employer's Agent. The Contractor shall thereafter be held entirely responsible for the protection of all reference and level beacons.

The Contractor shall employ a capable surveyor to set out the Works to the required lines and levels. The Employer's Agent shall be informed immediately should any discrepancy be discovered between the levels or dimensions obtained by the Contractor and those shown on the drawings.

Where a beacon is likely to be disturbed during construction operations, the Contractor shall establish suitable reference beacons at locations where they will not be disturbed during construction. No beacons shall be covered over, disturbed or destroyed before accurate reference beacons have been established and details of the positions and levels of such beacons have been submitted to the Employer's Agent. The Contractor's reference beacons shall be of at least the same accuracy and sturdiness of construction as the existing beacons.

The Contractor shall submit the method of setting out he proposes to employ to the Employer's Agent. Accurate control off-line and level shall be provided by the Contractor at all stages of construction.

Work set out by the Contractor may be checked by the Employer's Agent and any errors found shall be rectified by the Contractor at his own expense. The Contractor shall supply any instrument, equipment, material and labour required by the Employer's Agent for this survey work. Any assistance, including checking given to the Contractor by the Employer's Agent or any setting out done by the Employer's Agent for Contractor shall not be held as relieving the Contractor of his responsibility for the accurate construction of the Works.

The Contractor's survey instruments and survey equipment shall be suitable for the accurate setting out of the Works and shall be subject to the approval of the Employer's Agent. They shall furthermore be checked and

correctly adjusted by the authorized agents before the commencement of the contract and subsequently when required by the Employer's Agent and when otherwise necessary.

When required the Contractor shall, at his own expense, provide one labourer to assist the Employer's Agent. The Employer's Agent shall have the sole right of approving of such a labourer.

Survey work shall not be measured and paid for directly and compensation for the work involved in setting out shall be deemed to be covered by the rates tendered and paid for the various items of work included under the contract.

The contractor must verify with the Employer's Agent prior to construction whether the coordinates shown on the drawings have reference to the Clarke 1880 or WGS 84 system.

### C3.4.21 Control of Noise and Dust

All noise and dust to be kept to the lowest level possible.

### C3.4.22 <u>Source of Construction Material</u>

The location and procurement of all imported material will be the responsibility of the Contractor. Rates tendered for all imported material shall include haulage. All manufactured materials shall carry the SABS mark.

### C3.4.23 Freehaul

All tendered rates shall allow for all transport costs. The free haul distance for the purpose of this Contract will be unlimited unless otherwise indicated in the schedule of quantities.

### C3.4.24 <u>Drainage of Excavations and Trenches and Planning of Such Activities</u>

The Contractor is responsible for the drainage of excavations and trenches and shall therefore provide, work and maintain the pumps and other plant required for this purpose. Drainage of trenches and excavations will not be measured and paid for separately and the cost thereof will be deemed to be covered by the prices tendered and paid for the various items of work included under this contract.

During the wet winter months, the extent of open trenches shall be limited to reduce the risk of any delays. The Contractor shall be responsible for planning the work accordingly.

The Contractor shall amend his preferred working method by for example opening up and immediately closing up of trenches once the short section of pipe is laid to prevent any material from becoming unsuitable or saturated.

Indiscriminate working methods, lack of proper planning and protection of the works during the winter months resulting in a delay shall not be considered a circumstance, event or act on which a claim may be based and such claim shall not be payable by the Employer.

No additional payment will be made for altering the working method.

### C3.4.25 Safety of Trenches

The strutting and shoring of excavated faces, if necessary, will be the responsibility of the Contractor and will not be measured and paid for separately. The Contractor, however, will be responsible to maintain and to keep all excavated faces in a safe condition to protect the Works and workers and to prevent delays caused by slope failures.

No trenches may be left open during the Contractor's holiday during December and January. All trenches which have been excavated but which have not been finally backfilled and compacted at the commencement of the said holiday period shall be temporarily fully backfilled and compacted to a standard which will:

- (a) prevent damage occurring to the trenches or any other part of the Works;
- (b) prevent damage to or physical loss of the property of any person;
- (c) eliminate the risk of injury to any person;

during the said period.

All costs involved in the temporary backfilling and compaction of such trenches and the subsequent re-opening of the trenches after the holiday period shall be for the Contractor's account.

### C3.4.26 Transport of Material

All costs of transporting material, including overhaul, shall be included in the applicable tendered rates. All references in the specifications to transport, overhaul and haul distances shall be deleted irrespective of whether or not the deletion is included in these project specifications.

### Security Control

The Contractor will be responsible for the safety and security of his personnel and the site in general all times. All laws, rules and regulations shall be strictly followed in this regard and all the necessary precautions and measures shall be taken to ensure the safety of personnel, the public and equipment. The safeguarding of excavations in particular shall be a priority.

The Contractor shall provide security watchmen for this contract, as he deems fit at no extra cost for the Employer.

### C3.4.28 Testing of Water Pipes or Sewers

The Contractor shall carry out all control testing of materials and workmanship. The Employer's Agent must be notified well in advance of all final tests to be undertaken. No portion of pipe may be finally covered before the proper prescribed tests have been done and approved in writing by the Employer's Agent.

All test results must be tabulated and test sections described properly by the Contractor and must be submitted timeously by the Contractor. All tests positions and pipe sections tested shall be indicated on a drawing provided by the Contractor.

### C3.4.29 Materials Off Site

Should the Contractor claim payment of a portion of the value of some or all of the pipes, valves or any other material held in off-site stores the items concerned must be clearly marked as the property of the Employer. A certificate to this effect and confirmation that the relevant items have been paid for shall accompany his claim detailing the items and serial numbers as well as the street address of the store where the plant and equipment have been insured in terms of the general Conditions of Contract. The Contractor shall in writing provide documentary proof from the insurance company that these items are fully covered by the insurance policy concerned while the plant and equipment are stored away from the Site (street address of store to be stated).

### C3.4.30 Photographs

The Employer, Employer's Agent and any of their agents shall at all times be allowed to photograph or film (video) any activities on site and the use of such shall be unlimited.

### C3.4.31 Opening up and closing down of designated borrow pits

Measurement and payment for opening up and closing down designated borrow pits, including removing and stockpiling overburden and restoring the Site, shall be made under item 8.3.4(b) of SANS 1200 D. This item applies to all borrow material required under this Contract.

The requirements of subclause 5.2.2.2 of SANS 1200 D regarding the opening up, maintenance and closing down of burrow pits shall be adhered to.

### C3.4.32 Workmanship and quality control

The onus to produce work that conforms in quality and accuracy of detail to the requirements of the Specifications and Drawings rests with the Contractor, and the Contractor shall, at his own expense, institute a quality control system and provide suitably qualified and experienced engineers, foremen, surveyors, materials technicians, other technicians and technical staff, together with all transport, instruments and equipment to ensure adequate supervision and positive control of the Works at all times.

The cost of supervision and process control, including testing carried out by the Contractor, will be deemed to be included in the rates tendered for the related items of work.

The Contractor's attention is drawn to the provisions of the various Standardized Specifications regarding the minimum frequency of testing required. The Contractor shall, at his own discretion, increase this frequency where necessary to ensure adequate control.

On completion and submission of every part of the work to the Employer's Agent for examination and measurement, the Contractor shall furnish the Employer's Agent with the results of the relevant tests, measurements and levels to demonstrate the achievement of compliance with the Specifications.

### C3.4.33 Plant and Materials

### C3.4.33.1 Plant and materials supplied by the Employer

The Employer shall not supply any plant or materials.

### C3.4.33.2 Samples

Materials, samples and shop drawings

Materials or work which does not conform to the approved samples submitted in terms of Subclause 7.4.1 of the Conditions of Contract will be rejected. The Employer's Agent reserves the right to submit samples to tests to ensure that the material represented by the sample meets the specification requirements.

The costs of any such tests conducted by or on behalf of the Employer's Agent, the results of which indicate that the samples provided by the Contractor do not conform to the requirements of the Contract, shall, in accordance with the provisions of Subclause 7.4.4 of the Conditions of Contract, be for the Contractor's account.

### C3.4.34 Construction Equipment

### C3.4.34.1 Requirements for equipment

The Contractor shall supply all the plant and equipment required and all plant and equipment shall comply with the requirements as stipulated in the Environmental and Occupational Health and Safety Act and the Construction Regulation Act (2003).

### C3.4.34.2 Equipment provided by the Employer

The Employer shall supply no plant, material or equipment.

### C3.4.35 Site Usage and Demarcated Working Areas

Access to demarcated working areas shall be limited to the Contractor and his personnel. The Contractor shall be responsible to control unauthorized entry to these areas and shall inform the Employer's Agent of any breach of such rules. The site shall be managed and used for its intended purpose.

### C3.4.37 <u>Construction Restrictions, Demolition and Diversion Works</u>

As part of the civil construction process, the Contract will be subject to construction restrictions. The aforementioned will need to be considered for programming and planning requirements as stipulated.

The following restrictions will impact the construction process and the Contractor's proposed programme:

### C3.4.38 Access to Properties

The Contractor shall organize the work in such a manner as to cause the least possible inconvenience to the public and to the property owners adjacent to or affected by the work included in this contract.

The Contractor shall provide access to the public and to the property owners and maintain the necessary access for the duration of the contract.

If, as a result of restricted road reserve widths and the nature of the works, the construction of bypasses is not feasible, construction shall be carried out under traffic conditions in order to provide access to the erven and properties.

The Contractor may, with the approval of the Employer's Agent, make arrangements with the occupiers of the affected erven and properties to close off a portion of a street, road, footpath or entrance temporarily, provided the contractor duly notifies the occupiers of the intended closure and its probable duration and shall, as punctually as possible, re-open the route at the prescribed time. Where possible, the road shall be made safe and re-opened to traffic overnight. Any such closure shall be made by arrangement between the Contractor and the occupiers and shall not absolve the Contractor from his obligations under the contract to provide access at all times. The Employer's Agent shall be informed of such arrangements prior to implementation and it shall be subject to the approval by the Employer's Agent. Barricades, traffic signs and drums shall be provided by the Contractor to suit the specific conditions.

Note: No payment items have been scheduled separately for any work required to ensure compliance with the above-mentioned. The Contractor must note that the rates and prices tendered shall be deemed to include full compensation for any additional work required to construct the works as specified and to maintain access, and that no extra payment will be made, nor will any claim for payment for these difficulties be considered.

The arrangements made between the affected parties and the Contractor shall be confirmed in writing

by the Contractor and submitted to the Employer's Agent for written approval by the Employer's Agent.

### C3.4.39 Contractor's Vehicles

All equipment and vehicles used by the contractor shall be roadworthy at all times and all drivers and operators shall be in possession of valid drivers' licenses.

#### **Employment of Local Labour**

It is the intention that the project, of which this contract is a part, should make the maximum possible use of the local labour force which is at present under employed.

To this end the contractor is expected to limit non-local employees to key personnel only and to employ local labour on this contract.

The contractor shall fill in **Schedule 1K**: Schedule of Estimated Local Labour to be Employed on the Contract and state how many non-local key personnel he intends to employ in the various categories. The tenderer must also state on this form the number of local labourers he intends employing for this contract.

The numbers stated in the above-mentioned data sheet will be strictly controlled during the contract period and any increase in numbers shall be subject to the approval of the employer.

The workforce utilized on the contract is to comprise only of local workers within the area of the jurisdiction of the client i.e. within municipal boundaries. The Employer's Agent may, at his discretion, upon receipt of a written and fully motivated application from the contractor and where he deems the circumstances so warrant, authorize in writing that non-local temporary works, not being his Key Personnel, be included in the workforce.

The contractor shall pay to all temporary workers engaged in terms of this clause, not less than the minimum rate of remuneration as specified in the Appendix to Tender.

The contractor must provide records of all labour employed including name, surname and ID number, differentiating between male, female, local or non-local key personnel, youth and handicapped on a monthly basis. This record must also indicate the total number of man-hours and total remuneration of labour. Monthly payment certificates will only be processed if they are accompanied by the completed reports.

All costs, relating to identification, acquisition, allocation, training, relieving labour of their duties, problem-solving and attending to any other matters in order that the employment of local labour proceeds smoothly, shall be <u>included</u> in the relevant rates.

### Construction Programme and Planning

### C3.5.1.1 Programme

The Contractor shall submit his programme of work to the Employer's Agent not later than 14 days after the Contractor has been notified of the acceptance of his tender and only after discussions with the Employer's Agent. The Contractor shall furthermore carefully consider the expected wet weather conditions during winter and plan the work and working methods to limit any possible standing time or delay. The Due Completion date and any "float" must be indicated by the Contractor on the programme. Should the Due Completion date not be indicated, the Due Completion date, in the opinion of the Employer's Agent, shall be accepted as correct and binding. If necessary, the Employer's Agent may instruct the Contractor to adjust his programme to suit other activities.

The Contractor shall deliver the programme to the Employer's Agent's offices and shall include :

- 2 colour paper copies
- In electronic MS Project format.

The programme shall not be in the form of a bar chart only but shall clearly show the anticipated quantities and value of work to be performed each week.

If, during the progress of the work, the quantities of work performed per week fall below those shown on the programme, or if the sequence of operations is altered, or if the programme is deviated from in any other way, the Contractor shall, within one week of being notified by the Employer's Agent, submit a revised programme.

If the programme has to be revised by reason of the Contractor falling behind his programme, he shall produce a revised programme showing how he intends to regain lost time in order to ensure completion of the works within the time for completion as defined in clause 1.1.1.14 of the General Conditions of Contract or any granted extension of time. Any proposal to increase the tempo of work must be accompanied by positive steps to increase production by either providing more labour and equipment on site or using the available labour and equipment in a more efficient

manner.

Failure on the part of the contractor to submit or to work according to the programme or revised programmes shall be sufficient reason for the Employer's Agent to take steps as provided in clause 9.2 of the General Conditions of Contract.

The approval by the Employer's Agent of any programme shall have no contractual significance other than that the Employer's Agent will be satisfied if the work is carried out according to such programme and that the Contractor undertakes to carry out the work in accordance with the programme. It shall not limit the right of the Employer's Agent to instruct the contractor to vary the programme should circumstances make this necessary. The Contractor is also referred to clause PS 8 when drawing up his programme.

The tenderer must make provision in his programme and tendered rates for the following constraints in working hours and working methods: (This list is not exhaustive, and it is accepted that all other constraints were identified by the Contractor during the site inspection)

All wayleaves must be obtained prior to construction.

The Contractor must submit on a monthly basis a progress report consisting of a short report on the progress, project constraint implications (Time, cost, quality, risks, resources) and progress shall be indicated on the approved programme for each activity.

The progress report must be submitted 2 Days before site meetings and must accompany payment certificates to ensure the processing of payment.

#### C3.5.1.2 General Allowances

When drawing up his programme, the Contractor shall, take into consideration and make allowance for, inter alia:

- a) expected weather conditions and their effects,
- (b) known physical conditions or artificial obstructions,
- (c) searching for, dealing with and carrying out alterations to the existing services,
- (d) the accommodation of public access and traffic,
- (e) the provision and implementation of the health and safety plan in terms of the Construction Regulations, 2003 of the Occupational Health and Safety Act, and
- (f) the design, testing and approval of the concrete mixes.

### Reporting Requirements

The Contractor shall promptly submit the schedules and reports at Contract stage as requested by Employer's Agent. Updated reports must be submitted to the Employer's Agent two days before site meetings. Should the Contractor fail to provide the necessary documentation, the Employer's Agent may proceed to compile such documentation which costs will be deducted from payments due to the contractor. The report shall include the following:

- Bar chart or sloping bar chart schedule showing staff requirements by time interval and reflecting work planned by time interval.
- A monthly report showing planned progress versus actual progress giving details of how the Work will be completed in relation to the schedule.
- Daily major construction equipment report
- Daily staff report by crafts
- Procurement schedule for the procurement and receipt of materials, equipment and subcontract services by Contract and a monthly status report of all such materials and equipment
- MIG forms (approximately 5 pages) including employment details, expenditure and programme.

### C3.5.2 <u>Contractor's Responsibility in terms Of the OHS Act</u>

The Contractor shall be responsible for complying with the Occupational Health and Safety Act, Act 85 of 1993, and specifically the Construction Regulations 2003 issued in terms of Section 43 of the Act (GNR 1010 of 18 July 2003) as amended.

The Contractor is referred to Part T1.2 Tender Data and the Health and Safety Specification (see Part C3.5.8 and PHS Particular Specification: Occupational Health and Safety) in this regard.

### C3.5.3 <u>Unauthorized Persons</u>

The Contractor shall keep unauthorized persons from the Works at all times.

### C3.5.4 <u>Management Meetings</u>

### C3.5.4.1 Technical Meetings

Technical meetings shall be held on an ad-hoc basis as required either by the Employer's Agent or the Contractor.

The Contractor shall arrange for the Contract Manager and the Construction Manager to attend these meetings and all Site meetings.

### C3.5.4.2 Site Meetings

Site meetings shall be held monthly.

### C3.5.4.3 Health and Safety Meetings

Health and Safety Meetings shall be held monthly.

### C3.5.5 Monthly Statements, Payment Certificates and Electronic Payments

The Contractor shall provide his banking details to enable electronic payments to be made for all payment certificates.

The statement to be submitted by the Contractor in terms of Clause 6.10 of the Conditions of Contract shall be prepared by the Contractor at its own cost, strictly in accordance with the standard payment certificate format prescribed by the Employer's Agent in digital electronic computer format. The Contractor shall, together with a copy of the digital electronic computer file of the statement, submit TWO (2) A4 sized paper copies of the statement. The Contractor must submit the payment certificate in Excel or Bill format as instructed by the Employer's Agent. All supporting calculations of each quantity must be submitted with each payment certificate, sufficiently broken down into various portions of the work to enable the Employer's Agent to verify the quantities.

For the purposes of the Employer's Agent's payment certificate, the Contractor shall subsequently be responsible, at its own cost, for making such adjustments to its statement as may be required by the Employer's Agent for the purposes of accurately reflecting the actual quantities and amounts which the Employer's Agent deems to be due and payable to the Contractor in the payment certificate.

The Contractor shall, at its own cost, make the said adjustments to the statement and return to the Employer's Agent within THREE (3) normal working days from the date on which the Employer's Agent communicated to the Contractor the adjustments which requires, FIVE (5) sets of A4-sized paper copies of such adjusted statement, together with a copy of the electronic digital computer file thereof.

Any delay by the Contractor in making the said adjustments and submitting to the Employer's Agent the requisite copies of the adjusted statement for the purposes of the Employer's Agent's payment certificate will be added to the times allowed in terms of Sub-clause 6.10.4 of the Conditions of Contract to the Employer's Agent for submission to the Employer and the Contractor of the signed payment certificate and to the period in which the Employer is required to make payment to the Contractor.

### C3.5.6 Key Personnel

The Contractor shall provide a schedule of key personnel, with contact particulars and experience.

### C3.5.7 Health and Safety

### C3.5.7.1 Health and safety requirements and procedures

- a) In terms of the provisions of Section 37(2) of the Occupational Health and Safety Amendment Act, 1993 (Act 85 of 1993), hereinafter referred to as the Act, the following arrangements and procedures shall apply between the Contractor and the Employer to ensure compliance by the Contractor with the provisions of the Act:
  - (i) The Contractor undertakes to acquaint the appropriate officials and employees of the Contractor with all relevant provisions of the Act and the Regulations promulgated in terms of the Act.
  - (ii) The Contractor undertakes that all relevant duties, obligations and prohibitions imposed in terms of

the Act and Regulations on the Contractor will be fully complied with.

- (iii) The Contractor accepts sole liability for such due compliance with the relevant duties, obligations and prohibitions imposed by the Act and Regulations and expressly absolves the Employer from himself being obliged to comply with any of the aforesaid duties, obligations and prohibitions, with the exception of such duties, obligations and prohibitions expressly assigned to the Employer in terms of the Act and its associated Regulations.
- (iv) The Contractor agrees that any duly authorised officials of the Employer shall be entitled, although not obliged, to take such steps as may be necessary to monitor that the Contractor has conformed to his undertakings as described in paragraphs (i) and (ii) above, which steps may include, but will not be limited to, the right to inspect any appropriate site or premises occupied by the Contractor, or any appropriate records or safety plans held by the Contractor.
- (v) The Contractor shall be obliged to report forthwith to the Employer and Employer's Agent any investigation, complaint or criminal charge which may arise as a consequence of the provisions of the Act and Regulations, pursuant to work performed in terms of this Contract, and shall, on written demand, provide full details in writing, to the Employer and Employer's Agent, of such investigation, complaint or criminal charge.
- (vi) The Contractor shall furthermore, in compliance with Construction Regulations 2003 (Government Gazette 37305 and Regulation Gazette 10113 of 7 February 2014) to the Act acquaint himself with the requirements of the Employer's health and safety specification as laid down in regulation 4(1)(a) of the Construction Regulation 2014, and prepare a suitably and sufficiently documented health and safety plan as contemplated in regulation 7(1)(a) of the Construction Regulation 2014 for approval by the Employer or his assigned agent. The Contractor's health and safety plan and risk assessment shall be submitted for approval, to the Employer or his agent, within 14 days of the Commencement Date and shall be implemented and maintained from the commencement of the Works.

The Contractor shall at all times be responsible for full compliance with the approved plan as well as with the Construction Regulations and no extension of time will be considered for delays due to non-compliance with the abovementioned plan or regulations.

- (vii) The Employer, or his assigned agent, reserves the right to conduct periodic audits, as contemplated in the Construction Regulations 2014, to monitor that the Contractor is compliant in respect of his obligations. Failure by the Contractor to comply with the requirements of these Regulations shall entitle the Engineer, at the request of the Employer or his agent, to suspend all or any part of the Works, with no recourse whatsoever by the Contractor for any damages incurred as a result of such suspension,
  - until such time that the Employer or his agents are satisfied that the issues in which the Contractor has been in default have been rectified
- (viii) The proposed type of work, materials to be used and potential hazards likely to be encountered on this Contract are detailed in the Parts C3.4 and C3.5, the Bill of Quantities, the Drawings, and in the Employers' health and safety specification (regulation 5(1)(b) of the Construction Regulations 2014), which is contained in the Particular Specifications.

Payment items are included in the Bill of Quantities to cover the Contractor's cost for compliance with the OHS Act and the abovementioned regulations.

### C3.5.7.2 Health and Safety Plan

Without limiting his obligations and liabilities in terms of the Construction Regulations, 2003 of the OHS Act, the Contractor, in his Health and Safety Plan to be submitted in terms of the Contract Data, shall inter alia deal with the safety provisions he will set up in respect of the aspects specified in the Specifications.

The Health and Safety Plan shall be neatly set out in a lever-arch type file, with labelled dividers for each section.

A copy of the approved Health and Safety Plan shall be kept on Site and made available upon request.

### C3.6.1: Standard Specifications

### APPLICABLE STANDARDIZED SPECIFICATIONS

For the purposes of this contract, the following SANS 1200 Standardized Specifications for civil engineering construction shall apply:

SABS 1200	Α	:	General (1986)
SABS 1200	С	:	Site clearance (1980)
SABS 1200	D	:	Earthworks (1988)

SABS 1200 DB : Earthworks (Pipe Trenches) (1989) SABS 1200 L : Medium Pressure Pipe Lines (1983)

### C3.6.2: VARIATIONS AND ADDITIONS TO THE SANS STANDARIZED SPECIFICATIONS

Each clause with the prefix PS shall refer to the congruent clause in the appropriate section of the standardised or particular specification. Such clause shall either substitute, or supplement, or amend the clause with the same number. Where there is no such congruent clause in the standardised or particular specification, the PS clause shall be a new clause in the project specification. Any clause that is referred to in the standardised specification will also include the appropriate project specification.

### **STATUS**

In the event of any discrepancy between the project specifications and a part or parts of the SANS 1200 Standardized Specifications, the schedule of quantities or the drawings, the project specifications shall take precedence.

The following variations and additions to the following SANS 1200 standardized specifications listed in C3.6.1 are given as follows:

SABS 1200	Α	:	General (1986)
SABS 1200	С	:	Site clearance (1980)
SABS 1200	D	<i>:</i>	Earthworks (1988)

SABS 1200 DB : Earthworks (Pipe Trenches) (1989)
SABS 1200 L : Medium Pressure Pipe Lines (1983)

 SABS 1200
 LB
 :
 Bedding (pipes) (1983)

 SANS 1200
 LF
 :
 Erf Connections (1983)

### PSA GENERAL (1986)

### PSA 1 SCOPE

### Replace subclause 1.1 with the following:

"1.1 This specification covers requirements, principles and responsibilities of a general nature which are normally applicable to all civil engineering contracts as well as the requirements for the contractor's establishment on site."

### PSA 2 INTERPRETATIONS

### PSA 2.3 **Definitions**

In the opening phrase between the words "specification" and "the following", insert the words "the definitions given in the conditions of contract and "

### (a) General

Add the following definitions:

"Employer's Agent: All references in the SANS specifications referring to the Engineer shall also be deemed to refer to the Employer's Agent in terms of the General Conditions of Contract.

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

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

(c) Measurement and payment

Replace the definitions for fixed charge and time-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.

#### PSA 2.4 Abbreviations

### (a) Abbreviations relating to standard documents

Add the following abbreviation:

"CKS: SABS Co-ordinating 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 SABS specifications shall bear the SABS mark, whether so specified or not. Copies of SABS Certificates of all materials used must be submitted to the Employer's Agent."

#### Add the following:

"The Contractor must provide the Employer's 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 layer works over areas for which test results are not available will be undertaken at the Contractors own risk."

Add the following subclause(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 Employer's Agent.

### PSA 4 PLANT

Replace the heading of PSA 4 with:

"PSA 4 Construction Equipment".

### PSA 4.1 Silencing of Plant

Replace the heading of "PSA 4.1 Silencing of plant" with:

"PSA 4.1 Silencing of Construction Equipment".

Replace the contents of subclause 4.1 with the following:

"The Contractor's attention is drawn to the applicable regulations pertaining to noise and hearing conservation, framed under the Occupational Health and Safety Act (Act No. 85 of 1993) as amended.

The Contractor shall at all times and at its own cost, be responsible for implementing all necessary steps to ensure full compliance with such regulations, including but not restricted to the provision and use of suitable and effective silencing devices for pneumatic tools and other Construction Equipment which would otherwise cause a noise level in excess of that specified in the said regulations.

Where appropriate, the Contractor shall further, by means of temporary barriers, effectively isolate the source of such noise in order to comply with the said regulations."

### 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 the second paragraph:

"The Contractor shall provide on the Site and in close proximity to the actual locations where the work is being executed, one toilet per 10 workmen, which toilets shall be effectively screened from public view and their use enforced. Such toilets shall be relocated from time to time as the location of the work being executed changes, so as to ensure that easy access to the toilets is maintained.

The contractor shall, where applicable, make all necessary arrangements and pay for the removal of night soil."

### "PSA 4.3 Site Security

The area within the area used by the Contractor for the establishment of his camp site may be subject to a security risk. The Contractor must assess the additional risk and make his own provision for additional protection.

No separate payment will be made for these additional security measures and the cost thereof will be deemed to be included in the rates tendered for Items PSA 8.3 and PSA 8.4. Should the Contractor feel that he needs additional insurance to cover these risks, the cost of such insurance will also be deemed to be included in the tendered rates."

### PSA 5 CONSTRUCTION

#### PSA 5.1 Survey

### 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 Subclause 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 Subclause 5.1.2:

"The Contractor and the Employer's 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 Subclause 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 Employer's 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 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 Employer's Agent, were disturbed, damaged or destroyed by others beyond his control."

### 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 this subclause 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 that 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 its 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 Employer's Agent, obtain the most up-to-date plans as are available, showing the positions of services existing in the area where it intends to work. Neither the Employer nor the Employer's Agent offer 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 and the provision and utilisation of suitable detecting and testing equipment.

Thereafter, the Contractor shall, by the use of appropriate methodologies carefully expose the services at such positions as are agreed to by the Employer's 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 SABS 1200D (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 Employer's 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 Employer's Agent immediately any such service is encountered or discovered on the Site.

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

- (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 services which ought reasonably to have been a Known Service in accordance with the provisions of this clause :

as well as for consequential damage, whether caused directly by the Contractor's operations or by the lack of proper protection;

Provided always that the Contractor will not be held liable in respect of damages occurring to services not being Known Services

No separate payment will be made to the Contractor in respect of its 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 Employer's Agent, the Drawings as aforesaid and these costs shall be deemed included in the Contractor's other tendered rates and prices included in the Contract.

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

### PSA 5.4.2 <u>Protection during construction</u>

The contractor shall exercise all the necessary care to prevent damage to known services during construction operations. Major excavating equipment and other plant shall not be operated in dangerously close proximity of these services. Where necessary, excavation in close proximity of these services shall be carefully carried out by means of suitable hand tools, excluding picks wherever their use could cause damage to the services.

Services left exposed shall be suitably protected from damage.

### PSA 5.4.3 <u>Alterations and repairs to existing services</u>

Unless the contrary is clearly specified or ordered, the contractor shall not carry out any alterations to existing services. Where this may be necessary, the contractor shall inform the Employer's 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.

Where existing services are damaged by the contractor, he shall immediately inform the Employer's Agent, or when this is not possible, the relevant authority, and shall obtain instructions as to who should carry out repairs. In urgent cases the contractor shall take all necessary steps to minimise damage to and the interruption of the service. No repairs shall be attempted to telecommunication cables or electric power lines and cables.

No liability for damages arising from any delay in having such alterations or repairs effected will be accepted by the employer. The contractor shall provide all reasonable opportunity, access and assistance to persons doing alterations or repairs to existing services."

### PSA 5.7 Safety

Replace the contents of subclause 5.7 with the following:

"Pursuant to the provisions of the Conditions of Contract, and without in any way limiting the Contractor's obligations thereunder, the Contractor shall at its 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):

- (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 (Act No 85 of 1993) and Construction Regulations 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; and
- (b) Provide, install and maintain on 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; and
- (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; and
- (d) Implement all necessary measures as to ensure compliance of the Act by all subcontractors engaged by the Contractor and their employees engaged on the Works; and
- (e) Comply fully with all other requirements pertaining to safety as may be specified in the Contract.

The Employer and the Employer's 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 cooperate fully in such inspections and shall make available for inspection, all such documents and records as the Employer's Agent Representative may reasonably require.

Where any such investigations reveal, or where it comes to the Employer's 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 Employer's 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 Employer's 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 Employer's 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 Date for Completion 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 Employer's 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.

Add the following subclause:

### "PSA 5.9 Site Meetings

The Contractor or its authorised agent will be required to attend regular site meetings, which shall normally be held twice a month on dates and at times determined by the Employer's Agent, but in any case whenever reasonably required by the Employer's Agent. Unless otherwise indicated in the Contract or instructed by the Employer's 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 etc, shall be discussed, but not matters concerning the day-to-day running of the Contract."

Add the following:

### "PSA 5.10 Work on, Over, Under or Adjacent to a Railway Line

All work carried out on, over, under or adjacent to a railway line shall be carried out strictly in accordance with the latest edition of Transnet Specification E7, part 2. The contractor shall obtain a copy of the latest edition, which shall be kept on the site, before any work of this nature is commenced.

Attention is drawn especially to the requirements contained in the E7 Specification regarding approval that must be obtained from Transnet for a work permit or the occupation of property of the Transport Services and the approval of false work and form work plans."

### PSA 6 TOLERANCES

Add the following subclause:

### PSA 6.2 Degrees of Accuracy

Add to the subclause:

"Degree of Accuracy 1 shall be applicable to the following parts of the Works unless stated to the contrary elsewhere; weirs, flanges at civil/mechanical interfaces."

#### "PSA 6.4 General

No guarantee is given that the full specified tolerances will be available independently of each other, and the contractor is cautioned in regard to the fact that the liberal or full use of any one or more of the tolerances may deprive him of the full or any use of tolerances relating to other aspects of the work.

Except where the contrary is specified or when clearly not applicable, all quantities shall for purpose of measurement and payment be determined from the 'authorised' dimensions. This shall be taken to mean the dimensions as specified or shown on the drawings or, if changed, as finally instructed by the Employer's Agent, without any allowance for the tolerances specified. Save as hereinafter specified to the contrary, all measurements for determining quantities for purposes of payment will be based on the "authorised" dimensions.

If the work is therefore constructed in compliance with the "authorised" dimensions plus or minus any tolerances allowed, quantities will be based on the "authorised" dimensions regardless of the actual dimensions to which the work has been constructed."

When the work is not constructed in accordance with the 'authorised' dimensions plus or minus the tolerances allowed, the Employer's Agent may nevertheless, at his sole discretion, accept the work for payment. In such cases no payment shall be made for quantities of work or material in excess of those calculated for the 'authorised' dimensions, and where the actual dimensions are less than the 'authorised' dimensions minus the tolerance allowed, quantities for payment shall be calculated based on the actual dimensions as constructed."

### PSA 7 TESTING

### PSA 7.1.1 Checking

Replace the last sentence with the following:

"The contractor shall obtain the services of an independent testing laboratory at his own expense (Refer subclause PS 8.4 of portion 1 of the project specifications) to carry out such checks as are prescribed in the various standardised specifications."

### PSA 7.1.2 <u>Standard of finished work not to specification</u>

Insert the words "or checks by an approved laboratory ..." after the words "Where the Employer's Agent's checks ..." in the first line of Subclause 7.1.2.

### PSA 7.2 Approved Laboratories

### REPLACE THE CONTENTS OF SUB-CLAUSE 7.2 WITH THE FOLLOWING:

"Unless otherwise specified in the relevant specification or elsewhere in the Project Specification, the following shall be deemed to be approved laboratories in which design work, or testing required in terms of a specification for the purposes of acceptance by the Employer's Agent of the quality of materials used and/or workmanship achieved, may be carried out:

(a) any testing laboratory certified by the South African National Accreditation Systems (SANAS) in respect of

the nature and type of testing to be undertaken for the purposes of the Contract;

- (b) any testing laboratory owned, managed or operated by the Employer or the Employer's Agent;
- (c) any testing laboratory established and operated on the Site by or on behalf of the Employer or the Employer's Agent.

#### PSA 8 MEASUREMENT AND PAYMENT

#### PSA 8.1 Measurement

### PSA 8.1.1 Method of Measurement, All Sections of the Schedule

Delete the words: "and South West Africa".

### PSA 8.1.2 Preliminary and general items or section

### PSA 8.1.2.1 Contents

Delete item (c).

### PSA 8.1.2.2 Tendered sums

Replace the contents of this subclause with the following:

"The contractor's tendered sums under items PSA 8.3 and PSA 8.4 shall collectively cover all charges for:

- Risks, costs and obligations in terms of the general conditions of contract and of this standardised specification, except to the extent that provision is made in these project specifications to cover compensation for any of these items of work.
- Cost of all wayleaves.
- Head-office and site overheads and supervision.
- Profit and financing costs.
- Expenses of a general nature not specifically related to any item or items of permanent or temporary work.
- Providing facilities on site for the contractor's personnel, including offices, storage facilities, workshops, ablutions, for providing services such as water, electricity, sewerage, sewage and rubbish disposal, for access roads and all other facilities required as well as for the maintenance and removal on completion of the works of these facilities and the cleaning-up of the camp site on completion of the works.
- Providing facilities for the Employer's Agent and his staff as specified in Part C3.4: Construction Site Establishment.
- Providing and erecting two new contract name boards as shown on the drawings.
- Providing all the required documentation described in Part C3.
- Adhering and complying with the client's Procurement requirements including the monthly completion of labour and remuneration records."

### PSA 8.2 Payment

### PSA 8.2.1 Fixed-charge and value-related items

Replace the contents of this subclause with the following:

"Payment of fixed charges in respect of item 8.3.1 will be made as follows:

Eighty per cent (80%) of the sum tendered will be paid once the facilities have been provided and approved. The remaining twenty per cent (20%) will be paid once the works have been completed, the facilities removed and the camp-site cleared and cleaned.

Payment for the sum tendered under item 8.3.2 will be made in three separate instalments as follows:

(a) The first instalment which is 40% of the sum, will be paid when the contractor has met all his obligations to date under this specification, the general conditions of contract and the special conditions of contract, and

where the value of work certified for payment, excluding materials on site and any payments under preliminary and general items is equal to not less than 5% of the total value of the work listed in the schedule of quantities.

- (b) The second instalment, which is 40% of the sum, will be made when the amount certified for payment, including retention moneys but excluding the second instalment referred to herein, exceeds 50% of the tender sum.
- (c) The final payment, which is 20% of the sum, will be made when the works have been certified as completed and the contractor has fulfilled all his obligations to date under this specification, the general conditions of contract and the special conditions of contract.

Should the value of the measured work finally completed by more or less than the tender sum, then the sum tendered under item 8.3.2 will be adjusted pro rata up or down and this adjustment shall be applied to the third instalment. No adjustment will apply to item 8.3.1 in respect of variations in the value of work done or the time for completion finally authorised."

### PSA 8.2.2 <u>Time-related items</u>

Replace the contents of this subclause with the following:

"Three time related items shall be scheduled and shall be full compensation for all time related preliminary and general costs and shall include the following:

- Public holidays
- Year-end break(s) not exceeding 15 working days in duration; and
- The contract period during the normal industry working period outside public holidays and outside the industry shutdown period during December and January.

Subject to the provisions of 8.2.3 and 8.2.4, payment under item 8.4.1 (time-related item) will be made as follows:

Payment will be made monthly in equal amounts, calculated by dividing the sum tendered for the item by the tendered contract period in Days (excluding public holidays and the year-end break during December and January), provided always that the total of the monthly amounts so paid for the item is not more than in proportion to the progress of the work as a whole.

Should the Employer's Agent grant an extension of the time for completion of the works, the Contractor will be entitled to an increase in the sum tendered for the time-related item, which increase shall be in the same proportion to the original tendered sum as the extension of time is to the original time for completion of the works.

The tendered amount per day will be payable for the number of statutory public holidays included in the contract period which replaces normal working days.

Should an extension of time be granted and a public holiday is within this period, the Contractor will be entitled to additional payment for each additional public holiday which replaces a working day.

The tendered sum will be payable for the annual holiday not exceeding 15 working days in duration which falls within the construction period. Should an extension of time be granted which extends the contract period beyond the annual holiday, the Contractor will be entitled to payment as tendered for this item 8.2.2.3.

Payment for such increased amounts determined in accordance with PSA 8.2.2.1 to PSA 8.2.2.2 will be taken to be in full compensation for all additional time-related preliminary and general costs, that result from the circumstances pertaining to the extension of time granted."

### PSA 8.3 Scheduled Fixed-Charge and Value-Related Items

Replace the items with the following:

"PSA 8.3.1 Fixed preliminary and general charges Unit: Sum

PSA 8.3.2 <u>Value-related preliminary and general charges</u> <u>Unit: Sum</u>

The sums tendered shall collectively include full compensation for all fixed and value-related preliminary and

general charges as described in subclause PSA 8.1.2.2. Payment will be made as described in subclause PSA 8.2.1."

Add the following subclause:

"PSA 8.3.5 

This item must cover all costs incurred to locate, record and protect pegs during the duration of the contract and the reinstatement of all disturbed pegs on completion of the contract in the manner as prescribed by the Land Survey Act."

#### **PSA 8.4 Scheduled Time-Related Items**

Replace the items with the following:

#### "PSA 8.4.1 Time-related preliminary and general charges

PSA 8.4.1.1 

PSA 8.4.1.2 

PSA 8.4.1.3 

> The sums and rate tendered for items PSA 8.4.1.1 to PSA 8.4.1.3 shall include full compensation for all time-related preliminary and general charges as described in subclause PSA 8.1.2.2. Payment will be made as described in subclause PSA 8.2.2."

#### **PSA 8.6 Prime Cost Items**

Replace Subclause 8.6 with the following:

#### "PSA 8.6 **Prime Cost Sums**

Sub-items (a) and (b) will be provided in the Schedule of Quantities for each different item to which a Prime Cost

The Contractor shall be reimbursed under sub-item(s) (a) in substitution of the respective Prime Cost Sums included in the Contract, the actual price(s) paid or payable by him in respect of the goods, materials or services supplied, but excluding any charges for the Contractor's labour, profit, carriage, establishment or other charges related to such goods, services or materials.

The Contractor shall be paid under sub-item (b), the respective percentage, as stated by the Contractor in its Tender, of the amount certified by the Employer's Agent for payment under the related sub-item (a). The percentages tendered by the Contractor for each respective sub-item (b) included in the Schedule of Quantities shall be deemed to in full and final compensation to the Contractor in respect of any charge by the Contractor for labour, carriage profit, establishment and for any other charges related to the goods, services or materials supplied under the related sub-item (a).

If the Contractor shall have omitted within its Tender to insert a tendered percentage under sub-item (b), or tendered a zero percentage, the Contractor's tendered rate for sub-item (b) shall be deemed to be zero and the Contractor shall not be entitled to any payment under sub-item (b).

#### **PSA 8.7 Daywork**

Replace the contents of Subclause 8.7 with the following:

"Measurement and payment shall be in accordance with the provisions of Sub-clause 6.5 of the Conditions of Contract."

Add the following item:

#### **PSA 8.8 Temporary Works**

PSA 8.8.2 

Add the following:

"Traffic control facilities and traffic management plan to comply to requirements as set by the South African Road Traffic Sign Manual Volume 2 and the Health and Safety Specification.

This amount shall further cover all costs in respect of the provision, erection, moving, re-erection and maintenance of all barriers, road signs, lights and flagmen necessary for the protection of the works, for the construction, gravelling and maintenance of detours and entrance roads affected by the work, as well as the breaking up and removal thereof at the contract completion, and for compliance with all necessary traffic rules and regulations, liaising with the road authorities, and all other costs necessary in respect of accommodation of traffic."

PSA 8.8.3 Protection of infrastructure during construction of pipe at the existing municipal cemetery ............ Unit: sum

Add the following:

"This amount shall cover the cost to protect existing built out structures, all visible services and graves during the construction of the new pipe at the existing cemetery. Trenchless construction will take place, but the Contractor will still need to set out the works and confirm the impact it may have on existing infrastructure. Should it be required to construct section by open excavation, the Contractor will still be required to take additional steps to protect all infrastructure"

Replace item 8.8.4 with the following:

### "PSA 8.8.4 Location and protection of existing services

Where particular items are provided in other sections of the schedule the costs of detection, exposure, protection and alterations shall be covered by such particular items. Where no such particular items are provided and where there is reason to expect the presence of such a service or services, the following items will apply:

### PSA 8.8.4.1 Provision of detecting devices for:

The tendered rate shall include full compensation to provide a scanner to detect steel pipes and a scanner to detect electrical cables and to mark the position of these services on site.

- Ùnit: Sum

Other

PSA 8.8.4.2 Hand excavation necessary for locating and exposing existing services in all materials:

The rates shall cover the cost of excavating by means of hand tools within authorised dimensions, for all precautionary measures necessary to protect the services from damage during excavation and backfilling and for subsequent backfilling and compacting. Compaction of material in all areas except in roadways shall be to 93% of modified AASHTO density.

The rate for hand excavation in roadways shall also include compensation for compacting excavated or selected backfill material to 100% of modified AASHTO density. Reinstating layerworks and surfacing shall be measured and paid for under SABS 1200 DB.

The tendered rates shall also include for keeping excavations safe, for dealing with surface and subsurface water and for removal of surplus excavated material from the site."

Add the following items:

#### 

The sum shall cover the cost for the provision, operation, maintaining and removal of all plant and materials required to deal with surface and subsurface water anywhere on the Site as required in terms of Subclause 5.1.3 of SABS 1200 D and Subclause 5.1.2 of SABS 1200 DB. No additional payment will be made for "Special water hazards".

The sum shall cover the cost of providing the necessary plant or materials, or both, fully erected and operative on the Site, the cost of operating and maintaining pumps, well points, sheeting, close timbering, and other equipment, as applicable, for 24 hours a day, 7 days a week, throughout the period during which the facilities are required, and the cost of removing such goods and restoring the Site to its original condition on completion of that part of the project for which the temporary works were erected.

Equal monthly payments will be made calculated by dividing the sum tendered for the item by the tendered contract period in months. The sum of the equal monthly payments shall not exceed the sum tendered for this item except

where an extension of the contract period is approved by the Employer's Agent in which case the monthly payments will be made pro rata to the extension of time only if dealing with water is required."

PSA 8.8.10 Dust control Unit: Sum

> The tendered rate shall include full compensation for the provision of a water truck on site on a continuous basis during the construction of earthworks and layerworks period and the regular wetting of the construction area to prevent any dust disturbance to adjacent areas.

Add the following:

#### "PSA 8.9 **Standing Time Cost**

(a)	Plant	Unit: Day
(b)	Labour	Unit: Day
(c)	Other	

The sum tendered for this item shall allow for full compensation for all standing time costs of whatever nature, and approved by the Employer's Agent.

For purposes of calculating the standing time costs, a working week will be held to consist of five working days.

The amount by which the standing time costs is adjusted shall only apply to delays which, in the opinion of the Employer's Agent, are incurred as a result of a riot, commotion, politically motivated sabotage and acts of terrorism or disorder outside the Contractor's control.

Costs for delays incurred for all other circumstances shall be treated as provided for in the Conditions of Contract.

The provision of this Clause shall in no way prejudice the right of either the Employer or the Contractor to terminate the Contract in terms of the provisions of Clause 9.1.2 of the General Conditions of Contract.

Variations in the Total Tender Sum resulting from payment for delays as a result of standing time costs as described herein shall be excluded from the total tender sum when Clause 6.4 of General Conditions of Contract is applied."

### Compliance with The Occupational Health and Safety Act (Act No 85 Of 1993) and

Construction Regulations and Specifications Included in the Particular Specifications ............. Unit: Sum

The tendered rate shall include full compensation for compliance with the OHS Act and Construction Regulations and the Health and Safety requirements and specification included in this tender document. Refer to the Particular Specifications and Part C3.5.

It shall further include full compensation for the registration of the project with the Authorities (Department of Labour) and any delay in awaiting for approvals by the Authorities.

Temporary barriers and fences for deep or trench excavations required in terms of the contract shall not be paid for separately.

Payment under this item will be made as follows:

- (a) The first instalment which is 30% of the sum tendered, will be paid once the contractors Health and Safety Plan is approved by the Employer or the Employers Agent and the Contractor has met all his obligations to date under this specification.
- The remainder of the sum tendered will be paid in equal monthly amounts calculated by dividing the sum (b) tendered (less 30%) divided by the contract period in months.

No additional payment will be made should an extension of the contract period be granted. Penalties for noncompliance will be deducted from payments due to the contractor.

#### **PSA 8.13** Compliance with The Environmental Management Plan and Requirements

The tendered rate shall include full compensation for compliance with the environmental management requirements and specification included in this tender document.

Payment under this item will be made in equal monthly amounts calculated by dividing the sum tendered divided

by the contract period in months.

No additional payment will be made should an extension of the contract period be granted. Penalties for noncompliance will be deducted from payments due to the contractor.

#### **PSA 8.19**

The tendered rate shall include full compensation for all liaisons with the residents of each area and the Municipality regarding valve closures and issuing of public notices.

Residents must be informed of valve closures at least 48 hours prior to closing of valves.

The tendered rate must include:

- the preparation of an information page which must be delivered to each household to be affected, prior to working in the area
- the delivery of a notice informing residents of a disruption in the water supply (three days prior to the disruption)
- obtaining a "happy letter" from all residents once the work is completed and gardens re-instated.
- direct liaison with residents should a complaint be received including a written account of the complaint and agreement reached with the resident.

No additional payment will be made for additional notices of disruption which must be issued as a result of failed connection attempts."

### **SITE CLEARANCE (1982)**

#### PSC 3 **MATERIALS**

#### **PSC 3.1 Disposal of Material**

Add the following:

"The contractor shall obtain his own dumping sites for the disposal of material and all transport costs shall be included in the rates tendered for site clearance.

#### PSC 5 CONSTRUCTION

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

Add the following:

"Pipeline routes shall be cleared to a distance of 1,5 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**

#### PSC 5.2.3 Preservation of trees

#### PSC 5.2.3.2 Individual trees

Replace the last sentence with the following:

"An amount of R500-00 will be deducted from moneys due to the Contractor as a penalty for every tree that is damaged or removed unnecessarily."

#### **PSC 5.3** Clearing

### ADD THE FOLLOWING:

"The thickness of the layer that will unavoidably be stripped during clearing of vegetation will be taken as 100 mm. This implies that levels used in earthworks quantity calculations will be 100 mm lower than the original levels."

Add the following:

"The tenderers attention is drawn to the fact that all items described under subclause 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 8 **MEASUREMENT AND PAYMENT** PSC 8.1 **Basic Principles** Add the following: "Levels to be used for earthworks quantity calculations will be surveyed once the clearing operation have been completed." **PSC 8.2** Scheduled Items PSC 8.2.1 Clear and Grub Replace the first line with the following: "The area designated by the Employer's Agent to be cleared and grubbed will be measured in m<sup>2</sup> to the nearest square meter or, The contractor shall ascertain the works necessary to remove the top structures up to floor level complete as given in the schedule of quantities and noted on the drawings. "The rate shall cover the cost of excavating around the structure, demolishing the structure, disposal of excavated material and rubble, and backfilling where necessary of the hole with sand in layers of 300 mm including compaction to 100% of MOD AASHTO. There will be distinguished between different structures." Add the following payment clauses: PSC 8.2.11 Various items shall be scheduled. The rates shall collectively include full compensation to rip, clear and spoil at a spoil site provided by the contractor of asphalt or block paving. PSC 8.2.12 The rate shall cover the cost of the removal, transport and disposal of existing kerbs to a spoil site furnished by the Contractor, including all necessary excavation and backfill compacted to 100% modified AASHTO density PSC 8.2.13 The rate shall cover the cost of the removal, transport and disposal of existing fence to a spoil site furnished by the Contractor, including all necessary excavation and backfill compacted to 100% modified AASHTO density **PSD EARTHWORKS (1988)** PSD<sub>2</sub> **INTERPRETATIONS PSD 2.1** SUPPORTING SPECIFICATIONS Replace subclause 2.1.2 with the following: "PSD 2.1.2 Any of the other SABS 1200 specifications may form part of the contract documents." **PSD 2.3 DEFINITIONS** Replace the definition "Specified density" with the following: "Specified density: The specified dry density expressed as a percentage of modified AASHTO dry density." Replace the definition "Stockpile" with the following: "Stockpile (Verb): The process of selecting and, as maybe necessary, loading, transporting and off-loading material in a designated area for later use and a specific purpose."

Add the following definitions:

the earthworks up to below the selected sub-grade level.

"Fill: An embankment or terrace constructed from material obtained from excavations or borrow. In roads it includes

Fill (material): Material used for the construction of an embankment or terrace.

Roadbed: The in-situ material on which a fill is to be constructed.

Placing: Placing shall mean spreading of backfilling material, watering, mixing, compacting, final grading, complying with the required tolerances and providing for testing, all in accordance with the requirements of the specification."

PSD 3 MATERIALS

PSD 3.1 CLASSIFICATION FOR EXCAVATION PURPOSES

PSD 3.1.1 Method of classifying

Add the following:

"Classification of material other than 'soft excavation' shall be agreed upon before excavation may be commenced. The contractor shall immediately inform the engineer if and when the nature of the material being excavated changes to the extent that a new classification for further excavation is warranted. Failure on the part of the contractor to advise the engineer thereof in good time shall entitle the engineer to classify, at his discretion, such excavation as may have been executed in material of a different nature."

PSD 3.3 SELECTION

PSD 3.3.1 General

Replace the second paragraph with the following:

"The Contractor shall deal selectively with materials from all excavations to ensure that no acceptable backfill or bedding material is contaminated by material unfit for use. No additional payment shall be made in this regard and all costs related to the above selection process shall be included in the applicable payment items. Should useful material be contaminated to such an extent that it is regarded as unfit for use the Contractor shall at his own cost dispose of this material and replace it with material of an equivalent standard to the acceptable in-situ material."

Add the following subclause:

PSD 4 PLANT

PSD 4.4 DETECTORS

Replace the contents of Subclause 4.4 with the following:

"The Contractor shall, for the purposes of detecting and locating underground services in accordance with the provisions of Subclause 5.4 of SABS 1200 A and Subclause 5.1.2 of SABS 1200 D, at its own cost, provide and use detecting equipment which is suitable for the detection of underground cables and pipes."

PSD 5 CONSTRUCTION

PSD 5.1 PRECAUTIONS

PSD 5.1.1 Safety

PSD 5.1.1.1 Barricading and Lighting

REPLACE "Machinery and Occupational Safety Act, 1983 (Act 6 of 1983)" WITH "Occupational Health and Safety Act, 1993 (Act 85 of 1993."

PSD 5.1.1.2 Safeguarding of Excavations

REPLACE "Machinery and Occupational Safety Act" WITH "Occupational Health and Safety Act, 1993 (Act 85 of 1993)."

Add the following to paragraph (B)(1):

"Payment for supporting the sides of excavations and trenches shall be deemed to be included in the rates tendered for excavations. No separate payment will be made in this regard and it will be the Contractor's responsibility to ensure the safety and stability of all excavations.

Where trenches have to be widened to accommodate manholes, junction boxes, etc., the cost of supporting the vertical sides of such additional excavations will be deemed to be included in the rates tendered for excavation."

Add the following to paragraph (B)(2):

"The slope of the sides of an excavation of trench may never be steeper than 60° to the horizontal and all costs incurred to slope the sides of an excavation or trench will, irrespective of the angle of the slope, be deemed to be included in the rates quoted for excavation."

PSD 5 CONSTRUCTION

PSD 5.1 PRECAUTIONS

PSD 5.1.2 Existing services

PSD 5.1.2.2 Detection, location and exposure

Replace the contents of sub subclause 5.1.2.2 with the following:

"Where no services are shown on the drawings, but the presence of such a service could be assumed within reason, the Contractor must in co-operation with the relevant authorities locate such a service before commencing construction. After locating such a service, it would be regarded as a noted service, and the Contractor will be responsible for any costs arising from damages to the service due to the construction activities of the contractor."

"The exposure by the Contractor of underground services, as required in terms of Subclause 5.4 of SABS 1200 A (as amended) shall be carried out by careful hand excavation at such positions and to such dimensions as are agreed to by the Engineer.

Unless otherwise instructed or agreed by the Engineer, no service shall be left exposed after its exact position has been determined and all excavations carried out for the purposes of exposing underground services shall be promptly backfilled and compacted to the following densities:

(a) In roadways : 98% Mod AASHTO density; and

(b) In all other areas : 93% Mod AASHTO density.

Where hand excavations to expose underground services have to be carried out in roadways, the Contractor shall reinstate the road layerworks in accordance with the provisions of Subclause 5.9 of SABS 1200DB.

Payment in respect of the exposing of the services by means of hand excavation as described above, will be made in accordance with Subclause PSD 8.3.8.1.

Payment in respect of the reinstatement of layerworks in roadways will be made in accordance with Subclause 8.3.6.1 of SABS 1200DB (as amended).

PSD 5.1.2.3 Protection of cables

REPLACE SUBSUBCLAUSE 5.1.2.3 WITH THE FOLLOWING:

"5.1.2.3 Protection during Construction

Further to the requirements of Subclause 5.4.2 of SABS 1200A (as amended), major excavating equipment and other Equipment shall not be operated dangerously close to Known Services. Where necessary, excavation in close proximity to Known Services shall be carefully carried out with suitable hand tools, excluding picks wherever their use could damage the services. No additional payment will apply to such more difficult work.

Should any service not being a Known Service be discovered or encountered during the course of the Contract, the Contractor shall, in addition to complying with the requirements of Subclause 5.4.2 of SABS 1200A (as amended), immediately notify the Engineer thereof and implement such measures as will prevent damage of such service or, if it was damaged in the course of discovery, will prevent and minimise the occurrence of any further damage occurring."

PSD 5.2 METHODS AND PROCEDURES

PSD 5.2.2 Excavation

PSD 5.2.2.1 Excavation for general earthworks and for structures

Add the following to paragraph (b):

"Where the nature of the material precludes the above procedure, additional excavations shall be made to provide working space for the erection of form work. In general payment will be made for a working width of 600mm, but

the contractor may excavate a greater working width at no additional cost to the employer. Excavation for structures shall be measured to vertical planes 0,6m outside the concrete perimeter.

Immediately before any permanent construction is commenced, all loose material shall be removed or thoroughly compacted."

Replace paragraph (e) with the following:

"Where excavations have been carried out below the authorized levels, the contractor shall backfill such excavations to the correct level with approved gravel compacted to 95% of modified AASHTO density or to the density of the surrounding material.

Where excavations for structures in hard material have been carried out, the engineer may however require the over-excavation to the backfilled with a weak concrete if there is a danger of settlement or differential settlement of the foundations.

Where the sides of excavations against which concrete is to be cast have been over-excavated or have collapsed partially, the contractor shall retrim in the excavations if necessary and, unless other remedial measures are agreed to by the engineer, shall cast the concrete for the structure, including any additional concrete which may be required as a result of the over-excavation or partial collapse. The cost of the additional concrete or remedial measures shall be for the contractor's account."

### "PSD 5.2.2.3 Disposal

Add the following:

"The contractor shall provide the necessary spoil sites and shall make the necessary arrangements with the owner of the site where the material is disposed of and shall include in his rates for all charges in this regard and for transporting the material regardless of the distance involved."

Add the following subclause:

### PSD 5.2.3 Placing and Compaction

### Grass or other vegetation

Add the following subclause:

### **Grass**

### Sods and runners

- 1. Grass sods shall be clean of invasive plants or weeds.
- 2. Sods shall be obtained from a source approved by the Engineer/Client. Sods rejected by the Engineer/Client shall be removed from the site immediately.
- Grass shall have been grown specifically for sod purposes, mown regularly and cared for to provide an
  approved uniformity to the satisfaction of the Engineer/Client. It shall be harvested by special machines
  manufactured for this purpose to ensure an even depth of cut with sufficient root material and soil.
- Sods shall be delivered in healthy conditions and be free from weeds and disease.
- 5. Sods shall be obtained from an approved nursery. Nursery sods shall have been maintained regularly to the required quality. Nursery grass sods shall have at least a 30 mm layer of topsoil.
- 6. Runners shall be of an approved quality and free from disease or weeds.

### Seed

- 1. The seed mix quantities and purity levels shall be specified and approved by the Engineer/Client.
- 2. Seed shall be utilised for the cultivation of material for re-vegetation.
- 3. Seed shall be utilised for direct sowing.
- 4. Seed must be pre-dried then stored under cool, dry, insect free conditions until required either for cultivation in the nursery or in the rehabilitation process. Only viable, ripe seed shall be used.
- 5. Seed shall be stored at the Contractors expense.

### Commercial seed

1. All seed used shall be labelled in accordance with the Government Seed Act No. 28 of 1961 or amendment thereof. The Contractor shall furnish the Engineer/Client with signed copies of a statement from the seed merchant certifying that each container of seed delivered is fully labelled in accordance with the Government Seed Act. This certification shall appear on, or be submitted with, all copies of invoices for the seed.

2. Commercial seed shall only be used in previously disturbed areas.

#### Basic regressing

1. The Contractor shall use 2:3:2 and super-phosphate.

### Cultivated lawns

1. The Contractor shall use 3:2:3, super-phosphate or similar as approved by the Engineer/Client.

### PSD 5.2.5 Transport for Earthworks

### PSD 5.2.5.2 Overhaul

Replace the contents of this subclause with the following:

"No overhaul will be paid under sections 1200 D, 1200 DM, 1200 DK or 1200 DB or any other sections. All transport costs irrespective of distance, source and material must be included in the relevant payment clauses."

### PSD 7 TESTING

#### PSD 7.2 TAKING AND TESTING OF SAMPLES

Replace the contents of this subclause with the following:

"The contractor shall carry out sufficient tests on a regular basis as agreed between him and the engineer to determine whether the degree of compaction, and, where applicable, the quality of materials used, comply with the specification and shall submit the results of these tests to the engineer in a form approved by him. The engineer may likewise carry out such tests.

Testing by the engineer will not relieve the contractor of his obligations to provide materials and workmanship in accordance with the specifications.

The requirements of the density for a particular lot shall be deemed to be satisfied if at least 75% of the dry-density tests show values equal to or above the specified density and no single value is more than five percentage points below the specified value."

### PSD 8 MEASUREMENT AND PAYMENT

### PSD 8.1 BASIC PRINCIPLES

Add the following paragraph:

"PSD 8.1.4 Where backfilling is part of the activities described under a payment clause, the word backfilling includes the supply of the approved backfilling (regardless of the source and distance), as well as the placing of the material as described under subclause PSD 2.3."

PSD 8.1.5 Watering or harrowing of material and allowing it to dry out to obtain optimum moisture content before backfilling and compaction of fill material (whether obtained from site or commercial sources) will not be paid for separately and shall be deemed to be included in the tendered rates for Bulk Excavation or Restricted Excavation.

### PSD 8.2 COMPUTATION OF QUANTITIES

PSD 8.2.1(a)(2) Add "or residential houses", after ".... rail embankment".

### PSD 8.3 SCHEDULED ITEMS

### PSD 8.3.2 Bulk Excavation:

Add the words "temporary stockpiling, harrowing or drying the material" after the words "....... basic selection, loading ......" in the second sentence of paragraph (a).

Add the following:

#### 

The rate shall cover the cost of complying with all precautions required in terms of SABS 1200 subclause 5.1 in addition to the cost of excavation, basic selection, loading, transportation within freehaul distance, off-loading, temporary stockpiling, spreading or backfilling, watering, harrowing and drying the material, compacting, final grading complying with the requirements for tolerances, and maintaining of the stockpile, all in accordance with the

requirements of the specifications."

PSD 8.3.2.2	Cut to spoil
	The unit measurement shall be the cubic metre of material measured in-situ before excavation or measured in accordance with the provisions of 8.2.2 by taking a percentage of the loose volume in trucks. Where material from an excavation is used in fill, as well as taken to spoil the provisions of 8.2.1 shall be strictly adhered to for purposes of measurement.
	The tendered rates shall include full compensation for excavating as if in soft excavation, loading, transporting for the free-haul distance and for off-loading, spreading and trimming the spoil material at sites provided by the employer.
PSD 8.3.2.3	Extra over sub-items 8.3.2.1 and 8.3.2.2 for excavating in :
	(a) Intermediate excavation
	(b) Hard rock excavation
	The tendered rates shall include full compensation for the additional cost of excavating and processing material in the classes specified (see drawing D-1)."
PSD 8.3.3	Restricted excavation
	Add the words "harrowing or drying the material" after the words " material separate (where relevant)" in the fourth sentence of paragraph (a).
	Add the following sub-sub-item :
	"(c) Extra over item 8.3.3 (a) for hand excavation
	This item shall apply to hand excavation ordered by the engineer or where the engineer considers that, owing to circumstances, excavation by mechanical excavators is not practicable. It shall not apply to hand excavation for the purpose of trimming or finishing excavation made by mechanical means.
	The tendered rate shall include full compensation for the additional cost of excavating by means of hand tools."
PSD 8.3.4	Importing of Materials
	Amend subclause '(a)' as follows:
	Delete the words "Extra over for" from the heading. Delete the words "additional to 8.3.2 and 8.3.3" and replace with "of the work and items described in payment items 8.3.2 or 8.3.3 and including the cost of".
PSD 8.3.6	<u>Overhaul</u>
	Add the following:
	"No overhaul shall apply to material from commercial sources or to material disposed of to sites provided by the contractor or by other means employed by the contractor."
PSD 8.3.8	Existing services (see 5.1.2.2)
PSD 8.3.8.1	Location
	REPLACE ITEM 8.3.8.1 WITH THE FOLLOWING :
"8.3.8.1	Hand Excavation for Locating and Exposing Existing Services :
	(a) <u>In roadways</u>
	(b) In all other areas
	The unit of measurement shall be the cubic metre of material excavated, measured in place according to the authorised or actual dimensions of the excavation, whichever is the lesser.

The tendered rates shall cover the cost of excavating in all materials by means of hand tools within authorised dimensions and at locations approved by the Engineer in accordance with the requirements of Subclause PSA 5.4.1, for all precautionary measures necessary to protect the services from damage during excavation and

backfilling, and for subsequent backfilling and compacting. Compaction of material in all areas except in roadways shall be to 90% of the modified AASHTO density.

The tendered rate for hand excavation in roadways shall include compensation for compacting excavated or selected backfill material to 93% of modified AASHTO density (100% of modified AASHTO for sand). Reinstating layerworks and surfacing shall be measured and paid for in terms of SABS 1200DB.

The tendered rates shall also include for keeping excavations safe, for dealing with surface and subsurface water, for removing surplus excavated material from the Site, for transporting all material within the free-haul distance, and for supplying adequate supervision during both excavation and backfilling operations. Overhaul, if applicable, will be measured and paid for in terms of SABS 1200DB."

## PSD 8.3.11 <u>Grassing or other vegetation cover</u>

Replace the contents with the following:

PSD 8.3.11.2 Planting of grass sods Unit: m<sup>2</sup>

Only special type of grass with a short root system is to be used.

## Sodding

- Prior to sodding, the area shall be re-inoculated with microbes contained within natural veld sods. Veld sods of restios or grasses shall be collected, as directed by the Site Manager, and replanted in shallow hollows for this purpose.
- 2. Re-inoculation shall occur during or immediately after a rain event. Inoculation sods shall be watered lightly after placement.
- 3. Revegetation sods shall be planted in strips to reduce erosion.
- 4. Sodding shall take place on moist, rock free topsoil that has been scarified.
- Sods, once harvested or delivered from a nursery, shall not be allowed to dry out and shall be planted within 30 hours of being removed from the soil or growing medium. If necessary, they shall be lightly watered prior to planting.
- 6. Sods shall be planted so they abut tightly against one another. The first row shall be in a straight line with subsequent rows planted so that the joints are staggered. Any gaps shall either be planted with a sod reduced to the gap size or filled with topsoil.
- 7. Where grass sods are planted on slopes steeper than 1:2, wooden stakes of 500 mm diameter shall be used to anchor the sods in position.
- 8. In the absence of rain, sods shall be well watered after planting and not be allowed to deteriorate through a lack of moisture.
- 9. Where grass sods are planted in the floodplain, wooden stakes of 500 mm in diameter shall be used to anchor the sods in position.

ADD THE FOLLOWING ITEMS IN SUBCLAUSE 8.3:

#### 

The unit of measurement shall be the cubic metre of material from necessary excavations, temporarily stockpiled by the Contractor on the instructions of the Engineer, before being used in embankments or backfill. Measurements shall be taken in place in compacted embankment or backfill as the case may be.

The tendered rate shall include for the costs, additional to those provided for in PSD 8.3.2.1(a) and PSD 8.3.3 of off-loading, forming and maintaining the stockpile for as long as is required, reloading and transporting within the applicable freehaul distance from the stockpile.

Payments to the Contractor under this item will only be made in respect of that material stockpiled on the instructions of the Engineer (which instruction shall state specifically that payments for such stockpiling will be paid for under this item) and no payments will be made to the Contractor under this item in respect of materials stockpiled by the Contractor on its own volition, nor for materials necessarily stockpiled by the Contractor in consequence of the sequence of operations adopted by it in the course of executing the Works, whether such stockpiling was avoidable or otherwise."

PSD 8.3.16 Extra over items 8.3.2 and 8.3.3 for disposing of spoil material on a site provided by the contractor...... Unit: m³

The tendered rate shall include full compensation for the additional cost of providing a spoil site or other means of disposing of surplus spoil material, for transporting the material, regardless of the distance involved, for any charges for taking such material and for all other incidentals necessary to dispose of the spoil material. No overhaul shall apply.

## PSD 8.3.17 <u>Variations in compactive effort</u>: (use in conjunction with PSD 8.3.2.1(b))

(a)	Vibrator roller	Unit : m²-pass
(b)	Heavy grid roller	Unit : m²-pass
(c)	Tamping roller	Unit : m²-pass
(d) (e)	Flat wheel roller	Unit : m²-pass Unit : m²-pass

The unit of measurement shall be the square-metre-pass and shall be computed by multiplying the number of square metres to which the changed pass efforts apply by the increased or decreased number of roller passes, computed on the basis of a 200 mm layer thickness.

Where a change in the compaction effort is requested, the contractor will be compensated at the tendered rates for the above items in respect of the increased number of square-metre roller passes of each type of roller required over and above that specified in the relevant standard effort. His compensation will be decreased simultaneously, at the applicable rates, by the number of square-metre roller passes of each type of roller which is either decreased or completely left out.

The tendered rate for each additional square-metre-pass ordered by the engineer over and above the specified number of passes, shall include full compensation for all supervision, labour, plant, equipment, fuel, materials and incidentals necessary for completing the work. The same rates shall be accepted by the contractor during computation of a decrease in his compensation where the number of roller passes for each specific type or roller is decreased.

## Compaction of In-situ Material to a depth of 150 mm

The tendered rate shall include full compensation for scarifying, watering, shaping and compacting the in-situ material to 93% modified AASHTO density to a depth of 150 mm."

Allowance must also be made for the above before handover to the Client.

## PSD 8.3.21 <u>Importing topsoil from commercial sources and mixing with stockpile</u>

"The unit of measurement shall be the cubic metre and the quantity shall be calculated from the authorized dimensions.

The tendered rate shall include for importing of topsoil from commercial sources, mixing the imported topsoil with the existing topsoil stockpile.

## **EARTHWORKS (PIPE TRENCHES) (1989)**

## PSDB 3 MATERIALS

### PSDB 3.5 Backfill Materials

Add the following paragraphs:

## "(c) Cement stabilised backfilling

Backfilling shall be stabilised with 5% cement where directed by the Employer's Agent. Aggregate shall consist of approved soil or gravel containing stones not bigger than 38 mm and with a plasticity index not exceeding 10.

The soil or gravel shall be mixed with 5% cement and shall be compacted in layers of 100 mm thick to 90% of modified AASHTO density.

### (d) Soilcrete backfilling

Aggregate for soilcrete shall be mixed with 5% cement and shall consist of approved soil or gravel containing

stones not bigger than 38 mm and with a plasticity index not exceeding 10.

The soil or gravel shall be mixed in a concrete mixer with the cement and enough water to such a consistency that the mixture can be placed with vibrators to fill all voids between the pipe and the sides of the trench. Shuttering shall be used where necessary."

### PSDB 3.7 Selection

Replace the words "if he so wishes" in the first line of the second paragraph with the words "at his own cost".

### PSDB 4 PLANT

### PSDB 4.1 Excavation Equipment

Add the following paragraph:

"All excavations in excess of the specified depth and width, must be backfilled with approved backfilling material. No additional payment regarding this will be made, it will be assumed that payment is included in the tendered rates for the applicable items.

Compaction of sand must be to 100% of modified AASHTO maximum density."

### PSDB 5 CONSTRUCTION

### PSDB 5.1 Precautions

### PSDB 5.1.3 Accommodation of traffic and access to properties

Replace the semicolon and the word "and" at the end of subclause 5.1.3(a) with a full stop and replace item (b) with the following:

"(b) Where necessary to achieve compliance by the Contractor with his obligations in terms of subclause PS 8.1 of Portion 1 Specifications to provide and maintain pedestrian and vehicular access to properties affected by the works, the Contractor shall construct and maintain to the satisfaction of the Employer's Agent, such temporary access roads around, and/or steel or timber bridges over excavations in roads, pavements, entrances or accesses to properties.

Temporary pedestrian access bridges shall be at least 1,2 m wide and temporary access bridges for vehicles shall be at least 3,6 m wide. All temporary access bridges shall be fitted with handrails as well as protective mesh fencing on both sides.

On completion of the work, the Contractor shall dismantle and remove all such temporary constructions and reinstate these areas to their former condition.

Except only where the Employer's Agent has included in the Schedule of Quantities, particular payment items specifically therefore, the Contractor will not be paid directly for the construction and maintenance of temporary access roads and/or the provision and maintenance of bridges as aforementioned, and the costs thereof shall be deemed included in the Contractor's tendered rates for excavation."

## **Minimum Base Widths**

Add the following above the table.

"No allowance shall be made for the extra thickness of the collars or couplings."

Add the following after paragraph (b):

"The above is not applicable to trenches for subsurface drains.

Trenches for subsurface drains shall be excavated to the dimensions and gradients shown on the drawings or directed by the Employer's Agent."

## PSDB 5.4 Excavation

Add the following:

"All excavation for pipes must be done according to the trench excavation method, and not to the fill method. No additional payment extra over to that listed under item 8.3.3 will be made for pipes, culverts or any other structure that falls within the road or fill layers. Except where otherwise specified, trenches shall be of such a depth that the minimum cover over the pipes shall be 700 mm except at road-crossings where the minimum cover shall be 1 000 mm."

## PSDB 5.6 Backfilling

## PSDB 5.6.3 Disposal of soft Excavation Material

Replace the contents of the subclause with the following:

"Excavated material from the trench that has become surplus because of bulking, displacement by the pipe, and importation, shall be disposed of outside the site boundaries at a spoil site provided by the contractor. No additional payment will be made and all costs related to the disposal of this surplus or unsuitable material will be deemed to be included in the tendered rates for the applicable items."

## PSDB 5.7 Compaction

## PSDB 5.7.1 Areas not Subject to Traffic Loads

Replace "90%" with "95%".

Add the following sentence: -

"All non-cohesive material shall be compacted to 100% MOD AASHTO density."

## PSDB 5.7.2 Areas Subject to Traffic Loads:

Replace "93%" with "95%".

Delete "98%" and substitute "100%".

Add the following:

"All pipe trenches that fall within the road reserves shall be regarded as areas subject to traffic loads."

### PSDB 8 MEASUREMENT AND PAYMENT

## PSDB 8.1 Basic Principles

PSDB 8.1.1 Replace the last section of subclause 8.1.1 ".... surplus material along the route of the pipeline within 0,5 km of the source", with ".... surplus material within the freehaul distance of the site boundaries."

## PSDB 8.1.2 Add the following:

"In the road prism the ground surface from which depth will be measured will always (irrespective of operation sequenced) be the road bed level at centre-line."

## PSDB 8.2 Computation of Quantities

## PSDB 8.2.3 Add the following to subclause 8.2.3.

"Where two or more pipes/ducts are to be placed in one trench, the specified base width shall be calculated as follows:

The trench width for the deeper service shall be calculated according to above specifications. The effective trench width for the shallower service shall then be the difference between its specified base width and the overlap with the trench width of the deeper service.

The trench width for subsurface drains shall be as shown on the drawings."

### PSDB 8.3 Scheduled Items

## PSDB 8.3.2 Excavation

(a) Excavate in all materials for trenches, backfill, compact and dispose of surplus material. Replace "of 1, 0 m" in the first sentence of 8.3.2 (a) with "as scheduled in the schedule of quantities." Replace the words "measured to the bottom of the bedding layer" with "measured from the final road layer or surface to the pipe invert level".

Replace the phrase "within freehaul distances" with:

"at a spoil site provided by the contractor or municipal dumpsite unless scheduled otherwise" Add the following after the last sentence and before paragraph (b).

"The tendered rate for excavation of trenches for electrical cables to be supplied and installed by the Electrical Contractor shall include full compensation for liaising with the Electrical Contractor, maintaining the trenches to allow the installation of the cables, supply and installation of warning tape and backfilling once the Electrical Contractor completed the installation of cables."

Add the following after the third paragraph:

"The rate shall also cover the cost of the additional compactive effort required as specified in 5.7.2 (as amended) and the additional selection of materials as specified in 5.6.2 to comply with the requirements for areas subject to road traffic loads. No additional payment will therefor be made under item 8.3.3.3."

(b) Extra-over item (a) above for; and (c) excavate and dispose of unsuitable material from trench bottom

Replace the phrase "within freehaul distances" with:

"at a spoil site provided by the contractor or municipal dumpsite unless scheduled otherwise"

## PSDB 8.3.2 (b) Extra over item (a) for :

Add the following at the end of the existing sub-item 2:

"No payments will be made under sub-items (1) and (2) in respect of any materials measured and paid for under sub-item 3 below."

And add the following new sub-items in 8.3.2(b):

"(3) Hand excavation and backfill where ordered by the Employer's Agent:

The unit of measurement shall be the cubic metre of material, measured in place according to the authorised dimensions, or the lesser dimension excavated, which was excavated by hand on the specific prior written instructions of the Employer's Agent; provided always that the Employer's Agent's said instruction shall have stated that measurement and payment for such hand excavation will be in accordance with this item.

The tendered rate shall include full compensation for the additional cost, effort and time resulting from excavating in the respective materials using hand methods only.

The Employer's Agent shall not be obliged to authorise payment under this item in respect of any hand excavation carried out (whether ordered in writing or otherwise), which hand excavation was in any case necessary to achieve compliance by the Contractor of his obligations under the Contract to:

- (i) utilise construction appropriate to the nature of the specific parts of the Work and /or
- (ii) protect existing structures and/or services: and/or
- (iii) comply with all prevailing legislation and regulations.

The unit of measurement shall be the cubic metre of backfill material, measured in place after compaction according to the authorised dimensions, which was stabilised on the Employer's Agent's instructions in accordance with Sub-clause PSDB 3.5(c).

The tendered rate shall include full compensation for supplying the cement and for selecting, mixing, backfilling and compacting the stabilised material to 90% of modified AASHTO density.

## PSDB 8.3.3 Excavation ancillaries

PSDB 8.3.3.1 Add the following to the last paragraph:

"The freehaul distance is unlimited and no additional payment will be made for the transport of the material".

PSDB 8.3.3.3 Compaction in road reserves

Replace the heading of this subitem with the following:

"PSDB 8.3.3.3 Compaction in road crossings"

And replace the sentence "The volume will be measured as specified in 8.2.2, 8.2.3 and 8.3.3.1" with the following:

"In the case of gravel roads, determining the volume, the depth will be measured from the underside of the gravel wearing course to the top of the fill blanket, and in the case of bitumen roads, from the underside of the subbase to the top of the fill blanket, unless a selected layer is specified then it will be measured from the bottom of the selected layer. The length of the trench used for compacting the quantity for payment will be the actual length under the road."

The rest of the trench shall be backfilled as specified in Clauses 5.9.3, 5.9.4 and 5.9.5, as applicable, and payment will be made under item 8.3.6.1."

### PSDB 8.3.3.4 Overhaul

Delete this item.

No overhaul will be paid on material for the purposes of this contract and all the costs for transporting material shall be included in the applicable tendered rates and amounts.

## PSDB 8.3.4 Particular Items

## PSDB 8.3.4(a) Shore trench opposite structure or service

Replace the heading of this subitem with the following:

### "PSDB 8.3.4(a) Shore trench opposite structure or service or in restricted workspace

Add 'of the approved design, presentation of method statement' after 'if necessary', in the second sentence.

"Add the following after the last sentence:

The Contractor shall be responsible for the design of all lateral support and shoring. Designs certified by a Registered Professional Engineer including all design assumptions, calculations, drawings and method statements must be submitted to the Employer's Agent for acceptance prior to ordering material and prior to any excavation work commences.

Add the following after the last sentence:

"Separate items will be measured for depths of trenches in increments of 1,0m. The rate for each stated category shall cover the cost of shoring from ground level up to the full depth of the stated category, both sides of the trench. Payment for this item will only be made if written instructions were issued by the Employer's Agent."

## Existing services that intersect or adjoin a pipe trench

PSDB 8.3.5(b) Services that adjoin a trench

Replace the last phrase "measuring for shoring" with the words "protected by shoring". The rate for this item shall cover the cost of any necessary shoring.

Add the following:

- "(v) This rate shall also cover the additional cost of detection, exposure, hand excavation, protection, alteration and backfill material (the last if outside trench dimensions).
- (vi) An existing service which has been abandoned at the time it is crossed, will not be measured.

## PSDB 8.3.6 Finishing

## Add the following:

(a) Asphalt roads and sidewalks

The courses shall consist of 35 mm Asphalt on MC-30 bitumen on 150 mm thick G4 base to 98% Mod AASHTO, on 150 mm thick G5 subbase to 97% Mod AASHTO on 300mm sand to 100% Mod AASHTO.

The tendered rate shall also include the application of a joint sealer, Viaseal or equivalent for all joints in the asphalt.

Where hot premix cannot be obtained, road crossings shall be reinstated in accordance with the following.

Tosas Pothole Patch water resistant hot mixed cold bagged premix; or similar proven and approved

### Product to satisfy:

- Grading as per COLTO Table 4202/7 for medium continuously graded asphalt
- With a typical active filter content of 1%, and
- base bitumen as per Clause 4202 (a) (1).
- Binder content between 4,8 and 5,8% by mass and specifically formulated binder additive 0,008 to 0,009% by mass (the lower value for hot conditions and higher value for cold conditions)
- Voids in mix 3,0 to 5,0
- Marshall properties:
  - Stability (kN)8,0 to 16,0;
  - o Flow (mm) 2 to 14;
  - o Immersion Index (%) 75(min)
- All weather application possible in case of emergency, but ambient temperature should be 20 degrees centigrade and rising.
- (b) Gravel roads and sidewalks

The course shall consist of 150 mm G5 subbase compacted to 97% Mod AASHTO on 300 mm sand to 100% Mod Aashto.

### **MEDIUM-PRESSURE PIPELINES**

## PSL 2 INTERPRETATIONS

### PSL 2.1 REFERENCES

### PSL 3 MATERIAL

### PSL 3.1 GENERAL

Add the following paragraphs:

"For each type of pipe to be delivered to the site the individual pipes shall have a standard length, which shall correspond with standard lengths offered by the pipe manufacturer in his catalogue, with a maximum allowable variation in length of ± 2%.

A pipe which has a shorter or longer length than the defined standard will be rejected by the engineer, except where such non-standard lengths are required in terms of the contract and have been specifically manufactured or cut as such by the pipe manufacturer or supplier."

## PSL 3.7 OTHER TYPES OF PIPES

## PSL 3.7.1 PVC-U pipes

Replace "uPVC" with "PVC-U" in the heading and first sentence.

Replace "SABS 966" with "SANS 966: PART 1:2000 (PVC-U).

Add the following:

"All PVC-U pipes shall be class/PN 12 unless otherwise specified".

## PSL 3.10 VALVES

Replace the contents of this subclause with the following:

"Valves shall be the standard cast-iron gate valve for waterworks and shall comply with the following requirements:

- (a) Valves shall be left hand closing with a non-rising spindle and spindle cap bolt to spindle with stainless steel 316 bolt.
- (b) Valves shall be class 16.
- (c) Valves shall comply with the requirements of SABS 664/1974. "AVK" or similar approved.

- (d) Valves shall be the resilient seal type.
- (e) Valves shall be coated before delivery both internally and externally with a suitable bitumastic paint free of phenols.
- (a) The direction for turning the valve open or closing must be permanently marked on the valve."
- (b) All valve installations deeper than 350mm measured from ground level/final road level to top of spindle, to include extension spindle.

"Fire hydrants shall be the standard cast-iron fire hydrant and shall comply with the following requirements:

- (a) Fire hydrants shall be anti clockwise closing with a non-rising spindle and spindle cap and also fitted with a captop with a stainless bolt to attach the captop to the hydrant spindle. No clips, split pins or screws allowed
- (b) Fire hydrants shall be class 16
- (c) Fire hydrants shall be a type 65 "AVK or Ainsworth" or any approved by the local authority
- (d) Fire hydrants must have London Round thread outlets
- (e) Fire hydrants shall be coated before delivery both internally and externally with a suitable bitumanistic paint free of phenols.
- (f) The direction for turning the fire hydrant open or closing shall be permanently marked on the fire hydrant.

## PSL 5.6 VALVE AND HYDRANT CHAMBERS

### PSL 5.6.1 General

Replace the words "drawing L-1" in the second line with "the drawings".

## PSL 5.6.2 <u>Construction of chambers</u>

Replace the words "drawing L-1, L-2 and L-3" in the fourth line with "the drawings".

## PSL 7 <u>TESTING</u>

## PSL 7.3 STANDARD HYDRAULIC PIPE TEST

## PSL 7.3.1 <u>Test pressure and time of test</u>

## PSL 7.3.1.2 Add the following:

The test pressure for field testing shall be 1.25 times the working pressure indicated by the class of the pipe.

(e.g. Test at 15 bar for class 12 pipe).

"The engineer may order re-testing of any section of the entire network at any time after the trench is backfilled. The contractor will do the tests and any remedial work required at his own cost.

Any isolating valves and/or end caps, blank flanges, or other isolating devices required for testing mixed types of classes of pipelines which traverse over a wide range of altitudes, will be installed by the contractor at his own cost."

## PSL 8 MEASUREMENT AND PAYMENT

### PSL 8.2 SCHEDULED ITEMS

## PSL 8.2.1 Supply, lay and bed pipes complete with couplings

Add the following:

"The tendered rates shall also include full compensation for the cost of all labour, material, plant, chemicals and overheads for the complete sterilisation of the entire potable water reticulation system and the disposal of the sterilising solution as approved by the engineer."

## PSL 8.2.11 Anchor/Thrust blocks and pedestals

Add the following:

"The tendered rates shall also include the wrapping of uPVC pipes and fittings with Densopol 80 or similar approved material where the pipes and fittings are in contact with concrete."

PSL 8.2.18 

The tendered rate shall include full compensation for the location of the main pipe, excavation, removal of surplus material, cutting into the main pipe supply and installation of all fittings and constructing the connection as shown on the drawings, backfilling with clean sand and compacting to 100% Mod Aashto.

The tendered rate will also include all liaison with the local authority and closing of the water supply and notifying affected Residents

## **BEDDING (PIPES) (1983)**

#### **PSIB3.2** Selected Fill Material

Add the following:

"Where required, selected fill material used for bedding, is to be stabilised with 5% cement as specified under subclause PSDB 3.5(c)."

#### **PSLB 3.3 Bedding**

Add the following:

"PVC-U and HDPE pipes are considered to be flexible pipes for the purpose of this subclause."

#### PSLB 3.4.1 Suitable material available from trench excavation

Replace the words "(but is not required)" in the fifth line with the words "(at his own cost)".

#### PSLB 5 CONSTRUCTION

#### **PSLB 5.1** General

#### PSLB 5.1.2 Details of bedding

Add the following paragraph.

"The dimension "X" for flexible and rigid pipes as indicated on drawing LB-1 will be 150 mm unless otherwise indicated on the drawing. The dimension "X" will be measured from the invert of the pipe."

#### **PSLB 5.1.4** Replace "90%"

with:

"90% (100% for sand)".

#### PSLB 7 **TESTING**

Add the following:

#### **PSLB 7.3 Routine Testing**

The Contractor must test the bedding density and grading every 50m. A laboratory grading analysis must be undertaken every 50m. All test positions must be recorded by the Contractor and submitted with test results to the Employer's Agent within 7 Days of placing the bedding.

#### PSLB 8 **MEASUREMENT AND PAYMENT**

#### **PSLB 8.1 Principles**

#### **PSLB 8.1.1** Supply of Bedding Materials measured separately

Insert the following words after the word "placing" in the last sentence: "density testing and grading analysis every 50m,".

#### **PSLB 8.1.3** Volume of Bedding Materials

Add the following to paragraph (b):

## Scope of Work C3.1. Description of Works

"The depth of bedding as specified in PSLB 5.1.2 is applicable. The volume of bedding material displaced by the pipeline shall not be included in the calculation of the volume of bedding material."

## PSLB 8.1.5 Disposal of Displaced Material

Replace the contents of this subclause with the following:-

"Material displaced by the pipeline and by importation of material from sources other than trench excavation, shall be disposed of outside the boundaries of the site."

## I HEREBY DECLARE THAT I WILL COMPLY WITH ALL THE DESCRIPTION OF WORKS OF TENDER AS SET OUT ABOVE.

SIGNATURE:	NAME (PRINT):	
CAPACITY:	DATE:	
NAME OF FIRM:		

## C3.2.1 HEALTH AND SAFETY SPECIFICATION BY EMPLOYER

## THEEWATERSKLOOF MUNICIPALITY

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## **PURPOSE AND INTENT**

In terms of the Construction Regulation 5(1)(b), Theewaterskloof Municipality hereafter referred to as the Client, is required to compile a Project Specific Health & Safety Specification (hereafter referred to as the specification) for any intended project and provide such specification to any prospective Principal Contractor (hereafter referred to as the Contractor) and or a subcontractor who, on appointment shall submit a Project Specific Health and Safety Plan which shall address the requirements of this specification.

This specification is applicable to the Project known as Upgrading of the Villiersdorp Public Transport Hub – Phase 1.

Take note of the following specific requirements and statements:

- The Principal Contractor must, after award, immediately appoint a competent Construction Manager (as defined in Act 48 of 2000) and as prescribed in Construction Regulation 2014, Sub-regulation 8(1). The qualifications, experience and registration details must be included into the Project Health and Safety Plan. This person, in terms of these specifications, is the person accountable to ensure the agreed Project Health and Safety Plan is executed and controlled.
- Compliance to the Occupational Health and Safety Act (Act 85 of 1993) and the linked Regulations are not limited to the
  specifications and definitions contained in this document but, additionally, all new health and safety risks that get identified during
  the project lifetime must be adequately controlled as well.
- A comprehensive and documented Health and Safety Plan must be drawn up by the Principal Contractor, as a duty imposed on
  the Principal Contractor's Construction Manager. The plan must be based on the results of Health and Safety Risk Assessments
  conducted by the Client. This plan must be submitted to the Construction Health and Safety (CHS) Agent for approval prior to
  commencement of work. This plan will transform into the Project Health and Safety File, as and when project Health and Safety
  Records are added to it.
- Monitoring of compliance of Health and safety on site shall be to the requirements of the OHS Act and Regulations as well as the contents of the Health and Safety Plan(s) of the Principal Contractor and Sub- Contractors, and. ensuring compliance to these is the duty of the appointed Construction Manager of the Principal Contractor. The Client's Construction Health and Safety Agent is duty bound under CR 5(7) to manage the Principal Contractor's (hereafter referred to as the Contractor) compliance to the agreed Project Health and Safety Plan, and as such has unrestricted access to site for the duration of the project to execute this duty.

### **PURPOSE**

The purpose of this specification is to provide the Contractor with any information other than the standard conditions pertaining to construction sites which might affect the health and safety of persons at work and of persons in connection with the use of plant and machinery. It further aims to protect persons other than its employees against any potential hazards to their health and safety arising out of or in connection with the activities of persons at work during the construction work for the project.<sup>3</sup>

The purpose of this specification is further:

To brief the Principal Contractor/Contractor on the significant health and safety requirements and aspects of the project. This shall include the provision of the following information and requirements namely:

- a) safety considerations affecting the site of the project and its environment;
- b) health and safety aspects of the associated structures and equipment;
- c) required submissions on health and safety matters required from the Contractor and subcontractors;

To serve to ensure that the Contractor and Subcontractors are fully aware of what is expected

Scope of Work C3.1. Description of Works

from them with regards to the Occupational Health and Safety Act, 85 of 1993 and the Regulations made there- under including the applicable safety standards, and in particular in terms of Section 8 of the Act.

To ensure that a Contractor and Subcontractors entering into a contract with the Client achieve an acceptable level of Occupational Health & Safety performance. This specification forms an integral part of the contract agreement. The Contractor and its Subcontractors MUST make it part of any Contract that they may have with their Contractors and/or Suppliers.

## **DEFINITIONS**

The most important definitions in the Act and Regulations pertaining to this specification document are tabulated below.

Act	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993).
Agent	A competent person who acts as a representative for a client.
Client	Any person for whom construction work is performed.
Construction	A competent person responsible for the management of the physical construction
Manager	processes and the coordination, administration and management of resources on a
	construction site.
Construction site	A workplace where construction work is being performed.
Construction	A competent person responsible for supervising construction activities on a-
Supervisor	construction site.
Construction	any work in connection with -
work	• the construction, erection, alteration, renovation, repair, demolition or dismantling
	of or addition to a building or any similar structure; or
	• the construction, erection, maintenance, demolition or dismantling of any bridge,
	dam, canal, road, railway, runway, sewer or water reticulation system; or the
	moving of earth, clearing of land, the
	making of excavation, piling, or any similar civil engineering structure
	or type of work;
Contractor	An employer who performs construction work.

Designer	a competent person who-	
	prepares a design;	
	<ul> <li>checks and approves a design;</li> </ul>	
	<ul> <li>arranges for a person at work under his or her control to prepare a design, including</li> </ul>	
	an employee of that person where he or she is the employer; or	
	<ul> <li>designs temporary work, including its components;</li> </ul>	
	<ul> <li>an architect or engineer contributing to, or having overall responsibility for a design;</li> </ul>	
	b) a building services engineer designing details for fixed plant;	
	c) a surveyor specifying articles or drawing up specifications;	
	d) a contractor carrying out design work as part of a design and building	
	project; or an interior designer, shop-fitter or landscape architect;	
Excavation work	The making of any man-made cavity, trench, pit or depression formed by cutting,	
Exactation work	digging or scooping.	
Fall protection		
plan	all risks relating to working from a fall risk position, considering the nature of work	
·	undertaken;	
	<ul> <li>the procedures and methods to be applied in order to eliminate the risk of falling;</li> </ul>	
	and	
	a rescue plan and procedures.	
Health and	A file, or other record containing the information in writing required by the	
Safety File	Construction Regulations.	
Health and	A site, activity or project specific documented plan in accordance with the	
Safety	client's health and safety specification.	
Plan		
Health and	A site, activity or project specific document prepared by the client pertaining to all	
Safety	health and safety requirements related to construction	
Specification	work.	
Method	A document detailing the key activities to be performed in order to reduce	
Statement	as reasonably as practicable the hazards identified in any risk assessment.	
Principal	An employer appointed by the client to perform construction work.	
contractor		
Risk	A program to determine any risk associated with any hazard at a	
Assessment	construction site, in order to identify the steps needed to be taken to remove, reduc	
	or control such hazard.	

## ORGANIZATIONAL STRUCTURE OF HEALTH AND SAFETY RESPONSIBILITIES

All responsibilities fall under the legal requirement of legal appointment letters – each responsible person must have an appointment letter. The site must commit to establish, implement and maintain a site Organogram. The Organogram must be displayed on site.

The Principal Contractor must appoint in writing a full time Construction Manager in terms of CR8(1) who will be responsible for managing all construction work on a site.

The Principal Contractor and their appointed Contractors must appoint in writing a Construction Supervisor in terms of CR8(7) who will be responsible for supervising all construction work on site

The Principal Contractor must at all times have supervision on site for all construction activities at that point in time, which include work after hours and weekends.

The Principal Contractor must in writing appoint a Part Time Health & Safety Officer (registered with SACPCMP) to monitor the Health and Safety compliance on site.

ROLE	RESPONSIBILITIES
	The Client and/or its Agent shall ensure that the Principal Contractor,
Client	appointed in terms of Construction Regulation 5(1) (k), implements and
	maintains the agreed and approved Health and Safety Plan. Failure on the
Client Agent	part of the Client or Agent to comply with this requirement will not relieve
	the Principal Contractor from any duties under the Act and Regulations.
	The Chief Executive Officer of the Principal Contractor in terms of Section
CEO – Principle	16
Contractor	(1) of the OHS Act to ensure that the Employer (as defined in the Act)
	complies with the Act. The pro forma Legal Compliance Audit may be used
	for this purpose by the Principal Contractor or his/her appointed contractor.
	All OHS Act (85 /1993), Section 16 (2) appointee/s as detailed in their
Person responsible	respective appointment forms shall regularly, in writing, report to
for Health and	management on health and safety matters or deviations identified during
Safety	routine or ad hoc inspections/ audits. All reports shall be made available to
	the principal Contractor to become part of their site records (Health &
Section 16(2)	Safety File).
	The Construction Manager and Assistant Construction Supervisor/s
Construction	appointed in terms of Construction Regulation 8 shall regularly, in writing,
Manager or	report to their managers on health and safety matters or deviations
Assistant	identified during inspections. All reports shall be made available to the
	principal Contractor to become part of site records (Health & Safety File).
	All Health and Safety Representatives (SHE-Reps) shall act and report as
SHE	per Section 18 of the OHS Act. She Representatives shall inspect and
Representatives	monitor activities on a daily basis and report findings to the Client and
	Health and Safety manager immediately. These safety representatives
	have the right to stop any unsafe work or work due to unsafe conditions
	and report findings and reason immediately to the employer.
	Further (Specific) Supervision Responsibilities for OH&S
Other Legal	Several appointments or designations of responsible and /or competent
Appointees	people in specific areas of construction work are required by the OHS Act
	and Regulations. The following competent appointments, where

applicable, in terms of the Construction Regulations are required to ensure
compliance tothe Act, Regulations and Safety Standards.

Legislation	Appointment  Description	Required Competency
	CEO	
OHSA 16(1)	(Appointment/	Legal Liability
0110/110(1)	Declaration)	Logar Elability
OHSA 16(2)	Delegated Authority	1 Page CV & Legal Liability
CR 8(1)	Construction Manager	1 Page CV, ND Civil Engineering, US 120344.Legal Liability
0.1.0(1)	Sonoi asion manager	& HIRA
	Assistant	
CR 8(2)	Construction Manager	1 Page CV, ND Civil Engineering, US 120344 Legal Liability
		& HIRA
CR 8(7)	Construction Supervisor	1 Page CV, SAQA US 365183, Legal Liability & HIRA
	Assistant Construction	
CR 8(8)	Supervisor	1 Page CV, SAQA US 365183, Legal Liability & HIRA
		US 229994 - Assess a work site for work at height and
		prepare a fall protection plan
		US 229998 - Explain and perform fall arrest techniques
		when working at heights
CR 10(1)(a)	Fall Protection Planner	US 229995 - Install, use and perform basic rescues from fall
		arrest systems and implement the fall protection plan
		TRAINING PROVIDER TO BE ACCREDITED BY THE
		INSTITUTE FOR WORK AT HEIGHT
		US 229998 - Explain and perform fall arrest techniques
CR 10(4)(b)	Fall Arrest Equipment	when working at heights
	Inspector	TRAINING PROVIDER TO BE ACCREDITED BY THE
		INSTITUTE FOR WORK AT HEIGHT
		US 229998 - Explain and perform fall arrest techniques
	All employees working at	when working at heights
	heights	TRAINING PROVIDER TO BE ACCREDITED BY THE
		INSTITUTE FOR WORK AT HEIGHT
		US 229998 - Explain and perform fall arrest techniques
		when working at heights
	Each climbing	US 229995 - Install, use and perform basic rescues from fall
	team must	arrest systems and implement the fall protection plan
	have 1 working	

	at heights	TRAINING PROVIDER TO BE ACCREDITED BY THE
	rescue	INSTITUTE FOR WORK AT HEIGHT
	technician	
CR 13(1)(a)	Excavation	US 336961   US 254061, US 365183 Excavation
	Supervisor	Safety Training
	Vehicle/Plant	
CR 23(d)(k)	Operator &	Relevant code operator's license
	Inspector	
	1.46	
<b></b>	Lifting Machine	Relevant Operating License (Refer to Driven Machinery
DMR 18(11)	Operator &	Regulations)
	Inspector	
Legislation	Appointment	Required Competency
	Description	
DMR 18(10)(e)		
	Lifting Tackle	US 14706 - Perform basic rigging procedures
	Inspector	
		US 259622 - HSE Rep or other applicable certificate /US &
EMR 10(4)	Portable	deemed competent by company as per 3.6.2 below
2	Electric Tool	documed competent by company do per cici. 2 boton
	Inspector	
	mopodoi	US 259622 - HSE Rep or other applicable certificate /US
CR 28(a)	Stacking &	The Enter of Street applicable Solutional (1995)
01120(0)	Storage	
	Supervisor	
	Hazardous	US 259622 - HSE Rep or other applicable certificate /US &
HCS 3(3)	Chemical	training on relevant MSDS
	Substance	
	Supervisor	
	5 ap 5 : 7.55	US 229998 - Explain and perform fall arrest
GSR 13(a)	Ladder	techniqueswhen working at heights
35	Inspector	2
		US 263245 - Erect, use and dismantle accessscaffolding
CR 16(1)	Scaffolding	US 263205 - Inspect access scaffolding
	Supervisor	

		LIO 000045 Freet was and discountly account the	
	Scaffolding Erector	US 263245 - Erect, use and dismantle accessscaffoldi	ng
		US 263245 - Erect, use and dismantle accessscaffoldi	ng
	Scaffolding Inspector	US 263205 - Inspect access scaffolding	
OHSA 8	Hand Tools Inspector	US 259622 - HSE Rep or other applicable certificate /	JS
OHSA 8	PPE Inspector	US 259622 - HSE Rep or other applicable certificate /	JS
		Aligned to US 258923 - Ensure safety at road w	vorks
OHSA 8	Flagman	inurban areas	
		US 258923 – South African Road Federation (TrafficS	afety
OHSA 8	Traffic Safety Officer	Officer course)	
CR 8(5)	HSE Officer	HSE Qualification NQF Level 5 & SACP CHSORegistration, CV, (If making use of Candid CHSO SACPCMP Outcomes letter to be submitted with CV of mentor and SACP Registration)	dates
OD 0(4)	Diala Assassa	Risk Assessor Training US 244287   US 2443	83
CR 9(1)	Risk Assessor	US120330	
GAR 9(2)	Incident Investigator	Incident Investigation Training US 120335   US 1204	33
GSR 3(4)	First Aider	As prescribed in General Safety Regulations 3	
CR 29(h)(i)	Fire Equipment Operator &Inspector	Fire Fighting Training US 12484	
OHSA 17(1)	Health & Safety representative	HSE Representative Training US 259622	
OHSA 19(3)	H&S Committee Appointee's	N/A	
Best practice	l		
10(4)(c)(i)	Safety harness inspe	ctor Principal Contr & Contractor	actor
E.M.R 10(4)	Portable electrical eq	uipment inspector Principal Contr & Contractor	actor

C.R 29(I)	Emergency evacuation co-ordinator	Principal Contractor
		& Contractor
C.R 29(i)	Fire marshal	Principal Contractor
		& Contractor

Legal appointment lists may be used as a reference or tool to determine which components of the Act and Regulations would be applicable. This list shall not be assumed to be exhaustive.

### APPLICATIONS AND INTERPRETATION

The Occupational Health and Safety Act and all its Regulations, with the exception of the Construction Regulations, distinguish between the roles, responsibilities and functions of employers and employees respectively. It views Consultants and Contractors as employees of the "owner" of a construction or operational project, the "owner" being regarded as the employer. Only if formally agreed to by way of the written agreement in this regard between the "owner(s)" and Consultant and/or between the "owner(s)" and the Contractor(s), will these assumptions be relinquished in favour of the position agreed upon between the relevant parties.

The position taken by the Construction Regulations is that the "owner", in terms of its instructions, operates (has to operate) in the role of Client as per relevant definition. The Contractors working for the Client are seen to be in two categories, i.e. the Contractors and Subcontractors. The Contractor has to take full responsibility for the health and safety on the site of the relevant project/contract. This includes monitoring health and safety conditions and overseeing administrative measures required by the Construction Regulations from all Contractors on the project site.

Subcontractors are required to operate under the scrutiny and control (in terms of all health and safety measures which are covered in the Construction Regulations) of the Contractor. Where, for the work the Contractor will have to execute himself, practical health and safety measures are applicable, he will also be subjected to the relevant requirements with which Subcontractors have to comply with. The Contractor, however, does not have to actually fulfil such requirements in respect of any of the work/functions of any Subcontractors on the site for which he has been appointed as a Contractor. He has to, however, monitor such processes, ensuring that the requirements are complied with and that the required appointments/evaluations/inspections/assessments and tests are done and that the records are duly generated and kept as prescribed in the Construction Regulations. This has to feature clearly in the Contractors Health and Safety Plan.

## **RESPONSIBILITIES**

## A Client (Municipality) must:

- prepare a baseline risk assessment for an intended construction work project;
- prepare a suitable, sufficiently documented and coherent site-specific health and safety specification
- include the health and safety specification in the tender documents;
- ensure that potential principal contractors submitting tenders have made adequate provision for the cost of health and safety measures;
- ensure that the principal contractor to be appointed has the necessary competencies and resources to carry out the construction work safely;
- ensure before any work commences on a site that every Contractor is registered and in good standing with the compensation fund or with a licensed compensation insurer as contemplated in the Compensation for Occupational Injuries and Diseases Act, 1993 (Act No. 130 of 1993);
- appoint every Contractor in writing for the project or part thereof on the construction site;
- ensure that the Construction Work Permit (CWP) is available from the CHSA prior to any Contractors commencing any form
  of construction work
- ensure that the health and safety file contemplated in regulation 7(1)(b) is kept and maintained by the principal contractor.

### A Contractor must:

- The Contractor shall ensure that he is fully conversant with the requirements of this Specification and all relevant health and safety legislation. This Specification is not intended to supersede the Act nor the Construction Regulations or any part of either. Those sections of the Act and the Construction Regulations which apply to the scope of work to be performed by the Principal Contractor in terms of this contract (entirely or in part) will continue to be legally required of the Principal Contractor to comply with. The Principal Contractor will in no manner or means be absolved from the responsibility to comply with all applicable sections of the Act, the Construction Regulations or any Regulations proclaimed under the Act or which may perceivable be applicable to this contract;
- The Contractor shall ensure that the appointed Construction Health and Safety Officer/s are competent, resourced and have the
  support and accountability required in terms of the OHSA and Regulations, as well as the duties required by the SACPCMP.
  Resources include administrative supplies such as computers, printers, 3g cards, vehicles, means of communication, stationary
  etc.
- A principal contractor must further —
- provide and demonstrate to the client a suitable, sufficiently documented and coherent site specific health and safety plan, based
  on the client's documented health and safety specifications contemplated in regulation 5(1) (b), which plan must be applied from
  the date of commencement of and for the duration of the construction work and which must be reviewed and updated by the
  principal contractor as work progresses;
- open and keep on site a health and safety file, which must include all documentation required in terms of the Act and these Regulations, which must be made available on request to an inspector, the client, the client's agent or a contractor; and
- on appointing any other contractor, in order to ensure compliance with the provisions of the Act-
- provide contractors who are tendering to perform construction work for the principal contractor, with the relevant sections of the health and safety specifications contemplated in regulation 5(1)(b) pertaining to the construction work which has to be performed;
- ensure that potential contractors submitting tenders have made sufficient provision for health and safety measures during the construction process;
- ensure that no contractor is appointed to perform construction work unless the principal
- contractor is reasonably satisfied that the contractor that he or she intends to appoint, has the necessary competencies and resources to perform the construction work safely;
- ensure prior to work commencing on the site that every contractor is registered and in good standing with the compensation fund
  or with a licensed compensation insurer as contemplated in the Compensation for Occupational Injuries and Diseases Act, 1993;
- appoint each contractor in writing for the part of the project on the construction site;
- take reasonable steps to ensure that each contractor's health and safety plan contemplated in sub regulations (2)(a) is implemented and maintained on the construction site:
- ensure that the periodic site audits and document verification are conducted at intervals mutually agreed upon between the principal contractor and any contractor, but at least once every 30 days;
- stop any contractor from executing construction work which is not in accordance with the client's health and safety specifications and the principal contractor's health and safety plan for the site or which poses a threat to the health and safety of persons;
- where changes are brought about to the design and construction, make available sufficient health and safety information and appropriate resources to the contractor to execute the work safely; and
- discuss and negotiate with the contractor the contents of the health and safety plan contemplated in sub regulations (2)(a), and must thereafter finally approve that plan for implementation;
- ensure that a copy of his or her health and safety plan contemplated in paragraph (a), as well as the contractor's health and safety plan contemplated in sub regulation (2)(a), is available on request to an employee, an inspector, a contractor, the client or the client's agent;

- hand over a consolidated health and safety file to the client upon completion of the construction work and must, in addition to the documentation referred to in sub regulation (2)(b), include a record of all drawings, designs, materials used and other similar information concerning the completed structure:
- in addition to the documentation required in the health and safety file in terms of paragraph (c)(v) and sub regulation (2)(b), include and make available a comprehensive and updated list of all the contractors on site accountable to the principal contractor, the agreements between the parties and the type of work being done; and lastly
- ensure that all his or her conduct pre-employment, periodic and exit medical certificates of fitness specific to the construction work to be performed before and issued by an occupational medical practitioner in the form of Annexure 3.
- Failure to comply will be noted as a serious offence.

### SITE SPECIFIC INFORMATION

These specifications are applicable to the specific scope of work pertaining Upgrading of the Villiersdorp Public Transport Hub – Phase 1. The proposed scope of works involves the following:

## **CIVIL ENGINEERING**

- Site clearance to remove topsoil and unwanted material
- · Opening of existing civil services and pipelines
- · Trenching for new pipelines
- Laying of new water, stormwater, and sewer pipelines
- Connection of the new pipelines to existing infrastructure
- Testing of the new line
- Importation of soil, backfilling, and compaction
- Construction of new asphalt road surface
- Supply and installation of new kerbs and channels
- Construction of new concrete surface beds and sidewalks

The following list is an example of specific activities and considerations that may be encountered on a project. The Contractor must select the applicable and extend with items particular to the project under consideration and Site Risk Assessments, Standard Working Procedures (SWP), management and control measures and Method Statements (where necessary) have to be developed by the Contractor:

- Site Establishment including:
- Office/s
- Secure/Safe Storage and storage areas for materials, plant & equipment
- Ablution facilities
- Sheltered eating area
- Vehicle access to the site
- Dealing with existing structures.
- Location of existing Services
- Installation & maintenance of temporary construction electrical supply, lighting and equipment
- Accommodation of traffic
- Adjacent land uses and surrounding property exposures

•	Boundary & access control/public liability exposures (NB: The Employer is also responsible for the health
•	and safety of 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, lightning, allergies etc.
•	Exposure to noise
•	Exposure to vibration
•	Protection against dehydration and heat exhaustion
•	Protection from wet & cold conditions
•	Demolition
•	Dealing with HIV/Aids
•	Use of Portable Electrical Equipment including:
•	Angle grinder
•	Electrical Drilling machine
•	Skill saw
•	Welding including:
•	Arc Welding
•	Gas welding
•	Flame cutting
•	Use of LP Gas torches and appliances
•	Formwork
•	Scaffolding
•	Steel reinforcement
•	Concrete
•	Excavations
•	Work in trenches
•	Loading & Offloading of delivery trucks
•	Aggregate/sand and other materials delivery and or removal
•	Manual and mechanical handling
•	Lifting and rigging operations
•	Driving & operation of construction vehicles and mobile plant including:
•	Vibratory rollers and others
•	Plate compactor
•	Front End Loader
•	Mobile Cranes, tower cranes and the ancillary lifting tackle
•	Parking of vehicles & mobile plant
•	Towing of vehicles & mobile plant
•	Use and storage of flammable liquids and other hazardous substances. The Client and/or its Agent must
	be informed of this prior to such substances being brought on to site
•	Ergonomic hazards
•	As discovered by the Contractor's hazard identification and risk assessment
•	As discovered from any inspections and audits conducted by the Client and/or its Agent
•	As discovered from any accident/incident investigation.

NOTIFICATION TO AUTHORITIES, INTERESTED AND AFFECTED PARTIES

Notifications of Construction Work

Each Contractor must submit a Notification of Construction work, where the conditions specified under regulation 4. (1)(a-d) is triggered, 7 days prior to commencing on site to the department of employment and labour's provincial office.

### **HEALTH AND SAFETY FILE**

The Contractor must, in terms of Construction Regulation 7(2)(b), keep an Occupational Health & Safety File on site at all times that must include all documentation required in terms of the Act and Regulations and must also include a list of all Contractors on site that are accountable to the Principal Contractor and the agreements between the parties and details of work being done. A more detailed list of documents and other legal requirements that must be kept in the Health and Safety File is attached as an addendum to this document. The Health and Safety File will remain the property of the Client and/or its Agent on its behalf throughout the period of the project and shall be consolidated and handed over to the Client and/or its Agent on its behalf at the time of completion of the project.

The template for the file has been agreed and will be forward with the meeting minutes and indicated as annexure A. POLICY

The following policies must be developed, reviewed and approved:

- Occupational Health and Safety Policy
- Environmental Policy
- Alcohol and Drug Abuse Policy
- Disciplinary Policy

All the above Policies must be displayed in a conspicuous area, communicated to all employees and records of such training shall be retained in the safety file.

**OH&S PERFORMANCE** 

The Contractor is required to report monthly on his health and safety performance to the Client or its Agent. This will include but not limited to:

- Number of injuries (First aid, medical injuries, lost time injuries and fatalities)
- Number of near misses
- Number of property damages
- Lost time injury rate
- · Medical treatment cases
- First aid injury cases
- Total man-hours worked
- Man-hours without a lost time injury
- Total man-power numbers
- Total number of improvements, contravention and prohibition notices

### HEALTH AND SAFETY HAZARD IDENTIFICATION, RISK ASSESSMENT AND CONTROL

This Specification prescribes the minimum requirements for any Health and Safety Hazard Identification, Risk Assessment and Control activity during the Upgrades and Construction of Upgrading of the Villiersdorp Public Transport Hub – Phase 1. It applies to all site staff involved during the Upgrading of the Villiersdorp Public Transport Hub – Phase 1. These include the Client, his Agents, visitors and other stakeholders such as the Department of Labour (DoL)etc.

Effective Health and Safety programs are critical for all Constructioncompanies and, if implemented and managed well, is a substantial cost saving exercise through the resultant minimized losses. This includes an effective Hazard Identification, Risk Assessment and Control Program.

This Specification prescribes the minimum components required to constitute a substantially common approach to hazard identification, risk assessment and control of these in order to:

- Pro-actively assess the hazards and risks associated with all tasks performed by the Division;
- Reduce and where possible eliminate the risks that employees and equipment are exposed to;
- Create hazard awareness amongst the employees performing various tasks;
- Ensure compliance to legislation and the requirements of the client.

Risk assessment methodology

Any risk assessment methodology that is accepted in the industry or prescribed by a Client may be used but all efforts must be made to ensure that it is covering the specifics in the construction industry.

The hazard identification and risk assessment process (HIRA) is a team-process. The Contractors appointed Risk Assessor must establish the relevant HIRA team and ensure that the members are trained to understand and be competent to perform HIRA using the multiplier approach. Though the Health and Safety professional coordinates the activities of the HIRA team, the Project or Line Manager must ensure the assessed and ranked risks are controlled on his Project. All Health and Safety hazards and risks must ideally be identified and assessed per project, per process and task step in order to support the Method Statements, Safe Work Procedure and Planned Task Observation requirements.

Minimum required risk assessment processes

The following HIRA processes form part of an integrated pure risk management program and must be developed for each project:

Project Risk Assessment:

This must be conducted to encompass all the Projects Risks prior to commencement of work, covering all project specific areas, responsibilities, tasks, scope of work, method statements etc. from the project risk register;

Issue Based Risk Assessment:

This must be conducted prior to commencement of any specific work, covering all specific tasks and activities to be performed. This will include all tasks related to the scope of work, including newly identified tasks.

Daily Safe Task Instruction:

Informal risk assessments compiled by Frontline Supervisors or Foremen and discussed with employees before commencement of daily tasks.

Planned Task Observations:

Planned Task Observations (PTO) must be completed weekly by the Contractor's & subcontractor's management. After any scope change, or specification change, or equipment change, new hazards and associated risk areas need to be evaluated, controlled and communicated to the workforce. Change can be identified in the scope of work, the work environment, personnel selection / job competencies, man job specifications, laws, conventions, plant and equipment et cetera.

Conditions to consider when conducting HIRA

The HIRA process shall take the following into account when conducting hazard identification and risk assessments:

- Routine and non-routine activities;
- Activities of all persons having access to the workplace (including contractors and visitors);
- Human behaviour, capabilities and other human factors;
- Identified hazards originating outside the workplace capable of adversely affecting the health and safety of persons under the control of the organization within the workplace;
- Hazards created in the vicinity of the workplace by work-related activities under the control of the organization;
- Infrastructure, equipment and materials at the workplace, whether provided by the organization or others;
- Changes or proposed changes in the organization, its activities, or materials;
- Modifications to the Health and Safety Management system, including temporary changes, and their impacts on operations, processes and activities;
- Any applicable legal obligations relating to risk assessment and implementation of necessary controls;

• The design of work areas, processes, installations, machinery and equipment, operating procedures and work organization, including their adaptation to human capabilities.

Health risks to be included in assessments

The following health risks must also be considered when doing workplace risk assessments:

- Noise
- Dust
- Lighting
- Vibration
- Chemical Stressors
- Ergonomics

The prevalence and potential risk posed by biological stressors must be assessed by a Health and Safety Professional. These include:

- Bacteria;
- Viruses;
- Fungi;
- Parasites;
- Poisonous plants;
- Poisonous animals;
- Vectors such as mosquitoes, rats, mice, cockroaches;
- Water borne diseases;
- Air borne diseases;
- Blood borne diseases such as HIV/AIDS.

Manual material handling and repetitive action stress disorders

- Workflow design and environmental conditions must be considered;
- The posture, actions and movements required for manual handling must be considered;
- The shape, size, weight and nature of the objects must be considered;
- The distance over which the object is handled must be considered;
- The handler's age and general state of health must be considered;
- The availability and suitability of mechanical aids must be considered
- · A study of force application requirements must be done
- A study of energy consumption demands must be done Psychological stressors
- Psychological workplace stressors must be identified, for example extreme people concentrations or excessive work pressure, et cetera.
- Fire risks assessment
- Fire risks and follow on risks as a result of a fire, must be identified and assessed;
- A recognized fire authority must be consulted;
- The level of service available from the local authority must be assessed and results incorporated in the risk management plan.
- Emergency Scenarios
- Potential emergency scenarios must be identified and assessed, and emergency equipment or procedures must be supplied in relation to the risks. This includes assessing the following base emergency scenarios:
- · Political instability risks;
- · High-jacking and abduction risks;
- Theft and burglary risks;

## MONITORING AND REVIEW AND MANAGEMENT OF CHANGE

- The contractor must develop and implement a monitoring and review plan for the risk assessments.
- For any changes due to new designs, processes and incidents the specification, baseline risk assessment and SHE plan must be updated.

### **AUDITING AND INSPECTIONS**

· Periodical audit by Construction Health and Safety Agent

The Construction Health and Safety Agent will be conducting monthly audits at times agreed with the Contractor to comply with Construction Regulation 5(1)(o) to ensure that the Contractor has implemented, is adhering to and is maintaining the agreed and approved OH&S Plan (audits must be done at least once every 30 days).

· Other audits and inspections by Construction Health and Safety Agent

The Construction Health and Safety Agent reserves the right to conduct any ad hoc audits and inspections as it deems necessary.

A representative of the Contractor and the relevant Health and Safety Representative(s) (SHE- Reps) must accompany the Agent on all Audits and Inspections and may conduct their own audit/inspection simultaneously. Each party will, however, take responsibility for the results of his/her own audit/inspection results. The Agent may request a copy of the Contractor SHE Committee meeting minutes, reflecting possible recommendations made by that committee to the employer for reference purposes.

The Contractor must conduct at least monthly audits on their Subcontractors and daily regular site inspections and generate reports which must be handed to Contractor Management for their action. All inspections and audits must be available for the Client/Agent at any time. Records of the audits must be retained in the safety file for review by the Client and/or its Agent

· Actions plans must be developed for all findings recorded in the audits or inspections completed.

## INCIDENT INVESTIGATION, REPORTING AND MANAGEMENT

## Incident investigation

- The Contractor is responsible to investigate all his incidents. This will include near misses, first aid injuries, medical treatment injuries seen by a doctor and hospital or clinic cases, lost time injuries and fatalities. (General Administrative Regulation 9).
- All incidents must be recorded in the Incident Register. (General Administrative Regulation 9).
- The Contractor is responsible for the investigation of all incidents as described in Section 24 (1) (b) & (c) of the Act and keeping a record of the results of such investigations including the corrective action to prevent similar incidents in future.
- The Contractor is responsible for the investigation of all road traffic accidents relating to the construction site and keeping a record of the results of such investigations including the steps taken to prevent similar accidents in future.
- Notwithstanding the requirements of Section 24 of the Act, all incidents shall be investigated and reported on in writing, irrespective of whether such incident gave rise to injury or damage.

## Incident reporting

- The Contractor is required to notify the Construction Health and Safety Agent of all incidents immediately and then follow the Incident management reporting procedures thereafter.
- The Contractor shall further report all incidents where an employee is injured on duty to the extent that he/she:
- · Dies;
- becomes unconscious;
- loses a limb or part of a limb;
- is injured or becomes ill to such a degree that he/she is likely either to die or to suffer a permanent physical defect or likely to be unable for a period of at least 14 days either to work or continue with the activity for which he/she was usually employed.
- or where:

- a major incident occurred;
- the health or safety of any person was endangered (this could be a near miss);
- where a dangerous substance was spilled;
- the uncontrolled release of any substance under pressure took place;
- machinery or any part of machinery fractured or failed resulting in flying, falling or uncontrolled moving objects;
- machinery ran out of control.
- to the Provincial Director of the Department of Labour within seven days and at the same time to the Client or its Agent. Refer in this regard to Section 24 of the Act, Construction Regulation 5(3) & General Administrative Regulation 8.
- The Contractor is required to provide the Client and/or its Agent on its behalf with copies of all statutory reports required in terms of the Act and the Regulations;
- The Contractor is required to provide a.s.a.p. the Client and/or its Agent on its behalf with copies of all internal and external accident/incident investigation reports
- Incident Management
- The Contractor's safety officer must escort all injuries on duty to the hospital with the injured;
- Must be in possession of a completed WCL.2 form (employers report of accident), and certified ID of the injured.
- After treatment, the safety officer must ensure that he/she obtains a first medical report, from the attending Dr.
- The Contractor must ensure the injured employee honours his/her medical check-ups post treatment. All progress medical
  reports issued to the injured employee must be retained in the safety file. The Contractor must further arrange transport for the
  employee to be accompanied to the hospital when required.
- All medical reports and the investigations report must be filed in the safety file.
- An incident recall must be conducted post all injuries including near misses. An attendance register must be kept for all incident recalls.
- Risk assessment, safe work procedures, method statements and SHE Plan must be amended where required post the incident to ensure the controlled measures are strengthened to prevent a reoccurrence of the incident.

### SITE ESTABLISHMENT

Proper planning by management is an essential part of preparation and budgeting for the safe and efficient running of a construction operation. Site establishment method statements and detailed risk assessments are required for each activity to be completed linking to the construction programme.

Details regarding management of subcontractors and Suppliers are contained within the body of the specification. Competent, resourced subcontractors are to be used, with an H&S plan approval lead time of 7 days prior to Contractors being able to commence work.

It is expected that Contractors and subcontractors will respect each other's workspaces and operations and communicate with each other to arrange work where there are overlaps or adjacent activities. The following rules apply:

- All equipment and personal belongings must be locked whilst on site.
- The camp must set-up at a location to prevent flooding and collision with traffic.
- Precautions must be taken to prevent fires from starting.
- Suitable toilet for each gender and signage posted to indicate such gender will be on site for the duration. The Contractor must note the Covid-19 hygiene requirements with respect to mobile toilets.
- Provision of suitable change rooms

## SITE ACCESS AND PROTECTING THE PUBLIC AND SITE

Site security

- All people who are on site must be authorised.
- No firearms or other dangerous weapons will be allowed at this construction site.

• No people under the influence of alcohol or behaviour altering substances are allowed at this construction site.

Site boundary

Information obtained from the pre-construction information and pre-contract situational assessment will enable decisions to be made on the site layout. It is important to remember that decisions relating to the site layout and its boundaries are important in protecting the safety of the public, especially children, as well as the safety of the workforce.

Owing to the proximity of the community to the Project, a fence must be erected enclosing all construction activities. In this case:

- The fence should not be less than 1,8m high;
- The fence should not be capable of being easily climbed;
- The fence should be either close-boarded or covered with mesh not exceeding 30mm in size;
- The fence should be planned, designed and constructed to ensure that it is stable and will not fall over;
- Solid fencing/hoarding must be designed to take into account wind loading;
- Access openings should be fitted with gates which must be kept locked at all times when the site is unoccupied;
- Surveillance of the gates should be maintained when they are open;
- Fencing should be properly maintained;
- Materials should not be placed or stacked in the vicinity of the fence in such a way as to provide easily climbed access over the fence:
- Suitable warning notices should be fixed to the fence.

As part of the planning process thought should also be given to the possibility of materials or equipment falling onto persons outside the site boundaries.

- The possibility of plant, parts of plant, or loads extending beyond the site boundary and potentially hitting people or vehicles also needs to be considered;
- Lifting operations over public areas should be avoided as far as is possible.

Site layout

In addition to considerations of the site boundary, there are a range of other factors to be considered in deciding upon the site layout. Site layout plan must consider, but not limited to the following:

- · Location of sanitary facilities;
- · Parking area in relation to movement of persons;
- Security guard house;
- Illumination at night;
- Storeroom/s:
- Emergency signs and assembly area;
- Smoking areas
- Location of the construction board
- Construction access gate

### Safe access

Safe access and good visibility for plant and vehicles entering and leaving the sitemust be ensured. Where possible, pedestrians should be excluded from vehicle access ways. Trained Banksmen should be used on busy highways near public footpaths and elsewhere if reversing is necessary. One-way systems or other means of controlling site transport and avoiding the need to reverse, should be set out. The conditions of both vehicle and pedestrian routes must be maintained in good order. Suitable warning signs must be posted. Employees will not be allowed to be transported at the back of construction vehicles unless the vehicle is fitted with seatbelts and the seats are firmly secured to the vehicle.

Delivering of Material and Equipment, Signage, Flagmen and Compliance to the South African Road Traffic Signs Manual (SARTSM) Chapter 13. Plan to be Monitored and Reviewed at least monthly or as the construction programme/activities changes with proof placed on file.

## Storage areas

Location of stores and storage areas will be determined by the availability of space, the nature of the materials and any statutory requirements, e.g. in relation to highly flammable materials or explosives. Consideration must be given to suitable off-loading areas and lifting equipment. Positioning lifting appliances. It must be noted that the site has limited space with a sloping topography.

Positioning of cranes, hoists and other lifting appliances will be determined by physicalfeatures on the site (e.g. overhead lines), the building under construction.

Decanting plan requirements

- Access to the new clinic location must be controlled;
- Provision must made for people with disabilities;
- Sufficient and suitable fencing must be erected:
- · Emergency escape routes and assembly points must be considered during layout;
- Sanitary facilities, soap, water must be available;
- Toilets must be serviced at least 3 times a week
- Consideration should be given to car parking arrangements.

## **DEMOLITION WORKS**

A Contractor must appoint a competent person in writing to supervise and control of demolition works on site. A Contractor must ensure that before any demolition work is carried out, and in order to ascertain the method of demolition to be used, a detailed structural engineer survey of the structure to be demolished is carried out by a competent person and method statement on the procedure to be followed in demolishing the structure is developed by competent person. During a demolition, the competent person contemplated above must check the structural integrity of the structure at interval determined by in the method statement contemplated above, in order to avoid premature collapses.

A Contractor who performs demolition work must with regard to the structure being demolished take steps to ensure that:

- No floor, roof or other part of the structure is overloaded with debris or material in a manner that will render it unsafe;
- A reasonably practicable precaution is taken to avoid the danger of structure collapsing when any part of the framing of a framed or partly framed building is removed or when reinforced concrete is cut; and
- Precautions are taken in the form of adequate shoring or other means that may be necessary to prevent accidental collapse of any roof of any structure of the or adjoining structure.

The contractor must ensure that no person works under overhanging material or structure which has not been adequately supported, shored or braced.

Where the stability of the adjoining building, structure is likely to be affected by demolition work on a structure, take steps to ensure the stability of such structure. Erect a catch platform or net above entrance or passageways of an area where person pass or fence off the danger area which works is being performed so as to keep all persons away from the danger. The contactor must ensure no material is dropped to any point, which falls outside the exterior walls of the structure unless the area is effectively barricaded.

## **EXCAVATION AND TRENCHING**

Excavation work must to be properly planned, managed, supervised and carried out to ensure that every excavation is done with absolute safety and to ensure there is no threat of damage to any service and that the excavation remains in a safe condition for the period that it is open.

Pre-excavation

Note: All excavation work requires a permit.

Excavation work must be carried out under the supervision of a competent person who has been appointed in writing.

Planning for trenching and excavation work must as a minimum take the following into consideration:

- Location of existing services (gas, water, electricity, fibre optic cables, etc.) adjacent to or crossing the line of the trench. Mark all underground services before any excavation work commences by:
- using service plan to locate and mark underground services; and
- using locators to trace any services where there are no obvious signs of these services.
- Traffic diversions
- Hard surfaces or obstructions to be broken out.
- Limitations on plant (access, rights of way, headroom, overhead cables, bearing capacity of ground, noise restrictions)
- Possibility of flooding by surface run-off or water from broken mains
- · Presence of standing or running water
- · Suitable means of draining discharged water
- Condition and stability of adjacent structures
- Surcharge loads
- Vibrations
- Working area and room for placement of spoil and materials
- · Evidence of previous excavations in the area
- Evidence of possible hazardous contamination

Ensure that all employees involved in the digging know about safe digging practices and how to deal with damage to cables and pipes:

- Excavation by powered equipment is prohibited closer than 1.2 metres to any underground cable; do not remove tiles covering electric cables without prior approval.
- Make sure that there is an emergency plan to deal with damage to cables and pipes and a system for notifying the service owner.

Assessment of ground conditions

Prior to any excavation taking place, the ground conditions must be assessed. This can be achieved through boreholes, trial pits or information from previous or current work in the area. If none of the above is possible the ground conditions can only be examined when excavation commences. This examination must be carried out by a competent person using the initial excavation as a trial pit.

Excavation depth less than 1.25 metres

A risk assessment must be carried out to determine if a risk to employees exists, and if so, the method and type of protection to be provided. It should address, but not be limited to, the following:

- Water table Is it above or below the trench bottom?
- De-watering is dewatering required, and if so, will it affect the stability of the trench?
- Adjacent buildings or roads are adjacent buildings, roads or services liable to damage?
- Ground conditions has the type of ground been examined to determine its structure, i.e. clay, sand, silt, rock, fill or previously excavated ground?
- If any doubt exists as to the self-supporting ability of the ground it must be benched, battered or shored.

Excavation depth 1.25 metres or greater

Trenches 1.25 metres deep or greater require a protective system, unless the excavation is made entirely in stable rock. Trenching or excavation work shall not be commenced until the ground has been examined by a competent person to determine the protection required. Protection must be erected and maintained where having regard to the nature of the soil

and the slope of the side of the trench or excavation, a fall or dislodgment of earth or other material is likely to occur from a height of 1.25 metres or more so as to bury or trap a person.

The competent person must then provide a statement in writing - detailing the findings of the examination, type(s) of ground encountered, the calculations used in deciding the method of protection required. Trenches of six meters (6m) deep or greater require that the protective system be designed by a registered professional engineer or be based on tabulated data prepared and/or approved by a registered professional engineer.

### Sloping and benching

In general, the flatter the sloping or benching angle, the greater the protection. Benches are cuts in the slope that give it a stair-step appearance. There are two types of benches: simple and multiple.

Rain, vibration, and pressure from heavy equipment can make soil unstable and increase the risk of a cave-in. Sloped or benched excavations that show signs of cracks, bulges, or clumps of soil that fall away from the faces are dangerous and must be inspected by a competent person. You must immediately get out of the excavation and stay away until the competent person determines it is safe to enter.

### Shoring

Shoring and shielding systems can prevent cave-ins in excavations with or without sloped or benched faces; it requires installing aluminium hydraulic or other types of supports to prevent soil movement. The safest way to install and remove them is from outside the excavation.

Vertical shores are called uprights. They're easy to install, relatively inexpensive, and often used in stable soil or in shallow excavations that have parallel faces. Vertical shores must be sized for the excavation's dimensions and soil type.

If shoring is to be used, it must be designed by a competent person. Shoring involving major temporary works (e.g. sheet piling/dewatering) should be designed by an experienced designer with suitable professional indemnity insurance provisions.

The shoring or support system must be installed without delay as the excavation progresses. Operatives installing the system must be given clear instructions preferably recorded as drawings or sketches. The shoring must extend at least 300mm above the edge of the excavation, or a fender board of the same height provided.

## Shielding

Shields provide employees a safe work area by using trench boxes or other types of supports to protect them from collapsing soil. Shields don't prevent cave-ins but "shield" employees if a face does collapse. They are usually placed in the excavation by heavy equipment.

## Barricading

Every part of the trench or excavation where there is a likelihood of a person falling 1 metre or more must be provided with barricades or guardrails as soon as possible after excavation. Barricades or guardrails can be removed to allow access or movement of plant, or materials. Once access is no longer required, the barricades or guardrails must be re-instated. Whenever barriers are set back from the edge of a trench, all access to the excavation should be confined to the proper pathways and no materials should be stacked in the space between the barrier and the trench edge.

Where vehicles can pass close to a trench, heavy loads can endanger the trench. Traffic barriers must be provided to keep vehicle traffic from encroaching too close to the trench edge. Barriers or stop blocks are also necessary to stop cranes, dumpers tip trucks, etc. manoeuvring too close to the edge of the trench and endangering its stability. Timber baulks are effective against small wheeled machines, but taller barriers are required for larger pieces of plant.

## Backfill and compaction

- A competent person must supervise the installation, alteration, or removal of excavation support.
- Make sure that employees removing shoring after completion of work are not left in the bottom of the excavation; remove shoring
  in a manner to prevent cave-in on employees.

- Backfill consists of the placement of specified backfill material, in layers of 15 cm, in the excavations; use soil materials for backfill
  that is free of clay clods, rock or gravel larger than 6 cm. Debris waste, frozen materials and other deleterious matter of any
  dimension must be removed.
- Backfill excavations as promptly as the work permits, but not until completion of the following:
- approval of construction below finish grade;
- inspection, testing, approval, and recording location of underground utilities;
- · removal of concrete formwork; and
- removal of rubbish and debris:
- Perform the compaction of soil materials for backfills by using the specified compaction equipment that is suitable for the soil material being compacted and for use in the location of the work area.
- Control soil compaction for compliance with the percentage of maximum density for the area classification, where applicable.

Precautions

Materials falling into excavations

Make sure that the edges of the excavation are protected against falling materials by:

- providing toe boards where necessary; and
- storing excavated ground and building materials well away from the side of any excavation.

### Inspections

A competent person must inspect trenches daily, and as conditions change, before employee entry and as needed throughout the shift to ensure elimination of excavation hazards. Changing conditions include, for example, after every rainfall or hail fall, as soil conditions change or after any accidental fall of rock, earth or any other material. Stop work if the inspection shows it is not safe to continue.

Note: A competent person is an individual who is capable of identifying existing and predictable hazards or working conditions that are hazardous, unsanitary, or dangerous to employees, soil types and protective systems required, and who is authorised to take prompt corrective measures to eliminate these hazards and conditions.

## Confined Space

An employer or a user of machinery shall take steps to ensure that a confined space is entered by an employee or other person only after the air therein has been tested and evaluated by a person who is competent to pronounce on the safety thereof, and who has certified in writing that the confined space is safe and will remain safe while any person is in the confined space, taking into account the nature and duration of the work to be performed therein.

Where the provisions of above cannot be complied with the employer or user of machinery, as the case may be, shall take steps to ensure that any confined space in which there exists or is likely to exist a hazardous gas, vapour, dust or fumes, or which has or is likely to have, an oxygen content of less than 20 per cent by volume, is entered by an employee or other person only when--

The confined space is purged and ventilated to provide a safe atmosphere therein and measures necessary to maintain a safe atmosphere therein have been taken; and

The confined space has been isolated from all pipes, ducts and other communicating openings by means of effective blanking other than the shutting or locking of a valve or a cock, or, if this is not practicable, only when all valves and cocks which are a potential source of danger have been locked and securely fastened by means of chains and padlocks.

The employer or user of machinery shall take steps to ensure that the confined space in question is entered only when the employee or person entering is using breathing apparatus of a type approved by the chief inspector and, further, that--

Any employee or person entering the confined space is using a safety harness or other similar equipment, to which a rope is securely attached which reaches beyond the access to the confined space, and the free end of which is attended to by a person trained in resuscitation is and remains in attendance immediately outside the entrance of the confined space in

order to assist or remove any or persons from the confined space, if necessary; and effective apparatus for breathing and resuscitation of a type approved by the chief inspector is available immediately out side the confined space.

An employer or user of machinery shall take steps to ensure that all persons vacate a confined space on completion of any work therein where the hazardous gas, vapour, dust or fumes are of an explosive or flammable nature, an employer or user of machinery shall further take steps to ensure that such a confined space is entered only if the concentration of the gas, vapour, dust or fumes does not exceed 25 per cent of the lower explosive limit of the gas, vapour, dust or fumes concerned where the work to be performed is of such a nature that it does not create a source of ignition; or such concentration does not exceed 10 per cent of the lower explosive limit of the gas, vapour, dust or fumes where other work is performed.

### **EMERGENCY PREPAREDNESS**

The Contractor must develop a site Evacuation Plan detailing specification for the appropriate appointments for the fire-fighting team, bulk first aid and the emergency coordinating team. In addition to which, mustering points must be identified and depicted by the use of appropriate symbolic signage (SANS approved). The Emergency Evacuation Plan must be approved by the Contractor in consultation with the Client, or Clients Agents. Should the early warning fire alarm system not be integrated each zone/area must, by definition be accommodated in the site Evacuation Plan. (Ref Environmental Regulations Section 9).

The following plans must be action by the Contractor:

- The Site Manager must conduct an emergency identification exercise and establish what emergencies could possibly develop.
   He/she must then develop a detailed contingency plan and emergency procedure, taking into account any emergency plans that may already be in place.
- The Contractors must hold regular practice drills of the contingency plans and emergency procedures to test them and to familiarise employees with them.
- Contractor and subcontractors must appoint a competent person to act as Emergency Controller/Coordinator.
- A contact list of all emergency service providers (Fire Department, Ambulance, Police, Medical and Hospital, etc.) must be
  maintained and available for site personnel. An emergency situation, which is likely to require outside emergency assistance,
  may attract mass circulation, written media or electronic media attention and be harmful to the Client's reputation. No person
  may comment on the incident on site without prior approval from the Client.

Scenarios must be risk based and can include the following base emergency scenarios:

- Medical evacuation risks:
- Fire risk
- Political instability risks;
- High-jacking and abduction risks;
- Theft and burglary risks;
- · Construction mafia risks;
- Flooding risk
- Riots

Records from the emergency drills must be retained. The emergency equipment must be visible.

## TRAINING AND COMMUNICATION

The contents and syllabi of all training required by the OHSACT and Regulations must be included in the principal contractor's occupational health and safety plan. A training matrix must be developed and scheduled for all training required for the project.

General induction training

All members of the Contractor's site management, employees, essential visitors as well as all the persons appointed as responsible for occupational health and safety in terms of the Construction and other Regulations will be required to attend a general induction session.

All employees of the principal and other contractors must be in possession of proof of general induction training. This could be by means of stickers on the hardhats.

All subsequent and newly appointed employees must also be subjected to the induction training as soon as possible after the appointment but prior to starting to work onsite.

Site-specific induction training

The Contractor will be required to develop a contract work project specific induction training course based on the risk assessments for the contract work and train all employees and other contractors and their employees in this.

All employees of the Contractor and other contractors must be in possession of proof that they have attended a site-specific occupational health and safety induction training at all times.

### Communication

A risk communicate plan must be developed. This must include the platform to communicate all Health and safety risks. This can include emails, DSTI's, training, communication of SOP's and risk assessments, face to face meetings, notices and signages, toolbox talks, SHE rep meetings, community liaison, formal training etc. All communications must be recorded and saved.

## SPECIFIC OBLIGATORY REQUIREMENTS PERSONAL PROTECTIVE EQUIPMENT

Subject	Requirement
PPE needs	Need for PPE identified and prescribed in writing.
analysis	PPE remain property of Employer, not to be removed from premises
	GSR 2(4)
Head Protection	All persons on site wearing Hardhats including Contractors and Visitors (where prescribed)
Foot Protection	All employees on site wearing Safety Footwear including Gumboots for
	concrete / wet work and non-slip shoes for roof work.
	Visitors to wear same upon request or where prescribed
Eye and Face Protection	Eye and Face (also Hand and Body) Protection (Goggles, Face Shields,
	Welding Helmets etc.) used when operating the following:

	<ul> <li>Jack/ Kango Hammers</li> <li>Angle / Bench Grinders</li> <li>Electric Drills (Overhead work into concrete / cement / bricks</li> <li>Explosive Powered tools</li> <li>Concrete Vibrators / Pokers</li> <li>Hammers &amp; Chisels</li> <li>Cutting / Welding Torches</li> <li>Cutting Tools and Equipment</li> <li>Guillotines and Benders</li> <li>Shears</li> <li>Sanders and Sanding Machines</li> <li>CO2 and Arc Welding Equipment</li> <li>Skill / Bench Saws</li> </ul>
	- Spray Painting Equipment etc.
Hearing	Hearing Protectors (Muffs, plugs etc.) used when operating the
Protection	following:
	- Jack / Kango Hammers
	- Explosive Powered Tools  Wood/Aluminium Working Machines e.g. saws, planers, routers
Hand Protection	Protective Gloves worn by employees handling / using:
	- Cement / Bricks / Steel / Chemicals
	- Welding Equipment
	- Hammers & Chisels Jack / Kango Hammers etc.
Respiratory	Suitable/efficient prescribed Respirators worn correctly by employees
Protection	handling / using:
	- Dry cement
	- Dusty areas
	- Hazardous chemicals
	- Angle Grinders Spray Painting etc.
Fall Prevention	Suitable Safety harnesses / Fall Arrest Equipment correctly used by
Equipment	persons working on / in unguarded, elevated positions e.g.:
	- Scaffolding
	- Riggers
	- Lift shafts
	- Edge work
	- Ring beam edges etc.
	Other methods of fall prevention applied e.g. catch nets

Protective	All jobs requiring protective clothing (Overalls, Rain Wear, Welding
Clothing	Aprons etc.) Identified and clothing worn. Disposable overalls when
	Asbestos is handled.
PPE Issue &	Identified Equipment issued free of charge. All PPE maintained in good
Control	condition. (Regular checks).
	Workers instructed in the proper use & maintenance of PPE.
	Commitment obtained from wearer accepting conditions and to wear the
	PPE. Record of PPE issued kept on H&S File.
	PPE remain property of Employer, not to be removed from premises
	GSR 2(4)

### Scaffolding / formwork / support work

Subject	Requirement
Access/System Scaffolding	- Foundation firm / stable
	- Sufficient bracing.
	Tied to Structure/prevented from side or cross movement
	Platform boards in good condition/sufficient/secured.
	- Handrails and toe boards provided.
	- Access ladders / stairs provided.
	- Area/s under scaffolding tidy.
	- Safe/unsafe for use signs
	- Complying with OH&S Act/SABS 085
Free Standing Scaffolding	- Foundation firm / stable
	- Sufficient bracing.
	- Platform boards in good condition/sufficient/secured.
	- Handrails and toe boards provided.
	- Access ladders / stairs provided.
	- Area/s under scaffolding tidy.
	- Safe/unsafe for use signs
	- Height to base ratio correct
	- Outriggers used /tied to structure where necessary
	- Complying with OH&S Act/SABS 085
Mobile Scaffolding	- Foundation firm / stable
	- Sufficient bracing.
	- Platform boards in good condition/sufficient/secured.
	- Handrails and toe boards provided.
	- Access ladders / stairs provided.
	- Area/s under scaffolding tidy.

	- Safe/unsafe for use signs
Mobile Scaffolding	- Wheels / swivels in good condition
	- Brakes working and applied.
	- Height to base ratio correct.
	- Outriggers used where necessary
	- Complying with OH&S Act/SABS 085
Suspended Scaffolding	- Outriggers securely supported and anchored.
	- Correct No. of steel wire ropes used.
	- Platform as close as possible to the structure.
	- Handrails on all sides
	- All winches / ropes / cables / brakes inspected regularly and replaced as
	prescribed
	- Scaffolding complies with OHS Act (Act 85/93)
	Winch(es) maintained by competent person(s)
Formwork / Support Work	- All components in good condition.
	- Foundation firm / stable.
	- Adequate bracing / stability ensured.
	- Good workmanship / uprights straight and plumb.
	- Good cantilever construction.
	- Safe access provided.
	- Areas under support work tidy.
	Same standards as for system scaffolding.
Special Scaffolding	- Special Scaffolding e.g. Cantilever, Jib and Truss-out scaffolds erected to an
	acceptable standard and inspected by specialists.
Edges & Openings	- Edges barricaded to acceptable standards.
	- Manhole openings covered / barricaded.
	- Openings in floor / other openings covered, barricaded/fenced.
	- Stairs provided with handrails.
	Lift shafts barricaded / fenced off.

Subject	Requirement

Physical	Condition	/	Use	8	Stepladders - hinges/stays/braces/stiles in order.
Storage					Extension ladders - ropes/rungs/stiles/safety latch/hook in order.
					Extension / Straight ladders secured or tied at the bottom / top.
					No joined ladders used
					Wooden ladders are never painted except with varnish
					Aluminium ladders NOT to be used with electrical work
					All ladders stored on hooks / racks and not on ground.
					Ladders protrude 900 mm above landings / platforms / roof. Fixed ladders higher
					than 5 m have cages/Fall arrest system

Electricity (as part of, or additional to the manual "safety & switching procedures for electrical installations")

Subject	Requirement
Electrical Distribution Boards &	- Colour coded / numbered / symbolic sign displayed.
Earth Leakage	- Area in front kept clear and unobstructed.
Zarar Zoanago	·
	- Fitted with inside cover plate / openings blanked off / no exposed
	"live" conductors / terminals/Door kept close
	- Switches / circuit breakers identified.
	- Earth leakage protection unit fitted and operating.
	- Tested with instrument: Test results within 15 – 30 milliamps
	- Aperture/Opening/s provided for the plugging in and removal of extension leads
	without the need to open the door
	Apertures and openings used for extension leads to be protected against
	the elements and especially rain.
Electrical Installations & Wiring	Temporary wiring / extension leads in good condition / no bare or exposed
	wires. Earthing continuity / polarity correct:
	Cables protected from mechanical damage and moisture. Correct loading
	observed e.g. no heating appliance used from
	lighting circuit etc. Light fittings/lamps protected from mechanical
	damage/moisture.
	Cable arrestors in place and used inside plugs

Physical condition of Electrica	Electrical Equipment and Tools: (includes all items plugging in to a 16 Amp
Appliances & Tools	supply socket)
	- Insulation / casing in good condition.
	- Earth wire connected/intact where not of double insulated design
	- Double insulation mark indicates that no earth wire is to be connected.
	- Cord in good condition/no bare wires/secured to machine & plug. Plug in good
	condition, connected correctly and correct polarity.

#### Emergency and fire prevention and protection

Emergency and fire prevention and protection				
Fire Extinguishing Equipment	Fire Risks Identified and on record			
	The correct and adequate Fire Extinguishing Equipment available for:			
	- Offices			
	- General Stores			
	- Flammable Store			
	- Fuel Storage Tank/s and catchment well			
	- Gas Welding / Cutting operations			
	- Where flammable substances are being used / applied.			
	- * Equipment Easily Accessible			
Maintenance	Fire equipment checked minimum monthly, serviced yearly			
Location & Signs	Fire Extinguishing Equipment:			
	- Clearly visible			
	- Unobstructed			
	- Signs posted including "No Smoking" / "No Naked Lights" where required.			
	(Flammable store, Gas store, Fuel tanks etc.)			
Storage Issue & Control of	Storage Area provided for flammables with suitable doors, ventilation, bund			
Flammables (incl.Gas cylinders	etc.			
	- Flammable store neat / tidy and no Class A combustibles. Decanting of			
	flammable substances carried out in ignition free and adequately ventilated			
	area. Container bonding principles applied			
	- Only sufficient quantities issued for one task or one day's usage			
	- Separate, special gas cylinder store/storage area.			
	- Gas Cylinders stored / used / transported upright and secured in			
	trolley/cradle/structure and ventilated.			
	<ul> <li>Types of Gas Cylinders clearly identified as well as the storage area and stored separately.</li> </ul>			
	- Full cylinders stored separately from empty cylinders.			

	-	All valves, gauges, connections, threads of all vessels to be checked regularly
		for leaks.
	-	Leaking acetylene vessels to be returned to the supplier
		IMMEDIATELY.
Storage, Issue & Control of	-	HCS storage principles applied: products segregated
Hazardous Chemical Substances	-	Only approved, non-expired HCS to be used
(HCS)	-	Only the prescribed PPE shall be used as the minimum protection
	-	Provision made for leakage/spillage containment and ventilation
	_	Emergency showers/eye wash facilities provided
	_	HCS under lock & key controlled by designated person
	_	Decanted/issued in containers as prescribed
$\wedge$	-	with information/warning labels
/ <b>X</b> \	-	Disposal of unwanted HCS by accredited disposal agent
_	-	No dumping or disposal of any HCS on or inside the storage area or anywhere
		else on the project site
	_	All vessels or containers to be regularly checked for leaks

#### Tools

Subject	Requirement
Hand Tools	Shovels / Spades / Picks:
	Handles free from cracks and splinters
	Handles fit securely
	Working end sharp and true Hammers:
	Good quality handles, no pipe or reinforcing steel handles.
	Handles free from cracks and splinters
	Handles fit securely
	Chisels:
	No mushroomed heads / heads chamfered
	Not hardened
	Cutting edge sharp and square Saws:
	Teeth sharp and set correctly
	* Correct saw used for the job

Explosive Powered Tools.	- Only used by trained / authorized personnel.
	- Prescribed warning signs placed / displayed where tool is in use.
	- Work area must be properly isolated/demarcated during use of tool.
	- Inspected at least monthly by competent person and results recorded.
	- Issue and return recorded including cartridges / nails and unused cartridges /
	nails / empty shells recorded.
	Cleaned daily after use.

### Transport & materials handling equipment

Subject	Requirement			
Site Vehicles	<ul> <li>All Site Vehicles, Dumpers, Bobcats, Loaders etc.; checked daily before use by driver / operator.</li> <li>Inventory of vehicles used/operated on site</li> <li>Inspection by means of a checklist / results recorded.</li> <li>No persons riding on equipment not designed or designated for passengers.</li> <li>Site speed limit posted, enforced and not exceeded.</li> <li>Drivers / Operators trained / licensed and carrying proof.</li> <li>No unauthorized persons allowed to drive / operate equipment.</li> </ul>			
Conveyors	Conveyor belt nip points and drive gear guarded.			
252,0.0	Emergency stop/lever/brake fitted, clearly marked & accessible and tested to be functional under full load.			

### SITE PLANT AND MACHINERY

Subject	Requirement
Brick Cutting Machine	- Operator Trained.
	- Only authorized persons use the machine.
	- Emergency stop switch clearly marked and accessible.
	- Area around the machine dry and slip/trip free/clear of offcuts
	- All moving drive parts guarded/electrical supply cable protected
	- Operator using correct PPE - eye/face/hearing/foot/hands/body.

	=
Electric Arc Welder	- Welder Trained.
	Only authorized / trained persons use welder.
	- Earth cable adequately earthed to work.
	- Electrode holder in good condition/safe
	- Cables, clamps & lugs/connectors in good condition.
	- Area in which welding machine is used is dry/protected from wet.
	- Welder using correct PPE - eye/ face/foot/body/respirator.
	Correct transparent coroons & warning signs placed
Woodworking Machines	Correct transparent screens & warning signs placed
Woodworking Machines	- Operators Trained.
	- Only authorized persons use machines.
	- Provided with guards.
	- Guards used.
	- Operators using correct PPE - eye/face/feet/hearing
	- Circular saws strictly operated according to prescribed methods and settings
	Only prescribed saw blades (crosscut, ripping blade, smooth cut, aluminium)
	shall be used for various applications
Compressors	- Relief valves correctly set and locked / sealed.
	<ul> <li>Maximum Safe Working Pressure (MSWP) indicated on face of pressure gauge: not</li> </ul>
	on glass cover.
	- All drives adequately guarded.
	- Receiver/lines drained daily
	- Hoses good condition/clamped, not wired
	, , , , , , , , , , , , , , , , , , , ,
	Compressed air NEITHER used to dust off clothing/PPE/ and work areas NOR
	on bare skin.
Concrete Mixer / Batch	· · · · · · · · · · · · · · · · · · ·
Plant	- Dust abatement methods in use.
	- Operators using correct PPE - eye / hands / respirators.
	- All moving drive parts guarded.
	- Emergency stops identified / indicated and accessible.
	- Area kept clean/dry/and free from tripping and slipping hazards.
	Operator's overseer identified and crane signals displayed and used.

Gas	Welding	/	Flame	-	Only authorized/trained persons use the equipment.
Cuttir	Cutting Equipment		-	Torches and gauges in good condition.	
				-	Flashback arrestors fitted at cylinders and gauges.
				-	Hoses in good condition/correct type/all connections with clamps.
				- Cylinders stored, used and transported in upright position, secured in trolley / cra	
					/ to structure.
				-	All cylinders regularly checked for leaks, leaking cylinders returned immediately.
					Fire prevention/control methods must apply such as hot work permits.

### Plant & storage yards/site workshops specifics

Subject	Requirement
Section 8(2)(1) General  Machinery Regulation 2(1):  Supervision of the Use &  Maintenance of Machinery	<ul> <li>Person/s with specific knowledge and experience designated in writing to supervise the Use &amp; Maintenance of Machinery.</li> <li>Critical items of Machinery identified/numbered/placed on register/inventory.</li> <li>Inspection/maintenance schedules for abovementioned.</li> <li>Inspections/maintenance carried out to above schedules.</li> </ul> Results recorded.
General Machinery Regulation	·
9(2): Notices re. Operation of	
Machinery	
Pressure Equipment Regulation	- Person/s with specific knowledge and experience designated in writing to
13(1)(b): Supervision of the Use	supervise the Use &Maintenance of Pressure Equipment.
& Maintenance of Vessels under	- Pressure Equipment identified/numbered/placed on
Pressure or Pressure Equipment	register/Manufacturers plate intact.
	- Inspection/maintenance carried out according to schedule.
	Results recorded/Test certificates available.
Lock-out Procedure	Lock-out procedure in operation
Ergonomics	- Ergonomics survey conducted - results on record. Survey results
	applied.

Demarcation & Colour	- Demarcation principles applied	
Coding Colour		
County	All services, pipes, electrical installation, stop-start controls, emergence	
	controls etc. colour coded to own published or SABS standard	
	Employees trained to identify colour coding	
Portable & Bench	- Area around grinder clear/trip/slip free	
Grinders	- Bench grinders mounted securely/grinder generally in good condition/No	
	excessive vibration	
	- On/Off switch/button clearly demarcated/accessible	
	- Adequate guards in place	
	- Tool rest – secure/square/max. 2 mm gap, perpendicular to drive shaft	
	- Stone/disk - correct type and size/mounted correctly/dressed	
	Use of Eye protection enforced	
Battery Storage &	- Adequately ventilated, ignition free room/area/no smoking sign/s	
Charging	- Batteries placed on rubber/wooden surface	
	- Emergency shower/eye wash provided	
	- No acid storage in area	
	Prescribed methods in place and adhered to when charging batteries	
Ancillary Lifting	- Chain Blocks/Tirfors/jacks/mobile gantries etc. identified/ numbered on	
Equipment	register	
	- Chains in good condition/links no excessive wear/checked daily	
	- Lifting hooks – throat pop marked/safety latch fitted	
	- SWL/MML marked/displayed	
Presses/Guillotines/	Only operated by trained/authorised persons Interlocks/lockouts	
Shears	fitted/PPE worn or used at all times	

Workplace environment, health and hygiene

Subject	Requirement
Lighting	Adequate lighting in places where work is being executed e.g. stairwells and basements. Light fittings placed / installed causing no irritating/blinding glare.  Stroboscopic effect eliminated (not only reduced) where moving objects or machinery is used

Ventilation	Adequate ventilation / extraction / exhausting in hazardous areas e.g.
Ventulation	chemicals / adhesives / welding / petrol or diesel/ motors running and
	in confined spaces / basements.
	in confined spaces / basements.
Noise	Tasks identified where noise levels exceed 85 dB at any one time. All
140100	reasonable steps taken to reduce noise levels at the source.
	Hearing protection used where noise levels could not be reduced to
	below 85 db.
	below 65 db.
Heat Stress	Measures in place to prevent heat exhaustion in heat stress problem
	areas
	e.g. steel decks, when the WBGT index reaches 30. (See
	Environmental Regulation 4)
	Cold drinking water readily available at all times.
	g g
Ablutions	Sufficient hygiene facilities provided - 1 toilet per 30 employees
	(National Building Regulations prescribe chemical toilets for
	Construction sites)
	- Toilet paper available.
	- Sufficient showers provided.
	- Facilities for washing hands provided.
	Soap/cleaning agent available for washing hands.
	<ul> <li>Means of drying hands available.</li> <li>Lock-up changing facilities / area provided. Ablution facilities kept</li> </ul>
	hygienic and clean.
Eating / Cooking	g Adequate storage facilities provided.
Facilities	Weather protected eating area provided, separate from changing area.
raciiilles	Refuse bins with lids provided.
	·
	Facilities kept clean and hygienic.

Pollution Environment	of	Measures in place to minimize dust generation.  Accumulation or littering of empty cement pockets, plastic wrapping bags, packing materials etc. prevented. Spillage / discarding of oil chemicals and dieseline into storm water and other drains or into existing or newly dug holes/cavities of site expressly prohibited.	
Hazardous Che Substances	emical	All substances identified and list available e.g. acids, flammables, poisons etc. Material Safety Data Sheets (MSDS) indicating hazardous properties and emergency procedures in case of incident on file and readily available.  Substances stored safely.  Expiry dates meticulously checked where applicable.	

#### EDGE PROTECTION AND BARRICADING

The Principal Contractor must ensure that all exposed edges and openings are guarded and demarcated at all times until permanent protection has been erected. All barriers must be at a minimum height of 900mm. The Contractor has the following options when contemplating the protection of openings, slabs and edges:

- A physical barrier at the edge of the opening/slab, which must be strong enough to carry theweight of a person in the process of falling (wire will not be deemed sufficient).
- External façade scaffold (with mid rail at 450 mm) complete with a fully boarded platform at the same level as the slab with a handrail, could serve as a fall protection measure.
- A visual barrier in the form of orange webbing, at a distance of at least one meter from the actual edge of such slab, opening.
- Should none of the above be achieved, as a last resort, the Contractor must endeavour to gain exemption from Construction Regulation 10(4)(a) obtainable in writing from the Department of Labour.
- The Principal Contractor's fall protection plan must detail the following safety measures: Protection of decking edges; finished floor slab edges; stairways; floor penetrations; lift shafts; and all other openings and areas from where a person may fall.
- The placement of edge protection at deck edges must be coordinated so as to minimize the time that such edge protection is not in place:
- The removal of edge protection from temporary work decks and the subsequent replacement thereof at the finished floor edge must be systematically coordinated by the Principal Contractor.
- During the erection of temporary works, edge protection may be wavered in lieu of fall arrest equipment. The Principal Contractor and contractors' fall protection plans must include the strategies for management of edge protection and penetrations.

#### **BRICKLAYING**

The Contractor must ensure the following:

- Ensure appropriate instruction in manual handling techniques and in the placing of bricks and blocks.
- The use of gloves when lifting and/or when applying mortar may be appropriate but care should be taken to ensure that gloves are a good fit.
- Do not allow brick or block work walls to increase in height by more than 1.5 m per day.
- Keep stacks of loose bricks and blocks at a low level and check for stability.

- Safety footwear should be worn.
- Safety helmets (hard hats) may be needed in some circumstances where there is a risk of objects falling onto someone's head.
- Use protective gloves or barrier creams and avoid direct contact with mortar.
- Consider wearing eye protection when mixing mortar, especially if this is done outside on windy days.
- Ensure when using scaffold that it conforms to SANS 10085 standards
- When working at heights, the fall protection plan must be communicated to employees.

#### HOUSEKEEPING

Good housekeeping will be maintained at all times as per Construction Regulation No. 27. Poor housekeeping contributes to three major problems, namely, costly or increased accidents, fire or fire hazards and reduction in production. Good housekeeping will enhance production time.

Particular emphasis is to be placed on the following crucial elements of a construction site:

- Phase priorities and production/plant layout;
- Enclosures:
- · Pits, openings and shoring;
- Storage facilities;
- Effective, sufficient and maintained lighting or illumination;
- Principal sources of injuries e.g. stairways, runways, ramps, loose building material;
- Oil, grease, water, waste, rubble, glass, storm water;
- Colour coding;
- Demarcations:
- Pollution:
- · Waste disposal;
- · Ablution and hygiene facilities; and
- First aid.

This list must not be taken to be exclusive or exhaustive!

In promotion of environmental control all waste, rubble, scrap etc, will be disposed of at a registered dump site and records will be maintained. Where it is found to be impractical to use a registered dump site or it is not available, the Principal Contractor will ensure that the matter is brought to record with the client or his representative, after which suitable, acceptable alternatives will be sought and applied.

Dross and refuse from metals, and waste matters or by-products whose nature is such that they are poisonous or capable of fermentation, putrefaction or constituting a nuisance shall be treated or disposed of by methods approved of by an inspector.

**NOTE:** No employer (Contractor) shall require or permit any person to work at night or after hours unless there is adequate, suitable artificial lighting including support services in respect of Health and Safety.

#### LOCKOUT SYSTEMS - ELECTRICAL

A system of control shall be established in order that no unauthorized person can energize a circuit, open a valve, or activate a machine on which people are working or doing maintenance, even if equipment, plant or machinery is out of commission for any period, thus eliminating injuries and damage equipment as far as is reasonably practicable. Physical/mechanical lock-out systems shall be part of the safety system and included in training. Lockouts shall be tagged, and the system tested before commencing with any work or repairs.

#### **GENERAL**

The project under control of the Contractor shall be subject to periodic health and safety audits that will be conducted by the client at intervals agreed upon between the Contractor and the client, provided such intervals will not exceed periods of

one month. The Contractor is to ensure that he/she and all persons under his control on the construction site shall adhere to the above specifications, as non- conformance will lead to the client taking action as directed by Construction Regulation 5(1)(q).

The Contractor should note that he shall be held liable for any anomalies including costs and resulting deficiencies due to delays caused by non-conformance and/or non-compliance to the above Health and Safety Specifications and the Health and Safety Plan based on these specifications.

#### MANDATORY LISTS AND RECORDS TO BE KEPT

The following are lists of several records that are to be retained in terms of the Construction Regulations. The lists are:

- · List of appointments;
- List of record keeping responsibilities;

These lists and documents are to be used as a point of reference to determine which components of the Act would be applicable to a particular site or task or project.

List of record of responsibilities

ITEM	RECORD TO BE KEPT	RESPONSIBLE
		PERSON
1.	Application for construction work permit	Client
	to Provincial Director – Annexure 1,	
	Available on site. The	
2.	37(2) agreement between the Client and	Client, Contractor
	Contractor and Contractor and the	& subcontractor
	subcontractor.	
3.	Copy of Contractor's Health & Safety	Client
3.	Plan available	Ciletit
	on request	
	on request	

4.	Copy of Contractor's Health & Safety Plan	Contractor
	As well as each Contractor's Health &	
	Safety Plan Available on request	
5.	Health and Safety File opened and kept	All Contractors
	on site (including all documentation	
	required in terms of OHSA & Regulations	
	Available on request	
6.	Consolidated Health and Safety File	Contractor
	handed to Client on completion of	
	Construction work.	
	To include all documentation required in	
	terms of the OHSA & Regulations and	
	records of all drawings, designs,	
	materials used and similar	
	information on thestructure	
7.	Comprehensive and Updated List of all	Contractor
	subcontractors on site, the agreements	
	between the parties and the work being	
	done Included in	
	Health and Safety file and available on	
	request	

### List of records

ITEM	CR	RECORD TO BE KEPT	RESPONSIBLE PERSON
1.	8(6)	Keep record on the Health and Safety Officers	Contractor
		registration with a statutory body approved by the Chief Inspector.	
2.	9(1)	Risk Assessment - Available on site for inspection	Contractor
3.	7 (5)	Proof of Health and Safety Induction Training	Every Employee on site
4.	10(3)	Construction Manager [CR 8(1)] has latest updated version of Fall Protection Plan [CR 10(1)]	Contractor
5.	11(2)(b)	Record of inspections of the structure [First 2 years  – once every 6 months, thereafter yearly] -  Available on request	Owner of Structure

6.	11(2)(c)	Maintenance records - safety of structure -	Owner of Structure
		Available	
		on request	
7.	13(2)(h)	Record of excavation inspection - On site available	Contractor
		on request	
8.	17(11)	Suspended Platform inspection and performance	Contractor
		test records Kept on site available, on request	
9.	19(8)(c)	Material Hoist daily inspection entered and	Contractor
		signed in record book kept on the premises	
10.	19(8)(d)	Maintenance records for Material Hoist - Available	Contractor
		on site	
11.	20(8)	Records of Batch Plant maintenance and repairs	Contractor
		on site available for inspection	
12.	21(2)(g)(ii)	Issuing and collection of cartridges and nails or	Contractor
		studs (Explosive Powered Tools) recorded in	
		register – recipient signed for receipt as well as	
		return	
13.	23(1)(k)	Findings of daily inspections (prior to use) of	Contractor
		Construction Vehicles and Mobile Plant	
14.	24(d)	Record of temporary electrical installation	Contractor
		inspections [once a week] and electrical machinery	
		[daily before use] in a register and	
		kept on site	
15	29(I)	Fire Evacuation Plan	Contractor

### Acceptance

Confirmation and Acceptance	Signature	Date
Iconfirm that I have read and understood the Health and Safety Specifications as set out above.		

Iconfirm that I have read and understood and confirm my intention to comply with all the legal requirements.	
Iconfirm my acceptance and understanding of the assigned responsibilities and duties involved.	

### THEEWATERSKLOOF MUNICIPALITY

UPGRADING THE VILLIERDORP TRANSPORT HUB – PHASE 3A LED 01/2023/2024

C5 DETAIL DRAWINGS



















