



**CITY OF CAPE TOWN
ISIXEKO SASEKAPA
STAD KAAPSTAD**

Making progress possible. Together.

MEMORANDUM OF AGREEMENT

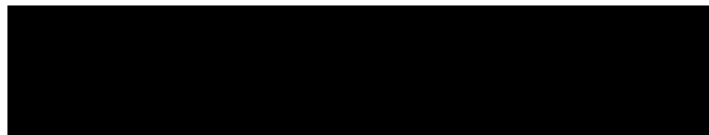
MADE AND ENTERED INTO BETWEEN

CITY OF CAPE TOWN METROPOLITAN MUNICIPALITY

And

NEJENI CONSTRUCTION AND PROJECT MANAGEMENT (PTY)

LTD



PREAMBLE

WHEREAS the City of Cape Town's Bid Adjudication Committee awarded Tender 107Q/2018/19: Term Tender for Civil Engineering Works within the City of Cape Town (the 'Tender') to Nejeni Construction and Project Management (Pty) Ltd on 29 April 2020 in accordance with resolution SCMB 49/04/20 for a period not exceeding 5 (five) years from the date of commencement of contract;

AND WHEREAS in line with resolution SCMB 49/04/20 the conclusion of the Framework Contract between the City of Cape Town and Nejeni Construction and Project Management (Pty) Ltd is subject to the conclusion of the process prescribed by section 33 of the Local Government: Municipal Finance Management Act 56 of 2003;

AND WHEREAS it is recorded that conditions of tender for the Framework Contract are the Standard Conditions of Tender as contained in Annex F of Board Notice 136 of 2015 in Government Gazette No. 38960 of 10 July 2015, Construction Industry Development Board (CIDB) Standard for Uniformity in Construction Procurement, read with the terms and conditions of the Tender.

NOW THEREFORE THE PARTIES AGREE AS FOLLOWS:

1. PARTIES

The Parties to this Contract are:

- 1.1. **The City of Cape Town**, a metropolitan municipality, established in terms of the Local Government: Municipal Structures Act. 117 of 1998 read with the Province of the Western Cape: Provincial Gazette 5588 dated 22 September 2000, as amended ("**the Employer**"), herein represented by the **City Manager or his nominee** and duly authorised hereto;
- 1.2. **Nejeni Construction and Project Management (Pty) Ltd**, a private company registered in terms of the laws of the Republic of South Africa

with registration no [REDACTED] (the "Employee"), herein represented by its duly authorised representative.

each a "Party" and together the "Parties".

2. INTERPRETATION

2.1. In the event of any conflict between the provisions of this Contract, the General Conditions of Contract for Construction Works, Third Edition, 2015, prepared by the South African Institution of Civil Engineering (the 'GCC') and any Annexure and/or Appendix attached hereto, or any other document incorporated by reference to this Contract, save to the extent expressly stated to the contrary, such conflict will be resolved by giving precedence to such different parts of this Contract in the following order of precedence:

2.1.1. first, the terms and conditions of the SCC;

2.1.2. second, the terms and conditions of the GCC;

2.1.3. third, Annexures and/or Appendices and schedules to this Contract; and

2.1.4. fourth, any other documents incorporated by reference.

2.2. The provisions of this Contract supersede and replace the provisions of any previous agreement entered into between the Parties relating to the same subject matter.

3. APPOINTMENT AND DURATION

3.1. The Employer hereby appoints the Employee to perform the Scope of Work to the Employer from the date the Service Provider receives a copy of the signed report (signed contract).

- 3.2. Unless terminated earlier in accordance with the applicable provisions as set out in the GCC or any other provision in terms of this Contract, this Contract shall endure for a period not exceeding 5 (five) years from the date of commencement of contract'.

4. MUTUAL GOOD FAITH / CO-OPERATION

- 4.1. The Parties represent and undertake to do all such things, perform all such acts and take all steps to procure the doing of all such things and the performance of all such acts, as may be necessary or incidental to give effect to the execution of this Contract.
- 4.2. The Parties shall at all times during the continuance of this Contract observe the principles of good faith towards one another in the performance of their obligations in terms of this Contract.

5. OBLIGATIONS OF THE EMPLOYER

- 5.1. The Employer undertakes to perform its obligations in accordance with the Contract, including but not limited to, the Scope of Works as set out in the conditions and specifications of the Tender, and subject to the satisfactory fulfilment of the obligations by the Employee as set out in this Contract.
- 5.2. The Employer shall monitor and evaluate the Employee's performance in respect of and in accordance with the provisions of this Contract, the GCC and any annexure and/or appendix attached hereto, or any other document incorporated by reference to this Contract, including the specifications and conditions of tender for the Tender.

6. OBLIGATIONS OF THE EMPLOYEE

- 6.1. The Employer hereby agrees and undertakes to Scope of Works as set out in this Contract, the GCC and any annexure and/or appendix attached hereto, or any other document incorporated by reference to this Contract, including the specifications and conditions of tender for the Tender.
- 6.2. The Employee will perform its obligations as expeditiously as possible and furthermore agrees and undertakes to Scope of Works in accordance with and subject to the operational requirements of the Employer.
- 6.3. The Employee will ensure that the Scope of Works will be of a satisfactory quality and fit for purpose.
- 6.4. The Employee shall, ensure that its employees, agents, representatives, sub-contractors and suppliers comply with this Contract and all applicable Laws in the execution of its obligations to provide the Scope of Works.
- 6.5. The Employee will not conduct any activity of whatsoever nature which may be detrimental to the Employer's reputation and goodwill.
- 6.6. The Employee undertakes to and in favour of the Employer that it –
 - 6.6.1. has the resources, necessary expertise and skill, capabilities and technology to execute the Scope of Works; and
 - 6.6.2. has effective, efficient and transparent financial management and control systems in place.

7. PRICING DATA

- 7.1. The Pricing Data for the Scope of Works shall be as set out in Appendix 2: Pricing Schedule.
- 7.2. The Employee shall not be entitled to any other consideration for the execution of the Scope of Works other than as provided for in this Contract, the GCC and any annexure and/or appendix hereto, or any

other document incorporated by reference to this Contract, including the specifications and conditions of tender for the Tender.

8. SIGNATURE:

FOR THE CITY OF CAPE TOWN:

Name and surname: [REDACTED]

Signature: : [REDACTED]

Designation: : *DIRECTOR INFORMAL SETTLEMENTS*

Witness 1: :

Date: [REDACTED]

Witness 2: :

FOR NEJENI CONSTRUCTION AND PROJECT MANAGEMENT (PTY) LTD

Name and surname: [REDACTED]

Signature: : [REDACTED]

Designation: [REDACTED]

Witness 1: :

Date: [REDACTED]

Witness 2: :

Part T2: Returnable Documents

T2.1 List of Returnable Documents

T2.2 Returnable Schedules

T2.1 List of Returnable Documents

The tenderer must complete the following Returnable Documents in non-erasable **black ink**:

1. Returnable Schedules that will be incorporated into the Contract

	Pages
1: COMPULSORY ENTERPRISE QUESTIONNAIRE	38:
CERTIFICATE OF INDEPENDENT TENDER DETERMINATION	39-40
3: CERTIFICATE OF AUTHORITY FOR JOINT VENTURES	41
4: DECLARATION OF TENDERER'S PAST SUPPLY CHAIN MANAGEMENT PRACTICES (MBD 8)	42
5: DECLARATION OF INTEREST – STATE EMPLOYEES (MBD 4)	43
6: <u>AUTHORISATION FOR THE DEDUCTION OF OUTSTANDING AMOUNTS OWED TO CCT</u>	45
7: <u>DECLARATION IN RESPECT OF COMPLIANCE WITH LABOUR LEGISLATION</u>	46
8: CONFIRMATION OF CCT SUPPLIER DATABASE REGISTRATION	47
9: SCHEDULE OF WORK EXPERIENCE OF TENDERER	48
10: SCHEDULE OF EQUIPMENT INSTALLATIONS AND SERVICE HISTORY	49
11: CONFIRMATION OF CONTRACTOR REGISTRATION / <u>ACCREDITATION</u>	50
12: DETAILS OF QUALIFICATIONS AND EXPERIENCE OF STAFF	51
13: SCHEDULE OF CONSTRUCTION EQUIPMENT	52
14: DETAILS OF TENDERER'S WORKSHOP FACILITIES	54
15: SCHEDULE OF SUBCONTRACTORS	55
16: HEALTH AND SAFETY PLAN	56
17: PROPOSED DEVIATIONS AND QUALIFICATIONS BY TENDERER	57
18: FUNCTIONALITY CRITERIA	58
19: REGIONS OF PREFERENCE	59
20: DECLARATION CERTIFICATE FOR LOCAL PRODUCTION AND CONTENT FOR DESIGNATED SECTORS 60-64	60-64
21: PRICE BASIS FOR IMPORTED RESOURCES	65
22: RECORD OF ADDENDA TO TENDER DOCUMENTS	66
23: PREFERENCE SCHEDULE (where preferences are granted in respect of B-BBEE contribution)	67-71
24: INFORMATION TO BE PROVIDED WITH THE TENDER	72

2. Other documents required for tender evaluation purposes

Joint Venture Agreement (if applicable) - append to Schedule 3.

Health and Safety Plan - append to Schedule 16.

Functionality Criteria - append to Schedule 18.

3. C1.1 The offer portion of the C1.1 Form of Offer and Acceptance

4. C1.2 Contract Data (Part 2)

5. C2.2 Schedules of Rates

CITY OF CAPE TOWN

INFORMAL SETTLEMENTS WATER & WASTE SERVICES: INFORMAL SETTLEMENTS & BACKYARDERS

CONTRACT NO. 107Q/2018/19

TERM TENDER FOR CIVIL ENGINEERING WORKS WITHIN THE CITY OF CAPE TOWN

1. T2.2 Returnable Schedules

2.

NOTE: Certain of the following Returnable Schedules, amended as applicable, will also have to be completed for each Works Project.

CITY OF CAPE TOWN

INFORMAL SETTLEMENTS WATER & WASTE SERVICES: INFORMAL SETTLEMENTS & BACKYARDERS

CONTRACT NO. 107Q/2018/19

TERM TENDER FOR CIVIL ENGINEERING WORKS WITHIN THE CITY OF CAPE TOWN

SCHEDULE 1 : COMPULSORY ENTERPRISE QUESTIONNAIRE

The following particulars must be furnished. In the case of a joint venture, separate enterprise questionnaires in respect of each partner must be completed and submitted.

Section 1: Name of enterprise: NETENI CONSTRUCTION & PROJECT MANAGEMENT

Section 2: VAT registration number, if any: 4790257143

Section 2a: National Treasury Central Supplier Database registration number: MAAA 0173203

Section 2b: SARS Tax Compliance Status PIN: ETCF181117

Section 3: cidb registration number, if any: 234338

Section 4: Particulars of sole proprietors and partners in partnerships

* Complete only if sole proprietor or partnership and attach separate page if more than 3 partners

Section 5: Particulars of companies and close corporations

Company registration number: 2015/064536/07

Close corporation number: 9059082140

Tax reference number: 9059082140

The undersigned, who warrants that he / she is duly authorised to do so on behalf of the enterprise, authorizes the Employer to obtain a tax clearance certificate from the South African Revenue Services that my / our tax matters are in order;

confirms that neither the name of the enterprise or the name of any partner, manager, director or other person, who wholly or partly exercises, or may exercise, control over the enterprise appears on the Register of Tender Defaulters established in terms of the Prevention and Combating of Corrupt Activities Act of 2004 or Database of Restricted Suppliers;

confirms that no partner, member, director or other person, who wholly or partly exercises, or may exercise, control over the enterprise appears, has within the last five years been convicted of fraud or corruption;

confirms that I / we are not associated, linked or involved with any other tendering entities submitting tender offers and have no other relationship with any of the tenderers or those responsible for compiling the scope of work that could cause or be interpreted as a conflict of interest; and

(iv) confirms that the contents of this questionnaire are within my personal knowledge and are to the best of my belief both true and correct.

Signed

Date

Name

Position

Enterprise name

SIGNED ON BEHALF OF TENDERER:

23 NOVEMBER 2018

GENERAL MANAGER

CLIFF SWART

NETENI CONSTRUCTION & PROJECT MANAGEMENT



NEJENI CONSTRUCTION AND PROJECT MANAGEMENT (PTY) LTD

POSTNET SUITE 9
PRIVATE BAG X04
KUILSRIVER
7679

THE FEDERATED EMPLOYER'S
MUTUAL ASSURANCE COMPANY
(RF) PTY LTD

Physical address
12th Floor
The Towers
2 Heerengracht
Cape Town
8001

Postal address
12th Floor
The Towers
2 Heerengracht
Cape Town
8001

Tel
Fax

05 July 2018

LETTER OF GOOD STANDING

COMPENSATION FOR OCCUPATIONAL INJURIES & DISEASES ACT, 1993

Policy Number: 208258

Compensation Fund BP Reference Number: 2001300225

Compensation Fund CA Reference Number: 990000577093

With reference to Section 84(1)(b) and Section 89 of the Act, we hereby certify that

NEJENI CONSTRUCTION AND PROJECT MANAGEMENT (PTY) LTD

has complied with the requirements of the above Act and, with the approval of the Compensation Commissioner and Department of Labour, is at present registered and in good standing with The Federated Employers' Mutual Assurance Company (RF) PTY LTD

Nature of Business: A02 CIVIL ENGINEERING

Note: The Nature of Business is as per the Compensation Commissioner's approval and the subsequent applicable assessment rate.

Expiry Date: 31 May 2019

This Policy also covers South African employee's outside of the borders of the Republic of South Africa for continuous periods not exceeding 12 months.

The Federated Employers' Mutual Assurance Company (RF) (Pty) Ltd shall at their own discretion institute criminal proceedings against perpetrators who unlawfully alter or deface this letter with intent to defraud or misrepresent facts contained herein.

A400CED1-418C-45DF-A8D1-950013B39B6F

The code above can be used on the FEM website
(www.femsa.co.za) to validate the Letter Of Good Standing.



Compensation Fund
WORKING FOR YOU



labour
Department
Labour
REPUBLIC OF SOUTH AFRICA

Page No. 2536/2017/1071
Director: M F Looys (Chairman), J R Boreas, P G M Coetzee, A Deyl, J N T Moolenaar, M G Bosh, M Joubert, A P N Jantzen
C S Jyvan, M A Gubbins, G M Molebetsi, K M Mofokeng, M Mofokeng, H Mofokeng, P Mofokeng, P Mofokeng
CEO: N P Masekela, Company Secretary: E J Vella

2018/11/15/19



Tax Clearance Certificate Number:
0700/2/2018/AD01870999

Tax Clearance Certificate - Good Standing

Enquiries
0800 00 SARS (7277)
Approved Date
2018-04-23
Expiry Date
2019-04-23

Company Reg
Income Tax
VAT
PAYE

Trading Name NEJENI CONSTRUCTION AND PROJECT MANAGE

It is hereby confirmed that, on the basis of the information at the disposal of the South African Revenue Service (SARS), the above-mentioned taxpayer has complied with the requirements as set out in the Tax Administration Act.

This certificate is valid until the expiry date reflected above, subject to the taxpayer's continued tax compliance. To verify the validity of this certificate, contact SARS through any of the following channels:

- via eFiling
- by calling the SARS Contact Centre
- at your nearest SARS branch

This certificate is issued in respect of the taxpayer's tax compliance status only, and does not address any other aspect of the taxpayer's affairs.

This certificate is issued free of charge by SARS



**CENTRAL SUPPLIER
DATABASE**
FOR GOVERNMENT

Report Date:

20 Aug 2018 10:45:17 AM

Report Ran By:

info@nejani.co.za

CSD REGISTRATION SUMMARY REPORT

SUPPLIER IDENTIFICATION	
Supplier Number	MAAAD173203
Is Supplier Active	Yes
Supplier type	CIPC Company
Supplier sub-type	Private Company (Pty)(Ltd)
Legal name	NEJANI CONSTRUCTION AND PROJECT MANAGEMENT
Identification type	South African Company/Close Corporation Registration Number
Current breakdown	Private Companies (Pty)(Ltd)

MAAAD173203

Yes

CIPC Company

Private Company (Pty)(Ltd)

NEJANI CONSTRUCTION AND PROJECT MANAGEMENT

South African Company/Close Corporation Registration Number

Private Companies (Pty)(Ltd)

Business status	In Business
Country of origin	South Africa
South African company registration number	
Have Bank Account	Yes
Registration date	27 Feb 2015 00:00:00
Restricted Supplier	No
Restriction Last Verification Date	20 Aug 2018 10:44:53:313

In Business	Yes
South Africa	
Have Bank Account	Yes
Registration date	27 Feb 2015 00:00:00
Restricted Supplier	No
Restriction Last Verification Date	20 Aug 2018 10:44:53:313

PREFERRED CONTACT	
Contact type	Administration
Name(s)	Chif Swart
Identification type	South African Identification Number
Preferred communication via email	Yes

Administration

Chif Swart

South African Identification Number

Yes

Email address	info@nejani.co.za
Telephone number	0219057938
Cellphone number	092 996 8300
Fax number	0868042000

Email address	info@nejani.co.za
Telephone number	0219057938
Cellphone number	092 996 8300
Fax number	0868042000

PREFERRED ADDRESS	
Address type	Physical
Address line	6 Heath Circle
Address type	Blackheath
Address type	Happy Valley
Address type	Western Cape

Physical

6 Heath Circle

Blackheath

Happy Valley

Western Cape

Municipality	City of Cape Town
City	Blackheath
Postal code	7980
Ward number	14
Country	South Africa

City of Cape Town	
Blackheath	
7980	
14	
South Africa	

PREFERRED ACCOUNT	
Bank Verification Status	Verification Failed
Is this a preferred account?	Yes
Effective date	04 Nov 2016 09:00:54:827
Bank Verification Response	Incorrect Company Name/ Surname

Verification Failed

Yes

04 Nov 2016 09:00:54:827

Incorrect Company Name/ Surname

Response date	04 Nov 2016 09:00:54:827
Business days since last update	486
Is the supplier linked to the bank	Yes

Response date	04 Nov 2016 09:00:54:827
Business days since last update	486
Is the supplier linked to the bank	Yes

TAX	
Overall Tax Status	Tax Compliant

Tax Compliant

Is this supplier a VAT vendor	Yes
-------------------------------	-----

Is this supplier a VAT vendor	Yes
-------------------------------	-----



national treasury
Department of
National Treasury
REPUBLIC OF SOUTH AFRICA

Page: 1 of 3



**CENTRAL SUPPLIER
DATABASE
FOR GOVERNMENT**

Report Date:

20 Aug 2018 10:45:17 AM

Report Ran By:

info@nsajenl.co.za

CSD REGISTRATION SUMMARY REPORT

Tips and Frequently Asked Questions (FAQ)

Identifier

CSD cannot electronically verify the identity of a supplier other than a South African Individual / Sole Proprietor (through Home Affairs) or a company registered at the Companies and Intellectual Property Commission (CIPC). For this reason, a disclaimer is displayed for supply chain practitioners to obtain supporting documentation to verify the identity and legitimacy of a supplier in these cases.

Bank

For help on how to resolve bank failures click here: I received an email stating the bank information I captured on the CSD was sent for bank account validation and could not be validated. The response received from the bank contains an error message. The various possible error messages received from the bank are highlighted in red. Search for the applicable message and follow the detailed steps associated with that error message.

T

Tax Compliance Status

For help on how to deal with tax status differences between CSD and the tax clearance certificate click here: What should a supplier do if the tax status on CSD differs from the tax clearance certificate?

Tax Compliance Expiry Date

For help on how to deal with tax status differences between CSD and the tax clearance certificate click here: How does CSD determine the tax compliance expiry date?

CIPC

Should the director/member information reflected on the CIPC registration report differs to that reflected on CSD for help click here: The active Directors/Members are not being populated on the CSD Directors/Members screen as they appear at CIPC. how can I rectify this?

State Employee

For more information pertaining to government employment status click here: Will there be verification done to identify if a supplier is a government employee?



national treasury
Department
National Treasury
REPUBLIC OF SOUTH AFRICA

Page: 3 of 3

TERM TENDER FOR CIVIL ENGINEERING WORKS WITHIN THE CITY OF CAPE TOWN

SCHEDULE 2: CERTIFICATE OF INDEPENDENT TENDER DETERMINATION

I, the undersigned, in submitting this tender for Contract No. 107Q/2018/19: TERM TENDER FOR CIVIL ENGINEERING WORKS WITHIN THE CITY OF CAPE TOWN

in response to the invitation for the tender made by the City of Cape Town, do hereby make the following statements that I certify to be true and complete in every respect:

I certify, on behalf of: NEJENI CONSTRUCTION & PROJECT MANAGEMENT that:
(Name of Tenderer)

1. I have read and I understand the contents of this Certificate;
2. I understand that this tender will be disqualified if this Certificate is found not to be true and complete in every respect;
3. I am authorized by the tenderer to sign this Certificate, and to submit this tender on behalf of the tenderer;
4. Each person whose signature appears on this tender has been authorized by the tenderer to determine the terms of, and to sign, the tender, on behalf of the tenderer;
5. For the purposes of this Certificate and this tender, I understand that the word "competitor" shall include any individual or organization, other than the tenderer whether or not affiliated with the tenderer, who:
 - (a) has been requested to submit a tender in response to this invitation to tender;
 - (b) could potentially submit a tender in response to this invitation to tender, based on their qualifications, abilities or experience; and
 - (c) provides the same goods and services as the tenderer and/or is in the same line of business as the tenderer;
6. The tenderer has arrived at this tender independently from, and without consultation, communication, agreement or arrangement with any competitor. However, communication between partners in a joint venture or consortium¹ will not be construed as collusive tendering;
7. In particular, without limiting the generality of paragraph 6 above, there has been no consultation, communication, agreement or arrangement with any competitor regarding:
 - (a) prices;
 - (b) geographical area where product or service will be rendered (market allocation);
 - (c) methods, factors or formulas used to calculate prices;
 - (d) the intention or decision to submit or not to submit a tender;
 - (e) the submission of a tender which does not meet the specifications and conditions of the tender; or
 - (f) tendering with the intention not to win the tender;

¹ 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.

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 invitation to tender relates;

9. The terms of this tender have not been, and will not be, disclosed by the tenderer, directly or indirectly, to any competitor, prior to the date and time of the official tender opening or of the awarding of the contract;

10. I am aware that, in addition and without prejudice to any other remedy provided to combat any restrictive practices related to tenders and contracts, tenders that are suspicious will be reported to the Competition Commission for investigation and possible imposition of administrative penalties in terms of section 59 of the Competition Act No. 89 of 1998 and or may be reported to the National Prosecuting Authority (NPA) for criminal investigation and or may be restricted from conducting business with the public sector for a period not exceeding ten (10) years in terms of the Prevention and Combating of Corrupt Activities Act No. 12 of 2004 or any other applicable legislation.

Signature

Date

Name

Position

CITY OF CAPE TOWN

INFORMAL SETTLEMENTS WATER & WASTE SERVICES: INFORMAL SETTLEMENTS & BACKYARDERS

CONTRACT NO. 107Q/2018/19

TERM TENDER FOR CIVIL ENGINEERING WORKS WITHIN THE CITY OF CAPE TOWN

SCHEDULE 3 : CERTIFICATE OF AUTHORITY FOR JOINT VENTURES

This returnable schedule is to be completed by joint ventures.

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

Mr/Msauthorised signatory of the company,

close corporation or partnership

....., acting in the capacity of lead partner, to sign all documents in connection with the tender offer and any contract resulting from it on our behalf.

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

Note :

A copy of the Joint Venture Agreement, showing clearly the **percentage contribution of each partner** to the joint venture, shall be appended to this schedule.

TERM TENDER FOR CIVIL ENGINEERING WORKS WITHIN THE CITY OF CAPE TOWN**SCHEDULE 4: DECLARATION OF TENDERER'S PAST SUPPLY CHAIN MANAGEMENT PRACTICES**

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, 56 of 2003, and attach it to this schedule.

The tender offer of any tenderer may be rejected if that tenderer or any of its directors/members have:
 abused the municipality's / municipal entity's supply chain management system or committed any improper conduct in relation to such system;
 been convicted for fraud or corruption during the past five years;
 willfully neglected, reneged on or failed to comply with any government, municipal or other public sector contract during the past five years; or
 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).

2 In order to give effect to the above, the following questionnaire must be completed and submitted with the bid.

Item	Question	Yes	No
1.1	Is the Tenderer or any of its directors listed on the National Treasury's Database of Restricted Suppliers as a company or person prohibited from doing business with the public sector? (Companies or persons who are listed on this Database were informed in writing of this restriction by the Accounting Officer/Authority of the institution that imposed the restriction after the <i>audi alteram partem</i> rule was applied). The Database of Restricted Suppliers now resides on the National Treasury's website www.treasury.gov.za and can be accessed by clicking on its link at the bottom of the home page.	Yes ☐	No ☒
1.1.1	If so, furnish particulars:		
1.2	Is the Tenderer 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, 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 ☒
1.2.1	If so, furnish particulars:		
1.3	Was the Tenderer 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 ☒
1.3.1	If so, furnish particulars:		
1.4	Does the Tenderer 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 ☒
1.4.1	If so, furnish particulars:		
1.5	Was any contract between the Tenderer and the municipality / municipal entity or any other organ of state terminated during the past five years on account of failure to perform on or comply with the contract?	Yes ☐	No ☒
1.5.1	If so, furnish particulars:		

I, _____, the undersigned,
 (full name in block letters)

certify that the information furnished on this declaration form is true and correct, and accept that, in addition to cancellation of a contract, action may be taken against me should this declaration prove to be false.

Signature

Date

Position

NEJENI CONSTRUCTION & PROJECT
MANAGEMENT

Name of Tenderer/Contractor

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, 56 of 2003, and attach it to this schedule.

T2.2

SCHEDULE 5: DECLARATION OF INTEREST - STATE EMPLOYEES (MBD 4)

No bid will be accepted from persons in the service of the state¹.

Any person, having a kinship with persons in the service of the state, including a blood relationship, may make an offer or offers in terms of this invitation to bid. In view of possible allegations of favouritism, should the resulting bid, or part thereof, be awarded to persons connected with or related to persons in service of the state, it is required that the tenderer or their authorised representative declare their position in relation to the evaluating/adjudicating authority.

3 In order to give effect to the above, the following questionnaire must be completed and submitted with the bid.

3.1 Full Name of tenderer or his or her representative: [REDACTED]

3.2 Identity Number: [REDACTED]

3.3 Position occupied in the Company (director, trustee, shareholder): [REDACTED]

3.4 Company or Close Corporation Registration Number: [REDACTED]

3.5 Tax Reference Number: [REDACTED]

3.6 VAT Registration Number: [REDACTED]

3.7 The names of all directors / trustees / shareholders members, their individual identity numbers and state employee numbers must be indicated in paragraph 4 below.

3.8 Are you presently in the service of the state? YES / **NO**

3.8.1 If yes, furnish particulars: [REDACTED]

3.9 Have you been in the service of the state for the past twelve months? YES / **NO**

3.9.1 If yes, furnish particulars [REDACTED]

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

3.10.1 If yes, furnish particulars: [REDACTED]

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

3.11.1 If yes, furnish particulars [REDACTED]

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

3.12.1 If yes, furnish particulars: [REDACTED]

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

3.13.1 If yes, furnish particulars:

13.4 Do you or any of the directors, trustees, managers, principle shareholders, or stakeholders of this company have any interest in any other related companies or business whether or not they are bidding for this contract? **YES** / NO

3.14.1 If yes, furnish particulars:

SA CONSTRUCTION GROUP

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

Full Name	Identity Number	State Employee Number
[REDACTED]	[REDACTED]	-
[REDACTED]	[REDACTED]	-
[REDACTED]	[REDACTED]	-
[REDACTED]	[REDACTED]	-

The tenderer hereby certifies that the information set out in this schedule and/or attached thereto is true and correct, and acknowledges that failure to properly and truthfully complete this schedule may result in the tender being disqualified, and/or (in the event that the tenderer is successful) the cancellation of the contract, restriction of the tenderer or the exercise by the employer of any other remedies available to it

Signature: [REDACTED]

Name (PRINT)

(For and on behalf of the tenderer, duly authorised)

**MSCM Regulations: "In the service of the state" means to be--
a member of--
any municipal council;
any provincial legislature; or
the national Assembly or the national Council of provinces;**

**a member of the board of directors of any municipal entity;
an official of any municipality or municipal entity;
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);
an executive member of the accounting authority of any national or provincial public entity; or
an employee of Parliament or a provincial legislature.**

*** 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.**

3.1 Full Name of tenderer or his or her representative:.....

3.2 Identity Number:

Tender

Part T2: Returnable Documents

Reference No. 107QQ/2018/19

20

T2.2
Returnable Schedules

CITY OF CAPE TOWN

INFORMAL SETTLEMENTS WATER & WASTE SERVICES: INFORMAL SETTLEMENTS & BACKYARDERS

CONTRACT NO. 107Q/2018/19

TERM TENDER FOR CIVIL ENGINEERING WORKS WITHIN THE CITY OF CAPE TOWN

SCHEDULE 6: AUTHORISATION FOR THE DEDUCTION OF OUTSTANDING AMOUNTS OWED TO THE CITY OF CAPE TOWN

To: THE CITY MANAGER, CITY OF CAPE TOWN
 From: NETEM (CONSTRUCTION & PROJECT MANAGEMENT)
 (Name of tenderer)

The tenderer:

hereby acknowledges that according to SCM Regulation 38(1)(d)(i) the City Manager may reject the tender of the tenderer if any municipal rates and taxes or municipal service charges owed by the tenderer (or any of its directors/members/partners) to the CCT, or to any other municipality or municipal entity, are in arrears for more than 3 (three) months; and

therefore hereby agrees and authorises the CCT to deduct the full amount outstanding by the Tenderer or any of its directors/members/partners from any payment due to the tenderer; and

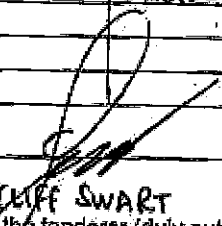
confirms the information as set out in the tables below for the purpose of giving effect to b) above;

The tenderer hereby certifies that the information set out in this schedule and/or attached hereto is true and correct, and acknowledges that failure to properly and truthfully complete this schedule may result in steps being taken against the tenderer, the tender being disqualified, and/or (in the event that the tenderer is successful) the cancellation of the contract and/or steps in terms of abuse of the Supply Chain Management Policy.

Physical Business address of the Tenderer	Municipal Account number(s)
6 HEATH CIRCLE, BLACKHEATH, 7580	221094745

If there is not enough space for all the names, please attach the additional details to the Contract Document

Name of Director / Member / Partner	Identity Number	Physical residential address of Director / Member / Partner	Municipal Account number(s)
JULIAN DANIELS	6810105273086	9 LINKS DRIVE, PINELANDS	221293514
DIANE DANIELS	6701160154081	9 LINKS DRIVE, PINELANDS	221293514
HEIKE WILKEN	609300254089	12 TDPAZ STREET, HELDERVLE	172135154
NICO WILKEN	6705125126084	12 TDPAZ STREET, HELDERVLE	172135154

Signature 
 Print name: CLIFF SWART
 On behalf of the tenderer (duly authorised)

23 NOVEMBER 2018

Date



CITY OF CAPE TOWN
ISIXEKO SASAKAPA
STAD KAAPSTAD

City Centre

13 Hartweg Square 8001
P.O. Box 650 Cape Town 8000
VAT registration number
4502193492

Page 1 of 2



NEJENI CONSTRUCTION AND PROJECTMANAGEMENT
TCC
POSTNET SUITE 8
PRIVATE BAG X04
KUNSRIVER
7579

Tax invoice number	106008795347
Customer VAT registration number	4790257143
Account number	221094745
Signature code	
Business partner number	1002233257

Computer generated copy tax invoice

Tel: 086 010 3089 - Fax: 086 010 3093
Tel: International calls +27 21 431 4701
Email: account@capecity.gov.za
Correspondence: Director: Revenue, P.O. Box 655,
Cape Town 8000
Web address: www.capecity.gov.za

Previous account balance		4260.72
Less payments		0.00
Amount due		4260.72
Latest account - see overleaf	PROCESSED	4534.92
Current amount due (b)		4534.92
Total (a) + (b) above		8797.64
Total liability		

**DROUGHT CRISIS
THINK WATER**
www.capecity.gov.za/thinkwater

Please note:

- Payment options:
(a) Debt relief Call 0860 100 007 or visit a Customer Service Centre. (b) Immediate payments: Visit www.paycity.co.za or www.paycity.co.za.
(c) Bankwide payments (EFT): Select the City of Cape Town as a bankwide beneficiary on your bank's website. Use only your nine-digit municipal account number as reference. (d) Direct deposit at Heideveld: Please present your account number 221094745 to the bank teller. (e) Cash, debit card and credit card: The City will recover the bank fees on cash, debit and/or credit card payment on the amount above R7 000 per transaction per account number. The City does not accept cash in lieu of single payments of R7 000 and below.
- Interest will be charged on all amounts still outstanding after the due date.
- You may not withhold payment, even if you have submitted a query to the City concerning this account.
- Failure to pay could result in:
(a) The City recovering their outlay on the purchasing of prepaid electricity.
(b) Your water and/or electricity supply being disconnected/terminated. Immediate reconnection of the supply will be charged and your deposit amount might be increased.

Pay points: City of Cape Town cash offices or the vendors below:

NEJENI CONSTRUCTION AND PROJECTMANAGEMENT	Account number	221094745
	Total due if not paid in cash	8797.64
	Amount due if paid in cash	8797.60
	Rounded down amount carried forward to next invoice	0.04

155552210947456



CITY OF CAPE TOWN
ISIXEKO SASEKAPA
STAD KAAPSTAD

Civic Centre
12 Hertzog Boulevard 8001
PO Box 655 Cape Town 8000
VAT Registration number
4500193497

Tax invoice number
Customer VAT registration
number
Account number
Distribution code
Business partner number

Page 1 of 2

02233333333333333333

Tax Invoice

Tel: 086 010 3089 - Fax: 086 201 1017
Tel: International calls +27 21 401 4701
E-mail: accounts@capetown.gov.za
Correspondence: Director Revenue
PO Box 655 Cape Town 8000
Web address: www.capetown.gov.za

Account number: 2233333333		Date: 08/10/2018	
Previous account balance			
		9575.60	
Less payments (22/08/2018)		Thank You	
		9575.60-	
(a)		0.00	
Latest account - see overleaf		8113.23	
Current amount due (b)		8113.23	
Total (a) + (b) above		8113.23	
Total liability		8113.23	

**DROUGHT CRISIS
THINK WATER**
www.capetown.gov.za/thinkwater

Please pay to: **BRIGADIER BC GREEN** 01 00912 01140, 81m. **WESTERN CAPE** 060008 / 008524

SOUTH AFRICAN POLICE SERVICE

1. Payment details:
(a) Debit orders: Call 0860 103 089 or visit a Customer Service Centre.
(b) Electronic payments (EFT): Select the City of Cape Town as a bank-listed beneficiary on your bank's website. Use only your nine-digit municipal account number as reference.
(c) Direct Deposit at Nedbank: Please present your account number 2233333333 to the bank teller.
(d) Cash, debit and credit card: The City will recover the bank cost on a cash, debit and/or credit card payment on the amount above R7 000 per transaction per account number. The City absorbs such costs in respect of single payments of R7 000 and below.
2. Interest will be charged on all amounts still outstanding after the due date.
3. You may not withhold payment, even if you have submitted a query to the City concerning this account.
4. Failure to pay could result in:
(a) the City recovering debt overdue on the purchasing of pre-paid electricity,
(b) your water and/or electricity supply being disconnected/restricted. Immediate reconnection of the supply after payment cannot be guaranteed. A disconnection fee will be charged and your deposit amount might be increased.

Pay points: City of Cape Town cash offices or the vendors below:

NEDBANK	SHOPRITE	Checkers	WOOLWORTHS	W	SPAR
Post Office	Pick n Pay	EasyPay	payCity	connected clients	PEPS
MR JN AND MRS DC DANIELS					
Account number: 2233333338					
Amount due if not paid in cash: 8113.23					
Amount due if paid in cash: 8113.20					
Rounded down amount carried forward to next invoice: 0.03					

91555223333333333333



INDIVIDUAL CONFIRMING ANOTHER INDIVIDUAL'S RESIDENTIAL ADDRESS

I, the undersigned;

Full names and surname

Identifying number

Residential Address

Hereby declare that I am an adult male/female (delete whichever is not applicable) residing at the above address.

I confirm that

(full names and surname of person opening the account)

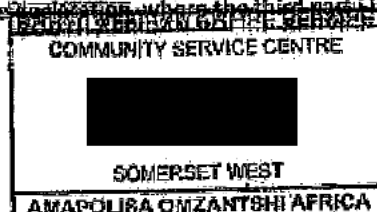
with I.D number _____ is my _____ (state relationship, e.g. mother), reside with me at the aforementioned address.

I confirm that an original Municipal Account (description of document as per the list of acceptable documents*) was produced to verify my residential address and is attached hereto.

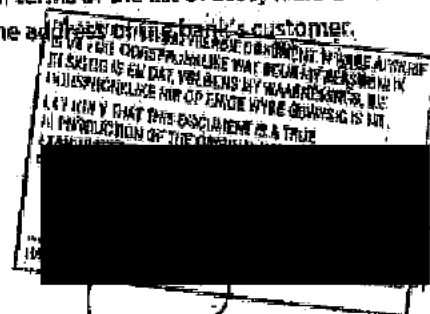
(Declarer's signature)

(Date)

*Note: A document issued by any Division or subsidiary of the bank in terms of the list of acceptable documents must accompany the declaration where the third party is verifying the address of the bank's customer.



Version 10: October 2013



GEREGISTREERDE WOON- EN POSADRES

1. Bewaar die bewys van u GEGISTREERDE WOON- EN POSADRES in hierdie sakke.

2. Indien u van adres verander het, of indien besonderhede van u huidige adres, byvoorbeeld, straat- en huisnommer, verander het, moet die vorm KENNISGEWING VAN ADRESVERANDERING, wat in die sakke byter in die identiteitsdokumente is, gebruik word om die verandering aan te meld en moet dit ingedien word by of gegee word aan die meesle streek-/denksentrum van die DEPARTMENT VAN BINNELANDSE SAKKE

REGISTERED RESIDENTIAL AND POSTAL ADDRESS

1. Keep the proof of your REGISTERED RESIDENTIAL AND POSTAL ADDRESS in this packet

2. If you have changed your address, or, if particulars of your present address, e.g. name of street and/or street number, etc., have been changed, the NOTICE OF CHANGE OF ADDRESS form in the packet at the back of this identity document must be used to report the change and it must be handed in at or posted to the nearest regional district office of the DEPARTMENT OF HOME AFFAIRS

I.D.No.

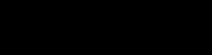


S.A. BURGER/S.A. CITIZEN

VAN/SURNAME



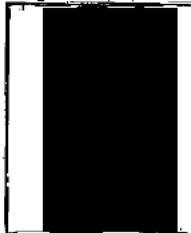
VOORNAME/FORNAME



GEBORTEDISTRIK OF-LAND/
DISTRICT OR COUNTRY OF BIRTH

SOUTH AFRICA

GEDOORTE/DATE OF BIRTH



DATUM UITGEREK
DATE ISSUED



WITTEKOPPE OP DESEK VAN DIE
KONSTITUSIE/GENERAL
JINNELANDSE SAKKE

ISSUED BY AUTHORITY OF THE
DIRECTOR-GENERAL
HOME AFFAIRS

Ek verklaar dat hierdie dokument 'n ware afskrif is van die
I certify that this document is a true reproduction copy of the original
and that I am not aware of any falsification or alteration of the original
document. My signature is on the original document and I am not aware of any falsification or alteration of the original document.

SIGNEER/

Handwriting Signature

Handwritten

SUID-AFRIKAANSE POLISIEDIENS

INTERNE OUDIT/INTERNAL AUDIT

WESTERN CAPE

SOUTH AFRICAN POLICE SERVICE

1

GEREGISTREERDE WOON- EN POSADRES

1. Bewaar die bewys van u GEREGISTREERDE WOON- EN POSADRES in hierdie folder.

2. Indien u van adres verander, of indien besonderhede van u huidige adres, byvoorbeeld post- of telefoon nommer, verander moet die VOOR KENNINGSGEWING VAN ADRES-VERANDERING, wat in die folder agter in die identiteitsdokument is, gebruik word om die verandering aan te meld. Dit moet dit geskied word by of gepos word aan die Resepte Stasie, Administrasie van die DEPARTEMENT VAN BINNELANDSE SAKE.

REGISTERED RESIDENTIAL AND POSTAL ADDRESS

1. Keep the proof of your REGISTERED RESIDENTIAL AND POSTAL ADDRESS in this folder.

2. If you have changed your address, or if particulars of your present address, e.g. Address of street and/or street number, etc., have been changed, the NOTICE OF CHANGE OF ADDRESS form at the back of the folder document must be used to report the change and it must be handed in or it posted to the nearest regional district office of the DEPARTMENT OF HOME AFFAIRS.

I.D. No. 670116 0154 08 1

S.A. BURGER/S.A. CITIZEN

VAN/DURNAME
DANIELS

VOORNAAM/FORENAME
DIANE CHARLOTTE

**GEBOORTESTREEK OF LAND/
DISTRICT OF COUNTRY OF BIRTH**
SOUTH AFRICA

**GEBOORTEDATUM/
DATE OF BIRTH**
1967-01-16

**DATUM UITGEREK
DATE ISSUED**
1998-04-20

UITGEREK BY/ISSUED BY
**DIREKTOR-GENERAAL
DIRECTOR-GENERAL**

**ISSUED BY AUTHORITY OF THE
DIRECTOR-GENERAL
HOME AFFAIRS**



Ek getuig dat hierdie dokument in ware afskryf afkomstig is van die h. party wat die dokument as 'n ware afskryf van die oorspronklike dokument verskaf het en dat dit, behalwe my persoonlike kennis, nie op enige manier anderszins getuig is nie.

BRIGADIER
SC. GREEN

Signature

SUID-AFRIKAANSE POLISIEDIENS

INTERNE OUDIT/INTERNAL AUDIT

2019-10-08

WESTERN CAPE

SOUTH AFRICAN POLICE SERVICE

[illegible]

2. If you have changed your name or if any of the contents of your present address, e.g. telephone, e-mail, fax, etc., have been changed, the NOTICE OF CHANGE OF ADDRESS must be used. The notice is attached to the back of the change document and must be used to report the change and it must be forwarded as an e-posted or a regular second class letter to the DEPARTMENT OF HOME AFFAIRS.

[illegible]

EXCERPT

Take the Phone Seriously

I.D.No

G. A. BURGER / G. A. CITIZEN

WIRTSCHAFT

ਪ੍ਰਤਿਬੱਧਤਾ ਅਤੇ ਸੰਤੋਖਤਾ

REPORTED DISTRICT OF LAND
DISTRICT OR COUNTRY OF BIRTH

SUID-AFRIKA

PERCENTAGE
DATE OF BIRTH

DATE RECEIVED

THE UNIVERSITY OF CHICAGO
CHICAGO, ILLINOIS 60637-1508
TEL: 773/936-7000 FAX: 773/936-7000
WWW.CHICAGOEDU.EDU

SUID-AFRIKAANSE POLISIEDIENS
INTERNE OUDIT/INTERNAL AUDIT
[REDACTED]
WESTERN CAPE
SOUTH AFRICAN POLICE SERVICE

DEREGISTREERDE WOON EN POSTADRES

1. Blywys die adres van u GEREGETREERDE WOON- EN POSTADRES in hierdie adres.

2. Indien u wen adres verander het, of indien besonderhede van u huidige adres, byvoorbeeld straatnaam en huisnommer, verander het, moet die vorm KENNINGSKIND VAN ADRESVERANDERING, wat in die kassie agter in die oorspronklike 1, gebruik word om die verandering aan te meld, en die oorspronklike 1 by u adres word aan die meesde streeke, op te stuur aan die DEPARTEMENT VAN BURELANGE SAKKE.

REGISTERED RESIDENTIAL AND POSTAL ADDRESS

1. Place the copy of your REGISTERED RESIDENTIAL AND POSTAL ADDRESS in this pocket.

2. If you have changed your address, or, if particulars of your present address, e.g. name of street and of street number, etc., have been changed, the NOTICE OF CHANGE OF ADDRESS form in the pocket at the back of the identity document must be used to report the change and it must be handed in at or posted to the nearest registration office at the DEPARTMENT OF HOME AFFAIRS.

I.D.No.



S.A. BORDER/B.A. CITIZEN

VAN DER LEE NAME

VOORNAAMES/FORENAMES

GEDOORTE/STREEK OF PLAAS
DISTRICT OR COUNTRY OF BIRTH

SOUTH AFRICA

GEDOORTE/STREEK
DATE OF BIRTH

DATUM UITGEREK
DATE ISSUED

VERSTREK DE WYSE VAN DIE
STREEK/PLAAS/STREEK
DISTRICT/PLAAS/STREEK

VERSTREK DE WYSE VAN DIE
STREEK/PLAAS/STREEK
DISTRICT/PLAAS/STREEK

Ek verklaar dat hierdie dokument 'n ware afbeelding is van die foto wat in hierdie dokument is en dat my persoonlike besonderhede, soos naam, adres, geboortedatum, etc., korrek is en dat ek hierdie dokument gebruik sal maak om my persoonlike besonderhede te verander, indien nodig, en dat ek hierdie dokument gebruik sal maak om my persoonlike besonderhede te verander, indien nodig, en dat ek hierdie dokument gebruik sal maak om my persoonlike besonderhede te verander, indien nodig.

SUID-AFRIKAANSE POLISIEDIENS
INTERNE OUDIT/INTERNAUDIT
WESTERN CAPE
SOUTH AFRICAN POLICE SERVICE

CITY OF CAPE TOWN

INFORMAL SETTLEMENTS WATER & WASTE SERVICES: INFORMAL SETTLEMENTS & BACKYARDERS

CONTRACT NO. 107Q/2018/19

TERM TENDER FOR CIVIL ENGINEERING WORKS WITHIN THE CITY OF CAPE TOWN
CONTRACT NO. 107Q/2018/19

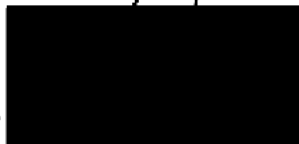
SCHEDULE 7: DECLARATION IN RESPECT OF COMPLIANCE WITH LABOUR LEGISLATION

Tenderers must be registered with the relevant Bargaining Council as contained in the tender conditions and must append to this schedule a certificate of compliance / letter of good standing in terms of the relevant Government Gazette that indicates compliance / validity at the time of tender award.
party to a Consortium/Joint Venture shall append separate certificates in the above regard.

Declaration in respect of labour legislation

The tenderer, by signing this schedule, declares that it will comply with all labour legislation, as may be applicable.

SIGNED ON BEHALF OF TENDERER: ...





[REDACTED]
Nejani Construction and Management CC
Postnet Suite No 9
Private Bag X04
Kuisrivier
7579

Attention: [REDACTED]

RE: LETTER OF GOOD STANDING

Dear Julian,

I hereby confirm that Nejani Construction and Management CC, registration number: [REDACTED]
is fully compliant and that all council funds are paid up to date.

Please note: (This letter is only valid for the period ending 12 February 2019)

Yours sincerely

[REDACTED]
JN Fassen
General Secretary
Bargaining Council for the Civil Engineering (BCCEI)

JHB	Block F, Easyside Office Park, 24 South Boulevard Road, Durban, 2191 • Tel: 031 451 4867/8 • Fax: 031 568 4996
DBN	Suite 102, Gateway Office Park, 3 Rugsbyweg, Umhlanga Ridge, Durban, 4026 • Tel: 031 001 0097 • Fax: 031 560 4100
GT	White Oak Terraces, Old Oak Office Park, Edmore Street, Grahamstown, 7760 • Tel: 010 001 0096 • Fax: 036 550 4995
PE	51 Elm Avenue, Newson Park, Port Elizabeth, 6050 • Tel: 010 001 0096 • Fax: 036 550 4995
EL	Shop 110, Beacon Bay Crossing Centre, Cor M2 & Beacon Bay Road, Beacon Bay, East London, 5241 • Tel: 010 001 0096 • Fax: 031 568 4995

© 2018 BCCEI • Durban • Chapter: LR255/18

CITY OF CAPE TOWN

INFORMAL SETTLEMENTS WATER & WASTE SERVICES: INFORMAL SETTLEMENTS & BACKYARDERS

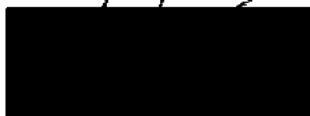
CONTRACT NO. 107Q/2018/19

TERM TENDER FOR CIVIL ENGINEERING WORKS WITHIN THE CITY OF CAPE TOWN

SCHEDULE 8: CONFIRMATION OF CITY OF CAPE TOWN SUPPLIER DATABASE REGISTRATION

CITY OF CAPE TOWN VENDOR DATABASE REGISTRATION		
COMPANY NAME	REGISTERED YES/NO	REGISTRATION NUMBER IF APPLICABLE
NEJENI CONSTRUCTION & PROJECT MANAGEMENT	YES	

SIGNED ON BEHALF OF TENDERER:



TERM TENDER FOR CIVIL ENGINEERING WORKS WITHIN THE CITY OF CAPE TOWN

The tenderer shall insert in the spaces provided below a list of similar completed contracts awarded to him and those currently being undertaken.

EMPLOYER (NAME, TEL No. AND FAX No.)	CONSULTING ENGINEER (NAME, TEL No. AND FAX No.)	NATURE OF WORK	VALUE OF WORK R(m)	COMPLETION DATE
COMPLETED CONTRACTS				
Detailed	Schedule of	Experience	Attached	Hereto -
CURRENT CONTRACTS				

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

SIGNED ON BEHALF OF TENDERER

COMPLETED CONTRACTS

City of Cape Town	Emergency maintenance and repair of water infrastructure	Salveter Fortuin	076-535278 / 021-4445140	592/2016/17	19,615.02	5/12/2017
TenderRight	Upgrade of sewer infrastructure	Tammy Crane	0722343218	Private	453,323.07	23/08/2018
Sublimo	Upgrade of sewer infrastructure - open road	Christopher Clements / SAHCC	0766689492	ST001	3,703,847.00	Current
Sonitays	Upgrade of Parking Area	Christopher Clements / SAHCC	0219501447	ST002	2,710,018.00	30/08/2018
City of Cape Town	Upgrading of the Sewer Rehabilitation systems (open trench / pipe relining)	Isabel Ngwenyane	021 808 8210	710/2017/18	7,613,185.48	Current - 09/2018
Stellenbosch Municipality	Trenchless rehabilitation of water pipelines - pipe relining	Tracy Wehr	021 808 8210	BSM 07/17	157,356.48	Current
Stellenbosch Municipality	Trenchless rehabilitation of water pipelines - pipe relining	Tracy Wehr	021 808 8210	BSM 07/17	361,741.72	25/04/2018
Stellenbosch Municipality	Trenchless rehabilitation of water pipelines - pipe relining	Tracy Wehr	021 808 8210	BSM 07/17	361,902.40	25/08/2018
Stellenbosch Municipality	Trenchless rehabilitation of water pipelines - pipe relining	Tracy Wehr	021 808 8210	BSM 07/17	1,528,553.95	25/04/2018
City of Cape Town	Repair of Water Pipeline - via pipe relining	Muhammad Jefferys	021 980 6021	4470/2017/18 - Emergency	444,902.10	09/10/2017 - 19/11/2017
City of Cape Town	Rehabilitation of water pipelines via pipe relining	Thando Bule	021 980 6021	4470/2017/18	513,357.05	23/12/2016
City of Cape Town	Rehabilitation of water pipelines via pipe relining	Thando Bule	021 980 6021	4470/2017/18	596,553.77	26/04/2017
City of Cape Town	Rehabilitation of water pipelines via pipe relining	Thando Bule	021 980 6021	4470/2017/18	476,355.08	07/2017
City of Cape Town	Rehabilitation of water pipelines via pipe relining	Thando Bule	021 980 6021	4470/2017/18	595,105.00	03/2018
City of Cape Town	Rehabilitation of water pipelines via pipe relining	Thando Bule	021 980 6021	4470/2017/18	286,480.82	09/2018
City of Cape Town	Rehabilitation of water pipelines via pipe relining	Thando Bule	021 980 6021	4470/2017/18	153,348.90	07/2018
City of Cape Town	Emergency maintenance and repair of water infrastructure	John Engel	021-4443388 / 021-4443389	530/2016/17	67,650.59	15/12/2017
City of Cape Town	Emergency maintenance and repair of water infrastructure	John Engel	021-4443388 / 021-4443389	530/2016/17	32,735.67	13/12/2017
City of Cape Town	Emergency maintenance and repair of water infrastructure	John Engel	021-4443388 / 021-4443389	530/2016/17	46,438.96	31/01/2018
City of Cape Town	Emergency maintenance and repair of water infrastructure	John Engel	021-4443388 / 021-4443389	530/2016/17	25,475.39	24/02/2018
City of Cape Town	Emergency maintenance and repair of water infrastructure	Salveter Fortuin	076-535278 / 021-4445140	530/2016/17	16,460.67	1/3/2018
City of Cape Town	Emergency maintenance and repair of water infrastructure	Y. Mdumiso	021-4443388	530/2016/17	87,358.03	6/3/2018
City of Cape Town	Emergency maintenance and repair of water infrastructure	Salveter Fortuin	076-535278 / 021-4445140	530/2016/17	37,479.65	11/4/2018
Canfield Construction	Repair of Water Pipeline - via pipe relining	Freddie van Staden	082 334 9197	Private	205,496.30	04/05/2017 - 26/06/2017
Ngqo	New Water Connections / Valve Cuts-in (AC Pipeline)	Grant Reijts	021 980 6021	Private	57,513.25	21-Nov-17
City of Cape Town	Repair of Water Pipeline - via pipe relining	Muhammad Jefferys	021 980 6021	4470/2017/18 - Emergency	444,902.10	09/10/2017 - 19/11/2017

City of Cape Town	Open Trench Repair of Sewer Infrastructure - Emergency	Mogamatjies	021 930 6011	CAH Burnside and Koeberg Roads	530/2016/17	119,432.29	16-Oct-17
City of Cape Town	Open Trench Repair of Water Infrastructure - Emergency	Mogamatjies	021 930 6011	Burnside Industrial	530/2016/17	150,000.00	4-Oct-17
City of Cape Town	Open Trench Repair of Water Infrastructure - Emergency	Thandi Bika	0761602575	100 Poyson Street, Welgemoed	530/2016/17	199,841.43	7-Nov-17
City of Cape Town	Open Trench Repair of Sewer Pipeline - Emergency	Engelbert Koenig	083 448 5828	Luxander Hill (Kum) Station, Rynkeel	446/2010/21	796,560.34	12-Jan-07
City of Cape Town	Open Trench Repair of Sewer Pipeline - Emergency	Peter Abrahams	023 350 9515	16th Street, 6th Floor, Laces	446/2010/21	362,347.79	17-Jun-17
City of Cape Town	Open Trench Repair of Sewer Pipeline - Emergency	Marino Bile	0763651575	Coastal Road, Kenridge	446/2010/21	546,553.77	28-Apr-17
City of Cape Town	Repairs and maintenance of sewer line - Bulk Repair	David Bousquet	074 445 0695	Mendham Avenue, Tokai	630/2016/17	137,890.74	4-Dec-17
City of Cape Town	Repairing of existing and laying of new sewer mains - emergency sewer point repair	David Bousquet	074 445 0695	Helen Joseph Road, Saron Mochell	630/2016/17	374,991.96	20/11/2016
City of Cape Town	Repairing of existing and laying of new sewer mains - emergency sewer point repair	Jeremy Block	021 444 2370	Block Street, Delft	NEI-000282	166,154.00	18-Sep-17 (120-Sep-17)
City of Cape Town	Open Trench Repair of Sewer Pipeline - Emergency	Adeline Jacobs	021 444 2370	Caydon and 3rd Avenue Lullas River	NEI-000278	504,339.56	26/09/2017
City of Cape Town	Open Trench Repair of Sewer Pipeline - Emergency	Leah Claassen	021 400 6892	Rondeletia, Knippenburg	PO 45013252	176,008.54	15/09/2017
City of Cape Town	Open Trench Repair of Sewer Pipeline - Emergency	Leah Claassen	021 400 6892	Cochrane Avenue, Epping Industria	NEI-000278	814,068.06	23/02/2018
City of Cape Town	Repairs and maintenance of sewer line	Renald Adams	021 444 2473	13 Block Street, Landdown	630/2016/17	137,438.32	5-Nov-17
City of Cape Town	Repairs and maintenance of sewer line	Carle Sanders	021 444 2473	Philippi Street to V&BIO	630/2016/17	186,542.48	23-Nov-17
City of Cape Town	Repairing of existing and laying of new sewer mains - emergency sewer point repair	David Bousquet	074 445 0695	100 Wageningen, Amdal	630/2016/17	67,668.28	14-Sep-17
City of Cape Town	Open Trench Repair of Sewer Pipeline - Emergency	Michael Jacobs	021 444 2381	100 Scrandfontein Road, Ottery	630/2016/17	447,036.56	6-Nov-17
City of Cape Town	Installation of new treated effluent infrastructure - directional drilling + open trench	Nail Bamon	021 444 2381	100 Scrandfontein Road, Ottery	630/2016/17	1,134,295.41	30-Jun-17
City of Cape Town	Installation of new treated effluent infrastructure - directional drilling + open trench	Nail Bamon	021 444 2381	100 Scrandfontein Road, Ottery	630/2016/17	2,058,474.78	30-Jun-17
City of Cape Town	Installation of new treated effluent infrastructure - directional drilling + open trench	Nail Bamon	021 444 2381	100 Scrandfontein Road, Ottery	630/2016/17	2,281,173.00	30-Jun-17
City of Cape Town	Installation of new treated effluent infrastructure - directional drilling + open trench	Nail Bamon	021 444 2381	100 Scrandfontein Road, Ottery	630/2016/17	3,366,336.09	30-Jun-17
City of Cape Town	Installation of new treated effluent infrastructure - directional drilling + open trench	Nail Bamon	021 444 2381	100 Scrandfontein Road, Ottery	630/2016/17	2,480,860.42	30-Jun-17
City of Cape Town	Installation of new treated effluent infrastructure - directional drilling + open trench	Nail Bamon	021 444 2381	100 Scrandfontein Road, Ottery	630/2016/17	2,600,719.48	30-Jun-17
City of Cape Town	Installation of new treated effluent infrastructure - directional drilling + open trench	Nail Bamon	021 444 2381	100 Scrandfontein Road, Ottery	630/2016/17	1,150,000.00	30-Jun-17
City of Cape Town	Installation of new treated effluent infrastructure - directional drilling + open trench	Nail Bamon	021 444 2381	100 Scrandfontein Road, Ottery	630/2016/17	2,821,096.00	30-Jun-17
City of Cape Town	Installation of new treated effluent infrastructure - directional drilling + open trench	Nail Bamon	021 444 2381	100 Scrandfontein Road, Ottery	630/2016/17	1,583,983.00	30-Jun-17

City of Cape Town	Installation of new treated effluent infrastructure - open trench	Bony Phelan	1021 - 481 1900	Company Gardens	313Q WDM-11	490,000.00	27/05/2016
City of Cape Town	Replacement of water mains by pipe open trench and pipe capping	Shanya Mubanda	0813100640	Karoo and Motina Roads, Bellar	447Q D4-17	1,025,358.00	2015
City of Cape Town	Construction of Water Mains by Open Trench / Pipecapping	Thando Bille	0761592575	Pt Suez, Duikayidim	447Q D6-10	892,374.00	2015
City of Cape Town	Laying of New Water Main	Arthur Cashe	0843482463	Dookin & Walbond Street	447Q D6-13	543,803.00	2015
City of Cape Town	Rehabilitation of water pipeline via Pipecapping	Thando Bille	0761592575	Light Close	447Q D6-14	552,218.79	10/2015
City of Cape Town	Installation of new treated effluent infrastructure - open trench	Booth Stenelle	0219164755	Parkway Treated Effluent Section 4	313Q WDM-25	3,474,000.00	2014
City of Cape Town	Installation of new treated effluent infrastructure - open trench	Winston Mackay	0215913417	Howe Park Treated Effluent Section 3	313Q	3,405,000.00	2014
City of Cape Town	Open Trench Installation of Pressure Mains	Ivy Masinga	0731516041	McGowan Treated Effluent Supply	313Q D012/13	2,877,416.00	2014
City of Cape Town	Investigation and Mapping	Winston Mackay	0215913417	Academy Treated Effluent Reporting	913Q D012/13	1,890,812.00	2014
City of Cape Town	Pipecapping, Mapping, Open Trench	Ivy Masinga	0731516041	De Beers Avenue	313Q D012/13	2,038,000.00	2013
City of Cape Town	Pressure Pipe Clay Water	Winston Mackay	0215913417	Buhain Street TE Watering system	313Q D012/13	947,000.00	2013
City of Cape Town	Pressure Pipe Clay Water	Winston Mackay	0215913417	Century City TE Reserve watering	313Q D012/13	350,000.00	2013
City of Cape Town	Survey and Mapping	Ivy Masinga	0731516041	Admore South Phase 1 Section 3	313Q D012/13	154,869.00	2013
City of Cape Town	Open Trench Installation of Water Mains	Ivy Masinga	0731516041	Admore South Phase 1 Section 4	313Q D012/13	218,823.00	2013
City of Cape Town	Open Trench Installation of Water Mains	Ivy Masinga	0731516041	Malassan Summum Watermeters	313Q D012/13	3,173,564.28	2013
City of Cape Town	Open Trench Installation of Water Mains	Ivy Masinga	0731516041	Chabot Road	313Q D012/13	1,826,233.00	2013
City of Cape Town	Open Trench Installation of Pressure Mains	Booth Stenelle	0219164755	Booth Street Treated Effluent Pipe	313Q D012/13	591,591.24	2013
City of Cape Town	Open Trench Installation of Water Mains	Royal Hapwong City	0822948764	Admore Treated Effluent Testing & Repair	313Q D012/13	3,846,000.00	2013
City of Cape Town	Rehabilitation of water pipelines	Cayden Sale	0214448944	Porterville Road	447Q D6-41	175,042.00	March 2016
City of Cape Town	Rehabilitation of water pipelines via pipe capping	Thando Bille	021980 0021	Kempson Street	447Q D6-16	350,038.00	Feb 2016
City of Cape Town	Rehabilitation of water pipelines	Thando Bille	021980 0021	Rhodes Crescent	447Q D6-17	615,405.00	March 2016
City of Cape Town	Rehabilitation of water pipelines	Zeyden Sale	0214448944	Townsend Street	447Q D6-41	400,416.00	Feb 2016
City of Cape Town	Repair of existing water mains	Ernst Alexander	0845000515	Rupert Street	447Q D6-21	372,783.00	2016
City of Cape Town	Construction of Water Mains by Open Trench	Zeyden Sale	0214448944	Marina Crescent	447Q D6-36	789,189.11	2015
City of Cape Town	Water Main in Ragsburg Street, Somerset West	Ernst Alexander	0845000515	McNair Street	447Q D6-13	727,720.56	2015
City of Cape Town	Laying of New Water Main	Arthur Cashe	0843482463	Dookin & Watsonia Street	447Q D6-15	553,863.00	2015

City of Cape Town	New Watermain: Mountain Ash Warg, Dell.	Graham Alexander	D94960515			447Q/04-12	172,276.70	2015
City of Cape Town	Water main - Third Avenue, Grassy Park	Ernie Robinson	0227610399			447Q/01-12	1,753,144.30	2015
City of Cape Town	Water main in Sixth Avenue, Grassy Park	Ernie Robinson	0217610279			447Q/01-13	1,586,753.14	2015
City of Cape Town	Watermain, Fire Hydrants and Valves	Graham Alexander	02491000515			447Q/04-11	1,927,957.28	2015
City of Cape Town	Watermain, Fire Hydrants and Valves	Graham Alexander	02491000515			447Q/04-10	1,776,052.50	2015
City of Cape Town	Water main in Lane, Road, Hart Bay	Ernie Robinson	0217610399			447Q/03-04	1,794,543.15	2015
City of Cape Town	Construction of Water Mains by Open Trench	Arthur Oxley	0242762343			447Q/04-17	257,924.00	2015
City of Cape Town	Rehabilitation of water pipelines via pipelining	Thando Bile	0761692575			447Q/06-14	557,250.79	2015
City of Cape Town	Rehabilitation of water pipelines	Kashele Mchanda	0835100040			447Q/04-17	1,025,358.00	Dec 2015
City of Cape Town	Rehabilitation of water pipelines	Thando Bile	0761692575			447Q/06-20	330,400.70	Dec 2015
City of Cape Town	Construction of Water Mains by Open Trench	Thando Bile	0761692575			447Q	1,057,430.00	2015
City of Cape Town	Construction of Water Mains by Open Trench	Thando Bile	0761692575			447Q/06-22	279,231.00	2015
City of Cape Town	Construction of Water Mains by Open Trench	Thando Bile	0761692575			447Q/06-11	542,891.00	2015
City of Cape Town	Construction of Water Mains by Open Trench	Thando Bile	0761692575			447Q/06-10	559,374.00	2015
City of Cape Town	Construction of Water Mains by Open Trench	Louis Sewell	0242762343			447Q/06-19	423,007.79	2015
City of Cape Town	Construction of Water Mains by Open Trench	Mogamat Ali	0242762343			447Q/06-11	632,009.00	2015
City of Cape Town	Rehabilitation of water mains	Graham Alexander	0242762343			447Q	584,735.86	2015
City of Cape Town	Open Trench Installation of Water Mains	Zayden Sello	0214448944			447Q/2010/11	522,507.00	2014
City of Cape Town	Installation of Water Meters	Zayden Sello	0214448944			447Q/2010/11	1,888,000.00	2014
City of Cape Town	Open Trench Installation of Water Mains	Luvai Joni	0214448944			447Q/2010/11	847,000.00	2013
City of Cape Town	Installation of valves	Ernie Robinson	0242762343			447Q/2010/11	705,470.00	2013
City of Cape Town	Open Trench Installation of Water Mains	Thando Bile	0761692575			447Q/2010/11	3,025,358.00	2013
City of Cape Town	Open Trench Installation of Water Mains	Graham Alexander	0242762343			447Q/2010/11	752,330.00	2013
City of Cape Town	Open Trench Installation of Water Mains	Zayden Sello	0214448944			447Q/2010/11	458,000.00	2013
City of Cape Town	Open Trench Installation of Water Mains	Zayden Sello	0214448944			447Q/2010/11	300,710.00	2013
City of Cape Town	Water Mains and FGV Installation	Cycle Kogan	0715832265			447Q/2010/11	2,197,572.00	2012
City of Cape Town	Repair of collapsed water main	Ernie Robinson	0214448944			447Q/2010/11	455,593.92	2-Jul-17

City of Cape Town	Repair of collapsed sewer line, 4m, 300mm pipe	Geac Classics	0075 770 1500	Jodanay Str, Lange, Spring Main, Lange	446Q/2010/11	26,482.88	3-Sep-17
City of Cape Town	Repair of collapsed sewer line 210mm line, 1.5m deep	David Bouspitt	021 641 0695	Ref 7232 Cecil Hem Street, Intitama Yehin, Hunt Bay	446Q/2010/11	20,632.88	24-Mar-17
City of Cape Town	Open trench sewer repair - Emergency	Ronald Adams	021 441 7473	Reverend Ngqisi Str, Lange, (Soyezant)	446Q/2010/11	42,047.14	27-Feb-17
City of Cape Town	Open trench sewer repair - Emergency	Ossie Landers	021 444 7473	Fernox Adams Str, Sannara Machel	446Q/2010/11	242,854.44	3-Oct-17
City of Cape Town	Open trench sewer line repair	Ossie Landers	021 444 7473	Rough-Hair Str, Sannara Machel	446Q/2010/11	18,105.67	3-Oct-17
City of Cape Town	Open trench sewer line repair	Ossie Landers	021 444 7473	Uiten Ngqisi Ave, Sannara	446Q/2010/11	155,463.53	12-Jan-18
City of Cape Town	Open trench sewer line repair	Graham Alexander	021 444 7473	Solomon Str, Normanto	446Q/2010/11	223,012.40	2-Sep-16
City of Cape Town	Open trench sewer line repair	Jeremy Black	021 444 7473	Nomane & Dalie Str, Cross, Middel	446Q/2010/11	9,818.00	4-Jun-16
City of Cape Town	Open trench sewer line repair	Dodie Landers	021 444 7473	Fernox Adams Str, Sannara Machel	446Q/2010/11	102,024.24	3-Oct-16
City of Cape Town	Open trench sewer line repair	Ronnie Adams	021 444 7473	63 Irvine Street, Morariberg	446Q/2010/11	35,594.00	2-May-16
City of Cape Town	Open trench sewer repair - Emergency	Jeremy Black	021 444 7473	25 Uitenhale Str, Middel	446Q/2010/11	18,730.77	19-Oct-16
City of Cape Town	Open trench sewer repair - Emergency	Gerrit Mathysse	021 444 7473	25414 Septhar Str, Kaska Village, Normanto	446Q/2010/11	13,360.52	23-Sep-16
City of Cape Town	Open trench sewer repair - Emergency	Ossie Landers	021 444 7473	1552 Fernox Adams Str, Sannara Machel	446Q/2010/11	82,390.23	20-Jul-16
City of Cape Town	Open trench sewer repair - Emergency	Esprit Mathysse	021 444 7473	25672 Zulu Drive, Normanto	446Q/2010/11	47,503.96	5-May-16
City of Cape Town	Installation of Sewer Mains	Vuyo James	021 444 7473	Gugulethu	446Q/2010/11	1,356,154.02	June 2016
City of Cape Town	200mm & 110mm dia. Sewer Line & Manholes	Princed Pa	021 444 7473	Clan Sany Reservoir, Vrededorf	446Q/2010/11	501,884.07	Aug 2016
City of Cape Town	200mm Sewer Line	Melvin Engelbrecht	021 444 7473	Purwal Bypass	446Q/2010/11	285,077.39	Aug 2016
City of Cape Town	200mm & 315mm dia. Sewer Line	Melvin Engelbrecht	021 444 7473	Arbosa Trench Effluent	446Q/2010/11	2,159,198.32	Nov 2016
City of Cape Town	Sewer Mains, 104 - 115 Main Sewer Spine Beach	Graham Alexander	021 444 7473	Strand Beach Road	446Q/2010/11	898,933.22	2016
City of Cape Town	Laying of new Sewer Mains	Graham Alexander	021 444 7473	Spandan Village, Somerset West	446Q/2010/11	130,025.02	2016
City of Cape Town	Emergency repair of main sewer lines	Henri Jossipus	021 444 7473	Northern Area Sewer Collapse	446Q/2010/11	5,521,311.93	2016
City of Cape Town	Construction of New Sewer Mains	Human Settlements	021 444 7473	Rossmore Mainline, Durr	446Q/2010/11	287,771.21	2015
City of Cape Town	Sewer Rehabilitation Crisis Work	Noble Louw	021 444 7473	Various Sewer repairs and upgrades	446Q/2010/11	64,000,000.00	2014
City of Cape Town	Open Trench Installation of Sewer Mains	Vuyo James	021 444 7473	Joan Road, Knoll Park	446Q/2010/11	322,000.00	2014
City of Cape Town	Open Trench Installation of Sewer Mains	Sethina Nyabesha	021 444 7473	Cornub Street	446Q/2010/11	500,000.00	2014
City of Cape Town	Open Trench Installation of Sewer Mains	Vuyo James	021 444 7473	Heide, Bush Streets, Nyanga	446Q/2010/11	295,000.00	2014
City of Cape Town	Specifying and Upgrading Sewer Mains	Andrew Taylor	021 444 7473	Rosa Road, Grassy Park	446Q/2010/11	900,000.00	2014

City of Cape Town	Open Trench Installation of Sewer Mains	Luselo Tona	0830804033	Olisa Road, Atlantis	446Q/2010/11	340,075.00	2014
City of Cape Town	Open Trench Installation of Sewer Mains	Luselo Tona	0830804033	Olisa Road, Maitland	446Q/2010/11	175,034.00	2014
City of Cape Town	Pipecracking and Upgrading Sewer Mains	Lucky Mngeliso	0218080437	Verloren Rood, Durbanville	69Q/2010/11	1,734,589.00	2014
City of Cape Town	Open Trench Installation of Sewer Mains	Meyer James	0134006592	Spekboom Road, Rondebosch	446Q/2010/11	793,245.00	2014
City of Cape Town	Open Trench Installation of Sewer Mains	Osida Lesdys	0835531458	Willemits Farm VVWTV	446Q/2010/11	381,204.00	2013
City of Cape Town	Open Trench Installation of Sewer Mains	Graham Alexander	0849000435	Tanga Pumpstation	446Q/2010/11	545,433.00	2013
City of Cape Town	Replacement of Sewer Mains	Themphizal Lumbona	0218080437	Faure Marine Drive	446Q/2010/11	3,149,522.68	2015
City of Cape Town	Open Trench Installation of Water Mains	Moya James	0214000592	Heidenfeld Sewer line	446Q/2010/11	114,180.00	2013
City of Cape Town	Open Trench Installation of Sewer Mains	Osida Lesdys	0835531458	Spina Road 7m above mainline	446Q/2010/11	982,608.00	2013
City of Cape Town	Open Trench Installation of Sewer Mains	Arthur Castle	0841462463	De Nieuw Sandvlei	446Q/2010/11	235,361.00	2013
City of Cape Town	Open Trench Installation of Sewer Mains	Fred Amoo	0841462463	Leschebek Street Repair	446Q/2010/11	472,604.00	2013
City of Cape Town	Sewer CCTV & Jet	Neil Lesdys	0849250343	Miles Plover Road CCTV	446Q/2010/11	317,341.00	2013
City of Cape Town	Sewer CCTV & Jet Cleaning	Lucky Mngeliso	0218080437	Edlin Road CCTV Investigation	69Q/2010/11	131,000.00	2013
City of Cape Town	Pipecracking and Upgrading Sewer Mains	Rhanya Mubanda	0218080437	Marmosa Sewer Upgrade	69Q/2010/11	824,556.00	2013
City of Cape Town	Pipecracking and Upgrading Sewer Mains	Andrew Taylor	0847000435	Julier Road, Kestenhof	69Q/2010/11	108,753.85	2013
City of Cape Town	Pipecracking and Upgrading Sewer Mains	Thangiso Biliq	0218080437	Bullelaan Street	69Q/2010/11	3,103,023.00	2013
City of Cape Town	Pipecracking and Upgrading Sewer Mains	Arthur Castle	0849250343	Dunant Road, Jackson Upside	69Q/2010/11	832,723.00	2012
City of Cape Town	Pipecracking and Upgrading Sewer Mains	Graham Alexander	0849000435	Mona Road, Somerset West	69Q/2010/11	177,547.73	2012
City of Cape Town	Pipecracking and Upgrading Sewer Mains	Arthur Castle	0849250343	John Van Niekerk Phase 1	69Q/2010/11	212,518.30	2011
City of Cape Town	Pipecracking and Upgrading Sewer Mains	Arthur Castle	0849250343	John Van Niekerk Phase 2	69Q/2010/11	217,135.80	2011
City of Cape Town	Repairing of existing Sewer Main	Sakhona Moya	0218080437	Merple Crescent, Ficksburg	Emergency Repair	3,051,690.53	9/11/2016
City of Cape Town	Sewer Main Collapse (Emergency Sewer Repair)	Arthur Castle	0218080437	139 Joe Mafu Street	Emergency Repair	510,435.43	Sept 2015
City of Cape Town	Sewer Main Collapse (Emergency Sewer Repair)	Graham Alexander	0849000435	Marmosa	Emergency Repair		Jun 2016
City of Cape Town	Open trench Water (Emergency Water Repair)	Peter Abels	021 350 3515	Esans Street, Parow	Emergency Repair	167,418.25	Aug 2016
City of Cape Town	Pipe Cracking	Melanie Amoo		Wierdenburg Street	Emergency Repair	126,306.96	Jul 2016
City of Cape Town	Pipe Cracking	Thangiso Biliq	021 350 3515	Polman Street	Emergency Repair	266,480.62	Sept 2016
City of Cape Town	Pipe Cracking	Gerrit Lema	021 350 3515	Amalia Street	Emergency Repair	183,348.90	Jul 2016

EMPLOYER	NATURE OF WORK	ENGINEER / PROJECT MANAGER	Contract Details	PROJECT NAME	CONTRACT NUMBER	CONTRACT VALUE	COMPLETION DATE
City of Cape Town	Open trench Water	Gerrit Smith	02140001796	Kunene Street	Emergency Repair	191,859.86	Jul 2016
City of Cape Town	Open trench Water	Andrew April	0738754939	Simonsdal Main Road	Emergency Repair	702,048.12	Aug 2016
City of Cape Town	10mm dia. Watermain (Emergency Water Supply)	Thando Biko	011 980 6021	Park Avenue	Emergency Repair	151,977.31	Sept 2016
City of Cape Town	110 Water mains Installation (Emergency Water Supply)	Louis Small	0842240008	Boes Barrel - Tygerberg Valley Rd	Emergency Repair	154,035.09	Sept 2016
Sakhisya	Water Meter Installation (DWWS)	Chris Reynolds	0810605151	Therewat Road	34501	115,000.00	Jun 2016
Sakhisya	Water Meter and Chamber Installation	Chris Reynolds	0832555451	Saldanha	WC-12	347,000.00	Apr 2016
Sakhisya	Water Meter Installation (DWWS)	Chris Reynolds	0832560151	URGS RIVER DAM - BASECDS	WC-35	102,385.00	Jun 2016
Sakhisya	Water Meter and Chamber Installation	Chris Reynolds	0830855151	DUARRETER PUMPSTATION	WC-30	180,417.00	Jul 2016
Sakhisya	Water Meter and Chamber Installation (DWWS)	Chris Reynolds	0832665451	12 KONTINENT CAMP SITES	WC-02 TO 12	1,919,055.00	Sept 2016
Sakhisya	Investigation and Installation of Water Meters	Michael Mafico	0841844122	Saldanha BWS Installation	Private	397,588.00	2015
ALE	Construction of Gate services for Development	John (UDS Africa)	0218943893	ALE Development	Private	620,000.00	2015
Kellogg	150mm G5 Paved	Francis Venturino	0748018879	Kellogg Schools	PRIVATE	2,257,290.50	Aug 2016
Kellogg	Construction of all Civil Works - Markham, concrete works, mells and risings	Francis Venturino	0748018879	Hewitson High School, Markham	Private	1,101,536.00	2015
Sakhisya	Construction of Sewer Connections	Ben Potlako	071 602 8586	Tonstad House, Bree Street	Private	163,613.00	2015
Sakhisya	Installation of Water Meters	Chris Reynolds	0832665451	Saldanha Borehole Meter Installation	Private	394,508.00	Oct 2015
Sakhisya	Installation of Water Meters	Chris Reynolds	0832665451	Three Waters West Country Estate Meter Installation	Private	108,185.00	Oct 2015
Ville Indaba	Piperecking and Upgrading Water Mains	Mark Mesche	0833779685	Amherst Army Base	Private	3,000,000.00	2011
Ville Indaba	Piperecking and Upgrading Water Mains	Mark Mesche	0833779685	Loftholm Army Base	Private	3,000,000.00	2011

PRESSURE MANAGEMENT WORKS (PRESSURE AND ZONE VALVE INSTALLATIONS)

EMPLOYER	NATURE OF WORK	ENGINEER / PROJECT MANAGER	Contract Details	PROJECT NAME	CONTRACT NUMBER	CONTRACT VALUE	COMPLETION DATE
City of Cape Town	Construction and replacement of Pressure Reducing Valve and Meter Chambers	Uroo Sympo	0213440408	Louis Butha + Heritage Park	1001 WDMA-25	518,561.78	Oct 2011
City of Cape Town	Construction and replacement of Pressure Reducing Valve and Meter Chambers	Uroo Sympo	0213440408	Elliot Road, Avon Road	1002 WDMA-21	518,561.78	18/06/2016
City of Cape Town	Construction and replacement of Pressure Reducing Valve and Meter Chambers	Uroo Sympo	0213440408	Brooklyn Section Road / N1 Verga, Paarden Eiland	1003 WDMA-22	1,468,110.63	28/06/2016
City of Cape Town	Construction and replacement of Pressure Reducing Valve and Meter Chambers	Uroo Sympo	0213440408	Elliot Road, Paarden Eiland	1004 WDMA-24	418,783.72	29/06/2016
City of Cape Town	Construction and replacement of Pressure Reducing Valve and Meter Chambers	Uroo Sympo	0213440408	Coetzia 1.2 and Overvalley 1.2	1005 WDMA-18	3,560,532.76	05/04/2018
City of Cape Town	Construction and replacement of Pressure Reducing Valve and Meter Chambers	Uroo Sympo	0213440408	Coetzia 1.2 and Overvalley 1.2	1006 WDMA-16	1,851,134.03	21/09/2018

City of Cape Town	Installation of Pressure Reducing Valve and Meter Chambers	Upgraded Rotor	0471591094	Installation of Zone Meters Meters 100' and Standard	2002014/15 WDM-03	1,596,957.77	2017
City of Cape Town	Installation of Pressure Reducing Valve and Meter Chambers	Muleki Mithaba	0637510933	Installation of Zone Meters in Airline	1002004/15 WDM-04	3,467,236.90	2017
City of Cape Town	Water Meter Installation	Lyle Goldman (DOAT)	0213600133	Direct 2 Meter Installation	2002012/13	833,612.00	2016
City of Cape Town	Pressure Reducing Valves and Chambers	Faithful Dottle	0723022719	Steenberg Road PRV Installation & Chamber	101 WDM-35	1,706,624.59	2016
City of Cape Town	Pressure Reducing Valves and Chambers	Faithful Dottle	0723022719	Wynberg 3B PRV Installation & Chamber	101 WDM-39	1,389,154.83	2016
City of Cape Town	Pressure Reducing Valves and Chambers	Maria Myerwa	0237042562	Penhays PRV Installation & Chamber	101 WDM-32	446,000.00	2016
City of Cape Town	Pressure Reducing Valves and Chambers	Maria Myerwa	0237042562	Kommelle PRV Installation & Chamber	101 WDM-31	423,340.00	2016
City of Cape Town	Construction of Pressure Management Systems	Faithful Dottle	0723022719	Harther Avenue PRV's	101 WDM-25	1,583,988.07	2015
City of Cape Town	Pressure Reducing Valves and Chambers	Lyle Goldman (DOAT)	0213600133	Hendry Woodstock	101 WDM-18	1,911,594.59	2015
City of Cape Town	Pressure Reducing Valves and Chambers	Lyle Goldman (DOAT)	0213600133	Wynberg PRV's	101 WDM-16	1,732,689.11	2015
City of Cape Town	Pressure Reducing Valves and Chambers	Faithful Dottle	0723022719	Devict 1 PRV's	101 WDM-14	752,250.52	2014
City of Cape Town	Pressure Management Installation	Melvin Engelbrecht	0215901539	Potloden PRV Installation	101 WDM-12	1,599,564.00	2014
City of Cape Town	Pressure Management Installation	Melvin Engelbrecht	0215901539	Surfingdale 2 PRV Installation	101 WDM-11	2,999,566.00	2014
City of Cape Town	Supply and Installation of Reservoir meters	Faithful Dottle	0723022719	City of Cape Town Boundaries	101 WDM-07	1,552,720.10	2014
City of Cape Town	Pressure Management Installation	Lyle Goldman (DOAT)	0213600133	District 6A PRV Works	101 WDM-04	1,572,062.00	2014
City of Cape Town	Pressure Management Installation	Lyle Goldman (DOAT)	0213600133	BPCL Mafikeng	WDM-04/05B	147,949.20	2014
City of Cape Town	Pressure Management Installation	Lyle Goldman (DOAT)	0213600133	BPCL Pelican Park	WDM-04/05C	189,758.00	2014
V&A Waterburg	Pressure Management Installation	Marcel Passens	0215901539	V&A Waterburg PRV Installation	Private	2,559,072.53	2014
City of Cape Town	Pressure Management Design and Build	Melvin Engelbrecht	0215901539	Melville Pressure Management	25907313/14	5,222,611.56	2014
City of Cape Town	Build of mechanical and civil works for advanced pressure management of water	Melvin Engelbrecht	0215901539	Harvey Park, Kensington, Sandown, Rylands, Sunnyside and Surrounds	90	8,267,843.00	2011
City of Cape Town	Pressure Management Installation	Melvin Engelbrecht	0215901539	Crossroads and Goodwood	170	2,245,404.10	2011
City of Cape Town	Pressure Management Installation	Melvin Engelbrecht	0215901539	Grassy Park Pressure Zones	260	2,700,598.37	2011
City of Cape Town	Build of mechanical and civil works for advanced pressure management of water	Melvin Engelbrecht	0215901539	Edgeway Lane Pressure Zones	740	1,493,826.34	2011
City of Cape Town	Build of mechanical and civil works for advanced pressure management of water	Melvin Engelbrecht	0215901539	Thornhill and Surrounding Pressure Zones	750	2,479,802.86	2011
City of Cape Town	Pressure Management Installation	Melvin Engelbrecht	0215901539	Deft and Swindle	850	3,587,614.09	2011

SCHEDULE 7: SCHEDULE OF WORK EXPERIENCE OF TENDERER

ROADS, BASIC SERVICES AND STORMWATER

EMPLOYER	NATURE OF WORK	ENGINEER / PROJECT MANAGER	CONTRACT DETAILS	PROJECT NAME	CONTRACT NUMBER	CONTRACT VALUE	COMPLETION DATE
1 Stellenbosch University	Upgrading of parking area	CHR Sweet	082 890 8809	Stellenbosch Municipality Engineering Building	Private	1,500,000.00	30/10/2018
2 Cagiro	Installation of Basic Civil Engineering Services	George Albertini	0823432575	Scottsdale	Private	3,983,000.00	15/08/2017
4 Cagiro	Installation of Basic Civil Engineering Services	George Albertini	0823432575	Belhar - Pocket 11	Private	8,043,500.00	30/11/2017
5 Cagiro	Installation of Basic Civil Engineering Services	George Albertini	0823432575	Belhar - Pocket 8A	Private	4,200,000.00	30/08/2017
6 Cagiro	Installation of Basic Civil Engineering Services	George Albertini	0823432575	Belhar - Pocket 5-9	Private	4,000,000.00	ETA TBD
7 Cagiro	Installation of Basic Civil Engineering Services	George Albertini	0823432575	Belhar - Pocket 2,3 + 4	Private	5,992,559.40	15/03/2018 - 15/04/2018
8 Civil Dynamics	Development Roads construction and Stormwater	Civil Dynamics - Kobus Oosthuizen	0823952272	ED PARK EXTENSION	LIDS 150	600,000.00	2014
9 Seven Six	Development Roads Construction and Stormwater	Neo Consulting - Willie Groenewald	081261662	Hoodskops 2 Phase 2 - 4 Development Grabouw	Private	1,641,302.50	March 2012
10 Seven Six	Development Roads Construction and Stormwater	Neo Consulting - Willie Groenewald	081261662	Pleinvlei Housing Project	Private	1,433,656.00	July 2012
11 Civil Dynamics	Upgrading of roads and stormwater	Civil Dynamics - Kobus Oosthuizen	0823952272	MELKBOESCH VILLAGE: UPGRADING OF POND SYSTEM	A2017/C/POND	177,220.00	June 2012
12 Welapedia	Construction of all Civil Works - Pavedment, concrete, walls, drains and finished	Francis Verduyn	078019872	Hamilton High School, Hermanus	Private	1,501,536.00	2015

RETICULATION WORKS (OPEN TRENCH / TRENCHLESS PIPELINE INSTALLATIONS, REHABILITATION AND VALVE INSTALLATIONS)

EMPLOYER	NATURE OF WORK	ENGINEER / PROJECT MANAGER	CONTRACT DETAILS	PROJECT NAME	CONTRACT NUMBER	CONTRACT VALUE	COMPLETION DATE
City of Cape Town	Emergency sewer repair	Morganat Omsid		C/o Dale Road & Turfloop Road, Wierburg	630/2016/2017 - NE2312	139,085.38	9/7/2018
City of Cape Town	Emergency sewer repair	Morganat Omsid		Wynburg & Heideveld	630/2016/17 - NE3126	344,528.15	16/07/2018
City of Cape Town	Emergency repair of pump station	Dodd Erasmus	078 045 0695	Wynburg Pumpstation (Phase 1, 2 & 3)	630/2016/17 - NE2394	2,705,385.00	21/06/2018
City of Cape Town	Emergency maintenance and repair of water infrastructure	Kim Stevens	081 444 3383	Beaumont Avenue, Tiel	530/2016/17	375,293.88	27/06/2018
City of Cape Town	Emergency maintenance and repair of water infrastructure	Selwyn Fortuin	078-833278 / 081-4455041	Greenbush, Constantia repair	550/2016/17	37,479.55	11/04/2018
City of Cape Town	Emergency maintenance and repair of water infrastructure	Murphree Allen	0780631847	Sunshine Reservoir, Heideveld repair	590/2016/17	340,435.02	16/06/2018
City of Cape Town	Emergency maintenance and repair of water infrastructure	Ashley Gordon		Blue Water Close, Brecklow	530/2016/17	171,195.62	26/01/2018

CITY OF CAPE TOWN

INFORMAL SETTLEMENTS WATER & WASTE SERVICES: INFORMAL SETTLEMENTS & BACKYARDERS

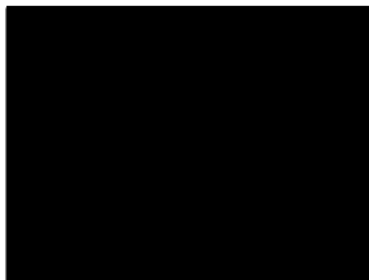
CONTRACT NO. 107Q/2018/19

TERM TENDER FOR CIVIL ENGINEERING WORKS WITHIN THE CITY OF CAPE TOWN

SCHEDULE 10: SCHEDULE OF EQUIPMENT INSTALLATIONS AND SERVICE HISTORY

NOT APPLICABLE

SIGNED ON BEHALF OF TENDERER:



CITY OF CAPE TOWN

INFORMAL SETTLEMENTS WATER & WASTE SERVICES: INFORMAL SETTLEMENTS & BACKYARDERS

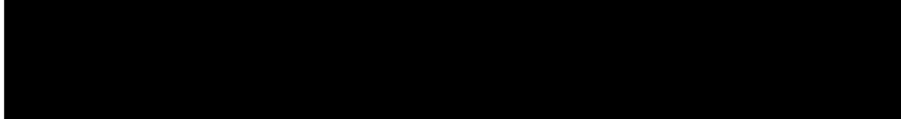
CONTRACT NO. 107Q/2018/19

TERM TENDER FOR CIVIL ENGINEERING WORKS WITHIN THE CITY OF CAPE TOWN

SCHEDULE 11: CONFIRMATION OF CONTRACTOR REGISTRATION / ACCREDITATION

SANS 9001

Where a QA system has been approved in terms of SANS 9001, state registration certificate number and standard.

Certificate No: 

SANS 14001

Where an Environmental Management System has been approved in terms of SANS 14001, state registration certificate number and standard.

Certificate No: 

OHSAS 18001

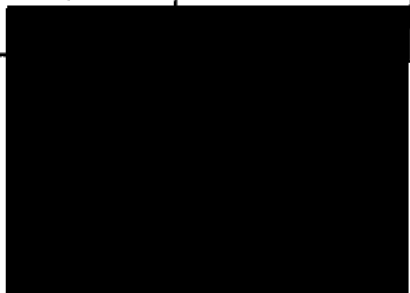
Where an Occupational Health and Safety (OHS) Management System has been approved in terms of OHSAS 18001, state registration certificate number and standard.

Certificate No: 

NRS 040-3:2002

Where a person has been authorised, in writing, to be responsible for ensuring that the work on or near medium and high voltage equipment and installations can be carried out with safety.

	Name of Responsible Person	Certificate Number	Certificate Date	Copy of Certificate (Y/N)
1	N/A			
2				
3				
4				
5				



SIGNED ON BEHALF OF TENDERER:

SANS 9001



CERTIFICATE OF REGISTRATION

This is to certify that

Nejeni Construction and Project Management (Pty) Ltd
Ground Floor
6 Heath Circle
Blackheath
7580

has been audited and found to meet the requirements of standard
ISO 9001:2015 Quality Management System

Scope of certification

Civil Engineering Services including Project Management, Installation,
Maintenance and Rehabilitation of Pipelines, Water retaining structure and
Pressure Management.

Certificate number: 15779 02

Certificate valid until: 31/12/2019

Certificate valid from: 01/01/2019

Certificate valid until: 31/12/2019

Certificate valid from: 01/01/2019

Certificate valid until: 31/12/2019

Certificate valid from: 01/01/2019

Karen Prendergast
Sector Director - Certification
Exova BM TRADA

Exova (Pty) Ltd, (T/A Exova BM TRADA), Chelmsford, Essex, High Wycombe, Buckinghamshire, HP14 4ND, UK
Registered Office: Exova (Pty) Ltd, 600000 Industrial Estate, Hendridge, Aldershot, Surrey GU11 3LJ, United Kingdom. Reg No. 50070419

This certificate remains the property of Exova (Pty) Ltd. This certificate and all copies or reproductions of the certificate shall be returned to Exova (Pty) Ltd or destroyed if requested. Further information regarding the scope of this certificate and verification of the certificate is available through Exova BM TRADA at the above address or at www.exovabmtrada.com

The use of the UKAS Accreditation mark indicating accreditation in respect of these activities covered by the ISO 9001:2015 certificate 012

CITY OF CAPE TOWN

INFORMAL SETTLEMENTS WATER & WASTE SERVICES: INFORMAL SETTLEMENTS & BACKYARDERS

CONTRACT NO. 107Q/2018/19

TERM TENDER FOR CIVIL ENGINEERING WORKS WITHIN THE CITY OF CAPE TOWN

SCHEDULE 12: DETAILS OF QUALIFICATIONS AND STAFF EXPERIENCE OF STAFF

Tenderers shall set out in the Schedule hereunder details of the listed staff's experience in work of a similar nature to that for which their Tender is submitted.

SITE AGENT / CONSTRUCTION MANAGER	NAME: COLIN BROWN				NQF LEVEL	7
	IAN DANIELS					5
CONTRACT & CLIENT	NATURE OF WORK	POSITION HELD	VALUE OF WORK	YEAR COMPLETED		
CV, QUALIFICATIONS & EXPERIENCE ATTACHED FOR:						
• COLIN BROWN • IAN DANIELS						

GENERAL FOREMAN/ CONSTRUCTION SUPERVISOR	NAME: PETER ALGERMAN				NQF LEVEL	4
	JEROME JOEMAT					4
CONTRACT & CLIENT	NATURE OF WORK	POSITION HELD	VALUE OF WORK	YEAR COMPLETED		
CV & EXPERIENCE ATTACHED FOR:						
• PETER ALGERMAN • JEROME JOEMAT.						

Number of sheets appended by the tenderer to this Schedule 13 (If nil, enter NIL).

SIGNED ON BEHALF OF THE TENDERER:

CITY OF CAPE TOWN

INFORMAL SETTLEMENTS WATER & WASTE SERVICES: INFORMAL SETTLEMENTS & BACKYARDERS

CONTRACT NO. 107Q/2018/19

TERM TENDER FOR CIVIL ENGINEERING WORKS WITHIN THE CITY OF CAPE TOWN

SCHEDULE 13: SCHEDULE OF CONSTRUCTION EQUIPMENT

The tenderer shall state below what construction equipment will be available for this Contract. The tenderer shall differentiate, if applicable, between construction equipment immediately available and construction equipment which will become available by virtue of outstanding orders, and indicate what further construction equipment will be acquired or hired for the work should he be awarded the Contract.

CONSTRUCTION EQUIPMENT IMMEDIATELY AVAILABLE

DESCRIPTION, SIZE, CAPACITY	NUMBER
DETAILED SCHEDULE ATTACHED —	

CONSTRUCTION EQUIPMENT ON ORDER

(State details of arrangements made, with delivery dates)

DESCRIPTION, SIZE, CAPACITY	NUMBER
N/A	

CONSTRUCTION EQUIPMENT THAT WILL BE ACQUIRED OR HIRED

(State details of delivery arrangements)

DESCRIPTION, SIZE, CAPACITY	NUMBER
IF REQUIRED, ACCOUNT CONFIRMATION FOR 	

Number of sheets appended by the tenderer to this Schedule 2 (If nil, enter NIL).

SIGNED ON BEHALF OF TENDERER:



Tender

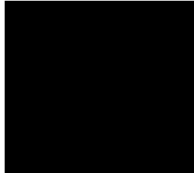
SCHEDULE 13: SCHEDULE OF CONSTRUCTION EQUIPMENT



DESCRIPTION	AVAILABLE (A)	QTY
	ON ORDER (O)	
	Hired (H)	
FUSO Crane Truck - 4 Ton	A	1
FUSO Tipper - 4 Ton	A	3
JCB Digger Loader	A	3
BOMAG 65 Walk Behind Roller with Trailer	A	1
FUSO High Pressure Jet Truck incl. 4x4	A	1
DEUTZ 3 Cylinder Power Pack	A	1
Hydraulic Pipe Puller	A	2
Diesel Bowser on trailer	A	1
PLASSON Electrofusion Polymatic Welder 230V	A	2
Electrofusion Polymatic Welder 230V	A	1
Butt Welder incl. shaver and hot plate	A	1
Heavy Duty Breaker incl. Moil Point	A	1
Small Breaker incl. Moil Point	A	1
HGR 72 Rammer	A	3
Plate Compactor	A	3
1000L Water Tanker with Pump	A	1
HONDA 7 KVA Generator	A	2
IDEAL POWER 6 KVA Generator	A	2
3 Inch. Trash Pump incl. pipes	A	1
2 Inch. Centrifugal	A	1
TOYOTA HILUX 2L - 1 Ton (LDV)	A	1
MITSUBISHI TRITON 2L - 1 Ton (LDV)	A	1
HYUNDAI H100 1.3 Ton Commercial Vehicle LDV	A	5
CHEV CORSA 3/4 ton Utility Vehicle LDV	A	5
FORD Ranger 2.2L Club Cab 1 ton LDV	A	1
Round Trench Compactor 270 Honda GX	A	1
JCB Vibro Max Sit on Roller	A	1
STIHL Petrol Power Saw	A	1
HAMM Roller	A	2
Yanmar Vio30 Excavator (2015)	A	1
FAW 8 TON TRUCK	A	1
10m3 Truck (Mercedes)	Hired (H)	4
50t Crane (Lea Cranes)	Hired (H)	2
Excavators (various)	Hired (H)	TBC



NEJENI CONSTRUCTION AND PROJECT MANAGEMENT (PTY) LTD

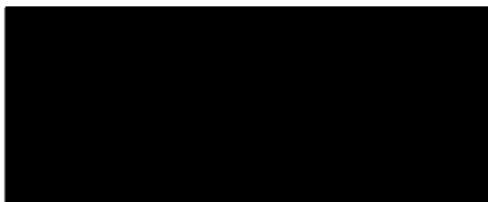


Re: Credit Application

I refer to your recent application and am pleased to inform you that your company's credit application has been approved to a maximum limit of R250,000.00 30 days NETT.

Looking forward to a long and mutually beneficial relationship between our companies.

Yours faithfully,



On behalf of QuicksILVA Burcon Plant Hire (PTY) LTD

NOTHING'S IMPOSSIBLE

CITY OF CAPE TOWN
INFORMAL SETTLEMENTS WATER & WASTE SERVICES: INFORMAL SETTLEMENTS & BACKYARDERS

CONTRACT NO. 107Q/2018/19

TERM TENDER FOR CIVIL ENGINEERING WORKS WITHIN THE CITY OF CAPE TOWN

SCHEDULE 14: DETAILS OF TENDERER'S WORKSHOP FACILITIES

NOT APPLICABLE

TERM TENDER FOR CIVIL ENGINEERING WORKS WITHIN THE CITY OF CAPE TOWN

Acceptance of this tender shall not be construed as approval of all or any of the listed sub-contractors. Should any of the sub-contractors not be approved subsequent to acceptance of the tender, this shall in no way invalidate the contract, and the tendered unit rates for the various items making up the work activities shall remain final and binding.

SUB-CONTRACTORS		
Sub-contractor's name	Work activities to be undertaken by the Sub-contractor	Estimated value of work (Rand)
W6CONSTRUCT (PTY) LTD	CIVIL WORKS	≤ 30%

SIGNED ON BEHALF OF TENDERER: . . .

B-BBEE EXEMPTED AFFIDAVIT FOR EXEMPTED MICRO ENTERPRISES
(ISSUED IN TERMS OF THE AMENDED CONSTRUCTION SECTOR CODE)
 (Gazette Vol 670 No. 41287)

Issued in terms of paragraph 3.6.2.4.1 (B)

I, the undersigned,

Full names and surname	[REDACTED]
Identity number	[REDACTED]

Hereby declare under oath as follows:

- The contents of this statement are to the best of my knowledge a true reflection of the facts.
- I am a Member / Director / Owner of the following enterprise and am duly authorized to act on its behalf.

Enterprise Name:	WECONSTRUCT (PTY) LTD		
Trading Name (If Applicable):			
Registration Number:	[REDACTED]		
Physical Address:	1 UTULIS STREET, BLACKHEATH 7580		
Type of Entity (CC, (Pty) Ltd, Sole Prop etc.):	(PTY) LTD		
Nature of Construction Business: <i>Indicate the applicable category with a tick.</i>	BEP (Build Environment Professional)	Contractor ☒	Supplier
Definition of "Black People"	As per the Broad-Based Black Economic Empowerment Act 53 of 2003 as Amended by Act No 48 of 2013 "Black People" is a generic term which means: Africans, Coloureds and Indians - who are citizens of the Republic of South Africa by birth or descent; or who became citizens of the Republic of South Africa by naturalization before 27 April 1994; or after 27 April 1994 and who would have been entitled to acquire citizenship by naturalization prior to that date.		
Definition of "Black Designated Groups"	"Black Designated Groups" means: (a) unemployed black people not attending and not required by law to attend an educational institution and not awaiting admission to an educational institution; (b) Black people who are youth as defined in the National Youth Commission Act of 1998; (c) Black people who are persons with disabilities as defined in the Code of Good Practice on employment of people with disabilities issued under the Employment Equity Act; (d) Black people living in rural and under developed areas; (e) Black military veterans who qualifies to be called a military veteran in terms of the Military Veterans Act 18 of 2011.		

- 3) I hereby declare under Oath that as per Amended Code Section 100 of the Amended Codes of Good Practice issued under section 9 (1) of B-BBEE Act No 53 of 2003 as Amended by Act No 48 of 2013,

- The Enterprise is 51 % Black Owned
- The Enterprise is 25.5 % Black Female Owned
- The Enterprise is 0 % Owned by Black Designated Group (provide Black Designated Group Breakdown below as per the definition in the table above)

☐ Black Youth %	<u>18.57</u> %
☐ Black Disabled %	<u>0</u> %
☐ Black Unemployed %	<u>0</u> %
☐ Black People living in Rural areas %	<u>0</u> %
☐ Black Military Veterans %	<u>0</u> %

Construction Sector Affidavit



Tax Clearance Certificate Number:

Tax Clearance Certificate - Good Standing

Enquiries
0800 00 SARS (7277)
Approved Date
2018-04-04
Expiry Date
2019-04-04

Company registration number [REDACTED]
Income Tax [REDACTED]
Trading Name WECONSTRUCT PTY LTD

It is hereby confirmed that, on the basis of the information at the disposal of the South African Revenue Service (SARS), the above-mentioned taxpayer has complied with the requirements as set out in the Tax Administration Act.

This certificate is valid until the expiry date reflected above, subject to the taxpayer's continued tax compliance. To verify the validity of this certificate, contact SARS through any of the following channels:

- via eFiling
- by calling the SARS Contact Centre
- at your nearest SARS branch

This certificate is issued in respect of the taxpayer's tax compliance status only, and does not address any other aspect of the taxpayer's affairs.

This certificate is issued free of charge by SARS

COR39



Companies and Intellectual
Property Commission
Kommissie van Bedryfs- en
Eienskapereguleerder van Suid-Afrika

Date: 14/05/2018

Our Reference: 9111919045

KAREN OOSTHUIZEN
E-mail: KAREN@SHELFCO.CO.ZA
P O BOX 5344
CAPE TOWN
8000

RE: Amendment to Company Information
Company Number: 2017/067609/07
Company Name: WECONSTRUCT (PTY) LTD

We have received a COR39 (Notice of change of company directors) from you dated 29/03/2018.

The COR39 was accepted and placed on file.

The following change was effected to Director/Secretary/Officer:
Director COLIN BROWN was added

The following change was effected to Director/Secretary/Officer:
Director DIANE CHARLOTTE DANIELS details was Changed

The following change was effected to Director/Secretary/Officer:
Director HEIKE WILKEN details was Changed

The following change was effected to Director/Secretary/Officer:
Director NICOLAAS JOHANNES WILKEN details was Changed

The following change was effected to Director/Secretary/Officer:
Director JULIAN NASEN DANIELS details was Changed

The following change was effected to Director/Secretary/Officer:
Director DONNAVIN MICHAEL WRIGHT details was Changed

The following change was effected to Director/Secretary/Officer:
Director CLIFFORD SWART details was Changed

Yours truly

Commissioner: CIPC

Please Note:

The attached certificate can be validated on the CIPC web site at www.cipc.co.za.
The contents of the attached certificate was electronically transmitted to the South African Revenue Services.



The Companies and Intellectual Property Commission
of South Africa
P.O. BOX 422, PRETORIA, 0001, Republic of South Africa, Corner 25th, PRETORIA.
Call Centre Tel: 0800 100 2672, Website www.cipc.co.za



1

COR39

**Certificate issued by the Companies and Intellectual Property
Commission on Monday, May 14, 2018 12:58
Certificate of Confirmation**



Companies and Intellectual
Property Commission
A member of the SAG Group

Registration number **2017/067609/07**
Enterprise Name **WECONSTRUCT (PTY) LTD**

Name
Postal Address

Active Directors / Officers

Surname and first names	ID number or date of birth	Director type	Appoint-ment date	Addresses
BROWN, COLIN	6911265042087	Director	13/03/2018	Postal: 13 YINLAN STREET, VREDEKLOOF, CAPE TOWN, WESTERN CAPE, 7580 Residential: 13 YINLAN STREET, VREDEKLOOF, CAPE TOWN, WESTERN CAPE, 7580
SWART, CLIFFORD	8111185062081	Director	16/02/2017	Postal: VIRIDIAN STREET, BURGUNDY ESTATE, PLATTEKLOOF, WESTERN CAPE, 7500 Residential: VIRIDIAN STREET, BURGUNDY ESTATE, PLATTEKLOOF, WESTERN CAPE, 7500
DANIELS, JULIAN NABEN	6810105272095	Director	16/02/2017	Postal: 9 LINKS DRIVE, PINELANDS, CAPE TOWN, WESTERN CAPE, 7405 Residential: 9 LINKS DRIVE, PINELANDS, CAPE TOWN, WESTERN CAPE, 7405
WILKEN, NICOLAAS JOHANNES	6705325126084	Director	15/02/2017	Postal: 12 TOPAZ STREET, SOMERSET WEST, CAPE TOWN, WESTERN CAPE, 7130 Residential: 12 TOPAZ STREET, SOMERSET WEST, CAPE TOWN, WESTERN CAPE, 7130
WILKEN, HEIKE	6909300254099	Director	15/02/2017	Postal: 12 TOPAZ STREET, SOMERSET WEST, CAPE TOWN, WESTERN CAPE, 7130 Residential: 12 TOPAZ STREET, SOMERSET WEST, CAPE TOWN, WESTERN CAPE, 7130
DANIELS, DIANE CHARLOTTE	6701160154081	Director	15/02/2017	Postal: 9 LINKS DRIVE, PINELANDS, CAPE TOWN, WESTERN CAPE, 7405 Residential: 9 LINKS DRIVE, PINELANDS, CAPE TOWN, WESTERN CAPE, 7405



The Companies and Intellectual Property Commission
of South Africa

P.O. BOX 429, PRETORIA, 0001, Republic of South Africa. Dated 269, PRETORIA.
Call Centre Tel: 086 010 2473 / Website: www.cipc.co.za



3

CITY OF CAPE TOWN

INFORMAL SETTLEMENTS WATER & WASTE SERVICES: INFORMAL SETTLEMENTS & BACKYARDERS

CONTRACT NO. 107Q/2018/19

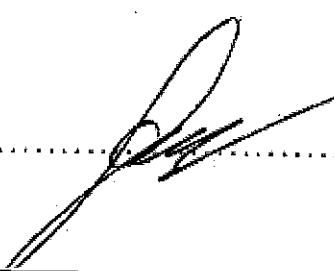
TERM TENDER FOR CIVIL ENGINEERING WORKS WITHIN THE CITY OF CAPE TOWN

SCHEDULE 16: HEALTH AND SAFETY PLAN

Tenderers are referred to the requirements of Clause F.2.16.4 in Part T1.2 Tender Data and shall append the required draft Health and Safety Plan to this Schedule.

Number of sheets appended by the tenderer to this Schedule 19 (If nil, enter NIL).

SIGNED ON BEHALF OF TENDERER:





HEALTH and SAFETY PLAN

for Nejeni Construction and Project Management

HEALTH AND SAFETY PLAN

1.0 INTRODUCTION

This document will reflect Safety Management system that will be implemented by the above-mentioned company on the intended project.

The purpose of this document will present to the client a proposal as to how all Health and Safety aspects will be implemented, monitored and managed.

1.1 ABBREVIATIONS AND REFERENCE DOCUMENTS

- Occupational Health and Safety Act no.85 of 1993 and regulation (OHSA)
- Construction Regulations 2014
- SABS 400 Application of National Building Regulations
- SABS 810 Portable rechargeable fire extinguishers
- SABS 400 General Safety Regulations 13a

1.2 OBJECTIVES AND TARGETS FOR THE PROJECT

The company is committed to ensure a safe and healthy environment for all employees to work in. All subcontractors, visitors or consultants must adhere to the provisions of this Safety Plan.

- All accidents are avoidable
- Everyone is responsible for organizing accident prevention at his or her own level on site
- Safety training is essential
- Prevention is an integral part of the quality approach
- Working safely is ensuring your job
- The company Project Management commits itself to the above objectives and targets for all projects undertaken
- The contractor targets a Disabling Injury Frequency Rate (DIFR) of 0
- Legal Compliance
- To minimize risks
- Protection of the workforce

1.3 PLANNING AN PROCEDURES

1.3.1 Introduction

The purpose of planning and procedures is to ensure the established targets and objectives are met as defined in para. 1.2

Page 3 of 19

Project Directory:

Client	City of Cape Town	Tel: 021 444 3392
Contact Person	Hakeem Abed	Fax:
Client Agent		Tel:
Contact Person		Fax:
Consulting Engineer		Tel:
Contact Person		Fax:
Contractor CEO	Cliff Swart	Cell:
Contact Person		Tel: 021 905 7338
Construction Work Supervisor		Fax: 086 604 2000
Contact Person		Cell: 082 896 8306
Contract Health & Safety Consultant	Safety Max	Tel:
Contact Person	Jos van Zyl	Tel: 021 300 1734
Services		Cell: 079 852 0924
Department of Labour		Tel:

Provided that where appropriate qualifications and training are registered in terms of the provisions of the National Qualification Framework Act, 200 (Act No.67 of 200), those qualifications and that training must be regarded as the required qualifications and training; and

b) is familiar with the Act and with the applicable regulations made under the Act;

"Construction Manager" means a competent person responsible for the management of the physical construction processes and the coordination, administration and management of resources on a construction site;

"Construction Site" means a work place where construction work is being performed;

"Construction Supervisor" means a competent person responsible for supervising construction activities on a construction site;

"Construction Vehicle" means a vehicle used as a means of conveyance for transporting persons or material, or persons and material, on and of the construction site for the purposes of performing construction work;

"Construction Work" means any work in connection with -

- a) the construction, erection, alteration, renovation, repair, demolition or dismantling of or addition to a building or any similar structure; or
- b) 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;

"Construction Work Permit" means a document issued in terms of regulation 3;

"Contractor" means an employer who performs construction work;

"Demolition work" means a method to dismantle, wreck, break, pull down or knock down of a structure or part hereof by way of manual labour, machinery, or the use of explosives;

"Design" in relation to any structure, includes drawings, calculations, design details and specifications;

"Designer" means-

- (a) a competent person who-
 - (i) prepares a design;
 - (ii) checks and approves a design;
 - (iii) arranges for a person at work under his or her control to prepare a design, including an employee of that person where he or she is the employer; or

Page 7 of 19

"Mobile Plant" means any machinery, appliance or other similar device that is able to move independently, and is used for the purpose of performing construction work on a construction site;

"National Building Regulations" means the National Building Regulations made under the National Building Regulations and Building Standards Act, 197 (Act No. 103 of 197), and promulgated by Government Notice No. R. 2378 of 30 July 190, as amended by Government Notices No's R. 432 of 8 March 191, R. 919 of 30 July 199 and R. 547 of 30 May 208;

"Parson Day" means one normal working shift of carrying out construction work by a person on a construction site;

"Principal Contractor" means an employer appointed by the client to perform construction work;

"Professional Engineer or Professional Certificated Engineer" means a person holding registration as either a Professional Engineer or Professional Certificated Engineer in terms of the Engineering Profession Act, 200 (Act No. 46 of 200);

"Professional Technologist" means a person holding registration as a Professional Engineering Technologist in terms of the Engineering Profession Act, 200;

"Provincial Director" means the provincial director as defined in regulation 1 of the General Administrative Regulations, 2003;

"shoring" means a system used to support the sides of an excavation and which is intended to prevent the cave-in or the collapse of the sides of an excavation;

"Structure" means-

- a) any building, steel or reinforced concrete structure (not being a building), railway line or siding, bridge, waterworks, reservoir, pipe or pipeline, cable, sewer, sewage works, fixed vessels, road, drainage works, earthworks, dam, wall, mast, tower, tower crane, bulk mixing plant, pylon, surface and underground tanks, earth retaining structure or any structure designed to preserve or alter any natural feature, and any other similar structure;
- b) any false work, scaffold or other structure designed or used to provide support or means of access during construction work; or
- c) any fixed plant in respect of construction work which includes installation, commissioning, decommissioning or dismantling and where any construction work involves a risk of a person falling;

"Temporary works" means any false work, formwork, support work, scaffold, shoring or other temporary structure designed to provide support or means of access during construction work;

Contractor, shall conduct hazard identification, job observations and task analysis of activities on site. The Project Manager and his senior management prior to the commencement of any construction work will do these studies in order to assess the risks which shall form part of the safety plan applied on site.

Contractor, shall ensure that a copy of the HIRA be submitted to the Client for approval.

Contractor, shall ensure that all HIRA's conducted will be conveyed to all personnel and sub-contractors through the site training program and that these training sessions will be presented by the competent person regarding the hazard and related work procedures before any work commences and thereafter at two monthly intervals.

The Contractor, HIRA Team that will be established will comprise members as follows:

- Competent Risk Assessor
- Health and Safety Representative(s).
- Management Representative

2.3.9 Health and Safety Representatives(s)

Contractor, shall ensure that at least one (1) Health and Safety Representative is elected and trained to carry out his/her functions in his/her area of responsibility. This will include areas where less than fifty (50) employees are engaged in activity. Contractor, shall ensure that the elected persons are designated in writing for a specific area and period of time.

Contractor, shall further ensure that the designated persons conduct fortnightly inspections within their area of responsibility, the records shall be kept for auditing and that deviations recorded are reported to the responsible supervisor within the designated person's area so that appropriate action can be taken.

The designated person/s shall be permitted to attend Health and Safety Committee Meetings.

2.3.10 Health and Safety Committee

Contractor shall convene a health and safety committee meeting quarterly. All members required to be in attendance shall be notified of such meeting by means of a formal agenda.

Contractor, shall ensure that the meetings be organized and chaired by's responsible Person, and that an attendance register and minutes are kept for auditing purposes.

Contractor, shall ensure that a copy of the minutes be circulated to all members in attendance well before convening the next meeting.

2.3.11 Health and Safety Training

Contractor acknowledges that training of personnel is both a legal requirement and a contractual requirement. The shall provide to the Engineer a Safety Planning Matrix at Quarterly intervals for review.

- ✓ Pollution
- ✓ Handtool

2.3.13 General Inspection, Monitoring and Reporting

Contractor, shall comply with the requirements of the safety management plan upon which the dates of inspections and training and awareness will be entered, conducted and monitored.

Contractor shall ensure that they comply with procedure reference to Accident, Non-Conformance and corrective and preventive action management.

Contractor shall keep all records of inspections and investigations undertaken during the contract for the specified legal period as defined in the OHSA and Regulations.

2.3.15 Internal Audits

Internal Audits will be conducted monthly.

- The audits will be conducted.
- Records of these audits will be kept on site for auditing purposes.
- Deviations identified and non-conformances reported shall be investigated and corrective action taken to prevent re-occurrences, which arise out of the internal audits.
- Internal audits will be done by Vlam Business Consultants which have extensive experience in the implementation of the Occupational Health and Safety Act 85 of 1993 and Construction Regulations of 2003 over the past 8 years. Audits will be done by Wessel Barnard with detailed reports being presented.

2.3.16 External Audits

- These audits are to be conducted quarterly by the Client's appointed Agent.
- The audit will be conducted using the Consultants Safety Audit System.
- The copy of the audit shall be kept on site for inspection purposes.

2.3.17 Emergency Procedures

Contractor shall submit to the Engineer a detailed Emergency Plan prior to commencement of work subject to the Letter of Acceptance being received.

2.3.18 First Aid Box and First Aid Equipment

Contractor shall ensure that all working areas are adequately provided with first aid whether there are fifty (50) employees or less engaged on the contract. The First Aid attendant shall be trained in accordance with the requirements set out in the OHSA with recognized and accredited service providers.

Contractor, shall assess the Health and Safety Signage requirement in conjunction with the HIRA's conducted and will place the signage at strategic positions on the site works.

Contractor shall also maintain the signage to ensure its effectiveness at all times and under all conditions. Signage, which cannot be repaired, shall be replaced.

2.3.24 Permits

No permits are envisaged for the Project.

2.3.25 Sub-contractors/Suppliers

Contractor shall enter into an Agreement with Mandatory in terms of Section 37(2) of the Occupational Health and Safety Act, 85 of 1993, with all sub-contractors appointed. The Subcontractor Directory shown below may change as the project progresses.

2.3.26 Subcontractors Directory

Subcontractor TBA	Contact Person:	Task:

Contractor shall assist and ensure the Sub-contractors engaged comply with all of these requirements and adhere to the requirements set out in the OHSA.
Contractor shall ensure that only those Section 37(2) agreements and appointments of the responsible persons on site, including the letters of good standing applicable to them, requested by Contractor, are obtained.

2.4 OCCUPATIONAL SAFETY

2.4.1 Excavations, Sloping, Dewatering or Drainage

Contractor shall ensure that all activities involving excavations, sloping, dewatering or drainage, a safe working procedure is submitted to the engineer for approval prior to work commencing. Excavation work may at times exceed a depth of 1,5 meters.

2.4.2 Stacking of Materials

Contractor shall ensure that stacking will be supervised by a person competent to supervise over the activities.

Contractor, shall ensure that clearly defined and allocated storage areas are provide for and identified, and that materials being stored within this area are stacked in accordance with sound stacking principles of sort-by sort, access to be maintained, level surface, and the height will not exceed three times the base width.

2.5.3 Hired Plant and Machinery

The Contractor shall ensure the following criteria are adhered to when considering hired plant and machinery:

- Only approved hire companies shall supply equipment to the site.
- Hired plant shall be checked for safety compliance prior to being accepted for use on site.
- Should hired equipment be accompanied by an operator, Contractor shall ensure that the operator's competency is verified.
- Contractor shall ensure the operators of hired plant attend fortnightly toolbox talks in conjunction with the Contractor, site personnel.
- Contractor shall ensure that all operators are equipped with the required PPE before commencing work on site.

2.5.4 General Machinery

In accordance with General Machinery Regulation 2(1), The Contractor shall:

- Ensure a competent person be appointed as defined in the above clause from the Occupational Health and Safety Act, 85 of 1993 and Regulations, to service and maintain all machinery in use on site.
- Contractor shall ensure that records are maintained of all services conducted.

2.5.5 Portable Electrical/Explosive Power Tools

Contractor, shall ensure the following procedure is adhered to regarding Portable Tools and Explosive Power tools:

- Minimum compliance with legislation.
- Only competent persons shall be permitted to conduct routine and daily inspections on the equipment.
- Persons competent to inspect the equipment shall be appointed in writing.
- Persons who are trained to operate such equipment shall be appointed and shall be the only authorized person to operate the equipment.
- Contractor shall ensure operation of the equipment is in accordance with the approved HIRA and Safe Working Procedure set out.
- All users shall undergo regular awareness training to ensure compliance.
- Contractor shall ensure the required PPE and clothing is provided and maintained.

2.5.6 Transport of Workers

Contractor shall ensure that whilst working on the contract, all employees will be transported in accordance with the requirements set out in the National Road Transport Regulations, 2000. The requirements shall include but are not limited to the following:

- Personnel shall not be transported on vehicles which are already conveying other goods or tools;
- Personnel shall not be transported in open vehicles. An adequate canopy or cover shall be provided;
- No employees shall stand or sit on the edge of the vehicle conveying them;

3.4 SHE RULES

1. LEARN the safe way to do your job before you start.
2. THINK safety, and ACT safely at all times.
3. OBEY safety rules and regulations – they are for your protection.
4. WEAR proper clothing and protective equipment.
5. CONDUCT yourself properly at all times – horseplay is prohibited.
6. OPERATE only the equipment you are authorized to use.
7. INSPECT tools/equipment for safe condition before starting work.
8. ADVISE your superior promptly of unsafe conditions or practices.
9. REPORT any injury immediately to your superior.
10. SUPPORT your safety program and take an active part in safety meetings.

CITY OF CAPE TOWN

INFORMAL SETTLEMENTS WATER & WASTE SERVICES: INFORMAL SETTLEMENTS & BACKYARDERS

CONTRACT NO. 107Q/2018/19

TERM TENDER FOR CIVIL ENGINEERING WORKS WITHIN THE CITY OF CAPE TOWN

SCHEDULE 17: PROPOSED DEVIATIONS AND QUALIFICATIONS BY TENDERER

The Tenderer should record any proposed deviations or qualifications he may wish to make to the tender documents in this Returnable Schedule. Alternatively, a tenderer may state such proposed deviations and qualifications in a covering letter attached to his tender and reference such letter in this schedule. Any proposed deviations or qualifications contained in a covering letter which is not referenced in this schedule will not be considered.

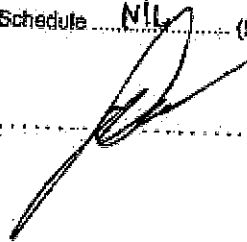
The Tenderer's attention is drawn to clause F.3.8 of the Standard Conditions of Tender referenced in the Tender Data regarding the Employer's handling of material deviations and qualifications.

If no deviations or qualifications are proposed, the schedule hereunder is to be marked NIL and signed by the Tenderer.

PAGE	CLAUSE OR ITEM	PROPOSED DEVIATION OR QUALIFICATION
—		

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

SIGNED ON BEHALF OF TENDERER:



CITY OF CAPE TOWN

INFORMAL SETTLEMENTS WATER & WASTE SERVICES: INFORMAL SETTLEMENTS & BACKYARDERS

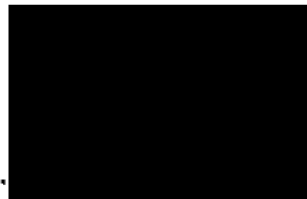
CONTRACT NO. 107Q/2018/19

TERM TENDER FOR CIVIL ENGINEERING WORKS WITHIN THE CITY OF CAPE TOWN

SCHEDULE 18: FUNCTIONALITY CRITERIA

Not applicable to this tender.

SIGNED ON BEHALF OF TENDERER:



CITY OF CAPE TOWN

INFORMAL SETTLEMENTS WATER & WASTE SERVICES: INFORMAL SETTLEMENTS & BACKYARDERS

CONTRACT NO. 107Q/2018/19

TERM TENDER FOR CIVIL ENGINEERING WORKS WITHIN THE CITY OF CAPE TOWN

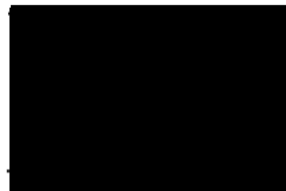
SCHEDULE 19: REGIONS OF PREFERENCE

The Tenderer shall

- a) complete this Regions of Preference schedule to indicate his preferred regions, where the Tenderer has submitted rates for more than one region;
- b) indicate his order of preference (first to fourth) by inserting the appropriate region (Central, South, East or North) alongside the preference; or
- c) If submitting rates for only one region, insert such region as his first region of preference.

Preference	Region
First Region of Preference	NORTH
Second Region of Preference	EAST
Third Region of Preference	CENTRAL
Fourth Region of Preference	SOUTH

SIGNED ON BEHALF OF TENDERER:



CITY OF CAPE TOWN

INFORMAL SETTLEMENTS WATER & WASTE SERVICES: INFORMAL SETTLEMENTS & BACKYARDERS

CONTRACT NO. 107Q/2018/19

TERM TENDER FOR CIVIL ENGINEERING WORKS WITHIN THE CITY OF CAPE TOWN

SCHEDULE 20 : DECLARATION CERTIFICATE FOR LOCAL PRODUCTION AND CONTENT FOR DESIGNATED SECTORS

This declaration is based on and replaces Municipal Bid Document 6.2 (MBD 6.2).

The amendments made to the MBD 6.2 document have been necessary to clarify this standard document as it relates to local production and content in the designated sector.

Before completing this declaration, bidders must study the General Conditions, Definitions, Directives applicable in respect of Local Content as prescribed in the Preferential Procurement Regulations, 2017 and the South African Bureau of Standards (SABS) approved technical specification number SATS 1286:2011 (Edition 1) and the Guidance on the Calculation of Local Content together with the Local Content Declaration Templates [Annex C (Local Content Declaration: Summary Schedule), D (Imported Content Declaration: Supporting Schedule to Annex C) and E (Local Content Declaration: Supporting Schedule to Annex C)].

Documents listed herein are downloadable from the dti's official website, <http://www.thedti.gov.za>.

This schedule must be completed by tenderers and returned with their tender at the closing date and time for this tender.

General Conditions

1.1 Preferential Procurement Regulations, 2017 (Regulation 8) makes provision for the promotion of local production and content.

1.2 Regulation 8(2) prescribes that in the case of designated sectors, organs of state must advertise such bids with the specific bidding condition that only locally produced goods with a stipulated minimum threshold for local production and content will be considered.

1.3 Where necessary, for tenders referred to in paragraph 1.2 above, a two stage bidding process may be followed, where the first stage involves a minimum threshold for local production and content and the second stage price and B-BEE.

1.4 A person awarded a contract in relation to a designated sector, may not sub-contract in such a manner that the local production and content of the overall value of the contract is reduced to below the stipulated minimum threshold.

1.5 The local content (LC) expressed as a percentage of the bid price must be calculated in accordance with the SABS approved technical specification number SATS 1286: 2011 as follows:

$$LC = [1 - x / y] * 100$$

Where

x is the imported content in Rand

y is the bid price in Rand excluding value added tax (VAT)

Prices referred to in the determination of x must be converted to Rand (ZAR) by using the exchange rate published by ABSA Bank at close of business on the date of advertisement of the bid as required in paragraph 4.1 below.

NOTE: The SABS approved technical specification number SATS 1286:2011 is accessible on http://www.thedti.gov.za/industrial_development/lp.jsp at no cost.

1.6 A bid may be disqualified/declared non-responsive if this Declaration Certificate and Annex C (Local Content Declaration: Summary Schedule) are not submitted as part of the bid documentation.

SCHEDULE 20 : DECLARATION CERTIFICATE FOR LOCAL PRODUCTION AND CONTENT FOR DESIGNATED SECTORS (Cont'd)

2. The stipulated minimum threshold(s) for local production and content (refer to Annex A of SATS 1286:2011) for this bid is/are as follows:

Description of services, works or goods Stipulated minimum threshold

Electrical and Telecom Cable sector 90%

3. Does any portion of the services, works or goods offered for Items as detailed in Annexure C have any imported content?

(Tick

applicable

box)

YES	☒	NO	☐
-----	-------------------------------------	----	--------------------------

3.1 If yes, the rate(s) of exchange to be used in this bid to calculate the local content as prescribed in paragraph 1.5 of the above General Conditions must be the rate(s) published by Absa Bank at close of business on the date of advertisement of the bid.

Indicate the rate(s) of exchange against the appropriate currency in the table below (refer to Annex A of SATS 1286:2011):

Currency	Rates of exchange
US Dollar	
Pound Sterling	
Euro	18.00
Yen	
Other	

NB: Suppliers must submit proof of the ABSA Bank rate(s) of exchange used.

Where, after the award of a bid, challenges are experienced in meeting the stipulated minimum threshold for local content the dti must be informed accordingly in order for the dti to verify and in consultation with the CCT provide directives in this regard.

TERM TENDER FOR CIVIL ENGINEERING WORKS WITHIN THE CITY OF CAPE TOWN

SCHEDULE 20 : DECLARATION CERTIFICATE FOR LOCAL PRODUCTION AND CONTENT FOR DESIGNATED SECTORS (Cont'd)

LOCAL CONTENT DECLARATION BY CHIEF FINANCIAL OFFICER OR OTHER LEGALLY RESPONSIBLE PERSON NOMINATED IN WRITING BY THE CHIEF EXECUTIVE OR SENIOR MEMBER/PERSON WITH MANAGEMENT RESPONSIBILITY (CLOSE CORPORATION, PARTNERSHIP OR INDIVIDUAL)

IN RESPECT OF BID NO. 107Q/2018/19

ISSUED BY: (Procurement Authority / Name of Municipality / Municipal Entity):
CITY OF CAPE TOWN

NB

The obligation to complete, duly sign and submit this declaration cannot be transferred to an external authorized representative, auditor or any other third party acting on behalf of the bidder.

Guidance on the Calculation of Local Content together with Local Content Declaration Templates (Annex C, D and E) is accessible on <http://www.thedti.gov.za/industrialdevelopment/ip.jsp>. Bidders should first complete Declaration D. After completing Declaration D, bidders should complete Declaration E and then consolidate the information on Declaration C. Declaration C should be submitted with the bid documentation at the closing date and time of the bid in order to substantiate the declaration made in paragraph (c) below. Declarations D and E should be kept by the bidders for verification purposes for a period of at least 5 years. The successful bidder is required to continuously update Declarations C, D and E with the actual values for the duration of the contract.

I, the undersigned, [REDACTED] (full names),
do hereby declare, in my capacity as [REDACTED]
of NEPTON CONSTRUCTION & PROJECT MANAGEMENT (name of bidder entity), the following:

The facts contained herein are within my own personal knowledge.

I have satisfied myself that:

the goods to be delivered in terms of the above-specified bid comply with the minimum local content requirements as specified in the bid, and as measured in terms of SATS 1286:2011;

The local content percentages (%) indicated below has been calculated using the formula given in clause 3 of SATS 1286:2011, the rates of exchange indicated in paragraph 4.1 above and the information contained in Declaration D and E which has been consolidated in Declaration C;

Bid price, excluding VAT (y)	R
Imported content (x), as calculated in terms of SATS 1286:2011	R 3173.00
Stipulated minimum threshold for local content (paragraph 2 above)	70%
Local content %, as calculated in terms of SATS 1286:2011	83.86%

If the bid is for more than one product, the local content percentages for each product contained in Declaration C shall be used instead of the table above. The local content percentages for each product has been calculated using the formula given in clause 3 of SATS 1286:2011, the rates of exchange indicated in paragraph 3.1 above and the information contained in Declaration D and E.

I accept that the Procurement Authority / Municipality / Municipal Entity has the right to request that the local content be verified in terms of the requirements of SATS 1286:2011.

I understand that the awarding of the bid is dependent on the accuracy of the information furnished in this application. I also understand that the submission of incorrect data, or data that are not verifiable as described in SATS 1286:2011, may result in the Procurement Authority / Municipal / Municipal Entity imposing any or all of the remedies as provided for in Regulation 14 of the Preferential Procurement Regulations, 2017 promulgated under the Preferential Policy Framework (2000-2005 of 2000).

SIGNATURE: [REDACTED]

DATE: [REDACTED]

WITNESS No. [REDACTED]

DATE: [REDACTED]

WITNESS No. [REDACTED]

DATE: 23.11.2018

Annex C

Local Content Declaration - Summary Schedule

(C1)	Tender No.	107Q/2018/19
(C2)	Tender description:	CIVIL ENGINEERING WORKS
(C3)	Designated product(s)	VALVES
(C4)	Tender Authority:	CITY OF CAPE TOWN
(C5)	Tendering Entity name:	N&JENI CONSTRUCTION
(C6)	Tender Exchange Rate:	Pula
(C7)	Specified local content %	EU

GBP

Note: VAT to be excluded from all calculations

Calculation of local content								Tender summary			
Tender item no's	List of items	Tender price per UoM (excl VAT)	Exempted imported value	Tender value net of exempted Imported content	Imported value	Local value	Local content % (per item)	Anticipated Annual Tender Qty (m)	Total tender value	Total exempted imported content	Total Imported content
(C8)	(C9)	(C10)	(C11)	(C12)	(C13)	(C14)	(C15)	(C16)	(C17)	(C18)	(C19)
G.3.1.1	110mm Class 16 Resilient Seal, left hand closing valves (SABS 1200)	3495.00	0.00	3495.00	683.00	2912.00	83%	1	3495.00		583.00
G.3.1.2	160mm Class 16 Resilient Seal, left hand closing valves (SABS 1200)	6390.00	0.00	6390.00	997.00	5393.00	84%	1	6390.00		997.00
G.3.1.3	200mm Class 16 Resilient	10190.00	0.00	10190.00	1593.00	8597.00	84%	1	10190.00		1593.00

CITY OF CAPE TOWN

INFORMAL SETTLEMENTS WATER & WASTE SERVICES: INFORMAL SETTLEMENTS & BACKYARDERS

CONTRACT NO. 107Q/2018/19

TERM TENDER FOR CIVIL ENGINEERING WORKS WITHIN THE CITY OF CAPE TOWN

SCHEDULE 20B : DECLARATION CERTIFICATE FOR LOCAL PRODUCTION AND CONTENT FOR DESIGNATED SECTORS

This declaration is based on and replaces Municipal Bid Document 6.2 (MBD 6.2)

The amendments made to the MBD 6.2 document have been necessary to clarify this standard document as it relates to local production and content in the designated sector.

Before completing this declaration, bidders must study the General Conditions, Definitions, Directives applicable in respect of Local Content as prescribed in the Preferential Procurement Regulations, 2017 and the South African Bureau of Standards (SABS) approved technical specification number SATS 1286:2011 (Edition 1) and the Guidance on the Calculation of Local Content together with the Local Content Declaration Templates [Annex C (Local Content Declaration: Summary Schedule), D (Imported Content Declaration: Supporting Schedule to Annex C) and E (Local Content Declaration: Supporting Schedule to Annex C)].

Documents listed herein are downloadable from the dti's official website, <http://www.thedti.gov.za>.

This schedule must be completed by tenderers and returned with their tender at the closing date and time for this tender.

General Conditions

1.1 Preferential Procurement Regulations, 2017 (Regulation 8) makes provision for the promotion of local production and content.

1.2 Regulation 8(2) prescribes that in the case of designated sectors, organs of state must advertise such bids with the specific bidding condition that only locally produced goods with a stipulated minimum threshold for local production and content will be considered.

1.3 Where necessary, for tenders referred to in paragraph 1.2 above, a two stage bidding process may be followed, where the first stage involves a minimum threshold for local production and content and the second stage price and B-BBEE.

1.4 A person awarded a contract in relation to a designated sector, may not sub-contract in such a manner that the local production and content of the overall value of the contract is reduced to below the stipulated minimum threshold.

1.5 The local content (LC) expressed as a percentage of the bid price must be calculated in accordance with the SABS approved technical specification number SATS 1286: 2011 as follows:

$$LC = [1 - x / y] * 100$$

Where

x is the imported content in Rand

y is the bid price in Rand excluding value added tax (VAT)

Prices referred to in the determination of x must be converted to Rand (ZAR) by using the exchange rate published by ABSA Bank at close of business on the date of advertisement of the bid as required in paragraph 4.1 below.

NOTE: The SABS approved technical specification number SATS 1286:2011 is accessible on http://www.thedti.gov.za/industrial_development/ip.jsp at no cost.

1.6 A bid may be disqualified/declared non-responsive if this Declaration Certificate and Annex C (Local Content Declaration: Summary Schedule) are not submitted as part of the bid documentation.

Tender
Part T2: Returnable Documents
Reference No. 107Q/2018/19

T2.2
Returnable Schedules

SCHEDULE 20 B : DECLARATION CERTIFICATE FOR LOCAL PRODUCTION AND CONTENT FOR DESIGNATED SECTORS (Cont'd)

2. The stipulated minimum threshold(s) for local production and content (refer to Annex A of SATS 1286:2011) for this bid is/are as follows:

<u>Description of services, works or goods</u>	<u>Stipulated minimum threshold</u>
Steel Products and Components	100%

3. Does any portion of the services, works or goods offered for Items as detailed in Annexure C have any imported content?
(Tick applicable box)

YES	☐	NO	☒
-----	--------------------------	----	-------------------------------------

3.1 If yes, the rate(s) of exchange to be used in this bid to calculate the local content as prescribed in paragraph 1.5 of the above General Conditions must be the rate(s) published by Absa Bank at close of business on the date of advertisement of the bid.

Indicate the rate(s) of exchange against the appropriate currency in the table below (refer to Annex A of SATS 1286:2011):

Currency	Rates of exchange
US Dollar	
Pound Sterling	
Euro	
Yen	
Other	

NB: Suppliers must submit proof of the ABSA Bank rate(s) of exchange used.

Where, after the award of a bid, challenges are experienced in meeting the stipulated minimum threshold for local content the dti must be informed accordingly in order for the dti to verify and in consultation with the CCT provide directives in this regard.

Tender
Part T2: Returnable Documents
Reference No. 107QQ/2018/19

T2.2
Returnable Schedules

CITY OF CAPE TOWN

INFORMAL SETTLEMENTS WATER & WASTE SERVICES: INFORMAL SETTLEMENTS & BACKYARDERS
CONTRACT NO. 107Q/2018/19

TERM TENDER FOR CIVIL ENGINEERING WORKS WITHIN THE CITY OF CAPE TOWN

SCHEDULE 20 B : DECLARATION CERTIFICATE FOR LOCAL PRODUCTION AND CONTENT FOR DESIGNATED SECTORS (Cont'd)

LOCAL CONTENT DECLARATION BY CHIEF FINANCIAL OFFICER OR OTHER LEGALLY RESPONSIBLE PERSON NOMINATED IN WRITING BY THE CHIEF EXECUTIVE OR SENIOR MEMBER/PERSON WITH MANAGEMENT RESPONSIBILITY (CLOSE CORPORATION, PARTNERSHIP OR INDIVIDUAL)

IN RESPECT OF BID NO. 107Q/2018/19

ISSUED BY: (Procurement Authority / Name of Municipality / Municipal Entity):

CITY OF CAPE TOWN

NE

The obligation to complete, duly sign and submit this declaration cannot be transferred to an external authorized representative, auditor or any other third party acting on behalf of the bidder.

Guidance on the Calculation of Local Content together with Local Content Declaration Templates (Annex C, D and E) is accessible on <http://www.thedti.gov.za/industrialdevelopment/ncip.jsp>. Bidders should first complete Declaration D. After completing Declaration D, bidders should complete Declaration E and then consolidate the information on Declaration C. Declaration C should be submitted with the bid documentation at the closing date and time of the bid in order to substantiate the declaration made in paragraph (a) below. Declarations D and E should be kept by the bidders for verification purposes for a period of at least 5 years. The successful bidder is required to continuously update Declarations C, D and E with the actual values for the duration of the contract.

I, the undersigned, CHIEF SWART (full names),

do hereby declare, in my capacity as GENERAL MANAGER

of NEJON CONSTRUCTION & PROJECT MANAGEMENT (name of bidder entity), the following:

The facts contained herein are within my own personal knowledge.

I have satisfied myself that:

the goods to be delivered in terms of the above-specified bid comply with the minimum local content requirements as specified in the bid, and as measured in terms of SATS 1286:2011;

The local content percentages (%) indicated below has been calculated using the formula given in clause 3 of SATS 1286:2011, the rates of exchange indicated in paragraph 4.1 above and the information contained in Declaration D and E which has been consolidated in Declaration C;

Bid price, excluding VAT (y)	R <u>2157</u>
Imported content (x), as calculated in terms of SATS 1286:2011	R <u>0</u>
Stipulated minimum threshold for local content (paragraph 2 above)	<u>100%</u>
Local content %, as calculated in terms of SATS 1286:2011	<u>100%</u>

If the bid is for more than one product, the local content percentages for each product contained in Declaration C shall be used instead of the table above. The local content percentages for each product has been calculated using the formula given in clause 3 of SATS 1286:2011, the rates of exchange indicated in paragraph 3.1 above and the information contained in Declaration D and E.

I accept that the Procurement Authority / Municipality / Municipal Entity has the right to request that the local content be verified in terms of the requirements of SATS 1286:2011.

I understand that the awarding of the bid is dependent on the accuracy of the information furnished in this application. I also understand that the submission of incorrect data, or data that are not verifiable as described in SATS 1286:2011, may result in the Procurement Authority / Municipal / Municipal Entity imposing any or all of the remedies as provided for in Regulation 14 of the Preferential Procurement Regulations, 2017 promulgated under the Preferential Policy Framework Act (PPFA), 2000 (Act No. 5 of 2000).

SIGNATURE:

DATE: 27.05.19

WITNESS No. 1

DATE: 27.05.19

WITNESS No. 2

DATE: 27.05.19

Tender
Part T2: Returnable Documents
Reference No. 107Q/2018/19

T2.2
Returnable Schedules

Local Content Declaration - Summary Schedule

(C1)	Tender No.	107Q2018/19
(C2)	Tender description:	TERM TENDER FOR CIVIL ENGINEERING WORKS WITHIN THE CITY OF CAPE TOWN
(C3)	Designated product(s)	Steel Products and Components
(C4)	Tender Authority:	CITY OF CAPE TOWN
(C5)	Tendering Entity name:	MOSEBIS CONSTRUCTION
(C6)	Tender Exchange Rate:	Fula Bt Gbp
(C7)	Specified local content %	100

Note: VAT to be excluded from all calculations

Calculation of local content							
Tender Item no	List of items	Tender price per UoM (incl VAT)	Exempted imported value	Tender value net exempted imported content	Imported value	Local value	Local content % (per item)
(C8)	(C9)	(C10)	(C11)	(C12)	(C13)	(C14)	(C15)
E.2.1	2000 x 1000 x 1000 nominal depth gabion mattresses as specified (Excluding Stone)	777.00	-	-	-	777.00	100%
E.2.2	2000 x 1000 x 500 nominal depth gabion mattresses as specified (Excluding Stone)	586.00	-	-	-	586.00	100%
E.2.3	1000 x 1000 x 250 nominal depth Reno mattresses as specified (Excluding Stone)	423.00	-	-	-	423.00	100%

Tender summary			
Anticipated Annual Tender Qty (m)	Total tender value	Total exempted imported content	Total imported content
(C16)	(C17)	(C18)	(C19)
1	777.00	-	-
1	586.00	-	-
1	423.00	-	-

Tender
Part 12: Performance Requirements
Reference No. 107Q2/2018/19

T&T
Estimable Schedules

E 2.4	2000 x 1000 x 279 nominal depth in sleepers and mattresses as specified (Excluding Stone)	423.00	-	-	-	423.00	100%	1	423.00	-	-
-------	---	--------	---	---	---	--------	------	---	--------	---	---

Signature of tenderer from Annex B


Date: 07.05.19

(C20) Total tender value	R 2159
(C21) Total exempt imported content	R -
(C22) Total Tender value not of exempt imported content	R -
(C23) Total imported content	R -
(C24) Total local content	R 2159
(C25) Average local content % of tender	100%

Tender
Part T2: Returnable Documents
Reference No. 107Q/2018/19

T2.2
Returnable Schedules

CITY OF CAPE TOWN

CONTRACT NO. 107Q/2018/19

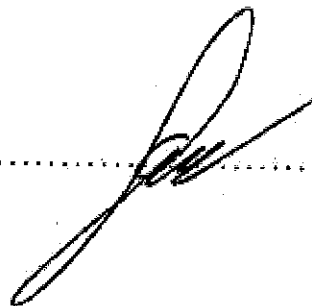
TERM TENDER FOR CIVIL ENGINEERING WORKS WITHIN THE CITY OF CAPE TOWN

SCHEDULE 22: 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:		
	Date	Title or Details
	19 NOVEMBER 2018	NOTICE TO TENDERERS NO.1

Attach additional pages if more space is required.

SIGNED ON BEHALF OF TENDERER:





**CITY OF CAPE TOWN
ISIXEKO SASEKAPA
STAD KAAPSTAD**

**FINANCE
SUPPLY CHAIN MANAGEMENT**

Kashiefa Ally
Supply Chain Management

T: 021 400 4160
E: kashiefa.ally@cape.gov.za

NOTICE TO TENDERERS NO: 1
Page: 4

19 November 2018

TENDER NO: 107Q/2018/19
CLOSING DATE: 26 NOVEMBER 2018
TENDER BOX NO: 152
DESCRIPTION: TERM TENDER FOR CIVIL ENGINEERING WORKS WITHIN THE CITY OF CAPE TOWN

Your attention is drawn to the following enquiries in respect of the above tender. This Notice to Tenderers forms an integral part of the Contract and is an addendum which must be recorded in Schedule 24: Record of Addenda to Tender Documents and bound within the 'Returnable Schedules'.

This Notice to Tenderers confirms that the following amendments to the Tender:

1. Replace page 133 with page A133. The amendments are as follows:
 - Item F.6.3 "Specify, mix and compact existing layer works (top 150mm)" Replace Unit "m" with "m³"
2. Replace page 189 with page A189. The amendments are as follows:
 - Add the following to "PSAB1 ENGINEER'S OFFICE"
 - **PSAB 1.2 Office Buildings (Sub clause 3.2)**
A furnished office of a minimum 12 m² is required on the site for the engineer or his representative.
 - **PSAB 1.3 Ablution and lairne facilities (Sub clause 3.2)**
The Contractor shall provide a toilet for the personal use of the engineer or his representative.
 - **PSAB 1.4 Carports (Sub clause 3.2)**
The Contractor shall provide two carports for the use of the engineer and his representative
3. Replace page (i) with page A1. The amendments are as follows:
 - Replace Closing Date 20 November 2018 with **Closing Date: 26 November 2018**
4. Replace page 2 with page A2. The amendments are as follows:
 - Replace Closing Date 20 November 2018 with **Closing Date: 26 November 2018**

Yours faithfully,

For: Basil Chindasamy
Director Supply Chain Management

CIVIC CENTRE OIKO LOUNTU BURGEMESTERUM
12 HERZOG BOULEVARD CAPE TOWN 8001 P.O. BOX 683 CAPE TOWN 8003
www.cape.gov.za

Making progress possible. Together.

Tenderers are to return a signed copy of this notice with the submission of their Tender (See Schedule 24 - Record of Addenda to Tender Document).

WRITTEN ACKNOWLEDGEMENT OF RECEIPT OF NOTICE 1 - 107Q/2018/19

Signature Date 19 NOVEMBER 2018

Legal and full name of tendering entity:

NETENI CONSTRUCTION & PROJECT MANAGEMENT (PVT) LTD

CITY OF CAPE TOWN

INFORMAL SETTLEMENTS WATER & WASTE SERVICES: INFORMAL SETTLEMENTS & BACKYARDERS

CONTRACT NO. 107Q/2018/19

TERM TENDER FOR CIVIL ENGINEERING WORKS WITHIN THE CITY OF CAPE TOWN

SCHEDULE 23: PREFERENCE SCHEDULE TO BE USED IN TERMS OF THE AMENDED CODES FOR MEASURING BROAD-BASED BLACK ECONOMIC EMPOWERMENT IN THE CONSTRUCTION SECTOR (2017) AND ITS TRANSITIONAL MEASURES

Preference Schedule where preferences are granted in respect of B-BBEE contribution

1 Definitions

The following definitions shall apply to this schedule:

All applicable taxes: Includes value-added tax, pay as you earn, income tax, unemployment insurance fund contributions and skills development levies.

Applicable Code: Shall be either the Amended Codes of Good Practice (published on 11 October 2013) or Sector Specific Codes as indicated in the tender conditions

B-BBEE: Broad-based black economic empowerment as defined in section 1 of the Broad-Based Black Economic Empowerment Act.

B-BBEE status level of contributor: The B-BBEE status of an entity in terms of a code of good practice on black economic empowerment issued in terms of section 9(1) of the Broad-Based Black Economic Empowerment Act.

Bid (Tender): A written offer in a prescribed or stipulated form in response to an invitation by an organ of state for the provision of services, works or goods, through price quotations, advertised competitive bidding processes or proposals.

Black Designated Groups: The meaning assigned to it in the codes of good practice issued in terms of section 9(1) of the Broad-Based Black Economic Empowerment Act, 2003, (Act 53 of 2003).

Black People: The meaning assigned to it in section 1 of the Broad-Based Black Economic Empowerment Act.

Broad-Based Black Economic Empowerment Act: The Broad-Based Black Economic Empowerment Act, Act 53 of 2003.

Consortium or Joint Venture: 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.

Contract The agreement that results from the acceptance of a bid by an organ of state.

Co-operative: A co-operative registered in terms of section 7 of the Co-operatives Act, 2005 (Act no. 14 of 2005).

Designated Group: Black designated groups, black people, women, people with disabilities or small enterprises as defined in section 1 of the National Small Enterprises Act, 1996 (act no. 102 of 1996)

Designated Sector: A sector, sub-sector or industry or product that has been designated in terms of any relevant regulation of the Preferential Procurement Regulations, 2017.

Exempted Micro Enterprise (EME): An exempted micro enterprise in terms of a code of good practice on black economic empowerment issued in terms of section 9(1) of the Broad-Based Black Economic Empowerment Act.

Firm Price: The price that is only subject to adjustments in accordance with the actual increase or decrease resulting from the change, imposition, or abolition of customs or excise duty and any other duty, levy, or tax, which, in terms of the law or regulation, is binding on the contractor and demonstrably has an influence on the price of any supplies, or the rendering costs of any service, for the execution of the contract.

Functionality: The ability of a tenderer to provide goods or services in accordance with specifications as set out in the tender documents.

Military Veteran: The meaning assigned to it in section 1 of the Military Veterans Act, 2011 (Act No. 18 of 2011).

National Treasury: The meaning assigned to it in section 1 of the Public Finance Management Act, 1999 (Act No. 18 of 1999).

Non-firm prices: All prices other than "firm" prices.

Person: Includes a juristic person.

People with disabilities: The meaning assigned to it in section 1 of the Employment Equity Act, 1998 (Act No. 55 of 1998).

Price: Includes all applicable taxes less unconditional discounts.

Proof of B-BBEE status level of contributor: The B-BBEE status level certificate issued by an authorised body or person, a sworn affidavit as prescribed by the B-BBEE Codes of good Practice or any other requirement prescribed in terms of the Broad-Based Black Economic Empowerment Act.

Qualifying Small Enterprise (QSE): A qualifying small enterprise in terms of a code of good practice on black economic empowerment issued in terms of section 9(1) of the Broad-Based Black Economic Empowerment Act.

Rand Value: means the total estimated value of a contract in Rand, calculated at the time of bid invitations.

Rural Area: A sparsely populated area in which people farm or depend on natural resources, including villages and small towns that are dispersed through the area or an area including a large settlement which depends on migratory labour and remittances and government social grants for survival, and may have a traditional land tenure system.

Stipulated Minimum Threshold: The minimum threshold stipulated in terms of any relevant regulation of the Preferential Procurement Regulations, 2017.

Sub-contract: The primary contractor's assigning, leasing, making out work to, or employing, another person to support such primary contractor in the execution of part of a project in terms of the contract.

The Act: The Preferential Procurement Policy Framework Act, 2000 (Act No 5 of 2000).

Total Revenue: Bears the same meaning assigned to this expression in the Codes of Good Practice on Black Economic Empowerment, issued in terms of section 9(1) of the Broad-Based Black Economic Empowerment Act and promulgated in the *Government Gazette* on 9 February 2007.

Township: An urban living area that at any time from the late 19th century until 27 April 1994, was reserved for black people, including areas developed for historically disadvantaged individuals post 27 April 1994.

Treasury: The meaning assigned to it in section 1 of the Public Finance Management Act, 1999 (Act No. 18 of 1999).

Trust: The arrangement through which the property of one person is made over or bequeathed to a trustee to administer such property for the benefit of another person.

Trustee: Any person, including the founder of a trust, to whom property is bequeathed in order for such property to be administered for the benefit of another person.

Youth: The meaning assigned to it in section 1 of the National Youth Development Agency Act, 2008 (Act No. 54 of 2008).

2 Conditions associated with the granting of preferences

A supplier that is granted a preference undertakes to:

accept that the number of preference points allocated will be based on the B-BBEE status level of contributor of the supplier as at the closing date for submission of quotation offers;

not sub-contract more than 25% of the value of the contract to sub-contractors that do not have an equal or higher B-BBEE status level of contributor than the supplier, unless the intended sub-contractors are exempted micro enterprises that have the capability and ability to execute the sub-contract works or unless otherwise declared in terms of Section 5 below;

accept that a contract may not be awarded if the price offered is not market related;

accept the sanctions set out in Section 3 below should Condition 2(2) be breached, or should the tenderer have submitted any false information regarding its B-BBEE status level of contributor, local production and content, or any other matter required in terms of this bid that will affect, or has affected the bid evaluation;

accept that, in order to qualify for preference points, it is the responsibility of the supplier to submit documentary proof of its BBBEE level of contribution in accordance with the Codes of Good Practise, 2013, to the CCT at the Supplier Management Unit located within the Tender Distribution Office, 2nd Floor (Concourse Level), Civic Centre, 12 Hertzog Boulevard, Cape Town (Tel 021 400 9242/3/4/5);

accept that, further to 5) above, Consortiums/Joint Ventures will qualify for preference points, provided that the entity submits the relevant certificate/scorecard in terms of the Preferential Procurement Regulations, 2017. Note that, in the case of unincorporated entities, a verified scorecard in the name of the consortium/Joint Venture must be submitted with the quotation (attached to this schedule);

accept that if it is found that, in the performance of the contract, the participation of the various partners in a Consortium/ Joint Venture differs substantially from that upon which the consolidated scorecard submitted in terms of 5) above was based, and the impact of which is that the Joint Venture would not have been awarded the contract in terms of the actual B-BBEE level of contribution achieved by the Joint Venture, then a financial penalty shall be applied (in addition to any other remedies that the CCT may have) in accordance with Section 3 below;

accept that suppliers are required to be registered on the City of Cape Town's Supplier Database prior to the acceptance of tenders in order to qualify for preference points. The CCT will verify the B-BBEE level of contributor of the supplier as at the closing date for submission of tender offers, to determine the number of preference points

to be awarded to the supplier. In the case of Consortiums/Joint Ventures which tender as unincorporated entities, a verified scorecard submitted with the tender and valid as at the closing date will be used to determine the number of preference points to be awarded to the supplier;

accept that, notwithstanding 8) above, a supplier will **not** be awarded points for B-BBEE status level of contributor if he indicates in his tender that he intends sub-contracting more than 25% of the value of the contract to sub-contractors that do not qualify for at least the points that the supplier qualifies for unless the intended sub-contractors are exempted micro enterprises that have the capability and ability to execute the sub-contract works;

accept that any subcontracting arrangements after the award of the tender may only be entered into upon the prior approval of the City of Cape Town; and

immediately inform the City of Cape Town of any change that may affect the tenderer's B-BBEE level of contribution upon which preference points will be or have been allocated.

3 Sanctions relating to breaches of preference conditions

The sanctions for breaching the conditions associated with the granting of preferences are:

- 1) disqualify the supplier from the quotation process;
- 2) recover costs, losses or damages the CCT has incurred or suffered as a result of the supplier's or contractor's conduct;
- 3) cancel the contract in whole or in part and claim any damages which the CCT has suffered as a result of having to make less favourable arrangements due to such cancellation;
- 4) restrict the supplier, its shareholders and directors, or only the shareholders and directors who acted on a fraudulent basis, from obtaining business from the CCT for a period not exceeding 10 years, after the *audi alteram partem* (hear the other side) rule has been applied and inform the National Treasury accordingly;
- 5) forward the matter for criminal prosecution; and/or
- 6) financial penalties payable to the CCT, as set out below.

Financial penalty for breach of Condition 2 in Section 2 above:

The penalty to be applied for sub-contracting more than 25% of the value of the contract to sub-contractors that do not qualify for at least the preference points that the supplier qualified for (unless so declared or proven to be beyond the control of the supplier, or the sub-contractors are EMEs that have the capability and ability to execute the sub-contract works) shall be as provided for in the following formula:

$$\text{Penalty} = 0.5 \times E(\%) \times P^*$$

where:

E = The value of work (excluding VAT) executed by sub-contractors that do not qualify for at least the preference points that the supplier qualified for, expressed as a percentage of P*, less 25%

P* = Value of the contract

Financial penalty for breach in terms of condition 6 in Section 2 above:

The penalty to be applied where, in the performance of the contract, the participation of the various partners in a Consortium/ Joint Venture differs substantially from that upon which the consolidated scorecard submitted in terms of 5) in Section 2 above was based, and the impact of which is that the Joint Venture would not have been awarded that contract in terms of the actual B-BBEE level of contribution achieved by the Joint Venture, shall be as provided for in the following formula:

$$\text{Penalty} = 5/100 \times (B\text{-BBEE}^a - B\text{-BBEE}^t) \times P^*$$

where:

B-BBEE^a = The B-BBEE level of contribution that is achieved, determined in accordance with the actual participation of the Joint Venture partners in the performance of the contract

B-BBEE^t = The B-BBEE level of contribution that was used to determine the number of preference points granted to the Joint Venture at the time of quotation evaluation

P* = Value of the contract

Financial penalty for breach in terms of condition 10 in Section 2 above:

The penalty to be applied where the supplier fails to disclose subcontracting arrangement after the award of the tender is up to a maximum of 10% of the value of the contract.

4 Level of Contribution in respect of enterprise status or structure of the tendering entity (the supplier)

In the interest of transparency, suppliers are required to complete Table 1: Level of Contribution below applicable to the Code they wish to be evaluated against.

Table 1: Level of Contribution: Amended Codes of Good Practise (Generic Scorecard)

Type of B-BBEE Contributor	Status (tick box(es) below as applicable)
Exempted Micro Enterprise (EME), 100% black-owned	☐
Exempted Micro Enterprise (EME), at least 51% but less than 100% black-owned	☐
Exempted Micro Enterprise (EME), less than 51% black-owned	☐
Qualifying Small Enterprise (QSE), 100% black-owned	☐
Qualifying Small Enterprise (QSE), at least 51% but less than 100% black-owned	☐
Qualifying Small Enterprise (QSE), less than 51% black-owned	☐
Verified B-BBEE contributor B-BBEE Status Level of Contributor ¹ 3	☒
Non-compliant contributor	☐

Table 1: Level of Contribution: Amended Codes for Measuring Broad-Based Black Economic Empowerment in the Construction Sector.

Type of B-BBEE Contributor	Status (tick box(es) below as applicable)
Exempted Micro Enterprise (EME), 100% black-owned	☐
Exempted Micro Enterprise (EME), at least 51% but less than 100% black-owned	☐
Exempted Micro Enterprise (EME), at least 30% but less than 51% black-owned	☐
Exempted Micro Enterprise (EME), less than 30% black-owned	☐
Exempted Micro Enterprise B-BBEE Status Level of Contributor ¹	☐
Qualifying Small Enterprise B-BBEE Status Level of Contributor ¹	☐
Qualifying Small Enterprise (QSE), 100% black-owned	☐
Qualifying Small Enterprise (QSE), at least 51% but less than 100% black-owned	☐
Qualifying Small Enterprise (QSE), less than 51% black-owned	☐
Verified B-BBEE contributor B-BBEE Status Level of Contributor ¹	☐
Non-compliant contributor	☐

¹ If it is indicated that the company/firm/entity is a verified B-BBEE contributor, then the verified status level of contributor must be inserted in the box provided (insert a number from 1 to 8 as applicable)

5 Declarations

- 1) With reference to Condition 8 in Section 2 above, the supplier declares that:

I/we hereby forfeit my preference points because I /we DO intend sub-contracting more than 25% of the value of the contract to sub-contractors that do not qualify for at least the points that I/we as supplier qualify for or are not exempted micro enterprises that have the capability and ability to execute the sub-contract works



Note:

Tenderers who do not tick this box will be allocated preference points but the sanctions relating to breaches of preference conditions in Section 3 will be applicable if the tenderer contravenes the conditions in Section 2.

2) The undersigned, who warrants that he/she is duly authorized to do so on behalf of the supplier, hereby certifies that the preference claimed based on the B-BBEE status level of contribution indicated in Table 1, qualifies the supplier, subject to condition 8 in Section 2 above, for such preference claimed, and acknowledges that:

the information furnished is true and correct;

the preference claimed is in accordance with the conditions of this schedule;

the supplier may be required to furnish documentary proof to the satisfaction of the CCT that the BBEE level of contributor as at the closing date is correct; and

iv) he/she understands the conditions under which preferences are granted, and confirms that the supplier will satisfy the conditions pertaining to the granting of preferences.

Signature

WIFE SWART

Name (PRINT)

(For and on behalf of the Supplier (duly authorised))

23 NOVEMBER 2018

Date

For official use.		
SIGNATURE OF CITY OFFICIALS AT QUOTATION OPENING		
1.	2.	3.

Name (PRINT)

(For and on behalf of the Supplier (duly authorised))

For official use.		
SIGNATURE OF CITY OFFICIALS AT QUOTATION OPENING		
1.	2.	3.

BBBEE Rating Agency has assessed and verified the specified BBBEE elements of the above-mentioned registered entity, to provide an independent and impartial opinion on the BBB status of the measured entity, based on the Broad-Based Black Economic Empowerment (BBBEE) Codes of Good Practice.

BBBEE
1234567890
1234567890

***sanas**

VERIFICATION MANAGER
BBBEE RATING AGENCY

MEASURED ENTERPRISE	Nejoni Construction & Project Management (Pty) Ltd
PHYSICAL LOCATION	6 Heath Circle, Blackheath, 7580
REGISTRATION NUMBER	2015/064536/07
VAT NUMBER	4790257143
CERTIFICATE NUMBER	BBE836/18
B-BBEE STATUS	Level 3 (91.15 Points)
B-BBEE RECOGNITION LEVEL	110%
PRIORITY LEVEL ACHIEVED	Yes
BLACK OWNERSHIP	70%
BLACK FEMALE OWNERSHIP	30%
EMPLOYING SUPPLIER	Yes
SCORECARD	Amended Construction Generic - Contractor 1 Dec 2017
B-BBEE ELEMENTS AUDITED	
OWNERSHIP	25.00
MANAGEMENT	10.77
SKILLS DEVELOPMENT	19.41
ENTERPRISE AND SUPPLIER DEVELOPMENT	22.96
SOCIO-ECONOMIC DEVELOPMENT	6.00
ISSUE DATE	29 June 2018
EXPIRY DATE	28 June 2019

BROAD-BASED BLACK ECONOMIC EMPOWERMENT CERTIFICATE



CITY OF CAPE TOWN

INFORMAL SETTLEMENTS WATER & WASTE SERVICES: INFORMAL SETTLEMENTS & BACKYARDERS

CONTRACT NO. 107Q/2018/19

TERM TENDER FOR CIVIL ENGINEERING WORKS WITHIN THE CITY OF CAPE TOWN

SCHEDULE 24: INFORMATION TO BE PROVIDED WITH THE TENDER

The following information shall be provided with the Tender:

The various technical details and data required by the Technical Data Sheets and information required in the Returnable Schedules (Section C3.11).

Drawings and Samples (Section C3.12)

Drawings and samples that may be required to be furnished by it and the drawings and samples shall be duly marked so as to connect them with the tender to the satisfaction of the Employer's Agents. Particulars of the drawings to be furnished with the tender are given in the Specification and the Schedules.

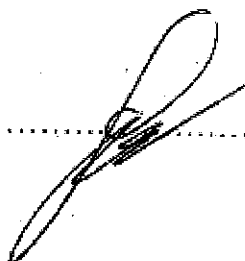
If the tender is accepted, the drawings shall be re-submitted for approval and after being approved will form part of the contract.

The Schedule of Type Tests completed (Section C3.13).

Maintenance manual of equipment offered.

Quality assurance plan.

SIGNED ON BEHALF OF TENDERER:



PART C1: AGREEMENTS AND CONTRACT DATA

- C1.1 Form of Offer and Acceptance (Framework Agreement)**
- C1.2 Contract Data**
- C1.3 Form of Performance Guarantee**
- C1.4 Form of Advance Payment Guarantee**
- C1.5 Occupational Health and Safety Agreement**
- C1.6 Protection of the Environment Declaration**
- C1.7 Insurance Broker's Warranty**
- C1.8 Contract of Temporary Employment as Community Liaison
Officer**
- C1.9 Works Project Acceptance/Refusal Notice**

CITY OF CAPE TOWN

INFORMAL SETTLEMENTS WATER & WASTE SERVICES: INFORMAL SETTLEMENTS & BACKYARDERS

CONTRACT NO. 107Q/2018/19

TERM TENDER FOR CIVIL ENGINEERING WORKS WITHIN THE CITY OF CAPE TOWN

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. 107Q/2018/19: TERM TENDER FOR CIVIL ENGINEERING WORKS WITHIN THE CITY OF CAPE TOWN

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 completed Schedules of Rates (excluding VAT) for the regions tendered for, as contained in Part C2.2 Pricing Data, shall form the tender offer. These rates shall be multiplied, as applicable, by the quantities required in respect of relevant items to develop individual Works Projects to be allocated in accordance with the procedures described in Part C1.2 Contract Data in this Framework Contract document.

This offer may be accepted by the employer by signing the acceptance part of this form of offer and acceptance and returning one copy of this document to the tenderer before the end of the period of validity stated in the tender data, whereupon the tenderer becomes the party named as the contractor in the conditions of contract identified in the contract data.

Signature(s)
Name(s) CLIFF SWART
Capacity GENERAL MANAGER
for the tenderer

(Name of organization/tenderer) NEDENI CONSTRUCTION & PROJECT MANAGEMENT
(Address of organization/tenderer) 6 HEATH CIRCLE, BLACKHEATH, 7580

Name and
signature
of witness LIZINDA CRONJE
[Signature]

Date 23-11-2018

For official use		
INITIALS OF CITY OFFICIALS AT TENDER OPENING		
1. <u>[Signature]</u>	2. <u>[Signature]</u>	3. <u>[Signature]</u>

Acceptance

1. By signing this part of this form of offer and acceptance, the employer identified below accepts the tenderer's offer in respect of the region(s) awarded to the tenderer. In consideration thereof, the employer shall pay the contractor any amounts 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 framework agreement)
Part C2: Pricing data
Part C3: Scope of work
Part C4: Site information

in Volumes 3 and 5, together with any drawings and documents or parts thereof, which may be incorporated by reference into the above listed Parts.

Deviations from and amendments to the documents listed in the tender data and any addenda thereto as listed in the returnable 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 form of offer and acceptance. 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 securities, 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). The tenderer (now contractor) shall within five working days of the agreement coming into effect notify the employer in writing of any reason why he cannot accept the contents of this agreement as a complete and accurate memorandum thereof, failing which the agreement presented to the contractor shall constitute the binding contract between the parties.

This agreement constitutes a framework contract for the purposes of developing individual Works Projects to be allocated in terms of the procedures described in the contract, the status of the contractor with respect to the region(s) awarded to him in terms of this tender process being recorded in the schedule of deviations.

Signature(s)

Name(s)

Capacity

for the
Employer

R. PRETORIUS
DIRECTOR INFRASTRUCTURE
DEVELOPMENT
CITY OF CAPE TOWN
Tower Block, Civic Centre,
12 Hertzog Boulevard
Cape Town

Name and
signature
of witness

Date

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 Status of Contractor per region(s) awarded.

Details The status of the contractor with respect to the region(s) awarded to him in terms of this term tender process is recorded in the table below.

Regions ¹ :		Central	South	East	North
Status of contractor (tick as applicable):	Winner				
	Standby No. 1				
	Standby No. 2				

¹ Unused regions are to be struck through.

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 returnable 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) C. Swaro

Capacity G.M

(Name of organization/tenderer) Nereus Construction & Project Management

(Address of organization/tenderer) 6 Hards Circle, Blackheath

Name and
signature
of witness

Date 11/02/2021

For the Employer:

Signature(s)

Name(s)

Capacity

(Name and
address of
organization)
Cape Town

CITY OF CAPE TOWN
Tower Block, Civic Centre,
12 Hertzog Boulevard

Name and
signature
of witness

Date

Confirmation of Receipt

The tenderer, (now contractor), identified in the offer part of this agreement hereby confirms receipt from the employer, identified in the acceptance part of this agreement, of one fully completed original copy of this framework agreement, including the schedule of deviations (if any), today:

the 11 (day)
of February (month)
20.21 (year)
at Cape Town (place)

For the Contractor:

Signature(s)
Name(s) C. Swana
Capacity G.M.

Signature and name of witness:

Signature
Name

C1.2 Contract Data

3. 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, Third Edition, 2015

prepared by the South African Institution of Civil Engineering (SAICE) shall apply to and form 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: civilinfo@saice.org.za.

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

The Pro-formas bound with the General Conditions of Contract 2015, on pages 96 to 113 shall not apply to this Contract and shall be replaced with the documentation bound into this Contract Document.

The General Conditions of Contract 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 below is cross-referenced to the clause in the General Conditions of Contract to which it mainly applies.

The documents forming the Contract are to be taken as mutually explanatory of one another. For the purposes of interpretation, the priority of the documents shall be in accordance with the following sequence.

the Form of Offer and Acceptance,
the Contract Specific Data within the Contract Data,
the General Conditions of Contract for Construction Works, Third Edition, 2015,
the Drawings,
the Scope of Work,
the Pricing Data, and
the conditions of tender, the tender data and tender schedules.

If an ambiguity or discrepancy is found in the documents, the Employer's Agent shall issue any necessary clarification or instruction.

CONTRACT SPECIFIC DATA

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

Clause 1.1.1.2:

Add the following after "Bill of Quantities":

, also referred to as Bills of Quantities,

Clause 1.1.1.7:

Add the following after "Contract" and before "means":

, also referred to as Framework Contract or term tender contract,

Add the following after "Acceptance,":

including, if applicable, the Form of Offer and Acceptance in a Works Project contract document, in which case "Contract" includes the Works Project contract,

Clause 1.1.1.11:

Add the following after "Acceptance":

... of a Works Project.

The Contract Sum for each Works Project shall exceed R 2 000 000.00 and not exceed R6 500 000.00 million (including contingencies and VAT).

Clause 1.1.1.13:

The Defects Liability Period is **12 months** per Works Project.

Clause 1.1.1.14:

Delete "Commencement Date" and replace with:

date specified in the Works Project contract for commencement with Works execution,

The time for achieving Practical Completion, inclusive of non-working days referred to in Clause 5.8.1 below, but exclusive of special non-working days (Clause 5.8.1), will be determined for each Works Project as specified in the Works Project contract document.

Clause 1.1.1.15:

The **Employer** is the **CITY OF CAPE TOWN**, represented by the **Director : INFORMAL SETTLEMENTS WATER & WASTE SERVICES: INFORMAL SETTLEMENTS & BACKYARDERS**, or such other Director named in the Works Project contract document(s), and/or such other person or persons duly authorised thereto by the Employer in writing.

The name of the Employer is: **CITY OF CAPE TOWN
INFORMAL SETTLEMENTS WATER & WASTE SERVICES:
INFORMAL SETTLEMENTS & BACKYARDERS**

and is referred to in the Contract documents by the terms "Employer", "City of Cape Town" or "Council" as the context provides.

Clause 1.1.1.16:

Add the following after "Contract Data":

in the Works Project contract document,

The name of the Employer's Agent will be stated in the Works Project contract document(s) and who may be an employee of the Employer or, alternatively, may be an independent agent appointed by the Employer.

Clause 1.1.1.20

Add the following after "Contract":

and also includes the Form of Offer and Acceptance applicable in each Works Project contract document.

Clause 1.1.1.26:

The Pricing Strategy is a Re-measurement Contract.

Clause 1.1.1.28:

The Scope of Work in this Framework Contract document is applicable, as relevant, together with the project specific Scope of Work in each Works Project contract document.

Clause 1.1.1.33:

The "Works" applies to the Works Projects individually or as a whole, as the context provides.

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 **"Framework Contract"** means the Contract as defined in Clause 1.1.1.7; and **"Framework Contract Period"** means the period stated in the Contract Data, during which Works Projects must be allocated to the Contractor and for which Purchase Orders may be raised provided that the works and the Defects Liability Period of that Works Project falls within the framework Contract Period.

1.1.1.37 **"Framework Contract Manager"** means the person named as the Framework Contract Manager in the Contract Data or any other person appointed from time to time by the Employer and of whom the Contractor is notified, in writing, to act as Framework Contract Manager for the purposes of the Contract as substitute for the Framework Contractor Manager so named.

The function of the Framework Contract Manager is to administer the Framework Contract, and such functions as would normally fall to the Employer's Agent in accordance with the provisions of the Framework Contract, shall be undertaken by the Framework Contract Manager in this regard.

The Framework Contract Manager shall be an employee of the Employer, authorised as its representative to administer the Framework Contract, and all references to "Employer's Agent" in the Contract shall apply to the Framework Contract Manager in respect of his/her administering the Framework Contract.

The Framework Contract Manager is:

Name: Mr D Rangolie (INFORMAL SETTLEMENTS WATER & WASTE SERVICES: INFORMAL SETTLEMENTS & BACKYARDERS)

Address: City of Cape Town
Civic Centre
12 Hertzog Boulevard
Cape Town 8001

Tel: 021 400 9423

E-mail: dlaan.rangolie@capetown.gov.za

1.1.1.38 **"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 a successful tenderer's Offer and no rights shall accrue.

1.1.1.39 **"Purchase Order"** means the official purchase order created and released on the City of Cape Town's SAP System.

1.1.1.40 **"Schedules of Rates"** means, in this Framework Contract document, the document so designated in the Pricing Data, and which will be used to compile Bills of Quantities in the Works Project contract document(s).

1.1.1.41 **"Standby Panel"** means a number of contractors appointed by the Employer under the Framework Contract to be available to execute Works Projects as and when they arise, on a "winner-takes-all" basis as stated in the Contract, in the order of their ranking in terms of the Framework Contract tender evaluation, and then only if the Winner has refused a work opportunity (or if his offer is non-responsive/invalid).

1.1.1.42 **"Winner"** means the Contractor appointed by the Employer under the Framework Contract to be available to execute Works Projects as and when they arise, on a "winner-takes-all" basis as stated in the Contract, and who will be allocated work on an on-going basis, unless he refuses a work opportunity (or if his offer is non-responsive/invalid), for the duration of the term tender contract.

1.1.1.43 **"Works Project"** means a part of the Works to be performed (task) by a Contractor under the Contract, the specific terms, conditions and scope of the Works Project contract being specified in a Works Project contract document.

1.1.1.44 **"Works Project Acceptance/Refusal Notice"** means the formal notification, signed by the successful tenderer/prospective Contractor and sent to the Employer, of his decision to accept/ refuse the opportunity afforded to participate further in the Contractor appointment procedure for a Works Project as specified in the Contract.

Clause 1.2.1.2:

The address of the Employer is:

Physical address: Tower Block, Civic Centre
12 Hertzog Boulevard
Cape Town
8001

Postal address: P O Box 298
Cape Town
8000

E-mail address: Riana.pretorius@capetown.gov.za

The address of the Employer's Agent will be stated in the Works Project contract document(s).

Clause 2:

Add the following Clause after Clause 2.5.1:

2.6 Procedures for the allocation of Works Projects

The Employer reserves the right to plan and effect individual Works Projects at its sole discretion.

The Employer will only order those quantities of work items which it actually requires for execution in a Works Project from time to time. The Employer reserves the right not to order any quantities at all depending on circumstances and subject to operational requirements.

The Works Projects shall be executed in areas within four regions identified within the City of Cape Town municipal area and outlined in clause F.1.6.1 in Part T1.2 Tender Data, on a "winner-takes-all" basis as described therein.

The Works Projects shall be identified subject to availability of funding.

The procedures for the allocation of Works Projects are described in detail at the end of this Part 1: Contract Data provided by the Employer.

Clause 3.1.3:

The Employer's Agent shall obtain the specific approval of the Employer before executing any of his functions or duties according to the following Clauses of the General Conditions of Contract or Contract Data:

- a) Clause 3.3.1 Nomination of Employer's Agent's Representative
- b) Clause 3.3.4 Employer's Agent's authority to delegate
- c) Clause 5.8.1 Non-working times
- d) Clause 5.11.1 Suspension of the Works
- e) Clause 5.12.4 Acceleration instead of extension of time
- f) Clause 6.3.1 Ordering of any variation that causes the contract price to exceed the contract sum
- g) Clause 6.4.1 Approval of rates for new items
- h) Clause 6.10.10 Advance payment, for items not listed in the Advance Payment Schedule
- g) Other requirements

Clause 5:1

Add the following Clause after Clause 5.1.1.2:

5.1.2 Framework Contract Period

The Framework Contract Period is for a period of **60 months/Five years** calculated from the Commencement Date.

5.1.3 Works Projects

No individual Works Projects will commence after **48 months/three years** calculated from the Commencement Date of the Framework Contract

Clause 5.3:

Delete Clauses 5.3.1 to 5.3.3 in their entirety and replace with the following:

5.3.1 Upon appointment as either the Winner or to a Standby Panel, if applicable, the Contractor shall submit the required documentation, for approval by the Framework Contract Manager, as set out below. If the documentation is not submitted with 14 days from the Commencement Date, or is found to be unacceptable, the Employer may terminate the Framework Contract in terms of Clause 9.2.

The documentation required is:

- a) Approved framework Health and Safety Plan (Refer to applicable in the Health and Safety Specification in Part C3.5 in the Scope of Work)
- b) Security (Refer to Clause 6.2)
- c) Evidence of Insurance (Refer to Clause 8.6)
- d) Occupational Health and Safety Agreement (Part C1.5 in Agreements and contract Data)
- e) Letter of Good Standing from the Compensation Commissioner (if not insured with a Licensed Compensation Insurer) (Refer to Clause 4.3)
- f) Protection of the Environment Declaration (Part C1.6 in Agreements and Contract Data)
- g) Other requirements

5.3.2 The Contractor shall, save as may be otherwise provided in the Contract or be legally or physically impossible, commence executing the Works on the date specified in the Works Project contract; subject to the submission by the Contractor, and approval by the Employer's Agent, of any documentation required before commencement with Works execution, as set out in the Works Project contract.

The following documentation shall be submitted for **each Works Project** by the invited contractor as part of the Works Project submission:

- a) Approved site specific Health and Safety plan (Refer to Health and Safety Specification in Part C3.5 Management and any other specific requirements stated in the Works Project contract document)
- b) Initial Programme (Refer to Clause 5.6)
- c) Evidence of Insurance (Refer to Clause 8.6)
- d) Proof of Registration / Letter of Good Standing with the Bargaining Council for the Civil Engineering Industry (BCCEI)

The time to submit any documentation required before commencement with Works execution of **each Works Project** shall be within the number of days from the Commencement Date of the Works Project as specified in the Works Project contract. Such documentation may include:

- e) Method Statement (Refer to Environmental Management Specification in Part C3.5 Management)

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 5.6.2.3:

Insert the following after "...approvals,":

... permits,

Clause 5.8.1:

The non-working days are Sundays.

The special non-working days are:

- a) All gazetted public holidays.
- b) Year-end break(s) not exceeding 15 working days in duration.

Clause 5.12.1:

Add the following:

The Contractor may not claim a delay on another Works Project as causing delay on the particular Works Project contract in question.

Clause 5.12.2:

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
February	2 days
March	2 days
April	2 days
May	2 days
June	4 days
July	4 days
August	4 days
September	4 days
October	2 days
November	2 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 abnormal climatic conditions or for any other reason will be entertained.

Clause 5.13.1:

The penalty for failing to complete the Works of each Works Project within the time referred to in Clause 1.1.1.14 is **R3 000.00** per day.

Insert the following after "actual date of Practical Completion":

... or, in the case of termination by the Employer in terms of Clause 9.2.1, the actual date of termination,

Clause 5.16.3:

The latent defects period is **10** years.

Clause 6.2.1:

The security to be provided by the Contractor shall be a blanket performance guarantee of **R975 000 per region**. The performance guarantee shall contain the precise wording of the document included in Part C1.3 of the Contract Data: **Form of Performance Guarantee**, and it shall be issued by a financial institution approved by the Employer, at the date when the guarantee is issued. The list of approved financial institutions current at the date of tender is attached to the **Form of Performance Guarantee**.

In the event of the guarantee being called up (in full or in part) the Contractor shall within 21 days of the issue of a first written demand by the Employer to the Guarantor, provide at his own cost a replacement performance guarantee of R975 000 for the particular region, and no work will be allocated to the Contractor in that region until the replacement performance guarantee has been provided.

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 last Certificate of Completion of the Works for the Works Projects in a region is issued.

Clause 6.5.1.2.3:

The percentage allowance to cover overhead charges is **10%**

Clause 6.8.2:

Add the following to Clause 6.8.2:

The Contract Price shall be subject to contract price adjustment in accordance with Clause 6.8 of the General Conditions of Contract.

If special materials are specified in Part 2 of the Contract Data then the provisions of Clause 6.8.3 of the General Conditions of Contract shall apply to such special materials.

Where applicable, in terms of the foregoing, the value of the certificates issued shall be adjusted in accordance with the Contract Price Adjustment Schedule with the following values:

The value of "x" is 0,10.

The values of the coefficients are:

a = 0,21 b = 0,27 c = 0,42 d = 0,10

The base month is one month prior to the month in which the tender closed.

Furthermore, the Contract Price Adjustment Schedule shall be amended as follows:

"L" is the "Labour Index" and shall be the Consumer Price Index (CPI) for "All items (CPI Headline)", as published in the Statistical News Release, P0141: Table A – Consumer Price Index: Main Indices of Statistics South Africa

"P" is the "Plant Index" and shall be the Construction Materials Price Index for "Plant and Equipment" as published in the Statistical News Release P0151.1, Table 4 – Mining and construction plant and equipment price index of Statistics South Africa

"M" is the "Materials Index" and shall be the Construction Materials Price Index for selected materials, Materials for "Civil Engineering material – roads, general (**excluding bitumen**)", as published in the Statistical News Release P0151.1, Table 6 – Civil engineering material price indices of Statistics South Africa

"F" is the "Fuel Index" and shall be the Producer Price Index (PPI) for "Coal and Petroleum Products - Diesel", as published in the Statistical News Release P0142.1: Table 1 –PPI for final manufactured goods of Statistics South Africa

Clause 6.8.3: Variation in the cost of special materials

Price adjustment for variations in the cost of special materials is provided for in the Special Materials Schedule at the end of this Part 1: Contract Data provided by the Employer.

Clause 4.2 of the Contract Price Adjustment Schedule

Delete the words "by the Contractor" that appear after ".... entered in the Contract Data"

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 7 days before the closing date for an offer on a Works Project, no costs other than those that can be claimed under Clause 5.12.3 shall be added to the Contract Price.

Add the following after Clause 6.8.4:

6.8.5.If price adjustment for variations in the cost of plant and materials imported from outside of South Africa is provided for in the contract data, such adjustment shall be based on the information contained on the schedule titled "**Price Basis for Imported Resources**" and as below. For the purposes of this clause the Rand value of imported Plant and Materials inserted on the schedule titled "**Price Basis for Imported Resources**" (column (F)) shall be the value in foreign currency (column (A)) converted to South African Rand (column (C)) by using the closing spot selling rate quoted by **Employer's** main banker, ABSA, on the Base Date (seven calendar days before tender closing date) rounded to the second decimal place (column(B)), to which shall be added any Customs Surcharge and Customs Duty applicable at that date (columns (D) and (E)).

6.8.5.1 Adjustment for variations in rates of exchange:

- (a) The value in foreign currency inserted in column (A) shall be subject to clause (h) below when recalculating the Rand value.
- (b) The rate of exchange inserted in column (B) shall be the closing spot selling rate quoted by **Employer's** main banker, ABSA, on the Base Date, rounded to the second decimal place, subject to sub-paragraph (c) below.
- (c) If the rate of exchange inserted by the Tenderer differs from the ABSA rate referred to above, then the ABSA rate shall apply and the Rand value in columns (C) and (F) shall be recalculated accordingly, without altering the price in the Schedules of Quantities for the relevant items.
- (d) If a tender from a supplier or sub-contractor provides for variations in rates of exchange, the Contractor may **only** claim for variations in rates of exchange if he binds the supplier or sub-contractor to the same provision to take out forward cover as described in sub-paragraph (e) below.
- (e) The Contractor (or supplier or sub-contractor) shall within five working days from the date of placing a firm order on an overseas supplier, cover or recover forward by way of a contract with a bank which is an authorised foreign exchange dealer, the foreign exchange component of the cost of any imported Plant and Materials inserted by the Tenderer on the schedule titled "**Price Basis for Imported Resources**".
- (f) When the Contractor (or supplier or sub-contractor) so obtains forward cover, the Contractor shall immediately notify the Employer of the rate obtained and furnish the Employer with a copy of the foreign exchange contract note.
- (g) Based on the evidence provided in sub-paragraph (f) above, the value in Rand inserted in column (C) on the schedule titled "**Price Basis for Imported Resources**" shall be recalculated using the forward cover rate obtained, and any increase or decrease in the Rand value defined in this clause shall be adjusted accordingly, subject to sub-paragraph (h) below. Failure to provide such evidence shall result in no such recalculation shall be considered by the Employer.
- (h) The adjustments shall be calculated upon the value in foreign currency in the Contractor's (or supplier's or sub-contractor's) **forward cover contract**, provided that, should this value exceed the value in foreign currency inserted in column (A) of the schedule titled "**Price Basis for Imported Resources**", then the value in column (A) shall be used.

6.8.5.2 Adjustment for variations in customs surcharge and customs duty

- (a) Any increase or decrease in the Rand value between the amounts of Customs Surcharge and Customs Duty inserted on the schedule titled "**Price Basis for Imported Resources**" and those amounts actually paid to the Customs and Excise Authorities, which are due to changes in the percentage rates applicable or to the foreign exchange rate used by the authorities, shall be adjusted accordingly.
- (b) The Tenderer shall state the Customs Duty Tariff Reference applicable to each item and the Contractor shall advise the Employer's Agent of any changes which occur.

6.8.5.3 Adjustment for variation in labour and material Costs

If the prices for imported Plant and Materials are not fixed, the Contractor shall in his Tender specify the formula for calculating Contract Price Adjustments normally used in the country of manufacture and the indices and relative proportions of labour and material on which his Tender prices are based. Evidence of the indices applicable shall be provided with each claim. The indices applicable 42 days before contractual dispatch date from the factory will be used for the purposes of Contract Price Adjustment.

Failure to specify a formula in the Tender shall mean that the prices are fixed or shall be deemed to be fixed.

Clause 6.10.1.5:

Delete Clause 6.10.1.5 in its entirety and replace with the following:

6.10.1.5 The value of Plant and materials:

6.10.1.5.1 up to a percentage limit of 80% for the Plant and materials referred to in Clause 6.9.1.1 brought on to the Site but not yet built into the Permanent Works;

Provided that the Contractor has produced documentary evidence of ownership of such Plant and/or materials and has delivered to the Employer an indemnity, approved in writing by the Employer, against any claim to or in respect of such Plant and/or materials by reason of the Contractor's sequestration or liquidation, or of any defect in the Contractor's title to the Plant and/or materials;

6.10.1.5.2 which have been manufactured and are stored at places other than the Site, in respect of which the Employer has indicated, on the Advance Payment Schedule, that advance payment will be permitted;

6.10.1.5.3 for which a deposit with order is required from the Contractor by a manufacturer/supplier, only in respect of which the Employer has indicated, on the Advance Payment Schedule, that advance payment will be permitted;

The terms and conditions for advance payment are set out in Clause 6.10.10 and in the Advance Payment Schedule at the end of this Part 1: Contract Data provided by the Employer.

Clause 6.10.1.7:

Add the following after the words "Clause 5.13":

or any other fines or penalties that become due under the Contract.

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 Contractor shall be subject to a retention by the Employer of an amount of 5% of the said amounts due to the Contractor, with no limit per Works Project. A guarantee in lieu of retention is not permitted.

Clause 6.10.4:

Add the following to the last sentence of Clause 6.10.4:

..., dated as at the date of delivery of the Contractor's statement to the Employer's Agent.

Add the following to Clause 6.10.4:

Notwithstanding the 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 Clause 4.10.2 and as described in the Scope of Work.

The Contractor may submit a fully motivated application regarding more frequent payment to the Employer's Agent to be submitted to the Employer for consideration. Requests for more frequent payments will be considered at the sole discretion of Employer and is not a right in terms of this contract.

Clause 6.10.10:

Add the following Clause after Clause 6.10.9:

6.10.10 Advance payment

Subject to Clauses 6.10.1.5.2 and 6.10.1.5.3, and the Advance Payment Schedule, the Employer shall make an advance payment for Plant and materials stored at places other than the Site, or in respect of which a deposit with order is required, only once the Contractor has submitted an advance payment guarantee in accordance with this Clause.

Unless and until the Employer receives this guarantee, the following paragraphs shall not apply.

The Employer's Agent shall issue an Interim Payment Certificate for, or including, advance payment after receiving a statement under Clause 6.10.1 and after the Employer has received a guarantee in an amount equal to the advance payment requested. This guarantee shall be issued by a financial institution approved by the Employer, as listed in the Annexure in Part C1.3 of the Contract Data, and shall be in the form of and shall contain

the precise wording of the document included in Part C1.4: **Form of Advance Payment Guarantee** and shall come into force, be administered and expire in terms thereof.

The Employer shall return the guarantee to the Contractor within 14 days after the expiry date.

The provision of the Advanced Payment Guarantee shall be at the Contractor's cost.

The term "deposit" or "deposit with order" used in the context of this Clause and elsewhere by reference to this Clause, means a sum payable by the Contractor to a manufacturer/supplier prior to the manufacture of an item of Plant or material, required at the time of placing an order, the balance of the value of the item being payable later.

Clause 8.6.1:

The insurances to be effected and maintained by the Contractor shall be in the form of a blanket/umbrella policy per region for this term tender contract. This policy shall be endorsed as and when required to reflect each Works Project that may be allocated to the Contractor.

Clause 8.6.1.1.1:

The Contract Price shall, for insurance purposes, include for individual Contract Sums of up to **R6 500 000** for each Works Project per region.

Clause 8.6.1.1.2:

The value of Plant and materials supplied by the Employer to be included in the insurance sum is **R 0.00 (Nil)**.

Clause 8.6.1.1.3:

The amount to cover professional fees for repairing damage and loss to be included in the insurance sum is **R0.00 (Nil)**.

Clause 8.6.1.3:

The limit of indemnity for liability insurance is R20 000 000.00 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, 130 of 1993.
- c) 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 8.6.5:

Delete the following from Clause 8.6.5:

"and the terms thereof shall be subject to the approval of the Employer's Agent, which approval shall not be unreasonably withheld."

Clause 8.6.6:

Replace clause 8.6.6 with the following:

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 per region worded precisely as given in Part C1.7 Insurance Broker's Warranty.

In addition, an insurance broker's warranty will be required for every Works Project as and when the contractor submits an offer for a Works Project contract. This warranty shall, *inter alia*, confirm that the applicable blanket/umbrella policy per region for the term tender contract has been endorsed to reflect the Works Project contract and that all premiums have been paid.

Clause 8.6.7:

Add the following to the end of this Clause:

; and/or the Employer shall be entitled to exclude the Contractor from participating in any future Works Project processes until such time as satisfactory evidence has been provided.

Clause 9.1:

In Clause 9.1.6 replace "and 9.1.3" with:

, 9.1.3 and 9.1.7

Add the following Clause after Clause 9.1.6:

9.1.7 Death of Sole Proprietor/Member

Upon the death of the Contractor who was a Sole Proprietor, or a sole member of a Close Corporation, the Contract will terminate forthwith. The Employer shall pay to the Contractor's estate any money which it considers due under the Contract in terms of Clause 9.1.5, in full and final settlement thereof.

Clause 9.2.1:

Delete "or" at the end of Clause 9.2.1.3.6 and add the following Clause after Clause 9.2.1.3.7:

9.2.1.3.8 Has failed to provide the required insurances within the prescribed time,

Add the following Clause after Clause 9.2.1.3:

9.2.1.4 The Contractor has consistently failed to attend compulsory Works Project meetings, has consistently refused work opportunities, or has had a Works Project contract terminated by the Employer, then the Employer may, at its sole discretion, terminate the Framework Contract forthwith in its entirety, or with respect to a particular region.

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 Employer's Agent.

PROCEDURES FOR THE ALLOCATION OF WORKS PROJECTS

The procedures for the allocation of Works Projects, given below, are to be read in conjunction with clause F.1.6.1 in Part T1.2 Tender Data and Clause 2.6 in the Contract Data. These procedures include the development of a Works Project contract document, applying the tendered rates in order to arrive at a financial offer, receiving the contractor's Works Project contract document, and allocating the Works Project to the contractor, on a "winner-takes-all" basis as described in clause F.1.6.1, as follows: "whereby the work will always be offered and, if accepted, allocated to, the highest ranked tenderer ("the winner") in the framework contracts for that region, and only if he refuses (or if his offer is non-responsive) will the work be offered to the next highest ranked tenderer in terms of F.1.3.3 j)".

In terms of the foregoing, "the contractor" in the procedures below is the contractor under consideration (starting with "the winner") for allocation of the Works Project.

The procedures are summarised under the stages below, wherein the Employer (acting through his agent) shall

Stage 1: Employer prepares Works Project contract document and prices bills of quantities using the contractor's rates for the region

- a) select a Work Area within the region for the execution of the Works Project;
- b) prepare a Works Project contract document, including Bills of Quantities and Scope Work therein; and
- c) compute the financial offer for the contractor appointed to the region, using his framework contract rates;

Stage 2: Contractor collects copy of Works Project contract document and attends a Works Project meeting

- d) make available to the contractor a copy of the Works Project contract document with the Bills of Quantities priced by the Employer (as in b) and c) above);
- e) simultaneously, invite the contractor to attend a compulsory Works Project meeting;
- f) conduct the Works Project meeting, including discussing any issues the contractor may have (this may result in changes being made to the Works Project contract document and its being re-issued after steps c) and d) have been repeated); and
- g) receive any refusal notice from the contractor timeously after the meeting;

Stage 3: Contractor submits completed Works Project contract document and Employer allocates Works Project

- h) if the contractor who attended the Works Project meeting did not submit a refusal notice, request him to complete the Returnable Schedules, Form of Offer, Works Project Acceptance/Refusal Notice, etc. in the Works Project contract document and submit the completed document to the Employer; and
- i) test submission for completeness and allocate the Works Project to the contractor or, if his offer is non-responsive/invalid, repeat the processes in h) and i) with the contractor on the standby panel with the next highest ranking.

Further details of the procedures under the above stages are given below.

Stage 1

As and when the Employer requires work to be executed in a Works Project under the framework contract, the Employer shall specify, *inter alia*, the nature, location(s), extent, scope of work, proposed programme and contract period for the work required, in a **Works Project contract document** comprising, as relevant, Work Allocation Procedures, Returnable Schedules, Agreements and Contract Data, Bills of Quantities and Scope of Work.

In the Bills of Quantities the Employer shall assign quantities to the work items relating to the specific Scope of Work in the Works Project. The assigned quantities shall be multiplied by the framework contract rates to constitute amounts that will be totalled to provide a **financial offer** for the contractor for this specific Works Project.

Stage 2

The Employer shall invite the contractor under consideration in the particular region to attend a compulsory **Works Project meeting** at a time and venue disclosed in writing by the Employer.

The Employer shall issue the invitation **three (3)** working days prior to the meeting date, and simultaneously make available to the contractor his individually priced Works Project contract document.

The Employer shall conduct the compulsory Works Project meeting on the date specified. The purpose of this meeting is to inform the contractor of the Scope of Work required in the Works Project. The meeting shall furthermore serve to answer any queries the contractor may have in respect of the required work, billed items and quantities, etc. (this may result in changes being made to the Works Project contract document and its being re-issued as in f) above). A contractor who fails to attend the compulsory Works Project meeting will be **excluded** from further participation in the Works Project allocation process.

Included in the Works Project contract document is a Works Project **Acceptance/Refusal Notice** (Form C1.9) requesting the contractor to state in writing whether he accepts/refuses the opportunity afforded to participate further in the work allocation procedure (i.e. that he is willing/not willing to undertake the work specified in the Scope of Work and Bills of Quantities and has/has not the necessary resources, including a site specific construction manager, available to complete the work within the required Works Project contract period should he be allocated the work). The contractor who **refuses** will be required to complete and return the Works Project Acceptance/Refusal Notice, either by fax or email, to the Employer within **five (5)** working days after the compulsory Works Project meeting.

Stage 3

The Works Project contract document shall be completed, signed and returned by the contractor to the Employer's agent's offices no later than **five (5)** working days after the date of the compulsory Works Project meeting or after receipt thereof if changes thereto were required (refer to f) above).

The Employer will specify the proposed Works Project construction time period (time from the date specified for commencement with Works execution to Due Completion Date) for completing the specified Works in the Scope of Work in the Works Project contract document. The contractor shall submit a realistic **preliminary construction programme** reflecting his proposed sequence and tempo of execution of the Works Project contract for completing the Works within the prescribed construction time period, and shall append the preliminary (initial) programme to the applicable schedule in Part A2.2 Returnable Schedules in the Works Project contract document.

The submission of a fully completed and signed Works Project contract document is mandatory for the contractor who accepts, and the contractor may be requested by the Employer to complete and/or sign his submission, if necessary, should he have not already done so. A submission will be **rejected** as being non-responsive/invalid if the document is not fully completed and/or signed after the contractor has been requested by the Employer to complete and/or sign his submission.

The returned Works Project contract document will be **tested for completeness** in accordance with these procedures. The contractor whose returned Works Project contract document is fully completed and signed will be appointed as Contractor to execute the Works for the specific Works Project in terms of the Contract.

A contractor whose offer is non-responsive/invalid, or who failed to return the completed, signed Works Project contract document (the offer) within the time stated herein, will be **excluded** from further participation in the Works Project allocation process, and the next highest ranked standby panel contractor, in terms of the status indicated in the Schedule of Deviations in Part C1.1 Form of Offer and Acceptance in the Framework Contract document, will become the contractor under consideration and steps b) to i) above will be repeated (in such a circumstance the construction time period may have to be amended by the Employer and agreed to by the contractor).

Acceptance of the contractor's offer takes place on the date the contractor (now Contractor in terms of the Contract) receives the City of Cape Town's official **purchase order**, such date being the Commencement Date of the Works Project contract. **No Purchase Orders will be issued after month 48 of the Framework Contract.**

Each Works Project shall be in the **value range** of above R 2 000 000.00 up to R6 500 000.00 (including contingencies and VAT, but excluding contract price adjustment, if applicable).

Working days for these procedures are Mondays to Fridays.

SPECIAL MATERIALS SCHEDULE

Each material dealt with as a special material in terms of Clause 4.1 of the Contract Price Adjustment Schedule of the General Conditions of Contract is stated in the list below. The provisions of Clause 6.8.3 of the General Conditions of Contract shall apply to such special materials. The base prices for the special materials (current at the time of tender) shall be as stated in the schedule below, or where required, shall be furnished by the tenderer/contractor. Only those materials listed by the Employer below shall be considered as special materials.

Special Material	Unit	Base Price
Bitumen (50/70 penetration grade)	t	Confirm
	t	
	t	The Arcelor Mittal prices, as published in their official price lists, current at the time of tender closing, will be used as the base prices for determining the adjustment in steel prices.
	t	
	t	
	t	

Conditions:

When called upon to do so, the contractor shall substantiate the prices to be used to determine the adjustment in respect of the special materials listed above with acceptable documentary evidence.

In the case of bituminous products, the Employer has provided, in the schedule above, a base rate for bitumen upon which the tendered rates will be deemed to be based, and which will be used for determining the adjustment in the price of such bituminous products.

Where an adjustment for the variation in the price of bituminous products is claimed, the claim must be substantiated by a declaration from the manufacturer, confirming the source of bitumen used in such bituminous products at the time in question.

Where the source of bitumen (the refinery) is located in the Western Cape Province, or where bitumen sourced from abroad is landed at a port in the Western Cape, the cost of transporting such bitumen within the boundaries of the Western Cape shall be included in the rate for bituminous products. Extra-over rates to cover the cost of transporting bitumen from beyond the borders of the Western Cape have been measured separately in the Bill of Quantities.

Where imported bitumen used in bituminous products is landed at a port beyond the borders of the Western Cape, the importers must clearly state whether or not their price is inclusive of transport to the Western Cape, which will determine whether extra-over transport costs are applicable, or not. The price of the imported bitumen itself must be expressed as a landed price in ZAR.

ADVANCE PAYMENT SCHEDULE

This Advance Payment Schedule is to be read in conjunction with Clauses 6.10.1.5.2, 6.10.1.5.3 and 6.10.10 in the Contract Specific Data. The purpose of this schedule is to itemise specific Plant and materials not yet brought on to the Site for building into the Permanent Works and for which the Employer is prepared to make advance payments to the Contractor, subject to the conditions below.

The items of Plant and materials which have been identified by the Employer as being suitable for advance payment in terms of the Contract are listed in the table below. Should an item or items be added to the list at tender stage by a tenderer, such item(s) will not be binding on the Employer.

Plant and materials which have been manufactured and are stored at places other than the Site:	Plant and materials yet to be manufactured and for which a deposit with order is required from the Contractor by a manufacturer/supplier, and which may be stored at places other than the Site after manufacture:

Conditions:

The Contractor can only rely on advance payment being permitted by the Employer in respect of the Plant and materials listed in the table above. The Employer may, however, permit advance payment for other Plant and materials in exceptional circumstances and at its sole discretion, during the course of the Contract, and upon reasonable request from the Contractor.

Advance payment for the purposes of deposits will only be provided up to a limit of 20% of the value of any one item being claimed.

The Contractor shall provide the Employer with documentary evidence of the terms and conditions for which a deposit with order is required by a manufacturer/supplier, together with the advance payment guarantee.

The Contractor will also be permitted to obtain advance payment for the balance of the value of the Plant and materials in respect of which he has paid a deposit, for an item which after manufacture is stored at a place other than the Site. The Contractor shall, in respect of such payment, provide an advance payment guarantee, either for such balance or, if the advance payment guarantee in respect of the deposit is to be returned by the Employer upon request, for the whole value of the item.

Part 2: Data provided by the Contractor

Clause 1.1.1.9:

The name of the Contractor is NEJENI CONSTRUCTION & PROJECT MANAGEMENT

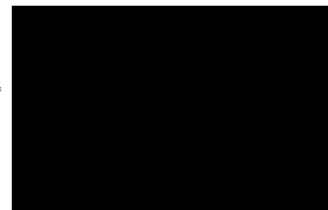
Clause 1.2.1.2:

The address of the Contractor is

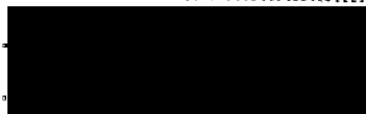
Physical :
Address



Postal :
Address



Telephone :



Fax:



email :

CITY OF CAPE TOWN

INFORMAL SETTLEMENTS WATER & WASTE SERVICES: INFORMAL SETTLEMENTS & BACKYARDERS

CONTRACT NO. 107Q/2018/19

TERM TENDER FOR CIVIL ENGINEERING WORKS WITHIN THE CITY OF CAPE TOWN

C1.3 Form of Performance Guarantee

PERFORMANCE GUARANTEE

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

GUARANTOR DETAILS AND DEFINITIONS

"Guarantor" means:

"Physical address:

"Employer" means: The City of Cape Town, INFORMAL SETTLEMENTS WATER & WASTE SERVICES: INFORMAL SETTLEMENTS & BACKYARDERS.

"Contractor" means: The Contractor named in an individual Works Project Contract.

"Employer's Agent" means:

"Works" means: Works Projects which may be allocated in the South Region, individually or as a whole as the context provides, under Framework Contract No. 107Q/2018/19: TERM TENDER FOR CIVIL ENGINEERING WORKS WITHIN THE CITY OF CAPE TOWN.

"Site" means: The site as defined in Clause 1.1.1.29 of the General Conditions of Contract.

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

"Guaranteed Sum" means: The maximum aggregate amount of R 975 000.00.

Amount in words: Nine Hundred and Seventy Five Thousand Rand and nil cents.

"Expiry Date" means: The date of issue by the Employer's Agent of the last Certificate of Completion of the Works for the Works Projects in a region.

CONTRACT DETAILS

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

PERFORMANCE GUARANTEE

1. The Guarantor's liability shall be limited to the amount of the Guaranteed Sum.
2. The Guarantor's period of liability shall be from and including the date of issue of this Performance Guarantee and up to and including the Expiry Date or the date of payment in full of the Guaranteed Sum, whichever occurs first. The Employer's Agent and/or the Employer shall advise the Guarantor in writing of the date on which the last Certificate of Completion of the Works for the Works Projects in a region has been issued.
3. The Guarantor hereby acknowledges that:
 - 3.1 any reference in this Performance Guarantee to the Contract is made for the purpose of convenience and shall not be construed as any intention whatsoever to create an accessory obligation or any intention whatsoever to create a suretyship;

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

13. Where this Performance Guarantee is issued in the Republic of South Africa the Guarantor hereby consents in terms of Section 45 of the Magistrate's Courts Act No 32 of 1944, as amended, to the jurisdiction of the Magistrate's Court of any district having jurisdiction in terms of Section 28 of the said Act, notwithstanding that the amount of the claim may exceed the jurisdiction of the Magistrate's Court.

Signed at

Date

Guarantor's signatory (1)

Capacity

Guarantor's signatory (2)

Capacity

Witness signatory (1)

Witness signatory (2)

•
•
•
ANNEXURE

•
LIST OF APPROVED FINANCIAL INSTITUTIONS

•
The following financial institutions are currently (as at 18 October 2016) approved for issue of contract guarantees to the City:

National Banks:

ABSA Bank Ltd.
FirstRand Bank Ltd.
Investec Bank Ltd.
Nedbank Ltd.
Standard Bank of SA Ltd.

International Banks (with branches in SA):

Barclays Bank plc.
Citibank n.a.
Credit Agricole Corporate and Investment Bank
HSBC Bank plc.
JP Morgan Chase Bank
Societe Generale
Standard Chartered Bank

Insurance companies:

ABSA Insurance
Coface s.a.
Compass Insurance Co.
Constantia Insurance Co.
Credit Guarantee Insurance Co.
Guardrisk Insurance Co.
Hollard Insurance Company Ltd.
Home Loan Guarantee Co.
Infiniti Insurance Limited
Lombard Insurance
Mutual & Federal Insurance Co.
New National Assurance Co.
Regent Insurance Co.
Renasa Insurance Company Ltd.
Santam Limited
Zurich Insurance Co.

CITY OF CAPE TOWN

INFORMAL SETTLEMENTS WATER & WASTE SERVICES: INFORMAL SETTLEMENTS & BACKYARDERS

CONTRACT NO. 107Q/2018/19

TERM TENDER FOR CIVIL ENGINEERING WORKS WITHIN THE CITY OF CAPE TOWN

C1.4 Form of Advance Payment Guarantee

Not applicable

ADVANCE PAYMENT GUARANTEE

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

GUARANTOR DETAILS AND DEFINITIONS

"Guarantor" means:

"Physical address:

"Employer" means: The City of Cape Town, INFORMAL SETTLEMENTS WATER & WASTE SERVICES: INFORMAL SETTLEMENTS & BACKYARDERS.

"Contractor" means:

"Employer's Agent" means:

"Works" means: Works Project No. 107Q/2018/19 WP-01: , to be executed in the South Region under Framework Contract No. 107Q/2018/19: TERM TENDER FOR CIVIL ENGINEERING WORKS WITHIN THE CITY OF CAPE TOWN .

"Site" means: The site as defined in Clause 1.1.1.29 of the General Conditions of Contract.

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

"Plant and materials" means: The Plant and materials stored at places other than the Site, or in respect of which an advance payment prior to manufacture is required, which the Employer has agreed may be subject to advance payment, such Plant and materials being listed in the Schedule of Plant and materials.

"Schedule of Plant and materials" means: A list of Plant and materials which shows the value thereof to be included in the Guaranteed Advance Payment Sum.

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

Amount in words:

"Expiry Date" means: The date of the payment certificate wherein the Plant and materials have been certified by the Employer's Agent as having been built into the Permanent Works.

CONTRACT DETAILS

Employer's Agent issues: Interim Payment Certificates and Final Payment Certificate for each Works Project.

ADVANCE PAYMENT GUARANTEE

1. The Guarantor's liability shall be limited to the amount of the Guaranteed Advance Payment Sum.
2. The Guarantor's period of liability shall be from and including the date of issue of this Advance Payment Guarantee and up to and including the Expiry Date or the date of payment in full of the Guaranteed Advanced Payment Sum, whichever occurs first.

3. The Guarantor hereby acknowledges that:

3.1 any reference in this Advance Payment Guarantee to the Contract is made for the purpose of convenience and shall not be construed as any intention whatsoever to create an accessory obligation or any intention whatsoever to create a suretyship;

3.2 its obligation under this Advance Payment Guarantee is restricted to the payment of money.

4. Subject to the Guarantor's maximum liability referred to in 1, the Guarantor hereby undertakes to pay the Employer the sum certified upon receipt of the documents identified in 4.1 to 4.3:

4.1 A copy of a first written demand issued by the Employer to the Contractor stating that payment of a sum certified by the Employer's Agent in an Interim or Final Payment Certificate has not been made in terms of the Contract and failing such payment within seven (7) calendar days, the Employer intends to call upon the Guarantor to make payment in terms of 4.2;

4.2 A first written demand issued by the Employer to the Guarantor at the Guarantor's physical address with a copy to the Contractor stating that a period of seven (7) calendar days has elapsed since the first written demand in terms of 4.1 and the sum certified has still not been paid;

4.3 A copy of the aforesaid payment certificate which entitles the Employer to receive payment in terms of the Contract of the sum certified in 4.

5. Subject to the Guarantor's maximum liability referred to in 1, the Guarantor undertakes to pay to the Employer the Guaranteed Advance Payment Sum or the full outstanding balance upon receipt of a first written demand from the Employer to the Guarantor at the Guarantor's physical address calling up this Advance Payment Guarantee, such demand stating that:

5.1 the Contract has been terminated due to the Contractor's default and that this Advance Payment Guarantee is called up in terms of 5; or

5.2 a provisional or final sequestration or liquidation court order has been granted against the Contractor and that the Advance Payment Guarantee is called up in terms of 5; and

5.3 the aforesaid written demand is accompanied by a copy of the notice of termination and/or the provisional/final sequestration and/or the provisional liquidation court order.

6. It is recorded that the aggregate amount of payments required to be made by the Guarantor in terms of 4 and 5 shall not exceed the Guarantor's maximum liability in terms of 1.

7. Payment by the Guarantor in terms of 4 or 5 shall be made within seven (7) calendar days upon receipt of the first written demand to the Guarantor.

8.

8. The Employer shall have the absolute right to arrange his affairs with the Contractor in any manner which the Employer may deem fit and the Guarantor shall not have the right to claim his release from this Advance Payment Guarantee on account of any conduct alleged to be prejudicial to the Guarantor.

9. The Guarantor chooses the physical address as stated above for the service of all notices for all purposes in connection herewith.

10. This Advance Payment Guarantee is neither negotiable nor transferable and shall expire in terms of 2, whereafter no claims will be considered by the Guarantor. The original of this Guarantee shall be returned to the Guarantor after it has expired.

11. This Advance Payment Guarantee, with the required demand notices in terms of 4 or 5, shall be regarded as a liquid document for the purposes of obtaining a court order.

12. Where this Advance Payment Guarantee is issued in the Republic of South Africa the Guarantor hereby consents in terms of Section 45 of the Magistrate's Courts Act No 32 of 1944, as amended, to the jurisdiction of the Magistrate's Court of any district having jurisdiction in terms of Section 28 of the said Act, notwithstanding that the amount of the claim may exceed the jurisdiction of the Magistrate's Court.

Signed at

Date

Guarantor's signatory (1)

Capacity

Guarantor's signatory (2)

Capacity

Witness signatory (1)

Witness signatory (2)

Schedule of Plant and material

For use with Advance Payment Guarantees on contracts using the General Conditions of Contract for Construction Works, Third Edition, 2015.

The City of Cape Town, INFORMAL SETTLEMENTS WATER & WASTE SERVICES: INFORMAL SETTLEMENTS & BACKYARDERS
Employer

Contractor

Works Project No. 107Q/2018/19 WP-01: , to be executed in the South Region under Framework Contract No. 107Q/2018/19: TERM TENDER FOR CIVIL ENGINEERING WORKS WITHIN THE CITY OF CAPE TOWN

Payment Certificate No.

Advance payment is requested in respect of the following items of Plant and materials, which have been manufactured and are stored at places other than the Site, or in respect of which a deposit with order is required from the Contractor by a manufacturer/supplier:

[illegible]

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

.....

As witness

.....

for the Contractor

.....
Approved by Employer's Agent

Contract
Part C1: Agreements and Contract Data
Reference No. 107Q/2018/19

1264
Form of Advance Payment Guarantee

CITY OF CAPE TOWN

INFORMAL SETTLEMENTS WATER & WASTE SERVICES: INFORMAL SETTLEMENTS & BACKYARDERS

CONTRACT NO. 107Q/2018/19

TERM TENDER FOR CIVIL ENGINEERING WORKS WITHIN THE CITY OF CAPE TOWN

C1.5 Occupational Health and Safety Agreement

AGREEMENT MADE AND ENTERED INTO BETWEEN THE CITY OF CAPE TOWN (HEREINAFTER CALLED THE "EMPLOYER") AND

Neyens Construction
(Contractor/Mandatory/Company/CC Name)

IN TERMS OF SECTION 37(2) OF THE OCCUPATIONAL HEALTH AND SAFETY ACT, 85 OF 1993 AS AMENDED.

I, Cliff Swaro, representing

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

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

COID ACT Registration Number:

OR Compensation Insurer: FEM Policy No.: 2089252

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

I further undertake to ensure that any subcontractors employed by me will enter into an occupational health and safety agreement separately, and that such subcontractors comply with the conditions set.

I hereby declare that I have read and understand the Occupational Health and Safety Specifications contained in this tender and undertake to comply therewith at all times.

I hereby also undertake to comply with the Occupational Health and Safety Specification and Plan submitted and approved in terms thereof.

Signed at Cape on the 11 day of February 2021

Witness

Mandatory

Signed at on the day of 20

Witness

for and on behalf of
City of Cape Town

CITY OF CAPE TOWN

INFORMAL SETTLEMENTS WATER & WASTE SERVICES: INFORMAL SETTLEMENTS & BACKYARDERS

CONTRACT NO. 107Q/2018/19

TERM TENDER FOR CIVIL ENGINEERING WORKS WITHIN THE CITY OF CAPE TOWN

C1.6 Protection of the Environment Declaration

PROTECTION OF THE ENVIRONMENT DECLARATION

The Contractor will not be given right of access to the Site until this form has been signed

CONTRACT NO.: 107Q/2018/19

CONTRACT TITLE: TERM TENDER FOR CIVIL ENGINEERING WORKS WITHIN THE CITY OF CAPE TOWN

I/ we, Majani Construction {Contractor} record as follows:

1. I/ we, the undersigned, do hereby declare that I/ we am/ are aware of the increasing requirement by society that construction activities shall be carried out with due regard to their impact on the environment.

In view of this requirement of society and a corresponding requirement by the Employer with regard to this Contract, I/ we will, in addition to complying with the letter of the terms of the Contract dealing with protection of the environment, also take into consideration the spirit of such requirements and will, in selecting appropriate employees, plant, materials and methods of construction, in-so-far as I/ we have the choice, include in the analysis not only the technical and economic (both financial and with regard to time) aspects but also the impact on the environment of the options. In this regard, I/ we recognise and accept the need to abide by the "precautionary principle" which aims to ensure the protection of the environment by the adoption of the most environmentally sensitive construction approach in the face of uncertainty with regard to the environmental implications of construction.

I/ we declare that I/ we have read and understood the contents of the Environmental Management Programme (which is comprised of the Environmental Management Specification and its Annexures) for this Contract, and that I/ we understand my/our responsibilities in terms of enforcing and implementing the Environmental Management Programme. I/ we also declare that I/ we have made appropriate provision in my/ our pricing of the Schedules of Rates items for the Environmental Management Programme.

I/ we acknowledge and accept the right of the Employer to deduct, should he so wish, from any amounts due to me/ us, such amounts (hereinafter referred to as fines) as the Employer's Agent shall certify as being warranted in view of my/ our failure to comply with the terms of the Contract dealing with protection of the environment, subject to the following:

4.1 The Employer's Agent, in determining the amount of such fine, shall take into account, *inter alia*, the nature of the offence, the seriousness of its impact on the environment, the degree of prior compliance/non-compliance, the extent of the Contractor's overall compliance with environmental protection requirements and, in particular, the extent to which he considers it necessary to impose a sanction in order to eliminate/reduce future occurrences

4.2 The Employer's Agent shall, with respect to any fine imposed, provide me/ us with a written statement giving details of the offence, the facts on which the Employer's Agent has based his assessment and the terms of the Contract (by reference to the specific clause) which has been contravened.

Signed

CONTRACTOR

Date 11/2/21

CITY OF CAPE TOWN

INFORMAL SETTLEMENTS WATER & WASTE SERVICES: INFORMAL SETTLEMENTS & BACKYARDERS

CONTRACT NO. 107Q/2018/19

TERM TENDER FOR CIVIL ENGINEERING WORKS WITHIN THE CITY OF CAPE TOWN

C1.7 Insurance Broker's Warranty

Pro Forma



Signature of Contractor's Insurance Broker

Date _____

CITY OF CAPE TOWN
City Manager
Civic Centre
12 Hertzog Boulevard
Cape Town
8001

Dear Sir

CONTRACT NO.: 107Q/2018/19

CONTRACT TITLE: TERM TENDER FOR CIVIL ENGINEERING WORKS WITHIN THE CITY OF CAPE TOWN (REGION - SOUTH)

NAME OF CONTRACTOR: _____

I, the undersigned, do hereby confirm and warrant that all the insurances required in terms of the abovementioned term tender contract have been issued and, in the case of blanket/umbrella policies, will be endorsed to reflect the interests of the CITY OF CAPE TOWN with regard to each Works Project contract, and that all the insurances and endorsements, etc., are all in accordance with the requirements of the contract.

I furthermore confirm that all premiums in the above regard have been paid.

Yours faithfully

Signed: _____

For: _____

CITY OF CAPE TOWN

INFORMAL SETTLEMENTS WATER & WASTE SERVICES: INFORMAL SETTLEMENTS & BACKYARDERS

CONTRACT NO. 107Q/2018/19

TERM TENDER FOR CIVIL ENGINEERING WORKS WITHIN THE CITY OF CAPE TOWN

C1.8 Contract of Temporary Employment as Community Liaison Officer

Construction Contract No.:

PROJECT.....

• AGREEMENT made between the CONTRACTOR.....
and the Community Liaison Officer....., hereafter
referred to as the CLO, for the appointment and employment of a CLO for the duration of the work in respect of the
above named construction contract.

1. THE PARTIES HAVE AGREED THAT

The CLO will be employed by the CONTRACTOR on a temporary basis for the duration of the work from the date of signing this agreement to the date of practical completion as defined in the Contract, subject to all the conditions set out below.

2. THE DUTIES OF THE COMMUNITY LIAISON OFFICER SHALL BE:

1. to keep the community informed on the progress of the project;
2. to keep the Contractor informed on relevant Community affairs and possible grievances;
3. to manage the recruitment of workers from the Sub-Council Job-Seekers Database;
4. to assist the Contractor's supervisory staff in the management of the workers.

3. THE FOLLOWING CONDITIONS OF EMPLOYMENT SHALL APPLY:

The Conditions of Temporary Employment as applicable on this Contract for the workers recruited from the Community shall apply equally to the CLO, except that the rate of remuneration shall be **R365R305.00** per working day. These conditions that apply are listed below as they appear in the Contract of Temporary Employment:

3.1 If required to work on a statutory public holiday or Sunday the payment will be double the amount stated in the previous paragraph.

3.2 Maximum hours of work:

- (i) 9½ hours per day
- (ii) 45 hours per week;
- (iii) 5 days per week;
- (iv) 5 hours without an interval, whereupon there shall be an interval of at least 30 minutes;
- (v) A spread-over period of 12 hours.

3.3 The CLO shall be entitled to payment where he is prevented from working by reasons which are within the control of the Contractor.

3.4 On days when it is raining the Contractor may, before 9 a.m., decide not to open the site and there will be no pay.

If the Contractor closes the site between 9 a.m. and 1 p.m., the CLO will be paid half the daily wage.

If the site works later than 1 p.m., the CLO will be paid the full daily wage.

3.5 Workers and the CLO will not be permitted to work under conditions of:

- (i) undisciplined or unruly behaviour;
- (ii) insubordination to Team Leader, Supervisors or Management;
- (iii) abuse of intoxicating substances;
- (iv) criminal actions by the employee;
- (v) strike action or political stayaways.

3.6 Workers, including the CLO, may be dismissed after two official written warnings for the following behaviour:

- (i) undisciplined or unruly behaviour;
- (ii) insubordination to Team Leader, Supervisors or Management;
- (iii) abuse of intoxicating substances;
- (iv) wilful or negligent damage to or loss of machines or equipment.

The Contractor shall ensure that he has statements from at least two witnesses concerning any of the above situations.

The Contractor shall inform the CLO within 24 hours of any warning issued to workers employed from the Job-Seekers Database.

3.7 The CLO will be paid on a Friday afternoon every two weeks, one week in arrears.

3.8 The CLO shall be given a statement with each payment on which is recorded:

- (i) the name of the Contractor;
- (ii) the CLO's name;
- (iii) the number of days worked by the CLO;
- (iv) the rate per day;
- (v) the details of any deductions made;
- (vi) the actual amount paid to the CLO.

3.9 No deduction shall be made from the remuneration except where the CLO consents in writing or unless the Contractor is permitted or required to do so by law or the order of any competent court.

3.10 The CLO shall be supplied free of charge with all health and safety equipment required by the Occupation Health and Safety Act. The equipment shall remain the property of the Contractor.

3.11 The Contractor must give the CLO at least one week's notice of the termination of the Contract of Temporary Employment. If this is not done, the CLO must be paid earnings for five days. This condition does not apply if the CLO is dismissed.

3.12 At the end of the period of temporary employment, the Contractor shall provide a Certificate of Service recording the Contractor's name, the CLO's name and address, the period of service, the type of work on which the CLO was engaged and the rate of remuneration on termination.

4. TERMINATION OF AGREEMENT

4.1 If the CLO can no longer perform and execute his/her duties as detailed in this agreement, this agreement will be terminated without prejudice to any rights under this agreement.

5. THE CONDITIONS OF THIS AGREEMENT

5.1 The parties expressly declare that this agreement contains all the conditions negotiated between them, and no condition or stipulation not contained herein shall be binding upon the parties.

6. **THUS AGREED AND SIGNED BY THE PARTIES:**

Contractor:

Community Liaison officer:

Date:

CITY OF CAPE TOWN

INFORMAL SETTLEMENTS WATER & WASTE SERVICES: INFORMAL SETTLEMENTS & BACKYARDERS

CONTRACT NO. 107Q/2018/19

TERM TENDER FOR CIVIL ENGINEERING WORKS WITHIN THE CITY OF CAPE TOWN

C1.9 Works Project Acceptance/Refusal Notice

Should the contractor accept the work opportunity, he shall do so on this form as part of his Works Project offer.

Should the contractor wish to refuse the work opportunity, he shall do so on this form, which must be returned to the offices of the Employer's agent as soon as possible, but not later than the date for submission of the offer.

The contractor who fails to submit a refusal notice, or an offer, by the due date will be **excluded** from further participation in the work allocation process.

I/We herewith

Accept

☐

Refuse

☐

Tick applicable box

the opportunity afforded to me/us by the City of Cape Town to participate in the work allocation process as set out in the Work Allocation Procedures for the work specified in the Works Project contract document.

I/We accept that no contractor will be allocated work unless the contractor has demonstrated to the satisfaction of the Employer that he has the resources, including a site specific construction manager, required for this Works Project.

I/We agree to the construction time period specified in the Scope of Work.

4. CONTRACTOR'S NAME:

AUTHORISED CONTACT PERSON (NAME):

SIGNATURE:

DATE:.....

PART C2 PRICING DATA

C2.1 Pricing Assumptions

C2.2 Schedule of Rates

•
5. C2.1 Pricing Assumptions

Pricing Assumptions mean the criteria as set out below, read together with all Parts of this contract document, which it will be assumed in the contract, that the tenderer has taken into account when developing his prices.

1. The method of measurement published by the South African Bureau of Standards in clause 8 of the Standardised Specifications for Civil Engineering Construction is applicable, subject to the variations and amendments contained in the section "Applicable SANS 1200 standardised specifications".
2. Descriptions in the Bills of Quantities are abbreviated and comply generally with those in the Standardised Specifications. Clause 8 of each Standardised Specification, read together with the relevant clauses of the Scope of Work, set out what ancillary or associated activities are included in the rates for the operations specified. Should any requirements of the measurement and payment clause of the applicable Standardised Specification, or the Scope of Work, conflict with the terms of the Schedule, the requirements of the Standardised Specification or Scope of Work, as applicable, shall prevail.
3. The measurement and payment clauses in a specification in which further information regarding the scheduled items is given, are referenced under "Item" (pay items) in the Bills of Quantities. The referenced clauses are not necessarily the only sources of information in respect of scheduled items. Further information and specifications may be found elsewhere in the contract documents. Standardised Specifications are identified by the digits which follow SANS in the SANS 1200 series of specifications, e.g. G for SANS 1200 G.
4. Unless otherwise stated, items are measured net in accordance with the drawings, and no allowance is made for waste.
5. The quantities set out in the Bills of Quantities are the estimated quantities of the Contract Works, but the Contractor will be required to undertake whatever quantities may be directed by the Employer's Agent from time to time. The Contract Price for the completed contract shall be computed from the actual quantities of work done, valued at the relevant unit rates and prices.
6. 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 several items. Such prices and rates shall cover all costs and expenses that may be required in and for the execution of the work described, and shall cover the cost of all general risks, liabilities, and obligations set forth or implied in the documents on which the tender is based, as well as overhead charges and profit. Reasonable prices shall be inserted as these will be used as a basis for assessment of payment for additional work that may have to be carried out.
7. A price or rate should be entered against each item in the Bills of Quantities, whether the quantities are stated or not. An item against which no price (in any format) or a nil rate is entered will be considered to be covered by the other prices or rates in the Bills of Quantities, and that there is no charge for that particular item (even should the quantity subsequently increase).
8. Except where rates only are required, insert all amounts to be included in the total tendered price in the "Amount" column and show the corresponding total tendered price.

9. The units of measurement described in the Schedules of Rates are metric units. Abbreviations which may be used in these Schedules of Rates are as follows:

mm	=	Millimetre	h	=	hour
m	=	Metre	kg	=	kilogram
km	=	Kilometre	t	=	ton (1000 kg)
km-pass	=	kilometre-pass	No.	=	number
m ²	=	square metre	sum	=	lump sum
m ² .pass	=	square metre-pass	MN	=	meganeutron
ha	=	Hectare	MN.m	=	meganeutron-metre
m ³	=	cubic metre	P C sum	=	Prime Cost sum
m ³ .km	=	cubic metre-kilometre	Prov	=	Provisional sum
l	=	Litre	sum	=	
kl	=	Kilolitre	%	=	per cent
MPa	=	Megapascal	kW	=	kilowatt
kPa	=	Kilopascal	day	=	Working day

Tenderers are only to price their Regions of Preference as they have indicated on the relevant returnable schedule, in accordance with clauses F.1.6.1 and F.2.10.5 in Part T1.2 Tender Data.

10. Where fractions of a cent occur in calculations of prices and amounts, they shall be rounded up/down to the nearest whole cent.
11. The Tenderer is referred to F.2.24 in Part T1.2 Tender Data regarding the pricing of Deviations and/or Qualifications.
12. Clause F.2.13.11 c) in Part T1.2 Tender Data shall be applicable to the submission of Bills of Quantities which have been priced electronically, and which the Tenderer wishes to submit as a printed version with his/her tender in the place of handwritten priced Bills of Quantities.
- If there is found to be any variance between the printed version and the original issued document, the original shall stand. However, where Addenda have been issued which amend the Bills of Quantities, then the printed Bills of Quantities shall take these into account. The pages of the issued Bills of Quantities should not be removed from the tender document.
13. Tenderers are referred to Clause 8 Measurement and Payment in the Environmental Management (EM) Specification in Part C3.5 in the Scope of Work for the basic principles of measurement and pricing of the EM Specification.
14. All descriptions or clauses where trade names or proprietary products are specified, are deemed to include the phrase "or equal approved"
15. Tenderers are referred to Clause 6.8.2 in Part C1.2 Contract Data regarding contract price adjustment Pricing Assumptions mean the criteria as set out below, read together with all Parts of this framework contract document, which it will be assumed in the contract, that the tenderer has taken into account when developing his prices(rates).

The following bills in Part C2.2 Bills of Quantities are deemed applicable to the following categories for the purposes of Contract Price Adjustment:

NO.	SCHEDULE	CPA CATEGORY
1.	GENERAL OBLIGATIONS	To be proportioned
2.	ACCOMMODATION OF TRAFFIC	Roads and earthworks
3.	OVERHAUL	Roads and earthworks
	ETC	

CITY OF CAPE TOWN

INFORMAL SETTLEMENTS WATER & WASTE SERVICES: INFORMAL SETTLEMENTS & BACKYARDERS

CONTRACT NO. 107Q/2018/19

TERM TENDER FOR CIVIL ENGINEERING WORKS WITHIN THE CITY OF CAPE TOWN

C2.2 Schedules of Rates

CONTENTS

PAGES

Schedule of Rates

115 - 165

CITY OF CAPE TOWN

INFORMAL SETTLEMENTS WATER & WASTE SERVICES: INFORMAL SETTLEMENTS & BACKYARDERS

CONTRACT NO. 107Q/2018/19

TERM TENDER FOR CIVIL ENGINEERING WORKS WITHIN THE CITY OF CAPE TOWN

SCHEDULES OF RATES

107Q/2018/19 TERM TENDER FOR CIVIL ENGINEERING WORKS WITHIN THE CITY OF CAPE TOWN				
SQR				
ITEM No.	PAYMENT	DESCRIPTION	Unit	Rate
SECTION A : GENERAL	SANS 1200A	ELIMINARY AND GENERAL		
A.1	8.3	FIXED-CHARGE ITEMS		
A.1.1	8.3.1	Contractual Requirements	Sum	R 75,000.00
	8.3.2	Establish Facilities on site:		
	8.3.2.1	Facilities for the Engineer		
A.1.2		Furnished office (One office for the Engineer and CLO)	Sum	R 25,000.00
A.1.3		Ablution and latrine facilities	Sum	R 8,000.00
A.1.4		Carports	Sum	R 5,000.00
	8.3.2.2	Facilities for Contractor		
A.1.5		Offices and storage sheds	Sum	R 15,000.00
A.1.6		Workshops	Sum	R 5,000.00
A.1.7		Ablution and latrine facilities	Sum	R 5,000.00
A.1.8	PSA 8.6.3	Testing carried out by commercial laboratory as ordered by Engineer	Prov Sum	R 0.00
A.1.9		% Profit + Attendance for item A.1.8	%	R 0.10
A.1.10		Tools and equipment	Sum	R 5,000.00
A.1.11		Water supplies, electric power and communications	Sum	R 10,000.00
A.1.12		Dealing with water (see sub clause 5.5)	Sum	R 7,500.00
A.1.13		Access (see sub clause 5.8)	Sum	R 500.00
A.1.14	8.3.3	Other fixed-charge obligations	Sum	R 1,500.00
A.1.15	8.3.4	Removal of site establishment	Sum	R 15,000.00
A.2	8.4	TIME-RELATED ITEMS		

A.2.1	8.4.1	Contractual Requirements	day	R 2,000.00
	8.4.2	Operate and maintain facilities on the site, for duration of construction, except where stated otherwise		
	8.4.2.1	Facilities for Engineer		
A.2.2		Furnished office	day	R 1,000.00
A.2.3		Ablution and latrine facilities	day	R 200.00
A.2.4		Carport	day	R 500.00
A.2.5	PSAB 1.1	Name board	No	R 12,500.00
	8.4.2.2	Facilities for Contractor		R 0.00
A.2.6		Offices and storage sheds	day	R 250.00
A.2.7		Ablution and Latrine facilities	day	R 100.00
A.2.8		Workshops	day	R 350.00
A.2.9		Tools and equipment	day	R 250.00
A.2.10		Water supplies, electric power and communications	day	R 750.00
A.2.11		Dealing with water (see sub clause 5.5)	day	R 1,300.00
A.2.12		Access (see sub clause 5.8)	day	R 500.00
A.2.13	8.4.3	Supervision for duration of the contract	day	R 12,000.00
A.2.14	8.4.4	Company and Head Office Overhead costs for the duration of the contract	day	R 1,600.00
A.2.15	8.4.5	Other time-related obligations (Specify)		R 0.00
A.2.15.1			day	R 0.00
A.2.15.2			day	R 0.00
A.3	8.8	TEMPORARY WORKS		R 0.00
A.3.1	8.8.2	Dealing with Traffic (or accommodation of traffic)		R 0.00
A.3.1.1	PSA 8.8.2 (a)	(a) Flagmen	man/day	R 405.00
A.3.1.2		(b) Road signs, R-and TR-series, 900mm dia.	No.	R 1,000.00
A.3.1.3		(c) Road signs, TW-series, 900mm sides	No.	R 1,000.00
A.3.1.4		(d) Road signs, STW-DTG,-TGS-, TG- and TIN series (excl delineators and barricades)	m ²	R 750.00
A.3.1.5		(e) Delineators (DTG50J) (200mm x 800mm)		R 0.00
A.3.1.5.1		i) Single	No.	R 100.00

A.3.1.6		(f) Traffic cones (450mm)	No.	R 180.00
A.3.1.7		(g) Movable barriers (concrete new jersey type)	No.	R 5,500.00
A.3.2		Traffic Safety Officer	day	R 600.00
A.4		ENVIRONMENTAL REQUIREMENTS		R 0.00
A.4.1	PSA 8.9	Complying with Environmental requirements	Prov Sum	R 0.00
A.4.2		% Profit + Contractor's charges for item A.4.1	%	R 0.10
A.5		HEALTH & SAFETY REQUIREMENTS		R 0.00
A.5.1	PSA 8.10	Complying with Health and Safety requirements in terms of Construction Regulations 2014	Prov Sum	R 0.00
A.5.2		% Profit + Contractor's charges for item A.5.1	%	R 0.10
A.6		SURVEY REQUIREMENTS		R 0.00
A.6.1		Place steel pegs (per steel peg)	No.	R 150.00
A.7		MANAGEMENT REQUIREMENTS		R 0.00
A.7.1		a) Costs associated with the recruitment, employment and management of unskilled local labour including complying with statutory requirements for the employment of casual labour, excluding remuneration.	Sum	R 5,000.00
A.7.2	PSA 8.5.1	Community Liaison Officer	day	R 500.00
A.8	8.7	DAYWORKS		R 0.00
A.8.1	PSA 8.7	LABOUR CHARGES		R 0.00
A.8.1.1		(a) Labourer	h	R 42.00
A.8.1.2		(b) Chargehand	h	R 58.00
A.8.1.3		(c) Foreman	h	R 200.00
A.8.1.4		(d) Artisan	h	R 77.00
A.8.1.5		(e) Plant Operator	h	R 65.00
A.8.1.6		(f) Flag person	h	R 42.00
A.8.1.7		(g) Driver	h	R 56.00
A.8.1.8		(h) Surveyor	h	R 200.00
A.8.1.9		i) Survey complete for generation of DTM	h	R 200.00
A.8.1.10		ii) As-built survey of all civil engineering infrastructure constructed in the contract and the preparation of	h	R 500.00

		Record Drawings on CAD to CoCT GIS requirements and standards		
A.8.2	PSA 8.7	MATERIALS CHARGES		R 0.00
A.8.2.1		(a) Cement OPC	kg	R 2.00
A.8.2.2		(b) Building Sand	m ³	R 270.00
A.8.2.3		(c) Crushed Stone (19mm)	m ³	R 420.00
A.8.2.4		(d) Bricks NFX	1000	R 3.00
A.8.3	PSA 8.7	PLANT CHARGES		R 0.00
A.8.3.1		(a) Backhoe/loader	h	R 400.00
A.8.3.2		(b) Tractor	h	R 200.00
A.8.3.3		(c) Trailer	h	R 30.00
A.8.3.4		(d) Tip truck	h	R 0.00
A.8.3.4.1		(i) Capacity of 6 m ³	h	R 390.00
A.8.3.4.2		(ii) Capacity of 10 m ³	h	R 460.00
A.8.3.5		(e) Walk-behind vibrating roller(1t)	h	R 85.00
A.8.3.6		(f) Plate compactor	h	R 45.00
A.8.3.7		(g) Water cart (9000 l)	h	R 450.00
A.8.3.8		(h) Water cart (3000 l)	h	R 320.00
A.8.3.9		(i) Concrete mixer	h	R 50.00
A.8.3.10		(j) Dumper	h	R 850.00
A.8.3.11		(k) Flat bed truck (3t)	h	R 530.00
A.8.3.12		(l) Off road dump truck (10 m3)	h	R 950.00
A.8.3.13		(m) Bulldozer 27 t (D7)	h	R 1,250.00
A.8.3.13.1		i) transportation (delivery & removal)	No.	R 4,600.00
A.8.3.13.2		ii) hourly rate	h	R 350.00
A.8.3.14		(n) Bulldozer 35t (D8)	h	R 1,400.00
A.8.3.14.1		i) transportation (delivery & removal)	No.	R 4,600.00
A.8.3.14.2		ii) hourly rate	h	R 350.00
A.8.3.15		(o) Bulldozer 50t (D9)	h	R 1,550.00
A.8.3.15.1		i) transportation (delivery & removal)	No.	R 4,600.00
A.8.3.15.2		ii) hourly rate	h	R 350.00
A.8.3.16		(p) Grader	h	R 1,100.00
A.8.3.17		(q) Vibrating roller	h	R 485.00

A.8.3.18		(r) Excavator (20t)	h	R 770.00
A.8.3.19		(s) Pumps: Centrifugal 100mm	h	R 200.00
A.8.3.20		Other plant not specified above(Specify)		R 0.00
A.8.3.20.1			h	R 1,020.00
A.8.3.20.2			h	R 3,500.00
A.9	8.8.4	EXISTING SERVICES		R 0.00
A.9.1		Extra over excavation for short trenches for carefully protecting, locating, excavating around, backfilling, protecting, carting away surplus excavated material, dewatering, etc. to existing services crossing the line of the trench for		R 0.00
A.9.1.1		(a) Electrical Cables	No.	R 1,200.00
A.9.1.2		(b) Water mains	No.	R 1,200.00
A.9.1.3		(c) Telkom ducts and cables	No.	R 1,200.00
A.9.1.4		(d) Sewer pipes	No.	R 1,200.00
A.9.1.5		(e) Storm water pipes	No.	R 1,200.00
A.9.2		Extra over excavation for short trenches for carefully protecting, locating, excavating around, backfilling, protecting, carting away surplus excavated material, dewatering, etc. to existing services adjoining the line of the trench for		R 0.00
A.9.2.1		a) Electrical ducts	m	R 150.00
A.9.2.2		(b) Water mains	m	R 150.00
A.9.2.3		(c) Telkom ducts and cables	m	R 150.00
A.9.2.4		(d) Sewer pipes	m	R 150.00
A.9.2.5		(e) Storm water pipes	m	R 150.00
A.9.3		Liaison with service authorities	Sum	R 7,000.00
A.9.4	8.8.4 (c)	Excavate by hand in soft material to expose existing services	m ³	R 275.00
SECTION B SITE CLEARANCE				
ITEM No.	PAYMENT	DESCRIPTION	Unit	Rate
	SANS 1200 C	SECTION B: SITE CLEARANCE		
B.1		CLEAR SITE		
B.1.1	8.2.1.	Clear and grub	m ²	R 18.00
B.1.2	8.2.2	Remove and grub large trees and tree stumps of girth:		R 0.00

B.1.2.1		(i) over 1m and up to and including 2m	No.	R 1,500.00
B.1.2.2		(ii) over 2m and up to and including 3m	No.	R 2,500.00
B.1.2.3		(iii) over 3m and up to and including 4m	No.	R 3,500.00
B.1.3	8.2.5	Take down existing fences	km	R 100,000.00
B.1.4	8.2.7	Dismantle and remove pipelines, electricity transmission lines, cable etc		R 0.00
B.1.4.1		a) Existing storm water pipes:		R 0.00
B.1.4.1.1		i) 300mm dia.	m	R 150.00
B.1.4.1.2		ii) 375mm dia.	m	R 185.00
B.1.4.1.3		iii) 450mm dia.	m	R 210.00
B.1.4.1.4		iv) 525 mm dia.	m	R 245.00
B.1.4.1.5		v) 600mm dia.	m	R 295.00
B.1.4.2		b) Existing trapezoidal storm water channels (600mm x 450mm x 250mm)	m	R 325.00
B.1.5	8.2.10	Remove topsoil to a nominal depth of 150mm and stockpile	m ³	R 40.00
B.1.6	PSC 8.2.11	Remove, transport and stack existing kerbs, channels and edgings for reinstatement	m	R 70.00
B.1.7	PSC 8.2.12	Removal of hardened surfacing:		R 0.00
B.1.7.1		a) Cut, demolish, remove and dispose of concrete surface slabs to site selected by Contractor	m ²	R 200.00
B.1.7.2		b) Remove interlocking brick paving and precast concrete paving slabs and stack for reinstatement	m ²	R 60.00
B.1.7.3		c) Cut, remove and dispose of existing asphalt surfacing to site selected by Contractor	m ²	R 200.00
B.1.7.4		d) Remove existing gravel wearing coarse up to 150mm thick and stockpile for later use	m ²	R 17.00
B.1.8	PSC 8.2.13	Remove existing palisade fences and stack for reinstatement	m ²	R 220.00
B.1.9	PSC 8.2.14	<u>Remove existing vibracrete fences and stack for reinstatement</u>	m ²	R 220.00
B.1.10	PSC 8.2.15	Demolish, remove and dispose of the following existing storm water structures to site selected by Contractor:		
B.1.10.1		a) Concrete or brick manholes for pipes up to 600mm diameter and up to 2.5m deep	No	R 1,750.00
B.1.10.2		b) Single kerb inlet catchpits	No	R 1,200.00

B.1.10.3		c) Double kerb inlet catchpits	No	R 1,500.00
B.1.10.4		d) Grid inlet catchpits	No.	R 1,200.00
B.1.10.5		e) Concrete or brick head/wing walls up to 250mm thick	m ²	R 1,350.00
B.1.11	PSC 8.12.16	Remove and dispose of existing gabions and reno mattresses complete, to site selected by Contractor	m ³	R 400.00

SECTION C: EARTHWORKS

ITEM No.	PAYMENT	DESCRIPTION	Unit	Rate
		SECTION C : EARTHWORKS		
	SANS 1200 D	EXCAVATION		
C.1	8.3.2	BULK EXCAVATION		
		Cut to Fill		
C.1.1		Excavate in all materials and place in fill within site boundary, compact to 93% Mod AASHTO max density (100% for sand).	m ³	R 52.00
C1.2		Extra Over C.1.1 for excavation and removing material to site selected by Contractor, outside of site boundary		R -
C.1.2.1		a) Clayey soil material	m ³	R 180.00
C.1.2.2		b) Hard rock material	m ³	R 650.00
C.1.3	8.3.4 PSDM2	Extra Over C.1.2.1 and C.1.2.2 for importation of sand fill material		
C.1.3.1		a) from commercial sources selected by Contractor	m ³	R 250.00
C.1.4	8.3.6	Overhaul		
C.1.4.1	8.3.6 (a)	i) Limited overhaul	m ³	R 180.00
C.1.4.2	8.3.6 (b)	ii) Long overhaul	m ³ /km	R 12.00
C.2	8.3.7 PSD 4.1.1	STABILISATION		
C.2.1		Straw stabilisation		
C.2.1.1		a) By machine	m ²	R 4.00
C.2.1.2		b) By hand	m ²	R

C.3	8.3.8	Existing Services		5.00
C.2.2	8.3.8.1 (C)	Excavate by hand, backfill and compact in layers in all materials to locate existing services	m ³	R 350.00
C.2.2.1		Cut 100mm topsoil to stockpile and maintain	m ³	R 40.00
C.2.2.2		Reinstate topsoil from stockpile	m ³	R 35.00
C.3	8.3.10	TOPSOIL		
C.3.1		Spread topsoil to a depth of 150 mm from stockpile	m ²	R 30.00

SECTION D: EARTHWORKS (PIPE TRENCHES)

ITEM No.	PAYMENT	DESCRIPTION	Unit	Rate
SECTION D	SANS 1200 DB	EARTHWORKS (PIPE TRENCHES)		
D.1		EXCAVATION		
D.1.1		WATER MAINS		
D.1.1.1	8.3.2(a)	Excavate in all materials for trenches, backfill and compact, incl. dispose surplus/unsuitable material, for pipes:		
		Up to 300 mm dia. for depths		
		Over and up to		
D.1.1.1.1		0,0m 1,0m	m	R 120.00
D.1.1.1.2		1,0 m 1,5m	m	R 150.00
D.1.1.1.3		1,5m 2,0m	m	R 180.00
D.1.1.1.4		Deeper than 2,0m	m	R 280.00
		Larger than 300mm Up to 600 mm diam. for depths		
		Over and up to		
D.1.1.1.5		0,0m 1,0m	m	R 150.00
D.1.1.1.6		1,0 m 1,5m	m	R 180.00
D.1.1.1.7		1,5m 2,0m	m	R 280.00
D.1.1.1.8		Deeper than 2,0m	m	R 380.00

D.2.1		SEWERS		
D.2.1.1	8.3.2(a)	Excavate in all materials for trenches, backfill and compact, incl. dispose surplus/unsuitable material, for pipes:		
		100 mm up to 250 mm dia. for depths:		
		Over and up to		
D.2.1.1.1		0,0 m 1,0 m	m	R 120.00
D.2.1.1.2		1,0 m 2,0 m	m	R 150.00
D.2.1.1.3		2,0 m 3,0 m	m	R 280.00
D.2.1.1.4		3,0 m 4,0 m	m	R 380.00
D.3.1		Storm Water		
D.3.1.1	8.3.2(a)	Excavate in all materials for trenches, backfill and compact, incl. dispose surplus/unsuitable material, for pipes:		
		Up to 450 mm dia. for depths:		
		Over and up to		
D.3.1.1.1		0,0 m 1,0 m	m	R 150.00
D.3.1.1.2		1,0 m 2,0 m	m	R 180.00
D.3.1.1.3		2,0 m 3,0 m	m	R 280.00
D.3.1.1.4		3,0 m 4,0 m	m	R 380.00
D.4.1		Cable Ducts		
D.4.1.1	8.3.2(a)	Excavate by hand in all materials for trenches, backfill & compact, incl. dispose surplus/unsuitable material for		
D.4.1.1.1		Electrical ducts		
		Depth range 0 m - 1,0 m and trench widths :		
D.4.1.1.1.1		a) Up to 600 mm wide (2 x L.V. sleeves)	m	R 100.00
D.4.1.1.2		Telkom ducts		
		Trench widths 750 mm wide		
D.4.1.1.2.1		a) Depth range 0 m to 1,0 m	m	R 100.00
D.5		Erf Connections		

D.5.1.1	8.3.2(a)	Excavate in all materials for trenches, backfill and compact, incl. dispose surplus/unsuitable material, for pipes:		
D.5.1.1.1		Up to 60 mm dia. and up to 1,0 m deep	m	R 85.00
D.6.1	8.3.2(b)	Extra-over items D.1.1.1.1 to D.1.1.1.8, D.2.1.1.1 to D.2.1.1.4, D.3.1.1.1 to D.3.1.1.4, D.4.1.1.1.1, D.4.2.1.1.2.1 & D.5.1.1.1 inclusive for excavation and removing material off-site, to a site selected by the Contractor		
	PSDB 3.1			
D.6.1.1		a) Clayey soil material	m ³	R 180.00
D.6.1.2		b) Hard rock material	m ³	R 650.00
D.6.1.3		c) Intermediate material	m ³	R 250.00
D.7.1	8.3.2(c)	Excavate and dispose of unsuitable material from trench bottom, to site selected by Contractor	m ³	R 250.00
D.8.1	8.3.3.1	Make up deficiency in backfill material:		
D.8.1.1		a) imported sand from commercial sources, selected by Contractor	m ³	R 250.00
D.8.1.2		b) imported 13 mm crushed stone	m ³	R 460.00
		Particular Items		
	PSDB 7.3	a) Shoring to Trench		
		i) 1.0 m to 2.0 m	m ²	R 160.00
		ii) 2.0m to 3.0 m	m ²	R 265.00
		iii) 3.0m to 4.0 m	m ²	R 290.00
		Dewatering of Trenches	m	R 100.00
D.9	8.3.5	EXISTING SERVICES		
D.9.1	8.3.5 (a)	Existing services that intersect a trench:		
D.9.1.1		(a) Electrical Cables	m	R 150.00
D.9.1.2		(b) Water mains	m	R 150.00
D.9.1.3		(c) Telkom ducts and cables	m	R 150.00
D.9.1.4		(d) Sewer pipes	m	R

				150.00
D.1.9.5		(e) Storm water pipes	m	R 150.00
D.9.2	8.3.5 (b)	Existing services that adjoin a trench:		
D.9.2.1		(a) Electrical Cables	m	R 150.00
D.9.2.2		(b) Water mains	m	R 150.00
D.9.2.3		(c) Telkom ducts and cables	m	R 150.00
D.9.2.4		(d) Sewer pipes	m	R 150.00
D.9.2.5		(e) Storm water pipes	m	R 150.00
D.9.2.6	PSDB 7.6	Protection of Services by encasing service sleeves with concrete	m ³	R 1,850.00
D.10	8.3.6.1	ROAD REINSTATEMENT		
D.10.1	PSDB 7.4	Re-instatement of roads		
D.10.1.1		a) Asphalt surface 40 mm thick	t	R 1,600.00
D.10.1.2		b) 150 mm Base course (G3)	m ³	R 720.00
D.10.1.3		c) 150 mm Base course (G4)	m ³	R 605.00
D.10.1.4		d) 150 mm Sub-base (G5)	m ³	R 480.00
D.10.1.5		e) 150 mm Sub-base (G7)	m ³	R 375.00
D.11	PSDB 7.5	Locating Existing Services	Sum	R 7,500.00
D.12	PSDB 7.6	Excavate by Hand to Expose Existing Services, and Backfill	m ³	R 325.00
D.13	PSDB 7.7	Protection of Services	m ³	R 215.00
D.14	PSDB 7.8	Liaison with Service authorities	Sum	R 7,000.00
SANS 1200 DK: GABIONS AND PITCHING				
E.1		Surface Preparation for Bedding of Gabions		
E.1.1	8.2.1	150mm thick G5 subbase material	m ²	R

		compacted to 95% Mod AASHTO as surface preparation for bedding of gabions		75.00
E.2	8.2.2	Gabions		
E.2.1		a) 2000 x 1000 x 1000 nominal depth gabion mattresses as specified with 100 – 120mm stone	No.	R 3,450.00
E.2.2		b) 2000 x 1000 x 500 nominal depth gabion mattresses as specified with 100 – 120mm stone	No.	R 3,050.00
E.2.3		c) 2000 x 1000 x 270 nominal depth reno mattresses as specified with 100 – 120mm stone on side slopes	No.	R 2,500.00
E.2.4		d) 2000 x 1000 x 270 nominal depth reno mattresses as specified with 100 – 120mm stone on horizontal surface	No.	R 2,400.00
E.3	8.2.4	Geotextile (340gm/m ² x 200l/s needle-punched woven – Grade 1)	m ²	R 25.00
		State type and grade of Geotextile offered:		
		Type:.....BIDIM.....		
		Grade:.....A4.....		
E.4	8.2.5	Pitching	m ²	R 275.00
E.5	8.2.6	Backing for pitching	m ²	R 85.00
E.6	8.2.7	Weepholes	No.	R 250.00

SECTION F SANS 1200DM EARTHWORKS (ROADS, SUBGRADE)

F.1	PSDM1	ROADBED PREPARATION		
F.1.1	PSDM 8.3.3	Road-bed preparation and compaction of material to:		
F.1.1.1		a) Minimum od 90% of modified AASHTO maximum density	m ³	R 60.00
F.1.1.2		b) Minimum od 93% of modified AASHTO maximum density	m ³	R 65.00
F.1.1.3		c) Minimum od 100% of modified AASHTO maximum density	m ³	R 70.00
		Three-Pass roller compaction		

		a) Grid Roler	m ²	R 2.00
		b) Vibratory Roller	m ²	R 3.00
F.1.2.	PSDM 8.3.4	Cut o Fill		
F.1.2.1		a) Compact to 90% of modified AASHTO maximum density	m ³	R 45.00
F.1.3		Borrow to Fil		
F.1.3.1		a) Compact to 90% of modified AASHTO maximum density	m ³	R 50.00
F.2		Selected Layers		
F.2.1	PSDM 8.3.5	Selected Layer using material from designated borrow pits or excavations:		
		a) Minimum od 90% of modified AASHTO maximum density	m ³	R 90.00
F.2.1.1		b) Minimum od 93% of modified AASHTO maximum density	m ³	R 95.00
F.2.1.2		c) Minimum od 100% of modified AASHTO maximum density	m ³	R 100.00
F.3	PSDM 8.3.6	Extra Over items F.1.2, F.1.3 & F.2.1		
F.3.1		a) Intermediate excavation	m ³	R 220.00
F.3.2		b) Hard Excavation	m ³	R 600.00
F.3.3		c) Boulder Excavation Class A	m ³	R 150.00
F.3.4		d) Boulder Excavation Class B	m ³	R 150.00
F.4	PSDM 8.3.7	Cut to Spoil From:		
F.4.1		a) Soft Excavation	m ³	R 250.00
F.4.2		b) Hard Excavation	m ³	R 700.00
F.4.3		c) Boulder Excavation Class A	m ³	R 350.00

F.4.4		d) Boulder Excavation Class B	m ³	R 350.00
F.5	PSDM 8.3.16	Gravel Surface Layer	m ³	R 400.00
F.6	PSDM 8.3.19	Sidewalks		
F.6.1		1) Fill compacted to 90% of Modified AASHTO density and obtained from		
F.6.1.1		a) Designated borrow pits	m ³	R 75.00
F.6.1.2		b) Comercial Sources	m ³	R 300.00
F.6.1.3		c) Excavations	m ³	R 75.00
F.6.2		2) Scarify in-situ material to a depth of 150 mm and compact to 90 % MOD AASHTO density	m ³	R 100.00
F.6.2.1		Escavated material removed to spoil	m ³	R 250.00
F.6.3	PSDM 8.3.20	Scarify, mix and cmpact existing layerworks (top 150mm)	m	R 20.00
F.6.4	PSDM 8.3.22	Tie in with existing road edge	m	R 50.00
SECTION G: PIPELINE				
SANS 1200 L				
G.1	8.2.1	Supply, handle, lay, joint and bed (class B) Class 12 uPVC pressure pipes to SANS 966 including couplings, with spigot and socket joints, test and disinfect		
G.1.1		a) 110 mm diam.	m	R 120.00
G.1.2		b) 160 mm diam.	m	R 195.00
G.1.3		c) 200 mm diam.	m	R 330.00
	8.2.1	Supply, handle, lay and bed (class B) PN12.5 PE100 HDPE pressure pipes, test and disinfect		
G.1.4		a) 110 mm diam.	m	R 280.00
G.1.5		b) 160 mm diam.	m	R 450.00

G.1.6		c) 200 mm diam.	m	R 610.00
G.2		SPECIALS AND FITTINGS		
G.2.1	8.2.2 PSL 4.4	Supply, lay, bed (Class B) and joint uPVC fittings Class 16 to SANS 966 or EN12842, incl. cut pipes to length where required, test and disinfect: Extra-over items G.1.1, G.1.2 & G.1.3 for pipelaying		
G.2.1.1		Tees Cast Iron with Socket ends for uPVC pipes (Class 16)		
G.2.1.1.1		a) 110 x 110mm	No.	R 550.00
G.2.1.1.2		b) 110 x 160mm	No.	R 1,135.00
G.2.1.1.3		c) 110 x 200mm	No.	R 1,745.00
G.2.1.1.4		d) 160 x 160 mm	No.	R 1,075.00
G.2.1.1.5		e) 160 x 200 mm	No.	R 1,845.00
G.2.1.1.6		f) 200 x 200 mm	No.	R 1,800.00
G.2.1.2		Hydrant Tees for uPVC pipes		
G.2.1.2.1		a) 110 mm dia.	No.	R 835.00
G.2.1.2.2		b) 160 mm dia.	No.	R 1,350.00
G.2.1.2.3		c) 200 mm dia.	No.	R 1,780.00
G.2.1.3		End caps for uPVC pipes		
G.2.1.3.1		a) 110 mm dia.	No.	R 340.00
G.2.1.3.2		b) 160 mm dia.	No.	R 870.00
G.2.1.4		90 degree bends for uPVC pipes		
G.2.1.4.1		a) 110 mm dia.	No.	R 350.00
G.2.1.4.2		b) 160 mm dia.	No.	R 450.00
G.2.1.4.3		c) 200 mm dia.	No.	R 860.00
G.2.1.5		45 degree bends for uPVC pipes		
G.2.1.5.1		a) 110 mm dia.	No.	R

				350.00
G.2.1.5.2		b) 160 mm dia.	No.	R 450.00
G.2.1.5.3		c) 200 mm dia.	No	R 860.00
G.2.1.6		22.5 degree bends for uPVC pipes		
G.2.1.6.1		a) 110 mm dia.	No.	R 350.00
G.2.1.6.2		b) 160 mm dia.	No.	R 450.00
G.2.1.6.3		c) 200 mm dia.	No.	R 860.00
G.2.2	8.2.2 PSL4.4	Supply, lay, bed (Class B) and joint HDPE PN12.5 PE100 fittings, incl. cut pipes to length where required, test and disinfect: Extra-over items G.1.3, G.1.4 & G.1.5 for pipelaying		
G.2.2.1		Tees Cast Iron with Socket ends for HDPE pipes (PN12.5)		
G.2.2.1.1		a) 110 x 110mm	No.	R 650.00
G.2.2.1.2		b) 110 x 160mm	No.	R 1,235.00
G.2.2.1.3		c) 110 x 200mm	No.	R 1,845.00
G.2.2.1.4		d) 160 x 160 mm	No.	R 1,175.00
G.2.2.1.5		e) 160 x 200 mm	No.	R 1,940.00
G.2.2.1.6		f) 200 x 200 mm	No.	R 1,900.00
G.2.2.2		Hydrant Tees for HDPE pipes		
G.2.2.2.1		a) 110 mm diam.	No.	R 935.00
G.2.2.2.2		b) 160 mm diam.	No.	R 1,450.00
G.2.2.2.3		c) 200 mm diam.	No.	R 1,880.00
G.2.2.3		End caps for HDPE pipes		
G.2.2.3.1		a) 110 mm diam.	No.	R 540.00
G.2.2.3.2		b) 160 mm diam.	No.	R 980.00

G.2.2.3.3		b) 200mm diam.	No.	R 1,200.00
G.2.2.4		90 degree bends for HDPE pipes		
G.2.2.4.1		a) 110 mm dia.	No.	R 1,500.00
G.2.2.4.2		b) 160 mm dia.	No.	R 4,500.00
G.2.2.4.3		c) 200 mm dia.	No.	R 7,200.00
G.2.2.5		45 degree bends for HDPE pipes		
G.2.2.5.1		a) 110 mm dia.	No.	R 1,250.00
G.2.2.5.2		b) 160 mm dia.	No.	R 2,650.00
G.2.2.5.3		c) 200 mm dia.	No.	R 4,200.00
G.2.2.6		22.5 degree bends for HDPE pipes		
G.2.2.6.1		a) 110 mm dia.	No.	R 1,150.00
G.2.2.6.2		b) 160 mm dia.	No.	R 1,850.00
G.2.2.6.3		c) 200 mm dia.	No.	R 2,400.00
G.3		VALVES		
G.3.1	PSL 4.2	Supply, in valve box, joint, incl. cut pipes where necessary, test. Extra-over items G.1.1, G.1.2 & G.1.3 for pipelaying		
G.3.1.1		Socket ended valves for uPVC pipes		
G.3.1.1.1		a) 110 mm dia.	No.	R 3,000.00
G.3.1.1.2		b) 160 mm dia.	No.	R 4,500.00
G.3.1.1.3		c) 200 mm dia.	No.	R 7,500.00
G.3.2	PSL 4.2	Supply, in valve box, joint, incl. cut pipes where necessary, test. Extra-over items G.1.4, G.1.5 & G.1.6 for pipelaying		
G.3.2.1		Socket ended valves for HDPE pipes		
G.3.2.1.1		a) 110 mm dia.	No.	R 3,500.00
G.3.2.1.2		b) 160 mm dia.	No.	R 5,200.00

G.3.2.1.3		c) 200 mm dia.	No.	R 7,500.00
G.4		FIRE HYDRANTS		
G.4.1	PSL 4.3	Supply in chamber, joint incl. cut pipes where necessary, complete in accordance with City of Cape Town standard drawing W2.	No.	R 8,500.00
G.5		ANCILLARIES		
G.5.1	8.2.11	Anchor/Thrust blocks and pedestals		
G.5.1.1		Concrete mix 25/19	m ³	R 1,750.00
G.5.1.2		Formwork	m ²	R 650.00
G.5.1.3		Reinforcement	t	R 15,000.00
G.6		VALVE CHAMBERS AND BOXES		
G.6.1		Valve chambers and boxes, complete to City of Cape Town standard drawing W1.		
G.6.1.1		Ductile iron valve boxes with cover and cap		
G.6.1.1.1		a) 100 mm up to 250 mm diam.	No.	R 4,000.00
G.7		SUNDRIES		
G.7.1		CONNECTION TO EXISTING PIPES		
G.7.1.1	PS DB 7.5	Excavate by hand to expose existing services, and backfill	m ³	R 325.00
G.7.1.2	PSL 8.1	Payment to City of Cape Town Water & Sanitation Department for work executed	Prov Sum	R 10,000.00
G.7.1.3	PSL 8.2	Overheads, charges and profits on item G.7.1.2	%	R 0.10
G.7.1.4		Cut into existing pipes and fit cast iron Viking Johnson couplings to join pipes under municipality supervision	No.	R 1,250.00
SECTION H: BEDDING: (PIPES)				
	SANS 1200 LB			
H.1	8.2.1	PROVISION OF BEDDING		
H.1.1		Available from trench excavation within site boundaries		
H.1.1.1		a) Selected granular bedding cradle material	m ³	R 50.00

H.1.1.2		b) Selected fill blanket material	m ³	R 50.00
H.1.2		Imported bedding material from commercial sources, selected by Contractor		
H.1.2.1		a) Selected granular bedding cradle material	m ³	R 250.00
H.1.2.2		b) Selected fill blanket material	m ³	R 250.00
SECTION I: CABLE DUCTS				
I.1	1200 LC 8.2.5	Supply, lay, joint, bed and prove ducts, including 3,6mm galvanised draw wire:		
I.1.1		a) 110 mm dia. ducts supplied by Telkom		
I.1.1.1		(i) One duct	m	R 50.00
I.1.2		b) 110mm dia. uPVC heavy duty ducts to SANS 791		
I.1.2.1		(i) One duct	m	R 60.00
I.1.2.2		(ii) Two ducts	m	R 120.00
I.1.2.3		(iii) Three ducts	m	R 180.00
I.1.2.4		(iv) Four ducts	m	R 240.00
I.1.3		c) 160 mm dia. uPVC heavy duty ducts to SANS 791		
I.1.3.1		(i) One duct	m	R 110.00
I.1.3.2		(ii) Two ducts	m	R 220.00
I.1.3.3		(iii) Three ducts	m	R 330.00
I.1.3.4		(iv) Four ducts	m	R 440.00
I.2	8.2.8	Cable markers		
I.2.1		a) Route Markers	No.	R 100.00
I.2.2	PSLC 3.1	b) Kerb Marks	No.	R 75.00
SECTION J: SEWERS				
J.1	SANS1200 LD 8.2.1	Supply, lay, joint, bed (class B), including		

		testing and couplings		
J.1.1		1) Class 34 uPVC pipes to SANS 791 (heavy duty solid wall)		
J.1.1.1		a) 110 mm dia.	m	R 50.00
J.1.1.2		b) 160 mm dia.	m	R 110.00
J.1.1.3		c) 200 mm dia.	m	R 180.00
J.2	8.2.2	SPECIALS AND FITTINGS		
J.2.1		Extra-over items J.1.1.1 to J.1.1.3 for specials - uPVC Fittings to SANS 791		
J.2.1.1		Y-Junctions		
J.2.1.1.1		a) 110 mm x 110 mm	No.	R 250.00
J.2.1.1.2		b) 110 mm x 160 mm	No.	R 350.00
J.2.1.1.3		c) 160 mm x 160 mm	No.	R 450.00
J.2.1.1.4		d) 160 mm x 200 mm	No.	R 550.00
J.2.1.1.5		e) 200 mm x 200 mm	No.	R 650.00
J.2.1.2		Bends at 45deg Y- Junctions and rodding eyes		
J.2.1.2.1		a) 110 mm x 45 deg. long radius	No.	R 200.00
J.2.1.2.2		b) 160 mm x 45 deg. long radius	No.	R 300.00
J.2.1.2.3		c) 200 mm x 45 deg. long radius	No.	R 400.00
J.2.1.3		Bends at 45deg. long radius		
J.2.1.3.1		a) 110 mm x 45 deg. long radius	No.	R 200.00
J.2.1.3.2		b) 160 mm x 45 deg. long radius	No.	R 300.00
J.2.1.3.3		c) 200 mm x 45 deg. long radius	No.	R 400.00
J.2.1.4		End caps		
J.2.1.4.1		a) 110 mm dia.	No.	R 45.00
J.2.1.4.2		b) 160 mm dia.	No.	R

				65.00
J.2.1.4.3		c) 200 mm dia.	No.	R 85.00
J.2.1.5.		Rodding eyes complete		
J.2.1.5.1		a) 110 mm dia.	No	R 100.00
J.2.1.5.2		b) 160 mm dia.	No	R 150.00
J.2.1.5.3		c) 200 mm dia.	No.	R 250.00
J.3	SANS 1200 LD	MANHOLES		
J.3.1	8.2.3	Manholes to standard drawing complete with heavy duty cover and frames (refer to drawing no S1)		
J.3.1.1		a) Precast concrete manholes (1000 mm internal dia.) up to and including 200 mm diameter pipes and depths		
		Over and up to		
J.3.1.1.1		1,0 m 1,5 m	No.	R 9,000.00
J.3.1.1.2		1,5 m 2,0 m	No.	R 10,000.00
J.3.1.1.3		2,0 m 2,5 m	No.	R 11,500.00
J.3.1.1.4		2,5 m 3,0 m	No.	R 13,000.00
J.3.1.1.5		3,0 m 3,5 m	No.	R 16,000.00
J.3.1.1.6		3,5 m 4 m	No.	R 18,000.00
J.3.2	8.2.3	Manholes to standard drawing complete with heavy duty cover and frames (refer to drawing no S2)		
J.3.2.1		a) Fibre Cement manholes (1000 mm internal dia.) up to and including 200 mm diameter pipes and depths		
		Over and up to		
J.3.2.1.1		1,0 m 1,5 m	No.	R 10,000.00
J.3.2.1.2		1,5 m 2,0 m	No.	R 11,500.00
J.3.2.1.3		2,0 m 2,5 m	No.	R 13,000.00

J.3.2.1.4		2,5 m 3,0 m	No.	R 15,000.00
J.3.3	PSLD 2.1	External backdrops on manholes for depths		
		Over and Up to		
J.3.3.1		1,0 m 2,0 m	No.	R 950.00
J.3.3.2		2,0 m 3,0 m	No.	R 1,350.00
J.3.4	8.2.11	Connecting to existing sewer manhole	No.	R 1,750.00
	PSLD 2.2			
J.3.5	8.2.12	Raising or lowering of existing manholes	No.	R 750.00
J.4		ANCILLARIES		
J.4.1	PSLD 6.1.1	CCTV inspections of sewer main pipes to CoCT specifications	m	R 80.00
SECTION K: STORMWATER DRAINAGE				
	SANS 1200 LE	STORMWATER DRAINAGE		
K.1	8.2.1	Supply, handle, bed (Class B) and lay Class 100D spigot & socket reinforced concrete pipe culverts:		
K.1.1		a) 300 mm dia.	m	R 400.00
K.1.2		b) 375 mm dia.	m	R 475.00
K.1.3		c) 450 mm dia.	m	R 550.00
K.1.4		d) 525 mm dia.	m	R 625.00
K.1.5		e) 600 mm dia.	m	R 700.00
	8.2.1	Handle, bed (Class B) and lay Class 100D spigot & socket reinforced precast concrete pipe culverts (Pipe culverts supplied by Client):		
K.1.6		a) 300 mm dia.	m	R 100.00
K.1.7		b) 375 mm dia.	m	R 110.00
K.1.8		c) 450 mm dia.	m	R 120.00
K.1.9		d) 525 mm dia.	m	R

				130.00
K.1.10		e) 600 mm dia.	m	R 150.00
K.2	8.2.2	Supply, handle, bed, lay and joint 600mm x 450mm x 250mm precast concrete trapezoidal channels on 100mm thick sand bedding	m	R 2,500.00
K.3		MANHOLES		
K.3.1	8.2.8	Supply and install precast concrete manholes to City of Cape Town standard drawing SW3, complete with heavy duty cover and frame for pipes up to 600mm dia. for depths:		
		Over and up to		
K.3.1.1		0,5 m 1,0 m	No.	R 9,500.00
K.3.1.2		1,0 m 1,5 m	No.	R 10,500.00
K.3.1.3		1,5 m 2,0 m	No.	R 12,000.00
K.3.1.4		2,0 m 2,5 m	No.	R 13,500.00
K.3.1.5		2,5 m 3,0 m	No.	R 16,000.00
K.3.2	8.2.13	The raising or lowering of existing storm water manholes:		
		Over and up to		
K.3.2.1		0,0 m 0,3 m	No.	R 750.00
K.3.2.2		0,3 m 0,6m	No.	R 1,000.00
K.3.2.3		0,6 m 0,9 m	No.	R 1,250.00
K.3.2.4		0,9 m 1,2 m	No.	R 1,500.00
K.3.2.5		1,2 m 1,5 m	No.	R 2,000.00
K.4		CATCHPITS		
K.4.1	8.2.8	Supply and construct single kerb inlet to City of Cape Town standard drawing SW6 for depths:		
		Over and up to		
K.4.1.1		0,5 m 1,0 m	No	R 8,750.00

K.4.1.2		1,0 m 1,5 m	No	R 9,500.00
K.4.1.3		1,5 m 2,0 m	No.	R 10,750.00
K.4.2	8.2.8	Supply and construct double kerb inlet to City of Cape Town standard drawing SW6 for depths:		
		Over and up to		
K.4.2.1		0,5 m 1,0 m	No.	R 9,750.00
K.4.2.2		1,0 m 1,5 m	No.	R 10,500.00
K.4.2.3		1,5 m 2,0 m	No.	R 11,750.00
K.4.3	8.2.8	Supply and construct grid inlet catchpit to City of Cape Town standard drawing SW8 for depths:		
		Over and up to		
K.4.3.1		0,5 m 1,0 m	No.	R 8,750.00
K.4.3.2		1,0 m 1,5 m	No.	R 9,500.00
K.4.3.3		1,5 m 2,0 m	No.	R 10,750.00
K.5		HEADWALLS		
K.5.1		Construct headwalls to pipe outlet/inlets complete to City of Cape Town standard drawing SW9 for pipe sizes:		
K.5.1.1		a) 300 mm dia.	No.	R 7,500.00
K.5.1.2		b) 375 mm dia.	No.	R 8,500.00
K.5.1.3		c) 450 mm dia.	No.	R 9,750.00
K.5.1.4		d) 525 mm dia.	No.	R 10,500.00
K.5.1.5		e) 600 mm dia.	No.	R 12,500.00
K.6		SUB-SURFACE DRAINAGE		
K.6.1	PSLE 2.2	Supply, handle, bed and lay sub-surface drains complete to City of Cape Town standard drawings SW1 for pipe sizes:		
K.6.1.1		a) 110 mm dia.	m	R

				300.00
K.6.2	PSLE 2.3	Connect sub-surface drains to manhole or catchpit	No.	R 1,500.00
K.6.3	PSLE 2.4	Sub-surface drain rodding eye	No.	R 200.00
SECTION L: ERF CONNECTIONS				
	SANS 1200 LF			
L.1	8.2.2	Supply, lay, bed and test HDPE PE100 PN16 to SANS4427		
L.1.1		a) 20 mm dia.	m	R 50.00
L.1.2		b) 25 mm dia.	m	R 60.00
L.1.3		c) 32 mm dia.	m	R 70.00
L.1.4		d) 40 mm dia.	m	R 80.00
L.2	PSLF 2.2	SPECIALS AND FITTINGS		
L.2.1	8.2.3	Extra-over items L.1.1 –L.1.4 for specials		
L.2.1.1		Saddles including corrosion protection (diaper filled with 6:1 cement mortar)		
L.2.1.1.1		a) 110 mm dia. (uPVC pipe)	No.	R 200.00
L.2.1.1.2		b) 160 mm dia. (uPVC pipe)	No.	R 250.00
L.2.1.2		Male threaded 90 deg Elbow		
L.2.1.2.1		a) 20 mm x 1"	No.	R 50.00
L.2.1.2.2		b) 25 mm x 1"	No.	R 60.00
L.2.1.2.3		c) 32 mm x 1"	No.	R 70.00
L.2.1.2.4		d) 40 mm x 1"	No.	R 80.00
L.2.1.3		Reducing Tee		
L.2.1.3.1		a) 25 mm x 20 mm	No.	R 150.00
L.2.1.3.2		b) 32 mm x 20 mm	No.	R 180.00
L.2.1.3.3		c) 32 mm x 25 mm	No.	R 200.00

L.2.1.3.4	d) 40 mm x 20 mm	No.	R 220.00
L.2.1.3.5	e) 40 mm x 25 mm	No.	R 250.00
L.2.1.3.6	f) 40 mm x 32 mm	No.	R 280.00
L.2.1.4	Reducing Coupler		
L.2.1.4.1	a) 25 mm x 20 mm	No.	R 100.00
L.2.1.4.2	b) 32 mm x 20 mm	No.	R 120.00
L.2.1.4.3	c) 32 mm x 25 mm	No	R 140.00
L.2.1.4.4	d) 40 mm x 20 mm	No	R 160.00
L.2.1.4.5	e) 40 mm x 25 mm	No	R 180.00
L.2.1.4.6	f) 40 mm x 32 mm	No.	R 200.00
L.2.1.5	90 deg Elbow	No	R -
L.2.1.5.1	a) 20 mm	No	R 100.00
L.2.1.5.2	b) 25 mm	No.	R 120.00
L.2.1.5.3	c) 32 mm	No	R 140.00
L.2.1.5.4	d) 40 mm	No.	R 150.00
L.2.1.6	DZR Ballcock		
L.2.1.6.1	a) 20 mm	No.	R 150.00
L.2.1.6.2	b) 25 mm	No.	R 200.00
L.2.1.6.3	c) 32 mm	No.	R 250.00
L.2.1.6.4	d) 40 mm	No.	R 300.00
L.2.1.7	End cap		
L.2.1.7.1	a) 20 mm	No.	R 20.00
L.2.1.7.2	b) 25 mm	No.	R 30.00

L.2.1.7.3		c) 32 mm	No.	R 40.00
L.2.1.7.4		d) 40 mm	No.	R 50.00
L.3		WATER METERS AND CHAMBERS		
L.3.1	8.2.4	Supply and Install Water Meter up to 150mm dia. in chamber complete as per Standard Detail Drawing W4 (Including brick chamber and cover)	No.	R 150,000.00
L.3.2	8.2.5	Site testing of Meters	No.	R 5,000.00
L.4	8.2.8	MARKINGS OR MARKING POSTS		
L.4.1		Markings or marking posts	No.	R 300.00
L.5		TOILET STRUCTURES		
L.5.1		<u>Sanitary Fittings</u>		
L.5.1.1		Gemini PVC P-Trap pan complete with pan collar, seat and flap	No	R 1,500.00
L.5.1.2		9 litre PVC Cistern complete with flush pipe, collar, ball valve, flush and fittings	No	R 1,500.00
L.5.1.3		PVC wash through, 490mm x 660mm complete with fixing bracket, waste outlet, plug and 40mm dia waste trap	No	R 1,500.00
L.5.2		<u>Plumbing</u>		
L.5.2.1		Ø15mm collortap stopcock	No	R 500.00
L.5.2.2		Ø15mm colortap bibtap	No	R 500.00
L.5.2.3		Two way vent valve (Provisional)	No	R 1,500.00
L.5.2.4		Complete sewer plumbing including fittings for wash trough and pan to civil sewer connection point.	Prov Sum	
L.5.2.4.1		% Profit + Contractor's charges for item L.5.2.4	%	R 0.10
L.5.2.5		Complete water plumbing including fittings and holderbats for wash trough and pan to civil water connection point	Prov Sum	
L.5.2.5.1		% Profit + Contractor's charges for item L.5.2.5	%	R 0.10
L.5.2.6		Approved precast concrete toilet cubicle and associated fittings with 20MPa concrete plinth and galvanised sheet iron door	Prov Sum	
L.5.2.6.1		% Profit + Contractor's charges for item	%	R

		L.5.2.6		0.10
L.5.2.7		Supply and place a 50mm thick layer of 25mm crushed stone 1m wide around toilet structure	No	R 1,500.00
SECTION M: SUBBASE				
	SANS 1200 ME			
M.1	8.3.3	Construct subbase with material from commercial sources, selected by Contractor.		
M.1.1		Type G5 compacted to 95 % Mod. AASHTO density		
M.1.1.1		a) 100 mm	m ³	R 500.00
M.1.1.2		b) 150 mm	m ³	R 480.00
M.2	8.3.5	Extra-over items M.1.1 and M.1.1.2 for processing subbase material by stabilisation (3.5% Cement)	m ³	R 45.00
M.3	8.3.8	Stabalising agent		
M.3.1		c) Portland Cement	t	R 1,600.00
	SANS 1200 MF			
N.1	8.3.3	Construct base with material from commercial sources, selected by Contractor		
N.1.1		Type G4 compacted to 98 % Mod. AASHTO density		
N.1.1.1		a) 150 mm	m ³	R 600.00
N.1.2		Type G3 compacted to 98 % Mod. AASHTO density		
N.1.2.1		a) 150 mm	m ³	R 700.00
SECTION O: SEGEMENTED PAVING				
	SANS 1200 MJ			
O.1	8.2.1	Provision of Edge Restraints		
O.1.1		For straight Edging	m	R 180.00
O.1.2		For Curved Edging	m	R 200.00
O.1.3		For Tree Rings	No	R 1,200.00
O.2	8.2.2	Construction of Paving Complete		

O.2.1	Type S-A interlocking concrete blocks on 20mm clean sand (90/45 degree herringbone pattern):		
	50 mm thick 35MPa	m ²	R 200.00
	60mm thick 35MPa	m ²	R 200.00
	70 mm thick 35MPa	m ²	R 220.00
	80mm thick 35MPa	m ²	R 220.00
O.2.2	Type S-A interlocking concrete blocks on 20mm clean sand (Stretcher Bond Pattern):		
	50 mm thick 35MPa	m ²	R 200.00
	60mm thick 35MPa	m ²	R 200.00
	70 mm thick 35MPa	m ²	R 220.00
	80mm thick 35MPa	m ²	R 220.00
O.2.3	Type S-C interlocking concrete blocks on 20mm clean sand (90/45 degree herringbone pattern):		
	50 mm thick 35MPa	m ²	R 200.00
	60mm thick 35MPa	m ²	R 200.00
	70 mm thick 35MPa	m ²	R 220.00
	80mm thick 35MPa	m ²	R 220.00
O.2.4	Type S-C interlocking concrete blocks on 20mm clean sand (Stretcher Bond Pattern):		
	50 mm thick 35MPa	m ²	R 200.00
	60mm thick 35MPa	m ²	R 200.00
	70 mm thick 35MPa	m ²	R 220.00
	80mm thick 35MPa	m ²	R 220.00

O.2.5	Clay Pavers PB (De Hoop Red) on 20mm clean sand (90/45 degree herringbone pattern)		
	50 mm thick	m ²	R 380.00
	73 mm thick	m ²	R 420.00
O.2.6	Clay Pavers PB (De Hoop Red) on 20mm clean sand stretcher bond pattern)		
	50 mm thick	m ²	R 380.00
	73 mm thick	m ²	R 420.00
O.2.7	Clay Pavers PB (Light Colour) on 20mm clean sand (90/45 degree herringbone pattern)		
	50 mm thick	m ²	R 350.00
	65 mm thick	m ²	R 400.00
	73 mm thick	m ²	R 450.00
O.2.8	Clay Pavers PB (Light Colour) on 20mm clean sand (stretcher bond pattern)		
	50 mm thick	m ²	R 350.00
	65 mm thick	m ²	R 400.00
	73 mm thick	m ²	R 450.00
O.2.9	Concrete Flagstone Paving Slabs (450 x 450 mm)		
	50 mm thick	m ²	R 100.00
O.2.10	Concrete Flagstone Paving Slabs (600 x 600 mm)		
	50 mm thick	m ²	R 150.00
O.2.11	NON Slip Paving Blocks as Per Drawing R 17A and R 17 B (COCT Standards)		
	315 x 315 x 75 mm, 25 MPa Bubble Paving Block	m ²	R 375.00
O.2.12	Hard Lawn Grass Blocks		

		600 x 400 x 100 mm	m ²	R 400.00
O.3	PS MJ8.2.3	Cutting Blocks to fit edge restraints		
O.3.1		Straight Cutting	m	R 18.00
O.3.2		Raking Cutting	m	R 20.00
O.3.3		Circular Cutting	m	R 25.00
O.4	8.2.4	Rolling to locked up conditions as specified in Clause 5.6.2	m ²	R 5.00
O.5	PSMJ 8.2.6	Construction of paving complete using pavers from stockpile on site	m ²	R 95.00
SECTION P: ASPHALT BASE AND SURFACING				
	SANS 1200 MH			
P.1	8.5.1	PRIME COAT		
P.1.1		Supply and apply prime coat (Colprime-E)	m ²	R 18.00
P.2	8.5.4	ASPHALT SURFACING		
P.2.1		Continuously graded SABS Medium Mix with 5.5% bitumen content		
P.2.1.1		a) 40 mm compacted thickness to roads	m ²	R 180.00
P.2.2		Continuously graded SABS Fine Mix with 5.5% bitumen content		
P.2.2.1		a) 30 mm compacted thickness to roads	m ²	R 160.00
P.2.3		Continuously graded SABS Pavement Mix with 6.5% bitumen content		
P.2.3.1		a) 25 mm compacted thickness to roads	m ²	R 150.00
P.2.3.2		b) 30 mm compacted thickness to roads	m ²	R 160.00
		State type and grade offered (Bituminous Binder)		
		Type:.....Pavement Mix 50/70 (6.5% Bitumen)		
		Grade:.....Continuously Graded		
P.2.4		Extra-over items P.2.3.1-P.2.3.2 for importing 50/70 penetration grade bitumen from alternative sources	t	R 1,450.00

P.2.5		Supply and place 80mm compacted thick BTB with 4% 50/70 bitumen content	m ²	R 200.00
P.3		SUNDRIES		
P.3.1	PSMH6.2	Tie into existing roads	m	R 50.00
P.3.2	PSMH6.3	100 mm cores in asphalt surfacing	No.	R 400.00
SECTION Q: KERBING AND CHANNELLING				
	SANS 1200 MK			
Q1	8.2.1	Concrete Kerbing		
Q.1.1		Supply and lay Barrier kerb (BK2), including bedding, etc.		
Q.1.1.1		Radius (m)		
		Over and up to		
Q.1.1.1.1		1,0 m 4,0 m	m	R 200.00
Q.1.1.1.2		4,0 m 20,0 m	m	R 210.00
Q.1.1.1.3		Greater than 20,0 m	m	R 210.00
Q.1.1.2		Straights	m	R 190.00
Q.1.2	8.2.1	Supply and lay Channel (C1), including bedding, etc.		
Q.1.2.1		Radius (m)		
		Over and up to		
Q.1.2.1.1		1,0 m 4,0 m	m	R 195.00
Q.1.2.1.2		4,0 m 20,0 m	m	R 200.00
Q.1.2.1.3		Greater than 20,0 m	m	R 200.00
Q.1.2.2		Straights	m	R 185.00
Q.1.3	8.2.1	Supply and lay mountable kerb (MK10), including bedding, etc.		
Q.1.3.1		Radius (m)		
		Over and up to		
Q.1.3.1.1		1,0 m 4,0 m	m	R 175.00

Q.1.3.1.2		4,0 m 20,0 m	day	R 180.00
Q.1.3.1.3		Greater than 20,0 m	m	R 180.00
Q.1.3.2		Straights	m	R 170.00
Q.1.4		Supply and lay Edging (E1), including bedding, etc.		
Q.1.4.1		Radius (m)		
		Over and up to		
Q.1.4.1.1		1,0 m 4,0 m	m	R 105.00
Q.1.4.1.2		4,0 m 20,0 m	m	R 110.00
Q.1.4.1.3		Greater than 20,0 m	m	R 110.00
Q.1.4.2		Straights	m	R 95.00
Q.1.5	8.2.1	Supply and lay Edging (E3), including bedding, etc.		
Q.1.5.1		Radius (m)		
		Over and up to		
Q.1.5.1.1		1,0 m 4,0 m	m	R 175.00
Q.1.5.1.2		4,0 m 20,0 m	m	R 180.00
Q.1.5.1.3		Greater than 20,0 m	m	R 180.00
Q.1.5.2		Straights	m	R 180.00
Q.2	8.2.2	Concrete Kerbing and Chanelling combined		
Q.2.1		Supply and lay Barrier kerb (BK2) and Channel (C1), including bedding, etc.		
Q.2.1.1		Radius (m)		
		Over and up to		
Q.2.1.1.1		1,0 m 4,0 m	m	R 295.00
Q.2.1.1.2		4,0 m 20,0 m	m	R 300.00
Q.2.1.1.3		Greater than 20,0 m	m	R 300.00

Q.2.1.2		Straights	m	R 285.00
Q.2.2		Supply and lay mountable kerb and channel (CK5), including bedding, etc.		
Q.2.2.1		Radius (m)		
		Over and up to		
Q.2.2.1.1		4,0 m 20,0 m	m	R 370.00
Q.2.2.1.2		Greater than 20,0 m	m	R 370.00
Q.2.2.2		Straights	m	R 340.00
Q.3	8.2.6	ANCILLARIES		
Q.3.1		Cast in-situ transition channels		
Q.3.1.1		Radius (m)		
		Over and up to		
Q.3.1.1.1		1,0 m 4,0 m	m	R 260.00
Q.3.1.1.2		4,0 m 20,0 m	m	R 270.00
Q.3.1.1.3		Greater than 20,0 m	m	R 270.00
Q.3.1.2		Straights	m	R 250.00
Q.4		Extra-over all kerb items for depress kerbs	m	R 30.00
SECTION R: ANCILLARY ROADWORKS				
	SANS 1200 MM	ANCILLARY ROADWORKS		
	8.3.6	STATUTORY SIGNS		
R.1.1		Signs in accordance with Road Traffic Signs Manual. Allow for excavation, concrete, sign, pole, fixing, erection, etc. Painted or coloured semi-matt background with symbols, lettering and borders in semi-matt black, where the sign board is constructed from:		
R.1.1.1		2,0mm thick Aluminium sheet, area not exceeding 2m ²	m ²	R 1,750.00
R.1.2		Extra-over item R.1.1.1 for background of retro-reflective material	m ²	R 500.00
	8.4	ROAD MARKINGS		
R.2.1	8.4.1	Non-reflectorised paint applied at a		

		nominal rate of 0,42 l/m2:		
R.2.1.1	8.4.1 (a)	White lines, broken, 100mm wide	km	R 8,000.00
R.2.1.2		White lines, broken, 300mm wide	km	R 22,000.00
R.2.1.3		White lines, unbroken, 100mm wide	km	R 8,000.00
R.2.1.4		White lines, unbroken, 300mm wide	km	R 22,000.00
R.2.1.5	8.4.1 (b)	Yellow lines, unbroken, 100mm wide	km	R 8,000.00
R.2.1.6	8.4.1 (c)	Word "STOP" 2,5m high	m ²	R 500.00
R.2.1.7	8.4.1 (d)	Symbol "FH"	m ²	R 500.00
R.2.2	8.4.2	Variation in rate of application from that stated in item P.2.1		
R.2.2.1		a) White paint	l	R 75.00
R.2.2.2		b) Yellow paint	l	R 75.00
R.2.3	8.4.4	Setting out and pre-marking:		
R.2.3.1		a) Lines	km	R 1,500.00
R.2.3.2		b) Words	No.	R 500.00
R.2.3.3		c) Symbols	No.	R 500.00

CONTINGENCIES

ITEM	DESCRIPTION	UNIT	RATE
	CONTINGENCIES Allow the sum of 10% (ten percent) of the Sub-total of the bills in the Summary of the Bills of Quantities for Contingencies to be spent as the Employer's Agent may direct and to be deducted in whole or in part if not required.	%	10

DECLARATION (In respect of completeness of Tender)

City of Cape Town
Tower Block, Civic Centre
12 Hertzog Boulevard
CAPE TOWN

I/we, the undersigned, do hereby declare that these are the properly priced Schedule of Rates forming Part C2.2 of this Contract Document containing 167 pages in consecutive order, with Annex 5 attached containing 43 pages in consecutive order, upon which my/our tender for **TENDER NO. 107Q/2018/19: TERM TENDER FOR CIVIL ENGINEERING WORKS WITHIN THE CITY OF CAPE TOWN** has been based. If I/we have submitted a printed version of the Schedules of Rates, I/we warrant that no amendments have been made to it from the original, other than amendments issued in any Addenda in terms of Clause F.3.2 in Part T1.2 Tender Data.

SIGNATURE OF TENDERER/S

DATE

Part C3: Scope of Work

C3.1 Description of the Works

C3.2 Engineering

C3.3 Procurement

C3.4 Construction

C3.5 Management

C3.6 Annexes

Status

Should any requirement or provision in the parts of the Scope of Work conflict with any requirement of any Standardised Specification, particular specification or any drawings, the order of precedence, unless otherwise specified, is:

Drawings

Scope of Work (Parts C3.1, C3.4, C3.5 and C3.6)

Particular Specifications

SANS Standardised Specifications

C3.1 Description of the Works

CONTENTS

1. EMPLOYER'S OBJECTIVES
2. OVERVIEW OF THE WORKS
 - 2.1. GENERAL DESCRIPTION
 - 2.2. WORK AREAS
 - 2.3. BOUNDARIES OF THE SITE
 - 2.4. OCCUPATION OF THE SITE
3. EXTENT OF THE WORKS
4. NATURE OF GROUND AND SUBSURFACE CONDITIONS
 - 4.1. TOPOGRAPHY
 - 4.2. GEOTECHNICAL CONDITIONS
 - 4.3. SOURCE OF CONSTRUCTION MATERIALS
 - 4.4. DISCLAIMER
5. HANDING OVER THE SITE
6. CONSTRUCTION PROGRAMME
 - 6.1. GENERAL
 - 6.2. TIME FOR PRACTICAL COMPLETION
7. SITE FACILITIES REQUIRED
 - 7.1. LOCATION OF CAMP AND DEPOT
 - 7.2. SOURCE OF WATER SUPPLY
 - 7.3. SOURCE OF POWER SUPPLY
 - 7.4. ABLUTION FACILITIES
8. FEATURES REQUIRING SPECIAL ATTENTION
 - 8.1. PROTECTION OF NEIGHBOURING PROPERTIES
 - 8.2. LOCATION OF EXISTING SERVICES
 - 8.3. ENVIRONMENTAL MANAGEMENT PLAN
 - 8.4. PREVENTION OF DUST NUISANCE
 - 8.5. COMPLIANCE WITH OCCUPATION HEALTH AND SAFETY ACT
 - 8.6. ACCOMMODATION OF TRAFFIC
9. BLOCK CORNERS, PROPERTY BEACONS AND SURVEY BENCH MARKS
10. OVERHAUL
11. SPOIL SITES
12. MATERIAL CLASSIFICATION FOR EXCAVATION PURPOSES
13. ACCEPTANCE TESTING
 - 13.1. DENSITY TESTING
14. SETTING OUT
15. FINISHING AND TIDYING
16. "AS-BUILT" DRAWINGS

1. EMPLOYER'S OBJECTIVES

The Employer's objectives are to implement civil engineering services infrastructure as and where necessary in the Cape Town metropolitan area, specifically in informal areas and to backyard dwellers that form part of this department's mandate.

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.

2. OVERVIEW OF THE WORKS

2.1. GENERAL DESCRIPTION

This tender involves the construction of civil engineering services infrastructure in the City of Cape Town. The works pertain mainly to those in informal areas and to backyard dwellers but is not limited to these areas.

Work items under this tender shall include, but is not limited to, any one or more of the following:

- Establishment on site
- Accommodation of traffic during construction
- Clearing of vegetation, removal of trees, and general clear and grub
- Earthworks
 - Cut/fill earthworks
 - Excavations
 - Preparation of the subgrade
- Cutting, removal, disposing or stacking of and reinstatement of various hardened surfaces
- Removal, stacking, disposing of and reinstatement of existing and/or new fencing
- Hardening layer
 - Construction of gravel pavement layers (subbase and base)
 - Stabilisation of pavement layers
- Locating and dealing with existing services including maintaining operational services located on site
- Construction of waterborne sewerage reticulation network with connections, fittings and manholes
- Construction of stormwater drainage network with manholes
- Construction of piped water reticulation network with connections and fittings
- Installation of cable ducts
- Carrying out of tests related to the construction works
- Construction of asphalt base and surfacing
- Construction of kerbing and channeling
- Installation of gabions and stone pitching
- Installation of ancillary roadworks

2.2. WORK AREAS

The successful tenderers will be required to work within the boundaries of the four (4) regions within the Cape Town municipal area.

Where ambiguity exists as to the exact location of the boundary (i.e. The boundary is shown as being directly on a road), the boundary shall always be either to the north or east of the road in question.

2.3. BOUNDARIES OF THE SITE

The site of the works shall consist of all the separate areas associated with the work to be constructed under the Works Project, including the construction camp, any storage area on the site which the Contractor may require in addition to the area required for construction of the works and special works as defined by the limits of construction shown on the drawings, plus such additional length of road that is necessary for the erection of the traffic accommodation road signs on the approaches to the works.

2.4. OCCUPATION OF THE SITE

Access to the site of the works will be given to the Contractor on the commencement date.

The site of the works includes portions of existing public roads and footpaths, which will remain in use during the course of the work. Every effort shall be made by the Contractor to minimise the disruption to existing pedestrian and traffic flows during construction. No roads or traffic lanes may be closed without the prior written approval of the Engineer and traffic shall be accommodated.

Where existing roads are used, they shall be protected from damage by extraordinary traffic. The Contractor shall immediately repair any damage done by him to fences, gateways, drains or to any other structure during the execution of the Contract and shall leave everything in the same state as it was found by him.

The Contractor shall as far as possible confine his operations to within the limits of the site or land provided by the Employer, but if this is inadequate for his purpose, he shall make all arrangements for any further land he may require and shall pay all costs and charges in this connection.

The Contractor shall afford all reasonable pedestrian and/or vehicular access to all owners or occupiers of properties abutting the works to the satisfaction of the Engineer.

Workmen employed by the Contractor will not be permitted on private property abutting the works during its progress unless such presence is required to successfully complete the work and permission from the owner/occupier has been granted.

3. EXTENT OF THE WORKS

The work that is to be carried out under the contract is as provided for in the Works Project contracts. However, if during the course of construction conditions are found to differ from those anticipated, the Engineer reserves the right to modify the scope of the work to suit the prevailing conditions and circumstances. Variations introduced in this manner will be measured and paid for at the rates tendered for appropriate items listed elsewhere in the schedule of quantities or in the absence of such rates, as extra work.

The extent and details of the construction of civil engineering infrastructure will be provided.

4. NATURE OF GROUND AND SUBSURFACE CONDITIONS

4.1. TOPOGRAPHY

Due to the nature and various locations of the Works Project contracts, no topographical surveys were carried out.

4.2. GEOTECHNICAL CONDITIONS

Due to the nature and various locations of the Works Project contracts, no geotechnical studies have been conducted.

4.3. SOURCE OF CONSTRUCTION MATERIALS

It is anticipated that the surface layer of soil in some areas will be suitable as selected subgrade and fill and that a proportion of the excavated trench material will be suitable for the provision of Class B bedding to pipes providing that the PI values, as applicable, are within specification.

All other construction material shall be obtained from either commercial sources, selected by the Contractor, or supplied by the Client.

4.4. DISCLAIMER

The information regarding the sub-surface conditions and materials on site is provided in good faith for the Contractor's convenience as an indication of the conditions likely to be encountered.

The provision of such information shall not be regarded as in any way limiting or detracting from the Contractor's responsibilities in terms of the General Conditions of Contract and the Specifications.

5. HANDING OVER THE SITE

The construction site shall be handed over to the Contractor but with the provision that the Contractor progresses from a logical approved point in a systematic pattern of completion with due consideration for such criteria as accommodation of traffic, access to private properties etc. If the manner of working is unacceptable to the Engineer he/she may instruct the Contractor as to the sequence they must follow to satisfy the above criteria.

Construction methods must be of such a nature that no property or life is endangered. The Employer accepts no responsibility for work that is done without consent by the Engineer outside the site boundaries.

6. CONSTRUCTION PROGRAMME

6.1. GENERAL

The construction program shall be in the form of a bar chart prepared in "Microsoft Project" to sufficient detail which is acceptable to the Engineer. The programme shall be drawn to a horizontal time scale, activity orientated showing interdependencies, and critical path, clearly related to the items or groups of items reflected in the Bills / Schedules of Quantities and indicating the quantity of work that shall be carried out each week.

The Construction Programme shall be updated every 4 weeks and presented at the monthly site meeting if required, depending on the duration of the works.

6.2. TIME FOR PRACTICAL COMPLETION

The time for completion is as stated in the Contract Data in terms of Clause 1.1.1.14, the Contractor shall plan and programme his construction sequence for completion within the time period specified.

7. SITE FACILITIES REQUIRED

7.1. LOCATION OF CAMP AND DEPOT

The Contractor shall make his own arrangements for the accommodation of all labour and comply with the requirements of the respective authorities.

The Contractor shall, at his own cost provide such access to his camp as he may require. Control of access for construction plant onto the public roads shall be in accordance with the requirements of the relevant roads authority. Accommodation of traffic shall be in accordance with latest edition of the South African Road Traffic Signs Manual.

Contractor's camp is to be fenced and will be located at an approved location as agreed between all parties. The Contractor shall be responsible for maintenance of the campsite and facilities. The Contractor shall comply with the requirement for maintenance of the campsite and facilities as specified in the Construction Environmental Management Programme and Health and Safety Specification.

The Engineer will not require facilities on site.

7.2. SOURCE OF WATER SUPPLY

The Contractor may draw water for general and drinking purpose from the existing watermains. The water shall be drawn from a metered connection or portable metered standpipe installed in a position approved by the Engineer. Metered standpipe will be obtainable from the City of Cape Town, Water Services. Water used by the Contractor will be charged for and the Contractor shall also be responsible for the cost of the connection and meter.

The Contractor must take note of the City of Cape Town's water restrictions and "greener" construction methods and must take all necessary precautions to limit the use and wastage of potable water on site. Any fines, which the Contractor may receive because of a result of not adhering to the water restrictions, will be for the account of the Contractor.

7.3. SOURCE OF POWER SUPPLY

The Contractor shall make his own arrangements for electrical power for Construction purposes.

7.4. ABLUTION FACILITIES

The Contractor shall provide temporary toilet facilities for his employees and shall maintain them in a clean and hygienic state at all times. The Contractor shall comply with the requirement for toilet facilities specified in the Environmental Management Programme. The toilets shall be located in close proximity to the actual working area at all times.

All portable toilet facilities shall be adequately secured to the ground to prevent them tipping over as a result of wind or any other cause.

8. FEATURES REQUIRING SPECIAL ATTENTION

8.1. PROTECTION OF NEIGHBOURING PROPERTIES

The Contractor will ensure that no damage is caused as a result of his operations to any other surrounding properties adjacent to the site.

The Contractor shall take steps to protect all property not directly affected by the Works and shall ensure that no avoidable damage or disturbance is caused.

The cost for the implementation of these measures shall be included by the Contractor in the tendered rate for Fixed and Time related establishment.

8.2. LOCATION OF EXISTING SERVICES

The Contractor's attention is drawn to the fact that they will be required to work over and around services which are encountered during the trench excavation and other construction operations and will be required to exercise every precaution including the utilisation of suitable construction techniques and equipment to prevent damage to services.

The Contractor shall establish the exact location and levels of all affected services and shall give the Engineer written notice prior to excavation taking place. Adequate protection of open services and trenches shall be provided at all times. The Contractor may use suitable service locating equipment in order to expedite the service location process. Items for the location of existing services have been provided in the Preliminary and General section of the Schedule of Quantities for the cost of locating and protecting existing services

The Employer shall take no responsibility for delays as a result of existing services or damages done to existing services. The cost of repair of damaged services shall be borne by the Contractor.

The Contractor will be responsible for obtaining all necessary way-leaves and permits from the relevant service authorities and the safekeeping of all existing services within the area of the contract, including kerbs, channels and finished surfaces in the road reserves.

The Contractor's attention is drawn to the fact that the existing services surrounding the Works must remain in operation at all times unless prior arrangements have been made with the owner or local service authority, whichever applicable.

8.3. ENVIRONMENTAL MANAGEMENT PLAN

The Works shall comply with the requirement and methods of the Environmental Management Programme (EMP) in all respects. Particular specifications have been included in this document. Refer to the Section C3.5 Management of this document.

8.4. PREVENTION OF DUST NUISANCE

To prevent dust nuisance, the Contractor is required to take the precautions set out in PSA General (PSA 5.6) and the EMP.

The cost for the implementation of these measures shall be included by the Contractor in the tendered rate for Fixed and Time related establishment.

8.5. COMPLIANCE WITH OCCUPATION HEALTH AND SAFETY ACT

The Contractor shall comply with the requirements of the New Construction Regulations (2014) and Occupational Health and Safety Act (No. 85 of 1993).

The Contractor shall be required to submit a Health and Safety Plan in terms of Schedule 13 of the Returnable schedules and the health and safety specifications.

The Contractor shall be required to comply with additional requirements set out in Section C3.5 Management of this document.

8.6. ACCOMMODATION OF TRAFFIC

- (i) The safety and convenience of the travelling public is to be considered of utmost importance and every effort must be made to ensure that all temporary road signs, cones, flagmen and speed controls are maintained and effective, and that courtesy is extended to the public at all times.

- (ii) It is important that the traffic accommodation requirements described in these specifications are adhered to and that all installations meet with the approval of the relevant traffic authority ie the Traffic Manager of the City of Cape Town.
- (iii) Work, including the erection and removal of traffic control facilities, shall be executed between sunrise and sunset on Monday to Saturday, inclusive. Occupation of existing traffic lanes will only be allowed during daylight hours on normal working days, which are defined as Monday to Saturday, inclusive. The existing number of lanes for each traffic movement affected by construction shall not be reduced without the written authorization of the Engineer.
- (iv) It should be noted that Sundays are specified as "Special non-working days" in the Contract Data. In terms of Clause 5.8 of the General Conditions of Contract the Engineer's permission has to be obtained for work to be carried out on special non-working days, for which permission shall be applied for at least one (1) week prior to the day.
- (v) The travelling public has the right of way on public roads, and the Contractor shall make use of approved methods to control the movement of his equipment and vehicles so as not to constitute a hazard on public roads.
- (vi) Failure to maintain road signs, warning signs or flicker lights, etc, in good condition shall constitute ample reason for the Engineer to bring the works to a stop until the road signs, etc, have been repaired to his satisfaction.
- (vii) The Contractor may not commence constructional activities before adequate provision has been made to accommodate traffic in accordance with the requirements of these specifications and Chapter 13 of Volume 2 of the South African Road Traffic Signs Manual (SARTSM).
- (viii) The Contractor shall submit proposals in connection with all signs and accommodation of traffic to the Engineer for approval.

The traffic shall be accommodated on the existing surfaced carriageway and shoulders. No bypasses or temporary deviations shall be constructed. Accommodation of traffic will generally be carried out by closing off one lane of traffic at a time and accommodating the traffic on the other lane(s). During non-working days and the period from the 16th December to 5th January, the Contractor will be required to shut down normal construction activities and ensure that the total surfaced width is available to public traffic. Only emergency work will be allowed. The traffic safety officer will be required to patrol during these non-working periods and ensure that all temporary traffic-control facilities are in place and functional. The accommodation of traffic team will be required to be on standby. Details of traffic accommodation for the Works Projects will be provided.

9. BLOCK CORNERS, PROPERTY BEACONS AND SURVEY BENCH MARKS

The Contractor's attention is drawn to Clause 5.1.2 of SANS 1200 A with regard to the protection of survey beacons. Where the removal of any peg is unavoidable due to the proximity of the works, the Contractor shall obtain prior written approval from the Engineer to move or bury such pegs.

10. OVERHAUL

Notwithstanding any clauses in any of the standardised specification dealing with the definition or payment of transport, freehaul and/or overhaul, all haulage will be considered to be freehaul and the cost thereof to be covered by other rates in the Schedule, unless specifically scheduled or provided for in the document.

11. SPOIL SITES

No indiscriminate spoiling of material will be allowed.

All unsuitable surplus material shall be removed from the site and the Contractor shall make his own arrangements with regard to a suitable spoil site. The Contractor shall be responsible for obtaining all necessary approvals or permits required for the dumping of material on the elected site.

12. MATERIAL CLASSIFICATION FOR EXCAVATION PURPOSES

The Contractor's attention is drawn to the material classification in Clause PSD 3.1, which supersedes the material classification in all relevant Clauses in SANS 1200.

For the purposes of this Contract material will be classified as either hard rock, which will be material requiring blasting, or soft excavation i.e. all excavation other than hard rock excavation. No differentiation will be made between bulk or restricted excavation for the purpose of classification, or for measurement and payment.

13. ACCEPTANCE TESTING

13.1. DENSITY TESTING

The Engineer may carry out acceptance testing as required. Acceptance testing will be undertaken by an approved soils laboratory appointed by the Engineer. A provisional sum has been provided for in the schedule of quantities for payments made to a commercial laboratory for acceptance testing.

The Contractor must undertake his own density control testing, in terms of SANS 1200, at his own cost, by use of either a nuclear density gauge or the sand replacement method.

14. SETTING OUT

The Contractor is responsible for setting out the works as indicated on the drawings. No separate payment shall be made for this, as all costs related thereto shall be deemed to be included in the tendered rates.

15. FINISHING AND TIDYING

Progressive and systematic finishing and tidying will form an essential part of this contract. Under no circumstances shall spoil, rubble, materials, equipment or unfinished operations be allowed to accumulate unnecessarily and in the event of this occurring the Engineer shall have the right to withhold payment for as long as necessary in respect of the relevant works in the area(s) concerned.

No material for use in the works or rubble from clearing operations shall be left in the public areas or roads adjacent to the site. All materials shall be stored in the Contractors yard until required on the works or shall be placed directly in the works on delivery. Spoil material shall be carted away directly from the works to approved spoil sites

16. "AS-BUILT" DRAWINGS

The Contractor shall ensure that accurate "As-built" records are kept of all infrastructure installed or relocated during the contract.

The Engineer shall himself prepare the "As-built" drawings where applicable.

C3.2 Engineering

CONTENTS

1. DRAWINGS
2. DRAWINGS ISSUED WITH THIS DOCUMENT

1. DRAWINGS

The drawings, if any, issued with this tender document are attached in order to give an overview of the term tender project.

Construction drawings will, in terms of the Conditions of Contract, be issued to the Contractor by the Engineer, as appropriate, prior to the date for commencement with Works execution, and from time to time as required.

The Works shall be constructed in accordance with the issued design drawing, if any.

2. DRAWINGS ISSUED WITH THIS DOCUMENT

The following drawings are applicable to the contract and are issued with this tender document and will form part of the Contract Documents as **Volume 4**.

City of Cape Town Standard Details

DRAWING NUMBER	DESCRIPTION
SW1	Subsurface Drain
SW2	Manhole Subsurface
SW3	Manhole up to 600mm Dia.
SW6	Double Kerb Inlet – Gully Grid Catchpit
SW8	Double gully grid catchpit
SW9	Typical stormwater headwall
S1	Sewer Manholes – Precast Concrete Ring Type
S2	Sewer Manholes – Solid Shaft Fibre Cement
S6	Typical Sewer Connection Details
S7	Rodding Eye on Private Property
W1	Valve Chamber
W2	Hydrant Chamber
W4	Typical Water Meter Chamber
R17A	Typical Pedestrian Crossing for Disabled Persons
R17B	Typical Pedestrian Crossing for Disabled Persons and the Blind

C3.3 Procurement

I. CONTENTS

1. PREFERENTIAL PROCUREMENT
2. SUB-CONTRACTING PROCEDURES

1. PREFERENTIAL PROCUREMENT

The Works shall be executed in accordance with the conditions associated with the granting of preferences detailed in Returnable Schedule 19: Preferencing **Schedule** where preferences are granted in respect of B-BBEE contribution. In particular, where the Tenderer/Contractor has declared in Section 5 of Returnable Schedule 19 that "I/we **DO NOT** intend sub-contracting more than 25% of the value of the contract to sub-contractors that do not qualify for at least the points that I/we as prime contractor qualify for" then the Contractor may not sub-contract more than 25% of the value of the **Works Project** contract (as defined in Returnable Schedule 19) to sub-contractors that do not have an equal or higher B-BBEE status level than the Contractor, unless the sub-contractors are exempted micro enterprises that have the capability and ability to execute the sub-contract works.

The declarations made in Returnable **Schedule** 19 of the framework contract will be used in the evaluation of tender offers as described in clause F.3.11 in Part T1.2 Tender Data.

A financial penalty, as described in Returnable **Schedule** 19, shall be applied in the event that the Contractor sub-contracts more than 25% of the value of the **Works Project** contract to sub-contractors that do not qualify for at least the preference points that the Contractor qualified for (unless proven to be beyond the control of the Contractor, or the sub-contractors are exempted micro enterprises).

Notwithstanding the application of penalties, the Contractor's attention is drawn to other sanctions that may be applied by the Employer (listed in Returnable **Schedule** 19) with due consideration to the circumstances.

2. SUB-CONTRACTING PROCEDURES

2.1 Monitoring the use of sub-contractors

Notwithstanding the restriction (in the circumstances described in Clause 1 above) on sub-contracting more than 25% of the value of the **Works Project** contract to sub-contractors that do not qualify for at least the preference points that the Contractor qualified for, it is recognised that sub-contracting is an integral part of construction, which the General Conditions of Contract (Clause 4.4) make provision for.

In order, however, to ensure that more than 25% of the value of the **Works Project** contract is not sub-contracted to sub-contractors that do not qualify for at least the preference points that the Contractor qualified for, the Contractor shall submit to the Engineer, on a monthly basis, a **B-BBEE Sub-contract Expenditure Report**. The format of this report is provided in Annex 2 attached.

The Contractor shall submit to the Engineer documentary evidence (either an original valid B-BBEE status level verification certificate or an Exempted Micro Enterprise certificate issued by a registered auditor, accounting officer (as contemplated in section 60(4) of the Close Corporation Act, 69 of 1984) or an accredited verification agency in terms of the Construction Codes of Good Practice for Broad-Based Black Economic Empowerment, in terms of the Preferential Procurement Regulations, 2011) of the B-BBEE status level of every sub-contractor employed by the Contractor. Until such time as documentary evidence as described above has been submitted to the Engineer, a sub-contractor shall be deemed to be a non-compliant contributor.

The Contractor shall furthermore, on the written request of the Engineer, provide documentary evidence showing the value of work sub-contracted to any or all of the sub-contractors employed by the Contractor.

2.2 Procedure for the selection of sub-contractors/suppliers

Where monetary allowances for provisional sums or prime cost items have been provided in the Bills of Quantities in the Works Project contract document, and where the work or items to which the allowances relate are 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 the monetary allowance is less than or equal to R200 000, the Contractor shall invite three quotations from suitably qualified sub-contractors/suppliers for the required work or items. The selection of the three sub-contractors/suppliers shall be in consultation with, and to the approval of the Engineer. The evaluation of the quotations received must include a preference points system as described in F.3.11 of the Tender Data.

Where the monetary allowance is in excess of R200 000, an open competitive tender process shall be followed in respect of the selection of a sub-contractor/supplier for the required work or items. In such circumstances, tender documentation will be prepared by the Engineer in consultation with and to the approval of the Contractor, invitations to tender will be advertised in the media by the Engineer on behalf of the Contractor, and a sub-contractor/supplier will be selected from the responses received, by the Contractor and Engineer in consultation. The evaluation of the offers received must include a preference points system as described in F.3.11 of the Tender Data. The Contractor must satisfy him/herself that the selected sub-contractor/supplier can meet the requirements of the sub-contract /supply agreement and may, on reasonable grounds, elect not to employ a particular sub-contractor/supplier.

In both instances above (less than or equal to R200 000 or in excess of R200 000), the contractual relationship between the Contractor and sub-contractor/supplier shall be as described in Clause 4.4.3 of the General Conditions of Contract.

•

C3.4 Construction

CONTENTS

1. APPLICABLE STANDARDISED SPECIFICATIONS
2. VARIATIONS / ADDITIONS TO THE STANDARDISED SPECIFICATION
3. EXISTING SERVICES
4. WAYLEAVES, PERMISSIONS AND PERMITS
5. LOCAL PRODUCTION AND CONTENT
6. FEATURES REQUIRING SPECIAL ATTENTION

1. APPLICABLE STANDARDISED SPECIFICATIONS

Although not bound in or issued with this document, the following standardised specifications shall form part of the Contract, and, notwithstanding the provisions of clause 2.2 SANS 1200A, the editions specified below will apply:

<u>Section</u>	<u>Edition</u>	<u>Title</u>
SANS 1200 A	1986	General
SANS 1200 AB	1986	Engineer's Office
SANS 1200 C	1980	Site Clearance
SANS 1200 D	1988	Earthworks
SANS 1200 DB	1989	Earthworks (Pipe Trenches)
SANS 1200 DK	1996	Gabions and Pitching
SANS 1200 DM	1981	Earthworks (Road, Subgrade)
SANS 1200 G	1982	Concrete (Structural)
SANS 1200 GA	1982	Concrete (Small Works)
SANS 1200 L	1983	Medium Pressure Pipelines
SANS 1200 LB	1983	Bedding (Pipes)
SANS 1200 LC	1981	Cable Ducts
SANS 1200 LD	1982	Sewers
SANS 1200 LE	1982	Stormwater Drainage
SANS 1200 LF	1983	Erf Connections (Water)
SANS 1200 M	1996	Roads (General)
SANS 1200 ME	1981	Subbase
SANS 1200 MF	1981	Base
SANS 1200 MH	1996	Asphalt Base and Surfacing
SANS 1200 MJ	1984	Segmented Paving
SANS 1200 MK	1983	Kerbing and Channelling
SANS 1200 MM	1984	Ancillary Roadworks

All the above SANS specifications are obtainable from the offices of the South African Bureau of Standards.

This Standard Specification may also be inspected, by appointment, at the offices of the Employer and the Consulting Engineers during normal office hours.

Where reference is made to the standard specifications in this contract, it shall mean the **South African Bureau of Standards Standardized Specification for Civil Engineering Construction SANS 1200**, complete with any corrections and amendments applicable at the time of tendering.

2. VARIATIONS / ADDITIONS TO STANDARDISED SPECIFICATIONS

In certain instances, the Standard Specifications listed above allow a choice to be specified in the Scope of Work between alternative materials or methods of construction. Allowance is also made for additional requirements to be specified to suit each particular contract. Details of such alternatives of additions are contained in this part of the Scope of Works. In addition it contains some supplementary

specifications required for this particular contract. Subclauses referred to are those in the relevant Standardised Specification.

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

PSA PRELIMINARY & GENERAL

PSA 2 INTERPRETATIONS (Clause 2)

PSA 2.1 APPLICATION (Sub-Clause 2.1)

In the second line of Sub-Clause 2.1 delete "Portion 2 of the project specification" and replace with "Section 3.4 Construction of the contract document"

PSA 2.2 APPLICABLE EDITION OF STANDARDS (Sub-Clause 2.2)

Add at the beginning of Sub-Clause 2.2:-

"Unless a specific edition is specified (see the List of Applicable Specifications),..."

PSA 2.8 ITEMS IN SCHEDULE OF QUANTITIES (sub-clause 2.8)

PSA 2.8.1 Principle

In the fourth line of Sub-Clause 2.8.1 after the word "specification", add "or in the measurement and payment clause of the standard or particular specification or section or project specification".

PSA 3 MATERIALS (Clause 3)

PSA 3.1 Quality (Sub Clause 3.1)

All pipes, fittings and materials used in the works, must bear the official standardisation mark of the SANS where applicable. The mark on a pipe shall be visible from above after the pipe is laid.

The Employer's Agent's approval of all manufacturers' instructions with regard to installation of pipelines and sealing of joints is required.

PSA 4 PLANT (Clause 4)

PSA 4.1 SILENCING OF PLANT (Sub Clause 4.1)

Replace the contents of sub-clause 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, 1993 (Act No 85 of 1993) as amended.

The Contractor shall at all times and at his 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 plant 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."

Add the following:

"The Contractor will be required to obtain a noise exemption permit from the City of Cape Town."

PSA 4.2 CONTRACTOR'S OFFICES, STORES AND SERVICES (Sub Clause 4.2)

Add the following paragraph before the existing first paragraph in subclause 4.2:

"The Contractor's buildings, sheds and other facilities erected or utilised on the Site for the purposes of the Contract shall be fenced off and shall contain all offices, stores, workshops, testing laboratories, toilet facilities, etc. as may be and if required by the Contractor. The facilities shall always be kept in a neat and orderly condition.

No personnel may reside on the Site. Only a night-watchman may be on the Site after hours" Delete "and first-aid services" in the second paragraph of subclause 4.2 and add the following: "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 5 CONSTRUCTION (Clause 5)

PSA 5.2 WATCHING, BARRICADING, LIGHTING AND TRAFFIC CROSSINGS

The Contractor shall comply in all respects with the road traffic regulations of the local authority.

ACCOMMODATION OF TRAFFIC

a) Precautions

The Contractor shall be responsible for the safe and easy passage of public traffic past and/or over sections of roads of which he has occupation. The Contractor shall at all times in all his operations and in using his construction plant take the necessary care to protect the public and to facilitate the flow of traffic.

b) Access to properties

The Contractor shall also provide and grant access to persons whose properties fall within or adjoin the area over which he is working, and in this respect the Contractor's attention is drawn to the General Conditions of Contract. No separate payment will be made for the provision and maintenance of such accesses and facilities, except where it may be required outside the road reserve.

c) Temporary traffic-control facilities

The Contractor shall provide, erect and maintain the necessary traffic-control facilities, road signs, channelization devices, barricades, warning devices and road markings (hereinafter referred to as traffic-control facilities), as described in the latest edition of South African Road Traffic Signs Manual, and shall remove them when no longer required. It shall be incumbent upon the Contractor to see to it that the above-mentioned traffic-control facilities are present at all times and are functioning properly but, prior to any section of the road which requires the above facilities being opened to traffic, the Contractor shall submit his proposals in this connection to the Engineer for comment.

The Contractor shall inspect all traffic-control facilities at least once daily, and report to the Engineer and immediately make good any shortcomings. Road signs, channelization devices and barricades no longer required may be moved for re-use, and, if no longer suitable for use, replaced without any additional compensation if they are required for re-use.

PSA 5.4 PROTECTION OF OVERHEAD AND UNDERGROUND SERVICES (Sub-Clause 5.4)

Add the following to Sub-Clause 5.4:-

The Contractor shall take cognisance of restrictions imposed by service authorities with respect to operations adjacent to or near their services. In particular the relevant authority shall be advised by the Contractor, at least 48 hours in advance, of any operation within 3,0 m, measured on a horizontal plane to the estimated position of the authority's service, so that the authority can make arrangements for the supervision of the operations by his staff.

The Contractor will be held responsible for any damage to known services (i.e. services that are within the Site and are shown on the drawings or which are located during construction) and he / she shall take all necessary measures to protect them. All work or protective measures shall be subject to approval. In the event of a service being damaged, the Contractor shall immediately notify the authorities concerned as well as the Engineer. The Contractor shall not repair any such service unless instructed to do so.

a) Protection during construction

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

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

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

b) Alterations and repairs to existing services

Unless the contrary is clearly specified in the Contract or ordered by the Employer's Agent, the Contractor shall not carry out alterations to existing services. When any such alterations become necessary, the Contractor shall promptly 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.

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

No liability for damages arising from any delay in having such alterations or repairs undertaken 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.

d) Liability for Damage and Insurance

The Contractor's attention is drawn to the relevant clauses of the General Conditions of Contract and Contract Specific Data regarding liability for damage to the Works, or property, or injury to persons arising from the construction of the Works. His attention is also drawn to the General Conditions of Contract regarding insurance to be effected by the Contractor. Special attention is drawn to the exclusions in this insurance policy and particularly to the exclusions regarding consequential damage.

e) Access to Services

The Contractor shall allow all reasonable access to any Authority for the purpose of repairing, maintaining, laying and/or relaying any service, cables or mains during the period of this Contract. The Contractor shall co-operate with other Contractors or Authorities responsible for the installation of water reticulation, electricity cables and communication cables and shall arrange his programme accordingly.

f) Public relations

Prior to the commencement of the works, the Contractor shall on Council's letterhead at his own expense and with all relevant contact numbers, compile and distribute explanatory letters typed in English, Afrikaans and where necessary in Xhosa to each address likely to be affected by the works.

These letters are to be vetted by the Employer's Agent prior to distribution. Complaints from members of the public are to be dealt with in a courteous and expedient manner to the entire satisfaction of the Employer's Agent.

PSA 5.5 SPECIAL WATER CONTROL (Clause 5.5)

All water, whether from rain, pipeline failures, or subsurface water and infiltration shall be dealt with in such a way as to ensure the safety of the works.

It is required that adequate preventive measures are taken and maintained to ensure that the works are protected from damage due to water from any source.

The Contractor shall design, construct and maintain all drains and other temporary works necessary for the dewatering and flood protection of the permanent works. All methods of dewatering and flood protection shall be submitted to the Engineer for approval.

In the event of these measures failing to protect the works, action shall be taken immediately to protect the works from further damage, the cost of which shall be carried by the Contractor. The damage caused by the water shall be made good by those responsible for the work damaged, or as directed by the Engineer.

The Contractor shall be responsible for and shall repair at his expense any damage to the foundations, structures or any part of the works caused by floods, water or failure of any part of the dewatering and flood protection works.

Having served their purpose, all temporary works shall be removed, backfilled or levelled such that the operation of the works shall not be affected in any way.

The cost of all flood protection and control of water shall be included in the tendered sum for payment in General Section of the Schedules of Rates

Where specialist dewatering measures are required for a project and is to be undertaken, the cost shall be included as a separate item in the BOQ.

PSA 5.6 PREVENTION OF DUST NUISANCE (Clause 5.6)

The Contractor's attention is drawn to the possible presence of existing dwellings adjacent to the site that may be vulnerable to dust nuisance and traffic hazards which might arise from the Contractor's operations. The Contractor is particularly required to take all necessary precautions, including limiting the length of open trenches to 100 metres, watering where appropriate to prevent dust blowing from construction material and spoil heaps and / or ground stripped of vegetation cover. The Contractor is to allow for the cost of this work as a time related item in the Preliminary and General section of the Schedules of Rates.

PSA 5.7 SAFETY

Replace the contents of Sub-clause 5.7 with the following:

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

(a) Provide to its Employees on the site of the works, all safety materials, clothing and equipment necessary to ensure full compliance with the provisions of the Occupational Health and Safety Act, 1993 (Act No 85 of 1993) as amended (hereinafter referred to as the Act) at all times, and shall institute appropriate and effective measures to ensure the proper usage of such safety materials, clothing and equipment at all times;

(b) Provide, install and maintain all barricades, safety signage and other measures to ensure the safety of workmen and all persons in, on and around the site, as well as the general public;

(c) Implement on the site of the works, such procedures and systems and keep all records as may be required to ensure compliance with the requirements of the Act at all times;

(d) Implement all necessary measures so as to ensure compliance with the Act by all subContractors engaged by the Contractor and their employees engaged on the works;

(e) Full compliance with all other requirements pertaining to safety as may be specified in the Contract.

The Employer and the 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 co-operate fully in such inspections and shall make available for inspection all such documents and records as the Employer's and/or Employer's Agent's 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 GCC 2015 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 5.13.1 GCC 2015 of the Conditions of Contract should the Contractor fail to complete the Works on or before the specified due completion date in consequence of the suspension.

Persistent and repeated breach by the Contractor of the requirements of the Act and/or this clause shall constitute grounds for the Employer's Agent to act in terms of Clause 9.2.1.3.6 GCC 2015 of the Conditions of Contract* and for the Employer to cancel the Contract in accordance with the further provisions of the said Clause 9.2 GCC 2015.

a) **Occupational Health and Safety Act**

The Contractor is to observe the provisions of the Occupational Health and Safety Act 85 of 1993. Working on underground pipelines presents hazardous conditions and the Contractor's attention is drawn to the Occupational Health and Safety Act - General Safety Regulations and in particular Regulation No. 5 – Work in Confined Spaces. The Contractor shall, in terms of the Occupational Health and Safety Act Construction Regulations 2014, address these hazards in his Health and Safety Plan.

The Contractor shall give notice to the Provincial Director, in terms of Clause 3 of the Occupational Health and Safety Act Construction Regulations 2014, prior to the commencement of work on site. The Contractor must appoint a full time Construction Health & Safety Officer (CSHO) to monitor all works construction sites for compliance.

PSA 5.9 PUBLIC RELATIONS (New Clause)

Prior to the commencement of work the Contractor shall at his own expense and on his own letter with relevant contact numbers, compile and distribute explanatory letters typed in English, Afrikaans and where necessary in Xhosa to each address likely to be affected by the works. These letters are to be vetted by the Engineer prior to distribution. Complaints from members of the public are to be dealt with in a courteous and expedient manner to the entire satisfaction of the Engineer.

PSA 5.10 ENVIRONMENTAL PROTECTION (New Clause)

PSA 5.10.1 GENERAL

The Contractor shall take particular note of the environmental requirements contained in C3.5 Management: Environmental Specifications.

Construction will take place within the site footprint of each Works Project and every precaution must be taken to protect the established vegetation and roadside facilities. It is therefore essential that the Engineer be continually consulted throughout the period to ensure that environmental requirements of the authorisation are:

- No surface or ground water may be polluted due to actions on the site
- No trees that form part of the historic Bluegum tree lane may be felled or damaged
- The footprint of the development must be limited to the areas required for the actual construction works. Areas outside the footprint must be clearly demarcated and regarded as "no-go" areas. During construction, activities and movement of people must be restricted to the footprint.
- The loss of the critically endangered Cape Flats Sand Fynbos must be limited to the footprint of the proposed development.

Failure to show adequate consideration to the environmental aspects of this contract will be sufficient for the Engineer to have the Contractor's representative or any other Contractor's employee (s) removed from the site in terms of the General Conditions of Contract.

The following conditions have been imposed and shall be strictly complied with:

- i. Personnel and plant shall not enter property beyond the boundaries of approved working areas, camp sites and stockpile sites without written authorisation by the Engineer irrespective of whether the approved areas are fenced off or not.

Whenever the Contractor is permitted by the Engineer to encroach on abutting land, he shall remove, after such encroachment, all temporary facilities, tracks and access roads and shall reinstate the environment all at his own expense.

- ii. The Contractor shall, to the satisfaction of the Engineer, take every necessary precaution to prevent the contamination and pollution of the environment.

The Contractor shall plan his activities that materials, in so far as possible, can be transported direct to and placed at the point where it is to be used. However, where utilising materials in this manner is impractical, it shall be temporarily stockpiled materials will not be payable directly, but full compensation therefore shall be included in the rates for the various items of work in which the stockpiled material is used.

Stockpiling areas shall be indicated to and approved by the Engineer. Before any stockpiling of materials may be done, the site shall be cleaned, and all loose stones or any plant or other material which may cause pollution shall be removed. After the stockpiled material has been removed, the site shall be reinstated as closely as possible to its original condition.

- iii. The Contractor shall be responsible for the establishment of a refuse control system for the collection and removal of refuse from the camp site and working areas.

The Contractor shall ensure that waste and surplus food, food packaging plastic and organic waste is not deposited by his employees anywhere on the site except in refuse bins for removal. If his employees are to eat elsewhere on site than in the camp site, the Contractor shall designate restricted places for eating in his working areas, shall provide adequate refuse containers in all these places and shall remove the refuse and clean up any remaining food containers immediately after mealtimes.

- iv. The Contractor has no right to the trees, shrubs or any other existing vegetation on the site/route.

- v. No bituminous material or waste material shall be dumped, even if only as temporary measure, on or outside the shoulders of the roadway, but provision shall be made to remove such excess material directly off the site of works.

- vi. The Contractor shall ensure adequate provision of latrine facilities for his employees.

- vii. The Contractor shall ensure that any material or mud that is deposited by the construction traffic on the existing roads is promptly removed to avoid endangering the traffic using that road.

PSA 7 TESTING (Clause 7)

PSA 7.1.1 Checking (Subclause 7.1.1)

Every completed layer or section of the Works shall be subject to check testing by the Contractor, at his own cost. Once the Contractor has satisfied himself with the standard of his works, he shall provide the Engineer with the results of his check testing indicating that the work is to specification. In order to minimise delays due to testing, the Contractor shall give the Engineer at least 24 hours notice of when any portion of the works will be completed to his satisfaction so that the Engineer can arrange for his acceptance control testing to be done.

Failure by the Contractor to notify the Engineer or to provide the required information or, where specified, to perform the required test, will be grounds to exempt the Employer from payment for the associated work and for all subsequent work which would be affected by the failure of the work to be tested.

The Engineer will be under no obligation to the Contractor to perform acceptance tests. If the Engineer elects not to perform a particular test after notification by the Contractor, he will issue the Contractor with a written instruction to proceed with the relevant works without the acceptance test being performed.

Nothing contained in this Clause will relieve the Contractor of his responsibilities under the specification or in any way limit the tests which the Engineer may call for or perform in terms of the specification.

PSA 7.1.2 Standard of Finished Work not to Specification (Subclause 7.1.2)

In addition to the provisions of Subclause 7.1.2, the costs of check testing by the Engineer including tests carried out by commercial laboratories after remedial work by the Contractor shall be borne by the Contractor.

PSA 7.2 Approved Laboratories (Subclause 7.2)

The Engineer will employ the services of a commercial laboratory in order to carry out acceptance testing. All acceptance testing carried out by a commercial laboratory shall be paid for by the Contractor. The costs of such tests which meet the specification requirements will be reimbursed to the Contractor in the monthly payment certificate.

A Provisional Sum has been provided in the Schedule of Quantities to allow for the cost of such testing.

The Contractor shall make due allowance for testing procedures in his construction programme.

PSA 7.5 Testing for Engineering Services

i. PSA 7.5.1 Pipe Trenches

The Engineer may perform acceptance density tests on pipe trenches in bedding layers and in backfill layers. The Contractor shall notify the Engineer when the bedding layer and each backfill layer has been completed.

ii. PSA 7.5.2 Stormwater, Sewer and Water Mains

The Engineer may perform pressure tests and visual inspections on stormwater pipes, sewers and water mains after completion of any pipework. Tests for pipework under roads in such a position that repairs could affect the roadworks must be completed before the Contractor may proceed with any layerworks.

Pressure tests may be performed after the bedding layer is placed and compacted, and again when backfilling is complete. The pipework shall only be accepted when the second test has passed.

Manholes shall be visually inspected for ingress of water and shall be watertight.

The Contractor shall provide all plugs and testing apparatus.

iii. PSA 7.5.3 Control of Levels

Invert levels shall be controlled by laser beams or sight rails.

The Contractor shall check the invert level of the laid pipe at each manhole position prior to the construction of the manhole. In the case of water pipelines the levels shall be checked at changes in gradient or at major bends or connection points. The onus is on the Contractor to arrange and verify the check levelling but any deviation from the specified tolerance remains the responsibility of the Contractor.

PSA 7.6 As-built Information

As the works are progressing, the Contractor shall mark on a separate set of drawings, after checking the information, all as-built details and submit them to the Engineer's Representative for approval on a weekly basis.

All services shall be surveyed. The ends of all ducts or banks of ducts, all pipe bends and the cover and invert levels of all manholes and catchpits shall be surveyed prior to being backfilled. The Contractor shall supply this co-ordinate and level information in electronic format, with the marked-up drawings at the completion of the contract. The format of as-built electronic information shall be obtained from the Engineer. All costs incurred by the Contractor in complying with PSA 8.6.5 shall be deemed to be included in the Contractor's general obligations and no separate payment shall be made in this regard.

The Certificate of Completion shall only be issued once the required information has been submitted and approved.

PSA 8 MEASUREMENT AND PAYMENT

PSA 8.1 MEASUREMENT (Clause 8.1)

Add the following to sub-clause 8.1.

Prior to the commencement of any portion of works the Engineer and Contractor shall agree on the programme, values of all dimension, levels, and other data which are to be used in the calculation of quantities of works performed.

The Contractor shall notify the Engineer in good time of his intention to commence with any portion of the works and shall allow sufficient time for himself and the Engineer to do all and any checks on

dimensions, levels, etc. that might be necessary to reach agreement. Should the Contractor commence with any portion of the work before reaching agreement with the Engineer as to the values of dimensions, the decision of the Engineer in respect of such values shall be final and no further negotiation will be entertained.

PSA 8.1.1 METHOD OF MEASUREMENT, ALL SECTIONS (Sub-Clause 8.1.1.)

In the second line of Sub-Clause 8.1.1, after the words "standardised specification or" add: "in the measurement and payment clause of the standard specification or".

PSA 8.2 PAYMENT (Clause 8.2)

PSA 8.2.2 TIME-RELATED ITEMS (Sub-Clause 8.2.2)

Delete the second sentence and replace with the following:

"Subject to the provisions of 8.2.3 and 8.2.4, the tendered sum per day shall be multiplied by the number of days required to complete the site activities from the commencement date of the contract until the end of the period for completion of the works."

PSA 8.4 SCHEDULED TIME-RELATED ITEMS (Sub-Clause 8.4)

Wherever the words "The sum" occurs in Sub-clause 8.4 replace with the words "The sum per day".

Wherever the Unit " Sum " occurs in Sub-clause 8.4 replace with the Unit "day ".

PSA 8.5 PROVISIONAL SUMS

PSA 8.5.1 Community Liaison Officer (CLO)

Payment of the community liaison officer shall be made on a monthly basis to the Contractor. The monthly amount for the cost of employment of the CLO shall be set by the Employer and the contractor shall recover the cost thereof under the provisional sum allowed for.

The Contractor's tendered mark-up must allow for accommodation of the CLO for the duration of the contract as per the requirements of T1.2 Tender Data Clause F.4.5

The cost of the Contractor's time for liaison with the local community shall be deemed to be included in the Fixed Establishment Costs tendered by the Contractor.

The cost for the employment of the CLO shall cover overhead charges and profit.

Item

Unit

Community Liaison Officer.....day

PSA 8.6 PRIME COST ITEMS (Clause 8.6)

PSA 8.6 TESTING (Clause 7)

PSA 8.6.1 Checking (Subclause 7.1.1)

Every completed layer or section of the Works shall be subject to check testing by the Contractor, at his own cost. Once the Contractor has satisfied himself with the standard of his works, he shall provide the Engineer with the results of his check testing indicating that the work is to specification. In order to minimise delays due to testing, the Contractor shall give the Engineer at least 24 hours notice of when any portion of the works will be completed to his satisfaction so that the Engineer can arrange for his acceptance control testing to be done.

Failure by the Contractor to notify the Engineer or to provide the required information or, where specified, to perform the required test, will be grounds to exempt the Employer from payment for the associated work and for all subsequent work which would be affected by the failure of the work to be tested.

The Engineer will be under no obligation to the Contractor to perform acceptance tests. If the Engineer elects not to perform a particular test after notification by the Contractor, he will issue the Contractor with a written instruction to proceed with the relevant works without the acceptance test being performed.

Nothing contained in this Clause will relieve the Contractor of his responsibilities under the specification or in any way limit the tests which the Engineer may call for or perform in terms of the specification.

PSA 8.6.2 Standard of Finished Work not to Specification (Subclause 7.1.2)

In addition to the provisions of Subclause 7.1.2, the costs of check testing by the Engineer including tests carried out by commercial laboratories after remedial work by the Contractor shall be borne by the Contractor.

PSA 8.6.3 Approved Laboratories (Subclause 7.2)

The Engineer will employ the services of a commercial laboratory in order to carry out acceptance testing. All acceptance testing carried out by a commercial laboratory shall be paid for by the Contractor. The costs of such tests which meet the specification requirements will be reimbursed to the Contractor in the monthly payment certificate.

A Provisional Sum has been provided in the Schedule of Quantities to allow for the cost of such testing.

The Contractor shall make due allowance for testing procedures in his construction programme.

PSA 8.6.4 Testing for Engineering Services

PSA 8.6.4.1 Pipe Trenches

The Engineer may perform acceptance density tests on pipe trenches in bedding layers and in backfill layers. The Contractor shall notify the Engineer when the bedding layer and each backfill layer has been completed.

PSA 8.6.4.2 Stormwater, Sewer and Water Mains

The Engineer may perform pressure tests and visual inspections on stormwater pipes, sewers and water mains after completion of any pipework. Tests for pipework under roads in such a position that repairs could affect the roadworks must be completed before the Contractor may proceed with any layerworks.

Pressure tests may be performed after the bedding layer is placed and compacted, and again when backfilling is complete. The pipework shall only be accepted when the second test has passed.

Manholes shall be visually inspected for ingress of water and shall be watertight.

The Contractor shall provide all plugs and testing apparatus.

PSA 8.6.4.3 Control of Levels

Invert levels shall be controlled by laser beams or sight rails.

The Contractor shall check the invert level of the laid pipe at each manhole position prior to the construction of the manhole. In the case of water pipelines the levels shall be checked at changes in gradient or at major bends or connection points. The onus is on the Contractor to arrange and verify the check levelling but any deviation from the specified tolerance remains the responsibility of the Contractor.

PSA 8.7 Dayworks

The amount allowed under this item is for minor work which is to be undertaken during the Contract which cannot reasonably be measured and paid for using the rates submitted in the Schedules of Rates. Such work is only to be undertaken on written instruction from the Engineer.

Item Unit

Labour charges.....	h
Material Charges	h
Plant charges.....	h

PSA 8.8 TEMPORARY WORKS (Clause 8.8)

Wherever the words "The sum" occurs in Sub-clause 8.8 replace with the words "The sum per day".
Wherever the Unit " Sum " occurs in Sub-clause 8.8 replace with the Unit "day ".

PSA 8.8.2(a) Flagmen

The unit of measure shall be a full day worked by flagmen. A man/day shall be deemed to comprise of two eight hour shifts in a twenty four hour period. Shorter single portion shifts (6 to 10 hours) shall be measured as a half man/day.

Item Unit

(a) Flagmen.....man/day

PSA 8.8.2(b) Road signs

The unit of measure shall include the provision, erection and maintenance of all statutorily required road signs.

Item Unit

(b) Road signs, R- and TR-series, 900mm dia.....No.

(c) Road signs, TW-series, 900mm sides.....No.

(d) Road signs, STW-DTG, -TGS-, TG- and TIN series (excl delineators and barricades)....No.

PSA 8.8.2(c) Delineators (DTG50J) (200mm x 800mm)

The unit of measure shall include the provision, erection and maintenance of all statutorily required delineators. This shall include the sign stand, together with the provision of two sand bags per delineator to hold it in position and for their replacement when necessary.

Item Unit

i. Single.....No.

PSA 8.8.2(d) Traffic Cones

The unit of measure shall be for provision, placement and removal of traffic cones.

Item Unit

(f) Traffic cones (450mm).....No.

PSA 8.8.2(e) Movable barriers

The unit of measure shall be for provision, placement and removal of movable barriers.

Item Unit

(g) Movable Barriers (concrete new jersey type).....No.

PSA 8.8.2(f) Traffic Safety Officer

The unit of measure shall be the period in calendar days that the approved traffic safety officer (s), including their vehicles, equipment and personnel, are operative on accommodation of traffic and on which satisfactory duties and reports are completed as specified.

The tendered rate per day shall include full compensation for the cost of the traffic safety officer (s) their vehicles, equipment and personnel, to conduct their duties as specified by the Engineer.

Item Unit

(h) Traffic Safety Officer.....day

PSA 8.9 Complying with environmental requirements

The sum for complying with environmental requirements shall include for all costs incurred by the Contractor in complying with the requirements of PSA 6 Environmental Protection, the Environmental Management Specification in Part C3.5 in the Scope of Work and the Environmental Authorisation for the Development, if any.

Item Unit

.....Sum

PSA 8.10 Complying with Health and Safety requirements

The sum for shall include for all costs incurred by the Contractor in complying with the requirements of the Occupational Health and Safety Act 85 of 1993, the 2014 Construction Regulations, his Health and Safety Plan and the Works Project Health and Safety Specification.

Item

Unit

Complying with Health and Safety requirementsSum

PSAB ENGINEER'S OFFICE

PSAB 1 MATERIALS (Clause 3)

PSAB 1.1 Nameboards (Subclause 3.1)

Replace paragraph one with the following:

The Contractor shall supply and erect, at an approved site, nameboards complying, with regard to size, painting, decorating and details, with the standard City of Cape Town signboard.

All nameboards shall be removed before, or at, the end of the Defects liability Period.

PSC **SITE CLEARANCE**

PSC 1 **SCOPE**

This specification shall also cover the removal of debris, the dismantling and removal of fences, the clearing of vegetation, as well as the removal of identified trees on the Site, the dismantling and removal of existing paving, kerbs and channels, and the removal of existing asphalt and concrete surfacing, etc.

Site clearance shall only be required in areas where the surface is to be cleared before excavation.

PSC 2 **INTERPRETATION**

PSC 2.3 **DEFINITIONS**

Designated Site/Area

Add the following

The designated site for clearing and grubbing (as defined in SANS 1200 C Clause 5.3 & 5.4) shall be defined as that which falls within the Site boundary shown in the Works Project documents or as indicated by the Engineer.

PSC 3 **MATERIALS**

PSC 3.1 **DISPOSAL OF MATERIAL (Clause 3.1)**

Add the following to sub-clause 3.1

Burning of material on site will not be permitted.

All spoil material shall be disposed off site to a suitable spoil site. The Contractor shall make his own arrangements for the provision of a suitable spoil area off the site.

The contractor shall ensure that all necessary permits for disposal of material are obtained.

The whole of the site of the works shall be deemed to be within freehaul distance.

PSC 8 **MEASUREMENT AND PAYMENT**

PSC 8.2.1 **Clear and grub**

Measurement and payment for clear and grub shall be made per metre squared (m²), to the nearest 10 m².

Site clearance shall be carried out on prior to earthworks and shall be measured once. Site clearing shall also mean bush clearing. The Contractor shall pay attention to the method of removing vegetation to ensure that roots are removed without removing excessive sand material.

The tendered rate for site clearance shall include removal of the bush and trees as specified under 8.2.1, including disposal and shall cover all plant, labour and any other incidental costs required to clear the area of works site, to the satisfaction of the Engineer.

Item

Unit

Clear and grubm²

PSC 8.2.11 **Remove, transport and stack existing kerbs, channels and edgings for reinstatement (New Clause)**

Where existing kerbs, channels or edgings in the work area are to be removed by the Contractor these shall be removed carefully to minimise damage, cleaned of excess concrete and shall be transported and stacked for reinstatement.

The rate tendered and paid is for the recovery of existing kerbs, channels or edgings and shall include for disposal of surplus spoil and concrete bedding and shall cover all labour, plant and other incidental costs necessary to execute the work described. Kerbs, channels or edgings which in the opinion of the Engineer are damaged by the Contractor during recovery or transportation, to the extent that they cannot be reused will not be measured for payment.

Item

Unit

Remove, transport and stack existing kerbs, channels and edgings for reinstatement.....m

PSC 8.2.12 Removal of hardened surfacing (New Clause)

Where existing hardened surfaces in the work area are to be demolished and removed by the Contractor these shall be removed carefully to minimise damage. All concrete and asphalt must be saw cut prior to removal, to ensure a neat joint for reinstatement. Areas of hardened surfaces to be removed shall be measured in place prior to breaking out and removal and must be verified by the Engineer before work commences.

The tendered rate shall include the disposal of surplus material where applicable and shall cover the cost of all plant, labour, materials and all other incidentals necessary to remove the hardened surface as neatly as possible. Any surfacing removed and stacked for reinstatement, which in the opinion of the Engineer is damaged by the Contractor during recovery or transportation, to the extent that they cannot be reused will not be measured for payment.

<u>Item</u>	<u>Unit</u>
a) Cut, demolish, remove and dispose of concrete surface slabs up to 150 mm thick.....	m ²
b) Remove interlocking brick paving and precast concrete surface slabs and stack for reinstatements.....	m ²
c) Cut, Remove and dispose of existing asphalt.....	m ²
d) Remove existing gravel wearing course up 150 mm thick and stockpile for later use	m ²

PSC 8.2.13 Remove existing palisade fences and stack for reinstatement (New Clause)

Where existing high precast concrete palisade fences in the work area are to be removed by the Contractor these shall be removed carefully to minimise damage, and shall be stacked for use in reinstatement when work in the area is complete.

The rate tendered and paid is for the recovery of existing palisade fences and shall include for disposal of surplus spoil and concrete bedding and shall cover all labour, plant and other incidental costs necessary to execute the work described. Palisades which in the opinion of the Engineer are damaged by the Contractor during recovery or transportation, to the extent that they cannot be reused will not be measured for payment.

<u>Item</u>	<u>Unit</u>
Remove existing palisade fences and stack for reinstatement.....	m²

PSC 8.2.14 Remove existing vibracrete fences and stack for reinstatement (New Clause)

Where existing vibracrete fences, in the work area are to be removed by the Contractor these shall be removed carefully to minimise damage, and shall be stacked for use in reinstatement when work in the area is complete.

The rate tendered and paid is for the recovery of existing vibracrete fences and shall include for disposal of surplus spoil and concrete bedding and shall cover all labour, plant and other incidental costs necessary to execute the work described. Palisades which in the opinion of the Engineer are damaged by the Contractor during recovery or transportation, to the extent that they cannot be reused will not be measured for payment.

<u>Item</u>	<u>Unit</u>
Remove existing palisade fences and stack for reinstatement.....	m²

PSC 8.2.15 Demolish, Remove and Dispose of existing stormwater structures (New Clause)

The tendered rate shall cover the cost of all plant, labour and other incidentals necessary to demolish and remove the existing stormwater structures as listed in the items and dispose of at a suitable spoil site.

<u>Item</u>	<u>Unit</u>
-------------	-------------

Demolish, Remove and Dispose of the following existing stormwater structures:

- a) Concrete or brick manholes up to 2.5m deep.....No
- b) Single kerb inlet catchpits.....No
- c) Double kerb inlet catchpits.....No
- d) Grid inlet catchpits.....No
- e) Concrete or brick head/wing walls for pipes up to 250 mm thick..... m²

PSC 8.2.16 Remove and dispose of existing gabions and reno mattresses complete (New Clause)

Where existing gabions or reno mattresses are damaged or need to be removed due it's proximity to the works, these shall be removed prior to any construction. The contractor shall remove and dispose of these complete, including all wire baskets, stone fill and geotextile underlay.

The rate tendered and paid for the removal and disposing of existing gabions and reno mattresses shall cover all labour, plant and other incidental costs necessary to execute the work described.

Item

Unit

Remove and dispose of existing gabions and reno mattresses complete, to a site selected by the Contractor..... m³

PSD EARTHWORKS

PSD1 General

Generally the bulk earthworks comprise cuts and fills to construct platform and the road prisms.

Should the excavations encounter hard rock, the Contractor will have to adopt appropriate techniques to excavate and break up and remove the rock as required to a level such that a 150 mm layer of imported subgrade material can be placed on the rock to form a subgrade for the subbase layer.

Should the excavations encounter clayey soil, the Contractor shall excavate and remove the clayey soil to a level such that a 300 mm layer of imported subgrade material can be placed on the clayey soil to form a subgrade for the subbase layer.

PSD2 CONSTRUCTION (Clause 5)

PSD 2.1 Windblown sand (Subclause 5.1.3)

The Contractor shall ensure that the premixed roads(if applicable), abutting the site is kept clear of windblown sand and silt during his construction activities.

PSD 3 EXISTING SERVICES

PSD 3.1 Detection, Location And Exposure Of Existing Services (Subclause 5.1.2.2)

The Contractor shall ascertain the presence and position of all services likely to be damaged or interfered with by his activities. For this purpose he shall obtain from the Engineer up-to-date plans showing the position of services in the area where he intends to work.

As the location of services can often not be reliably determined from such plans, he shall further determine the exact position of such services by means of suitable detecting equipment and afterwards by careful hand excavation, where necessary, in order to expose the service at the positions of possible interference by his activities. The latter procedure shall also be followed in respect of any service not shown on plans, but believed to be present.

All such services, the positions of which have been located at the critical points, shall be designated as "known" services and their positions shall be indicated on a separate set of Drawings by the Contractor, a copy of which shall be furnished to the Engineer.

While he is in occupation of the Site, the Contractor shall be liable for all damage caused by him to known services as well as for consequential damage arising therefrom, whether caused directly by his operations or by lack of proper protection.

PSD 3.2. Protection of Existing Services (Subclause 5.1.2.3)

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 to these services. Where necessary, excavation in close proximity to these services shall be carefully carried out by means of suitable hand tools, excluding picks wherever their use could cause damage to the services. No additional payment will apply to such more difficult work.

Services left exposed shall be suitably protected from damage and/or theft.

PSD 4 Stabilisation by straw

The topsoil (seedbed) shall be stabilised by means of straw rotavated into the upper 150 mm of the completed surface. Immediately after suitable areas have been cut or filled to level and accepted, the Engineer will order the stabilisation process to be carried out. This shall be done immediately so as to avoid loss of material from completed sections.

On areas that are too steep for machine stabilisation it will be necessary to stabilise by hand. Baled straw shall be placed on the completed area, opened and evenly spread by hand or machine so that the coverage will be 1 bale per 25 square metres. It shall then immediately be rotavated into the upper 150 mm of the platform. This operation shall not be attempted when the wind strength is such as to remove straw before it can be rotavated. This requirement will mean that the Contractor will have to be in a position to take advantage of periods of calm at short notice.

2. PSD 4.1 MEASUREMENT AND PAYMENT

PSD 4.1.1 Stabilization

Straw stabilisation

(a) By machine Unit: m²

(b) By hand Unit: m²

The rate shall include for supply of straw, for spreading and for rotavation and for all transport, plant, materials, labour and incidentals necessary to complete the work.

PSD 5 PEGGING OF BLOCK CORNERS

On completion of the bulk earthworks, the Employer's surveyor will place steel pegs at all the block corners of the layout. The Contractor shall protect the block corner pegs from disturbance. Any pegs that are disturbed by the Contractor shall be replaced at the cost of the Contractor.

PSD 6 CLASSES OF EXCAVATION

The excavation of the clayey soil material in excavations is deemed to be categorised as being in the category "Soft Excavations".

PSD 7 OVERHAUL

Overhaul shall not be measured for the following materials :

- (a) Material to be obtained from commercial sources or sources supplied by the Contractor.
- (b) Spoil material to be removed from the site to spoil sites provided by the Contractor.
- (c) Material to be disposed at waste disposal facilities.

Notwithstanding the provisions of Subclause 8.3.6 of SANS 1200 D, the whole of the site of the works shall be deemed to be within freehaul distance.

PSDB EARTHWORKS (PIPE TRENCHES)

3. PSDB 1 MATERIALS FOR REINSTATEMENT OF ROADS (Subclause 3.6)

PSDB 1.1 Subbase and Base (Subclause 3.6.1)

Type G4 and G3 basecourse and type G5 subbase shall be used for reinstatement of existing road layers in layers of 150 mm minimum thickness after compaction.

The subbase and base layers shall be benched so that each layer overlaps the underlying layer by 300 mm on either side of the trench excavation.

PSDB 1.2 Asphalt Surfacing (Subclause 3.6.4)

The surfacing shall consist of asphalt surfacing as specified in Part MH of the project specification. The edges of the asphalt shall overlap the base by at least 300 mm on both sides of the trench excavation.

PSDB 2 CONSTRUCTION (Clause 5)

4. PSDB 2.1 Trench Bottom (Subclause 5.5)

Where waterlogged trench bottom conditions exist after the Contractor has, in the Engineer's opinion, carried out all possible dewatering operations, the Engineer may order that unsuitable material be excavated and replaced with crushed stone. A layer of 13 mm crushed stone shall be placed over the full width of the trench bottom, in increments of 200 mm thick or such other thickness as may be ordered by the Engineer. The crushed stone shall be placed and rammed into the trench bottom to create a firm platform and shall be finished off to the required trench formation level.

As an alternative, the Engineer may order that a suitable selected fill material, obtained from the site, be placed in the trench bottom to the same dimensions as specified for the crushed stone. The selected fill material shall be compacted to the specified density for trench bottoms.

Where the Contractor's method of working results in quagmire conditions in the trench bottom, the Contractor shall excavate and stabilise the trench at his own cost.

PSDB 2.2 Stormwater, Seepage and Dewatering of Excavations (Sub Clause 5.1.2)

In addition to the Contractor's responsibilities for dealing with water, the Employer's Agent may order the Contractor to place a crushed stone bedding layer (minimum thickness 150mm) on the trench bottom.

Prior to the provision of the stone layer, Grade 3 geofabric filter material of minimum mass of 150g/m², must be installed on the trench bottom. After the placement of the stone bedding, the geofabric filter material shall be folded over the stone with a minimum overlap of 300mm to form an enclosed drain. The specified bedding material shall then be used to bed the pipe. The Contractor will only be paid for providing and laying the stone bedding layer and the geofabric filter material after receipt of a written order to do so from the Employer's Agent.

PSDB 2.3 Excavation

All excavated material shall be placed in such a way and in such positions as not to endanger or interfere with the works, pedestrians, traffic or property and the Employer's Agent may order the Contractor to remove any material that is considered liable to endanger or interfere with the works, pedestrians, property or traffic and to place such material in another position as indicated by the Employer's Agent.

Add the following:

PSDB 5.4.1 Shoring of Pipe Trenches

The Contractor shall take full responsibility for the safety of excavation, and shall carry out all measures necessary to make secure, by timbering and strutting or sheet piling, the excavated face. If timbering and strutting must be of sufficient strength and capable of being removed readily as the work proceeds. The Contractor shall further take all precautions to safeguard existing services and structures next or next to excavations carried out by him and shall provide and erect any shoring or underpinning that may be necessary.

The timbering, strutting and sheet piling of the pipe trenches shall not relieve the Contractor of any responsibility and all claims for the compensation for damages or injury caused or aggregated by the Contractor not taking all precautions to safeguard persons or property, shall be met entirely by the Contractor.

PSDB 3 DISPOSAL OF SURPLUS MATERIAL (Subclause 5.6.3 and 5.6.4)

PSDB 3.1 Description

General surplus material shall be taken off the site to a landfill site. No payment for overhaul will be made.

PSDB 4 COMPACTION (Subclause 5.7)

5. PSDB 4.1 Areas Subject to Traffic Loads (Subclause 5.7.2)

All trenches backfilled under this contract shall be backfilled with sand or cohesionless material compacted to 100 percent Modified AASHTO maximum density.

6. PSDB 5 REINSTATEMENT OF BITUMEN SURFACE (Subclause 5.9.5)

Trench excavations crossing existing roads must be completed, reinstated and reopened to traffic outside of peak-hours.

PSDB 6 DETECTION, LOCATION AND EXPOSURE OF EXISTING SERVICES

The Contractor shall ascertain the presence and position of all services likely to be damaged or interfered with by his activities. For this purpose he shall obtain from the Engineer up-to-date plans showing the position of services in the area where he intends to work.

As the location of services can often not be reliably determined from such plans, he shall further determine the exact position of such services by means of suitable detecting equipment and afterwards by careful hand excavation, where necessary, in order to expose the service at the positions of possible interference by his activities. The latter procedure shall also be followed in respect of any service not shown on plans, but believed to be present.

All such services, the positions of which have been located at the critical points, shall be designated as "known" services and their positions shall be indicated on a separate set of Drawings by the Contractor, a copy of which shall be furnished to the Engineer.

While he is in occupation of the Site, the Contractor shall be liable for all damage caused by him to known services as well as for consequential damage arising therefrom, whether caused directly by his operations or by lack of proper protection.

PSDB 6.1 Protection of Existing Services

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 to these services. Where necessary, excavation in close proximity to these services shall be carefully carried out by means of suitable hand tools, excluding picks wherever their use could cause damage to the services. No additional payment will apply to such more difficult work.

Services left exposed shall be suitably protected from damage and/or theft.

PSDB 6.2 Liability for Damage and Insurance

The Contractor's attention is drawn to the relevant clauses of the General and Special Conditions of Contract regarding liability for damage to the Works, or property, or injury to persons arising from the construction of the Works. His attention is also drawn to the General Conditions of Contract regarding insurance to be effected by the Contractor. Special attention is drawn to the exclusions in this insurance policy and particularly to the exclusions regarding consequential damage.

PSDB 6.3 Alterations and Repairs to Existing Services

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 Engineer, 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 Engineer, 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 minimize 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.

PSDB 6.4 Access to Services

The Contractor shall allow all reasonable access to any Authority for the purpose of maintaining, laying and/or relaying any service, cables or mains during the period of this Contract.

The Contractor shall co-operate with other Contractors or Authorities responsible for the installation of water reticulation, electricity cables and telephone cables and shall arrange his programme accordingly.

7. PSDB 7 MEASUREMENT AND PAYMENT (Subclause 8.3.6)

PSDB 7.1 Control of Water

It can be expected that the existing pipelines may be located below the water table. These conditions will necessitate that the Contractor will have to adopt appropriate techniques as set out in subclause 4.2 to control the water. The Contractor's attention is drawn to subclause 5.1.2 in connection with the control of water.

PSDB 7.2 Bedding in waterlogged conditions

The replacement of unsuitable material from the trench bottom, where instructed by the Engineer in terms of PSDB 2.1, shall be measured and paid for under 8.3.3.1 (Make up deficiency in backfill material). The removal of the unsuitable material shall be measured and paid for under 8.3.2(c) (Excavate and dispose of unsuitable material from trench bottom).

PSDB 7.3 Particular Items

a) Shoring trench Unit: m²

Shoring shall be measured per square meter of the face of the excavation. Should the Contractor elect to use sheet piling it shall be cut off 1,0 m below ground level and the remainder left in-situ. The use of shoring however, does not in any way relieve the Contractor of his responsibilities in terms of the Machinery and Occupational Safety Act. Where shoring is specified or ordered, it shall be measured per square metre of actual pit face shored. Payment will be categorised in depth increments of 1,0 meters. The tendered sum shall include full compensation for shoring of the trench as specified.

b) Temporary Works: Control of Water

Where specialist dewatering measures are required for a project and are to be undertaken by the Contractor, the payment will be in terms of the items provided in the Schedule of Rates.

PSDB 7.4 Reinstatement of surfaces

(a) Asphalt surfacing 40 mm thick	Unit: t
(b) 150mm Base course (G3)	Unit: m ³
(c) 150mm Base course (G4)	Unit: m ³
(d) 150mm Subbase (G5)	Unit: m ³
(e) 150mm Subbase (G7)	Unit: m ³

The area and volume will be computed from the authorised dimensions measured for each layer after compaction. Payment for finishing will be additional to that for excavation covered by Subclause 8.3.2.

The tendered rate shall cover the cost involved as specified in Subclause 8.3.6.1.

PSDB 7.5 Locating Existing Services

Unit: Sum

The unit of measurement shall be the sum.

The tendered lump sum shall include full compensation for the supply or hiring of specialized detecting equipment, for the use of such equipment and for drawing up plans of the located services as specified. Alternatively an approved specialist firm may be employed to carry out the work.

PSDB 7.6 Excavate by Hand to Expose Existing Services, and Backfill

Unit: m³

The unit of measurement shall be the cubic metre of material excavated.

The tendered rate shall include full compensation for all hand excavation within the lengths and widths authorized by the Engineer and the depth required to expose the service (excavation in excess of the authorized dimensions shall not be measured for payment), for backfilling and compacting to a minimum of 90% of modified AASHTO density (100% for sand), for disposal of any excavated material not required for backfilling, for keeping excavations safe, for dealing with any surface or subsurface water, for taking special care to ensure that services are not damaged in any way, and for any other operation necessary to complete the work.

The tendered rate shall also include for the transporting of surplus excavated material as well as for supplying adequate supervision during both excavation and backfilling operations.

No distinction will be made between hard and soft material, neither will distinction be made between the various types of services to be exposed, or the depths to which excavations are taken.

PSDB 7.7 Protection of Services

Unit: m³

The unit of measurement shall be the cubic metre of concrete or soilcrete. The tendered rate shall include full compensation for all supervision, labour, plant, equipment, materials and all other incidentals necessary to construct the protection complete as shown on the drawings. Excavation, bedding and backfilling shall be measured separately. Payment will distinguish between the various methods of protection.

PSDB 7.8 Liaison with Services Authorities

Unit: Sum

The tendered sum shall include full compensation for liaising and interacting with all the relevant Service Authorities, for obtaining the necessary wayleaves for services affected by the Works, allowing them onto the site and accommodating them for any service protection, relocation or supervision which may be required.

PSDK GABIONS AND PITCHING

PSDK 1 SIZE OF STONE FOR PITCHING (Subclause 3.1.1.2)

The size shall comply with the ordinary classification of Table 2. Prior to commencement of work, samples of the stone shall be provided to the Engineer for his/her approval.

PSDK 2 MESH

Gabions shall be made of hexagonal woven, triple twisted mesh (80 x 100mm) galvanised to SANS 675 class A before weaving. PVC coated gabions shall have extruded onto the galvanised wire before weaving, a minimum thickness of 0,5mm poly vinyl chloride, capable of resisting the deleterious effects of salt water and ultra violet light. The diameter of the mesh wire shall be as specified in PSDK 6.

PSDK 3 SELVEDGE WIRE

All edges shall be mechanically selvedged with a wire of which the diameter is as specified in PSDK 6. Diaphragm and end panels shall be selvedged along the top edge and vertical sides.

PSDK 4 DIAPHRAGMS

Wire mesh diaphragm panels shall be provided at 1m intervals.

PSDK 5 BINDING WIRE

Sufficient binding wire shall be provided to carry out all necessary wiring operations in accordance with the manufacturer's instructions. The diameter of the binding wire shall be as specified in PSDK 6.

PSDK 6 NOMINAL WIRE DIAMETERS

With reference to the nominal wire diameter, only the following shall apply:

Gabion boxes : (80 x 100) wire mesh
Mesh wire : 2.7mm and PVC coated
Selvedge wire : 3.4mm and PVC coated
Binding wire : : 2.2mm and PVC coated

Gabion mattresses : (80 x 100) wire mesh
Mesh wire : 2.5mm and PVC coated
Selvedge wire : 3.0mm and PVC coated
Binding wire : : 2.2mm and PVC coated

PSDK 7 GEOTEXTILE

The geotextile for use in river protection works shall be a grade 1 needle punched non-woven filter fabric. The table below gives the values for the properties:

GRADE 1 GEOTEXTILE PROPERTIES		
PROPERTY	GRADE 1	TEST METHOD
Penetration load (minimum), N	3800	3.5 of SABS 0221 – 1988
Puncture resistance (maximum), mm	14	Clause B8114
Water percolation (minimum, 1/m2/s	20	3.7 of SABS 0221 – 1988
Mass per unit area (minimum), g/m2	320	3.4 of SABS 0221 – 1988

The geotextile for subsurface drainage shall comply to grade 2 or grade 3 as specified in the Bill of Quantities or shown on the drawings. Only non-woven Geotextile's complying with the requirements of grade 1 and with a minimum mass of 320 gram per square metre, as determined in accordance with test method 3.4 of SABS 0221, shall be considered for river protection works or filter backing for the protection of earthworks against erosion.

PSDM EARTHWORKS (ROADS, SUBGRADE)

PSDM 1 GENERAL

Generally the in-situ sand shall be prepared as road-bed and compacted in a 300 mm layer.

Should the road-bed contain hard rock within 150 mm of its finished level, Contractor will have to adopt appropriate techniques to excavate and break up and remove the rock as required to a level such that a 150 mm layer of imported sand fill material can be placed on the rock to form a subgrade for the subbase layer.

Should the road-bed contain clayey soil, the Contractor shall excavate and remove the clayey soil to a level such that a 300 mm layer of imported sand fill material can be placed on the clayey soil to form a subgrade for the subbase layer.

Unsuitable material excavated from the roadbed shall be removed from the site to a site selected by the Contractor.

8. PSDM 3 MATERIALS

9.

10. PSDM 3.2 CLASSIFICATION FOR PLACING PURPOSES

11.

12. PSDM 3.2.3 Selected layer

13. *REPLACE THE CONTENTS OF THIS SUBCLAUSE WITH THE FOLLOWING:*

14. "The following requirements shall apply in respect of the selected layer:

15. (a) Maximum particle size: 60% of compacted layer thickness

16. (b) Unstabilised selected layer

17. (i) Upper selected layer

18.

19. Minimum CBR at 93% of modified AASHTO density : 15

20. Maximum PI : 12 (the Engineer has the right to alter this requirement to 3 x the grading modulus + 10)

21. (ii) Lower selected layer

22.

23. Minimum CBR at 90% of modified AASHTO density : 7

24. Maximum PI : 12 (the Engineer has the right to alter this requirement to 3 x the grading modulus + 10)

25. (c) Stabilised selected layer

26.

27. Minimum grading modulus of natural material : 0,75

28. UCS of stabilised material 300 kPa - 500 kPa at 93% of modified AASHTO density

29. Maximum PI for stabilised material : 10"

30.

31.

32.

33.

34.

35.

36.

37.

38.

39.

40.

41. **PSDM 5 CONSTRUCTION**

42.

43. **PSDM 5. METHODS AND PROCEDURES**

44. **PSDM 5.2.2 Cut and borrow**

45. **PSDM 5.2.2.3 Use of material**

46.

47. *ADD THE FOLLOWING PARAGRAPH:*

48. "(e) Commercial sources

49. The provisions of Subclause PSD 5.2.5 of SABS 1200 D as amended shall apply."

50.

51. **PSDM 5.2.3 Treatment of the road-bed**

52.

53. **PSDM 5.2.3.2 Removal of unsuitable ground**

54.

55. *REPLACE THE SECOND SENTENCE OF PARAGRAPH (a) WITH THE FOLLOWING:*

56. "The excavated spaces shall then be backfilled with approved imported material compacted to the required density."

57. *ADD THE FOLLOWING SENTENCE TO PARAGRAPH (b):*

58. "Unsuitable excavated material will be paid for as cut to spoil."

59.

60. **PSDM 5.2.3.3 Treatment of road-bed**

61.

62. *ADD THE FOLLOWING PARAGRAPH:*

63. "(c) Three-pass roller compaction

64. Any portion of the roadbed that is shown on the drawings or is specified or is directed by the Engineer to be given three-pass roller compaction because of its inadequate natural density, shall be prepared by shaping where necessary and compacting with a roller, complying with the requirements specified below.

65. Compaction shall comprise three complete coverages by the wheels of the specified roller over every portion of the area that is being compacted. While it is not the intention that the Contractor should apply water to the roadbed for this type of compaction, and while no rigid moisture control will be exercised during compaction, the Contractor shall nevertheless satisfy the Engineer that everything is being done to take full advantage of favourable soil moisture conditions during the rainy season, and that such compaction is as far as possible carried out when the roadbed is neither excessively dry nor excessively wet.

66. The Engineer has the authority to decide when conditions are favourable for compaction and where such compaction is to be carried out at any particular time and he has the right to instruct the Contractor to water the roadbed at the Contractor's expense when, in the opinion of the Engineer, the Contractor failed, neglected or refused to comply with these requirements.

67. The rollers to be used for roller-pass compaction shall conform to the following requirements:

68. Grid roller :

69. The grid roller shall have a mass of not less than 13,5 t when ballasted, shall be loaded to this mass if required, and shall be moved at a speed of not less than 12 km/h.

70. Vibratory roller :

71. The vibratory roller shall be capable of exerting a combined static and dynamic force of not less than 120 kN/m width for every metre of loose-layer thickness at an operating frequency not exceeding 25 Hz and shall move at a speed not exceeding 4 km/h."

72.

73.

- 74.
- 75.
- 76.
77. **PSDM 5.2.4 Fill**
- 78.
79. **PSDM 5.2.4.3 Finishing**
- 80.
81. (e) Topsoiling
82. *REPLACE THE SECOND SENTENCE WITH THE FOLLOWING:*
83. "The thickness of the topsoil shall be as directed by the Engineer."
- 84.
85. **PSDM 5.2.5 Selected layer**
- 86.
87. *REPLACE THE CONTENTS OF THIS SUBCLAUSE WITH THE FOLLOWING:*
88. "Except with regard to density, the requirements of Subclause 5.2.4 shall apply. The degree of compaction shall be:
89. Upper selected : 93% of modified AASHTO density
90. Lower selected : 90% of modified AASHTO density."
- 91.
92. **PSDM 5.2.6 Gravel surfacing**
- 93.
94. *REPLACE THE THIRD SENTENCE OF THIS SUBCLAUSE WITH THE FOLLOWING:*
95. "The relevant requirements in Subsubclause 5.2.4.2 shall apply, except that the material shall be compacted to 93% of modified AASHTO density."
- 96.
97. **PSDM 5.2.8 Transport**
- 98.
99. **PSDM 5.2.8.1 Freehaul**
- 100.
101. *REPLACE THE CONTENT OF THIS SUBCLAUSE WITH THE FOLLOWING:*
102. "All transport within the site boundaries will be regarded as freehaul."
- 103.
104. **PSDM 5.2.8.2 Overhaul**
- 105.
106. *DELETE THE CONTENTS OF THIS CLAUSE AND REPLACE WITH THE FOLLOWING:*
107. "No overhaul outside the site boundaries will be paid. All transport costs for spoiling or importation of material will be deemed to be included in the relevant rates."
- 108.
109. **PSDM 6 TOLERANCES**
- 110.
111. **PSDM 6.2 DIMENSIONS, LEVELS ETC.**
112. **PSDM 6.2.2 Cut**
113. *ADD THE FOLLOWING TOLERANCE:*
114. "(d) Final level of all cuttings +0 mm to -50 mm."
- 115.
- 116.

117.

118.

PSDM 8 MEASUREMENT AND PAYMENT

PSDM 8.2 COMPUTATION OF QUANTITIES

REPLACE SUBCLAUSES 8.2.1 TO 8.2.3 (INCLUSIVE) WITH THE FOLLOWING:

"PSDM 8.2.1 The provisions of Subclause 8.2.1 of SABS 1200 D shall apply.
PSDM 8.2.2 The provisions of Subclause 8.2.2 of SABS 1200 D shall apply.
PSDM 8.2.3 The provisions of Subclause 8.2.2 of SABS 1200 D shall apply."

PSDM 8.2.5 Verifying quantities

REPLACE THE FIRST SENTENCE WITH THE FOLLOWING:

"Before any earthworks are commenced but after completion of any site preparation, the Engineer will, upon a written request from the Contractor, provide cross-sections for the purpose of measurement of earthworks quantities."

PSDM 8.3 SCHEDULED ITEMS

PSDM 8.3.3 Treatment of roadbed

(1) Roadbed preparation and compaction of material to
ADD THE FOLLOWING:

"The unit of measurement shall be the cubic metre of material recompacted as specified and the volume shall be determined from levelled cross-sections on which are superimposed the levels to which the roadbed is to be constructed. When material is imported to make up the required volume, such material will be paid for as cut or borrow to fill as relevant."

ADD THE FOLLOWING:

"(c) Three-pass roller compaction:

(i) Grid roller Unit : m²

(ii) Vibratory roller Unit : m²

The units of measurement shall be the square metre of roadbed compacted as specified in Subclause PSDM 5.2.3.3(c) for the areas designated by the Engineer.

The tendered rates shall include full compensation for shaping the areas, providing the rollers and for compacting the roadbed by means of three roller passes over the entire area."

PSDM 8.3.4 Cut to fill, borrow to fill

REPLACE THE LAST SENTENCE OF THIS ITEM WITH THE FOLLOWING:

"The unit of measurement shall be the cubic metre of fill and the volume will be calculated in accordance with the authorised dimensions of the embankment and levelled cross-sections. The tendered rates shall include full compensation for excavating the material as if in soft material, for selecting, loading, transporting for the free-haul distance, for off-loading, watering, mixing and compacting the material as specified. Borrow to fill in this item relates to material from designated borrow areas (provided by the Employer).

Where it is required that material be obtained from commercial sources, payment for procuring the material will be made under item PSDM 8.3.17."

PSDM 8.3.5 Selected layer compacted to 93% of modified AASHTO maximum density

REPLACE THE HEADING AND THE CONTENTS OF THIS ITEM WITH THE FOLLOWING:

"PSDM 8.3.5 Selected layer using material from designated borrow pits or excavations:

(iii) Compacted to 90% of modified AASHTO densityUnit : m³

(iv) Compacted to 93% of modified AASHTO densityUnit : m³

(v) Compacted to 100% of modified AASHTO density (sand).....Unit : m³

The unit of measurement shall be the cubic metre and the quantity will be calculated from the authorised dimensions of the compacted layer.

The tendered rates shall include full compensation for excavating the material as if in soft material for loading, transporting for the free-haul distance, for off-loading, spreading, watering, mixing, breaking down and compacting the layer."

PSDM 8.3.7 Cut to spoil or stockpile from:
REPLACE THE HEADING WITH THE FOLLOWING:

"PSDM 8.3.7 Cut to spoil from:"
PSDM 8.3.12 Overhaul:

REPLACE THIS ITEM WITH THE FOLLOWING:

PSDM 8.3.16 Gravel surface layer

REPLACE THE CONTENTS OF THIS ITEM WITH THE FOLLOWING:

"The unit of measurement shall be the cubic metre of gravel surface layer and the quantity will be determined from the authorised dimensions of the compacted layer.
The tendered rate shall include full compensation for excavating the material as if in soft material, for loading and transporting the material for the free-haul distance, for off-loading, spreading, breaking down, watering, mixing and compacting the material." *ADD THE FOLLOWING ITEMS:*

"PSDM 8.3.17 Extra over items 8.3.4, 8.3.5 and 8.3.16 for obtaining material from commercial sources.....Unit : m³

The tendered rate shall include full compensation for the additional cost of finding a suitable source of material, for procuring the material and paying all royalties or other charges to the owner of the source, for transporting the material to the point of use regardless of the distance hauled and for excavating in intermediate, hard or boulder material as required.

Items PSDM 8.3.6 do not apply to material obtained from commercial sources.

PSDM 8.3.19 Sidewalks:

- (a) Fill compacted to 90% of modified AASHTO density and obtained from:
- (i) Designated borrow pitsUnit : m³
 - (ii) Commercial sources.....Unit : m³
 - (iii) ExcavationsUnit : m³
- (b) Scarify in situ material to a depth of 150 mm and compact to 90% of modified AASHTO density.....Unit : m³
- (c) Excavated material removed to spoilUnit : m³

The tendered rates shall include full compensation for constructing the sidewalks to the profiles indicated either on the Drawings or by the Engineer, for working in restricted areas, for using material classified as soft material with a maximum particle size of 60 mm, and for carrying out the work in accordance with the Specifications.

Additional payment will be made under item PSDM 8.3.12 if overhaul is applicable to subitems (a)(i), (a)(iii) and (c) above.

PSDM 8.3.20 Scarify, mix and compact existing layerworks (top 150 mm) Unit : m³

This item applies to areas where the new road levels will be higher than the existing. The rate shall cover the cost to scarify the existing tar and base to a depth of 150 mm, mixing it with some of the new material (base or subbase), shaping it to the new levels and lines and compacting the layer to 98% of the MOD AASHTO density.

PSDM 8.3.21 Extra over item 8.3.7 for benching into existing layerworks Unit : m

The rate shall cover the extra cost for neatly cutting through the existing tar and benching into the existing road layers as shown on drawing no.

PSDM 8.3.22 Tie in with existing road edge Unit : m

The tendered rate shall include full compensation for removal and disposal of existing concrete backing, protecting the existing paving when excavating the road box adjacent to it and tying the new layerworks to the existing.

- 119.
- 120.
- 121.
- 122.
- 123.
- 124.
- 125.
- 126.
- 127.
- 128.
- 129.
- 130.
- 131.
- 132.
- 133.
- 134.
- 135.
- 136.
- 137.
- 138.
- 139.
- 140.
- 141.
- 142.
- 143.
- 144.
- 145.
- 146.
- 147.
- 148.
- 149.
- 150.
- 151.

152. PSL MEDIUM-PRESSURE PIPELINES

PSL 2 CONSTRUCTION (Clause 5)

PSL 2.1 uPVC PIPES AND SPECIALS (Subclause 3.2)

All fittings, accessories and specials shall be Class 16, in compliance to the latest edition of the relevant SANS or ISO specifications and JASWIC approval.

Reticulation pipes between 7 mm and 300 mm diameter shall be uPVC pressure pipe, Class 12 in 6 m standard lengths to SANS 966 with spigot and socket rubber ring joints.

Cut pipes shall only be used at pipe junctions and street intersections to position valves and specials as shown on the drawings or as may be indicated by the Engineer.

Pipes shall be laid with a cover of 0,9 m. To avoid other services the cover may be gradually increased or decreased to a minimum cover of 0,8 m and a maximum cover of 1,2 m.

PSL 3 JOINTING MATERIALS (uPVC PIPES) (Subclause 3.8.1)

Cast-iron tees, bends and end caps shall be socketed for uPVC pressure pipes.

PSL 4 CORROSION PROTECTION

PSL 4.1 Joints, bolts, nuts and washers (Subclause 3.9.5)

Cast iron short collar couplings, flanges and saddles shall be protected against corrosion using cement mortar.

PSL 4.2 Valves (Subclause 3.10)

Extract from City of Cape Town Specifications:

- All valves shall be AVK or similar approved type and be approved by the Director: Water and Sanitation.
- Valves to be of the resilient seal or wedge-gate type. Resilient seal valves shall be used for general applications, and wedge-gate valves shall be used for valves dividing zones, or similar key applications
- Valves shall be clockwise opening / left hand closing.
- Direction of opening to be clearly marked on valve body or spindle cap.
- Valves shall be heavy duty; class 16.
- Valves shall have non-rising spindles.
- Valves shall be fitted with cast iron cap tops, secured with retaining bolts.
- Only valves supplied with minimum thickness of 250 micron Copon KSIR 88 epoxy paint applied to all internal and external surfaces after it has been thoroughly cleaned by grit blastings to SA 2 ½ finish in compliance with the requirements of SIS 05 09 00 or valves with similar approved coatings, will be acceptable.
- Valve chambers shall be constructed in accordance with Drawing W1.
- Valve bell tobies shall be shall be ductile iron conforming to SANS 50124. The covers are to be secured to the frame with a galvanised chain or cable.
- Valve covers for general purpose valves shall be painted blue and shall protrude about 25mm above ground level in non-paved areas.
- Valve covers for zonal valves and valves which generally remain closed, shall be painted red and shall protrude about 25mm above ground level.

PSL 4.3 Fire Hydrants

Extract from City of Cape Town Specifications:

- Fire hydrants shall be Ainsworth or similar approved type and shall be installed in accordance with SANS 1200, comply with the local Fire Department standard regulations, and approved by the Director: Water and Sanitation.
- All Fire Hydrants shall be 65 mm diameter (internal).
- Outlets shall be London round thread with loose cap and securing chain.
- Hydrant spindles shall be provided with cast iron caps, secured with retaining bolts.
- Hydrants shall be clockwise opening / left hand closing.
- Only hydrants supplied with minimum thickness of 250 micron Copon KSIR 88 epoxy paint applied to all internal and external surfaces after it has been thoroughly cleaned by grit blastings

to SA 2 ½ finish in compliance with the requirements of SIS 05 09 00 or hydrants with similar approved coatings, will be acceptable.

- Hydrant covers and frames shall be ductile iron conforming to SANS 50124 and shall be painted with yellow oil paint. The covers are to be secured to the frame with a galvanised chain or cable.
- Hydrants shall be supplied and installed complete with a flanged CI extension piece complete with stainless steel nuts and bolts to ensure depth not greater than 400 mm.
- Hydrant chambers to be constructed in accordance with Drawing W2.
- Hydrants shall be installed at the end of dead "runs" for charging and bleeding the lines.

All steel pipes and fittings including those within the hydrant chamber shall be protected by means of cement mortar lining and sheathing. All cast iron fittings shall be protected by means of a cement mortar lining.

PSL 4.4 Fittings and Specials

All fittings and specials shall be Class 16.

Extract from City of Cape Town Specifications:

- Fittings and specials for uPVC pipes shall be cast iron or ductile iron with spigot and socket rubber ring joints and shall comply with the relevant requirements of SANS 966 or EN 12842.
- All cast iron or ductile iron fittings shall be fusion bonded thermoplastic coated internally and externally to a minimum thickness of 250 micron.
- Only stainless steel bolts and nuts shall be used on all fittings such as saddles, flanges, short collar couplings, etc.

PSL 5 STANDARD HYDRAULIC PIPE TEST (Subclause 7.3)

PSL 5.1 Test Pressure and Time of Test (Subclause 7.3.1.2)

All water mains shall be pressure tested as specified in SANS 1200-L with all fittings, specials and house connections and leadings in place.

PSL 5.2 Permissible Leakage Rates (Subclause 7.3.3)

For pipe sizes up to and including 300 mm diameter, no leakage will be permissible.

PSL 6 CONNECTING TO EXISTING PIPES

PSL 6.1 General

The work involving the connection to, or cutting into existing pipes, will be executed by the City of Cape Town. A Prime Cost Sum has been allowed in the Schedule of Quantities for this work.

PSL 8 MEASUREMENT AND PAYMENT (Clause 8)

PSL 8.1 Connecting Into Existing Watermains

Unit: Prov Sum

Payment shall be made for amounts invoiced by the City of Cape Town, paid by the Contractor and approved by the Engineer.

PSL 8.2 Overheads, Charges and Profit on PSL 8.1

Unit: %

The tendered percentage shall be the percentage of approved payments made to the Municipality and shall cover all costs incurred by the Contractor under PSL 8.1, and profit.

153. PSLB BEDDING (PIPES)

154. PSLB 1 MATERIALS (Clause 3)

PSLB 1.1 SELECTED GRANULAR MATERIAL (Subclause 3.1)

Selected granular material shall be of a granular, non-plastic nature and shall conform to the following grading:

% passing	4,750 mm sieve 95% min
	0,425 mm sieve 50% min
	0,075 mm sieve 10% max

and shall have a compactibility factor (as determined by the test given in Section LB, Part 3 of SANS 0120) not exceeding 0,4.

PSLB 2 CLASS OF BEDDING (Subclause 3.3)

Watermains, stormwater and sewer pipes shall all be laid on **Class B** bedding, unless otherwise shown on the Drawings, or instructed by the Engineer.

PSLB 2.1 Bedding Materials (Subclause 3.4)

Suitable selected bedding material will be available from the trench excavations along the route. Should additional selected granular material be required, it shall be obtained from other excavations on the site.

PSLB 2.2 Contractor to Excavate Selectively for Bedding Materials (Subclause 3.4.1)

Notwithstanding the requirements of Subclause 3.7 of SANS 1200 DB and Subclause 3.4.1 of SANS 1200 LB regarding the use of selective methods of excavating, the Contractor shall use selective methods of excavating and shall provide and use plant that will enable him to avoid burying or contaminating material that is suitable and is required for bedding.

PSLB 3 CONSTRUCTION (Clause 5)

PSLB 3.1 Compacting (Subclause 5.1.4)

The degree of compaction of the bedding shall be 100% of Modified AASHTO in sand and not less than 93% in the case of non-sand materials.

PSLB 4 MEASUREMENT AND PAYMENT

Notwithstanding the fact that suitable bedding cradle and fill blanket material will be available from the trenches, the provision of bedding will be measured as a separate item in terms of SANS 1200 LB Subclause 8.2.1.

PSLC CABLE DUCTS

PSLC 1 MATERIALS (Clause 3)

PSLC 1.1 Ducts (Subclause 3.1)

All ducts shall be heavy-duty uPVC pipes to SANS 791, as amended.

PSLC 2 CONSTRUCTION

PSLC 2.1 Trench Widths and Depths (Subclause 5.1.1)

Where this Subclause refers to Drawing LC-1, amend it to read the "Typical Duct Installation Details as specified".

PSLC 2.2 Bedding and Compaction of Bedding (Subclause 5.2.2)

Where ducts are laid under roads the pipes shall be bedded in a 1:20 cement / sand mixture (soilcrete).

PSLC 2.3 Concrete Encasement (Subclause 5.5)

Concrete encasement shall only be used if directed by the Engineer. The concrete shall be 20 MPa / 38mm.

PSLC 2.4 Road Crossings (Subclause 5.8)

The position of each duct crossing shall be marked in accordance with the duct marker details on the "Typical Duct Installation Details" drawing and as described below.

PSLC 2.5 Position to be Marked (Subclause 5.10)

The position of all ducts installed under the roadway shall be indicated by a kerb with the applicable lettering (eg. "E DUCT", "T DUCT" etc) cut into the kerbface using 70 mm high lettering. The position of all ducts shall be confirmed to the Engineer prior to cutting into the kerbs.

PSLC 3 MEASUREMENT AND PAYMENT (Clause 8)

PSLC 3.1 Kerb marks Unit: No

The duct markers shall be measured by the number. The rate shall include the cost of all materials, labour, plant and supervision necessary to complete the work as specified. The rate shall also include for locating and proving to the Engineer the position of the service before marking as well as providing the Engineer with detailed records of the position of each duct or group of ducts.

PSLD SEWERS

PSLD 1 MATERIALS (Clause 3)

PSLD 1.1 Sewer Pipes (Subclause 3.1.1)

Sewer pipes shall be uPVC Class 34 (Heavy Duty), solid wall pipes to SANS 791 with spigot and socket rubber ring joints.

PSLD 1.2 Manholes, Chambers etc (Subclause 3.5)

PSLD 1.2.1 General

Precast concrete or solid fibre cement manholes, complete with covers and frames, are to be constructed in accordance with the details shown on the drawings.

PSLD 1.2.2 Bricks (Subclause 3.5.1)

Bricks shall be obtained from an approved manufacturer and shall be special grade Class NFX (Non-facing extra) clay bricks to SANS 227 with a nominal compressive strength of 21 MPa and a water absorption of not more than 10 %.

In addition, perforated bricks with cavities not exceeding 25 % are acceptable. The Contractor shall submit to the Engineer samples of the bricks he intends using in the construction of the Works (see Subclause 3.1 of SANS 1200 A or SANS 1200 AA as applicable). The samples of bricks that are approved will be retained by the Engineer.

PSLD 1.2.3 Cement

Sulphate resisting cement shall be used for all mortar and concrete work for foul sewer manholes.

PSLD 1.2.4 Aggregate

Dolomitic aggregate and dolomitic sand shall be used for all mortar and concrete work for foul sewer manholes.

PSLD 1.2.5 Step Irons (Subclause 3.5.7)

Step irons shall be manufactured from mild steel encapsulated with polypropylene and have antislip blocks on the stepping surface.

PSLD 1.2.6 Manhole Covers and Frames (Subclause 3.5.8)

Manhole covers and frames shall be ductile iron heavy duty type 2A with hinged cover in accordance with SANS 50124-D400. Samples shall be submitted for approval together with compliance certificates before any covers are delivered to site.

PSLD 1.2.7 Watertightness of Manholes

Manholes shall be visually inspected internally for ingress of water. All manholes shall be watertight. The joints between the manhole rings shall be sealed in accordance with the details on the drawings.

155. PSLD 2 CONSTRUCTION (Clause 5)

PSLD2.1 Construction of backdrops

Where backdrops are required they shall be constructed externally on new manholes and internally on existing manholes. The construction of the backdrops shall be in accordance with the drawings.

PSLD2.2 Connection to Existing Foul Sewers

The benching and channels of the existing manhole shall be adapted to accommodate the new pipe connection. The Contractor shall exercise extreme care when connecting into the existing sewer to prevent the ingress of water and sand into the system. The Contractor shall make good any damage and clean the pipeline should this be necessary. The benching and manhole walls shall be reinstated after completing the channel connection.

Work must be planned and executed in such a manner so as to avoid interruption of the existing service if at all possible.

PSLD 2.3 Manholes, Inspection Chambers etc (Clause 5.6)

PSLD 2.3.1 General (Subclause 5.6.1)

The concrete used in roof slabs in foul sewer structures shall be at least 30 MPa with a cover of 45 mm.
The concrete used in the floor slabs in foul sewer structures shall be at least 25 MPa with a cover of 50 mm.

PSLD 3 TESTING (Clause 7)

PSLD 3.1 Watertightness of Manholes (Subclause 7.2.6)

Manholes shall be visually inspected internally for ingress of water. All manholes shall be watertight.

PSLD 4 SEWER CONNECTIONS

PSLD 4.1 General

The Contractor shall take care in setting out and constructing the plot connection pipework in the exact positions to ensure the easy connection of the top structures when erected.

PSLD 5 CCTV INSPECTION

PSLD 5.1 Description

Prior to acceptance, specialist Sub-contractors shall inspect the sewers using closed circuit television to confirm compliance with the specifications. The work shall be carried out in accordance with the City of Cape Town requirements.

PSLD 6 MEASUREMENT AND PAYMENT

PSLD 6.1 Closed circuit television (CCTV)

PSLD 6.1.1 Closed circuit television (CCTV) inspection of sewer pipes to CoCT specifications
and as approved by the Engineer Unit: m

PSLE STORMWATER DRAINAGE

PSLE 1 CONSTRUCTION (Clause 5)

PSLE 1.1 Bedding and Laying (Subclause 5.2)

All pipes shall be laid on Class B bedding, as specified in SANS 1200 LB. Spigot and socket pipes with rubber ring joints must be used exclusively

PSLE 2 MEASUREMENT AND PAYMENT (Clause 8)

PSLE 2.1 Supply and Install Manholes, Catchpits and the Like (Subclause 8.2.8)

The unit of measurement shall be the number of each, in the depth increments as scheduled, fully installed in accordance with the details shown on the drawings.

The rate shall cover the cost of excavating and backfilling with approved selected material from site borrow pits, stockpile or commercial sources, compacted to 93 % of MAASHTO density (100 % for sand), supplying and installing of all material and accessories, the inlet kerbs and the channel adjacent thereto as well as for the removal and spoil of all surplus material. The rate shall also include the connection of pipes to manholes, catchpits, etc. and of building pipes into the walls of such structures and the cutting of skewed ends."

PSLE 2.2 Supply, handle, bed and lay sub-surface drains complete

The length shall be measured on the centre line of the completed subsurface drain. The rate shall cover the cost of supplying, transporting, off-loading and installing all materials as well as for cutting, wasting, overlapping and installing of the materials where applicable.

PSLE 2.3 Connecting sub-surface drains to manhole or catchpit

The unit is the number of subsurface drain pipes built in at manholes or catchpits. The rate shall cover the cost of all labour, plant and materials necessary to connect the subsurface drain to manholes and/or catchpits, and making the structure watertight, all as shown on the drawings.

PSLE 2.4 Sub-surface drain rodding eye

The unit of measurement is the number of rodding eyes supplied and installed. The rate shall include full compensation for all costs, overheads and profits associated with the works.

<u>Item</u>	<u>Unit</u>
Supply, handle, bed and lay sub-surface drains complete to City of Cape Town standard drawing SW1 for pipe size: 110mm dia	m
Connect sub-surface drain to manhole or catchpit.....	No.
Sub-surface drain rodding eye.....	No.

PSLF ERF CONNECTIONS (WATER)

PSLF 1 SCOPE

This specification covers the construction of the water erf connections.

PSLF 2.1 Pipes

Erf connections shall be HDPE pipes to SANS ISO 4427 PE 100 PN16 using compression fittings and joints.

PSLF 2.2 Compression fittings for HDPE Pipes

Extract from City of Cape Town Specifications:

- All compression fittings included in this specification shall be designed and be suitable for use with potable water distribution systems and be supplied from manufacturer complying with the requirements of ISO 9002. Fittings bodies may be of various configurations and include male adaptors, female adaptors, couplings, reduced couplings, elbows 90°, elbows 90° with male off take, elbows 90° with female off takes, elbows 45°, elbows 45° with male off take, Tee 90°, Tee 90° reduced / increased, Tee 90° with male off take, Tee 90° with female off take, Flanged joints, end caps and wall plate-elbows. The main size range is from 16 mm diameter up to 110 mm diameter. The fittings must be able to operate at a constant working pressure of 16 bar at an ambient temperature of 20 degree centigrade.
- Suppliers must provide approvals of minimum three internationally recognised authorities, such as DVGW, DS, SVGW etc. for their products.
- All bodies shall be injection moulded from recognised top quality polypropylene (PP) and be coloured black. The bodies must have moulded-in manufacturer identification, material and series information and show the dimensions of the pipe outside diameter and if necessary of the threads. All male and female threads of the bodies shall be injection moulded according to the ISO 7/1 standard.
- All compression fitting nuts shall be injection moulded from recognised top quality polypropylene (PP) and be coloured blue. The nuts must have an UV resistance of grade 8 according to ASTM D2565 and shall have moulded-in manufacturer identification and show the KIWA and Australian standard approval. The outer circumference must be provided with ribs to enhance handgrip or the tightening of the nut with adequate tools.
- All clamp rings shall be injection moulded from recognised top quality Polyacetalic Resin (POM) and be coloured white. Clamp rings shall not be connected to the thrust rings but be able to move freely on them. Thrust rings and clamp rings must be two (2) different components.
- All thrust rings shall be injection moulded from recognised top quality polypropylene (PP) and be coloured black. Thrust rings up to 50 mm diameter shall be secured in the body so that they cannot fall if the fittings are disassembled. Thrust rings must not be connected to the clamp rings. Thrust rings must apply pressure on the gaskets if the nut is tightened. Thrust rings and clamp rings must be two (2) different components.
- All gaskets shall be made of a recognised top quality Nitrile Rubber (NBR) and not contain a plasticiser that when in direct contact, has a harmful effect to either plastic pipes or fittings. Each gasket must have a smooth finish and be free from moulding flashes or similar. Gaskets up to 63 mm diameter must have an average Shore hardness of 70 ± 5 degrees. Gaskets greater than 63 mm diameter must have an average Shore hardness of 60 ± 5 degrees.
- All gaskets shall be coloured black. All gaskets must have a conical shape on the inside of the gasket for an easy insertion of the pipe without disassembling of the fitting. All gaskets are to have a wide flat sealing contact function with the pipe in question. All gaskets must have a cylindrical shape on the outside of the gasket. Gaskets must have two (2) lips on the bottom of the gaskets to guarantee a good sealing in cases of suction and vacuum. Gaskets must be pre-lubricated to facilitate easy installation. The use of O-rings as a pipe to fitting seal is not permitted.
- The compression fittings must conform to the relevant internationally recognised performance requirements:
 - Type test Standard Dimensions of the threads
 - Tightness of the joints
 - Tightness of the joints when subjected to bending
 - Resistance to pull-out
 - Internal under-pressure test
 - Long term pressure test
 - ISO 7/1
 - ISO 3458
 - ISO 3503
 - ISO 3501
 - ISO 3459
 - ISO/DIS 14236
- Samples to be submitted for the City's approval.

PSLF 2.3 Laying from Mains to erven

House lead-ins shall be laid perpendicular to the watermain and in a straight line without any coupling between the watermain and the water meter. Connections crossing roads shall be at a depth of at least 500 mm below final surfacing level.

PSLF 3 MEASUREMENT AND PAYMENT

PSLF 3.1 Supply, lay and test erf connections

The measurement and payment for the supply and laying of erf connections will be made in accordance with SANS 1200 LF 8.2.2. Fittings and specials will, however, be measured separately in terms of SANS 1200 LF 8.2.3.

PSME SUBBASE

PSME 2 MATERIALS (Clause 3)

PSME 2.1 Physical Properties (Subclause 3.2)

156. PSME 2.1.1 Subbase Material (Subclause 3.2.1)

The sub base material placed on the plots and in the roads shall comply with the requirements of a G5 or G7 material as described in Table 3B in SANS 1200 M.

PSME 3 CONSTRUCTION (Clause 5)

157. PSME 3.1 Excavation (Subclause 5.2)

Material shall be imported from approved commercial sources.

PSME 3.2 Placing and Compaction (Subclause 5.4)

158. PSME 3.2.1 Compaction (Subclause 5.4.4)

The 100 mm thick subbase placed on the plots and the 150 mm thick subbase placed in the roads shall be compacted to 95% of Modified AASHTO density.

159. PSME 3.3 Stabilisation (Subclause 5.5)

The roads shall be stabilised with 3,5% cement by mass.

160. PSME 3.4 Transport (Subclause 5.7)

161.

PSME 3.4.1 Overhaul (Subclause 5.7.2)

The entire site shall be deemed to be within the freehaul distance. Overhaul shall not apply to subbase material obtained from commercial sources.

162. PSME 4 TOLERANCES (Subclause 6)

163. PSME 4.1 Thickness (Subclause 6.1.4)

Add the following:

The Engineer may accept thicknesses in excess of those shown on the drawings but no payment will be made for any excess material over and above the specified thickness.

PSMF BASE

PSMF 1 PHYSICAL PROPERTIES

The base material placed in roads shall comply with the requirements of a G4 or G3, whichever is required for the Works Project, material as described in SANS 1200 MF subclause 3.3.1.

PSMF 2 COMPACTION (Subclause 5.4.4)

The base shall be compacted to a density of 98% of modified AASHTO maximum density.

PSMF 3 TOLERANCES (Subclause 6)

PSMF 3.1 Thickness (Subclause 6.1.4)

Add the following to Subclause 6.1.4.

The Engineer may accept thicknesses in excess of those specified on the drawings but no payment will be made for any excess material over and above the specified thickness.

PSMH ASPHALT BASE AND SURFACING

164. PSMH 1 SCOPE (Clause 1)

165.

PSMH 1.1 Type of Asphalt

Roads

Continuously graded, medium mix, SABS asphalt with 5,5% bitumen content to a minimum thickness of 30mm or 40mm must be used as surfacing to the roads. The smoothness must be in accordance with degree of accuracy 2 and a tolerance of 0.

Sidewalks

Hot pavement mix with 6,5% bitumen content to a minimum thickness of 25mm must be used as surfacing to the surfaced sidewalks. The smoothness must be in accordance with degree of accuracy 2 and a tolerance of 0.

PSMH 2 MATERIALS (Clause 3)

PSMH 2.1 Bituminous Binder (Subclause 3.4)

PSMH 2.1.1 Surfacing (Subclause 3.4.2)

A 50/70 penetration grade bitumen, complying with the applicable requirements of SABS 307 must be used.

PSMH 2.3 Aggregate (Subclause 3.5)

PSMH 2.3.1 Grading (Subclause 3.5.6)

The gradings of the aggregate in the job mixes for surfacing shall be as approved by the Engineer. For tendering purposes the gradings given in column 4 of Table 1 and in column 5 (for carriageways) and 7 (for sidewalks) of Table 2 of 1200 MH, for surfacing shall be assumed. Reasonable variations from the means of these envelopes will not be deemed to be grounds for any additional compensation

PSMH 3 PLANT AND EQUIPMENT (Clause 4)

PSMH 3.1 Mixing Plant (Subclause 4.3)

The mixes shall be obtained from an approved commercial source and shall be produced in a batch mixing plant.

PSMH 4 TESTING (Clause 7)

PSMH 4.1 Mix Design (Subclause 7.1)

The Contractor is required to fulfill the provisions of this clause.

PSMH 5.2 Coring of Asphalt Surfacing

The Contractor shall provide suitable coring machines capable of cutting 100 mm diameter cores from the completed asphalt surfacing. The Contractor will be paid in accordance with the relevant pay item for cutting cores ordered by the Engineer for testing by the Engineer. The cost of extracting cores for process control by the Contractor shall be included in the rates for the construction of the asphalt pavement surfacing, and will not be paid for separately.

All core holes, whether extracted for the Contractor's process control, or from the Engineer's testing, shall be neatly repaired with asphalt and compacted to the specified density by the Contractor. Wherever possible, the cores shall be filled with the same mix as used for the layer tested.

PSMH 5.3 Tie into Existing Roads

Where the proposed roads intersect with existing roads, the edges of each existing layer of the road construction shall be cut back vertically to straight lines so that the one layer overlaps the lower layer by at least 300 mm.

PSMH 6 MEASUREMENT AND PAYMENT

PSMH 6.1 Computation of Quantities (Subclause 8.4)

The unit of measurement shall be the ton of asphalt surfacing constructed to the thickness specified. No payment will be made for material wasted. The rate shall include full compensation for procuring, furnishing, heating, mixing, placing and compaction of all materials as specified as well as process control testing, protecting and maintaining the work as specified

PSMH 6.2 Tie into existing roads Unit: m

Measurement shall be per metre of existing road edge tied into and payment shall include for the cutting back of all the layers of the existing road.

PSMH 6.3 100 mm cores in asphalt surfacing Unit: No.

The unit of measurement shall be the number of 100 mm cores drilled and recovered as instructed by the Engineer for the Engineer's testing. No separate payment shall be made for cores drilled as part of the Contractor's obligation under process control, the costs of which shall be included in the prices for the various items of asphalt surfacing.

The rate shall cover the cost of plant, fuel, labour and other incidentals necessary for drilling the cores as directed, and for repairing the holes drilled.

PSMJ SEGMENTED PAVING

PSMJ 5 CONSTRUCTION

PSMJ 5.2 EDGE RESTRAINTS

ADD THE FOLLOWING:

"Edge Restraints shall be constructed with expansion joints of width at least 12 mm at intervals not exceeding 10 m. These joints must be filled with a compound such as flexcell or equivalent product and sealed with a polysulphide sealant."

PSMJ 5.7 JOINT FILLING

REPLACE THE LAST TWO PARAGRAPHS WITH THE FOLLOWING:

"A mixture of sand that complies with 3.3(b) and cement (Ratio 5:1) shall be broomed into the joints until they are full, and sufficient passes of a plate compactor shall be made to settle the joint filling. The procedure shall be repeated until the joints remain full after compaction.

All excess shall be washed off and care shall be taken not to contaminate the stormwater system. Damage caused during compaction shall be made good by the Contractor at his own expense."

PSMJ 8 MEASUREMENT AND PAYMENT

PSMJ 8.2 SCHEDULED ITEMS

PSMJ 8.2.1 Provision of edge restraints:

ADD THE FOLLOWING:

"The rates shall cover all the costs for excavating, bedding, laying (including expansion joints), jointing, compacting and backfilling, including the removal of excess material."

PSMJ 8.2.3 Cutting units to fit edge restraints Unit : m

DELETE THE FIRST SENTENCE OF THIS CLAUSE AND REPLACE WITH THE FOLLOWING:

"No separate items will be scheduled for straight, raking and circular cutting."

ADD THE FOLLOWING ITEMS:

"PSMJ 8.2.6 Construction of paving complete using pavers from stockpile.....Unit:m²

The rate shall cover the cost of taking paving units from a stockpile on site, supply of sand, placing the bedding layer, laying the units, compacting the pavement, filling the gaps, filling joints, locking up the pavement (when relevant) and removing excess sand.

PSMK KERBING AND CHANNELLING

166. PSMK 1 MATERIAL (Clause 3)

The material on which precast kerbs and channels are bedded shall consist of Grade 15/13 concrete to SANS 1200 GA and to the dimensions indicated on the drawings.

167.

168. PSMK 1.1 Bedding Material (Subclause 3.9)

Replace Subclause 3.9 with the following:

"Bedding and backing for precast kerbs and channels shall be 15MPa / 13 mm concrete to SANS 1200 GA, to the dimensions indicated on the Drawings."

169. PSMK 1.2 Cast-In-Situ Concrete (Subclauses 3.3 and 5.4)

Add the following :

"Cast-in-situ concrete for curves less than 1 m and for transitions shall be 25 MPa / 19 mm."

PSMK 1.3 Nominal Lengths of Precast Units (Subclause 3.2.2)

Replace the second sentence and table with the following :

Units laid to a radius of 1,0 m or greater shall be precast and shall have the following nominal lengths:

Radius in Plan	Nominal Length
1,0 m to 20,0 m	0,3 m
Greater than 20 m and straight	1,0 m

PSMK 1.4 Expansion Joints in Kerbs and Channels (Subclause 5.2)

Replace the fourth sentence of Subclause 5.2 with the following :

"Provision shall be made in kerbs and channels for expansion joints of width at least 12 mm at intervals not exceeding 20 m. The concrete surfaces shall be primed and the joints filled with an approved sealant. Sealant for expansion joints in kerbing shall comply with the relevant requirements of SANS 110. Sealant for expansion joints in channels shall comply with the relevant requirements of BS 2499."

170. PSMK 3 MEASUREMENT AND PAYMENT (Clause 8)

PSMK 3.1 Bedding and Backing of Kerbs

Measurement and payment for bedding as well as the backing of kerbs as specified in SANS 1200 MK 5.2 shall be included in the separate items scheduled in terms of Subclauses 8.2.1 and 8.2.2 of SANS 1200 MK. The rates shall cover the cost of supplying and installing the bedding as specified in Subclause PSMK 1.1

PSMM ANCILLARY ROADWORKS

PSMM 1. STOP LINES

Stop lines will be used at intersections, and shall extend across the full width of the appropriate lane and in locations as directed by the Engineer.

PSMM 2. STOP SIGNS

Stop signs shall be placed 1,0 m behind the kerb line with the underside of the sign face 2,1 m above ground level.

The sign shall be Type R1 and the lettering shall conform to the 203 and 305 mm series C lettering tables of the SADC Road Traffic Signs Manual.

PSMM 3. CENTRE LINES AND LANE LINES

White centre lines and lane lines shall be broken lines of at least 100 mm width consisting of 1,5 m of painted line sprayed 3,0 m apart.

PSMM 4. BARRIER LINES

A barrier line shall be a continuous white line of at least 100 mm width. The Contractor's attention is drawn to the Road Traffic Ordinance No. 21 of 1966 as amended, and the Regulations pertaining thereto.

PSMM 5. EDGE LINES

Edge lines where needed shall be continuous red lines, 100 mm wide.

PSMM 6. DIRECTIONAL ARROWS

Yellow or white markings shall be 200 mm width consisting of 2,5 m long painted line and arrow. Cycle lanes to be marked with 1.0m long painted arrows.

PSMM 7. PEDESTRIAN PASSING

White blocks shall be of at least 600 mm width and 2.4 m long, spaced at a 600 mm apart.

3. EXISTING SERVICES

The Contractor shall carry out the works with the minimum interference to existing services. He shall co-operate with all Authorities and Departments concerned and he shall be solely responsible for carrying out the following operations and checks:

- (i) He shall inform all Authorities and Departments in good time before the correct stage of the construction is reached for the laying and/or relaying of any particular services.
- (ii) He shall set out the lines and levels of kerbs, pipes, culverts and any other necessary features of the Contract in order that Authorities and Departments are able to lay and/or relay services correctly.

It shall be clearly understood that obtaining the necessary wayleaves and any extra work, such as the removal of any portion of the Works already executed either by the Contractor or other Authority or Department and its subsequent re-execution, which is caused by the Contractor's failure to observe and carry out his responsibilities as specified, will be at his own cost.

If the Contractor considers that the progress of the works is being retarded by the failure of any Authority or Department to lay, remove or divert pipes, ducts, services, cables or poles within a reasonable time, he shall immediately notify the Engineer in writing, stating clearly the number of days of delay claimed. The Engineer will then decide whether such a claim is justifiable, and in the event of the claim being accepted he will hand to the Contractor a certificate stating clearly the number of days of delay sanctioned.

The cost of repairing any damage to services, due to miscalculations or negligence on the part of the Contractor or his failure to carry out the duties set out in this Clause, shall be borne by the Contractor.

(a) Protection of Overhead and Underground Services

Services and sub-surface obstructions likely to be affected by the work, based on available records and surveys, have been shown on the drawings. Although every care has been exercised in the presentation of the available data, the Employer cannot and does not vouch for the accuracy or completeness of the information shown. Whenever the Contractor deems it necessary to determine the exact location of an existing service or obstruction, he shall, at his own expense, make any examination that he may consider desirable in advance of the work, and the Employer does not accept any liability for loss, damage or delay to the Contractor as a result of the non-location or inaccurate location of services or obstructions.

Where no underground services are shown on the drawings or scheduled, but the possibility of their presence can be reasonably inferred, the Contractor shall in collaboration with the Engineer, search for such services to establish their positions well in advance of the work. A full report shall then be submitted in good time to the Engineer, to enable the necessary arrangements for the protection, removal or diversion of the services before work is commenced in their vicinity.

In the event of damage to existing services, the Contractor shall take such immediate action as is necessary to prevent further damage or danger to life or property and shall immediately notify the Engineer who will issue instructions as to the necessary repairs or protective measures to be taken. The cost thereof shall be borne by the Contractor irrespective of whether the repairs or protective measures were carried out by him or by or on behalf of the service authority or department concerned.

As soon as an underground service not shown on the drawings is discovered, it shall be deemed to be a known service and the Contractor will be held responsible for any subsequent damage to it. If such service is damaged during the course of its discovery, the Contractor will be reimbursed for the cost of making good such damage, unless it is established by the Engineer that the Contractor did not exercise reasonable diligence and care and that the damage was avoidable.

(b) Existing Services

"Existing service" shall include any service which has been temporarily taken out of service to allow for the execution of the works or which has been taken out of service as a result of an event which necessitated the execution of the works.

(c) Condition of Existing Services

The Contractor acknowledges that he has inspected and examined all known existing services and all existing services subsequently discovered, as contemplated in (a) above and is satisfied that all such

services were in an acceptable and serviceable state at the commencement of the works, alternatively, upon discovery thereof as contemplated in (a) above.

In the event of a dispute as to the acceptability and/or serviceability of an existing service at the commencement of the works or upon the discovery of such service, the Contractor shall bear the onus of proving that the service in question was not in an acceptable and/or serviceable state at the commencement of the works.

(d) Maintenance, Protection and Relocation of Existing Services

During the course of the works, all existing services including traffic signals, watermains, sewers and stormwater reticulation, electricity transmission and telephone lines, cables, poles and conduits whether in service or not shall be protected, supported and maintained to the satisfaction of the service authority or department concerned and the Engineer. The Contractor shall bear all costs in this regard.

Where a bank of underground ducts, cables, etc. are crossed over a distance of less than 1.0 m they shall be regarded as a single crossing. Hydrants under pressure, watermain valve covers and manholes shall be kept unobstructed and accessible at all times.

The covers and frames of service manholes, catchpits, watermains, valve boxes and sewers will have to be adjusted where they are affected by the roadworks.

(e) Work in Close Proximity to Existing Services

The Contractor shall note that no mechanical excavators or vibratory type compactors may be used within three (3) metres of any telecommunications or electrical services. No pegs or stakes shall be driven into the ground in the vicinity of underground services unless their exact positions have been determined.

The Contractor's attention is drawn to the following with regard to work done in the proximity of ESKOM and other electrical services:

MACHINERY AND OCCUPATIONAL SAFETY ACT (Act No 6 of 1983) WITH REGULATIONS **D16 (7) Excavations**

"The builder or excavator shall ascertain as far as practicable the location and nature of underground services likely to be affected by the excavation and take such steps as may be necessary to prevent danger to persons."

THE ELECTRICITY ACT (Act No 40 of 1958) **Section 51(3) : Offences and Penalties**

"Any person who without legal right (the proof of which shall be upon him) cuts or damages or interferes with any apparatus for generating, transmitting or distributing electricity, shall be guilty of an offence and liable on conviction to a fine not exceeding R1 000,00 or to imprisonment for a period not exceeding twelve months."

The Contractor shall take the above into account in the drawing up of his construction programme and in the calculation of his tendered rates, and shall note that no additional payment or compensation will be allowed for any additional costs or delays incurred as a result of compliance with these regulations, except as measured and paid under the Items listed in the Bill of Quantities.

The Contractor shall allow all reasonable access to the representatives of any Authority or Department for the purpose of maintaining, laying and/or relaying any services, cables or mains during the period of the Contract.

Permanent alterations to existing services ordered in writing by the Engineer, and for which no separate provision has been made in the Bill of Quantities, will be paid for under dayworks if required.

4. WAYLEAVES, PERMISSIONS AND PERMITS

The Contractor shall be responsible for obtaining all of the necessary wayleaves, permissions or permits applicable to working near any existing services or other infrastructure on Site, and shall ensure that any wayleaves, permissions or permits obtained by the Employer's Agent prior to the award of the contract are transferred into the Contractor's name.

The Contractor shall abide by any 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.

5. LOCAL PRODUCTION AND CONTENT

The Contractor shall be responsible for obtaining all of the necessary wayleaves, permissions or permits applicable to working near any existing services or other infrastructure on Site, and shall ensure that any wayleaves, permissions or permits obtained by the Employer's Agent prior to the award of the contract are transferred into the Contractor's name.

6. FEATURES REQUIRING SPECIAL ATTENTION

6.1. Services to be constructed / relocated by others

Where applicable, details of services which have to be constructed, installed or relocated by others will be provided.

6.2. Surveys and Beacons

The Contractor shall preserve, as far as is possible, any existing beacons and use them to place his own beacons for setting out and control of the work under this Contract. The setting-out co-ordinates on the drawings are based on the new WGS 84 co-ordinate system.

Should a Property or a Trigonometrical Survey beacon be buried or displaced by the Contractor, he shall bear the cost of searching for the beacon and, if so instructed, arrange for the checking of its position and/or replacement.

It may be that during the course of the construction of the Works certain pegs or beacons may be lost or disturbed due to unavoidable circumstances such as the close proximity to the works. Prior to commencing any operations in the vicinity of such pegs or beacons, the Contractor shall notify the Engineer that loss or disturbance of such pegs or beacons appears unavoidable. The Engineer may agree in writing that such beacons could not reasonably be preserved, and only those beacons so signed for will be replaced at the Employer's cost.

The cost of replacing pegs or beacons disturbed due to unavoidable circumstances as determined by the Engineer shall be paid for under dayworks, if required.

6.3. Standard of Materials, Workmanship, Testing and Performance

The attention of Tenderers is particularly drawn to the high standard of materials, workmanship, testing and performance applicable to his Contract as a whole and he shall convey this requirement to his proposed Sub-Contractors.

The Contractor will carry out control testing of materials and workmanship as required in terms of the specifications. Where necessary, the Engineer may carry out acceptance control testing. The Employer will not pay claims or grant extension of time for delays to the works resulting from the awaiting of test results. Testing as required by the Engineer will be effected as promptly as possible but it is in the Contractors own interest to submit material samples and other components of workmanship for testing in good time to assist in avoiding or minimising delays.

6.4. Weatherproof Protection for Workers

All staff required to continue working during rain shall be provided with oilskins and rubber knee boots, or other approved protective clothing and footwear.

6.5. Night Work and Work on Public Holidays

Where the Contractor requires staff to work overtime, he shall make the necessary arrangements with the Engineer and obtain written approval from the Engineer. The Contractor shall bear the cost of his overtime work.

6.6. Construction in Confined Areas

It will be necessary for the Contractor to work within confined and restricted areas. No additional payment will be made for work done in such areas, despite indications to the contrary in the Standard Specifications.

6.7. Health and Safety Plan

Prior to commencing work, the Contractor shall submit a Health and Safety Plan, compiled in accordance with the Project Works specification, the Project Specifications in PSA: General and the Health and Safety Specifications in C3.5: Management, to the Engineer for approval. The Contractor may not commence construction without the Engineer's approval of the Health and Safety Plan.

C3.5 Management

CONTENTS

- 3.5.1. FORMS FOR CONTRACT ADMINISTRATION
- 3.5.2 PARTICIPATION OF TARGETED LABOUR
- 3.5.3. COMMUNITY LIAISON OFFICER
- 3.5.4. PARTICIPATION OF TARGETED ENTERPRISES
- 3.5.5. ENVIRONMENTAL MANAGEMENT PROGRAMME
- 3.5.6. HEALTH AND SAFETY

3.5.1 FORMS FOR CONTRACT ADMINISTRATION

The Contractor shall complete, sign and submit with each monthly statement for payment in respect of each Works Project contract, the following updated returns (the format of which are attached in C3.6 Annexes):

- a) Monthly Project Labour Report (Annex 1)
- b) B-BBEE Sub-Contract Expenditure Report (Annex 2)
- c) Joint Venture Expenditure Report (Annex 3)
- d) Targeted Labour Contract Participation Expenditure Report (Annex 4)
- e) Targeted Enterprises Contract Participation Expenditure Report (Annex 5)

The Monthly Project Labour Report must include details of all labour (including that of sub-contractors) that are South African citizens earning less than R350.00 per day, as adjusted from time to time (excluding any benefits), who are employed on a temporary or contract basis on this contract in the month in question.

In addition to the Monthly Project Labour Report the Contractor shall simultaneously furnish the Employer's Agent with copies of the signed employment contracts entered into with such labour, together with certified copies of identification documents as well as evidence of payments to such labour in the form of copies of payslips or payroll runs. If the worker is paid in cash or by cheque, this information must be recorded on the envelope and the worker must acknowledge receipt of payment by signing for it and proof of such acknowledgement shall be furnished to the Employer's Agent.

The Monthly Project Labour Reports shall be completed and submitted in accordance with the instructions therein and copies of all submitted documents must be kept on site be made available to the employer's agent upon request.

The **B-BBEE Sub-Contract Expenditure Report** is required for monitoring the prime contractor's compliance with the sub-contracting conditions of the **Preference Schedule**.

The Joint Venture Expenditure Report is required for monitoring the joint venture's compliance with the percentage contributions of the JV partners as tendered, where the joint venture has been awarded preference points in respect of its consolidated B-BBEE scorecard.

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

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

The Expenditure Reports shall be verified by the Employer's Agent/Employer's Agent's Representative.

In respect of Annexes 2 and 3, the Employer shall, in addition to any other sanctions available to it, apply the financial penalties applicable to breach of preferencing conditions in the **Preference Schedule** in Part T2.2 Returnable Schedules. In the case of joint ventures (Annex 3), the contractor shall prove his compliance with item 6) in Section 2 of the **Preference Schedule** by providing a consolidated scorecard at his own cost on instruction from the Employer's Agent.

3.5.2 PARTICIPATION OF TARGETED LABOUR

3.5.2.1 Minimum targeted labour contract participation goal

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

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

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

The specified minimum targeted labour contract participation goal (CPGL) is

15%

The minimum CPGL is such that the Contractor will have to carry out some of the work that would normally have been undertaken using mechanised construction methods, by using labour intensive construction methods instead. It is left to the discretion of the Contractor to identify suitable work activities for the intensification of labour. The Contractor shall, within 5 working days of being requested in writing by the Employer's Agent to do so, submit details of his/her plan to achieve the minimum CPGL in the Works Project. If, due to the selection of items and quantities in any individual Works Project, it is not possible for the Contractor to achieve the specified minimum CPGL on that particular Works Project, then the Employer's Agent, at his/her sole discretion, may reduce such minimum CPGL upon motivation by the Contractor.

3.5.2.2 Definitions

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

"Target area" means the geographical area described in the Works Project contract document.

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

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

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

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

3.5.2.3 The selection and recruitment of targeted labour

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

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

3.5.2.4 Contract participation goal credits

Credits towards the achieving the minimum CPG_L shall be granted by converting the total monetary value of wages paid to targeted labour (including that of sub-contractors) to a percentage of the value of the contract. No credits shall be accorded should the contractor/sub-contractor fail to enter into written contracts with the targeted labour. Furthermore, no credits shall be accorded in respect of targeted labour employed on work in the respect of provisional sums or prime cost items. Such labour shall nevertheless be recorded on the Monthly Project Labour Report which is required to be furnished by the Contractor.

3.5.2.5 Training of targeted labour

The Contractor is required to provide all informal (on-the-job) skills training so as to ensure that a minimum level of competence is achieved and maintained, such that the various activities are carried out safely and to the required standard. The cost of informal training shall be included in the rates for the various work activities.

3.5.2.6 Penalties

The financial penalty to be applied for failing to meet the specified minimum targeted labour contract participation goal in the performance of the contract (unless proven to be beyond the control of the Contractor), is as follows:

$$\text{Penalty} = (\text{CPG}_L^S - \text{CPG}_L^A) \times P^*$$

Where CPG_L^S = the specified minimum targeted labour contract participation goal (expressed as a percentage).

CPG_L^A = the targeted labour contract participation goal achieved (expressed as a percentage).

P^* = the value of the contract.

3.5.3 COMMUNITY LIAISON OFFICER

Certain Works Projects may require a Community Liaison Officer (CLO) to be appointed by the Contractor. The primary functions of the CLO shall be to assist the Contractor with the selection and recruitment of targeted labour, to represent the local community in matters concerning the use of targeted labour (and/or enterprises) on the works, and to assist with and facilitate communication between the Contractor, the Employer's Agent and the local communities.

The identification of suitable candidates (maximum 5; minimum 3) for the CLO position shall be resolved by the relevant Ward Councillor/s. Should suitable candidates not be identified within two weeks of the date of request, the Contractor shall be allowed to seek candidates from the relevant Sub-Council Job-Seekers Database. The final selection and appointment of the CLO in terms of the contract shall be the responsibility of the Contractor.

The period of appointment of the CLO shall be as stated in the Contract for Temporary Employment as a Community Liaison Officer referred to below. The date of commencement of temporary employment of the CLO shall be as agreed with the Employer's Agent.

If it is required, therefore, that the Contractor enter into a contract of temporary employment with the selected CLO, the contracting parties will be the Contractor and the CLO. To this end, a specimen Form of Contract of Temporary Employment as Community Liaison Officer is included in this document (Part C1.9 Community Liaison Officer). This Form of Contract sets out, inter alia, the agreement between the parties, the duties and conditions of employment of the CLO (including the rate of remuneration to be paid). As said contract will be between the Contractor and the CLO, all costs involved shall be borne by the Contractor and items will be provided in the Bills of Quantities in the Works Project contract document therefor.

3.5.4. PARTICIPATION OF TARGETED ENTERPRISES

3.5.4.1 Minimum targeted enterprises contract participation goal

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

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

The specified minimum targeted enterprises contract participation goal (CPG_E) is

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

3.5.4.2 Definitions

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

"Target area" means the geographical area described in the Works Project contract document.

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

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

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

3.5.4.3 Achieving the contract participation goal

The contractor may achieve the specified minimum CPG_E as follows:

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

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

3.5.4.4 Contract participation goal credits

Credits towards achieving the minimum CPG_E shall be granted by converting the total monetary value (exclusive of VAT) of the agreements between the Contractor, or Contractor's sub-contractors, and targeted enterprises, to a percentage of the value of the contract.

No credits shall be accorded should the Contractor (or sub-contractors):

- a) make direct payment to third parties in connection with the contract on behalf of targeted enterprises, when such payment is recovered by making deductions from payments due to the targeted enterprise;
- b) fail to enter into written contractual agreements with the relevant targeted enterprises.

Credits claimed towards the contract participation goal shall be denied where such written contractual agreements contain any of the following:

- c) conditions which are more onerous than those that exist in the prime contract (this contract);
- d) payment procedures based on a pay when paid system;
- e) authoritarian rights given to the employing contractor, with no recourse to independent adjudication in the event of a dispute arising.

No credits may be claimed in respect of targeted enterprises that do not adhere to statutory labour practices.

No credits shall be accorded in respect of targeted enterprises engaged on work in respect of provisional sums or prime cost items.

In the event that a targeted enterprise sub-contracts to another targeted enterprise, only the value of the higher level sub-contract shall be granted as credit towards achieving the specified minimum CPG_E.

In addition to the form required for contract administration (the Targeted Enterprises Contract Participation Expenditure Report), the Contractor shall furnish the Employer's Agent, upon written request, with documentary evidence that the targeted enterprises have their base of operations in the target area, copies of the contractual agreements with the various targeted enterprises, as well as documentary proof of payments made to the various targeted enterprises.

3.5.4.5 Penalties

The financial penalty to be applied for failing to meet the specified minimum targeted enterprises contract participation goal in the performance of the contract (unless proven to be beyond the control of the Contractor), is as follows:

$$\text{Penalty} = (\text{CPG}_E^S - \text{CPG}_E^A) \times P^*$$

Where CPG_E^S = the specified minimum targeted enterprises contract participation goal (expressed as a percentage).

CPG_E^A = the targeted enterprises contract participation goal achieved (expressed as a percentage).

P^* = the value of the contract.

3.5.5 ENVIRONMENTAL MANAGEMENT PROGRAMME

Particular Specification E: Environmental Management Specification and its Annexures are attached hereto.

3.5.6 HEALTH AND SAFETY

Particular Specification H: Health and Safety Specification is attached hereto.

E: ENVIRONMENTAL MANAGEMENT SPECIFICATION

CONTENTS

E1 SCOPE

E2 INTERPRETATIONS

- E2.1 Supporting specifications
- E2.2 Application
- E2.3 Definitions and abbreviations
 - E2.3.1 Environment
 - E2.3.2 Potentially hazardous substance
 - E2.3.3 Method Statement
 - E2.3.4 Reasonable
 - E2.3.5 Solid waste
 - E2.3.6 Contaminated water
 - E2.3.7 Working area
 - E2.3.8 Contractor's camp or construction camp
 - E2.3.9 Employer's Agent
 - E2.3.10 Employer's Agent's Representative (ER)
 - E2.3.11 Environmental Officer (EO)
 - E2.3.12 Environmental Control Officer (ECO)
 - E2.3.13 Environmental Site Officer (ESO)
 - E2.3.14 Abbreviations
- E2.4 Employer's Agent's authority to delegate

E3 MATERIALS

- E3.1 Materials handling, use and storage
- E3.2 Hazardous substances

E4 PLANT

- E4.1 Fuel (petrol and diesel) and oil
 - E4.1.1 Storage
 - E4.1.2 Refuelling
 - E4.1.3 Treatment and remediation
- E4.2 Ablution and toilet facilities
- E4.3 Eating areas
- E4.4 Solid waste management
 - E4.4.1 Litter and refuse
 - E4.4.2 Construction waste
- E4.5 Contaminated water management
- E4.6 Site structures
- E4.7 Lights
- E4.8 Workshop, equipment maintenance and storage
- E4.9 Noise

E5 CONSTRUCTION

- E5.1 Method Statements
 - E5.1.1 Method Statements to be provided within 14 days from the Commencement Date
- E5.2 Environmental Awareness Training
 - E5.2.1 Training Course for Management and Foremen
 - E5.2.2 Training Course for Site Staff and Labour
- E5.3 Contractor's Environmental Representative (ESO)
- E5.4 Site division, demarcation and "no go" areas
- E5.5 Access routes/ haul roads
- E5.6 Construction personnel information posters
- E5.7 Fire control
- E5.8 Emergency procedures
- E5.9 Health and safety
- E5.10 Community relations
- E5.11 General protections in terms of the National Heritage Resources Act, 25 of 1999
- E5.12 Protection of natural features
- E5.13 Protection of flora and fauna
- E5.14 Erosion and sedimentation control
- E5.15 Aesthetics
- E5.16 Temporary site closure
- E5.17 Asphalt and bitumen
- E5.18 Dust
- E5.19 Contractor's advertising signage
- E5.20 Clearance of Site on completion
 - E5.20.1 Clause E3.1
 - E5.20.2 Clause E4.1.3
 - E5.20.3 Clause E4.4
 - E5.20.4 Clause E5.4
 - E5.20.5 Clause E5.5
 - E5.20.6 Clause E5.7
 - E5.20.7 Clauses E5.11 to 5.13
 - E5.20.8 Clause E5.14
 - E5.20.9 Clause E5.19

E6 TOLERANCES

- E6.1 Fines

E7 TESTING

E8 MEASUREMENT AND PAYMENT

- E8.1 Basic principles

- 9. ANNEXURE A:..... ENVIRONMENTAL METHOD STATEMENT
- 10. ANNEXURE B:..... ENVIRONMENTAL SITE INSPECTION CHECKLIST
- ANNEXURE C: CONSTRUCTION PERSONNEL INFORMATION POSTER
- ANNEXURE D: ADDITIONAL ENVIRONMENTAL ISSUES DEEMED TO FORM PART OF THE ENVIRONMENTAL MANAGEMENT PROGRAMME

E: ENVIRONMENTAL MANAGEMENT SPECIFICATION

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

E1 SCOPE

The Environmental Management Programme (EMP) for the project is comprised of this Environmental Management (EM) Specification and its Annexures, including the "Additional environmental issues deemed to form part of the Environmental Management Specification" attached as Annexure D hereto, which together cover the requirements for controlling the impact on the environment of construction activities.

E2 INTERPRETATIONS

E2.1 Supporting specifications

The following standardised specification shall, *inter alia*, apply to this Contract:

- a) SANS 1200A, as may be varied or added to in the Scope of Work

E2.2 Application

This EM Specification contains clauses that are generally applicable to the undertaking of construction works in areas where it is necessary to impose pro-active controls on the extent to which the construction activities impact on the environment.

In the event of any difference or discrepancy between the provisions of the Standardised Specifications and the provisions of the EM Specification, the latter shall prevail.

E2.3 Definitions and abbreviations

For the purposes of this EM Specification the following definitions and abbreviations shall apply:

E2.3.1 Environment

The surroundings within which humans exist and that are made up of -

- a) the land, water and atmosphere of the earth;
- b) micro-organisms, plant and animal life;
- c) any part or combination of i) and ii) and the interrelationships among and between them; and
- d) the physical, chemical, aesthetic and cultural properties and conditions of the foregoing that influence human health and well-being.

E2.3.2 Potentially hazardous substance

A substance which, in the reasonable opinion of the Employer's Agent, can have a deleterious effect on the environment.

E2.3.3 Method Statement

A written submission by the Contractor to the Employer's Agent in response to the EM Specification or a request by the Employer's Agent, setting out the plant, materials, labour and method the Contractor proposes using to carry out an activity, in such detail that the Employer's Agent is enabled to assess whether the Contractor's proposal is in accordance with the Scope of Work and/or will produce results in accordance with the EM Specification.

E2.3.4 Reasonable

Unless the context indicates otherwise, means reasonable in the opinion of the Employer's Agent after he has consulted with a person suitably experienced in "environmental implementation plans" and "environmental management plans" (both as defined in the National Environmental Management Act, 107 of 1998).

E2.3.5 Solid waste

All solid waste, including construction debris, chemical waste, excess cement/ concrete, wrapping materials, timber, tins and cans, drums, wire, nails, domestic waste, dead vegetation, asphalt products, etc.

E2.3.6 Contaminated water

Water contaminated by the Contractor's activities containing cements, concrete, lime, paint products, thinners, turpentine, chemicals, fuels, oils washing detergents, etc.

E2.3.7 Working area

Any area within the boundaries of the Site where construction is taking place.

E2.3.8 Contractor's camp or construction camp

The area designated for all temporary site offices, storage areas, construction plant parking areas, staff welfare facilities, etc.

E2.3.9 Employer's Agent

The person/firm so named in the Contract Data, whose function is to administer the Contract as agent of the Employer.

E2.3.10 Employer's Agent's Representative (ER)

The natural person appointed by the Employer's Agent in terms of the Contract, who shall observe the execution of the Works, examine and test materials and workmanship, and deliver and receive communications to/from the Contractor.

E2.3.11 Environmental Officer (EO)

Appointed by the Employer's Agent as his environmental representative on Site, with the mandate to enforce compliance with the EMP. The duties of the EO are stipulated in the City's guideline document for the EO and ER.

E2.3.12 Environmental Control Officer (ECO)

An independent appointment to objectively monitor implementation of relevant environmental legislation, conditions of Environmental Authorisations (EAs), and the EMP for the project.

E2.3.13 Environmental Site Officer (ESO)

Employed by the Contractor as his environmental representative to monitor, review and verify compliance with the EMP by the Contractor. The ESO must ensure that he is involved at all phases of the construction (from site clearance to rehabilitation).

E2.3.14 Abbreviations

The following abbreviations occur in this EM Specification:

EMP - Environmental Management Programme
EM Specification – Environmental Management Specification
EO - Environmental Officer
ECO – Environmental Control Officer
ESO – Environmental Site Officer
ER – Employer's Agent's Representative
MSDS - Material Safety Data Sheets

E2.4 Employer's Agent's authority to delegate

In terms of Clause 3.2.4 of the General Conditions of Contract, Third Edition, 2015 (GCC 2015), the Employer's Agent has the authority to appoint a representative. Other than the Employer's Agent's Representative (ER) in terms of Clause 3.2, this can be in the form of an Environmental Officer (EO), who shall be responsible for monitoring compliance with the EMP. All instructions given by the EO shall go through the ER, who will then convey these to the Contractor, except in the case of an environmental emergency, in which case the EO can issue an instruction directly to the Contractor. An environmental emergency is one which, in the opinion of the EO, would cause serious environmental harm if not addressed immediately.

Depending on the nature/environmental sensitivity of the Contract the following variations in the organisational structure are possible:

- a) The ER may work together with an EO; or

- b) There may be an ER only (for construction projects with low potential for causing significant environmental impacts). In this case the ER has responsibility for the EO's functions.
- c) There may be an independently appointed Environmental Control Officer (ECO) who will fulfil essentially the same functions as the EO. The ECO may work with just the ER (if there is no EO) or may work with both the ER and EO.

The term "Employer's Agent" in this EM Specification refers to the Employer's Agent as defined in Clause E2.3.9 acting through the ER/EO/ECO as delegated.

E3 MATERIALS

E3.1 Materials handling, use and storage

The Contractor shall ensure that any delivery drivers are informed of all procedures and restrictions (including "no go" areas) required to comply with the EM Specification. The Contractor shall ensure that these delivery drivers are supervised during off loading by someone with an adequate understanding of the requirements of the EM Specification.

Materials shall be appropriately secured to ensure safe passage between destinations. Loads, including but not limited to, sand, stone chip, fine vegetation, refuse, paper and cement, shall have appropriate cover to prevent them spilling from the vehicle during transit. The Contractor shall be responsible for any clean-up resulting from the failure by his employees or suppliers to properly secure transported materials.

All manufactured and or imported materials shall, where reasonably possible, be stored within the Contractor's camp and, if so required by the Employer's Agent, out of the rain. The location and method of protection of such materials stored outside of the Contractor's camp and the method of rehabilitation of these areas, shall be subject to the Employer's Agent's approval.

Stockpile areas shall be approved by the Employer's Agent before any stockpiling commences.

E4 Hazardous substances

Hazardous chemical substances (as defined in the Regulations for Hazardous Chemical Substances in GN 1179 (25 August 1995)) stored on Site for use during construction shall be stored in secondary containers which are clearly and appropriately marked/signed. The relevant Material Safety Data Sheets (MSDS) shall be available on Site. Procedures detailed in the MSDSes shall be followed in the event of an emergency situation.

If potentially hazardous substances are to be stored on Site, the Contractor shall inform the Employer's Agent of such substances and provide a Method Statement detailing the substances/ materials to be used, together with the storage, handling and disposal procedures of the materials. Hazardous substances shall be stored out of flood risk areas and disposal of these substances shall be at a licensed waste disposal facility. **PLANT (referring to "Construction Equipment" as defined in GCC 2015, and the Contractor's facilities as used in SANS 1200A)**

E4.1 Fuel (petrol and diesel) and oil

E4.1.1 Storage

If fuel and oil is to be stored on Site, then the Contractor shall submit a Method Statement covering the procedures for dealing with accidental hydrocarbon spillage and leaks, and detailing how these liquids will be stored, handled and disposed of.

The Employer's Agent shall approve the location of all fuel storage areas. All necessary approvals with respect to fuel storage and dispensing shall be obtained from the appropriate authorities. Symbolic safety signs depicting "No Smoking", "No Naked Lights" and "Danger" conforming to the requirement of SANS 1186 are to be prominently displayed in and around the fuel storage area. There shall be adequate fire-fighting equipment at the fuel storage area.

The Contractor shall ensure that all liquid fuels and oils are stored in tanks with lids, which are kept firmly shut and adequately secured. The capacity of the tank shall be clearly displayed and the product contained within the tank clearly identified using the emergency information system detailed in SANS 0232 part 1. Fuel storage tanks shall have a capacity not exceeding 9000 litres and shall be kept on site only for as long as fuel is needed for construction activities, on completion of which they shall be removed.

The tanks shall be situated on a smooth impermeable base with an earth bund. The volume inside the bund shall be 110% of the total capacity of the largest storage tank. The base may be constructed of concrete, or of plastic sheeting with impermeable joints, covered by a layer of compacted earth to protect the sheeting. The impermeable lining shall extend to the crest of the bund. The floor of the storage area shall be sloped to

enable any spilled fuel and/or fuel-contaminated water to be removed easily.

If any rainwater collects in the bunded areas, it shall be promptly removed and taken off Site to a disposal site approved by the Employer's Agent.

Only empty and externally clean tanks may be stored on the bare ground. Empty and externally dirty tanks shall be sealed and stored on an area where the ground has been protected.

Adequate precautions shall be provided to prevent spillage during the filling of any tank and during the dispensing of the contents. If fuel is dispensed from 200 litre drums, the proper dispensing equipment shall be used, and the drum shall not be tipped in order to dispense fuel. The dispensing mechanism for the fuel storage tanks shall be stored in a waterproof container when not in use.

E4.1.2 Refuelling

Plant shall be refuelled at a designated refuelling area approved by the Employer's Agent. The surface under the temporary refuelling area shall be protected against pollution to the reasonable satisfaction of the Employer's Agent prior to any refuelling activities. The Contractor shall ensure that there is always a supply of absorbent material (e.g. Spill Sorb or Enretech #1 powder or equivalent) readily available that is designed to absorb, break down and encapsulate minor hydrocarbon spillage. The quantity of such material shall be able to handle a minimum of 200 litres of hydrocarbon liquid spill.

E4.1.3 Treatment and remediation

Treatment and remediation of hydrocarbon spill and leak areas shall be undertaken to the satisfaction of the Employer's Agent. In the event of a hydrocarbon spill the source of the spillage shall be isolated and the spillage contained.

E4.2 Ablution and toilet facilities

Washing, whether of the person or of personal effects, defecating and urinating are strictly prohibited other than at the facilities provided.

The Contractor shall provide ablution facilities for all personnel employed on the Site, including shelter, toilets and washing facilities. The Contractor's personnel will not be permitted to use the City's ablution facilities.

Toilet facilities provided by the Contractor shall occur in a ratio of not less than 1 toilet per 30 workers (1:15 is preferred) of each sex. Toilet facilities shall be located within the Contractor's camp, but also at work areas remote from the camp, all to the satisfaction of the Employer's Agent. All portable toilets shall be adequately secured to the ground to prevent them toppling over as a result of wind or any other cause.

The Contractor shall ensure that the entrances to these toilets are adequately screened from view, that they are maintained in a hygienic state, serviced regularly, that no spillage occurs when they are cleaned and that contents are removed from Site. Toilets shall also be emptied before any temporary site closure for a period exceeding one week. Discharge of waste from toilets into the environment and burial of waste is strictly prohibited. The Contractor shall provide toilet paper at all times.

No ablution facilities shall be located closer than 50m to any water body

A Method Statement shall be provided by the Contractor detailing the provision, location, and maintenance of ablution facilities.

E4.3 Eating areas

The Contractor shall designate eating areas within the approved Contractor's camp. The feeding of, or leaving of food for, animals is strictly prohibited. Sufficient bins, as specified in Clause E4.4 below, shall be present in these areas.

Any cooking on Site shall be done on well-maintained gas cookers with fire extinguishers present. No open fires for cooking purposes shall be permitted, unless for occasional use in facilities specifically provided for this purpose and within the confines of the Contractor's camp.

E4.4 Solid waste management

E4.4.1 Litter and refuse

The site shall be kept neat and clean at all times, littering is prohibited.

No on-site burying or dumping of any waste materials, vegetation, litter or refuse shall occur. The Contractor shall provide scavenger and weatherproof bins with lids, of sufficient number and capacity to store the solid waste produced on a daily basis. The lids shall be kept firmly on the bins at all times. Bins shall not be allowed to become overfull and shall be emptied regularly, at least once a week. Waste from bins may be temporarily stored on Site in a central waste area that is weatherproof and scavenger-proof, and which the Employer's Agent has approved. Wherever possible refuse shall be recycled, and containers for glass, paper, metals and plastics shall be provided and the contents delivered to suitable recycling facilities when necessary.

All other litter and refuse shall be disposed of off Site at an approved landfill site. The Contractor shall supply the Employer's Agent with a certificate of disposal.

E4.4.2 Construction waste

Where possible all construction waste or spoil material shall be recycled, either on Site or elsewhere. As a last resort all construction waste shall be disposed of off Site at an approved landfill site. The Contractor shall supply the Employer's Agent with a certificate of disposal.

E4.5 Contaminated water management

Potential pollutants of any kind and in any form shall be kept, stored, and used in such a manner that any spill or escape can be contained and the water table and/or any adjacent water courses or bodies are not endangered. Spill kits which can be used to contain and/or mop up spills shall be available. Water containing such pollutants as cements, concrete, lime, chemicals, oils and fuels shall be discharged into a conservancy tank for removal from the Site to a licensed disposal facility. This particularly applies to water emanating from concrete batching plants and to runoff from fuel storage, refuelling or construction equipment washing areas. Wash down areas shall be placed and constructed in such a manner so as to ensure that the surrounding areas are not polluted.

No paint products, chemical additives and cleaners, such as thinners and turpentine, may be disposed of into the stormwater system or elsewhere on Site. Brush/roller wash facilities shall be established to the satisfaction of the Employer's Agent.

A Method Statement shall be provided by the Contractor detailing the management of contaminated water. Should contaminated water be released into the environment, specifically into a water course, monitoring thereof shall commence in accordance to the National Water Act, 36 of 1998, Section 21(f) – refer to GN 399 (26 March 2004). Contaminated water must not be released into the environment without authorisation from the relevant authority.

The Contractor shall notify the Employer's Agent immediately of any pollution incidents on Site and, at his own cost, take all reasonable measures to contain and minimise the effects of the pollution.

Any rehabilitation of the environment required as a result of such pollution shall be carried out by the Contractor at his own cost in accordance with a Method Statement approved by the Employer's Agent.

E4.6 Site structures

The type and colour of roofing and cladding materials to the Contractor's temporary structures shall be selected to reduce the visual impact.

E4.7 Lights

The Contractor shall ensure that any lighting installed on the Site for his activities does not cause a reasonably avoidable disturbance to other users of the surrounding area.

Lighting installed shall, as far as practically possible, be energy efficient. Lighting utilised on Site shall be turned off when not in use.

E4.8 Workshop, equipment maintenance and storage

No workshops or plant maintenance facilities shall be constructed on Site for performing major or routine maintenance of equipment and vehicles.

The Contractor shall ensure that in those areas where, after obtaining the Employer's Agent's approval, the Contractor carries out emergency or minor routine plant maintenance, there is no contamination of the soil, water sources or vegetation. Drip trays to collect waste oil and other lubricants shall be provided in any areas of the Site where such maintenance takes place. Drip trays must be emptied regularly and after rain, and the contents disposed of at a licensed disposal facility.

All vehicles and plant shall be kept in good working order. Leaking vehicles and plant shall be repaired immediately or removed from the Site.

The washing of vehicles and plant on Site shall be restricted to emergency or minor routine maintenance requirements only. Washing may only be undertaken in areas designated by the Employer's Agent.

E4.9 Noise

The Contractor shall limit noise levels (for example, by installing and maintaining silencers on plant). The provisions of SANS 1200A Clause 4.1 regarding "built-up areas" shall apply.

Appropriate directional and intensity settings are to be maintained on all hooters and sirens.

No amplified music shall be allowed on Site. The use of audio equipment shall not be permitted, unless the volume is kept sufficiently low so as to be unobtrusive. The Contractor shall not use sound amplification equipment on Site, unless in emergency situations.

Construction activities generating output levels of 85 dB(A) or more in residential areas, shall be confined to the hours 08h00 to 17h00 Mondays to Fridays. Should the Contractor need to do this work outside of the above times, he shall do so only with the approval of the Employer's Agent, and the surrounding communities shall be informed prior to the work taking place.

E5 CONSTRUCTION

E5.1 Method Statements

The Contractor shall submit the environmental method statements required within such reasonable time as the Employer's Agent shall specify or as required by the EM Specification. The Contractor shall not commence any activity until the Method Statement in respect thereof has been approved and shall, except in the case of emergency activities, allow a period of two weeks for consideration of the Method Statement by the Employer's Agent.

The Employer's Agent may require changes to a Method Statement if the proposal does not comply with the specification or if, in the reasonable opinion of the Employer's Agent, the proposal may result in, or carries a greater than reasonable risk of, damage to the environment in excess of that permitted by the EM Specification.

Approved Method Statements shall be readily available on the Site and shall be communicated to all relevant personnel. The Contractor shall carry out the Works in accordance with the approved Method Statement. Approval of the Method Statement shall not absolve the Contractor from any of his obligations or responsibilities in terms of the Contract.

Changes to the way the Works are to be carried out must be reflected by amendments to the original approved Method Statements, and these amendments require the signature of both the Contractor and the Employer's Agent.

Method Statements shall consider all environmental hazards and risks identified by the Contractor and/or Employer's Agent and shall contain sufficient information and detail to enable the Employer's Agent to assess the potential negative environmental impacts associated with the proposed activity and shall cover applicable details with regard to:

- a) construction procedures,
- b) materials and equipment to be used,
- c) getting the equipment to and from Site,
- d) how the equipment/material will be moved while on Site,
- e) how and where material will be stored,
- f) the containment (or action to be taken if containment is not possible) of leaks or spills of any liquid or material that may occur,
- g) the control of fire,
- h) timing and location of activities,
- i) compliance/non-compliance with the EM Specification,
- j) any other information deemed necessary by the Employer's Agent.

The format to be used for the required method statements is bound in Annexure A of this EM Specification. The Contractor (and, where relevant, any sub-contractors) must also sign the Method Statement, thereby indicating that the work will be carried out according to the methodology contained in the approved Method Statement.

E5.1.1 Method Statements to be provided within 14 days from the Commencement Date

- a) Layout and Preparation of Contractor's Camp (E5.4).
- b) Ablution Facilities: number of, location, cleaning, method of securing to the ground, etc. of portable toilets (E4.2).
- c) Solid Waste Management: number of, type, location, cleaning, method of securing to the ground, etc. of bins (E4.4).
- d) Environmental Awareness Training: logistics for the environmental awareness courses for all the Contractor's management staff, as well as other employees (E5.2).
- e) Emergency Procedures for Accidental Hydrocarbon Leaks and Spillages (E4.1 and E5.8).
- f) Asphalt and Bitumen: details of all methods and logistics associated with the use of bitumen and asphalt (E5.11).

E5.2 Environmental Awareness Training

It is a requirement of this Contract that environmental awareness training courses are run for all personnel on Site. Two types of courses shall be run: one for the Contractor's and subcontractors' management, and one for all site staff and labourers. Courses shall be run during normal working hours at a suitable venue provided by the Contractor. All attendees shall remain for the duration of the course and sign an attendance register that clearly indicates participants' names on completion, a copy of which shall be handed to the Employer's Agent. The Contractor shall allow for sufficient sessions to train all personnel. Subsequent sessions shall be run for any new personnel coming onto Site. A Method Statement with respect to the organisation of these courses shall be submitted.

Notwithstanding the specific provisions of this clause, it is incumbent upon the Contractor to convey the spirit of the EM Specification to all personnel involved with the Works.

Training Course for Management and Foremen

The environmental awareness training course for management shall include all management and foremen. The course, which shall be presented by the Employer's Agent or his designated representative, shall be of approximately one hour duration. The course shall be undertaken prior to the commencement of work on Site.

E5.2.1 Training Course for Site Staff and Labour

The environmental awareness training course for site staff and labour shall be presented by the Contractor from material provided by the Employer's Agent. The course shall be approximately one hour long. The course shall be undertaken not later than 3 working days after the commencement of work on Site, with sufficient sessions to accommodate all available personnel.

All the Contractor's employees, sub-contractors' employees and any suppliers' employees that spend more than 1 day a week or four days in a month on Site shall attend the Environmental Awareness Training Course for Site Staff and Labour

E5.3 Contractor's Environmental Representative (ESO)

The Contractor shall appoint an environmental representative, also called an Environmental Site Officer (ESO), who shall be responsible for undertaking a daily site inspection to monitor compliance with this EM Specification. The Contractor shall forward the name of the environmental representative (ESO) to the Employer's Agent for his approval. The environmental representative (ESO) shall complete Environmental Site Inspection Checklists (Annexure B attached hereto) and these shall be submitted to the Employer's Agent once a week.

E5.4 Site division, demarcation and "no go" areas

The Contractor shall restrict all his activities, materials, plant and personnel to within the Site or any particular working areas specified or indicated on the drawings.

The Contractor shall erect and maintain permanent and/or temporary fences of the type and in the locations specified elsewhere in the Scope of Work or on the drawings. Such fences shall, if so specified, be erected before undertaking any construction activities.

Where environmentally sensitive areas are specified as "no go" areas, the Contractor shall ensure that, insofar as he has the authority, no person, plant or material shall enter the "no go" areas at any time.

A Method Statement detailing the layout and method of establishment of the Contractor's camp (including all offices, shelters, eating areas, storage areas, ablution facilities and other infrastructure required for the running of

the project) shall be provided.

E5.5 Access routes/ haul roads

On the Site and, if so required, within such distance of the Site as may be stated by the Employer's Agent, the Contractor shall control the movement of all vehicles and construction equipment, including that of his suppliers, so that they remain on designated routes, are distributed so as not to cause an undue concentration of traffic, and that all relevant laws are complied with. In addition, the movement of such vehicles and construction equipment shall be planned and operated so as to minimise disruption to regular users of the routes. As far as possible the Contractor shall use existing access and haul routes. Damage to existing access roads as a result of construction activities shall be repaired to the satisfaction of the Employer's Agent, using material similar to that originally used. The cost of the repairs shall be borne by the Contractor. New temporary access or haul routes may only be established with the prior approval of the Employer's Agent. The rehabilitation of such routes shall be to the Contractor's own cost and to the approval of the Employer's Agent.

Any directional signage required by the Contractor for the purposes of directing the movement of his own vehicles and construction equipment (or that of his subcontractors or suppliers) must be of a design and in a location approved by the Employer's Agent. Directional signage may not be erected in such a manner that it interferes with sight lines or pedestrian movement.

E5.6 Construction personnel information posters

The Contractor shall erect and maintain information posters for the information of his employees, depicting actions to be taken to ensure compliance with aspects of the EM Specification. A2 information posters, printed on white vinyl, shall be erected at the eating areas and any other locations specified by the Employer's Agent.

The specification for the poster is presented in Annexure C of this EM Specification. The symbols shall be black and the circles shall be red lines. The Contractor shall ensure that the construction personnel information posters are not damaged in any way, and shall replace a poster if any part of it becomes illegible.

E5.7 Fire control

Other than for cooking purposes as specified in Clause E4.3, no fires may be lit on Site. Any fires which occur shall be reported to the Employer's Agent immediately.

Smoking shall not be permitted in those areas where it is a fire hazard. Such areas shall include fuel storage and refuelling areas, and any other areas where the vegetation or other materials are susceptible to the start and rapid spread of fire.

In terms of the National Environment Management: Air Quality Act, 39 of 2004 and Community Fire Safety By-law, burning is not permitted as a disposal method.

The Contractor shall appoint a Fire Officer (who may be the ESO) who shall be responsible for ensuring immediate and appropriate actions in the event of a fire and shall ensure that employees are aware of the procedure to be followed. The Contractor shall advise the relevant authority of a fire as soon as one starts and shall not wait until he can no longer control it. The Contractor shall forward the name of the Fire Officer to the Employer's Agent for his approval.

The Contractor shall comply with Clause 27 of the Construction Regulations, 2003 where applicable, and shall ensure that there is suitable and sufficient fire-fighting equipment available on Site at all times.

The Contractor shall be liable for any costs relating to the rehabilitation of burnt areas, should the fire be the result of the Contractor's activities on Site

The Contractor shall submit a Method Statement to the Employer's Agent covering the procedure to be followed in the event of a fire.

E5.8 Emergency procedures

The Contractor's attention is drawn to the Method Statements required in terms of Clauses E4.1 and E5.7 above. Such Method Statements shall include procedures to be followed by the Contractor in the event of an emergency.

Furthermore, in the event of an emergency the Contractor shall contact the City of Cape Town's Emergency Call Centre by telephoning 107 or 021 480 7700 (from a cell phone). Telephone numbers of emergency services, including the local fire fighting service, shall be posted conspicuously in the Contractor's office near the telephone.

E5.9 Health and safety

The Contractor shall comply with requirements of the Occupational Health and Safety Act, 85 of 1993 and Construction Regulations, 2014, the Health and Safety Specification and relevant clauses of GCC 2015, insofar as health and safety is concerned.

E5.10 Community relations

If so required, the Contractor shall erect and maintain information boards in the position, quantity, design and dimensions specified in the Scope of Work or as directed by the Employer's Agent. Such boards shall include contact details for complaints by members of the public in accordance with details provided by the Employer's Agent.

The Contractor shall keep a "Complaints Register" on Site. The Register shall contain all contact details of the person who made the complaint, and information regarding the complaint itself.

E5.11 General protections in terms of the National Heritage Resources Act, 25 of 1999

The Contractor shall take cognisance of the provisions of the National Heritage Resources Act, 25 of 1999 in respect of, *inter alia*, structures older than 60 years; archaeology, palaeontology and meteorites; burial grounds and graves; and public monuments and memorials.

E5.12 Protection of natural features

The Contractor shall not deface, paint, damage or mark any natural features (e.g. rock formations) situated in or around the Site for survey or other purposes, unless agreed beforehand with the Employer's Agent. Any features affected by the Contractor in contravention of this clause shall be restored/ rehabilitated to the satisfaction of the Employer's Agent. The cost of restoration/rehabilitation shall be borne by the Contractor.

The Contractor shall not permit his employees to make use of any natural water sources (e.g. springs, streams, open water bodies) for the purposes of swimming, personal washing and the washing of machinery or clothes.

E5.13 Protection of flora and fauna

Except to the extent necessary for the carrying out of the Works, as specified by the Employer's Agent, no vegetation shall be removed, damaged or disturbed.

The presence of any wild animals found on Site shall be reported to the Employer's Agent, who shall issue an instruction with regard to their removal or relocation. If a wild animal needs removal from the Site the Cape Nature (Metro Region) Conservation Services Manager may be contacted for assistance (tel 021 955 9132/9121/3122/9130). Trapping poisoning, injuring or shooting animals is strictly forbidden. No domestic pets or livestock are permitted on Site, with the exception of controlled watchdogs approved by the Employer's Agent.

Where the use of herbicides, pesticides and other poisonous substances has been specified, the Contractor shall submit a Method Statement to the Employer's Agent for approval.

E5.14 Erosion and sedimentation control

The Contractor shall take all reasonable measures to limit erosion and sedimentation due to the construction activities and shall, in addition, comply with such detailed measures as may be required by the Scope of Work. Where erosion and/or sedimentation, whether on or off the Site, occurs, rectification shall be carried out in accordance with details specified by the Employer's Agent. Where erosion and/or sedimentation occur due to the fault of the Contractor, rectification shall be carried out to the reasonable requirements of the Employer's Agent, at the Contractor's cost. In particular, the Contractor shall ensure that the City's stormwater system is kept free from sediment arising from the Works.

Any runnels or erosion channels developed during the construction period or during the vegetation establishment period shall be backfilled and compacted, and the areas restored to a proper condition. Stabilisation of cleared areas to prevent and control erosion shall be pro-actively managed by the Contractor. The method of stabilisation shall be determined in consultation with the Employer's Agent.

E5.15 Aesthetics

The Contractor shall take any requisite measures to ensure that construction activities do not have an undue negative impact on the aesthetics of the area.

E5.16 Temporary site closure

In the event of temporary site closure (for a period exceeding one week), the Contractor's ESO shall carry out checks and ensure that, amongst others, the following conditions pertain and report on compliance with this clause:

- a) Fire extinguishers are serviced and accessible.
- b) There is adequate ventilation in enclosed spaces.
- c) All hazardous substance stores are securely locked.
- d) Fencing and barriers are in place.
- e) Emergency and management contact details are prominently displayed and available.
- f) Wind and dust mitigation measures, e.g. straw, brush packs, irrigation, etc. are in place.
- g) Excavated and filled slopes and stockpiles are at a stable angle and capable of accommodating normal expected water flows.
- h) There are sufficient detention ponds or channels in place.
- i) Cement and materials stores are secured.
- j) Toilets are empty and secured.
- k) Central waste area and all refuse bins are empty and secured.
- l) Contaminated water conservancy tank empty.
- m) Any bunded areas are clean and treated with an approved product where applicable (e.g. Spill Sorb or Enretech #1 powder or equivalent).
- n) Drip trays are empty and secure

E5.17 Asphalt and bitumen

Bitumen drums/products, if stored on Site, shall be stored in an area approved by the Employer's Agent. This area shall be indicated on the Method Statement for the Layout and Preparation of the Contractor's Camp. The storage area shall be constructed with an appropriate base, bunding and sump to the satisfaction of the Employer's Agent. A Method Statement shall be provided in this regard.

When heating bitumen products, the Contractor shall take cognisance of appropriate fire risk controls. Heating shall only be undertaken using LPG or similar zero emission fuels. Appropriate fire fighting equipment shall be readily available on Site.

E5.18 Dust

The Contractors shall be solely responsible, at his cost, for the control of dust arising from his activities on Site, and for any costs involved in damages resulting from the dust. The Contractor shall take all reasonable measures to minimise the generation of dust

E5.19 Contractor's advertising signage

Any advertising on the Site or any part of the Works shall remain at the sole discretion of the Employer, who reserves the right to order, via the Employer's Agent, its removal, covering or re-sizing, wherever placed, at no cost to the Employer.

Apart from at the Contractor's camp, no signage advertising the Contractor, or any of its subcontractors, manufacturers, suppliers or service providers shall be placed, fixed or erected anywhere on the Site or on the Works without the prior approval of the Employer's Agent. No advertising signage will be permitted on any designated scenic route. Notwithstanding any prior approval given, the Employer's Agent may instruct the Contractor to remove, cover or re-size any advertising signage at any time at no cost to the Employer.

Advertising signage at the Contractor's camp shall be appropriately designed and sized with due consideration to the surrounding environment, views and sight lines.

Branding or identification markings on the Contractor's and subcontractor's vehicles and equipment is generally permitted, although the Employer reserves the right to instruct, via the Employer's Agent, the removal, covering or re-sizing of any branding, markings or signage, on any equipment (scaffolding, for example), which it considers inappropriate in the environment in which it is placed.

No third party advertising (that is, in respect of any person, business or product that is not associated with the Works) shall be permitted anywhere on the Site or Works.

E5.20 Clearance of Site on completion

On completion of the Works, and at final completion when all defects have been remedied or corrected, the Contractor shall, in addition to the requirements for clearance of the Site in terms of the Contract, ensure that he has complied with the following requirements in terms of this EM Specification:

E5.20.1 Clause E3.1

Clean-up of improperly secured transported materials, and rehabilitation of storage areas.

E5.20.2 Clause E4.1.3

Remediation of hydrocarbon spill and leak areas.

E5.20.3 Clause E4.4

Disposal of litter, refuse and Contractor's waste.

E5.20.4 Clause E5.4

Removal of temporary fences and Contractor's camp.

E5.20.5 Clause E5.5

Repair of access roads damaged by the Contractor, and rehabilitation of temporary access routes.

E5.20.6 Clause E5.7

Rehabilitation of burnt areas should a fire be the result of Contractor's activities on Site.

E5.20.7 Clauses E5.11 to 5.13

Rehabilitation of heritage and natural features, including vegetation which is damaged or disturbed, which required protection in terms of these clauses.

E5.20.8 Clause E5.14

Rectification where erosion and/or sedimentation has occurred due to the fault of the Contractor.

E5.20.9 Clause E5.19

Removal of Contractor's advertising signage.

E6 TOLERANCES

E6.1 Fines

Environmental management is concerned not only with the final results of the Contractor's operations, but also with the control of how these operations are carried out. Tolerance with respect to environmental matters applies not only to the finished product, but also to the standard of the day-to-day operations required to complete the Works.

It is thus required that the Contractor shall comply with the EM Specification on an on-going basis and any failure on his part to do so will entitle the Employer's Agent to certify the imposition of a fine. Fines may be issued per incident at the discretion of the Employer's Agent. Such fines will be issued in addition to any remedial costs incurred as a result of non-compliance with the environmental specifications. The Employer's Agent will inform the Contractor of the contravention and the amount of the fine, and will deduct the amount from monies due in payment certificates issued under the Contract.

Maximum fines for the following transgressions by either the Contractor and/or his sub-contractors may be imposed by the Employer's Agent, as follows:

	Maximum fine per incident
a) Vehicles, plant or materials related to the Contractor's operations, parked or stored outside the demarcated boundaries of the Site.	R 2 000
b) Persons, vehicles, plant or materials related to the Contractor's operations, found within the designated boundaries of a "no go" area.	R 4 000
c) Persistent and unrepaired oil leaks from machinery/not using a drip tray to collect waste oil and other lubricants/not using specified absorbent material to encapsulate hydrocarbon spillage/using inappropriate methods of refuelling (the use of a funnel rather than a pump).	R 3 000
d) Refuelling in areas not approved by the Employer's Agent.	R 3 000
e) Litter on Site.	R 1 000
f) Deliberate lighting of fires on Site.	R 5 000
g) Individual not making use of the Site ablution facilities.	R 1 000
h) Damage to trees not specified to be removed.	R 5 000

- | | | |
|----|--|---------|
| i) | Dust or excessive noise emanating from the site | R 1 000 |
| j) | Not containing water contaminated with pollutants such as cement, concrete, fuel, etc. | R 2 000 |

For each subsequent similar offence the fine shall be doubled in value to a maximum value of R50 000.

TESTING

Not applicable to this tender.

E7 MEASUREMENT AND PAYMENT

E7.1 Basic principles

Except where separate pay items have been measured in the Bills of Quantities, all costs in respect of complying with the EM Specification are deemed to be covered by the sum tendered for complying with the EM Specification.

ANNEXURE A: ENVIRONMENTAL METHOD STATEMENT

CONTRACT:.....

DATE:.....

PROPOSED ACTIVITY (give title of method statement and reference number from the EMP):

WHAT WORK IS TO BE UNDERTAKEN (give a brief description of the works - attach extra information to ensure accurate description given):

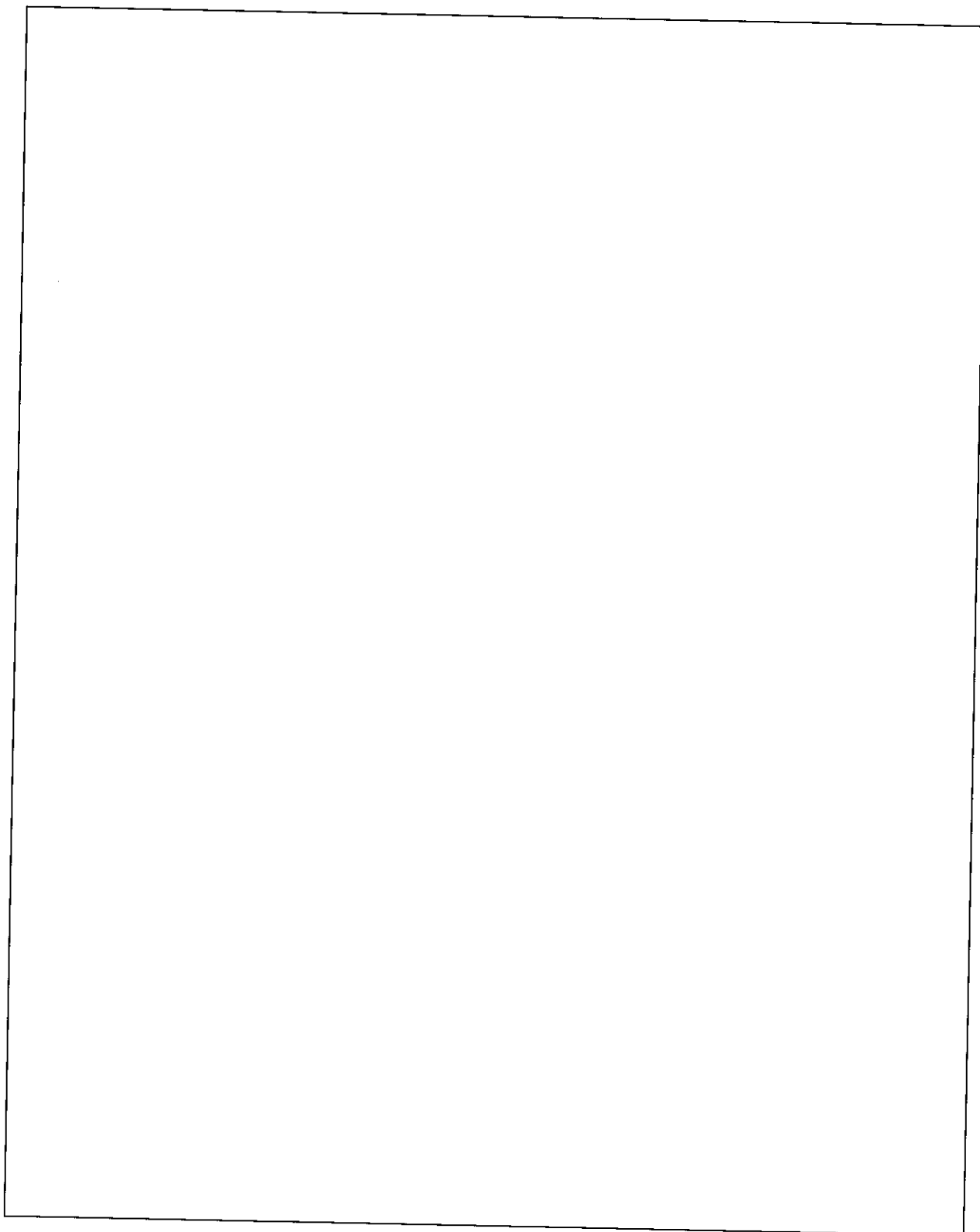
WHERE THE WORKS ARE TO BE UNDERTAKEN (where possible, provide an annotated plan and a full description of the extent of the works):

START AND END DATE OF THE WORKS FOR WHICH THE METHOD STATEMENT IS REQUIRED:

Start Date:

End Date:

HOW THE WORKS ARE TO BE UNDERTAKEN (provide as much detail as possible, including annotated sketches and plans where possible):



Note: please give too much information rather than too little. Please ensure that issues such as emergency procedures, hydrocarbon management, wastewater management, access, individual responsibilities, materials, plant used, maintenance of plant, protection of natural features, etc. are covered where relevant

DECLARATIONS

1) EMPLOYER'S AGENT'S REPRESENTATIVE/ENVIRONMENTAL OFFICER/ENVIRONMENTAL CONTROL OFFICER

The work described in this Method Statement, if carried out according to the methodology described, appears to be satisfactorily mitigated to prevent avoidable environmental harm:

(signed)

(print name)

Dated: _____

2) CONTRACTOR

I understand the contents of this Method Statement and the scope of the works required of me. I further understand that this Method Statement may be amended on application to other signatories and that the Employer's Agent's Representative/Environmental Officer/Environmental Control Officer will audit my compliance with the contents of this Method Statement. I understand that this method statement does not absolve me from any of my obligations or responsibilities in terms of the Contract.

(signed)

(print name)

Dated: _____

3) EMPLOYER'S AGENT

The works described in this Method Statement are approved.

(signed)

(print name)

(designation)

Dated: _____

ANNEXURE B: ENVIRONMENTAL SITE INSPECTION CHECKLIST

To be submitted to the Employer's Agent once a week

CONTRACT:.....

DATE:.....

ENVIRONMENTAL ASPECT	YES/ NO (✓ or X)	COMMENTS
• All new personnel on Site are aware of the contents of the EMP and have been through the environmental awareness course.		
• Contractor's camp is neat and tidy and the labourers' facilities are of an acceptable standard.		
• Sufficient and appropriate fire fighting equipment is visible and readily available in the appropriate places.		
• Waste control and removal system is being maintained.		
• Fences are being maintained.		
• Drip trays are being utilised where there is a risk of spillage.		
• Bunded areas/drip trays are being emptied on a regular basis (especially after rain).		
• No leaks are visible from construction vehicles.		
• Refuelling of vehicles and plant occurs within designated areas, and appropriate refuelling apparatus and drip trays are being used.		
• "No go" areas, natural features, vegetation, etc. have not been damaged.		
• Dust control measures (if necessary) are in place and are effectively controlling dust.		
• Noise control measures (if necessary) are in place and are working effectively.		
• Erosion and sedimentation control measures (if necessary) are in place and are controlling effectively.		
• Material stockpiles are located within the boundary of the Site and are protected from erosion.		
• Other		

Completed by:.....

Signed:.....

ANNEXURE C: CONSTRUCTION PERSONNEL INFORMATION POSTER

ENVIRONMENTAL MANAGEMENT DO'S AND DON'TS

	Workers & equipment must stay inside the site boundaries at all times.		Use the toilets provided Report full or leaking toilets
	Do not swim in or drink from streams		Only eat in demarcated eating areas Never eat near a river or stream Put packaging & leftover food into rubbish bins
	Do not throw oil, petrol, diesel, concrete or rubbish in the stream		Do not litter - put all rubbish (especially cement bags) into the bins provided Report full bins to your supervisor The responsible person should empty bins regularly
	Do not work in the stream without direct instruction Do not damage the banks or vegetation of the stream		Always keep to the speed limit Drivers - check & report leaks Ensure loads are secure & do not spill
	Protect animals on the site Ask your supervisor or Contract's Manager to remove animals found on site		Know all the emergency phone numbers
	Do not damage or cut down any trees or plants without permission Do not pick flowers		Fines of between R1000 and R5000 Removal from site Construction may be stopped
	Put cigarette butts in a rubbish bin Do not smoke near gas, paints or petrol Do not light any fires without permission Know the positions of fire fighting equipment Report all fires Do not burn rubbish or vegetation without permission		Report any breaks, floods, fires, leaks and injuries to your supervisor Ask questions!
	Work with petrol, oil & diesel in areas marked for this Report any petrol, oil & diesel leaks or spills Use a drip tray under vehicles & machinery Empty drip trays after rain & do not throw this water into a river		
	Try to avoid producing dust - wet dry ground & soil		
	Do not make loud noises around the site, especially near schools and homes Report or repair noisy vehicles		

ANNEXURE D: ADDITIONAL ENVIRONMENTAL ISSUES DEEMED TO FORM PART OF THE ENVIRONMENTAL MANAGEMENT PROGRAMME

Listed below are issues pertaining to the environment that form part of the Contract Document. The clause references relate to the **General Conditions of Contract for Construction Works, Third Edition, 2015 (GCC 2015)**. They are listed here to emphasise that they form part of the environmental considerations and requirements for this project. They must be read together with any Contract Specific Data referring thereto in Part C1.2 Contract Data. The comments made below on the various issues are to be taken as explanatory, in so far as environmental matters are concerned, and do not modify the clauses in any way.

1. Monitoring

Clause 3.1.1 makes provision for the Employer's Agent to administer the Contract in accordance with the provisions of the Contract, including the monitoring of any environmental variables.

2. Health and safety

Clauses 3.1.4, 4.3.1, 4.3.2 and 4.10.1 remind the Contractor of his obligations in terms of the Occupational Health and Safety Act (No. 85 of 1993) and Construction Regulations 2003.

Clause 5.7 of SANS 1200A reinforces these requirements through the observation of proper and adequate safety arrangements.

3. Employer's Agent's authority to delegate

Clause 3.2.4 gives the Employer's Agent the authority to appoint a representative to act as the Environmental Officer (EO) for the Contract. The EO, who shall be responsible for monitoring compliance with the EMP, may be the Employer's Agent's Representative or any other person accountable to the Employer's Agent.

4. Employer's Agent's instructions

Clause 4.2.1 requires that the Contractor comply with the Employer's Agent's instructions on any matter relating to the Works. Moreover, Clause 4.2.2 ensures that the Contractor only takes instructions from the Employer's Agent, the Employer's Agent's Representative or a person authorised by the Employer's Agent in terms of Clause 3.2.4.

5. Compliance with applicable laws

Clause 4.3.1 requires that the Contractor comply with all applicable laws, regulations, etc. in fulfilling the Contract.

6. Protection of fossils, etc.

Clause 4.7.1 requires the Contractor to take reasonable precautions to prevent any person from damaging, *inter alia* anything of geological or archaeological interest, and requires that he inform the Employer's Agent and follows any instructions issued in this regard.

7. Housing, food and transport

Clause 4.10.1 requires the Contractor to make his own arrangements for payment, housing, feeding and transport for his employees, provided that if he uses any part of the Site for such purposes he shall obtain the Employer's Agent's prior approval.

Clause 4.2 of SANS 1200A further requires that facilities provided comply with local authority regulations and are maintained in a clean and sanitary condition.

8. Competent employees

Clause 4.11.1 requires that all persons employed on Site are careful, competent, and efficient. These attributes embrace knowledge of the environmental matters and issues dealt with in the EMP.

9. Removal from Site

Clause 4.11.2 makes provision for the Employer's Agent to instruct the removal from the Works and Site of any person who is guilty of misconduct, or is incompetent or negligent, or is an undesirable presence on Site.

Clause 7.1.1 requires that all Construction Equipment be in good working order. Accordingly, the Employer's Agent may order that any Construction Equipment not complying with the environmental specifications be removed from Site.

10. Unacceptable documentation

Clauses 5.3.1 and 5.3.2 require the Contractor to provide documentation required before commencement with Works execution, failing which the Employer may terminate the Contract. Such documentation includes the Protection of the Environment Declaration provided for in the Contract Document.

11. Programme and Method Statements

Clause 5.6.1 makes provision for the Employer's Agent to request the programmes for carrying out the Works.

Clause 5.6.2 makes provision for the Employer's Agent to request statements from the Contractor for the entire scope of the work. In the case of the environmental specifications, these would be submitted as Method Statements.

12. Hours of operation

Clause 5.8.1 restricts the Contractors hours of operation to between sunrise and sunset on working days (usually from Monday to Saturday), unless, *inter alia*, permitted by the Employer's Agent in writing.

Clause 5.7.2 further requires that in the event that permission is granted for night work, then such work shall be carried out without excessive noise and disturbance.

13. Suspension of Works

Clause 5.11.1 enables the Employer's Agent to suspend the progress of the Works or any part thereof, which may be as a result of some default or breach of the Contract on the part of the Contractor.

14. Site clean-up

Clause 5.15.1 requires that, on completion of the Works, the Contractor shall clear away and remove from the Site all Construction Equipment, surplus materials, rubbish and Temporary Works of every kind and leave the whole of the Site and Works clean and in a safe condition. All streams and watercourses shall be restored to the condition as at the commencement of the Works. Should the Contractor fail to do the work upon notice from the Employer's Agent, the Employer may in terms of Clause 7.8.3, employ others to carry out the work and recover the cost of doing so from the Contractor.

15. Access to the Works

Clause 7.3.1 makes provision for the Employer's Agent to authorise the Environmental Officer (EO) to have access to the Works and Site.

16. Pollution prevention and interferences

Clause 8.1.2 requires that all operations necessary for the execution of the Works be carried out so as not to cause unnecessary noise or pollution, or to interfere unnecessarily or improperly with public services, or the access to, use and occupation of public or private roads and footpaths or properties.

Clause 5.6 of SANS 1200A further requires the Contractor to minimise dust nuisance and pollution of streams and inconvenience to or interference with the public.

17. Dust

Clause 8.1.2 requires that all operations necessary for the execution of the Works be carried out so as not to cause unnecessary pollution.

Clause 5.6 of SANS 1200A requires that the Contractor take all reasonable measures to minimise any dust nuisance.

18. Noise

Clause 8.1.2 requires that all operations necessary for the execution of the Works be carried out so as not to cause unnecessary noise.

Clause 4.1 of SANS 1200A requires that when working in built-up areas, the Contractor shall provide and use suitable and effective silencing devices for pneumatic tools and other plant that would otherwise cause a noise level exceeding 85dB.

19. Protection of existing environment

Clause 8.1.3 requires that the Contractor uses every reasonable means to prevent any roads or bridges to or in the vicinity of the Site being subjected to damage by excessive loads, or disruption due to excessive traffic, occasioned by his transport arrangements.

20. Reinstatement

Clauses 8.2 and 8.4 make provision for the Contractor to repair and make good any damage to the Works in his care (other than "excepted risks"), and bear any costs associated with such reinstatement.

21. Reporting accidents

Clause 8.5.1 requires the Contractor to report to the Employer's Agent every occurrence on the Site which causes environmental damage.

H: HEALTH AND SAFETY SPECIFICATION

CONTENTS

H1 DEFINITIONS

H2 SCOPE

H3 INTERPRETATION

H4 GENERAL REQUIREMENTS

H5 ADMINISTRATION

- H5.1 Application for construction work permit
- H5.2 Notification of intention to commence construction work
- H5.3 Occupational Health and Safety Agreement
- H5.4 Good standing with the Compensation Fund or a licensed compensation insurer
- H5.5 Emergency procedures
- H5.6 Health and safety file
- H5.7 Health and safety committee
- H5.8 Inspections, formal enquires and incidents
- H5.9 Personal protective equipment and clothing

H6 APPOINTMENTS

- H6.1 Appointment of construction manager
- H6.2 Appointment of construction supervisor, and health and safety officers
- H6.3 Other competent persons
- H6.4 Health and safety representative(s)

H7 EMPLOYER'S HEALTH AND SAFETY AGENT

H8 CREATING AND MAINTAINING A SAFE AND HEALTHY WORK ENVIRONMENT

- H8.1 General
- H8.2 Risk assessment
- H8.3 Health and safety plans
- H8.4 Responsibilities towards employees and visitors
- H8.5 Subcontractors
- H8.6 Work permits and wayleaves
- H8.7 Access to the Site
- H8.8 First aid and emergency procedures
- H8.9 Housekeeping
- H8.10 Fire precautions
- H8.11 Facilities for workers

H9 GENERAL HAZARDS AND RISKS APPLICABLE TO WORK REQUIRED IN TERMS OF THIS TERM TENDER

- H9.1 Existing Site conditions
- H9.2 Information provided by the designer (CR 6(1))
- H9.3 Environmental hazards
- H9.4 Traffic hazards
- H9.5 Construction materials (hazardous substances)
- H9.6 Fall protection (working at heights) (CR 10)
- H9.7 Structures (CR 11)
- H9.8 Temporary works (CR 12)
- H9.9 Excavation work (CR 13)
- H9.10 Demolition work (CR 14)
- H9.11 Tunneling (CR 15)
- H9.12 Scaffolding (CR 16)
- H9.13 Suspended platforms (CR 17)
- H9.14 Rope access work (CR 18)
- H9.15 Material hoists (CR 19)
- H9.16 Bulk mixing plant (CR 20)
- H9.17 Explosive actuated fastening device (CR 21)

- H9.18 Cranes (CR 22)
- H9.19 Construction vehicles and mobile plant (equipment) (CR 23)
- H9.20 Electrical installations and machinery (CR 24)
- H9.21 Flammable liquids (CR 25)
- H9.22 Water environments (CR 26)
- H9.23 Overhead work (CR 27(g))
- H9.24 Confined spaces
- H9.25 Other hazards...

H: HEALTH AND SAFETY SPECIFICATION

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

H1 DEFINITIONS

For the purposes of this Specification, the definitions given in the Occupational Health and Safety Act, 85 of 1993 and the Construction Regulations, 2014, and the following definitions, shall apply:

- a) "Construction Regulations, 2014" means the Construction Regulations (GNR. 84 of 7 February 2014) published in terms of the OHS Act.
- b) "Contractor" means the Principal Contractor as defined in the Construction Regulations, 2014.
- c) "Employer" means the Client or his agent as defined in the Construction Regulations, 2014.
- d) "Employer's Agent" means the person/firm so named in the Contract Data whose function is to administer the Contract as agent of the Employer, acting through, if appointed, a Health and Safety Agent.
- e) "OHS Act" means the Occupational Health and Safety Act, 85 of 1993.
- f) "subcontractor" means any contractor employed by the Contractor to perform construction work.

H2 SCOPE

In terms of the OHS Act and the Construction Regulations, 2014 the Employer must provide the Contractor with a Health and Safety Specification, to which the Contractor must respond with a Health and Safety Plan for approval by the Employer.

The purpose of this Specification is to ensure that a contractor entering into a contract with the Employer maintains an acceptable level of compliance with regard to health and safety issues during the performance of the Contract. In this regard the Health and Safety Specification forms an integral part of the Contract and the Contractor shall ensure that his subcontractors and/or suppliers comply with the requirements of this Specification.

H3 INTERPRETATION

The OHS Act and its associated regulations shall have precedence in the interpretation of any ambiguity or inconsistency between it and this Specification.

Responsibility for health and safety relating to the Works lies with the Contractor as described in this Specification. Nothing stated in or omitted from this Specification shall in any way limit the Contractor's obligations and liabilities in terms of the OHS Act.

H4 GENERAL REQUIREMENTS

The Contractor shall:

- a) create and maintain a safe and healthy work environment;
- b) execute the Works in a manner that complies with all the requirements of the OHS Act and all its associated regulations, and in so doing, minimize the risk of incidents occurring; and
- c) respond to the instructions issued by the Employer's Agent through the Employer's Agent's Representative, except in the case of a health and safety issue which requires the Contractor's immediate attention, in which case the Employer's Health and Safety Agent can issue an instruction directly to the Contractor.

H5 ADMINISTRATION

H5.1 Application for construction work permit

Not applicable until 7 August 2015.

H5.2 Notification of intention to commence construction work

The Contractor shall notify the Provincial Director of the Department of Labour in writing using the pro forma contained in Annexure 2 of the Construction Regulations, 2014 before construction work commences, and retain a copy of such notification in the health and safety file, if such work will:

- a) include excavation work;
- b) include working at a height where there is a risk of falling;
- c) include the demolition of a structure; or
- d) include the use of explosives to perform construction work.

The Contractor shall ensure that no work commences on an electrical installation which requires a new supply or an increase in electricity supply before the person who supplies or contracts or agrees to supply electricity to that electrical installation has been notified of such work.

The Contractor shall ensure that no asbestos work is carried out before the Provincial Director of the Department of Labour has been notified in writing.

H5.3 Occupational Health and Safety Agreement

The Contractor shall enter into an Agreement with the Employer before the commencement of the Works on Site.

H5.4 Good standing with the Compensation Fund or a licensed compensation insurer

The Contractor shall provide the Employer's Agent with a letter of good standing from the Compensation Commissioner or a licensed compensation insurer before the commencement of the Works on Site.

H5.5 Emergency procedures

The Contractor shall submit for acceptance to the Employer's Agent a health and safety emergency procedure, which includes but is not limited to fire, spills, accidents and exposure to hazardous substances, which:

- a) identifies the key personnel who are to be notified of any emergency;
- b) sets out details of available emergency services, including contact particulars; and
- c) the actions or steps which are to be taken during an emergency.

The Contractor shall within 24 hours of an emergency taking place notify the Employer's Agent in writing of the emergency and briefly outline what happened and how it was dealt with.

H5.6 Health and safety file

The Contractor shall ensure that a Health and Safety file, which shall include all documentation required in terms of the provisions of the OHS Act, the Construction Regulations, 2014 and this Health and Safety Specification, is open and kept on Site at all times.

The Health and Safety file shall be made available for inspection by any inspector, subcontractor, the Employer, the Employer's Agent, the Employer's Health and Safety Agent, or employee of the Contractor, upon the request of such persons.

The Contractor shall hand over the Health and Safety file to the Employer's Agent upon Works completion of the Contract and, if applicable, a certificate of compliance accompanied by a test report for the electrical installation in accordance with the provisions of the Electrical Installation Regulations, 1992.

H5.7 Health and safety committee

Where applicable, the Contractor shall establish a health and safety committee, and shall convene health and safety meetings as provided for in the OHS Act.

The Employer's Agent or the Employer's Health and Safety Agent shall be invited to attend such

meetings as an observer.

The Contractor shall ensure that minutes of the health and safety committee meetings are kept.

H5.8 Inspections, formal enquires and incidents

The Contractor shall inform the Employer's Agent:

- a) beforehand of inspections, investigations or formal inquiries of which he has been notified by an inspector; and
- b) as soon as reasonably practicable of the occurrence of an incident (as defined in the OHS Act) on the Site.

The Contractor shall record all incidents and notify the Employer's Agent of any incident, except in the case of a traffic accident on a public road, as soon as possible after it has occurred and report such incident to an inspector as designated in terms of the OHS Act.

The Contractor shall investigate all incidents and issue the Employer's Agent with copies of such investigations.

H5.8 Personal protective equipment and clothing

The Contractor shall ensure that all workers are issued with the necessary personal protective clothing.

H6 APPOINTMENTS

H6.1 Appointment of construction manager

The Contractor shall, prior to commencing the Works on Site, appoint a full-time competent person as the construction manager, with the duty of managing all construction work on a single site, including the duty of ensuring occupational health and safety compliance. In the absence of the construction manager an alternative must be appointed by the Contractor.

The Contractor may, having considered the size of the project, appoint, in writing, one or more assistant construction managers for different sections thereof.

No construction manager may manage any construction work on or in any construction site other than the Site in respect of which he or she has been appointed.

H6.2 Appointment of construction supervisor, and health and safety officers

The construction manager shall appoint a competent employee(s) in writing as the construction supervisor(s) for the Site, who will be responsible for construction activities and ensuring occupational health and safety compliance on the construction site. The Contractor may, having considered the size of the project, appoint, in writing, one or more competent employees to assist the appointed construction supervisor(s).

The Contractor may, having considered the size of the project, the degree of danger likely to be encountered or the accumulation of hazards or risks on the Site, appoint a full-time or part-time construction health and safety officer in writing, who has in the Contractor's opinion the necessary competencies and resources, to assist the Contractor in the control of all health and safety related aspects on the Site.

The Contractor shall compile and maintain an organogram which outlines the roles and responsibilities of the construction supervisor's assistants, and health and safety officers.

H6.3 Other competent persons

The Contractor shall appoint in writing competent persons to supervise or inspect, as relevant, any of the following:

- a) temporary works operations;
- b) excavation work;
- c) demolition work;
- d) scaffolding work operations;
- e) suspended platform work operations;
- f) rope access work;
- g) material hoists;
- h) operation of bulk mixing plant;

- i) explosive activated fastening device;
- j) cranes;
- k) construction vehicles and mobile plant (equipment);
- l) the stacking and storage of articles on the Site; and
- m) fire equipment.

The Contractor shall appoint in writing competent persons to:

- n) induct employees in health and safety; and
- o) prepare a fall protection plan.

H6.4 Health and safety representative(s)

The Contractor shall appoint in writing, if necessary in terms of the OHS Act, a health and safety employee representative(s), whose duties shall be as described in the OHS Act.

H7 EMPLOYER'S HEALTH AND SAFETY AGENT

The Employer's Health and Safety Agent shall:

- a) audit the Contractor's compliance with the requirements of this Specification prior to the commencement of any physical construction activities on the Site;
- b) accept or reject all safety plans, giving reasons for rejecting such plans;
- c) monitor the effective implementation of all safety plans;
- d) conduct periodic and random audits on the health and safety file to establish compliance with the requirements of this Specification and the Contractor's health and safety plan; and
- e) visit the site at regular intervals to conduct site inspections, and based upon such visits issue, wherever necessary, any notices and/or instructions to the Contractor or any of the Contractor's subcontractors with a copy to the Employer's Agent and, where relevant, to the Contractor.

The Contractor shall invite the Employer's Health and Safety Agent to audit compliance with the requirements of this Specification before commencing with any new construction activity on the Site.

The Contractor shall permit the Employer's Health and Safety Agent to audit the Contractor's compliance with the approved Health and Safety Plan, and shall provide any assistance and/or documentation as may be required in this regard.

H8 CREATING AND MAINTAINING A SAFE AND HEALTHY WORK ENVIRONMENT

H8.1 General

The Contractor shall with respect to the Site and the construction works that are contemplated:

- a) cause a preliminary hazard identification to be performed by a competent person before commencing any physical construction activity;
- b) evaluate the risks associated with such work constituting a hazard to the health and safety of such employees and the steps that need to be taken to comply with the OHS Act; and
- c) as far as is reasonably practicable, prevent the exposure of such employees to the hazards concerned or, where prevention is not reasonably practicable, minimize such exposure.

The Contractor shall ensure that:

- d) all reasonably practicable steps are taken to prevent the uncontrolled collapse of any new or existing structure or any part thereof, which may become unstable or is in a temporary state of weakness or instability due to the carrying out of construction work;
- e) no structure or part of a structure is loaded in a manner which would render it unsafe;
- f) relevant information, if any, provided by the designer of the structure is taken into account in the risk assessment; and
- g) the designer of any temporary works complies with the requirements of regulation 6(2) of Construction Regulations, 2014.

The Contractor shall carry out regular inspections and audits to ensure that the Works are being performed in accordance with the requirements of this Specification and the Contractor's health and safety plan

H8.2 Risk assessment

The Contractor shall before the commencement of any construction work on Site and during such

construction work, cause risk assessment(s) to be performed by a competent person appointed in writing. Such assessment(s) shall as a minimum:

- a) identify the risks and hazards to which persons may be exposed to;
- b) analyse and evaluate the identified risks and hazards based on a documented method;
- c) document a plan of safe work procedures, including the use of any personal protective equipment or clothing and the undertaking of periodic "toolbox talks" or inductions before undertaking hazardous work, in order to mitigate, reduce or control the risks and hazards that have been identified;
- d) provide a monitoring plan; and
- e) provide a review plan.

The Contractor shall ensure that as far as is reasonably practicable, ergonomic related hazards are analysed, evaluated and addressed in the risk assessment.

The Contractor must review the relevant risk assessment -

- f) where changes are effected to the design and or construction that result in a change to the risk profile; or
- g) when an incident has occurred.

H8.3 Health and safety plans

The Contractor shall prior to commencing the Works to which this Specification applies, submit to the Employer's Health and Safety Agent for approval a suitable and sufficiently documented health and safety plan, based on this Specification and the risk assessment that is conducted.

The health and safety plan shall include, but not be limited to, the following:

- a) The safety management structure, including the names of all designated persons such as the construction supervisor and any other competent persons;
- b) Safety method statements and procedures to be adopted to ensure compliance with the OHS Act; Construction Regulations, 2014 and this Health and Safety Specification;
- c) The provision and use of temporary services;
- d) Personal protective equipment, devices and clothing required;
- e) Emergency procedures;
- f) Provision of workers' welfare facilities;
- g) Induction and training;
- h) Arrangements for monitoring and control to ensure compliance with the safety plan; and
- i) Provision and maintenance of the health and safety file and all other relevant documentation.

The Contractor shall provide each subcontractor with the sections of this Health and Safety Specification pertaining to the construction work to be performed by that subcontractor. The subcontractor shall provide the Contractor with a health and safety plan pertaining to his work, for incorporation into the Contractor's health and safety plan.

The Contractor shall discuss the submitted health and safety plan with the Employer's Health and Safety Agent, modify such plan in the light of the discussions and resubmit the modified plan for approval.

The Contractor shall apply the approved health and safety plan from the date of its approval and for the duration of the Works to which this Specification applies.

The Contractor shall conduct periodic audits for compliance with the approved health and safety plan at intervals agreed upon with the Employer's Health and Safety Agent, but at least once every month.

The Contractor shall update the health and safety plan whenever changes to the Works are brought about.

H8.4 Responsibilities towards employees and visitors

The Contractor shall, as far as is reasonably practicable, cause every employee to be made conversant with the hazards to his health and safety attached to any work which he has to perform, any article or substance which he has to produce, process, use, handle, store or transport and any plant or machinery which he is required or permitted to use, as well as with the precautionary measures which should be taken and observed with respect to those hazards or safe work procedures.

The Contractor shall ensure that all employees under his control are informed, instructed and trained by a competent person regarding any hazard and the related work procedures before any work commences, and thereafter at such times as may be determined in the risk assessment.

The Contractor shall cause a record of all induction training to be kept, which indicates the names, identity numbers and job description of all those who attended such training.

The Contractor shall not allow or permit any employee to enter the Site, unless such person has undergone health and safety induction training pertaining to the hazards prevalent on the Site at the time of entry.

The Contractor shall ensure that all of his employees have a valid medical certificate of fitness specific to the construction work to be performed and issued by an occupational health practitioner on the prescribed form.

The Contractor shall ensure that each visitor to the Site, save where such visitor only visits the site office and is not in direct contact with the construction work activities:

- a) undergoes health and safety instruction pertaining to the hazards prevalent on the Site; and
- b) is in possession of and using the necessary personal protective equipment.

The Contractor shall cause a record of all induction training to be kept in the Health and Safety file.

The Contractor shall provide suitable on-site signage to alert workers and visitors to health and safety hazards and requirements. Such signage shall include but not be limited to:

- c) prohibited unauthorized entrance;
- d) signage to indicate what personal protective equipment is to be worn; and
- e) activity related signs.

The Contractor shall not permit any person who is or who appears to be under the influence of intoxicating liquor or drugs, to enter or remain at a workplace.

H8.5 Subcontractors

The Contractor may only subcontract work in terms of a written subcontract and shall only appoint a subcontractor should he be reasonably satisfied that such a subcontractor has the necessary competencies and resources to safely perform the work falling within the scope of the subcontract.

The Contractor shall ensure that all of his obligations in respect of subcontractors in terms of the Construction Regulations, 2014 are adhered to.

H8.6 Work permits and wayleaves

The Contractor shall be responsible for obtaining all the 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.

H8.7 Access to the Site

The Contractor shall ensure that access to the Site is strictly controlled and that, where possible, only authorised persons are permitted onto the Site.

The Contractor shall control the access to Site of his own personnel and equipment, and that of his subcontractors and suppliers, in such a way so as to ensure that the safety of all public pedestrian and vehicular traffic is not compromised.

H8.8

H8.9 First aid and emergency procedures

The Contractor shall, where more than five employees are employed at a workplace, provide a first aid box or boxes at or near the workplace, which shall be available and accessible for the treatment of injured persons at that workplace. Such first aid boxes shall contain suitable first aid equipment.

The Contractor shall ensure, where there are more than 10 employees employed on the Site, that for every group of up to 50 employees at that workplace at least one person is readily available during normal working hours who is in possession of a valid certificate of competency in first aid.

The following information shall be conspicuously posted in the offices of the Contractor for the duration of the Contract:

- a) Telephone numbers of emergency services;
- b) The names of all safety representatives and safety officers; and
- c) The name(s) of the competent first aider(s).

The Contractor shall post, in prominent places, notices indicating where the first aid box(es) is/are kept, as well as the name of the person in charge of the first aid box.

H8.10 Housekeeping

The Contractor shall ensure, *inter alia*, that suitable housekeeping is continuously implemented on the Site, including provision for the:

- a) removal of scrap, waste and debris, and materials which are no longer required for use, at appropriate intervals (in accordance with Construction Regulation 27); and
- b) proper stacking and storage of materials and equipment (in accordance with Construction Regulations 27 and 28).

H8.11 Fire precautions

The Contractor shall ensure that all appropriate measures are taken to minimise the risk of fire and that appropriate procedures and equipment are in place to deal with the event of a fire, all in accordance with Construction Regulation 29 and the Environmental Management Specification in Part C3.5 of the Scope of Work.

H8.12 Facilities for workers

The Contractor shall provide ablution facilities and eating areas all as specified in the Environmental Management Specification in Part C3.5 of the Scope of Work.

H9 PROJECT SPECIFIC HAZARDS AND RISKS

H9.1 Information provided by the designer

It must be noted that the designer also has Health and Safety duties assigned in terms of the Construction Regulations. Where the contractor fulfils a design function in terms of this project, these duties will also apply. Please refer to Regulation 6 of the Construction Regulations 2014.

H9.2 Environmental hazards

The Contractor must be mindful of adverse weather conditions upon the health and safety of the workforce. This includes inclement weather, strong wind, heat stress, extreme cold, etc. The Contractor's risk assessment process must take into account the risks associated with such weather conditions. The same is true when working in an environment where there is a risk to employees' health and safety from presence of poisonous flora, or wildlife (including bees, snakes, etc). The Contractor's risk assessment process must take these risks into account.

H9.3 Traffic hazards

Traffic management must be in place as applicable to protect workers from the dangers of passing traffic and road users against the dangers associated with the construction works. Ensure all trained flag persons are

on point with high visibility flags and high visibility clothes at all times. Warning signs to be clearly displayed for road users.

H9.4 Construction materials (hazardous substances)

In addition to the requirements in the HCS Regulations, the principal contractor must provide proof in the Health and Safety Plan that:

- ☐ Material Safety Data Sheets (MSDS's) of the relevant materials / hazardous chemical substances are available prior to use by the contractor. All MSDS's shall be available for inspection by the agent at all times.
- ☐ Risk assessments are done at least once every 6 months.
- ☐ Exposure monitoring is done according to OESSM and by an Approved Inspection Authority (AIA) and that the medical surveillance programme is based on the outcomes of the exposure monitoring.
- ☐ How the relevant HCS's are being/going to be controlled by referring to:
- ☐ Limiting the amount of HCS
- ☐ Limiting the number of employees
- ☐ Limiting the period of exposure
- ☐ Substituting the HCS
- ☐ Using engineering controls
- ☐ Using appropriate written work procedures
- ☐ The correct PPE is being used.
- ☐ HCS are stored and transported according to SANS 072 and 0228.
- ☐ Training with regards to these regulations was given.

The Health and Safety plan should make reference to the disposal of hazardous waste on classified sites and the location thereof (where applicable).
The First Aider must be made aware of the MSDS and trained in how to treat HCS incidents appropriately.

H9.5 Working at heights (fall protection)

Not thought to be applicable to this project.

H9.6 Structures

Not thought to be applicable to this project.

H9.7 Formwork and support work

Not thought to be applicable to this project.

H9.8 Excavation work

A contractor must:

- ☐ ensure that all excavation work is carried out under the supervision of a competent person who has been appointed in writing for that purpose; and
- ☐ evaluate, as far as is reasonably practicable, the stability of the ground before excavation work begins.

A contractor who performs excavation work:

- ☐ must take reasonable and sufficient steps in order to prevent, as far as is reasonably practicable, any person from being buried or trapped by a fall or dislodgement of material in an excavation;
- ☐ may not require or permit any person to work in an excavation which has not been adequately shored or braced: Provided that shoring and bracing may not be necessary where-
- ☐ the sides of the excavation are sloped to at least the maximum angle of repose measured relative to the horizontal plane; or
- ☐ such an excavation is in stable material: Provided that -
 - o permission has been given in writing by the appointed competent person contemplated above upon evaluation by him or her of the site conditions; and
 - o where any uncertainty pertaining to the stability of the soil still exists, the decision from a professional engineer or a professional technologist competent in excavations is decisive and such a decision must be noted in writing and signed by both the competent person and the professional engineer or technologist, as the case may be;
- ☐ must take steps to ensure that the shoring or bracing contemplated above is designed and constructed in a manner that renders it strong enough to support the sides of the excavation in question;
- ☐ must ensure that no load, material, plant or equipment is placed or moved near the edge of any excavation where it may cause its collapse and consequently endangers the safety of any person, unless precautions

such as the provision of sufficient and suitable shoring or bracing are taken to prevent the sides from collapsing;

- ☐ must ensure that where the stability of an adjoining building, structure or road is likely to be affected by the making of an excavation, steps are taken to ensure the stability of such building, structure or road and the safety of persons;
- ☐ must cause convenient and safe means of access to be provided to every excavation in which persons are required to work, and such access may not be further than six meters from the point where any worker within the excavation is working;
- ☐ must ascertain, as far as is reasonably practicable, the location and nature of electricity, water, gas or other similar services which may in any way be affected by the work to be performed, and must before the commencement of excavation work that may affect any such service, take the steps that are necessary to render the circumstances safe for all persons involved;
- ☐ must ensure that every excavation, including all bracing and shoring, is inspected -
 - ☐ daily, prior to the commencement of each shift;
 - ☐ after every blasting operation;
 - ☐ after an unexpected fall of ground;
 - ☐ after damage to supports; and
 - ☐ after rain,

by the competent person, in order to ensure the safety of the excavation and of persons, and those results must be recorded in a register kept on site and made available on request to an inspector, the client, the client's agent, any other contractor or any employee;

- ☐ must cause every excavation which is accessible to the public or which is adjacent to public roads or thoroughfares, or whereby the safety of persons may be endangered, to be –
- ☐ adequately protected by a barrier or fence of at least one metre in height and as close to the excavation as is practicable; and
- ☐ provided with warning illuminants or any other clearly visible boundary indicators at night or when visibility is poor, or have resort to any other suitable and sufficient precautionary measure where this is not practicable;
- ☐ must ensure that all precautionary measures stipulated for confined spaces as determined in the General Safety Regulations, 2014 are complied with by any person entering any excavation;
- ☐ must, where the excavation work involves the use of explosives, appoint a competent person in the use of explosives for excavation, and must ensure that a method statement is developed by that person in accordance with the applicable explosives legislation; and
- ☐ must cause warning signs to be positioned next to an excavation within which or where persons are working or carrying out inspections or tests.

H9.9 Demolition work

Not thought to be applicable to this project.

H9.10 Tunnelling

Not thought to be applicable to this project.

H9.11 Scaffolding

Not thought to be applicable to this project.

H9.12 Suspended platforms

Not thought to be applicable to this project.

H9.13 Boatswain's chairs

Not thought to be applicable to this project.

H9.14 Material hoists

Not thought to be applicable to this project.

H9.15 Batch plants

Not thought to be applicable to this project.

H9.16 Explosive powered tools

Not thought to be applicable to this project.

H9.17 Cranes

Not thought to be applicable to this project.

H9.18 Construction vehicles and mobile plant

A contractor must ensure that all construction vehicles and mobile plant:

- ☐ are of an acceptable design and construction;
- ☐ are maintained in a good working order;
- ☐ are used in accordance with their design and the intention for which they were designed, having due regard to safety and health;
- ☐ are operated by a person who-
 - ☐ has received appropriate training, is certified competent and in possession of proof of competency and is authorised in writing to operate those construction vehicles and mobile plant;
 - ☐ has a medical certificate of fitness to operate those construction vehicles and mobile plant, issued by an occupational health practitioner in the form of Annexure 3.
- ☐ have safe and suitable means of access and egress;
- ☐ are properly organized and controlled in any work situation by providing adequate signalling or other control arrangements to guard against the dangers relating to the movement of vehicles and plant, in order to ensure their continued safe operation;
- ☐ are prevented from falling into excavations, water or any other area lower than the working surface by installing adequate edge protection, which may include guard-rails and crash barriers;
- ☐ are fitted with structures designed to protect the operator from falling material or from being crushed should the vehicle or mobile plant overturn;
- ☐ are equipped with an acoustic warning device which can be activated by the operator;
- ☐ are equipped with an automatic acoustic reversing alarm; and
- ☐ are inspected by the authorised operator or driver on a daily basis using a relevant checklist prior to use and that the findings of such inspection are recorded in a register kept in the construction vehicle or mobile plant.

A contractor must ensure that:

- ☐ no person rides or is required or permitted to ride on a construction vehicle or mobile plant otherwise than in a safe place provided thereon for that purpose;
- ☐ every construction site is organized in such a way that, as far as is reasonably practicable, pedestrians and vehicles can move safely and without risks to health;
- ☐ the traffic routes are suitable for the persons, construction vehicles or mobile plant using them, are sufficient in number, in suitable positions and of sufficient size;
- ☐ every traffic route is, where necessary, indicated by suitable signs;
- ☐ all construction vehicles and mobile plant left unattended at night, adjacent to a public road in normal use or adjacent to construction areas where work is in progress, have appropriate lights or reflectors, or barricades equipped with appropriate lights or reflectors, in order to identify the location of the vehicles or plant;
- ☐ all construction vehicles or mobile plant when not in use, have buckets, booms or similar appendages, fully lowered or blocked, controls in a neutral position, motors stopped, wheels chocked, brakes set and ignition secured;
- ☐ whenever visibility conditions warrant additional lighting, all mobile plant are equipped with at least two headlights and two taillights when in operation;
- ☐ tools, material and equipment are secured and separated by means of a physical barrier in order to prevent movement when transported in the same compartment with employees;
- ☐ vehicles used to transport employees have seats firmly secured and adequate for the number of employees to be carried; and
- ☐ all construction vehicles or mobile plant travelling, working or operating on public roads comply with the requirements of the National Road Traffic Act, 1996.

H9.19 Electrical installations and machinery

A contractor must, in addition to compliance with the Electrical Installation Regulations and the Electrical Machinery Regulations, ensure that:

- ☐ before construction commences and during the progress thereof, adequate steps are taken to ascertain the presence of and guard against danger to workers from any electrical cable or apparatus which is under, over or on the site;

- ☐ all parts of electrical installations and machinery are of adequate strength to withstand the working conditions on construction sites;
- ☐ the control of all temporary electrical installations on the construction site is designated to a competent person who has been appointed in writing for that purpose;
- ☐ all temporary electrical installations used by the contractor are inspected at least once a week by a competent person and the inspection findings are recorded in a register kept on the construction site; and
- ☐ all electrical machinery is inspected by the authorized operator or user on a daily basis using a relevant checklist prior to use and the inspection findings are recorded in a register kept on the construction site.

H9.20 Flammable liquids

A contractor must, in addition to compliance with the provisions for the use and storage of flammable liquids in the General Safety Regulations, 2014, ensure that:

- ☐ where flammable liquids are being used, applied or stored at the workplace concerned, it is done in a manner that does not cause a fire or explosion hazard, and that the workplace is effectively ventilated;
- ☐ no person smokes in any place in which flammable liquid is used or stored, and the contractor must affix a suitable and conspicuous notice at all entrances to any such areas prohibiting such smoking;
- ☐ an adequate amount of efficient fire-fighting equipment is installed in suitable locations around the flammable liquids store with the recognized symbolic signs;
- ☐ only the quantity of flammable liquid needed for work on one day is taken out of the store for use;
- ☐ all containers holding flammable liquids are kept tightly closed when not in actual use and, after their contents have been used up, are removed from the construction site and safely disposed of;
- ☐ where flammable liquids are decanted, the metal containers are bonded and earthed; and
- ☐ no flammable material, including cotton waste, paper, cleaning rags or similar material is stored together with flammable liquids

H9.21 Water environments

Not thought to be applicable to this project.

H9.22 Overhead Work

Not thought to be applicable to this project.

H9.23 Confined spaces

Not thought to be applicable to this project

H9.24 Lifting Machinery and Tackle

The Contractor shall ensure that lifting machinery and tackle is inspected before use and on a monthly basis. The Contractor shall have lifting machinery and tackle inspector who will inspect the equipment at intervals required by the Driven Machinery Regulations, taking into account that:

- ☐ All lifting machinery and tackle have a safe working load clearly indicated;
- ☐ Regular inspection and servicing is carried out;
- ☐ Records are kept of inspections and of service certificates;
- ☐ Thorough examinations are carried out by competent personnel at the frequencies required by legislation
- ☐ There is proper supervision in terms of guiding the loads which includes a trained banks man to direct and check lifting tackle if it is safe for use.

H9.25 Lifting Machinery and Tackle

The Contractor shall ensure that all ladders are numbered and inspected regularly, keeping record of inspections. It should be noted that aluminium ladders are preferred to wooden ladders.

CITY OF CAPE TOWN

INFORMAL SETTLEMENTS WATER & WASTE SERVICES: INFORMAL SETTLEMENTS & BACKYARDERS

CONTRACT NO. 107Q/2018/19

TERM TENDER FOR CIVIL ENGINEERING WORKS WITHIN THE CITY OF CAPE TOWN

C3.6 Annexes

CONTENTS

Annex 1: Monthly Project Labour Report

Annex 2: B-BBEE Sub-Contract Expenditure Report

Annex 3: Joint Venture Expenditure Report

Annex 4: Targeted Labour Contract Participation Expenditure Report

Annex 5: Targeted Enterprises Contract Participation Expenditure Report

Annex 6: Regional Maps

Annex 7: Example Works Project contract document (Winner-takes-all Type)

**CITY OF CAPE TOWN
MONTHLY PROJECT LABOUR REPORT**



CITY OF CAPE TOWN
ISIXEKO SASEKAPA
STAD KAAPSTAD

General

- 1 The Monthly Project Labour Reports must be completed in full, using typed, capital letter
- 2 characters; alternatively, should a computer not be available, handw ritten in black ink.
- 3 Incomplete / Incorrect / illegible forms will not be accepted.
- 4 Any conditions relating to targeted labour stipulated in the Contract (in the case of

5 _____
If a field is not applicable insert the letters: NA

- 6 Either a Contract (in the case of contracted out services or works) or a Works Project (in the case of direct employment by the City) name and number must be inserted. The name of the contract or works project may be abridged if necessary. In the case of term tenders the contract name and number must reflect the term tender as advertised.
- 7 On completion of the contract or works project the anticipated end date must be updated to reflect the actual end date.

3 Care must be taken to ensure that worker details correspond accurately with the

- worker's ID document of which a **Certified copy must be kept for reporting.**

Numbers in cells below e.g (6) refer to the relevant instruction above for completing and submitting forms

PROJECT LABOUR REPORT CURRENT MONTH (mark with "X")												
JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	YEAR (insert last 2 digits)
CONTRACT OR WORKS PROJECT NAME: (6)		CONTRACT OR WORKS PROJECT NUMBER: (6)										
DIRECTORATE:		DEPARTMENT:										
CONTRACTOR OR VENDOR NAME:		CONTRACTOR OR VENDOR E-MAIL ADDRESS:										
CONTRACTOR OR VENDOR CONTACT PERSON:		CONTRACTOR OR VENDOR TEL. NUMBER:		CELL WORK								

ACTUAL START DATE (yyyy/mm/dd)				ANTICIPATED / ACTUAL END DATE (yyyy/mm/dd)		(7)	
2	0			2	0		
TOTAL PROJECT EXPENDITURE / VALUE OF WORK DONE TO-DATE (INCLUDING ALL COSTS, BUT EXCLUDING VAT)							
R							



CITY OF CAPE TOWN
ISIXEKO SASEKAPA
STAD KAAPSTAD

WORKER DETAILS AND WORK INFORMATION

CONTRACT OR WORKS PROJECT NUMBER:										
No.	(8) First name	(8) Surname	(8) ID number	(9) Jobseeker Database Reference Number	(10) New Worker (Y/N)	Gender (M/F)	Disabled (Y/N)	(11) No of days worked this month (excl. training)	(12) No of training days this month (with stipend)	(13) Rate of pay per day (R - c)
1										
2										
3										
4										
5										
6										
7										
8										
9										
10										
11										
12										
13										
14										
15										
16										
17										
18										
19										
20										
				0		0		R		
Declared by Contractor or Vendor to be true and correct:										
			Name							
			Date							
Received by Employer's Agent Project Manager/ Representative:										
			Name							
			Date							
			Signature							

CITY OF CAPE TOWN

CONTRACTOR:

DECLARATION OF INTEREST

R

Name of Sub-contractor
(list all)

Value of Sub-contract work to date (excl. VAT)¹

Value of Sub-contract work to Sub-contractors with a lower B-BBEE Status Level than Prime Contractor

Sub-contractor B

100

¹Documentary evidence to be provided

**Declared by Contractor
to be true and correct:**

Verified by Employer's Agent / Representative:

Contract

Part C3: Scope of Work

278 C3.6
Annexes

ANNEX 3

CITY OF CAPE TOWN

CONTRACT NO. AND NAME:

CONTRACTOR:

JOINT VENTURE EXPENDITURE REPORT BASED ON PAYMENT CERTIFICATE NO.

Value of the contract (as defined in the Preference Schedule) (P*)		R		B-BBEE Status Level of Joint Venture	
Name of Joint Venture partner (list all)	B-BBEE Status Level of each JV partner as at contract award	Percentage contribution of JV partner per JV Agreement ¹ A	Total value of JV partner's contribution (excl. VAT) ¹ B = A% x P*	Value of JV partner's contribution to date (excl. VAT) ¹ C	Value of JV partner's contribution as a percentage of the work executed to date D = C/P* x 100
JV Partner A		%	R	R	%
JV Partner B		%	R	R	%
JV Partner C		%	R	R	%
Documentary evidence to be provided					

Signatures

Declared by Contractor to be true and correct:

Verified by Employer's Agent / Representative

Date:

Date:

Contract

Part C3: Scope of Work
Reference No. 107Q/2018/19

279 C3.6
Annexes

ANNEX 4

CITY OF CAPE TOWN

CONTRACT NO. AND NAME:

CONTRACTOR:

TARGETED LABOUR CONTRACT PARTICIPATION EXPENDITURE REPORT BASED ON CERTIFICATE NO.

Value of the contract (as defined in the Preference Schedule)		R	Specified Targeted Labour Contract Participation Goal		%
Name of Contractor/Sub-contractor (list all)	Total previous expenditure on wages in respect of targeted labour	Net Amount for this month ¹	Total expenditure on wages in respect of targeted labour		
Contractor	R	R	R		
Sub-contractor A	R	R	R		
Sub-contractor B	R	R	R		
			Total:	R	
			Expressed as a percentage of P*		%

¹Documentary evidence to be provided

Signatures

Declared by Contractor to be true and correct:

Date

Verified by Employer's Agent / Representative

Date

CITY OF CAPE TOWN

CONTRACTOR:[illegible]

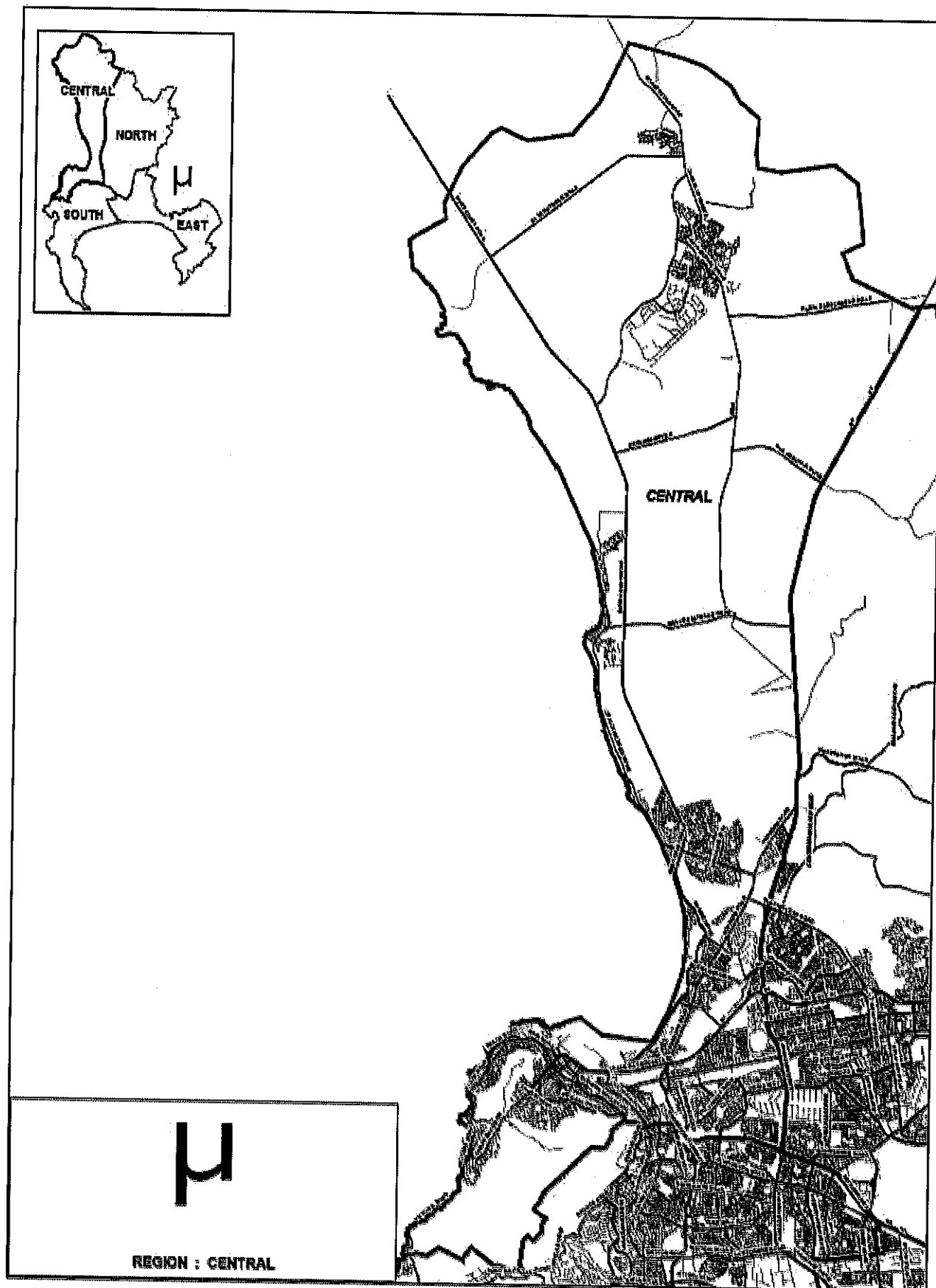
Total:

**Verified by Employer's Agent/
Employer's Agent's Representative:**

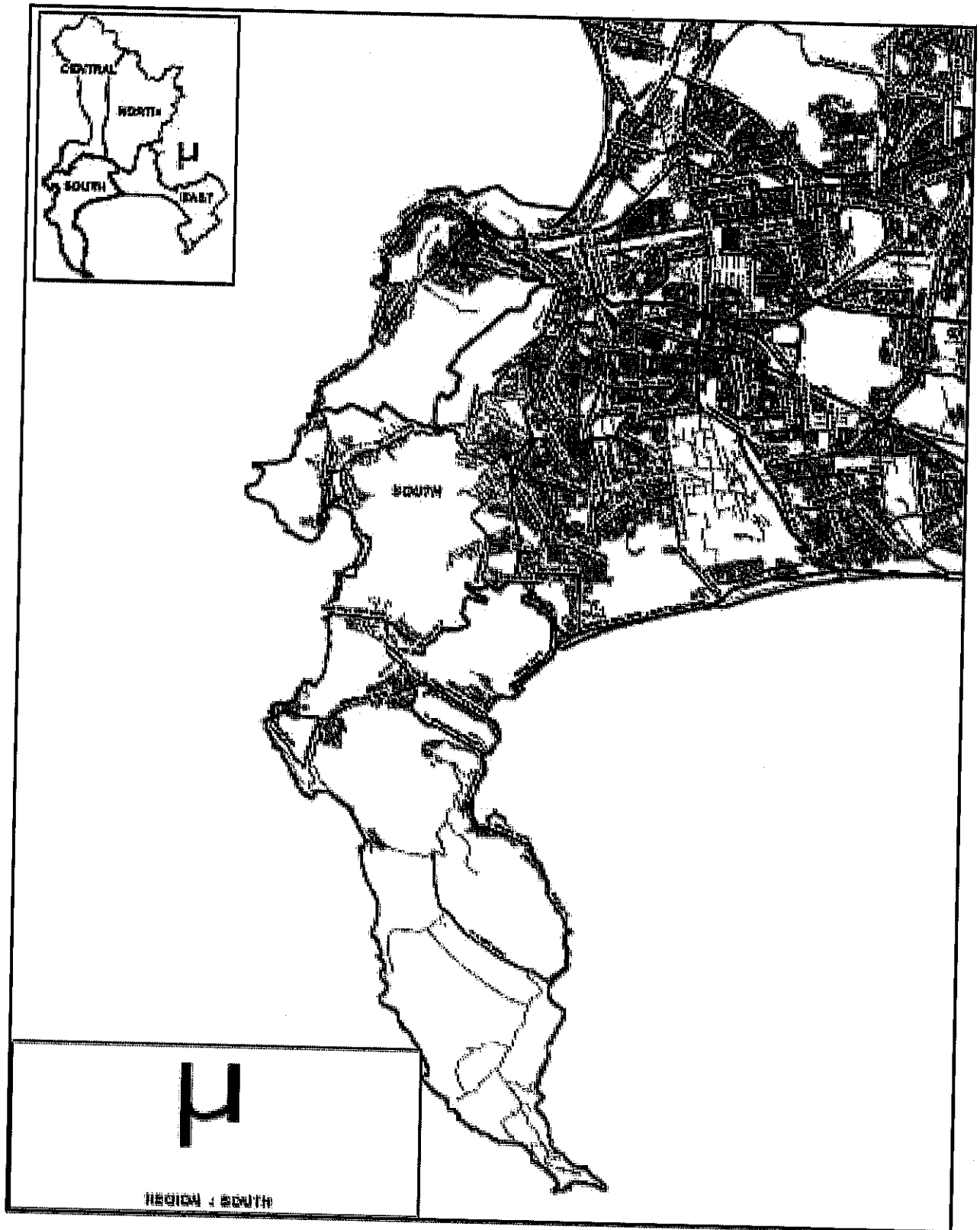
Date _____

ANNEX 6

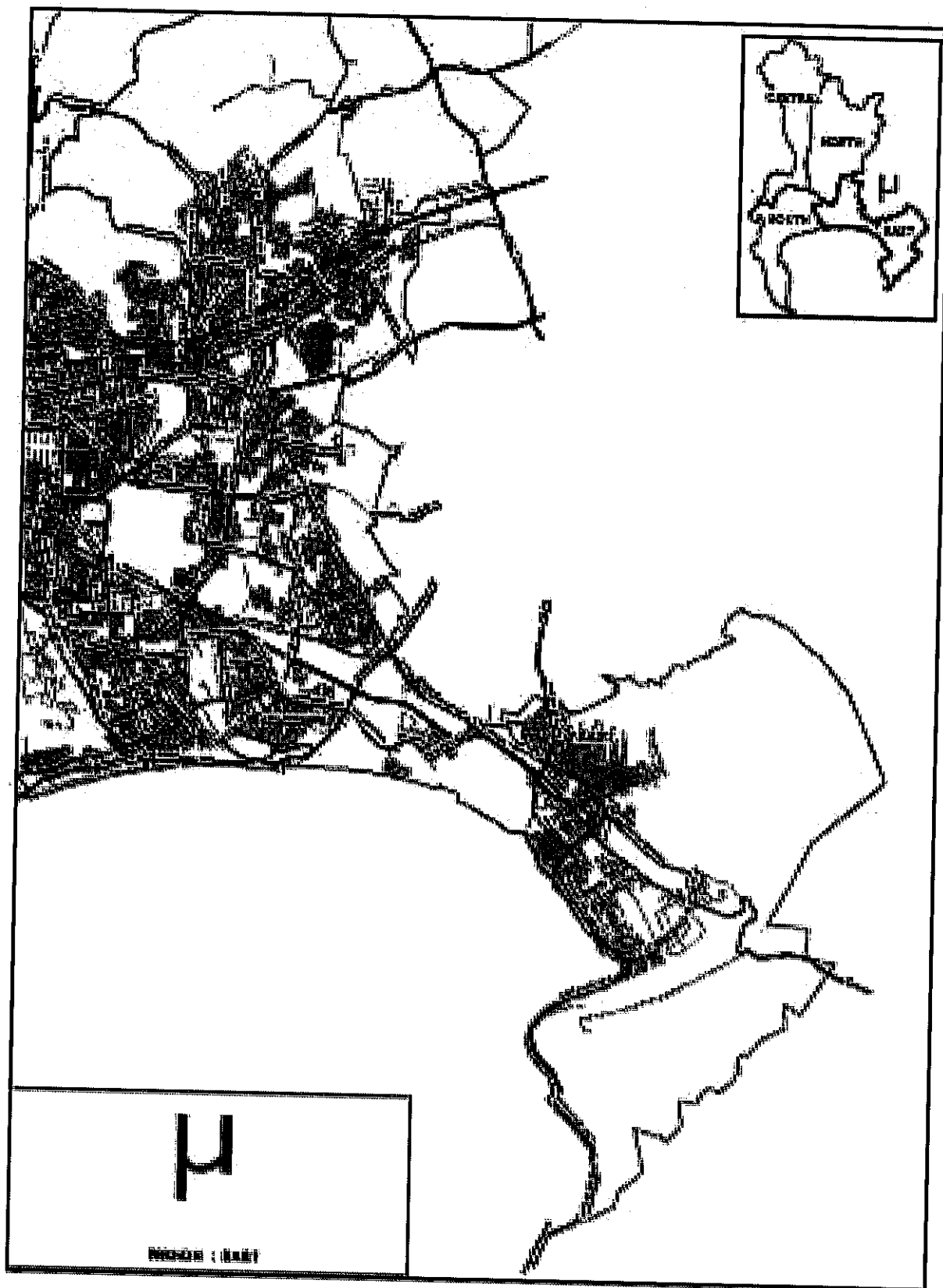
Area Central



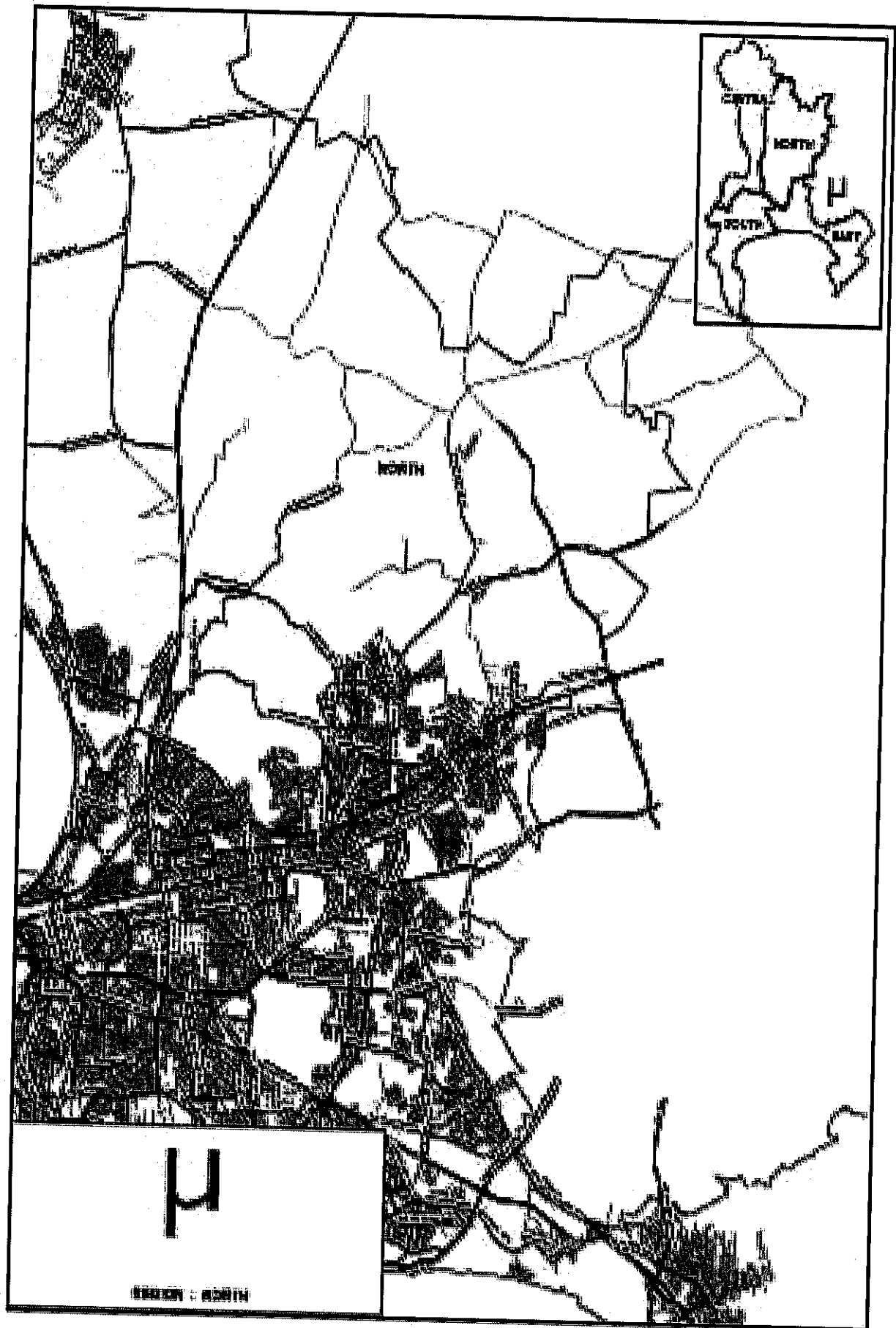
Area South



Area East



Area North



Annex 7

EXAMPLE WORKS PROJECT CONTRACT DOCUMENT (WINNER-TAKES-ALL TYPE)

Annex 6 provides an example of a Works Project contract document (Winner-takes-all Type), which is attached at the end of this Framework Contract document. It serves to inform Tenderers who may be the Winner or placed on a Standby Panel of what they may expect should they be invited to take part in a Works Project allocation process and any subsequent contract.

WORKS PROJECT EXAMPLE DOCUMENT (WINNER-TAKES-ALL TYPE) PAGES ATTACHED AT THE END OF THIS FRAMEWORK CONTRACT DOCUMENT:

Cover, pages i and ii, pages 1 to 43

NOTE:

Highlighted (shaded) text in the example document is project specific and which a compiler will have to apply his or her mind to. All other text will generally remain unaltered in the final Contract Document.

PART C4: SITE INFORMATION

C4 Site information

CITY OF CAPE TOWN

INFORMAL SETTLEMENTS WATER & WASTE SERVICES: INFORMAL SETTLEMENTS & BACKYARDERS

CONTRACT NO. 107Q/2018/19

TERM TENDER FOR CIVIL ENGINEERING WORKS WITHIN THE CITY OF CAPE TOWN

C4 Site Information

CONTENTS

1. GENERAL
2. WORKS PROJECTS

1. GENERAL

The sites for the Works are those areas which may be identified within the four regions (Central, South, East and North) in the City of Cape Town municipal area in which Works Projects are to be executed. The sites will be specific sections of roads needing guardrail supply and installation services.

2. WORKS PROJECTS

Site specific information will be specified, as required, in the Works Project contract document for a particular Works Project.