REQUEST FOR QUOTATIONS (RFQ): PROVISION OF BASIC SANITATION SERVICES: CLUSTERS 1 - 6

The Nelson Mandela Bay Municipality invites bidders for the **Emergency Provision of Basic Sanitation Services: Clusters 1 – 6** over a **twelve (12) month** period.

Tenderers should have a CIDB Contractor grading designation of **5CE and higher.**

The following minimum CIDB contractor grading designations are required for the following NMBM Wastewater Conveyance Division Cluster Areas (Bidders must provide a valid CIDB certificate as part of the submissions.)

- Cluster 1 – Molly Blackburn: 5CE or higher
- Cluster 2 – Lillian Diedericks: 5CE or higher
- Cluster 3 – Alex Matikinca: 5CE or higher
- Cluster 4 – Zolani Nqini: 5CE or higher
- Cluster 5 – Champion Galela: 5CE or higher
- Cluster 6 – Govan Mbeki: 5CE or higher

Only bidders who submit the documentation required in accordance with the requirements of this RFQ are eligible to submit quotes. In addition, bidders must meet the minimum requirements as specified.

Documents will be accessible on the NMBM website page on the **15 June 2023** and must be returned to SCM on the **22 June 2023** by any means to the Nelson Mandela Bay Municipality.

The physical address for the drop of request for quotation documents is as follows:

The Foyer of the Supply Chain Management Offices, Harrower Road Depot, C/O Buxton Avenue and Harrower Road, North End, Port Elizabeth 6001, Tel no. 041 506 3129

A compulsory clarification meeting with representatives of the Employer will take place physical on 19 **June 2023** (Monday) starting at **10:00 until 11:00,** where all the technical and contractual aspects of the document will be explained at the boardroom of the Supply Chain Management Offices, Harrower Road Depot, C/O Buxton Avenue and Harrower Road, North End, Port Elizabeth 6001

Queries relating to this RFQ must be submitted to Ms N. Fumbeza nfumbeza@mandelametro.gov.za in writing and queries related to technical clarification must be addressed in writing to Mr. C.A. Tetyana, Project Manager, email: ctetyane@mandelametro.gov.za and znyila@mandelametro.gov.za, Manager: Sanitation (Planning & Research Division). Responses will be sent to all the bidders in writing. date.

The closing time for receipt of quotations is **11:00 am** on **22 June 2023**. Quotations must be enclosed in sealed envelopes, bearing the applicable reference, and must be addressed to:

THE CHIEF FINANCIAL OFFICER: FINANCE DEPARTMENT,

SUPPLY CHAIN MANAGEMENT UNIT,

PORT ELIZABETH, 6001

PART C3 (OF 5) SCOPE OF WORKS

C3.1 DESCRIPTION OF THE WORKS

C3.1.1 EMPLOYER'S OBJECTIVES

The Nelson Mandela Bay Municipality intends to provide rudimentary services to communities that are in need within the demarcated municipal boundaries whilst closely maintaining the principles of sustainability, affordability, effectiveness, efficiency, and appropriateness.

The level of services for these rudimentary services shall be in compliance with Gazette No. 41100, National Norms and Standards for Domestic Water and Sanitation Services, Version 3 dated 08 September 2017, and any later revisions. Compliance with these norms and standards shall draw on the principles of universal access, human dignity, user participation, service standards, redress, and value for money.

Norms and Standards for Levels of Sanitation Services

This contract intends to provide both the interim level and basic level of services in terms of sanitation services, depending on the apparent circumstances in each community. In the case of interim level of services, these services shall prevent the spread of faecal-oral diseases through proper excreta containment at a fixed point. The basic level of services improves the goals of the interim level of services by removing excreta from the environment through treatment, pathogen reduction and/or control, resource recovery and nutrient reuse.

These interim and basic levels of services are categorised in terms of needs, as provided below:-

- interim level – excreta containment.
- basic level – free basic services.

Interim Level

The National Policy, 2016, defines interim sanitation as; "an interim measure to provide privacy to the user, be readily accessible and in close walking distance, and provide for the safe disposal of human waste, including hygiene and end-user education."

These services intend to provide people with access to a pleasant, safe, reliable, and well-maintained and improved toilet and hand washing facility in close proximity for a period of time until a basic level of sanitation service can be established.

Interim sanitation services are intended to be provided as follows:-

a. Communal and shared facilities:

i. Users are consulted on the sitting and designs (technology), and regarding the identification of roles and responsibilities for the cleaning and maintenance of these shared facilities.

ii. Installation of plumbing components shall comply with the general principles of the National Building Regulations.

iii. Where possible, communal, and shared toilets shall be provided with lighting.

iv. Efforts to build a sense of ownership and pride of possession are made to promote voluntary cooperation with communities.

v. Sufficient sanitation facilities shall be provided for the number of users, as per the below minimum ratios:

Type	Toilet seats	Urinal units	Hand washing
Communal toilet	1 seat per 50 users	1 unit per 100 users	1 basin per 10 toilet seats
Shared toilet mostly used all the time	1 seat per 20 users	1 unit per 50 users	1 basin per 4 toilet seats

vi. Shared and communal facilities shall provide:

- separate toilet blocks for men and women with separate entries;
- waste bins with lids in toilet block for women – emptied once a week and disposed of appropriately;
- urinal facilities for men;
- seats for children in the section for women;
- waiting/ circulating area;
- separate washing cubicles for men and women;
- facility to store large volumes of water (water-borne sanitation);
- appropriate wastewater disposal system; and
- storeroom for keeping the cleaning material/ equipment.

b. Water and Anal Cleansing Material:

i. Water shall be provided for all toilets with water flush and/or hygienic seal mechanisms.

ii. Toilet paper shall be provided for anal cleansing.

c. Menstruation Consideration:

i. Toilets shall be provided with appropriate disposal of menstrual material (waste bins with lids that are emptied regularly).

d. Containment of Children's Faeces:

i. Parents and caregivers shall be provided with information about the safe disposal of infants' faeces, laundering practices, and the use of nappies (diapers), potties, or scoops for effectively managing safe disposal.

e. Accessibility for All:

i. The toilets shall be made accessible to all groups, but special toilets shall be constructed for children, older people and persons with disabilities according to the building regulations and SANS 10400 – S.

f. Operation and Maintenance:

i. The NMBM shall be fully responsible for the capital, operation, maintenance and refurbishment actions and costs pertaining to these interim services.

ii. Blockages and health risk shall be addressed and rectified within 24 hours.

Basic Level – Free Basic Services

Providing people with access to atleast a pleasant, safe, reliable, and well-maintained improved toilet and hand washing facility within their yard(s).

Free basic services are intended to be provided as follows:-

a. *Single household facility:*

   i. All indigent households shall be provided with uninterrupted access to an adequate and appropriate facility with no cost to the user.

   ii. Households shall be supported with knowledge and any other relevant resources to take responsibility for the correct and consistent use of the sanitation service, including but not limited to the toilet facility.

   iii. Users are consulted on the sitting and designs (technology), and regarding the identification of roles and responsibilities for the cleaning and maintenance of these shared facilities.

   iv. Installation of plumbing components shall comply with the general principles of the National Building Regulations.

   v. Where possible, household toilets must be provided with lighting.

b. *Water and Cleansing Material:*

   i. Water shall be provided for all toilets with water flush and/or hygienic seal mechanisms.

c. *Menstruation Consideration:*

   i. Toilets shall be provided with appropriate disposal of menstrual material (waste bins with lids that are emptied regularly by the household).

d. *Containment of Children's Faeces:*

   i. Parents and caregivers shall be provided with information about the safe disposal of infants' faeces, laundering practices, and the use of nappies (diapers), potties, or scoops for effectively managing safe disposal.

e. *Accessibility for All:*

   i. The toilets shall be made accessible to all groups, but special toilets shall be constructed for children, older people and persons with disabilities according to the building regulations and SANS 10400 – S.

f. *Operation and Maintenance:*

   i. The household or owner shall be expected to adhere to the relevant by-laws of the NMBM regarding on-site sanitation.

   ii. The household or owner with the sanitation facility shall be fully responsible for all operation, maintenance and refurbishment actions and costs pertaining to on-site sanitation.

C3.1.2 OVERVIEW OF THE WORKS

The scope of works includes sourcing materials and components, coordinating with suppliers, constructing the foundation and substructures, assembling, and installing pre-cast concrete components and plumbing fixtures, applying finishes, performing quality control checks and inspections, commissioning the plumbing and wastewater systems, providing as-built drawings and documentation, conducting a final walkthrough, and addressing any outstanding snags and/or defects.

These tasks require a high level of technical expertise and attention to detail to ensure the waterborne pre-cast concrete toilet meets design specifications and relevant SANS codes.

C3.1.3 EXTENT OF THE WORKS

The scope of works will be implemented at various settlements within the six (6) clusters in the jurisdiction of the NMBM – and the Scope of Works include the following:

- Source materials and components, such as pre-cast concrete panels, fixtures, and fittings;
- Coordinate with pre-cast concrete suppliers to fabricate the required components according to the design specifications;
- Arrange for transportation and delivery of pre-cast concrete components, and other materials to the construction site;
- Clear and prepare the site for construction, including any necessary excavation or grading;
- Construct the foundation for the waterborne pre-cast concrete toilet;
- Construct substructures such as septic and conservancy tanks (if required by the Employer);
- Erect fencing to secure the toilet;
- Assemble and install the pre-cast concrete components;
- Install plumbing fixtures, such as toilets, wash troughs, and taps;
- Connect the plumbing system to the water supply and sewage network (where applicable);
- Apply any necessary finishes, such as paint or sealant, to the pre-cast concrete surfaces;
- Perform quality control assessments, checks, and inspections to ensure the pre-cast concrete toilet meets design specifications and relevant SANS codes;
- Commission the plumbing and wastewater systems;
- Provide as-built drawings and documentation to the Employer;
- Conduct a final walkthrough with stakeholders to ensure satisfaction with the completed project; and
- Address any outstanding snags and/or defects before closing out the project.

C3.1.4 LOCATION OF WORKS

The project is located within the juristic municipal boundaries of the NMBM. The sites where the works will be carried out, will take place at various settlements within the six (6) clusters in the NMBM.

C3.1.5 TEMPORARY WORKS

C3.1.5.1 Other Services (i.e., Telkom, Electricity, etc.)

The Contractor shall ensure that the position of all existing services affected by the Works have been verified before construction works commences and should it be necessary to lower or relocate any service, the Contractor will be required to make the necessary arrangements with the relevant service provider and to advise the Employer's Agent accordingly.

C3.1.5.2 Survey Beacons and Benchmarks

The Contractor shall be responsible for the preservation of all land survey, erf or other pegs, benchmarks and beacons. If damage or disturbance of any such pegs or beacons is caused by the operations of the Contractor or his subcontractors, the pegs are to be replaced by a Registered Land Surveyor at the cost of the Contractor. Information

regarding the position of all such pegs will be made available to the Contractor by the Employer's Agent.

The Contractor is to ensure that no spoil is placed over erf pegs or benchmarks and that these are adequately protected for the full duration of the Contract.

Where disturbances of boundary pegs are unavoidable due to excavation or other operations adjacent to the pegs, the Contractor shall advise the Employer's Agent or his Representative immediately, and agreement is to be reached that the disturbance of the peg is unavoidable and a strict record of such disturbed pegs is to be kept. Such pegs are to be replaced by a Registered Land Surveyor as described above and the Contractor is to submit proof of the cost of replacement of pegs. The Contractor will be reimbursed on a basis pro-rata to the total cost of peg replacement determined on completion of the Works.

C3.1.5.3 Protection of Existing Works

The Contractor shall take all necessary steps to ascertain the location of existing services before commencing any section of the works and shall exercise the greatest care when working in the vicinity of such services. No more than three weeks and not less than one week before commencing his operations in any particular area, the Contractor shall request in writing from the Employer's Agent the latest available drawings showing the location of services already installed. The Contractor will also be responsible for contacting the various service providers, arranging a meeting and verifying all known as well as possible unknown services on site.

The Contractor shall take all necessary steps to protect any existing works whatsoever against damage which may arise as a result of his operations on Site. The Contractor shall bear the cost of the repair of damage to any service, the possible existence of which could reasonably have been ascertained by him in good time.

Where the Contractor is responsible for damage for which repairs have to be carried out by the Employer or an outside Authority, the costs of these repairs will be recovered by means of a deduction from the Contractor's monthly Payment Certificate. The Employer will attend to the payment of monies due to outside authorities, should the Contractor not make direct payment, to the outside authorities, timeously.

C3.1.5.4 Tidying up of the Works

The Contractor shall take note that progressive and systematic finishing and tidying will form an essential part of this contract. On no account shall spoil, rubble, materials, equipment or unfinished operations be allowed to accumulate in such a manner as to unnecessarily be a hindrance to or impede the activities of other contractors or service providers. In the event of this occurring, the Employer shall have the right to withhold payment for as long as may be necessary in respect of the relevant works in the area(s) concerned.

Upon completion of the Works or any portion thereof, the ground, fences, gates and any structures that have been interfered with are to be carefully restored to their original condition and all rubbish, tools, tackle, plant and material must be removed so as to leave the Site in a clean and orderly condition. No additional payment shall be made for work set out above.

C3.4 CONSTRUCTION

C3.4.1 APPLICABLE SANS 2001 OR SANS 1200 STANDARDS FOR CONSTRUCTION WORKS

The SABS 1200 Standardised Specifications for Civil Engineering Construction read in conjunction with the SABS 0120 Code of Practise for use with standardised specifications for Civil Engineering Construction and Contract Documents apply.

C3.4.2 APPLICABLE NATIONAL AND INTERNATIONAL STANDARDS

For the purpose of this Contract the latest issues of the following Standard Specifications for Civil Engineering Construction, applicable at the date of request for quotation advertisement, shall apply:

SABS 1200 A	:	General
SABS 1200 C	:	Site Clearance
SABS 1200 D	:	Earthworks
SABS 1200 DB	:	Earthworks (Pipe trenches)
SABS 1200 GA	:	Concrete (Small Works)
SABS 1200 L	:	Medium Pressure Pipelines
SABS 1200 LB	:	Bedding (Pipes)
SABS 1200 LC	:	Cable Ducts
SABS 1200 LD	:	Sewers
SABS 1200 LF	:	Erf Connections (Water)
SABS 1200 MK	:	Kerbing and Channelling
SABS 1200 MM	:	Ancillary Roadworks

The term “project specifications” appearing in any of the SABS 1200 Standardised Specifications shall be replaced with the term “Scope of Work”.

The variations and additions to the specifications listed in C3.4.3.1 are provided in C3.6.

C3.4.3 ADDITIONAL SPECIFICATIONS

The following additional specifications included in this volume are applicable to this contract:

Annexure C	:	Site Specific Health & Safety Specification
Annexure D	:	Site Specific Baseline Risk Assessment
Annexure H	:	Emerging Enterprise Development Support Programme
Annexure J	:	Environmental Management Specification

C3.4.4 CERTIFICATION BY RECOGNISED BODIES

Where materials to be used in the works are required to comply with a SANS/ SABS specification, they will be accepted as complying with the SANS/ SABS specification if one of the following is satisfied:

- The display of a SANS/ SABS mark on the product with a copy of the SANS/ SABS certificate that allows the manufacturer to use the mark, or

- All the criteria in the relevant SABS / SABS specification is measured and confirmed on site or in an approved laboratory.

The same will apply to materials specified to comply with ISO, BS, ASTM, or other international specifications.

C3.4.5 AGRÉMENT CERTIFICATES

Not applicable.

C3.4.6 DISPOSAL SITES

Unless instructed otherwise, the Contractor shall dispose all surplus material from the site at a Municipal Solid Waste Disposal Facility.

The Contractor shall inform the Employer's Agent in writing of any other site he proposes to use. Use of the alternative disposal site may only be used if approved by the Employer's Agent in writing.

C3.4.7 EQUIPMENT, PLANT AND MATERIALS PROVIDED BY THE EMPLOYER

The Employer will not provide plant or materials for this Contract. The Contractor shall be responsible for procuring all plant and materials required for construction of the works.

C3.4.8 MATERIALS SAMPLES AND SHOP DRAWINGS

Any material that shall comply with the requirements of a South African National Standard specification in terms of this Contract shall bear the official SABS mark, should the material be available with such mark.

C3.4.9 EQUIPMENT PROVIDED BY THE EMPLOYER

The Employer will not provide equipment for this Contract.

C3.4.10 REQUIREMENT FOR EQUIPMENT

The Contractor's equipment shall be operational and adequately specified for the task it is intended for.

C3.4.11 EXISTING SERVICES

The positions of existing services, insofar as they are known, are shown on the drawings. Items have been allowed in the Schedule of Quantities for dealing with and protecting services.

Refer to PSA5.4.1

C3.4.12 DAMAGE TO SERVICES

Refer to C3.1.5.

C3.4.13 REINSTATEMENT OF SERVICES AND STRUCTURES DAMAGED DURING CONSTRUCTION

Should any service be damaged by the Contractor, the relevant authority shall be notified by the Contractor immediately.

C3.4.14 SERVICES AND FACILITIES PROVIDED BY THE EMPLOYER

Source of Water Supply

The Contractor may make application to the Municipality's Water Division for a clean water supply point and shall bear all the costs for the installation of such supply point.

Water used by the Contractor from the Employer's mains will be charged for at the tariffs ruling at the time of use.

The Contractor shall make himself thoroughly acquainted with the regulations relating to the use of water and shall take adequate measures to prevent the wastage of water.

The Employer accepts no responsibility for the shortage of water due to any cause whatsoever, nor additional costs incurred by the Contractor as a result of such shortage.

The Contractor shall take note that no direct payment will be made for any costs incurred for the provision of a water supply point nor for the cost of water drawn. Payment for the aforementioned shall be deemed to be covered by the rates and prices tendered and paid for the various items of work included under the Contract.

Source of Power Supply

The Contractor is to make his own arrangements with the Electricity Department for a supply of electricity, if required, and shall pay establishment and consumption costs at the tariffs ruling at the time.

Location of Camp and Materials storage area

The camp site and storage area will be indicated to tenderers at the site inspection for the contract.

The Contractor shall confine his camp and storage of materials to the areas designated. On completion of the construction works the surface of the areas utilised shall be re-instated.

The Contractor shall submit a general layout drawing to a scale of not less than 1:200 to the Engineer for approval before any work on the camp or offices may commence commenced.

No housing is available and the Contractor shall make his own arrangements to house his employees and transport them to and from the Site. All arrangements for housing workmen shall be made in accordance with and subject to applicable regulations and requirements.

C3.4.15 FACILITIES PROVIDED BY THE CONTRACTOR

Temporary Offices

An office for the Engineer is required. The type of office required for the Engineer is specified in clauses AB 3.2 and PSAB 3.4.2

Site meetings will be held in the Contractor's site office.

Sanitary Facilities

The Contractor shall supply chemical toilets for use by his workmen. The number of toilets shall be based on one toilet per fifteen personnel on site and in accordance with the Health and Safety and Environmental Management Specifications.

Under no circumstances will the Contractor's staff be allowed to use public toilet facilities.

C3.4.16 STORAGE AND LABORATORY FACILITIES

Storage and laboratory facilities are not required.

C3.4.17 OTHER FACILITIES AND SERVICES

No other facilities or services are required.

C3.4.18 EQUIPMENT FOR THE EMPLOYER'S AGENT

Generally, due to the envisaged nature of the works, no facilities will be required for the Employer's Agent.

If the work package is deemed to be substantive in size (agreed upon by the NMBM), the Contractor shall provide for the use of the Employer's Agent, maintain and service, as applicable, the following facilities as specified in SANS 1200AB and PSAB:

- two nameboards,
- one furnished office for use by the Engineer,
- latrine and ablution facilities,
- covered carport for one vehicle,
- printer/scanner/photocopier,
- survey equipment,
- one survey assistant,
- a site instruction book,
- protective clothing,
- safety equipment,
- medical facilities,

Unless specified otherwise, on completion of the Works these facilities shall revert to the Contractor who shall remove them from the site.

The term "use of the Employer's Agent" will be deemed to include, as appropriate, use by the Employer's Agent's staff and the Employer's Agent's Representative and his staff.

C3.4.19 ADVERTISING RIGHTS

Not applicable.

C3.4.20 NOTICE BOARDS

The Contract notice boards shall be manufactured, installed, maintained, and removed in accordance with PSAB 3.1.

C3.4.21 SITE USAGE

Access to the site shall be restricted to the Contractor, Employer, Employer's Agent and their personnel, agents, or Subcontractors. The Contractor shall control entry to the site and shall report unauthorised entry to the Employer's Agent.

C3.4.22 PERMITS AND WAY LEAVES

Not applicable.

C3.4.23 ALTERATIONS, ADDITIONS, EXTENSIONS AND MODIFICATIONS TO EXISTING WORKS

The Contractor must confirm in writing to the Employer's Agent timeously that the accuracy of all existing levels is compatible with the proposed works.

C3.4.24 SURVEY CONTROL AND SETTING OUT OF THE WORKS

Before commencement of work, the Contractor shall liaise with the Employers' Agent to establish and verify the position and level of benchmarks, and the status of all boundary pegs in the Township. The Contractor shall record the exact position of all erf pegs on a marked-up print of the site. Should the Contractor proceed with excavations prior to confirming the ground levels and / or benchmark levels, the levels as indicated on the drawings will be considered as the accepted levels for the purpose of quantity calculations.

On completion of the Contract, the pegs that have been unavoidably disturbed will be replaced by the Employer. Pegs which have, in the opinion of the Engineer, been disturbed due to the negligence of the Contractor, will be replaced at the Contractor's cost.

C3.4.25 INSPECTION OF ADJOINING PROPERTIES

The condition of the existing roads shall be assessed and recorded by video and / or photography before commencing construction.

C3.4.26 FEATURES REQUIRING SPECIAL ATTENTION

C3.4.26.1 Health and Safety

In addition to sub-clause 5.7 of SABS 1200 A, the Contractor shall comply with the Occupational Health and Safety Act (Act No. 85 of 1993) (OHS Act) and in particular it's Construction Regulations, 2014. In addition, the Contractor shall comply with the Employer's Health and Safety Specification.

C3.4.26.2 Continuous operation of existing services

All existing services shall be maintained in operation unless prior arrangements have been made with the relevant authority and written permission for an interruption of the service has been granted and adequate notice has been given to the affected residents.

C3.4.26.3 Sanitary conditions

Unhygienic habits and other behaviour that may cause contamination of any part of the Works or the surrounding areas are strictly prohibited. The Contractor shall ensure that sanitary conditions prevail throughout the Site and that all his workmen are aware of, and comply with, this rule.

C3.4.26.4 Neatness of the site

Refer to C3.1.5.4.

C3.4.26.5 Temporary fences

The Contractor shall erect temporary fences where required for the execution of the Works, where shown on the drawings and in place of existing fences which have to be temporarily relocated.

All fences shall be maintained during construction. Temporary fences shall be suitable for preventing stock on adjacent properties from wandering.

The cost of the erection, maintenance and removal of temporary fencing will be deemed to be covered by the rates or the establishment of facilities for the Contractor.

C3.4.26.6 Dust control

The Contractor shall take preventative measures to control dust arising from the site. Such measures will include, but not be limited to, watering, placing tarpaulins on exposed areas, placing thatch grass on exposed areas, as appropriate, or instructed by the Employer's Agent.

C3.4.26.7 Connection to existing services

All connections to the existing water and sewerage systems shall be undertaken in a manner and at times to be approved by the Employer's Agent. It is anticipated that this work may have to be done at night in order to minimise inconvenience to users. No claims for additional payment will be considered in this regard.

C3.4.27 EPWP LABOUR INTENSIVE CONSTRUCTION

C3.4.27.1 General

The Extended Public Works Programme (EPWP) is a country-wide government initiative aimed at creating jobs and imparting skills through public spending.

It involves re-orientating line function budgets so that government expenditure results in more work opportunities, particular for unskilled labour.

In accordance with its signed Memorandum of Understanding with the National Department of Public Works, the Nelson Mandela Bay Municipality (NMBM) is committed in ensuring that job creation opportunities are maximised on each and every project, and that every job opportunity created is recorded in line with the Department's requirements and those of the Auditor General.

Any work or portion of work that can be undertaken by labour intensive methods on an efficient basis, shall be done in that manner, using targeted labour from the affected historically disadvantaged area, and shall be done in accordance with the requirements of the Expanded Public Works Programme (EPWP) of the Department of Labour.

C3.4.27.2 Training of Targeted Labour

The Contractor shall provide all the necessary on-the-job training to targeted labour to enable such labour to master the basic work techniques required to undertake the work in accordance with the requirements of the contract in a manner that does not compromise worker health & safety.

The Contractor shall allow two (2) working days per month to the targeted labour for standard EPWP basic life skills training and/or accredited training. The cost of EPWP life skills training of targeted labour will be funded by the local office of the Department of Labour. A provisional sum has been added in the Schedule of Rates for arranging accredited training through accredited training service providers. Training will take place as close to the project site as practically possible. An allowance equal to 100% of the task rate or daily rate shall be paid by the Contractor to workers who attend basic life skills and/or accredited training.

C3.4.27.3 EPWP Reporting Requirements

The Contractor shall provide monthly production records showing the number of personnel employed using labour intensive construction methods, the wages paid and production measurement records, refer to the contents page for the relevant annexure for the reporting template. The NMBM may change the requirements for reporting from time to time.

The reporting frequency should be monthly and the information must be submitted to the NMBM by no later than the 5th working day of the subsequent month to the reporting month. The records are to be submitted directly to the Employer on a monthly basis. Should the Contractor not submit the records timeously a fine will be imposed and the payment will not be processed by the Employer, refer to C1.2 Contract Data Item, Part 1, Item No. 48.

The information required is set out in the table below and the templates for items No. 1 to 4 refer to the contents page for the relevant Annexure.

No.	Document	Frequency	Responsible Person
1	Contract Details Sheet	Once off	Employer and Agent
2	Monthly Labour Payment & Training Schedule	Monthly	Contractor

3	Labour Attendance Register	Monthly	Contractor
4	Monthly Labour Schedule	Monthly	Contractor
5	Copies of Employee Contracts	Once off	Contractor
6	Certified Copies of Employees ID Documents	Once off	Contractor
7	Expenditure report	Monthly	Employer and Agent

In order to meet the requirements of item No 7 the Engineer must email a copy of the Contractors monthly payment certificates to the NMBM before physical submission.

C3.4.27.4 Labour Intensive Competencies of Supervisory and Management Staff

Contractors having a CIDB Contractor grading designation of 5CE and higher shall only engage supervisory and management staff in labour intensive works that have either completed or, for the period 1 July 2012 to 30 June 2014, are registered for training towards the skills programme outlined in Table 1 below.

The managing principal of Contractor (sole proprietor, the senior partner, the managing director or managing member of a close corporation) having a Contractor grading designation of 1CE, 2CE, 3CE and 4CE shall have personally completed or, for the period 1 July 2012 to 30 June 2014, be registered on a skills programme for the NQF level 2.

All other site supervisory staff in the employ of such contractors must have completed or, for the period of appointment until expiry of the contract term, be registered on a skills programme for the NQF level 2-unit standards or NQF level 4-unit standards.

Table 1: Skills Programme for Supervisory and Management Staff

Personnel	NQF level	Unit standard titles	Skills programme description
Team leader/ supervisor	2	Apply labour intensive construction systems and techniques to work activities.	This unit standard must be completed and
		Use Labour Intensive Construction Methods to Construct and Maintain Roads and Storm-water Drainage.	any one of these unit standards
		Use Labour Intensive Construction Methods to Construct and Maintain Water and Sanitation Services.	
		Use Labour Intensive Construction Methods to Construct, Repair and Maintain Structures.	
Foreman/ supervisor	4	Implement Labour Intensive Construction Systems and Techniques.	This unit standard must be completed and
		Use Labour Intensive Construction Methods to Construct and Maintain Roads and Stormwater Drainage.	any one of these unit standards
		Use Labour Intensive Construction Methods to Construct and Maintain Water and Sanitation Services.	
		Use Labour Intensive Construction Methods to Construct, Repair and Maintain Structures.	
Construction Manager/ Manager (Contractor's most senior site representative)	5	Manage Labour Intensive Construction Processes.	Skills Programme against this single unit standard

C3.4.27.5 Employment Conditions for Labour-Intensive Works and Construction

The Ministerial Determination, Special Public Works Programmes, issued in terms of the Basic Conditions of Employment Act of 1997 by the Minister of Labour in Government Notice No. R63 of 25 January 2002 and reproduced below, shall apply to works described in the scope of work as being labour-intensive and undertaken by unskilled or semi-skilled workers.

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

C3.4.27.5.1 Terminology

- "*Department*" means any department of the State, implementing agent or Contractor.
- "Employer" means any department, implementing agency or Contractor that hires workers to work in elementary occupations on a SPWP.
- "Workers" means any person working in an elementary occupation on an SPWP.
- "Elementary occupation" means any occupation involving unskilled or semi-skilled work.
- "Management" means any person employed by a department or implementing agency to administer or execute an SPWP.
- "Task" means a fixed quantity of work.
- "task-based work" means work in which a worker is paid a fixed rate for performing a task.
- "task-rated worker" means a worker paid based on the number of tasks completed.
- "time-rated worker" means a worker paid based on the length of time worked.

C3.4.27.5.2 Terms of Work

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

C3.4.27.5.3 Normal Hours of Work

- An Employer may not set tasks or hours of work that require a worker to work:
  - more than forty hours in any week
  - on more than five days in any week
  - for more than eight hours on any day
- An Employer and worker may agree that a worker will work four days per week. The worker may then work up to ten hours per day.
- A task-rated worker may not work more than a total of 55 hours in any week (based on a 40-hour week) to complete the tasks allocated to that worker.

C3.4.27.5.4 Meal Breaks

- A worker may not work for more than five hours without taking a meal break of at least thirty minutes duration.
- An Employer and worker may agree on longer meal breaks.
- A worker may not work during a meal break. However, an Employer may require a worker to perform duties during a meal break if those duties cannot be left unattended and cannot be performed by another worker. An Employer must take reasonable steps to ensure that a worker is relieved of his or her duties during the meal break.

- A worker is not entitled to payment for the period of a meal break. However, a worker who is paid on the basis of time worked must be paid if the worker is required to work or to be available for work during the meal break.

C3.4.27.5.5 Special Conditions for Security Guards

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

C3.4.27.5.6 Daily Rest Period

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

C3.4.27.5.7 Weekly Rest Period

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

C3.4.27.5.8 Work on Sundays and Public Holidays

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

C3.4.27.5.9 Sick Leave

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

C3.4.27.5.10 Maternity Leave

- A worker may take up to four consecutive month's unpaid maternity leave.
- A worker in not entitled to any payment or employment-related benefits during maternity leave.
- A worker must give her Employer reasonable notice of when she will start maternity leave and when she will return to work.
- A worker is not required to take the full period of maternity leave. However, a worker may not work for four weeks before the expected date of birth of her child or for six weeks after the birth of her child, unless a medical practitioner, midwife or qualified nurse certifies that she is fit to do so.
- A worker may begin maternity leave
  - four weeks before the expected date of birth, or on an earlier date
  - if a medical practitioner, midwife, or certified nurse certifies that it is necessary for the health of the worker or that of her unborn child; or
  - if agreed to between Employer and worker; or
  - on a later date if a medical practitioner, midwife, or certified nurse has certified that the worker is able to continue to work without endangering her health.
- A worker who has a miscarriage during the third trimester of pregnancy or bears a stillborn child may take maternity leave for up to six weeks after the miscarriage or stillbirth.
- A worker who returns to work after maternity leave has the right to start a new cycle of twenty-four months employment unless the SPWP on which she was employed has ended.

C3.4.27.5.11 Family Responsibility Leave

Workers, who work for at least four days per week, are entitled to three days paid family responsibility leave each year in the following circumstances.

- When the employee's child is born;
- When the employee's child is sick;
- In the event of the death of:
  - The employee's spouse or life partner;
  - The employee's parent, adoptive parent, grandparent, child, adopted child, grandchild, or sibling.

C3.4.27.5.12 Statement of Conditions

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

C3.4.27.5.13 Keeping Records

- Every Employer must keep a written record of at least the following:
  - the worker's name and position
  - in the case of a task-rated worker, the number of tasks completed by the worker
  - in the case of a time-rated worker, the time worked by the worker

- payments made to each worker.
- The Employer must keep this record for a period of at least three years after the completion of the SPWP.

C3.4.27.5.14 PAYMENT

- An Employer must pay all wages at least monthly in cash or by cheque or into a bank account.
- A task-rated worker will only be paid for tasks that have been completed.
- An Employer must pay a task-rated worker within five weeks of the work being completed and the work having been approved by the manager, or of the Contractor having submitted an invoice to the Employer.
- A time-rated worker will be paid at the end of each month.
- Payment must be made in cash, by cheque or by direct deposit into a bank account designated by the worker.
- Payment in cash or by cheque must take place:
  - at the workplace or at a place agreed to by the worker
  - during the worker's working hours or within fifteen minutes of the start or finish of work
  - In a sealed envelope which becomes the property of the worker.
- An Employer must give a worker the following information in writing:
  - the period for which payment is made
  - the numbers of tasks completed or hours worked
  - the worker's earnings
  - any money deducted from the payment
  - The actual amount paid to the worker.
- 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.
- If a worker's employment is terminated, the Employer must pay all monies owing to that worker within one month of the termination of employment.

C3.4.27.5.15 Deductions

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

C3.4.27.5.16 Health and Safety

- Employers must take all reasonable steps to ensure that the working environment is healthy and safe.
- A worker must:
  - work in a way that does not endanger his/her health and safety or that of any other person
  - obey any health and safety instruction
  - obey all health and safety rules of the SPWP

- use any personal protective equipment or clothing issued by the Employer
- report any accident, near-miss incident or dangerous behaviour by another person to their Employer or manager.

C3.4.27.5.17 Compensation for Injuries and Diseases

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

C3.4.27.5.18 Termination

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

C3.4.27.5.19 Certificate of Service

On the termination of employment, a worker is entitled to a certificate stating:

- the worker's full name
- the name and address of the Employer
- the SPWP on which the worker worked
- the work performed by the worker
- any training received by the worker as part of the SPWP
- the period for which the worker worked on the SPWP
- Any other information agreed on by the Employer and worker.

C3.4.28 COMMUNITY PARTICIPATION AND LIAISON

C3.4.28.1 Community Liaison Officer (CLO)

The Contractor shall employ a Community Liaison Officer (CLO) for the duration of construction in accordance with Annexure K. The function of the CLO is to represent the local community through the Project Works Committee (PWC) and to assist the Contractor, the Employer and the Engineer with their communication with the community and vice versa.

The Community Liaison Officer's duties include:

- to be available on site daily during the normal working hours as stated in the Contract.
- to communicate daily with the Contractor and the Engineer to determine the labour requirements with regard to numbers and skill, to identify possible labour disputes and to assist in their resolution.
- to attend all meetings in which the community and/or labour is present or is required to be represented. In particular he/she will attend the first part of the monthly site meeting to report on the local community and labour involvement.
- to identify, screen and nominate labour from the community in conjunction with the PWC in accordance with Annexure L and the Contractor's requirements.
- to inform local labour of their conditions of temporary employment, to ensure their timeous availability and to inform local labourers timeously when they will be relieved.
- to attend disciplinary proceedings to ensure that hearings are fair and reasonable.
- to consult on all decisions regarding local problems and any matters of importance that, in any way, be of relevance to the Contract.
- to keep a daily written record of his/her interviews and community liaison.

The Contractor shall pay the CLO bi-weekly and will be refunded by certification in the monthly certificates of payment. The CLO shall be paid at the prevailing minimum wage at the time of his appointment. The Contractor will be paid for his overheads and profit in a separate item in the Schedule of Rates.

Further, it is also required by the contract that short-term contract workers be employed in the following ratio and the Contractor will strictly adhere to this requirement:

- One third Youth (i.e., persons under the age of 35 years)
- One third Male
- One third Female

C3.4.28.2 Attending Community Meetings

It is a requirement of this Contract that the Contractor include in his rates the cost of attending an average of two community meetings each month. The meetings will not necessarily be during normal working hours and it is accepted that the Contractor tendering for the Works is familiar with dealing with communities and understands the implications of keeping the communities informed.

C3.4.28.3 Construction of Ancillary Works

Hand Methods

It is envisaged that hand methods will be used wherever possible. The following labour-intensive operations are envisaged:

- excavation to search and relocate existing services,
- miscellaneous civil engineering works,
- steel fixing, shuttering, placing of concrete, etc.,
- re-routing existing pipelines,
- hand excavation of pipelines, laying of pipelines, backfilling operations,
- construction of manholes and brick/concrete chambers,
- building work,
- construction of access roads, concrete block pavers,
- finishing off the site on completion of the Works, etc.

C3.4.28.4 Communication with Community

A Social Facilitator will be appointed by the Engineer and a Project Steering Committee will be formed to act as the communication channel between the Contractor and the Community. The Contractor however remains responsible for communication and should the Project Steering Committee not perform satisfactorily this will not excuse the Contractor from performing the task required to successfully undertake the project.

The Project Steering Committee will generally consist of representatives from the following stakeholders:

- Employer
- Engineer or Project Manager
- Contractor
- Ward Councillor
- Ward Committee

In order to cope with the Contractor's limited office accommodation, each of the above stakeholders will be represented by a maximum of two persons.

The Project Steering Committee will ensure that dialogue adheres to the following communication channel:

- Community
- Project Committee
- Employer
- Engineer or Project Manager
- Contractor

It should be noted that the Community Structures will be represented at the Technical Site Meetings by a representative from the Ward Committee. Any issues that need to be brought to the attention of the Community will then be raised at the Project Steering Committee Meetings.

The Project Steering Committee Meetings will take place separately from the Technical Site Meetings. The Technical Site Meetings are a forum only for the two contracting parties (viz. the NMBM and the Contractor), to communicate under the jurisdiction of the Engineer or Project Manager.

C3.6 VARIATIONS AND ADDITIONS TO STANDARDISED SPECIFICATIONS

The following variations and additions to the SABS1200 Standardised Specifications for Civil Engineering Construction apply to this Contract. The prefix “PS” denotes a reference to the Standardised specification. The letters and clause number following the prefix denote a reference to the specific clause in the specific Standardised specification.

An asterisk (*) placed next to the PS clause heading denotes the inclusion of an additional clause that does not appear in the Standardised specification.

The term “project specification” used in the Standardised Specification shall mean “Scope of Works”.

The following Standardised Specifications for Civil Engineering Construction, as amended in the Scope of Work, form part of the Contract Documents:

SABS 1200 A	:	General
SABS 1200 C	:	Site Clearance
SABS 1200 D	:	Earthworks
SABS 1200 DB	:	Earthworks (Pipe trenches)
SABS 1200 GA	:	Concrete (Small Works)
SABS 1200 L	:	Medium Pressure Pipelines
SABS 1200 LB	:	Bedding (Pipes)
SABS 1200 LC	:	Cable Ducts
SABS 1200 LD	:	Sewers
SABS 1200 LF	:	Erf Connections (Water)
SABS 1200 MK	:	Kerbing and Channelling

PSA 2 INTERPRETATIONS

PSA 2.3 DEFINITIONS AND ABBREVIATIONS

"SABS'" shall mean "SANS", except for references to the official SABS mark.

PSA 2.8 ITEMS IN SCHEDULE OF QUANTITIES

PSA 2.8.1 Principle

In the fourth line of Clause 2.8.1, after the word "specification", add: "or in the measurement and payment clause of the standard specification or Scope of Works".

PSA 3 MATERIALS

PSA 3.1 QUALITY

Where applicable, materials shall bear an official standardization mark. Where it is specified that a material shall comply with the requirements of an SABS specification, the material shall bear the official SABS mark, unless the Contractor can prove that such material is not available with the mark.

PSA 4 PLANT

PSA 4.1 SILENCING OF PLANT

Replace the reference to "Machinery and Occupational Safety Act, 1983 (Act No.6 of 1983) with "Occupational Health and Safety Act, 1993 (Act No. 85 of 1993).

PSA 4.2 CONTRACTOR'S OFFICES, STORES AND SERVICES

The Contractor's offices, buildings, sheds, stores, and other facilities erected for the purposes of the contract shall be fenced off and shall be always kept in a neat and tidy condition.

No personnel may reside on the site, except for night-watchmen.

The Contractor shall provide one chemical toilet for every 15 workers, which shall be easily accessible to workers at all areas of the site and shall be effectively screened from public view. The Contractor shall strictly enforce the use of the toilets and shall ensure that the toilets are serviced / replaced on an acceptable, regular basis.

The Contractor shall provide a first aid cabinet fully equipped and maintained with at least the minimum contents as listed in the Annexure (Regulation 3) to the General Safety Regulations of the Occupational Health and Safety Act, 1993 (Act 85 of 1993). The Contractor shall also provide personal protective equipment and facilities as required by Regulation 2 of the General Safety Regulations of the Occupational Health and Safety Act, 1993 (Act 85 of 1993).

PSA 5 CONSTRUCTION

PSA 5.1 SURVEY

PSA 5.1.1 Setting out of the Works

In addition to the requirements of Clause 5.1.1.

Add the following paragraph:

"The Contractor shall be required to check and verify, prior to commencement of any construction work, all benchmarks and boundary reference pegs. Reference and benchmark pegs disturbed and/or removed during the construction period shall be replaced by a

Professional Land Surveyor and the Contractor shall bear the cost of such replacement. Payment to check and verify the reference and benchmark pegs will be made in terms of PSA 8.8.5."

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

Delete from the second sentence "Before the commencement . . . . “to” . . . . apparently in their correct positions" and replace with the following:

"Immediately on taking over the site, the Contractor, in consultation and liaison with the Engineer, shall search for all pegs and the Contractor shall compile a list of pegs that are apparently in their correct position."

Replace the third sentence of Clause 5.1.2 with the following:

“At completion of the Contract, the Contractor shall expose and mark all pegs that were listed at the commencement of the construction as being in order and the Contractor shall arrange with a registered Land Surveyor the replacement of pegs that have become disturbed or damaged. The Contractor shall, as a precedent to the issue of the Certificate of Completion, provide to the Engineer, a certificate from the Registered Land Surveyor, certifying that all the pegs listed at the commencement of construction in accordance with the provisions of this Clause, have been checked and that those found to have been disturbed, damaged or destroyed have been replaced in their correct positions, all in accordance with the provisions of the said Act.

The costs of replacement and certification as aforesaid shall be entirely for the Contractor’s account, provided always that the Contractor shall not be held liable for the cost of replacement of pegs which:

cannot reasonably be re-established in their original positions by reason of the finished dimensions of the Permanent Works ; and

the Contractor can prove beyond reasonable doubt and to the satisfaction of the Engineer, were disturbed, damaged or destroyed by others beyond its control, and

were in close proximity to the work and which would unavoidably be removed, subject to the Engineer’s approval being given to remove such pegs.”

PSA 5.2 WATCHING, BARRICADING AND LIGHTING

The Contractor shall comply in all aspects with the requirements of the Occupational Health and Safety Act (Act 85 of 1993). Refer also to PSA5.10.

PSA 5.3 PROTECTION OF STRUCTURES

Replace the reference to “Machinery and Occupational Safety Act, 1983 (Act No.6 of 1983) with “Occupational Health and Safety Act, 1993 (Act No. 85 of 1993).

PSA 5.4 PROTECTION OF OVERHEAD AND UNDERGROUND SERVICES

The approximate position of known services is shown on the drawings according to the best information available. Neither the employer nor the Engineer gives any warranty for the accuracy or completeness of the information provided.

PSA 5.4.1 Locating existing services *

As existing services can seldom be reliably located from drawings, the Contractor shall locate all existing services with the co-operation of the relevant authority, and carefully excavate by hand, expose and survey such services before commencing any excavation. The requirements of Clauses 4.4 and 5.1.2.2 of SABS 1200D shall also apply. If the information regarding any existing service as given in the drawings is missing, incomplete or incorrect, the Contractor shall, as soon as the service has been located, submit details of the exact location, depth and type of service in writing to the Engineer. This procedure shall also be followed for services not shown on the drawings, but which may reasonably be anticipated by an experienced contractor to be present on, under, over or within the Site.

PSA 5.4.3 Alterations and repair of existing services *

Unless specified otherwise by the Engineer, the Contractor shall not carry out alterations to services, or repairs of damaged services.

When existing services are damaged by the Contractor, he shall immediately inform the Engineer, 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 the necessary steps to minimise damage to and interruptions of the service. No repairs of telecommunication cables or electric power lines and cables shall be attempted.

The Employer will accept no liability for damages due to a delay in having such alterations or repairs affected. The Contractor shall provide all reasonable opportunity, access and assistance to persons carrying out alterations or repairs of existing services."

PSA5.5 DEALING WITH WATER ON WORKS

Add to Clause 5.5, water shall include ground water, rain fall, stormwater run-off, flood water, water used during the course of construction, water from the non-perennial stream that crosses R Alexander Road and any other water that could reasonably be expected.

PSA 5.9 DRAWINGS

Construction drawings and additional detailed information will be made available to the Contractor as and when required. RFQ drawings shall not be used for construction.

PSA 5.10 SAFEGUARDING AND ACCOMMODATION OF TRAFFIC *

The existing roads within and around the Site shall remain operational throughout the Contract period. To this end the Contractor shall provide and maintain all temporary works, temporary road signs, temporary bridges, culverts, barriers, kerb ramps, flagmen, drums, lighting, deviations and all other incidentals that are necessary to maintain the normal, safe and easy flow of all vehicular and pedestrian traffic.

Temporary traffic signs shall be erected at all diversions. Temporary road signs and road markings shall comply with the Site Manual entitled "Safety at Roadworks in Urban Areas", as published by the Department of Transport. The number and layout of the traffic signs shall comply with the Site Manual entitled "Safety at Roadworks in Urban Areas", as published by the Department of Transport. Road signs shall have a yellow background with either a red or black border.

The Contractor shall accommodate and maintain through traffic, traffic at crossings and vehicle access to houses and buildings at all times, unless the closing of streets and thoroughfares has been approved by the local authority

No direct payment will be made for the cost of dealing with and accommodating traffic. Payment will be deemed to be covered by the rates and sums tendered and paid for the various items of work included under the contract. Further, the provision of PSA 5.2 shall apply."

PSA 5.11a EME SUBCONTRACT WORK

The Contractor shall closely manage and supervise all EME's and shall manage, guide and assist each EME in all aspects of management, execution and completion of his subcontract. This shall typically include assistance with planning his works, sourcing and ordering of materials, labour relations, monthly measurements and invoicing procedures, etc. The extent

and level of such management, guidance and assistance, to be provided by the Contractor shall be commensurate with the expertise of relevant EME and shall be directed at enabling the EME's to achieve the successful execution and completion of the subcontract.

A provisional sum item shall be provided in the schedule of rates in the Main Contract.

PSA 5.11b OVERHEAD CHARGES ON EME SUBCONTRACT WORK

for allowance of subcontracting work packages for EME's and the Contractor will be reimbursed under this item on the basis of a percentage of the value of the subcontracts awarded, for his attendance on the EME subcontractors. This percentage shall allow for:

- All costs incurred for advertising and adjudicating tenders, and for assistance afforded to prospective tenderers.
- All administrative, management and supervisory functions associated with the employment of the EME's.

The Contractor shall be required to appoint an EME Construction Manager who will be responsible to assist EME's as and when required and shall be reimbursed under PSA 8.15. The EME Construction Manager's duties are specified in C3.3.2.

PSA 7 TESTING

PSA 7.2 APPROVED LABORATORIES

In addition to the approved laboratories stated in Clause 7.2, a testing laboratory certified by the South African National Accreditation Systems (SANAS) in respect of the nature and type of testing to be undertaken for the purposes of the Contract, will also be regarded as an approved laboratory.

PSA 8 MEASUREMENT AND PAYMENT

PSA 8.3.1 (a) Value Related Contractual Requirements

The unit of measurement is percentage (%). The value related component will be paid for as a percentage of the portion of works agreed to by the Engineer and Contractor at the commencement of the Work Package. This will be paid on a monthly basis only while the works is being undertaken.

PSA 8.3.1 (b) Time-Related Contractual Requirements

The unit of measurement is month. The time related component will be paid for based on a different value of works. The cost thereof is to include full compensation for any insurances, supervision, running costs and the likes. Payment will only be made for each month or portion thereof when the Contractor is physically on site. No payment will be made for durations when no work packages are undertaken.

PSA 8.3.5* Provision of Security Supervision

The Contractor is to satisfy himself in conjunction with the Engineer with the level of security required (listed below) for each work package if required. Security provision will only be during working hours. The Engineer nor the client will be liable for loss due to security supervision related incidents. Once the level is agreed upon the Contractor will supply 3 quotations for this level of security for approval by the Engineer.

SECURITY TYPE	DESCRIPTION
Security Level 1 (Grade D)	Access control and visibility security provision in a low risk area with no weapon
Security Level 2 (Grade C)	Security of site in high risk area with a guard dog

Security Level 3 (Grade B)	Security of site in a very high risk areas with guard dog and weapon

PSA 8.4.6 Standing Time / Delays Due to Community Disruption *

(a) Plant ..... Unit : Sum per working day

(b) Labour ..... Unit : Sum per working day

(c) Supervision..... Unit : Sum per working day

(d) Other services, facilities etc. not covered by (a), (b) and (c)... Unit : Sum per working day

The sum tendered for each item shall cover the full and final standing cost per day of delaying the specified resource or facility and no additional compensation shall apply, notwithstanding any provisions to the contrary in the contract documents, or in respect of any extension of time granted in relation to the circumstances. This payment item shall only apply to delays which in the opinion of the Engineer are due to the circumstances described in Clauses 5.12.2.4 resulting from community disruptions.

For the purposes of calculating the total delay, a working week shall be held to consist of five working days and a working day 9 hours.

Payment for partial standing of any of the scheduled resources for a day or part thereof, or the standing of a complete resource for a part day, will be made pro-rata in proportion to an appropriate factor assessed by the Engineer.

The amount by which compensation for delays is adjusted shall be subject to the contract price adjustment.

The cost of delays incurred for all other circumstances shall be treated as provided for in the General Conditions of Contract.

The provision of this clause shall in no way prejudice the rights of either the Employer or the Contractor to terminate the contract in terms of the provisions in clause 9 of the General Conditions of Contract for Construction Works.

The Contractor shall take note that no payment will be considered for any additional cost incurred in protecting his plant and site establishment, as well as for costs incurred in respect

PSA 8.15 EME CONSTRUCTION MANAGER *

The Contractor shall, in addition to the requirements of Clause 4.4 of the General Conditions of Contract for Construction Works (2015), guide, assist and mentor all eligible potential EME's wishing to submit tenders, in the proper completion and submission of their particular tenders, including advice and guidance on how to establish rates.

The Contractor shall employ on a full-time basis, a construction manager on the Contract who will manage the EME's and report on progress to the EME Committee. Such Construction Manager must be adequately experienced with EME work and the development thereof and will be subject to the approval of the Employer. The assistance rendered by the Construction Manager, shall *inter alia*:

(i) be given at a level and to the extent which is commensurate with the expertise and resources of the EME,
(ii) be given in a manner which is neither prescriptive, dictatorial, nor coercive towards the EME;
(iii) not be utilized by the Contractor to manipulate the rates and prices submitted, to his advantage, and
(iv) be given in a manner which does not unfairly prejudice or favour any particular EME.

The EME Construction Manager will after the tendering process work with and manage the EME Subcontractors throughout the Contract. Refer also to C3.3.2."

The tendered rates shall cover all costs of the Construction Manager, and all other related costs including but not limited to procurement, management, mentoring, supervision, training, administration and the requirements as per C3.3 Procurement for the EME Construction Manager.

Payment of the Fixed Charge Item will only be certified once the Contractor's approved EME Construction Manager has been appointed and the EME Method Statement has been approved.

Payment of the Time Related Item will be certified monthly in compliance with the method laid down in Sub-clause 8.2.2 of SABS 1200A once the requirements for the Fixed Charge Item has been completed.

PSA 8.16 REMUNERATION OF THE COMMUNITY LIAISON OFFICER *

The tendered rates shall cover all costs of the Community Liaison Officer. Cost rates to be based on rates supplied by the NMBM from the time of the CLO is taken into service.

PSA 8.18 TRAINING OF EME'S *

This Provisional Sum is for Accredited training of EME's from time to time, where it is evident that the EME will require such training. All training will carry the approval of the client before training may commence. Training will have to be motivated by the contractor and is not compulsory nor obligatory.

PSA 8.19 SUPPLY AND ERECTION OF PRE-CAST CONCRETE PANEL TOILET, COMPLETE WITH PLASTIC LOW/ POUR FLUSH PEDESTAL AND CISTERN*

This rate shall include the supply and erection of an Agrément certified pre-cast concrete superstructure, inclusive of a high-density plastic door, applicable joint connections, and roofing. Additionally, the rate shall cover the installation of a SABS approved cistern and pedestal system, whilst excluding any associated plumbing work – which shall be measured elsewhere. (Refer to Part C5 Annexures for RFQ Drawings.)

PSA 8.20 SUPPLY AND ERECTION OF PRE-CAST CONCRETE TOILET, COMPLETE WITH PLASTIC LOW/ POUR FLUSH PEDESTAL AND CISTERN, STAINLESS STEEL DOG-LEG AND CISTERN GRAB BAR

This rate shall include the supply and erection of an Agrément certified pre-cast concrete superstructure, inclusive of a high-density plastic door, applicable joint connections, roofing, stainless steel grab rails – all in accordance with SANS 10400-S:2011. Additionally, the rate shall cover the installation of a SABS approved cistern and pedestal system, whilst excluding any associated plumbing work and ramps – which shall be measured elsewhere. (Refer to Part C5 Annexures for RFQ Drawings.)

PSC SITE CLEARANCE (SABS 1200 C)

PSC 3 MATERIALS

PSC 3.1 DISPOSAL OF MATERIAL

The Contractor shall dispose of all cleared vegetation, rubble and construction waste at the site described in C3.4.6, unless instructed otherwise by the Engineer.

PSC 5 CONSTRUCTION

PSC 5.1 AREAS TO BE CLEARED AND GRUBBED

The Contractor shall ensure that the areas cleared and grubbed are kept to the minimum area necessary for the execution of the Works.

The Contractor shall clear and grub the area required for the Works, areas on which material will be stockpiled for later use and areas where material is to be dumped and spread, unless instructed otherwise by the Engineer.

For pipe trenches outside of road reserves, the maximum width that may be cleared is 10m.

PSC 5.2 CUTTING OF TREES

The Contractor shall not remove trees with a trunk girth of more than 1m without the written permission of the Engineer.

PSC 5.6 CONSERVATION OF TOPSOIL

Topsoil shall be removed from the cleared areas up to a depth of 150 mm (if available) and either :

- be spread and neatly trimmed on adjacent erven to a maximum depth of 75 mm; or
- stockpiled on approved sites for later reuse. Until required for spreading, the stockpiles of topsoil material shall be stabilized by watering or other approved means.

PSC 8 MEASUREMENT AND PAYMENT

PSC 8.2.1 Clear and grub

Delete “(except where 8.2.9 is applicable)” in the seventh line of this Clause.

Add the following:

“The tendered rate shall also cover the cost of loading, transporting and disposing of all rubble and other unwanted debris encountered in road reserves or along service routes.

Clearing and grubbing shall only be executed where ordered by the Engineer”

PSC 8.2.5 Take down existing fences ……Unit: m

Add the following to Clause 8.2.5:

“The rate shall also cover the cost to reinstate the fence to the approval of the Engineer.

The unit of measurement shall be the length of fence taken down, removed and reinstated in order to obtain access to the area of works and to allow passage through for the services to be installed.”

Replace the heading of subclause 8.2.5 with the following:

PSC 8.2.11 Remove and dispose of existing kerbing and concrete channelling.....Unit : m

The sum tendered shall cover the provision of all labour and equipment to remove and dispose of existing kerbing and concrete channelling at the designated tip site and making good any resulting damage to adjacent services.

PSC 8.2.12 Saw-cut asphalt surfacing.....Unit : m

The sum tendered shall cover the provision of all labour and equipment to saw-cut asphalt surfacing on average 40 mm deep.

PSC 8.2.13 Remove and dispose of asphalt surfacing……...Unit : m2

The sum tendered shall cover the provision of all labour and equipment to remove and dispose of asphalt surfacing (saw-cutting will be compensated for under item PSC 8.2.12).

PSC 8.2.14 Saw-cut concrete surfacing .....Unit : m

The sum tendered shall cover the provision of all labour and equipment to saw-cut concrete surfacing."

PSC 8.2.15 Remove and dispose of concrete surfacing……...Unit : m2

The sum tendered shall cover the provision of all labour and equipment to remove and dispose of concrete surfacing (saw-cutting will be compensated for under item PSC 8.2.14).

PSD EARTHWORKS (SABS 1200 D)

PSD 3 MATERIALS

PSD 3.1 CLASSIFICATION FOR EXCAVATION PURPOSES

Delete SABS 1200D Clause 3.1 and replace with the following:

PSD 3.1.1 Method of Classifying

Replace the third sentence of Clause 3.1.1 with

”The classification will be based on the Engineers inspection of the material to be excavated and on the criteria given in PSD3.1.2”.

PSD 3.1.2 Classes of Excavation

Notwithstanding Clause 3.1.2, intermediate excavation and boulder excavation (class A and B) will be classified as soft excavation.

Replace 3.1.2 c) 2) with:

“In the case of restricted excavation of trenches for pipelines, hard rock excavation shall be excavation in material that cannot be efficiently removed by a 30 tonne excavator equipped with a rock bucket.”

PSD 8 MEASUREMENT AND PAYMENT

PSD 8.3.3 Restricted Excavation

Notwithstanding the requirements of Clause 8.3.3, no additional payment will be made for restricted excavation of roads in its entirety irrespective of road width or length. The cost of which will be deemed to be included in the tendered rates for excavation.

PSD 8.3.10 Topsoiling

In addition to the provisions of Clause 8.3.10, the rate for topsoiling shall cover the cost of watering, and stabilising the topsoil on slopes to avoid erosion and slipping where necessary, to the approval of the Engineer.

PSDB EARTHWORKS (PIPE TRENCHES) (SABS 1200 DB)

PSDB 3 MATERIALS

PSDB 3.1 CLASSES OF EXCAVATION

Delete the contents of Clause 3.1 and replace with the following:

The classification shall be as described in PSD 3.1.

PSDB 3.6 MATERIALS FOR REINSTATEMENT OF ROAD AND PAVED AREAS

The reinstatement of existing road layers shall be executed with materials that comply with the following:

Subbase:	G5 or material with PI maximum 10. CBR at least 45 at 95% of mod. AASHTO max. density.
Base:	G4 or material with PI maximum 6. CBR at least 80 at 98% of mod. AASHTO max density.
Surfacing:	Commercial cold mix asphalt surfacing as specified in Clause 3.6.4.
Gravel wearing course:	PI 10-14. The size of the aggregate shall not exceed 40 mm. CBR at least 45 at 95% of mod. AASHTO max. density.

PSDB 3.6.1 Subbase and base:

Delete the contents of Clause 3.6.1 and replace with the following:

"Where trenches cross existing surfaced roads the following will apply:

a) The service (pipe, cable etc.) shall be laid on a bedding cradle, and covered with a fill blanket, as specified in section LB (Bedding - Pipes) SABS 1200 or in the Project Specification.
b) The remaining portion of the trench, from the top of the fill blanket to the road surface, shall be filled with cellular trench backfill material.
c) The specification for this material is as follows:

(i)	Definition	:	Material shall consist of a cellular light-weight concrete incorporating large volumes of controlled micro-air cement and sand.
(ii)	Density Range	:	150 - 1400 kg/m3 and have an equivalent CBR value greater than 100.
(iii)	Consistency	:	Material shall be of a pickable nature after final setting.
(iv)	Admixture	:	The admixture is a pre-foam organic compound accelerated by the addition of calcium chloride. Chloride free additive must be used where the outer casing of the service being covered is metallic.
(v)	Setting Times	:	The finished product must achieve initial set within 90 minutes. It must then be able to carry light traffic.
(vi)	Specifications	:	British Standards draft S.W.P. 146 of July 1990.

PSDB 3.6.4 Bituminous and Premix Surfacing

Delete the contents of Clause 3.6.4 and replace with the following:

"Where this project is undertaken simultaneously with the construction of bituminous and/or premix surfaced roads, a hot premix and/or bituminous surfacing in accordance with the specifications applicable to the road surfacing shall be used in the reinstatement of the road surface. Where the construction of surfaced roads do not form part of this project a hot premix (type IVa or 7mm sidewalk mix) laid on a cleaned surface which has been previously tack coated with an anionic emulsion shall be used in the reinstatement of the road surface."

PSDB 3.7 SELECTION

Notwithstanding Clause 3.7, the Contractor is required to use selective methods of excavating. The Contractor shall selectively remove and keep separate topsoil, unsuitable material, and material suitable for reuse as backfill, selected fill, selected granular material or for other use as ordered by the Engineer.

PSDB 3.8 GEOTEXTILE BLANKET *

As specified in PSDK3.1.3.

PSDB 5 CONSTRUCTION

PSDB 5.1 PRECAUTIONS

PSDB 5.1.2.3 Sloping ground

On slopes steeper than 1:4, the Contractor shall excavate by hand. No additional payment will be certified for such excavation.

PSDB 5.2 MINIMUM BASE WIDTHS

The minimum base width for flexible pipes shall be as follows:

External diameter of pipe barrel (mm)		Minimum base width (mm)
Over	Up to and including	
-	50	400
50	110	600
110	300	800
300	450	1,000

Otherwise the provisions of clause 5.2 shall apply.

PSDB 5.1.4 Existing services that intersect or adjoin trenches

Where the proximity of existing services or the lack of space prohibits the use of a mechanical excavator for trench excavation, the Engineer may order or permit the use of hand excavation. No additional payment will be certified for such excavation, as any additional costs will be held to be covered in the rates.

PSDB 5.4 EXCAVATION

Add:

The provisions of C3.5.4 shall apply.

PSDB 5.5 TRENCH BOTTOM

Should the Engineer consider the trench bottom to be unstable, he may instruct the Contractor to replace unsuitable material with a 19 mm single-sized crushed stone layer in order to provide a stable platform for the placing of the pipe bedding. The stone layer shall be 150mm thick over the full width of the trench, and shall be wrapped in a geotextile blanket with 150mm overlap at the joint.

PSDB 5.6 BACKFILLING

PSDB 5.6.2 Material for backfilling

The Contractor shall ensure that all excavated material is kept within the pipe servitude until backfilling is complete. The toe of the heap of excavated material next to the trench shall be kept a minimum of 500mm from the edge of the trench, and this strip shall be kept clear of excavated material at all times.

PSDB 5.6.3 Disposal of Soft Excavation Material

Delete the contents of Clause 5.6.3. and replace with the following:

"Excess material arising from the excavations will be disposed of at a designated disposal site. The rate for spoiling of excess material shall include for the loading and carting of material, and the off-loading at the tip site. The Contractor shall be responsible for all charges levied at the tip site. The current charges applicable may be obtained from the Municipality's Cleansing Division."

PSDB 5.6.6 Completion of backfilling

The length of trench open at any one time shall not exceed 100 m per pipe-laying team or 600m in total, whichever is the greater.

If in the opinion of the Engineer, insufficient progress is being made with the backfilling of trenches, the Engineer may order that no further excavation may take place until the backfilling of trenches has caught up. No additional payment will be made for any delay that this may cause.

PSDB 5.7 COMPACTION

PSDB 5.7.2 Areas subject to traffic loads

All trenches will be considered to be subject to traffic loads and the backfill material and compaction in these trenches shall comply with the requirements of PSDB3.5 and 5.7.2.

PSDB 5.9 REINSTATEMENT OF SURFACES

The reinstatement of the existing road layers shall be to the following minimum thicknesses and compaction:

Subbase	: depth of cover to crown of pipe : 95% of mod. AASHTO max. density
Base	: 150 mm minimum : 98% of mod. AASHTO max density
Surfacing	: 40 mm minimum : As specified in Clause 5.9.5.2
Gravel wearing course	: 150 mm minimum : 95% of mod. AASHTO max. density

PSDB 5.9.7 Procedure for Backfilling with Trenchfill*

a) The cellular backfill material (hereinafter called "trenchfill") is ordered from the supplier, and is delivered to site in a truck-mixer. The material is poured directly into the trench, and no vibrating or additional compaction is necessary.
b) The trenchfill shall be cast flush with the surrounding road surface, and trowelled to an even surface.
c) After the trenchfill has set, either the same day or the following day, the top 40mm of the trenchfill must be scabbled off using a pick, or paving breaker and the depression reinstated using hot asphalt. After compaction, the asphalt must be finished flush with the surrounding road surface.
d) The asphalt reinstatement of the trench will be carried out by the Municipality or, in the case where the works are being performed by a contractor; the contractor may carry out the reinstatement.

PSDB 5.9.8 Safety*

a) During the time period between pouring the trenchfill into the trench, and the setting of this material, it is imperative that no person or animal be allowed to gain access to the

trench. Suitable barricades shall be provided around the trench and a guard placed on duty at the trench until the material sets.

b) Should the trenchfill not be set by nightfall, safety lamps shall be placed on the barricades.
c) The responsibility for public safety lies with the organisation carrying out the excavation and backfill operations.

PSDB 7 TESTING

PSDB 7.1 DENSITY TESTING

The Contractor will be required to carry out as many density tests that are necessary to achieve the required material control, with a minimum testing frequency of:

- Every 50m on the bedding
- Every 50m on the backfill

Notwithstanding Clause 7.1, the Contractor will be responsible for the cost of all testing.

PSDB 8 MEASUREMENT AND PAYMENT

PSDB 8.3.2 Excavation

Notwithstanding Clause 8.3.2, the rate for excavation in all materials shall cover the cost of excavation in all classes of excavation, except hard rock. An extra-over item has been scheduled for excavation in hard rock. The rate for the extra-over item shall include all costs associated with excavation of rock, over and above the cost of excavation in all materials.

The rates for excavation of trenches shall also cover the cost of the activities with respect to areas subject to traffic loads as set out in Clause 8.3.3.3, the cost of accommodation of traffic and all costs of density testing to be borne by the Contractor.

PSDB 8.3.3.1 Make up deficiency in backfill material

Add the following to sub-clause 8.3.3.1:

“The rate tendered for trenchfill shall cover the cost of the supply and placing of the material as specified including the later removal of the top 40 mm. The volume will be computed from the length of trench falling within the area subject to road traffic loads, as applicable, and the width determined from the drawings and specifications, and the depth from road surface to top of selected fill blanket. Payment for this item will be additional to that for excavation covered by 8.3.2 and PSDB 8.3.2.

The rates shall also cover the cost of temporary accommodation of traffic (including the signs and by-passes), arranging for safety of the public, excavation (including breaking up, removal and disposal of surplus material) and the subsequent reinstatement as specified in 5.9 and PSDB 5.9, and shall include the cost of delays and the cost of any risk of having to repair damage as specified in 5.10.

PSDB 8.3.3.3 Compaction in road reserves

Replace the contents of this Clause with the following:

"This item shall only apply to the compaction of materials in areas subject to road traffic loads as defined in PSDB 3.5 (b).

The volume will be computed from the length of trench falling within the defined area, the width as shown on the Drawings and the depth from the top of the bedding to the designated level of the underside of the required selected layer, finished verge level etc. as scheduled on the Drawings. The rate tendered shall cover the cost of the additional compactive effort as specified.

Payment for this work will be additional to that covered by 8.3.2(a)."

PSDB 8.3.5 Existing services that intersect or adjoin a pipe trench

Notwithstanding the requirements of this clause, no additional payment will be made for dealing with existing services, the cost of which is included in the rates for excavation in accordance with PSA8.8.4.1.

Add the following item at the end of the clause:

"v) all hand excavation that may be necessary, whether ordered by the Engineer or elected by the Contractor."

PSDB8.3.6.1 Reinstate road surfaces

a) Extra-over for backfilling trenches using Trenchfill.....m^3

b) Hot asphalt type IVA (min thickness 40mm).....m^2

For item (a) the volume will be computed from the length of trench as applicable, and the width determined from the applicable side allowances specified in 8.2.3, and the depth from road surface to top of selected fill blanket. Payment for this item will be additional to that for excavation covered by 8.3.2.

For item (b) the area will be computed from the length of paved trench surface as applicable and the width determined from the applicable side allowances specified in 8.2.3. The final compacted thickness of the layer must be not less than 25mm.

The rate shall cover the cost of temporary accommodation of traffic (including the signs and by-passes), arranging for safety of the public, excavation (including breaking up, removal and disposal of surplus material) and the subsequent reinstatement as specified in 5.9, and shall include the cost of delays and the cost of any risk of having to repair damage as specified in 5.10.

PSGA CONCRETE (SMALL WORKS) (SABS 1200 GA)

PSGA 3 MATERIALS

PSGA 3.2 CEMENT

PSGA 3.2.1 Applicable specifications

Notwithstanding Clause 3.2.1, the specification for cements shall be SABS EN 197.

Cement Grade CEM I 42,5N shall be used. Pulverised fly ash (PFA) shall comply with SABS1491-2.

PSGA 3.3 WATER

Only potable water may be used for mixing concrete. Other clean water may be used for curing concrete.

PSGA 3.4 AGGREGATES

The maximum aggregate size shall be 19mm. Plums are not permitted.

PSGA 4 PLANT

PSGA 4.2 MIXING PLANT

When the concrete is mixed on site, an approved rotary mixer, suitable in size for a batch containing cement in increments of one sack of 50kg, shall be used. The Contractor's method of batching of the ingredients shall be to the approval of the Engineer's Representative.

PSGA 4.3 VIBRATORS

All concrete shall be vibrated.

PSGA 5 CONSTRUCTION

PSGA 5.1 REINFORCEMENT

PSGA 5.1.3 Cover

Notwithstanding Clause 5.1.3, the cover to reinforcement shall be as shown on the drawings and bending schedules, and shall not be less than 40mm.

PSGA 5.4 CONCRETE

PSGA 5.4.1.4 Prescribed mix concrete

Prescribed mix concrete shall be mixed in the proportions as set out in Clause 8.4.1.

PSGA 5.4.1.5 Strength concrete

The concrete mix design for strength concrete must be prepared by an approved concrete laboratory or supplier and the results of actual test mixes must be submitted for approval together with 7-day and 28-day strength test results. The Contractor shall bear the costs of determining the proportions of the mix and making and testing cubes for this purpose. If the Contractor submits reliable test records of concrete made from the same materials and mix proportions which he proposes to use, then the Engineer may waive all or part of the strength tests required above to verify that the concrete mix design which the Contractor proposes to use is satisfactory.

No concrete shall be cast until the mix designs have been approved by the Engineer.

In order to facilitate increasing the workability of concrete in the fresh/plastic state, to ensure watertightness without increasing the water/cement ratio, the Engineer may approve the use of an additive. The workability of concrete shall be assessed by means of the slump test. The slump shall be between 30 and 40 mm.

PSGA 5.4.2 Batching

All strength concrete shall be weigh batched.

PSGA 5.4.7 Curing and protection

Concrete shall be wet cured with water by ponding such as to maintain it in a continuously wet condition. Where the surface to be cured is to receive further concrete, and wet curing cannot be achieved by ponding, the concrete shall be wet cured by continuous sprinkling/spraying.

As an alternative, at the Engineers discretion, curing may be carried out by the application of a curing compound. In this case, a white pigmented natural resin based liquid curing compound complying with ASTM C309-74 Type 2 Class B, may be used.

PSGA 5.4.8 Concrete surfaces

All unformed concrete surfaces shall be wood float finished, unless specified otherwise.

Where wood-floating is ordered or scheduled, the surface shall first be given a finish as specified in Clause 5.4.8.2 and, after the concrete has hardened sufficiently, it shall be wood-floated, either by hand or machine, only sufficiently to produce a uniform surface free from screeding marks.

PSGA 6 TOLERANCES

PSGA 6.4 PERMISSIBLE DEVIATIONS

Degree of Accuracy II in Clause 6.4 shall apply.

PSGA 7 TESTING

PSGA 7.1 FACILITIES AND FREQUENCY OF SAMPLING

PSGA 7.1.2 Frequency of sampling

One sample shall consist of three concrete test cubes. For each sample taken the position in the structure shall be recorded where the batch represented by that sample is placed.

The Contractor shall carry out his own testing during the construction of the Works to ensure that the concrete complies with the specification. The Engineer will carry out such check testing as he requires, and the Contractor shall render any assistance necessary in taking samples and carrying out tests.

PSL MEDIUM-PRESSURE PIPELINES (SABS 1200 L)

PSL 1 SCOPE

Add to Clause 1.1 "Drawings numbered L1, L2 and L3 are withdrawn and replaced by the Construction Drawings."

PSL 2 INTERPRETATIONS

PSL 2.1 REFERENCES

PSL 2.1.3 Drawings *

Drawings numbered L1, L2 and L3 are withdrawn and replaced by the Construction Drawings.

PSL 3 MATERIALS

PSL 3.1 GENERAL

Pipes for water mains shall be

PVC-U Class 9 pipes complying with the requirements of SABS 966.

(and / or)

high density polyethylene (HDPE) Class 10, type PE100 pipes complying with the requirements of SABS ISO 4427. HDPE pipes shall be joined using of the "Plasson" compression type, or equivalent, approved couplings which have a polypropylene body, nut and compression ring with rubber O ring. ALT. HDPE pipes shall be joined using fusion welding techniques or "Frialen" or equivalent, approved electro-fusion fittings.

Subject strictly to the requirements of Clause 3.1 pipes may be offloaded and strung out in the servitude.

All pipes, specials and valves arriving on site shall be marked clearly with the item number appearing in the Schedule of Rates. Furthermore the nuts, bolts, washers and other ancillary equipment for each individual item shall be kept separate in a bag which shall also bear the respective reference number of that item. The cost of such marking will be held to have been included in the rates tendered for the items.

The Contractor shall satisfy the Engineer that the manufacturers' recommendations for transporting, handling, stacking, storing and installing pipes, pipe fittings, sealing rubbers etc. are being followed. The Engineer shall be given the opportunity to inspect all materials immediately prior to installation and shall have the right to reject any materials which, in his opinion, have suffered damage which may impair the long term durability or strength of said items.

Pipes and specials shall be protected against damage during all stages of manufacture, delivery, storage and handling. The ends of all steel pipes and specials shall be protected against denting. Steel pipes shall be transported and stacked in such a manner that the pipe barrel is not deformed by more than 2% of its diameter. Dents which cause a protrusion of more than 1 mm on the inside of the steel special, may result in the special being rejected.

PSL 3.3 CAST IRON PIPES, FITTINGS AND SPECIALS

Cast iron specials shall be used with PVC-U mains, and shall be provided with standard couplings, unless otherwise specified or shown on the drawings.

All cast iron fittings and specials shall be class 16 and shall be coated according to PSL 3.9.1.

PSL 3.4 STEEL PIPES, FITTINGS AND SPECIALS

PSL 3.4.1 General

Steel pipes and fittings shall comply with SABS 719 Grade B and have a minimum thickness of 4.5mm.

All steel pipes and specials shall be clearly marked with the grade and thickness of the steel, the series number of the pipe or special, the item number in the Schedule of Rates, the nominal diameter and the working pressure.

If applicable, the drilling pattern shall be stamped on all flanges.

PSL 3.7 OTHER TYPES OF PIPES

PSL 3.7.1 PVC-U Pipes

In addition to Clause 3.7.1, solvent welded joints or fittings shall not be used.

PSL 3.7.3 Specials for PVC-U pipes *

All specials (except flanges) shall be suitable for working pressure of not less than 1,600kPa.

Standard specials such as tees, flange adaptors, reducers etc. for PVC-U pipelines shall be fabricated from cast iron. Unless otherwise shown on the drawings, all bends shall be PVC-U.

PSL 3.8 JOINTING MATERIALS

PSL 3.8.3 Flanges and accessories

Flanges shall comply with SABS 1123 and have a minimum working pressure of 1,600kPa. Holes shall be drilled to Table 1600/3 of SABS 1123.

Any item of pipework or special or valve, of which the flanges are incorrectly drilled, will be rejected. The reaming of bolt-holes to oversized dimensions to enable a particular item to fit will not be allowed.

All flanges shall be provided complete with bolts, nuts and washers compliant with SABS 135, and 2mm thick rubber insertions. The insertion piece shall cover the full face of the flange between the ID and OD.

PSL 3.8.4 Loose Flanges

With regard to Clause 3.8.4 the following standard shall apply :

"Bolts and nuts shall comply with requirements of SABS 135".

PSL 3.9 CORROSION PROTECTION

Unless otherwise specified or indicated on the drawings, all bolts, nuts and washers shall be hot-dip galvanized to SABS 763 after threading. All bolts, nuts and washers within water retaining structures or exposed to rain water shall be fabricated from stainless steel.

PSL 3.9.2 Steel pipes and specials

Steel pipes and specials with a nominal bore up to 150mm shall be hot dip galvanised after fabrication, in accordance with the Clause 3.9.2.1 and the requirements of SABS 763 for heavy duty applications. Further machining, cutting or welding after hot-dip galvanizing will not be allowed.

Steel pipes and specials with a nominal bore over 150mm shall be coated with a polyamide-cured epoxy system ("Copon EP 2300" or similar approved) internally and externally as specified in Clause 3.9.2.2(b)(2) as amended by PSL3.9.2.2(b)(2).

PSL 3.9.2.2(b)(2) Polyamide-cured epoxy system

The internal and external surfaces of the fitting shall be grit blasted to at least SIS Standard Sa 3 with an anchor profile between 45 micrometres (minimum) to 75 micrometres (maximum). Thereafter the complete fitting including the flange faces but except for the sealing areas and bolt holes shall be coated with a two-pack solvent-free epoxy paint in accordance with Clause 3.9.2.2(b)(2), applied by means of a hot airless machine to a total dry film thickness of not less than 250 micrometres.

Alternatively an approved sintered epoxy powder to a total dry film thickness of at least 450 micrometres may be applied after cleaning as specified above in accordance with Clause 3.9.2.2(b)(4).

The above specified painting shall be applied after the fitting has passed its hydraulic test. The sealing area of the flanges shall be treated with an approved zinc rich primer.

All damaged paint areas (if any) caused by the transport and handling of the fitting shall be repaired in accordance with the above specification, prior to installation. Any damaged paint area caused by the installation of the fittings shall also be repaired as specified above. The grinding down of the damaged area to Sa 2 1/2 and the feathering of the edges are an acceptable alternative to re-blast cleaning.

PSL 3.9.2.2(b)(4) Fusion bonded epoxy

Fusion bonded epoxy (FBE) coating shall comply with the provisions of SABS 1217 as for a Type 2 powder coating, and may only be carried out by an applicator that is approved by the Engineer.

The entire surface to be coated must be free of dust and moisture and must comply with the provisions of Clause 4.1.1 of SABS 1217.

The total dry film thickness shall be at least 400 micrometres (+ 50 micrometres). The sealing area of the flanges shall be treated to a dry film thickness of 150 micrometres (+ 25 micrometres) (i.e. masked off before the second coat is applied).

The painting shall be such that all trimmings are covered by paint for a distance of at least 5 mm to discourage bi-metal corrosion.

No field repairs of damaged paint areas (if any) are allowed. Should any damage of the coating occur, the fitting shall be re-coated in the applicators workshop.

PSL 3.9.6 Corrosive Soil

All buried flanged joints, saddles, bolts and nuts shall be protected by means of Denso paste and then wrapped to give a covering of at least three layers of Denso impregnated tape or other means of inhibiting corrosion approved by the Engineer. Denso tape must be carefully moulded over the paste and fitting to expel all air pockets.

PSL 3.10.1 Gate valves*

Gate valves shall comply with SABS 664 and shall bear the SABS mark, the trade name and the nominal diameter and class of the valve. A test certificate as per Clause 3.5.20 of compliance with SABS 664 will be acceptable.

Gate valves shall be resilient seal (''RSV'') Class 16, clockwise closing, with non-rising spindle, and shall be drop-tight when tested in accordance with BS 5163. The direction of closing must be shown clearly on the valve. The design of the stuffing box shall be such that the O-rings can be replaced while the valve is in service without having to remove the valve dome. Valve gates shall be fully EPDM rubber lined, internally and externally and the spindle shall be Grade 316 Stainless Steel or equivalent with a double o-ring seal."

Gate valves shall be fitted with cap-tops (Alt) handwheels and shall be either flanged or spigotted or socketed, as scheduled. Gate valves shall be supplied with couplings and all materials necessary for complete installation.

PSL 3.10.2 Fire hydrants *

Hydrants shall be of the underground screw down type with an overall maximum height of 320 mm and rising spindle. The hydrant shall be opened by rotating the spindle in an anti-clockwise direction. The outlet connection shall be of the London Round Thread type. The hydrant must conform to SABS 1128: Part 1-1977.

PSL 3.11 MANHOLES AND SURFACE BOXES

PSL 3.11.6 Surface boxes

All cast-iron surface boxes for valves and hydrants shall be fitted with chains as per SABS 558.

For non-trafficked areas, surface boxes are to be the thermoplastic type as per Engineer's Department Standard Detail Drawing No PSL 2/1. For trafficked areas surface boxes are to be cast iron type as per Engineer's Department Standard Detail drawing no. PSL 2/2.

PSL 5 CONSTRUCTION

PSL 5.1 LAYING

PSL 5.1.1 General

The centreline of the pipeline shall be laid according to the coordinates provided on the drawings. The pipeline is to be laid continuously and leaving gaps for fittings will not be allowed.

PVC-U pipes shall be handled, transported, stored and laid strictly in accordance with the manufacturer's instructions.

PSL 5.1.3 Keeping pipelines clean

In addition to the requirements of Clause 5.1.3, the Contractor shall ensure that both ends of all pipes and specials strung out above ground along the line of the trench are closed by means of an adequately fixed plastic cap or other approved material, in order to prevent the ingress of foreign material.

Unless otherwise directed by the Engineer, the Contractor shall, when filling the pipeline with water for the first time, use suitable pipe pigs driven by a flush of water to aid the cleaning of all sections of the pipeline(s). If necessary, the pig shall be passed through a section more than once. If necessary, the Contractor shall install special temporary fittings in the pipeline for the insertion and recovery of the pigs. Such temporary fittings shall be removed after the pipeline has been cleaned to the satisfaction of the Engineer. The Contractor shall satisfy the Engineer that every pig inserted into the pipeline is recovered after use.

PSL 5.1.4 Depths and cover

Water pipelines shall be laid to the levels indicated on the drawings. Where no such levels are provided, the following cover shall be provided:

Water mains under roads	:	Minimum cover of 1.0m measured from the finished road level to the crown of the pipe. Maximum cover of 1.25m
Water mains elsewhere	:	Minimum cover 750mm, maximum cover 1.25m
Erf connections	:	Minimum cover 450mm, maximum cover 600mm

PSL 5.1.4.3 Minimum clearance between services

Where the minimum clearance between services would be less than that specified in Clause 5.1.4.3, the water main shall be laid beneath the service crossed, at an invert level which allows for the clear space as specified. The water main shall be laid horizontally at this level for a distance of at least 1.0 m on either side of the centreline of the service crossed and the transition to the specified cover levels obtained as specified in Clause 5.1.4.2.

The Contractor may, at his own expense, increase the cover levels by a maximum of 200 mm. No decrease in cover level or clear space between pipe barrels as specified will be permitted unless otherwise instructed by the Engineer in writing.

PSL 5.3 SETTING OF VALVES, SPECIALS AND FITTINGS

All valves and hydrants shall be positioned so that the valve spindle or hydrant outlet is directly opposite an erf boundary or splay corner peg to within 150 mm, and directly above the main, or as otherwise dimensioned on the drawing.

The Contractor shall ensure that upon completion of the Works, all gate valves in the reticulation (other than scour valves) are, unless otherwise instructed by the Engineer, in the "open" position.

PSL 5.6 VALVE AND HYDRANT CHAMBERS

Delete in Clauses 5.6.1 and 5.6.2 the references to drawings L1, L2 and L3 and replace by "The Standard Details of the Municipal Water Division".

PSL 5.10 DISINFECTION OF PIPELINES

Notwithstanding the requirements of Clause 5.10, the Contractor shall disinfect the pipelines before connecting into the reticulation.

PSL 5.11 CONNECTION INTO EXISTING MAIN *

Where shown on the drawing or ordered, the Contractor shall connect to the bulk water main at an existing tee.

Before commencing the excavation of pipe trenches in the vicinity of a proposed connection, the Contractor shall excavate for, expose, survey and record the position and level of the connection point on the existing water main.

The Contractor shall be responsible, through the Engineer, for liaison with the Municipality (or relevant authority) to arrange for turning off the water in order to carry out the connection. These arrangements shall be made at least 5 working days prior to the proposed connection date so that affected consumers can be notified in advance.

The Contractor may cut into the existing water main only after he has received a written instruction from the Engineer to do so.

Before the connection is made, the new pipes must be laid to within 2.0m of the connecting point, and must be temporarily blanked off, anchored, tested and disinfected.

The Contractor shall arrange all the necessary work involved with the connections, including liaising with the Municipality, locating existing services, breaking out anchor blocks (if necessary), and removal of existing pipe fittings and couplings.

PSL 5.12 MAINTENANCE AND REPAIRS DURING DEFECTS LIABILITY PERIOD *

Should leaks or defects develop during the Defects Liability Period they will be rectified by the Municipality at the Contractor's expense. This will include the cost of re-testing and subsequent disinfection.

PSL 6 TOLERANCES

PSL 6.2 CONTROL POINTS

Add: "Valves shall be located as indicated on the plan layout opposite the boundary peg of the erf, and to within a longitudinal tolerance of 100mm."

PSL 7 TESTING

PSL 7.3 STANDARD HYDRAULIC PIPE TEST

PSL 7.3.1 Test pressure and time of test

Testing of water mains shall be carried out after the installation of erf connections. The stopcock shall be open for the test and a temporary end cap shall be fitted to the outlet end of the assembly. The permissible leakage rate specified in Clause 7.3.3 shall be that applicable to the length of water main only, and the length shall therefore not include the length of erf connections.

The Contractor's test equipment shall be connected directly to the flange of a hydrant tee and not through the hydrant's screwed outlet, or through a specially adapted end cap, or a short length of pipe.

Notwithstanding Clause 7.3.1.2 and Clause 7.3.1.3, the test pressure for field testing shall be:

1.35MPa for Class 9 PVC-U , Class 10 HDPE pipes and Class C AC pipes;

1.80MPa for Class 12 PVC-U and Class 12 HDPE pipes and Class D AC pipes.

Delete Clause 7.3.1.4.

In addition to the requirements of Clause 7.3.1.5 water used to fill the reticulation and during testing shall be water drawn from the Municipal mains and transported in a clean container. The bleeding off of air trapped within the reticulation shall only be carried out via the fire hydrants, erf connections or at the prescribed connection points to the existing reticulation by a bleeder system fitted to the end caps, or a bleeder system fitted to a short length, say 500mm, of a pipe included at the end of the new reticulation.

PSL 7.5 TESTING AND REPAIRS DURING DEFECTS LIABILITY PERIOD *

Should leaks or defects develop during the Defects Liability Period they will be rectified by the Municipality at the Contractor's expense. This will include the cost of re-testing and subsequent disinfection. During the Defects Liability Period the Municipality may carry out further pressure tests on the whole or part of the new reticulation and any necessary remedial work will be carried out by the Municipality at the Contractor's expense.

PSL 7.3.4 Witnessing of a Successful Leakage Test by an Official of the Water Division *

The Contractor shall take note that the Engineer's Representative is required to ensure that an official of the Water Division witnesses a successful leakage test of the whole new reticulation being put forward for acceptance. Visits to site of this official to witness the test after the initial visit will be charged at a rate determined by the Municipal Water Division.

This amount shall be payable directly to the Municipality by the Contractor prior to each subsequent visit.

PSL 7.3.5 Removal of Test Equipment *

Upon the successful completion of the leakage test the new reticulation will be deemed to be Municipal property and the Contractor shall not carry out any work on the pipes apart from the disconnection of his pump (but not his flange and pipe system from the hydrant tee), the completion of the backfilling to the pipeline and construction of the hydrant and valve chambers. The Water Division will connect in the new reticulation as soon as possible and the Contractor shall supply such materials, pipes and specials as detailed by the Engineer. The completion of backfill at the connection points and the surface restoration/reinstatement shall be carried out by the Contractor.

PSLB BEDDING (PIPES) (SABS 1200 LB)

PSLB 3 MATERIALS

PSLB 3.1 SELECTED GRANULAR MATERIAL

Replace Clause 3.1 with the following:

"Selected granular material shall be a granular, free-draining, non-cohesive material with a grading analysis that shows 100% passing a 9.5 mm sieve and less than 5% passing a 0.425mm sieve. The Compactability Factor shall not exceed 0.4."

PSLB 3.2 SELECTED FILL MATERIAL

Where rock or expansive clay is encountered in the trench bottom, the material in the selected fill blanket shall be selected granular material.

PSLB 3.4 SELECTION

Notwithstanding any references to the contrary in Clause 3.4, the Contractor is required to use selective methods of excavating. The Contractor shall selectively remove and keep separate topsoil, unsuitable material, and material suitable for reuse as backfill, selected fill, selected granular material or for other use as ordered by the Engineer.

PSLB 5 CONSTRUCTION

PSLB 5.2 PLACING AND COMPACTING OF RIGID PIPES

PSLB 5.2.1 Class A Bedding

Add the following:

"or a period of 5 days has elapsed after the placing of the concrete in that section, whichever occurs first"

PSLB 5.2.2 Class B and Class C bedding

Concrete stormwater pipes shall be bedded as specified for rigid pipes with Class C bedding unless otherwise shown on the drawings or ordered by the Engineer.

PSLB 5.2.2 Class B Bedding

The dimension "x" for all rigid and flexible pipes (except for HDPE erf connections) as referred to in drawing LB-1 and LB-2 shall be 150mm.

The dimension "x" for HDPE erf connections shall be 100 mm.

PSLB 5.3 PLACING AND COMPACTING OF FLEXIBLE PIPES

All PVC-U and HDPe water pipes, sewers and erf connections shall be classified as flexible pipes.

PSLB 7 TESTING

PSLB 7.1 DENSITY TESTING

Density tests shall be as per PSDB7.1.

PSLB 8 MEASUREMENT AND PAYMENT

PSLB 8.2.2.3 From commercial sources

(b)* 6,7 mm concrete stone to SANS 1083 Unit: m³

Add the following to the end of this Clause:

“Commercial sources shall include off-site sources located by the Contractor.

PSLD SEWERS (SABS 1200 LD)

PSLD 1 SCOPE

Add to Clause 1.1: "Drawings Numbered LD 2 to LD 8 are replaced by the standard details as depicted in the NMBM City Engineer's Department Standard Details – Latest Edition".

PSLD 3 MATERIALS

PSLD 3.1 PIPES, FITTINGS AND JOINTS

Sewers shall be constructed with solid wall uPVC class 34 (heavy duty – minimum hoop stiffness 300kPa) pipes and fittings. Sewer erf connections shall be constructed with 110mm diameter uPVC class 51 (normal duty – minimum hoop stiffness 100kPa) pipes and fittings. uPVC pipes and fittings shall comply with the relevant requirements of SABS 791. Structured wall uPVC pipes will not be acceptable.

PSLD 3.5 MANHOLES, CHAMBERS, ETC.

PSLD 3.5.1 Bricks

Bricks used in sewerage infrastructure shall be burnt clay engineering bricks, with a compressive strength of 28 MPa minimum, that comply with the requirements of SABS 227.

PSLD 3.5.2 Precast concrete sections

Joints between concrete chamber sections shall be sealed according to the PSLD5.6.5.

"Dolomitic aggregate shall be used in the manufacture of the chamber sections, levelling rings and roof slabs."

PSLD 3.5.3 Prefabricated AC manholes

Prefabricated AC manholes are not permitted.

PSLD 3.5.4 Concrete

Dolomitic aggregate shall be used in the manufacture of the precast concrete chamber sections, levelling rings and roof slabs, and for all cast insitu concrete, mortar, benching and plaster used in manholes.

PSLD 3.5.7 Step irons

Step irons are not required in manholes.

PSLD 3.5.8 Manhole covers and frames

Approved precast concrete heavy duty roof slabs shall be used in all areas subject to traffic loads, i.e. in the road carriageways, verges and service lanes. Approved precast concrete medium duty roof slabs shall be used in all other areas.

Approved precast concrete manhole covers (heavy duty and/or medium duty, to match the roof slab class) shall be used in all areas other than road carriageways.

Medium duty cast iron Type 4 manhole covers and frames, which comply with the requirements of SABS 558, shall be used in all areas not subject to traffic loads.

Heavy duty cast iron Type 2A manhole covers and frames, which comply with the requirements of SABS 558, shall be used in all carriageways.

PSLD 3.6 MARKER POSTS

Erf connection markers shall be 40mm diameter HDPe class 10 pipes, which protrude 300mm above finished ground level, with a 200mm wide strip at the top of the marker painted yellow.

PSLD 5 CONSTRUCTION

PSLD 5.4.1 Connection into Existing Manholes *

An appropriate item has been allowed in the Schedule of Quantities to cover all costs connected with the making of this connection.

PSLD 5.6 MANHOLES, INSPECTION CHAMBERS, ETC

Manholes shall be 1000mm nominal diameter precast concrete sections and shall be installed according to the manufacturer's specifications. The flexible connections to the manholes shall be as shown on the drawings.

A sample manhole shall be completed at the start of construction. Once the sample manhole has been approved by the Engineer, it will be used as a standard for all other manholes.

Manholes shall not be backfilled without the written approval of the Engineer.

PSLD 5.6.1 General

Delete in Clauses (a) and (b) the word "brick" and replace by "cast in situ concrete."

Delete in Clause (d) "Drawings LD....." and replace by "Municipal Standard Details Drawings".

PSLD 5.6.2.3 Benching

The concrete render to be applied on top of the benching shall be mixed in the proportions of 1 part cement, 2 parts sand and 3 parts 7mm concrete stone, by mass. The sand proportion may be varied between 1.5 and 2.5 to obtain ideal workability.

PSLD 5.6.7 Finished cover levels *

Unless otherwise ordered by the Engineer or dimensioned explicitly on the drawings, the cover level of the manholes shall be installed:

- flush with the final surface of a carriageway, footway, paved area, verge or service lane;
- 150 mm above the finished ground level for manholes situated at the midblock position; and
- 600 mm above ground level in undeveloped open space.

PSLD 5.6.5 Precast concrete manholes

Precast concrete sections shall be placed such that there is no misalignment of the shaft and such that the shaft is truly vertical. The first section shall be bedded firmly in the base while the concrete is wet. The first precast section shall not rest on the crown or collar of a sewer. The precast concrete section shall be cut to suit the sewer with an angle grinder, and under no circumstances shall holes by knocked out by hammer.

Joints between precast concrete sections shall be sealed with a bitumastic sealant. The sealant shall be placed on the top of the section before placing the next section above it. The external surface of the joint shall be thoroughly cleaned and a double layer of self-adhesive polyethylene tape shall be wrapped around the joint.

PSLD 5.6.8 Manhole repair *

Any infiltration visible in the manhole channels, pipe ends or benching shall be rectified by demolishing the base and rebuilding. Rectification of infiltration through the walls and/or joints may be attempted only by externally applied measures, failing which the manhole shall be demolished and rebuilt.

PSLD 5.9 Connecting sewers

PSLD 5.9.1 Location and Details

Delete the words "Drawing LD 7 or Drawing LD 8" as applicable and replace by :

"The relevant Municipal Standard Detail Drawings."

PSLD 5.9.2 Marker posts

Before backfilling the erf connection, and while the end of the erf connection is still exposed, the marker post shall be installed immediately in front of the end cap. The post shall extend from the crown of the erf connection at the end cap, vertically above its centreline to a point 300 mm above finished ground level in accordance with PSLD3.6, or as otherwise specified by the Engineer.

PSLD 5.9.3 Recording location

Replace item (c) with “the X, Y coordinates of the marker to an accuracy of 2m”

The data recorded in accordance with Clause 5.9.3 shall be submitted to the Engineer in electronic format.

PSLD 5.9.4 Connection to existing sewer/manhole *

The Contractor shall determine the exact position and existing invert level at the proposed connection point before excavating pipe trenches upstream of the connection point. Any discrepancy between the position and level on site and the design data shall be brought to the attention of the Engineer immediately.

The Contractor shall under no circumstances connect the new reticulation into an existing sewer or manhole without the prior written instruction of the Engineer. This instruction will only be given after acceptance, by the Engineer, of the sewers and manholes of the new reticulation upstream of the connection point.

After receiving the Engineer's approval of the proposed operation the Contractor shall interrupt or divert the sewage flow, expose the existing sewer, cut into the pipe, remove the debris, connect the new pipe into the old and make good, and backfill.

PSLD 5.9.5 Erf connections *

Erf connections shall be constructed according to the type and details shown on the drawings. Erf connections shall be situated 1.3m alongside the erf boundary as indicated on the drawings. The ends of the erf connections shall extend 1,0m into the erf, and shall be sealed with end caps and marked according to PSLD 5.9.2.

Where erf connections are built into manholes, the benching and channels shall be constructed in accordance with the drawings.

PSLD 6 TOLERANCES

PSLD 6.2 OVERALL CENTRE LINE CONTROL AND MANHOLE LOCATION

Delete in second line " ± 300" and replace by "±100". Manhole positions, as shown on the drawings, are critical. Any required deviation by the Contractor, in excess of the tolerance, must be authorized by the Engineer.

PSLD 6.3 MANHOLE INVERT LEVELS

Replace "± 50mm" in the second line with "±25mm".

PSLD 6.4 ALIGNMENT AND GRADE BETWEEN MANHOLES

Replace “5%” in 6.4(a)(1) with “3%”.

PSLD 6.6 AS-BUILT INFORMATION*

The Contractor shall submit "As-Built" levels, distances between manholes and the grades of pipelines for which he requires payment at the time he submits his monthly payment claim. A sample form is obtainable from the Engineer.

PSLD 7 TESTING

PSLD 7.1 GENERAL

PSLD 7.1.6 Torch and Mirror Test

Delete wording of Clause (c) and replace by: "A torch and mirror test shall be carried out on all pipe lengths, in both directions".

PSLD 7.2 TESTS AND ACCEPTANCE/REJECTION CRITERIA

PSLD 7.2.6 Watertightness of manholes

The Engineer may request a watertightness test of any manhole. The watertightness test shall be conducted as follows:

The pipe ends shall be sealed with temporary end caps.

Infiltration : The excavation surrounding the manhole shall be flooded to approximately the top of wall level and this depth of water shall be maintained for at least 48 hours. The manhole will have satisfied the test requirements provided there is no sign of infiltration of water into the manhole.

Exfiltration : The manhole shall be filled with water to the top of wall level and this depth maintained for at least 24 hours. Water shall be added to maintain this level. At the end of the subsequent 24 hour period the drop in water level shall be measured. The manhole will have satisfied the test requirement provided the drop is less than 75mm per metre in depth of the manhole measured from channel invert to the original height of the water. A shorter testing time may be allowed at the discretion of the Engineer, subject to a minimum of 3 hours, in which case a 'drop in level' pro rata to the time tested shall be used.

PSLD 7.2.7 Torch and mirror test *

For the pipeline to be acceptable the visibility of the plug/reflector shall be at least 50% of its area.

PSLD 7.2.8 CCTV Inspection *

The Contractor shall perform closed circuit television inspection (CCTV) as a post-construction method to determine if the pipeline has been installed as required, all joints have been properly joined, and to inspect the lateral erf connections to the main sewer. The CCTV system shall have a tractor mounted rotating lens camera with articulating head, capable of pan and rotate. The system shall be capable of recording onto DVD and shall be equipped with an inclinometer. Each joint and erf connection shall be scanned 360 degrees. The camera shall be operative in 100% humidity conditions. Lighting for the camera shall minimize reflective glare. Lighting and camera quality shall be suitable to provide a clear, in focus picture of the entire periphery of the pipe for all conditions encountered during the work. Focal distance shall be adjustable through a range from 75mm to infinity. The remote reading distance counter shall be accurate to one percent (1%) over the length of the particular section being inspected. The camera, television monitor and other components of the colour video system shall be capable of producing a minimum of 500 line resolution. All such inspections shall be performed by personnel trained to locate and identify breaks, obstacles and lateral erf connections by closed circuit colour television.

Documentation consisting of a colour video DVD, a written report detailing the condition of the mainline and joints, and a colour thematic map indicating the location of the main sewer

and the lateral erf connections shall be submitted to the Engineer for approval prior to final payment

The newly installed pipe shall be visibly free of defects, which may affect the integrity or strength of the pipe. If in the opinion of the Engineer such defects exist, the pipe shall be repaired or replaced at the Contractor's expense. Any section of the pipe with a gash, blister, abrasion, nick, scar, or other deleterious fault greater in depth than ten percent (10%) of the wall thickness shall not be used and shall be removed from the site.

Post construction DVDs, reports and thematic maps shall be submitted to the Engineer for review prior to final payment. Should any portion of the inspection DVDs be of inadequate quality or coverage, as determined by the Engineer, the Contractor shall re-inspect the unacceptable portion at no additional expense to the Employer. All original DVDs shall remain the property of the Employer.

PSLD 7.2.9 Acceptance criteria *

The acceptance of the pipe length or manhole will depend upon whether it satisfies the criteria set out in SABS 1200 LD clauses 6 and 7 and the PS clauses above.

Only tests carried out on the pipelines after completion of the backfilling to ground level (excluding surface restoration) and completion of the construction of manholes to roof height, including benching, will be considered for acceptance purposes.

PSLD 8 MEASUREMENT AND PAYMENT

PSLD 8.2.1 Supply, lay, joint, bed and test pipeline

Notwithstanding the requirements of clause C3.5.7, up to a maximum of 75% of the measured lengths of pipes will be certified for payment until such lengths have successfully passed the field test.

In addition to Clause 8.2.1, the rate for supply, lay, bed and testing of pipelines shall include all test methods specified in PSLD 7 except for the CCTV Inspection which is measured as a lump sum for the inspection of the entire sewer reticulation as defined in PSLD8.2.14.

PSLD 8.2.3 Manholes, inspection chambers

In addition to the requirements of Clauses 8.2.3, 8.2.4 and 8.2.5, the rate for manholes shall include the cost of supplying and installing the manhole complete, the supply, laying and jointing of channels as for a through manhole, the supply and installation of manhole roof slabs and medium duty precast concrete manhole covers and frames.

For the purpose of measurement and payment, the depth of a manhole, inspection chamber, etc., is defined as the depth from the cover level to the invert level of the manhole, inspection chamber, etc.

Extra-over items for heavy duty roof slabs and covers and frames have been scheduled.

PSLD 8.2.5 Extra over 8.2.3 for the construction of additional channelling and the building in of short pipe specials at branch manholes, manholes at bends and erf connection manholes……Unit: No

The construction of the additional channelling and the building in of the short pipe specials at branch manholes, manholes at bends and erf connection manholes will be measured extra over that provided for in “straight through manholes”. The rates shall cover the cost of the provision of all materials, the laying and jointing of channel specials including benching and the building in of the short pipe specials measured under 8.2.1 and 8.2.2, all in accordance with the details shown on the drawings.”

Delete the heading and contents of Subclause 8.2.6 with the following:

PSLD 8.2.6 (a) Erf connections

Notwithstanding the requirements of Clause 8.2.6, excavation in hard rock will be measured separately in accordance with the requirements of Clause 8.3.2(b) of SABS 1200 DB.

In addition to Clause 8.2.6, the rates for the various types of erf connections shall also cover the cost of supply and installation of the bends, end cap and erf connection marker, recording locations, laying the connection pipeline to 1.0m within the erf, and testing.

PSLD 8.2.6 (b) Extra-Over Item 8.2.6 for additional length of pipe

Where the length of the erf connection measured from the centreline of the main sewer to a point 1.0m into the erf, exceeds the standard 2.3m by 700mm, an extra-over item shall be scheduled for the additional length of pipe necessary.

The extra-over rate shall cover the cost of additional excavation in soft materials, backfilling, bedding, disposal of surplus material, and the supply and laying of additional erf connection pipeline.

PSLD 8.2.7 Encasing of pipes in concrete

Notwithstanding the provisions of the payment Clause, provision shall be made for forming joints at positions that suit the pipe lengths used, as well as for complying with the requirements of 5.7.

PSLD 8.2.11 Connection to existing sewer

Connections that involve cutting and building into existing manholes will be measured by number.

Construction of new manholes on existing pipes will be measured by number extra-over the rate paid for the construction of manholes.

PSLD 8.2.13 Watertightness of manholes *

Watertightness tests of manholes will be measured by number, per type (infiltration or exfiltration). Payment will be made only for successful testing. The cost of retesting failed tests will be to the Contractors account.

PSLD 8.2.14 Construction of Rodding Eye

The rate for the construction of a rodding eye, shall include the cost of supplying and installing the rodding eye complete up to 1.5 m depth, including the concrete surround to the rodding eye terminal

PSLF ERF CONNECTIONS (WATER) (SABS 1200 LF)

PSLF 1 SCOPE

This contract covers the construction of erf connections up to 0.5m beyond the erf boundary.

The provision of water meters is excluded from the contract.

PSLF 3 MATERIALS

PSLF 3.1 GENERAL

Add to clause 3.1 :

"Where pipe diameters are indicated on the drawings or referred to in this specification they shall be held to be nominal internal diameter unless outside diameters are specifically stated"

PSLF 3.1 PIPES, FITTINGS AND COUPLINGS

Erf connections shall be high density polyethylene (HDPE) Class 10, PE 100, 32mm or 25mm nominal diameter pipes as shown on the drawings, complying with the requirements of SABS 533, and shall be joined using "Plasson" compression type couplings.

PSLF 3.1.4 Polyethylene pipes

Delete the contents of clause 3.1.4 and replace with the following:

"HDPE pipes and fittings shall be type IV to SABS 533. All fittings used to join HDPE pipes shall be of the compression type approved by the Engineer. Take-off points for erf connections shall be approved "Plasson" type or similar saddles supplied with stainless steel bolts."

PSLF 3.1.6 Ferrules (Not applicable to uPVC pipes)

Ferrules shall be of the plug in type manufactured from brass with a medium shank and shall be "Barber Hays" type or similar approved.

PSLF 3.1.7 Saddles

Cast iron fittings will not be permitted. Only "Plasson" or similar approved saddles supplied with stainless steel bolts will be accepted. Saddles shall be protected with denso paste and denso wrap according to PSL 3.9.6

PSLF 5 CONSTRUCTION

PSLF 5.2 LAYING FROM MAIN TO ERF

PSLF 5.2.2 Pipe laying

The alignment of the erf connection shall be perpendicular to the water main unless otherwise authorized by the Engineer. The excavation of the erf connection trench across a carriageway constructed under this contract shall commence only after the subgrade layer has been accepted.

The cover to the crown of the erf connection shall be between 450 and 600mm in areas subject to traffic loads and 300mm in the erven. The side allowance shall be 150mm. The thickness of the bedding cradle under the pipe barrel and over the crown of the pipe shall be 75mm.

The basecourse quality material used in the backfill of trenches across roads shall be compacted to 95% of mod. AASHTO max. density and this backfill shall be extended to 1.0m behind the back of the kerb. The trench backfill shall be completed and accepted before the construction of the next layer is commenced.

PSLF 5.2.3 Service connections

For uPVC and HDPE mains, a “Plasson” or similar approved saddle, secured by stainless steel bolts shall be fitted to the main at the required position and the erf connection connected directly to the saddle without a valve.

PSLF 5.4 Connecting points

PSLF 5.4.1 Markers

Where water meters are not required, the erf connection shall be terminated with a “Plasson” or similar approved end cap. The end of the erf connection shall have a minimum of 300mm cover at the termination point, 0.5m into the erf.

Erf connection markers shall be 40mm diameter HDPe class 10 pipes with a 200mm wide strip at the top of the marker, painted blue.

Before backfilling the erf connection, and while the end of the erf connection is still exposed, the marker post shall be installed immediately in front of the end cap. The marker shall extend from the erf connection at the end cap, vertically above its centreline to a point 300mm above finished ground level, or as otherwise specified by the Engineer.

PSLD 5.4.2 Recording of locations

Replace item (c) with “the X, Y coordinates of the meter or end cap to an accuracy of 2m” and delete item (d).

The data recorded in accordance with Clause 5.4.2 shall be submitted to the Engineer in electronic format.

PSLF 7 TESTING

PSLF 7.1 GENERAL

The erf connections shall be tested concurrently with the new reticulation to which they are connected. Allowance shall not be made for the volume of water contained in the connection when calculating permissible leakage.

PSLF 8 MEASUREMENT AND PAYMENT

PSLF 8.2.1 Provide erf connections complete

Measurement of erf connections will be measured by the number of each type of connection, such as short single, short double, long single and long double.

In addition to Clause 8.2.1, the rate shall include couplings, all fittings, the end cap, bedding material, bedding the pipe, and all other materials, plant and labour required to complete the erf connection.

Notwithstanding Clauses 8.2.4, 8.2.5, 8.2.6, 8.2.7, and 8.2.8, the rate for the provision of erf connections complete shall cover the cost of the supply and installation of water meters, stop taps, surface boxes, markers and recording, all as specified in Clauses 8.2.4, 8.2.5, 8.2.6, 8.2.7, and 8.2.8.

The standard length of erf connections is defined as the distance between the water main and a point 0.5m beyond the erf boundary, measured perpendicular to the water main. No variations of the standard length of erf connections will be measured for payment.

PSLF 8.2.8 Markers *

The requirements of Clause PSLF 5.4.1 shall be included in the rate for the erf connection.

PSLF 8.2.4 Install Meters Complete……..Unit: No

Meters will be measured separately by number.

The rate tendered shall cover the cost of collecting, handling, transporting, safekeeping, installing, including any excavations and backfilling, jointing, cutting, commissioning, testing, listing and submitting of the specified records and data of all installation to the Engineer."

PSLF 8.2.9* Extra over item PSLF 8.2.1 for additional piping ..... Unit: m

The rate shall cover the cost of the supply of materials and fittings, for laying, jointing, bedding, testing and backfilling to provide the additional length of 20 mm HDPE pipe required from the 1m long erf connection to a point up to 1m from the ablution block.

CLAUSE C.3.8.2 MINIMUM REQUIREMENTS

A responsive tenderer is one that satisfies the minimum requirements as specified below:

Minimum requirements for determining responsiveness are as follows, a tenderer has:

1) Grading:

CIDB Grading of **5CE or higher**;

2) Previous Work Experience

Carried out and completed work for an Organ(s) of State in the past three (3) years. To be referenced as part of T2.2.5 returnable form;

Note that the references may be contacted to verify the tenderers performance which can result in the Tender Offer being considered non-responsive if not satisfactory.

3) Key Personnel

Identified Key Personnel that meet the minimum requirements in terms of previous work experience, qualifications and/or certifications as specified within the T2.2.3 returnable form;

Note that only relevant previous work experience as related to the Scope of Work of this request for quotation should be included.

4) Mandatory Plant and Equipment

Provided a portfolio of evidence that supports the tenderers' possession of the minimum mandatory plant and equipment as specified within the T2.1.24 returnable form;

5) Financial Statements

Provided comprehensive Three-(3)-year Annual Financial Statements as part of T2.1.6 returnable form, to conduct an economic risk assessment;

Note that closed corporations are required by Section 58 of the Close Corporation Act 69 of 1984 within nine months after the end of every financial year of the corporation cause financial statements in respect of that financial year to made.

In the case of Close Corporations, financial statements in accordance with Section 58 Section 58 of the Close Corporation Act 69 of 1984 are required:

- or the past three years; or
- since their establishment if, established during the past three years.

6) Pricing Instructions (Schedule of Rates)

Complied with the specifications and clauses referenced within **C2.1: Pricing Instructions**.

Note that non-compliance with the specifications and clauses referenced within C2.1: Pricing Instructions shall result in the tenderer being considered non-responsive.

SPECIAL CONDITIONS OF CONTRACT (TENDER CLAUSE C.1.6)

Tenderers should note that this forms part of a batch of six (6) clusters, relating to providing Support Water & Sanitation Services in the Nelson Mandela Bay Municipality.

Tenderers may submit request for quotation offers for one or more of the six (6) clusters but limited to two (2) clusters per tenderer. The Employer reserves the right not to award more than one cluster per tenderer based on an eligibility criteria.

Only those tenderers who satisfy the following eligibility criteria are eligible to submit more than one request for quotation offer:

1. Meets the minimum requirements as specified in accordance with C3.8.2; and
2. CIDB grading upper limit of tender value exceeds the sum of the tendered amounts of the clusters that are tendered for by the tenderer. Also, this shall be supported by an economical risk assessment for the overall contract.

The Employer may opt to negotiate the final terms of contract with preferred bidders as per Section 24 of the Employer's Supply Chain Management Policy - as adopted in terms of Section 111 of the Local Government Municipal Finance Management Act 56 of 2003, to adopt the under-mentioned revised policy as the **Nelson Mandela Bay Municipality – Supply Chain Management Policy, Version 6 of 20 December 2021**. A copy of this section of the policy will be made available to bidders upon request.

Clusters are for tendering purposes only, the Employer reserves the right to award work packages in a particular cluster to any other successful tenderer, in the following events:

a) Contractual non-performance of a successful tenderer in their respective cluster; and/or
b) Circumstantial non-performance of a successful tenderer in their respective cluster.

T2.1.24: SCHEDULE FOR MINIMUM REQUIREMENTS FOR PLANT AND MAINTENANCE

The tenderer must provide evidence of possession and operation of plant and equipment that meets or exceeds the minimum requirements set below in this returnable document, including but not limited to compliance with all applicable laws, regulations, and standards. The tenderer must demonstrate that the plant and equipment are in good condition and suitable for the intended use in accordance with the specifications outlined in the request for quotation document.

As a minimum requirement, the tenderer must complete the schedule and provide at least one of the following: a copy of their eNATIS registration certificate, a vehicle and/or plant lease agreement that spans a period of no less than one (1) year, a letter of intent signed by both parties involved in the lease, or any other legally acceptable documentation that proves ownership of their plant and equipment.

Each cluster must have a unique submission, and there should be **no duplication of any documentation**, including copies of eNATIS registration certificates, vehicle and/or plant lease agreements that span a period of no less than one (1) year, letters of intent signed by both parties involved in the lease, or any other legally acceptable documentation that proves ownership of their plant and equipment, between clusters.

1. Dropside Truck (at least 2-ton, but less than 12-ton):

Vehicle Registration Number	
Vehicle Identification Number	
Make (e.g., Mitsubishi)	
Vehicle Description (e.g., Logger body)	
License Number (e.g., DYJ 255 EC)	
Owner Name	
Hired, or owned	

2. TLB (Tractor Loader Backhoe):

Vehicle Registration Number	
Vehicle Identification Number	
Make (e.g., Mitsubishi)	
Vehicle Description (e.g., Logger body)	
License Number (e.g., DYJ 255 EC)	
Owner Name	
Hired, or owned	

3. Compactor (Bomag 90, or similar):

Vehicle Registration Number	
Driven (e.g., Self-propelled)	
Make (e.g., Bomag 90)	
Vehicle Description (e.g., Roller smooth drum)	
Size	
Owner Name	
Hired, or owned	

In the event that the schedule is not completed for this cluster and the tenderer has submitted a request for quotation offer, the tenderer shall be considered non-responsive.

The undersigned, who warrants that he / she is duly authorised to do so on behalf of the enterprise, confirms that the contents of this schedule are within my personal knowledge and are to the best of my belief both true and correct.

Signed ..... Date ……

Name ..... Position ……

Tenderer ……

T2.2.3: SCHEDULE FOR KEY PERSONNEL MINIMUM REQUIREMENTS

Tenderer must provide key personnel details, including qualifications, professional certifications, and relevant experience that is comparable to the Scope of Works of this request for quotation. Each key personnel must meet the minimum requirement of the specific years of experience, possess relevant certifications (where applicable), and demonstrate an applicable record of involvement in similar projects. Each cluster must have a unique submission, and there should be **no duplication of key personnel** amongst the cluster submissions. Failure to comply shall result in the tenderer being non-responsive.

The minimum requirements for each key personnel have been provided below based on qualifications, professional certifications, and relevant experience that is comparable to the Scope of Works of this request for quotation.

The following minimum requirements will be used for evaluation purposes as per **Tender Data: Clause C.3.8.2**.

No.	Key Personnel Designation	Minimum Requirement (or higher)
1.	Construction Manager *< Insert Full Name here >*	**Qualification** Possess a National Diploma (NDip.) in Civil Engineering (NQF Level 6) at an accredited Higher Education Institution by the Council on Higher Education (CHE). ***Note:*** *Foreign qualifications are to be accredited by South African Qualifications Authority (SAQA).* **Professional Certification** Registered as a Candidate Engineering Technician under the Engineering Council of South Africa (ECSA). ***Note:*** *Foreign certifications are to be accredited by an Internationally recognized Authority.* **Years of Experience (Post Professional Certification)** Accumulated at least three (3) years of work experience as a **Construction Manager (or higher designation)** in relevant projects that are comparable to the Scope of Works of this request for quotation.
2.	Site Agent *< Insert Full Name here >*	**Qualification** Possess an Occupational Qualification (NQF Level 4, or equivalent) related to the Built Environment Profession that is accredited by Quality Council for Trades and Occupations (QCTO), or Construction Education and Training Authority (CETA). ***Note:*** *Foreign qualifications to be accredited by South African Qualifications Authority (SAQA).* **Professional Certification** Optional. **Years of Experience (Post Qualification or Professional Certification).** Accumulated at least three (3) years of work experience as a **Site Agent (or higher designation)** in relevant projects that

No.	Key Personnel Designation	Minimum Requirement (or higher)
		are comparable to the Scope of Works of this RFQ.
3.	Civil Work Foreman *< Insert Full Name here >*	**Qualification** Possess an Occupational Qualification (NQF Level 4, or equivalent) related to the Built Environment Profession that is accredited by Quality Council for Trades and Occupations (QCTO), or Construction Education and Training Authority (CETA). ***Note:*** *Foreign qualifications are to be accredited by South African Qualifications Authority (SAQA).* **Professional Certification** Optional. **Years of Experience (Post Qualification or Professional Certification).** Accumulated at least one (1) year of work experience as a **Civil Work Foreman (or higher designation)** in relevant projects that are comparable to the Scope of Works of this request for quotation.
4.	Construction Health and Safety Officer *< Insert Full Name here >*	**Qualification** Possess a Safety, Health, and Quality Practitioner (NQF Level 5, or equivalent) accredited by an accredited Institution of Prior Learning, or Higher Education Institution by the Council on Higher Education (CHE). ***Note:*** *Foreign qualifications are to be accredited by South African Qualifications Authority (SAQA).* **Professional Certification** Optional. **Years of Experience (Post Qualification or Professional Certification).** Accumulated at least three (3) years of work experience as a **Construction Health and Safety Officer (or similar designation)** in relevant projects that are comparable to the Scope of Works of this request for quotation.
5.	EME – Construction Manager *< Insert Full Name here >*	**Qualification** Possess a National Diploma (NQF Level 6) in Civil, Electrical and Mechanical Engineering, Quantity Surveying, and Architectural Studies at an accredited Higher Education Institution by the Council on Higher Education (CHE). ***Note:*** *Foreign qualifications are to be accredited by South African Qualifications Authority (SAQA).* **Professional Certification** Registered as a Candidate Engineering Technician under the Engineering Council of South Africa (ECSA).

No.	Key Personnel Designation	Minimum Requirement (or higher)
		Note: *Foreign certifications are to be accredited by an Internationally recognized Authority.* **<u>Years of Experience (Post Qualification or Professional Certification).</u>** Accumulated at least three (3) years of work experience as a **Site/ Resident Engineer, or Quantity Surveyor (or similar designation)** in relevant projects that are comparable to the Scope of Works of this request for quotation.

The tenderer must submit a CV and certified copies of qualifications and professional certifications (if applicable) for each key personnel.

<u>In the event that the below form is not completed for this cluster and the tenderer has submitted a request for quotation offer, the tenderer shall be considered non-responsive.</u>

<u>Note</u>:

It should be acknowledged that each cluster must have distinct key personnel and no duplication of key personnel should occur between clusters.

T2.2.5 : SIMILAR PROJECTS UNDERTAKEN BY TENDERER

Tenderers are to submit atleast three (3) details (refer to attached template for the required information) and proof of an appointment letter, completion letter/ certificate, and a signed client reference letter for an organ of state:

- Construction of infrastructural services including water, sanitation, roads, stormwater, and electricity, performed to the value of R10million including VAT or higher.

Proof of appointment and completion and value of each project, in the form of copies of the below is to be included in a separate folder/ document and not attached to this schedule.

No.	Project Name	Client	Value of Work (including VAT)
1		Name: Email: Tel/Cell:	
2		Name: Email: Tel/Cell:	
3		Name: Email: Tel/Cell:	
4		Name: Email: Tel/Cell:	
5		Name: Email: Tel/Cell:	

The Tenderer shall be required to submit atleast three (3) signed client reference letter containing the information within the template provided in the following page.

Client Reference Letter Template:

< Referee Letter Head >

< Referees' Address >
< Date >

< Tenderers' Address >

< Opening Salutations >

< Subject: (Title of Contract to be included.) >

< Body of Letter (To include the below Table: Project Information) >

Project Title:					
Lead Consultant:					
Client:					
Project Description:					
Construction Value (incl. VAT)					
Fee Value (incl. VAT)					
Start – Completion Date (mm/yyyy):					
Engineering Services Offered:					
Overall Performance:	Poor	Fair	Good	Very Good	Excellent
Recommend for Further Work?	Yes		No		

< Closing Salutations >

< Signature: Head of Department >

The undersigned, who warrants that he / she is duly authorised to do so on behalf of the enterprise, confirms that the contents of this schedule are within my personal knowledge and are to the best of my belief both true and correct.

Signed ..... Date ……

Name ..... Position ……

Tenderer ……

C2.1 PRICING INSTRUCTIONS

C2.1.1 PREAMBLE TO THE SCHEDULE OF RATES

C2.1.1.1 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 SABS 1200 standardised specifications".

C2.1.1.2 Descriptions in the Schedule of Rates 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 of Rates, the requirements of the Standardised or Scope of Work, as applicable, shall prevail.

A payment reference column is provided in the Schedule of Rates to assist the Tenderer when pricing this request for quotation. Certain items may not have a payment reference and the onus is on the Tenderer to refer to the relevant specifications as stated above to ensure that the item is priced correctly. If in doubt the Tenderer shall preferably seek clarification or else qualify any assumptions made.

C2.1.1.3 The clauses in a specification in which further information regarding the scheduled item can be obtained appear under "Reference clause" in the Schedule. The reference clauses indicated 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 letter or letters which follow SABS in the SABS 1200 series of specifications, e.g., G for SABS 1200 G.

C2.1.1.4 Unless otherwise stated, items are measured nett in accordance with the drawings, and no allowance is made for waste. The Schedule of Rates has to be completed in black non-erasable ink and the Tenderer is referred to the Tender Specifications in regard to the correction of errors.

C2.1.1.5 The quantities set out in the Schedule of Rates 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 Works Assignment Price for the completed works assignment shall be computed from the actual quantities of work done, valued at the relevant unit rates and prices.

C2.1.1.6 The prices and rates to be inserted in the Schedule of Rates 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 request for quotation 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.

C2.1.1.7 A price or rate is to be entered against each item in the Schedule of Rates, whether the quantities are stated or not.

C2.1.1.8 A rate is to be entered in the "Amount" column against each item in the Schedule of Rates that requires a "rates only".

C2.1.1.9 All prices or rates inserted in the Schedule of Rates shall EXCLUDE VAT. Provision has been made on the Summary Page, of the Schedule of Rates, for the addition of VAT.

C2.1.1.10 Arithmetical errors of responsive tenders will be corrected in terms of clause C.3.9 of the Standard Conditions of Tender (Annexure C).

C2.1.1.11 For the purposes of this Schedule of Rates, the following words shall have the meanings hereby assigned to them:

Unit: The unit of measurement for each item of work as Standardized in the Particular Specifications

Quantity: The number of units of work for each item. **Fictitious quantities** are inserted for tender stage and adjudication (Exact quantities to be provided with each **Works Assignment**)

Rate: The payment per unit of work as which the Tenderers tenders to do the work

Amount: The quantity of an item multiplied by the tendered rate of the (same) item.

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

C2.1.1.12 The units of measurement described in the Schedule of Rates are metric units. Abbreviations used in the Schedule of Rates are as follows:

mm	=	millimetre	h	=	hour
m	=	metre	kg	=	kilogram
km	=	kilometre	t	=	ton (1 000 kg)
m^2	=	square metre	No.	=	number
m^2.pass	=	square metre-pass	sum	=	lump sum
ha	=	hectare	MN	=	MegaNewton
m^3	=	cubic metre	MN.m	=	MegaNewton-metre
m^3.km	=	cubic metre-kilometre	P C sum	=	Prime Cost sum
ℓ	=	litre	Prov sum	=	Provisional sum
kℓ	=	kilolitre	%	=	per cent
MPa	=	Mega Pascal	kW	=	kilowatt

C2.1.1.13 The quantities set out in the Schedule of Rates are the estimated quantities of the Works, but the Contractor will be required to undertake whatever quantities as may be directed by the Employer's Agent from time to time. The Work Assignment Price for the completed works assignment shall be computed from the actual quantities of work done, valued at the relevant unit rates and prices.

C2.1.1.14 A price or rate is to be entered against each item in the Schedule of Rates, whether the quantities are stated or not. The use of a word or phrase such as “included” or “provided elsewhere” against an item shall not be permitted.

C2.1.1.15 The value of the certificates issued shall be adjusted in accordance with the Contract Price Adjustment Schedule as detailed in Section C1.2 Contract Data (Part 1).

C2.1.1.16 The Schedule of Rates must be completed by the insertion of rates / prices in accordance with the instruction described in the items above. As this Contract is a re-measurable Contract and not a Lump Sum Contract, a blank Schedule of Rates with only a lump sum amount will not be accepted.

C2.1.1.17 Correction of entries made by the Tenderer shall be in in terms of clause C2.11 of the Standard Conditions of Tender (Annexure C) as amended by the Tender Data.

ITEMS MARKED “EME”

The Nelson Mandela Bay Municipality’s procurement policy requires that a certain amount of the work has to be sub-contracted to Emerging Micro Enterprises (EMEs). The Tenderer is referred to Section C3.3 Procurement of this document where the details and instruction of the requirements are fully explained.

NOTE:

Tenderers are to refer to the Scope of Works and in particular the Specification Data when pricing the Schedule of Rates. Certain clauses in the Standardised Specifications and the Particular Specifications have been omitted, amended or added to and these changes must be taken into account when pricing the request for quotation.

C2.2 SCHEDULE OF RATES

AS PER SABS 1200 & SABS 0120

SHEDULE OF RATES: CLUSTER 1

SECTION 1 - PART 1: PRELIMINARY AND GENERAL						
SCHEDULE OF RATES					THIS SECTION IS FOR EVALUATION PURPOSES ONLY	
ITEM NO	PAYMENT REFERS	DESCRIPTION	UNIT	RATE	ESTIMATED QUANTITY	AMOUNT
1		**SECTION 1 - PART 1: PRELIMINARY AND GENERAL**				
1.1		**PRELIMINARY AND GENERAL: CONTRACTOR'S ESTABLISHMENT ON SITE & GENERAL** The contractor's general obligations.				
1.1.1	PSA 8.3.1(a)	Value-related obligations for works assignments ranging between:				
1.1.1.1		(a) R0 - R2 000 000	%		1 000 000.00	
1.1.1.2		(b) R2 000 001 - R4 000 000	%		3 000 000.00	
1.1.1.3		(c) R4 000 001 - R6 000 000	%		5 000 000.00	
1.1.1.4		(d) Greater than R6 000 001	%		7 000 000.00	
1.1.2	PSA 8.3.1(b)	Time-related obligations for works assignments ranging between:				
1.1.2.1		(a) R0 - R2 000 000	Month		36	
1.1.2.2		(b) R2 000 001 - R4 000 000	Month		36	
1.1.2.3		(c) R4 000 001 - R6 000 000	Month		36	
1.1.2.4		(d) Greater than R6 000 001	Month		36	
TOTAL CARRIED FORWARD TO SUMMARY :						

SECTION 1 - PART 2: DAYWORKS						
SCHEDULE OF RATES					THIS SECTION IS FOR EVALUATION PURPOSES ONLY	
ITEM NO	PAYMENT REFERS	DESCRIPTION	UNIT	RATE	ESTIMATED QUANTITY	AMOUNT
1		**SECTION 1 - PART 2: DAYWORKS**				
1.3		**DAYWORKS (PROVISIONAL)**				
1.3.1		Personnel during normal working hours				
1.3.1.1		(a) Unskilled labour	hr		1 000	
1.3.1.2		(b) Semi-skilled labour	hr		1 000	
1.3.1.3		(c) Skilled labour	hr		1 000	
1.3.1.4		(d) Ganger	hr		1 000	
1.3.1.5		(e) Flagman	hr		1 000	
1.3.2		Plant				
1.3.2.1		(a) Dropside truck (2 to 12-ton capacity)	hr		100	
1.3.2.2		(b) Tipper Trucks (3 to 5-ton capacity)	hr		100	
1.3.2.3		(c) TLB (digger loader)	hr		100	
1.3.2.4		(d) Compactor (Bomag 90 or similar)	hr		100	
1.3.2.5		(e) Water truck (10 000 litres)	hr		100	
1.3.2.6		(f) Suitable truck for transporting labourers (min. of 30 people)	hr		100	
1.3.2.7		(g) Safety vehicle for pre-marking purposes	hr		100	
1.3.2.8		(h) Dewatering pump including generators and accessories	hr		100	
1.3.2.9		(i) Light delivery vehicle (LDV)	hr		100	
1.3.2.10		(j) Centre-mount crane (more than 8-ton)	hr		100	
1.3.2.11		(k) Other Specify	hr		100	
1.3.3		Materials				
1.3.3.1		(a) Procurement of materials	Prov. Sum	500 000	1	500 000.00
1.3.3.2		(b) Contractor's handling costs, profit and all other charges in respect of sub-item 1.3.3.1	%		500 000	
1.3.4		Establishment (maximum 150km per trip)				
1.3.4.1		(a) Dropside truck (2 to 12-ton capacity)	km		100	
1.3.4.2		(b) Tipper Trucks (3 to 5-ton capacity)	km		100	
1.3.4.3		(c) TLB (digger loader)	km		100	
1.3.4.4		(d) Water truck (10 000 litres)	km		100	
1.3.4.5		(e) Suitable truck for transporting labourers (min. of 30 people)	km		100	
1.3.4.6		(f) Light delivery vehicle (LDV)	km		100	
1.3.4.7		(g) Centre-mount crane (more than 8-ton)	km		100	
1.3.5	PSA 8.4.6	Compensation in terms of clause 5.12.2.4 of the Conditions of Contract for delays incurred				
1.3.5.1		(a) Plant	day		100	
1.3.5.2		(b) Labour	day		100	
1.3.5.3		(c) Supervision	day		100	
1.3.5.4		(d) Other services, facilities, etc. not covered by items 1.3.5.1 to 1.3.5.3	day		100	
1.4	SANS 1200 A	**TEMPORARY WORKS**				
1.4.1		Existing services				
1.4.1.1	8.8.4 (c)	(a) Excavate by hand in soft material to expose existing services	m^3		10	
1.4.1.2		(b) Lowering/ relocating/ repairing existing services	Prov. Sum	50 000	1	50 000.00
CARRIED FORWARD:						

SECTION 1 - PART 2: DAYWORKS						
SCHEDULE OF RATES					THIS SECTION IS FOR EVALUATION PURPOSES ONLY	
ITEM NO	PAYMENT REFERS	DESCRIPTION	UNIT	RATE	ESTIMATED QUANTITY	AMOUNT
BROUGHT FORWARD:						
1.4.2	8.8.5	Cost of survey in terms of Land Survey Act				
1.4.2.1		(a) Locate, record and protect erf boundary and survey pegs	Sum		1	
1.4.2.2		(b) Replace pegs recorded as missing at commencement of Contract as well as pegs removed in terms of PSA 5.1.1	No		100	
TOTAL CARRIED FORWARD TO SUMMARY :						

SECTION 2: HEALTH & SAFETY						
SCHEDULE OF RATES					THIS SECTION IS FOR EVALUATION PURPOSES ONLY	
ITEM NO	PAYMENT REFERS	DESCRIPTION	UNIT	RATE	ESTIMATED QUANTITY	AMOUNT
2		**SECTION 2: HEALTH & SAFETY**				
2.1		Provision for Personal Protective Equipment & Protective Clothing				
2.1.1		(a) Reflective vests	No		100	
2.1.2		(b) Reflective bibs	No		100	
2.1.3		(c) Hard hats	No		100	
2.1.4		(d) Protective foot wear	No		100	
2.1.5		(e) Earplugs	No		100	
2.1.6		(f) Dust masks	No		100	
2.1.7		(g) Workman Gloves	No		100	
2.2		Provision of full time Construction Health and Safety Officer	Month		36	
2.3		Costs of Medical Certificates and Medical Surveillance				
2.3.1		(a) Initial (baseline) medical examinations	No		100	
2.3.2		(b) Exit examinations	No		100	
2.4		Induction Training	No		100	
2.5		Environmental Monitoring Tests	No		100	
2.6		Noise Monitoring				
2.6.1		(a) Establishment of noise zones	No		10	
2.6.2		(b) Audiograms	No		10	
2.7		Provision of First Aid boxes	Sum		1	
2.8		Transportation of Workers	Month		12	
2.9		Submission of the Health and Safety File	Sum		1	
2.10	PSA 8.3.5	On-site Security Supervision				
2.10.1		(a) Provision of Security Services to ensure the safe working environment for all workers, materials and works on site during working hours	Prov. Sum	250 000	1	250 000.00
2.10.2		(b) Handling costs and charges for the Contractor on item 2.10.1	%		250 000	
TOTAL CARRIED FORWARD TO SUMMARY:						

SECTION 3: EME SUB-CONTRACTING WORK						
SCHEDULE OF RATES					THIS SECTION IS FOR EVALUATION PURPOSES ONLY	
ITEM NO	PAYMENT REFERS	DESCRIPTION	UNIT	RATE	ESTIMATED QUANTITY	AMOUNT
3		**SECTION 3: EME SUB-CONTRACTING WORK**				
3.1		EME Support Programme				
3.1.1		(a) Establishment and monitoring of EME Support Programme	Prov. Sum	100 000	1	100 000.00
3.1.2		(b) Overhead charges on Item 3.1.1	%		100 000	
3.2		EME Support Initiative: Management				
3.2.1	PSA 8.15	(a) EME Construction Manager remuneration	Prov. Sum	10 000	1	10 000.00
3.2.2		(b) Overhead charges on Item 3.2.1	%		10 000	
3.2.3	PSA 8.16	(c) Community Liaison Officer (CLO) remuneration	Prov. Sum	10 000	1	10 000.00
3.2.4		(d) Overhead charges on Item 3.2.3	%		10 000	
3.3		EME Support Initiative: Training				
3.3.1	PSA 8.18	(a) Training of EMEs	Prov. Sum	100 000	1	100 000.00
3.3.2		(b) Mark-up on Item 3.3.1	%		100 000	
TOTAL CARRIED FORWARD TO SUMMARY :						

SECTION 4: ABLUTION FACILITIES						
SCHEDULE OF RATES					THIS SECTION IS FOR EVALUATION PURPOSES ONLY	
ITEM NO	PAYMENT REFERS	DESCRIPTION	UNIT	RATE	ESTIMATED QUANTITY	AMOUNT
4		**SECTION 4: ABLUTION FACILITIES**				
4.1	SABS 1200 C	**SITE CLEARANCE** as specified in SABS 1200 C and in the project specification				
4.1.1	PSC 8.2.1	Clear and grub for toilet ablutions	m²		100	
4.2	SABS 1200 D	**EARTHWORKS** as specified in SABS 1200 D and in the project specification				
4.2.1	8.3.1	Site preparation				
4.2.1.1	8.3.1.2	Remove topsoil to nominal depth 150mm, stockpile and maintain	m³		10	
4.2.2	8.3.3	Restricted excavation				
	PSD 8.3.3	(a) Excavate for restricted foundations, footings, trenches, and landscaping in soft materials and use for backfill, berm or dispose, as ordered:				
4.2.2.1		(i) Embankment and landscaping compacted to 90% of max modified AASHTO density	m³		10	
4.2.2.2		(ii) Backfill compacted to 98% of modified AASHTO maximum density	m³		10	
4.2.2.3		(iii) Dispose	m³		10	
4.2.2.4		(b) Extra-over item 4.2.2.1 to 4.2.2.3 for hard rock excavation	m³		10	
4.2.3	PSDB 8.3.3.1	Make up deficiency in backfill				
		(a) By importation from commercial or "off site" sources selected by the contractor				
4.2.3.1		(i) Subbase quality material complying with subclause 3.2.2 of SABS 1200ME compacted to 98% of modified AASHTO maximum density	m³		10	
4.2.3.2	8.3.9	(b) Extra-over item 4.2.3.1 for backfill or for fill material against structures	m³		10	
4.2.4	PSD 8.3.10	Topsoiling (100mm thick)	m²		100	
4.2.5	8.3.11	Grassing (with sods of kweek)	m²		100	
4.3	SANS 1200 GA	**CONCRETE (SMALL WORKS)** as specified in SABS 1200 GA and in the project specification				
4.3.1	8.2	Schedule for Formwork Items				
4.3.1.1	8.2.1	(a) Rough (covered)	m²		100	
4.3.1.2	8.2.2	(b) Smooth (exposed)	m²		100	
4.3.2	8.3	Schedule for Reinforcement Items				
	8.3.2	High-tensile welded mesh				
4.3.2.1		(a) Ref. 195	m²		100	
4.3.2.2		(b) Ref. 245	m²		100	
4.3.3	8.4	Schedule for Concrete Items				
4.3.3.1	8.4.2	Blinding Layer in 15MPa/19 Concrete (30mm nominal thickness)	m²		100	
CARRIED FORWARD:						

SECTION 4: ABLUTION FACILITIES						
SCHEDULE OF RATES					THIS SECTION IS FOR EVALUATION PURPOSES ONLY	
ITEM NO	PAYMENT REFERS	DESCRIPTION	UNIT	RATE	ESTIMATED QUANTITY	AMOUNT
BROUGHT FORWARD:						
	8.4.3	Strength concrete				
4.3.3.2		(a) 20MPa/19 (Apron to ablutions)	m^3		10	
4.3.3.3		(b) 25MPa/19 (Floor Slab)	m^3		10	
	8.4.4	Unformed surface finishes				
4.3.3.4		(a) Wood-floated finish (Apron Slab)	m^2		100	
	8.5	Joints				
4.3.3.5		(a) Soft Joint	m		1 000	
4.4	SANS 1200 GE	**PRECAST CONCRETE (STUCTURAL)** as specified in SANS 1200 GE and in the project specification				
4.4.1	8.2.1	Supply and Install Structural Precast Units				
		(a) Wash Hand Basin				
4.4.1		(i) Precast concrete single wash trough (SABS approved) complete with wall mounting connections	No		100	
4.5		**DELIVERY OF CONTAINER ABLUTIONS**				
4.5.1		Delivery of Container Type Ablution from Collection Point to Site				
4.5.1.1		(a) radius distance <10km from collection point	No		10	
4.5.1.2		(b) 10km < radius distance > 20km from collection point	No		10	
4.5.1.3		(c) 20km < radius distance > 30km from collection point	No		10	
4.5.1.4		(d) 30km < radius distance from collection point	No		10	
4.5.2		Delivery of Container Type Ablution to Previous Site (including safe disconnection of water and sewer connections) to New Site/ Depot				
4.5.2.1		(a) radius distance < 10km from previous site	No		10	
4.5.2.2		(b) 10km < radius distance > 20km from previous site	No		10	
4.5.2.3		(c) 20km < radius distance > 30km from previous site	No		10	
4.5.2.4		(d) 30km < radius distance from previous site	No		10	
4.6		**PRE-CAST PANEL TOILETS COMPLETE WITH PEDESTAL AND CISTERN** as specified by Agrement South Africa - Performance Criteria (Structural Strength and Stability), complete with Agrement South Africa, and SABS Approved (for raw material) low/ pour flush pedestal and cistern, and high-density plastic door.				
4.6.1	PSA 8.19	Standard Pre-cast Panel Toilets				
4.6.1.1		(a) Supply and erection of pre-cast panel toilet, complete with low/ pour flush pedestal and cistern (1 - 100 units)	Unit		1	
4.6.1.2		(b) Supply and erection of pre-cast panel toilet, complete with low/ pour flush pedestal and cistern (101 - 500 units)	Unit		1	
4.6.1.3		(c) Supply and erection of pre-cast panel toilet, complete with low/ pour flush pedestal and cistern (501 - 1 000 units)	Unit		1	
CARRIED FORWARD:						

SECTION 4: ABLUTION FACILITIES						
SCHEDULE OF RATES					THIS SECTION IS FOR EVALUATION PURPOSES ONLY	
ITEM NO	PAYMENT REFERS	DESCRIPTION	UNIT	RATE	ESTIMATED QUANTITY	AMOUNT
BROUGHT FORWARD:						
4.6.2	PSA 8.20	Pre-cast Panel Toilets for Persons with Disabilities as specified by SANS 10400-S:2011.				
4.6.2.1		(a) Supply and erection of pre-cast toilet, complete with low/ pour flush pedestal and cistern, dog-leg and cistern grab bar (min. 604 x 604 x Ø32mm, min. 750 x Ø32mm, respectively)	Unit		1	
4.7		**PRE-CAST PANEL TOILET** as specified and certified by Agrement South Africa - Performance Criteria (Structural Strength and Stability), complete with high-density plastic door, applicable joint connections, and roofing				
4.7.1		Standard Pre-cast Panels				
4.7.1.1		(a) Supply and erection of pre-cast panels (1 - 100 units)	Unit		1	
4.7.1.2		(b) Supply and erection of pre-cast panels (101 - 500 units)	Unit		1	
4.7.1.3		(c) Supply and erection of pre-cast panels (501 - 1000 units)	Unit		1	
4.7.2		Pre-cast Panel Toilets for Persons with Disabilities as specified by SANS 10400-S:2011.				
4.7.2.1		(a) Supply and erection of pre-cast panels, complete with dog-leg and cistern grab bar (min. 604 x 604 x Ø32mm, min. 750 x Ø32mm, respectively)	Unit		1	
TOTAL CARRIED FORWARD TO SUMMARY:						

SECTION 5: WATER RETICULATION AND CONNECTIONS						
SCHEDULE OF RATES					THIS SECTION IS FOR EVALUATION PURPOSES ONLY	
ITEM NO	PAYMENT REFERS	DESCRIPTION	UNIT	RATE	ESTIMATED QUANTITY	AMOUNT
5		**SECTION 5: WATER RETICULATION AND CONNECTIONS**				
5.1	SANS 1200 C	**SITE CLEARANCE** as specified in SANS 1200 C and in the Scope of Work				
5.1.1	PSC 8.2.1	Clear and grub 2m wide strip (where ordered)	m		1 000	
5.1.2	PSC 8.2.5	Take down existing fences	m		1 000	
5.1.3	PSC 8.2.11	Remove and dispose of existing kerbing and concrete channelling	m		1 000	
5.1.4	PSC 8.2.12	Saw-cut asphalt surfacing	m		1 000	
5.1.5	PSC 8.2.13	Remove and dispose of asphalt surfacing	m²		100	
5.1.6	PSC 8.2.14	Saw-cut concrete surfacing	m		1 000	
5.2	SANS 1200 DB	**EARTHWORKS (PIPE TRENCHES)** as specified in SANS 1200 DB and in the Scope of Work				
5.2.1	8.3.2	Excavation				
	PSDB 8.3.2 (a)	(a) Excavate in all materials for trenches, backfill, compact and dispose of surplus material				
		(i) Trenches of width 300mm for water supply & connections				
5.2.1.1		- Depth up to 1,0m	m		1 000	
5.2.1.2		- Depth 1,0m up to 1,5m	m		1 000	
5.2.1.3	PSDB 8.3.2 (b)	(b) Extra over items 5.2.1.1 and 5.2.1.2 for hard rock excavation	m³		10	
5.2.1.4	8.3.2 (c)	(c) Excavate and dispose of unsuitable material from trench bottom	m³		10	
5.2.2		Excavation ancillaries				
	PSDB 8.3.3.1	*Make up deficiency in backfill material*				
5.2.2.1		(a) From other necessary excavations on site	m³		10	
		(b) By importation from commercial or off-site sources selected by the Contractor				
5.2.2.2		(i) Subbase quality material complying with subclause 5.2.1 of SANS 1200 ME.	m³		10	
5.2.2.3		(ii) Trench fill (using cellular lightweight concrete)	m³		10	
5.2.3	PSDB 8.3.3.3	Compaction in road reserves (to 95% of modified AASHTO maximum density)	m³		10	
5.2.4	8.3.6	Finishing				
	8.3.6.1	*Reinstate road surfaces complete with all courses*				
5.2.4.1	PSDB 8.3.6.1	(a) Gravel on shoulders and driveways	m²		100	
5.2.4.2		(b) Hot asphalt type IVA (min thickness 40mm)	m²		100	
5.2.4.3		(c) Concrete paving (25/19 MPa) - 100mm thick	m²		100	
CARRIED FORWARD:						

SECTION 5: WATER RETICULATION AND CONNECTIONS						
SCHEDULE OF RATES					THIS SECTION IS FOR EVALUATION PURPOSES ONLY	
ITEM NO	PAYMENT REFERS	DESCRIPTION	UNIT	RATE	ESTIMATED QUANTITY	AMOUNT
BROUGHT FORWARD:						
5.3	SANS 1200 LB	**BEDDING (PIPES)** as specified in SANS 1200 LB and in the Scope of Work				
5.3.1	8.2.1	Provision of bedding for trench excavation				
5.3.1.1		(a) Selected granular material	m^3		10	
5.3.2	8.2.2	Supply only of bedding by importation				
	PSLB 8.2.2.3	From commercial sources				
5.3.2.1		(a) Selected granular material	m^3		10	
5.3.2.2		(b) 6.7mm concrete stone to SANS 1083	m^3		10	
5.4	SANS 1200 LF	**ERF CONNECTIONS** as specified in SANS 1200 LF and in the Scope of Work				
5.4.1	PSLF 8.2.1	Provide erf connections complete				
		(a) Single erf connections off existing water reticulation				
		(i) 20mm dia. short connection of approximately 1m in length complete with all fittings and specials off:				
5.4.1.1		- 200mm dia. FC pipe	No		100	
5.4.1.2		- 150mm dia. FC pipe	No		100	
5.4.1.3		- 75mm dia. FC pipe	No		100	
5.4.1.4		- 50mm dia. FC pipe	No		100	
5.4.1.5		- 200mm dia. PVC pipe	No		100	
5.4.1.6		- 160mm dia. PVC pipe	No		100	
5.4.1.7		- 110mm dia. PVC pipe	No		100	
5.4.1.8		- 90mm dia. PVC pipe	No		100	
5.4.1.9		- 75mm dia. PVC pipe	No		100	
5.4.1.10		- 63mm dia. PVC pipe	No		100	
5.4.1.11		- 63mm dia. HDPE pipe	No		100	
5.4.1.12		- 50mm dia. HDPE pipe	No		100	
5.4.1.13	PSLF 8.2.9	(b) Extra over item 5.4.1.1 to 5.4.1.12 for additional piping	m		1 000	
5.4.2	PSLF 8.2.4	Supply and install domestic water meter	No		100	
5.4.3	PSLF 8.2.8	Markers	No		100	
TOTAL CARRIED FORWARD TO SUMMARY:						

SECTION 6: SEWER DRAINAGE AND CONNECTIONS						
SCHEDULE OF RATES					THIS SECTION IS FOR EVALUATION PURPOSES ONLY	
ITEM NO	PAYMENT REFERS	DESCRIPTION	UNIT	RATE	ESTIMATED QUANTITY	AMOUNT
6		**SECTION 6: SEWER DRAINAGE AND CONNECTIONS**				
6.1	SANS 1200 C	**SITE CLEARANCE** as specified in SANS 1200 C and in the Scope of Work				
6.1.1	PSC 8.2.1	Clear and grub 2m wide strip (where ordered)	m		1 000	
6.1.2	PSC 8.2.5	Take down existing fences	m		1 000	
6.1.3	PSC 8.2.11	Remove and dispose of existing kerbing and concrete channelling	m		1 000	
6.1.4	PSC 8.2.12	Saw-cut asphalt surfacing	m		1 000	
6.1.5	PSC 8.2.13	Remove and dispose of asphalt surfacing	m²		100	
6.1.6	PSC 8.2.14	Saw-cut concrete surfacing	m		1 000	
6.2	SANS 1200 DB	**EARTHWORKS (PIPE TRENCHES)** as specified in SANS 1200 DB and in the Scope of Work				
6.2.1	8.3.2	Excavation				
	PSDB 8.3.2(a)	(a) Excavate in all materials for trenches, backfill, compact and dispose of surplus material				
		(i) Trenches of 400mm width for 110mm NB sewer drains				
6.2.1.1		- Depth up to 1,0m	m		1 000	
		(ii) Trenches of 600mm width for 110mm NB sewer drains				
6.2.1.2		- Depth exceeding 1,0m up to 1,5m	m		1 000	
6.2.1.3		- Depth exceeding 1,5m up to 2,0m	m		1 000	
		(iii) Trenches of 760mm width for 160mm NB sewer mains				
6.2.1.4		- Depth up to 1,0m	m		1 000	
6.2.1.5		- Depth exceeding 1,0m up to 1,5m	m		1 000	
6.2.1.6		- Depth exceeding 1,5m up to 2,0m	m		1 000	
6.2.1.7		- Depth exceeding 2,0m up to 2,5m	m		1 000	
6.2.1.8		- Depth exceeding 2,5m up to 3,0m	m		1 000	
6.2.1.9	PSDB 8.3.2 (b)	(b) Extra-over items 6.2.1.1 through to 6.2.1.8 for hard rock excavation	m³		10	
6.2.1.10	8.3.2 (c)	(c) Excavate and dispose of unsuitable material from trench bottom	m³		10	
6.2.2		Excavation ancillaries				
	PSDB 8.3.3.1	*Make up deficiency in backfill material*				
6.2.2.1		(a) From other necessary excavations on site	m³		10	
		(b) By importation from commercial or off-site sources selected by the Contractor				
6.2.2.2		(i) Selected material complying with subclause 3.4.2 of SANS 1200 ME	m³		10	
6.2.2.3		(ii) Trench fill (using cellular lightweight concrete)	m³		10	
6.2.3	PSDB 8.3.3.3	Compaction in road reserves (to 95% of modified AASHTO maximum density)	m³		10	
6.2.4	8.3.6	Finishing				
CARRIED FORWARD:						

SECTION 6: SEWER DRAINAGE AND CONNECTIONS						
SCHEDULE OF RATES					THIS SECTION IS FOR EVALUATION PURPOSES ONLY	
ITEM NO	PAYMENT REFERS	DESCRIPTION	UNIT	RATE	ESTIMATED QUANTITY	AMOUNT
BROUGHT FORWARD:						
6.2.5	8.3.6.1	Reinstate road surfaces complete with all courses				
6.2.5.1	PSDB 8.3.6.1	(a) Gravel on shoulders and driveways	m²		100	
6.2.5.2		(b) Hot Asphalt Type IV A (minimum thickness 40 mm)	m²		100	
6.2.5.3		(c) Concrete paving (Class 25/19) - 150mm thick	m²		100	
6.3	SANS 1200 LB	**BEDDING (PIPES)** as specified in SANS 1200 LB and in the Scope of Work				
6.3.1	8.2.1	Provision of bedding from trench excavation				
6.3.1.1		(a) Selected granular material	m³		10	
6.3.1.2		(b) Selected fill material	m³		10	
6.3.2	8.2.2	Supply only of bedding by importation				
	PSLB 8.2.2.3	From commercial sources				
6.3.2.1		(a) Selected granular material	m³		10	
6.3.2.2		(b) 6.7 mm concrete stone to SANS 1083	m³		10	
6.4	SANS 1200 LD	**SEWERS** as specified in SANS 1200 LD and in the Scope of Work				
6.4.1	8.2.1	Supply, lay, joint, bed and test pipeline				
	PSLD 8.2.1	(a) Structured wall PVCu sewers of outside diameters stated (400kPa, Type 1, SANS 1601, Maincor, Ultracor or similar approved), bedded as detailed on the drawings				
6.4.1.1		(i) 110mm dia	m		1 000	
6.4.1.2		(ii) 160mm dia	m		1 000	
6.4.2	8.2.3	Manholes				
	PSLD 8.2.3	(a) Precast concrete manholes complete including medium duty concrete roof slab and type 4 cover and frame for pipes up to and including 160mm dia				
6.4.2.1		(i) Depth up to 1,0m	No		100	
6.4.2.2		(ii) Depth exceeding 1,0m up to 1,5m	No		100	
6.4.2.3		(iii) Depth exceeding 1,5m up to 2,0m	No		100	
6.4.2.4		(iv) Depth exceeding 2,0m up to 2,5m	No		100	
6.4.2.5		(v) Depth exceeding 2,5m up to 3,0m	No		100	
6.4.2.6		(b) Extra-over items 6.4.2.1 through to 6.4.2.5 for type 2A cover and frame for manholes in road areas	No		10	
6.4.3	8.2.4	Extra-over items 6.4.2.1 through to 6.4.2.5 for the construction of ramps and backdrops as detailed complete				
		(a) Ramps for pipes of diameters stated				
6.4.3.1		(i) 160mm	No		10	
		(b) Backdrops				
		(i) 160mm				
6.4.3.2		- up to 1,5m	No		10	
6.4.3.3		- Exceeding 1,5m up to 2,0m	No		10	
6.4.3.4		- Exceeding 2,0m up to 2,5m	No		10	
CARRIED FORWARD:						

SECTION 6: SEWER DRAINAGE AND CONNECTIONS						
SCHEDULE OF RATES					THIS SECTION IS FOR EVALUATION PURPOSES ONLY	
ITEM NO	PAYMENT REFERS	DESCRIPTION	UNIT	RATE	ESTIMATED QUANTITY	AMOUNT
BROUGHT FORWARD :						
6.4.4	PSLD 8.2.5	Extra-over 6.4.2.1 through to 6.4.2.5 for the construction of additional channelling and the building in of short pipe specials at branch manholes, manholes at bends and erf connection manholes				
		(a) For branched channels				
6.4.4.1		(i) 150mm dia.	No		10	
		(b) For channels at bends				
6.4.4.2		(i) 150mm dia.	No		10	
6.4.4.3		(c) Terminal erf connections (110mm dia) into manhole	No		10	
6.4.4.4		(d) Erf connections (110mm dia) into manhole	No		10	
6.4.5	PSLD 8.2.6 (a)	Erf connections (complete with fittings as per drawing)				
		(a) Short length of 1.3m (On new sewer reticulation)				
6.4.5.1		(i) Type 1	No		10	
6.4.5.2		(ii) Type 2	No		10	
6.4.5.3		(iii) Type 3	No		10	
6.4.5.4		(iv) Type 4	No		10	
6.4.5.5		(v) Type 5	No		10	
		(b) Short length of 1.3m (On existing sewer reticulation)				
6.4.5.6		(i) Type 1	No		10	
6.4.5.7		(ii) Type 2	No		10	
6.4.5.8		(iii) Type 3	No		10	
6.4.5.9		(iv) Type 4	No		10	
6.4.5.10		(v) Type 5	No		10	
6.4.6	PSLD 8.2.6 (b)	Extra-over items 6.4.5.1 through 6.4.5.10 for additional length of pipe	m		1 000	
6.4.7	PSLD 8.2.7	Encasing of pipes in concrete	m^3		10	
6.4.8	PSLD 8.2.11	Connection into existing sewer	Sum		10	
6.4.9	PSLD 8.2.13	Testing of watertightness of manholes	No		10	
6.4.10	PSLD 8.2.14	Supply and construct rodding eye complete as detailed on the drawings, including concrete surround (Depth up to 1,5m deep)	No		100	
TOTAL CARRIED FORWARD TO SUMMARY:						

SCHEDULE OF RATES					THIS SECTION IS FOR EVALUATION PURPOSES ONLY	
ITEM NO	PAYMENT REFERS	DESCRIPTION	UNIT	RATE	ESTIMATED QUANTITY	AMOUNT
BROUGHT FORWARD:						
7.2.15		(xi) 110mm Vent Horn Bend Access Heel 87,5 degrees (Marley SB400 or similar)	No		100	
7.2.16		(xii) 50mm Bend Plain 95 degrees (Marley WBE50 or similar)	No		100	
7.2.17		(xiii) Eccentric Reducer 110 x 50mm (Marley SE404 or similar)	No		100	
7.2.18		(xiv) 40mm PVC U-Trap / Sink Trap (DPE DB3 or similar)	No		100	
7.2.19		(xv) 40mm Bend Access Heel 87,5 degrees (Marley WDE41 or similar)	No		100	
7.2.20		(xvi) 40mm PVC holderbats (Marley WHB4 or similar)	No		100	
7.2.21		(xvii) PVC SV reducer 50 x 40mm (Marley WR5 or similar)	No		100	
7.2.22		(xviii) 40mm PVC SV Junction Plain 87,5 degrees (Marley WS4 or similar)	No		100	
7.2.23		(xix) 110mm Junction Single Access Heel 87,5 degrees (Marley SY42 or similar)	No		100	
		(c) Soil & vent pipe and fittings				
7.2.24		(i) 40mm Pipe (WPE213/1 or similar)	m		1 000	
7.2.25		(ii) 40mm Perforated Pipe (WPE213/1 or similar)	m		1 000	
7.2.26		(iii) 40mm PVC urinal waste cap with CP grating	No		100	
7.2.27		(iv) 40mm solvent stop end	No		100	
7.2.28		(v) 40mm 90 degree bend (W40B, NS001 or similar)	No		100	
7.2.29		(vi) 40mm x 150mm threaded HDPE pipe	No		100	
7.2.30		(vii) 40mm PVC End cap drilled and tapped to 15mm (CA2 or similar)	No		100	
7.2.31		(viii) 40mm holderbats	No		100	
7.2.32		(ix) 40mm PVC threaded female-female straight coupler (MA2 or similar)	No		100	
7.2.33		(x) 40mm PVC back nut (NU4 or similar)	No		100	
7.2.34		(xi) 40mm rubber gasket	No		100	
		(d) Taps				
7.2.35		(i) Bib tap "KM2.202-15" Cobra or similar approved	No		100	
		(e) Cistern				
7.2.36		(i) Low volume cistern (SABS and Agrement South Africa approved)	No		100	
		(f) Pedestal				
7.2.37		(i) Low/ Pour flush (2l or less) pedestal (SABS and Agrement South Africa approved)	No		100	
		(g) Child-seat Lid				
7.2.38		(i) Child-seat lid as a single unit for the normal adult sized seat with child-seat incorporated into the lid	No		100	
7.3		Concrete (20MPa concrete):				
7.3.1		(a) Cast concrete (20 MPa) gulley surround for 190 x 110mm grating (grating elsewhere)	No		100	
7.3.2		(b) Cast concrete (20 MPa) around rodding Eye (450 x 450 x 150mm)	No		100	
TOTAL CARRIED FORWARD TO SUMMARY :						

SECTION 8: CONSERVANCY TANKS						
SCHEDULE OF RATES					THIS SECTION IS FOR EVALUATION PURPOSES ONLY	
ITEM NO	PAYMENT REFERS	DESCRIPTION	UNIT	RATE	ESTIMATED QUANTITY	AMOUNT
8		**SECTION 8: CONSERVANCY TANKS** Rates to include supervision, administration, health and safety, and profit.				
8.1	SANS 1200 C	**SITE CLEARANCE** as specified in SANS 1200 C and in the Scope of Work				
8.1.1		Clear and Grub				
8.1.1.1	8.2.1	(a) Clear site as directed by the Engineer, including spoiling material to a municipal approved tip site	m²		100	
8.1.1.2	8.2.10	(b) Remove topsoil to nominal depth of 150mm and stockpile	m³		10	
8.2	SANS 1200 A	**TEMPORARY WORKS** Rates to include for each and every operation required.				
8.2.1	8.8.4 (c)	Hand excavation in soft material where ordered for locating and exposing existing services	m³		10	
8.3	SANS 1200 DB	**EXCAVATIONS & EARTHWORKS**				
8.3.1		Excavate for conservancy or urine diversion - biodigestion tank size	m³		10	
8.3.2		Extra-over item 8.3.1 for hard rock	m³		10	
8.3.3		Extra-over item 8.3.1 for keeping all excavations from all types of water ingress by any suitable method	Sum		1	
8.3.4		Excavate in all materials for trenches, backfill, compact and dispose of surplus/ unsuitable material and make tidy for:				
8.3.4.1		(a) Trenches for uPVC pipes of diameter up to 150mm and for depths of up to 0.5m	m		1 000	
8.4		**SUB-STRUCTURES**				
8.4.1		Conservancy Tank as specified in SANS 10400-P:2010 (or SABS Approved)				
		(a) Supply and installation of a conservancy tank including any necessary fittings and backfilling required with Engineer approved material				
8.4.1.1		(i) Up to 2 500l	Unit		1	
8.4.1.2		(ii) 2 500l < Size < 5 000l	Unit		1	
8.4.1.3		(iii) 5 000l < Size < 10 000l	Unit		1	
8.4.2		Urine Diversion - Biodigestion Tank Type I (Calcimite eco-mite or similar)				
		(a) Supply and installation of urine diversion - biodigestion tank unit with polyethylene base complete with toilet pedestal and urine diversion unit, including a polyethylene drying plate, solar dome with hinge lid, vent pipe and wind extractor				
8.4.2.1		(i) Up to 500l	Unit		1	
8.4.2.2		(ii) 500l < Size < 2 000l	Unit		1	
8.4.2.3		(iii) 2 000l < Size < 2 500l	Unit		1	
CARRIED FORWARD :						

SECTION 8: CONSERVANCY TANKS						
SCHEDULE OF RATES					THIS SECTION IS FOR EVALUATION PURPOSES ONLY	
ITEM NO	PAYMENT REFERS	DESCRIPTION	UNIT	RATE	ESTIMATED QUANTITY	AMOUNT
BROUGHT FORWARD:						
8.4.3		Urine Diversion - Biodigestion Tank Type II (Enviro Loo or similar) (SABS Approved)				
		(a) Supply and installation of biodigestion tank unit with low-density polyethylene base complete with toilet pedestal, including a drying plate, drying bag and vent extraction unit				
8.4.3.1		(i) For 1 - 10 users per day	Unit		1	
8.4.3.2		(ii) For 1 - 20 users per day	Unit		1	
8.4.3.3		(iii) For 1 - 30 users per day	Unit		1	
8.4.3.4		(iv) For 1 - 40 users per day	Unit		1	
TOTAL CARRIED FORWARD TO SUMMARY :						

SECTION 9: SEPTIC TANK						
SCHEDULE OF RATES					THIS SECTION IS FOR EVALUATION PURPOSES ONLY	
ITEM NO	PAYMENT REFERS	DESCRIPTION	UNIT	RATE	ESTIMATED QUANTITY	AMOUNT
9		**SECTION 9: SEPTIC TANK** Rates to include supervision, administration, health and safety, and profit.				
9.1	SANS 1200 C	**SITE CLEARANCE** as specified in SANS 1200 C and in the Scope of Work				
9.1.1		Clear and Grub				
9.1.1.1	8.2.1	(a) Clear site as directed by the Engineer, including spoiling material to a municipal approved tip site	m²		100	
9.1.1.2	8.2.10	(b) Remove topsoil to nominal depth of 150mm and stockpile	m³		10	
9.2	SANS 1200 A	**TEMPORARY WORKS** Rates to include for each and every operation required.				
9.2.1	8.8.4 (c)	Hand excavation in soft material where ordered for locating and exposing existing services	m³		10	
9.3	SANS 1200 DB	**EXCAVATIONS & EARTHWORKS**				
9.3.1		Excavate for septic tank pit (max. 3150 x 3150mm) commencing from reduced levels and not exceeding a depth greater than 1,5m	m		10	
9.3.2		Excavate for septic tank pit (max. 3150 x 3150mm) commencing from 1,5m depth and not exceeding a depth greater than 3m	m		10	
9.3.3		Excavate for septic tank pit (max. 3150 x 3150mm) commencing from 3m depth and not exceeding a depth greater than 4,5m	m		10	
9.3.4		Extra-over items 9.3.1 through to 9.3.3 for hard rock	m³		10	
9.3.5		Extra-over items 9.3.1 through to 9.3.3 for keeping all excavations from all types of water ingress by any suitable method	Sum		1	
9.3.6		Excavate in all materials for trenches, backfill, compact and dispose of surplus/ unsuitable material and make tidy for:				
9.3.6.1		(a) Trenches for uPVC pipes of diameter up to 150mm and for depths of up to 0.5m	m		1 000	
9.4		**SUB-STRUCTURE (CONCRETE AND BRICK WORKS)** as specified in SANS 10400-P:2010 (or SABS Approved)				
9.4.1		Construction of leach-pit structure (French drain) [max. 3150 x 3150mm] using M6 concrete blocks complete with in-situ preparation, reinforced concrete floor and cover slab, wall brickwork, min. concrete cover for durability and smart lock manhole cover, including all fittings, inlet and outlet pipes	Unit		1	
TOTAL CARRIED FORWARD TO SUMMARY:						

SECTION 10: FENCING AND SECURITY						
SCHEDULE OF RATES					THIS SECTION IS FOR EVALUATION PURPOSES ONLY	
ITEM NO	PAYMENT REFERS	DESCRIPTION	UNIT	RATE	ESTIMATED QUANTITY	AMOUNT
10		**SECTION 10: FENCING AND SECURITY**				
10.1		**EARTHWORKS (HOLES FOR POSTS)**				
10.1.1		Excavation				
10.1.1.1	8.3.1	Excavate holes for corner/end or standard posts (500 x 500 x 400mm)	No		10	
10.2	SANS 1200 GA	**CONCRETE WORKS**				
10.2.1		Concrete to bases 15MPa/19	m^3		10	
10.2.2		Supply and install 152 x 152 x 23kg/m steel H section 3000mm long, cast 600mm into concrete base (measured elsewhere), including galvanising to SANS 0763.	kg		100	
10.2.3		Supply and install in previously erected H section steel columns, 50MPa precast concrete wall panel 3000 x 1200 x 120mm thick including grouting	m^2		100	
10.3		**FENCING**				
10.3.1		Supply and install 1,8m high-weld mesh fence (50 x 50 x 2,5mm)	m		1 000	
10.3.2		Dismantle and reinstall 1,8m high existing fence line to new position	m		1 000	
10.3.3		Extra-over items 10.3.1 and 10.3.2	m		1 000	
10.3.4		Supply and install corner posts (150mm OD)	No		10	
10.3.5		Supply and install straining posts (150mm OD)	No		10	
10.3.6		Supply and install 1.8m high security fencing. Posts of 100 x 54 x 2mm H section, planted min. 600mm deep, galvanised to SANS 0763 and coated min. 100 micron fusion bond PVC - inside and outside, complete with top cap. Fence panels with inner aperture size 12,7 x 76,2mm galvanised SANS 0763 and min. 100 micron fusion bond PVC coating.	m		1 000	
10.3.7	SANS 457	Supply and install 150mm dia. post and rail (90mm dia.) timber fencing (or ranch fencing) all poles to be tantalised, including excavation - where directed by Engineer.	m		1 000	
10.4		**REMOVAL OF FENCING**				
10.4.1		Salvage of existing fencing for re-use				
10.4.1.1		(a) Take down existing 1,8m diamond mesh fence including roll up of mesh, coiling of wire, loading, carting and off loading at NMBM depot	m		1 000	
10.4.1.2		(b) Excavate for and recover 2,4m corner and intermediate fence posts including removal of anchor concrete, closure of post hole, sorting, loading, carting and off-loading at NMBM depot	No		10	
10.4.1.3		(c) Dismantle 1,8m high by 3,0m opening two leaf diamond mesh gate complete including loading, carting, and off-loading at NMBM depot	No		10	
CARRIED FORWARD :						

SECTION 10: FENCING AND SECURITY						
SCHEDULE OF RATES					THIS SECTION IS FOR EVALUATION PURPOSES ONLY	
ITEM NO	PAYMENT REFERS	DESCRIPTION	UNIT	RATE	ESTIMATED QUANTITY	AMOUNT
BROUGHT FORWARD:						
10.5		**MISCELLANEOUS ITEMS**				
10.5.1		Supply and installation of hardened steel hasp with shackle protector (BBH535 or similar), complete with standard discus padlock including five (5) high security keys (BBP170-F1 or similar)	No		10	
10.5.2		Stencil marking of pre-cast concrete toilets with pavecote based paint	No		10	
TOTAL CARRIED FORWARD TO SUMMARY :						

SECTION 11: GENERAL						
SCHEDULE OF RATES					THIS SECTION IS FOR EVALUATION PURPOSES ONLY	
ITEM NO	PAYMENT REFERS	DESCRIPTION	UNIT	RATE	ESTIMATED QUANTITY	AMOUNT
11		**SECTION 11: GENERAL**				
11.1	SANS 1200 C	**SITE CLEARANCE** as specified in SANS 1200 C and in the Scope of Work				
11.1.1	PSC 8.2.1	Clear and grub 2m wide strip (where ordered)	m		1 000	
11.1.2	PSC 8.2.5	Take down existing fences	m		1 000	
11.1.3	PSC 8.2.11	Remove and dispose of existing kerbing and concrete channelling	m		1 000	
11.1.4	PSC 8.2.12	Saw-cut asphalt surfacing	m		1 000	
11.1.5	PSC 8.2.13	Remove and dispose of asphalt surfacing	m²		100	
11.1.6	PSC 8.2.14	Saw-cut concrete surfacing	m		1 000	
11.2	SANS 1200 GA	**CONCRETE (SMALL WORKS)** as specified in SANS 1200 GA and in the Scope of Work				
11.2.1		For minor concrete works as directed on site				
	8.2	(a) Formwork				
11.2.1.1	8.2.1	(i) Rough (covered)	m²		100	
11.2.1.2	8.2.2	(ii) Smooth (exposed)	m²		100	
	8.3.2	(b) High-tensile welded mesh				
11.2.1.3		(i) Ref. 195	m²		100	
11.2.1.4		(ii) Ref. 245	m²		100	
11.2.1.5		(iii) Ref. 359	m²		100	
11.2.1.6		(iv) Ref. 617	m²		100	
	8.4	(c) Concrete				
	8.4.3	(i) Strength concrete				
11.2.1.7		- 15MPa/19	m³		10	
11.2.1.8		- 20MPa/19	m³		10	
	8.4.4	(d) Unformed surface finishes				
11.2.1.9		(i) Wood-floated finish	m²		100	
11.2.1.10		(ii) Steel-floated finish	m²		100	
11.3		**RELOCATION OF INFORMAL HOUSING** All building material to be secured with little to no damage - for reuse.				
11.3.1		Diss-assemble existing informal housing				
11.3.1.1		(a) Informal housing size < 15m²	No		1	
11.3.1.2		(b) 15m² < Informal housing size < 30m²	No		1	
11.3.1.3		(c) Informal housing size > 30m²	No		1	
11.3.2		Transportation from Relocation Site to Beneficiary Site				
11.3.2.1		(a) radius distance <10km from relocation site	No		10	
11.3.2.2		(b) 10km < radius distance > 20km from relocation site	No		10	
11.3.2.3		(c) 20km < radius distance > 30km from relocation site	No		10	
11.3.2.4		(d) 30km < radius distance from relocation site	No		10	
CARRIED FORWARD :						

SECTION 11: GENERAL						
SCHEDULE OF RATES					THIS SECTION IS FOR EVALUATION PURPOSES ONLY	
ITEM NO	PAYMENT REFERS	DESCRIPTION	UNIT	RATE	ESTIMATED QUANTITY	AMOUNT
BROUGHT FORWARD:						
11.3.3		Re-assemble existing informal housing Rates to also include sealants, fasteners, applicable connections and waterproofing.				
11.3.3.1		(a) Informal housing size < 15m²	No		1	
11.3.3.2		(b) 15m² < Informal housing size < 30m²	No		1	
11.3.3.3		(c) Informal housing size > 30m²	No		1	
TOTAL CARRIED FORWARD TO SUMMARY :						

C2.3 SUMMARY OF SCHEDULE OF RATES

CLUSTER 1

SECTION	DESCRIPTION	PRICE
1 – PART 1	PRELIMINARY AND GENERAL	R
1 – PART 2	DAYWORKS	R
2	HEALTH & SAFETY	R
3	EME – SUB-CONTRACTING WORK	R
4	ABLUTION FACILITIES	R
5	WATER RETICULATION AND CONNECTIONS	R
6	SEWER DRAINAGE AND CONNECTIONS	R
7	PLUMBING AND SANITARYWARE	R
8	CONSERVANCY TANKS	R
9	SEPTIC TANKS	R
10	FENCING AND SECURITY	R
11	GENERAL	R

TOTAL OF PRICED ITEMS	R
NET CONTRACT PRICE	R
VALUE ADDED TAX (15% of Net Contract Price)	R
CONTRACT SUM (CARRIED TO C1.1. FORM OF OFFER)	**R**

Notes:

1. The Contract Price is subject to Contract Price Adjustment in terms of Clause 6.8.2 of the Conditions of Contract.
2. The Contract Sum is a Fictitious Value that shall be used for **Evaluation Purposes only**.
3. The undersigned, who warrants that he / she is duly authorised to do so on behalf of the enterprise, confirms that the contents of this schedule are within my personal knowledge and are to the best of my belief both true and correct.

Signed ..... Date .....

Name ..... Position .....

Tenderer .....

SHEDULE OF RATES: CLUSTER 2

SECTION 1 - PART 1: PRELIMINARY AND GENERAL						
SCHEDULE OF RATES					THIS SECTION IS FOR EVALUATION PURPOSES ONLY	
ITEM NO	PAYMENT REFERS	DESCRIPTION	UNIT	RATE	ESTIMATED QUANTITY	AMOUNT
1		**SECTION 1 - PART 1: PRELIMINARY AND GENERAL**				
1.1		**PRELIMINARY AND GENERAL: CONTRACTOR'S ESTABLISHMENT ON SITE & GENERAL** The contractor's general obligations.				
1.1.1	PSA 8.3.1(a)	Value-related obligations for works assignments ranging between:				
1.1.1.1		(a) R0 - R2 000 000	%		1 000 000.00	
1.1.1.2		(b) R2 000 001 - R4 000 000	%		3 000 000.00	
1.1.1.3		(c) R4 000 001 - R6 000 000	%		5 000 000.00	
1.1.1.4		(d) Greater than R6 000 001	%		7 000 000.00	
1.1.2	PSA 8.3.1(b)	Time-related obligations for works assignments ranging between:				
1.1.2.1		(a) R0 - R2 000 000	Month		36	
1.1.2.2		(b) R2 000 001 - R4 000 000	Month		36	
1.1.2.3		(c) R4 000 001 - R6 000 000	Month		36	
1.1.2.4		(d) Greater than R6 000 001	Month		36	
TOTAL CARRIED FORWARD TO SUMMARY :						

SECTION 1 - PART 2: DAYWORKS						
SCHEDULE OF RATES					THIS SECTION IS FOR EVALUATION PURPOSES ONLY	
ITEM NO	PAYMENT REFERS	DESCRIPTION	UNIT	RATE	ESTIMATED QUANTITY	AMOUNT
1		**SECTION 1 - PART 2: DAYWORKS**				
1.3		**DAYWORKS (PROVISIONAL)**				
1.3.1		Personnel during normal working hours				
1.3.1.1		(a) Unskilled labour	hr		1 000	
1.3.1.2		(b) Semi-skilled labour	hr		1 000	
1.3.1.3		(c) Skilled labour	hr		1 000	
1.3.1.4		(d) Ganger	hr		1 000	
1.3.1.5		(e) Flagman	hr		1 000	
1.3.2		Plant				
1.3.2.1		(a) Dropside truck (2 to 12-ton capacity)	hr		100	
1.3.2.2		(b) Tipper Trucks (3 to 5-ton capacity)	hr		100	
1.3.2.3		(c) TLB (digger loader)	hr		100	
1.3.2.4		(d) Compactor (Bomag 90 or similar)	hr		100	
1.3.2.5		(e) Water truck (10 000 litres)	hr		100	
1.3.2.6		(f) Suitable truck for transporting labourers (min. of 30 people)	hr		100	
1.3.2.7		(g) Safety vehicle for pre-marking purposes	hr		100	
1.3.2.8		(h) Dewatering pump including generators and accessories	hr		100	
1.3.2.9		(i) Light delivery vehicle (LDV)	hr		100	
1.3.2.10		(j) Centre-mount crane (more than 8-ton)	hr		100	
1.3.2.11		(k) Other Specify	hr		100	
1.3.3		Materials				
1.3.3.1		(a) Procurement of materials	Prov. Sum	500 000	1	500 000.00
1.3.3.2		(b) Contractor's handling costs, profit and all other charges in respect of sub-item 1.3.3.1	%		500 000	
1.3.4		Establishment (maximum 150km per trip)				
1.3.4.1		(a) Dropside truck (2 to 12-ton capacity)	km		100	
1.3.4.2		(b) Tipper Trucks (3 to 5-ton capacity)	km		100	
1.3.4.3		(c) TLB (digger loader)	km		100	
1.3.4.4		(d) Water truck (10 000 litres)	km		100	
1.3.4.5		(e) Suitable truck for transporting labourers (min. of 30 people)	km		100	
1.3.4.6		(f) Light delivery vehicle (LDV)	km		100	
1.3.4.7		(g) Centre-mount crane (more than 8-ton)	km		100	
1.3.5	PSA 8.4.6	Compensation in terms of clause 5.12.2.4 of the Conditions of Contract for delays incurred				
1.3.5.1		(a) Plant	day		100	
1.3.5.2		(b) Labour	day		100	
1.3.5.3		(c) Supervision	day		100	
1.3.5.4		(d) Other services, facilities, etc. not covered by items 1.3.5.1 to 1.3.5.3	day		100	
1.4	SANS 1200 A	**TEMPORARY WORKS**				
1.4.1		Existing services				
1.4.1.1	8.8.4 (c)	(a) Excavate by hand in soft material to expose existing services	m^3		10	
1.4.1.2		(b) Lowering/ relocating/ repairing existing services	Prov. Sum	50 000	1	50 000.00
CARRIED FORWARD:						

SECTION 1 - PART 2: DAYWORKS						
SCHEDULE OF RATES					THIS SECTION IS FOR EVALUATION PURPOSES ONLY	
ITEM NO	PAYMENT REFERS	DESCRIPTION	UNIT	RATE	ESTIMATED QUANTITY	AMOUNT
BROUGHT FORWARD:						
1.4.2	8.8.5	Cost of survey in terms of Land Survey Act				
1.4.2.1		(a) Locate, record and protect erf boundary and survey pegs	Sum		1	
1.4.2.2		(b) Replace pegs recorded as missing at commencement of Contract as well as pegs removed in terms of PSA 5.1.1	No		100	
TOTAL CARRIED FORWARD TO SUMMARY :						

SECTION 2: HEALTH & SAFETY						
SCHEDULE OF RATES					THIS SECTION IS FOR EVALUATION PURPOSES ONLY	
ITEM NO	PAYMENT REFERS	DESCRIPTION	UNIT	RATE	ESTIMATED QUANTITY	AMOUNT
2		**SECTION 2: HEALTH & SAFETY**				
2.1		Provision for Personal Protective Equipment & Protective Clothing				
2.1.1		(a) Reflective vests	No		100	
2.1.2		(b) Reflective bibs	No		100	
2.1.3		(c) Hard hats	No		100	
2.1.4		(d) Protective foot wear	No		100	
2.1.5		(e) Earplugs	No		100	
2.1.6		(f) Dust masks	No		100	
2.1.7		(g) Workman Gloves	No		100	
2.2		Provision of full time Construction Health and Safety Officer	Month		36	
2.3		Costs of Medical Certificates and Medical Surveillance				
2.3.1		(a) Initial (baseline) medical examinations	No		100	
2.3.2		(b) Exit examinations	No		100	
2.4		Induction Training	No		100	
2.5		Environmental Monitoring Tests	No		100	
2.6		Noise Monitoring				
2.6.1		(a) Establishment of noise zones	No		10	
2.6.2		(b) Audiograms	No		10	
2.7		Provision of First Aid boxes	Sum		1	
2.8		Transportation of Workers	Month		12	
2.9		Submission of the Health and Safety File	Sum		1	
2.10	PSA 8.3.5	On-site Security Supervision				
2.10.1		(a) Provision of Security Services to ensure the safe working environment for all workers, materials and works on site during working hours	Prov. Sum	250 000	1	250 000.00
2.10.2		(b) Handling costs and charges for the Contractor on item 2.10.1	%		250 000	
TOTAL CARRIED FORWARD TO SUMMARY:						

SECTION 3: EME SUB-CONTRACTING WORK						
SCHEDULE OF RATES					THIS SECTION IS FOR EVALUATION PURPOSES ONLY	
ITEM NO	PAYMENT REFERS	DESCRIPTION	UNIT	RATE	ESTIMATED QUANTITY	AMOUNT
3		**SECTION 3: EME SUB-CONTRACTING WORK**				
3.1		EME Support Programme				
3.1.1		(a) Establishment and monitoring of EME Support Programme	Prov. Sum	100 000	1	100 000.00
3.1.2		(b) Overhead charges on Item 3.1.1	%		100 000	
3.2		EME Support Initiative: Management				
3.2.1	PSA 8.15	(a) EME Construction Manager remuneration	Prov. Sum	10 000	1	10 000.00
3.2.2		(b) Overhead charges on Item 3.2.1	%		10 000	
3.2.3	PSA 8.16	(c) Community Liaison Officer (CLO) remuneration	Prov. Sum	10 000	1	10 000.00
3.2.4		(d) Overhead charges on Item 3.2.3	%		10 000	
3.3		EME Support Initiative: Training				
3.3.1	PSA 8.18	(a) Training of EMEs	Prov. Sum	100 000	1	100 000.00
3.3.2		(b) Mark-up on Item 3.3.1	%		100 000	
TOTAL CARRIED FORWARD TO SUMMARY :						

SECTION 4: ABLUTION FACILITIES						
SCHEDULE OF RATES					THIS SECTION IS FOR EVALUATION PURPOSES ONLY	
ITEM NO	PAYMENT REFERS	DESCRIPTION	UNIT	RATE	ESTIMATED QUANTITY	AMOUNT
4		**SECTION 4: ABLUTION FACILITIES**				
4.1	SABS 1200 C	**SITE CLEARANCE** as specified in SABS 1200 C and in the project specification				
4.1.1	PSC 8.2.1	Clear and grub for toilet ablutions	m²		100	
4.2	SABS 1200 D	**EARTHWORKS** as specified in SABS 1200 D and in the project specification				
4.2.1	8.3.1	Site preparation				
4.2.1.1	8.3.1.2	Remove topsoil to nominal depth 150mm, stockpile and maintain	m³		10	
4.2.2	8.3.3	Restricted excavation				
	PSD 8.3.3	(a) Excavate for restricted foundations, footings, trenches, and landscaping in soft materials and use for backfill, berm or dispose, as ordered:				
4.2.2.1		(i) Embankment and landscaping compacted to 90% of max modified AASHTO density	m³		10	
4.2.2.2		(ii) Backfill compacted to 98% of modified AASHTO maximum density	m³		10	
4.2.2.3		(iii) Dispose	m³		10	
4.2.2.4		(b) Extra-over item 4.2.2.1 to 4.2.2.3 for hard rock excavation	m³		10	
4.2.3	PSDB 8.3.3.1	Make up deficiency in backfill				
		(a) By importation from commercial or "off site" sources selected by the contractor				
4.2.3.1		(i) Subbase quality material complying with subclause 3.2.2 of SABS 1200ME compacted to 98% of modified AASHTO maximum density	m³		10	
4.2.3.2	8.3.9	(b) Extra-over item 4.2.3.1 for backfill or for fill material against structures	m³		10	
4.2.4	PSD 8.3.10	Topsoiling (100mm thick)	m²		100	
4.2.5	8.3.11	Grassing (with sods of kweek)	m²		100	
4.3	SANS 1200 GA	**CONCRETE (SMALL WORKS)** as specified in SABS 1200 GA and in the project specification				
4.3.1	8.2	Schedule for Formwork Items				
4.3.1.1	8.2.1	(a) Rough (covered)	m²		100	
4.3.1.2	8.2.2	(b) Smooth (exposed)	m²		100	
4.3.2	8.3	Schedule for Reinforcement Items				
	8.3.2	High-tensile welded mesh				
4.3.2.1		(a) Ref. 195	m²		100	
4.3.2.2		(b) Ref. 245	m²		100	
4.3.3	8.4	Schedule for Concrete Items				
4.3.3.1	8.4.2	Blinding Layer in 15MPa/19 Concrete (30mm nominal thickness)	m²		100	
CARRIED FORWARD:						

SECTION 4: ABLUTION FACILITIES						
SCHEDULE OF RATES					THIS SECTION IS FOR EVALUATION PURPOSES ONLY	
ITEM NO	PAYMENT REFERS	DESCRIPTION	UNIT	RATE	ESTIMATED QUANTITY	AMOUNT
BROUGHT FORWARD:						
	8.4.3	Strength concrete				
4.3.3.2		(a) 20MPa/19 (Apron to ablutions)	m^3		10	
4.3.3.3		(b) 25MPa/19 (Floor Slab)	m^3		10	
	8.4.4	Unformed surface finishes				
4.3.3.4		(a) Wood-floated finish (Apron Slab)	m^2		100	
	8.5	Joints				
4.3.3.5		(a) Soft Joint	m		1 000	
4.4	SANS 1200 GE	**PRECAST CONCRETE (STUCTURAL)** as specified in SANS 1200 GE and in the project specification				
4.4.1	8.2.1	Supply and Install Structural Precast Units				
		(a) Wash Hand Basin				
4.4.1		(i) Precast concrete single wash trough (SABS approved) complete with wall mounting connections	No		100	
4.5		**DELIVERY OF CONTAINER ABLUTIONS**				
4.5.1		Delivery of Container Type Ablution from Collection Point to Site				
4.5.1.1		(a) radius distance <10km from collection point	No		10	
4.5.1.2		(b) 10km < radius distance > 20km from collection point	No		10	
4.5.1.3		(c) 20km < radius distance > 30km from collection point	No		10	
4.5.1.4		(d) 30km < radius distance from collection point	No		10	
4.5.2		Delivery of Container Type Ablution to Previous Site (including safe disconnection of water and sewer connections) to New Site/ Depot				
4.5.2.1		(a) radius distance < 10km from previous site	No		10	
4.5.2.2		(b) 10km < radius distance > 20km from previous site	No		10	
4.5.2.3		(c) 20km < radius distance > 30km from previous site	No		10	
4.5.2.4		(d) 30km < radius distance from previous site	No		10	
4.6		**PRE-CAST PANEL TOILETS COMPLETE WITH PEDESTAL AND CISTERN** as specified by Agrement South Africa - Performance Criteria (Structural Strength and Stability), complete with Agrement South Africa, and SABS Approved (for raw material) low/ pour flush pedestal and cistern, and high-density plastic door.				
4.6.1	PSA 8.19	Standard Pre-cast Panel Toilets				
4.6.1.1		(a) Supply and erection of pre-cast panel toilet, complete with low/ pour flush pedestal and cistern (1 - 100 units)	Unit		1	
4.6.1.2		(b) Supply and erection of pre-cast panel toilet, complete with low/ pour flush pedestal and cistern (101 - 500 units)	Unit		1	
4.6.1.3		(c) Supply and erection of pre-cast panel toilet, complete with low/ pour flush pedestal and cistern (501 - 1 000 units)	Unit		1	
CARRIED FORWARD:						

SECTION 4: ABLUTION FACILITIES						
SCHEDULE OF RATES					THIS SECTION IS FOR EVALUATION PURPOSES ONLY	
ITEM NO	PAYMENT REFERS	DESCRIPTION	UNIT	RATE	ESTIMATED QUANTITY	AMOUNT
BROUGHT FORWARD:						
4.6.2	PSA 8.20	Pre-cast Panel Toilets for Persons with Disabilities as specified by SANS 10400-S:2011.				
4.6.2.1		(a) Supply and erection of pre-cast toilet, complete with low/ pour flush pedestal and cistern, dog-leg and cistern grab bar (min. 604 x 604 x Ø32mm, min. 750 x Ø32mm, respectively)	Unit		1	
4.7		**PRE-CAST PANEL TOILET** as specified and certified by Agrement South Africa - Performance Criteria (Structural Strength and Stability), complete with high-density plastic door, applicable joint connections, and roofing				
4.7.1		Standard Pre-cast Panels				
4.7.1.1		(a) Supply and erection of pre-cast panels (1 - 100 units)	Unit		1	
4.7.1.2		(b) Supply and erection of pre-cast panels (101 - 500 units)	Unit		1	
4.7.1.3		(c) Supply and erection of pre-cast panels (501 - 1000 units)	Unit		1	
4.7.2		Pre-cast Panel Toilets for Persons with Disabilities as specified by SANS 10400-S:2011.				
4.7.2.1		(a) Supply and erection of pre-cast panels, complete with dog-leg and cistern grab bar (min. 604 x 604 x Ø32mm, min. 750 x Ø32mm, respectively)	Unit		1	
TOTAL CARRIED FORWARD TO SUMMARY:						

SECTION 5: WATER RETICULATION AND CONNECTIONS						
SCHEDULE OF RATES					THIS SECTION IS FOR EVALUATION PURPOSES ONLY	
ITEM NO	PAYMENT REFERS	DESCRIPTION	UNIT	RATE	ESTIMATED QUANTITY	AMOUNT
5		**SECTION 5: WATER RETICULATION AND CONNECTIONS**				
5.1	SANS 1200 C	**SITE CLEARANCE** as specified in SANS 1200 C and in the Scope of Work				
5.1.1	PSC 8.2.1	Clear and grub 2m wide strip (where ordered)	m		1 000	
5.1.2	PSC 8.2.5	Take down existing fences	m		1 000	
5.1.3	PSC 8.2.11	Remove and dispose of existing kerbing and concrete channelling	m		1 000	
5.1.4	PSC 8.2.12	Saw-cut asphalt surfacing	m		1 000	
5.1.5	PSC 8.2.13	Remove and dispose of asphalt surfacing	m²		100	
5.1.6	PSC 8.2.14	Saw-cut concrete surfacing	m		1 000	
5.2	SANS 1200 DB	**EARTHWORKS (PIPE TRENCHES)** as specified in SANS 1200 DB and in the Scope of Work				
5.2.1	8.3.2	Excavation				
	PSDB 8.3.2 (a)	(a) Excavate in all materials for trenches, backfill, compact and dispose of surplus material				
		(i) Trenches of width 300mm for water supply & connections				
5.2.1.1		- Depth up to 1,0m	m		1 000	
5.2.1.2		- Depth 1,0m up to 1,5m	m		1 000	
5.2.1.3	PSDB 8.3.2 (b)	(b) Extra over items 5.2.1.1 and 5.2.1.2 for hard rock excavation	m³		10	
5.2.1.4	8.3.2 (c)	(c) Excavate and dispose of unsuitable material from trench bottom	m³		10	
5.2.2		Excavation ancillaries				
	PSDB 8.3.3.1	*Make up deficiency in backfill material*				
5.2.2.1		(a) From other necessary excavations on site	m³		10	
		(b) By importation from commercial or off-site sources selected by the Contractor				
5.2.2.2		(i) Subbase quality material complying with subclause 5.2.1 of SANS 1200 ME.	m³		10	
5.2.2.3		(ii) Trench fill (using cellular lightweight concrete)	m³		10	
5.2.3	PSDB 8.3.3.3	Compaction in road reserves (to 95% of modified AASHTO maximum density)	m³		10	
5.2.4	8.3.6	Finishing				
	8.3.6.1	*Reinstate road surfaces complete with all courses*				
5.2.4.1	PSDB 8.3.6.1	(a) Gravel on shoulders and driveways	m²		100	
5.2.4.2		(b) Hot asphalt type IVA (min thickness 40mm)	m²		100	
5.2.4.3		(c) Concrete paving (25/19 MPa) - 100mm thick	m²		100	
CARRIED FORWARD:						

SECTION 5: WATER RETICULATION AND CONNECTIONS						
SCHEDULE OF RATES					THIS SECTION IS FOR EVALUATION PURPOSES ONLY	
ITEM NO	PAYMENT REFERS	DESCRIPTION	UNIT	RATE	ESTIMATED QUANTITY	AMOUNT
BROUGHT FORWARD:						
5.3	SANS 1200 LB	**BEDDING (PIPES)** as specified in SANS 1200 LB and in the Scope of Work				
5.3.1	8.2.1	Provision of bedding for trench excavation				
5.3.1.1		(a) Selected granular material	m^3		10	
5.3.2	8.2.2	Supply only of bedding by importation				
	PSLB 8.2.2.3	From commercial sources				
5.3.2.1		(a) Selected granular material	m^3		10	
5.3.2.2		(b) 6.7mm concrete stone to SANS 1083	m^3		10	
5.4	SANS 1200 LF	**ERF CONNECTIONS** as specified in SANS 1200 LF and in the Scope of Work				
5.4.1	PSLF 8.2.1	Provide erf connections complete				
		(a) Single erf connections off existing water reticulation				
		(i) 20mm dia. short connection of approximately 1m in length complete with all fittings and specials off:				
5.4.1.1		- 200mm dia. FC pipe	No		100	
5.4.1.2		- 150mm dia. FC pipe	No		100	
5.4.1.3		- 75mm dia. FC pipe	No		100	
5.4.1.4		- 50mm dia. FC pipe	No		100	
5.4.1.5		- 200mm dia. PVC pipe	No		100	
5.4.1.6		- 160mm dia. PVC pipe	No		100	
5.4.1.7		- 110mm dia. PVC pipe	No		100	
5.4.1.8		- 90mm dia. PVC pipe	No		100	
5.4.1.9		- 75mm dia. PVC pipe	No		100	
5.4.1.10		- 63mm dia. PVC pipe	No		100	
5.4.1.11		- 63mm dia. HDPE pipe	No		100	
5.4.1.12		- 50mm dia. HDPE pipe	No		100	
5.4.1.13	PSLF 8.2.9	(b) Extra over item 5.4.1.1 to 5.4.1.12 for additional piping	m		1 000	
5.4.2	PSLF 8.2.4	Supply and install domestic water meter	No		100	
5.4.3	PSLF 8.2.8	Markers	No		100	
TOTAL CARRIED FORWARD TO SUMMARY:						

SECTION 6: SEWER DRAINAGE AND CONNECTIONS						
SCHEDULE OF RATES					THIS SECTION IS FOR EVALUATION PURPOSES ONLY	
ITEM NO	PAYMENT REFERS	DESCRIPTION	UNIT	RATE	ESTIMATED QUANTITY	AMOUNT
6		**SECTION 6: SEWER DRAINAGE AND CONNECTIONS**				
6.1	SANS 1200 C	**SITE CLEARANCE** as specified in SANS 1200 C and in the Scope of Work				
6.1.1	PSC 8.2.1	Clear and grub 2m wide strip (where ordered)	m		1 000	
6.1.2	PSC 8.2.5	Take down existing fences	m		1 000	
6.1.3	PSC 8.2.11	Remove and dispose of existing kerbing and concrete channelling	m		1 000	
6.1.4	PSC 8.2.12	Saw-cut asphalt surfacing	m		1 000	
6.1.5	PSC 8.2.13	Remove and dispose of asphalt surfacing	m²		100	
6.1.6	PSC 8.2.14	Saw-cut concrete surfacing	m		1 000	
6.2	SANS 1200 DB	**EARTHWORKS (PIPE TRENCHES)** as specified in SANS 1200 DB and in the Scope of Work				
6.2.1	8.3.2	Excavation				
	PSDB 8.3.2(a)	(a) Excavate in all materials for trenches, backfill, compact and dispose of surplus material				
		(i) Trenches of 400mm width for 110mm NB sewer drains				
6.2.1.1		- Depth up to 1,0m	m		1 000	
		(ii) Trenches of 600mm width for 110mm NB sewer drains				
6.2.1.2		- Depth exceeding 1,0m up to 1,5m	m		1 000	
6.2.1.3		- Depth exceeding 1,5m up to 2,0m	m		1 000	
		(iii) Trenches of 760mm width for 160mm NB sewer mains				
6.2.1.4		- Depth up to 1,0m	m		1 000	
6.2.1.5		- Depth exceeding 1,0m up to 1,5m	m		1 000	
6.2.1.6		- Depth exceeding 1,5m up to 2,0m	m		1 000	
6.2.1.7		- Depth exceeding 2,0m up to 2,5m	m		1 000	
6.2.1.8		- Depth exceeding 2,5m up to 3,0m	m		1 000	
6.2.1.9	PSDB 8.3.2 (b)	(b) Extra-over items 6.2.1.1 through to 6.2.1.8 for hard rock excavation	m³		10	
6.2.1.10	8.3.2 (c)	(c) Excavate and dispose of unsuitable material from trench bottom	m³		10	
6.2.2		Excavation ancillaries				
	PSDB 8.3.3.1	*Make up deficiency in backfill material*				
6.2.2.1		(a) From other necessary excavations on site	m³		10	
		(b) By importation from commercial or off-site sources selected by the Contractor				
6.2.2.2		(i) Selected material complying with subclause 3.4.2 of SANS 1200 ME	m³		10	
6.2.2.3		(ii) Trench fill (using cellular lightweight concrete)	m³		10	
6.2.3	PSDB 8.3.3.3	Compaction in road reserves (to 95% of modified AASHTO maximum density)	m³		10	
6.2.4	8.3.6	Finishing				
CARRIED FORWARD:						

SECTION 6: SEWER DRAINAGE AND CONNECTIONS						
SCHEDULE OF RATES					THIS SECTION IS FOR EVALUATION PURPOSES ONLY	
ITEM NO	PAYMENT REFERS	DESCRIPTION	UNIT	RATE	ESTIMATED QUANTITY	AMOUNT
BROUGHT FORWARD:						
6.2.5	8.3.6.1	Reinstate road surfaces complete with all courses				
6.2.5.1	PSDB 8.3.6.1	(a) Gravel on shoulders and driveways	m²		100	
6.2.5.2		(b) Hot Asphalt Type IV A (minimum thickness 40 mm)	m²		100	
6.2.5.3		(c) Concrete paving (Class 25/19) - 150mm thick	m²		100	
6.3	SANS 1200 LB	**BEDDING (PIPES)** as specified in SANS 1200 LB and in the Scope of Work				
6.3.1	8.2.1	Provision of bedding from trench excavation				
6.3.1.1		(a) Selected granular material	m³		10	
6.3.1.2		(b) Selected fill material	m³		10	
6.3.2	8.2.2	Supply only of bedding by importation				
	PSLB 8.2.2.3	From commercial sources				
6.3.2.1		(a) Selected granular material	m³		10	
6.3.2.2		(b) 6.7 mm concrete stone to SANS 1083	m³		10	
6.4	SANS 1200 LD	**SEWERS** as specified in SANS 1200 LD and in the Scope of Work				
6.4.1	8.2.1	Supply, lay, joint, bed and test pipeline				
	PSLD 8.2.1	(a) Structured wall PVCu sewers of outside diameters stated (400kPa, Type 1, SANS 1601, Maincor, Ultracor or similar approved), bedded as detailed on the drawings				
6.4.1.1		(i) 110mm dia	m		1 000	
6.4.1.2		(ii) 160mm dia	m		1 000	
6.4.2	8.2.3	Manholes				
	PSLD 8.2.3	(a) Precast concrete manholes complete including medium duty concrete roof slab and type 4 cover and frame for pipes up to and including 160mm dia				
6.4.2.1		(i) Depth up to 1,0m	No		100	
6.4.2.2		(ii) Depth exceeding 1,0m up to 1,5m	No		100	
6.4.2.3		(iii) Depth exceeding 1,5m up to 2,0m	No		100	
6.4.2.4		(iv) Depth exceeding 2,0m up to 2,5m	No		100	
6.4.2.5		(v) Depth exceeding 2,5m up to 3,0m	No		100	
6.4.2.6		(b) Extra-over items 6.4.2.1 through to 6.4.2.5 for type 2A cover and frame for manholes in road areas	No		10	
6.4.3	8.2.4	Extra-over items 6.4.2.1 through to 6.4.2.5 for the construction of ramps and backdrops as detailed complete				
		(a) Ramps for pipes of diameters stated				
6.4.3.1		(i) 160mm	No		10	
		(b) Backdrops				
		(i) 160mm				
6.4.3.2		- up to 1,5m	No		10	
6.4.3.3		- Exceeding 1,5m up to 2,0m	No		10	
6.4.3.4		- Exceeding 2,0m up to 2,5m	No		10	
CARRIED FORWARD:						

SECTION 6: SEWER DRAINAGE AND CONNECTIONS						
SCHEDULE OF RATES					THIS SECTION IS FOR EVALUATION PURPOSES ONLY	
ITEM NO	PAYMENT REFERS	DESCRIPTION	UNIT	RATE	ESTIMATED QUANTITY	AMOUNT
BROUGHT FORWARD :						
6.4.4	PSLD 8.2.5	Extra-over 6.4.2.1 through to 6.4.2.5 for the construction of additional channelling and the building in of short pipe specials at branch manholes, manholes at bends and erf connection manholes				
		(a) For branched channels				
6.4.4.1		(i) 150mm dia.	No		10	
		(b) For channels at bends				
6.4.4.2		(i) 150mm dia.	No		10	
6.4.4.3		(c) Terminal erf connections (110mm dia) into manhole	No		10	
6.4.4.4		(d) Erf connections (110mm dia) into manhole	No		10	
6.4.5	PSLD 8.2.6 (a)	Erf connections (complete with fittings as per drawing)				
		(a) Short length of 1.3m (On new sewer reticulation)				
6.4.5.1		(i) Type 1	No		10	
6.4.5.2		(ii) Type 2	No		10	
6.4.5.3		(iii) Type 3	No		10	
6.4.5.4		(iv) Type 4	No		10	
6.4.5.5		(v) Type 5	No		10	
		(b) Short length of 1.3m (On existing sewer reticulation)				
6.4.5.6		(i) Type 1	No		10	
6.4.5.7		(ii) Type 2	No		10	
6.4.5.8		(iii) Type 3	No		10	
6.4.5.9		(iv) Type 4	No		10	
6.4.5.10		(v) Type 5	No		10	
6.4.6	PSLD 8.2.6 (b)	Extra-over items 6.4.5.1 through 6.4.5.10 for additional length of pipe	m		1 000	
6.4.7	PSLD 8.2.7	Encasing of pipes in concrete	m^3		10	
6.4.8	PSLD 8.2.11	Connection into existing sewer	Sum		10	
6.4.9	PSLD 8.2.13	Testing of watertightness of manholes	No		10	
6.4.10	PSLD 8.2.14	Supply and construct rodding eye complete as detailed on the drawings, including concrete surround (Depth up to 1,5m deep)	No		100	
TOTAL CARRIED FORWARD TO SUMMARY:						

SCHEDULE OF RATES					THIS SECTION IS FOR EVALUATION PURPOSES ONLY	
ITEM NO	PAYMENT REFERS	DESCRIPTION	UNIT	RATE	ESTIMATED QUANTITY	AMOUNT
BROUGHT FORWARD:						
7.2.15		(xi) 110mm Vent Horn Bend Access Heel 87,5 degrees (Marley SB400 or similar)	No		100	
7.2.16		(xii) 50mm Bend Plain 95 degrees (Marley WBE50 or similar)	No		100	
7.2.17		(xiii) Eccentric Reducer 110 x 50mm (Marley SE404 or similar)	No		100	
7.2.18		(xiv) 40mm PVC U-Trap / Sink Trap (DPE DB3 or similar)	No		100	
7.2.19		(xv) 40mm Bend Access Heel 87,5 degrees (Marley WDE41 or similar)	No		100	
7.2.20		(xvi) 40mm PVC holderbats (Marley WHB4 or similar)	No		100	
7.2.21		(xvii) PVC SV reducer 50 x 40mm (Marley WR5 or similar)	No		100	
7.2.22		(xviii) 40mm PVC SV Junction Plain 87,5 degrees (Marley WS4 or similar)	No		100	
7.2.23		(xix) 110mm Junction Single Access Heel 87,5 degrees (Marley SY42 or similar)	No		100	
		(c) Soil & vent pipe and fittings				
7.2.24		(i) 40mm Pipe (WPE213/1 or similar)	m		1 000	
7.2.25		(ii) 40mm Perforated Pipe (WPE213/1 or similar)	m		1 000	
7.2.26		(iii) 40mm PVC urinal waste cap with CP grating	No		100	
7.2.27		(iv) 40mm solvent stop end	No		100	
7.2.28		(v) 40mm 90 degree bend (W40B, NS001 or similar)	No		100	
7.2.29		(vi) 40mm x 150mm threaded HDPE pipe	No		100	
7.2.30		(vii) 40mm PVC End cap drilled and tapped to 15mm (CA2 or similar)	No		100	
7.2.31		(viii) 40mm holderbats	No		100	
7.2.32		(ix) 40mm PVC threaded female-female straight coupler (MA2 or similar)	No		100	
7.2.33		(x) 40mm PVC back nut (NU4 or similar)	No		100	
7.2.34		(xi) 40mm rubber gasket	No		100	
		(d) Taps				
7.2.35		(i) Bib tap "KM2.202-15" Cobra or similar approved	No		100	
		(e) Cistern				
7.2.36		(i) Low volume cistern (SABS and Agrement South Africa approved)	No		100	
		(f) Pedestal				
7.2.37		(i) Low/ Pour flush (2l or less) pedestal (SABS and Agrement South Africa approved)	No		100	
		(g) Child-seat Lid				
7.2.38		(i) Child-seat lid as a single unit for the normal adult sized seat with child-seat incorporated into the lid	No		100	
7.3		Concrete (20MPa concrete):				
7.3.1		(a) Cast concrete (20 MPa) gulley surround for 190 x 110mm grating (grating elsewhere)	No		100	
7.3.2		(b) Cast concrete (20 MPa) around rodding Eye (450 x 450 x 150mm)	No		100	
TOTAL CARRIED FORWARD TO SUMMARY :						

SECTION 8: CONSERVANCY TANKS						
SCHEDULE OF RATES					THIS SECTION IS FOR EVALUATION PURPOSES ONLY	
ITEM NO	PAYMENT REFERS	DESCRIPTION	UNIT	RATE	ESTIMATED QUANTITY	AMOUNT
8		**SECTION 8: CONSERVANCY TANKS** Rates to include supervision, administration, health and safety, and profit.				
8.1	SANS 1200 C	**SITE CLEARANCE** as specified in SANS 1200 C and in the Scope of Work				
8.1.1		Clear and Grub				
8.1.1.1	8.2.1	(a) Clear site as directed by the Engineer, including spoiling material to a municipal approved tip site	m²		100	
8.1.1.2	8.2.10	(b) Remove topsoil to nominal depth of 150mm and stockpile	m³		10	
8.2	SANS 1200 A	**TEMPORARY WORKS** Rates to include for each and every operation required.				
8.2.1	8.8.4 (c)	Hand excavation in soft material where ordered for locating and exposing existing services	m³		10	
8.3	SANS 1200 DB	**EXCAVATIONS & EARTHWORKS**				
8.3.1		Excavate for conservancy or urine diversion - biodigestion tank size	m³		10	
8.3.2		Extra-over item 8.3.1 for hard rock	m³		10	
8.3.3		Extra-over item 8.3.1 for keeping all excavations from all types of water ingress by any suitable method	Sum		1	
8.3.4		Excavate in all materials for trenches, backfill, compact and dispose of surplus/ unsuitable material and make tidy for:				
8.3.4.1		(a) Trenches for uPVC pipes of diameter up to 150mm and for depths of up to 0.5m	m		1 000	
8.4		**SUB-STRUCTURES**				
8.4.1		Conservancy Tank as specified in SANS 10400-P:2010 (or SABS Approved)				
		(a) Supply and installation of a conservancy tank including any necessary fittings and backfilling required with Engineer approved material				
8.4.1.1		(i) Up to 2 500l	Unit		1	
8.4.1.2		(ii) 2 500l < Size < 5 000l	Unit		1	
8.4.1.3		(iii) 5 000l < Size < 10 000l	Unit		1	
8.4.2		Urine Diversion - Biodigestion Tank Type I (Calcimite eco-mite or similar)				
		(a) Supply and installation of urine diversion - biodigestion tank unit with polyethylene base complete with toilet pedestal and urine diversion unit, including a polyethylene drying plate, solar dome with hinge lid, vent pipe and wind extractor				
8.4.2.1		(i) Up to 500l	Unit		1	
8.4.2.2		(ii) 500l < Size < 2 000l	Unit		1	
8.4.2.3		(iii) 2 000l < Size < 2 500l	Unit		1	
CARRIED FORWARD :						

SECTION 8: CONSERVANCY TANKS						
SCHEDULE OF RATES					THIS SECTION IS FOR EVALUATION PURPOSES ONLY	
ITEM NO	PAYMENT REFERS	DESCRIPTION	UNIT	RATE	ESTIMATED QUANTITY	AMOUNT
BROUGHT FORWARD:						
8.4.3		Urine Diversion - Biodigestion Tank Type II (Enviro Loo or similar) (SABS Approved)				
		(a) Supply and installation of biodigestion tank unit with low-density polyethylene base complete with toilet pedestal, including a drying plate, drying bag and vent extraction unit				
8.4.3.1		(i) For 1 - 10 users per day	Unit		1	
8.4.3.2		(ii) For 1 - 20 users per day	Unit		1	
8.4.3.3		(iii) For 1 - 30 users per day	Unit		1	
8.4.3.4		(iv) For 1 - 40 users per day	Unit		1	
TOTAL CARRIED FORWARD TO SUMMARY :						

SECTION 9: SEPTIC TANK						
SCHEDULE OF RATES					THIS SECTION IS FOR EVALUATION PURPOSES ONLY	
ITEM NO	PAYMENT REFERS	DESCRIPTION	UNIT	RATE	ESTIMATED QUANTITY	AMOUNT
9		**SECTION 9: SEPTIC TANK** Rates to include supervision, administration, health and safety, and profit.				
9.1	SANS 1200 C	**SITE CLEARANCE** as specified in SANS 1200 C and in the Scope of Work				
9.1.1		Clear and Grub				
9.1.1.1	8.2.1	(a) Clear site as directed by the Engineer, including spoiling material to a municipal approved tip site	m²		100	
9.1.1.2	8.2.10	(b) Remove topsoil to nominal depth of 150mm and stockpile	m³		10	
9.2	SANS 1200 A	**TEMPORARY WORKS** Rates to include for each and every operation required.				
9.2.1	8.8.4 (c)	Hand excavation in soft material where ordered for locating and exposing existing services	m³		10	
9.3	SANS 1200 DB	**EXCAVATIONS & EARTHWORKS**				
9.3.1		Excavate for septic tank pit (max. 3150 x 3150mm) commencing from reduced levels and not exceeding a depth greater than 1,5m	m		10	
9.3.2		Excavate for septic tank pit (max. 3150 x 3150mm) commencing from 1,5m depth and not exceeding a depth greater than 3m	m		10	
9.3.3		Excavate for septic tank pit (max. 3150 x 3150mm) commencing from 3m depth and not exceeding a depth greater than 4,5m	m		10	
9.3.4		Extra-over items 9.3.1 through to 9.3.3 for hard rock	m³		10	
9.3.5		Extra-over items 9.3.1 through to 9.3.3 for keeping all excavations from all types of water ingress by any suitable method	Sum		1	
9.3.6		Excavate in all materials for trenches, backfill, compact and dispose of surplus/ unsuitable material and make tidy for:				
9.3.6.1		(a) Trenches for uPVC pipes of diameter up to 150mm and for depths of up to 0.5m	m		1 000	
9.4		**SUB-STRUCTURE (CONCRETE AND BRICK WORKS)** as specified in SANS 10400-P:2010 (or SABS Approved)				
9.4.1		Construction of leach-pit structure (French drain) [max. 3150 x 3150mm] using M6 concrete blocks complete with in-situ preparation, reinforced concrete floor and cover slab, wall brickwork, min. concrete cover for durability and smart lock manhole cover, including all fittings, inlet and outlet pipes	Unit		1	
TOTAL CARRIED FORWARD TO SUMMARY:						

SECTION 10: FENCING AND SECURITY						
SCHEDULE OF RATES					THIS SECTION IS FOR EVALUATION PURPOSES ONLY	
ITEM NO	PAYMENT REFERS	DESCRIPTION	UNIT	RATE	ESTIMATED QUANTITY	AMOUNT
10		**SECTION 10: FENCING AND SECURITY**				
10.1		**EARTHWORKS (HOLES FOR POSTS)**				
10.1.1		Excavation				
10.1.1.1	8.3.1	Excavate holes for corner/end or standard posts (500 x 500 x 400mm)	No		10	
10.2	SANS 1200 GA	**CONCRETE WORKS**				
10.2.1		Concrete to bases 15MPa/19	m^3		10	
10.2.2		Supply and install 152 x 152 x 23kg/m steel H section 3000mm long, cast 600mm into concrete base (measured elsewhere), including galvanising to SANS 0763.	kg		100	
10.2.3		Supply and install in previously erected H section steel columns, 50MPa precast concrete wall panel 3000 x 1200 x 120mm thick including grouting	m^2		100	
10.3		**FENCING**				
10.3.1		Supply and install 1,8m high-weld mesh fence (50 x 50 x 2,5mm)	m		1 000	
10.3.2		Dismantle and reinstall 1,8m high existing fence line to new position	m		1 000	
10.3.3		Extra-over items 10.3.1 and 10.3.2	m		1 000	
10.3.4		Supply and install corner posts (150mm OD)	No		10	
10.3.5		Supply and install straining posts (150mm OD)	No		10	
10.3.6		Supply and install 1.8m high security fencing. Posts of 100 x 54 x 2mm H section, planted min. 600mm deep, galvanised to SANS 0763 and coated min. 100 micron fusion bond PVC - inside and outside, complete with top cap. Fence panels with inner aperture size 12,7 x 76,2mm galvanised SANS 0763 and min. 100 micron fusion bond PVC coating.	m		1 000	
10.3.7	SANS 457	Supply and install 150mm dia. post and rail (90mm dia.) timber fencing (or ranch fencing) all poles to be tantalised, including excavation - where directed by Engineer.	m		1 000	
10.4		**REMOVAL OF FENCING**				
10.4.1		Salvage of existing fencing for re-use				
10.4.1.1		(a) Take down existing 1,8m diamond mesh fence including roll up of mesh, coiling of wire, loading, carting and off loading at NMBM depot	m		1 000	
10.4.1.2		(b) Excavate for and recover 2,4m corner and intermediate fence posts including removal of anchor concrete, closure of post hole, sorting, loading, carting and off-loading at NMBM depot	No		10	
10.4.1.3		(c) Dismantle 1,8m high by 3,0m opening two leaf diamond mesh gate complete including loading, carting, and off-loading at NMBM depot	No		10	
CARRIED FORWARD :						

SECTION 10: FENCING AND SECURITY						
SCHEDULE OF RATES					THIS SECTION IS FOR EVALUATION PURPOSES ONLY	
ITEM NO	PAYMENT REFERS	DESCRIPTION	UNIT	RATE	ESTIMATED QUANTITY	AMOUNT
BROUGHT FORWARD:						
10.5		**MISCELLANEOUS ITEMS**				
10.5.1		Supply and installation of hardened steel hasp with shackle protector (BBH535 or similar), complete with standard discus padlock including five (5) high security keys (BBP170-F1 or similar)	No		10	
10.5.2		Stencil marking of pre-cast concrete toilets with pavecote based paint	No		10	
TOTAL CARRIED FORWARD TO SUMMARY :						

SECTION 11: GENERAL						
SCHEDULE OF RATES					THIS SECTION IS FOR EVALUATION PURPOSES ONLY	
ITEM NO	PAYMENT REFERS	DESCRIPTION	UNIT	RATE	ESTIMATED QUANTITY	AMOUNT
11		**SECTION 11: GENERAL**				
11.1	SANS 1200 C	**SITE CLEARANCE** as specified in SANS 1200 C and in the Scope of Work				
11.1.1	PSC 8.2.1	Clear and grub 2m wide strip (where ordered)	m		1 000	
11.1.2	PSC 8.2.5	Take down existing fences	m		1 000	
11.1.3	PSC 8.2.11	Remove and dispose of existing kerbing and concrete channelling	m		1 000	
11.1.4	PSC 8.2.12	Saw-cut asphalt surfacing	m		1 000	
11.1.5	PSC 8.2.13	Remove and dispose of asphalt surfacing	m²		100	
11.1.6	PSC 8.2.14	Saw-cut concrete surfacing	m		1 000	
11.2	SANS 1200 GA	**CONCRETE (SMALL WORKS)** as specified in SANS 1200 GA and in the Scope of Work				
11.2.1		For minor concrete works as directed on site				
	8.2	(a) Formwork				
11.2.1.1	8.2.1	(i) Rough (covered)	m²		100	
11.2.1.2	8.2.2	(ii) Smooth (exposed)	m²		100	
	8.3.2	(b) High-tensile welded mesh				
11.2.1.3		(i) Ref. 195	m²		100	
11.2.1.4		(ii) Ref. 245	m²		100	
11.2.1.5		(iii) Ref. 359	m²		100	
11.2.1.6		(iv) Ref. 617	m²		100	
	8.4	(c) Concrete				
	8.4.3	(i) Strength concrete				
11.2.1.7		- 15MPa/19	m³		10	
11.2.1.8		- 20MPa/19	m³		10	
	8.4.4	(d) Unformed surface finishes				
11.2.1.9		(i) Wood-floated finish	m²		100	
11.2.1.10		(ii) Steel-floated finish	m²		100	
11.3		**RELOCATION OF INFORMAL HOUSING** All building material to be secured with little to no damage - for reuse.				
11.3.1		Diss-assemble existing informal housing				
11.3.1.1		(a) Informal housing size < 15m²	No		1	
11.3.1.2		(b) 15m² < Informal housing size < 30m²	No		1	
11.3.1.3		(c) Informal housing size > 30m²	No		1	
11.3.2		Transportation from Relocation Site to Beneficiary Site				
11.3.2.1		(a) radius distance <10km from relocation site	No		10	
11.3.2.2		(b) 10km < radius distance > 20km from relocation site	No		10	
11.3.2.3		(c) 20km < radius distance > 30km from relocation site	No		10	
11.3.2.4		(d) 30km < radius distance from relocation site	No		10	
CARRIED FORWARD :						

SECTION 11: GENERAL						
SCHEDULE OF RATES					THIS SECTION IS FOR EVALUATION PURPOSES ONLY	
ITEM NO	PAYMENT REFERS	DESCRIPTION	UNIT	RATE	ESTIMATED QUANTITY	AMOUNT
BROUGHT FORWARD:						
11.3.3		Re-assemble existing informal housing Rates to also include sealants, fasteners, applicable connections and waterproofing.				
11.3.3.1		(a) Informal housing size < 15m²	No		1	
11.3.3.2		(b) 15m² < Informal housing size < 30m²	No		1	
11.3.3.3		(c) Informal housing size > 30m²	No		1	
TOTAL CARRIED FORWARD TO SUMMARY :						

C2.3 SUMMARY OF SCHEDULE OF RATES

CLUSTER 2

SECTION	DESCRIPTION	PRICE
1 – PART 1	PRELIMINARY AND GENERAL	R
1 – PART 2	DAYWORKS	R
2	HEALTH & SAFETY	R
3	EME – SUB-CONTRACTING WORK	R
4	ABLUTION FACILITIES	R
5	WATER RETICULATION AND CONNECTIONS	R
6	SEWER DRAINAGE AND CONNECTIONS	R
7	PLUMBING AND SANITARYWARE	R
8	CONSERVANCY TANKS	R
9	SEPTIC TANKS	R
10	FENCING AND SECURITY	R
11	GENERAL	R

TOTAL OF PRICED ITEMS	R
NET CONTRACT PRICE	R
VALUE ADDED TAX (15% of Net Contract Price)	R
CONTRACT SUM (CARRIED TO C1.1. FORM OF OFFER)	**R**

Notes:

1. The Contract Price is subject to Contract Price Adjustment in terms of Clause 6.8.2 of the Conditions of Contract.
2. The Contract Sum is a Fictitious Value that shall be used for **Evaluation Purposes only**.
3. The undersigned, who warrants that he / she is duly authorised to do so on behalf of the enterprise, confirms that the contents of this schedule are within my personal knowledge and are to the best of my belief both true and correct.

Signed ..... Date .....

Name ..... Position .....

Tenderer .....

SCHEDULE OF RATE: CLUSTER 3

SECTION 1 - PART 1: PRELIMINARY AND GENERAL						
SCHEDULE OF RATES					THIS SECTION IS FOR EVALUATION PURPOSES ONLY	
ITEM NO	PAYMENT REFERS	DESCRIPTION	UNIT	RATE	ESTIMATED QUANTITY	AMOUNT
1		**SECTION 1 - PART 1: PRELIMINARY AND GENERAL**				
1.1		**PRELIMINARY AND GENERAL: CONTRACTOR'S ESTABLISHMENT ON SITE & GENERAL** The contractor's general obligations.				
1.1.1	PSA 8.3.1(a)	Value-related obligations for works assignments ranging between:				
1.1.1.1		(a) R0 - R2 000 000	%		1 000 000.00	
1.1.1.2		(b) R2 000 001 - R4 000 000	%		3 000 000.00	
1.1.1.3		(c) R4 000 001 - R6 000 000	%		5 000 000.00	
1.1.1.4		(d) Greater than R6 000 001	%		7 000 000.00	
1.1.2	PSA 8.3.1(b)	Time-related obligations for works assignments ranging between:				
1.1.2.1		(a) R0 - R2 000 000	Month		36	
1.1.2.2		(b) R2 000 001 - R4 000 000	Month		36	
1.1.2.3		(c) R4 000 001 - R6 000 000	Month		36	
1.1.2.4		(d) Greater than R6 000 001	Month		36	
TOTAL CARRIED FORWARD TO SUMMARY :						

SECTION 1 - PART 2: DAYWORKS						
SCHEDULE OF RATES					THIS SECTION IS FOR EVALUATION PURPOSES ONLY	
ITEM NO	PAYMENT REFERS	DESCRIPTION	UNIT	RATE	ESTIMATED QUANTITY	AMOUNT
1		**SECTION 1 - PART 2: DAYWORKS**				
1.3		**DAYWORKS (PROVISIONAL)**				
1.3.1		Personnel during normal working hours				
1.3.1.1		(a) Unskilled labour	hr		1 000	
1.3.1.2		(b) Semi-skilled labour	hr		1 000	
1.3.1.3		(c) Skilled labour	hr		1 000	
1.3.1.4		(d) Ganger	hr		1 000	
1.3.1.5		(e) Flagman	hr		1 000	
1.3.2		Plant				
1.3.2.1		(a) Dropside truck (2 to 12-ton capacity)	hr		100	
1.3.2.2		(b) Tipper Trucks (3 to 5-ton capacity)	hr		100	
1.3.2.3		(c) TLB (digger loader)	hr		100	
1.3.2.4		(d) Compactor (Bomag 90 or similar)	hr		100	
1.3.2.5		(e) Water truck (10 000 litres)	hr		100	
1.3.2.6		(f) Suitable truck for transporting labourers (min. of 30 people)	hr		100	
1.3.2.7		(g) Safety vehicle for pre-marking purposes	hr		100	
1.3.2.8		(h) Dewatering pump including generators and accessories	hr		100	
1.3.2.9		(i) Light delivery vehicle (LDV)	hr		100	
1.3.2.10		(j) Centre-mount crane (more than 8-ton)	hr		100	
1.3.2.11		(k) Other Specify	hr		100	
1.3.3		Materials				
1.3.3.1		(a) Procurement of materials	Prov. Sum	500 000	1	500 000.00
1.3.3.2		(b) Contractor's handling costs, profit and all other charges in respect of sub-item 1.3.3.1	%		500 000	
1.3.4		Establishment (maximum 150km per trip)				
1.3.4.1		(a) Dropside truck (2 to 12-ton capacity)	km		100	
1.3.4.2		(b) Tipper Trucks (3 to 5-ton capacity)	km		100	
1.3.4.3		(c) TLB (digger loader)	km		100	
1.3.4.4		(d) Water truck (10 000 litres)	km		100	
1.3.4.5		(e) Suitable truck for transporting labourers (min. of 30 people)	km		100	
1.3.4.6		(f) Light delivery vehicle (LDV)	km		100	
1.3.4.7		(g) Centre-mount crane (more than 8-ton)	km		100	
1.3.5	PSA 8.4.6	Compensation in terms of clause 5.12.2.4 of the Conditions of Contract for delays incurred				
1.3.5.1		(a) Plant	day		100	
1.3.5.2		(b) Labour	day		100	
1.3.5.3		(c) Supervision	day		100	
1.3.5.4		(d) Other services, facilities, etc. not covered by items 1.3.5.1 to 1.3.5.3	day		100	
1.4	SANS 1200 A	**TEMPORARY WORKS**				
1.4.1		Existing services				
1.4.1.1	8.8.4 (c)	(a) Excavate by hand in soft material to expose existing services	m^3		10	
1.4.1.2		(b) Lowering/ relocating/ repairing existing services	Prov. Sum	50 000	1	50 000.00
CARRIED FORWARD:						

SECTION 1 - PART 2: DAYWORKS						
SCHEDULE OF RATES					THIS SECTION IS FOR EVALUATION PURPOSES ONLY	
ITEM NO	PAYMENT REFERS	DESCRIPTION	UNIT	RATE	ESTIMATED QUANTITY	AMOUNT
BROUGHT FORWARD:						
1.4.2	8.8.5	Cost of survey in terms of Land Survey Act				
1.4.2.1		(a) Locate, record and protect erf boundary and survey pegs	Sum		1	
1.4.2.2		(b) Replace pegs recorded as missing at commencement of Contract as well as pegs removed in terms of PSA 5.1.1	No		100	
TOTAL CARRIED FORWARD TO SUMMARY :						

SECTION 2: HEALTH & SAFETY						
SCHEDULE OF RATES					THIS SECTION IS FOR EVALUATION PURPOSES ONLY	
ITEM NO	PAYMENT REFERS	DESCRIPTION	UNIT	RATE	ESTIMATED QUANTITY	AMOUNT
2		**SECTION 2: HEALTH & SAFETY**				
2.1		Provision for Personal Protective Equipment & Protective Clothing				
2.1.1		(a) Reflective vests	No		100	
2.1.2		(b) Reflective bibs	No		100	
2.1.3		(c) Hard hats	No		100	
2.1.4		(d) Protective foot wear	No		100	
2.1.5		(e) Earplugs	No		100	
2.1.6		(f) Dust masks	No		100	
2.1.7		(g) Workman Gloves	No		100	
2.2		Provision of full time Construction Health and Safety Officer	Month		36	
2.3		Costs of Medical Certificates and Medical Surveillance				
2.3.1		(a) Initial (baseline) medical examinations	No		100	
2.3.2		(b) Exit examinations	No		100	
2.4		Induction Training	No		100	
2.5		Environmental Monitoring Tests	No		100	
2.6		Noise Monitoring				
2.6.1		(a) Establishment of noise zones	No		10	
2.6.2		(b) Audiograms	No		10	
2.7		Provision of First Aid boxes	Sum		1	
2.8		Transportation of Workers	Month		12	
2.9		Submission of the Health and Safety File	Sum		1	
2.10	PSA 8.3.5	On-site Security Supervision				
2.10.1		(a) Provision of Security Services to ensure the safe working environment for all workers, materials and works on site during working hours	Prov. Sum	250 000	1	250 000.00
2.10.2		(b) Handling costs and charges for the Contractor on item 2.10.1	%		250 000	
TOTAL CARRIED FORWARD TO SUMMARY:						

SECTION 3: EME SUB-CONTRACTING WORK						
SCHEDULE OF RATES					THIS SECTION IS FOR EVALUATION PURPOSES ONLY	
ITEM NO	PAYMENT REFERS	DESCRIPTION	UNIT	RATE	ESTIMATED QUANTITY	AMOUNT
3		**SECTION 3: EME SUB-CONTRACTING WORK**				
3.1		EME Support Programme				
3.1.1		(a) Establishment and monitoring of EME Support Programme	Prov. Sum	100 000	1	100 000.00
3.1.2		(b) Overhead charges on Item 3.1.1	%		100 000	
3.2		EME Support Initiative: Management				
3.2.1	PSA 8.15	(a) EME Construction Manager remuneration	Prov. Sum	10 000	1	10 000.00
3.2.2		(b) Overhead charges on Item 3.2.1	%		10 000	
3.2.3	PSA 8.16	(c) Community Liaison Officer (CLO) remuneration	Prov. Sum	10 000	1	10 000.00
3.2.4		(d) Overhead charges on Item 3.2.3	%		10 000	
3.3		EME Support Initiative: Training				
3.3.1	PSA 8.18	(a) Training of EMEs	Prov. Sum	100 000	1	100 000.00
3.3.2		(b) Mark-up on Item 3.3.1	%		100 000	
TOTAL CARRIED FORWARD TO SUMMARY :						

SECTION 4: ABLUTION FACILITIES						
SCHEDULE OF RATES					THIS SECTION IS FOR EVALUATION PURPOSES ONLY	
ITEM NO	PAYMENT REFERS	DESCRIPTION	UNIT	RATE	ESTIMATED QUANTITY	AMOUNT
4		**SECTION 4: ABLUTION FACILITIES**				
4.1	SABS 1200 C	**SITE CLEARANCE** as specified in SABS 1200 C and in the project specification				
4.1.1	PSC 8.2.1	Clear and grub for toilet ablutions	m²		100	
4.2	SABS 1200 D	**EARTHWORKS** as specified in SABS 1200 D and in the project specification				
4.2.1	8.3.1	Site preparation				
4.2.1.1	8.3.1.2	Remove topsoil to nominal depth 150mm, stockpile and maintain	m³		10	
4.2.2	8.3.3	Restricted excavation				
	PSD 8.3.3	(a) Excavate for restricted foundations, footings, trenches, and landscaping in soft materials and use for backfill, berm or dispose, as ordered:				
4.2.2.1		(i) Embankment and landscaping compacted to 90% of max modified AASHTO density	m³		10	
4.2.2.2		(ii) Backfill compacted to 98% of modified AASHTO maximum density	m³		10	
4.2.2.3		(iii) Dispose	m³		10	
4.2.2.4		(b) Extra-over item 4.2.2.1 to 4.2.2.3 for hard rock excavation	m³		10	
4.2.3	PSDB 8.3.3.1	Make up deficiency in backfill				
		(a) By importation from commercial or "off site" sources selected by the contractor				
4.2.3.1		(i) Subbase quality material complying with subclause 3.2.2 of SABS 1200ME compacted to 98% of modified AASHTO maximum density	m³		10	
4.2.3.2	8.3.9	(b) Extra-over item 4.2.3.1 for backfill or for fill material against structures	m³		10	
4.2.4	PSD 8.3.10	Topsoiling (100mm thick)	m²		100	
4.2.5	8.3.11	Grassing (with sods of kweek)	m²		100	
4.3	SANS 1200 GA	**CONCRETE (SMALL WORKS)** as specified in SABS 1200 GA and in the project specification				
4.3.1	8.2	Schedule for Formwork Items				
4.3.1.1	8.2.1	(a) Rough (covered)	m²		100	
4.3.1.2	8.2.2	(b) Smooth (exposed)	m²		100	
4.3.2	8.3	Schedule for Reinforcement Items				
	8.3.2	High-tensile welded mesh				
4.3.2.1		(a) Ref. 195	m²		100	
4.3.2.2		(b) Ref. 245	m²		100	
4.3.3	8.4	Schedule for Concrete Items				
4.3.3.1	8.4.2	Blinding Layer in 15MPa/19 Concrete (30mm nominal thickness)	m²		100	
CARRIED FORWARD:						

SECTION 4: ABLUTION FACILITIES						
SCHEDULE OF RATES					THIS SECTION IS FOR EVALUATION PURPOSES ONLY	
ITEM NO	PAYMENT REFERS	DESCRIPTION	UNIT	RATE	ESTIMATED QUANTITY	AMOUNT
BROUGHT FORWARD:						
	8.4.3	Strength concrete				
4.3.3.2		(a) 20MPa/19 (Apron to ablutions)	m^3		10	
4.3.3.3		(b) 25MPa/19 (Floor Slab)	m^3		10	
	8.4.4	Unformed surface finishes				
4.3.3.4		(a) Wood-floated finish (Apron Slab)	m^2		100	
	8.5	Joints				
4.3.3.5		(a) Soft Joint	m		1 000	
4.4	SANS 1200 GE	**PRECAST CONCRETE (STUCTURAL)** as specified in SANS 1200 GE and in the project specification				
4.4.1	8.2.1	Supply and Install Structural Precast Units				
		(a) Wash Hand Basin				
4.4.1		(i) Precast concrete single wash trough (SABS approved) complete with wall mounting connections	No		100	
4.5		**DELIVERY OF CONTAINER ABLUTIONS**				
4.5.1		Delivery of Container Type Ablution from Collection Point to Site				
4.5.1.1		(a) radius distance <10km from collection point	No		10	
4.5.1.2		(b) 10km < radius distance > 20km from collection point	No		10	
4.5.1.3		(c) 20km < radius distance > 30km from collection point	No		10	
4.5.1.4		(d) 30km < radius distance from collection point	No		10	
4.5.2		Delivery of Container Type Ablution to Previous Site (including safe disconnection of water and sewer connections) to New Site/ Depot				
4.5.2.1		(a) radius distance < 10km from previous site	No		10	
4.5.2.2		(b) 10km < radius distance > 20km from previous site	No		10	
4.5.2.3		(c) 20km < radius distance > 30km from previous site	No		10	
4.5.2.4		(d) 30km < radius distance from previous site	No		10	
4.6		**PRE-CAST PANEL TOILETS COMPLETE WITH PEDESTAL AND CISTERN** as specified by Agrement South Africa - Performance Criteria (Structural Strength and Stability), complete with Agrement South Africa, and SABS Approved (for raw material) low/ pour flush pedestal and cistern, and high-density plastic door.				
4.6.1	PSA 8.19	Standard Pre-cast Panel Toilets				
4.6.1.1		(a) Supply and erection of pre-cast panel toilet, complete with low/ pour flush pedestal and cistern (1 - 100 units)	Unit		1	
4.6.1.2		(b) Supply and erection of pre-cast panel toilet, complete with low/ pour flush pedestal and cistern (101 - 500 units)	Unit		1	
4.6.1.3		(c) Supply and erection of pre-cast panel toilet, complete with low/ pour flush pedestal and cistern (501 - 1 000 units)	Unit		1	
CARRIED FORWARD:						

SECTION 4: ABLUTION FACILITIES						
SCHEDULE OF RATES					THIS SECTION IS FOR EVALUATION PURPOSES ONLY	
ITEM NO	PAYMENT REFERS	DESCRIPTION	UNIT	RATE	ESTIMATED QUANTITY	AMOUNT
BROUGHT FORWARD:						
4.6.2	PSA 8.20	Pre-cast Panel Toilets for Persons with Disabilities as specified by SANS 10400-S:2011.				
4.6.2.1		(a) Supply and erection of pre-cast toilet, complete with low/ pour flush pedestal and cistern, dog-leg and cistern grab bar (min. 604 x 604 x Ø32mm, min. 750 x Ø32mm, respectively)	Unit		1	
4.7		**PRE-CAST PANEL TOILET** as specified and certified by Agrement South Africa - Performance Criteria (Structural Strength and Stability), complete with high-density plastic door, applicable joint connections, and roofing				
4.7.1		Standard Pre-cast Panels				
4.7.1.1		(a) Supply and erection of pre-cast panels (1 - 100 units)	Unit		1	
4.7.1.2		(b) Supply and erection of pre-cast panels (101 - 500 units)	Unit		1	
4.7.1.3		(c) Supply and erection of pre-cast panels (501 - 1000 units)	Unit		1	
4.7.2		Pre-cast Panel Toilets for Persons with Disabilities as specified by SANS 10400-S:2011.				
4.7.2.1		(a) Supply and erection of pre-cast panels, complete with dog-leg and cistern grab bar (min. 604 x 604 x Ø32mm, min. 750 x Ø32mm, respectively)	Unit		1	
TOTAL CARRIED FORWARD TO SUMMARY:						

SECTION 5: WATER RETICULATION AND CONNECTIONS						
SCHEDULE OF RATES					THIS SECTION IS FOR EVALUATION PURPOSES ONLY	
ITEM NO	PAYMENT REFERS	DESCRIPTION	UNIT	RATE	ESTIMATED QUANTITY	AMOUNT
5		**SECTION 5: WATER RETICULATION AND CONNECTIONS**				
5.1	SANS 1200 C	**SITE CLEARANCE** as specified in SANS 1200 C and in the Scope of Work				
5.1.1	PSC 8.2.1	Clear and grub 2m wide strip (where ordered)	m		1 000	
5.1.2	PSC 8.2.5	Take down existing fences	m		1 000	
5.1.3	PSC 8.2.11	Remove and dispose of existing kerbing and concrete channelling	m		1 000	
5.1.4	PSC 8.2.12	Saw-cut asphalt surfacing	m		1 000	
5.1.5	PSC 8.2.13	Remove and dispose of asphalt surfacing	m²		100	
5.1.6	PSC 8.2.14	Saw-cut concrete surfacing	m		1 000	
5.2	SANS 1200 DB	**EARTHWORKS (PIPE TRENCHES)** as specified in SANS 1200 DB and in the Scope of Work				
5.2.1	8.3.2	Excavation				
	PSDB 8.3.2 (a)	(a) Excavate in all materials for trenches, backfill, compact and dispose of surplus material				
		(i) Trenches of width 300mm for water supply & connections				
5.2.1.1		- Depth up to 1,0m	m		1 000	
5.2.1.2		- Depth 1,0m up to 1,5m	m		1 000	
5.2.1.3	PSDB 8.3.2 (b)	(b) Extra over items 5.2.1.1 and 5.2.1.2 for hard rock excavation	m³		10	
5.2.1.4	8.3.2 (c)	(c) Excavate and dispose of unsuitable material from trench bottom	m³		10	
5.2.2		Excavation ancillaries				
	PSDB 8.3.3.1	*Make up deficiency in backfill material*				
5.2.2.1		(a) From other necessary excavations on site	m³		10	
		(b) By importation from commercial or off-site sources selected by the Contractor				
5.2.2.2		(i) Subbase quality material complying with subclause 5.2.1 of SANS 1200 ME.	m³		10	
5.2.2.3		(ii) Trench fill (using cellular lightweight concrete)	m³		10	
5.2.3	PSDB 8.3.3.3	Compaction in road reserves (to 95% of modified AASHTO maximum density)	m³		10	
5.2.4	8.3.6	Finishing				
	8.3.6.1	*Reinstate road surfaces complete with all courses*				
5.2.4.1	PSDB 8.3.6.1	(a) Gravel on shoulders and driveways	m²		100	
5.2.4.2		(b) Hot asphalt type IVA (min thickness 40mm)	m²		100	
5.2.4.3		(c) Concrete paving (25/19 MPa) - 100mm thick	m²		100	
CARRIED FORWARD:						

SECTION 5: WATER RETICULATION AND CONNECTIONS						
SCHEDULE OF RATES					THIS SECTION IS FOR EVALUATION PURPOSES ONLY	
ITEM NO	PAYMENT REFERS	DESCRIPTION	UNIT	RATE	ESTIMATED QUANTITY	AMOUNT
BROUGHT FORWARD:						
5.3	SANS 1200 LB	**BEDDING (PIPES)** as specified in SANS 1200 LB and in the Scope of Work				
5.3.1	8.2.1	Provision of bedding for trench excavation				
5.3.1.1		(a) Selected granular material	m^3		10	
5.3.2	8.2.2	Supply only of bedding by importation				
	PSLB 8.2.2.3	From commercial sources				
5.3.2.1		(a) Selected granular material	m^3		10	
5.3.2.2		(b) 6.7mm concrete stone to SANS 1083	m^3		10	
5.4	SANS 1200 LF	**ERF CONNECTIONS** as specified in SANS 1200 LF and in the Scope of Work				
5.4.1	PSLF 8.2.1	Provide erf connections complete				
		(a) Single erf connections off existing water reticulation				
		(i) 20mm dia. short connection of approximately 1m in length complete with all fittings and specials off:				
5.4.1.1		- 200mm dia. FC pipe	No		100	
5.4.1.2		- 150mm dia. FC pipe	No		100	
5.4.1.3		- 75mm dia. FC pipe	No		100	
5.4.1.4		- 50mm dia. FC pipe	No		100	
5.4.1.5		- 200mm dia. PVC pipe	No		100	
5.4.1.6		- 160mm dia. PVC pipe	No		100	
5.4.1.7		- 110mm dia. PVC pipe	No		100	
5.4.1.8		- 90mm dia. PVC pipe	No		100	
5.4.1.9		- 75mm dia. PVC pipe	No		100	
5.4.1.10		- 63mm dia. PVC pipe	No		100	
5.4.1.11		- 63mm dia. HDPE pipe	No		100	
5.4.1.12		- 50mm dia. HDPE pipe	No		100	
5.4.1.13	PSLF 8.2.9	(b) Extra over item 5.4.1.1 to 5.4.1.12 for additional piping	m		1 000	
5.4.2	PSLF 8.2.4	Supply and install domestic water meter	No		100	
5.4.3	PSLF 8.2.8	Markers	No		100	
TOTAL CARRIED FORWARD TO SUMMARY:						

SECTION 6: SEWER DRAINAGE AND CONNECTIONS						
SCHEDULE OF RATES					THIS SECTION IS FOR EVALUATION PURPOSES ONLY	
ITEM NO	PAYMENT REFERS	DESCRIPTION	UNIT	RATE	ESTIMATED QUANTITY	AMOUNT
6		**SECTION 6: SEWER DRAINAGE AND CONNECTIONS**				
6.1	SANS 1200 C	**SITE CLEARANCE** as specified in SANS 1200 C and in the Scope of Work				
6.1.1	PSC 8.2.1	Clear and grub 2m wide strip (where ordered)	m		1 000	
6.1.2	PSC 8.2.5	Take down existing fences	m		1 000	
6.1.3	PSC 8.2.11	Remove and dispose of existing kerbing and concrete channelling	m		1 000	
6.1.4	PSC 8.2.12	Saw-cut asphalt surfacing	m		1 000	
6.1.5	PSC 8.2.13	Remove and dispose of asphalt surfacing	m²		100	
6.1.6	PSC 8.2.14	Saw-cut concrete surfacing	m		1 000	
6.2	SANS 1200 DB	**EARTHWORKS (PIPE TRENCHES)** as specified in SANS 1200 DB and in the Scope of Work				
6.2.1	8.3.2	Excavation				
	PSDB 8.3.2(a)	(a) Excavate in all materials for trenches, backfill, compact and dispose of surplus material				
		(i) Trenches of 400mm width for 110mm NB sewer drains				
6.2.1.1		- Depth up to 1,0m	m		1 000	
		(ii) Trenches of 600mm width for 110mm NB sewer drains				
6.2.1.2		- Depth exceeding 1,0m up to 1,5m	m		1 000	
6.2.1.3		- Depth exceeding 1,5m up to 2,0m	m		1 000	
		(iii) Trenches of 760mm width for 160mm NB sewer mains				
6.2.1.4		- Depth up to 1,0m	m		1 000	
6.2.1.5		- Depth exceeding 1,0m up to 1,5m	m		1 000	
6.2.1.6		- Depth exceeding 1,5m up to 2,0m	m		1 000	
6.2.1.7		- Depth exceeding 2,0m up to 2,5m	m		1 000	
6.2.1.8		- Depth exceeding 2,5m up to 3,0m	m		1 000	
6.2.1.9	PSDB 8.3.2 (b)	(b) Extra-over items 6.2.1.1 through to 6.2.1.8 for hard rock excavation	m³		10	
6.2.1.10	8.3.2 (c)	(c) Excavate and dispose of unsuitable material from trench bottom	m³		10	
6.2.2		Excavation ancillaries				
	PSDB 8.3.3.1	*Make up deficiency in backfill material*				
6.2.2.1		(a) From other necessary excavations on site	m³		10	
		(b) By importation from commercial or off-site sources selected by the Contractor				
6.2.2.2		(i) Selected material complying with subclause 3.4.2 of SANS 1200 ME	m³		10	
6.2.2.3		(ii) Trench fill (using cellular lightweight concrete)	m³		10	
6.2.3	PSDB 8.3.3.3	Compaction in road reserves (to 95% of modified AASHTO maximum density)	m³		10	
6.2.4	8.3.6	Finishing				
CARRIED FORWARD:						

SECTION 6: SEWER DRAINAGE AND CONNECTIONS						
SCHEDULE OF RATES					THIS SECTION IS FOR EVALUATION PURPOSES ONLY	
ITEM NO	PAYMENT REFERS	DESCRIPTION	UNIT	RATE	ESTIMATED QUANTITY	AMOUNT
BROUGHT FORWARD:						
6.2.5	8.3.6.1	Reinstate road surfaces complete with all courses				
6.2.5.1	PSDB 8.3.6.1	(a) Gravel on shoulders and driveways	m²		100	
6.2.5.2		(b) Hot Asphalt Type IV A (minimum thickness 40 mm)	m²		100	
6.2.5.3		(c) Concrete paving (Class 25/19) - 150mm thick	m²		100	
6.3	SANS 1200 LB	**BEDDING (PIPES)** as specified in SANS 1200 LB and in the Scope of Work				
6.3.1	8.2.1	Provision of bedding from trench excavation				
6.3.1.1		(a) Selected granular material	m³		10	
6.3.1.2		(b) Selected fill material	m³		10	
6.3.2	8.2.2	Supply only of bedding by importation				
	PSLB 8.2.2.3	From commercial sources				
6.3.2.1		(a) Selected granular material	m³		10	
6.3.2.2		(b) 6.7 mm concrete stone to SANS 1083	m³		10	
6.4	SANS 1200 LD	**SEWERS** as specified in SANS 1200 LD and in the Scope of Work				
6.4.1	8.2.1	Supply, lay, joint, bed and test pipeline				
	PSLD 8.2.1	(a) Structured wall PVCu sewers of outside diameters stated (400kPa, Type 1, SANS 1601, Maincor, Ultracor or similar approved), bedded as detailed on the drawings				
6.4.1.1		(i) 110mm dia	m		1 000	
6.4.1.2		(ii) 160mm dia	m		1 000	
6.4.2	8.2.3	Manholes				
	PSLD 8.2.3	(a) Precast concrete manholes complete including medium duty concrete roof slab and type 4 cover and frame for pipes up to and including 160mm dia				
6.4.2.1		(i) Depth up to 1,0m	No		100	
6.4.2.2		(ii) Depth exceeding 1,0m up to 1,5m	No		100	
6.4.2.3		(iii) Depth exceeding 1,5m up to 2,0m	No		100	
6.4.2.4		(iv) Depth exceeding 2,0m up to 2,5m	No		100	
6.4.2.5		(v) Depth exceeding 2,5m up to 3,0m	No		100	
6.4.2.6		(b) Extra-over items 6.4.2.1 through to 6.4.2.5 for type 2A cover and frame for manholes in road areas	No		10	
6.4.3	8.2.4	Extra-over items 6.4.2.1 through to 6.4.2.5 for the construction of ramps and backdrops as detailed complete				
		(a) Ramps for pipes of diameters stated				
6.4.3.1		(i) 160mm	No		10	
		(b) Backdrops				
		(i) 160mm				
6.4.3.2		- up to 1,5m	No		10	
6.4.3.3		- Exceeding 1,5m up to 2,0m	No		10	
6.4.3.4		- Exceeding 2,0m up to 2,5m	No		10	
CARRIED FORWARD:						

SECTION 6: SEWER DRAINAGE AND CONNECTIONS						
SCHEDULE OF RATES					THIS SECTION IS FOR EVALUATION PURPOSES ONLY	
ITEM NO	PAYMENT REFERS	DESCRIPTION	UNIT	RATE	ESTIMATED QUANTITY	AMOUNT
BROUGHT FORWARD :						
6.4.4	PSLD 8.2.5	Extra-over 6.4.2.1 through to 6.4.2.5 for the construction of additional channelling and the building in of short pipe specials at branch manholes, manholes at bends and erf connection manholes				
		(a) For branched channels				
6.4.4.1		(i) 150mm dia.	No		10	
		(b) For channels at bends				
6.4.4.2		(i) 150mm dia.	No		10	
6.4.4.3		(c) Terminal erf connections (110mm dia) into manhole	No		10	
6.4.4.4		(d) Erf connections (110mm dia) into manhole	No		10	
6.4.5	PSLD 8.2.6 (a)	Erf connections (complete with fittings as per drawing)				
		(a) Short length of 1.3m (On new sewer reticulation)				
6.4.5.1		(i) Type 1	No		10	
6.4.5.2		(ii) Type 2	No		10	
6.4.5.3		(iii) Type 3	No		10	
6.4.5.4		(iv) Type 4	No		10	
6.4.5.5		(v) Type 5	No		10	
		(b) Short length of 1.3m (On existing sewer reticulation)				
6.4.5.6		(i) Type 1	No		10	
6.4.5.7		(ii) Type 2	No		10	
6.4.5.8		(iii) Type 3	No		10	
6.4.5.9		(iv) Type 4	No		10	
6.4.5.10		(v) Type 5	No		10	
6.4.6	PSLD 8.2.6 (b)	Extra-over items 6.4.5.1 through 6.4.5.10 for additional length of pipe	m		1 000	
6.4.7	PSLD 8.2.7	Encasing of pipes in concrete	m^3		10	
6.4.8	PSLD 8.2.11	Connection into existing sewer	Sum		10	
6.4.9	PSLD 8.2.13	Testing of watertightness of manholes	No		10	
6.4.10	PSLD 8.2.14	Supply and construct rodding eye complete as detailed on the drawings, including concrete surround (Depth up to 1,5m deep)	No		100	
TOTAL CARRIED FORWARD TO SUMMARY:						

SCHEDULE OF RATES					THIS SECTION IS FOR EVALUATION PURPOSES ONLY	
ITEM NO	PAYMENT REFERS	DESCRIPTION	UNIT	RATE	ESTIMATED QUANTITY	AMOUNT
BROUGHT FORWARD:						
7.2.15		(xi) 110mm Vent Horn Bend Access Heel 87,5 degrees (Marley SB400 or similar)	No		100	
7.2.16		(xii) 50mm Bend Plain 95 degrees (Marley WBE50 or similar)	No		100	
7.2.17		(xiii) Eccentric Reducer 110 x 50mm (Marley SE404 or similar)	No		100	
7.2.18		(xiv) 40mm PVC U-Trap / Sink Trap (DPE DB3 or similar)	No		100	
7.2.19		(xv) 40mm Bend Access Heel 87,5 degrees (Marley WDE41 or similar)	No		100	
7.2.20		(xvi) 40mm PVC holderbats (Marley WHB4 or similar)	No		100	
7.2.21		(xvii) PVC SV reducer 50 x 40mm (Marley WR5 or similar)	No		100	
7.2.22		(xviii) 40mm PVC SV Junction Plain 87,5 degrees (Marley WS4 or similar)	No		100	
7.2.23		(xix) 110mm Junction Single Access Heel 87,5 degrees (Marley SY42 or similar)	No		100	
		(c) Soil & vent pipe and fittings				
7.2.24		(i) 40mm Pipe (WPE213/1 or similar)	m		1 000	
7.2.25		(ii) 40mm Perforated Pipe (WPE213/1 or similar)	m		1 000	
7.2.26		(iii) 40mm PVC urinal waste cap with CP grating	No		100	
7.2.27		(iv) 40mm solvent stop end	No		100	
7.2.28		(v) 40mm 90 degree bend (W40B, NS001 or similar)	No		100	
7.2.29		(vi) 40mm x 150mm threaded HDPE pipe	No		100	
7.2.30		(vii) 40mm PVC End cap drilled and tapped to 15mm (CA2 or similar)	No		100	
7.2.31		(viii) 40mm holderbats	No		100	
7.2.32		(ix) 40mm PVC threaded female-female straight coupler (MA2 or similar)	No		100	
7.2.33		(x) 40mm PVC back nut (NU4 or similar)	No		100	
7.2.34		(xi) 40mm rubber gasket	No		100	
		(d) Taps				
7.2.35		(i) Bib tap "KM2.202-15" Cobra or similar approved	No		100	
		(e) Cistern				
7.2.36		(i) Low volume cistern (SABS and Agrement South Africa approved)	No		100	
		(f) Pedestal				
7.2.37		(i) Low/ Pour flush (2l or less) pedestal (SABS and Agrement South Africa approved)	No		100	
		(g) Child-seat Lid				
7.2.38		(i) Child-seat lid as a single unit for the normal adult sized seat with child-seat incorporated into the lid	No		100	
7.3		Concrete (20MPa concrete):				
7.3.1		(a) Cast concrete (20 MPa) gulley surround for 190 x 110mm grating (grating elsewhere)	No		100	
7.3.2		(b) Cast concrete (20 MPa) around rodding Eye (450 x 450 x 150mm)	No		100	
TOTAL CARRIED FORWARD TO SUMMARY :						

SECTION 8: CONSERVANCY TANKS						
SCHEDULE OF RATES					THIS SECTION IS FOR EVALUATION PURPOSES ONLY	
ITEM NO	PAYMENT REFERS	DESCRIPTION	UNIT	RATE	ESTIMATED QUANTITY	AMOUNT
8		**SECTION 8: CONSERVANCY TANKS** Rates to include supervision, administration, health and safety, and profit.				
8.1	SANS 1200 C	**SITE CLEARANCE** as specified in SANS 1200 C and in the Scope of Work				
8.1.1		Clear and Grub				
8.1.1.1	8.2.1	(a) Clear site as directed by the Engineer, including spoiling material to a municipal approved tip site	m²		100	
8.1.1.2	8.2.10	(b) Remove topsoil to nominal depth of 150mm and stockpile	m³		10	
8.2	SANS 1200 A	**TEMPORARY WORKS** Rates to include for each and every operation required.				
8.2.1	8.8.4 (c)	Hand excavation in soft material where ordered for locating and exposing existing services	m³		10	
8.3	SANS 1200 DB	**EXCAVATIONS & EARTHWORKS**				
8.3.1		Excavate for conservancy or urine diversion - biodigestion tank size	m³		10	
8.3.2		Extra-over item 8.3.1 for hard rock	m³		10	
8.3.3		Extra-over item 8.3.1 for keeping all excavations from all types of water ingress by any suitable method	Sum		1	
8.3.4		Excavate in all materials for trenches, backfill, compact and dispose of surplus/ unsuitable material and make tidy for:				
8.3.4.1		(a) Trenches for uPVC pipes of diameter up to 150mm and for depths of up to 0.5m	m		1 000	
8.4		**SUB-STRUCTURES**				
8.4.1		Conservancy Tank as specified in SANS 10400-P:2010 (or SABS Approved)				
		(a) Supply and installation of a conservancy tank including any necessary fittings and backfilling required with Engineer approved material				
8.4.1.1		(i) Up to 2 500l	Unit		1	
8.4.1.2		(ii) 2 500l < Size < 5 000l	Unit		1	
8.4.1.3		(iii) 5 000l < Size < 10 000l	Unit		1	
8.4.2		Urine Diversion - Biodigestion Tank Type I (Calcimite eco-mite or similar)				
		(a) Supply and installation of urine diversion - biodigestion tank unit with polyethylene base complete with toilet pedestal and urine diversion unit, including a polyethylene drying plate, solar dome with hinge lid, vent pipe and wind extractor				
8.4.2.1		(i) Up to 500l	Unit		1	
8.4.2.2		(ii) 500l < Size < 2 000l	Unit		1	
8.4.2.3		(iii) 2 000l < Size < 2 500l	Unit		1	
CARRIED FORWARD :						

SECTION 8: CONSERVANCY TANKS						
SCHEDULE OF RATES					THIS SECTION IS FOR EVALUATION PURPOSES ONLY	
ITEM NO	PAYMENT REFERS	DESCRIPTION	UNIT	RATE	ESTIMATED QUANTITY	AMOUNT
BROUGHT FORWARD:						
8.4.3		Urine Diversion - Biodigestion Tank Type II (Enviro Loo or similar) (SABS Approved)				
		(a) Supply and installation of biodigestion tank unit with low-density polyethylene base complete with toilet pedestal, including a drying plate, drying bag and vent extraction unit				
8.4.3.1		(i) For 1 - 10 users per day	Unit		1	
8.4.3.2		(ii) For 1 - 20 users per day	Unit		1	
8.4.3.3		(iii) For 1 - 30 users per day	Unit		1	
8.4.3.4		(iv) For 1 - 40 users per day	Unit		1	
TOTAL CARRIED FORWARD TO SUMMARY :						

SECTION 9: SEPTIC TANK						
SCHEDULE OF RATES					THIS SECTION IS FOR EVALUATION PURPOSES ONLY	
ITEM NO	PAYMENT REFERS	DESCRIPTION	UNIT	RATE	ESTIMATED QUANTITY	AMOUNT
9		**SECTION 9: SEPTIC TANK** Rates to include supervision, administration, health and safety, and profit.				
9.1	SANS 1200 C	**SITE CLEARANCE** as specified in SANS 1200 C and in the Scope of Work				
9.1.1		Clear and Grub				
9.1.1.1	8.2.1	(a) Clear site as directed by the Engineer, including spoiling material to a municipal approved tip site	m²		100	
9.1.1.2	8.2.10	(b) Remove topsoil to nominal depth of 150mm and stockpile	m³		10	
9.2	SANS 1200 A	**TEMPORARY WORKS** Rates to include for each and every operation required.				
9.2.1	8.8.4 (c)	Hand excavation in soft material where ordered for locating and exposing existing services	m³		10	
9.3	SANS 1200 DB	**EXCAVATIONS & EARTHWORKS**				
9.3.1		Excavate for septic tank pit (max. 3150 x 3150mm) commencing from reduced levels and not exceeding a depth greater than 1,5m	m		10	
9.3.2		Excavate for septic tank pit (max. 3150 x 3150mm) commencing from 1,5m depth and not exceeding a depth greater than 3m	m		10	
9.3.3		Excavate for septic tank pit (max. 3150 x 3150mm) commencing from 3m depth and not exceeding a depth greater than 4,5m	m		10	
9.3.4		Extra-over items 9.3.1 through to 9.3.3 for hard rock	m³		10	
9.3.5		Extra-over items 9.3.1 through to 9.3.3 for keeping all excavations from all types of water ingress by any suitable method	Sum		1	
9.3.6		Excavate in all materials for trenches, backfill, compact and dispose of surplus/ unsuitable material and make tidy for:				
9.3.6.1		(a) Trenches for uPVC pipes of diameter up to 150mm and for depths of up to 0.5m	m		1 000	
9.4		**SUB-STRUCTURE (CONCRETE AND BRICK WORKS)** as specified in SANS 10400-P:2010 (or SABS Approved)				
9.4.1		Construction of leach-pit structure (French drain) [max. 3150 x 3150mm] using M6 concrete blocks complete with in-situ preparation, reinforced concrete floor and cover slab, wall brickwork, min. concrete cover for durability and smart lock manhole cover, including all fittings, inlet and outlet pipes	Unit		1	
TOTAL CARRIED FORWARD TO SUMMARY:						

SECTION 10: FENCING AND SECURITY						
SCHEDULE OF RATES					THIS SECTION IS FOR EVALUATION PURPOSES ONLY	
ITEM NO	PAYMENT REFERS	DESCRIPTION	UNIT	RATE	ESTIMATED QUANTITY	AMOUNT
10		**SECTION 10: FENCING AND SECURITY**				
10.1		**EARTHWORKS (HOLES FOR POSTS)**				
10.1.1		Excavation				
10.1.1.1	8.3.1	Excavate holes for corner/end or standard posts (500 x 500 x 400mm)	No		10	
10.2	SANS 1200 GA	**CONCRETE WORKS**				
10.2.1		Concrete to bases 15MPa/19	m^3		10	
10.2.2		Supply and install 152 x 152 x 23kg/m steel H section 3000mm long, cast 600mm into concrete base (measured elsewhere), including galvanising to SANS 0763.	kg		100	
10.2.3		Supply and install in previously erected H section steel columns, 50MPa precast concrete wall panel 3000 x 1200 x 120mm thick including grouting	m^2		100	
10.3		**FENCING**				
10.3.1		Supply and install 1,8m high-weld mesh fence (50 x 50 x 2,5mm)	m		1 000	
10.3.2		Dismantle and reinstall 1,8m high existing fence line to new position	m		1 000	
10.3.3		Extra-over items 10.3.1 and 10.3.2	m		1 000	
10.3.4		Supply and install corner posts (150mm OD)	No		10	
10.3.5		Supply and install straining posts (150mm OD)	No		10	
10.3.6		Supply and install 1.8m high security fencing. Posts of 100 x 54 x 2mm H section, planted min. 600mm deep, galvanised to SANS 0763 and coated min. 100 micron fusion bond PVC - inside and outside, complete with top cap. Fence panels with inner aperture size 12,7 x 76,2mm galvanised SANS 0763 and min. 100 micron fusion bond PVC coating.	m		1 000	
10.3.7	SANS 457	Supply and install 150mm dia. post and rail (90mm dia.) timber fencing (or ranch fencing) all poles to be tantalised, including excavation - where directed by Engineer.	m		1 000	
10.4		**REMOVAL OF FENCING**				
10.4.1		Salvage of existing fencing for re-use				
10.4.1.1		(a) Take down existing 1,8m diamond mesh fence including roll up of mesh, coiling of wire, loading, carting and off loading at NMBM depot	m		1 000	
10.4.1.2		(b) Excavate for and recover 2,4m corner and intermediate fence posts including removal of anchor concrete, closure of post hole, sorting, loading, carting and off-loading at NMBM depot	No		10	
10.4.1.3		(c) Dismantle 1,8m high by 3,0m opening two leaf diamond mesh gate complete including loading, carting, and off-loading at NMBM depot	No		10	
CARRIED FORWARD :						

SECTION 10: FENCING AND SECURITY						
SCHEDULE OF RATES					THIS SECTION IS FOR EVALUATION PURPOSES ONLY	
ITEM NO	PAYMENT REFERS	DESCRIPTION	UNIT	RATE	ESTIMATED QUANTITY	AMOUNT
BROUGHT FORWARD:						
10.5		**MISCELLANEOUS ITEMS**				
10.5.1		Supply and installation of hardened steel hasp with shackle protector (BBH535 or similar), complete with standard discus padlock including five (5) high security keys (BBP170-F1 or similar)	No		10	
10.5.2		Stencil marking of pre-cast concrete toilets with pavecote based paint	No		10	
TOTAL CARRIED FORWARD TO SUMMARY :						

SECTION 11: GENERAL						
SCHEDULE OF RATES					THIS SECTION IS FOR EVALUATION PURPOSES ONLY	
ITEM NO	PAYMENT REFERS	DESCRIPTION	UNIT	RATE	ESTIMATED QUANTITY	AMOUNT
11		**SECTION 11: GENERAL**				
11.1	SANS 1200 C	**SITE CLEARANCE** as specified in SANS 1200 C and in the Scope of Work				
11.1.1	PSC 8.2.1	Clear and grub 2m wide strip (where ordered)	m		1 000	
11.1.2	PSC 8.2.5	Take down existing fences	m		1 000	
11.1.3	PSC 8.2.11	Remove and dispose of existing kerbing and concrete channelling	m		1 000	
11.1.4	PSC 8.2.12	Saw-cut asphalt surfacing	m		1 000	
11.1.5	PSC 8.2.13	Remove and dispose of asphalt surfacing	m²		100	
11.1.6	PSC 8.2.14	Saw-cut concrete surfacing	m		1 000	
11.2	SANS 1200 GA	**CONCRETE (SMALL WORKS)** as specified in SANS 1200 GA and in the Scope of Work				
11.2.1		For minor concrete works as directed on site				
	8.2	(a) Formwork				
11.2.1.1	8.2.1	(i) Rough (covered)	m²		100	
11.2.1.2	8.2.2	(ii) Smooth (exposed)	m²		100	
	8.3.2	(b) High-tensile welded mesh				
11.2.1.3		(i) Ref. 195	m²		100	
11.2.1.4		(ii) Ref. 245	m²		100	
11.2.1.5		(iii) Ref. 359	m²		100	
11.2.1.6		(iv) Ref. 617	m²		100	
	8.4	(c) Concrete				
	8.4.3	(i) Strength concrete				
11.2.1.7		- 15MPa/19	m³		10	
11.2.1.8		- 20MPa/19	m³		10	
	8.4.4	(d) Unformed surface finishes				
11.2.1.9		(i) Wood-floated finish	m²		100	
11.2.1.10		(ii) Steel-floated finish	m²		100	
11.3		**RELOCATION OF INFORMAL HOUSING** All building material to be secured with little to no damage - for reuse.				
11.3.1		Diss-assemble existing informal housing				
11.3.1.1		(a) Informal housing size < 15m²	No		1	
11.3.1.2		(b) 15m² < Informal housing size < 30m²	No		1	
11.3.1.3		(c) Informal housing size > 30m²	No		1	
11.3.2		Transportation from Relocation Site to Beneficiary Site				
11.3.2.1		(a) radius distance <10km from relocation site	No		10	
11.3.2.2		(b) 10km < radius distance > 20km from relocation site	No		10	
11.3.2.3		(c) 20km < radius distance > 30km from relocation site	No		10	
11.3.2.4		(d) 30km < radius distance from relocation site	No		10	
CARRIED FORWARD :						

SECTION 11: GENERAL						
SCHEDULE OF RATES					THIS SECTION IS FOR EVALUATION PURPOSES ONLY	
ITEM NO	PAYMENT REFERS	DESCRIPTION	UNIT	RATE	ESTIMATED QUANTITY	AMOUNT
BROUGHT FORWARD:						
11.3.3		Re-assemble existing informal housing Rates to also include sealants, fasteners, applicable connections and waterproofing.				
11.3.3.1		(a) Informal housing size < 15m²	No		1	
11.3.3.2		(b) 15m² < Informal housing size < 30m²	No		1	
11.3.3.3		(c) Informal housing size > 30m²	No		1	
TOTAL CARRIED FORWARD TO SUMMARY :						

C2.3 SUMMARY OF SCHEDULE OF RATES

CLUSTER 3

SECTION	DESCRIPTION	PRICE
1 – PART 1	PRELIMINARY AND GENERAL	R
1 – PART 2	DAYWORKS	R
2	HEALTH & SAFETY	R
3	EME – SUB-CONTRACTING WORK	R
4	ABLUTION FACILITIES	R
5	WATER RETICULATION AND CONNECTIONS	R
6	SEWER DRAINAGE AND CONNECTIONS	R
7	PLUMBING AND SANITARYWARE	R
8	CONSERVANCY TANKS	R
9	SEPTIC TANKS	R
10	FENCING AND SECURITY	R
11	GENERAL	R

TOTAL OF PRICED ITEMS	R
NET CONTRACT PRICE	R
VALUE ADDED TAX (15% of Net Contract Price)	R
CONTRACT SUM (CARRIED TO C1.1. FORM OF OFFER)	**R**

Notes:

1. The Contract Price is subject to Contract Price Adjustment in terms of Clause 6.8.2 of the Conditions of Contract.
2. The Contract Sum is a Fictitious Value that shall be used for **Evaluation Purposes only**.
3. The undersigned, who warrants that he / she is duly authorised to do so on behalf of the enterprise, confirms that the contents of this schedule are within my personal knowledge and are to the best of my belief both true and correct.

Signed ..... Date .....

Name ..... Position .....

Tenderer .....

SHEDULE OF RATES: CLUSTER 4

SECTION 1 - PART 1: PRELIMINARY AND GENERAL						
SCHEDULE OF RATES					THIS SECTION IS FOR EVALUATION PURPOSES ONLY	
ITEM NO	PAYMENT REFERS	DESCRIPTION	UNIT	RATE	ESTIMATED QUANTITY	AMOUNT
1		**SECTION 1 - PART 1: PRELIMINARY AND GENERAL**				
1.1		**PRELIMINARY AND GENERAL: CONTRACTOR'S ESTABLISHMENT ON SITE & GENERAL** The contractor's general obligations.				
1.1.1	PSA 8.3.1(a)	Value-related obligations for works assignments ranging between:				
1.1.1.1		(a) R0 - R2 000 000	%		1 000 000.00	
1.1.1.2		(b) R2 000 001 - R4 000 000	%		3 000 000.00	
1.1.1.3		(c) R4 000 001 - R6 000 000	%		5 000 000.00	
1.1.1.4		(d) Greater than R6 000 001	%		7 000 000.00	
1.1.2	PSA 8.3.1(b)	Time-related obligations for works assignments ranging between:				
1.1.2.1		(a) R0 - R2 000 000	Month		36	
1.1.2.2		(b) R2 000 001 - R4 000 000	Month		36	
1.1.2.3		(c) R4 000 001 - R6 000 000	Month		36	
1.1.2.4		(d) Greater than R6 000 001	Month		36	
TOTAL CARRIED FORWARD TO SUMMARY :						

SECTION 1 - PART 2: DAYWORKS						
SCHEDULE OF RATES					THIS SECTION IS FOR EVALUATION PURPOSES ONLY	
ITEM NO	PAYMENT REFERS	DESCRIPTION	UNIT	RATE	ESTIMATED QUANTITY	AMOUNT
1		**SECTION 1 - PART 2: DAYWORKS**				
1.3		**DAYWORKS (PROVISIONAL)**				
1.3.1		Personnel during normal working hours				
1.3.1.1		(a) Unskilled labour	hr		1 000	
1.3.1.2		(b) Semi-skilled labour	hr		1 000	
1.3.1.3		(c) Skilled labour	hr		1 000	
1.3.1.4		(d) Ganger	hr		1 000	
1.3.1.5		(e) Flagman	hr		1 000	
1.3.2		Plant				
1.3.2.1		(a) Dropside truck (2 to 12-ton capacity)	hr		100	
1.3.2.2		(b) Tipper Trucks (3 to 5-ton capacity)	hr		100	
1.3.2.3		(c) TLB (digger loader)	hr		100	
1.3.2.4		(d) Compactor (Bomag 90 or similar)	hr		100	
1.3.2.5		(e) Water truck (10 000 litres)	hr		100	
1.3.2.6		(f) Suitable truck for transporting labourers (min. of 30 people)	hr		100	
1.3.2.7		(g) Safety vehicle for pre-marking purposes	hr		100	
1.3.2.8		(h) Dewatering pump including generators and accessories	hr		100	
1.3.2.9		(i) Light delivery vehicle (LDV)	hr		100	
1.3.2.10		(j) Centre-mount crane (more than 8-ton)	hr		100	
1.3.2.11		(k) Other Specify	hr		100	
1.3.3		Materials				
1.3.3.1		(a) Procurement of materials	Prov. Sum	500 000	1	500 000.00
1.3.3.2		(b) Contractor's handling costs, profit and all other charges in respect of sub-item 1.3.3.1	%		500 000	
1.3.4		Establishment (maximum 150km per trip)				
1.3.4.1		(a) Dropside truck (2 to 12-ton capacity)	km		100	
1.3.4.2		(b) Tipper Trucks (3 to 5-ton capacity)	km		100	
1.3.4.3		(c) TLB (digger loader)	km		100	
1.3.4.4		(d) Water truck (10 000 litres)	km		100	
1.3.4.5		(e) Suitable truck for transporting labourers (min. of 30 people)	km		100	
1.3.4.6		(f) Light delivery vehicle (LDV)	km		100	
1.3.4.7		(g) Centre-mount crane (more than 8-ton)	km		100	
1.3.5	PSA 8.4.6	Compensation in terms of clause 5.12.2.4 of the Conditions of Contract for delays incurred				
1.3.5.1		(a) Plant	day		100	
1.3.5.2		(b) Labour	day		100	
1.3.5.3		(c) Supervision	day		100	
1.3.5.4		(d) Other services, facilities, etc. not covered by items 1.3.5.1 to 1.3.5.3	day		100	
1.4	SANS 1200 A	**TEMPORARY WORKS**				
1.4.1		Existing services				
1.4.1.1	8.8.4 (c)	(a) Excavate by hand in soft material to expose existing services	m^3		10	
1.4.1.2		(b) Lowering/ relocating/ repairing existing services	Prov. Sum	50 000	1	50 000.00
CARRIED FORWARD:						

SECTION 1 - PART 2: DAYWORKS						
SCHEDULE OF RATES					THIS SECTION IS FOR EVALUATION PURPOSES ONLY	
ITEM NO	PAYMENT REFERS	DESCRIPTION	UNIT	RATE	ESTIMATED QUANTITY	AMOUNT
BROUGHT FORWARD:						
1.4.2	8.8.5	Cost of survey in terms of Land Survey Act				
1.4.2.1		(a) Locate, record and protect erf boundary and survey pegs	Sum		1	
1.4.2.2		(b) Replace pegs recorded as missing at commencement of Contract as well as pegs removed in terms of PSA 5.1.1	No		100	
TOTAL CARRIED FORWARD TO SUMMARY :						

SECTION 2: HEALTH & SAFETY						
SCHEDULE OF RATES					THIS SECTION IS FOR EVALUATION PURPOSES ONLY	
ITEM NO	PAYMENT REFERS	DESCRIPTION	UNIT	RATE	ESTIMATED QUANTITY	AMOUNT
2		**SECTION 2: HEALTH & SAFETY**				
2.1		Provision for Personal Protective Equipment & Protective Clothing				
2.1.1		(a) Reflective vests	No		100	
2.1.2		(b) Reflective bibs	No		100	
2.1.3		(c) Hard hats	No		100	
2.1.4		(d) Protective foot wear	No		100	
2.1.5		(e) Earplugs	No		100	
2.1.6		(f) Dust masks	No		100	
2.1.7		(g) Workman Gloves	No		100	
2.2		Provision of full time Construction Health and Safety Officer	Month		36	
2.3		Costs of Medical Certificates and Medical Surveillance				
2.3.1		(a) Initial (baseline) medical examinations	No		100	
2.3.2		(b) Exit examinations	No		100	
2.4		Induction Training	No		100	
2.5		Environmental Monitoring Tests	No		100	
2.6		Noise Monitoring				
2.6.1		(a) Establishment of noise zones	No		10	
2.6.2		(b) Audiograms	No		10	
2.7		Provision of First Aid boxes	Sum		1	
2.8		Transportation of Workers	Month		12	
2.9		Submission of the Health and Safety File	Sum		1	
2.10	PSA 8.3.5	On-site Security Supervision				
2.10.1		(a) Provision of Security Services to ensure the safe working environment for all workers, materials and works on site during working hours	Prov. Sum	250 000	1	250 000.00
2.10.2		(b) Handling costs and charges for the Contractor on item 2.10.1	%		250 000	
TOTAL CARRIED FORWARD TO SUMMARY:						

SECTION 3: EME SUB-CONTRACTING WORK						
SCHEDULE OF RATES					THIS SECTION IS FOR EVALUATION PURPOSES ONLY	
ITEM NO	PAYMENT REFERS	DESCRIPTION	UNIT	RATE	ESTIMATED QUANTITY	AMOUNT
3		**SECTION 3: EME SUB-CONTRACTING WORK**				
3.1		EME Support Programme				
3.1.1		(a) Establishment and monitoring of EME Support Programme	Prov. Sum	100 000	1	100 000.00
3.1.2		(b) Overhead charges on Item 3.1.1	%		100 000	
3.2		EME Support Initiative: Management				
3.2.1	PSA 8.15	(a) EME Construction Manager remuneration	Prov. Sum	10 000	1	10 000.00
3.2.2		(b) Overhead charges on Item 3.2.1	%		10 000	
3.2.3	PSA 8.16	(c) Community Liaison Officer (CLO) remuneration	Prov. Sum	10 000	1	10 000.00
3.2.4		(d) Overhead charges on Item 3.2.3	%		10 000	
3.3		EME Support Initiative: Training				
3.3.1	PSA 8.18	(a) Training of EMEs	Prov. Sum	100 000	1	100 000.00
3.3.2		(b) Mark-up on Item 3.3.1	%		100 000	
TOTAL CARRIED FORWARD TO SUMMARY :						

SECTION 4: ABLUTION FACILITIES						
SCHEDULE OF RATES					THIS SECTION IS FOR EVALUATION PURPOSES ONLY	
ITEM NO	PAYMENT REFERS	DESCRIPTION	UNIT	RATE	ESTIMATED QUANTITY	AMOUNT
4		**SECTION 4: ABLUTION FACILITIES**				
4.1	SABS 1200 C	**SITE CLEARANCE** as specified in SABS 1200 C and in the project specification				
4.1.1	PSC 8.2.1	Clear and grub for toilet ablutions	m²		100	
4.2	SABS 1200 D	**EARTHWORKS** as specified in SABS 1200 D and in the project specification				
4.2.1	8.3.1	Site preparation				
4.2.1.1	8.3.1.2	Remove topsoil to nominal depth 150mm, stockpile and maintain	m³		10	
4.2.2	8.3.3	Restricted excavation				
	PSD 8.3.3	(a) Excavate for restricted foundations, footings, trenches, and landscaping in soft materials and use for backfill, berm or dispose, as ordered:				
4.2.2.1		(i) Embankment and landscaping compacted to 90% of max modified AASHTO density	m³		10	
4.2.2.2		(ii) Backfill compacted to 98% of modified AASHTO maximum density	m³		10	
4.2.2.3		(iii) Dispose	m³		10	
4.2.2.4		(b) Extra-over item 4.2.2.1 to 4.2.2.3 for hard rock excavation	m³		10	
4.2.3	PSDB 8.3.3.1	Make up deficiency in backfill				
		(a) By importation from commercial or "off site" sources selected by the contractor				
4.2.3.1		(i) Subbase quality material complying with subclause 3.2.2 of SABS 1200ME compacted to 98% of modified AASHTO maximum density	m³		10	
4.2.3.2	8.3.9	(b) Extra-over item 4.2.3.1 for backfill or for fill material against structures	m³		10	
4.2.4	PSD 8.3.10	Topsoiling (100mm thick)	m²		100	
4.2.5	8.3.11	Grassing (with sods of kweek)	m²		100	
4.3	SANS 1200 GA	**CONCRETE (SMALL WORKS)** as specified in SABS 1200 GA and in the project specification				
4.3.1	8.2	Schedule for Formwork Items				
4.3.1.1	8.2.1	(a) Rough (covered)	m²		100	
4.3.1.2	8.2.2	(b) Smooth (exposed)	m²		100	
4.3.2	8.3	Schedule for Reinforcement Items				
	8.3.2	High-tensile welded mesh				
4.3.2.1		(a) Ref. 195	m²		100	
4.3.2.2		(b) Ref. 245	m²		100	
4.3.3	8.4	Schedule for Concrete Items				
4.3.3.1	8.4.2	Blinding Layer in 15MPa/19 Concrete (30mm nominal thickness)	m²		100	
CARRIED FORWARD:						

SECTION 4: ABLUTION FACILITIES						
SCHEDULE OF RATES					THIS SECTION IS FOR EVALUATION PURPOSES ONLY	
ITEM NO	PAYMENT REFERS	DESCRIPTION	UNIT	RATE	ESTIMATED QUANTITY	AMOUNT
BROUGHT FORWARD:						
	8.4.3	Strength concrete				
4.3.3.2		(a) 20MPa/19 (Apron to ablutions)	m^3		10	
4.3.3.3		(b) 25MPa/19 (Floor Slab)	m^3		10	
	8.4.4	Unformed surface finishes				
4.3.3.4		(a) Wood-floated finish (Apron Slab)	m^2		100	
	8.5	Joints				
4.3.3.5		(a) Soft Joint	m		1 000	
4.4	SANS 1200 GE	**PRECAST CONCRETE (STUCTURAL)** as specified in SANS 1200 GE and in the project specification				
4.4.1	8.2.1	Supply and Install Structural Precast Units				
		(a) Wash Hand Basin				
4.4.1		(i) Precast concrete single wash trough (SABS approved) complete with wall mounting connections	No		100	
4.5		**DELIVERY OF CONTAINER ABLUTIONS**				
4.5.1		Delivery of Container Type Ablution from Collection Point to Site				
4.5.1.1		(a) radius distance <10km from collection point	No		10	
4.5.1.2		(b) 10km < radius distance > 20km from collection point	No		10	
4.5.1.3		(c) 20km < radius distance > 30km from collection point	No		10	
4.5.1.4		(d) 30km < radius distance from collection point	No		10	
4.5.2		Delivery of Container Type Ablution to Previous Site (including safe disconnection of water and sewer connections) to New Site/ Depot				
4.5.2.1		(a) radius distance < 10km from previous site	No		10	
4.5.2.2		(b) 10km < radius distance > 20km from previous site	No		10	
4.5.2.3		(c) 20km < radius distance > 30km from previous site	No		10	
4.5.2.4		(d) 30km < radius distance from previous site	No		10	
4.6		**PRE-CAST PANEL TOILETS COMPLETE WITH PEDESTAL AND CISTERN** as specified by Agrement South Africa - Performance Criteria (Structural Strength and Stability), complete with Agrement South Africa, and SABS Approved (for raw material) low/ pour flush pedestal and cistern, and high-density plastic door.				
4.6.1	PSA 8.19	Standard Pre-cast Panel Toilets				
4.6.1.1		(a) Supply and erection of pre-cast panel toilet, complete with low/ pour flush pedestal and cistern (1 - 100 units)	Unit		1	
4.6.1.2		(b) Supply and erection of pre-cast panel toilet, complete with low/ pour flush pedestal and cistern (101 - 500 units)	Unit		1	
4.6.1.3		(c) Supply and erection of pre-cast panel toilet, complete with low/ pour flush pedestal and cistern (501 - 1 000 units)	Unit		1	
CARRIED FORWARD:						

SECTION 4: ABLUTION FACILITIES						
SCHEDULE OF RATES					THIS SECTION IS FOR EVALUATION PURPOSES ONLY	
ITEM NO	PAYMENT REFERS	DESCRIPTION	UNIT	RATE	ESTIMATED QUANTITY	AMOUNT
BROUGHT FORWARD:						
4.6.2	PSA 8.20	Pre-cast Panel Toilets for Persons with Disabilities as specified by SANS 10400-S:2011.				
4.6.2.1		(a) Supply and erection of pre-cast toilet, complete with low/ pour flush pedestal and cistern, dog-leg and cistern grab bar (min. 604 x 604 x Ø32mm, min. 750 x Ø32mm, respectively)	Unit		1	
4.7		**PRE-CAST PANEL TOILET** as specified and certified by Agrement South Africa - Performance Criteria (Structural Strength and Stability), complete with high-density plastic door, applicable joint connections, and roofing				
4.7.1		Standard Pre-cast Panels				
4.7.1.1		(a) Supply and erection of pre-cast panels (1 - 100 units)	Unit		1	
4.7.1.2		(b) Supply and erection of pre-cast panels (101 - 500 units)	Unit		1	
4.7.1.3		(c) Supply and erection of pre-cast panels (501 - 1000 units)	Unit		1	
4.7.2		Pre-cast Panel Toilets for Persons with Disabilities as specified by SANS 10400-S:2011.				
4.7.2.1		(a) Supply and erection of pre-cast panels, complete with dog-leg and cistern grab bar (min. 604 x 604 x Ø32mm, min. 750 x Ø32mm, respectively)	Unit		1	
TOTAL CARRIED FORWARD TO SUMMARY:						

SECTION 5: WATER RETICULATION AND CONNECTIONS						
SCHEDULE OF RATES					THIS SECTION IS FOR EVALUATION PURPOSES ONLY	
ITEM NO	PAYMENT REFERS	DESCRIPTION	UNIT	RATE	ESTIMATED QUANTITY	AMOUNT
5		**SECTION 5: WATER RETICULATION AND CONNECTIONS**				
5.1	SANS 1200 C	**SITE CLEARANCE** as specified in SANS 1200 C and in the Scope of Work				
5.1.1	PSC 8.2.1	Clear and grub 2m wide strip (where ordered)	m		1 000	
5.1.2	PSC 8.2.5	Take down existing fences	m		1 000	
5.1.3	PSC 8.2.11	Remove and dispose of existing kerbing and concrete channelling	m		1 000	
5.1.4	PSC 8.2.12	Saw-cut asphalt surfacing	m		1 000	
5.1.5	PSC 8.2.13	Remove and dispose of asphalt surfacing	m²		100	
5.1.6	PSC 8.2.14	Saw-cut concrete surfacing	m		1 000	
5.2	SANS 1200 DB	**EARTHWORKS (PIPE TRENCHES)** as specified in SANS 1200 DB and in the Scope of Work				
5.2.1	8.3.2	Excavation				
	PSDB 8.3.2 (a)	(a) Excavate in all materials for trenches, backfill, compact and dispose of surplus material				
		(i) Trenches of width 300mm for water supply & connections				
5.2.1.1		- Depth up to 1,0m	m		1 000	
5.2.1.2		- Depth 1,0m up to 1,5m	m		1 000	
5.2.1.3	PSDB 8.3.2 (b)	(b) Extra over items 5.2.1.1 and 5.2.1.2 for hard rock excavation	m³		10	
5.2.1.4	8.3.2 (c)	(c) Excavate and dispose of unsuitable material from trench bottom	m³		10	
5.2.2		Excavation ancillaries				
	PSDB 8.3.3.1	*Make up deficiency in backfill material*				
5.2.2.1		(a) From other necessary excavations on site	m³		10	
		(b) By importation from commercial or off-site sources selected by the Contractor				
5.2.2.2		(i) Subbase quality material complying with subclause 5.2.1 of SANS 1200 ME.	m³		10	
5.2.2.3		(ii) Trench fill (using cellular lightweight concrete)	m³		10	
5.2.3	PSDB 8.3.3.3	Compaction in road reserves (to 95% of modified AASHTO maximum density)	m³		10	
5.2.4	8.3.6	Finishing				
	8.3.6.1	*Reinstate road surfaces complete with all courses*				
5.2.4.1	PSDB 8.3.6.1	(a) Gravel on shoulders and driveways	m²		100	
5.2.4.2		(b) Hot asphalt type IVA (min thickness 40mm)	m²		100	
5.2.4.3		(c) Concrete paving (25/19 MPa) - 100mm thick	m²		100	
CARRIED FORWARD:						

SECTION 5: WATER RETICULATION AND CONNECTIONS						
SCHEDULE OF RATES					THIS SECTION IS FOR EVALUATION PURPOSES ONLY	
ITEM NO	PAYMENT REFERS	DESCRIPTION	UNIT	RATE	ESTIMATED QUANTITY	AMOUNT
BROUGHT FORWARD:						
5.3	SANS 1200 LB	**BEDDING (PIPES)** as specified in SANS 1200 LB and in the Scope of Work				
5.3.1	8.2.1	Provision of bedding for trench excavation				
5.3.1.1		(a) Selected granular material	m^3		10	
5.3.2	8.2.2	Supply only of bedding by importation				
	PSLB 8.2.2.3	From commercial sources				
5.3.2.1		(a) Selected granular material	m^3		10	
5.3.2.2		(b) 6.7mm concrete stone to SANS 1083	m^3		10	
5.4	SANS 1200 LF	**ERF CONNECTIONS** as specified in SANS 1200 LF and in the Scope of Work				
5.4.1	PSLF 8.2.1	Provide erf connections complete				
		(a) Single erf connections off existing water reticulation (i) 20mm dia. short connection of approximately 1m in length complete with all fittings and specials off:				
5.4.1.1		- 200mm dia. FC pipe	No		100	
5.4.1.2		- 150mm dia. FC pipe	No		100	
5.4.1.3		- 75mm dia. FC pipe	No		100	
5.4.1.4		- 50mm dia. FC pipe	No		100	
5.4.1.5		- 200mm dia. PVC pipe	No		100	
5.4.1.6		- 160mm dia. PVC pipe	No		100	
5.4.1.7		- 110mm dia. PVC pipe	No		100	
5.4.1.8		- 90mm dia. PVC pipe	No		100	
5.4.1.9		- 75mm dia. PVC pipe	No		100	
5.4.1.10		- 63mm dia. PVC pipe	No		100	
5.4.1.11		- 63mm dia. HDPE pipe	No		100	
5.4.1.12		- 50mm dia. HDPE pipe	No		100	
5.4.1.13	PSLF 8.2.9	(b) Extra over item 5.4.1.1 to 5.4.1.12 for additional piping	m		1 000	
5.4.2	PSLF 8.2.4	Supply and install domestic water meter	No		100	
5.4.3	PSLF 8.2.8	Markers	No		100	
TOTAL CARRIED FORWARD TO SUMMARY:						

SECTION 6: SEWER DRAINAGE AND CONNECTIONS						
SCHEDULE OF RATES					THIS SECTION IS FOR EVALUATION PURPOSES ONLY	
ITEM NO	PAYMENT REFERS	DESCRIPTION	UNIT	RATE	ESTIMATED QUANTITY	AMOUNT
6		**SECTION 6: SEWER DRAINAGE AND CONNECTIONS**				
6.1	SANS 1200 C	**SITE CLEARANCE** as specified in SANS 1200 C and in the Scope of Work				
6.1.1	PSC 8.2.1	Clear and grub 2m wide strip (where ordered)	m		1 000	
6.1.2	PSC 8.2.5	Take down existing fences	m		1 000	
6.1.3	PSC 8.2.11	Remove and dispose of existing kerbing and concrete channelling	m		1 000	
6.1.4	PSC 8.2.12	Saw-cut asphalt surfacing	m		1 000	
6.1.5	PSC 8.2.13	Remove and dispose of asphalt surfacing	m²		100	
6.1.6	PSC 8.2.14	Saw-cut concrete surfacing	m		1 000	
6.2	SANS 1200 DB	**EARTHWORKS (PIPE TRENCHES)** as specified in SANS 1200 DB and in the Scope of Work				
6.2.1	8.3.2	Excavation				
	PSDB 8.3.2(a)	(a) Excavate in all materials for trenches, backfill, compact and dispose of surplus material				
		(i) Trenches of 400mm width for 110mm NB sewer drains				
6.2.1.1		- Depth up to 1,0m	m		1 000	
		(ii) Trenches of 600mm width for 110mm NB sewer drains				
6.2.1.2		- Depth exceeding 1,0m up to 1,5m	m		1 000	
6.2.1.3		- Depth exceeding 1,5m up to 2,0m	m		1 000	
		(iii) Trenches of 760mm width for 160mm NB sewer mains				
6.2.1.4		- Depth up to 1,0m	m		1 000	
6.2.1.5		- Depth exceeding 1,0m up to 1,5m	m		1 000	
6.2.1.6		- Depth exceeding 1,5m up to 2,0m	m		1 000	
6.2.1.7		- Depth exceeding 2,0m up to 2,5m	m		1 000	
6.2.1.8		- Depth exceeding 2,5m up to 3,0m	m		1 000	
6.2.1.9	PSDB 8.3.2 (b)	(b) Extra-over items 6.2.1.1 through to 6.2.1.8 for hard rock excavation	m³		10	
6.2.1.10	8.3.2 (c)	(c) Excavate and dispose of unsuitable material from trench bottom	m³		10	
6.2.2		Excavation ancillaries				
	PSDB 8.3.3.1	*Make up deficiency in backfill material*				
6.2.2.1		(a) From other necessary excavations on site	m³		10	
		(b) By importation from commercial or off-site sources selected by the Contractor				
6.2.2.2		(i) Selected material complying with subclause 3.4.2 of SANS 1200 ME	m³		10	
6.2.2.3		(ii) Trench fill (using cellular lightweight concrete)	m³		10	
6.2.3	PSDB 8.3.3.3	Compaction in road reserves (to 95% of modified AASHTO maximum density)	m³		10	
6.2.4	8.3.6	Finishing				
CARRIED FORWARD:						

SECTION 6: SEWER DRAINAGE AND CONNECTIONS						
SCHEDULE OF RATES					THIS SECTION IS FOR EVALUATION PURPOSES ONLY	
ITEM NO	PAYMENT REFERS	DESCRIPTION	UNIT	RATE	ESTIMATED QUANTITY	AMOUNT
BROUGHT FORWARD:						
6.2.5	8.3.6.1	Reinstate road surfaces complete with all courses				
6.2.5.1	PSDB 8.3.6.1	(a) Gravel on shoulders and driveways	m²		100	
6.2.5.2		(b) Hot Asphalt Type IV A (minimum thickness 40 mm)	m²		100	
6.2.5.3		(c) Concrete paving (Class 25/19) - 150mm thick	m²		100	
6.3	SANS 1200 LB	**BEDDING (PIPES)** as specified in SANS 1200 LB and in the Scope of Work				
6.3.1	8.2.1	Provision of bedding from trench excavation				
6.3.1.1		(a) Selected granular material	m³		10	
6.3.1.2		(b) Selected fill material	m³		10	
6.3.2	8.2.2	Supply only of bedding by importation				
	PSLB 8.2.2.3	From commercial sources				
6.3.2.1		(a) Selected granular material	m³		10	
6.3.2.2		(b) 6.7 mm concrete stone to SANS 1083	m³		10	
6.4	SANS 1200 LD	**SEWERS** as specified in SANS 1200 LD and in the Scope of Work				
6.4.1	8.2.1	Supply, lay, joint, bed and test pipeline				
	PSLD 8.2.1	(a) Structured wall PVCu sewers of outside diameters stated (400kPa, Type 1, SANS 1601, Maincor, Ultracor or similar approved), bedded as detailed on the drawings				
6.4.1.1		(i) 110mm dia	m		1 000	
6.4.1.2		(ii) 160mm dia	m		1 000	
6.4.2	8.2.3	Manholes				
	PSLD 8.2.3	(a) Precast concrete manholes complete including medium duty concrete roof slab and type 4 cover and frame for pipes up to and including 160mm dia				
6.4.2.1		(i) Depth up to 1,0m	No		100	
6.4.2.2		(ii) Depth exceeding 1,0m up to 1,5m	No		100	
6.4.2.3		(iii) Depth exceeding 1,5m up to 2,0m	No		100	
6.4.2.4		(iv) Depth exceeding 2,0m up to 2,5m	No		100	
6.4.2.5		(v) Depth exceeding 2,5m up to 3,0m	No		100	
6.4.2.6		(b) Extra-over items 6.4.2.1 through to 6.4.2.5 for type 2A cover and frame for manholes in road areas	No		10	
6.4.3	8.2.4	Extra-over items 6.4.2.1 through to 6.4.2.5 for the construction of ramps and backdrops as detailed complete				
		(a) Ramps for pipes of diameters stated				
6.4.3.1		(i) 160mm	No		10	
		(b) Backdrops				
		(i) 160mm				
6.4.3.2		- up to 1,5m	No		10	
6.4.3.3		- Exceeding 1,5m up to 2,0m	No		10	
6.4.3.4		- Exceeding 2,0m up to 2,5m	No		10	
CARRIED FORWARD:						

SECTION 6: SEWER DRAINAGE AND CONNECTIONS						
SCHEDULE OF RATES					THIS SECTION IS FOR EVALUATION PURPOSES ONLY	
ITEM NO	PAYMENT REFERS	DESCRIPTION	UNIT	RATE	ESTIMATED QUANTITY	AMOUNT
BROUGHT FORWARD :						
6.4.4	PSLD 8.2.5	Extra-over 6.4.2.1 through to 6.4.2.5 for the construction of additional channelling and the building in of short pipe specials at branch manholes, manholes at bends and erf connection manholes				
		(a) For branched channels				
6.4.4.1		(i) 150mm dia.	No		10	
		(b) For channels at bends				
6.4.4.2		(i) 150mm dia.	No		10	
6.4.4.3		(c) Terminal erf connections (110mm dia) into manhole	No		10	
6.4.4.4		(d) Erf connections (110mm dia) into manhole	No		10	
6.4.5	PSLD 8.2.6 (a)	Erf connections (complete with fittings as per drawing)				
		(a) Short length of 1.3m (On new sewer reticulation)				
6.4.5.1		(i) Type 1	No		10	
6.4.5.2		(ii) Type 2	No		10	
6.4.5.3		(iii) Type 3	No		10	
6.4.5.4		(iv) Type 4	No		10	
6.4.5.5		(v) Type 5	No		10	
		(b) Short length of 1.3m (On existing sewer reticulation)				
6.4.5.6		(i) Type 1	No		10	
6.4.5.7		(ii) Type 2	No		10	
6.4.5.8		(iii) Type 3	No		10	
6.4.5.9		(iv) Type 4	No		10	
6.4.5.10		(v) Type 5	No		10	
6.4.6	PSLD 8.2.6 (b)	Extra-over items 6.4.5.1 through 6.4.5.10 for additional length of pipe	m		1 000	
6.4.7	PSLD 8.2.7	Encasing of pipes in concrete	m^3		10	
6.4.8	PSLD 8.2.11	Connection into existing sewer	Sum		10	
6.4.9	PSLD 8.2.13	Testing of watertightness of manholes	No		10	
6.4.10	PSLD 8.2.14	Supply and construct rodding eye complete as detailed on the drawings, including concrete surround (Depth up to 1,5m deep)	No		100	
TOTAL CARRIED FORWARD TO SUMMARY:						

SECTION 7: PLUMBING AND SANITARYWARE						
SCHEDULE OF RATES					THIS SECTION IS FOR EVALUATION PURPOSES ONLY	
ITEM NO	PAYMENT REFERS	DESCRIPTION	UNIT	RATE	ESTIMATED QUANTITY	AMOUNT
BROUGHT FORWARD:						
7.2.15		(xi) 110mm Vent Horn Bend Access Heel 87,5 degrees (Marley SB400 or similar)	No		100	
7.2.16		(xii) 50mm Bend Plain 95 degrees (Marley WBE50 or similar)	No		100	
7.2.17		(xiii) Eccentric Reducer 110 x 50mm (Marley SE404 or similar)	No		100	
7.2.18		(xiv) 40mm PVC U-Trap / Sink Trap (DPE DB3 or similar)	No		100	
7.2.19		(xv) 40mm Bend Access Heel 87,5 degrees (Marley WDE41 or similar)	No		100	
7.2.20		(xvi) 40mm PVC holderbats (Marley WHB4 or similar)	No		100	
7.2.21		(xvii) PVC SV reducer 50 x 40mm (Marley WR5 or similar)	No		100	
7.2.22		(xviii) 40mm PVC SV Junction Plain 87,5 degrees (Marley WS4 or similar)	No		100	
7.2.23		(xix) 110mm Junction Single Access Heel 87,5 degrees (Marley SY42 or similar)	No		100	
		(c) Soil & vent pipe and fittings				
7.2.24		(i) 40mm Pipe (WPE213/1 or similar)	m		1 000	
7.2.25		(ii) 40mm Perforated Pipe (WPE213/1 or similar)	m		1 000	
7.2.26		(iii) 40mm PVC urinal waste cap with CP grating	No		100	
7.2.27		(iv) 40mm solvent stop end	No		100	
7.2.28		(v) 40mm 90 degree bend (W40B, NS001 or similar)	No		100	
7.2.29		(vi) 40mm x 150mm threaded HDPE pipe	No		100	
7.2.30		(vii) 40mm PVC End cap drilled and tapped to 15mm (CA2 or similar)	No		100	
7.2.31		(viii) 40mm holderbats	No		100	
7.2.32		(ix) 40mm PVC threaded female-female straight coupler (MA2 or similar)	No		100	
7.2.33		(x) 40mm PVC back nut (NU4 or similar)	No		100	
7.2.34		(xi) 40mm rubber gasket	No		100	
		(d) Taps				
7.2.35		(i) Bib tap "KM2.202-15" Cobra or similar approved	No		100	
		(e) Cistern				
7.2.36		(i) Low volume cistern (SABS and Agrement South Africa approved)	No		100	
		(f) Pedestal				
7.2.37		(i) Low/ Pour flush (2l or less) pedestal (SABS and Agrement South Africa approved)	No		100	
		(g) Child-seat Lid				
7.2.38		(i) Child-seat lid as a single unit for the normal adult sized seat with child-seat incorporated into the lid	No		100	
7.3		Concrete (20MPa concrete):				
7.3.1		(a) Cast concrete (20 MPa) gulley surround for 190 x 110mm grating (grating elsewhere)	No		100	
7.3.2		(b) Cast concrete (20 MPa) around rodding Eye (450 x 450 x 150mm)	No		100	
TOTAL CARRIED FORWARD TO SUMMARY :						

SECTION 8: CONSERVANCY TANKS						
SCHEDULE OF RATES					THIS SECTION IS FOR EVALUATION PURPOSES ONLY	
ITEM NO	PAYMENT REFERS	DESCRIPTION	UNIT	RATE	ESTIMATED QUANTITY	AMOUNT
8		**SECTION 8: CONSERVANCY TANKS** Rates to include supervision, administration, health and safety, and profit.				
8.1	SANS 1200 C	**SITE CLEARANCE** as specified in SANS 1200 C and in the Scope of Work				
8.1.1		Clear and Grub				
8.1.1.1	8.2.1	(a) Clear site as directed by the Engineer, including spoiling material to a municipal approved tip site	m²		100	
8.1.1.2	8.2.10	(b) Remove topsoil to nominal depth of 150mm and stockpile	m³		10	
8.2	SANS 1200 A	**TEMPORARY WORKS** Rates to include for each and every operation required.				
8.2.1	8.8.4 (c)	Hand excavation in soft material where ordered for locating and exposing existing services	m³		10	
8.3	SANS 1200 DB	**EXCAVATIONS & EARTHWORKS**				
8.3.1		Excavate for conservancy or urine diversion - biodigestion tank size	m³		10	
8.3.2		Extra-over item 8.3.1 for hard rock	m³		10	
8.3.3		Extra-over item 8.3.1 for keeping all excavations from all types of water ingress by any suitable method	Sum		1	
8.3.4		Excavate in all materials for trenches, backfill, compact and dispose of surplus/ unsuitable material and make tidy for:				
8.3.4.1		(a) Trenches for uPVC pipes of diameter up to 150mm and for depths of up to 0.5m	m		1 000	
8.4		**SUB-STRUCTURES**				
8.4.1		Conservancy Tank as specified in SANS 10400-P:2010 (or SABS Approved)				
		(a) Supply and installation of a conservancy tank including any necessary fittings and backfilling required with Engineer approved material				
8.4.1.1		(i) Up to 2 500l	Unit		1	
8.4.1.2		(ii) 2 500l < Size < 5 000l	Unit		1	
8.4.1.3		(iii) 5 000l < Size < 10 000l	Unit		1	
8.4.2		Urine Diversion - Biodigestion Tank Type I (Calcimite eco-mite or similar)				
		(a) Supply and installation of urine diversion - biodigestion tank unit with polyethylene base complete with toilet pedestal and urine diversion unit, including a polyethylene drying plate, solar dome with hinge lid, vent pipe and wind extractor				
8.4.2.1		(i) Up to 500l	Unit		1	
8.4.2.2		(ii) 500l < Size < 2 000l	Unit		1	
8.4.2.3		(iii) 2 000l < Size < 2 500l	Unit		1	
CARRIED FORWARD :						

SECTION 8: CONSERVANCY TANKS						
SCHEDULE OF RATES					THIS SECTION IS FOR EVALUATION PURPOSES ONLY	
ITEM NO	PAYMENT REFERS	DESCRIPTION	UNIT	RATE	ESTIMATED QUANTITY	AMOUNT
BROUGHT FORWARD:						
8.4.3		Urine Diversion - Biodigestion Tank Type II (Enviro Loo or similar) (SABS Approved)				
		(a) Supply and installation of biodigestion tank unit with low-density polyethylene base complete with toilet pedestal, including a drying plate, drying bag and vent extraction unit				
8.4.3.1		(i) For 1 - 10 users per day	Unit		1	
8.4.3.2		(ii) For 1 - 20 users per day	Unit		1	
8.4.3.3		(iii) For 1 - 30 users per day	Unit		1	
8.4.3.4		(iv) For 1 - 40 users per day	Unit		1	
TOTAL CARRIED FORWARD TO SUMMARY :						

SECTION 9: SEPTIC TANK						
SCHEDULE OF RATES					THIS SECTION IS FOR EVALUATION PURPOSES ONLY	
ITEM NO	PAYMENT REFERS	DESCRIPTION	UNIT	RATE	ESTIMATED QUANTITY	AMOUNT
9		**SECTION 9: SEPTIC TANK** Rates to include supervision, administration, health and safety, and profit.				
9.1	SANS 1200 C	**SITE CLEARANCE** as specified in SANS 1200 C and in the Scope of Work				
9.1.1		Clear and Grub				
9.1.1.1	8.2.1	(a) Clear site as directed by the Engineer, including spoiling material to a municipal approved tip site	m²		100	
9.1.1.2	8.2.10	(b) Remove topsoil to nominal depth of 150mm and stockpile	m³		10	
9.2	SANS 1200 A	**TEMPORARY WORKS** Rates to include for each and every operation required.				
9.2.1	8.8.4 (c)	Hand excavation in soft material where ordered for locating and exposing existing services	m³		10	
9.3	SANS 1200 DB	**EXCAVATIONS & EARTHWORKS**				
9.3.1		Excavate for septic tank pit (max. 3150 x 3150mm) commencing from reduced levels and not exceeding a depth greater than 1,5m	m		10	
9.3.2		Excavate for septic tank pit (max. 3150 x 3150mm) commencing from 1,5m depth and not exceeding a depth greater than 3m	m		10	
9.3.3		Excavate for septic tank pit (max. 3150 x 3150mm) commencing from 3m depth and not exceeding a depth greater than 4,5m	m		10	
9.3.4		Extra-over items 9.3.1 through to 9.3.3 for hard rock	m³		10	
9.3.5		Extra-over items 9.3.1 through to 9.3.3 for keeping all excavations from all types of water ingress by any suitable method	Sum		1	
9.3.6		Excavate in all materials for trenches, backfill, compact and dispose of surplus/ unsuitable material and make tidy for:				
9.3.6.1		(a) Trenches for uPVC pipes of diameter up to 150mm and for depths of up to 0.5m	m		1 000	
9.4		**SUB-STRUCTURE (CONCRETE AND BRICK WORKS)** as specified in SANS 10400-P:2010 (or SABS Approved)				
9.4.1		Construction of leach-pit structure (French drain) [max. 3150 x 3150mm] using M6 concrete blocks complete with in-situ preparation, reinforced concrete floor and cover slab, wall brickwork, min. concrete cover for durability and smart lock manhole cover, including all fittings, inlet and outlet pipes	Unit		1	
TOTAL CARRIED FORWARD TO SUMMARY:						

SECTION 10: FENCING AND SECURITY						
SCHEDULE OF RATES					THIS SECTION IS FOR EVALUATION PURPOSES ONLY	
ITEM NO	PAYMENT REFERS	DESCRIPTION	UNIT	RATE	ESTIMATED QUANTITY	AMOUNT
10		**SECTION 10: FENCING AND SECURITY**				
10.1		**EARTHWORKS (HOLES FOR POSTS)**				
10.1.1		Excavation				
10.1.1.1	8.3.1	Excavate holes for corner/end or standard posts (500 x 500 x 400mm)	No		10	
10.2	SANS 1200 GA	**CONCRETE WORKS**				
10.2.1		Concrete to bases 15MPa/19	m^3		10	
10.2.2		Supply and install 152 x 152 x 23kg/m steel H section 3000mm long, cast 600mm into concrete base (measured elsewhere), including galvanising to SANS 0763.	kg		100	
10.2.3		Supply and install in previously erected H section steel columns, 50MPa precast concrete wall panel 3000 x 1200 x 120mm thick including grouting	m^2		100	
10.3		**FENCING**				
10.3.1		Supply and install 1,8m high-weld mesh fence (50 x 50 x 2,5mm)	m		1 000	
10.3.2		Dismantle and reinstall 1,8m high existing fence line to new position	m		1 000	
10.3.3		Extra-over items 10.3.1 and 10.3.2	m		1 000	
10.3.4		Supply and install corner posts (150mm OD)	No		10	
10.3.5		Supply and install straining posts (150mm OD)	No		10	
10.3.6		Supply and install 1.8m high security fencing. Posts of 100 x 54 x 2mm H section, planted min. 600mm deep, galvanised to SANS 0763 and coated min. 100 micron fusion bond PVC - inside and outside, complete with top cap. Fence panels with inner aperture size 12,7 x 76,2mm galvanised SANS 0763 and min. 100 micron fusion bond PVC coating.	m		1 000	
10.3.7	SANS 457	Supply and install 150mm dia. post and rail (90mm dia.) timber fencing (or ranch fencing) all poles to be tantalised, including excavation - where directed by Engineer.	m		1 000	
10.4		**REMOVAL OF FENCING**				
10.4.1		Salvage of existing fencing for re-use				
10.4.1.1		(a) Take down existing 1,8m diamond mesh fence including roll up of mesh, coiling of wire, loading, carting and off loading at NMBM depot	m		1 000	
10.4.1.2		(b) Excavate for and recover 2,4m corner and intermediate fence posts including removal of anchor concrete, closure of post hole, sorting, loading, carting and off-loading at NMBM depot	No		10	
10.4.1.3		(c) Dismantle 1,8m high by 3,0m opening two leaf diamond mesh gate complete including loading, carting, and off-loading at NMBM depot	No		10	
CARRIED FORWARD :						

SECTION 10: FENCING AND SECURITY						
SCHEDULE OF RATES					THIS SECTION IS FOR EVALUATION PURPOSES ONLY	
ITEM NO	PAYMENT REFERS	DESCRIPTION	UNIT	RATE	ESTIMATED QUANTITY	AMOUNT
BROUGHT FORWARD:						
10.5		**MISCELLANEOUS ITEMS**				
10.5.1		Supply and installation of hardened steel hasp with shackle protector (BBH535 or similar), complete with standard discus padlock including five (5) high security keys (BBP170-F1 or similar)	No		10	
10.5.2		Stencil marking of pre-cast concrete toilets with pavecote based paint	No		10	
TOTAL CARRIED FORWARD TO SUMMARY :						

SECTION 11: GENERAL						
SCHEDULE OF RATES					THIS SECTION IS FOR EVALUATION PURPOSES ONLY	
ITEM NO	PAYMENT REFERS	DESCRIPTION	UNIT	RATE	ESTIMATED QUANTITY	AMOUNT
11		**SECTION 11: GENERAL**				
11.1	SANS 1200 C	**SITE CLEARANCE** as specified in SANS 1200 C and in the Scope of Work				
11.1.1	PSC 8.2.1	Clear and grub 2m wide strip (where ordered)	m		1 000	
11.1.2	PSC 8.2.5	Take down existing fences	m		1 000	
11.1.3	PSC 8.2.11	Remove and dispose of existing kerbing and concrete channelling	m		1 000	
11.1.4	PSC 8.2.12	Saw-cut asphalt surfacing	m		1 000	
11.1.5	PSC 8.2.13	Remove and dispose of asphalt surfacing	m²		100	
11.1.6	PSC 8.2.14	Saw-cut concrete surfacing	m		1 000	
11.2	SANS 1200 GA	**CONCRETE (SMALL WORKS)** as specified in SANS 1200 GA and in the Scope of Work				
11.2.1		For minor concrete works as directed on site				
	8.2	(a) Formwork				
11.2.1.1	8.2.1	(i) Rough (covered)	m²		100	
11.2.1.2	8.2.2	(ii) Smooth (exposed)	m²		100	
	8.3.2	(b) High-tensile welded mesh				
11.2.1.3		(i) Ref. 195	m²		100	
11.2.1.4		(ii) Ref. 245	m²		100	
11.2.1.5		(iii) Ref. 359	m²		100	
11.2.1.6		(iv) Ref. 617	m²		100	
	8.4	(c) Concrete				
	8.4.3	(i) Strength concrete				
11.2.1.7		- 15MPa/19	m³		10	
11.2.1.8		- 20MPa/19	m³		10	
	8.4.4	(d) Unformed surface finishes				
11.2.1.9		(i) Wood-floated finish	m²		100	
11.2.1.10		(ii) Steel-floated finish	m²		100	
11.3		**RELOCATION OF INFORMAL HOUSING** All building material to be secured with little to no damage - for reuse.				
11.3.1		Diss-assemble existing informal housing				
11.3.1.1		(a) Informal housing size < 15m²	No		1	
11.3.1.2		(b) 15m² < Informal housing size < 30m²	No		1	
11.3.1.3		(c) Informal housing size > 30m²	No		1	
11.3.2		Transportation from Relocation Site to Beneficiary Site				
11.3.2.1		(a) radius distance <10km from relocation site	No		10	
11.3.2.2		(b) 10km < radius distance > 20km from relocation site	No		10	
11.3.2.3		(c) 20km < radius distance > 30km from relocation site	No		10	
11.3.2.4		(d) 30km < radius distance from relocation site	No		10	
CARRIED FORWARD :						

SECTION 11: GENERAL						
SCHEDULE OF RATES					THIS SECTION IS FOR EVALUATION PURPOSES ONLY	
ITEM NO	PAYMENT REFERS	DESCRIPTION	UNIT	RATE	ESTIMATED QUANTITY	AMOUNT
BROUGHT FORWARD:						
11.3.3		Re-assemble existing informal housing Rates to also include sealants, fasteners, applicable connections and waterproofing.				
11.3.3.1		(a) Informal housing size < 15m²	No		1	
11.3.3.2		(b) 15m² < Informal housing size < 30m²	No		1	
11.3.3.3		(c) Informal housing size > 30m²	No		1	
TOTAL CARRIED FORWARD TO SUMMARY :						

C2.3 SUMMARY OF SCHEDULE OF RATES

CLUSTER 4

SECTION	DESCRIPTION	PRICE
1 – PART 1	PRELIMINARY AND GENERAL	R
1 – PART 2	DAYWORKS	R
2	HEALTH & SAFETY	R
3	EME – SUB-CONTRACTING WORK	R
4	ABLUTION FACILITIES	R
5	WATER RETICULATION AND CONNECTIONS	R
6	SEWER DRAINAGE AND CONNECTIONS	R
7	PLUMBING AND SANITARYWARE	R
8	CONSERVANCY TANKS	R
9	SEPTIC TANKS	R
10	FENCING AND SECURITY	R
11	GENERAL	R

TOTAL OF PRICED ITEMS	R
NET CONTRACT PRICE	R
VALUE ADDED TAX (15% of Net Contract Price)	R
CONTRACT SUM (CARRIED TO C1.1. FORM OF OFFER)	**R**

Notes:

1. The Contract Price is subject to Contract Price Adjustment in terms of Clause 6.8.2 of the Conditions of Contract.
2. The Contract Sum is a Fictitious Value that shall be used for **Evaluation Purposes only**.
3. The undersigned, who warrants that he / she is duly authorised to do so on behalf of the enterprise, confirms that the contents of this schedule are within my personal knowledge and are to the best of my belief both true and correct.

Signed ..... Date .....

Name ..... Position .....

Tenderer .....

SHEDULE OF RATES: CLUSTER 5

SECTION 1 - PART 1: PRELIMINARY AND GENERAL						
SCHEDULE OF RATES					THIS SECTION IS FOR EVALUATION PURPOSES ONLY	
ITEM NO	PAYMENT REFERS	DESCRIPTION	UNIT	RATE	ESTIMATED QUANTITY	AMOUNT
1		**SECTION 1 - PART 1: PRELIMINARY AND GENERAL**				
1.1		**PRELIMINARY AND GENERAL: CONTRACTOR'S ESTABLISHMENT ON SITE & GENERAL** The contractor's general obligations.				
1.1.1	PSA 8.3.1(a)	Value-related obligations for works assignments ranging between:				
1.1.1.1		(a) R0 - R2 000 000	%		1 000 000.00	
1.1.1.2		(b) R2 000 001 - R4 000 000	%		3 000 000.00	
1.1.1.3		(c) R4 000 001 - R6 000 000	%		5 000 000.00	
1.1.1.4		(d) Greater than R6 000 001	%		7 000 000.00	
1.1.2	PSA 8.3.1(b)	Time-related obligations for works assignments ranging between:				
1.1.2.1		(a) R0 - R2 000 000	Month		36	
1.1.2.2		(b) R2 000 001 - R4 000 000	Month		36	
1.1.2.3		(c) R4 000 001 - R6 000 000	Month		36	
1.1.2.4		(d) Greater than R6 000 001	Month		36	
TOTAL CARRIED FORWARD TO SUMMARY :						

SECTION 1 - PART 2: DAYWORKS						
SCHEDULE OF RATES					THIS SECTION IS FOR EVALUATION PURPOSES ONLY	
ITEM NO	PAYMENT REFERS	DESCRIPTION	UNIT	RATE	ESTIMATED QUANTITY	AMOUNT
1		**SECTION 1 - PART 2: DAYWORKS**				
1.3		**DAYWORKS (PROVISIONAL)**				
1.3.1		Personnel during normal working hours				
1.3.1.1		(a) Unskilled labour	hr		1 000	
1.3.1.2		(b) Semi-skilled labour	hr		1 000	
1.3.1.3		(c) Skilled labour	hr		1 000	
1.3.1.4		(d) Ganger	hr		1 000	
1.3.1.5		(e) Flagman	hr		1 000	
1.3.2		Plant				
1.3.2.1		(a) Dropside truck (2 to 12-ton capacity)	hr		100	
1.3.2.2		(b) Tipper Trucks (3 to 5-ton capacity)	hr		100	
1.3.2.3		(c) TLB (digger loader)	hr		100	
1.3.2.4		(d) Compactor (Bomag 90 or similar)	hr		100	
1.3.2.5		(e) Water truck (10 000 litres)	hr		100	
1.3.2.6		(f) Suitable truck for transporting labourers (min. of 30 people)	hr		100	
1.3.2.7		(g) Safety vehicle for pre-marking purposes	hr		100	
1.3.2.8		(h) Dewatering pump including generators and accessories	hr		100	
1.3.2.9		(i) Light delivery vehicle (LDV)	hr		100	
1.3.2.10		(j) Centre-mount crane (more than 8-ton)	hr		100	
1.3.2.11		(k) Other Specify	hr		100	
1.3.3		Materials				
1.3.3.1		(a) Procurement of materials	Prov. Sum	500 000	1	500 000.00
1.3.3.2		(b) Contractor's handling costs, profit and all other charges in respect of sub-item 1.3.3.1	%		500 000	
1.3.4		Establishment (maximum 150km per trip)				
1.3.4.1		(a) Dropside truck (2 to 12-ton capacity)	km		100	
1.3.4.2		(b) Tipper Trucks (3 to 5-ton capacity)	km		100	
1.3.4.3		(c) TLB (digger loader)	km		100	
1.3.4.4		(d) Water truck (10 000 litres)	km		100	
1.3.4.5		(e) Suitable truck for transporting labourers (min. of 30 people)	km		100	
1.3.4.6		(f) Light delivery vehicle (LDV)	km		100	
1.3.4.7		(g) Centre-mount crane (more than 8-ton)	km		100	
1.3.5	PSA 8.4.6	Compensation in terms of clause 5.12.2.4 of the Conditions of Contract for delays incurred				
1.3.5.1		(a) Plant	day		100	
1.3.5.2		(b) Labour	day		100	
1.3.5.3		(c) Supervision	day		100	
1.3.5.4		(d) Other services, facilities, etc. not covered by items 1.3.5.1 to 1.3.5.3	day		100	
1.4	SANS 1200 A	**TEMPORARY WORKS**				
1.4.1		Existing services				
1.4.1.1	8.8.4 (c)	(a) Excavate by hand in soft material to expose existing services	m^3		10	
1.4.1.2		(b) Lowering/ relocating/ repairing existing services	Prov. Sum	50 000	1	50 000.00
CARRIED FORWARD:						

SECTION 1 - PART 2: DAYWORKS						
SCHEDULE OF RATES					THIS SECTION IS FOR EVALUATION PURPOSES ONLY	
ITEM NO	PAYMENT REFERS	DESCRIPTION	UNIT	RATE	ESTIMATED QUANTITY	AMOUNT
BROUGHT FORWARD:						
1.4.2	8.8.5	Cost of survey in terms of Land Survey Act				
1.4.2.1		(a) Locate, record and protect erf boundary and survey pegs	Sum		1	
1.4.2.2		(b) Replace pegs recorded as missing at commencement of Contract as well as pegs removed in terms of PSA 5.1.1	No		100	
TOTAL CARRIED FORWARD TO SUMMARY :						

SECTION 2: HEALTH & SAFETY						
SCHEDULE OF RATES					THIS SECTION IS FOR EVALUATION PURPOSES ONLY	
ITEM NO	PAYMENT REFERS	DESCRIPTION	UNIT	RATE	ESTIMATED QUANTITY	AMOUNT
2		**SECTION 2: HEALTH & SAFETY**				
2.1		Provision for Personal Protective Equipment & Protective Clothing				
2.1.1		(a) Reflective vests	No		100	
2.1.2		(b) Reflective bibs	No		100	
2.1.3		(c) Hard hats	No		100	
2.1.4		(d) Protective foot wear	No		100	
2.1.5		(e) Earplugs	No		100	
2.1.6		(f) Dust masks	No		100	
2.1.7		(g) Workman Gloves	No		100	
2.2		Provision of full time Construction Health and Safety Officer	Month		36	
2.3		Costs of Medical Certificates and Medical Surveillance				
2.3.1		(a) Initial (baseline) medical examinations	No		100	
2.3.2		(b) Exit examinations	No		100	
2.4		Induction Training	No		100	
2.5		Environmental Monitoring Tests	No		100	
2.6		Noise Monitoring				
2.6.1		(a) Establishment of noise zones	No		10	
2.6.2		(b) Audiograms	No		10	
2.7		Provision of First Aid boxes	Sum		1	
2.8		Transportation of Workers	Month		12	
2.9		Submission of the Health and Safety File	Sum		1	
2.10	PSA 8.3.5	On-site Security Supervision				
2.10.1		(a) Provision of Security Services to ensure the safe working environment for all workers, materials and works on site during working hours	Prov. Sum	250 000	1	250 000.00
2.10.2		(b) Handling costs and charges for the Contractor on item 2.10.1	%		250 000	
TOTAL CARRIED FORWARD TO SUMMARY:						

SECTION 3: EME SUB-CONTRACTING WORK						
SCHEDULE OF RATES					THIS SECTION IS FOR EVALUATION PURPOSES ONLY	
ITEM NO	PAYMENT REFERS	DESCRIPTION	UNIT	RATE	ESTIMATED QUANTITY	AMOUNT
3		**SECTION 3: EME SUB-CONTRACTING WORK**				
3.1		EME Support Programme				
3.1.1		(a) Establishment and monitoring of EME Support Programme	Prov. Sum	100 000	1	100 000.00
3.1.2		(b) Overhead charges on Item 3.1.1	%		100 000	
3.2		EME Support Initiative: Management				
3.2.1	PSA 8.15	(a) EME Construction Manager remuneration	Prov. Sum	10 000	1	10 000.00
3.2.2		(b) Overhead charges on Item 3.2.1	%		10 000	
3.2.3	PSA 8.16	(c) Community Liaison Officer (CLO) remuneration	Prov. Sum	10 000	1	10 000.00
3.2.4		(d) Overhead charges on Item 3.2.3	%		10 000	
3.3		EME Support Initiative: Training				
3.3.1	PSA 8.18	(a) Training of EMEs	Prov. Sum	100 000	1	100 000.00
3.3.2		(b) Mark-up on Item 3.3.1	%		100 000	
TOTAL CARRIED FORWARD TO SUMMARY :						

SECTION 4: ABLUTION FACILITIES						
SCHEDULE OF RATES					THIS SECTION IS FOR EVALUATION PURPOSES ONLY	
ITEM NO	PAYMENT REFERS	DESCRIPTION	UNIT	RATE	ESTIMATED QUANTITY	AMOUNT
4		**SECTION 4: ABLUTION FACILITIES**				
4.1	SABS 1200 C	**SITE CLEARANCE** as specified in SABS 1200 C and in the project specification				
4.1.1	PSC 8.2.1	Clear and grub for toilet ablutions	m²		100	
4.2	SABS 1200 D	**EARTHWORKS** as specified in SABS 1200 D and in the project specification				
4.2.1	8.3.1	Site preparation				
4.2.1.1	8.3.1.2	Remove topsoil to nominal depth 150mm, stockpile and maintain	m³		10	
4.2.2	8.3.3	Restricted excavation				
	PSD 8.3.3	(a) Excavate for restricted foundations, footings, trenches, and landscaping in soft materials and use for backfill, berm or dispose, as ordered:				
4.2.2.1		(i) Embankment and landscaping compacted to 90% of max modified AASHTO density	m³		10	
4.2.2.2		(ii) Backfill compacted to 98% of modified AASHTO maximum density	m³		10	
4.2.2.3		(iii) Dispose	m³		10	
4.2.2.4		(b) Extra-over item 4.2.2.1 to 4.2.2.3 for hard rock excavation	m³		10	
4.2.3	PSDB 8.3.3.1	Make up deficiency in backfill				
		(a) By importation from commercial or "off site" sources selected by the contractor				
4.2.3.1		(i) Subbase quality material complying with subclause 3.2.2 of SABS 1200ME compacted to 98% of modified AASHTO maximum density	m³		10	
4.2.3.2	8.3.9	(b) Extra-over item 4.2.3.1 for backfill or for fill material against structures	m³		10	
4.2.4	PSD 8.3.10	Topsoiling (100mm thick)	m²		100	
4.2.5	8.3.11	Grassing (with sods of kweek)	m²		100	
4.3	SANS 1200 GA	**CONCRETE (SMALL WORKS)** as specified in SABS 1200 GA and in the project specification				
4.3.1	8.2	Schedule for Formwork Items				
4.3.1.1	8.2.1	(a) Rough (covered)	m²		100	
4.3.1.2	8.2.2	(b) Smooth (exposed)	m²		100	
4.3.2	8.3	Schedule for Reinforcement Items				
	8.3.2	High-tensile welded mesh				
4.3.2.1		(a) Ref. 195	m²		100	
4.3.2.2		(b) Ref. 245	m²		100	
4.3.3	8.4	Schedule for Concrete Items				
4.3.3.1	8.4.2	Blinding Layer in 15MPa/19 Concrete (30mm nominal thickness)	m²		100	
CARRIED FORWARD:						

SECTION 4: ABLUTION FACILITIES						
SCHEDULE OF RATES					THIS SECTION IS FOR EVALUATION PURPOSES ONLY	
ITEM NO	PAYMENT REFERS	DESCRIPTION	UNIT	RATE	ESTIMATED QUANTITY	AMOUNT
BROUGHT FORWARD:						
	8.4.3	Strength concrete				
4.3.3.2		(a) 20MPa/19 (Apron to ablutions)	m^3		10	
4.3.3.3		(b) 25MPa/19 (Floor Slab)	m^3		10	
	8.4.4	Unformed surface finishes				
4.3.3.4		(a) Wood-floated finish (Apron Slab)	m^2		100	
	8.5	Joints				
4.3.3.5		(a) Soft Joint	m		1 000	
4.4	SANS 1200 GE	**PRECAST CONCRETE (STUCTURAL)** as specified in SANS 1200 GE and in the project specification				
4.4.1	8.2.1	Supply and Install Structural Precast Units				
		(a) Wash Hand Basin				
4.4.1		(i) Precast concrete single wash trough (SABS approved) complete with wall mounting connections	No		100	
4.5		**DELIVERY OF CONTAINER ABLUTIONS**				
4.5.1		Delivery of Container Type Ablution from Collection Point to Site				
4.5.1.1		(a) radius distance <10km from collection point	No		10	
4.5.1.2		(b) 10km < radius distance > 20km from collection point	No		10	
4.5.1.3		(c) 20km < radius distance > 30km from collection point	No		10	
4.5.1.4		(d) 30km < radius distance from collection point	No		10	
4.5.2		Delivery of Container Type Ablution to Previous Site (including safe disconnection of water and sewer connections) to New Site/ Depot				
4.5.2.1		(a) radius distance < 10km from previous site	No		10	
4.5.2.2		(b) 10km < radius distance > 20km from previous site	No		10	
4.5.2.3		(c) 20km < radius distance > 30km from previous site	No		10	
4.5.2.4		(d) 30km < radius distance from previous site	No		10	
4.6		**PRE-CAST PANEL TOILETS COMPLETE WITH PEDESTAL AND CISTERN** as specified by Agrement South Africa - Performance Criteria (Structural Strength and Stability), complete with Agrement South Africa, and SABS Approved (for raw material) low/ pour flush pedestal and cistern, and high-density plastic door.				
4.6.1	PSA 8.19	Standard Pre-cast Panel Toilets				
4.6.1.1		(a) Supply and erection of pre-cast panel toilet, complete with low/ pour flush pedestal and cistern (1 - 100 units)	Unit		1	
4.6.1.2		(b) Supply and erection of pre-cast panel toilet, complete with low/ pour flush pedestal and cistern (101 - 500 units)	Unit		1	
4.6.1.3		(c) Supply and erection of pre-cast panel toilet, complete with low/ pour flush pedestal and cistern (501 - 1 000 units)	Unit		1	
CARRIED FORWARD:						

SECTION 4: ABLUTION FACILITIES						
SCHEDULE OF RATES					THIS SECTION IS FOR EVALUATION PURPOSES ONLY	
ITEM NO	PAYMENT REFERS	DESCRIPTION	UNIT	RATE	ESTIMATED QUANTITY	AMOUNT
BROUGHT FORWARD:						
4.6.2	PSA 8.20	Pre-cast Panel Toilets for Persons with Disabilities as specified by SANS 10400-S:2011.				
4.6.2.1		(a) Supply and erection of pre-cast toilet, complete with low/ pour flush pedestal and cistern, dog-leg and cistern grab bar (min. 604 x 604 x Ø32mm, min. 750 x Ø32mm, respectively)	Unit		1	
4.7		**PRE-CAST PANEL TOILET** as specified and certified by Agrement South Africa - Performance Criteria (Structural Strength and Stability), complete with high-density plastic door, applicable joint connections, and roofing				
4.7.1		Standard Pre-cast Panels				
4.7.1.1		(a) Supply and erection of pre-cast panels (1 - 100 units)	Unit		1	
4.7.1.2		(b) Supply and erection of pre-cast panels (101 - 500 units)	Unit		1	
4.7.1.3		(c) Supply and erection of pre-cast panels (501 - 1000 units)	Unit		1	
4.7.2		Pre-cast Panel Toilets for Persons with Disabilities as specified by SANS 10400-S:2011.				
4.7.2.1		(a) Supply and erection of pre-cast panels, complete with dog-leg and cistern grab bar (min. 604 x 604 x Ø32mm, min. 750 x Ø32mm, respectively)	Unit		1	
TOTAL CARRIED FORWARD TO SUMMARY:						

SECTION 5: WATER RETICULATION AND CONNECTIONS						
SCHEDULE OF RATES					THIS SECTION IS FOR EVALUATION PURPOSES ONLY	
ITEM NO	PAYMENT REFERS	DESCRIPTION	UNIT	RATE	ESTIMATED QUANTITY	AMOUNT
5		**SECTION 5: WATER RETICULATION AND CONNECTIONS**				
5.1	SANS 1200 C	**SITE CLEARANCE** as specified in SANS 1200 C and in the Scope of Work				
5.1.1	PSC 8.2.1	Clear and grub 2m wide strip (where ordered)	m		1 000	
5.1.2	PSC 8.2.5	Take down existing fences	m		1 000	
5.1.3	PSC 8.2.11	Remove and dispose of existing kerbing and concrete channelling	m		1 000	
5.1.4	PSC 8.2.12	Saw-cut asphalt surfacing	m		1 000	
5.1.5	PSC 8.2.13	Remove and dispose of asphalt surfacing	m²		100	
5.1.6	PSC 8.2.14	Saw-cut concrete surfacing	m		1 000	
5.2	SANS 1200 DB	**EARTHWORKS (PIPE TRENCHES)** as specified in SANS 1200 DB and in the Scope of Work				
5.2.1	8.3.2	Excavation				
	PSDB 8.3.2 (a)	(a) Excavate in all materials for trenches, backfill, compact and dispose of surplus material				
		(i) Trenches of width 300mm for water supply & connections				
5.2.1.1		- Depth up to 1,0m	m		1 000	
5.2.1.2		- Depth 1,0m up to 1,5m	m		1 000	
5.2.1.3	PSDB 8.3.2 (b)	(b) Extra over items 5.2.1.1 and 5.2.1.2 for hard rock excavation	m³		10	
5.2.1.4	8.3.2 (c)	(c) Excavate and dispose of unsuitable material from trench bottom	m³		10	
5.2.2		Excavation ancillaries				
	PSDB 8.3.3.1	*Make up deficiency in backfill material*				
5.2.2.1		(a) From other necessary excavations on site	m³		10	
		(b) By importation from commercial or off-site sources selected by the Contractor				
5.2.2.2		(i) Subbase quality material complying with subclause 5.2.1 of SANS 1200 ME.	m³		10	
5.2.2.3		(ii) Trench fill (using cellular lightweight concrete)	m³		10	
5.2.3	PSDB 8.3.3.3	Compaction in road reserves (to 95% of modified AASHTO maximum density)	m³		10	
5.2.4	8.3.6	Finishing				
	8.3.6.1	*Reinstate road surfaces complete with all courses*				
5.2.4.1	PSDB 8.3.6.1	(a) Gravel on shoulders and driveways	m²		100	
5.2.4.2		(b) Hot asphalt type IVA (min thickness 40mm)	m²		100	
5.2.4.3		(c) Concrete paving (25/19 MPa) - 100mm thick	m²		100	
CARRIED FORWARD:						

SECTION 5: WATER RETICULATION AND CONNECTIONS						
SCHEDULE OF RATES					THIS SECTION IS FOR EVALUATION PURPOSES ONLY	
ITEM NO	PAYMENT REFERS	DESCRIPTION	UNIT	RATE	ESTIMATED QUANTITY	AMOUNT
BROUGHT FORWARD:						
5.3	SANS 1200 LB	**BEDDING (PIPES)** as specified in SANS 1200 LB and in the Scope of Work				
5.3.1	8.2.1	Provision of bedding for trench excavation				
5.3.1.1		(a) Selected granular material	m^3		10	
5.3.2	8.2.2	Supply only of bedding by importation				
	PSLB 8.2.2.3	From commercial sources				
5.3.2.1		(a) Selected granular material	m^3		10	
5.3.2.2		(b) 6.7mm concrete stone to SANS 1083	m^3		10	
5.4	SANS 1200 LF	**ERF CONNECTIONS** as specified in SANS 1200 LF and in the Scope of Work				
5.4.1	PSLF 8.2.1	Provide erf connections complete				
		(a) Single erf connections off existing water reticulation (i) 20mm dia. short connection of approximately 1m in length complete with all fittings and specials off:				
5.4.1.1		- 200mm dia. FC pipe	No		100	
5.4.1.2		- 150mm dia. FC pipe	No		100	
5.4.1.3		- 75mm dia. FC pipe	No		100	
5.4.1.4		- 50mm dia. FC pipe	No		100	
5.4.1.5		- 200mm dia. PVC pipe	No		100	
5.4.1.6		- 160mm dia. PVC pipe	No		100	
5.4.1.7		- 110mm dia. PVC pipe	No		100	
5.4.1.8		- 90mm dia. PVC pipe	No		100	
5.4.1.9		- 75mm dia. PVC pipe	No		100	
5.4.1.10		- 63mm dia. PVC pipe	No		100	
5.4.1.11		- 63mm dia. HDPE pipe	No		100	
5.4.1.12		- 50mm dia. HDPE pipe	No		100	
5.4.1.13	PSLF 8.2.9	(b) Extra over item 5.4.1.1 to 5.4.1.12 for additional piping	m		1 000	
5.4.2	PSLF 8.2.4	Supply and install domestic water meter	No		100	
5.4.3	PSLF 8.2.8	Markers	No		100	
TOTAL CARRIED FORWARD TO SUMMARY:						

SECTION 6: SEWER DRAINAGE AND CONNECTIONS						
SCHEDULE OF RATES					THIS SECTION IS FOR EVALUATION PURPOSES ONLY	
ITEM NO	PAYMENT REFERS	DESCRIPTION	UNIT	RATE	ESTIMATED QUANTITY	AMOUNT
6		**SECTION 6: SEWER DRAINAGE AND CONNECTIONS**				
6.1	SANS 1200 C	**SITE CLEARANCE** as specified in SANS 1200 C and in the Scope of Work				
6.1.1	PSC 8.2.1	Clear and grub 2m wide strip (where ordered)	m		1 000	
6.1.2	PSC 8.2.5	Take down existing fences	m		1 000	
6.1.3	PSC 8.2.11	Remove and dispose of existing kerbing and concrete channelling	m		1 000	
6.1.4	PSC 8.2.12	Saw-cut asphalt surfacing	m		1 000	
6.1.5	PSC 8.2.13	Remove and dispose of asphalt surfacing	m²		100	
6.1.6	PSC 8.2.14	Saw-cut concrete surfacing	m		1 000	
6.2	SANS 1200 DB	**EARTHWORKS (PIPE TRENCHES)** as specified in SANS 1200 DB and in the Scope of Work				
6.2.1	8.3.2	Excavation				
	PSDB 8.3.2(a)	(a) Excavate in all materials for trenches, backfill, compact and dispose of surplus material				
		(i) Trenches of 400mm width for 110mm NB sewer drains				
6.2.1.1		- Depth up to 1,0m	m		1 000	
		(ii) Trenches of 600mm width for 110mm NB sewer drains				
6.2.1.2		- Depth exceeding 1,0m up to 1,5m	m		1 000	
6.2.1.3		- Depth exceeding 1,5m up to 2,0m	m		1 000	
		(iii) Trenches of 760mm width for 160mm NB sewer mains				
6.2.1.4		- Depth up to 1,0m	m		1 000	
6.2.1.5		- Depth exceeding 1,0m up to 1,5m	m		1 000	
6.2.1.6		- Depth exceeding 1,5m up to 2,0m	m		1 000	
6.2.1.7		- Depth exceeding 2,0m up to 2,5m	m		1 000	
6.2.1.8		- Depth exceeding 2,5m up to 3,0m	m		1 000	
6.2.1.9	PSDB 8.3.2 (b)	(b) Extra-over items 6.2.1.1 through to 6.2.1.8 for hard rock excavation	m³		10	
6.2.1.10	8.3.2 (c)	(c) Excavate and dispose of unsuitable material from trench bottom	m³		10	
6.2.2		Excavation ancillaries				
	PSDB 8.3.3.1	*Make up deficiency in backfill material*				
6.2.2.1		(a) From other necessary excavations on site	m³		10	
		(b) By importation from commercial or off-site sources selected by the Contractor				
6.2.2.2		(i) Selected material complying with subclause 3.4.2 of SANS 1200 ME	m³		10	
6.2.2.3		(ii) Trench fill (using cellular lightweight concrete)	m³		10	
6.2.3	PSDB 8.3.3.3	Compaction in road reserves (to 95% of modified AASHTO maximum density)	m³		10	
6.2.4	8.3.6	Finishing				
CARRIED FORWARD:						

SECTION 6: SEWER DRAINAGE AND CONNECTIONS						
SCHEDULE OF RATES					THIS SECTION IS FOR EVALUATION PURPOSES ONLY	
ITEM NO	PAYMENT REFERS	DESCRIPTION	UNIT	RATE	ESTIMATED QUANTITY	AMOUNT
BROUGHT FORWARD:						
6.2.5	8.3.6.1	Reinstate road surfaces complete with all courses				
6.2.5.1	PSDB 8.3.6.1	(a) Gravel on shoulders and driveways	m²		100	
6.2.5.2		(b) Hot Asphalt Type IV A (minimum thickness 40 mm)	m²		100	
6.2.5.3		(c) Concrete paving (Class 25/19) - 150mm thick	m²		100	
6.3	SANS 1200 LB	**BEDDING (PIPES)** as specified in SANS 1200 LB and in the Scope of Work				
6.3.1	8.2.1	Provision of bedding from trench excavation				
6.3.1.1		(a) Selected granular material	m³		10	
6.3.1.2		(b) Selected fill material	m³		10	
6.3.2	8.2.2	Supply only of bedding by importation				
	PSLB 8.2.2.3	From commercial sources				
6.3.2.1		(a) Selected granular material	m³		10	
6.3.2.2		(b) 6.7 mm concrete stone to SANS 1083	m³		10	
6.4	SANS 1200 LD	**SEWERS** as specified in SANS 1200 LD and in the Scope of Work				
6.4.1	8.2.1	Supply, lay, joint, bed and test pipeline				
	PSLD 8.2.1	(a) Structured wall PVCu sewers of outside diameters stated (400kPa, Type 1, SANS 1601, Maincor, Ultracor or similar approved), bedded as detailed on the drawings				
6.4.1.1		(i) 110mm dia	m		1 000	
6.4.1.2		(ii) 160mm dia	m		1 000	
6.4.2	8.2.3	Manholes				
	PSLD 8.2.3	(a) Precast concrete manholes complete including medium duty concrete roof slab and type 4 cover and frame for pipes up to and including 160mm dia				
6.4.2.1		(i) Depth up to 1,0m	No		100	
6.4.2.2		(ii) Depth exceeding 1,0m up to 1,5m	No		100	
6.4.2.3		(iii) Depth exceeding 1,5m up to 2,0m	No		100	
6.4.2.4		(iv) Depth exceeding 2,0m up to 2,5m	No		100	
6.4.2.5		(v) Depth exceeding 2,5m up to 3,0m	No		100	
6.4.2.6		(b) Extra-over items 6.4.2.1 through to 6.4.2.5 for type 2A cover and frame for manholes in road areas	No		10	
6.4.3	8.2.4	Extra-over items 6.4.2.1 through to 6.4.2.5 for the construction of ramps and backdrops as detailed complete				
		(a) Ramps for pipes of diameters stated				
6.4.3.1		(i) 160mm	No		10	
		(b) Backdrops				
		(i) 160mm				
6.4.3.2		- up to 1,5m	No		10	
6.4.3.3		- Exceeding 1,5m up to 2,0m	No		10	
6.4.3.4		- Exceeding 2,0m up to 2,5m	No		10	
CARRIED FORWARD:						

SECTION 6: SEWER DRAINAGE AND CONNECTIONS						
SCHEDULE OF RATES					THIS SECTION IS FOR EVALUATION PURPOSES ONLY	
ITEM NO	PAYMENT REFERS	DESCRIPTION	UNIT	RATE	ESTIMATED QUANTITY	AMOUNT
BROUGHT FORWARD :						
6.4.4	PSLD 8.2.5	Extra-over 6.4.2.1 through to 6.4.2.5 for the construction of additional channelling and the building in of short pipe specials at branch manholes, manholes at bends and erf connection manholes				
		(a) For branched channels				
6.4.4.1		(i) 150mm dia.	No		10	
		(b) For channels at bends				
6.4.4.2		(i) 150mm dia.	No		10	
6.4.4.3		(c) Terminal erf connections (110mm dia) into manhole	No		10	
6.4.4.4		(d) Erf connections (110mm dia) into manhole	No		10	
6.4.5	PSLD 8.2.6 (a)	Erf connections (complete with fittings as per drawing)				
		(a) Short length of 1.3m (On new sewer reticulation)				
6.4.5.1		(i) Type 1	No		10	
6.4.5.2		(ii) Type 2	No		10	
6.4.5.3		(iii) Type 3	No		10	
6.4.5.4		(iv) Type 4	No		10	
6.4.5.5		(v) Type 5	No		10	
		(b) Short length of 1.3m (On existing sewer reticulation)				
6.4.5.6		(i) Type 1	No		10	
6.4.5.7		(ii) Type 2	No		10	
6.4.5.8		(iii) Type 3	No		10	
6.4.5.9		(iv) Type 4	No		10	
6.4.5.10		(v) Type 5	No		10	
6.4.6	PSLD 8.2.6 (b)	Extra-over items 6.4.5.1 through 6.4.5.10 for additional length of pipe	m		1 000	
6.4.7	PSLD 8.2.7	Encasing of pipes in concrete	m^3		10	
6.4.8	PSLD 8.2.11	Connection into existing sewer	Sum		10	
6.4.9	PSLD 8.2.13	Testing of watertightness of manholes	No		10	
6.4.10	PSLD 8.2.14	Supply and construct rodding eye complete as detailed on the drawings, including concrete surround (Depth up to 1,5m deep)	No		100	
TOTAL CARRIED FORWARD TO SUMMARY:						

SECTION 7: PLUMBING AND SANITARYWARE						
SCHEDULE OF RATES					THIS SECTION IS FOR EVALUATION PURPOSES ONLY	
ITEM NO	PAYMENT REFERS	DESCRIPTION	UNIT	RATE	ESTIMATED QUANTITY	AMOUNT
BROUGHT FORWARD:						
7.2.15		(xi) 110mm Vent Horn Bend Access Heel 87,5 degrees (Marley SB400 or similar)	No		100	
7.2.16		(xii) 50mm Bend Plain 95 degrees (Marley WBE50 or similar)	No		100	
7.2.17		(xiii) Eccentric Reducer 110 x 50mm (Marley SE404 or similar)	No		100	
7.2.18		(xiv) 40mm PVC U-Trap / Sink Trap (DPE DB3 or similar)	No		100	
7.2.19		(xv) 40mm Bend Access Heel 87,5 degrees (Marley WDE41 or similar)	No		100	
7.2.20		(xvi) 40mm PVC holderbats (Marley WHB4 or similar)	No		100	
7.2.21		(xvii) PVC SV reducer 50 x 40mm (Marley WR5 or similar)	No		100	
7.2.22		(xviii) 40mm PVC SV Junction Plain 87,5 degrees (Marley WS4 or similar)	No		100	
7.2.23		(xix) 110mm Junction Single Access Heel 87,5 degrees (Marley SY42 or similar)	No		100	
		(c) Soil & vent pipe and fittings				
7.2.24		(i) 40mm Pipe (WPE213/1 or similar)	m		1 000	
7.2.25		(ii) 40mm Perforated Pipe (WPE213/1 or similar)	m		1 000	
7.2.26		(iii) 40mm PVC urinal waste cap with CP grating	No		100	
7.2.27		(iv) 40mm solvent stop end	No		100	
7.2.28		(v) 40mm 90 degree bend (W40B, NS001 or similar)	No		100	
7.2.29		(vi) 40mm x 150mm threaded HDPE pipe	No		100	
7.2.30		(vii) 40mm PVC End cap drilled and tapped to 15mm (CA2 or similar)	No		100	
7.2.31		(viii) 40mm holderbats	No		100	
7.2.32		(ix) 40mm PVC threaded female-female straight coupler (MA2 or similar)	No		100	
7.2.33		(x) 40mm PVC back nut (NU4 or similar)	No		100	
7.2.34		(xi) 40mm rubber gasket	No		100	
		(d) Taps				
7.2.35		(i) Bib tap "KM2.202-15" Cobra or similar approved	No		100	
		(e) Cistern				
7.2.36		(i) Low volume cistern (SABS and Agrement South Africa approved)	No		100	
		(f) Pedestal				
7.2.37		(i) Low/ Pour flush (2l or less) pedestal (SABS and Agrement South Africa approved)	No		100	
		(g) Child-seat Lid				
7.2.38		(i) Child-seat lid as a single unit for the normal adult sized seat with child-seat incorporated into the lid	No		100	
7.3		Concrete (20MPa concrete):				
7.3.1		(a) Cast concrete (20 MPa) gulley surround for 190 x 110mm grating (grating elsewhere)	No		100	
7.3.2		(b) Cast concrete (20 MPa) around rodding Eye (450 x 450 x 150mm)	No		100	
TOTAL CARRIED FORWARD TO SUMMARY :						

SECTION 8: CONSERVANCY TANKS						
SCHEDULE OF RATES					THIS SECTION IS FOR EVALUATION PURPOSES ONLY	
ITEM NO	PAYMENT REFERS	DESCRIPTION	UNIT	RATE	ESTIMATED QUANTITY	AMOUNT
8		**SECTION 8: CONSERVANCY TANKS** Rates to include supervision, administration, health and safety, and profit.				
8.1	SANS 1200 C	**SITE CLEARANCE** as specified in SANS 1200 C and in the Scope of Work				
8.1.1		Clear and Grub				
8.1.1.1	8.2.1	(a) Clear site as directed by the Engineer, including spoiling material to a municipal approved tip site	m²		100	
8.1.1.2	8.2.10	(b) Remove topsoil to nominal depth of 150mm and stockpile	m³		10	
8.2	SANS 1200 A	**TEMPORARY WORKS** Rates to include for each and every operation required.				
8.2.1	8.8.4 (c)	Hand excavation in soft material where ordered for locating and exposing existing services	m³		10	
8.3	SANS 1200 DB	**EXCAVATIONS & EARTHWORKS**				
8.3.1		Excavate for conservancy or urine diversion - biodigestion tank size	m³		10	
8.3.2		Extra-over item 8.3.1 for hard rock	m³		10	
8.3.3		Extra-over item 8.3.1 for keeping all excavations from all types of water ingress by any suitable method	Sum		1	
8.3.4		Excavate in all materials for trenches, backfill, compact and dispose of surplus/ unsuitable material and make tidy for:				
8.3.4.1		(a) Trenches for uPVC pipes of diameter up to 150mm and for depths of up to 0.5m	m		1 000	
8.4		**SUB-STRUCTURES**				
8.4.1		Conservancy Tank as specified in SANS 10400-P:2010 (or SABS Approved)				
		(a) Supply and installation of a conservancy tank including any necessary fittings and backfilling required with Engineer approved material				
8.4.1.1		(i) Up to 2 500l	Unit		1	
8.4.1.2		(ii) 2 500l < Size < 5 000l	Unit		1	
8.4.1.3		(iii) 5 000l < Size < 10 000l	Unit		1	
8.4.2		Urine Diversion - Biodigestion Tank Type I (Calcimite eco-mite or similar)				
		(a) Supply and installation of urine diversion - biodigestion tank unit with polyethylene base complete with toilet pedestal and urine diversion unit, including a polyethylene drying plate, solar dome with hinge lid, vent pipe and wind extractor				
8.4.2.1		(i) Up to 500l	Unit		1	
8.4.2.2		(ii) 500l < Size < 2 000l	Unit		1	
8.4.2.3		(iii) 2 000l < Size < 2 500l	Unit		1	
CARRIED FORWARD :						

SECTION 8: CONSERVANCY TANKS						
SCHEDULE OF RATES					THIS SECTION IS FOR EVALUATION PURPOSES ONLY	
ITEM NO	PAYMENT REFERS	DESCRIPTION	UNIT	RATE	ESTIMATED QUANTITY	AMOUNT
BROUGHT FORWARD:						
8.4.3		Urine Diversion - Biodigestion Tank Type II (Enviro Loo or similar) (SABS Approved)				
		(a) Supply and installation of biodigestion tank unit with low-density polyethylene base complete with toilet pedestal, including a drying plate, drying bag and vent extraction unit				
8.4.3.1		(i) For 1 - 10 users per day	Unit		1	
8.4.3.2		(ii) For 1 - 20 users per day	Unit		1	
8.4.3.3		(iii) For 1 - 30 users per day	Unit		1	
8.4.3.4		(iv) For 1 - 40 users per day	Unit		1	
TOTAL CARRIED FORWARD TO SUMMARY :						

SECTION 9: SEPTIC TANK						
SCHEDULE OF RATES					THIS SECTION IS FOR EVALUATION PURPOSES ONLY	
ITEM NO	PAYMENT REFERS	DESCRIPTION	UNIT	RATE	ESTIMATED QUANTITY	AMOUNT
9		**SECTION 9: SEPTIC TANK** Rates to include supervision, administration, health and safety, and profit.				
9.1	SANS 1200 C	**SITE CLEARANCE** as specified in SANS 1200 C and in the Scope of Work				
9.1.1		Clear and Grub				
9.1.1.1	8.2.1	(a) Clear site as directed by the Engineer, including spoiling material to a municipal approved tip site	m²		100	
9.1.1.2	8.2.10	(b) Remove topsoil to nominal depth of 150mm and stockpile	m³		10	
9.2	SANS 1200 A	**TEMPORARY WORKS** Rates to include for each and every operation required.				
9.2.1	8.8.4 (c)	Hand excavation in soft material where ordered for locating and exposing existing services	m³		10	
9.3	SANS 1200 DB	**EXCAVATIONS & EARTHWORKS**				
9.3.1		Excavate for septic tank pit (max. 3150 x 3150mm) commencing from reduced levels and not exceeding a depth greater than 1,5m	m		10	
9.3.2		Excavate for septic tank pit (max. 3150 x 3150mm) commencing from 1,5m depth and not exceeding a depth greater than 3m	m		10	
9.3.3		Excavate for septic tank pit (max. 3150 x 3150mm) commencing from 3m depth and not exceeding a depth greater than 4,5m	m		10	
9.3.4		Extra-over items 9.3.1 through to 9.3.3 for hard rock	m³		10	
9.3.5		Extra-over items 9.3.1 through to 9.3.3 for keeping all excavations from all types of water ingress by any suitable method	Sum		1	
9.3.6		Excavate in all materials for trenches, backfill, compact and dispose of surplus/ unsuitable material and make tidy for:				
9.3.6.1		(a) Trenches for uPVC pipes of diameter up to 150mm and for depths of up to 0.5m	m		1 000	
9.4		**SUB-STRUCTURE (CONCRETE AND BRICK WORKS)** as specified in SANS 10400-P:2010 (or SABS Approved)				
9.4.1		Construction of leach-pit structure (French drain) [max. 3150 x 3150mm] using M6 concrete blocks complete with in-situ preparation, reinforced concrete floor and cover slab, wall brickwork, min. concrete cover for durability and smart lock manhole cover, including all fittings, inlet and outlet pipes	Unit		1	
TOTAL CARRIED FORWARD TO SUMMARY:						

SECTION 10: FENCING AND SECURITY						
SCHEDULE OF RATES					THIS SECTION IS FOR EVALUATION PURPOSES ONLY	
ITEM NO	PAYMENT REFERS	DESCRIPTION	UNIT	RATE	ESTIMATED QUANTITY	AMOUNT
10		**SECTION 10: FENCING AND SECURITY**				
10.1		**EARTHWORKS (HOLES FOR POSTS)**				
10.1.1		Excavation				
10.1.1.1	8.3.1	Excavate holes for corner/end or standard posts (500 x 500 x 400mm)	No		10	
10.2	SANS 1200 GA	**CONCRETE WORKS**				
10.2.1		Concrete to bases 15MPa/19	m^3		10	
10.2.2		Supply and install 152 x 152 x 23kg/m steel H section 3000mm long, cast 600mm into concrete base (measured elsewhere), including galvanising to SANS 0763.	kg		100	
10.2.3		Supply and install in previously erected H section steel columns, 50MPa precast concrete wall panel 3000 x 1200 x 120mm thick including grouting	m^2		100	
10.3		**FENCING**				
10.3.1		Supply and install 1,8m high-weld mesh fence (50 x 50 x 2,5mm)	m		1 000	
10.3.2		Dismantle and reinstall 1,8m high existing fence line to new position	m		1 000	
10.3.3		Extra-over items 10.3.1 and 10.3.2	m		1 000	
10.3.4		Supply and install corner posts (150mm OD)	No		10	
10.3.5		Supply and install straining posts (150mm OD)	No		10	
10.3.6		Supply and install 1.8m high security fencing. Posts of 100 x 54 x 2mm H section, planted min. 600mm deep, galvanised to SANS 0763 and coated min. 100 micron fusion bond PVC - inside and outside, complete with top cap. Fence panels with inner aperture size 12,7 x 76,2mm galvanised SANS 0763 and min. 100 micron fusion bond PVC coating.	m		1 000	
10.3.7	SANS 457	Supply and install 150mm dia. post and rail (90mm dia.) timber fencing (or ranch fencing) all poles to be tantalised, including excavation - where directed by Engineer.	m		1 000	
10.4		**REMOVAL OF FENCING**				
10.4.1		Salvage of existing fencing for re-use				
10.4.1.1		(a) Take down existing 1,8m diamond mesh fence including roll up of mesh, coiling of wire, loading, carting and off loading at NMBM depot	m		1 000	
10.4.1.2		(b) Excavate for and recover 2,4m corner and intermediate fence posts including removal of anchor concrete, closure of post hole, sorting, loading, carting and off-loading at NMBM depot	No		10	
10.4.1.3		(c) Dismantle 1,8m high by 3,0m opening two leaf diamond mesh gate complete including loading, carting, and off-loading at NMBM depot	No		10	
CARRIED FORWARD :						

SECTION 10: FENCING AND SECURITY						
SCHEDULE OF RATES					THIS SECTION IS FOR EVALUATION PURPOSES ONLY	
ITEM NO	PAYMENT REFERS	DESCRIPTION	UNIT	RATE	ESTIMATED QUANTITY	AMOUNT
BROUGHT FORWARD:						
10.5		**MISCELLANEOUS ITEMS**				
10.5.1		Supply and installation of hardened steel hasp with shackle protector (BBH535 or similar), complete with standard discus padlock including five (5) high security keys (BBP170-F1 or similar)	No		10	
10.5.2		Stencil marking of pre-cast concrete toilets with pavecote based paint	No		10	
TOTAL CARRIED FORWARD TO SUMMARY :						

SECTION 11: GENERAL						
SCHEDULE OF RATES					THIS SECTION IS FOR EVALUATION PURPOSES ONLY	
ITEM NO	PAYMENT REFERS	DESCRIPTION	UNIT	RATE	ESTIMATED QUANTITY	AMOUNT
11		**SECTION 11: GENERAL**				
11.1	SANS 1200 C	**SITE CLEARANCE** as specified in SANS 1200 C and in the Scope of Work				
11.1.1	PSC 8.2.1	Clear and grub 2m wide strip (where ordered)	m		1 000	
11.1.2	PSC 8.2.5	Take down existing fences	m		1 000	
11.1.3	PSC 8.2.11	Remove and dispose of existing kerbing and concrete channelling	m		1 000	
11.1.4	PSC 8.2.12	Saw-cut asphalt surfacing	m		1 000	
11.1.5	PSC 8.2.13	Remove and dispose of asphalt surfacing	m²		100	
11.1.6	PSC 8.2.14	Saw-cut concrete surfacing	m		1 000	
11.2	SANS 1200 GA	**CONCRETE (SMALL WORKS)** as specified in SANS 1200 GA and in the Scope of Work				
11.2.1		For minor concrete works as directed on site				
	8.2	(a) Formwork				
11.2.1.1	8.2.1	(i) Rough (covered)	m²		100	
11.2.1.2	8.2.2	(ii) Smooth (exposed)	m²		100	
	8.3.2	(b) High-tensile welded mesh				
11.2.1.3		(i) Ref. 195	m²		100	
11.2.1.4		(ii) Ref. 245	m²		100	
11.2.1.5		(iii) Ref. 359	m²		100	
11.2.1.6		(iv) Ref. 617	m²		100	
	8.4	(c) Concrete				
	8.4.3	(i) Strength concrete				
11.2.1.7		- 15MPa/19	m³		10	
11.2.1.8		- 20MPa/19	m³		10	
	8.4.4	(d) Unformed surface finishes				
11.2.1.9		(i) Wood-floated finish	m²		100	
11.2.1.10		(ii) Steel-floated finish	m²		100	
11.3		**RELOCATION OF INFORMAL HOUSING** All building material to be secured with little to no damage - for reuse.				
11.3.1		Diss-assemble existing informal housing				
11.3.1.1		(a) Informal housing size < 15m²	No		1	
11.3.1.2		(b) 15m² < Informal housing size < 30m²	No		1	
11.3.1.3		(c) Informal housing size > 30m²	No		1	
11.3.2		Transportation from Relocation Site to Beneficiary Site				
11.3.2.1		(a) radius distance <10km from relocation site	No		10	
11.3.2.2		(b) 10km < radius distance > 20km from relocation site	No		10	
11.3.2.3		(c) 20km < radius distance > 30km from relocation site	No		10	
11.3.2.4		(d) 30km < radius distance from relocation site	No		10	
CARRIED FORWARD :						

SECTION 11: GENERAL						
SCHEDULE OF RATES					THIS SECTION IS FOR EVALUATION PURPOSES ONLY	
ITEM NO	PAYMENT REFERS	DESCRIPTION	UNIT	RATE	ESTIMATED QUANTITY	AMOUNT
BROUGHT FORWARD:						
11.3.3		Re-assemble existing informal housing Rates to also include sealants, fasteners, applicable connections and waterproofing.				
11.3.3.1		(a) Informal housing size < 15m²	No		1	
11.3.3.2		(b) 15m² < Informal housing size < 30m²	No		1	
11.3.3.3		(c) Informal housing size > 30m²	No		1	
TOTAL CARRIED FORWARD TO SUMMARY :						

C2.3 SUMMARY OF SCHEDULE OF RATES

CLUSTER 5

SECTION	DESCRIPTION	PRICE
1 – PART 1	PRELIMINARY AND GENERAL	R
1 – PART 2	DAYWORKS	R
2	HEALTH & SAFETY	R
3	EME – SUB-CONTRACTING WORK	R
4	ABLUTION FACILITIES	R
5	WATER RETICULATION AND CONNECTIONS	R
6	SEWER DRAINAGE AND CONNECTIONS	R
7	PLUMBING AND SANITARYWARE	R
8	CONSERVANCY TANKS	R
9	SEPTIC TANKS	R
10	FENCING AND SECURITY	R
11	GENERAL	R

TOTAL OF PRICED ITEMS	R
NET CONTRACT PRICE	R
VALUE ADDED TAX (15% of Net Contract Price)	R
CONTRACT SUM (CARRIED TO C1.1. FORM OF OFFER)	**R**

Notes:

1. The Contract Price is subject to Contract Price Adjustment in terms of Clause 6.8.2 of the Conditions of Contract.
2. The Contract Sum is a Fictitious Value that shall be used for **Evaluation Purposes only**.
3. The undersigned, who warrants that he / she is duly authorised to do so on behalf of the enterprise, confirms that the contents of this schedule are within my personal knowledge and are to the best of my belief both true and correct.

Signed ..... Date .....

Name ..... Position .....

Tenderer .....

SHEDULE OF RATES: CLUSTER 6

SECTION 1 - PART 1: PRELIMINARY AND GENERAL						
SCHEDULE OF RATES					THIS SECTION IS FOR EVALUATION PURPOSES ONLY	
ITEM NO	PAYMENT REFERS	DESCRIPTION	UNIT	RATE	ESTIMATED QUANTITY	AMOUNT
1		**SECTION 1 - PART 1: PRELIMINARY AND GENERAL**				
1.1		**PRELIMINARY AND GENERAL: CONTRACTOR'S ESTABLISHMENT ON SITE & GENERAL** The contractor's general obligations.				
1.1.1	PSA 8.3.1(a)	Value-related obligations for works assignments ranging between:				
1.1.1.1		(a) R0 - R2 000 000	%		1 000 000.00	
1.1.1.2		(b) R2 000 001 - R4 000 000	%		3 000 000.00	
1.1.1.3		(c) R4 000 001 - R6 000 000	%		5 000 000.00	
1.1.1.4		(d) Greater than R6 000 001	%		7 000 000.00	
1.1.2	PSA 8.3.1(b)	Time-related obligations for works assignments ranging between:				
1.1.2.1		(a) R0 - R2 000 000	Month		36	
1.1.2.2		(b) R2 000 001 - R4 000 000	Month		36	
1.1.2.3		(c) R4 000 001 - R6 000 000	Month		36	
1.1.2.4		(d) Greater than R6 000 001	Month		36	
TOTAL CARRIED FORWARD TO SUMMARY :						

SECTION 1 - PART 2: DAYWORKS						
SCHEDULE OF RATES					THIS SECTION IS FOR EVALUATION PURPOSES ONLY	
ITEM NO	PAYMENT REFERS	DESCRIPTION	UNIT	RATE	ESTIMATED QUANTITY	AMOUNT
1		**SECTION 1 - PART 2: DAYWORKS**				
1.3		**DAYWORKS (PROVISIONAL)**				
1.3.1		Personnel during normal working hours				
1.3.1.1		(a) Unskilled labour	hr		1 000	
1.3.1.2		(b) Semi-skilled labour	hr		1 000	
1.3.1.3		(c) Skilled labour	hr		1 000	
1.3.1.4		(d) Ganger	hr		1 000	
1.3.1.5		(e) Flagman	hr		1 000	
1.3.2		Plant				
1.3.2.1		(a) Dropside truck (2 to 12-ton capacity)	hr		100	
1.3.2.2		(b) Tipper Trucks (3 to 5-ton capacity)	hr		100	
1.3.2.3		(c) TLB (digger loader)	hr		100	
1.3.2.4		(d) Compactor (Bomag 90 or similar)	hr		100	
1.3.2.5		(e) Water truck (10 000 litres)	hr		100	
1.3.2.6		(f) Suitable truck for transporting labourers (min. of 30 people)	hr		100	
1.3.2.7		(g) Safety vehicle for pre-marking purposes	hr		100	
1.3.2.8		(h) Dewatering pump including generators and accessories	hr		100	
1.3.2.9		(i) Light delivery vehicle (LDV)	hr		100	
1.3.2.10		(j) Centre-mount crane (more than 8-ton)	hr		100	
1.3.2.11		(k) Other Specify	hr		100	
1.3.3		Materials				
1.3.3.1		(a) Procurement of materials	Prov. Sum	500 000	1	500 000.00
1.3.3.2		(b) Contractor's handling costs, profit and all other charges in respect of sub-item 1.3.3.1	%		500 000	
1.3.4		Establishment (maximum 150km per trip)				
1.3.4.1		(a) Dropside truck (2 to 12-ton capacity)	km		100	
1.3.4.2		(b) Tipper Trucks (3 to 5-ton capacity)	km		100	
1.3.4.3		(c) TLB (digger loader)	km		100	
1.3.4.4		(d) Water truck (10 000 litres)	km		100	
1.3.4.5		(e) Suitable truck for transporting labourers (min. of 30 people)	km		100	
1.3.4.6		(f) Light delivery vehicle (LDV)	km		100	
1.3.4.7		(g) Centre-mount crane (more than 8-ton)	km		100	
1.3.5	PSA 8.4.6	Compensation in terms of clause 5.12.2.4 of the Conditions of Contract for delays incurred				
1.3.5.1		(a) Plant	day		100	
1.3.5.2		(b) Labour	day		100	
1.3.5.3		(c) Supervision	day		100	
1.3.5.4		(d) Other services, facilities, etc. not covered by items 1.3.5.1 to 1.3.5.3	day		100	
1.4	SANS 1200 A	**TEMPORARY WORKS**				
1.4.1		Existing services				
1.4.1.1	8.8.4 (c)	(a) Excavate by hand in soft material to expose existing services	m^3		10	
1.4.1.2		(b) Lowering/ relocating/ repairing existing services	Prov. Sum	50 000	1	50 000.00
CARRIED FORWARD:						

SECTION 1 - PART 2: DAYWORKS						
SCHEDULE OF RATES					THIS SECTION IS FOR EVALUATION PURPOSES ONLY	
ITEM NO	PAYMENT REFERS	DESCRIPTION	UNIT	RATE	ESTIMATED QUANTITY	AMOUNT
BROUGHT FORWARD:						
1.4.2	8.8.5	Cost of survey in terms of Land Survey Act				
1.4.2.1		(a) Locate, record and protect erf boundary and survey pegs	Sum		1	
1.4.2.2		(b) Replace pegs recorded as missing at commencement of Contract as well as pegs removed in terms of PSA 5.1.1	No		100	
TOTAL CARRIED FORWARD TO SUMMARY :						

SECTION 2: HEALTH & SAFETY						
SCHEDULE OF RATES					THIS SECTION IS FOR EVALUATION PURPOSES ONLY	
ITEM NO	PAYMENT REFERS	DESCRIPTION	UNIT	RATE	ESTIMATED QUANTITY	AMOUNT
2		**SECTION 2: HEALTH & SAFETY**				
2.1		Provision for Personal Protective Equipment & Protective Clothing				
2.1.1		(a) Reflective vests	No		100	
2.1.2		(b) Reflective bibs	No		100	
2.1.3		(c) Hard hats	No		100	
2.1.4		(d) Protective foot wear	No		100	
2.1.5		(e) Earplugs	No		100	
2.1.6		(f) Dust masks	No		100	
2.1.7		(g) Workman Gloves	No		100	
2.2		Provision of full time Construction Health and Safety Officer	Month		36	
2.3		Costs of Medical Certificates and Medical Surveillance				
2.3.1		(a) Initial (baseline) medical examinations	No		100	
2.3.2		(b) Exit examinations	No		100	
2.4		Induction Training	No		100	
2.5		Environmental Monitoring Tests	No		100	
2.6		Noise Monitoring				
2.6.1		(a) Establishment of noise zones	No		10	
2.6.2		(b) Audiograms	No		10	
2.7		Provision of First Aid boxes	Sum		1	
2.8		Transportation of Workers	Month		12	
2.9		Submission of the Health and Safety File	Sum		1	
2.10	PSA 8.3.5	On-site Security Supervision				
2.10.1		(a) Provision of Security Services to ensure the safe working environment for all workers, materials and works on site during working hours	Prov. Sum	250 000	1	250 000.00
2.10.2		(b) Handling costs and charges for the Contractor on item 2.10.1	%		250 000	
TOTAL CARRIED FORWARD TO SUMMARY:						

SECTION 3: EME SUB-CONTRACTING WORK						
SCHEDULE OF RATES					THIS SECTION IS FOR EVALUATION PURPOSES ONLY	
ITEM NO	PAYMENT REFERS	DESCRIPTION	UNIT	RATE	ESTIMATED QUANTITY	AMOUNT
3		**SECTION 3: EME SUB-CONTRACTING WORK**				
3.1		EME Support Programme				
3.1.1		(a) Establishment and monitoring of EME Support Programme	Prov. Sum	100 000	1	100 000.00
3.1.2		(b) Overhead charges on Item 3.1.1	%		100 000	
3.2		EME Support Initiative: Management				
3.2.1	PSA 8.15	(a) EME Construction Manager remuneration	Prov. Sum	10 000	1	10 000.00
3.2.2		(b) Overhead charges on Item 3.2.1	%		10 000	
3.2.3	PSA 8.16	(c) Community Liaison Officer (CLO) remuneration	Prov. Sum	10 000	1	10 000.00
3.2.4		(d) Overhead charges on Item 3.2.3	%		10 000	
3.3		EME Support Initiative: Training				
3.3.1	PSA 8.18	(a) Training of EMEs	Prov. Sum	100 000	1	100 000.00
3.3.2		(b) Mark-up on Item 3.3.1	%		100 000	
TOTAL CARRIED FORWARD TO SUMMARY :						

SECTION 4: ABLUTION FACILITIES						
SCHEDULE OF RATES					THIS SECTION IS FOR EVALUATION PURPOSES ONLY	
ITEM NO	PAYMENT REFERS	DESCRIPTION	UNIT	RATE	ESTIMATED QUANTITY	AMOUNT
4		**SECTION 4: ABLUTION FACILITIES**				
4.1	SABS 1200 C	**SITE CLEARANCE** as specified in SABS 1200 C and in the project specification				
4.1.1	PSC 8.2.1	Clear and grub for toilet ablutions	m²		100	
4.2	SABS 1200 D	**EARTHWORKS** as specified in SABS 1200 D and in the project specification				
4.2.1	8.3.1	Site preparation				
4.2.1.1	8.3.1.2	Remove topsoil to nominal depth 150mm, stockpile and maintain	m³		10	
4.2.2	8.3.3	Restricted excavation				
	PSD 8.3.3	(a) Excavate for restricted foundations, footings, trenches, and landscaping in soft materials and use for backfill, berm or dispose, as ordered:				
4.2.2.1		(i) Embankment and landscaping compacted to 90% of max modified AASHTO density	m³		10	
4.2.2.2		(ii) Backfill compacted to 98% of modified AASHTO maximum density	m³		10	
4.2.2.3		(iii) Dispose	m³		10	
4.2.2.4		(b) Extra-over item 4.2.2.1 to 4.2.2.3 for hard rock excavation	m³		10	
4.2.3	PSDB 8.3.3.1	Make up deficiency in backfill				
		(a) By importation from commercial or "off site" sources selected by the contractor				
4.2.3.1		(i) Subbase quality material complying with subclause 3.2.2 of SABS 1200ME compacted to 98% of modified AASHTO maximum density	m³		10	
4.2.3.2	8.3.9	(b) Extra-over item 4.2.3.1 for backfill or for fill material against structures	m³		10	
4.2.4	PSD 8.3.10	Topsoiling (100mm thick)	m²		100	
4.2.5	8.3.11	Grassing (with sods of kweek)	m²		100	
4.3	SANS 1200 GA	**CONCRETE (SMALL WORKS)** as specified in SABS 1200 GA and in the project specification				
4.3.1	8.2	Schedule for Formwork Items				
4.3.1.1	8.2.1	(a) Rough (covered)	m²		100	
4.3.1.2	8.2.2	(b) Smooth (exposed)	m²		100	
4.3.2	8.3	Schedule for Reinforcement Items				
	8.3.2	High-tensile welded mesh				
4.3.2.1		(a) Ref. 195	m²		100	
4.3.2.2		(b) Ref. 245	m²		100	
4.3.3	8.4	Schedule for Concrete Items				
4.3.3.1	8.4.2	Blinding Layer in 15MPa/19 Concrete (30mm nominal thickness)	m²		100	
CARRIED FORWARD:						

SECTION 4: ABLUTION FACILITIES						
SCHEDULE OF RATES					THIS SECTION IS FOR EVALUATION PURPOSES ONLY	
ITEM NO	PAYMENT REFERS	DESCRIPTION	UNIT	RATE	ESTIMATED QUANTITY	AMOUNT
BROUGHT FORWARD:						
	8.4.3	Strength concrete				
4.3.3.2		(a) 20MPa/19 (Apron to ablutions)	m^3		10	
4.3.3.3		(b) 25MPa/19 (Floor Slab)	m^3		10	
	8.4.4	Unformed surface finishes				
4.3.3.4		(a) Wood-floated finish (Apron Slab)	m^2		100	
	8.5	Joints				
4.3.3.5		(a) Soft Joint	m		1 000	
4.4	SANS 1200 GE	**PRECAST CONCRETE (STUCTURAL)** as specified in SANS 1200 GE and in the project specification				
4.4.1	8.2.1	Supply and Install Structural Precast Units				
		(a) Wash Hand Basin				
4.4.1		(i) Precast concrete single wash trough (SABS approved) complete with wall mounting connections	No		100	
4.5		**DELIVERY OF CONTAINER ABLUTIONS**				
4.5.1		Delivery of Container Type Ablution from Collection Point to Site				
4.5.1.1		(a) radius distance <10km from collection point	No		10	
4.5.1.2		(b) 10km < radius distance > 20km from collection point	No		10	
4.5.1.3		(c) 20km < radius distance > 30km from collection point	No		10	
4.5.1.4		(d) 30km < radius distance from collection point	No		10	
4.5.2		Delivery of Container Type Ablution to Previous Site (including safe disconnection of water and sewer connections) to New Site/ Depot				
4.5.2.1		(a) radius distance < 10km from previous site	No		10	
4.5.2.2		(b) 10km < radius distance > 20km from previous site	No		10	
4.5.2.3		(c) 20km < radius distance > 30km from previous site	No		10	
4.5.2.4		(d) 30km < radius distance from previous site	No		10	
4.6		**PRE-CAST PANEL TOILETS COMPLETE WITH PEDESTAL AND CISTERN** as specified by Agrement South Africa - Performance Criteria (Structural Strength and Stability), complete with Agrement South Africa, and SABS Approved (for raw material) low/ pour flush pedestal and cistern, and high-density plastic door.				
4.6.1	PSA 8.19	Standard Pre-cast Panel Toilets				
4.6.1.1		(a) Supply and erection of pre-cast panel toilet, complete with low/ pour flush pedestal and cistern (1 - 100 units)	Unit		1	
4.6.1.2		(b) Supply and erection of pre-cast panel toilet, complete with low/ pour flush pedestal and cistern (101 - 500 units)	Unit		1	
4.6.1.3		(c) Supply and erection of pre-cast panel toilet, complete with low/ pour flush pedestal and cistern (501 - 1 000 units)	Unit		1	
CARRIED FORWARD:						

SECTION 4: ABLUTION FACILITIES						
SCHEDULE OF RATES					THIS SECTION IS FOR EVALUATION PURPOSES ONLY	
ITEM NO	PAYMENT REFERS	DESCRIPTION	UNIT	RATE	ESTIMATED QUANTITY	AMOUNT
BROUGHT FORWARD:						
4.6.2	PSA 8.20	Pre-cast Panel Toilets for Persons with Disabilities as specified by SANS 10400-S:2011.				
4.6.2.1		(a) Supply and erection of pre-cast toilet, complete with low/ pour flush pedestal and cistern, dog-leg and cistern grab bar (min. 604 x 604 x Ø32mm, min. 750 x Ø32mm, respectively)	Unit		1	
4.7		**PRE-CAST PANEL TOILET** as specified and certified by Agrement South Africa - Performance Criteria (Structural Strength and Stability), complete with high-density plastic door, applicable joint connections, and roofing				
4.7.1		Standard Pre-cast Panels				
4.7.1.1		(a) Supply and erection of pre-cast panels (1 - 100 units)	Unit		1	
4.7.1.2		(b) Supply and erection of pre-cast panels (101 - 500 units)	Unit		1	
4.7.1.3		(c) Supply and erection of pre-cast panels (501 - 1000 units)	Unit		1	
4.7.2		Pre-cast Panel Toilets for Persons with Disabilities as specified by SANS 10400-S:2011.				
4.7.2.1		(a) Supply and erection of pre-cast panels, complete with dog-leg and cistern grab bar (min. 604 x 604 x Ø32mm, min. 750 x Ø32mm, respectively)	Unit		1	
TOTAL CARRIED FORWARD TO SUMMARY:						

SECTION 5: WATER RETICULATION AND CONNECTIONS						
SCHEDULE OF RATES					THIS SECTION IS FOR EVALUATION PURPOSES ONLY	
ITEM NO	PAYMENT REFERS	DESCRIPTION	UNIT	RATE	ESTIMATED QUANTITY	AMOUNT
5		**SECTION 5: WATER RETICULATION AND CONNECTIONS**				
5.1	SANS 1200 C	**SITE CLEARANCE** as specified in SANS 1200 C and in the Scope of Work				
5.1.1	PSC 8.2.1	Clear and grub 2m wide strip (where ordered)	m		1 000	
5.1.2	PSC 8.2.5	Take down existing fences	m		1 000	
5.1.3	PSC 8.2.11	Remove and dispose of existing kerbing and concrete channelling	m		1 000	
5.1.4	PSC 8.2.12	Saw-cut asphalt surfacing	m		1 000	
5.1.5	PSC 8.2.13	Remove and dispose of asphalt surfacing	m²		100	
5.1.6	PSC 8.2.14	Saw-cut concrete surfacing	m		1 000	
5.2	SANS 1200 DB	**EARTHWORKS (PIPE TRENCHES)** as specified in SANS 1200 DB and in the Scope of Work				
5.2.1	8.3.2	Excavation				
	PSDB 8.3.2 (a)	(a) Excavate in all materials for trenches, backfill, compact and dispose of surplus material				
		(i) Trenches of width 300mm for water supply & connections				
5.2.1.1		- Depth up to 1,0m	m		1 000	
5.2.1.2		- Depth 1,0m up to 1,5m	m		1 000	
5.2.1.3	PSDB 8.3.2 (b)	(b) Extra over items 5.2.1.1 and 5.2.1.2 for hard rock excavation	m³		10	
5.2.1.4	8.3.2 (c)	(c) Excavate and dispose of unsuitable material from trench bottom	m³		10	
5.2.2		Excavation ancillaries				
	PSDB 8.3.3.1	*Make up deficiency in backfill material*				
5.2.2.1		(a) From other necessary excavations on site	m³		10	
		(b) By importation from commercial or off-site sources selected by the Contractor				
5.2.2.2		(i) Subbase quality material complying with subclause 5.2.1 of SANS 1200 ME.	m³		10	
5.2.2.3		(ii) Trench fill (using cellular lightweight concrete)	m³		10	
5.2.3	PSDB 8.3.3.3	Compaction in road reserves (to 95% of modified AASHTO maximum density)	m³		10	
5.2.4	8.3.6	Finishing				
	8.3.6.1	*Reinstate road surfaces complete with all courses*				
5.2.4.1	PSDB 8.3.6.1	(a) Gravel on shoulders and driveways	m²		100	
5.2.4.2		(b) Hot asphalt type IVA (min thickness 40mm)	m²		100	
5.2.4.3		(c) Concrete paving (25/19 MPa) - 100mm thick	m²		100	
CARRIED FORWARD:						

SECTION 5: WATER RETICULATION AND CONNECTIONS						
SCHEDULE OF RATES					THIS SECTION IS FOR EVALUATION PURPOSES ONLY	
ITEM NO	PAYMENT REFERS	DESCRIPTION	UNIT	RATE	ESTIMATED QUANTITY	AMOUNT
BROUGHT FORWARD:						
5.3	SANS 1200 LB	**BEDDING (PIPES)** as specified in SANS 1200 LB and in the Scope of Work				
5.3.1	8.2.1	Provision of bedding for trench excavation				
5.3.1.1		(a) Selected granular material	m^3		10	
5.3.2	8.2.2	Supply only of bedding by importation				
	PSLB 8.2.2.3	From commercial sources				
5.3.2.1		(a) Selected granular material	m^3		10	
5.3.2.2		(b) 6.7mm concrete stone to SANS 1083	m^3		10	
5.4	SANS 1200 LF	**ERF CONNECTIONS** as specified in SANS 1200 LF and in the Scope of Work				
5.4.1	PSLF 8.2.1	Provide erf connections complete				
		(a) Single erf connections off existing water reticulation (i) 20mm dia. short connection of approximately 1m in length complete with all fittings and specials off:				
5.4.1.1		- 200mm dia. FC pipe	No		100	
5.4.1.2		- 150mm dia. FC pipe	No		100	
5.4.1.3		- 75mm dia. FC pipe	No		100	
5.4.1.4		- 50mm dia. FC pipe	No		100	
5.4.1.5		- 200mm dia. PVC pipe	No		100	
5.4.1.6		- 160mm dia. PVC pipe	No		100	
5.4.1.7		- 110mm dia. PVC pipe	No		100	
5.4.1.8		- 90mm dia. PVC pipe	No		100	
5.4.1.9		- 75mm dia. PVC pipe	No		100	
5.4.1.10		- 63mm dia. PVC pipe	No		100	
5.4.1.11		- 63mm dia. HDPE pipe	No		100	
5.4.1.12		- 50mm dia. HDPE pipe	No		100	
5.4.1.13	PSLF 8.2.9	(b) Extra over item 5.4.1.1 to 5.4.1.12 for additional piping	m		1 000	
5.4.2	PSLF 8.2.4	Supply and install domestic water meter	No		100	
5.4.3	PSLF 8.2.8	Markers	No		100	
TOTAL CARRIED FORWARD TO SUMMARY:						

SECTION 6: SEWER DRAINAGE AND CONNECTIONS						
SCHEDULE OF RATES					THIS SECTION IS FOR EVALUATION PURPOSES ONLY	
ITEM NO	PAYMENT REFERS	DESCRIPTION	UNIT	RATE	ESTIMATED QUANTITY	AMOUNT
6		**SECTION 6: SEWER DRAINAGE AND CONNECTIONS**				
6.1	SANS 1200 C	**SITE CLEARANCE** as specified in SANS 1200 C and in the Scope of Work				
6.1.1	PSC 8.2.1	Clear and grub 2m wide strip (where ordered)	m		1 000	
6.1.2	PSC 8.2.5	Take down existing fences	m		1 000	
6.1.3	PSC 8.2.11	Remove and dispose of existing kerbing and concrete channelling	m		1 000	
6.1.4	PSC 8.2.12	Saw-cut asphalt surfacing	m		1 000	
6.1.5	PSC 8.2.13	Remove and dispose of asphalt surfacing	m²		100	
6.1.6	PSC 8.2.14	Saw-cut concrete surfacing	m		1 000	
6.2	SANS 1200 DB	**EARTHWORKS (PIPE TRENCHES)** as specified in SANS 1200 DB and in the Scope of Work				
6.2.1	8.3.2	Excavation				
	PSDB 8.3.2(a)	(a) Excavate in all materials for trenches, backfill, compact and dispose of surplus material				
		(i) Trenches of 400mm width for 110mm NB sewer drains				
6.2.1.1		- Depth up to 1,0m	m		1 000	
		(ii) Trenches of 600mm width for 110mm NB sewer drains				
6.2.1.2		- Depth exceeding 1,0m up to 1,5m	m		1 000	
6.2.1.3		- Depth exceeding 1,5m up to 2,0m	m		1 000	
		(iii) Trenches of 760mm width for 160mm NB sewer mains				
6.2.1.4		- Depth up to 1,0m	m		1 000	
6.2.1.5		- Depth exceeding 1,0m up to 1,5m	m		1 000	
6.2.1.6		- Depth exceeding 1,5m up to 2,0m	m		1 000	
6.2.1.7		- Depth exceeding 2,0m up to 2,5m	m		1 000	
6.2.1.8		- Depth exceeding 2,5m up to 3,0m	m		1 000	
6.2.1.9	PSDB 8.3.2 (b)	(b) Extra-over items 6.2.1.1 through to 6.2.1.8 for hard rock excavation	m³		10	
6.2.1.10	8.3.2 (c)	(c) Excavate and dispose of unsuitable material from trench bottom	m³		10	
6.2.2		Excavation ancillaries				
	PSDB 8.3.3.1	*Make up deficiency in backfill material*				
6.2.2.1		(a) From other necessary excavations on site	m³		10	
		(b) By importation from commercial or off-site sources selected by the Contractor				
6.2.2.2		(i) Selected material complying with subclause 3.4.2 of SANS 1200 ME	m³		10	
6.2.2.3		(ii) Trench fill (using cellular lightweight concrete)	m³		10	
6.2.3	PSDB 8.3.3.3	Compaction in road reserves (to 95% of modified AASHTO maximum density)	m³		10	
6.2.4	8.3.6	Finishing				
CARRIED FORWARD:						

SECTION 6: SEWER DRAINAGE AND CONNECTIONS						
SCHEDULE OF RATES					THIS SECTION IS FOR EVALUATION PURPOSES ONLY	
ITEM NO	PAYMENT REFERS	DESCRIPTION	UNIT	RATE	ESTIMATED QUANTITY	AMOUNT
BROUGHT FORWARD:						
6.2.5	8.3.6.1	Reinstate road surfaces complete with all courses				
6.2.5.1	PSDB 8.3.6.1	(a) Gravel on shoulders and driveways	m²		100	
6.2.5.2		(b) Hot Asphalt Type IV A (minimum thickness 40 mm)	m²		100	
6.2.5.3		(c) Concrete paving (Class 25/19) - 150mm thick	m²		100	
6.3	SANS 1200 LB	**BEDDING (PIPES)** as specified in SANS 1200 LB and in the Scope of Work				
6.3.1	8.2.1	Provision of bedding from trench excavation				
6.3.1.1		(a) Selected granular material	m³		10	
6.3.1.2		(b) Selected fill material	m³		10	
6.3.2	8.2.2	Supply only of bedding by importation				
	PSLB 8.2.2.3	From commercial sources				
6.3.2.1		(a) Selected granular material	m³		10	
6.3.2.2		(b) 6.7 mm concrete stone to SANS 1083	m³		10	
6.4	SANS 1200 LD	**SEWERS** as specified in SANS 1200 LD and in the Scope of Work				
6.4.1	8.2.1	Supply, lay, joint, bed and test pipeline				
	PSLD 8.2.1	(a) Structured wall PVCu sewers of outside diameters stated (400kPa, Type 1, SANS 1601, Maincor, Ultracor or similar approved), bedded as detailed on the drawings				
6.4.1.1		(i) 110mm dia	m		1 000	
6.4.1.2		(ii) 160mm dia	m		1 000	
6.4.2	8.2.3	Manholes				
	PSLD 8.2.3	(a) Precast concrete manholes complete including medium duty concrete roof slab and type 4 cover and frame for pipes up to and including 160mm dia				
6.4.2.1		(i) Depth up to 1,0m	No		100	
6.4.2.2		(ii) Depth exceeding 1,0m up to 1,5m	No		100	
6.4.2.3		(iii) Depth exceeding 1,5m up to 2,0m	No		100	
6.4.2.4		(iv) Depth exceeding 2,0m up to 2,5m	No		100	
6.4.2.5		(v) Depth exceeding 2,5m up to 3,0m	No		100	
6.4.2.6		(b) Extra-over items 6.4.2.1 through to 6.4.2.5 for type 2A cover and frame for manholes in road areas	No		10	
6.4.3	8.2.4	Extra-over items 6.4.2.1 through to 6.4.2.5 for the construction of ramps and backdrops as detailed complete				
		(a) Ramps for pipes of diameters stated				
6.4.3.1		(i) 160mm	No		10	
		(b) Backdrops				
		(i) 160mm				
6.4.3.2		- up to 1,5m	No		10	
6.4.3.3		- Exceeding 1,5m up to 2,0m	No		10	
6.4.3.4		- Exceeding 2,0m up to 2,5m	No		10	
CARRIED FORWARD:						

SECTION 6: SEWER DRAINAGE AND CONNECTIONS						
SCHEDULE OF RATES					THIS SECTION IS FOR EVALUATION PURPOSES ONLY	
ITEM NO	PAYMENT REFERS	DESCRIPTION	UNIT	RATE	ESTIMATED QUANTITY	AMOUNT
BROUGHT FORWARD :						
6.4.4	PSLD 8.2.5	Extra-over 6.4.2.1 through to 6.4.2.5 for the construction of additional channelling and the building in of short pipe specials at branch manholes, manholes at bends and erf connection manholes				
		(a) For branched channels				
6.4.4.1		(i) 150mm dia.	No		10	
		(b) For channels at bends				
6.4.4.2		(i) 150mm dia.	No		10	
6.4.4.3		(c) Terminal erf connections (110mm dia) into manhole	No		10	
6.4.4.4		(d) Erf connections (110mm dia) into manhole	No		10	
6.4.5	PSLD 8.2.6 (a)	Erf connections (complete with fittings as per drawing)				
		(a) Short length of 1.3m (On new sewer reticulation)				
6.4.5.1		(i) Type 1	No		10	
6.4.5.2		(ii) Type 2	No		10	
6.4.5.3		(iii) Type 3	No		10	
6.4.5.4		(iv) Type 4	No		10	
6.4.5.5		(v) Type 5	No		10	
		(b) Short length of 1.3m (On existing sewer reticulation)				
6.4.5.6		(i) Type 1	No		10	
6.4.5.7		(ii) Type 2	No		10	
6.4.5.8		(iii) Type 3	No		10	
6.4.5.9		(iv) Type 4	No		10	
6.4.5.10		(v) Type 5	No		10	
6.4.6	PSLD 8.2.6 (b)	Extra-over items 6.4.5.1 through 6.4.5.10 for additional length of pipe	m		1 000	
6.4.7	PSLD 8.2.7	Encasing of pipes in concrete	m^3		10	
6.4.8	PSLD 8.2.11	Connection into existing sewer	Sum		10	
6.4.9	PSLD 8.2.13	Testing of watertightness of manholes	No		10	
6.4.10	PSLD 8.2.14	Supply and construct rodding eye complete as detailed on the drawings, including concrete surround (Depth up to 1,5m deep)	No		100	
TOTAL CARRIED FORWARD TO SUMMARY:						

SECTION 7: PLUMBING AND SANITARYWARE						
SCHEDULE OF RATES					THIS SECTION IS FOR EVALUATION PURPOSES ONLY	
ITEM NO	PAYMENT REFERS	DESCRIPTION	UNIT	RATE	ESTIMATED QUANTITY	AMOUNT
BROUGHT FORWARD:						
7.2.15		(xi) 110mm Vent Horn Bend Access Heel 87,5 degrees (Marley SB400 or similar)	No		100	
7.2.16		(xii) 50mm Bend Plain 95 degrees (Marley WBE50 or similar)	No		100	
7.2.17		(xiii) Eccentric Reducer 110 x 50mm (Marley SE404 or similar)	No		100	
7.2.18		(xiv) 40mm PVC U-Trap / Sink Trap (DPE DB3 or similar)	No		100	
7.2.19		(xv) 40mm Bend Access Heel 87,5 degrees (Marley WDE41 or similar)	No		100	
7.2.20		(xvi) 40mm PVC holderbats (Marley WHB4 or similar)	No		100	
7.2.21		(xvii) PVC SV reducer 50 x 40mm (Marley WR5 or similar)	No		100	
7.2.22		(xviii) 40mm PVC SV Junction Plain 87,5 degrees (Marley WS4 or similar)	No		100	
7.2.23		(xix) 110mm Junction Single Access Heel 87,5 degrees (Marley SY42 or similar)	No		100	
		(c) Soil & vent pipe and fittings				
7.2.24		(i) 40mm Pipe (WPE213/1 or similar)	m		1 000	
7.2.25		(ii) 40mm Perforated Pipe (WPE213/1 or similar)	m		1 000	
7.2.26		(iii) 40mm PVC urinal waste cap with CP grating	No		100	
7.2.27		(iv) 40mm solvent stop end	No		100	
7.2.28		(v) 40mm 90 degree bend (W40B, NS001 or similar)	No		100	
7.2.29		(vi) 40mm x 150mm threaded HDPE pipe	No		100	
7.2.30		(vii) 40mm PVC End cap drilled and tapped to 15mm (CA2 or similar)	No		100	
7.2.31		(viii) 40mm holderbats	No		100	
7.2.32		(ix) 40mm PVC threaded female-female straight coupler (MA2 or similar)	No		100	
7.2.33		(x) 40mm PVC back nut (NU4 or similar)	No		100	
7.2.34		(xi) 40mm rubber gasket	No		100	
		(d) Taps				
7.2.35		(i) Bib tap "KM2.202-15" Cobra or similar approved	No		100	
		(e) Cistern				
7.2.36		(i) Low volume cistern (SABS and Agrement South Africa approved)	No		100	
		(f) Pedestal				
7.2.37		(i) Low/ Pour flush (2l or less) pedestal (SABS and Agrement South Africa approved)	No		100	
		(g) Child-seat Lid				
7.2.38		(i) Child-seat lid as a single unit for the normal adult sized seat with child-seat incorporated into the lid	No		100	
7.3		Concrete (20MPa concrete):				
7.3.1		(a) Cast concrete (20 MPa) gulley surround for 190 x 110mm grating (grating elsewhere)	No		100	
7.3.2		(b) Cast concrete (20 MPa) around rodding Eye (450 x 450 x 150mm)	No		100	
TOTAL CARRIED FORWARD TO SUMMARY :						

SECTION 8: CONSERVANCY TANKS						
SCHEDULE OF RATES					THIS SECTION IS FOR EVALUATION PURPOSES ONLY	
ITEM NO	PAYMENT REFERS	DESCRIPTION	UNIT	RATE	ESTIMATED QUANTITY	AMOUNT
8		**SECTION 8: CONSERVANCY TANKS** Rates to include supervision, administration, health and safety, and profit.				
8.1	SANS 1200 C	**SITE CLEARANCE** as specified in SANS 1200 C and in the Scope of Work				
8.1.1		Clear and Grub				
8.1.1.1	8.2.1	(a) Clear site as directed by the Engineer, including spoiling material to a municipal approved tip site	m²		100	
8.1.1.2	8.2.10	(b) Remove topsoil to nominal depth of 150mm and stockpile	m³		10	
8.2	SANS 1200 A	**TEMPORARY WORKS** Rates to include for each and every operation required.				
8.2.1	8.8.4 (c)	Hand excavation in soft material where ordered for locating and exposing existing services	m³		10	
8.3	SANS 1200 DB	**EXCAVATIONS & EARTHWORKS**				
8.3.1		Excavate for conservancy or urine diversion - biodigestion tank size	m³		10	
8.3.2		Extra-over item 8.3.1 for hard rock	m³		10	
8.3.3		Extra-over item 8.3.1 for keeping all excavations from all types of water ingress by any suitable method	Sum		1	
8.3.4		Excavate in all materials for trenches, backfill, compact and dispose of surplus/ unsuitable material and make tidy for:				
8.3.4.1		(a) Trenches for uPVC pipes of diameter up to 150mm and for depths of up to 0.5m	m		1 000	
8.4		**SUB-STRUCTURES**				
8.4.1		Conservancy Tank as specified in SANS 10400-P:2010 (or SABS Approved)				
		(a) Supply and installation of a conservancy tank including any necessary fittings and backfilling required with Engineer approved material				
8.4.1.1		(i) Up to 2 500l	Unit		1	
8.4.1.2		(ii) 2 500l < Size < 5 000l	Unit		1	
8.4.1.3		(iii) 5 000l < Size < 10 000l	Unit		1	
8.4.2		Urine Diversion - Biodigestion Tank Type I (Calcimite eco-mite or similar)				
		(a) Supply and installation of urine diversion - biodigestion tank unit with polyethylene base complete with toilet pedestal and urine diversion unit, including a polyethylene drying plate, solar dome with hinge lid, vent pipe and wind extractor				
8.4.2.1		(i) Up to 500l	Unit		1	
8.4.2.2		(ii) 500l < Size < 2 000l	Unit		1	
8.4.2.3		(iii) 2 000l < Size < 2 500l	Unit		1	
CARRIED FORWARD :						

SECTION 8: CONSERVANCY TANKS						
SCHEDULE OF RATES					THIS SECTION IS FOR EVALUATION PURPOSES ONLY	
ITEM NO	PAYMENT REFERS	DESCRIPTION	UNIT	RATE	ESTIMATED QUANTITY	AMOUNT
BROUGHT FORWARD:						
8.4.3		Urine Diversion - Biodigestion Tank Type II (Enviro Loo or similar) (SABS Approved)				
		(a) Supply and installation of biodigestion tank unit with low-density polyethylene base complete with toilet pedestal, including a drying plate, drying bag and vent extraction unit				
8.4.3.1		(i) For 1 - 10 users per day	Unit		1	
8.4.3.2		(ii) For 1 - 20 users per day	Unit		1	
8.4.3.3		(iii) For 1 - 30 users per day	Unit		1	
8.4.3.4		(iv) For 1 - 40 users per day	Unit		1	
TOTAL CARRIED FORWARD TO SUMMARY :						

SECTION 9: SEPTIC TANK						
SCHEDULE OF RATES					THIS SECTION IS FOR EVALUATION PURPOSES ONLY	
ITEM NO	PAYMENT REFERS	DESCRIPTION	UNIT	RATE	ESTIMATED QUANTITY	AMOUNT
9		**SECTION 9: SEPTIC TANK** Rates to include supervision, administration, health and safety, and profit.				
9.1	SANS 1200 C	**SITE CLEARANCE** as specified in SANS 1200 C and in the Scope of Work				
9.1.1		Clear and Grub				
9.1.1.1	8.2.1	(a) Clear site as directed by the Engineer, including spoiling material to a municipal approved tip site	m²		100	
9.1.1.2	8.2.10	(b) Remove topsoil to nominal depth of 150mm and stockpile	m³		10	
9.2	SANS 1200 A	**TEMPORARY WORKS** Rates to include for each and every operation required.				
9.2.1	8.8.4 (c)	Hand excavation in soft material where ordered for locating and exposing existing services	m³		10	
9.3	SANS 1200 DB	**EXCAVATIONS & EARTHWORKS**				
9.3.1		Excavate for septic tank pit (max. 3150 x 3150mm) commencing from reduced levels and not exceeding a depth greater than 1,5m	m		10	
9.3.2		Excavate for septic tank pit (max. 3150 x 3150mm) commencing from 1,5m depth and not exceeding a depth greater than 3m	m		10	
9.3.3		Excavate for septic tank pit (max. 3150 x 3150mm) commencing from 3m depth and not exceeding a depth greater than 4,5m	m		10	
9.3.4		Extra-over items 9.3.1 through to 9.3.3 for hard rock	m³		10	
9.3.5		Extra-over items 9.3.1 through to 9.3.3 for keeping all excavations from all types of water ingress by any suitable method	Sum		1	
9.3.6		Excavate in all materials for trenches, backfill, compact and dispose of surplus/ unsuitable material and make tidy for:				
9.3.6.1		(a) Trenches for uPVC pipes of diameter up to 150mm and for depths of up to 0.5m	m		1 000	
9.4		**SUB-STRUCTURE (CONCRETE AND BRICK WORKS)** as specified in SANS 10400-P:2010 (or SABS Approved)				
9.4.1		Construction of leach-pit structure (French drain) [max. 3150 x 3150mm] using M6 concrete blocks complete with in-situ preparation, reinforced concrete floor and cover slab, wall brickwork, min. concrete cover for durability and smart lock manhole cover, including all fittings, inlet and outlet pipes	Unit		1	
TOTAL CARRIED FORWARD TO SUMMARY:						

SECTION 10: FENCING AND SECURITY						
SCHEDULE OF RATES					THIS SECTION IS FOR EVALUATION PURPOSES ONLY	
ITEM NO	PAYMENT REFERS	DESCRIPTION	UNIT	RATE	ESTIMATED QUANTITY	AMOUNT
10		**SECTION 10: FENCING AND SECURITY**				
10.1		**EARTHWORKS (HOLES FOR POSTS)**				
10.1.1		Excavation				
10.1.1.1	8.3.1	Excavate holes for corner/end or standard posts (500 x 500 x 400mm)	No		10	
10.2	SANS 1200 GA	**CONCRETE WORKS**				
10.2.1		Concrete to bases 15MPa/19	m^3		10	
10.2.2		Supply and install 152 x 152 x 23kg/m steel H section 3000mm long, cast 600mm into concrete base (measured elsewhere), including galvanising to SANS 0763.	kg		100	
10.2.3		Supply and install in previously erected H section steel columns, 50MPa precast concrete wall panel 3000 x 1200 x 120mm thick including grouting	m^2		100	
10.3		**FENCING**				
10.3.1		Supply and install 1,8m high-weld mesh fence (50 x 50 x 2,5mm)	m		1 000	
10.3.2		Dismantle and reinstall 1,8m high existing fence line to new position	m		1 000	
10.3.3		Extra-over items 10.3.1 and 10.3.2	m		1 000	
10.3.4		Supply and install corner posts (150mm OD)	No		10	
10.3.5		Supply and install straining posts (150mm OD)	No		10	
10.3.6		Supply and install 1.8m high security fencing. Posts of 100 x 54 x 2mm H section, planted min. 600mm deep, galvanised to SANS 0763 and coated min. 100 micron fusion bond PVC - inside and outside, complete with top cap. Fence panels with inner aperture size 12,7 x 76,2mm galvanised SANS 0763 and min. 100 micron fusion bond PVC coating.	m		1 000	
10.3.7	SANS 457	Supply and install 150mm dia. post and rail (90mm dia.) timber fencing (or ranch fencing) all poles to be tantalised, including excavation - where directed by Engineer.	m		1 000	
10.4		**REMOVAL OF FENCING**				
10.4.1		Salvage of existing fencing for re-use				
10.4.1.1		(a) Take down existing 1,8m diamond mesh fence including roll up of mesh, coiling of wire, loading, carting and off loading at NMBM depot	m		1 000	
10.4.1.2		(b) Excavate for and recover 2,4m corner and intermediate fence posts including removal of anchor concrete, closure of post hole, sorting, loading, carting and off-loading at NMBM depot	No		10	
10.4.1.3		(c) Dismantle 1,8m high by 3,0m opening two leaf diamond mesh gate complete including loading, carting, and off-loading at NMBM depot	No		10	
CARRIED FORWARD :						

SECTION 10: FENCING AND SECURITY						
SCHEDULE OF RATES					THIS SECTION IS FOR EVALUATION PURPOSES ONLY	
ITEM NO	PAYMENT REFERS	DESCRIPTION	UNIT	RATE	ESTIMATED QUANTITY	AMOUNT
BROUGHT FORWARD:						
10.5		**MISCELLANEOUS ITEMS**				
10.5.1		Supply and installation of hardened steel hasp with shackle protector (BBH535 or similar), complete with standard discus padlock including five (5) high security keys (BBP170-F1 or similar)	No		10	
10.5.2		Stencil marking of pre-cast concrete toilets with pavecote based paint	No		10	
TOTAL CARRIED FORWARD TO SUMMARY :						

SECTION 11: GENERAL						
SCHEDULE OF RATES					THIS SECTION IS FOR EVALUATION PURPOSES ONLY	
ITEM NO	PAYMENT REFERS	DESCRIPTION	UNIT	RATE	ESTIMATED QUANTITY	AMOUNT
11		**SECTION 11: GENERAL**				
11.1	SANS 1200 C	**SITE CLEARANCE** as specified in SANS 1200 C and in the Scope of Work				
11.1.1	PSC 8.2.1	Clear and grub 2m wide strip (where ordered)	m		1 000	
11.1.2	PSC 8.2.5	Take down existing fences	m		1 000	
11.1.3	PSC 8.2.11	Remove and dispose of existing kerbing and concrete channelling	m		1 000	
11.1.4	PSC 8.2.12	Saw-cut asphalt surfacing	m		1 000	
11.1.5	PSC 8.2.13	Remove and dispose of asphalt surfacing	m²		100	
11.1.6	PSC 8.2.14	Saw-cut concrete surfacing	m		1 000	
11.2	SANS 1200 GA	**CONCRETE (SMALL WORKS)** as specified in SANS 1200 GA and in the Scope of Work				
11.2.1		For minor concrete works as directed on site				
	8.2	(a) Formwork				
11.2.1.1	8.2.1	(i) Rough (covered)	m²		100	
11.2.1.2	8.2.2	(ii) Smooth (exposed)	m²		100	
	8.3.2	(b) High-tensile welded mesh				
11.2.1.3		(i) Ref. 195	m²		100	
11.2.1.4		(ii) Ref. 245	m²		100	
11.2.1.5		(iii) Ref. 359	m²		100	
11.2.1.6		(iv) Ref. 617	m²		100	
	8.4	(c) Concrete				
	8.4.3	(i) Strength concrete				
11.2.1.7		- 15MPa/19	m³		10	
11.2.1.8		- 20MPa/19	m³		10	
	8.4.4	(d) Unformed surface finishes				
11.2.1.9		(i) Wood-floated finish	m²		100	
11.2.1.10		(ii) Steel-floated finish	m²		100	
11.3		**RELOCATION OF INFORMAL HOUSING** All building material to be secured with little to no damage - for reuse.				
11.3.1		Diss-assemble existing informal housing				
11.3.1.1		(a) Informal housing size < 15m²	No		1	
11.3.1.2		(b) 15m² < Informal housing size < 30m²	No		1	
11.3.1.3		(c) Informal housing size > 30m²	No		1	
11.3.2		Transportation from Relocation Site to Beneficiary Site				
11.3.2.1		(a) radius distance <10km from relocation site	No		10	
11.3.2.2		(b) 10km < radius distance > 20km from relocation site	No		10	
11.3.2.3		(c) 20km < radius distance > 30km from relocation site	No		10	
11.3.2.4		(d) 30km < radius distance from relocation site	No		10	
CARRIED FORWARD :						

SECTION 11: GENERAL						
SCHEDULE OF RATES					THIS SECTION IS FOR EVALUATION PURPOSES ONLY	
ITEM NO	PAYMENT REFERS	DESCRIPTION	UNIT	RATE	ESTIMATED QUANTITY	AMOUNT
BROUGHT FORWARD:						
11.3.3		Re-assemble existing informal housing Rates to also include sealants, fasteners, applicable connections and waterproofing.				
11.3.3.1		(a) Informal housing size < 15m²	No		1	
11.3.3.2		(b) 15m² < Informal housing size < 30m²	No		1	
11.3.3.3		(c) Informal housing size > 30m²	No		1	
TOTAL CARRIED FORWARD TO SUMMARY :						

C2.3 SUMMARY OF SCHEDULE OF RATES

CLUSTER 6

SECTION	DESCRIPTION	PRICE
1 – PART 1	PRELIMINARY AND GENERAL	R
1 – PART 2	DAYWORKS	R
2	HEALTH & SAFETY	R
3	EME – SUB-CONTRACTING WORK	R
4	ABLUTION FACILITIES	R
5	WATER RETICULATION AND CONNECTIONS	R
6	SEWER DRAINAGE AND CONNECTIONS	R
7	PLUMBING AND SANITARYWARE	R
8	CONSERVANCY TANKS	R
9	SEPTIC TANKS	R
10	FENCING AND SECURITY	R
11	GENERAL	R

TOTAL OF PRICED ITEMS	R
NET CONTRACT PRICE	R
VALUE ADDED TAX (15% of Net Contract Price)	R
CONTRACT SUM (CARRIED TO C1.1. FORM OF OFFER)	**R**

Notes:

iii. The Contract Price is subject to Contract Price Adjustment in terms of Clause 6.8.2 of the Conditions of Contract.

iv. The Contract Sum is a Fictitious Value that shall be used for **Evaluation Purposes only**.

v. The undersigned, who warrants that he / she is duly authorised to do so on behalf of the enterprise, confirms that the contents of this schedule are within my personal knowledge and are to the best of my belief both true and correct.

Signed ..... Date .....

Name ..... Position .....

Tenderer .....

RETURNABLES

T2.1.2: MUNICIPAL RATES CLEARANCE CERTIFICATE

Attach, as part of the request for quotation submission, a valid Billing Clearance certificate from the Nelson Mandela Bay Municipality and any other local municipal entity.

In terms of Section 38(1)(d)(i) of the Supply Chain Management Regulation, the Accounting Officer must reject any bid from a bidder if any municipal rates and taxes or service charges owed by that bidder or any of its directors to any Municipality, or to any other municipal entity, are in arrears for more than three months. In this regard, the following is also required:

- In the event that the bidder (company) or directors are renting the premises, a valid rental agreement must be submitted.
- Statement of accounts submitted must not be older than three months.
- Bidders who reside outside the NMBM must submit a Billing Clearance Certificate from the NMBM or an updated Statement of Municipal Accounts from their respective municipality.

The bidder shall attach on this page, a Municipal Accounts Billing Clearance Certificate, which provides proof that his/her payment of Municipal Accounts is up to date. The abovementioned information must be submitted with the bid document before the closing date.

The municipality reserves the right to request an updated Billing Clearance Certificate/municipal account.

These certificates are obtained from the Supply Chain Management Offices, Corner Buxton Avenue and Harrower Road, North End, Port Elizabeth.

Billing Clearance Tel: 041 506 3136

Fax: 086 577 3809

Email: billclear@mandelametro.gov.za

T2.1.14: DECLARATION OF INTEREST IN TENDER OF PERSONS IN SERVICE OF THE STATE (MBD4)

THIS FORM MUST BE COMPLETED IN FULL AND SIGNED. FAILURE TO COMPLY WILL RESULT IN THE TENDER BEING DISQUALIFIED.

(Refer to Clauses C2.26 and C2.27 in the Tender Data)

1. Is/was an employer/owner of the tenderer in the service of the state, or has been in the service of the state in the previous twelve months: ***YES / NO (INDICATE)***

If so, state particulars:

.....

If so, state the date of resignation:

.....

2. If the provider is not a natural person, whether any of its directors, managers, principal shareholders or stakeholder is in the service of the state, or has been in the service of the state in the previous twelve months: ***YES / NO (INDICATE)***

If so, state particulars:

.....

3. Whether a spouse, child or parent of the provider or of a director, manager, shareholder or stakeholder referred to in subparagraph 2 is in the service of the state, or has been in the service of the state in the previous twelve months: ***YES / NO (INDICATE)***

If so, state particulars:

.....

4. Is an employer / owner of the tenderer a person who is an advisor or consultant contracted with the municipality or municipal entity: ***YES / NO (INDICATE)***

If so, state particulars:

.....

5. Are the Tenderer or any of the members of the tendering entity involved in another entity for this particular tender: ***YES / NO (INDICATE)***

If so, state particulars:

.....

The undersigned, who warrants that he / she is duly authorised to do so on behalf of the enterprise, confirms that the contents of this schedule are within my personal knowledge and are to the best of my belief both true and correct.

Signed ..... Date …….

Name ..... Position …….

Tenderer

……

T2.1.16: DECLARATION OF TENDERERS PAST SUPPLY CHAIN MANAGEMENT PRACTICES

1. This form serves as a declaration to be used by the Employer in ensuring that when goods and services are being procured, all reasonable steps are taken to combat the abuse of the supply chain management system.
2. The tender of any Tenderer may be rejected if that Tenderer, or any of its directors have:
   a. abused the Municipality's / Municipal entity's supply chain management system or been guilty of any improper conduct in relation to such system;
   b. been convicted for fraud or corruption during the past five years;
   c. wilfully neglected, reneged on or failed to comply with any government, Municipal or other public sector contract during the past five years; or
   d. been listed in the Register for Tender Defaulters in terms of Section 29 of the Prevention and Combating of Corrupt Activities Act, 2004 (Act 12 of 2004).
3. In order to give effect to the above, this form and the questionnaire must be completed in full and signed. Failure to comply will result in the tender being disqualified.

ITEM	QUESTION	RESPONSE	
4.1	**Is the Tenderer or any of its directors listed on the National Treasurer's database as a company or persons prohibited from doing business with the public sector?** (Companies for persons who are listed on this database were informed in writing of this restriction by the National Treasury after the *audi alteram partem* rule was applied)	Yes	No
	If so, furnish particulars:		
4.2	**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, 2004 (Act 12 of 2004)?** (To access this Register enter the National Treasury's website, www.treasury.gov.za , click on the icon "Register for Tender Defaulters" or submit your written request for a hard copy of the Register to facsimile number 012-326-5445)	Yes	No
	If so, furnish particulars:		
4.3	**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
	If so, furnish particulars:		

4.4	**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
	If so, furnish particulars:		
4.5	**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
	If so, furnish particulars:		

The undersigned, who warrants that he / she is duly authorised to do so on behalf of the enterprise, confirms that the contents of this schedule are within my personal knowledge and are to the best of my belief both true and correct.

Signed ..... Date …….

Name ..... Position …….

Tenderer

……

T2.1.18: CERTIFICATE OF INDEPENDENT BID DETERMINATION

I, the undersigned, in submitting the accompanying bid:

.....

(Bid Number and Description)

in response to the invitation for the bid made by:

.....

(Name of Municipality / Municipal Entity)

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

I certify, on behalf of: .....that:

(Name of Bidder)

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

*** 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.**

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

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

……	……..……
Signature	Date
…….	……..……
Position	Name of Bidder