

ANNEXURE A
TECHNICAL SPECIFICATIONS

**APPOINTMENT OF A SERVICE PROVIDER FOR THE SUPPLY, DELIVERY, INSTALLATION AND
MAINTANCE OF ONSITE VIP SANITATION TOILETS WITHIN VARIOUS INFORMAL SETTLEMENTS IN
RUSTENBURG LOCAL MUNICIPALITY FOR THE PERIOD OF THREE YEARS**

1. PURPOSE

To appoint a contractor for the supply, delivery, construction, and maintenance of Ventilated Improved Pit (VIP) Toilets at various informal settlements in Rustenburg Local Municipality on an As and when basis from the date of award till three years.

2. SCOPE

The purpose of the bid is to appoint a contractor to supply, delivery, construct and maintenance of VIP toilets in informal settlements within Rustenburg Local Municipality.

2.1 Extend of the Works

The work to be carried out by the tenderer under this contract comprises mainly of the following:

- Project Management
- Material Sourcing and Delivering
- Construction Supervision
- Clear and grub
- Excavate toilet pits as per drawing with the following size and dimensions:
 - The pit should have a depth of 1500mm, Width of 870mm and Length of 1220mm (Volume of 1.6 m³).
 - The toilet pit should be water tight to prevent water seepage to the ground as Rustenburg Local Municipality area is highly dolomitic.

Repit Bladder LLDPE geomembrane complete with flange can be used or similar approved water tight material that can conform to subsequence and differential settlements and prevent water seepage.
 - 150mm thick reinforced concrete (25MPa and 19mm aggregates) pit base slab with Ref. 395
 - Toilet pits fully lined with 140mm maxi brick wall
- Construction of top structure with the following specifications and dimensions:
 - Floor Concrete Slab: 100mm Reinforced Concrete floor slab (25MPa) reinforced with Ref.395
 - Side and roof panels for precast structures should have a thickness of 40mm, bolted to one another and to the floor slab.
 - The pit to be vented by a 50Ømm pvc vent pipe projected above roof level with a fly screen cover at the top.

- The door should be pressed galvanized mild steel 1605x875x30mm with steel rod fixed to floor slab at bottom and fixed to mild steel frame at top.
- Pedestal with approved sealed rotating bowl made from non-stick Nano technology or similar approved.
- Maintenance of VIP Toilets: Includes emptying of VIP toilet pits once in every three (3) months and replacement of damaged top structure components as and when requested.

2.2 Site Establishment

Bidder(s) are required to familiarize themselves with the existing site conditions to enable them to properly price for the delivery and installation of the goods.

- **Source of Water Supply**

Water is available from the existing water network in RUSTENBURG LOCAL MUNICIPALITY and the contractor is to arrange with RUSTENBURG LOCAL MUNICIPALITY for a connection point. The Contractor will be responsible for the costs of the connection as well as the use of water for construction purposes.

- **Sources of power supply**

Electricity is available from the existing network in RUSTENBURG LOCAL MUNICIPALITY and the Contractor is to arrange with the Local Authority for a connection. The Contractor will be responsible for the costs of electricity consumed as well as the connection costs.

- **Location of camp and depot**

The Client shall point out the position of the Contractor camp to the Contractor during the site inspection after being appointed.

- **Sanitary facilities**

The Contractor is to provide the necessary sanitary facilities at the site camp, all of which will be governed by the requirements of the RUSTENBURG LOCAL MUNICIPALITY. The Contractor shall pay all sanitary fees and charges due.

- **Temporary offices**

The Contractor is not required to provide any specific office space for the Client, but the Contractor's offices shall have adequate space and facilities for the holding of site meetings, and for the Client to perform administrative functions.

Neither housing nor shelters will be provided for the contractor's employees, and the Contractor shall make his own arrangements to house his employees and transport them to the Site.

- **Name Boards**

One name board shall be provided in positions as ordered by the Client. The Client will provide the lettering required once the tender is awarded.

- The Contractor shall comply with RUSTENBURG LOCAL MUNICIPALITY land use policies and shall apply for temporary land use with RUSTENBURG LOCAL MUNICIPALITY

2.3 Existing Services

The Contractor shall so carry out all his operations as not to encroach on, or interfere with, trespass on, or damage adjoining lands, building properties, roads, structures, places and things in the vicinity of the Works, and he shall free and relieve the Employer of any liability that may be incurred in consequence of his failure to do so.

It is the contractor's responsibility to apply for WAYLEAVES with relevant stakeholders before undertaking any excavation work.

2.4 Work specifications

It is the responsibility of the bidder(s) to ensure that the work done comply as possible with SANS 1200.

RUSTENBURG LOCAL MUNICIPALITY reserves the right to reject any work that is found not to be of the highest quality and comply with SANS 1200.

The following applicable standardized and particular specifications are relevant to this contract:

SANS 1200 A General
SANS 1200 C Site Clearance
SANS 1200 DA Earthworks (small works)
SANS 1200 DB (pipe trenches)
SANS 1200 L Medium Pressure Pipelines
SANS 1200 GA Concrete (small works)
SANS 1024:2006 (Ref Mesh)

2.5 Preliminary and General

The preliminary and general section of the schedule shall be interpreted to be the contractor's lump sum to cover direct costs, overheads, profit, time related costs, all general risks, liabilities, Health and Safety Plan and provision of Safety Officer, charges for compliance with the requirements of the conditions of contract, charges for the provision, maintenance and removal of site establishment, provision of site office, all necessary and supervision of the project for the entire duration. The lump sum for the preliminary and general should be within 15% of the total cost of the project cost.

2.6 Site Clearance

The area required to be cleared per VIP toilet structure will be 12 m² (4 m x 3 m) which will include removal of all trees and bushes (complete with roots), other vegetation, rubbish, fences, and all other material that may interfere with the construction of the works. The disposal of all material resulting from the clearing to allocated site nearby. The moving of a certain amount of soil or gravel may be inherent in or unavoidable during the process of clearing. The cleared, grubbed, cut, and demolished will be dealt with as excavation in terms of the items scheduled for excavation or restricted excavation.

2.7 Excavations

After an area has been cleared to 12 m², excavation shall be carried to 1.5 m deep by 0.87 m width by 1.22 m length to ensure a satisfactory toilet pit. Excavation shall be cleaned of all loose material and soft material shall be permitted. Topsoil and overburden shall be stripped and stockpiled separately unless otherwise ordered. The Contractor shall so maintain borrow pits that they do not become a danger to persons and livestock. On completion of borrowing, all unused material, including overburden but excluding topsoil, shall be returned and the sides of the pits shall be graded 1:2. The stockpiled topsoil shall then be spread evenly over the area of the borrow pit and, thereafter, any access constructed by the Contractor shall be scarified and the area be reinstated. The Contractor shall not spoil, stockpile or waste any material without approval. The Contractor shall dispose of surplus and unsuitable material in areas designated nearby.

2.8 Compaction of backfilling to trenches

Backfilling to trenches shall be placed in layers of thickness (before compaction) not exceeding 200mm and have a minimum strength of 93% MOD. AASHTO.

2.9 Reinforcement

Supply and installation of Ref 395 Mesh

Toilet floor slab with front footing

The required mesh reinforcement shall comply with SANS 1024:2006, mesh no. 395 with a 3.95 Kg/m². The mesh will be installed on the slab, shall have a cover of 50 mm on the sides and be 50 mm above the bottom level of the concrete slab.

2.10 Concrete Work

Concrete for slabs

The required concrete strength shall be 25 MPa with 19 mm aggregates for concrete slab. The aggregates shall comply with relevant requirements of SANS 1083. Cement shall comply with SANS 471 Portland cement or SANS 626 Portland blast-furnace cement or SANS 831 Portland cement 15 and rapid-hardening portland cement 15. The water shall be clean and free from injurious amounts of acids, alkalis, organic matter, and other substances that may impair the strength of durability of concrete. The dimensions for the concrete slab shall be 1.4 m width by 0.15 m thickness and 1.5m length.

Concrete strength

The strength concrete necessary for the different portions of the work 25MPa:

Should concrete for the works be mixed on site, the Contractor is to provide the Engineer with a mix design carried out by an approved laboratory for approval. The Contractor is also to furnish the Clients Representative with the methodology and equipment to be used for the mixing of concrete for approval. Six tests cubes are to be taken prior to the first concrete pour, and the 7-day result will be utilized as a first indication of suitability of the mix design. Approval will however be based on the 28 day strength.

2.11 Pit lining with 140mm maxi bricks

The bricks shall be 140mm maxi bricks with a solid shape and a compressive stress of 7 MPa. The stretcher bond shall be applied in the half brickwork construction. Cement shall comply with SANS 471 Portland cement or SANS 626 Portland blast-furnace cement or SANS 831 Portland cement 15 and rapid-hardening portlant cement 15. The water shall be clean and free from injurious amounts of acids, alkalis, organic matter, and other substances that may impair the strength of the mortar. The sand shall comply with SANS 1090 be evenly graded from 5 mm downwards without excess of dust or other fine material. The mortar class II shall be applied and be 10 mm thick and comply with SANS 0164.

2.12 Side walls and roof precast concrete cement panels

The required side and roof panels should be 40mm thick precast concrete cement

2.13 Finishes

All exposed concrete surfaces shall be floated off to the necessary gradients and planes, and while still green, will be finished off to a smooth surface with a wooden trowel.

2.14 Inspection by Clients Representative

No stage of construction shall be proceeded with until the Engineer or his representative has examined and approved the previous stage. If any work is covered or hidden from view before the Engineer has inspected same, the Contractor shall at his own cost open the covered work for inspection. The Contractor shall also be responsible for making good any work damaged by such uncovering.

3. MATERIALS

All materials shall comply with the requirements of SANS 1200

4. CONSTRUCTION EQUIPMENT

All equipment on site shall be in a good working order, and is to be in such a condition that it can achieve production rates which are typical of the industry standards.

Should any equipment, in the opinion of the Clients Representative, be substandard or breaks down frequently to such an extent that it affects the progress on the project, the Clients Representative may instruct the Contractor to replace such equipment.

5. LOCATION OF THE WORKS

The sites will be in various Informal Settlements within Rustenburg Local Municipality (*see list below*).

No.	Informal Settlement	Location	Ward
1	Yizo Yizo	RE/207 of farm town and townlands272JQ; ERVEN 3463-4467	11
2	Mbeki Sun	RE/25, 84-87 of Paardekraal 279 JQ	22

3	Zakhele	Klipgat 281 JQ	34
4	Mmadithokwa	Kafferskraal 342 JQ	32
5	Nkaneng	Portion 2 of the Farm Klipfontein 300 JQ	33
6	Ikageng	Farm Bokfontein 284 JQ	44
7	Yizo Yizo - BTK	Portion 13 of the Farm Paardekraal 279JQ	20
8	Plot 14	Portion 71 of the Farm Paardekraal 279JQ	19
9	Ikemeleng	Ptn 53;99;129;157 and RE/185;RE/164 of Farm Kroondal 3 04 JQ	35
10	Freedom Park	Ptn 4 of Weldebeesfontein 279 JQ	38
11	Boitekong 14 Informal Chachalaza	Ptn 3 of the farm Reinkoyalskraal 278 JQ	38
12	Popo Molefe	Ptn of RE/16;39;106;109; and RE/26 of farm Paardekraal 279 JQ	22
13	Marikana Ext 13 Mahumapelo	Ptn 182-184 and ptn of RE 55	31
14	Stormhuise	RE/ 184;260-261; and RE 55 pf farm Rooikoppies 279 JQ	31
15	Sporong South	RE/ 55;3;42;65;66;69;80-83 of farm Rooikoppies 279 JQ	31
16	Sporong North	RE/ 55;3;42;65;66;69;80-83 of farm Rooikoppies 279 JQ	31
17	Ben	RE/184;RE/229;RE/232;RE/179	

No.	Informal Settlement	Location	Ward
18	Jabula & Donusa	Town and Townlands272JQ	43
19	Chachala- Motlhabeng	Reinkoyalskraal 278 JQ	40
20	Msenguville	Reinkoyalskraal 278 JQ	40
21	Phoane	Kroondal 304 JQ	35
22	Group 5	RE/ 9/67/8 of farm Rooikoppies 279 JQ	31
23	Braampie	Ptn 190;230;231 and 46232;273;7 RE/229 and 274 of farm Rooikoppies 279 JQ	31

24	Skierlik	RE/85 and 86 of farm Rooikoppies 279 JQ	31
25	Tshilong	Kafferskraal 342 JQ	31
26	Damoi View	RE/70 and 71 of ptn 69	40
27	Soviet View- Lethabong	Ptn of farm Harteesfontein 228 JQ	27
28	Rock View- Sunrise Park	RE/15 and 39	19
29	Abu-Dabi- Paardekraal	Ptn of 69/68/67	19/40
30	Tsunami- Ramochana	Portion of reminder of ptn of the farm Rusteburg Town and Townlands 272 JQ	39
31	Airport View- Ramochana	Portion of reminder of ptn of the farm Rusteburg Town and Townlands 272 JQ	39
32	Ramochana Prison	Portion of reminder of ptn of the farm Rusteburg Town and Townlands 272 JQ	39
33	Zinniaville	Portion of reminder of ptn of the farm Rusteburg Town and Townlands 272 JQ	43
34	Seraleng	An Erven of Seraleng	43
35	Plastic City	Located on erven within Geelhout Park Ext 10	16
36	Sonderwater	173 Waterkloof 305 JQ	17
37	Reutlwile- Zinniaville		44
38	Lapologang	Ptn 46	32
39	Boitekong Ext 2		20

6. CONSTRUCTION PROGRAM

It is specifically brought to the notice of the Contractor that time is critical on this project, and the construction period will be a major factor in the award of the tender.

Tenderers shall submit with their tender a **six (6) months Preliminary weekly programme for the construction** of the Works under this contract to suit their proposed method of executing the Works. The programme shall be sufficiently detailed to differentiate between the various activities so that the contract may be properly evaluated.

7. DRAWINGS

Typical detailed VIP toilet drawings are provided as Annexure A of this document.

The bidder (s) may submit alternative VIP toilet structure drawings together with his/her bid that meets the specifications stated in 2.1 of this document.

8. CONTRACT PERIOD

The duration of the contract will be from date of appointment on an As and When required basis for the period of three years.

9. ELIGIBILITY WITH RESPECT TO EXPANDED PUBLIC WORKS PROGRAMME

This Contract does qualify for consideration as an Expanded Public Works Programme project and maximum use of Local Labour as stated in 0(9.LABOUR INTENSIVE CONSTRUCTION/USE OF LOCAL **LABOUR**/Sub-contracting) must be attained.

9.LABOUR INTENSIVE CONSTRUCTION/USE OF LOCAL LABOUR

It is a requirement of the Contract that the work be executed in such a manner as to maximize the use of labour in order to provide the local community with employment opportunities (where applicable)

The contractor will also be required to report monthly on the amount of local labour in accordance with the Municipal Infrastructure Grant programme and EPWP program reporting formats which will be provided to the successful contractor.

10. STATED QUANTITIES

Please note that all quantities stated in the Schedule of rates of this bid document are estimated quantities.

The identified quantities are to assist the Bidders (s) with the pricing of the service.

11. ALTERNATIVE DRAWINGS

12. AWARDING OF BIDS

The Council reserves the right to accept any bid and does not bind itself to accept the lowest bid.

13. PAYMENT

Payment will be done based on the work completed during the project.

14. PERSONNEL

Bidders to indicate relevant experience of personnel whom will be involved in this project. Please attached CV's of key personnel Contracts Manager, Site Agent and General Foreman.

15. EXPERIENCE/REFERENCES:

The company should have a minimum of FIVE (5) years' experience in Civil construction projects whereby experience was gained in earthworks, brickwork, concrete work and projects which are related to the installation of toilet structure.

16. FUNCTIONALITY EVALUATION

Potential service providers will have to achieve a minimum score of **70 points** out of 100 for their functional proposals before their financial proposals. This is required so that there is a level of comfort that the potential service provider can deliver the project with the required professionalism and quality. The bidder with the highest scoring points on the functional evaluation would be considered for the evaluation on financial proposals.

17. ADDITIONAL CONDITION OF TENDER

17.1 OCCUPATIONAL HEALTH AND SAFETY

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

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

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

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

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

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

17.2 DEFECT LIABILITY PERIOD

The defects liability period is a period of four (4) months, measured from the date of the Certificate of Completion.

17.3 PENALTY FOR DELAY

The penalty for failing to complete the Works on time is R 1 000.00 per calendar day based on each agreed practical completion date.

18. GENERAL

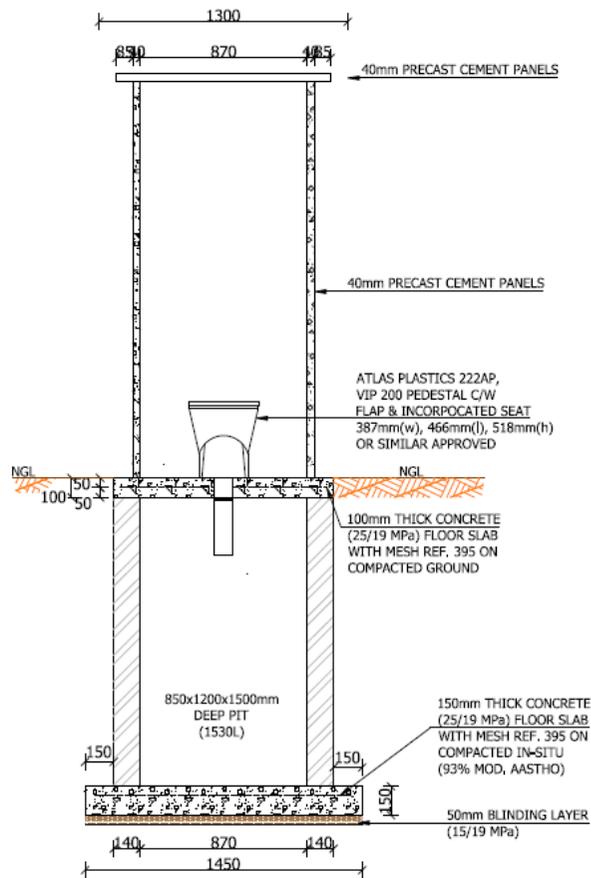
Bidders who are compelled to register with controlling authorities regarding their services to be rendered, must ensure that their relevant registration is in order for example CSD (Central supplier database) prior to the closure of bids and these must be attached to the bid document. Bidders should indicate in the bid document the notice period required prior to auction date.

19. PRICING SCHEDULE

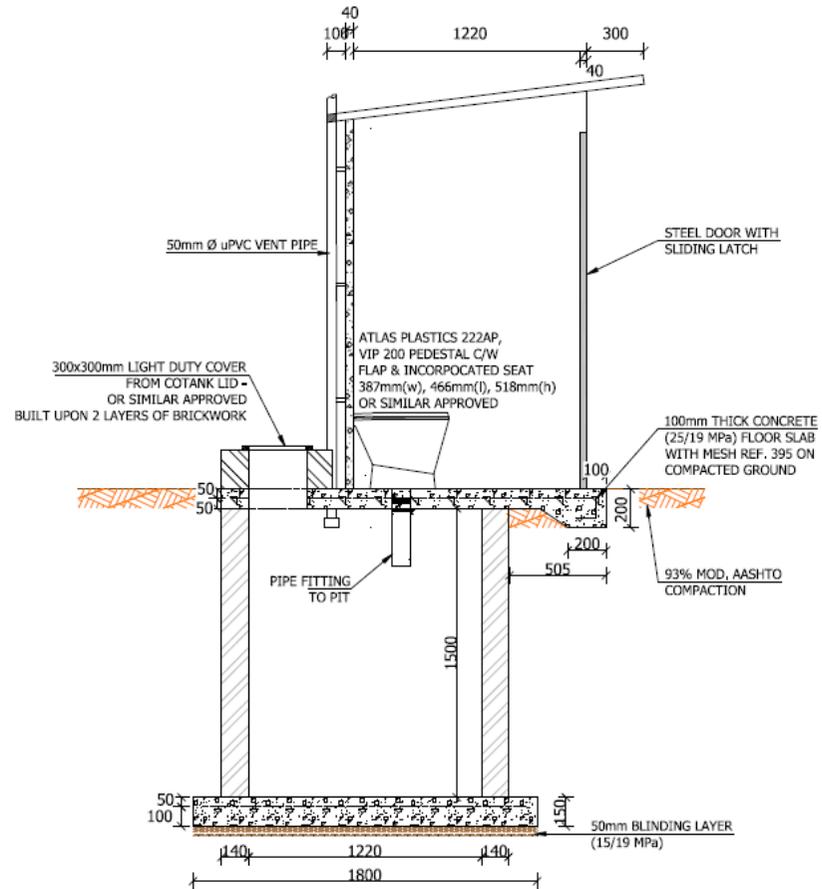
Attached as Annexure B to the document.

ANNEXURE C

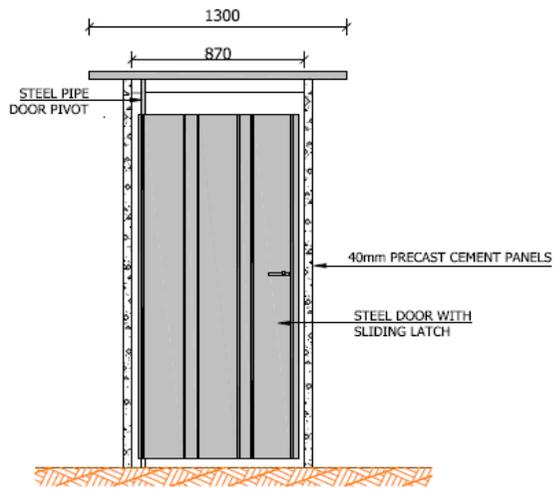
TYPICAL VIP TOILET DRAWINGS



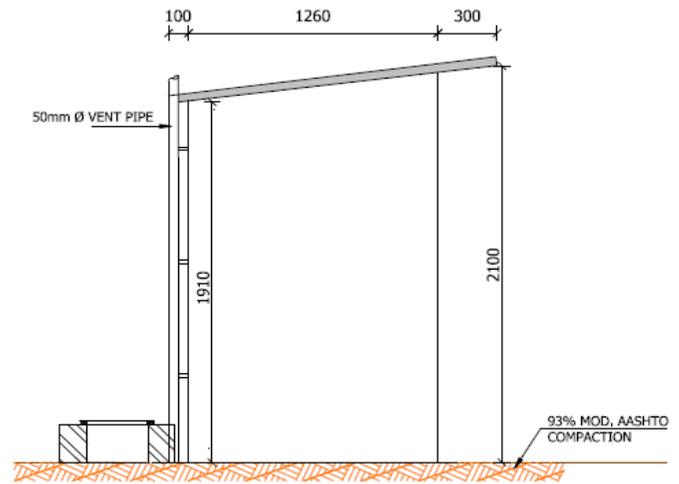
SECTION B-B
VENTILATED IMPROVED PIT (VIP)
TOILET: FRONT SECTION
 SCALE 1:20



SECTION A-A
VENTILATED IMPROVED PIT (VIP)
TOILET: SIDE SECTION
 SCALE 1:20



FRONT ELEVATION
SCALE 1:20



SIDE ELEVATION
SCALE 1:20

