



TERMS OF REFERENCES

**VHEMBE DISTRICT MUNICIPALITY
P/BAG X5006
THOHOYANDOU
0950**

**TEL: (015) 960 2000
FAX: (015) 960 1017**

DEPARTMENT OF TECHNICAL SERVICES

**CONSTRUCTION OF MULEDANE FIRE STATION
TRACTORS SHELTER
BID NUMBER: VDM/TECH/13/02/2025/01**

NAME OF BIDDER

TOTAL AMOUNT.....



VHEMBE DISTRICT MUNICIPALITY

REQUEST FOR TENDERS/PROPOSALS

BID NUMBER	DESCRIPTION	BID FEE	CDB GRADING	DOCS AVAILABLE	COMPULSARY BRIEFING SESSION	CLOSING DATE	TECHNICAL ENQUIRIES
VDM/TECH/13/02/2025/01	Construction of Muledane Fire Station Tractors Shelter	R1991.00 Non Refundable or Freely Downloaded in the Vhembe District Municipality Website	5 GB or Higher	14th April 2025	24th April 2025 at 10H30 at the Entrance of Vhembe District Municipality Offices	29th May 2025 at 12H00	General Manager Technical Services Department Mr Maluleke W at 015 960 200
VDM/TECH/13/02/2025/02	Appointment of service Provider to Dispose-Off Waste Chemicals	R1991.00 Non Refundable or Freely Downloaded in the Vhembe District Municipality Website	None	14th April 2025	24th April 2025 at 10H30 at the Entrance of Vhembe District Municipality Offices	8th May 2025 at 12H00	General Manager Technical Services Department Mr Maluleke W at 015 960 2000
VDM/CORP/04/12/2024/01	Maintenance, Supply and Installation of IT Equipment and Services for the Period of 36 Months	R1991.00 Non Refundable or Freely Downloaded in the Vhembe District Municipality Website	None	14th April 2025	24th April 2025 at 10H30 at the Entrance of Vhembe District Municipality Offices	29th May 2025 at 12H00	General Manager Corporate Services Department Ms Maputla T.M.D.W at 015 960 2000

Completed Tender document sealed in an envelope marked the above mentioned bids, Must be deposited in the bid box, next to the entrance of Vhembe District Municipality Offices, next to Khoroni Hotel (Former Venda-Tusk Hotel) wherein the bids will be opened in public.

The following documents are required and shall form part of the bid: CSD summary report, Tax clearance compliance status letter or tax clearance compliance number, Company Registration Certificate, Proof of Purchased tender document receipt for only purchased tender documents Bidders Certified copy of ID Document, Proof that the bidder municipal business account or any of the directors municipal account is not in arrears (N.B. Municipal Clearance not older than three months) or NB Letter from Traditional authority indicating that they are not paying Municipal rates and Auditor Financial Statements (only bid above R10 000 000.00)

Late bid, telegraphic, e-mails or telefax transmission documents will not be accepted. Vhembe District Municipality reserves the right to accept a tender as a whole or in part and does not bind itself to accept the lowest or any tender.

NB: All service providers/bidders are requested to pre-number and initial their documents before submission. No bid will be accepted from person in the service of the state.

Administrative enquiries can be directed to Supply Chain Practitioners of Vhembe District Municipality at telephone number (015) 960 2129/2130/2131/2132 & 2133.

VHEMBE DISTRICT MUNICIPALITY

PRIVATE BAG X-5006

THOHYANDOU 0950

Mr KUTAMA Z.N
(MUNICIPAL MANAGER)

**TERMS OF REFERENCE: CONSTRUCTION OF MULEDANE FIRE STATION
TRACTOR SHELTER. BID No: VDM/TECH/13/02/2025/01**

Scope of Works

1. 400m² Steel Structure.
2. Height: 5m.
3. Floor: Reinforced Concrete.
4. Wall: 1.5m brick wall, rest corrugated iron sheeting.
5. Entrance: 3.5m wide & 3.5m high.
6. Roofing: IBR Roof sheeting with fibre for natural light with ventilation.
7. Drive way: 3.5m.
8. Washing Bay adjacent to building (6m x 4m)
9. Storeroom: 50m²
10. Structure need to park 20 tractors.
11. Tractor dimensions used: Massey Ferguson 5710 & Case JX75
12. Implements that might require shaded parking:
 - 2 x Grain Planters (3.8m x 4.9m)
 - 1 x Boom Sprayer (2m x 1.3m)
 - 2 x Slashers (2.1m wide)
 - Diesel Cart (3.2m x 1.73m)
13. Storeroom to be used for storage of spare parts, tools and a compressor.
14. Parking arrangement to be determined by Service Provider.

Requirements

1. Company experience- Experience in construction of steel structures buildings for tractor shelter, community hall, pack house, warehouse or church building with a minimum of 400m², completed within the previous five years. Attach Appointment letter or Purchase Order along with the completion certificate.
2. Representative experience- Experience in construction of steel structures buildings for tractor shelter, community hall, pack house, warehouse or church building with a minimum of 400m²,
3. Representative Qualification
 - Contract Manager- Bsc/Tech in Civil Engineering and must be professionally registered with Engineering Council of South Africa (ESCA)
 - Site Agent- Bsc/Tech in Civil Engineering
 - Foreman- National Diploma in Civil Engineering
 - Health and Safety- National Diploma in Safety Management
4. CIDB Grading: 5GB or higher

ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
		SECTION NO 1: PRELIMINARY AND GENERAL				
	SANS 1200A					
	8.3	FIXED CHARGE ITEMS AND VALUE RELATED ITEMS				
1	8.3.1	Contractual requirements.	SUM	1		
	8.3.2	Establishment of Facilities on the Site				
	8.3.2.1	Facilities for Engineer				
2	8.3.2.1a	Furnished offices. (In No.1) Including A4 Printer (including cartridges and paper for the duration of the project), Wifi connection and Airconditioner	SUM	1		
	8.3.2.1b	Cellphone	SUM	1		
3	8.3.2.1c	Nameboards. (In No. 1).	SUM	1		
	8.3.2.1d	Survey Equipment (Digital level, GPS and Model maker systems software)	SUM	1		
	8.3.2.1e	Provision of a laptop	SUM	2		
	8.3.2.1f	Printing out of drawing sections	Prov.Sum	1	R 25,000.00	R 25,000.00
	8.3.2.2	Facilities for Contractor				
4	8.3.2.2a	Offices and storage sheds.	SUM	1		
5	8.3.2.2d	Living accommodation.	SUM	1		
6	8.3.2.2e	Ablution and latrine facilities.	SUM	1		
7	8.3.2.2f	Tools and equipment.	SUM	1		
8	8.3.2.2g	Communications and applications for Water, Sewer and Electricity	SUM	1		
9	8.3.2.2j	Plant.	SUM	1		
10	8.3.3	Other fixed charge obligations.				
	8.3.3a	Entry and exit medicals for employees	SUM	1		
	8.3.3b	Supply of PPE to all employees (2 pairs)	SUM	1		
	8.3.4	Establishment of site facilities	SUM	1		
11	8.3.5	Removal of site establishment on completion.	SUM	1		
	8.4	TIME RELATED ITEMS				
12	8.4.1	Contractual requirements.	SUM	6		
	8.4.2	Operation and Maintenance of Facilities on Site, for Duration of Construction, (unless otherwise stated)				
	8.4.2.1	Facilities for Engineer				
13	8.4.2.1a	Furnished offices. (In No. 1)	SUM	6		

ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
14	8.4.2.1c	SECTION NO 1: PRELIMINARY AND GENERAL Nameboards. (In No. 1).	SUM	6		
	8.4.2.2	Facilities for Contractor				
15	8.4.2.2a	Offices and storage sheds.	SUM	6		
16	8.4.2.2d	Living accommodation.	SUM	6		
17	8.4.2.2e	Ablution and latrine facilities.	SUM	6		
18	8.4.2.2f	Tools and equipment.	SUM	6		
19	8.4.2.2g	Provision of Water supplies, electric power, sewer and access.	SUM	6		
20	8.4.2.2j	Plant.	SUM	6		
21	8.4.3	Supervision for duration of construction.	Prov.Sum	6	R 30,000.00	R 180,000.00
22	8.4.4	Company and head office overhead costs for duration of construction.	%	20%	R 180,000.00	R 36,000.00
23	8.4.5	Other time related obligations. (PPE Supply and re-issue, Entry and exit medicals)	SUM	6		
24		a) Community Liaison Officer salary of R 6000.00/month	Prov.Sum	9	R 6,000.00	R 54,000.00
		b) PSC and CLO Training (generic and management skills)	Prov.Sum	1	R 110,000.00	R 110,000.00
		c) PSC sittings remunerations, R200 per seating	Prov.Sum	1	R 15,000.00	R 15,000.00
		e) Training of local labourers (Technical and enterpreneurial skills)	Prov.Sum	1	R 80,000.00	R 80,000.00
		f) Monthly payment of salary for 2 local civil engineering students in training	No	6	R 10,000.00	R 60,000.00
		g) Remuneration of local labourer during training	Prov.Sum	1	R 40,000.00	R 40,000.00
25		Overhead, charges and profit on above	%	20%	R 359,000.00	R 71,800.00
		Occupational health and safety				
26		Without limiting the generality of the provisions of clause 4.3.1 of the GCC second edition 2010, the contractor's attention is drawn to the provisions of the following regulations: Construction Regulations, 2014 issued in terms of the Occupational Health and Safety Act (Act No 85 of 1993) as amended. The employer reserves the right to take responsible action should any breaches of the above regulations and / or the Employer's Requirements come to their notice, including the provision of and insistence on the use of hard hats, overalls, ear protection plugs, eye protection goggles, reflective safety vests, gloves, safety boots, belted safety harnesses,				

ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
		SECTION NO 1: PRELIMINARY AND GENERAL etc by any person on the site, the cost for purchase of which will be borne by the contractor.				
		Provision of a safety file and first aid kit	SUM	1		
		Occupational Health and safety Consultant overheads charges and profit	Prov.Sum %	6 20%	R 55,000.00 R 11,000.00	R 330,000.00 R 66,000.00
		Environmental Consultant overheads charges and profit	Prov.Sum %	6 20%	R 55,000.00 R 11,000.00	R 330,000.00 R 66,000.00
		Social Facilitation overheads charges and profit	Prov.Sum %	6 20%	R 65,000.00 R 13,000.00	R 390,000.00 R 78,000.00
	8.5	SUMS STATED PROVISIONALLY BY ENGINEER				
27	8.5a	For conducting a geotechnical Investigation on the building platform to verify foundations designed	Prov.Sum	1	R 100,000.00	R 100,000.00
28	8.5a	For a topographical survey to complete the designs on all levels such as determining the Final Finish Floor Level of the building and the road levels	Prov.Sum	1	R 100,000.00	R 100,000.00
29	8.5a	For the provision of professional fees to confirm the foundation design and completion of "level" designs	Prov.Sum	1	R 100,000.00	R 100,000.00
30	8.5b.2	Overheads, charges and profit on Items 8.5a	%	20%	R 300,000.00	R 60,000.00
	8.8	DAYWORKS				
31	8.8.1	Main access road to works.	SUM	1		
32	8.8.2	Dealing with or accommodation of traffic.	SUM	1		
33	8.8.3	Existing services: Exposing, relocating/protecting	SUM	1		
Total for Section 1 - Carried to Final Summary						

ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	SANS 1200 C	SECTION NO 2: SITE CLEARANCE (BUILDING AND ROADS)				
1	8.2.1	Clear and grub: Digging up and removing rubbish, debris, vegetation, hedges, shrubs, bush, etc. and trees not exceeding 200mm girth	m ²	2730		
2	8.2.2	Remove and grub large trees and tree stumps of girth: Over 1,0 m and up to and including 2,0 m	No	3		
3		Over 2,0 m and up to and including 3,0 m	No	4		
4	8.2.10	Remove topsoil to nominal depth of 150mm and stockpile or dispose (as directed by Engineer)	m ³	409,5		

Total for Section 2 - Carried to Final Summary				
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ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
		SECTION NO 3 : BUILDING WORKS / FOUNDATIONS / CONCRETE AND REINFORCEMENT				
	8.3.2	BULK EXCAVATION				
1	8.3.2.a	Excavate in all materials and use for embankment / backfill or dispose as ordered;	m ³	360.0		
	8.3.2.b	Extra over for:				
2	8.3.2.b1	Intermediate excavation	m ³	120		
3	8.3.2.b2	Hard Rock	m ³	20		
	8.3.4	Importing of Material from Commercial Sources				
4	8.3.4.a	Approved G7 filling supplied and carted on by the Contractor, compacted in layers not exceeding 150mm to 95% Mod. AASHTO density	m ³	125		
5	8.3.4.a	Approved G5 filling supplied and carted on by the Contractor, compacted in layers not exceeding 150mm to 95% Mod. AASHTO density	m ³	250		
		EXCAVATION, FILLING, ETC OTHER THAN BULK				
		Excavate in pickable material not exceeding 2m deep below natural or reduced ground level				
6		Strip Footings and Bases	m ³	60		
		Extra over trench and hole excavations in earth for excavation in:				
7		Soft rock	m ³	5		
8		Hard rock	m ³	3		
		Extra over all excavations for carting away				
9		Surplus material from excavations and/or stock piles on site to a dumping site to be located by the contractor	m ³	13		
		Risk of collapse of excavations				
10		Allow for risk of collapse to sides of excavations to column bases, trenches, etc. from ground level to not exceeding 1.5m deep	m ²	60		
		Earth filling obtained from the excavations compacted to 95% Modified AASHTO density				
11		Backfilling to trenches	m ³	10		
		SOIL POISONING				
		Soil insecticide shall be done by an approved firm of registered specialist and submit a 5 x year guarantee for the above work.				
12		Under floors etc. including forming and poisoning shallow furrows against foundation walls, etc., filling in walls and ramming	m ²	792		
13		To bottoms and sides of trenches etc	m ²	99		

ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
14		Identify all termite nests	no	4		
15		Apply the "termite control" to the nests	no	4		
		Excavation in earth not exceeding 3m deep:				
16		Excavation of all termite nests, including carting away material to an approved dumping site	m ³	64		
		FILLING ETC				
		Selected earth filling, G7 supplied by the Contractor, compacted to 93% Mod AASHTO density				
17		Backfilling to trenches, holes, etc	m ³	64		
		TESTS				
		<u>Additional density tests as required by the Engineer over and above standard tests required by SANS</u>				
18		Allow for the provision of Modified AASHTO density tests (as per Engineer's instruction) to be carried out by the Contractor and pay all charges in connection therewith	No.	24		
		CONCRETE, FORMWORK AND REINFORCEMENT SUPPLEMENTARY PREAMBLES FORMWORK TO BASES, FOOTINGS & FLOORS				
		Description of formwork shall be deemed to include use and waste only (except where described as "left in" or "permanent"), for fitting together in the required forms, wedging, plumbing and fixing to true angles and surfaces as necessary to ensure easy release during stripping and for reconditioning as necessary before re-use				
		The vertical strutting shall be carried down to such construction as is sufficiently strong to afford the required support without damage and shall remain in position until the newly constructed work is able to support itself.				
		Formworks to soffits of solid etc shall be deemed to be slabs not exceeding 250mm thick unless otherwise described				
		Formwork to sides of bases, pile caps, etc will only be measured where it is prescribed for design reasons Formwork necessitated by irregularity or collapse of excavated surfaces will not be measured and the cost thereof shall be deemed to be included in the allowance for taking the risk of collapse of the sides of the excavations, provision for which is made in "Earthworks"				
		<u>UNREINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES</u>				
		<u>15MPa/19mm Concrete in:</u>				

ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
19		75mm Blinding under footings and bases	m ³	1		
		<u>REINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES</u>				
		<u>30 MPa/19mm Concrete in:</u>				
20		Pad footings	m ³	21		
21		Strip footings	m ³	6		
22		Aprons cast in panels to slopes	m ³	9		
23		V-channel cast on waterproofing to slopes	m ³	6		
		<u>REINFORCED CONCRETE CAST IN/ON FORMWORK</u>				
		<u>30 MPa/19mm Concrete:</u>				
24		Surface beds cast in panels	m ³	95		
25		Wash Bay floor cast in panels on waterproofing to slopes	m ³	6		
26		In Ramps to slope	m ³	4		
27		Stub columns	m ³	1.9		
28		Sump bases	m ³	1		
29		Suspended Slabs	m ³	8		
		TEST BLOCKS				
30		Making and testing 3 off 150x150x150mm concrete strength test cube samples and submit report to the Representative / Agent (only successful tests will be paid for)	No.	30		
		MOVEMENT JOINTS, ETC				
		Isolation joints with 10mm jointex between concrete and vertical brick surfaces				
31		10mm Joints not exceeding 300mm high along edges of surface beds	m	57		
		Saw cut joints as per drawings				
32		4 x 30mm Saw cuts in top of concrete	m	200		
		CONCRETE SUNDRIES				
		Finishing top surfaces of concrete smooth with power float				
33		Surface bed	m ²	595		
		Finishing top surfaces of concrete smooth with a wood float to slope				

ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
34		Aprons & ramps to slopes	m ²	120		
		SMOOTH FORMWORK (DEGREE OF ACCURACY II)				
		Smooth formwork to:				
35		Stub columns & Bases	m ²	58		
36		Smooth formwork to soffits	m ²	56		
37		Edges, risers, ends and reveals not exceeding 300mm high or wide.	m	195		
		REINFORCEMENT				
		High tensile steel reinforcement to structural concrete work				
38		All Diameter bars	Ton.	3.3		
		Fabric reinforcement				
39		Type 395 fabric reinforcement in concrete wash bay floor & sump bases	m ²	690		

ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
Total for Section 3 - Carried to Final Summary						

ITEM NO	PAY REF	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
		SECTION NO 4: MASONRY / BRICKWORK				
		SUPPLEMENTARY PREAMBLES				
		BRICKWORK				
		Sizes in descriptions				
		Where sizes in descriptions are given in brick units, "one brick" shall represent the length and "half brick" the width of a brick				
		Face bricks				
		Bricks shall be ordered timeously to obtain uniformity in size and colour				
		Pointing				
		Descriptions of recessed pointing to fair face brickwork and face brickwork shall be deemed to include square recessed, hollow recessed, weathered pointing, etc				
		FACE BRICKWORK				
		FOUNDATIONS				
		Brickwork of semi-faced bricks (14 MPa nominal compressive strength) in class I mortar				
1		220mm brick walls	m ²	22.40		
		SUPERSTRUCTURE				
		Brickwork of semi-faced bricks in class II mortar				
2		110mm brick wall	m ²	45		
3		220mm brick wall	m ²	352		
		Brick-on-edge header course copings, sills, etc of face bricks pointed with recessed joints on all exposed faces				
4		220mm Wide coping on top of walls	m	62		
		BRICKWORK SUNDRIES				
		Brickwork reinforcement				
5		150mm Wide reinforcement built in horizontally	m	2,500		
		Galvanised hoop iron cramps, ties, etc				
6		35x1.2mm Wall tie 550mm long with one end fixed to steel column and other end built into brickwork	No.	160		
		Prestressed fabricated lintels				
7		230 x 75mm Lintels in lengths not exceeding 2m	No.	6		
		FIBRE-CEMENT WINDOW SILLS				
		Fibre cement window internal sill bedded in Class II mortar				

ITEM NO	PAY REF	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
8		150 x 15mm Wide sills set flat and slightly projecting	m	6		
Total for Section 4 - Carried to Final Summary						

ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
		SECTION NO 5: WATERPROOFING WATERPROOFING ON WALLS, ETC				
		PREAMBLES				
		For preambles see "Model Preambles for Trades"				
		DAMP PROOFING				
		One layer 250 micron polyethylene waterproofing (DPC):				
1		On compacted earth under concrete wash bay floor and V-channels, lapped 150 mm and sealed at all joints (measured net).	m ²			
		One layer 375 micron embossed "Gunplas Brikgrip" polyethylene damp proof course fixed with approved adhesive:				
2		In walls	m ²			
		JOINT SEALANTS ETC				
		ProStruct Vulkem 116 Polyurethane joint				
3		10 x 12 mm In isolation joints	m			
4		5 x 12mm Internal saw cut joints	m			
Total for Section 5 - Carried to Final Summary						

ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
		SECTION NO 6: ROOF COVERINGS				
		SHEET METAL FLASHINGS, LININGS, COPINGS, ETC				
		PREAMBLES				
		For preambles see "Model Preambles for Trades"				
		SUPPLEMENTARY PREAMBLES				
		Tenderers are advised to study the Construction Works: Specifications before pricing this bill as these standards shall apply.				
		Roof sheeting Installation certificate:				
		Written confirmation is to be submitted from the roof sheeting manufacturer that the installation has been completed in terms of their instructions and governing SABS specifications.				
		MILD STEEL PROFILED ROOF SHEETING				
		0.55mm thick IBR 686 with galvanized Z275 finish on both sides. Installed strictly accordance with the manufacturers specification, underwritten by 10 year SAFAL guarantee.				
1		Roof covering with pitch not exceeding 15 degrees	m ²	753		
2		Side gladding to steel girts	m ²	206		
3		0.8mm Thick IBR Polycarbonate Roof Sheeting (Opal), supplied, installed and fixed according to manufacturer's specifications on side cladding at specified intervals.	m ²	70		
4		0.6mm thick galvanized Z275 finish on both sides pierced fix flashing and closures				
5		231x231 x 462mm girth ridge Flashing	m	35		
6		686mm long IBR broad flute closure	m	70		
7		231x231 x 462mm girth barge flashing	m	36		
8		231x231 x 462mm girth external corner flashing	m	20		
		Roof and Wall Insulation:				
		"SA Fibreglass - Sisalation 420", or of equal approved standard, reinforced aluminium foil faced resin bonded glass fibre flexible building insulation 50mm Insulation laid taut over purlins (at approximately 1200mm centres) and fixed concurrent with roof covering including 3mm diameter straining wires at 300mm centres	m ²	623		
		Roof ventilation:				
9		300mm Diameter galvanized steel (WH-01) "Whirlybird" wind driven ventilator	No.	8		
Total for Section 6 - Carried to Final Summary						

ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
		SECTION NO 7: CAPENTRY AND JOINERY				
		SUPPLEMENTARY PREAMBLES				
		Joinery: Descriptions of frames shall be deemed to include frames, transomes, mullions, rails, etc				
		Descriptions of hardwood Joinery shall be deemed to include pelleting of bolt holes				
		Fixing				
		Items described as "nalled" shall be deemed to be fixed with hardened steel nails or shot pins to brickwork or concrete				
		TIMBER ROOF CONSTRUCTION				
		The following trusses shall be "Mitek" or other approved engineering designed roof trusses manufactured from sawn S.A.Pine as described at a maximum 740mm centres for concrete tiles (elsewhere), secured in position with 32mm hoop iron anchors, overhang, purlins, including all neccessary connecting plates,nuts, etc; (as per roof plan) at approximately 3000mm above natural ground level				
1		Provide the sum of R 25 000.00 (Twenty five thousand rand) for design and supply of prefabricated timber roof truss system including trusses, bracings, valleys, hips and 32mm branderling for ceilings etc, to 00 degree pitch designed for truss loading on the ablution areas	Item	1		
2		Add for profit and general attendance upon above if required	%			
3		Labour for erecting roof trusses including, purlins, bracing, etc	m²	37.12		
		DOORS, ETC				
		Wrot meranti framed, ledged and braced batten door with commercial veneer flush panel on inside suitable for painting with external weather board and solid back cover hung to steel frame (elsewhere)				
4		44mm Door size 813 x 2032mm high	No	5		
		Semi solid flush panel door with 3mm commercial ply wood finish for painting to both sides and hardwood concealed edges, hung to steel frames (elsewhere)				
5		44mm Door size 813 x 2032mm high	No	6		
Total for Section 7 - Carried to Final Summary						

ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
		SECTION NO 8: CEILINGS AND PARTITIONS				
		SUPPLEMENTARY PREAMBLES				
		Descriptions:				
		Items described as "nailed" shall be deemed to be fixed with hardened steel nails or pins or shot pinned to brickwork or concrete				
		Items described as "plugged" shall be deemed to include screwing to fibre, plastic or metal plugs at not exceeding 600mm centres, and where described as "bolted" the bolts have been given elsewhere				
		Nutec Everlite 6mm thick fibre cement ceiling board fixed under 38x38 brackerling. Ceiling to be fixed in accordance to manufacturers details				
1		Ceilings	m ²	37.12		
		Cornice: Everlite Polystyrene Core Nu-cornice. Plain 75mm cornice fixed with nu-cornice adhesive & painted to match ceiling as per paint specification				
2		75mm Coved cornices, nailed	m	36		

ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
Total for Section 8 - Carried to Final Summary						

ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
		SECTION NO 9: IRONMONGERY				
		Ironmongery shall be fixed to timber doors and steel frames unless otherwise described				
		SUPPLY AND INSTALL OF IRONMONGERY				
1		Yale 4-Lever Standard Lock Set, all included at storeroom door and ablution doors.	No	5		
2		Chrome Indicator Bolts at toilet and shower doors.	No	6		
3		Rubber door stops	No	10		
4		Coat hook	No	10		
5		Kick plates	No	4		
6		Stainless steel toilet roll holder	No	2		
7		Stainless steel towel rail	No	6		
8		Paper towel dispenser	No	2		
9		Shower curtain	No	4		
10		Shower curtain rails	No	4		
11		3 x Door Steel Lockers with dimensions of 1.8m x 0.3m x 45m. Colour - Hammertone Grey	No	6		
Total for Section 9 - Carried to Final Summary						

ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
		SECTION NO 10: STRUCTURAL STEELWORK				
	1200 H	STRUCTURAL STEEL NOTES: Tenders are advised to study the "Construction Works: Specifications before pricing this bill as these standards shall apply. SUPPLEMENTARY PREAMBLES General: All structural steelwork is to be carried out in accordance with SABS 1200H. Descriptions for structural steelwork are deemed to include all cutting to lengths, shaping, holling, forging, turning, fitting, assembling, bolting, welding, decorative or protective treatment and constructional aids as well as for hoisting up and fixing. Welds shall be done in a manner that will eliminate warping of members Approval by the engineer: It is a requirement that a full set of shop drawings be submitted for approval by the engineer. The contractor must independently verify dimensions to ensure correct fitting of elements. The onus remains with the contractor to comply with all SABS structural steel design and manufacturing codes. Any details of connections not provided by the engineer must be submitted to him for approval before manufacturing commences. And deviations from details provided by the engineer must be approved by him in writing before manufacturing commences. Corrosion protection: All structural steelwork is to be treated with red oxide. STEEL COLUMNS AND BEAMS <u>Welded sections in single lengths with flat bearer and connection plates, bolted to steel</u>				
1		254x146x31 (31kg/m) Cellular I-sections in columns	t	3.27		
2		305x102x25 (25kg/m) Cellular I-sections in beams and rafters	t	5.70		
3		200 IPE (22.8kg/m) Cellular I-sections in beams and rafters	t	2.06		

ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
4		40x40x4.0 x 2.42 kg/m Equal legged angle in sag bars	t	0.35		
5		60x60x6.0 x 5.42 kg/m Equal legged angle in knee braces and gable trims	t	1.20		
6		125x60x20x2.5 x 5.4kg/m Cold formed lipped channel C-section in purlins and glrts (Hot dip galvanised)	t	5.38		
7		Grade 350WA plate: 3mm - 25mm in connections including holes etc.	t	1.30		
		<u>Bolts, etc</u>				
8		M16 Grade 4,8 Bolts	t	0.30		
9		M16 Grade 4.8 Holding Down Bolts: 500mm long with 50x50x8.0 anchor end plates	t	0.152		
		<u>Grout</u>				
10		25 mm Thick non-shrink grout	m ²	5.7		

ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
Total for Section 10 - Carried to Final Summary						

ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
		SECTION NO 11: METALWORK				
		<u>SUPPLEMENTARY PREAMBLES</u>				
		<u>DESCRIPTIONS</u>				
		Descriptions of bolts shall be deemed to include nuts and washers. Descriptions of expansion anchors and bolts and chemical anchors and bolts shall be deemed to include nuts, washers and mortices in brickwork or concrete Metalwork described as "holed for bolts" shall be deemed to include the bolts unless otherwise described				
		STANDARD PRESSED STEEL DOOR FRAMES				
		Prices for steel door frames are to include for setting up and building into position				
		1,6mm Thick double rebated frames suitable for half brick walls				
1		Frame for 44mm single door size 813 x 2032 mm high	No	6		
		1,6mm Thick double rebated frames suitable for one brick walls				
2		Frame for 44mm single door size 813 x 2032 mm high	No	5		
		<u>WINDOWS</u>				
		Top and Side hung Residential Window (opening outwards): complete with pressed steel frame, 4mm thick pane glass and painting of the window frame.				
3		Type NE1 - 533mm x 654mm (Supply and install window frame, including painting of frame and installation of 4mm, shutterproof frosted glazing with 10mm thick burglar bars)	No	4		
4		Type NE4 1511mm x 654mm (Supply and install window frame, including painting of frame and installation of 4mm, shutterproof clear glazing with 10mm thick burglar bars on all windows)	No	2		
5		Type NE22 2000mm x 654mm (Supply and install window frame, including painting of frame and installation of 4mm, shutterproof clear glazing with 10mm thick burglar bars on all windows)	No	2		

ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
		DOORS				
		Roller shutter doors: Serranda series 1500, 0.8mm solid slatted galvanised mild steel roller shutter door with chain operation, including: Endblocks, full cover box, aluminium bottom bar with rubber seal, slide bolts for locking an steel work on sides to fit door onto accommodate double bell mounth guides due to height of door.				
5		3.5m High x 3.5m Wide Roll-up Door.	No.	2		
		Supply and install a heavy duty, steel security door with frame bolted to brick wall, including tamper proof door lock. Door and frame steel members shall be manufactured from square tubing with a minimum thickness of 40mm x 40mm x 3mm and 12mm round bars. (At storerooms and external door)	No.	3		
6						
Total for Section 11 - Carried to Final Summary						

ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
		SECTION NO 12 : PLASTERING				
		Note: Tenderers are reminded that common labours such as slightly rounded angles, fair edge, drips and arrises, etc are deemed to be included in the description of the plaster. Special prescribed labours are measured in accordance with the Standard System				
		SCREEDS				
		1:4 Cement screed finished with a wood float				
1		50mm Average thick screed to floors to falls in ablutions	m ²	37.5		
		INTERNAL PLASTER				
		One coat 1:4 cement plaster finished smooth with a steel trowel to				
2		Ablution Walls	m ²	152		
3		Narrow widths, projections, etc	m ²	10		
Total for Section 12 - Carried to Final Summary						

ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
		SECTION NO 13: TILING				
		SUPPLEMENTARY PREAMBLES				
		Tenderers are advised to study the document, specifications of materials and method to be used - "PW371" as published by the National Department of Public Works before pricing this Bill.				
		Descriptions Unless described as 'fixed with adhesive to plaster (plaster elsewhere)' descriptions of tiling on brick or concrete walls, columns, etc shall be deemed to include 1:4 cement plaster backing and descriptions of tiling on concrete floors etc shall be deemed to include 1:3 plaster bedding				
		Levelling screed Lay minimum 30mm and maximum 45mm levelling screed over entire floor area to accommodate the ±15mm tolerance as per SANS1200 Specification and wait to cure (screed measured elsewhere) Lay floor tiles as per architects drawings and required patterns Tiling contractor to note, the tiles might differ in thickness, between 9-12mm				
		Tiling jointsThe tiles are to be laid with 4mm joints (1mm tolerance is acceptable)All tiles must be checked for size before being laid A ready mixed water repellent grouting compound of flexible nature is to be used				
		Expansion joint Form minimum 8mm and maximum 10mm expansion joint with a 'Genesis' or similar approved expansion joint stainless steel strip Expansion joints to coincide with slab expansion joints Joints to be sealed with a suitable polysulphide or similar approved sealer				
		Dividing strips Allow for brass strips at all tiling pattern changes, between different floor finishes, etc				
		WALL TILING				
		450 X 450mm Kilimanjaro Sand EcoTec Mat Porcelain Tile fixed to internal wall plaster backing (plaster elsewhere measured) with and including Tal professional adhesive and tile grout and 3mm continuous joints in both directions complete as per manufacturer's specification. Or similar approved tile and colour.				
1		On walls (Up to ceiling height - all walls)	m ²	152		
2		On walls in isolated panels, splashbacks, etc	m ²	2		
3		On narrow widths	m ²	4		

ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
		FLOOR TILING				
		450 X 450mm Killimanjaro Sand EcoTec Mat Porcelain Tile fixed to internal wall plaster backing (plaster elsewhere measured) with and including Tal professional adhesive and tile grout and 3mm continuous joints in both directions complete as per manufacturer's specification. Or similar approved tile and colour.				
4		On floors	m ²	37,5		
		SUNDRIES				
5		Kirk aluminium straight edge trim (ASE030)	m	30		
6		Kirk aluminium movement joint trim (AMJ030)	m	30		
7		Corner protectors	no	6		
Total for Section 13 - Carried to Final Summary						

ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
		SECTION NO 14: PLUMBING AND DRAINAGE				
		SANITARY FITTINGS				
		<u>Rates on all sanitary fittings shall include all pipework from external supply to and from, required isolation valves, taps, the connection of water supply (hot and cold water), waste connections and traps and connection to the external sewer pipes.</u>				
		Vaal sanitaryware or equal and approved				
1		Toilets: "Daisy" Vaal Sanitaryware vitreous china 90 outlet open rim washdown pan colour White (Code: 751400) with Hibiscus front single flush vandal proof cistern (Code: 7108CP) including lid, fittings and flushpipe elbow and B2 economy double flap thermoset seat.	No	2		
2		Handwash Basins "Flamingo" Vaal Sanitaryware vitreous china wall mounted basin colour White (Code: 7007) with Lotus half pedestal (Code: 715222), size 560 x 405mm with one taphole including integrated overflow and chainstay hole, bolted to wall with 2 No.10mm bolts (Code: 844820)	No	4		
3		"Sweetpea" Vaal Sanitaryware 565 x 275 x 310mm white vitreous china wall mounted top inlet urinal (code: 705126) including 38mm chromium plated domical grating (code: 878720) and chromium plated top inlet spreader spreader (code: 705420), flush valve (code: FJ6000) and flush pipe (code: FJT5.5), fixed on and including two hanger brackets (code: 812720) and urinal division (code: 7052) fixed with and including fixing screws and hanger bracket.	No	1		
4		Libra Sitra acrylic square shower tray colour White, overall size 900 x 900 x 375mm deep with built in seat, set on 1:5 cement mortar bedding and point all round with mildew resistant silicone between shower tray and tiles, all in accordance with the manufacturer's recommendations.	No	4		
		SANITARY PLUMBING				
5		50mm Pipes fixed to brick walls	m	20		
6		50mm Pipes cast into concrete	m	4		
7		110mm Pipes fixed to brick walls	m	6		
		Extra over uPVC pipes for fittings				
8		50mm Adaptor	No	6		
9		50mm Reducer	No	6		
10		50mm Bend	No	12		

ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
11		50mm Access Bend	No	4		
12		50mm Junction	No	4		
13		50mm Access Junction	No	2		
14		110mm Fan connector	No	2		
15		110mm Access bend	No	2		
16		110mm Access junction	No	2		
17		110mm Access reducing junction	No	2		
18		110mm "GI Two-way" vent valve	No	2		
		TESTS, ETC.				
19		Testing waste pipe system	Item	2		
		WATER SUPPLIES				
		Copper pipes to comply with SABS Specification 460/0 above ground and SABS Specification 460/2 or 3 under ground including straight couplings				
20		15mm Pipes	m	12		
21		15mm Pipes chased in brick walls	m	24		
22		22mm Pipes	m	12		
23		22mm Pipes chased in brick walls	m	24		
		Extra over copper pipes for capillary fittings				
24		15mm Fittings	No	20		
25		22mm Fittings	No	20		
		TESTING				
26		Testing hot and cold water installation	Item	2		
		ELECTRICAL WATER HEATERS				
		Supply and install Kwikot Megaflow or similar approved geyser mounted horizontal on top of the storeroom roof slab, including water supply connections, vacuum breaker, pressure reducing valve and drip tray.				
27		150 Litre Megaflow horizontal electric water heater	No	2		
		FIRE APPLIANCES ETC				
28		Supply and Install 9kg Dry chemical fire extinguisher	No	6		

ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
Total for Section 14 - Carried to Final Summary						

ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
		SECTION NO 15: PAINTWORK				
		SUPPLEMENTARY PREAMBLES				
		All colours to be selected by the engineer and client				
		All painting measured generally will be in colours with a value of more than 7 on the Munsell system in accordance with the relevant SABS specification. Any painting in colours with a value of 7 or less on the Munsell system shall be given as paintwork in darker colours				
		Tenderers are advised that varying colours of paint are used in some instances on the same wall surface and they should allow in their rates for cutting in between different colours.				
		PAINTWORK ETC TO NEW WORK ON FLOATED INTERNAL PLASTER, ETC				
		Prepare, stop and apply one coat Professional Evolution Water Based Plaster Primer (PEP 850) and finish with two coats Professional Evolution Acrylic (PEV 900)				
1		Walls (Provisional)	m ²	10		
		ON PLASTER BOARD				
		Prepare stop and apply coat Professional Alkali Resistant Plaster Primer (PP 950) and finish with two coats Professional Evolution Acrylic (PEV 900)				
2		Ceilings	m ²	39		
		ON METAL				
		Prepare, stop and apply one coat Metalcare Mild Steel Primer (UC 501) and finish with two coats Metalcare WB Enamel (WBE 1)				
3		Metal door frames	m ²	22.88		
4		Structural steelwork	Ton	19.4		
		ON WOOD				
		Prepare, stop, and sand down and finish with 3 x coats polyurethane varnish suitable for external conditions.				
5		Wooden Doors	m ²	19.36		
Total for Section 15 - Carried to Final Summary						

ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
		SECTION NO 16: ROADS & EARTHWORKS				
	SANS 1200D	EARTHWORKS				
	8.3.2	Bulk excavation:				
1	8.3.2 a	Excavate in all materials and dispose	m ³	800		
		Extra over items 140.01.01.01 and 140.01.02 above for:				
2	8.3.2.b	Intermediate excavation	m ³	90		
	8.3.8	Existing services:				
	8.3.8.1 c	Hand excavation for locating and exposing existing services:				
3		In all other areas	m ³	4		
4	8.3.10	Topsoiling	m ³	50		
	SANS 1200DM	ROADS & SUBGRADE				
	8.3.3	Treatment of roadbed:				
	8.3.3 a	Roadbed preparation and compaction of material to:				
5		Minimum of 90% of modified AASHTO maximum density (under roads)	m ³	310		
6	8.3.5	Selected layer compacted to 93% of modified AASHTO maximum density (G7 Imported material: Commercial Source) (Including fill on lower side of packhouse)	m ³	310		
	SANS 1200ME	SUBBASE				
	8.3.3	Construct subbase course / Shoulders with material from commercial sources Subbase: G6 material compacted to 95% modified AASHTO density from:				
7		Commercial sources	m ³	300		
		Subbase: C4 material compacted to 95% modified AASHTO density from:				
8		Commercial sources	m ³	129		
	8.3.5	Process subbase material by one of the following processes, as relevant, and use in the subbase:				
9	8.3.5 d	Stabilization	m ³	129		
	8.3.8	Stabilizing agent:				
10	8.3.8 b	Portland cement	t	8		

ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
11	8.3.11	Treatment of subbase with:				
		Weed killer (under paving blocks)	m ²	780		
	SANS 1200MJ	SEGMENTED PAVING				
12	8.2.1	Provision of edge restraints:				
		30 Mpa Road edge beam 200 mm wide x 300 mm deep including excavation, concrete formwork, reinforcement, etc.:				
13		Straight	m	24		
	8.2.2	Construction of paving complete:				
		Type S-A interlocking concrete paving blocks (25 MPa) in herringbone pattern including 25 mm sand layer:				
14		80 mm thick	m ²	800		
		KERBING AND CHANNELLING				
15	8.2.1	Precast concrete kerbing:				
		SANS 927 fig 8c (Mountable):				
16		Radius over 10m and straight sections	m	390		
	SANS 1200MM	ANCILLARY ROADWORKS				
		PERMANENT ROAD SIGNS				
15	8.3.1	Sign faces with Chromadek painted background, Chromadek painted symbols, characters, legends, borders, steel back frames and with signboard constructed from:				
		Supply and install 1 x STOP Sign on a 600mm diameter steel sheet with a thickness of 1.6mm. Including retro-reflective background, symbols. Sign to be fixed to a 3.2m long 75mm D-Shaped galvanized steel tubing, installed 600mm deep in the ground and backfilled with 15MPA Concrete.	no	1		
16	8.4.1	ROAD MARKINGS				
		Proprietary brand road marking material applied at nominal rate of 0,42 litre/m ²				
16	8.4.1 a	White lines (solid):				
		100 mm wide	m	250		

ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
Total for Section 16 - Carried to Final Summary						

ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
		SECTION NO 17: CIVIL SERVICES				
	SANS 1200DB	TRENCHES FOR SEWER, WATER PIPES & SLEEVES				
	8.3.2	Excavate in all materials for trenches, backfill, compact to 93% MOD AASHTO and dispose of surplus material:				
		Pipes over 110 mm dia up to 200 mm dia for depths:				
1		Up to 2,0 m	m ³	115		
	8.3.2 b	Extra over Item 1 above for:				
2		Hard rock excavation	m ³	5		
3		Soilcrete backfill where directed by the Engineer	m ³	5		
	SANS 1200LB	BEDDING FOR SEWER, WATER PIPES & SLEEVES				
	8.2.2	Supply bedding by importation overhaul included Class C bedding:				
	8.2.2.3	From commercial sources				
4	8.2.2.3a	Compacted selected bedding: Compacted to 93% MOD AASHTO	m ²	30		
5	8.2.2.3b	Compacted selected fill blanket: Compacted to 93% MOD AASHTO	m ³	18		
	SANS 1200LC	CABLE DUCTS				
	8.2.5	Supply, lay and bed sleeves & ducts:				
		uPVC pipes:				
6		160 mm dia (Electrical)	m	30		
	SANS 1200LD	SEWERS				
	8.2.1	Supply, lay, joint, bed on class B bedding and test pipeline:				
		uPVC pipes:				
7		160 mm dia	m	40		
	8.2.3	Precast concrete manhole:				
		With SABS 558 type 2A cover and frame:				
8	8.2.5	Depth 1,0 m up to 1,5 m	No	1		
		Break into existing manhole				

ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
9	8.2.11	Connect to existing sewer manhole. Cost shall include, breaking / drilling of hole through manhole ring and repairing any damages.	No	1		
	8.2.5	Cleaning/rodding eyes				
10		160mm dia	No	2		
	SANS 1200L	MEDIUM-PRESSURE PIPELINES				
	8.2.1	<u>Supply, Lay and Bed Pipes complete with couplings</u> uPVC Pressure Pipes and Fittings Supply, lay, bed and test the following uPVC pressure pipes (conforming with SABS 946 Part 1 specifications) in 6m lengths, each pipe fitted at one end with socket for Mechanical jointing, in the following diameters:				
11		75mm Class 16	m	80		
		HDPE Pipes - Class 16				
12		25mm Class 16	m	20		
		VALVES, COUPLINGS AND OTHER ACCESSORIES				
	8.2.2	Extra over 11, 12 for the Supplying, Laying and Bedding of Fittings and Specials Complete with Couplings for uPVC Bends 90° (medium or long radius)				
13		75mm dia	no	3		
		End Caps				
		75mm dia				
14	8.2.5	Single erf connections in 50mm diameter Steel Pipes, water meter, excavation, saddle and any other fitting required, as per drawing.	no	1		
15	8.2.5	Connection from 75mm UPVC Pipe to ablution units and washbay, including saddles, 25mm HDPE Pipes, valves and all other fitting required.	no	3		

ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
Total for Section 17 - Carried to Final Summary						

ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
1		SECTION NO 3 : FENCING BILL NO 10 : FENCING GATES Sliding gate 7500 x 2100mm high consisting of 75x50x4mm rectangular iron frame to sides, top, bottom and centre mebers with 30x30x3mm squeare tubing verticals at 200mm centers welded to frame, including I-Beam track with a guide with lugs at 500mm centres casted into a 500mm x 400mm concrete strip including guide rollers and machined wheels with double sealed roller bearings.	No	1		

Total for Section 17 - Carried to Final Summary				
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ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
		SECTION NO 19: ELECTRICAL WORKS				
		DISTRIBUTION BOARD				
		Supply, install, test and commission LV Distribution board complete with all equipments as per single line diagram with spare capacity				
1		DB-TS	Each	1		
		LV CABLES				
		Supply and install PVC SWA PVC LV cables and BCEW with terminations				
2		25mm ² 4c LV Cable	m	150		
3		Supply and installation of Bare Copper Earth Wire	each	4		
4		16mm ² 4c LV Cable	m	130		
5		Supply and installation of BCEW and terminations	each	2		
		Surface-mounted, Galvanized Steel, including mounting accessories, fixtures, drawboxes, routing to Engineer's approval				
6		4mm ² 4c LV Cable	m	110		
7		Supply and installation of BCEW and terminations	each	2		
8		2,5mm ² 4c LV Cable	m	110		
9		Supply and installation of BCEW and terminations	each	4		
10		50mm diameter uPVC Sleeves complete with slow bends, draw wire and end-caps	m	120		
		INTERIOR AND EXTERIOR LIGHTING				
		Supply and installation of the luminaires as per relevant drawings				
11		49W 5FT Vapourline LED with 10kA surge protection, Vandal-Resistant, IP 65	each	27		
12		55W LED FLOOD MIDI OPTIC with HIGH Impact glass of 1K 09, Vandal-Resistant, IP 66	each	8		
13		21W Panel LED with 960 lumen brightness, IP20, Water resistant	each	6		
14		Day/Night Switch	each	1		
		Light Switches				
15		1 lever 1-way, Mounted @ 1200mm A.F.F.L.	each	4		
16		2 lever 2-way, Mounted @ 1200mm A.F.F.L.	each	2		

ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
		Socket Outlets				
		Supply and installation of the following PVC insulated socket outlets including wiring				
17		16A Normal socket outlet, IP 44	each	11		
18		16A Weatherproof socket outlet, IP 44	each	1		
19		40A Weatherproof Isolators	each	2		
		BUILDING EARTHING				
		Complete earthing of the buildings as per drawing and as specified in the SANS standards complete with COC, inclusive of the following material: 1.2m Copper Earth Spike Earth Terminations (Cad Weld) 70mm ² BCEW 16mm ² BCEW Trenching and backfill in pickable soil				
		Testing and certification of the earthing system including all test equipment required as well as the issuing of an earthing certificate by a qualified person	Sum	1		
		TESTING AND COMMISSIONING				
		Testing and commissioning of the LV Supply Network including the provision of all test equipment required and the issuing of a Certificate of Compliance for the installation	Sum	1		
		Testing and commissioning of the Internal and External Lighting including the provision of all test equipment required and the issuing of a Certificate of Compliance for the installation	Sum	1		
		Provide As Build documentation, operating and maintenance manuals and drawings to the engineer	Sum	1		

ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
Total for Section 19 - Carried to Final Summary						

SUMMARY OF SCHEDULE OF QUANTITIES AND CALCULATION OF TENDER AMOUNT		
SECTION NO.	DESCRIPTION	AMOUNT
1	Preliminary and Generals	
2	Site Clearance	
2	Concrete, formwork and reinforcement	
3	Masonry	
4	Waterproofing	
5	Roof coverings	
6	Carpentry and joinery	
7	Ceilings and Partitions	
8	Ironmongery	
9	Structural steelwork	
10	Metalwork	
11	Plastering	
12	Tiling	
13	Plumbing	
15	Paintwork	
16	Roadworks	
17	Civil Services	
18	Fencing	
19	Electrical	
	TOTAL SCHEDULE OF QUANTITIES	
	CONTINGENCIES 10% OF SUB TOTAL	
	SUB TOTAL	
	ADD 15% VAT	
	TOTAL AMOUNT CARRIED TO FORM OF CONTRACT	



VHEMBE DISTRICT MUNICIPALITY

**CONSTRUCTION OF MULEDANE FIRE STATION TRACTORS
SHELTER (VDM/TECH/13/02/2025/01)**

1. A. Company's Experience & References (40)

No.	Target goals Name reference with contact details (Projects involving Construction of steel structures buildings for Tractor shelter/Community Hall/Pack house/ warehouse/church buildings with a minimum of 400 SQM, completed within previous 5 years, from year 2020 to date. NB: Proof of experience should be attached	Weighting	Score
1.		10	
2.		10	
3.		10	
4		10	
	SUBTOTAL: Experience & References	40	

Note: Please attach appointment letters and signed completion certificate issued by the client as proof for having completed such project.

If the service provider is sub contracted the main contractor's appointment letter and completion certificate should be attached, together with the appointment letter of the subcontractor and completion certificate of the work done by the subcontractor

2. Representative experience

No.	Target goal (attach CV & Certified copy of Qualifications)	Weighting	Score
1.	Contract manager in Projects involving Construction of steel structures buildings for Tractor Shelter/Community Hall/Pack house/ warehouse/church buildings with a minimum of 400 SQM 5 years and above = 04 points 3-4 years = 02 points 1-2 years =01 point	04	

2.	Site agent in Projects involving Construction of steel structures buildings for Tractor Shelter/ CommunityHall/Pack house/ warehouse/church buildings 4 years and above = 3 2-3 years = 02 1-2 years = 01	03	
3.	Foreman Projects involving Construction of steel structures buildings for Tractor Shelter/CommunityHall/Pack house/ warehouse/church buildings 3 years and above = 02 1-2 years = 01	02	
4.	Health & Safety Officer years' experience as OHS Projects involving Construction of steel structures buildings for Tractor Shelter/CommunityHall/Pack house/ warehouse/church buildings 3 years and above = 1 1-2years =0.5	1	
	SUBTOTAL: Representative experience	10	

Note: Project organogram of the project team must be attached. Curriculum vitae with certified copies of qualifications and contact details should be attached to the tender document for verification by the clients.

NB foreign qualifications certified copies from SAQA must also be attached.

3. Representative Qualification

No.	Target goals	Weighting	Score
1.	Contract Manager BSc/B-Tech(structural) or higher in civil with ECSA/SACPCMP = 6 BSc/B-Tech(structural) or higher in civil = 4 National Diploma Civil/Building Science/ Construction management =2	6	

2.	Site Agent BSc/B-Tech or higher in civil = 4 National Diploma Civil/Building Science/ Construction management =2	4	
3	Foreman: Experience in projects involving steel structures buildings National Diploma Civil/ Building/ Construction Management = 03 points National "N" Diploma: Civil Engineering = 02 National Certificate: Civil Engineering/Building = 01	3	
4	Health and Safety Projects involving Construction of steel structures buildings for Community/Pack house/ warehouse/church building = 02 National Diploma : Safety Management National Certificate: SAMTRAC/NOSA = 01	2	
	SUBTOTAL: Representative Qualification	15	

Note: Project organogram of the project team must be attached. Curriculum vitae with certified copies of qualifications and contact details must be attached to the tender document for verification by the client.

NB foreign qualifications certified copies from SAQA must also be attached.

4. Financial Reference

No.	Target goals	Weighting	Score
1.	Tenderer submitted bank details proof attached	02	
2.	Bank rating "C" or better	08	
3.	Registered financial institution's full details as guarantor in the amount of 10% as specification for surety purposes shall be submitted	05	
	SUBTOTAL: Financial references	15	

5. Plants & Equipment

No.	Target goals	Weighting	Score
1.	TLB	03	
2.	20 Ton excavator	05	
3.	20 000 water tankers	02	
4.	2x 10m2 tipper trucks	04	
5.	Grader	02	
6.	Crane	04	
	SUBTOTAL: Plant & equipment	20	

Note: Proof of ownership to be submitted with tender. If plant will be hired, a signed letter from plant Hire Company confirming availability to the service provider for this particular contract and the ownership documents from the hiring company

1. Summary of table 1-5

No.	Summary of tables	Weighting	Score
1.	Experience & References	40	
2.	Representative experience	10	
3.	Financial references	15	
4.	Representative Qualifications	15=	
5.	Plants & Equipment	20	
	Sub-Total	100	
	PRICE	80	
	Specific Goals	20	
	HDI-CSD	10	
	Locality -04 points within the district -02 points within Limpopo province -01 point within south Africa(CSD report will be used to verify the locality of the bidder	4	
	Youth-ID or CSD	02	
	Women –ID or CSD	02	
	Disability(attach proof from the doctor-medical certificate	02	

NB: Functionality will be scored out of 100 and Bidders who do not reach the 75% threshold will not be evaluated further.



VHEMBE DISTRICT MUNICIPALITY

C2.1 Special Conditions of Contract

The following special conditions of contract, which include amendments to, omissions of or additions to certain clauses of the "General Conditions of Contract for Construction Works, GCC 2015 THIRD EDITION)", shall be applicable to the works. In the case of conflict with the mentioned general conditions of contract, these special conditions of contract shall be binding and applicable to the contract.

Each clause with the prefix SCC shall refer to the concurrent clause in the general conditions of contract. Such clause shall substitute, supplement or amend the clause with the same number in the general conditions of contract. Where there is no such concurrent clause in the general conditions of contract the SCC clause shall be numbered as a new clause in the special conditions of contract.

1. DEFINITIONS, INTERPRETATIONS AND GENERAL PROVISIONS

SCC 1.1.14 EMPLOYER

Add the following to GCC 2015

The employer is the **VHEMBE DISTRICT MUNICIPALITY**, and includes any persons appointed by the Employer. The official address is:

VHEMBE DISTRICT MUNICIPALITY
41 Biccard Street
Private Bag X5006
POLOKWANE
0713

SCC 1.1.15 ENGINEER

Add the following to GCC 2015

VHEMBE DISTRICT MUNICIPALITY
41 Biccard Street
Private Bag X5006
POLOKWANE
0713

2. AMBIGUITY IN DOCUMENTS

Add the following to GCC 2015

3.2) The several documents forming the contract shall rank in the following order of precedence:

- a) contract agreement;
- b) tender form and appendix;
- c) special conditions of contract;
- d) project specifications;
- e) general conditions of contract;
- f) drawings;
- g) standardised specifications (SABS 1200) and particular specifications;
- h) schedule of quantities and summary;
- i) statutory regulations and requirements;
- j) standard SABS specifications (not SABS 1200);
- k) other standard specifications.

If the requirements of any part of the tender document contradict any other part, the document in the highest position on the above order of precedence, shall have preference and apply.

3. PROGRAMME OF THE WORKS

SCC 12.2 PROGRAMM

Add the following to GCC 2015

The critical path of the works shall also be stipulated clearly in the programme.

4. INSTRUCTIONS AND DRAWINGS

SCC 13.1 DRAWINGS AND INSTRUCTIONS

Add the following to GCC 2015

The Contractor is entitled to three (3) free sets of paper plans for normal use and one (1) free set of paper plans on which to enter "as built" information. He shall also be supplied with one (1) free copy of the contract document. These drawings and contract document shall be issued to the Contractor, at the time of commencement of the contract, by the Engineer.

SCC 13.7 ENGINEER TO APPROVE CONTRACTOR'S DESIGNS AND DRAWINGS

Add the following to GCC 2015:

Although the Engineer may approve plans and designs of the Contractor, this does not exempt the Contractor from his responsibility. The professional responsibility for such designs shall be that of the Contractor and his Engineer.

5. CLEARANCE OF SITE

SCC 19.1 CLEARANCE OF SITE ON COMPLETION

Add the following to GCC 2015:

After completion of the works, the Contractor shall obtain certificates from all concerned land owners on whose property works have been executed, stating that they are satisfied with the condition of their property, which will normally include finishing of pipe trenches and structures, clearance and finishing of all stone quarries, borrow pits, diversions, private or tertiary or haulage roads that have been used for the transport of material, waste material, fencing, gates, etc on their properties. These certificates shall all be handed to the Engineer before he issues the certificate of completion. Notwithstanding a certificate of completion will not be issued if the work is not to the satisfaction of the Engineer.

6. CONTRACTOR'S EMPLOYEES

SCC 20.1 ENGAGEMENT OF EMPLOYEES

Add the following to clause 20.1:

In the event that the Contractor does not pay local labour or any outside agency employed on a monthly basis, the Employer has the automatic right to deduct such wages from the Contractor's next payment certificate. This will be deducted from either monies due to the Contractor or from retention already retained on the project. Payments to the local labour or outside agency will be made by cession.

SCC 20.3 ACCOMMODATION AND CARE OF EMPLOYEES

Add the following sub clause GCC 2015:

The sanitary facilities provided by the Contractor at his own cost, shall comply with the requirements of the statutory authority concerned.

7. MATERIALS, WORKMANSHIP AND CONSTRUCTIONAL PLANT

SCC 23.1 QUALITY OF MATERIALS AND WORKMANSHIP

Add the following to GCC 2015:

No second-hand or reject material shall be used without written permission from the Engineer.

SCC 23.7 COST OF TEST SPECIMENS AND TESTS

Substitute GCC 2015 with the following:

- (a) It is deemed that the Contractor has made provision in his tender for all such services and tests that are required from him. It is the duty of the Contractor to, at his own cost and by means of the necessary tests, prove to the Engineer that the works and compaction prescribed, comply with the specification.

8. EXAMINATION OF THE WORKS

SCC 25.1 EXAMINATION OF WORK BEFORE COVERING UP

Add the following to GCC 2015:

The Contractor shall give the Engineer a reasonable time to accommodate examinations in his programme, in which case a time for inspection can be agreed upon.

SCC 25.2 NOTICE TO BE GIVEN

Add the following to paragraph 2 of GCC 2015

If the Engineer attends with the purpose of examining any part or materials of the works at any time and date as agreed upon with the Contractor, and it is found that the works or materials are not yet ready for inspection, the Contractor shall be responsible for the costs of such a visit by the Engineer.

9. INDEMNIFICATIONS

SCC 33.1 LIABILITY

Add the following to GCC 2015

The Contractor indemnifies the Employer against any liability in respect of damage to or physical loss of the property of any person or injury to or death of any person due to not complying with the Occupational Health and Safety Act No 85 of 1993.

Attached in the tender document is the form "Contract between Employer and Contractor" to be completed by the successful Contractor.

SCC 35 INSURANCES

Add the following to GCC 2015

The amount shall be per occurrence. The number of occurrences is unlimited.

Add the following to GCC 2015:

Within 14 days of receipt of the letter of acceptance of his tender, the Contractor shall submit proof of payment to the Engineer.

SCC 35.9 CONTRACTOR AND EMPLOYER TO COMPLY

The Contractor and the Employer shall comply with the terms and conditions of the insurance policies.

As soon as a claim arises, the Contractor shall immediately submit the necessary claims on behalf of himself and the Employer. Copies of all claims and relevant documentation shall be submitted to the Engineer.

SCC 35.10 TIME TO REPAIR DAMAGES

If any insurance claim arises, the Contractor shall immediately proceed with the necessary repairs after the assessor, irrespective of whether the claim has been settled, has established the damage. No extension of time shall be granted if there is a waiting period for the settlement of the claim and all costs or losses which the Contractor may have regarding lost time, shall be deemed as covered by the insurance claim, or shall be borne by the Contractor himself.

10. VARIATIONS

SCC 37.2 DAYWORK

Add the following to GCC 2015

"Total remuneration" shall include the following:

- Basic wage
- Holiday fund stamp
- Unemployment insurance
- Employee's compensation
- Service bonus

Add the following to GCC 2015:

The percentage allowance stated in the appendix shall also include travelling cost or travelling allowance (transport of workmen with the Contractor's transport vehicles or transport vehicles hired by the Contractor or for which the Contractor paid), and residence allowance and other wages that are payable to the workmen on the date for submission of tenders.

11. SUSPENSION OF THE WORKS

SCC 39.1 SUSPENSION OF THE WORKS

Add the following to GCC 2015:

No payment shall be made for costs incurred by recompiling a construction programme. In the case of suspension of work, either for a change in sequence or as a result of GCC 39.1.1 to to 39.1.4, no payment shall be made for such costs resulting from this.

12. EXTENSION OF TIME FOR COMPLETION

SCC 42.1 TIME FOR COMPLETION

Add the following to GCC 2015

The time for completion shall exclude the period of builder's holidays for in the 24 months

SCC 42.2 EXTENSION OF TIME FOR COMPLETION

Add the following to GCC 2015

Extension of the time for completion as a result of extra or additional work and unfavourable physical conditions shall only be granted if such work or conditions influence work on the critical path of the programme. If no definitive method for extension of time due to weather conditions and rain is specified, extension of time as a result of this shall also only be applicable if it influences the critical path of activities.

SCC 42.3 SOME REASONS FOR EXTENSIONS OF TIME

Add the following to GCC 2015

42.3.2 Abnormal climatic conditions.

No extension of the time for completion shall be granted on the grounds of normal rainfall conditions, but extension of time in terms of clause 42.2 of the general conditions of contract on the grounds of abnormal rainfall or wet conditions shall be calculated separately for each calendar month or part thereof, according to the following formula. It shall be calculated as follows for the time for completion, including any extension thereof:

$$V = (N_w - N_n) + \left(\frac{R_w + R_n}{X} \right)$$

V = Extension of time for calendar days of the calendar month concerned. If the value of V is negative and the absolute value thereof is greater than N_n, V is taken as negative N_n.

N_w = Actual number of days during calendar month on which a rainfall of Y mm or more is recorded.

N_n = Average number of days in the calendar month concerned on which a rainfall of Y mm or more is recorded in terms of existing rainfall data.

R_w = Actual rainfall for the calendar month concerned in mm.

R_n = Average rainfall for the calendar month in mm deduced from existing rainfall data.

The total extension of time is the algebraic sum of the monthly totals for the period concerned. Extension of time for parts of a month shall be calculated by using pro rata values of N_n and R_n . If the algebraic sum of the monthly totals is negative, no reduction of the time for completion as a result of rainfall shall be applicable.

This formula does not take any delays as a result of flood damage, which may cause further or simultaneous delays; into consideration and flood damage shall be treated separately for purposes of extension of time for completion.

The factor $(N_w - N_n)$ is considered as a fair allowance for deviation from the normal for the number of days on which the rainfall exceeds Y mm. The factor $(R_w - R_n)/X$ is considered as a fair allowance for deviation from the normal for the number of days on which the rainfall does not exceed Y mm, but on which wet conditions will hamper or disrupt work.

For the purpose of this contract the values of N_n , R_n , X and Y will be the relevant values of the nearest weather station to the site as supplied by the South African Weather Bureau. It is the sole responsibility of the Tenderer to acquaint himself with the relevant values. These values shall, at the start of the contract be submitted to the Engineer for scrutiny and approval.

SCC 42.5 AVAILABILITY OF PETROLEUM PRODUCTS

The tender shall be based on the available supply of petroleum products required for the completion of the works. If, during the contract period, for reasons outside the control of the Contractor, a restriction or breakdown in the supply of petroleum products may occur, which has an actual influence on the execution of the works for a period of at least thirty (30) days, the Contractor shall make all reasonable efforts to complete the works and he shall be entitled to an extension of the time for completion and he shall also be entitled to such an adjustment of the contract price as deemed reasonable by the Engineer, with consideration of all materials and relevant factors directly responsible or having a direct effect on such restriction or breakdown, with the inclusion of the Contractor's site and overhead costs relevant to the contract.

SCC 42.6 EXTENSION OF TIME DUE TO SHORTAGE OF MATERIAL

If, during the preparation of his tender or during construction, the Contractor bases his unit prices on prices obtained from specific material or specific suppliers, it will be accepted that the Contractor has ascertained that such material shall be available on a continuous basis for the execution of the contract.

No extension of time shall be granted if material cannot be obtained locally, but is available from other sources in the country, and no additional remuneration shall be granted for increased costs due to obtaining material from sources in other parts of the country.

If suppliers cannot adhere to the quoted delivery dates, any delays resulting from this shall be considered as a matter between the supplier and the Contractor. Extension of time could be granted under such conditions after complete proofs have been submitted to and accepted by the Engineer, but without any financial implications for the Employer.

13. INTERIM PAYMENTS

SCC 49.2 VALUATION OF MATERIAL BROUGHT ONTO SITE

Add the following to GCC 2015

Material or goods for which payment is made in terms of this clause, shall be identified uniquely and be stored in a space approved by the Engineer, and which will only be used for the purposes of the Employer.

SCC 49.3 RETENTION MONEY

Add the following to GCC 2015

No limit of retention money will be applicable only the % as stated in the Contract Data will be applicable on the contract.

SCC 49.4 EMPLOYER'S OBLIGATION TO PAY

Replace GCC 2015 with the following:

The Engineer shall deliver to the Employer and the Contractor the payment certificate referred to in clause 49.1 within 07 (seven) days after the receipt by the Engineer of the Contractor's said statement, and the Employer shall pay the amount due to the Contractor within 65 (sixty-five) days after receipt by the Employer of the payment certificate signed by the Engineer.

SCC 49.11 VALUE ADDED TAX

Add the following to GCC 2015

Value added tax (VAT) shall be calculated on each payment certificate, but it shall remain the responsibility of the Contractor to issue a tax invoice for the certified amount. The Contractor is responsible for the payment of VAT.

14. DEFECTS

SCC 53.2 MAKING GOOD OF DEFECTS

Add the following to GCC 2015

If it is deemed necessary in the opinion of the Engineer, the defects liability period after repairs can be extended for a further period of twelve months or for a period to the discretion of the Engineer, as regards the relevant part of the works that is made good.

15. ADD THE FOLLOWING ADDITIONAL CLAUSE/S

SCC 59.1 COMPLIANCE WITH APPLICABLE LAWS

The Contractor shall be conversant with all the requirements, regulations, and standards of the Occupational Health and Safety Act, 1993 (Act No. 85 of 1993), hereinafter referred to as "the Act" and undertakes to execute all the works forming part of this Contract and to operate and utilise all machinery, plant, and equipment in accordance with the Act.

The Contractor shall, from the commencement date of the Contract up to completion or termination thereof, be the Employer's mandatory regarding occupational health and safety for all activities on the site but without derogating from his status in his own right as an employer or a user in accordance with the Act.

The Contractor is responsible for the compliance with the Act by all his subcontractors, whether or not nominated and/or approved by the Employer.

The Contractor shall, when called upon to do so, enter into and execute an Agreement, as provided for under Section 37(2) of the Act, with the Employer. The Agreement in the relevant form shall be prepared at the expense of the Employer.



VHEMBE DISTRICT MUNICIPALITY

C3. Schedule of Quantities

C3.1 Preamble to Schedule of Quantities

1. The general conditions of contract, the special conditions of contract (if any), the specifications (including the project specification) and the drawings are to be read in conjunction with the schedule of quantities.
2.
 - a) The schedule comprises items covering the Contractor's profit and costs of general liabilities and of the construction of temporary and permanent works.
 - b) The Contractor is at liberty to insert a rate of his own choosing for each item in the schedule and his attention is drawn to the fact that the Contractor has the right, under various circumstances, to payment for additional works carried out and that the Engineer is obliged to base his assessment of the rates to be paid for such additional work on the rates inserted in the schedule by the Contractor.
 - c) Clause 8 of each standardised specification and the measurement and payment clause of each particular specification, read together with the relevant clauses of the project specification, set out what ancillary or associated activities are included in the rates for the operations specified.
3. Descriptions in the schedule of quantities are abbreviated and the schedule has been drawn up generally in accordance with the latest issue of Civil Engineering Quantities¹. Should any requirement of the measurement and payment clause of the applicable standardised specification², or the project specification², or the particular specification(s)² conflict with the terms of the schedule or, when relevant, Civil Engineering Quantities¹, the requirement of the standardised, project or particular specification, as applicable, shall prevail.
4. Unless otherwise stated, items are measured net in accordance with the drawings, and no allowance has been made for waste.
5. The prices and rates to be inserted in the schedule of quantities are to be the full inclusive prices to the Employer for the work described under the several items, value added tax excluded. Such prices shall cover all costs and expenses that may be required in and for the construction of the work described, and shall cover the cost of all general risks, liabilities and obligations set forth or implied in the documents on which the quotation is based.
6. A price or rate is to be entered against each item in the schedule of quantities, whether the quantities are stated or not. An item against which no price is entered will be considered to be covered by the other prices or rates in the schedule.
7. The Contractor must price each item in the schedule of quantities in **BLACK INK**.
8. **All prices and rates shall exclude value added tax (VAT)**. The Contractor shall calculate value added tax and enter it at the end of the summary of the schedule of quantities.

9. For the purposes of this Schedule of Quantities, the following words shall have the meanings hereby assigned to them:

Unit	:	The unit of measurement for each item of work as defined in the Specifications.
Quantity	:	The number of units of work for each item
Rate	:	The payment per unit of measurement at which the Tenderer tenders to do the work.
Amount	:	The product of the quantity and the rate tendered for an item
Sum	:	An amount tendered for an item, the extent of which is described in the Schedule of Quantities, the specifications or elsewhere but the quantity of work of which is not measured in any units.
Prime Cost (or PC item)	:	A sum fixed by the Engineer and entered in the Schedule of Quantities as the net sum provided to cover the cost of specific goods or materials to be supplied under the contract, or the net sum to be paid by the Contractor to merchants or others for such articles or materials. ¹
Provisional Sum	:	A sum of money fixed by the Engineer and entered in the Schedule of Quantities to provide for work not defined at the tender stage and includes any allowance specifically made for unforeseen contingencies. ¹
Extra Over (or EO)	:	Qualifies an operation (or combination of operations) which is common in a varying degree to a number of other operations and which is scheduled once as "extra over" those other operations in order to avoid a multiplicity of items each reflecting the degree to which the common operations applies. The term "extra over" invariably denoted double measurement, no deduction being made from one on account of the other. ¹

10. The units of measurements indicated in the Schedule of Quantities are metric units.

The following abbreviations are used in the Schedule of Quantities:

mm	=	millimetre
m	=	metre
km	=	kilometre
km-pass	=	kilometre-pass
m ²	=	square metre
m ² -pass	=	square metre-pass
ha	=	hectare
m ³	=	cubic metre
m ³ -km	=	cubic metre-kilometre
l	=	litre
kl	=	kilolitre
kg	=	kilogram
t	=	ton (1 000 kg)
no	=	number
%	=	percentage
kW	=	kilowatt
PC Sum	=	prime cost sum
Prov. Sum	=	provisional sum
kPa	=	kilopascal
R/only	=	Rate only
W/day	=	Work day

- 1) The standard system of measurement of Civil Engineering Quantities of South Africa published by the South African Institution of Civil Engineers.
- 2) See definition in sub clause 2.1 of Part 1 of SABS 0120: Format and Contents.

DAY WORK LIST

GENERAL

Contractors must complete this list, which will be used to assess the value of work that the Engineer instructs in writing to be done on a day work basis, all in agreement with clause 37.2 of the General Conditions of Contract for Construction Works, First Edition, 2004 and coupled Special Conditions of Contract. All the rates are fixed and shall be binding till the issuing of the final certificate, except for statutory increases that are announced from time to time.

LABOUR COSTS

Rates for labour as listed below shall include all the allowances as specified in the General Conditions of Contract for Construction Works, First Edition, 2004 and Special Conditions of Contract. The extra allowance, applicable on Labour costs listed below, is given in the tender appendix and must not be taken into account in this list.

Overtime costs incurred by this contract shall be paid in the same proportion as the amounts actually paid to the employees.

DESCRIPTION	UNIT	RATE
Unschoolled labour	Hour	R
Half- Schooled labour	Hour	R
Pipe layer	Hour	R
Ganger	Hour	R
Foreman / Section leader	Hour	R
Brick layer	Hour	R
Plumber	Hour	R

EQUIPMENT COSTS

Full comprehensive hourly rates, which also include the cost of operators, must be listed below. Rates must also include all the costs of consumable items, maintenance, depreciation, tools, and all other coincidences that shall be necessary to operate the equipment for the purpose it is designed for. The rates must also include all the overhead costs, profits, site supervision, insurance, holidays with payment, travelling costs (or travelling allowances) and residence allowances of operators and any other allowances that are applicable on equipment. The Tenderer must list under each heading the make and specification of the equipment available.

DESCRIPTION	UNIT	RATE
1. Excavators		
.....	Hour	.....
.....	Hour	.....
.....	Hour	.....
2. Front-end loaders		
.....	Hour	.....
.....	Hour	.....
.....	Hour	.....
.....	Hour	.....
3. Trucks (m³ specified)		
.....	Hour	.....
.....	Hour	.....
.....	Hour	.....
.....	Hour	.....
4. Water truck (litres specified)		
.....	Hour	.....
.....	Hour	.....
.....	Hour	.....
.....	Hour	.....
5. Tractor & Trailer		
.....	Hour	.....
.....	Hour	.....
.....	Hour	.....
6. Compressor		
.....	Hour	.....
.....	Hour	.....
.....	Hour	.....
.....	Hour	.....

DESCRIPTION	UNIT	RATE
7. Concrete mixer (litres specified)		
.....	Hour	.....
.....	Hour	.....
.....	Hour	.....
.....	Hour	.....
8. "Dumper" (m³ specified)		
.....	Hour	.....
.....	Hour	.....
.....	Hour	.....
.....	Hour	.....
9. Water pumps		
75mm.....	Hour	.....
100mm.....	Hour	.....
150mm.....	Hour	.....
10. Compactors		
Plate	Hour	.....
.....	Hour	.....
.....	Hour	.....
.....	Hour	.....
11. Other equipment		
.....	Hour	.....
.....	Hour	.....
.....	Hour	.....
.....	Hour	.....



VHEMBE DISTRICT MUNICIPALITY

C4.1 Scope of Work

4.1.1 Employer's objectives

The employer's objectives are to deliver public infrastructure using labour intensive method, whereby the local community benefit throughout the entire project and also in doing so provide work place training opportunities to learners who have a Learnership Agreements with the Construction Education and Training Authority.

The employer's objective is to construct a tractor shelter for the district municipality. socio economic and agricultural development of the community, satisfy the needs of the community. Below is the Specification:

1. 400m² Steel Structure.
2. Height: 5m.
3. Floor: Reinforced Concrete.
4. Wall: 1.5m brick wall, rest corrugated iron sheeting.
5. Entrance: 3.5m wide & 3.5m high.
6. Roofing: IBR Roof sheeting with fibre for natural light with ventilation.
7. Drive way: 3.5m.
8. Washing Bay adjacent to building (6m x 4m)
9. Storeroom: 50m²
10. Structure need to park 20 tractors.
11. Tractor dimensions used: Massey Ferguson 5710 & Case JX75
12. Implements that might require shaded parking:
 - 2 x Grain Planters (3.8m x 4.9m)
 - 1 x Boom Sprayer (2m x 1.3m)
 - 2 x Slashers (2.1m wide)
 - Diesel Cart (3.2m x 1.73m)
13. Storeroom to be used for storage of spare parts, tools and a compressor.
14. Parking arrangement to be determined by Service Provider.

4.1.2 Overview of the works

On this Contract the aim is to provide a basic level of services, with regards to improve aspects of the current conditions. The Contract will entail a provision of the services as listed in the Project Specification. Also, with regards to EPWP requirements, labour-intensive works comprise the activities described in SANS 1921-5, Earthwork's activities which are to be performed by hand, and its associated specification data. Such works shall be constructed using local workers who are temporarily employed in terms of this Scope of Work. Time is of the essence for this contract. The Tenderer shall state the time in calendar months required by him/her to complete the Works. Tenderers offering early completion dates will generally be more favourably received, other things being equal.

4.1.3 Labour-Intensive Works

All the relevant tasks/works shall be constructed using Labour-Intensive Construction Methods only.

4.1.4 Location of the works

The area is situated at Muledane Fire Station, 2km from Thohoyandou CBD and is part of Thulamela Local Municipality in the jurisdiction of Vhembe District Municipality of Limpopo Province with the following coordinates:

Locality Details

- Province : Limpopo Province
- District : Vhembe District Municipality
- Municipality: Thulamela Local Municipality
- Coordinates: Latitude: (S) -22.987236
Longitude: (E) 30.4473099

4.1.5 Temporary works

The Contractor shall provide, erect, maintain and remove on completion of the Contract, ample temporary offices and sheds for the proper storage of perishable materials and for the use of his workmen.



VHEMBE DISTRICT MUNICIPALITY

C4.2 Drawing Descriptions

The following drawings are applicable to the contract:

4.2.1 Key plans

All key plans for this type of project are included in the tender document as "Part C.8 Drawings".

4.2.2 Typical details

All typical details for this type of project are included in the tender document as "Part C.8 Drawings".

4.2.3 Civil engineering drawings

The drawings used for setting up the Bills of Quantities are as indicated above in paragraph 4.2.1 and 4.2.2.



VHEMBE DISTRICT MUNICIPALITY

C4.3 Procurement

4.3.1 Preferential procurement procedures

The works shall be executed in accordance with the conditions attached to preferences granted in accordance with the referencing schedule.

4.3.2 Scope of mandatory subcontract work

The following portions of the works shall be subcontracted to CIDB registered contractors in accordance with the subcontracting procedures described hereunder:

Competitive Bids shall be invited in respect of each of the above portions of the works in accordance with the relevant provisions of the latest edition of the CIDB Standard for Uniformity in Construction Procurement. The Contract Data in the associated procurement documents shall be based on the use of BIFSA Non-Nominated Subcontract for use with the JBCC Series 2000 Principal Building Agreement / CIDB Standard subcontract (labour only) / JBCC series 2000 Nominated / Selected Subcontract Agreement / SAFCEC General conditions of subcontract (2003 edition) (select appropriate option) / NEC Engineering and Construction Subcontract / NEC Engineering and Construction Short Subcontract with minimal project specific variations and amendments that do not change their intended usage.

The Employer together with the Contractor shall evaluate the Bids received in accordance with the provisions of the Standard Conditions of Bid contained in Annex F of Standard for Uniformity in Construction Procurement. The evaluation panel shall comprise equal representatives from the Employer and from the Contractor.

The Contractor shall without delay enter into contract with the successful Bidding subcontractor based on their accepted Bid submission. The Contractor shall remain responsible for providing the subcontracted portion of the works as if the work had not been subcontracted.



VHEMBE DISTRICT MUNICIPALITY

C4.4 Construction

4.4.1 Setting out of Works (Sub clause 5.1.1)

The Employer shall arrange for the Contractor to be given sufficient reference pegs from which to work. The value of all bench marks shall be given in writing. The Contractor shall bear the cost of any re-survey and the cost of re-establishment or checking of any pegs, bench marks, etc. disturbed, destroyed or interfered with in any way and the cost of any survey to prove the accuracy of the setting out after any disturbance of or interference with any peg or bench mark. All surveys or re-survey shall be by Surveyors appointed by the Employer."

4.4.2 Applicable national and international standards

SABS 1200

4.4.3 Particular / generic specifications

The relevant provisions of the SABS 1200 (1981 edition) shall apply to the contract with the following amendments:

1115 Replace clause with the following:

The general conditions of contract are the General Conditions of Contract for Construction Works (2004) as published by the South African Institution of Civil Engineering read in conjunction with the Contract Data.

1202 Replace "Clause 15" with "Clause 12".

1206 Replace the first sentence with the following:

The contractor shall comply with all legal provisions in regard to surveying and setting out work.

1209(e) Replace "Clause 52" with "Clauses 29 and 49.2".

1210 Replace "Clause 54" with "Clause 51".

1212(1) Replace "Clause 49" with "Clause 46".

1215 Replace "Clause 45" with "Clause 42".

1217 Replace "Clause 35" with "Clause 31".

1303 Replace "Clauses 49 and 53" with "Clause 50".

13.01(3) Replace "Clauses 12 and 45" with "Clauses 1.1.4 and 42".

14.03(c) Replace "Clause 40(1)" with "Clause 37".

1505 Replace "Clauses 40 and 53" with "Clause 37".

3204(b) (iii) Replace "Clauses 40 and 53" with "Clause 37".

4.4.4 EPWP labour intensive specification

4.4.4.1 Labour intensive competencies of supervisory and management staff

Contractors having a CIDB contractor grading designation of **7 CE OR higher** shall only engage supervisory and management staff in labour intensive works who have either completed, or for the period of 24 months

All other site supervisory staff in the employ of such contractors must have completed, or for the period 24 months 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 any one of these 3 unit standards
		Use Labour Intensive Construction Methods to Construct and Maintain the Pump Station	
		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 any one of these 3 unit standards
		Use Labour Intensive Construction Methods to Construct and Maintain the Pump Station	
		Use Labour Intensive Construction Methods to Construct and Maintain Water and Sanitation Services	
		Use Labour Intensive Construction Methods to Construct, Repair and Maintain Structures	
Site Agent / Manager (i.e., the contractor's most senior representative that is resident on the site)	5	Manage Labour Intensive Construction Processes	Skills Programme against this single unit standard

4.4.4.2 Employment of unskilled and semi-skilled workers in labour-intensive works

4.4.4.2.1 Requirements for the sourcing and engagement of labour.

4.4.4.2.1.1 Unskilled and semi-skilled labour required for the execution of all labour-intensive works shall be engaged strictly in accordance with prevailing legislation and SANS 1914-5, Participation of Targeted Labour.

4.4.4.2.1.2 The rate of pay set for the EPWP is **R 140.00 per task or per day**.

4.4.4.2.1.3 Tasks established by the contractor must be such that:

- a) the average worker completes 5 tasks per week in 40 hours or less; and
- b) the weakest worker completes 5 tasks per week in 55 hours or less.

4.4.4.2.1.4 The contractor must revise the time taken to complete a task whenever it is established that the time taken to complete a weekly task is not within the requirements of 3.4.4.2.1.3.

4.4.4.2.1.5 The Contractor shall, through all available community structures, inform the local community of the labour-intensive works and the employment opportunities presented thereby. Preference must be given to people with previous practical experience in construction and / or who come from households:

- a) where the head of the household has less than a primary school education;
- b) that have less than one full time person earning an income;
- c) where subsistence agriculture is the source of income.
- d) those who are not in receipt of any social security pension income

4.4.4.2.1.6 The Contractor shall endeavour to ensure that the expenditure on the employment of temporary workers is in the following proportions:

- a) 60 % women;
- b) 20% youth who are between the ages of 18 and 25; and
- c) 2% on persons with disabilities.

4.4.4.2.2 Specific provisions pertaining to SANS 1914-5

4.4.4.2.2.1 Definitions

Targeted labour: Unemployed persons who are employed as local labour on the project.

4.4.4.2.2.2 Contract participation goals

4.4.4.2.2.2.1 There is no specified contract participation goal for the contract. The contract participation goal shall be measured in the performance of the contract to enable the employment provided to targeted labour to be quantified.

4.4.4.2.2.2.2 The wages and allowances used to calculate the contract participation goal shall, with respect to both time-rated and task rated workers, comprise all wages paid and any training allowance paid in respect of agreed training programmes.

4.4.4.2.2.3 Terms and conditions for the engagement of targeted labour

Further to the provisions of clause 3.3.2 of SANS 1914-5, written contracts shall be entered into with targeted labour.

4.4.4.2.2.4 Variations to SANS 1914-5

4.4.4.2.2.4.1 The definition for net amount shall be amended as follows:

Financial value of the contract upon completion, exclusive of any value added tax or sales tax which the law requires the employer to pay the contractor.

4.4.4.2.2.4.2 The schedule referred to in 5.2 shall in addition reflect the status of targeted labour as women, youth and persons with disabilities and the number of days of formal training provided to targeted labour.

4.4.4.2.2.5 Training of targeted labour

4.4.4.2.2.5.1 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 and safety.

4.4.4.2.2.5.2 The cost of the formal training of targeted labour, will be funded by the provincial office of the Department of Labour. This training should take place as close to the project site as practically possible. The contractor, must access this training by informing the relevant provincial office of the Department of Labour in writing, within 14 days of being awarded the contract, of the likely number of persons that will undergo training and when such training is required. The employer must be furnished with a copy of this request.

4.4.4.2.2.5.3 A copy of this training request made by the contractor to the DOL provincial office must also be faxed to the EPWP Training Director in the Department of Public Works, Fax Number 012 328 6820 or email cinderella.makunike@dpw.gov.za Tel: 083 677 4026.

4.4.4.2.2.5.4 The contractor shall be responsible for scheduling the training of workers and shall take all reasonable steps to ensure that each beneficiary is provided with a minimum of six (6) days of formal training if he/she is employed for 3 months or less and a minimum of ten (10) days if he/she is employed for 4 months or more.

4.4.4.2.2.5.5 The contractor shall do nothing to dissuade targeted labour from participating in training programmes.

4.2.2.5.4 An allowance equal to 100% of the task rate or daily rate shall be paid by the contractor to workers who attend formal training, in terms of 4.4.4.2.2.5.4 above.

4.4.4.2.2.5.5 Proof of compliance with the requirements of 4.4.4.2.2.5.2 to 4.4.4.2.2.5.6 must be provided by the Contractor to the Employer prior to submission of the final payment certificate.

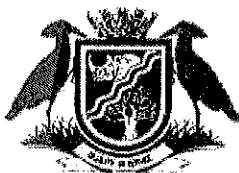
4.4.5 Plant and equipment

Add Subclause 4.4.5: Restriction on the use of plant.

"Except for the type of plant, and to the extent permitted in terms of the project specification or approved by the Engineer, in writing, the Contractor shall use only hand tools and equipment in the construction of the Works, or portion(s) of the Works, that are required in terms of the project specification to be constructed using labour intensive methods.

Failure by the Contractor to adhere to this clause will put him in breach of contract. The provisions contained in this contract with regard to labour content and labour-intensive construction, are binding, and will be enforced accordingly."

The plant and equipment used on the site shall not be inferior to that described in the Schedule of Plant and Equipment.



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C4.5 Management

4.5.1 Applicable SANS 1921 standards

The following parts of SANS 1921 Construction works standards and associated specification data are applicable to the works:

- 1) SANS 1921-1:2004
- 2) SANS 1921-2:2004
- 3) SANS 1921-6:2004

The abovementioned South African National Standards make several references to the Specification Data for data, provisions and variations that make these standards applicable to this contract. The Specification Data shall have precedence in the interpretation of any ambiguity or inconsistency between it and these standards.

Each item of Specification Data given below is cross-referenced to the clause in the standard to which it mainly applies.

The associated Specification Data is as follows:

SANS 1921-1, Construction and management requirements for works contracts – Part 1: General engineering and construction works	
Clause	Specification data
Essential data	
4.1.7	There are no requirements for drawings, information and calculations for which the contractor is responsible
4.2.1	The responsibility strategy assigned to the contractor for the works is A.
4.3.1	The planning, programme and method statements are to comply with the following: • format of programme, • critical path activities and their dependencies, • frequency of updating,
4.3.3	The notice period for inspection is 5 Days
4.7.3	The over break allowances for blasting are provided for in the scope of work.
4.9.3	The trees and shrubs which are not to be disturbed are identified in the scope of work.
4.12.2	The samples of materials, workmanship and finishes that the contractor is to provide and deliver to the employer are: 1) concrete works 2) pressure testing results done.
4.14.3	The office accommodation, equipment, accommodation for site meetings and other facilities for use by the employer and his agents are: 1) Site office which shall be used for site meetings and for the contractor's use. Such an office shall comprise a minimum of 20m² in area and 3 m high, be ventilated, have good lamination, must be reasonably sound proof, and have a hard floor construction. It shall be furnished with a desk on which drawings can be rolled open and on which there is sufficient writing space and sufficient temporary chairs or benches to accommodate all persons present at site meetings.
4.14.5	The Contractor is required to provide latrine and ablution facilities.
4.14.6	The requirements for the provision and erection of separate sign boards for consultants and subcontractors are: 1) The boards must comply with the official standard type signboard of the Employer and be at least 2750 x 1800 mm high. 2) The boards must be constructed with a firm flat exposed face using suitable material of firm construction, painted and lettered according to the standard drawings available from the Employer on request and mounted on sturdy pipe-standards at a height of 1800 mm above natural ground level.
4.17.1	The requirements for the termination, diversion or maintenance of existing services are: 1) Water 2) Electricity 3) Sanitation
4.17.3	Services which are known to exist on the site are: 1) Water 2) Sanitation 3) Electricity

Additional clauses

1 Site meetings and procedures

The Employer's Representative and the Contractor shall hold meetings relating to the progress of the works at regular intervals and at other such times as may be necessary. The Contractor shall attend all site meetings and shall ensure that all persons under his jurisdiction are notified timeously of all site meetings should the Employer's Representative require their attendance at such meetings.

The Contractor shall keep on site a set of minutes of all site meetings, daily records of resources (people and equipment employed), a site instruction book, a complete set of contracts working drawings and a copy of the procurement document and make these available at all reasonable times to all persons concerned with the contract.

2 Water

The Contractor is to provide, and remove and make good upon completion, all the necessary temporary plumbing connections and purchase water from the local authority for the works at his own cost.

3 Electricity

The Contractor is to provide, and remove and make good upon completion, all the necessary temporary electrical connections and installations and purchase electricity from the local authority / ESKOM for the works at his own cost.

4.5.2 Particular / generic specifications

The management of the site shall be in accordance with the provisions of the COLTO Standard Specification for Road and Bridge Works for State Authorities (1998 edition), obtainable from the South African Institution of Civil Engineering.

4.5.3 Recording of weather

The Contractor shall erect an effective rainfall gauge on the site and record the daily rainfall figures in a book. Such book shall be handed to the employer's representative for his signature no later than 12 days after rain that is considered to justify an extension of time occurs.

4.5.4 Unauthorised persons

The Contractor shall keep unauthorized persons from the works at all times. Under no circumstances may any person except guards be allowed to sleep on the building site.

4.5.5 Management meetings

Site meetings will be held on monthly basis. The following parties are required to attend these meetings: the Employer's Representative, the Engineer and/or Representative, the Contractor and/or Representative, the Community Liaison Officer, the Health and Safety Officer and all members of the Project Steering Committee.

4.5.6 Forms for contract administration

These forms will be issued to the Contractor as required.

4.5.7 Electronic payments

Proof of all electronic payments must on request be supplied to the Employer.

4.5.8 Daily records

All accidents and incidents shall be recorded daily in a site diary. Apart from the site diary the Contractor shall provide a site instruction notebook for use by the Engineer. The notebook shall be signed by both the Engineer and the Contractor whenever a site instruction is issued by the Engineer.

4.5.9 Payment certificates

Contractor to submit claims for the work done. All claims are subjected to verification by the Engineer.

4.5.10 Permits

Contractor to ensure that no unauthorised persons are permitted to site

4.5.11 Proof of compliance with the law

Contractor to submit copies of the CIDB Registration and the Company Registration Certificates



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C5. Project Specification

SCOPE

This project specification is set out in two parts. Portion 1 cover a general description of the project, the facilities available, and the requirements to be met. Portion 2 covers variations and additions to standardised or particular specifications that are applicable to the contract.

The numbering method in portion 2 of this project specification deviates as follows from the method suggested in Code of Practice SABS 1200.

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

PROJECT SPECIFICATION

PORTION 1: THE WORKS

PS 1 GENERAL DESCRIPTION OF WORKS

This contract entails the construction of the following:

1. 400m² Steel Structure.
2. Height: 5m.
3. Floor: Reinforced Concrete.
4. Wall: 1.5m brick wall, rest corrugated iron sheeting.
5. Entrance: 3.5m wide & 3.5m high.
6. Roofing: IBR Roof sheeting with fibre for natural light with ventilation.
7. Drive way: 3.5m.
8. Washing Bay adjacent to building (6m x 4m)
9. Storeroom: 50m²
10. Structure need to park 20 tractors.
11. Tractor dimensions used: Massey Ferguson 5710 & Case JX75
12. Implements that might require shaded parking:
 - 2 x Grain Planters (3.8m x 4.9m)
 - 1 x Boom Sprayer (2m x 1.3m)
 - 2 x Slashers (2.1m wide)
 - Diesel Cart (3.2m x 1.73m)
13. Storeroom to be used for storage of spare parts, tools and a compressor.
14. Parking arrangement to be determined by Service Provider.

Tenderers must note that certain rates in this tender are fixed and based on prices that the successful Tenderer shall undertake the complete construction of such installations. Tenderers are also to take note of the fact that the bulk of the work is to be executed by means of labour-intensive construction (LIC) methods, where feasible. The execution of the work will be done using the two following methods:

- (i) Established contractor to employ people from the communities where the work is to be done.
- (ii) Nominated emerging sub-contractors, which are to be employed and trained by the established contractor with the assistance of an approved training institution.

The tenderers must take note of the fact that it will be expected of the successful Tenderer to enter into a formal agreement with the Nominated Emerging Contractors (NEC) and all local labour to be employed on the project. The established/main contractor (MC) will be responsible for the quantity and progress of the work of the nominated emerging contractors.

The work to be carried out during the contract period may be given as separate tasks. Each task to be undertaken will be issued as a written instruction by the Engineer and will consist of a detail scope of work and relevant drawings for each particular task.

PS 2 DESCRIPTION OF THE SITE AND ACCESS

Refer to the "PART C.6 Site Information".

PS 3 DOCUMENTATION

PS 3.1 The Provisional Bill of Quantities is included in this document and *must be completed and handed in with the tender*.

PS 3.2 The drawings, for tender purposes, listed under part C3.2 are applicable to this contract

PS 3.3 The Tenderer shall check the Bills of Quantities for missing or duplicated pages or drawings and should any be missing or duplicated, or the reproduction be indistinct, or if any doubt exists as to the full intent or meaning of any particulars or description, or this Bills of Quantities contain any obvious errors, the Tenderer shall notify the Engineer at once who shall promptly give a written directive. No liability whatsoever will be admitted in respect of errors in any tender due to the abovementioned causes.

No alteration, erasure, omission or addition is to be made in the text and conditions of these Bills of Quantities or other documents. Should any such alterations, amendment, note or addition is made, it will not be recognised and the text of the Bills of Quantities or other documents as prepared by the Representative must be adhered to.

PS 3.4 The Tenderer shall examine all documents and shall thoroughly acquaint himself with the nature and extent of the Works and the manner in which they are to be executed as no claim for extra payment in this connection will be entertained.

PS 4 NATURE OF GROUND AND SUBSOIL CONDITIONS ON SITE

No bore tests or investigation of the in-situ material were done.

The water table may be relatively high during the summer months and provision must be made for effective draining of excavations.

It is the Contractor's responsibility to supply and deliver all material that complies with the minimum standards as well as for the building and maintaining of access roads to the works on site, haul areas or dumping sites. No additional payment will be applicable to the above-mentioned, other than the relevant items in the schedule of quantities.

No trial holes were dug along the network layout. Note that the prospective tenderers shall acquaint themselves with the nature of materials on site.

PS 5 DETAILS OF THE CONTRACT

PS 5.1 MAIN CONTRACTS

Work included in this contract involves the scope of work as per paragraph PS1.

The other main components of the work under this contract are:

- a) Establishment of the Contractor's camp.
- b) Site clearance and earthworks.
- c) Provision of all materials, special fittings and accessories as required, to complete the work as prescribed.
- d) Excavation and backfill compacted as specified, of pipe trenches and the removal of all excess material.
- e) Laying, bedding and installation of all pipes and accessories.
- f) Concrete work associated with the abovementioned equipment.
- g) Construction of concrete anchor blocks associated with the above.
- h) Commissioning of the works.
- i) Maintenance on the works for a twelve-month period.

PS 6 CONSTRUCTION PROGRAM AND METHODS

The construction site is situated in a built-up area; the Contractor shall ensure the least possible disruption of movement of the public during construction.

Construction methods must be of such a nature that no property or life is endangered. The Employer accepts no responsibility for work that is done without consent by the Engineer outside the site boundaries. The Contractor himself is responsible for liaison and

arrangements with the Local Authority in connection with the finalisation and approval of the construction program.

The Contractor is responsible for liaison and the necessary arrangements with the relevant road authorities in respect of the finalisation and approval of the works programme.

Sufficient photos of existing structures, walls, and areas that have to be crossed must be taken by the Contractor and handed over to the Engineer before such operations commence. No payment will be made in this regard and it shall be deemed to be covered in the Preliminary and General items.

Local labourers must do the trench preparation, bedding, handling, laying and backfilling of pipes and fittings. The contractor is responsible to liaise with the Labour Desk for labourers.

No separate payment shall be made for any arrangements with relative local authorities for closing off the current water supply or for the distribution of notices to the public.

The compilation of the construction programme and any amendments thereto during the course of construction shall be at the cost of the Contractor and shall not be measured elsewhere in this contract. The contract has to be completed within the time specified in the "Contract Data" of this document, excluding the builder and public holidays.

PS 7 SITE FACILITIES AVAILABLE

PS 7.1 SOURCES OF WATER SUPPLY, POWER SUPPLY, SANITATION, AND COMMUNICATION

Water for construction purposes will be for the account of the contractor at the ruling tariff and will be supplied at a suitable point, from where the contractor will be responsible to convey the water to the point of usage. Water for human consumption will from the existing network at the ruling tariff. Electrical power is available from the existing pipeline at ruling tariffs. The Contractor shall make his own arrangement for any water or power he may require. Any extension of time due to delays resulting from these facilities will not be granted.

The Contractor must supply and maintain at his own cost a sufficient number of portable chemical toilets, one of which must be situated at the campsite and the rest in the area of the site.

No waste or sludge must be left uncovered until it is removed. The contractor must operate an efficient solid waste removal system to the satisfaction of the engineer for the duration of the contract.

The Contractor must make his own arrangement for communication and a telephone service.

PS 7.2 LOCATION OF CAMP AND DEPOT

A site for the Contractor's camp and depot will be pointed out during the site inspection. No trees may be removed and the Contractor must provide his own firewood.

PS 7.3 HOUSING FOR CONTRACTOR'S EMPLOYEES

No housing is available for the Contractor's employees, and the Contractor shall make his own arrangements for housing his employees or transporting them to and from the site. The Contractor is in all respects responsible for the housing and transporting of his employees, and for the arrangement thereof, and no extension of time due to any delays resulting from this, will be granted.

PS 8 SITE FACILITIES REQUIRED

No housing is required for the Engineer. Other facilities such as an office, telephone, name board, survey equipment, etc. required for the Engineer, are described under the relevant sections.

PS 9 FEATURES REQUIRING SPECIAL ATTENTION

PS 9.1 CONTROL OF WATER

The Contractor is in all respects responsible for the handling of storm water from higher-laying areas, adjacent to the works for the handling of possible sub-surface water and for the handling of spoiled water when disconnecting existing connections or valves. No separate payment shall be made for this, as all costs related thereto shall be deemed to be included elsewhere in the tendered rates.

PS 9.2 "AS BUILT" DRAWINGS

As the work progresses, the Contractor shall keep full records of all amendments to and deviations from the drawings as issued to the Contractor at the start of the contract. The true positions, invert levels and ground levels of all services shall be indicated on the drawings, for which purpose the Contractor shall receive a separate complete set of drawings from the Engineer, at no cost.

The completion certificate shall only be issued after the Engineer has received a properly completed set of **"AS-BUILT"** drawings from the Contractor. No separate payment shall be made for this service, as all costs related thereto shall be deemed to be included in the related items.

PS 9.3 FINISHING AND TIDYING

Progressive and systematic finishing and tidying will form an essential part of this contract. Under no circumstances shall spoil, rubble, materials, equipment or unfinished operations be allowed to accumulate unnecessarily and in the event of this occurring the Engineer shall have the right to withhold payment for as long as necessary in respect of the relevant works in the area(s) concerned.

PS 9.4 SURVEY BEACONS

No setting out of the pipeline route was done. All proposed pipelines shall be parallel (at least 2,5 m away) to the existing yard boundaries. No separate payment shall be made for this, as all costs related thereto shall be deemed to be included elsewhere in the tendered rates.

PS 9.5 CONSTRUCTION MODUS OPERANDI

Labour-based or labour-intensive construction may be defined as the economically efficient employment of as much labour as is technically feasible to produce as high a standard of construction as demanded by the specification and allowed by the funding available. In other words, projects based on labour-intensive principles aim at devoting the highest feasible proportion of projects costs to unskilled, semi-skilled and skilled labour without jeopardising the technical quality of the product demanded by the specification.

The following regulations must be adhered to so as to ensure that the construction methods used are labour intensive.

- i) The remuneration to local labour for hourly-rated employees and/or daily-based work shall be in accordance with the terms and conditions of Proclamation R1841 of Government Gazette 16833 dated 24 November 1995 or its latest amendment.

- ii) The name, identification number, task performed, and hours worked per day for each labourer shall be recorded by the Contractor. These records shall be submitted to the secretary of the Project Steering Committee on the second working day of each week following the recounted week.

The employment of local labour must be at least **30%**, if at all possible, of the total contract amount. The 30% must be divided as follows:

Percentage of labour	Description
50%	Women
15%	Youth (Above school, but under 36)
1.5%	Disabled persons

PS 9.6 LOCALLY BASED SUB-CONTRACTORS

Tenderers are encouraged to utilise the services of locally based sub-contractors.

PS 10 TRAINING

PS 10.1 General

A suitably capable Training consultant is to be employed on this project.

Their duty is to identify suitable persons and train them for the following:

- i) Employee Training – community-based labour
- ii) Employer Training – community-based contractors
- iii) Committee Training – maintenance and operation of the Works (this however falls outside the scope of this Contract)

This project is a project using community-based labour and community-based contractors as far as possible.

The Contractor using the necessary plant and labour as he sees fit shall carry out conventional construction. However, the Contractor may only bring in key staff from outside the area that has the necessary skills not available among the local community. Other than key staff, all other labour must be employed from the local communities. As a guideline, key staff would include general foreman, foreman, site managers, buyers, quantity surveyors, etc.

The Training Consultant will provide the necessary training so that the local labourers will have the necessary skills to carry out this work. In this respect, the contractor and the Training Consultant will have to work closely together to identify what skills are required, how many labourers in each trade are required and when this labour will be required, so that the necessary training can be given timeously.

Typical training that is envisaged at this stage includes shuttering, concrete work, reinforcing, team leaders, etc.

The other part of the Contract is work that will be carried out by community-based contractors.

The Training Consultant will identify persons, with the assistance of the Project Steering Committee, and train these persons to establish small community based contracting firms, who will employ local labour. These firms will tender to carry out this work and successful

Tenderers will be appointed by the Contractor as nominated sub contractors to execute this work.

Typical training that will be given by the Training Consultant is:

- i) Community based contractors
 - Preparation phase – using a calculator, numeracy, using a scale ruler, reading a building plan, handling administrative tasks in the building industry.
 - Estimating and tendering – marketing the services of a company, seeking, selecting, collecting and studying tender documents, investigating and assessing a site, developing a bill of quantities from building plants, calculating the cost of a project, finalizing tender prices, completing and submitting a tender.
 - Project planning – introducing to planning techniques, pre-tender planning, planning contract activities, contract planning, executing a contract programme.
 - Executing the project – managing the finances of the company, managing materials, administering record systems, managing manpower, completion and handover.
- ii) Community based labour

Local labour will be taught the following skills:

 - Excavation if possible, bedding, selected backfill and backfill
 - Pipe laying, valves and fittings
 - Valve boxes, manholes, anchor blocks etc.

Again, the Contractor and Training Consultant will have to work closely together to identify what their requirements are and when this labour is needed.

Community based labour training will take place on site before actual production starts. No allowance needs to be made for wages, food or travelling during training.

Training of community-based contractors will take place at a central point. The Provincial Sum allowed in the Schedule of Quantities, makes allowance for travelling and meals for the training of community-based contractors.

PS 10.2 Construction and Materials Management

This section applies only to work to be carried out by community-based contractors.

The contractor shall provide construction and material management to the community-based contractors. In this respect, each party has the following responsibilities.

- i) Community Based Contractors
 - To tender on the labour-based sub contract work and enter into a contract with the Contractor.
 - To carry out the work according to specification and on time using community-based labour.
 - To liaise and co-operate with the contractor regarding specifications, programme, progress, delivery of material, quality of work etc.
 - To provide wheelbarrows, hand tools, clothing, safety equipment, etc. to enable his labourers to carry out the work. All material (pipes, fittings, valves, etc.) to be provided by the Contractor.
 - To receive material required for the task, store it and provide the necessary security until the material is built into the works.
 - To provide the necessary transport for this labour force.
 - To carry out a task in its entirety until final approval and acceptance. In other words, there will be no split responsibility. For example, a community-based contractor will excavate, provide the bedding, selected backfill, backfill, lay pipes, valves and fittings, build valve boxes, manholes, anchor blocks etc. and test the pipes in conjunction with the Contractor.
 - To pay his labourers. VAT etc. and finalize the final account.

ii) Contractor

- In conjunction with the Training Consultant, establish the needs, training and programming of the work.
- To assist the Training Consultant in drawing up the agreements of association between the Contractor and the community-based contractors where applicable.
- To enter into nominated sub contracts with the community-based contractors.
- To provide the necessary skills transfer and construction management for the community-based contractors to successfully complete this work. This includes setting out of the work, quality control over the work, programming of the work, progress, testing and acceptance thereof.
- To provide the necessary materials to execute the work. This includes purchasing the required materials, transporting them to the camp site, storage at the campsite, transporting of materials as required from camp site to the sites of the various community-based contractors, handing over of the materials.
- To pay the community-based contractors as the work progresses and the Contractor must make allowance in his Tender for this. Retention monies will be as for this Contract. No sureties will be required from the community-based contractors.
- To measure the work and finalize the final account.
- Complete copies of the emerging contractor's contracts to be given to the Engineer for endorsement prior to the contract being signed.

Candidate selection would be according to the requirements for a particular discipline. A Certificate of Achievement should be awarded to a student who has attained a prescribed level of competency.

A provisional amount for training has been recorded in both sections under the Item "Training", in the Preliminary and General portions in the Schedule of Quantities.

PS 11 APPLICABLE STANDARDISED SPECIFICATIONS

Although not bound in nor issued with this document, the following standardised specifications shall form part of the contract and, notwithstanding the provisions of sub clause 2.2 of SABS 1200 A, the editions specified below shall apply:

SABS 1200 A	-	1986	General
SABS 1200 AB	-	1986	Engineers Office
SABS 1200 C	-	1986	Site Clearance
SABS 1200 DB	-	1989	Earthworks (Pipe Trenches)
SABS 1200 L	-	1983	Medium pressure pipe lines
SABS 1200 LB	-	1983	Bedding (Pipes)

PS 10.2 Particular Specification

PSVC	: Security Fencing (Removal of Fencing)
PSW	: Pumps, Tanks and Valves

The newest additions of above specifications up to and including the month of this tender will prevail.

PROJECT SPECIFICATION

PORTION 2: VARIATIONS AND ADDITIONS TO STANDARDISED SPECIFICATIONS

SABS 1200 A: GENERAL

PS A 3 MATERIALS

PS A 3.1 QUALITY

Substitute the second sentence of the first paragraph of A 3.1 with the following:

Materials shall bear the official mark of the appropriate standard.

Substitute the second paragraph with the following:

The Contractor is responsible for the cost of all testing to ascertain that the materials do comply with the relevant minimum requirements and all such costs shall be deemed to be included in the tendered rates. The cost of control tests done by the Engineer and of which the results do not comply with the minimum requirements shall be for the Contractor's account.

The Contractor shall inform the Engineer of any control testing to be done at least 48 hours before such tests are required and must allow in his program for the time necessary for the tests and the processing of the results thereof.

The handling, storage, transport, and erection of equipment, machinery, and materials shall be strictly in accordance with the requirements of the supplier and/or manufacturer.

All materials shall be new and of the best quality available unless otherwise specified. They must function satisfactorily under prevailing climate and weather conditions at the place of installations.

PS A 4 PLANT

PS A 4.2 Contractor's Offices, Stores and Resources

Add the following to A 4.2:

No housing is available for the contractor's employees and the contractor must make his own arrangements for accommodation and transport of his employees.

PS A 4.3 Hand Tools

The contractor shall provide and maintain all hand tools required for the execution of the Works.

PS A 5 CONSTRUCTION

PS A 5.1 SURVEY

PS A 5.1.1 Setting out of the Works

Substitute the first sentence in A 5.1.1 with the following:

Setting out of the works is the sole responsibility of the Contractor and shall be done from the layouts given to him. The proposed network pipes must be placed 2,0m away from the erf boundaries in the road reserve. Any discrepancy shall immediately be reported in writing to the Engineer. Any costs or subsequent costs arising from discrepancies, which had not been reported to the Engineer, shall be the sole responsibility of the Contractor. *The exact position*

of the network pipes shall be determined on site in conjunction with the Engineer and must be approved before construction of the specific section starts.

The Engineer may alter any part of the works to suit local conditions. The Contractor must therefore contact the Engineer immediately after the preliminary setting out of any part of the works before starting with detail setting out, or construction. Only after the Engineer has approved a specific site or part of the works, may the detail setting out and construction commence.

PS A 5.2 WATCHING, BARRICADING, LIGHTING AND TRAFFIC CROSSINGS

Add the following to A 5.2:

The crossing of existing tar and dirt roads must be done in half widths, while the total traffic is accommodated on the other lane.

Road traffic signs shall comply with the requirements of the "South African Road Traffic Signs Manual" and shall be approved by the Engineer before construction commences.

PSA 7 TESTING

PS A 7.4 STATISTICAL ANALYSIS OF CONTROL TESTS

Substitute A 7.4 with the following:

Test results shall not be evaluated by statistical methods. All results shall comply with the specified minimum requirements of the materials concerned.

PS A 8 MEASUREMENT AND PAYMENT

PS A 8.2 PAYMENT

PS A 8.3 Fixed-Charge and Value-Related Items

PSA 8.3.1 Contractual Requirements..... Unit: Sum

The sum shall cover the Contractor's initial costs of providing sureties, insurance of the works and plant, third party or public liability insurance and unemployment insurance to cover his compliance with the requirements of the Workmen's Compensation Act, 1941 (Act NO. 30 of 1941) and any other initial financing obligations of a preliminary and general nature, such as contributions to the CEITB..

The tendered amounts for fixed-charge and value-related items will not be increased, if extension of time for the completion of the works is awarded.

PS A 8.3.2 Establishment of Facilities on the Site

PS A 8.3.2.1 Facilities for Engineer

- a) Furnished office (No) Unit: Sum
- b) Nameboards (1 No.) Unit: Sum

PS A 8.3.2.2 Facilities for Contractor

- (a) Offices, workshop and storage sheds Unit: Sum
- d) Living accommodation Unit: Sum
- e) Ablution and latrine facilities Unit: Sum
- g) Access Unit: Sum

PS A 8.3.3 Other Fixed-Charge Obligations..... Unit: Sum

This item as listed under Schedule A of the bill of quantities is as specified in the standardised specification SABS 1200 A.

PS A 8.3.4 Removal of Site Establishment..... Unit: Sum

The sum shall cover the cost of the demolition on and the removal from the surface of the site of all items established in terms of 8.3.2 and 8.3.3, and shall provide for the making good and the restoring of the Site to the satisfaction of the Engineer

PS A B.8.3.5 OCCUPATIONAL HEALTH AND SAFETY

PS A B.8.3.5.1 Contractor's initial obligations in respect of the Occupation Health and Safety Act and Contractual Regulations..... Unit: Sum

The full amount will be paid on the scheduled rate on condition that:

- (a) The contractor has notified the Provincial Director of the Department of Labour in writing of the project.
- (b) The contractor has made the required initial appointment of Employees and sub- contractors
- (c) The client has approved the contractor's Health and safety plan
- (d) The contractor has set up his Health and safety File and Safety Plan.
- (e) The Contractor has appointed a Health and Safety officer.

The provincial sum shall represent full compensation for that part of the contractor's general obligations in terms of Occupational Health and Safety Act and the Construction Regulation which are mainly a function of time. The sum for the supply of all safety equipment, safety clothing, first aid kit, etc. in order to adhere to the Occupational, Health and Safety Act specifications. The Contractor must familiarise himself with the conditions as per Occupational, Health and Safety Act and adhere thereto. The rate shall cover the Contractor's overheads, changes, and profit on payments for the Service Provider. Contractor to note that this item covers the costs for the preparation and submission of Health and Safety plan and file.

Payment shall be as specified for item 1.3 in the standard specifications

PS A B.8.3.5.2 Occupational, Health and Safety Act..... Unit: Sum

Handling cost in respect of sub-item 8.3.5. A percentage of the payment made to the Occupational health and safety act will be paid to the Contractor under this section. The rate shall cover the Contractor's overheads, changes, and profit on payments for the Occupational health and safety act.

(a) Provision for safety officer

The Contractor should appoint the safety officer who will be full time responsible for all safety issuers on site, and he or she should be full time on site.

The tendered rates include the full compensation for that part of the provision of safety officer in terms of the Occupational Health and Safety Act and the construction regulation which are mainly a function of time. Payment shall be made monthly.

- (a) Handling cost in respect of sub-item 8.3.5.2 (a). A percentage of the payment made to the Safety Officer will be paid to the Contractor. The rate shall cover the Contractor's overheads, changes, and profit on payments for the Safety Officer.

PS A B.8.3.5.3 Contractor's time related obligation in respect of the OH&S Act and Construction regulation

The tendered lump sum shall represent full compensation for that part of the contractor's general obligations in terms of Occupational Health and Safety Act and the Construction Regulations which are mainly a function of time. The lump sum will be paid monthly only after payment for item 1.3.3 and item 1.1.5 has been made Payment of the lump sum shall be made monthly (calculated by the division of the lump sum by the number of months remaining)

PS A 8.2.2 Time-Related Items

The tendered amount for a time-related item will be increased; if an extension of time for the completion of the works is awarded on the condition that the activity related to the item tendered for must be sustained during the extended period.

The ratio between the increased amount for a time-related item and the tendered amount must be the same as the ratio between the extension of the time period for the completion of the works and the original time period allowed for completion of the works.

If the works is completed before the end of the original time period allowed for completion of the works, the tendered amount of a time related item that is influenced by the earlier completion would be reduced similarly.

PS A 8.4 SCHEDULED TIME RELATED ITEMS

PS A 8.4.2.1 Facilities for Engineer

- a) Furnished offices Unit: Sum
b) Telephone for engineer's representative..... Unit: Prov. Sum

PSA 8.4.2.2 Facilities for Contractor Unit: Sum

The sum shall cover the Contractor's initial costs of providing sureties, insurance of the works and plant, third party or public liability insurance and unemployment insurance to cover his compliance with the requirements of the Workmen's Compensation Act, 1941 (Act NO. 30 of 1941) and any other initial financing obligations of a preliminary and general nature, such as contributions to the CEITB. Establishment of Facilities on the Site Facilities for Engineer

PSA 8.4.3 Supervision for Duration of Construction Unit: Sum

The sum shall cover the costs of on-site supervision and such local administration as the Contractor considers necessary for the proper completion of the Works, and shall cover the cost of the salaries, wages and allowances paid to the site agent, general foreman, section foremen (where applicable), site surveyors, timekeepers, assistants and other site supervisory staff, and of transport incurred in connection with such staff. Plant (designated plant or plant for designated operations or plant for use during Supervision for Duration of Construction

PSA 8.4.4 Company and Head Office Overhead Cost's for the Duration of the Contract.... Unit: Sum

The sum shall cover the Contractor's company and head office overhead costs.

PS A 8.5 SUMS STATED PROVISIONALLY BY ENGINEER

PS A 8.5(a)1 Community Liaison Officer Unit: P/Sum

The Contractor must pay a salary to a person appointed as the Community Liaison Officer for the project. The amount of payment and payment dates will be determined as soon as the Community Liaison Officer is appointed.

PSA 8.5 (a) 2 PSC Meetings Attendance Unit: P/Sum

The tendered rate shall cover the compensation of all members of Project Steering Committee for attending meetings. The amount of payment and payment dates will be determined on the commencement date of the project. The Engineer should authorise payment before it is made. Proof of payment has to be submitted to Engineer before claim can be certified.

PS A 8.5(a)3 Overheads, charges and profit on (1) above Unit: %

Handling cost and profit in respect of sub-item 8.5(a)1& 1. A percentage of the payment made to the Community Liaison Officer and PSC Meeting attendance will be paid to the contractor. The rate shall cover the Contractor's overheads, charges, and profit on payments for the Community Liaison Officer and PSC members. No payment will be made under this item before payment to the Community Liaison Officer and PSC members.

PS A 8.5(b)1 Training Unit: Sum

Provisional sum for training services supplied by the Training Company. The name and contact details of the Training Company, to be appointed by the Contractor, will be supplied to the Contractor by the Employer or Engineer.

PS A 8.5(b)2 Overheads, changes and profit on (1) above

Unit: %

Handling cost and profit in respect of sub-item 8.5(b)1. A percentage of the payment made to the Training Company will be paid to the Contractor. The rate shall cover the Contractor's overheads, changes, and profit on payments for the Training Company. No payment will be made under this item before any payment is made to the Training Company.

PS C 8.5 EXISTING SERVICES

The services parallel to the pipeline routes must only be removed and re-erected at the positions as indicated and approved by the Engineer and repaired where it was damaged. When the pipeline routes cross fencing or gates temporary wire gates must be provided that must be kept closed. After completion of the work these fences or gates must be repaired to the same condition as before commencement of the work.

PS A 8.5(c)2 Overheads, changes and profit on (1) above

Unit: %

Handling cost in respect of sub-item 8.5(c)1. A percentage of the payment made to the Service Provider will be paid to the Contractor. The rate shall cover the contractor's overheads, changes, and profit on payments for the Service Provider.

PS A 8.7 DAYWORK

Replace A 8.7 with the following:

Daywork will be paid according to the percentage allowance method. For calculating the total remuneration, the General Conditions of Contract for Construction Works, First Edition, 2004 shall apply, with the amendments as in the appropriate special conditions of contract, which is bound into this document. A daywork schedule will be provided for filling in the necessary information.

A 8.8 TEMPORARY WORKS

PS A 8.8.2 Accommodation of Traffic

Unit: Sum

Add the following to A 8.8.2:

The rate shall cover all costs pertaining to the provision, erection, moving, re-erection and maintenance of all temporary barricades, road signs, lights, flagmen, etc. as required, for the guarding and protection of the works, for the construction, gravelling and maintenance of access roads and detours to the site of the works, borrow pits or spoil sites, as well as for the later removal or the cleaning and tidying up thereof.

PROJECT SPECIFICATION

PORTION 2: VARIATIONS AND ADDITIONS TO STANDARDISED SPECIFICATIONS

SABS 1200 AB: ENGINEER'S OFFICE

PS AB 3 MATERIALS

PS AB 3.1 NAME BOARDS

Substitute "South African Institution of Civil Engineers" in the first paragraph of AB 3.1 with "South African Association of Consulting Engineers".

PS AB 3.2 OFFICE BUILDING

Replace AB 3.2 with the following:

Prior to commencing with work, the contractor shall provide and furnish for the use of the engineer's representative and his staff one office (3.0 x 4.5m Wendy House Type with veranda) in an approved position. The Engineer will indicate the position. All plans shall be submitted to the engineer for approval, before the commencement of erection.

The office with a minimum floor area of 13.50m² (the smaller dimension at least 3.0m) with a ceiling height of minimum 2.1m, shall also have one toilet apart from the office building for the exclusive use of the engineer's representative.

The office shall be provided with lined walls and boarded ceilings and floor and suitable door with secure locks. The office shall be ventilated, weather proof and waterproof and shall have windows with an area to at least 20% of the floor area. The office shall be insulated to provide comfortable working conditions.

Internal furnishings shall include:

- One desk (1,5m long x 1,0m wide x 0,9m high) with lockable drawers with keys
- One drawing table
- Eight desk chairs
- One table (2,0m long x 1,0m wide x 0,9m high) with smooth top.

PS AB 4 PLANT

PS AB 4.1 TELEPHONE AND FAX

Replace AB 4.1 with the following:

The Contractor shall supply the Engineer with a cellular telephone service for the exclusive use of the Engineer and Engineers Representative for official purposes for the duration of the contract.

PS AB 5 CONSTRUCTION

PS AB 5.1 NAME BOARDS

Add the following to AB 5.1:

The name boards shall be erected within a month of the commencement date of the contract and shall be placed at the position indicated by the Engineer. Any damage to these boards shall be repaired within seven days of a written instruction issued by the Engineer. No payment shall be made in terms of the contract prior to the erection of the name boards.

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

PS AB 5.5 SURVEY ASSISTANTS

Substitute "two or more suitably educated survey labourers" in the first sentence of PS 5.5 with "two semi-skilled labourers."

PS AB 5.6 SURVEY EQUIPMENT

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

- a) one tachometer capable of reading to minimum 20 seconds and maximum 6 seconds of arc, plus tripod;
- b) one automatic level plus tripod;
- c) two tachometer staffs and one level staff, all graduated metrically;
- d) one 5m and one 100 m tape measure; and
- e) diverse surveyors' necessities like paint, pegs, etc.

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

The Contractor shall keep the equipment continuously insured against any loss, damage, or breakage, and he shall indemnify the Engineer and the Employer against any claims in this regard.

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

PS AB 8 MEASUREMENT AND PAYMENT

PS AB 8.2 PAYMENT

PS AB 8.2.2(a) Office buildings

Unit: Sum

The rate shall cover all time-related costs pertaining to the office building as prescribed in PS AB 3.2.

PS AB 8.2.2(b) Telephone and fax

Unit: Sum

The rate shall cover all time-related costs pertaining to the telephone and fax as prescribed in PS AB 4.1.

PS AB 8.2.2(c) Name boards (2 off)

Unit: Sum

The rate shall cover all time-related costs pertaining to the name board/s as prescribed in PS AB 5.1.

PS AB 8.2.2(d) Survey assistance and equipment

Unit: Sum

The rate shall cover all time-related costs pertaining to the survey assistants and equipment as prescribed in PS AB 5.6.

PROJECT SPECIFICATION

PORTION 2: VARIATIONS AND ADDITIONS TO STANDARDISED SPECIFICATIONS

SABS 1200 C: SITE CLEARANCE

PS C 3 MATERIAL

PS C 3.1 DISPOSAL OF MATERIAL

Substitute the first sentence of C 3.1 with the following:

Material obtained from clearing and grubbing shall be disposed of at the site indicated at the site inspection. If such a site is indicated at tender stage, the cost of transporting material and debris will be included under 8.2.1.

Loading and off-loading should be done by hand and the contractor must price accordingly under item 8.2.1.

PS C 5 CONSTRUCTION

PS C 5.1 AREAS TO BE CLEARED AND GRUBBED

Substitute the first sentence of C 5.1 with the following:

Unless otherwise indicated by the Engineer, clearing and grubbing are limited to a 2,5m wide strip along the pipe route. Measurement and payment for clearing and grubbing shall only occur for areas as required in writing by the Engineer.

The Contractor may proceed with clearing and grubbing after the handing over of the site.

PS C 5.2 CUTTING OF TREES

PS C 5.2.3 Preservation of Trees

PS C 5.2.3.2 Individual trees

Add the following to C 5.2.3.2:

Trees outside pipeline routes must be left standing and undamaged, except where otherwise ordered in writing by the Engineer.

A penalty of **R15 000,00** per tree for trees damaged and/or removed will be charged.

PSC 5.3 EXISTING FENCING

The fencing parallel to the pipeline routes must only be removed and re-erected at the positions as indicated and approved by the Engineer and repaired where it was damaged. When the pipeline routes cross fencing or gates temporary wire gates must be provided that must be kept closed. After completion of the work these fences or gates must be repaired to the same condition as before commencement of the work.

PS C 8 MEASUREMENT AND PAYMENT

PS C 8.2 SCHEDULED ITEMS

PS C 8.2.1 Clear and grub (1.0m wide)

Unit: m

The removal of all rocks and boulders on site over 0,15 m³ will be paid under sub clause D 8.3.2(b). The removal of hard rock other than boulders will be paid under sub clause PS DB 8.3.2(b).

PSC 8.2.2 Remove and grub large trees and tree stumps of girth

- a) over 1 m and up to and including 2 m Unit: No
b) over 2 m and up to and including 3 m Unit: No

The girth of a tree or stump will be measured at the narrowest point of the tree or stump in the first metre of its height above ground level. Trees and stumps of girth exceeding 1 m will be measured individually and classified according to site in increments of 1 m as indicated above.

The rate shall cover the cost of clearing and grubbing trees and stumps of all sizes, cutting branches, backfilling holes, and removing, transporting, and disposing of all such trees, stumps, and branches and associated material.

PSC 8.2.3 Remove and grub all trees and tree stumps regardless of girth Unit: No

In exceptional circumstances, where construction is carried out through plantations or where the quantity of trees or girth exceeding 1 m renders individual measurement impracticable the project specification may provide that the clearing and grubbing of trees be measured in hectares. If this method of measurement is used the areas to which it is applicable will be defined clearly on the drawings and the reason for adopting the method of measurement will be stated in the project specification.

The rate shall cover the cost of all operations specified in .8...2.2.

PSC 8.2.5 Take down existing fence..... Unit: m

The rate shall cover the cost of taking down the fences, coiling wire, sorting and stacking all material at sites indicated by the Engineer and the cost of loading, transporting and offloading such material.

PROJECT SPECIFICATION

PORTION 2: VARIATIONS AND ADDITIONS TO STANDARDISED SPECIFICATIONS

SABS 1200 DB: EARTHWORKS (PIPE TRENCHES)

PSDB 1 SCOPE

This specification covers earthworks for trenches for all types and sizes of pipes. It covers excavation, the preparation of a trench bottom, backfilling and the reinstatement of surfaces.

PS DB 3 MATERIALS

PS DB 3.1 CLASSIFICATION FOR EXCAVATION PURPOSES

PS DB 3.1.1 Method of Classifying

Substitute DB 3.1.1 and DB 3.1.2(a), (b) and (c) with the following:

The Engineer shall classify excavated materials as Soft Class and Rock will be measured individually as extra-over items.

TABLE 1 : CLASSIFICATION OF MATERIALS

CLASSIFICATION	DESCRIPTION
Soft	All material other than rock
Rock	Material which cannot be economically fragmented and loosened for removal by hand implements and pneumatic tools, except by drilling and blasting or the use of rock breaking equipment.

In the first instance, the classification shall be based on the descriptions given in Table 1. In the event of disagreement between the Contractor and the Engineer, the Engineer shall reclassify the material in accordance with relevant specifications and without being unreasonable to the Contractor. The decision of the Engineer on the classification shall then, subject to the provisions of the Contract, be final and binding.

The Contractor shall notify the Engineer of the presence of what he considers to be rock immediately upon discovery thereof. The Engineer will inspect the material and decide whether or not it warrants the use of pneumatic tools or rock breaking equipment. In the case of isolated boulders set in a soil matrix, the Engineer may order the Contractor to either widen the excavation or roll the boulders sideways or lift the boulders out from the trenches.

In the event that the Engineer decides that the use of pneumatic tools, rock breaking equipment, or blasting is necessary, he will classify the material accordingly and arrange for the quantity thereof to be measured. The Construction Manager will supply necessary pneumatic equipment and arrange for others to break up rock into manageable pieces.

PS DB 3.5 BACKFILL MATERIALS

- a) Substitute "from trenches" in DB 3.5(a) with "from trenches and street excavations".

Add the following to DB 3.5(b):

- c) Road crossings, access to services, farms and camps and any section that fall within the road reserve shall be classified as areas subject to loads from road traffic and must be compacted accordingly to the top of the trench (natural ground level).

PS DB 3.7 SELECTION OF MATERIAL FOR REPAIR WORK

If the excavation of a pipeline damages an existing road surface, the Contractor must stockpile material from the top 200mm of such a road surface in order to reuse it as sub base for the repairing of the road crossing.

If necessary, gravel material that is suitable for the reparation of road surfaces must be imported.

The Contractor must make provision in his tariffs for compaction in road reserves for the selection of excavated material as specified above.

PS DB 4 PLANT

PS DB 4.1 EXCAVATION EQUIPMENT

Add the following to DB 4.1:

An adequate number of suitable tools, including hand stampers, wheelbarrows and hosepipes shall be provided by the Contractor. The Contractor will supply mechanical compaction equipment and when required pneumatic and rock breaking equipment.

All excavations exceeding the specified widths shall be backfilled with approved selected material. No payment shall be made for this and all relevant costs shall be deemed to be included in the tendered rates.

PSDB 5 CONSTRUCTION

PSDB 5.1 PRECAUTIONS

PS DB 5.1.1.1 Water in Trenches

Water in pipe trenches may cause movement of the pipes as a result of flotation and backfilling must therefore be executed as quickly as possible. If movement of the pipes does occur the contractor must, unless otherwise instructed by the Engineer, remove the pipes from the trench and reinstall it at his own expense.

PS DB 5.4 EXCAVATION

Add the following to DB 5.4:

"Excavation and backfilling of pipe trenches on sidewalks in the residential area shall be done in such a manner as to ensure the least possible disruption to the public and access to the properties. No additional payment shall be made for this and all relevant costs shall be deemed to be included in the tendered rates.

PS DB 5.5 TRENCH BOTTOM

Substitute "90 %" in the second paragraph of DB 5.5 with "93 %".

PS DB 5.5.1 Over Excavation of Trenches

Where pipe trenches are excavated deeper than specified or shown on the drawings, these excavations must be backfilled with suitable approved selected material in layers of not more than 150mm uncompacted thickness and must be compacted to the thickness of the adjoining in-situ material or as prescribed by the Engineer.

PS DB 5.6 BACKFILLING

PS DB 5.6.1 General

Backfilling in road reserves must be compacted in 100mm layers up to natural ground level.

Where prescribed by the Engineer all surplus material must be neatly piled over the real trench width to a height not more than 150mm higher than the adjoining level.

PS DB 5.6.3 Disposal of Soft Excavation Material

Add the following to DB 5.6.3:

All surplus and unsuitable material as described in DB 5.6.3 shall be disposed of at the spoil site, (as described in PS D 5.2.2.3) and levelled.

PS DB 5.7 COMPACTION

PS DB 5.7.2 Areas Subject to Traffic Loads

Add the following to DB 5.7.2:

All pipe trenches within road crossings, accesses to services, farms and camps that fall within the road reserve, will be regarded as areas subject to traffic loads. Backfilling of trenches that are subject to traffic loads will be executed in layers of 100mm as follows:

Item	% mod AASHTO	Final Layer Thickness
Approved Backfill	93%	200mm
Main Backfill up to road layers	96%	200mm
Sub-base	97%	200mm
Base	98%	175mm

PS DB 5.9 REINSTATEMENT OF SURFACE

PS DB 5.9.2 Private Property and Commonage

Add the following to DB 5.9.2:

Gardens and lawns shall be repaired to the original standard where they were crossed. Grass and plants shall be taken out of the ground, temporarily stocked, watered during construction, and replanted after backfilling.

PSDB 8 MEASUREMENT AND PAYMENT

PSDB 8.2 COMPUTATION OF QUANTITIES

PS DB 8.2.4 Shoring

Add the following to DB 8.2.4:

Shoring will only be measured and paid for, if the Engineer gives written approval before it is installed.

PSDB 8.3.2 Excavation

(a) Excavation in all material for trenches, backfill, compact and dispose of surplus material..... Unit (m)

Item will be provided for various pipe diameters in steps not greater than those specified in 5.2 and various depths in increments of 1.0 m measured to the bottom of the bedding layer (see Drawing DB 2, DB 3, and DB 4). Where measured volumetrically in terms of 8.1.2 (a), the volume of excavation will be computed in accordance with 8.2.2 and 8.2.3

The rate shall cover the cost of the same operation in heading where the Contractor elects to use such a method of excavation. The volume or length will be measured for payment on the assumption that normal trench excavation has been carried out. The volume or length in the undisturbed prism of material between the top of the tunnel and ground level will be classified as soft excavation in terms of 3.1. No additional payment will be made for such headings and no deductions will be made for reduced excavation quantities.

(b) Extra-over item (a) above for:

1. Intermediate excavation Unit: m³
2. Hard rock excavation..... Unit: m³
3. Hand excavation and backfill where ordered by the engineer. Unit: m³
4. Soil Crete backfilling where directed by the engineer. Unit: m³

Separate items will not be provided for depth increment, volume will be computed from the trench width determined in accordance with 8.2.3 and the depth from the top of the intermediate or hard rock excavation, as the case may be, either to the bottom of the same material or to the bottom of the trench as specified in (a) above, whichever is the lesser (see Drawing DB 5

The rates shall cover the additional cost of the excavation and hauling of the more difficult material of unsuitable material.

c) Excavate and dispose of unsuitable material from trench bottom (provisional)..... Unit: m³

The volume will be computed from the trench width determined in accordance with 8.2.3 and m³ the additional depth ordered.

The rate shall cover the cost of the excavation of the additional depth in any material, the disposal of the unsuitable material as specified for soft: excavation in 5.6.3 within freehaul distance and the backfilling of the additional depth with suitable material from the side of the trench.

PSDB 8.3.3 EXCAVATION ANCILLARIES

PSDB 8.3.3.1 Make up deficiency in backfill material

- a) from other necessary excavations on site Unit: m³
- b) by importation from designated borrow pits Unit: m³
- c) by importation from commercial or off-site sources selected by the Contractor Unit: m³

Items (b) and (c) above will not be measured for payment unless importation has been ordered in writing. The volume will be computed from the trench width determined in accordance with 8.2.3 and the depth from the top of the backfill to the top of the bedding as shown on Drawing DB-1 or the actual depth of backfill used to make up the deficiency or the depth of additional excavation ordered in terms of B.3.2(c), as applicable.

The rate for material from other necessary excavations on site shall cover the cost of selection of suitable material, the moving of the material to points alongside the trench spaced to suit the Contractor's method of working, and the disposal of the material that is replaced, all within freehaul distance.

The rate for material from designated borrow pits shall cover the cost of royalties, if applicable, excavation and selection of suitable material, the moving of the material to points alongside the trench spaced to suit the Contractor's methods of working, and the disposal of the material that becomes surplus as a result of the importation, all within freehaul distance.

The rate for material from commercial or off-site sources selected by the Contractor shall cover the cost of the acquisition of the material (including royalties, if applicable), the moving of the material to points alongside the trench spaced to suit the Contractor's methods of working, and the disposal of the material that becomes surplus as a result of the importation, all within freehaul distance (see Subclause 5.2.5.1 of SABS 1200 D or Subclause 5.2.6.1 of SABS 1200 DA, as applicable).

PSDB 8.3.3.2 Opening up and closing down of designated borrow pit Unit: Sum

This item will only be scheduled when a new borrow pit has to be established or when access to an existing borrow pit has to be established.

With the exception of the cost of the removal and spreading back of the topsoil (if scheduled), the sum shall cover the cost of opening up and of restoring the Site as specified in Subclause 5.2.2.2 of SABS 1200 D or Subclause 5.2.2(f) of SABS 1200 DA, as applicable.

PSDB 8.3.5 Existing Services

Existing Services-that Intersect or Adjoin a Pipe Trench (see Sub-clauses 5.1.2 and 8.3.8 of SABS 1200 D or Sub-clauses 5.1.3 and 8.3.5 of SABS 1200 DA, as applicable.)
(See Subclauses 5.1.2 as applicable.)

- (a) Services that intersect a trench (angles between centre-lines in plan of 45-90°)..unit (No)

Except where water pipes are to be recovered, existing water pipes, sewers, stormwater pipes, concrete-lined channels and drains, box culverts, electric cables, ducts, kerbs, channels, erf connections and various sizes of pipes and services that intersect a trench of specified width and require various degrees of care, whether or not their presence is known before they are uncovered, will be measured separately. The unit refers to one service, but services that are so grouped that they can be contained within a horizontal dimension of 200 mm measured at right angles to the axis of the services will be measured as one unit.

- (b) Services that adjoin a trench (parallel to or at an angle between centre-lines in plan of less than 45°) Unit (No)

In a case where a trench of specified width

1 runs parallel to or at an angle (in plan) of less than 45° to an existing service, and is such that the nearer side of the bottom of the trench lies at least partly between a vertical plane and a plane that lies at an angle of 45° below the horizontal, both planes passing through the axis of the service, the length of service within the minimum base width of the trench, determined in accordance with 5.2, will be measured for payment under this item and the remaining length, the side of the trench which, in the opinion of the Engineer, is rendered liable to collapse because of the existence of such service, will be measured for shoring (see 8.3.4(a)). The rate for an item scheduled in terms of (a) and (b) above shall cover the additional cost of

- i) care in excavation necessitated by the presence of such service in or across the trench;
- ii) protecting and maintaining such service in operation by means of temporary supports or shoring, as necessary;
- iii) delays and disruption of the progress of the work due to the existence of the service¹ and
- iv) repairs necessitated by damage caused by the Contractor.

PS DB 8.3.6 Finishing

PS DB 8.3.6.1 Reinstate road surfaces complete with all courses

Unit: m²

Replace DB 8.3.6.1 with the following:

a) Gravel

Unit: m²

The area will be calculated from the length of finished road or paved surfaces as applicable and with the trench width taken as 0,8m. Payment for finishing will be additional to that for excavation covered by 8.3.2.

The rate shall cover the cost, selective excavation (including the equipment that is required to break up, remove and, if necessary, stockpile the original surface material), and subsequently of reinstating and compaction and shall include the cost of delays and the cost of any risk of having to repair damage as specified in DB 5.10. Compaction to be according to PS DB 5.7.2

PROJECT SPECIFICATIONS

PORTION 2: VARIATIONS AND ADDITIONS TO STANDARDISED SPECIFICATIONS

SABS 1200 GA: CONCRETE (SMALL WORKS)

PSG1 SCOPE

This specification covers the requirements for concrete (plain and reinforced) for small works associated with pipelines, roads, railways, pump stations, etc. It covers the basic materials, the plant and formwork required, the quality, manufacture, and curing of concrete, tolerances in workmanship, testing, and the methods by which the finished structure is to be measured for the purposes of payment.

PSGA 3 MATERIAL

PSGA 3.2.1 Applicable Specifications

Add the following to G 3.2.1:

Portland cement that conforms to SABS 471

PSGA 3.2.2 Storage of Cement

Add the following to G 3.2.2:

Consignments of cement shall be used in the same sequence as that in which they are delivered to site. No cement shall be used which has been stored on site for a longer period than 6 (six) weeks. All cement so stored for a longer period than 6 (six) weeks, all cement damaged in any way, and all cement which does not comply with the specification, shall be removed immediately and permanently from the site.

PSGA 4 PLANT

PSGA 4.4 Formwork

PSGA 4.3.3 Ties

Add the following to G 4.4.3:

No ties will be allowed in vertical walls and permanent metal ties shall have a minimum concrete cover of 40 mm. Tie holes shall be filled with an approved non-shrink epoxy grout.

PSGA 5 CONSTRUCTION

PSGA 5.1 REINFORCEMENT

PSGA 5.1.3 Cover

Substitute G 5.1.3 with the following:

The cover of concrete over reinforcement, unless otherwise indicated on the drawings, shall be not less than 40 mm.

PSGA 5.2 FORMWORK

PSGA 5.2.1 Classification of Finishes

Add the following to G 5.2.1:

The following surface conditions are required in the various portions of the finished concrete:

(a) **Rough**

Concealed surfaces and surfaces lower than 100 mm below finished ground level.

(b) **Smooth**

All surface finishes not classified as "rough" in paragraph (a) shall be classified as "smooth". All exposed edges unless otherwise indicated on the drawings, shall be chamfered 20 mm x 20 mm by means of triangular fillets fixed to the formwork.

PSGA 5.4 CONCRETE

PSGA 5.4.1 Quality

PSGA 5.4.1.2 Consistency

Add the following to sub clause G 5.5.1.2(a):

The slump of concrete used in water retaining structures may not be less than 30mm and not more than 60mm.

PSGA 5.4.1.5 Strength concrete

Add the following to G 5.5.1.7:

The grade of strength concrete and the maximum nominal size of coarse aggregate for each portion of the works, unless otherwise indicated on the drawings, shall be as follows:

(a) Blinding layers and encasing of pipes	20 MPa/19 mm
(b) Benching	20 MPa/19 mm
(c) Screeds	20 MPa/10 mm
(d) Reinforced concrete	30 MPa/19 mm

PSGA 5.4.1.7 Durability

Concrete shall be so proportioned to ensure that the water/cement ratio does not exceed 0,5 and, to ensure workability, water-reducing admixtures of approved manufacture shall be used in preference to increasing the cement content.

PSGA 5.4.8 Concrete Surfaces

Add the following to GA 5.4.8.1:

Concrete surfaces under screeds, granolithic finishes or benching shall be brought up to a plane, uniform surface with a suitable screed board.

PSGA 5.4.11 Construction Joints

The use of construction joints must be minimised and may only be placed as shown on the drawings or at positions as approved by the Engineer.

At all construction joints in walls a PVC water stop without a centre bulb must be placed as shown on the drawings.

Alternative materials with similar properties may be proposed but may only be installed after approval of the Engineer.

PSGA 5.5.10.4 Wood-floated finish

Where wood floating is specified or scheduled, the surface shall first be given a finish as specified in G 5.5.10.1 and after the concrete has hardened sufficiently; it shall be floated to a uniform surface free from trowel marks. The screed surface shall be wood-floated, either by hand or machine, only sufficiently to produce a uniform surface free from screed marks.

PSGA 5.5.10.5 Steel-floated finish

Where steel floating is specified or scheduled, the surface shall be treated as specified in PS G 5.5.10.4 except that, when the moisture film has disappeared and the concrete has hardened sufficiently to prevent laitance from being worked to the surface, the screed surface shall be steel-trowelled under firm pressure to produce a dense, smooth, uniform surface free from trowel marks.

PSGA 8 Measurements and Payment

PSGA 8.1.1 Formwork

Formwork, other than formwork covered by 8.1.1.2 and 8.1.4, will be measured as the net area of the face of the concrete to be supported during the deposition of concrete. No deduction will be made for fillets and splays of size up to 50 mm x 50 mm or for openings of diameter up to 0,7 m or of area up to 0.5 m².

Formwork in continuous lengths of narrow widths and of fillets or splays over 20 mm x 20 mm will be measured by length, the width or range of widths being stated in the schedule. Boxing-out, the forming of holes, and other such operations will be measured by number, basic dimensions, perimeters, or drawing references, as stated in the schedule.

The unit rate shall cover the cost of all parts of formwork in contact with the concrete, and the necessary bearers, struts, and other supports, plus the labour and plant necessary to erect and strike such formwork.

PSGA 8.1.2 Reinforcement

Steel for normal reinforced concrete will be measured net by mass of all bars, including supporting steel detailed on the reinforcing schedules. The mass will be computed from the nominal bar size and nominal mass per unit length. No allowance will be made for cutting, waste, spacer devices (materials other than steel bars), or binding wire.

Steel reinforcement for precast concrete units will not be measured unless so scheduled (see 8.6).

Welded mesh will be measured by area as shown on the drawings, No allowance being made for cutting, waste, laps, or deductions for end cover. The areas measured will be those of the concrete floor or slab being reinforced by means of mesh. In the case of continuous unit partly reinforced by mesh, the area will be computed from the outside

dimensions of the area covered by mesh regardless of whether or not additional reinforcing steel is present in the same area.

Steel off cuts resulting from the cutting and bending of reinforcement in accordance with the bending schedules shall be deemed to be the property of the Contractor.

PSGA 8.1.3 Concrete

a) Concrete will be measured net to the dimensions shown on the drawings or to the dimensions cast, whichever are the smaller. Structural elements that are undersized will be measured for payment only if they are accepted by the Engineer

b) No allowance will be made for concrete required to make up overbreak in soft excavation, but payment will be made for additional concrete or formwork, or both, ordered in writing by the Engineer to replace unsuitable material or overbreak in hard rock or in intermediate excavation (see (d) below).

The unit rates shall cover the cost of the provision of concrete (made with ordinary portland cement unless otherwise scheduled), mixing, testing, placing, compacting, the forming of stop-ends and unforeseen construction joints, striking of for levelling as applicable, and curing and repairing where necessary, together with the cost of all parts of formwork in contact with the concrete and the necessary bearers, struts, and other supports, plus the layout and plant necessary to erect and strike such formwork.

PROJECT SPECIFICATION

PORTION 2: VARIATIONS AND ADDITIONS TO STANDARDISED SPECIFICATIONS

SABS 1200 L: MEDIUM PRESSURE PIPELINES

PSL 1 SCOPE

This specification covers the supply and installation of pipelines of diameter up to 1 000 mm, Complete with ancillary works, for transporting water and sewage under working pressures of up to 2.5 MPa.

PSL 3 MATERIAL

PSL 3.1 GENERAL

Replace the first sentence of L 3.1 with the following:

Duraflow mPVC and uPVC pipes, where relevant, will be used in the water pipelines.

Pipes and fittings shall be of the types specified in the schedule or in the project specification and, unless otherwise required in terms of the project specification, they and their couplings shall be capable of withstanding the applicable test pressure specified in 7.3.1. All pipes and fittings shall be supplied complete with couplings and jointing material.

Satisfactory temporary end covers shall be provided for the protection of threads, flanges, and prepared ends of plain-ended pipes and fittings, and to prevent damage to internal lining during transportation and during handling on Site.

Pipeline materials shall be so transported, stored, and handled that pipes are not overstressed at any time and fittings are not damaged in any way. PVC pipes to be stored under shade for the period between delivery to site and pipe laying and backfilling. All thin-walled, flexible, and soft-coated pipes shall be handled with particular care and shall be so stored that they are not subject to concentrated pressure from stones or other objects. Pipes damaged or cracked in any way shall be removed from the Site.

PSL 3.9 CORROSION PROTECTION

PSL 3.9.2 Protection of Steel Pipes and Accessories

All the pipe items of steel with diameters from 100mm and more must, unless otherwise specified be provided of three coats of epoxy paint (KSIR 88 or similar) to provide a final film of 300-micron dried thickness. Application must be according to the suppliers' prescription and must be on the inside and outside. Steel pipe items with diameters smaller than 100mm must be protected using galvanising or epoxy paint.

PSL 3.10 VALVES

All valves must be painted according to an approved method with epoxy paint (KSIR 88 or similar), to provide a final film of 300 micron dried thickness, after manufacturing and testing. Complete technical information of all valves must be submitted to the Engineer for approval before purchase.

PSL 3.10.1 Gate Valves

All gate valves shall be of the AVK type, shall comply with the requirements of SABS 664 and shall be suitable for a working pressure of 1,6 MPa (Class 16), or as indicated on the detail drawings. All gate valves must be supplied with a square spindle nut, suitable to be used with a valve key, or with a hand wheel as indicated on the detailed drawings. One valve key per nut size must be provided and will be included in the rate for valves.

All gate valves shall be flanged and drilled according to SABS 1123 or B.S. 4504 Table 16, unless shown differently on the drawings, and shall be right hand closing. The direction for opening and closing shall be permanently displayed on the valves. Valves shall have non-rising spindles.

Compression shut-off valves with rubber protected gate and smooth finish without recess inside, may be used.

The spindle seal shall consist of at least two O-rings located in a corrosion resistant housing. A wiper ring to prevent ingress of dirt shall be provided. The spindle nut may be loose or fixed in the gate.

The valves shall be provided with a straight, unobstructed body passage without any pocket and the gate shall be completely clear of the waterway in the fully open position. The sealing and gate guide areas shall be designed to eliminate deposits in the valve body. The gate guides shall be of substantial design to support the gate until the point of closure.

All components shall be interchangeable between valves of one size.

The rated working pressure shall be as detailed on the drawings. The valves are required to seal drop tight from zero to a test pressure of 1,1 times the rated working pressure under test and field conditions.

The valve shall be capable of being opened and closed under an unbalanced pressure equal to the rated working pressure.

Pipes shall not be tested against a closed valve. Thrust blocks for test sections shall be approved by the Engineer prior to testing of pipes.

PSL 3.10.2 Air Valves

All air valves to be Double orifice type. Rate shall include all accessories required as per tender drawing.

PSL 5 CONSTRUCTION

PSL 5.1 LAYING

PSL 5.1.1 General

Where connecting to the existing pipeline the position of the existing pipeline must be established by excavating test holes (hand excavation) before any trench excavation to the planned connection point is undertaken. The Contractor will not be compensated for excavation and any other work that is executed and proves to be unnecessary because this specification was not followed.

PSL 5.4 CONCRETE ENCASING

Replace the first sentence of L 5.4 with the following:

Concrete encasing with concrete with strength of 20 MPa/19mm, must be provided at positions indicated by the Engineer. Provision must be made to keep the pipe in position during the placement of the concrete encasing. The length of concrete encasing will be determined by means of site instructions from the Engineer.

PSL 5.4.1 Soil Crete Encasing

Add the following:

A mixture of Portland cement and gravel of base quality that is mixed in a ratio of 1:10 must be provided at positions indicated by the Engineer. Provision must be made to keep the pipe in position during the placement of the soilcrete encasing. The length of soilcrete encasing will be determined by means of a site instruction from the Engineer.

PSL 5.5 ANCHOR BLOCKS

Delete "15 Mpa/37,5mm" in the second sentence and replace with "20Mpa/19mm"

PSL 5.6 VALVE CHAMBERS

PSL 5.6.1 General

Substitute the first sentence of L 5.6.1 with the following:

The drawings of valve chambers, which are bound into the document, shall supersede the corresponding drawings in the standard specification.

Valve chambers, to the relevant specified sizes and specifications, shall be installed at all the new positions as indicated on the detailed drawings.

PSL 5.10 CLEANING OF PIPE

Sub clauses (a), (b) and (c) must be adhered to.

PSL 5.11 PIPE MARKERS

Pipe markers shall be installed at 50m intervals on the pipeline route, at all the newly installed isolation and scour valves as indicated on the detailed drawings as well as at all positions where the pipeline route deviates from the horizontal.

PSL 7 TESTING

PSL 7.3 STANDARD HYDRAULIC PIPE TEST

PSL 7.3.1 Test pressure and time of test

Add the following to L 7.3.1.1:

Pipes shall not be tested against isolating valves. Special blank flanges or end caps, fully anchored, shall be provided for testing.

PSL 8 MEASUREMENT AND PAYMENT

PSL 8.2 SCHEDULED ITEMS

PSL 8.2.1 Supply, Lay and Bed Pipes complete with couplingsUnit: m

PSL 8.2.1.1 uPVC Class 9 Pipes

The pipes should be the type with a spigot at one end and a socket with lymg rubber at the other. Contractor has an option to supply mPVC piping of same class and diameter if he so wishes, on condition the rate of cost used is that of uPVC. All pipes to have the class and diameter clearly marked, in addition to Manufacturer's details.

PSL 8.2.1.2 Steel Pipes

The pipes should be threaded at both ends and supplied fitted with one threaded socket. The pipes will thus be jointed using threaded sockets except on advice of Engineer or where drawings details indicate otherwise.

PSL 8.2.2 Extra-over 8.2.1 for the Supplying, Laying, and Bedding of Specials Complete with CouplingsUnit: No

These shall be measured and paid for per installation, complete with the inclusion of the cutting of pipes, couplings, extra excavation and all extra material and labour that is required, including tees, fittings complete as shown on the drawings.

PSL 8.2.2.1 Extra-over 8.2.1.1 for the Supplying, Laying, and Bedding of Specials Complete with Couplings for Steel pipes and adaptors to PVC

Bends, Tees and Reducers shall be steel, be flanged and drilled to Table 16 at all ends. End caps to be flanged at the open end. Bends to be long radius. Steel - uPVC Adaptors to be flanged at end linking to the steel pipe and spigot ended at end linking the PVC pipe. The spigot end to match the diameter of PVC piping. Separate flanges to be drilled to Table 16 with threading to match the steel pipe threading.

PSL 8.2.2.2 Extra-over 8.2.1.2 for the Supplying, Laying, and Bedding of Specials Complete with Couplings for uPVC pipes

All bends, reducers, tees, end caps etc for uPVC sections to be uPVC, unless indicated on the drawings. All bends to be long radius with one end socketed and the other spigot end. The rest of the fittings/ specials to be socketed at all ends, unless the drawings or Engineer suggests otherwise.

PSL 8.2.3 Extra-over 8.2.1 for the Supply, Fixing and Bedding of Valves Unit: No

Add the following to L 8.2.3:

Valves are measured and paid for per installation, complete with the inclusion of the cutting of pipes, couplings, extra excavation and all extra material and labour that is required, including tees, fittings complete as shown on the drawings.

PSL 8.2.4 Cut into and Connect to Existing Mains Unit: No

The number of each type and diameter of pipe cut into shall measure the cutting into existing mains.

The Tendered rate shall include full compensation for all arrangements with the relevant authorities, isolating the main, cutting into the main to accommodate the connecting fitting, dewatering, excavating, removing of excess material, taking steps to prevent the ingress of soil, stones and other material into the main as well as all material and labour to connect the pipe.

PS L 3.10 VALVES

PS L 3.10.1 Gate Valves

(a) 200mm isolation valve..... unit (No.)

All gate valves shall comply with the requirements of SANS 664 – Figure 2 and shall be suitable for a working pressure of 1.0 MPa. All gate valves shall be supplied with hand wheels, unless shown otherwise on the drawings.

Gate valves shall have flanged ends unless shown otherwise on the drawings and shall open clockwise. The direction for opening and closing shall be permanently displayed on the valves. Valves shall have non-rising spindles.

Spindles, spindle nuts, gate rings and body rings shall all be of bronze.

All flanged gate valves shall be drilled according to SANS 1123 Table 1600/3.

PSL8.2.10 Temporary Valves,

Payment for the supply or loan of temporary valves, end caps, blank flanges, or other isolating devices ordered by the Engineer in terms of 7.3.1.1 will be made at daywork rates or at a price to be agreed by the Engineer, unless the method of payment for the work has been dealt with in the project specification and a suitable item included in the schedule.

PSL 8.2.11 Anchor/Thrust Blocks

Unit: m³

Substitute L 8.2.11 with the following:

Anchor and thrust blocks shall be measured per cubic metre concrete and the Tendered rate shall include for all formwork and reinforcement (where specified) for the required dimensions.

"The concrete will be measured net by volume to the specified width and depth in excess of the external volume of the pipe (i.e. the volume of the pipe will be deducted).

The rate shall cover the cost of formwork and concrete."

PSL 8.2.13 VALVE CHAMBERS

Valve and hydrant chambers, manholes, etc., will be measured as complete units.

The rate shall cover additional excavation (see Subclauses 8.2.2 and 8.2.3 of SADS 1200 LIB), materials, plant, and labour necessary for the complete construction including the installation of the surface boxes or covers.

Valve chambers will be measured and paid for by number and the tariff must include all excavation, installation, finishing and numbering of the chamber, all materials as well as labour as described in PS L 5.12.

PSL 8.2.17 Soil Crete Casing

Unit: m³

The soilcrete (1:10 ratio) is measured by volume according to the specified width and depth that exceeds the outside volume of the pipe (the volume of the pipe detracted).

The tariff includes the cost of shuttering and soilcrete mixture.

PSL 8.2.18 Pipe Markers

Unit: No

Pipe markers will be measured and paid for by number and the tariff must include all excavation, installation, and paint and numbering of marker, concrete as well as labour as described in PS L 5.11.

PROJECT SPECIFICATION
PORTION 2: VARIATIONS AND ADDITIONS TO
STANDARDISED SPECIFICATIONS
SABS 1200 LB: BEDDING (PIPES)

PS LB 1 SCOPE

PS LB 1.1 SCOPE

Add the following to LB 1.1:

This specification also covers the bedding required for sleeve pipes.

PS LB 3 MATERIALS

PS LB 3.1 SELECTED GRANULAR MATERIAL

Substitute LB 3.1 with the following:

Selected granular material shall be an aggregate, sand or granular material, all of a non-cohesive nature and free from any organic material, of which the grading analysis shows 100 % passing a 13, 2 mm sieve and not more than 5 % passing a 0,075 mm sieve.

Only if approved by the Engineer may sand from the trench excavations be used as selected material

PS LB 3.2 SELECTED FILL MATERIAL

Substitute LB 3.2 with the following:

The requirements of PS LB 3.1 shall apply *mutatis mutandis*.

PS LB 3.3 BEDDING

Add the following to LB 3.3:

All pipes shall be classified as flexible pipes and shall have a bedding of selected granular material and selected fill material.

PS LB 3.4 SELECTION

PS LB 3.4.1 Suitable Material from Trench Excavation Available

Replace the first sentence of LB 3.4.1 with the following:

Notwithstanding the requirements DB 3.7 and LB 3.4.1 relating selected excavation methods, the Contractor must follow selected excavation methods and provide or use plant that will prevent material that is suitable and necessary for bedding being contaminated.

PS LB 5 CONSTRUCTION

PS LB 5.1 GENERAL

PS LB 5.1.4 Compacting

Substitute "90 % of Mod. AASHTO" in LB 5.1.4 with "93 % of Mod. AASHTO."

If sand is used the compaction grade must be 100% Mod. AASHTO

PS LB 8 MEASUREMENT AND PAYMENT

PS LB 8.1 PRINCIPLES

PSLB 8.1.1 Provision of Bedding from Trench Excavation

a) Selected granular materialUnit: m 3

b) Selected fill material Unit: m

The rates shall cover the cost of acquiring, from within 0,5 km, bedding that complies with the relevant requirements of the specification, of delivering it to points alongside the trench spaced to suit the Contractor's methods of working, and of disposing of displaced material within a freehaul distance of 0,5 km.

In terms of the standardized specifications covering pipelines, the rate for the supply and laying of pipelines covers the cost of handling bedding material from alongside the trench and placing it under and around the pipeline.

PSLB 8.1.2 Supply only of Bedding by Importation

From other necessary excavations

a) Selected granular materialUnit: m

b) Selected fill material Unit: m

PSLB 8.1.4 From commercial sources

a) Selected granular material Unit: m

b) Selected fill material Unit: m

The rate shall cover the cost of acquiring, regardless of distance, the required bedding from commercial sources (see Subclause 8.3.4 of SABS 1200 D or Subclause 8.3.4 of SABS 1200 DA, as relevant), of delivering it to points alongside the trench spaced to suit the Contractor's methods of working, and of delivering it to points alongside the trench spaced to suit the Contractor's methods of working, and of disposing of material displaced by such importation, within a freehaul distance of 0,5 km.

PSLB 8.1.6 Encasing of Pipes in Concrete Unit:

Separate items will be scheduled for each size of pipe and for each grade of concrete specified.

The volume will be computed from the dimensions of the concrete as given on the drawing.

The rate shall cover the cost of dealing with any excavation (in all materials including disposal of surplus) that is additional to that measured under the item for pipe trench excavation, the cost of encasing the pipe in concrete including the cost of formwork (if any), etc., and the cost of formwork to form flexible joints at 4 m centres.

PS LB 8.2.5 Overhaul of material for Bedding cradle and selected fill blanket

Unit: m³.km

Substitute LB 8.2.5 with the following:

- a) Limited overhaul (0,5 km to 1,0 km) Unit: m³
- b) Long overhaul Unit: m³.km

Except that the volume is calculated according to LB 8.1.3, the requirements of D 8.3.6 or DA 8.3.3, as applicable, shall apply for overhaul.

PROJECT SPECIFICATION

PORTION 2: VARIATIONS AND ADDITIONS TO STANDARDISED SPECIFICATIONS

SABS 1200 VC: FENCING

PSVC 1SCOPE

This specification covers the erection of a new 2.4m high fence with 1 x motor gate 2.4 x 2.4m.

PSVC 4.2 SECURITY FENCING

Sliding gate 7500 x 2100mm high consisting of 75x50x4mm rectangular iron frame to sides, top, bottom and centre members with 30x30x3mm square tubing verticals at 200mm centers welded to frame, including I-Beam track with a guide with lugs at 500mm centres casted into a 500mm x 400mm concrete strip including guide rollers and machined wheels with double sealed roller bearings.

PSVC 4.2.1 Material

B 5513 GENERAL REQUIREMENTS

The completed fence shall be plumb, taut, true to line and ground contour, with all posts, standards and stays firmly set. The height of the lower fencing wire above the ground at posts and standards shall not deviate by more than 25 mm from that shown on the drawings. Other fencing wires shall not deviate by more than 10 mm from their prescribed vertical positions.

B 5514 MEASUREMENT AND PAYMENT

Item

Unit

55.01 Cleaning the fence line 2 m wide strip..... m(m)

The removal of trees and stumps with a girth exceeding 1 m shall be paid as specified in section 1700

B 55.02 Supply and erect new fencing material for new fence and for supplementing material in existing fences which are being repaired or removed:

(a) Zinc-coating barbed wire 3 mild steel grade, double strand 2.5 mm diameter unidirectional twist (SABS 675)..... m (m)

(b) Zinc-coating smooth wire 2.24mm diameter, high tensile fencing wire (SABS 675)..... m (m)

The unit of measurement shall be erected as specified in the drawings completely drilled with steel cap and base plate and painted. The price shall also include full compensation for the excavation of 300mm x 300mm x 800mm deep holes and the backfill with concrete.

Gate

Single motor gate (2.4 x 2.4 mm)Unit (No.)

The unit of measurement shall be the number of new gate erected. The two wings of the double gates shall be considered as one gate. The tendered rate shall include full compensation for the procurement and

supply of all material including gates, gate posts, hinges, bolts, mesh, binding wire, concrete, etc., as well as the erection of the gates as specified and indicated on the drawings.

PROJECT SPECIFICATION

PORTION 2: VARIATIONS AND ADDITIONS TO STANDARDISED SPECIFICATIONS

SABS 1200 VC: MECHANICAL & ELECTRICAL PROJECT SPECIFICATIONS

PS PME 1 PUMPS

PS PME 1.1 SCOPE

This section covers the following electrically driven pumps with all accessories as specified:

- a) 167kw, 1480 per minute motors pump.

PS PME 5.2 ELECTRICAL SUPPLY AND EARTH CONNECTION

The supply to the existing main switchboard is 3-phase 400/230 V at 50 Hz.

The contractor shall install a circuit breaker in the main switchboard, rated for the required power supply to the new switch, as well as a power cable from the main switchboard to the new switchboard.

Once connected, the Contractor must ensure that the supply in terms of voltage and earthing is in order before switching power onto his equipment. Claims for damage arising from non-compliance will not be accepted.

PS PME 5.4 GENERAL ELECTRIC INSTALLATIONS

PS PME 5.4.1 Cables

Tenderers must allow for the supply and installation of all necessary cables of appropriate size to all the electrical equipment specified in accordance with Clause PMA 4.9 in this document.

Cables must be installed in lengths of surface mounted galvanised conduit to prevent them from sagging, or on cable trays.

ELECTRICAL EQUIPMENT

QUALITY SPECIFICATION

PS PME 4.1 GENERAL

This specification covers the general items of equipment for electrical installations. All materials and installation of such materials shall comply with the following:

1. The latest edition of the "Code of Practice for Wiring of Premises" SANS 10142-1 by the SA Bureau of Standards.
2. The Occupational Health and Safety Act (Act 85 of 1993).
3. The Local Supply Authority's Regulations and Fire Insurance Regulations.
4. Any special conditions implied in this specification.



VHEMBE DISTRICT MUNICIPALITY

C6. OHS Specifications for construction projects

5.1 Specification

1. PREAMBLE

In terms of Construction Regulation 4(1)(a) of the Occupational Health and Safety Act, 1993 (Act 85 of 1993), the VHEMBE DISTRICT MUNICIPALITY, as the Client, shall be responsible to prepare Health & Safety Specifications for any intended construction project and provide any Principal Contractor who is making a bid or appointed to perform construction work for the Client on its behalf with the same.

The Client's further duties are as described in The Act and the Regulations made there-under. The Principal Contractor shall be responsible for the Health & Safety Policy for the site in terms of Section 7 of the Act and in line with Construction Regulation 5 as well as the Health and Safety Plan for the project.

This 'Health and Safety Specifications' document is governed by the "Occupational Health and Safety Act, 1993 (Act No. 85 of 1993), hereinafter referred to as 'The Act'. Notwithstanding this, cognisance should be taken of the fact that no single Act or its set of Regulations can be read in isolation. Furthermore, although the definition of Health and Safety Specifications stipulates 'a documented specification of all health and safety requirements pertaining to associated works on a construction site, so as to ensure the health and safety of persons', it is required that the entire scope of the Labour legislation, including the Basic Conditions of Employment Act be considered as part of the legal compliance system. With reference to this specification document this requirement is limited to all health, safety and environmental issues pertaining to the site of the project as referred to here-in. Despite the foregoing it is reiterated that environmental management shall receive due attention.

Due to the wide scope and definition of construction work, every construction activity and site will be different, and circumstances and conditions may change even on a daily basis. Therefore, due caution is to be taken by the Principal Contractor when drafting the Health and Safety Plan based on these Health and Safety Specifications. Prior to drafting the Health and Safety Plan, and in consideration of the information contained here-in, the contractor shall set up a Risk Assessment Program to identify and determine the scope and details of any risk associated with any hazard at the construction site, in order to identify the steps needed to be taken to remove, reduce or control such hazard. *This Risk Assessment and the steps identified will be the basis or point of departure for the Health and Safety Plan.* The Health and Safety Plan shall include documented 'Methods of Statement' (see definitions under Construction Regulations) detailing the key activities to be performed in order to reduce as far as practicable, the hazards identified in the Risk Assessment.

2. SCOPE OF HEALTH AND SAFETY SPECIFICATION

The Health and Safety Specifications pertaining to this project, cover the subjects contained in the index and is intended to outline the normal as well as any special requirements of the Client pertaining to the health and safety matters (including the environment) applicable to the project in question. These Specifications should be read in conjunction with the Act, the Construction Regulations and all other Regulations and Safety Standards which were or will be promulgated under the Act or incorporated into the Act and be in force or come into force during the effective duration of the project. The stipulations in this specification, as well as those contained in all other documentation pertaining to the project, including contract documentation and technical specifications shall not be interpreted, in any way whatsoever, to countermand

or nullify any stipulation of the Act, Regulations and Safety Standards which are promulgated under, or incorporated into the Act.

3. PURPOSE

The Client is obligated to implement measures to ensure the health and safety of all people and properties affected under its custodianship or contractual commitments, and is further obligated to monitor that these measures are structured and applied according to the requirements of these Health and Safety Specifications.

The purpose of this specification document is to provide the relevant Principal Contractor with any information other than the standard conditions pertaining to construction sites which might affect the health and safety of persons at work and the health and safety of persons in connection with the use of plant and machinery; and to protect persons other than persons at work against hazards to health and safety arising out of or in connection with the activities of persons at work during the carrying out of construction work for the VHEMBE DISTRICT MUNICIPALITY. The Principal Contractor is to be briefed on the significant health and safety aspects of the project and to be provided with information and requirements on inter alia:

- a) Safety considerations affecting the site of the project and its environment;
- b) Health and safety aspects of the associated structures and equipment;
- c) Submissions on health and safety matters required from the Principal Contractor and,
- d) The Principal Contractor's health & safety plan.

To serve to ensure that the Principal Contractor is fully aware of what is expected from him/her with regard to the Occupational Health and Safety Act, 1993 (Act No. 85 of 1993) and the Regulations made thereunder including the applicable safety standards, and in particular in terms of Section 8 of the Act.

To inform the Principal Contractor that the Occupational Health and Safety Act, 1993 (Act 85 of 1993) in its entirety shall apply to the contract to which this specification document applies. The Construction Regulations shall apply to any person involved in construction work pertaining to this project, as will the Act.

4. DEFINITIONS

"Purpose of the Act" –

To provide for the health and safety of persons at work and the health and safety of persons in connection with the use of plant and machinery; the protection of persons other than persons at work against hazards to health and safety arising out of or in connection with the activities of persons at work; to establish an advisory council for occupational health and safety; and to provide for matters connected therewith.

"Agent" –

means any person who acts as a representative for a client;

"Client" –

means any person for whom construction work is performed;

"Construction Work" is defined as any work in connection with –

- (a) the erection, maintenance, alteration, renovation, repair, demolition or dismantling of or addition to a building or any similar structure;
- (b) the installation, erection, dismantling or maintenance of a fixed plant where such work includes the risk of a person falling;
- (c) the construction, maintenance, demolition or dismantling of any bridge, dam, canal, road, railway, runway, sewer or water pipeline system or any similar civil engineering structure; or
- (d) the moving of earth, clearing of land, the making of an excavation, piling, or any similar type of work;

"Contractor" –

means an employer, as defined in Section 1 of the Act, who performs construction work and includes Principal Contractors;

"Health and Safety File" –

means a file, or other record in permanent form, containing the information required a contemplated in the regulations;

"Health and Safety Plan" –

means a documented plan which addresses hazards identified and includes safe work procedures to mitigate, reduce or control the hazards identified;

"Health and Safety Specification" –

means a documented specification of all health and safety requirements pertaining to the associated works on a construction site, so as to ensure the health and safety of persons;

"Method Statement" –

means a document detailing the key activities to be performed in order to reduce as reasonably as practicable the hazards identified in any risk assessment;

"Principal Contractor" –

means an employer, as defined in section 1 of the Act who performs construction work and is appointed by the client to be in overall control and management of a part of or the whole of a construction site;

"Risk Assessment" –

means a program to determine any risk associated with any hazard at a construction site, in order to identify the steps needed to be taken to remove, reduce or control such hazard.

5. OCCUPATIONAL HEALTH & SAFETY MANAGEMENT

5.1 Structure and Organisation of OH&S Responsibilities

5.1.1. Overall Supervision and Responsibility for OH&S

- The Client and/or its Agent on its behalf to ensure that the Principal Contractor, appointed in terms of Construction Regulation 4(1)(c), implements and maintains the agreed and approved H&S Plan. Failure on the part of the Client or Agent to comply with this requirement will not relieve the Principal Contractor from any one or more of his/her duties under the Act and Regulations.
- The Chief Executive Officer of the Principal Contractor in terms of Section 16 (1) of the Act to ensure that the Employer (as defined in the Act) complies with the Act.
- All OH&S Act (85 /1993), Section 16 (2) appointee/s as detailed in his/her/their respective appointment forms to regularly, in writing, report to their principals on matters of health and safety per routine and ad hoc inspections and on any deviations as soon as observed, regardless of whether the observation was made during any routine or ad hoc inspection and to ensure that the reports are made available to the principal Contractor to become part of site records (Health & Safety File).
- The Construction Supervisor and Assistant Construction Supervisor/s appointed in terms of Construction Regulation 6 to regularly, in writing, report to their principals on matters of health and safety per routine and ad hoc inspections and on any deviations as soon as observed, regardless of whether the observation was made during any routine or ad hoc inspection and to ensure that the reports are made available to the principal Contractor to become part of site records (Health & Safety File).
- All Health and Safety Representatives (SHE-Reps) shall act and report as per Section 18 of the Act.

5.1.2. Legal Appointments

Several appointments or designations of responsible and /or competent people in specific areas of construction work are required by the Act and Regulations. The following competent appointments, where applicable, in terms of the Construction Regulations are required to ensure compliance to the Act, Regulations and Safety Standards.

Required appointments as per the Construction Regulations: -

Item	Regulation	Appointment	Responsible Person
1.	4(1)(c)	Principal contractor for each phase or project	Client
2.	5.(3)(b)	Contractor	Principal Contractor
3.	5(11)	Contractor	Contractor
4.	6(1)	Construction supervisor	Contractor
5.	6(2)	Construction supervisor sub-ordinates	Contractor
6.	6(6)	Construction Safety Officer	Contractor

Item	Regulation	Appointment	Responsible Person
7.	7(1)	Person to carry out risk assessment	Contractor
8.	7(4)	Trainer/Instructor	Contractor
9.	8(1)(a)	Fall protection planner	Contractor
10.	10 (a)	Formwork & support work supervisor	Contractor
11.	10(e) + (f)	Formwork & support work examiner	Contractor
12.	11(1)	Excavation supervisor	Contractor
13.	11(3)(b)(ii)(b)	Professional engineer or technologist	Contractor
14.	11(3)(k)	Explosives expert	Contractor
15.	12(1)	Supervisor demolition work	Contractor
16.	12(2) + (3)	Demolition expert	Contractor
17.	12(11)	Explosives expert	Contractor
18.	14(2)	Scaffold supervisor	Contractor
19.	15(1)	Suspended platform supervisor	Contractor
20.	15(2)(c)	Compliance plan developer	Contractor
21.	15(8)(c)	Suspended platform expert	Contractor
22.	15(13)	Outrigger expert	Contractor
23.	17(8)(a)	Material hoist inspector	Contractor
24.	18(1)	Batch plant supervisor	Contractor
25.	18(7)	Batch plant operator	Contractor
26.	19(2)(b)	Power tool expert	Contractor
27.	19.2 (g) (i)	Power tool controller	Contractor
28.	20(f)	Tower crane operator	Contractor
29.	21(1)(d)(i)	Construction vehicle and mobile plant operator	Contractor
30.	21(1)(j)	Construction vehicle and mobile plant inspector	Contractor
31.	22(d)	Temporary electrical installations inspector	Contractor
32.	22 (e)	Temporary electrical installations controller	Contractor
33.	26 (a)	Stacking and storage supervisor	Contractor
34.	27 (h)	Fire equipment inspector	Contractor

This list may be used as a reference or tool to determine which components of the Act and Regulations would be applicable to a particular site. This list must not be assumed to be exclusive or comprehensive.

5.2 Communication & Liaison

5.2.1 OH&S Liaison between the Employer, the Principal Contractor, the other Contractors, the Designer and other concerned parties shall be through the project Committee as per the procedures determined by the project Committee.

5.2.2 In addition to the above, communication may be directly to the Client or his appointed Agent, verbally or in writing, as and when the need arises.

- 5.2.3 Consultation with the workforce on OH&S matters will be through their Supervisors and H&S Representatives ('SHE – Reps')
- 5.2.4 The Principal Contractor will be responsible for the dissemination of all relevant OH&S information to the other Contractors e.g., design changes agreed with the Client and/or its Agent on its behalf and the Designer, instructions by the Client and/or his/her agent, exchange of information between Contractors, the reporting of hazardous/dangerous conditions/situations etc.

6. RESPONSIBILITIES

6.1 Client

- 6.1.1 The Client or his appointed Agent on his behalf will appoint each Principal Contractor for this project in writing for assuming the role of Principal Contractor as intended by the Construction Regulations and determined by the Bills of Quantities.
- 6.1.2 The Client or his appointed Agent on his behalf shall discuss and negotiate with the Principal Contractor the contents of the health and safety plan of the both Principal Contractor and Contractor for approval.
- 6.1.3 The Client or his appointed Agent on his behalf, will take reasonable steps to ensure that the health and safety plan of both the Principal Contractor and Contractor is implemented and maintained. The steps taken will include periodic audits at intervals of at least once every month.
- 6.1.4 The Client or his appointed Agent on his behalf, will prevent the Principal Contractor and/or the Contractor from commencing or continuing with construction work should the Principal Contractor and/or the Contractor at any stage in the execution of the works be found to:
- have failed to have complied with any of the administrative measures required by the Construction Regulations in preparation for the construction project or any physical preparations necessary in terms of the Act;
 - have failed to implement or maintain their health and safety plan;
 - have executed construction work which is not in accordance with their health and safety plan; or
 - act in any way which may pose a threat to the health and safety of any person(s) present on the site of the works or in its vicinity, irrespective of him/them being employed or legitimately on the site of the works or in its vicinity.

6.2 Principal Contractor

- 6.2.1 The Principal Contractor shall accept the appointment under the terms and Conditions of Contract. The Principal Contractor shall sign and agree to those terms and conditions and shall, before commencing work, notify the Department of Labour of the intended construction work in terms of Regulation 3 of the Construction. The Principal Contractor shall submit the notification in writing prior to commencement of work and inform the Client or his Agent accordingly.
- 6.2.2 The Principal Contractor shall ensure that he is fully conversant with the requirements of this Specification and all relevant health and safety legislation. *This Specification is not intended to*

supersede the Act nor the Construction Regulations or any part of either. Those sections of the Act and the Construction Regulations which apply to the scope of work to be performed by the Principal Contractor in terms of this contract will continue to be legally required of the Principal Contractor to comply with. The Principal Contractor will in no manner or means be absolved from the responsibility to comply with all applicable sections of the Act, the Construction Regulations or any Regulations proclaimed under the Act or which may perceivable be applicable to this contract.

- 6.2.3 The Principal Contractor shall provide and demonstrate to the Client a suitable and sufficiently documented health and safety plan based on this Specification, the Act and the Construction Regulations, which shall be applied from the date of commencement of and for the duration of execution of the works. This plan shall, as appendices, include the health and safety plans of all Sub-contractors for which he has to take responsibility in terms of this contract.
- 6.2.4 The Principal Contractor shall provide proof of his registration and good standing with the Compensation Fund or with a licensed compensation insurer prior to commencement with the works.
- 6.2.5 The Potential Principal Contractor shall, in submitting his tender, demonstrate that he has made provision for the cost of compliance with the specified health and safety requirements, the Act and Construction Regulations.
- 6.2.6 The Principal Contractor shall consistently demonstrate his competence and the adequacy of his resources to perform the duties imposed on the Principal Contractor in terms of this Specification, the Act and the Construction Regulations.
- 6.2.7 The Principal Contractor shall ensure that a copy of his health and safety plan is available on site and is presented upon request to the Client, an Inspector, Employee or Sub-contractor.
- 6.2.8 The Principal Contractor shall ensure that a health and safety file, which shall include all documentation required in terms of the provisions of this Specification, the Act and the Construction Regulations, is opened and kept on site and made available to the Client or Inspector upon request. Upon completion of the works, the Principal Contractor shall hand over a consolidated health and safety file to the Client.
- 6.2.9 The Principal Contractor shall, throughout execution of the contract, ensure that all conditions imposed on his Sub-contractors in terms of the Act and the Construction Regulations are complied with as if they were the Principal Contractor.
- 6.2.10 The Principal Contractor shall from time to time evaluate the relevance of the Health and Safety Plan and revise the same as required, following which revised plan shall be submitted to the Client and/or his/her Agent for approval.

7. SCOPE OF WORK

These specifications are applicable to the specific scope of work pertaining to the project as detailed in the tender documents. *Refer to Project specification.*

8. HEALTH AND SAFETY FILE

The Principal Contractor must, in terms of Construction Regulation 5(7), keep a Health & Safety File on site at all times that must include all documentation required in terms of the Act and Regulations and must also include a list of all Contractors on site that are accountable to the Principal Contractor and the agreements between the parties and details of work being done.

The Health and Safety File will remain the property of the Client and/or its Agent on its behalf throughout the period of the project and shall be consolidated and handed over to the Client and/or its Agent on its behalf at the time of completion of the project.

The safety file shall contain the following documentations:

- Safety reports,
- Notification documents,
- Appointment letters,
- Records of incidents,
- Records of training,
- Records of safety meetings,
- Records of PPE provision,
- And any other document related to safety issues on site.

9. MONITORING AND REVIEWING OH&S PERFORMANCE

The Principal Contractor is required to maintain acceptable incident rate and report on this to the Client and/or its Agent on its behalf on a monthly basis. The frequency rates must reflect permanent disability, lost workdays, restricted workdays, medical treatment and first aid treatment.

10. HAZARD IDENTIFICATION AND RISK ASSESSMENT

The Principal Contractor is required to develop Risk Assessments, Standard Working Procedures (SWP) and Method Statements for each activity executed in the contract or project. The identification of hazards is over and above the hazards identification program and those hazards identified during the drafting of the Health and Safety Plan. Hazard identification should be conducted continuously over and above the baseline risk assessment.

11. ARRANGEMENTS FOR MONITORING AND REVIEW

11.1 Monthly Audit by Client

The Client and/or its Agent on its behalf will be conducting Periodic Audits at times agreed with the Principal Contractor Audit to comply with Construction Regulation 4(1)(d) to ensure that the principal Contractor has implemented, is adhering to and is maintaining the agreed and approved OH&S Plan.

11.2 Other audits and inspections

The Client and/or its Agent on its behalf reserves the right to conduct any other ad hoc audits and inspections as it and/or its Agent on its behalf deem necessary.

A representative of the Principal Contractor and the relevant Health and Safety Representative(s) (SHE-Reps) must accompany the Client and/or its Agent on its behalf on all Audits and Inspections and may conduct their own audit/inspection at the same time. Each party will, however, take responsibility for the results of his/her own audit/inspection results. The Client and/or its Agent on its behalf may require to be handed a copy of the minutes of the previous Health and Safety Committee meeting reflecting possible recommendations made by that committee to the Employer for reference purposes and any other health and safety related issues.

11.3 Reports

- 12.3.1 The Principal Contractor shall report all incidents where an employee is injured on duty to the extent that he/she dies, becomes unconscious, loses a limb or part of a limb, is injured or becomes ill to such a degree that he/she is likely either to die or to suffer a permanent physical defect or likely to be unable for a period of at least 14 days either to work or continue with the activity for which he/she was usually employed, or where a major incident occurred, the health or safety of any person was endangered, where a dangerous substance was spilled, the uncontrolled release of any substance under pressure took place, machinery or any part of machinery fractured or failed resulting in flying, falling or uncontrolled moving objects, machinery ran out of control, to the Provincial Director of the Department of Labour within seven days and at the same time to the Client and/or its Agent on its behalf.
- 12.3.2 The Principal Contractor is required to provide the Client and/or its Agent on its behalf with copies of all statutory reports required in terms of the Act and the Regulations.
- 12.3.3 The Principal Contractor is required to provide the Client and/or its Agent on its behalf with a monthly "SHE Risk Management Report".
- 12.3.4 The Principal Contractor is required to provide the Client and/or its Agent on its behalf with copies of all internal and external accident/incident investigation reports. As soon as the occurrence of any accident/incident of whatever nature comes to the notice of the Principal Contractor, it shall be reported immediately to any of the following:

11.4 Review

The Principal Contractor is to review the Hazard Identification, Risk Assessments and Standard Work Processes at each Production Planning and Progress Report meeting as the construction work develops and progresses and each time changes are made to the designs, plans and construction methods and processes. The Principal Contractor must provide the Client and/or its Agent on its behalf, and all other concerned parties with copies of any changes, alterations or amendments

11.5 Site Safety Rules

11.5.1 Site OH&S Rules

The Principal Contractor must develop a set of site-specific OH&S rules that will be applied to regulate the Health and Safety Plan and associated aspects of the construction. When required for a site by law, visitors and non-employees upon entering the site shall be issued with the proper Personal Protective Equipment (PPE) as and when necessary.

11.5.2 Security Arrangements

The Principal Contractor must establish site access rules and implement and maintain these throughout the construction period. Access control must include the rule that non-employees shall at all times be provided with fulltime supervision while on site. The Principal Contractor must develop a set of Security rules and procedures and maintain these throughout the construction period.

If not already tasked to the H&S Officer appointed in terms of Construction Regulation 6(6), the Principal Contractor must appoint a competent Emergency Controller who must develop contingency plans for any emergency that may arise on site as indicated by the risk assessments. These must include a monthly practice/testing program for the plans

11.6 Training

The Principal Contractor shall ensure that all employees under the his or her control are informed, instructed and trained by a competent person regarding any hazard and the related work procedures before any work commences, and thereafter at such times as may be determined in the risk assessment.

The Principal Contractor shall ensure that all labourers are informed regarding any hazard as stipulated in the risk assessment before any work commences, and thereafter at such times as may be determined in the risk assessment.

The Principal Contractor shall ensure that as far as is reasonably practicable, ergonomic related hazards are analysed, evaluated and addressed in the risk assessment.

No Principal Contractor shall allow or permit any employee to enter any site, unless such person has undergone health and safety induction training pertaining to the hazards prevalent on the site at the time of entry.

The Principal Contractor shall ensure that all visitors to a construction site undergoes health and safety instruction pertaining to the hazards prevalent on the site and shall be provided with the necessary personal protective equipment: Provided that where visits are made only to the site office which is not in direct contact with the construction work activities, those health and safety instructions and the provision of personal protective equipment may not apply.

The contents and syllabi of all training required by the Act and Regulations including any other related or relevant training as required must be included in the Principal Contractor's Health and Safety Plan and Health and Safety File.

11.6.1 General Induction Training

The Principal contractor must ensure that the employees on site are conversant with the general health and safety requirements on site. All employees of the Principal and other Contractors must be in possession of proof of General Induction training.

11.6.2 Site Specific Induction Training

All employees of the Principal and other Contractors must be in possession of Site-Specific Occupational Health and Safety Induction or other qualifying training.

11.6.3 Other Training

All operators, drivers and users of construction vehicles, mobile plant and other equipment must be in possession of valid proof of training. All employees in jobs requiring training in terms of the Act and Regulations must be in possession of valid proof of training as follows:

- General Induction (Section 8 of the Act)
- Site/Job Specific Induction (also visitors) (Sections 8 & 9 of the Act)
- Site/Project Manager
- Construction Supervisor
- OH&S Representatives (Section 18 (3) of the Act)
- Training of the Appointees indicated in 12.6.1 & 12.6.2 above
- Operation of Cranes (Driven Machinery Regulations 18 (11))
- Operators & Drivers of Construction Vehicles & Mobile Plant (Construction Regulation 21)
- Basic Fire Prevention & Protection (Environmental Regulations 9 and Construction Regulation 27)
- As a minimum basic First Aid to be upgraded when necessary (General Safety Regulations 3)
- Storekeeping Methods & Safe Stacking (Construction Regulation 26)
- Emergency, Security and Fire Coordinator

11.7 Accident and Incident Investigation

The Principal Contractor is responsible to oversee the investigation of all accidents/incidents where employees and non-employees were injured to the extent that he/she/they had to receive first aid or be referred for medical treatment by a doctor, hospital or clinic, (General Administrative Regulation 9). The Principal Contractor is responsible for the investigation of all non-injury incidents as described in Section 24 (1) (b) & (c) of the Act and keeping a record of the results of such investigations including the steps taken to prevent similar incidents in future.

The Principal Contractor is responsible for the investigation of all road traffic accidents relating to the construction site and keeping a record of the results of such investigations including the steps taken to prevent similar accidents in future. Notwithstanding the requirements of Section 24 of the Act, ALL incidents shall be investigated and reported on in writing, irrespective of whether such incident gave rise to injury or damage.

11.8 H&S Representatives and H&S Committees

11.8.1 Designation of H&S Representatives

Where the Principal Contractor employs more than 20 persons (including the employees of other Contractors (sub-contractors)) he has to appoint one H&S Representative for every 20 employees or part thereof. (Section 17 of the Act and General Administrative Regulation 6. & 7.) H&S Representatives have to be designated in writing and the designation shall be in accordance with the Collective Agreement as concluded between the parties as is required in terms of General Administration Regulation 6.

11.8.2 Duties and Functions of the H&S Representatives

The Principal Contractor must ensure that the designated H&S Representatives conduct at least a weekly inspection of their respective areas of responsibility using a checklist and report thereon to the Principal Contractor, after which these reports shall be consolidated for submission to the Health and Safety Committee. H&S Representatives must be included in and be part of accident/incident investigations. H&S Representatives shall be members of at least one H&S Committee and must attend all meetings of that H&S committee.

11.8.3 Establishment of H&S Committee(s)

The Principal Contractor must establish H&S Committees consisting of designated H&S Representatives together with a number of Employers Representatives appointed as per Section 19(3) that are not allowed to exceed the number of H&S Representatives on the committee. The persons nominated by the employer on an H&S Committee must be designated in writing for such period as may be determined by the project period. The H&S Committee shall co-opt advisory (temporary) members and determine the procedures of the meetings including the chairmanship.

12. HOUSE KEEPING

Good housekeeping will be maintained at all times as per Construction Regulation No. 25. Poor housekeeping contributes to three major problems, namely, costly or increased accidents, fire or fire hazards and reduction in production. Good housekeeping will enhance production time.

Particular emphasis is to be placed on the following crucial elements of a construction site:

- Phase priorities and production/plant layout
- Enclosures
- Pits, openings and shoring
- Storage facilities
- Effective, sufficient and maintained lighting or illumination
- Principal sources of injuries e.g., stairways, runways, ramps, loose building material
- Oil, grease, water, waste, rubble, glass, storm water
- Colour coding
- Demarcations
- Pollution
- Waste disposal
- Ablution and hygiene facilities
- First aid disposals
- Hazardous chemical substances

This list must not be taken to be exclusive or exhaustive.

In promotion of environmental control all waste, rubble, scrap etc, will be disposed of at a registered dumping site and records will be maintained. Where it is found to be impractical to use a registered dump site or it is not available, the Principal Contractor will ensure that the matter is brought to record with the client or his representative, after which suitable, acceptable alternatives will be sought and applied. Dross and refuse from metals, and waste matters or by-products whose nature is such that they are poisonous or capable of fermentation, putrefaction or constituting a nuisance shall be treated or disposed of by methods approved of by an inspector.

13. OPERATIONAL CONTROL

The Principal Contractor shall take reasonable steps to ensure that necessary control measures are taken to promote safe working environment during all operational works. Routine safety inspections shall be carried out to ensure plant; machinery and tools are safe enough for employees to work with. Operational control measures shall be taken for the following activities and plant or machinery where applicable:

- Fall protection;
- Excavation work;
- Scaffolding;
- Mobile plants;
- Electrical installation and machinery; and
- Other associated activities.

14. SUB CONTRACTORS

The Principal Contractor shall ensure that agreements are entered into by all sub-contractors on site, and ensure that all sub-contractors are in compliance with the health and safety standards on site. Particulars of sub-contractors involved in specialised work such as blasting, concrete works and electrical installations must be submitted to the designers for approval and their safety plans submitted to the Client for approval.

15. OFFENCES AND PENALTIES

Any contractor who does not comply with the requirements of the Act, will be penalised or punished as per Section 38 of the Act. The principal contractor must also note that the Client may stop the execution of construction work if it is not in accordance with the health and safety plan or if it poses a threat on the health and safety of employees and the public.



VHEMBE DISTRICT MUNICIPALITY

C7. Site Information

7.1 General

This section describes the site at the time of the tender in order to enable the tenderer to price his tender accordingly and to decide upon his method of working, programming and risks.

The tenderer shall inform him / herself on the nature of the site and inspect the site.

The Employer will consider a tender only if the site inspection and/or tenderer's meeting arranged by the Engineer has been attended by a representative who must:

- Be suitably qualified to comprehend the implications of the work involved, and
- Be the tenderer him/herself or a person in the direct employ of the tenderer

6.2 Site location

The global positioning of the site is -22.9872360S Latitude and 30.4473099E Longitude. It forms part of the periphery villages of **Thohoyandou CBD** and is about 2km west of the CBD.

The area is situated with the following coordinates:

Locality Details

- Province : Limpopo Province
- District : Vhembe District Municipality
- Coordinates: Latitude: -22.9872360S
Longitude: 30.4473099E

The climate is very dry with an average annual rainfall below 500mm. General vegetation cover consists of sparse grasses and thorn trees scattered over the site. With thin vegetation cover, the area is susceptible to flood damage caused by sheet flow during heavy rains.

6.3 Access to site and restrictions

Access to the site is through R524 Road through to Thohoyandou CBD.

The construction sites are situated in the existing villages as mentioned in 6.1. These sites can be reached via existing streets/roads and Provincial Roads.

The operation of construction vehicles on existing roads or streets, or on streets which have been completed on the level of sub-base or base or bituminous surface treatment, shall be limited to traffic with an axle load not exceeding that allowed by the Road Traffic Ordinance of the authority concerned, or any amendment thereof. Hauling is strictly forbidden on sections of streets that have been completed as described above. The Contractor shall make use of temporary haul roads, or where not practically possible, program his work in such a manner that the haulage of materials shall be restricted to that required for the particular section of street. No additional payment shall be made for the use of temporary haul roads and all relevant costs shall be deemed to be covered by the appropriate rates.

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

If the Contractor does not make use of existing streets for the hauling of materials to or from the site, he shall be held responsible to clear any spillage caused by his activities on or near the roads by whatever means necessary, within two (2) days after such spillage has occurred. No additional payment will be made for the clearance of spillage and all relevant costs will be deemed to be covered under the relevant items.

6.4 Existing services, servitudes and way leaves

All the known existing services are indicated on the drawings.

6.5 Security

The security of the Contractor's plant, employers, materials and site camp will be the Contractor's responsibility.

6.6 Nature of ground and subsoil conditions

The Contractor shall familiarize himself with the conditions on site.

The materials on site mainly consist of soft and hard material. The majority of excavation will be in weathered and hard granite.

Also refer to the Project Specification "*PS 4 : NATURE OF GROUND AND SUBSOIL CONDITIONS ON SITE*".

BILLS OF QUANTITIES



VHEMBE DISTRICT MUNICIPALITY

C.8 Drawings

The following drawings, for tender purposes only, form part of this contract.

INVITATION TO BID

MBD 1

YOU ARE HEREBY INVITED TO BID FOR REQUIREMENTS OF THE (NAME OF MUNICIPALITY/ENTITY)

BID NUMBER:

CLOSING DATE:

CLOSING TIME:

DESCRIPTION:

The successful bidder will be required to fill in and sign a written Contract Form (MBD 7).

BID DOCUMENTS MAY BE POSTED TO:

OLD PARLIAMENT BUILDING
VHEMBE DISTRICT MUNICIPALITY
THOHOYANDOU
0950

OR

DEPOSITED IN THE BID BOX SITUATED AT (STREET ADDRESS)

OLD PARLIAMENT BUILDING, NEXT TO THE ENTRANCE OF VHEMBE DISTRICT MUNICIPALITY
THOHOYANDOU
DENGAMPHICALALE STREET
0950

Bidders should ensure that bids are delivered timeously to the correct address. If the bid is late, it will not be accepted for consideration.

The bid box is generally open 24 hours a day, 7 days a week.

ALL BIDS MUST BE SUBMITTED ON THE OFFICIAL FORMS – (NOT TO BE RE-TYPED)

THIS BID IS SUBJECT TO THE PREFERENTIAL PROCUREMENT POLICY FRAMEWORK ACT AND THE PREFERENTIAL PROCUREMENT REGULATIONS, 2011, THE GENERAL CONDITIONS OF CONTRACT (GCC) AND, IF APPLICABLE, ANY OTHER SPECIAL CONDITIONS OF CONTRACT

NB: NO BIDS WILL BE CONSIDERED FROM PERSONS IN THE SERVICE OF THE STATE (as defined in Regulation 1 of the Local Government: Municipal Supply Chain Management Regulations)

THE FOLLOWING PARTICULARS MUST BE FURNISHED
(FAILURE TO DO SO MAY RESULT IN YOUR BID BEING DISQUALIFIED)

NAME OF BIDDER

POSTAL ADDRESS

STREET ADDRESS

TELEPHONE NUMBER

CODE.....NUMBER.....

CELLPHONE NUMBER

☐ SIMILE NUMBER

CODE.....

NUMBER.....

E-MAIL ADDRESS

VAT REGISTRATION NUMBER

HAS AN ORIGINAL AND VALID TAX CLEARANCE CERTIFICATE BEEN ATTACHED? (MBD 2)
YES/NO

HAS A B-BBEE STATUS LEVEL VERIFICATION CERTIFICATE BEEN SUBMITTED? (MBD 6.1)
YES/NO

IF YES, WHO WAS THE CERTIFICATE ISSUED BY?

AN ACCOUNTING OFFICER AS CONTEMPLATED IN THE CLOSE CORPORATION ACT (CCA)

☐ VERIFICATION AGENCY ACCREDITED BY THE SOUTH AFRICAN NATIONAL ACCREDITATION
SYSTEM (SANAS)

☐ A REGISTERED AUDITOR

☐
(Tick applicable box)

(A B-BBEE STATUS LEVEL VERIFICATION CERTIFICATE MUST BE SUBMITTED IN ORDER TO
QUALIFY FOR PREFERENCE POINTS FOR B-BBEE)

ARE YOU THE ACCREDITED REPRESENTATIVE
IN SOUTH AFRICA FOR THE GOODS/SERVICES/WORKS OFFERED?

YES/NO

(IF YES ENCLOSE PROOF)

SIGNATURE OF BIDDER

DATE

CAPACITY UNDER WHICH THIS BID IS SIGNED

TOTAL BID PRICE.....TOTAL NUMBER OF ITEMS OFFERED

ANY ENQUIRIES REGARDING THE BIDDING PROCEDURE MAY BE DIRECTED TO:

Municipality / Municipal Entity: VHEMBE DISTRICT MUNICIPALITY

Department: BUDGET AND TREASURY

Contact Person: SUPPLY CHAIN PRACTITIONERS

Tel: 015 960 2130/2131/2132/2133

ANY ENQUIRIES REGARDING TECHNICAL INFORMATION MAY BE DIRECTED TO:

Contact Person:

Tel: 015 960 2000

**PRICING SCHEDULE – FIRM PRICES
(PURCHASES)**

NOTE: ONLY FIRM PRICES WILL BE ACCEPTED. NON-FIRM PRICES (INCLUDING PRICES SUBJECT TO RATES OF EXCHANGE VARIATIONS) WILL NOT BE CONSIDERED

IN CASES WHERE DIFFERENT DELIVERY POINTS INFLUENCE THE PRICING, A SEPARATE PRICING SCHEDULE MUST BE SUBMITTED FOR EACH DELIVERY POINT

Name of Bidder:

Bid Number:

Closing Time:

Closing Date:

OFFER TO BE VALID FOR.....DAYS FROM THE CLOSING DATE OF BID.

ITEM NO.	QUANTITY	DESCRIPTION	BID PRICE IN RSA CURRENCY ** (ALL APPLICABLE TAXES INCLUDED)
-------------	----------	-------------	---

- Required by:

- At:

- Brand and Model:

- Country of Origin:

- Does the offer comply with the specification(s)? *YES/NO

- If not to specification, indicate deviation(s)

- Period required for delivery:

*Delivery: Firm/Not firm

- Delivery basis:

Note: All delivery costs must be included in the bid price, for delivery at the prescribed destination.

** "all applicable taxes" includes value-added tax, pay as you earn, income tax, unemployment insurance fund contributions and skills development levies.

*Delete if not applicable

MBD 3.2

PRICING SCHEDULE – NON-FIRM PRICES
(PURCHASES)

NOTE: PRICE ADJUSTMENTS WILL BE ALLOWED AT THE PERIODS AND TIMES SPECIFIED
IN THE BIDDING DOCUMENTS.

IN CASES WHERE DIFFERENT DELIVERY POINTS INFLUENCE THE PRICING, A
SEPARATE PRICING SCHEDULE MUST BE SUBMITTED FOR EACH DELIVERY POINT

Name of Bidder.....	Bid number:
Closing Time:	Closing Date:

OFFER TO BE VALID FOR.....DAYS FROM THE CLOSING DATE OF BID.

ITEM NO. ** (ALL APPLICABLE TAXES INCLUDED)	QUANTITY	DESCRIPTION	BID PRICE IN RSA CURRENCY
--	----------	-------------	---------------------------

- Required by:
- At:
- Brand and model
- Country of origin
- Does the offer comply with the specification(s)? *YES/NO
- If not to specification, indicate deviation(s)
- Period required for delivery
- Delivery: *Firm/Not firm

** "all applicable taxes" includes value-added tax, pay as you earn, income tax, unemployment
insurance fund contributions and skills development levies.

*Delete if not applicable

A NON-FIRM PRICES SUBJECT TO ESCALATION

1. IN CASES OF PERIOD CONTRACTS, NON FIRM PRICES WILL BE ADJUSTED (LOADED) WITH THE ASSESSED CONTRACT PRICE ADJUSTMENTS IMPLICIT IN NON FIRM PRICES WHEN CALCULATING THE COMPARATIVE PRICES
2. IN THIS CATEGORY PRICE ESCALATIONS WILL ONLY BE CONSIDERED IN TERMS OF THE FOLLOWING FORMULA:

$$Pa = (1-V)Pt \left(D1 \frac{R1t}{R1o} + D2 \frac{R2t}{R2o} + D3 \frac{R3t}{R3o} + D4 \frac{R4t}{R4o} \right) + VPt$$

Pa	=	The new escalated price to be calculated.
(1-V) Pt	=	85% of the original bid price. Note that Pt must always be the original bid price and not an escalated price.
D1, D2..	=	Each factor of the bid price eg. labour, transport, clothing, footwear, etc. The total of the various factors D1,D2...etc. must add up to 100%.
R1t, R2t.....	=	Index figure obtained from new index (depends on the number of factors used).
R1o, R2o	=	Index figure at time of bidding.
VPt	=	15% of the original bid price. This portion of the bid price remains firm i.e. it is not subject to any price escalations.

3. The following index/indices must be used to calculate your bid price:
- | | | | | | |
|------------|------------|------------|------------|------------|------------|
| Index..... | Dated..... | Index..... | Dated..... | Index..... | Dated..... |
| Index..... | Dated..... | Index..... | Dated..... | Index..... | Dated..... |

4. FURNISH A BREAKDOWN OF YOUR PRICE IN TERMS OF ABOVE-MENTIONED FORMULA. THE TOTAL OF THE VARIOUS FACTORS MUST ADD UP TO 100%.

[illegible]

MBD 3.2

B PRICES SUBJECT TO RATE OF EXCHANGE VARIATIONS

1. Please furnish full particulars of your financial institution, state the currencies used in the conversion of the prices of the items to South African currency, which portion of the price is subject to rate of exchange variations and the amounts remitted abroad.

PARTICULARS FINANCIAL INSTITUTION	ITEM NO	PRICE	CURRENCY	RATE	PORTION OF PRICE SUBJECT TO ROE	AMOUNT IN FOREIGN CURRENCY REMITTED ABROAD
				ZAR=		
				ZAR=		
				ZAR=		
				ZAR=		
				ZAR=		
				ZAR=		
				ZAR=		

2. Adjustments for rate of exchange variations during the contract period will be calculated by using the average monthly exchange rates as issued by your commercial bank for the periods indicated hereunder: (Proof from bank required)

AVERAGE MONTHLY EXCHANGE RATES FOR THE PERIOD:	DATE DOCUMENTATION MUST BE SUBMITTED TO THIS OFFICE	DATE FROM WHICH NEW CALCULATED PRICES WILL BECOME EFFECTIVE	DATE UNTIL WHICH NEW CALCULATED PRICE WILL BE EFFECTIVE

MBD 4

DECLARATION OF INTEREST

1. No bid will be accepted from persons in the service of the state¹.
2. Any person, having a kinship with persons in the service of the state, including a blood relationship, may make an offer or offers in terms of this invitation to bid. In view of possible allegations of favouritism, should the resulting bid, or part thereof, be awarded to persons connected with or related to persons in service of the state, it is required that the bidder or their authorised representative declare their position in relation to the evaluating/adjudicating authority.
3. In order to give effect to the above, the following questionnaire must be completed and submitted with the bid.

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

3.2 Identity Number:

3.3 Position occupied in the Company (director, trustee, shareholder²):.....

3.4 Company Registration Number:

3.5 Tax Reference Number:.....

3.6 VAT Registration Number:

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

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

3.8.1 If yes, furnish particulars.

¹MSCM Regulations: "in the service of the state" means to be -

(a) a member of -

- (i) any municipal council;
- (ii) any provincial legislature; or
- (iii) the national Assembly or the national Council of provinces;

(b) a member of the board of directors of any municipal entity;

(c) an official of any municipality or municipal entity;

(d) an employee of any national or provincial department, national or provincial public entity or constitutional institution within the meaning of the Public Finance Management Act, 1999 (Act No.1 of 1999);

(e) a member of the accounting authority of any national or provincial public entity; or

(f) an employee of Parliament or a provincial legislature.

² Shareholder" means a person who owns shares in the company and is actively involved in the management of the company or business and exercises control over the company:

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

3.9.1 If yes, furnish particulars.....

.....

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

3.10.1 If yes, furnish particulars.

.....
.....

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

3.11.1 If yes, furnish particulars

.....
.....

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

3.12.1 If yes, furnish particulars.

.....
.....

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

3.13.1 If yes, furnish particulars.

.....
.....

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

3.14.1 If yes, furnish particulars:

.....
.....

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

Full Name	Identify Number	State Employee Number

.....
Signature

.....
Date

.....
Capacity

.....
Name of Bidder

PREFERENCE POINTS CLAIM FORM IN TERMS OF THE PREFERENTIAL PROCUREMENT REGULATIONS 2022

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

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

1. GENERAL CONDITIONS

1.1 The following preference point systems are applicable to invitations to tender:

- the 80/20 system for requirements with a Rand value of up to R50 000 000 (all applicable taxes included); and
- the 90/10 system for requirements with a Rand value above R50 000 000 (all applicable taxes included).

1.2 To be completed by the organ of state
(delete whichever is not applicable for this tender)

- a) The applicable preference point system for this tender is the 80/20 preference point system.

1.3 Points for this tender (even in the case of a tender for income-generating contracts) shall be awarded for:

- (a) Price; and
(b) Specific Goals.

1.4 To be completed by the organ of state:

The maximum points for this tender are allocated as follows:

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

- 1.5 Failure on the part of a tenderer to submit proof or documentation required in terms of this tender to claim points for specific goals with the tender, will be interpreted to mean that preference points for specific goals are not claimed.

- 1.6 The organ of state reserves the right to require of a tenderer, either before a tender is adjudicated or at any time subsequently, to substantiate any claim in regard to preferences, in any manner required by the organ of state.

2. DEFINITIONS

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

3. FORMULAE FOR PROCUREMENT OF GOODS AND SERVICES

3.1. POINTS AWARDED FOR PRICE

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

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

$$\begin{array}{ccc} 80/20 & \text{or} & 90/10 \\ P_s = 80 \left(1 - \frac{P_t - P_{min}}{P_{min}} \right) & \text{or} & P_s = 90 \left(1 - \frac{P_t - P_{min}}{P_{min}} \right) \end{array}$$

Where

- P_s = Points scored for price of tender under consideration
- P_t = Price of tender under consideration
- P_{min} = Price of lowest acceptable tender

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

3.2.1. POINTS AWARDED FOR PRICE

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

$$\begin{array}{ccc} 80/20 & \text{or} & 90/10 \\ P_s = 80 \left(1 + \frac{P_t - P_{max}}{P_{max}} \right) & \text{or} & P_s = 90 \left(1 + \frac{P_t - P_{max}}{P_{max}} \right) \end{array}$$

Where

- P_s = Points scored for price of tender under consideration
- P_t = Price of tender under consideration
- P_{max} = Price of highest acceptable tender

4. POINTS AWARDED FOR SPECIFIC GOALS

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

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

(Note to organs of state: Where either the 90/10 or 80/20 preference point system is applicable, corresponding points must also be indicated as such.)

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

The specific goals allocated points in terms of this tender	Number of points allocated (80/20 system) (To be completed by the organ of state)		Number of points claimed (90/10 system) (To be completed by the tenderer)	Number of points claimed (80/20 system) (To be completed by the tenderer)
	Number of points allocated (90/10 system) (To be completed by the organ of state)	• 04 points within the district 02 point within Limpopo Province 01 point within South Africa (CSD report of the bidder will be used to verify the locality of the bidder) Youth=02 Women=02 Disability (Attach proof the Doctor)=02		
HDI				
Locality				
Youth				
Women				
Disability				

DECLARATION WITH REGARD TO COMPANY/FIRM

- 4.3. Name of company/firm.....
- 4.4. Company registration number:

4.5.

TYPE OF COMPANY/ FIRM

- ☐ Partnership/Joint Venture / Consortium
 - ☐ One-person business/sole propriety
 - ☐ Close corporation
 - ☐ Public Company
 - ☐ Personal Liability Company
 - ☐ (Pty) Limited
 - ☐ Non-Profit Company
 - ☐ State Owned Company
- [TICK APPLICABLE BOX]

4.6.

I, the undersigned, who is duly authorised to do so on behalf of the company/firm, certify that the points claimed, based on the specific goals as advised in the tender, qualifies the company/ firm for the preference(s) shown and I acknowledge that:

- i) The information furnished is true and correct;
- ii) The preference points claimed are in accordance with the General Conditions as indicated in paragraph 1 of this form;
- iii) In the event of a contract being awarded as a result of points claimed as shown in paragraphs 1.4 and 4.2, the contractor may be required to furnish documentary proof to the satisfaction of the organ of state that the claims are correct;
- iv) If the specific goals have been claimed or obtained on a fraudulent basis or any of the conditions of contract have not been fulfilled, the organ of state may, in addition to any other remedy it may have –

- (a) disqualify the person from the tendering process;
- (b) recover costs, losses or damages it has incurred or suffered as a result of that person's conduct;
- (c) cancel the contract and claim any damages which it has suffered as a result of having to make less favourable arrangements due to such cancellation;
- (d) recommend that the tenderer or contractor, its shareholders and directors, or only the shareholders and directors who acted on a fraudulent basis, be restricted from obtaining business from any organ of state for a period not exceeding 10 years, after the *audi alteram partem* (hear the other side) rule has been applied; and
- (e) forward the matter for criminal prosecution, if deemed necessary.

.....
SIGNATURE(S) OF TENDERER(S)

SURNAME AND NAME:

DATE:



MBD 6.2

DECLARATION CERTIFICATE FOR LOCAL PRODUCTION AND CONTENT FOR DESIGNATED SECTORS

This Municipal Bidding Document (MBD) must form part of all bids invited. It contains general information and serves as a declaration form for local content (local production and local content are used interchangeably).

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

1. General Conditions

1.1. Preferential Procurement Regulations, 2011 (Regulation 9) makes provision for the promotion of local production and content,

1.2. Regulation 9.(1) prescribes that in the case of designated sectors, where in the award of bids local production and content is of critical importance, such bids must be advertised with the specific bidding condition that only locally produced goods, services or works or locally manufactured goods, with a stipulated minimum threshold for local production and content will be considered.

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

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

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

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

Where

- x is the imported content in Rand
y is the bid price in Rand excluding value added tax (VAT)

Prices referred to in the determination of x must be converted to Rand (ZAR) by using the exchange rate published by the South African Reserve Bank (SARB) at 12:00 on the date of advertisement of the bid as required in paragraph 4.1 below.

The SABS approved technical specification number SATS 1286:2011 is accessible on [http://www.thedti.gov.za/industrial development/ip.jsp](http://www.thedti.gov.za/industrial%20development/ip.jsp) at no cost.

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

2. Definitions

- 2.1. "bid" includes written price quotations, advertised competitive bids or proposals;
- 2.2. "bid price" price offered by the bidder, excluding value added tax (VAT);
-
- 2.3. "contract" means the agreement that results from the acceptance of a bid by an organ of state;
- 2.4. "designated sector" means a sector, sub-sector or industry that has been designated by the Department of Trade and Industry in line with national development and industrial policies for local production, where only locally produced services, works or goods or locally manufactured goods meet the stipulated minimum threshold for local production and content;
-
- 2.5. "duly sign" means a Declaration Certificate for Local Content that has been signed by the Chief Financial Officer or other legally responsible person nominated in writing by the Chief Executive, or senior member / person with management responsibility (close corporation, partnership or individual).
- 2.6. "imported content" means that portion of the bid price represented by the cost of components, parts or materials which have been or are still to be imported (whether by the supplier or its subcontractors) and which costs are inclusive of the costs abroad (this includes labour and intellectual property costs), plus freight and other direct importation costs, such as landing costs, dock duties, import duty, sales duty or other similar tax or duty at the South African port of entry;
- 2.7. "local content" means that portion of the bid price which is not included in the imported content, provided that local manufacture does take place;
- 2.8. "stipulated minimum threshold" means that portion of local production and content as determined by the Department of Trade and Industry; and
- 2.9. "sub-contract" means the primary contractor's assigning, leasing, making out work to, or employing another person to support such primary contractor in the execution of part of a project in terms of the contract.

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

4. Does any portion of the services, works or goods offered have any imported content?
(Tick applicable box)

YES		NO	
-----	--	----	--

4.1 If yes, the rate(s) of exchange to be used in this bid to calculate the local content as prescribed in paragraph 1.5 of the general conditions must be the rate(s) published by the SARB for the specific currency at 12:00 on the date of advertisement of the bid.

The relevant rates of exchange information is accessible on www.reservebank.co.za

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

Currency	Rates of exchange
US Dollar	
Pound Sterling	
Euro	
Yen	
Other	

NB: Bidders must submit proof of the SARB rate (s) of exchange used.

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

LOCAL CONTENT DECLARATION
(REFER TO ANNEX B OF SATS 1286:2011)

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

IN RESPECT OF BID NO.

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

NB

- 1 The obligation to complete, duly sign and submit this declaration cannot be transferred to an external authorized representative, auditor or any other third party acting on behalf of the bidder.
- 2 Guidance on the Calculation of Local Content together with Local Content Declaration Templates (Annex C, D and E) is accessible on <http://www.thedti.gov.za/industrial-development/ip.isp>. Bidders should first complete Declaration D. After completing Declaration D, bidders should complete Declaration E and then consolidate the information on Declaration C. Declaration C should be submitted with the bid documentation at the closing date and time of the bid in order to substantiate the declaration made in paragraph (c) below. Declarations D and E should be kept by the bidders for verification purposes for a period of at least 5 years. The successful bidder is required to continuously update Declarations C, D and E with the actual values for the duration of the contract.

I, the undersigned, (full names),
do hereby declare, in my capacity as
of (name of bidder
entity), the following:

- (a) The facts contained herein are within my own personal knowledge.
- (b) I have satisfied myself that:
 - (i) the goods/services/works to be delivered in terms of the above-specified bid comply with the minimum local content requirements as specified in the bid, and as measured in terms of SATS 1286:2011;
 - (c) The local content percentages (%) indicated below has been calculated using the formula given in clause 3 of SATS 1286:2011, the rates of exchange indicated in paragraph 4.1 above and the information contained in Declaration D and E which has been consolidated in Declaration C;

Bid price, excluding VAT (y)	R
Imported content (x), as calculated in terms of SATS 1286:2011	R
Stipulated minimum threshold for local content (paragraph 3 above)	
Local content %, as calculated in terms of SATS 1286:2011	

If the bid is for more than one product, the local content percentages for each product contained in Declaration C shall be used instead of the table above. The local content percentages for each product has been calculated using the formula given in clause 3 of SATS 1286:2011, the rates of exchange indicated in paragraph 4.1 above and the information contained in Declaration D and E.

- (d) I accept that the Procurement Authority / Municipality /Municipal Entity has the right to request that the local content be verified in terms of the requirements of SATS 1286:2011.
- (e) I understand that the awarding of the bid is dependent on the accuracy of the information furnished in this application. I also understand that the submission of incorrect data, or data that are not verifiable as described in SATS 1286:2011, may result in the Procurement Authority / Municipal / Municipal Entity imposing any or all of the remedies as provided for in Regulation 13 of the

Preferential Procurement Regulations, 2011 promulgated under the Preferential
Policy Framework Act (PPPFA), 2000 (Act No. 5 of 2000).

SIGNATURE: _____

DATE: _____

WITNESS No. 1 _____

DATE: _____

WITNESS No. 2 _____

DATE: _____

CONTRACT FORM - PURCHASE OF GOODS/WORKS

THIS FORM MUST BE FILLED IN DUPLICATE BY BOTH THE SUCCESSFUL BIDDER (PART 1) AND THE PURCHASER (PART 2). BOTH FORMS MUST BE SIGNED IN THE ORIGINAL SO THAT THE SUCCESSFUL BIDDER AND THE PURCHASER WOULD BE IN POSSESSION OF ORIGINALLY SIGNED CONTRACTS FOR THEIR RESPECTIVE RECORDS.

PART 1 (TO BE FILLED IN BY THE BIDDER)

1. I hereby undertake to supply all or any of the goods and/or works described in the attached bidding documents to (name of institution) *Vhembe District Municipality* in accordance with the requirements and specifications stipulated in bid number at the price/s quoted. My offer/s remain binding upon me and open for acceptance by the purchaser during the validity period indicated and calculated from the closing time of bid.

2. The following documents shall be deemed to form and be read and construed as part of this agreement:

- (i) Bidding documents, viz
 - Invitation to bid;
 - Tax clearance certificate;
 - Pricing schedule(s);
 - Technical Specification(s);
 - Specific goals
 - Declaration of interest;
 - Declaration of bidder's past SCM practices;
 - Certificate of Independent Bid Determination;
 - Special Conditions of Contract;
- (ii) General Conditions of Contract; and
- (iii) Other (specify)

3. I confirm that I have satisfied myself as to the correctness and validity of my bid; that the price(s) and rate(s) quoted cover all the goods and/or works specified in the bidding documents; that the price(s) and rate(s) cover all my obligations and I accept that any mistakes regarding price(s) and rate(s) and calculations will be at my own risk.

4. I accept full responsibility for the proper execution and fulfilment of all obligations and conditions devolving on me under this agreement as the principal liable for the due fulfilment of this contract.

5. I declare that I have no participation in any collusive practices with any bidder or any other person regarding this or any other bid.

6. I confirm that I am duly authorised to sign this contract.

NAME (PRINT)

CAPACITY

SIGNATURE

NAME OF FIRM.....

DATE

WITNESSES

1.

2.

DATE:

CONTRACT FORM - PURCHASE OF GOODS/WORKS

PART 2 (TO BE FILLED IN BY THE PURCHASER)

1. I in my capacity
as

accept your bid under reference number dated for the supply
of goods/works indicated hereunder and/or further specified in the annexure(s).

2. An official order indicating delivery instructions is forthcoming.

3. I undertake to make payment for the goods/works delivered in accordance with the terms and
conditions of the contract, within 30 (thirty) days after receipt of an invoice accompanied by the
delivery note.

ITEM NO.	PRICE (ALL APPLICABLE TAXES INCLUDED)	BRAND	DELIVERY PERIOD	B-BBEE STATUS LEVEL OF CONTRIBUTION	MINIMUM THRESHOLD FOR LOCAL PRODUCTIO N AND CONTENT (if applicable)

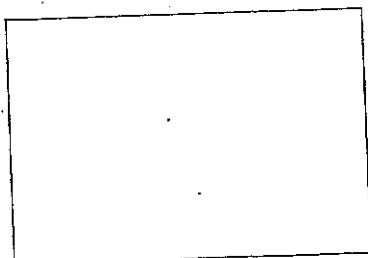
4. I confirm that I am duly authorized to sign this contract.

SIGNED AT ON

NAME (PRINT)

SIGNATURE

OFFICIAL STAMP



WITNESSES

1.

2.

DATE

CONTRACT FORM - RENDERING OF SERVICES

THIS FORM MUST BE FILLED IN DUPLICATE BY BOTH THE SERVICE PROVIDER (PART 1) AND THE PURCHASER (PART 2). BOTH FORMS MUST BE SIGNED IN THE ORIGINAL SO THAT THE SERVICE PROVIDER AND THE PURCHASER WOULD BE IN POSSESSION OF ORIGINALLY SIGNED CONTRACTS FOR THEIR RESPECTIVE RECORDS.

PART 1 (TO BE FILLED IN BY THE SERVICE PROVIDER)

1. I hereby undertake to render services described in the attached bidding documents to (name of the institution) *Vhembe District Municipality* in accordance with the requirements and task directives / proposals specifications stipulated in Bid Number at the price/s quoted. My offer/s remain binding upon me and open for acceptance by the Purchaser during the validity period indicated and calculated from the closing date of the bid.
2. The following documents shall be deemed to form and be read and construed as part of this agreement:
 - (i) Bidding documents, viz
 - Invitation to bid;
 - Tax clearance certificate;
 - Pricing schedule(s);
 - Filled in task directive/proposal;
 - Specific goals;
 - Declaration of interest;
 - Declaration of Bidder's past SCM practices;
 - Certificate of Independent Bid Determination;
 - Special Conditions of Contract;
 - (ii) General Conditions of Contract; and
 - (iii) Other (specify)
3. I confirm that I have satisfied myself as to the correctness and validity of my bid; that the price(s) and rate(s) quoted cover all the services specified in the bidding documents; that the price(s) and rate(s) cover all my obligations and I accept that any mistakes regarding price(s) and rate(s) and calculations will be at my own risk.
4. I accept full responsibility for the proper execution and fulfilment of all obligations and conditions devolving on me under this agreement as the principal liable for the due fulfilment of this contract.
5. I declare that I have no participation in any collusive practices with any bidder or any other person regarding this or any other bid.
6. I confirm that I am duly authorised to sign this contract.

NAME (PRINT)

CAPACITY

SIGNATURE

NAME OF FIRM

DATE

WITNESSES

1

2

DATE:

CONTRACT FORM - RENDERING OF SERVICES

PART 2 (TO BE FILLED IN BY THE PURCHASER)

1. I in my capacity
as
accept your bid under reference number dated for the
rendering of services indicated hereunder and/or further specified in the annexure(s).
2. An official order indicating service delivery instructions is forthcoming.
3. I undertake to make payment for the services rendered in accordance with the terms and
conditions of the contract, within 30 (thirty) days after receipt of an invoice.

DESCRIPTION OF SERVICE	PRICE (ALL APPLICABLE TAXES INCLUDED)	COMPLETION DATE	B-BBEE STATUS LEVEL OF CONTRIBUTION	MINIMUM THRESHOLD FOR LOCAL PRODUCTION AND CONTENT (if applicable)

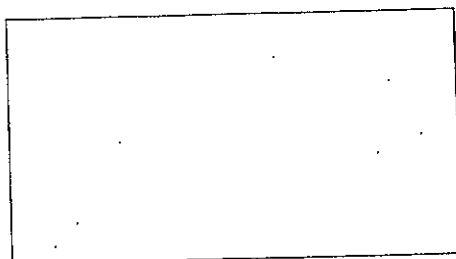
4. I confirm that I am duly authorised to sign this contract.

SIGNED AT ON

NAME (PRINT)

SIGNATURE

OFFICIAL STAMP.



WITNESSES

1

2

DATE:

CONTRACT FORM - SALE OF GOODS/WORKS

THIS FORM MUST BE FILLED IN DUPLICATE BY BOTH THE SUCCESSFUL BIDDER (PART 1) AND THE SELLER (PART 2). BOTH FORMS MUST BE SIGNED IN THE ORIGINAL SO THAT THE SUCCESSFUL BIDDER AND THE SELLER WOULD BE IN POSSESSION OF ORIGINALLY SIGNED CONTRACTS FOR THEIR RESPECTIVE RECORDS.

PART 1 (TO BE FILLED IN BY THE BIDDER)

- I hereby undertake to purchase all or any of the goods and/or works described in the attached bidding documents from (name of institution) **VHEMBE DISTRICT MUNICIPALITY** in accordance with the requirements stipulated in (bid number) at the price/s quoted. My offer/s remain binding upon me and open for acceptance by the seller during the validity period indicated and calculated from the closing time of bid.
- The following documents shall be deemed to form and be read and construed as part of this agreement:

- Bidding documents, viz
 - Invitation to bid;
 - Tax clearance certificate;
 - Pricing schedule(s);
 - Declaration of interest;
 - Declaration of Bidder's past SCM practices;
 - Special Conditions of Contract;
- General Conditions of Contract; and
- Other (specify)

- I confirm that I have satisfied myself as to the correctness and validity of my bid; that the price(s) quoted cover all the goods and/or works specified in the bidding documents; that the price(s) cover all my obligations and I accept that any mistakes regarding price(s) and calculations will be at my own risk.
- I accept full responsibility for the proper execution and fulfilment of all obligations and conditions devolving on me under this agreement as the principal liable for the due fulfillment of this contract.
- I undertake to make payment for the goods/works as specified in the bidding documents.
- I declare that I have no participation in any collusive practices with any bidder or any other person regarding this or any other bid.
- I confirm that I am duly authorised to sign this contract.

NAME (PRINT)

CAPACITY

SIGNATURE

NAME OF FIRM

DATE

WITNESSES

1

2

DATE:

MBD 7.3

CONTRACT FORM - SALE OF GOODS/WORKS

PART 2 (TO BE FILLED IN BY THE SELLER)

1. I..... in my capacity as.....
accept your bid under reference numberdated.....for the
purchase of goods/works indicated hereunder and/or further specified in the annexure(s).
2. I undertake to make the goods/works available in accordance with the terms and conditions of
the contract.

ITEM NO.	DESCRIPTION	PRICE (ALL APPLICABLE TAXES INCLUDED)		

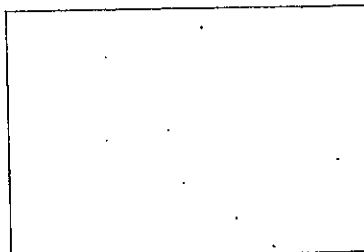
4. I confirm that I am duly authorized to sign this contract.

SIGNED ATON:.....

NAME (PRINT)

SIGNATURE

OFFICIAL STAMP



WITNESSES

1.

2.

DATE

DECLARATION OF BIDDER'S PAST SUPPLY CHAIN MANAGEMENT PRACTICES

- 1 This Municipal Bidding Document must form part of all bids invited.
- 2 It serves as a declaration to be used by municipalities and municipal entities in ensuring that when goods and services are being procured, all reasonable steps are taken to combat the abuse of the supply chain management system.
- 3 The bid of any bidder may be rejected if that bidder, or any of its directors have:
 - a. abused the municipality's / municipal entity's supply chain management system or committed any improper conduct in relation to such system;
 - b. been convicted for fraud or corruption during the past five years;
 - c. willfully neglected, reneged on or failed to comply with any government, municipal or other public sector contract during the past five years; or
 - d. been listed in the Register for Tender Defaulters in terms of section 29 of the Prevention and Combating of Corrupt Activities Act (No 12 of 2004).
- 4 In order to give effect to the above, the following questionnaire must be completed and submitted with the bid.

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

4.3.1	If so, furnish particulars:		
Item	Question	Yes	No
4.4	Does the bidder or any of its directors owe any municipal rates and taxes or municipal charges to the municipality / municipal entity, or to any other municipality / municipal entity, that is in arrears for more than three months?	☐	☐
4.4.1	If so, furnish particulars:		
4.5	Was any contract between the bidder and the municipality / municipal entity or any other organ of state terminated during the past five years on account of failure to perform on or comply with the contract?	☐	☐
4.7.1	If so, furnish particulars:		

CERTIFICATION

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

I ACCEPT THAT, IN ADDITION TO CANCELLATION OF A CONTRACT, ACTION MAY
 BE TAKEN AGAINST ME SHOULD THIS DECLARATION PROVE TO BE FALSE.

.....
 Signature

.....
 Date

.....
 Position

.....
 Name of Bidder

CERTIFICATE OF INDEPENDENT BID DETERMINATION

- 1 This Municipal Bidding Document (MBD) must form part of all bids¹ invited.
- 2 Section 4 (1) (b) (iii) of the Competition Act No. 89 of 1998, as amended, prohibits an agreement between, or concerted practice by, firms, or a decision by an association of firms, if it is between parties in a horizontal relationship and if it involves collusive bidding (or bid rigging).² Collusive bidding is a *pe se* prohibition meaning that it cannot be justified under any grounds.
- 3 Municipal Supply Regulation 38 (1) prescribes that a supply chain management policy must provide measures for the combating of abuse of the supply chain management system, and must enable the accounting officer, among others, to:
 - a. ~~take all reasonable steps to prevent such abuse;~~
 - b. reject the bid of any bidder if that bidder or any of its directors has abused the supply chain management system of the municipality or municipal entity or has committed any improper conduct in relation to such system; and
 - c. cancel a contract awarded to a person if the person committed any corrupt or fraudulent act during the bidding process or the execution of the contract.
- 4 This MBD serves as a certificate of declaration that would be used by institutions to ensure that, when bids are considered, reasonable steps are taken to prevent any form of bid-rigging.
- 5 In order to give effect to the above, the attached Certificate of Bid Determination (MBD 9) must be completed and submitted with the bid:

¹ Includes price quotations, advertised competitive bids, limited bids and proposals.

² Bid rigging (or collusive bidding) occurs when businesses, that would otherwise be expected to compete, secretly conspire to raise prices or lower the quality of goods and / or services for purchasers who wish to acquire goods and / or services through a bidding process. Bid rigging is, therefore, an agreement between competitors not to compete.

MBD 9

CERTIFICATE OF INDEPENDENT BID DETERMINATION

I, the undersigned, in submitting the accompanying bid:

.....
.....

in response to the invitation for the bid made by:

~~VHEMBE DISTRICT MUNICIPALITY~~

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

I certify, on behalf of: _____ that:

(Name of Bidder)

1. I have read and I understand the contents of this Certificate;
2. I understand that the accompanying bid will be disqualified if this Certificate is found not to be true and complete in every respect;
3. I am authorized by the bidder to sign this Certificate, and to submit the accompanying bid, on behalf of the bidder;
4. Each person whose signature appears on the accompanying bid has been authorized by the bidder to determine the terms of, and to sign, the bid, on behalf of the bidder;
5. For the purposes of this Certificate and the accompanying bid, I understand that the word "competitor" shall include any individual or organization, other than the bidder, whether or not affiliated with the bidder, who:
 - (a) has been requested to submit a bid in response to this bid invitation;
 - (b) could potentially submit a bid in response to this bid invitation, based on their qualifications, abilities or experience; and
 - (c) provides the same goods and services as the bidder and/or is in the same line of business as the bidder

MBD 9

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 consortium³ will not be construed as collusive bidding.
7. In particular, without limiting the generality of paragraphs 6 above, there has been no consultation, communication, agreement or arrangement with any competitor regarding:
- (a) prices;
 - (b) geographical area where product or service will be rendered (market allocation)
 - (c) methods, factors or formulas used to calculate prices;
 - (d) the intention or decision to submit or not to submit, a bid;
 - (e) the submission of a bid which does not meet the specifications and conditions of the bid; or
 - (f) bidding with the intention not to win the bid.
8. In addition, there have been no consultations, communications, agreements or arrangements with any competitor regarding the quality, quantity, specifications and conditions or delivery particulars of the products or services to which this bid invitation relates.
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.

³ Joint venture or Consortium means an association of persons for the purpose of combining their expertise, property, capital, efforts, skill and knowledge in an activity for the execution of a contract.

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

Signature

Date

Position

Name of Bidder

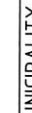
1. REFER TO DCN-001 TO 002 FOR GENERAL NOTES & SPECIFICATIONS.
2. REFER TO DRAWING DCN-003 FOR LAYOUT PLAN.
3. REFER TO DRAWING DCN-004 FOR FOUNDATION LAYOUT.
4. REFER TO DRAWING DCN-005 FOR SURFACE BED LAYOUT.
5. REFER TO DRAWING DCN-006-007 FOR SECTIONS, LAYOUT, SECTIONS & DETAILS.
6. REFER TO DRAWING DCN-008 FOR ELEVATIONS.
7. REFER TO DRAWING DCN-009 FOR STRUCTURAL STEEL ROOF LAYOUT.
8. REFER TO DRAWING DCN-010 FOR REINFORCED CONCRETE LAYOUT.
9. REFER TO DCN-011 FOR STRUCTURAL STEEL CONNECTION DETAILS.
10. REFER TO DBR-012 TO 015 FOR FOUNDATION REINFORCEMENT.
11. REFER TO DBR-016 FOR STRIP FOUNDATION REINFORCEMENT.
12. REFER TO DBR-017 FOR ROOF SLAB REINFORCEMENT.
13. REFER TO DCN-001 ITEM 14* FOR CONCRETE REINFORCEMENT.
14. REFER TO DCN-001 ITEM 17 FOR CONCRETE STRENGTH.
15. REFER TO DCN-002 ITEM 2 FOR STEEL STRENGTH.
16. REFER TO DCN-002 ITEM 3 FOR STEEL TO DCN-002 FOR PLATE CONNECTIONS.
17. FOUNDATIONS & STUB COLUMNS TO BE SET OUT CENTRALLY ON GRID LINES, UNLESS NOTED OTHERWISE.
18. BRICK/FORCE TO BE BUILT IN EVERY COURSE ABOVE OPENINGS FOR MN. 4 COURSES.
19. BRICK/FORCE TO BE BUILT IN EVERY COURSE BELOW SURFACE BED LEVEL AND EVERY 3RD COURSE ABOVE THE SURFACE BED.
20. BUTTERFLY TIES TO BE IN EVERY 2ND COURSE.
21. BRICKWORK TO BE W/MPA NFX BRICKS IN CLASS PORTLAND CEMENT.
22. REINFORCING IRONING IS TO BE INSPECTED BY THE ENGINEER PRIOR TO CASTING OF CONCRETE.
23. SITE DIMENSIONS TO BE CHECKED & SHOP DRAWINGS TO BE SUBMITTED TO ENGINEER FOR APPROVAL BEFORE MANUFACTURING.



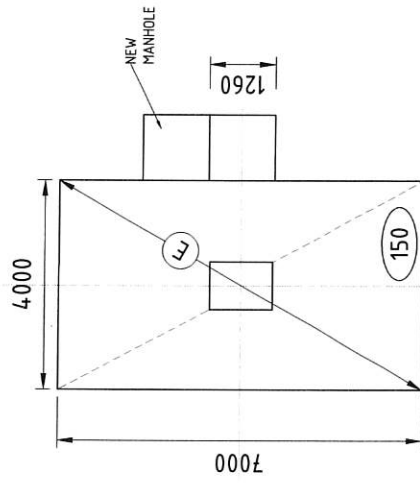
ROOF LAYOUT
SCALE 1:100

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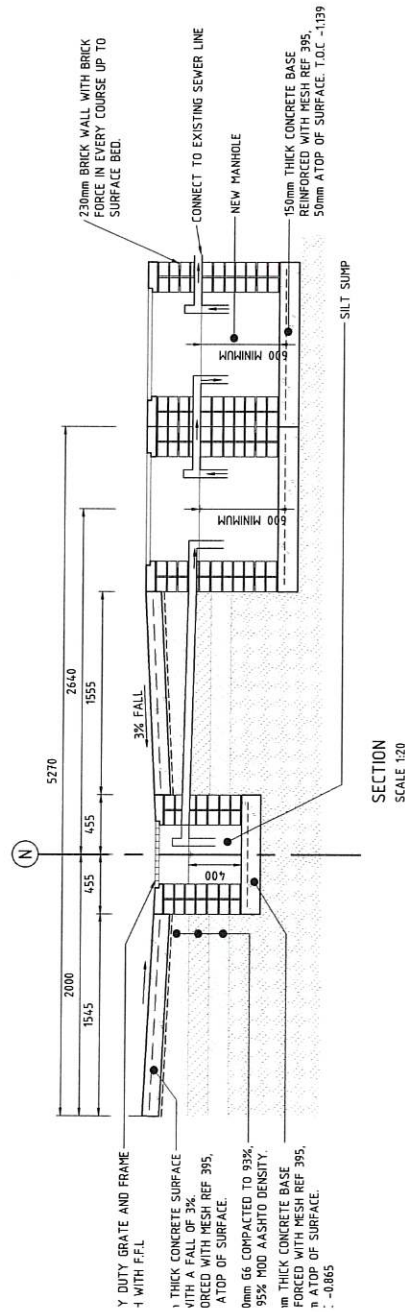
5. SEWER PIPE TO BE
160mm UPVC



APPROVED BY THE REGIONAL BOARD OF CONSTRUCTION	DATE IN	DRAWING APPROVED	TITLE	NAME	SCALES AT AN A4 SIZE DRAWING SCALE 1:100	DESIGNER	CLIENT	REGISTRATION			
								PAGE NO	DRAWING TYPE	SHEET NUMBER	SHEET PROJECT No.
	-		ERLO DE WAAL	DRAFTER ERLO DE WAAL		 SMEC South Africa Member of the Setahana Jointing Group	 VHEMBE DISTRICT MUNICIPALITY TRACTOR SHED SITE LAYOUT DRAWING TRACTOR SHED LAYOUT	01	TRD	001	00
		ENGINEER : PR ENG No. : SIGNATURE :		EBBEN GRIFFIOEN ERLO DE WAAL ERLO DE WAAL THOMAS SHINDEN ERLO DE WAAL THOMAS SHINDEN							

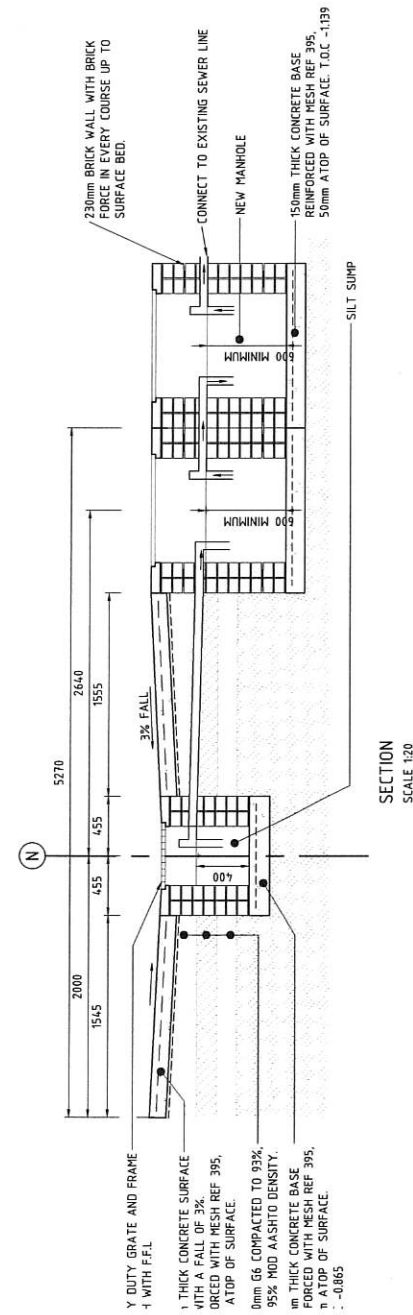
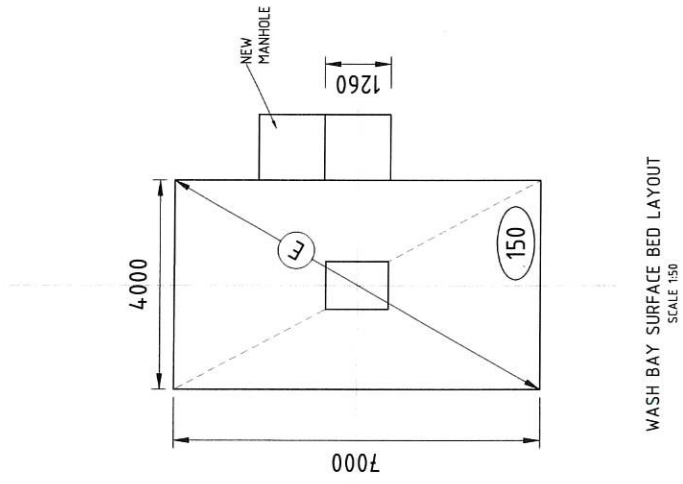


WASH BAY SURFACE BED LAYOUT
SCALE 1:50



SECTION
SCALE 1:20

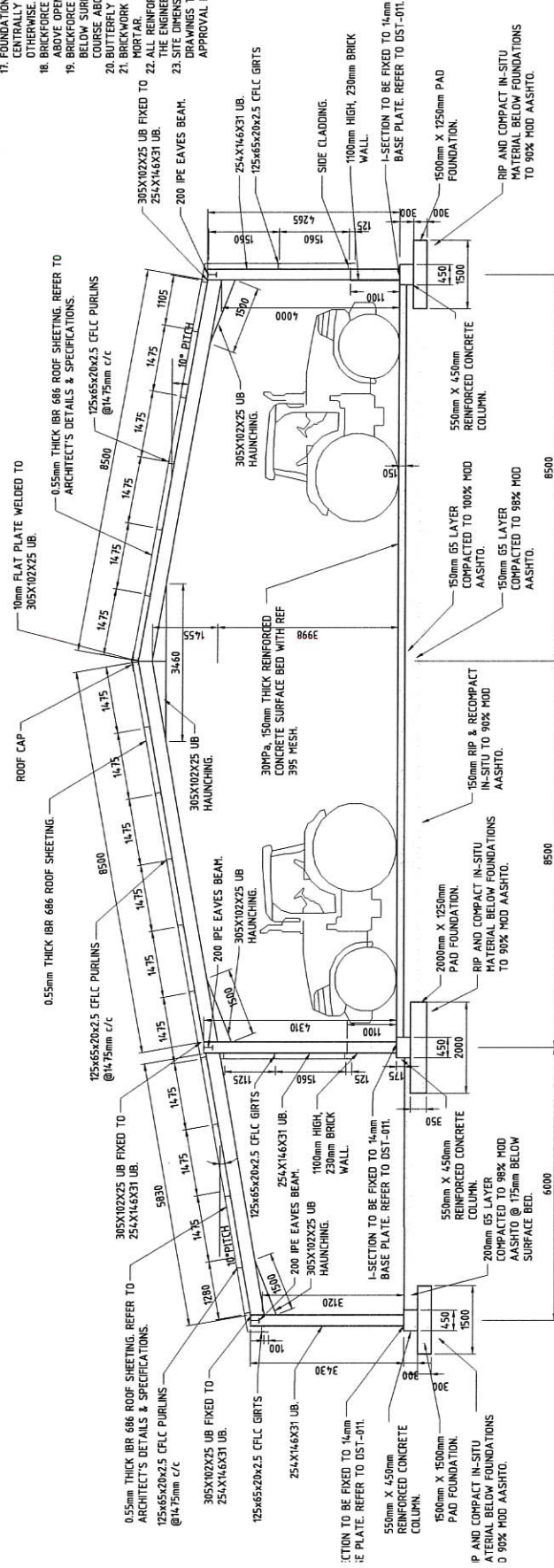
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		VHEMBE DISTRICT MUNICIPALITY TRACTOR SHED WASH BAY DRAWING LAYOUT AND SECTION		01 DRAWING TYPE DSE	002 SHEET NUMBER	00 REVISION
				SHEC PROJECT No. PM152		
						
						
						
						
						
						
						
						
						
						
						
						
						
						
						
						
						
						
						
						
						
						
						
						
						
						
						
						
						
						
						
						
						
						
						
						
						
						
						
						
						
						
						
						
						
						
						
						
						
						
						
						
						
						
						
						

NOTES:

1. REFER TO DCN-001 TO 002 FOR GENERAL NOTES & SPECIFICATIONS.
2. REFER TO DRAWING DCN-003 FOR LAYOUT PLAN.
3. REFER TO DRAWING DCN-004 FOR FOUNDATION LAYOUT.
4. REFER TO DRAWING DCN-005 FOR SURFACE BED LAYOUT, SECTIONS & DETAILS.
5. REFER TO DRAWING DCN-006-007 FOR SECTIONS.
6. REFER TO DRAWING DCN-008 FOR ELEVATIONS.
7. REFER TO DRAWING DST-009 FOR STRUCTURAL STEEL ROOF LAYOUT.
8. REFER TO DRAWING DCN-010 FOR REINFORCED CONCRETE ROOF LAYOUT.
9. REFER TO DST-011 FOR STRUCTURAL STEEL CONNECTION DETAILS.
10. REFER TO DBR-012 TO 015 FOR FOUNDATION REINFORCEMENT.
11. REFER TO DBR-016 FOR STRIP FOUNDATION REINFORCEMENT.
12. REFER TO DBR-017 FOR ROOF SLAB REINFORCEMENT.
13. REFER TO DCN-001 ITEM 14 FOR CURING DETAILS.
14. REFER TO DCN-001 ITEM 7 FOR CONCRETE STRENGTH.
15. REFER TO DCN-002 ITEM 2 FOR STEEL STRENGTH.
16. STEELWORK TO BE PAINTED. REFER TO DCN-002 ITEM 8 FOR PAINT SPECIFICATIONS.
17. FOUNDATIONS & STUB COLUMNS TO BE SET OUT ON GRID LINES, UNLESS NOTED OTHERWISE.
18. ABOVE OPENINGS FOR MIN. 4 COURSES.
19. BRICKWORK TO BE BUILT IN EVERY COURSE BELOW SURFACE BED LEVEL AND EVERY 3RD COURSE ABOVE THE SURFACE BED.
20. BUTTERFLY TIES TO BE IN EVERY 2ND COURSE.
21. BRICKWORK TO BE 14MPa MPX BRICKS IN CLASS 2 MORTAR.
22. ALL REINFORCING FIXING IS TO BE INSPECTED BY THE ENGINEER PRIOR TO CASTING OF CONCRETE.
23. SITE DIMENSIONS TO BE CHECKED & SHOP DRAWINGS TO BE SUBMITTED TO ENGINEER FOR APPROVAL BEFORE MANUFACTURING.



SECTION 1 - 1
SCALE 1:50

FOR TENDER		VHEMBE DISTRICT MUNICIPALITY		TRACTOR SHED		STRUCTURAL DRAWING		SECTION 1-1		SHEET 1 OF 1		
DATE	01	DRAWN BY	DCN	CHECKED BY	006	REVISION	B					
DESIGNER		SMEC		PROJECT NO. PMS2		SCALE		SCALE 1:50		SCALE 1:50		
TITLE		TRACTOR SHED		ENGINEER		WILLIAM R.V. DUTEREN		PR ENG No. :		2050175		
DRAWN		K. MOOLEY		CHECKED		W.A.V. DUTEREN		PROJECT MANAGER		ED. MAL		
APPROVAL		-		ENGINEER		-		SIGNATURE		-		
DATE		-		DATE		-		DATE		-		

1. REFER TO DCN-001 TO 002 FOR GENERAL NOTES & SPECIFICATIONS.
2. REFER TO DRAWING DCN-003 FOR LAYOUT PLAN.
3. REFER TO DRAWING DCN-004 FOR FOUNDATION LAYOUT.
4. REFER TO DRAWING DCN-005 FOR SURFACE BED LAYOUT, SECTIONS & DETAILS.
5. REFER TO DRAWING DCN-006-007 FOR SECTIONS.
6. REFER TO DRAWING DCN-008 FOR ELEVATIONS.
7. REFER TO DRAWING DST-009 FOR STRUCTURAL STEEL ROOF LAYOUT.
8. REFER TO DRAWING DCN-010 FOR REINFORCED CONCRETE LAYOUT.
9. REFER TO ROOF LAYOUT FOR STRUCTURAL STEEL CONNECTION DETAILS.
10. REFER TO DRB-012 TO 015 FOR FOUNDATION REINFORCEMENT.
11. REFER TO DRB-016 FOR STRIP FOUNDATION REINFORCEMENT.
12. REFER TO DRB-017 FOR ROOF SLAB REINFORCEMENT.
13. REFER TO DCN-001 ITEM 1, FOR CURING DETAILS.
14. REFER TO DCN-001 ITEM 17, FOR CONCRETE STRENGTH.
15. REFER TO DCN-002 ITEM 2 FOR STEEL STRENGTH.
16. STEEL WORK TO BE PAINTED REFER TO DCN-002 ITEM 8 FOR PAINT SPECIFICATIONS.
17. FOUNDATIONS & STUD COLUMNS TO BE SET OUT CENTRALLY ON GRID LINES, UNLESS NOTED OTHERWISE.
18. BRICKWORK TO BE BUILT IN EVERY COURSE ABOVE OPENINGS FOR MIN. 4 COURSES.
19. BRICKWORK TO BE BUILT IN EVERY COURSE BELOW SURFACE BED LEVEL AND EVERY 3RD COURSE ABOVE THE SURFACE BED.
20. BUTTERFLY TIES TO BE IN EVERY 2ND COURSE.
21. BRICKWORK TO BE 14MM X 6MM BRICKS IN CLASS 10.
22. ALL REINFORCING IS TO BE INSPECTED BY THE ENGINEER PRIOR TO CASTING OF CONCRETE.
23. SITE DIMENSIONS TO BE CHECKED & SHOP DRAWINGS TO BE SUBMITTED TO ENGINEER FOR APPROVAL BEFORE MANUFACTURING.

[illegible]

1. REFER TO DCN-001 TO 002 FOR GENERAL NOTES & SPECIFICATIONS.
2. REFER TO DRAWING DCN-003 FOR LAYOUT PLAN.
3. REFER TO DRAWING DCN-004 FOR FOUNDATION LAYOUT.
4. REFER TO DRAWING DCN-005 FOR SURFACE BED LAYOUT, SECTIONS & DETAILS.
5. REFER TO DRAWING DCN-006-007 FOR SECTIONS.
6. REFER TO DRAWING DCN-008 FOR ELEVATIONS.
7. REFER TO DRAWING DST-009 FOR STRUCTURAL STEEL ROOF LAYOUT.
8. REFER TO DRAWING DCN-010 FOR REINFORCED CONCRETE ROOF LAYOUT.
9. REFER TO DST-011 FOR STRUCTURAL STEEL CONNECTION DETAILS.
10. REFER TO DRB-012 TO 015 FOR FOUNDATION REINFORCEMENT.
11. REFER TO DRB-016 FOR STRIP FOUNDATION REINFORCEMENT.
12. REFER TO DRB-017 FOR ROOF SLAB REINFORCEMENT.
13. REFER TO DCN-001 ITEM 14 FOR CURING DETAILS.
14. REFER TO DCN-001 ITEM 17 FOR CONCRETE.
15. REFER TO DCN-002 ITEM 3 FOR STEEL STRENGTH.
16. STEELWORK TO BE PAINTED. REFER TO DCN-002 ITEM 3 FOR PAINT SPECIFICATIONS.
17. FOUNDATIONS & STUB COLUMNS TO BE SET OUT CENTRALLY ON GRID LINES, UNLESS NOTED OTHERWISE.
18. BRICKWORK TO BE BUILT IN EVERY COURSE ABOVE OPENINGS FOR MIN. 4 COURSES.
19. BRICKWORK TO BE BUILT IN EVERY COURSE BELOW SURFACE BED LEVEL AND EVERY 3RD COURSE ABOVE THE SURFACE BED.
20. BUTTERFLY TIES TO BE IN EVERY 2ND COURSE.
21. BRICKWORK TO BE 4"X8" NFX BRICKS IN CLASS 1.
22. ALL REINFORCING FISHING IS TO BE INSPECTED BY THE ENGINEER PRIOR TO CASTING OF CONCRETE.
23. SITE DIMENSIONS TO BE CHECKED & SHOP DRAWINGS TO BE SUBMITTED TO ENGINEER FOR APPROVAL BEFORE MANUFACTURING.

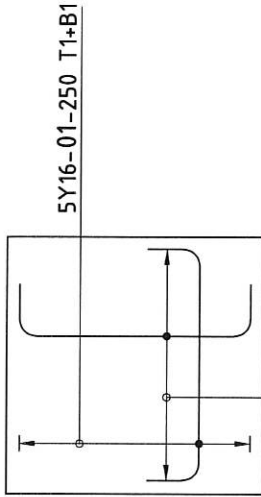


NOTE:
REFER TO ARCHITECT'S DOOR SCHEDULE FOR
DETAILS.

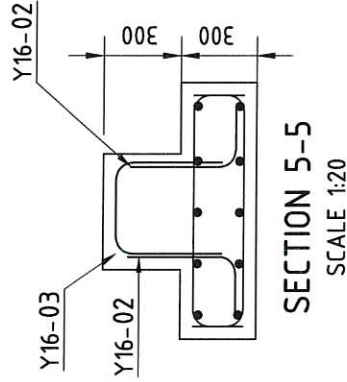
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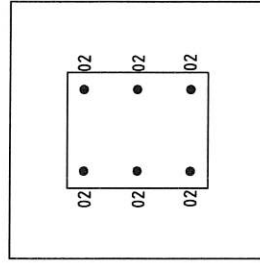
1. COVER TO REINFORCING:
FOUNDATION = 50mm
STUB COLUMN = 50mm
2. CONCRETE STRENGTH = 30MPa
3. REFER TO BENDING SCHEDULE
SRB-A-001.
4. REFER TO DCN 004 FOR SETTING OUT
DETAILS.



1000X1000 PAD FOUNDATION
(4 NO. OFF)
SCALE 1:20



SECTION 5-5
SCALE 1:20



550X450 STUB COLUMN
REINFORCEMENT
SCALE 1:20

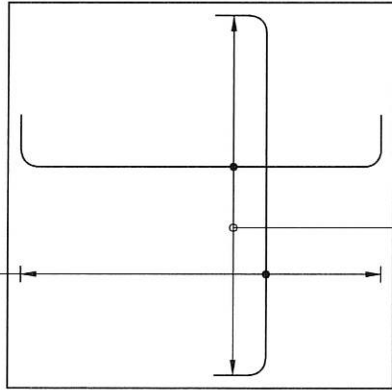
MEMBER	NO OF BARS	DIA	CUT LENGTH	TOTAL	BAR MARK	SC	A	B	C	D	E/R	kg
1000x1000 PAD	4	20	Y16	1250	80	01	38	200	900	200		158
FOUNDATION	4	6	Y16	600	24	02	37	230	410			23
	4	3	Y16	1100	12	03	38	410	350	410		21

8	10	12	16	20	25	32	40	TOT	Date	04.12.2023
R									Det by	K.MOODLEY
Y			408					408	Ref Dwg	PM752-1-DRB-012
TOT			408					408	Job No	PM752

 Member of the Southern Jointing Group	Revision	A
	Schedule No	SRB-A-001

17 2023 FOR TENDER	APPROVED / DESIGN DESCRIPTION	VPM No.	APPROVAL	DRAWING APPROVED	TITLE	NAME	SCALE AT 1/4 A1 SIZE DRAWING	SCALE 1:20	SCALES AT 1/4 A1 SIZE DRAWING	0.2 0.4 0.6 0.8 1.0	DESIGNED K.MOODLEY CHECKED K.MOODLEY DESIGNED K.MOODLEY CHECKED K.MOODLEY PROJECT MANAGER ED. MAL PROJECT DIRECTOR	ENGINEER : WILLIAM R.V. DUGTEREN PR ENG No. : 2050YTS SIGNATURE :	VHEMBE DISTRICT MUNICIPALITY TRACTOR SHED STRUCTURAL DRAWING FOUNDATION REINFORCEMENT SHEET 1 OF 4	DESCRIPTION	CLIENT	 SMEC Member of the Southern Jointing Group	FOR TENDER

7Y16-04-250 T1+B1



7Y16-04-250 T2+B2

1500X1500 PAD FOUNDATION
(5 NO. OFF)

SCALE 1:20

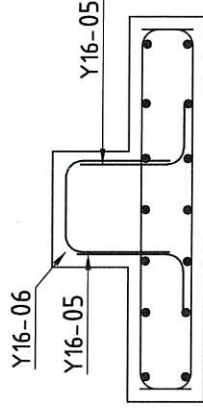
MEMBER	NO OF BARS	NO	DIA	CUT LENGTH	TOTAL	BAR MARK	SC	A	B	C	D	E/R	kg
1500x1500 PAD	5	28	Y16	1750	140	04	38	200	1400	200			387
FOUNDATION	5	6	Y16	600	30	05	37	230	410				28
	5	3	Y16	1100	15	06	38	410	350	410			26

8	10	12	16	20	25	32	40	TOT	Date	04.12.2023
R									Det by	K.MOODLEY
Y			441					441	Ref Dwg	PM752-1-DRB-013
TOT			441					441	Job No	PM752

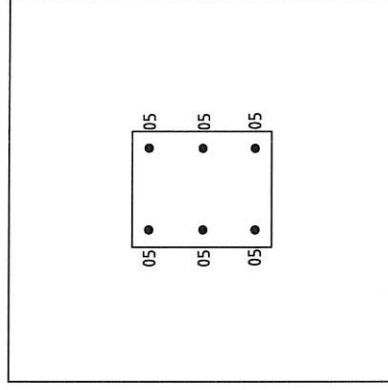
 SMEC South Africa Member of the Saurabh Group	TRACTOR SHED FOUNDATION	Revision	A
		Schedule No	SRB-A-002

NOTE:

- COVER TO REINFORCING:
FOUNDATION = 50mm
STUB COLUMN = 50mm
- CONCRETE STRENGTH = 30MPa
- REFER TO BENDING SCHEDULE
SRB-A-002.
- REFER TO DCN 004 FOR SETTING OUT DETAILS.



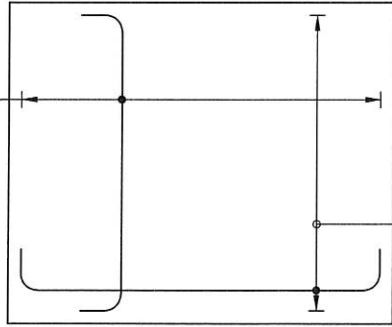
SECTION 6-6
SCALE 1:20



550X450 STUB COLUMN
REINFORCEMENT
SCALE 1:20

DATE 12/2023	FOR TENDER	APPROVED / REVIEW DESCRIPTION	VOLUME	SHEET NO.	SHEET TOTAL	REVISION	A	FOR TENDER	VHEMBE DISTRICT MUNICIPALITY	TRACTOR SHED STRUCTURAL DRAWING FOUNDATION REINFORCEMENT SHEET 2 OF 4	DRAWN BY 01	CHECKED BY 013	REVISION A
 SMEC South Africa Member of the Saurabh Group													
													
SHEET PROJECT NO. PM752													

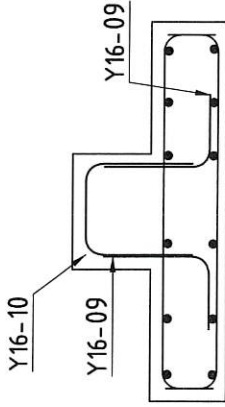
7Y16-07-250 T1+B1



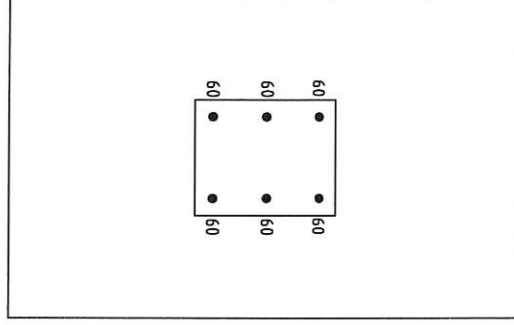
6Y16-08-250 T2+B2

1500X1250 PAD FOUNDATION (8 NO. OFF)

SCALE 1:20



SECTION 7-7 SCALE 1:20



550X450 STUB COLUMN REINFORCEMENT SCALE 1:20

NOTE:

1. COVER TO REINFORCING:
FOUNDATION = 50mm
STUB COLUMN = 50mm
2. CONCRETE STRENGTH = 30MPa
3. REFER TO BENDING SCHEDULE
SRB-A-003.
4. REFER TO DCN 004 FOR SETTING OUT
DETAILS.

MEMBER	NO OF BARS	NO	DIA	CUT LENGTH	TOTAL	BAR MARK	SC	A	B	C	D	E/R	kg
1500x1250 PAD FOUNDATION	8	14	Y16	1400	112	07	38	160	1150	160			247
	8	12	Y16	1650	96	08	38	160	1400	160			250
	8	6	Y16	650	48	09	37	280	410				49
	8	3	Y16	1100	24	10	38	410	350	410			42

8	10	12	16	20	25	32	40	TOT	Date	04.12.2023
R									Def by	K.MOODLEY
Y			558					558	Ref Dwg	PM752-1-DRB-014
TOT			558					558	Job No	PM752
TRACTOR SHED FOUNDATION									Revision	A
									Schedule No	SRB-A-003

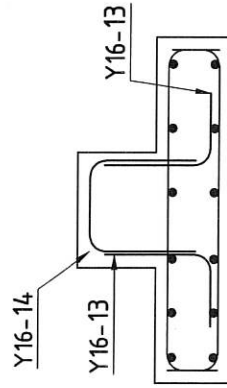


APPROVED / REVIEWED FOR TENDER	DRAWING APPROVED ENGINEER : PR ENG No : SIGNATURE :	WILLIAM R.V. DUGTEREN 2050175	TITLE DRAFTER CHECKED DESIGNER PROJECT MANAGER PROJECT DIRECTOR	NAME K.MOODLEY K.M.V. DUGTEREN K.MOODLEY K.M.V. DUGTEREN E.D. KHAL	SCALE AT A3 SIZE DRAWING SCALE 1:20	DESIGNED SMEC Member of the Sushama Jointing Group	CLIENT 	DESCRIPTION VHEMBE DISTRICT MUNICIPALITY TRACTOR SHED STRUCTURAL DRAWING FOUNDATION REINFORCEMENT SHEET 3 OF 4	TOTAL 01	DRAWING NUMBER DRB 014	REVISION A
									FOR TENDER		

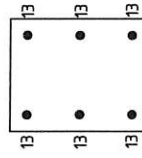
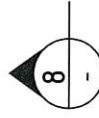
2000X1250 PAD FOUNDATION
(8 NO. OFF)

MEMBER	NO OF BARS	NO DIA	CUT LENGTH	TOTAL	BAR MARK	SC	A	B	C	D	E/R	kg
2000x1250	8	18	Y16	1400	14.4	11	38	160	1150	160		318
PAD	8	12	Y16	2150	96	12	38	160	1900	160		326
FOUNDATION	8	6	Y16	650	4.8	13	37	280	450			4.9
	8	3	Y16	1100	24	14	38	40	350	410		4.2

	8	10	12	16	20	25	32	40	TOT	Date	04.12.2023
R										Det by	K.MOODLEY
Y				735					735	Ref Dwg	PM752-1-DRB-015
TOT				735					735	Job No	PM752
									TRACTOR SHED FOUNDATION		
									Revision	A	
									Schedule No	SRB-A-004	

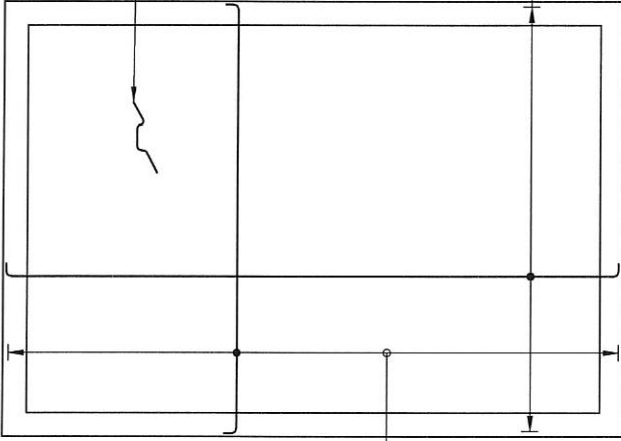


SECTION 8-8
SCALE 1:20



550X450 STUB COLUMN
REINFORCEMENT
SCALE 1:20

1. COVER TO REINFORCING:
FOUNDATION = 50mm
STUB COLUMN = 50mm
2. CONCRETE STRENGTH = 30MPa
3. REFER TO BENDING SCHEDULE
SRB-A-004.
4. REFER TO DCN 004 FOR SETTING OUT
DETAILS.



Y12-12-250 T1+B1

18Y12-13-250 T2+B2

150mm THICK ROOF SLAB (2 NO. OFF)
SCALE 1:50

NOTE:

- COVER TO REINFORCING:
ROOF SLAB = 50mm
- CONCRETE STRENGTH = 30MPa
- REFER TO BENDING SCHEDULE
SRB-A-006.
- REFER TO DCN 004 FOR SETTING
OUT DETAILS.

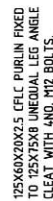
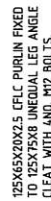
MEMBER	NO OF BARS	NO DIA	CUT LENGTH	TOTAL	BAR MARK	SC	A	B	C	D	E/R	kg
ROOF SLAB	2	50	Y12	4350	100	18	38	120	4160	120		386
	2	36	Y12	6150	72	19	38	120	5950	120		393
	2	26	Y12	800	52	20	83	250	80	250		37

8	10	12	16	20	25	32	40	TOT	Date	04.12.2023
R									Det by	K.MOODLEY
Y			816					816	Ref Dwg	PM752-1-DRB-017
TOT			816					816	Job No	PM752

		TRACTOR SHED ROOF SLAB		Revision	A
				Schedule No	SRB-A-006

PROJECT / DRAWING DESCRIPTION FOR TENDER	DRAWING APPROVED ENGINEER : PR ENG No. : SIGNATURE :	WILLIAM R.V. DUGTEREN 20150175	TITLE DRAFTING CHECK DESIGNER DESIGN CHECK PROJECT MANAGER PROJECT DIRECTOR	NAME K.MOODLEY M.R.V. DUGTEREN M.R.V. DUGTEREN M.R.V. DUGTEREN E.D. MAAL	SCALES AT A4 SIZE DRAWING SCALE 1:50 	DESIGNED  Member of the Surbana Jurong Group	CLIENT 	DESCRIPTION VHEMBE DISTRICT MUNICIPALITY TRACTOR SHED STRUCTURAL DRAWING ROOF SLAB REINFORCEMENT SHEET 1 OF 1	DRAWING NO 01	DRAWING TYPE DRB	DRAWING NUMBER 017	REGION A
									FOR TENDER			

SECTION A-A
SCALE 1:10



PHASE	DRAWING TYPE	DRAWING NUMBER
01	DST	011



Tractor Shed

Electrical lighting samples

Our Reference No. PM752

Prepared for Vhembe District Municipality

20 November 2023

Lighting and Socket Outlet Samples

Item	Description	Picture
Tractor Area	49W 5FT Vapourline LED with 10kA surge protection, Vandal-Resistant, IP 65	
External Area	55W LED FLOOD MIDI OPTIC with HIGH Impact glass of 1K 09, Vandal-Resistant, IP 66 High pressure die-cast aluminium	
	Day/Night Switch	
Store Room	49W 5FT Vapourline LED with 10kA surge protection, Vandal-Resistant, IP 65	
Locker Room	49W 5FT Vapourline LED with 10kA surge protection, Vandal-Resistant, IP 65	
Toilets	21W Panel LED with 960 lumen brightness, IP20, Water resistant	
Socket Outlets	16A Normal socket outlet, IP 44	
	16A Normal socket outlet, IP 44	

Refer to SANS 10142-1 The Wiring of Premises and SANS 10400 The Application of the National Building Regulations.



- NOTES**
1. All wiring to be made inside the gable conduits.
 2. Galvanised conduits are to be used for wiring and light switch wiring.
 3. The galvanised conduits are not to be drawn with two bends, so that wiring thought drawn with ease.
 4. All light switches are surface mounted shed structure.
 5. Emergency light fittings in the Shed 2 battery back-up pack.
 6. All lighting installations to comply with standards.

[illegible]

Old Parliament, 1
Complex, Tuck 1
Thonburi
Private Bag X-501
THOHOYANDOL
0950
Website: www.tcc.or.th
Tel (015) 960-20

CONSULTANT



Member of the Surtana Juring Group

Sampson Court,
 Rhododendri St.
 Jendler Ext 30
 Folsomville, 02559
 Website: www.smc.com

WOTLUNG
ENGINEER

PROJECT

WHEMBE DISTRICT MUNIC
TRACTOR SHED

DRAWING DESCRIPTION

LIGHTING LAYOUT

REV DATE	SCALE
2023/11/23	1:50

DRAWING NUMBER

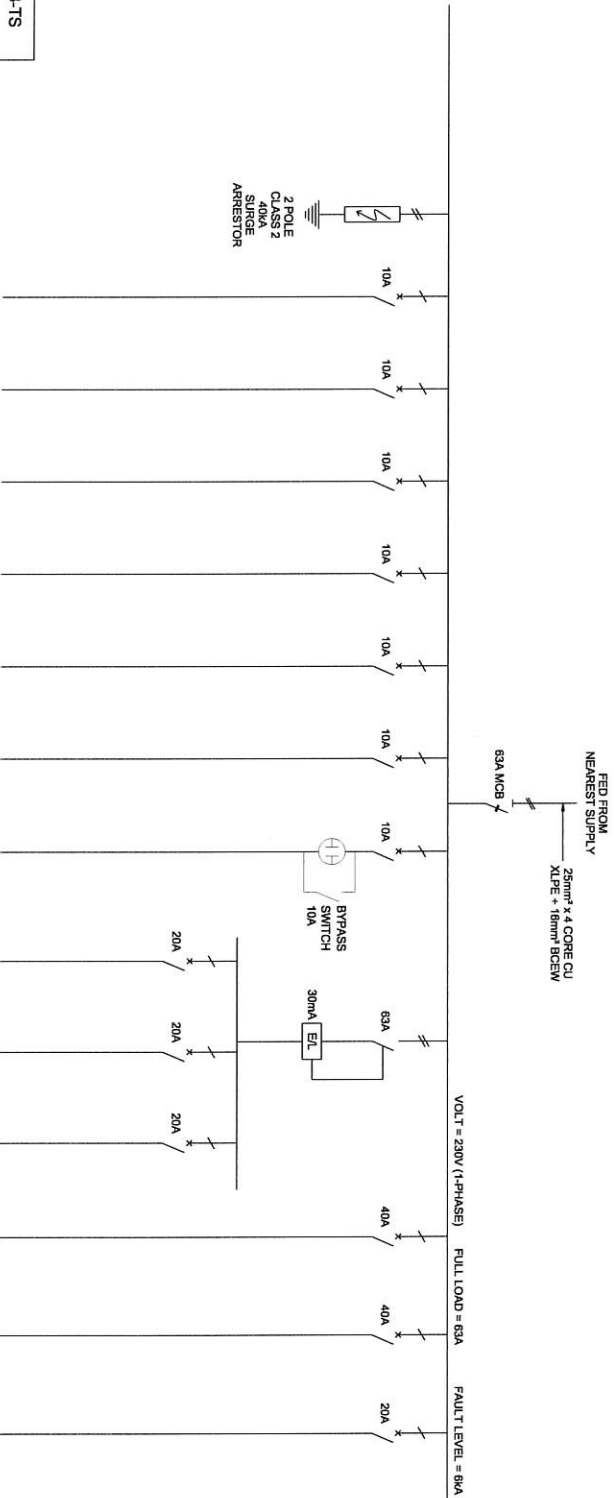
PM752-EE-C-LT-0001



FOR CONSTRUCTION ONLY

FOR CONSTRUCTION ONLY

SINGLE LINE DIAGRAM LEGEND	
	SINGLE PHASE - SINGLE POLE BREAKER
	SINGLE PHASE - DOUBLE POLE BREAKER
	CIRCUIT BREAKER
	SURGE ARRESTOR



CIRCUIT NUMBER	MAIN INCOMER	SURGE ARRESTOR	L1	L2	L3	L4	L5	EL1	EL2	P1	P2	P3	G1	G2	SPARE
CABLE SIZE	25mm² 4C CABLE + 16mm² EARTH		2 x 2.5mm² + 2.5mm² EARTH	2 x 2.5mm² + 2.5mm² EARTH	2 x 2.5mm² + 2.5mm² EARTH	2 x 2.5mm² + 2.5mm² EARTH	2 x 2.5mm² + 2.5mm² EARTH	2 x 2.5mm² + 2.5mm² EARTH	2 x 2.5mm² + 2.5mm² EARTH	2 x 4mm² + 4mm² EARTH	2 x 4mm² + 4mm² EARTH	2 x 4mm² + 4mm² EARTH	2 x 6mm² + 6mm² EARTH	2 x 6mm² + 6mm² EARTH	2 x 4mm² + 4mm² EARTH
CIRCUIT			LIGHTING							SMALL POWER					

DB-TS

FOR CONSTRUCTION ONLY

SMEC
SPECIALIST ELECTRICAL CONTRACTORS
Member of the Salford Group

SAB
SPECIALIST ELECTRICAL CONTRACTORS
Member of the Salford Group

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Tel: 01793 561170
Fax: 01793 561180
Website: www.smecc.co.uk

PROJECT
VHEMBE DISTRICT MUNICIPALITY
TRACTOR SHED

DRAWING DESCRIPTION
SINGLE LINE DIAGRAM
LAYOUT

REVISIONS

REV	DATE	DESCRIPTION
1	2023/11/23	FOR CONSTRUCTION ONLY

DESIGNED **DRAWN** **CHECKED**

DATE **DATE** **DATE**

DRAWING NUMBER
PMT52-EE-C-SLD-0003

SCALE
N.T.S.

SIZE
A1

DATE
2023/11/23

ENGINEER
SAB

DATE
2023/11/23

PROJECT
VHEMBE DISTRICT MUNICIPALITY
TRACTOR SHED

DRAWING DESCRIPTION
SINGLE LINE DIAGRAM
LAYOUT

REVISIONS

REV	DATE	DESCRIPTION
1	2023/11/23	FOR CONSTRUCTION ONLY

DESIGNED **DRAWN** **CHECKED**

DATE **DATE** **DATE**

DRAWING NUMBER
PMT52-EE-C-SLD-0003

SCALE
N.T.S.

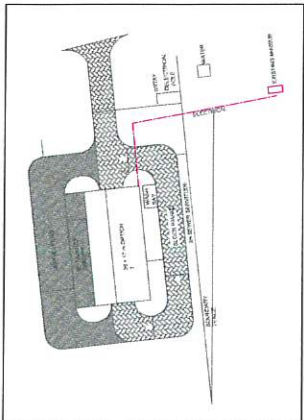
SIZE
A1

DATE
2023/11/23

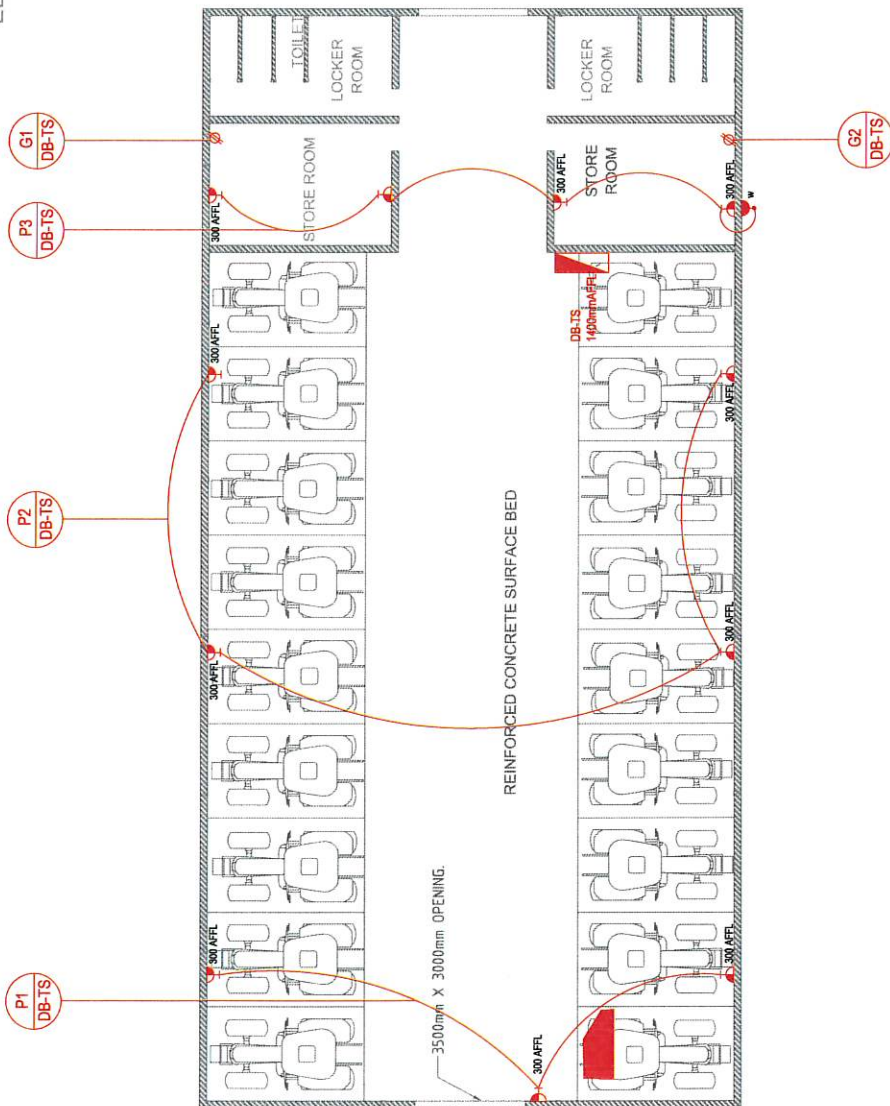
ENGINEER
SAB

DATE
2023/11/23

PROJECT
VHEMBE DISTRICT MUNICIPALITY
TRACTOR SHED



ELECTRICAL MAIN SUPPLY ROUTE



Refer to the notes prior to
Installation of electrical installations

SMALL POWER LAYOUT	
	ELECTRICAL DISTRIBUTION BOARD
	DOUBLE SWITCHED SOCKET OUTLET AT 300mm AFFL
	WEATHERPROOF SWITCHED SOCKET OUTLET AT 500mm AFFL
	WEATHERPROOF ISOLATOR ON ROOF

NOTES

1. All socket outlets and distribution board to be surface mounted.
2. Draw boxes for distribution board and socket outlets to be galvanised.
3. Weatherproof socket to be mounted at 500mm AFFL on the 1m exterior wall.
4. Weather proof isolators for geyser to be mounted on the roof.

REVISION SCHEDULE	
REV	DATE
1	2023/11/23
FOR CONSTRUCTION ONLY	

CLIENT
Old Parliament, Government
Complex, Tloane Vindla Street,
Private Bag 20020,
7901 GOROTIA/MAKODI,
Mopani District
Website: www.vhembe.gov.za
Tel: (018) 264-1138
Fax: (018) 264-0286

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Fax: (018) 264-0286
J.MOTLOANG
ENGINEER
2023/11/23
DATE

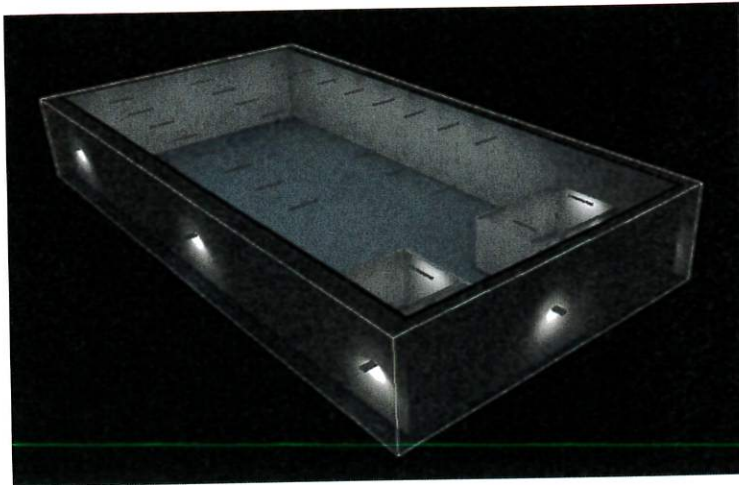
PROJECT
VHEMBE DISTRICT MUNICIPALITY
TRACTOR SHED

DRAWING DESCRIPTION
SMALL POWER LAYOUT

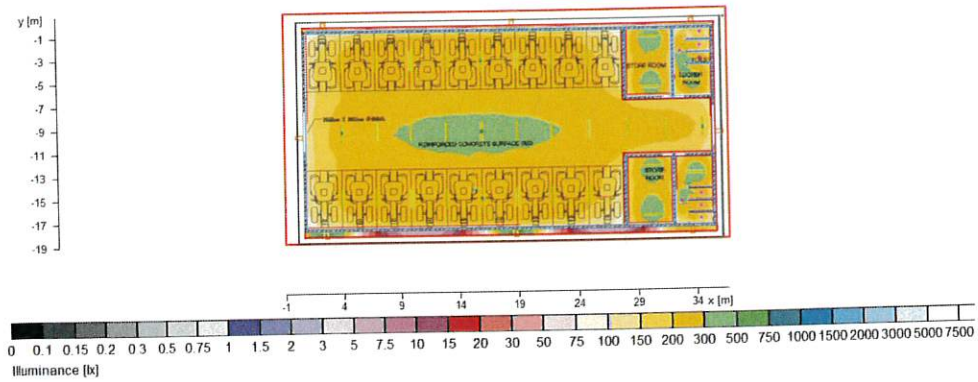
REV	DATE	SCALE	SIZE
1	2023/11/23	1:50	A1
DRAWING NUMBER			
PM752-EE-C-SP-0002			

FOR CONSTRUCTION ONLY

3D Lighting View



Lux Levels



Lighting Simulation

