3	1	1		T T
	METALWORK			
	-WORK GROUP 136-			
	WIRE MESH SECURITY FENCING			
3	Wire mesh fencing 2400mm high, including 300 mm flat wrapped razor wire on top, complete with bases, poles excavations etc. according to engineers detail, see details at the back of the bills of quantities	m	345	
	SECURITY FENCING			
	Powder coated steel security fencing as per COCHRANE PRODUCTS 358 HIGH SECURITY FENCING MESH. All details and specifications to be verified with manufacturer			
	"ClearVu" or other approved		ľ	
4	2100mm high "Cochrane ClearVu" fence or similar approved, complete with bases, excavations, post, barrier kerbs etc. according to manufacturers detail, see details at the back of the bills of quantities	m	142	
5	1200mm high "Cochrane ClearVu" fence or similar approved, complete with bases, excavations, post, barrier kerbs etc. according to manufacturers detail, see details at the back of the bills of quantities	m	61	
6	3000 x 1675mm High "Cochrane ClearVu" or similar approved panels with spikes on top between brick piers on top of brick walls, installed as per manufacturers specifications, complete as per details at the back of Bill of Quantities.	No	17	
7	2635 x 2535mm High "Cochrane ClearVu" or similar approved panels between brick piers on top of brick walls, installed as per manufacturers specifications, complete as per details at the back of Bill of Quantities.	No	6	
8	Wall spikes 2mm thick toughened steel 100mm electro- galvanised spikes fixed to top of walls in accordance to manufacturers specifications, see details at the back of these bill of quantities.	m	373	
9	700 x 2100mm High "Cochrane ClearVu" or similar approved Single gate complete as per details at the back of Bill of Quantities. (Type: G11)	No	2	
	Carried to Collection Section No. 3 Bill No. 4 Fencing, etc (Provisional)			R
	-176-	W.J	7 254	MB

	7	(10)	300	540 V
10	1000 x 1700mm High "Cochrane ClearVu" or similar approved Double gate complete as per details at the back of Bill of Quantities (type: G07&08).	No	2	
11	1100 x 2100mm High "Cochrane ClearVu" or similar approved Single gate complete as per details at the back of Bill of Quantities. (Type: G03)	No	5	
12	1800 x 2100mm High "Cochrane ClearVu" or similar approved Double gate complete as per details at the back of Bill of Quantities (type: G01).	No	5	
13	2280 x 2100mm High "Cochrane ClearVu" or similar approved Double gate complete as per details at the back of Bill of Quantities (type: G05).	No	2	
14	6500 x 2200mm High "Cochrane ClearVu" or similar approved double swing gate complete on and including guide rollers and gate motor, see details at the back of these bill of quantities.(Type: G06)	No	2	
	Section No. 3 Bill No. 4	1		R
	Fencing, etc (Provisional)		CCAC	
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Section No. 3	Î Î	1	
Bill No. 4			
Fencing, etc (Provisional)			
COLLECTION			
Total Brought Forward from Page No.		Page No 175 176 177	Amount
		R	
Carried Forward to Summary of Section No. 3 Section No. 3 Bill No. 4 Fencing, etc (Provisional)		PC 256	

Bill	SECTION SUMMARY - External Works (Provisional)	Page	ľ	Amount
No		No		
1	Site works and Paving (Provisional)	158		
2	Water supplies (Provisional)	169		
3	Soil Drainage (Provisional)	174		
4	Fencing, etc (Provisional)	178		
				-
	CARRIED TO FINAL SUMMARY		R	
	Section No. 3			
		190		1
	-179-	105	257	. 11

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Item No		Unit	Quantity	Rate	Amount
110	SECTION NO 4				
	BILL NUMBER 1				
	PROJECT ASSESSMENT SCHEME (PROVISIONAL)				
	SUPPLEMENTARY PREAMBLES				
	Tenderer is advised to carefully price this section of the bills of quantities in conjunction with C1.2: Contract Data, C2.1: Pricing Assumptions and C3: Scope of Work incorporated in the tender documents for this tender				
	The profit and attendance priced herein under is inclusive of associated costs to the contractor for implementation. The profit and attendance % is to remain unchanged for the duration of contract - refer to C2.1 Pricing Assumptions				
	TARGETED ENTERPRISE DEVELOPMENT CPG				
	Enterprise Development of Targeted Enterprise or JV Partners				
1	Needs Analysis and Enterprise Development Plan per Targeted Enterprise	No	2		
2	Monitoring and Interim reporting per Targeted Enterprise (Enterprise Development Co-ordinator and mentor)	PerQ	8		
3	Project Completion report per Targeted Enterprise	No	2		
	SUB-TOTAL			R	
4	Allow for profit & Attendance on Enterprise Development		Item		
	CONTRACT SKILLS DEVELOPMENT GOALS - CSDG				
	The following allowance will be subject to adjustment based on the notional cost (see Table 3) as per Government Gazette No. 48491 of 28 April 2023 as amended in line with the training opportunity agreed with the employer.				
5	Minimum Contract Skills Development Goal (CSDG) (0.5% x "Sub total A" on the Final Summary)		%		
	Carried to Collection Section No. 4 Bill No. 1 Project Assessment Scheme (Provisional)			R	
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6	Allow for profit & Attendance		Item			
				i i		
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	Carried to Collection	า		R		
	Section No. 4					
	Bill No. 1 Project Assessment Scheme (Provisional)					
	Project Assessment Scheme (Provisional)					
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Section No. 4	T T	1 1
Bill No. 1		
Project Assessment Scheme (Provisional)		
COLLECTION		
Total Brought Forward from Page No.	Page No 180 181	Amount
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Section No. 4 Bill No. 1 Project Assessment Scheme (Provisional)		
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Section No	FINAL SUMMARY		Page No		Amount
1	Preliminaries		46		
2	Building Work		145		
3	External Works (Provisional)		179		
	SUBTOTAL			R	
	Part B : Electrical Installation		Item		
	Part C : Mechanical Installation		Item		
	SUBTOTAL "A"			R	
4	Project Assessment Scheme (Provisional)		182		
	CLO Allowance				
	Provide a budgetary allowance of One Million Rand (R 1'000'000.00) for CLO complete		Item		1 000 000.00
	SUBTOTAL			R	
	CPAP Provision				
	CPAP Provision for the construction period		Item		7 000 000.00
	SUBTOTAL			R	
	ADD:				
	VALUE ADDED TAX			R	
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	1				
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# CONSTRUCTION OF DUNDONALD NEW POLICE STATION: MPUMALANGA PROVINCE

BID: 19/1/9/1/28TB(24)

**PART C:** 

**CONTRACT** 

Part C3

Scope of Work



JBCC Series 2000

## CONTENTS

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C3	SCOPE OF WORKS	25

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JBCC Series 2000

**Project** 

Construction of Dundonald new Police Station, Mpumalanga

**Employer** 

South African Police Service

Reference

19/1/9/1/28TB(24)

## C3.1. DESCRIPTION OF THE WORKS

#### C3.1.1. Employer's objectives

The South African Police Service endeavours to construct the new SAPS Police Station at 24/210-IT Dundonald, Mpumalanga

In addition to the above, the project aims to achieve the following:

- a) to provide a minimum Contract Participation Goal (CPG) of 5% of the total contract value and develop targeted enterprises by the main or lead partner contractors
- to train learners in Occupational qualifications, trade qualification, work integrated learners – P1 and P2 learners, professional candidates (which ever is applicable after award of the tender
- c) to deliver public infrastructure using labour-intensive methods in accordance with EPWP Guidelines
- d) Compulsory 30% for Subcontracting

The **employer** intends to appoint a suitable **contractor** to construct facilities and amenities as per the **employer**'s specifications

The general intent of this contract is that the **contractor** shall procure all items necessary to construct and complete the **works** in accordance with the terms of this contract, in a workmanlike and expeditious manner

## C3.1.2. Overview of the works

Works included in this contract comprise the construction of a New Police Station complex, with services that include fire reticulation and equipment, domestic hot and cold-water installation, drainage installation, electrical and lighting installation, to all buildings, as well as HVAC installation to the Main Police Building (Block A) and the Cell Block (Block B). Services installations include back-up installations for electricity and water supply, as well as septic tank installation. Services connections which form part of the project are Eskom and municipal water supply.

All buildings forming part of this complex are single-storey, and the total gross floor building is approximately  $1799 \text{ m}^2$ 

C3: SCOPE OF WORKS

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The Site works comprise bulk earthworks, landscaping, storm water management installation, services reticulation, paving for pedestrian and vehicular circulation, as well as face brick and steel perimeter fencing, including gates and carports.

Also included is the construction of two access roads. The main access road connection will be to the existing provincial road, which runs parallel to the south-western boundary of the site and will include works to that road. A second access road will be constructed along a road servitude on the east.

The total area of the site is 7500 m<sup>2</sup>, but a portion of the site works, as described above, falls outside the site boundary.

In addition to the requirements specified, the design will ensure that the buildings comply with the national building regulations and standards of the country (SANS), the legal, safety, and health requirements, and should observe sustainable design principles.

The extent of the works is detailed below, and the portion of the work relevant to the successful bidder of this document has also been stated below

#### C3.1.3. Extent of the works

The following is the high-level scope for the project:

- a) Block A: Main Police Station (1004m2) comprising of:
  - i. Community service Centre
  - ii. Public Toilets
  - iii. Victim Friendly facilities
  - iv. Offices
  - v. Boardroom
  - vi. General stores
- b) Block B: Single-storey Cell Block (394m2)
- c) Maintenance Staff rest rooms and storerooms (43m2)
- d) 3-bed Staff Housing, consisting of 2 Units (165m2)
- e) Bachelor Staff Housing Block, consisting of 2 Units (64m2)
- f) Refuse Area (29m2)
- g) Car wash bay (47m2)
- h) Covered Parking for 16 bays, including solar panel installation
- i) Generator Yard with ancillary site work
- j) 103m3 Sectional steel Water Storage tank, divided into domestic and fire water, including separate booster pumps domestic fire water.
- k) Borehole, Pump and filtration room (23m2)
- I) Septic Tank and soakaway
- m) Site Work, comprising of:
  - i. Bulk earthworks
  - ii. Paved driveways, parking areas and pedestrian walkways
  - iii. Landscaping

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- iv. Boundary and site walls, fencing, and gates
- v. Construction of access from existing provincial road, D26 (Senzeni Street), including construction of additional lanes, speed attenuation structures, road-markings, signage, and storm water structures.
- vi. Construction of new servitude access road (Majikiza Street)
- vii. Services installation, including storm water management, septic tank, borehole, and site lighting

#### C3.1.4. Location of the works

See C4: Site Information

#### C3.2. WORKS SPECIFICATION

## C3.2.1. Applicable national and international standards

The following, but not limited to, national specifications even though not bound apply to this document, refer to purpose written specifications for all national standards:

- a) Occupation Health and Safety Act, 1993
- b) SANS 10400: National Building Regulations
- c) SANS 10400-XA: Energy Usage in Buildings
- d) SANS 10400-X: Environmental sustainability
- e) SANS 1186-1: Symbolic safety signs Part 1: Standard signs and general requirements
- f) SANS 10142: The wiring pf premises (part 1 & 2)
- g) SANS 10389-1: Exterior lighting Part 1 Artificial lighting of exterior areas for work and safety
- h) SANS 10389-2: Exterior lighting Part 2 Exterior security lighting
- i) SANS 1765: Low voltage switchgear and control gear assemblies (distribution boards) with rated short circuit withastand strength up to and including 10kA
- j) SANS 10313: Protection against lightning physical damage to structures and life hazard
- k) SANS 62305: Protection against lightning
- l) SANS 62040: Uninterruptible Power Systems (UPS)
- m) SANS 10252-1: Water Supply Installations for Buildings
- n) SANS 10252-2: Drainage Installations for building
- o) Local Municipality by laws & requirements
- p) SAPS Project Five Star 2012 Specifications for New and Existing Police Cell
- q) NHBRC requirements, as per the Housing Consumers Protection Measures Act,
   1998 (Act No. 95 of 1998)

#### C3.2.2. Particular or generic specifications

The following purpose written (project specific) specifications are applicable to the **works** and are attached as Annexures after C4: Site Information

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- a) Paint and Epoxy Specifications (Flowcrete specification, ref. nr. MN0010JM 21 October 2024; Plascon paint specification, ref. nr. KP017513, 24 May 2024)
- b) Civil Specifications (2023-122 Dundonald Tender Specifications Combined)
- c) SAPS Dundonald Structural Specifications Tender Document, 16 October 2024
- d) SAPS Dundonald Part B Electrical Services Installation, Section 1 (Electrical Installation), Section 2 (Standby Generator Installation), Section 3 (PV Solar Installation)
- e) HVAC Tender Specifications, ref. nr. 3703 HVAC, Rev. 0, June 2024
- f) Fire Tender Specifications, ref. nr. 3703 FE & FS, Rev. 2, June 2024
- g) Occupational Health and Safety Specification for Construction of New Police Station in Dundonald, Rev 2, July 2024
- h) SAPS Project Five Star 2012 Specifications for New and Existing Police Cells
- i) Design Report for Energy Efficiency SANS 10400 XA, Dundonald, Rev. A, 28 May 2024

## C3.2.3. Minimum Standard requirements

- a) CIDB Best Practice Project Assessment Scheme (Government Gazette No.43726 of 18 September 2020)
- Standard for Developing Skills through Infrastructure Contracts, published in Gazette Notice 48491 of 28 April 2023
- c) Standard for Indirect Targeting for Enterprise Development through Construction Works Contracts, published in Gazette Notice No.36190 of 25 February 2013
- d) Guidelines for the Implementation of Labour-Intensive Infrastructure Projects Under the Expanded Public Works Programme (EPWP) – Third Edition 2015

#### C3.3. DRAWINGS

## C3.3.1. Tender Drawings

Tender drawings are provided in order to give an overview of the project. Any ambiguities shall be clarified by the tenderer with the **employer**'s **agent** prior to the submission of tenders

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

Drawings for construction purposes will be issued to the appointed contractor during the execution of the contract

The following drawings are annexed after C4: Site Information, and form part of the contract. The drawings issued to tenderers must be regarded as provisional and preliminary for the tenderer's benefit to assess the scope generally

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#	DESCRIPTION	DRAWING No.	REVISIO	N AND DATE
1.0	ARCHITECTURAL DRAWINGS			
1.1	Locality Plan	695.03 - 0/000	Rev. T	23 10 2024
1.2	SDP Site Plan	695.03 - 0/001	Rev. S	23 10 2024
1.3	Site Layout Plan	695.03 - 0/002	Rev. S	23 10 2024
1.4	Perspectives	695.03 - 0/2000	Rev. S	23 10 2024
1.5	Landscape Plan	OLA 531/000/01	Rev. 1	06 06 202
1.6	Overall Ground Floor Plan	695.03 - 0/100	Rev. S	23 10 202
1.7	Boundary Wall & Fencing Plan	695.03 - 0/110	Rev. S	23 10 202
1.8	Boundary Wall & Fencing Details 1	695.03 - 0/111	Rev. S	23 10 2024
1.9	Boundary Wall & Fencing Details 2	695.03 - 0/112	Rev. S	23 10 2024
1.10	Overall Roof Plan	695.03 - 0/150	Rev. S	23 10 2024
1.11	Police Station (Block A): Floor Plans	695.03 - A/100	Rev. S	23 10 2024
1.12	Police Station (Block A): Ceiling Plans	695.03 - A/110	Rev. S	23 10 2024
1.13	Police Station (Block A): Floor Finishes Plans	695.03 - A/120	Rev. S	23 10 2024
1.14	Police Station (Block A): Wall Finishes Plans	695.03 - A/130	Rev. S	23 10 2024
1.15	Police Station (Block A): Sections	695.03 - A/200	Rev. S	23 10 2024
1.16	Police Station (Block A): Sections	695.03 - A/201	Rev. S	23 10 2024
1.17	Police Station (Block A): Sections	695.03 - A/202	Rev. S	23 10 2024
1.18	Police Station (Block A): Elevations	695.03 - A/300	Rev. T	23 10 2024
1.19	Cells (Block B): Floor Plans	695.03 - B/100	Rev. S	23 10 2024
1.20	Cells (Block B): Ceiling Plans	695.03 - B/110	Rev. S	23 10 2024
1.21	Cells (Block B): Floor Finishes Plans	695.03 - B/120	Rev. S	23 10 2024
1.22	Cells (Block B): Wall Finishes Plans	695.03 - B/130	Rev. S	23 10 2024
1.23	Cells (Block B): Sections	695.03 - B/200	Rev. S	23 10 2024
1.24	Cells (Block B): Sections	695.03 - B/201	Rev. S	23 10 2024
1.25	Cells (Block B): Elevations	695.03 - B/300	Rev. S	23 10 2024
1.26	Housing Units (Block C): Plans, Section and Elevations	695.03 - C/100	Rev. S	23 10 2024
1.27	Housing Units (Block C): Finishes	695.03 - C/110	Rev. S	23 10 2024
1.28	Housing Units (Block C): Joinery Details	695.03 - C/400	Rev. S	23 10 2024
1.29	Bachelor Units (Block D): Plans, Section and Elevation	695.03 - D/100	Rev. S	23 10 2024
1.30	Bachelor Units (Block D): Finishes	695.03 - D/110	Rev. S	23 10 2024
1,31	Bachelor Units (Block D): Joinery Details	695.03 - D/400	Rev. S	23 10 2024
1.32	Outbuildings E: Cleaners' Rest Room & Stores	695.03 - E/100	Rev. S	23 10 2024
1.33	Pump Room & Refuse Yard	695.03 - F/100	Rev. S	23 10 2024
.34	Carport Details	695.03 - G/100	Rev. S	23 10 2024
.35	Construction Details	695.03 - 400	Rev. S	23 10 2024
.36	3 Bedroom Bathroom Details	695.03 - 410	Rev. S	23 10 2024
.37	Bachelors' Bathroom Details	695.03 - 411	Rev. S	23 10 2024
.38	Public Bathrooms	695.03 - 412	Rev. S	23 10 2024
.36	Public Bathrooms 2	695.03 - 413	Rev. S	23 10 2024
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.40	Staff Toilets 1	695.03 - 415	Rev. S	23 10 2024
.41		695.03 - 416	Rev. S	23 10 2024
.42 .43	Staff Toilets 2 Treatment Bathroom	695.03 - 417	Rev. S	23 10 2024

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1.44	Stationery Store	695.03 - 419	Rev. S 23 10 2
1.45	Stationery Store 2	695.03 - 420	Rev. S 23 10 2
1.46	Ammunitions Store	695.03 - 421	Rev. S 23 10 2
1.47	Firearms Store	695.03 - 422	Rev. S 23 10 2
1.48	Large Items Saps 13 Store	695.03 - 423	Rev. S 23 10 2
1.49	General Store	695.03 - 424	Rev. S 23 10 2
.50	Small Items Store	695.03 - 425	Rev. S 23 10 2
.51	Temp Saps 13 Store	695.03 - 426	Rev. S 23 10 2
.52	Docket Room	695.03 - 427	Rev. S 23 10 2
.53	Radio Room And Cas Room Worktops	695.03 - 429	Rev. S 23 10 2
.54	Cells (Block B): Holding Cell	695.03 - 433	Rev. T 23 10 2
.55	Cells (Block B): Guard Office	695.03 - 434	Rev. T 23 10 2
.56	Cells (Block B): Visitor Area Details	695.03 - 437	Rev. T 23 10 2
.57	Cell Block Gate Details	695.03 - 438	Rev. S 23 10 2
.58	Cell Window Details	695.03 - 440	Rev. S 23 10 20
.59	Cell Door Details	695.03 - 441	Rev. S 23 10 20
.60	Reception Counters	695.03 - 442	Rev. S 23 10 2
.61	Staff Rest Room & Kitchen	695.03 - 443	Rev. S 23 10 2
.62	Boardroom Kitchen & Cleaners	695.03 - 444	Rev. S 23 10 20
.63	Ramp Details	695.03 - 445	Rev. S 23 10 26
.64	Window Schedule 1	695.03 - 600	Rev. S 23 10 20
.65	Window Schedule 2	695.03 - 601	Rev. S 23 10 20
.66	Door Schedule 1	695.03 - 620	Rev. S 23 10 20
.67	Door Schedule 2	695.03 - 621	Rev. S 23 10 20
.68	Glass Door - Shopfront Schedule	695.03 - 622	Rev. S 23 10 20
.69	Gate Schedule	695.03 - 640	Rev. \$ 23 10 20
.70	Sanitary & Fittings Schedule	695.03 - 700	Rev. T 23 10 20
.71	Finishes Schedule	695.03 - 720	Rev. T 23 10 20
.72	Signage: External Signs Key Plan	695.03 - 760	Rev. T 23 10 20
.73	Signage: Block A Key Plan	695.03 - 761	Rev. T 23 10 20
.74	Signage: Flag Poles	695.03 - 765	Rev. T 23 10 20
.75	Signage: Feature Wall	695.03 - 766	Rev. T 23 10 20
.76	Signage: Main Entrance	695.03 ~ 767	Rev. T 23 10 20
.77	Signage: Helpdesk And Service Point	695.03 - 768	Rev. T 23 10 20
80	Signage: Chromadek Signs	695.03 - 769	Rev. T 23 10 20
.81	Signage: Aluminium Signs	695.03 - 770	Rev. T 23 10 20
.82	Signage: Vista Signs	695.03 - 771	Rev. T 23 10 20
.83	Ironmongery Schedule	695.03 - 800	Rev. 1 03 07 20
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.0	CIVIL ENGINEERING DRAWINGS		T D 4 07000
1	Combined Services Layout	2023-122-0001	Rev A 07 06 20
.2	Bulk Earthworks Layout	2023-122-2001	Rev E 20 05 20
.3	External Roads Layout	2023-122-3002	Rev D 20 05 20
.4	Roads Layout	2023-122-3301	Rev D 20 05 20

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2.5	Roads Typical Details	2023-122-3321	Rev B	20 05 202
2.6	Stormwater Layout	2023-122-3801	Rev D	20 05 202
2.7	Stormwater Long Section	2023-122-3831	Rev B	23 05 2024
2.8	Stormwater Typical Details	2023-122-3851	Rev B	20 05 2024
2.9	External Stormwater Layout	2023-122-3501	Rev B	20 05 202
2.10	Stormwater Longsection	2023-122-3531	Rev B	27 05 202
2.11	Sewer Layout	2023-122-4301	Rev D	20 05 202
2.12	Sewer Long Sections	2023-122-4331	· Rev B	23 05 202
2.13	Sewer Long Sections	2023-122-4332	Rev B	23 05 202
2.14	Sewer Typical Details	2023-122-4351	Rev B	20 05 202
2.15	External Water Layout	2023-122-4501	Rev D	20 05 202
2.16	Internal Water Layout	2023-122-4801	Rev D	20 05 202
2.17	Internal Water Typical Details	2023-122-4851	Rev B	20 05 202
2.18	Internal Water Typical Details	2023-122-4852	Rev B	20 05 2024
3.0	STRUCTURAL ENGINEERING DRAWINGS			
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3.2	Building E Foundation & Surfacebed Layout	2023-122-1040	<u>C</u>	27 09 202
3.3	Refuse Yard Foundation & Surfacebed Layout	2023-122-1045		27 09 202
3.4	Generator Plinth Layout and Details	2023-122-1050	В	27 09 202
3.5	Wash Bay Layout & Details	2023-122-1065	В	27 09 202
3.6	Water Tank Plinth Layout and Details	2023-122-1090	C	27 09 202
3.7	Carport A Layout and Details	2023-122-1570	С	27 09 202
3.8	Carport B Layout and Details	2023-122-1572	В	27 09 202
3.9	Carport C Layout and Details	2023-122-1574	В	27 09 202
3.10	Building D Foundation & Surfacebed Layout	2023-122-1035	E	27 09 2024
3.11	Building A Foundation Layout	2023-122-1010	E	27 09 2024
3.12	Building B Foundation Layout	2023-122-1020	С	27 09 2024
3.13	Building A Surfacebed Layout	2023-122-1012	<u>c</u>	27 09 2024
3.14	Building A Surfacebed Saw Cut Layout	2023-122-1013	В	27 09 2024
3.15	Building B Surfacebed Layout	2023-122-1022	С	27 09 2024
3.16	Building B Surfacebed Saw Cut Layout	2023-122-1023	В	27 09 2024
3.17	Building B Concrete Slab Layout	2023-122-1025	C	27 09 2024
3.18	Building A Concrete Slab Layout	2023-122-1015	D	27 09 2024
3.19	Pump Room Layout and Details	2023-122-1060	В	27 09 2024
3.20	Site Boundary Wall A Layout & Details	2023-122-1080	С	27 09 2024
3.21	Site Boundary Wall B Layout & Details	2023-122-1081	В	27 09 2024
3.22	Site Boundary Wall C Layout & Details	2023-122-1082	C	27 09 2024
3.23	Site Boundary Wall D Layout & Details	2023-122-1083	В	27 09 2024
3.24	Site Boundary Wall E Layout & Details	2023-122-1084	В	27 09 2024
3.25	Site Boundary Wall F Layout & Details	2023-122-1085	С	27 09 2024
3.26	Site Boundary Wall G Layout & Details	2023-122-1086	В	27 09 2024
3.37	Site Boundary Wall H Layout & Details	2023-122-1087	В	27 09 2024
3.28	Building B Overhead Grilles Sections & Details	2023-122-1520	С	27 09 2024

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3.29	Building A Surfacebed Sections & Details	2023-122-1014	Α	27 09 2024
3.30	Building A Foundation Sections and Details	2023-122-1011	В	27 09 2024
3.31	Building A Roof Sections	2023-122-1018	_ A	27 09 2024
3.32	Building B Roof Sections	2023-122-1028	Α	27 09 2024
3.33	Site Boundary Wall I Layout & Details	2023-122-1088	Α	27 09 2024
3.34	General Concrete & Steel Specifications	2023-122-1001	Α	16 10 2024
3.35	Brick Masonry Notes & Details 1	2023-122-1002	A	16 10 2024
3.36	Brick Masonry Notes & Details 2	2023-122-1003	В	16 10 2024
3.37	Steel Roof Details	2023-122-1501	Α	16 10 2024
3.38	Steel Elevation Details	2023-122-1502	Α	16 10 2024
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3.41	Beam Splices IPE, UB & UC	2023-122-1506	A	16 10 2024
3.42	Angle Splices	2023-122-1507	Α	16 10 2024
3.43	Water Tank Plinth Reinforcement Layout	2023-122-1090-SO1	<u>A</u>	27 05 2024
3.44	Water Tank Plinth Reinforcement Schedule	BS-2023-122-1090-SO1-001	Α	27 05 2024
3.45	Washbay Reinforcement Schedule	BS-2023-122-1065-001	Α	27 05 2024
3.46	Washbay Reinforcement Schedule	BS-2023-122-1065-002	Α	27 05 2024
3.47	Washbay Reinforcement Schedule	BS-2023-122-1065-003	Α	27 05 2024
3.48	Washbay Reinforcement Schedule	BS-2023-122-1065-004	A	27 05 2024
3.49	Washbay Reinforcement Schedule	BS-2023-122-1065-005	Α	27 05 2024
3.50	Washbay Reinforcement Schedule	BS-2023-122-1065-005A	Α	27 05 2024
3.51	Refuse Area Reinforcement Schedule	BS-2023-122-1045-001	Α	27 05 2024
3.52	Refuse Area Reinforcement Schedule	BS-2023-122-1045-002	Α	27 05 2024
3.53	Generator Plinth Reinforcement Schedule	BS-2023-122-1050-001	Α	27 05 2024
3.54	Generator Plinth Reinforcement Schedule	BS-2023-122-1050-001A	Α	27 05 2024
3.55	Generator Plinth Reinforcement Schedule	BS-2023-122-1050-001B	Α	27 05 2024
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3.57	Carport Foundation Reinforcement Schedule	BS-2023-122-1572-001	Α	27 05 2024
3.58	Carport Foundation Reinforcement Schedule	BS-2023-122-1574-001	A	27 05 2024
3.59	Building E Reinforcement Schedules	BS-2023-122-1040-001	Α	27 05 2024
3.60	Building E Reinforcement Schedules	BS-2023-122-1040-002	Α	27 05 2024
3.61	Building D Reinforcement Schedules	BS-2023-122-1035-001	A	27 05 2024
3.62	Building D Reinforcement Schedules	BS-2023-122-1035-002	Α	27 05 2024
3.63	Building C Reinforcement Schedules	BS-2023-122-1030-001	Α	27 05 2024
3.64	Building C Reinforcement Schedules	BS-2023-122-1030-002	A	27 05 2024
3.65	Building C Reinforcement Schedules	BS-2023-122-1030-003	Α	27 05 2024
3.66	Building C Reinforcement Schedules	BS-2023-122-1030-004	A	27 05 2024
3.67	Building A- Slab Reinforcement Layout	2023-122-1015-SO1	В	30 05 2024
3.68	Building A-Slab Reinforcement Schedules	BS-2023-122-1015-S01-001	В	30 05 2024
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3.70	Building A-Foundation Reinforcement Schedules	BS-2023-122-1010-001	Α	30 05 2024
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3.77	Building A-Foundation Reinforcement Schedules	BS-2023-122-1010-009	Α	30 05 2024
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3,80	Building A-Foundation Reinforcement Schedules	2023-122-1025-SO1	В	30 05 2024
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3.83	Building B-Slab Reinforcement Schedules		В	30 05 2024
3.84	Building B-Foundation Reinforcement Schedules	BS-2023-122-1020-001	Ä	30 05 2024
3.85	Building B-Foundation Reinforcement Schedules	BS-2023-122-1020-002	A	30 05 2024
3.86	Building B-Foundation Reinforcement Schedules	BS-2023-122-1020-003		30 05 2024
3.87	Building B-Foundation Reinforcement Schedules	BS-2023-122-1020-004	Α	30 05 2024
3.88	Building A-Surfacebed Reinforcement Schedules	BS-2023-122-1012-001	A.	
3.89	Boundary Wall Reinforcement Schedules	BS-2023-122-1081-001	Α .	31 05 2024
3.90	Boundary Wall Reinforcement Schedules	BS-2023-122-1081-002	A	31 05 2024
3.91	Boundary Wall Reinforcement Schedules	BS-2023-122-1081-003	Α .	31 05 2024
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3.95	Boundary Wall Reinforcement Schedules	BS-2023-122-1083-001	Α	31 05 2024
3.96	Boundary Wall Reinforcement Schedules	BS-2023-122-1083-002	A	31 05 2024
3.97	Boundary Wall Reinforcement Schedules	BS-2023-122-1083-003	A	31 05 2024
3.98	Boundary Wall Reinforcement Schedules	BS-2023-122-1083-004	Α	31 05 2024
3.99	Boundary Wall Reinforcement Schedules	BS-2023-122-1084-001	Α	31 05 2024
3.100	Boundary Wall Reinforcement Schedules	BS-2023-122-1084-002	A	31 05 2024
3.101	Boundary Wall Reinforcement Schedules	BS-2023-122-1084-003	Α	31 05 2024
3.102	Boundary Wall Reinforcement Schedules	BS-2023-122-1085-001	Α	31 05 2024
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3.108	Boundary Wall A Reinforcement Schedules	BS-2023-122-1080-001	A	03 06 2024
3.109	Boundary Wall A Reinforcement Schedules	BS-2023-122-1080-002	Α	03 06 2024
3.110	Boundary Wall A Reinforcement Schedules	BS-2023-122-1080-003	Α	03 06 2024
3.111	Boundary Wall A Reinforcement Schedules	BS-2023-122-1080-004	Α	03 06 2024
3.112	Boundary Wall A Reinforcement Schedules	BS-2023-122-1080-005	Α	03 06 2024
3,113	Boundary Wall H Reinforcement Schedules	BS-2023-122-1087-001	A	03 06 2024
3.114	Boundary Wall H Reinforcement Schedules	BS-2023-122-1087-002	Α	03 06 2024
3,114	Boundary Wall I Reinforcement Schedules	BS-2023-122-1088-001	Α	03 06 2024
3.116	Boundary Wall I Reinforcement Schedules	BS-2023-122-1088-002	Ä	03 06 2024
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3.117	Pump Room Reinforcement Schedules	BS-2023-122-1060-002	A	03 06 2024

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3.121	In-Situ Lintels & Sills 345thk Wall Reinforcement Schedules	BS-2023-122-999-002	Α	13 06 202
3.122	Building A-Column Reinforcement Schedules	BS-2023-122-1010-101	A	16 10 202
3.123	Building A-Cotumn Reinforcement Schedules	BS-2023-122-1010-102	Α	16 10 202
3.124	Building A-Column Reinforcement Schedules	BS-2023-122-1010-103	A	16 10 202
3.125	Building A-Column Reinforcement Schedules	BS-2023-122-1010-104	Α	16 10 202
3.126	Building A-Column Reinforcement Schedules	BS-2023-122-1010-105	A	16 10 202
·	Building A-Column Reinforcement Schedules	BS-2023-122-1010-106	Α	16 10 202
3.127	Building B-Column Reinforcement Schedules	BS-2023-122-1020-005	Α	16 10 202
3.128	Building B-Threshold Reinforcement Schedules	BS-2023-122-1022-001	Α	16 10 202
3.129	Building B-Trench Reinforcement Schedules	BS-2023-122-1022-002	Α	16 10 202
3.130	Building B-Slab Reinforcement Schedules	BS-2023-122-1025-S01-003	A	16 10 202
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#### C3.3.2. Construction Drawings

Construction drawings will, in terms of Clause 3.7 of the JBCC Principal Building Agreement Edition 4.1 of March 2005 be issued to the contractor by the principal agent on the commencement date and from time to time as required

The successful contractor will be supplied with three (3) sets of unreduced paper prints of each drawing free of charge. Any additional prints required will be for the account of the contractor

The contractor shall conform in all aspects to the drawings and specifications and to any written instructions, which the principal agent may provide him with during the contract

It is the contractor's responsibility to ensure that work is carried out in accordance with the latest revision of the construction drawings

Only figured dimensions may be used, and the drawings shall not be scaled unless the contractor is so instructed by the principal agent in writing. The principal agent will upon written request provide any dimensions that may have been omitted from the drawings

Should any differences or contradictions exist in the documents or dimensions used in the documents, the contractor shall be responsible for obtaining clarification thereof from the principal agent. Such clarification shall be in writing and shall be final and binding

Should the contractor fail to seek clarification of any differences or contradictions, the contractor shall be solely liable for any costs that may arise due to his failure in this regard

#### C3.3.3. As-built drawings

The contractor shall mark up on drawings provided to him for this purpose the exact positions and details of all infrastructure, pipelines, and the like constructed under the contract, as well as the details of all existing services found during the contract. The marked-up drawings shall be handed to the principal agent monthly as the work progresses

#### **PLANT AND MATERIALS** C3.4.

#### C3.4.1. Plant and materials supplied by the employer

No plant and "free issue" materials are provided by the employer

#### C3.4.2. Materials, samples, and shop drawings

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

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

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

#### **ACCESS TO WORKS SITE** C3.5.

See item C4.5 of Part 4: Site Information

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#### **EXISTING SERVICES** C3.6.

#### C3.6.1. Known services

Items have been allowed in the bills of quantities for dealing with and protecting existing services where they are known

The contractor shall take whatever extra precautions are required to protect all existing services from damage during the period of the contract. The contractor shall make use of hand excavation to expose services. Any damage to existing services indicated by the relevant service providers or other damage as a result thereof, shall be for the contractor's account

The contractor shall engage with the employer, local authority and principal agent to identify the positions of all existing services. Such service positions must be compared to those indicated on the drawings and any additional services so located, must be brought to the attention of the principal agent and marked up on the drawings. These will then become known services.

#### Water Supply

Water is not available on site. The contractor must provide water for the construction purposes. The Contractor may investigate the possibility of borehole...

#### **Electrical power supply**

Electrical power supply is not available on site. The Contractor must make his own arrangements for a connection to the electrical power supply. The Contractor will be responsible, at his own cost, for the supply and distribution of electricity for construction use

All existing services shall be regarded as live and operational until otherwise advised by the responsible service provider or official

#### C3.6.2. Treatment of existing services

Before the contractor commences operations, he must discuss with and have the approval of the employer, authority, or owner concerned regarding the method he proposes to use for relocating or safeguarding any services and existing works he may encounter during construction

#### C3.6.3. Use of Detection Equipment

.Where the presence of underground cables is suspected the contractor shall use such methods as necessary, including cable or metal detectors, to prevent unnecessary damage and consequent delay and cost of repair

#### C3.6.4. Damage to services

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

The contractor shall be responsible for immediately notifying the employer or employer's agent and the authorities concerned regarding any damage caused to public services and existing works

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#### ALTERATIONS, ADDITIONS, EXTENSIONS, AND MODIFICATIONS TO EXISTING C3.7.

The contractor shall satisfy himself within 14 days of moving onto a site that the dimensional accuracy, alignment, levels, and setting out of existing structures or components thereof are compatible with the proposed works and procedures. Any discrepancies shall immediately be brought to the attention of the principal agent in writing where this is not the case

Failure by the contractor to timeously give written notice to the principal agent in this regard shall result in any claim for additional time and/or costs being rejected

New structures shall, as far as possible, match existing structures regarding the type of materials and finishes unless otherwise stated. The contractor shall provide the employer's agent with samples of bricks, blocks, and other materials and finishes for approval at least 3 weeks prior to starting any work. Only once the principal agent has given approval may the contractor place orders for these materials

#### **PERMITS AND WAY LEAVES** C3.8.

The contractor shall obtain the necessary approvals and shall be required to comply with the authorities, service providers, and landowners' / occupiers' requirements at all times

The contractor will be required to take cognizance of, and comply with, the general wayleave and 'permission to occupy' requirements of the authorities, service providers, and landowners/occupiers during the construction of the works

The contractor will be required to confirm that permission has been granted and that the authorities, service providers, landowners/ occupiers, and all affected parties have been informed of the contractor's intentions before commencing work on each property

#### MANAGEMENT OF THE WORKS C3.9.

#### C3.9.1. Planning and programming

The programme shall be in the form of a bar chart (Gantt Chart) or similar acceptable time/activity form reflecting the proposed sequence and tempo of the various activities. The programme shall clearly indicate the critical path, the inter-dependency of activities, and the sequence in which the contractor proposes to construct the works

During the course of the contract, whenever a significant change occurs, the contractor shall submit a revised programme allowing the allocation of resources, to the principal agent for approval. The contractor shall update the programme whenever construction progress differs by more than a week from anticipated in the programme

#### C3.9.2. Quality plans and control

The onus to produce work which conforms in quality and accuracy of detail to the requirements of the specifications and drawings rests with the contractor, and the contractor shall, at his own expense, institute a quality-control system and provide experienced engineers, foremen, surveyors, materials technicians, other technicians, and technical staff, together with all transport, instruments, and equipment, to ensure adequate supervision and positive control of the works at all times

The costs of all supervision and process control, including testing thus carried out by the contractor shall be deemed to be included in the rates tendered for the related items of work

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The **contractor**'s attention is drawn to the provisions of the various standardized specifications regarding the minimum frequency of testing that will be required for process control. The **contractor** shall, at his own discretion, increase this frequency where necessary to ensure adequate control

On completion of every part of the work and submission thereof to the engineer for examination, the **contractor** shall furnish the **employer**'s **agent** with the results of all relevant tests, measurements, and levels to indicate compliance with the specifications

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

No separate payment will be made for such testing by an approved independent laboratory, the costs of which will be deemed to be included in the **contractor**'s tendered rates for the various items of work requiring testing in accordance with the specifications

The **contractor** shall provide a fortnightly progress report covering work that is the subject of a scope of works

#### C3.9.3. Payment Certificates

The **contractor** shall submit invoices at monthly intervals in terms of Clause 31.0 of **JBCC** Principal Building Agreement Edition 4.1 of March 2005 in respect of **works** completed during the preceding period and **materials and goods** on **site**. The work shall be measured according to the format of the **bills of quantities** and measurements should be taken together with the **employer**'s **agent** (e.g quantity surveyor) and are subject to agreement as to the status of work completed

The contractor will submit his invoice, together with invoices and other supporting documentation to the **principal agent** in terms of contract

The payment certificate will be scrutinised by the employer prior to payment within the prescribed period stipulated on the contract. The contractor must ensure that, allowing for the time allowed for processing payment certificates by the employer, his invoice is submitted in good time to allow for the payment cycle to be met

The **contractor**'s tendered rates for the relevant items in the **bills of quantities** shall include full compensation for all possible additional costs which may arise from this, and no claims for extra payment due to inconvenience as a result of the modus operandi will be considered

Each payment certificate must, where applicable, be accompanied by:

- a) Monthly local content report
- b) Tax Invoice
- c) Labour intensive report
- d) Contract participation and contract skills development goals reports
- e) Supporting documentation for materials and goods

#### C3.9.4. Community Liaison Officer

It is the responsibility of the **contractor** to appoint a competent Community Liaison Officer (CLO) for the duration of the contract

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The primary role of the CLO will be liaison and facilitation of communication which shall include

- a) Represent the community and assist the employer, the employer's agent and the contractor with communication between them and the community
- b) Inform community regarding the project detail, safety precautions and programme.
- c) Be available at the site offices when required in terms of the contract.
- d) Assist with relocation of people, where applicable
- e) Maintain and up-to-date record of potential employees within the community and provide the contractor with copies of this information
- To identify, screen and nominate labour from the community in accordance with the contractor's requirements and determine, in consultation with the contractor, the needs of local labour for employment and relevant technical training, where applicable.
- g) Liaise between principal contractor and labour regarding wages and conditions of employment.
- h) Communicate daily with the principal contractor on labour related issues such as numbers and skills.
- i) Identify possible labour disputes, unrest, strikes, etc., in advance and assist in their resolution.
- j) Have a good working knowledge of the contents of the contents of the contract document regarding labour and training matters.
- k) Attend all meetings at which the community and/or labour is represented or discussed.
- Attend contract site meetings and report on community and labour issues of these meetings.
- m) Co-ordinate and assist with the obtaining of information regarding the community's needs (questionnaires, etc.)
- n) Inform local labour of their conditions of temporary employment, to ensure their timeous availability and to inform them they will they will be relieved.
- o) Ensure that all labour involved in activities when tasks have been set, are fully informed of the principle of task based work.
- p) Attend disciplinary proceedings to ensure that hearings are fair and reasonable.
- g) Keep a daily written record of interviews and community liaison.
- r) Arrange venues for training if required.
- s) Assist with the training and education of the community regarding the correct usage of the services, where applicable.
- Any other duties that may became necessary as the works progress.

The CLO shall have no authority to issue any instructions to the contractor. The CLO shall be neutral to all parties and endeavor to remain impartial should any conflict arise

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Responsibility for identifying a pool of suitable labour shall rest with the CLO, although the contractor shall have the right to choose from the pool. The contractor (and sub-contractors) shall have the right to determine the total number of labourers required at any one time, which may vary throughout the contract

The contractor shall have the right to replace labour that is not performing adequately and the replacement of any labour shall be done in conjunction with the CLO

Due cognizance must be taken of the risk of the Community Liaison Officer not being a member of the targeted community, and/or the Community Liaison Officer not being recommended by the Ward Councilor(s)

#### LABOUR-INTENSIVE WORK C3.10.

Applicable: Yes ⊠ No □

If yes;

Labour-intensive works shall be constructed/maintained using local workers who are temporarily employed in terms of the scope of work. Provided, however, that should adequate and appropriate labour not be available within the locality, other labour may be employed to satisfactory proof that reasonable endeavor has been made to employ labour from the immediate locality

The contractor through the appointed CLO shall communicate with the local community leaders or project steering committee where applicable with purpose of negotiating with them regarding the utilization of local labour in the construction process

In this regard, the contractor shall furthermore give preference, wherever possible to the employment of single heads of households, women and youth. The contractor shall in general maximize the involvement of the local community

## C3.10.1. Generic Labour-Intensive Specification

Contractors are referred to the Guidelines for the Implementation of Labour-intensive Infrastructure Projects under the Expanded Publics Works Programme (EPWP) for the generic labour-intensive specification (Hereinafter referred to as "Guideline") applicable to the contract

This specification establishes general requirements for activities which are to be executed by hand involving the following:

- a) trenches having a depth of less than 1.5 metres
- b) stormwater drainage
- c) roads
- d) sidewalks and non-motorised transport infrastructure
- e) water and sanitation

#### Precedence

Where this specification is in conflict with any other standard or specification referred to in the C3: Scope of Works to this contract, the requirements of this specification shall prevail

#### Hand excavateable material

Hand excavateable material is:

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#### a) granular materials:

- whose consistency when profiled may in terms of table 2 be classified as very loose. loose, medium dense, or dense; or
- where the material is a gravel having a maximum particle size of 10mm and contains no cobbles or isolated boulders, no more than 15 blows of a dynamic cone penetrometer is required to penetrate 100mm;

#### b) cohesive materials:

- whose consistency when profiled may in terms of table 2 be classified as very soft. soft, firm, stiff and stiff / very stiff; or
- where the material is a gravel having a maximum particle size of 10mm and contains no cobbles or isolated boulders, no more than 8 blows of a dynamic cone penetrometer is required to penetrate 100mm;

#### Note

- i. A boulder is material with a particle size greater than 200mm, a cobble and gravel is material between 60 and 200mm
- A dynamic cone penetrometer is an instrument used to measure the in-situ shear resistance of a soil comprising a drop weight of approximately 10 kg which falls through a height of 400mm and drives a cone having a maximum diameter of 20mm (cone angle of 60° with respect to the horizontal) into the material being used

GRAI	NULAR MATERIALS	COHESIVE MATERIALS	
CONSISTENCY	DESCRIPTION	CONSISTENCY	DESCRIPTION
Very loose	Crumbles very easily when scraped with a geological pick.	Very soft	Geological pick head car easily be pushed in as far as the shaft of the handle.
Loose	Small resistance to penetration by sharp end of a geological pick.	Soft	Easily dented by thumb sharp end of a geological pick can be pushed in 30-40 mm; can be moulded by fingers with some pressure.
Medium dense	Considerable resistance to penetration by sharp end of a geological pick.	Firm	Indented by thumb with effort; sharp end of geological pick can be pushed in up to 10 mm; very difficult to mould with fingers; can just be penetrated with an ordinary hand spade.
Dense	Very high resistance to penetration by the sharp end of a geological pick;	Stiff	Can be indented by thumb- nail; slight indentation produced by pushing

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ē.	requires many blows for excavation.		geological pick point into soil; cannot be moulded by fingers.
Very dense	High resistance to repeated blows of a geological pick.	Very stiff	Indented by thumb-nail with difficulty; slight indentation produced by blow of a geological pick point.

#### Trench excavation

All hand excavateable material in trenches having a depth of less than 1,5 metres shall be excavated by hand

#### Compaction of backfilling to trenches (areas not subject to traffic)

Backfilling to trenches shall be placed in layers of thickness (before compaction) not exceeding 100mm. Each layer shall be compacted using hand stampers;

- a) to 90% Mod AASHTO;
- such that in excess of 5 blows of a dynamic come penetrometer (DCP) is required to penetrate 100 mm of the backfill, provided that backfill does not comprise more than 10% gravel of size less than 10mm and contains no isolated boulders, or
- c) such that the density of the compacted trench backfill is not less than that of the surrounding undisturbed soil when tested comparatively with a DCP

#### **Excavation**

All excavateable material including topsoil classified as hand excavateable shall be excavated by hand. Harder material may be loosened by mechanical means prior to excavation by hand. Any material which presents the possibility of danger or injury to workers shall not be excavated by hand

#### Clearing and grubbing

Grass and bushes shall be cleared by hand

#### **Shaping**

All shaping shall be undertaken by hand

#### Loading

All loading shall be done by hand. Haulage equipment should be selected in a manner that allows loading by hand to the greatest extent possible

#### <u>Haul</u>

Excavation material shall be hauled to its point of placement by means of wheelbarrows where the haul distance is not greater than 150m

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All material, however transported, is to be off-loaded by hand, unless tipper-trucks are utilised for haulage

#### Spreading

All material shall be spread by hand

#### Compaction

Small areas may be compacted by hand provided that the specified compaction is achieved. Appropriate rollers should be used where higher (than can be achieved by hand) levels of compaction are required or for large areas

#### Grassing

All grassing shall be undertaking by sprigging, sodding, or seeding by hand

#### Stone pitching and rubble concrete masonry

All stone required for stone pitching and rubble concrete masonry, whether grouted or dry, must to be collected, loaded, off loaded and placed by hand

Sand and stone shall be hauled to its point of placement by means of wheelbarrows where the haul distance is not greater than 150m

Grout shall be mixed and placed by hand

#### **Manufactured Elements**

Elements manufactured or supplied by the Contractor, such as manhole rings and cover slabs, precast concrete planks and pipes, masonry units and edge beams shall not individually, have a mass of more than 320kg. Where the mass of an element exceeds 55 kg, consideration should be given to the size of the element relative to its total mass related to the number of workers who would be needed to lift such mass

#### C3.10.2. Labour-intensive competencies of supervisory and management staff

Contractors shall only engage supervisory and management staff in labour-intensive works that have completed the skills programme including Foremen/ Supervisors at NQF level 4 "National Certificate: Supervision of Civil Engineering Construction Processes" and Site Agent/ Manager at NQF level 5 "Manage Labour-Intensive Construction Processes" or equivalent QCTO qualifications (See Appendix C of the Guideline) at NQF outlined in Table 1

#### C3.11. CONTRACT PARTICIPATION GOALS AND CONTRACT SKILLS DEVELOPMENT **GOALS**

The contractor shall achieve in the performance of the contract the following goals as specified below. Provision for pricing of the compliance with the achieving the goals is made in the Project Assessment Scheme section of the bills of quantities and it is explicitly pointed out that all requirements in respect of the aforementioned are deemed to be priced thereunder and no additional claims in this regards shall be entertained:

#### C3.11.1. Minimum Targeted Enterprise Development Contract Participation Goal

The Minimum Targeted Enterprise Development CPG: Applicable ⊠ Not Applicable ☐ If, applicable;

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The Standard for Indirect Targeting for Enterprise Development through Construction Works Contracts, published in Gazette Notice No.36190 of 25 February 2013 (Hereinunder referred to as "Standard") applies to this section

The lead partner or main **contractor** shall dedicate a minimum of 5% of the tender amount at the time of award to provide developmental support to the targeted subcontractor or joint venture partner. Preference will be given to insert type of enterprises e.g. General Building, Electrical, Mechanical, Plumbing, etc. It could be either or any combination of all enterprises

The successful contractor shall:

- a) Subcontract a minimum of 5% of the total project value to targeted enterprises;
- b) develop the targeted enterprise/s in two development areas as specified in the Standard<sup>1</sup>, and agreed by both the main contractor and the targeted enterprise/s;
- c) perform needs analysis on the targeted enterprise to identify developmental goals;
- d) provide internal mentorship support to improve the targeted enterprise/s performance;
- e) develop a project-specific enterprise development plan to improve the targeted enterprise/s performance in the identified developmental areas;
- f) monitor and report the progress of the agreed development areas with the targeted enterprise/s; and
- g) submit a project completion report to the **employer**'s representative for each targeted enterprise.

The development of the Targeted Enterprise shall be guided by the CIDB Competence Standard for Contractors Gazette No. 41237, 10 November 2017

The **contractor** shall attain or exceed the enterprise development goal in the performance of the contract. Failing to achieve the participation goal will result in a penalty of thirty percent (30%) of the value not achieved, excluding VAT, unless the **contractor** can prove to the **employer**'s satisfaction that the non-achievement was beyond his/her control

The main contractor or lead partner in a joint venture in a leader of the awarded bid must;

- a) prepare needs analysis for indirect targeting and development in at least any two developmental areas as stipulated in paragraph 3.2.1 of the Standard;
- b) appoint an enterprise development coordinator in accordance with paragraph 3.2.3 of the Standard.

Standard for Indirect Targeting for Enterprise Development through Construction Works Contracts, published in Gazette Notice No.36190 of 25 February 2013

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c) provide a competent person/s to provide internal mentorship to the Targeted Enterprise/s in the two agreed developmental areas.

The enterprise development coordinator shall have the following competencies:

- a) Minimum experience of 5 years in the construction industry at a Managerial level as a Site Agent, Contracts Manager, Site Manager, Construction Manager, Business Development Manager, or Enterprise Development Manager
- b) Minimum experience of 2 years in training and development in Building or Construction; and
- c) National Diploma or B Degree in the Built Environment or Business Management

#### Format of communications

The **contractor** shall submit to the **employer**'s representative:

- a) Project interim reports in the specified format (ED105P) detailing the interim value of the CPG that was achieved. Such a report shall also contain a monthly progress report, compiled by the employer's representative and the contractor, detailing an assessment of the enterprise development support provided
- b) Project completion report, in the specified format (ED101P), to the employer's representative for acceptance within 15 days of achieving practical completion. The report shall include the value of the CPG that was certified in accordance with the contract, cidb registration numbers of each and every targeted enterprise, and the value of the subcontracted works or the participation parameter of the joint venture entered into; and
- c) Enterprise development declaration (ED104P).

#### Management Meetings:

The contractor shall report to the employer's Representative on the implementation and progress of the targeted enterprise development and CPG

Forms for contract administration

The contractor shall submit to the employer's Representative the following proformas:

- a) Form ED 105P Project Interim Report
- b) Form ED 104P Enterprise Development Declaration
- c) Form ED 101P Project Completion Report

#### Records:

The contractor shall:

- a) keep records of the targeted enterprise development,
- b) keep records of the payments made to the targeted enterprises in relation to the CPG,

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c) ensure all the documentation required in terms of the Standard is provided in a timely manner and according to a prescribed format where applicable.

#### **Payment Certificates:**

#### The contractor shall:

- a) achieve the measurable CPG and provide enterprise development support to the targeted enterprise/s as per the Standard,
- b) submit payment certificates to the employer representative at intervals determined in the C1.2 Contract Data

## C3.11.2. Minimum Targeted Contract Skills Development Goal

Minimum Targeted Contract Skills Development Goal: Applicable ⊠ Not Applicable □ If, applicable;

The contractor shall achieve or exceed in the performance of the contract the Contract Skills Development Goal (CSDG) established in Table 2 of the Standard for Developing Skills through Infrastructure Contracts (published in Government Gazette No 43495 of 3 July 2020, as amended (Hereinafter in this section referred to as "Standard") in CIDB Best Practice Project Assessment Scheme Notice No. 43726 of 18 September 2020 - Condition of Contract

Failing to achieve the targeted Contract Skills Development Goal will result in A) a thirty percent (30%) penalty of the value of the portion not achieved, excluding VAT, and B) the issuing of completion certificates only after the completion certificate of achieving the skills development goal, counter-signed by the relevant individuals has been submitted, unless the contractor can prove to the employer's satisfaction that the non-achievement was beyond his/her control

The contractor shall apportion the learners in the different construction activities based on the scope of work. The cost of accommodating learners will be determined by using Table 3 in the Standard and this cost will be used to determine the value in Rand and will be added to the provision for training as provided for in the Preliminaries section in the Bill of Quantities

The contractor may only place 33% of employees employed by him or that of his subcontractors contributing to the CSDG

The contractor shall employ at least 60% of the learners from a Public FET / TVET college should the contractor select to have trade qualification learners (Method 2) contributing to the CSDG

The successful contractor may employ part/full occupational qualification learners, trade qualification learners, work integrated learners or candidates directly or through a Skills Development Agency (SDA), (A1 - List of cidb accredited SDAs).

The successful contractor shall ensure that no single method shall contribute more than seventy-five percent (75%) of the CSDG for the contract

Training requirements

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The contractor shall achieve the measurable CSDG by providing opportunities to learners requiring structured workplace learning using one or a combination of any of the Skills Methods as agreed:

- a) Part/Full Occupational Qualification Learners (Method 1)
- b) and/or Trade Qualification Learners (Method 2)
- c) and/or Work Integrated Learners (Method 3)
- d) and/or Candidates (Method 4) as per the Standard in relation to work directly related to the contract or order as indicated under clauses 4.2 and 4.3 in the Standard.

The contractor must ensure all beneficiaries of the Standard are registered with the CIDB Skills Development Agency (SDA)

#### The Format of Communications:

The contractor shall, within 30 days of the award of the contract and in the specific format (Form A2 Baseline Training Plan), submit to the employer's representative a baseline training plan

The contractor shall submit to the employers representative:

- a) an interim contract compliance training report in the specific format (Form A3 Project Interim Report) at intervals that do not exceed 3 months; and
- b) a final contract compliance training report, in the specific format (Form A5 Project Completion Report). This report shall, respectively, be submitted within 15 days of; reaching completion, end of the service, the delivery date for all work required or practical completion (in the case of professional service), service, design, and construct contracts, and engineering and construction works contracts,

#### The Key Personal:

For Structured Workplace Learning Opportunities for Learners (Method 1 and Method 2)

#### The contractor shall:

- a) appoint a responsible supervisor to allocate learning tasks, to learners in line with their training plans.
- b) appoint an artisan in the applicable trade with a minimum of 3 years to mentor learners associated with structured workplace learning.

For Structured Workplace Learning for Candidates (Method 3 and Method 4)

#### The contractor shall:

- a) appoint a supervisor who is actively engaged in work directly associated with the contract to issue tasks,
- b) appoint a suitable mentor as required by the professional body or statutory council.

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#### **Management Meetings:**

The contractor shall report to the employer's representative on the implementation and progress of the CSDG

The Forms for Contract Administration:

The contractor shall submit to the employer's representative the following proformas:

- a) Form A2 Baseline Training Plan
- b) Form A3 Project Interim Report
- c) Form A5 Project Completion Report

#### Records:

#### The contractor shall:

- a) keep records for learners and candidates of the hours worked and registration with the cidb SDA, Sector Education Training Authorities SETA's (where required), and professional statutory councils (where required) particulars towards compliance with this Standard
- b) ensure all the documentation required in terms of clause 4 in the Standard is provided in a timely manner and according to a prescribed format where applicable
- c) upon termination of the opportunities provided to satisfy the CSDG, certify the quantum and nature of the opportunity and submit the certificate and counter-certified by the relevant individual, to the employer's representative for record-keeping purposes

#### **Payment Certificates:**

#### The contractor shall:

- a) achieve the measurable CSDG as agreed by providing opportunities to learners requiring structured workplace learning using one or a combination of any of the Skills Methods as per the Standard in relation to work directly related to the contract or order as indicated under clause 4.2 and 4.3 in the Standard
- b) submit payment certificates to the employer's representative at intervals determined in the contract

#### **ANNEXURES** C3.12.

Annexure A: Design Specifications as listed in Paragraph C3.2.2

Annexure B: Tender Drawings as listed in Paragraph C3.3.1

Annexure C: Geotechnical investigation report

Annexure D: Letter from Environmental Impact Management

Annexure E: Local Municipality Building Permit and Occupation Certificate Application form

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# CONSTRUCTION OF DUNDONALD NEW POLICE STATION: MPUMALANGA PROVINCE

BID: 19/1/9/1/28TB(24)

PART C:

CONTRACT

Part C4

Site information:



# **C4: SITE INFORMATION**

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# **C4: SITE INFORMATION**

Project : Construction of Dundonald new Police Station, Mpumalanga

Employer : South African Police Service Reference : 19/1/9/1/28

## C4.1 SITE LOCALITY

Erf/stand number	24 / 210 IT Farm Dundonald
Site address	Road D26 (Senzeni Street), Dundonald
Township / Suburb	Dundonald
City / Town	Dundonald
Province	Mpumalanga
Local authority	Chief Albert Luthuli Municipality
GPS Coordinates	26°14'18" S 30°48'54" E

Google Earth picture for site locality below:



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#### C4.2 GEOTECHNICAL INFORMATION

#### C4.2.1 Nature of Ground

The Geotechnical Investigation report is attached herein for detailed description of the nature of the ground.

Whilst the information provided above is given in good faith, the Engineer and Employer accept no responsibility for the accuracy thereof. It remains the responsibility of the Contractor to verify the actual ground conditions during construction and to take appropriate measures to ensure the safety of persons and the Works at all times.

#### C4.3 EXISTING BUILDINGS

There are no masonry buildings on the site, but there is an existing wire fence that will need to be repositioned. There are no masonry buildings on the site, but there is an existing wire fence that will need to be repositioned. See architect's drawing 695.03 - 0/112, attached as per C3: Scope of Works.



# C4.4 EXISTING SERVICES, SERVITUDES AND WAYLEAVES

The known existing services are shown on the drawings. The positions of the services cannot be guaranteed. On establishing on site, the contractor must determine the positions of all pipelines and cable routes with the assistance of the engineer and the employer's staff on Site. The contractor must take precautions to prevent any damage to existing services. Damages that might occur will be repaired at the cost of the contractor.

The contractor must also excavate to determine the position where the installed outfall starts and determine the invert level of the first manhole.

Wayleaves will be required.

#### C4.5 ACCESS TO SITE

The site is situated along road D26 (Senzeni Street), just outside Dundonald I development, which is a class 4 tarred provincial road. Main access to the site will be from this road, according to the Mpumalanga Department of Public Works, Roads and Transport requirements.

A second access will be constructed from a road servitude on the east corner of the site, which links past a new shopping mall to an intersection in Senzeni road. This access (Majikiza Street) will be a new paved road to be constructed as part of the project. Refer to civil engineers' drawing 2023-122-3002 attached herein depicting the extent of this road.

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#### C4.6 ADDITIONAL SITE INFORMATION

#### C4.6.1 Water Supply

Water is not available for construction purposes and the Contractor must make his/her own arrangement for water supply to the site. The contractor will be responsible at his or her own cost for the supply and distribution of water for construction use.

#### C4.6.2 Electricity Supply

Electrical power is not available for construction purposes and the Contractor must make his/her own arrangement for electrical power supply to the site. The contractor will be responsible at his or her own cost for the supply and distribution of electricity for construction use.

#### C4.6.3 Environmental Issues

The site is not particularly sensitive from environmental perspective, see attached Letter from Environmental Impact Management (EIM).

The police station upgrade does not trigger any listed activities in terms of the 2014 EIA Regulations and can therefore proceed without an application for environmental authorization in terms of the National Environmental Management Act, Act 107 of 1998, as amended.

Your attention is drawn to Section 28 of the National Environmental Management Act, 1998 (Act 107 of 1998) as amended, which relates to duty of care and remediation of environmental damage.

#### C4.6.4 Traffic assessment

There is no need for traffic impact assessment since the site is anticipated increase in vehicular trips, associated with the proposed upgrade will not exceed the threshold which requires a traffic impact study.

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