

**Samora Machel New Police Station  
Portion 01 of STAND 8972 (Samora Machel)**

Brought Forward		
<b><u>(CPAP WORK GROUP NO. 104 UNLESS OTHERWISE STATED)</u></b>		
<b><u>Carefully dig up trees, level of area, set aside and re-plant in new position:</u></b>		
569	Tree stump exceeding 500mm and not exceeding 1000mm girth	No 2
<b><u>Ground preparation</u></b>		
570	Site clearance	m2 1 511
571	Rip and prepare areas to receive planting/lawn/seeding	m2 1 511
<b><u>Topsoil, compost, lime and fertilizer</u></b>		
572	Import topsoil for planting/lawn/seeding areas (100mm) (LI)	m3 151
573	Final shaping of planting/lawn/seeding areas (LI)	m2 1 511
574	Compost to planting areas (50mm) (LI)	m3 76
575	Fertilizer to planting/lawn beds (50g/m <sup>2</sup> ) (LI)	kg 30
<b><u>Grassing, Trees, etc</u></b>		
<b><u>Supply and plant the following plants</u></b>		
576	Lampranthus at the rate of five per square metre (LI)	m2 150
577	Chondropetalum at the rate of three per square metre (LI)	m2 150
578	Heteropyxis Natalensis 200mm high (LI)	No 20
579	Podocarpus Henkel 200mm high (LI)	No 15
<b><u>Supply and plant the following grass</u></b>		
580	Grass planting to level areas with Cynadon Dactylon continuous root planting described including all necessary fertiliser, weed killer, watering and rolling, mowing, etc. (LI)	m2 1 211

Carried Forward

Bill No. 19  
External Works

**351**

*[Signature]*

SS

M.B

**Samora Machel New Police Station**  
**Portion 01 of STAND 8972 (Samora Machel)**

## Brought Forward

## Maintenance

- 581 Maintenance of grassed areas for a period of 4 months  
(total area approximately 4543m<sup>2</sup>) including regularly  
cutting, weeding and irrigating as necessary (LI)

## Outdoor furniture

- 582 "Builders Merchant" or other equally approved quality garden concrete benches (two number) and table (one number), fixed to ground surfaces with approved epoxy glue (LI)

- 583 "SA Bins" or other equally approved 500mm Diameter x  
740mm high concrete ribbed round litter bin (grey colour  
finish), fixed to ground surfaces with approved epoxy  
glue (LI)

No

7

No

13

R

**Carried to Summary**

Bill No. 19  
External Works

352

R



SS

U.B

353

**Samora Machel New Police Station  
Portion 01 of STAND 8972 (Samora Machel)**

Brought Forward		R
4	Profit	390 000,00
5	Attendance	390 000,00
<b><u>CONTRACT SKILLS DEVELOPMENT GOALS - CSDG</u></b>		
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 <b>employer</b> .		
6	Minimum Contract Skills Development Goal (CSDG) (0.5% x "Sub total A" on the Final Summary)	0,50%
7	Profit	
8	Attendance	
Carried to Summary		R
Bill No. 20 Project Assessment Scheme (Provisional)		
354		



ss

M.B.

**Samora Machel New Police Station  
Portion 01 of STAND 8972 (Samora Machel)**

<b>FINAL SUMMARY</b>			
<b>Bill No</b>		<b>Page No</b>	<b>Amount</b>
1	Preliminaries	40	
2	Earthworks	44	
3	Concrete, Formwork and Reinforcement	50	
4	Masonry	55	
5	Waterproofing	58	
6	Roof Coverings, etc.	62	
7	Carpentry and Joinery	80	
8	Ceilings, Partitions and Access Flooring	83	
9	Floor Coverings	85	
10	Ironmongery	96	
11	Metalwork	113	
12	Plastering	116	
13	Tiling	119	
14	Plumbing and Drainage (Provisional)	138	
15	Electrical Works	174	
16	Mechanical Works	188	
17	Glazing	190	
18	Paintwork	192	
19	External Works	262	
	Sub Total (A)		R
20	Project Assessment Scheme (Provisional)	264	
	Sub Total		R
			R

**Carried Forward**

**355**

*[Signature]*

*SS*

*M.B*

**Samora Machel New Police Station**  
**Portion 01 of STAND 8972 (Samora Machel)**

## FINAL SUMMARY

**Bill  
No**

## Brought Forward

Add: "Allow the amount of R 3 900 000.00 (Three Million and Nine Hundred Thousand Rand) for price escalation to be adjusted in terms of JBCC Contract Price Adjustment Provisions (CPAP)"

Sub Total

Add: Value Added Tax @ 15%

Page  
No

Amount

R

Item

3 900 000,00

R

R

**Carried to Form of Tender**

R

356

6 SS N.B

**CONSTRUCTION OF SAMORA MACHEL NEW POLICE STATION:  
WESTERN CAPE PROVINCE**

**BID: 19/1/9/1/35 TB (25)**

**PART C:**

**CONTRACT**

**Part C3**

**Scope of Work**

**357**



## C3: SCOPE OF WORKS - CONSTRUCTION OF SAMORA MACHEL POLICE STATION

JBCC Series 2000

### CONTENTS

Document reference	Document title	No. of Pages
C3	SCOPE OF WORKS	23 – including this one

358

SS 6 MB





## C3: SCOPE OF WORKS

JBCC Series 2000

**Project** : Construction of New Samora Machel Police Station]

**Employer** : South African Police Service

**Reference** : 19/1/9/1/35 TB (25)

### C3.1. DESCRIPTION OF THE WORKS

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

The South African Police Service endeavours to complete the Construction of Samora Machel New Police Station.

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
- b) 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) **Small Micro and Medium Enterprises (SMME's) involvement of at least 30% of the contract value to be sourced from within the specified range from the project site that is Samora (ward 33), local, district and within the borders of the province.**
- e) 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, including all associated services.

The total size of the site is approximately 6941m<sup>2</sup>

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:

359



- a) Community service centre
- b) Public ablution block
- c) Victim friendly facilities
- d) Office block to cater for:
  - i. Station commander office (Lt Colonel), including secretary with waiting area
  - ii. Visible policing offices
  - iii. Crime prevention offices
  - iv. Detective services spaces
  - v. Support services spaces
  - vi. Financial services-members office
  - vii. Supply chain management-member's office
  - viii. Human resource management
  - ix. Communication services
  - x. Administration spaces
  - xi. Management information centre
  - xii. Store spaces
- e) Cell standard spaces (male, female and juveniles etc)
- f) Cleaners rest room
- g) Emergency generator room (generator must be provided)
- h) Air-cons and dehumidifier must be provided where and if necessary
- i) Security measures as per security advisory specs
- j) Undercover parking
- k) Vertical transportation (lift)

**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 withstand 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

**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

- a) SANS 1200 A: General
- b) SANS 1200 C: Site Clearance
- c) SANS 1200 D: Earthworks
- d) SANS 1200 DB: Earthworks (Pipe Trenches)
- e) SANS 1200 DM: Earthworks (Roads, Subgrade)
- f) SANS 1200 G: Concrete (Structural)
- g) SANS 1200 GA: Concrete (Ordinary Building)
- h) SANS 1200 H: Structural Steelwork
- i) SANS 1200 L: Medium pressure pipelines
- j) SANS 1200 LD: Sewers
- k) SANS 1200 LE: Stormwater drainage
- l) SANS 1200 ME: Subbase
- m) SANS 1200 MF: Base
- n) SANS 1200 MK: Kerbing and channelling
- o) SANS 1200 MM: Ancillary works
- p) SANS 1123: Flange Specification
- q) SANS 10140: Part 3: Pipe marking
- r) SANS 10400: Part A: General principles and requirements
- s) SANS 10400: Part O: lighting and ventilation
- t) SANS 10400: Part S: stairways
- u) SANS 10400: Part T: fire protection
- v) SANS 10400: Part W: fire installation
- w) SANS 10177-Part 2-4: fire testing of materials
- x) SANS 543: fire hose reels (with semi-rigid hose)
- y) SANS 1128: Part 1: components of underground and above-ground hydrant systems

361

M.B SS



- z) SANS 1128: Part 2: hose couplings, connectors, and branch pipe and nozzle connections
- aa) SANS 1186: Part 1: symbolic safety signs: standard signs and general requirements
- bb) SANS 1186: Part 5: Symbolic safety signs: photo luminescent signs
- cc) SANS 1464: Part 22: Safety of luminaries: luminaries for emergency lighting
- dd) SANS 10139: fire detection and alarm system design and installation
- ee) The Occupational Health and Safety Act, Act 85/1993
- ff) SANS 10400-T:2020 Fire Protection
- gg) SANS 10139: 2021 Fire detection and alarm systems for buildings - System design, installation and servicing
- hh) SANS 7240-16: Fire detection and alarm systems – Part 16 Sound System Control and Indicating Equipment
- ii) SANS 7240-19: Fire detection and alarm systems – Part 19 Design, Installation, Commissioning and Service of Sound Systems for Emergency Purposes
- jj) SANS 7240-24: Fire detection and alarm systems – Part 24 Sound-system loudspeakers
- kk) SANS 10400-A General Principles and Requirements
- ll) SANS 10140-3: 2017 Identification colour markings Part 3: Contents of pipelines
- mm) SANS 543:2019 Fire hose reels (with semi-rigid hose)
- nn) SANS 1086:2015 Flexible poly(vinyl chloride) (PVC) pressure hose
- oo) SANS 10087-1:2013 The handling, storage, distribution and maintenance of liquefied petroleum gas in domestic, commercial, and industrial installations Part 1: Liquefied petroleum gas installations involving gas storage containers of individual water capacity not exceeding 500 L and a combined water capacity not exceeding 3 000 L per installation
- pp) BS EN 12101-Part 5 - Smoke and Heat Control systems
- qq) Local Municipality Emergency Services By-Laws

**C3.2.3. Minimum Standard requirements**

- a) CIDB Best Practice Project Assessment Scheme (Government Gazette No.43726 of 18 September 2020)
- b) 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

362  
NB SS

**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** 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 on the E - PORTAL, 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.

#	DESCRIPTION	DRAWING No.	REVISION
<b>1.0</b>	<b>ARCHITECTURAL DRAWINGS</b>		
1.1.	SITE PLAN – DEMOLITION WORKS	UKU-A-1001-DP01	G
1.2.	SITE PLAN & LOCALITY MAP	UKU-A-1001-SP01	G
1.3.	GROUND PLAN CELL & ADMIN BLOCK	UKU-A-1002-SP01	G
1.4.	POLICE STATION ROOF PLAN & AREA SCHEDULE	UKU-A-1002-SP02	G
1.5.	GROUND PLAN – CSC	UKU-A-1002-SP3	G
1.6.	GROUND PLAN – CEILING PLAN	UKU-A-1002-SP4	G
1.7.	FIRST FLOOR	UKU-A-1002-SP5	G
1.8.	WEST WING FINISHES	UKU-A-1002-SP6	G
1.9.	CELL BLOCK – CEILING PLAN & DETAILS	UKU-A-1002-SP7	G
1.10.	EAST WING – CSC FINISHES	UKU-A-1002-SP8	G
1.11.	DOOR & GATE SCHEDULE	UKU-A-1002-SP10	G
1.12.	DETAILS 01	UKU-A-1003-SP11	G
1.13.	ELEVATIONS – CELL & ADMIN BLOCK	UKU-A-1003-SP3	G
1.14.	BOUNDARY WALL DETAIL	UKU-A-1003-SP4	G
1.15.	ELEVATIONS – CSC	UKU-A-1003-SP5	G
1.16.	SECTIONS	UKU-A-1003-SP6	G
1.17.	STAIR & RAMP DETAILS	UKU-A-1003-SP7	G
1.18.	WINDOW SCHEDULE	UKU-A-1003-SP8	G
1.19.	DOOR SCHEDULE	UKU-A-1003-SP9	G
1.20.	DETAILS 02	UKU-A-3000-SP18	G
1.21.	DETAILS 03	UKU-A-3000-SP19	G
1.22.	JOINERY DETAIL 1	UKU-A-3000-SP20	G
1.23.	JOINERY DETAIL 2	UKU-A-3000-SP21	G
1.24.	3D PERSPECTIVES 01	UKU-A-4000-0	G
1.25.	ARTISTIC RENDERS	UKU-A-4000-1	G
1.26.	ROOM DATA SHEET 01	UKU-A-5000-1	G
1.27.	ROOM DATA SHEET 02	UKU-A-5000-2	G
1.28.	ROOM DATA SHEET 03	UKU-A-5000-3	G
1.29.	ROOM DATA SHEET 04	UKU-A-5000-4	G
1.30.	ROOM DATA SHEET 05	UKU-A-5000-5	G
1.31.	ROOM DATA SHEET 06	UKU-A-5000-6	G



## PART C3: SCOPE OF WORKS

#	DESCRIPTION	DRAWING No.	REVISION
<b>1.0</b>	<b>ARCHITECTURAL DRAWINGS</b>		
1.32.	COORDINATED SITE PLAN	UKU-A-6000-0	G
1.33.	ELECTRICAL COORINDATED GROUND FLOOR PLAN CELL & ADMIN BLOCK	UKU-A-6001-1	G
1.34.	ELECTRICAL COORINDATED GROUND FLOOR PLAN – CSC	UKU-A-6001-2	G
1.35.	ELECTRICAL COORDINATED FIRST FLOOR	UKU-A-6001-3	G
1.36.	FIRE COORDINATED GROUND PLAN CELL & ADMIN BLOCK	UKU-A-6002-4	G
1.37.	FIRE COORDINATED GROUND PLAN - CSC	UKU-A-6002-5	G
1.38.	FIRE COORDINATED FIRST FLOOR	UKU-A-6002-6	G
1.39.	HVAC COORDINATED GROUND PLAN CELL & ADMIN BLOCK	UKU-A-6003-7	G
1.40.	HVAC COORDINATED GROUND PLAN – CSC	UKU-A-6003-8	G
1.41.	HVAC COORDINATED FIRST FLOOR	UKU-A-6003-9	G
1.42.	WET COORDINATED GROUND PLAN CELL & ADMIN BLOCK	UKU-A-6004-10	G
1.43.	WET COORDINATED GROUND PLAN – CSC	UKU-A-6004-11	G
1.44.	WET COORDINATED FIRST FLOOR	UKU-A-6005-12	G
1.45.	FINISHING, SANWARE & IRONMONGERY SCHEDULES 01	UKU-A-7001-4	G
1.46.	FINISHING, SANWARE & IRONMONGERY SCHEDULES 02	UKU-A-7001-5	G
1.47.	FINISHING, SANWARE & IRONMONGERY SCHEDULES 03	UKU-A-7001-6	G
1.48.	SIGNAGE SCHEDULE 1	UKU-A-7001-7	G
1.49.	SIGNAGE SCHEDULE 2	UKU-A-7001-8	G
1.50.	SIGNAGE SCHEDULE 3	UKU-A-7001-9	G

#	DESCRIPTION	DRAWING No.	REVISION
<b>2.0</b>	<b>CIVIL ENGINEERING DRAWINGS</b>		
2.1.	TYPICAL DETAILS (SHEET 01 OF 02)	FEC-23023-GEN-TYP-001	D
2.2.	TYPICAL DETAILS (SHEET 02 OF 02)	FEC-23022-GEN-TYP-002	D
2.3.	PROPOSED ROADS LAYOUT	FEC-23023-RGM-LAY-001	D
2.4.	PROPOSED SERVICES LAYOUT	FEC-23023-SER-LAY-001	D
2.5.	SEWER LAYOUT PLAN AND DETAILS	FEC-23023-SEW-LAY-001	D
2.6.	SEWER LONGSECTIONS	FEC-23023-SEW-LSC-001	D
2.7.	PROPOSED STORMWATER LAYOUT	FEC-23023-STW-LAY-001	D
2.8.	WATER LAYOUT PLAN	FEC-23023-WTR-LAY-001	D

#	DESCRIPTION	DRAWING No.	REVISION
<b>3.0</b>	<b>STRUCTURAL ENGINEERING DRAWINGS</b>		
3.1.	SITE PLAN	STR-001	B
3.2.	CSP FOUNDATION AND GROUND FLOOR PLAN	STR-002	B
3.3.	ADMIN BLOCK FOUNDATION PLAN	STR-003	B
3.4.	ADMIN BLOCK GROUND FLOOR PLAN	STR-004	B
3.5.	FIRST FLOOR / ROOF PLAN	STR-005	B
3.6.	SECTIONS AND FIRE TANK SLAB	STR-006	C
3.7.	ATTENUATION TANK – 1 NO. OFF	23023-STR-007	

364  
M.B. SS



## PART C3: SCOPE OF WORKS

#	DESCRIPTION	DRAWING No.	REVISION
<b>3.0</b>	<b>STRUCTURAL ENGINEERING DRAWINGS</b>		
3.8.	CSP BLOCK FOUNDATION REBAR LAYOUT AND BENDING SCHEDULE	STR-REBAR-001	B
3.9.	ADMIN & CELL BLOCK REBAR LAYOUT & SCHEDULE	STR-REBAR-002	B
3.10.	BOUNDARY WALL REBAR LAYOUT AND BENDING SCHEDULE	STR-REBAR-003	B
3.11.	STAIRCASE AND SAFE WALL REBAR LAYOUT AND BENDING SCHEDULE	STR-REBAR-004	B
3.12.	BEAM AND CELL BENCH REBAR LAYOUT & BENDING SCHEDULE	STR-REBAR-005	B
3.13.	ADMIN & CELL BLOCK RC SLAB BOTTOM REBAR LAYOUT AND BENDING SCHEDULE	STR-REBAR-006	B
3.14.	ADMIN & CELL BLOCK RC SLAB TOP REBAR LAYOUT AND BENDING SCHEDULE	STR-REBAR-007	C

#	DESCRIPTION	DRAWING No.	REVISION
<b>4.0</b>	<b>ELECTRICAL ENGINEERING DRAWINGS</b>		
4.1.	SITE PLAN ELECTRICAL LAYOUT	32308-001	0
4.2.	GROUND FLOOR LIGHTING LAYOUT	32308-100	B
4.3.	FIRST FLOOR LIGHTING LAYOUT	32308-101	B
4.4.	CSC BLOCK GROUND FLOOR LIGHTING LAYOUT	32308-102	B
4.5.	GROUND FLOOR SMALL POWER LAYOUT	32308-200	A
4.6.	FIRST FLOOR SMALL POWER LAYOUT	32308-201	B
4.7.	CSC BLOCK GROUND FLOOR SMALL POWER LAYOUT	32308-202	B
4.8.	GROUND FLOOR CEILING POWER LAYOUT	32308-210	0
4.9.	FIRST FLOOR CEILING POWER LAYOUT	32308-211	A
4.10.	CSC BLOCK GROUND FLOOR CEILING POWER LAYOUT	32308-212	A
4.11.	GROUND FLOOR MECHANICAL POWER LAYOUT	32308-220	B
4.12.	FIRST FLOOR MECHANICAL POWER LAYOUT	32308-221	B
4.13.	CSC BLOCK GROUND FLOOR MECHANICAL POWER LAYOUT	32308-222	B
4.14.	GROUND FLOOR ELECTRONICS LAYOUT	32308-300	0
4.15.	FIRST FLOOR ELECTRONICS LAYOUT	32308-301	0
4.16.	CSC BLOCK GROUND FLOOR ELECTRONICS LAYOUT	32308-302	0
4.17.	OVERALL DISTRIBUTION BOARD SCHEMATIC LAYOUT	32308-400	0
4.18.	MAIN LV KIOSK SINGLE LINE DISGRAM – SHEET 1 OF 2	32308-401	0
4.19.	MAIN LV KIOSK SINGLE LINE DISGRAM – SHEET 2 OF 2	32308-401	0
4.20.	DB-A SINGLE LINE DIAGRAM – SHEET 1 OF 2	32308-402	A
4.21.	DB-A SINGLE LINE DIAGRAM – SHEET 2 OF 2	32308-402	A
4.22.	DB-B SINGLE LINE DIAGRAM	32308-403	A
4.23.	DB-A1 SINGLE LINE DIAGRAM – SHEET 1 OF 2	32308-404	A
4.24.	DB-A1 SINGLE LINE DIAGRAM – SHEET 2 OF 2	32308-404	A
4.25.	DB-INVERTER LOAD SINGLE LINE DIAGRAM	32308-405	0
4.26.	DB-AE SINGLE LINE DIAGRAM – SHEET 1 OF 3	32308-406	A
4.27.	DB-AE SINGLE LINE DIAGRAM – SHEET 2 OF 3	32308-406	A
4.28.	DB-AE SINGLE LINE DIAGRAM – SHEET 3 OF 3	32308-406	A
4.29.	DB-A1E SINGLE LINE DIAGRAM – SHEET 1 OF 3	32308-407	A



## PART C3: SCOPE OF WORKS

#	DESCRIPTION	DRAWING No.	REVISION
<b>4.0</b>	<b>ELECTRICAL ENGINEERING DRAWINGS</b>		
4.30.	DB-A1E SINGLE LINE DIAGRAM – SHEET 2 OF 3	32308-407	A
4.31.	DB-A1E SINGLE LINE DIAGRAM – SHEET 3 OF 3	32308-407	A
4.32.	DB-BE SINGLE LINE DIAGRAM – SHEET 1 OF 2	32308-408	A
4.33.	DB-BE SINGLE LINE DIAGRAM – SHEET 2 OF 2	32308-408	A
4.34.	RETICULATION SCHEMATIC FOR 2 No. 50kW INVERTERS WITH 15 No. 10kWh BATTERIES	32308-409	0
4.35.	DB-CSC SINGLE LINE DIAGRAM – SHEET 1 OF 2	32308-410	A
4.36.	DB-CSC SINGLE LINE DIAGRAM – SHEET 2 OF 2	32308-410	A
4.37.	DB-CSC-E SINGLE LINE DIAGRAM – SHEET 1 OF 2	32308-411	A
4.38.	DB-CSC-E SINGLE LINE DIAGRAM – SHEET 2 OF 2	32308-411	A
4.39.	DB-MECH E SINGLE LINE DIAGRAM	32308-412	0
4.40.	INVERTER OUTPUT DB SINGLE LINE DIAGRAM	32308-413	0
4.41.	MANUAL CHANGEOVER DISTRIBUTION BOARD SINGLE LINE DIAGRAM	32308-414	0
4.42.	ELECTRICAL CABLE SCHEDULE	32308-600	0
4.43.	LUMINAIRE SCHEDULE – SHEET 1 OF 3	32308-601	0
4.44.	LUMINAIRE SCHEDULE – SHEET 2 OF 3	32308-601	0
4.45.	LUMINAIRE SCHEDULE – SHEET 3 OF 3	32308-601	0
4.46.	GENERATOR SCHEDULE – SHEET 1 OF 2	32308-602	0
4.47.	GENERATOR SCHEDULE – SHEET 2 OF 2	32308-602	0
4.48.	SOLAR PV INSTALLATION	32308-700	0
4.49.	GRID TIED PHOTOVOLTAIC SYSTEM – SCHEMATIC	32308-701	0
4.50.	SITE PLAN LIGHTNING PROTECTION LAYOUT	32308-800	0

#	DESCRIPTION	DRAWING No.	REVISION
<b>5.0</b>	<b>MECHANICAL ENGINEERING DRAWINGS</b>		
5.1.	GROUND FLOOR (SITE) FIRE PROTECTION LAYOUT	D0000-MF-A0-01	0
5.2.	GROUND FLOOR (SITE) FIRE PROTECTION LAYOUT	D0000-MF-A0-02	0
5.3.	FIRST FLOOR FIRE PROTECTION LAYOUT	D0000-MF-A-03	0
5.4.	FIRE PUMP ROOM AND DEDICATED FIRE STORAGE TANK LAYOUT	D0000-MF-A1-04	0
5.5.	PROCESS FLOW DIAGRAM	D0000-MF-A1-05	0
5.6.	TRAVEL DISTANCES	D0000-MF-A0-06	0
5.7.	FIRST FLOOR – HVAC LAYOUT	D0000-ML-A0-03	0
5.8.	GROUND FLOOR ADMIN HVAC LAYOUT	D0000-ML-A0-01	0
5.9.	GROUND FLOOR CSC HVAC LAYOUT	D0000-ML-A0-02	0
5.10.	GROUND STOREY DOMESTIC WATER PLAN	D0000-DW-A0-01	0
5.11.	FIRST STOREY AND SITE DOMESTIC WATER PLAN	D0000-DW-A0-02	0
5.12.	DOMESTIC WATER SITE PLAN	D0000-DW-A0-03	0
5.13.	GROUND STOREY SEWER PLAN	D0000-SW-A0-01	0
5.14.	FIRST STOREY SEWER PLAN	D0000-SW-A0-02	0
5.15.	KITCHEN EQUIPMENT LAYOUT	D0000-KE-A0-01	0





**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 site hand over 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.

**C3.4. PLANT AND MATERIALS**

**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**.

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

See item C4.5 of Part 4: Site Information

367

M.B S)



**C3.6. EXISTING SERVICES**

**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.

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**

**C3.7. ALTERATIONS, ADDITIONS, EXTENSIONS, AND MODIFICATIONS TO EXISTING WORKS**

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

### C3.8. PERMITS AND WAY LEAVES

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

### C3.9. MANAGEMENT OF THE WORKS

#### 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

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

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

370

M.B CS



## PART C3: SCOPE OF WORKS

- f) 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.
- l) 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.
- q) 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.
- t) Any other duties that may become 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 endeavour to remain impartial should any conflict arise

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 Councillor(s)

### C3.10. LABOUR-INTENSIVE WORK

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 endeavour 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 Public 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 excavatable material

Hand excavatable material is:

##### **a) granular materials:**

- i. whose consistency when profiled may in terms of table 2 be classified as very loose, loose, medium dense, or dense; or
- ii. 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:**

- i. whose consistency when profiled may in terms of table 2 be classified as very soft, soft, firm, stiff and stiff / very stiff; or

372

M.B. SS



## PART C3: SCOPE OF WORKS

- ii. 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
- ii. 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

Table 2: Consistency of materials when profiled			
GRANULAR MATERIALS		COHESIVE MATERIALS	
CONSISTENCY	DESCRIPTION	CONSISTENCY	DESCRIPTION
Very loose	Crumbles very easily when scraped with a geological pick.	Very soft	Geological pick head can 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; requires many blows for excavation.	Stiff	Can be indented by thumb-nail; slight indentation produced by pushing 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 excavatable 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;
- b) such that in excess of 5 blows of a dynamic cone 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 excavatable material including topsoil classified as hand excavatable 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

### Haul

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

### Offloading

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 undertaken 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 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;

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 30% 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 30% of the total project value to targeted enterprises;



## PART C3: SCOPE OF WORKS

- 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.
- 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

<sup>1</sup>

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



**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,
- 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 sub**contractors** 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**

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:**



## PART C3: SCOPE OF WORKS

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.

### 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

**C3.12. ANNEXURES – REFER TO E - PORTAL**

SPECIFICATIONS FOR ALL DISCIPLINES (ARC, MECH, ELE, C&STR, OHS)

TENDER DRAWINGS FOR ALL DISCIPLINES (ARC, MECH, ELE, C&STR)

GEOTECHNICAL INVESTIGATION REPORT

GEOHYDROLOGICAL INVESTIGATION REPORT

TOPOGRAPHIC SURVEY REPORT

OCCUPATIONAL HEALTH & SAFETY BOQ IS ATTACHED TO OHS SPEC –  
TOTAL TO BE BROUGHT TO MASTER BOQ

*CONSTRUCTION OF SAMORA MACHEL NEW POLICE STATION:  
PROVINCE*

***BID: 19/1/9/1/35 TB (25)***

**PART C:**

**CONTRACT**

**Part C4**

**Site information:**

.

381



## C4: SITE INFORMATION

### CONTENTS

Document reference	Document title	No. of Pages
C4	SITE INFORMATION	4 Including this one

382  
SS MB





## PART 4: SITE INFORMATION

### C4: SITE INFORMATION

**Project** : [Construction of New Samora Machel Police Station]

**Employer** : South African Police Service

**Reference** : 19/1/9/1/35 TB (25)

#### C4.1 SITE LOCALITY

Erf/stand number	ERF 9085 Weltevreden Valley
Site address	C/O Oliver Tambo and Lillian Ngoyi Streets, Weltevreden Valley North, 7785
Township / Suburb	Samora Machel
City / Town	Cape Town
Province	Western Cape Province
Local authority	Stocks and Stocks Municipality
GPS Coordinates	34°1' 3.57"S 18°34' 20.24"E

Google Earth picture for site locality below:





**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 temporary buildings on site.

**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**

Access is taken off C/O Oliver Tambo and Lillian Ngoyi Streets, as far as possible from the bend in the gravel road serving the site.

**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 an environmental perspective.

The police station construction 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

384

M.D. SS



**C4.6.4 Traffic assessment**

There is a need for traffic impact assessment since the site is anticipated increase in vehicular trips, associated with the proposed upgrade may exceed the threshold which requires a traffic impact study.