



Ingogo - Security Upgrade (Kwa Zulu Natal)

Vehicle gate

- 47 5000 x 2400mm High sliding gate with track made of 152 x 152mm mild steel H3-section beam welded with 20mm mild steel round bar welded on top of square tubing, fitted with 80mm Ø industrial type V-wheel. Gate to include lockable heavy duty padlock. All conduits for gate motor to and from isolator box and access control to be installed below track prior installation of track. Track to be installed on top of a 300 x 300mm deep concrete base (Refer Annexure 9 - Vehicle Access Gate Detail)

No

1

- 48 Isolator box with sliding panel built in wall for all connections to and from the gate motor. Wall shall provide security to the motor to prevent tempering. (Refer Annexure 9 - Vehicle Access Gate Detail).

No

1

Sundries

- 49 Allow an amount of R50,000.00 (Fifty Thousand Rands) for Vegetation along Boundary Wall.

Item

50,000.00

- 50 Allow an amount of R20,000.00 (Twenty Thousand Rands) for External Signage.

Item

20,000.00

Carried to Collection

R

Section No. 3  
Section 3: External Works  
Bill No. 2  
Fencing

189





**SECTION SUMMARY - Section 3: External Works**

**Bill  
No**

- 1 Stormwater Drainage
- 2 Fencing

**Page  
No**

58

69

**Amount**

**Carried to Final Summary**

Section No. 3  
Section 3: External Works

191

R



## SECTION 4: ELECTRICAL INSTALLATION



Item No		Quantity	Rate	Amount
<b><u>SECTION 4</u></b>				
<b><u>BILL NO. 1</u></b>				
<b><u>ELECTRICAL INSTALLATION</u></b>				
NOTE: The following work is to be carried out by an approved specialist Supplier: Supply, installation and commissioning of new Perimeter Lights: the following systems including all components and sundries, test, etc. required to bring the installations to the working order intended, compliance and guarantee.				
1	Supply and install Video intercom at the Pedestrian entrance Gate, including all accessories	No 1		
2	Supply and install Electric Lock (Magnetic lock) at Pedestrian entrance Gate	No 1		
3	Supply and install Gate Spring Closer Adjustable Tensioner 200mm	No 1		
4	Supply and install Armoured SWA cable, low voltage, 3 core PVC/SWA SHEATHED, Cu (SANS 1507-3), in ground/ducts/air (2,5 mm <sup>2</sup> ) complete with accessories	m 400		
5	Supply and install round twin and earth, Cu, PVC insulated 20mm <sup>2</sup>	m 300		
6	Supply and install electrical warning tape - buried cable	m 50		
7	Supply and install 10 Amp, double pole. 3 kA, circuit breaker	No 3		
8	Supply and install 25 mm diameter PVC conduit	No 10		
9	Weatherproof surface mount & 20A Amp Isolator Switch	No 2		
10	SAPS Blue Version (at pedestrian entrance): 16 LED BEKA Zela 37 Watt or Bekaray in a police blue colour or similar approved	No 2		
Carried to Collection				R
Section No. 4				
Section 4: Electrical Installation				
Bill No. 1				
Electrical Installation				

193



Ingogo - Security Upgrade (Kwa Zulu Natal)

11	Supply and install Perimeter light fitting, Post Top light - 46 watt LED BekaZela - White, IP 66, complete with accessories or Similar Approved	No	27	
12	Supply and install Galvanize Pole - 3.6m hot dipped galvanize pole, base plate, backing board & inspection cover with tamper proof screws and 5Amp control Circuit Breaker, complete with accessories	No	28	
13	Supply and install Wall Mount Bracket for Blue light	No	1	
14	Galvanized Conduit rates to include for waste, couplings, sets, cold galvanized paint on joint, etc. where applicable. (20mm <sup>2</sup> )	m	20	
15	Open channel galvanized trunking P8000 (76 x 76mm <sup>2</sup> )	m	4	
16	Supply and install Photocell (Day Switch) 15Amp, complete	No	2	
17	Supply and install Pratley non-sparking End Connectors and Insulating Sleeves or Similar Approved	No	28	
18	Excavation depth of 0.5 m and width of 0.3 m of soft/rock/hard rock and backfilling m <sup>3</sup> (Cables and Poles installation)	m	296	
19	Reinstate concrete/paving after cable installation, inclusive of proper soil compaction	m	10	
20	Cable sleeve pipes: HDPE sleeve to SANS/SABS specification: 110 m	m	40	
21	Remove rubbish and waste management			SUM
22	Testing and Certification: Certification of Compliance (COC), with regards to all electrical reticulation, connections, wiring, equipment & commissioning of Perimeter Lights	No	1	

Carried to Collection

R

Section No. 4  
Section 4: Electrical Installation  
Bill No. 1  
Electrical Installation

194



Section No. 4

Bill No. 1

Electrical Installation

**COLLECTION**

Total Brought Forward from Page No.

Page  
No  
71  
72

Amount

Carried to Final Summary

R

Section No. 4  
Section 4: Electrical Installation  
Bill No. 1  
Electrical Installation

195



## **SECTION 5: MECHANICAL INSTALLATION**



197



## FINAL SUMMARY

198



FINAL SUMMARY				
Section No		Page No		Amount
1	Section 1: Preliminaries	38		
2	Section 2: Building Works	54		
3	Section 3: External Works	70		
4	Section 4: Electrical Installation	73		
5	Section 5: Mechanical Installation	74		
SUB-TOTAL			R	
ADD: CONTINGENCIES(5%)			R	
SUB-TOTAL			R	
ADD: VALUE ADDED TAX (15%)			R	
SUB TOTAL			R	
Carried to Form of Offer & Acceptance			R	
199				

199



Item No	Unit	Quantity	Rate	Amount
------------	------	----------	------	--------

**HEALTH AND SAFETY BILL OF  
QUANTITIES FOR NEW POLICE STATIONS  
AND MAINTENANCE OF BUILDINGS  
MANAGED ON BEHALF OF SOUTH  
AFRICAN POLICE SERVICE**

**SUPPLEMENTARY**

**Supplementary preambles**

Where items in this Bill are identical to those in the previous Bills, the descriptions have been shortened, and the full descriptions in the Trades concerned are to be referred to for the full meaning and intent each item.

Prior to pricing the principal contractor must familiarize him/herself with the Occupational Health and Safety Act No. 85 Of 1993, Construction Regulations 2014, other relevant Regulations and Standards as well as project specific Health & Safety specifications.

The quantities contained herein serve as a guideline only to determine if the contractor has sufficiently priced for the Health and Safety obligations and demands of the Occupational Health and Safety Act No. 85 Of 1993, Construction Regulations 2014, other relevant Regulations and Standards as well as project specific Health & Safety specifications. Where quantities are missing the contractor is to insert his own quantities based on his individual requirements to comply with the Health and Safety obligations and demands of the Occupational Health and Safety Act No. 85 Of 1993, Construction Regulations 2014, other relevant Regulations and Standards as well as project specific Health & Safety specifications.

After pricing of the health and safety bill of quantities, the Contractor must sign the Certificate of

Acquaintance as evidence that he is up to date regarding the contents, obligations and demands of the

Occupational Health and Safety Act No. 85 Of 1993, Construction Regulations 2014, other relevant Regulations and Standards as well as project specific Health & Safety specifications. Failure, by the Tenderer, to sign the Certificate of Acquaintance may result in the

**Carried Forward**

R

Bill No. 1

Preliminaries

**SOUTH AFRICAN POLICE SERVICE  
PROGRAMME AND PROJECT MANAGEMENT**

**200**

**Brought Forward**

R

Tender being deemed non-responsive..

All Costs to comply with the obligations and demands of the Occupational Health and Safety Act No. 85 Of 1993, Construction Regulations 2014, other relevant Regulations and Standards as well as Health & Safety specifications must be carried to Preliminaries item of the Bills of Quantities 'OCCUPATIONAL HEALTH AND SAFETY ACT'

**OCCUPATIONAL HEALTH AND SAFETY****General**

- 1 Preparation of the contractors site specific health and safety plan and Safety File
- 2 Principal contractors initial obligations in respect of the occupational health and safety act and construction regulations In Particular (Asbestos, Demolition and other investigations)
- 3 Principal contractor's time related obligations in respect of the occupational health and safety act and construction regulations.
- 4 Allow for the appointment of a Full-Time Competent Construction Health & Safety Officer to assist in the control of all health and safety related aspects on site as per (CR 8(5)) for a period of 24 months.

Item

Item

Item

Item

Provide, supply and maintenance for each worker the following SANS approved personal protective equipment clothing as per the site-specific risk assessments:

- 5 (a) Reflective vests. (Contractor is to insert the quantity based on the Contractors own requirements)
- 6 (b) Hard hats. (Contractor is to insert the quantity based on the Contractors own requirements)

No

No

**Carried Forward**

R

Bill No. 1

Preliminaries

**SOUTH AFRICAN POLICE SERVICE  
PROGRAMME AND PROJECT MANAGEMENT**

**201**



Brought Forward			R
7	(c) Protective footwear. (Contractor is to insert the quantity based on the Contractors own requirements)	No	
8	(d) Earplugs. (Contractor is to insert the quantity based on the Contractors own requirements)	No	
9	(e) Dust masks. (Contractor is to insert the quantity based on the Contractors own requirements)	No	
10	(f) Gloves. (Contractor is to insert the quantity based on the Contractors own requirements)	No	
11	(g) High visibility overalls. (Contractor is to insert the quantity based on the Contractors own requirements)	No	
12	(h) Ear plugs SABS approved. (Contractor is to insert the quantity based on the Contractors own requirements)	No	
13	Provision for a <b>Full-time</b> construction health and safety officer	No	
14	Provision for a <b>Part-time</b> construction health and safety manager	No	
<u>Cost of medical certificates and medical surveillance:</u>			
15	(a) Initial (baseline) medical examinations.	Item	
16	Periodic and exit examination. & inoculation's (hepatitis's and tetanus)	Item	
17	Exit medical (end of project).	Item	
18	Contractors charges to allow for handling costs. (%)	Item	
Carried Forward			R
Bill No. 1 Preliminaries <b>SOUTH AFRICAN POLICE SERVICE PROGRAMME AND PROJECT MANAGEMENT</b>			
202			

**Brought Forward**

R

19	Health and safety education.	Item
20	Induction training. (Contractor is to insert the quantity based on the Contractors own requirements)	Item
21	Tool box talks. (Contractor is to insert the quantity based on the Contractors own requirements)	Item
22	Demonstrations. (Contractor is to insert the quantity based on the Contractors own requirements)	Item
23	Provision of first aid boxes to GSR requirements. (Contractor is to insert the quantity based on the Contractors own requirements)	Item
<u>Noise monitoring:</u>		
24	(a) Establish noise zone (plant)	No
25	(b) Audiograms (personnel). (Contractor is to insert the quantity based on the Contractors own requirements)	No
<u>Method Statements:</u>		
26	Risk Assessments CR 9(1)	Item
27	Fall protection plan CR 10(1)	Item
28	Electrical and use of machinery CR 24	Item
29	Emergency Plan and Response Plan	Item
30	Fire precautions	Item
31	Construction Vehicles and Mobile Plant	Item

**Carried Forward**

R

Bill No. 1  
Preliminaries  
**SOUTH AFRICAN POLICE SERVICE  
PROGRAMME AND PROJECT MANAGEMENT**

**203**



**Brought Forward**

R

- |    |   |
|----|---|
| 32 | Ladders   |
| 33 | Transportation of Workers                             |
| 34 | Submission of a health and safety file- Scanned to CD |
| 35 | Close Out Report Electronic.                          |

Item

Item

Item

Item

**Carried to Summary**

R

Bill No. 1  
Preliminaries  
**SOUTH AFRICAN POLICE SERVICE  
PROGRAMME AND PROJECT MANAGEMENT**

**204**



**APPOINTMENT OF A CONTRACTOR FOR SECURITY UPGRADE AT  
INGOGO POLICE STATION IN KWAZULU NATAL PROVINCE**

**BID: 19/1/9/1/10TB(23)**

**PART C**

**CONTRACT**

**PART C.2.1**

**FIVE STAR SPECIFICATION**

# **SOUTH AFRICAN POLICE SERVICE**



## **PROJECT FIVE STAR 2012**

### **SPECIFICATIONS FOR NEW AND EXISTING POLICE CELLS**

**206**

## TABLE OF CONTENTS

<b>1. MINIMUM ACCOMMODATION REQUIREMENTS</b>	<b>1</b>
<b>2. CELLS</b>	<b>2</b>
2.1. General Requirements	
2.2. General Construction	
2.3. Windows	
2.4. Doors and Gates	
2.5. Electrical	
2.6. Plumbing	
<b>3. EXERCISE YARDS</b>	<b>7</b>
3.1. General Requirements	
3.2. General Construction	
3.3. Windows	
3.4. Doors and Gates	
3.5. Electrical	
<b>4. SECURITY PASSAGE</b>	<b>9</b>
4.1. General Requirements	
4.2. General Construction	
4.3. Windows	
4.4. Doors and Gates	
4.5. Electrical	
4.6. Plumbing	
<b>5. CELL KITCHEN &amp; PANTRY</b>	<b>11</b>
5.1. General Requirements	
5.2. General Construction	
5.3. General Equipment	
5.4. Windows	
5.5. Doors and Gates	
5.6. Electrical	
5.7. Electrical Equipment	
5.8. Plumbing	
<b>6. KITCHEN YARD</b>	<b>13</b>
6.1. General Requirements	
6.2. General Construction	
6.3. Windows	
6.4. Doors and Gates	
6.5. Electrical	
6.6. Plumbing	

<b>7. VISITOR'S ROOM</b>	<b>14</b>
7.1. General Requirements	
7.2. General Construction	
7.3. Windows	
7.4. Doors and Gates	
7.5. Electrical	
7.6. Plumbing	
<b>8. PRISONER'S PROPERTY STORE</b>	<b>15</b>
8.1. General Requirements	
8.2. General Construction	
8.3. Windows	
8.4. Doors and Gates	
8.5. Electrical	
8.6. Plumbing	
<b>9. BLANKET STORE</b>	<b>16</b>
9.1. General Requirements	
9.2. General Construction	
9.3. Windows	
9.4. Doors and Gates	
9.5. Electrical	
9.6. Plumbing	
<b>10. HOT WATER GEYSERS AND HEATPUMPS</b>	<b>17</b>
10.1. General Requirements	
10.2. General Installation	
10.3. Electrical	
10.4. Plumbing	
<b>11. ADMITTANCE AREA</b>	<b>18</b>
11.1. General Requirements	
11.2. General Construction	
11.3. Windows	
11.4. Doors and Gates	
11.5. Electrical	
11.6. Plumbing	
<b>12. TEMPORARY HOLDING CELL</b>	<b>19</b>
12.1. General Requirements	
12.2. General Construction	
12.3. Windows	
12.4. Doors and Gates	
12.5. Electrical	
12.6. Plumbing	

<b>13.SECURITY SERVICE DUCT</b>	<b>20</b>
13.1. General Requirements	
13.2. General Construction	
13.3. Windows	
13.4. Doors and Gates	
13.5. Electrical	
13.6. Plumbing	
<b>14.ELECTRICAL GENERAL</b>	<b>21</b>
<b>15.SECURE OFF-LOADING AREA</b>	<b>22</b>
15.1. General Requirements	
15.2. General Construction	
<b>16.IDENTIFICATION PARADE ROOM</b>	<b>22</b>
16.1. General Requirements	
16.2. General Construction	
16.3. Windows	
16.4. Doors and Gates	
16.5. Electrical	
16.6. Recording equipment	
16.7. Plumbing	
<b>17.GENERAL NOTES</b>	<b>24</b>

## **1. MINIMUM ACCOMMODATION REQUIREMENTS**

The following rooms are essential for the effective functioning of any cell block. All of the rooms, have to be provided under the project (see Annexure "A"). The norms as applied by the Department of Public Works, are also provided. These norms are an indication of the ideal, but can be changed, due to limited space available on site. Any deviations from these norms are to be indicated on plan and motivated to SAPS : Supply Chain Management : Expert Services, for approval.

1.1. Cells (with ablution)	: 37.81 m <sup>2</sup> (male) and 20.20 m <sup>2</sup> (female)
1.2. Exercise Yards	: 18.70 m <sup>2</sup> (male) and 12 m <sup>2</sup> (female)
1.3. Security Passage to Cells	: 1,5 m wide
1.4. Cell Kitchen	: 18.00 m <sup>2</sup> for 4 cells plus 2 m <sup>2</sup> for every additional 3 cells
1.5. Pantry	: 6 m <sup>2</sup> for 4 cells plus 2 m <sup>2</sup> for every additional 3 cells
1.6. Kitchen Yard	: 16 m <sup>2</sup>
1.7. Kitchen Toilet	: 2 m <sup>2</sup>
1.8. Visitor's Room	: 18 m <sup>2</sup> for (2 cubicles) plus 1 for every additional 3 cells
1.9. Prisoner's Property Store	: 6 m <sup>2</sup> for 4 cells plus 2 m <sup>2</sup> for every additional 3 cells
1.10. Blanket Store	: 12 m <sup>2</sup> for 4 cells plus 2 m <sup>2</sup> for every additional 3 cells
1.11. Admittance Area	: 25 m <sup>2</sup> for 4 cells plus 2 m <sup>2</sup> for every additional 3 cells, (Including cell guard office and fingerprint area). (Toilet for cell guard to be provided in large cell blocks +6)
1.12. Waiting Lobby	: 6 m <sup>2</sup>
1.13. Declaration of Statements	: 8 m <sup>2</sup>
1.14. Holding Cell	: 10 m <sup>2</sup> for 4 cells plus 2 m <sup>2</sup> for every additional 3 cells
1.15. Secure Off-loading Area	: 50 m <sup>2</sup>
1.16. Security Service Duct	: 1,2 m wide behind cell block
1.17. Surge Room (adjacent to Visitors room)	: 2 m <sup>2</sup>
1.19. ID Photo Room	: 10 m <sup>2</sup>

#### **IDENTIFICATION PARADE ROOM**

Waiting Room No 1	7 m <sup>2</sup>
Waiting Cubicle No 1	1.8 m <sup>2</sup>
Viewing Room	18 m <sup>2</sup>
Line Up Area	29 m <sup>2</sup>
Waiting Cubicle No 2	1.8m <sup>2</sup>
Waiting Room No 2	10.5 m <sup>2</sup>
Toilet Waiting Room 1	3.2 m <sup>2</sup>
Toilet Waiting Room 2	3.2m <sup>2</sup>

The cell block should consist of at least four (4) cells with yards.  
SAPS: Expert Services (Lt.Col. Dirk Els / Capt. Kobus Swart)

**ALL SKETCH PLANS AND WORKING DRAWINGS HAVE TO BE SUBMITTED TO SYPPPLY CHAIN MANAGEMENT : EXPERT SERVICES FOR APPROVAL PRIOR TO CALLING OF TENDERS. THE SKETCH PLANS SHOULD CONSIST OF AT LEAST A FLOOR PLAN, SITE PLAN AND TYPICAL SECTION.**

Plans can be **posted** to:

**S.A.P.S.**  
**Supply Chain Management:**  
Expert Services  
Private Bag X254  
**Pretoria**  
0001

Plans can be **couriered** to:

**S.A.P.S.**  
**Supply Chain Management:**  
Expert Services  
18 De Havilland Crescent  
Acacia Building  
Persequor Technopark  
**Pretoria**

## **2. CELLS**

### **2.1 GENERAL REQUIREMENTS**

- 2.1.1 All cells must have ablution facilities, namely, a toilet, shower and drinking fountain inside the cell. See Annexure A, B & C

### **2.2 GENERAL CONSTRUCTION**

- 2.2.1 All brickwork to be **230mm** brick walls. A high tensile steel mesh of **100mm x 200mm x 5mm thick**, is to be built in cells, cell yards, kitchen, pantry or visitors area into the wall, between skins, in the perimeter walls of the cells (See Annexure "A"). The wall behind the toilet to be **330mm** (built up to sill height), with steel mesh between skins. (POL2012/S1)
- 2.2.2 Walls have to be painted to specification in heavy-duty, light coloured oil base coating. Proposed colours: ivory, light grey, etc. Approved undercoat Alkali resistant primer. No Contractors PVA. "See Annexure E" Underside of concrete slab to be painted white



- 2.2.3 A concrete bench must be built against the wall dividing the cell and the cell yard.
- 2.2.4 All cells, kitchens, pantry and visitors areas must have concrete ceilings with a minimum height of **3000mm** and finished with a conventional roof over.
- 2.2.5 All screen walls to the toilets and showers are to be **230mm** walls, built up to concrete slab/ceiling. Screen walls are to be added beside and in front of the toilet in accordance with the relevant Annexure. Free space between the front of the drinking fountain and screen wall to be **700mm to 900mm**.
- 2.2.6 All floors have to be finished in a steel/wooden trowel grano finish as specified with a **250mm high monolithic** upwards sloping concave skirting. See POL2012/B1
- 2.2.7 Insides of shower walls and floors to be waterproofed with Duraflex, "ABE" product or similar approved. Apply to manufactures specification and allow product to dry.
- 2.2.8 The floor to be finished with a **250mm high monolithic** upwards sloping concave grano skirting and sealed same as 2.2.7. The shower must be provided with a **170mm** threshold. See Annexure "A".

## 2.3 WINDOWS

- 2.3.1 Wire mesh- and expanded metal screens inside and outside windows, according to specifications, expanded metal, with a thickness of **3mm**, web width **10mm** and openings of **10mm x 40mm**, of the approved type Flatex/345 (Pigmesh). Openings in screens, for opening windows, to be finished so that **NO** sharp extrusions exists. Screen openings only on the inside screens of windows, **NO** openings on outside screens. (POL2012/W1 to W3)
- 2.3.2 Screen frames to be according to typical drawing POL2012/ W1, W2 and W3. The heavy-duty padlocks as specified on the drawings are to be included in the contract, on a master key system. The keys are to be handled in a similar fashion to the cell lock keys (see 2.4.7). Alternatively M10x30mm long bolt and nut can be used and tag welded instead of pad locks.
- 2.3.3 Glazing in cell windows to be **6,5mm** clear laminated glass. There must be a sufficient number of windows to ensure good ventilation of the cell.
- 2.3.4 Where windows and mesh are to be installed, all steel to be **hot dipped galvanised**. Galvanised steel work to be left unpainted and welding joints to be cold galvanised on site. The putty to galvanised windows to be painted with silver enamel paint.

- 2.3.5 The windows in the external wall to be built in as high as possible. Note that at least **2 brick** courses are to be left between underside of concrete ceiling and window soffit. The windows in the wall between the cell and the yard are to be built in at a standard soffit height of **2100mm** from finished floor level.
- 2.3.6 At least one window per cell is not to be installed until after the cell door and -gate have been built in and allowed to set (see 2.4.8).

## 2.4 DOORS AND GATES

- 2.4.1 All hinges in accordance with the specifications as per drawing no. POL2012/D4, and to be **greased monthly after installation**.
- 2.4.2 All frames, doors, gates and trellis work have to be in accordance with **drawings** POL2012/D1;D1a;D2;D3;D4 and D5. The cell door and gate lock box to have a keyhole only on the exercise yard side. Cell side to be blocked off.
- 2.4.3 Doors and gates have to be **hot dipped galvanised**.  
**NOTE: NO PAINT ON GALVANISED FINISHES**
- 2.4.4 ALL doors and gates have to open against the wall. See Annexure "A" and "B".
- 2.4.5 ALL cell type locks have to be ordered from SAPS: Project and Building Management Services (Tel: 012 841 7351). The cost of the locks have to be budgeted for in the contract amount, as SAPS Project and Building Management Services is only responsible for the ordering and co-ordinating. **ALL CELLS LOCKS ARE TO BE ACCOUNTED FOR BY THE CONTRACTOR AT THE END OF THE CONTRACT. THE CONTRACTOR MAY NOT TAKE POSSESSION OF ANY CELL LOCKS. EXTRA CELL LOCKS TO BE RETURNED TO SAPS:PROJECT AND BUILDING MANAGEMENT SERVICES.**
- 2.4.6 A total of two suites for the cell door and trellis door locks, have to be used in the entire cell complex. The locks are to be 4 lever, see drawing POL2012/D5. One suite has to be used for trellis and solid doors, to all cells and exercise yards, as well as the trellis gate in the passage, between the kitchen yard and the first exercise yard. The other suite has to be used for the trellis gate to the kitchen yard, the main entrance to the security passage, as well as any other trellis gates or solid doors. The Project Manager of Department of Public Works must confirm the number of different locks with the Commander of SAPS Project and Building Management Services in writing. A floor plan of cell block to be included.

**THE LOCKS HAVE TO BE ORDERED WELL IN ADVANCE, AS THE DELIVERY TIME CAN BE AS LONG AS TWO TO THREE MONTHS.**

- 2.4.7 **UNDER NO CIRCUMSTANCES** may the contractor or any other party, except the Station Commissioner of the station or his nominated representative, take possession of the keys of the locks. The keys have to be provided to the Station Commissioner or representative, in a sealed envelope (signed for) and kept in the safe of the station, for safekeeping.
- 2.4.8 The door, gate and frame are delivered to site as a unit, welded closed. Under no circumstances may the doors be cut open until after it has been built in completely and **ten (10) days settlement**. For this reason, the doors have to be built in before the windows, or one window per cell is not to be built in, until after the door has been built in, to allow access to the cell. (See 2.3.6).

**2.5 ELECTRICAL**

- 2.5.1 Vandal proof wall and ceiling lights with metal bases for fixing to structure and polycarbonate screens to be used throughout. See Annexure "D".
- 2.5.2 Lights in cells to be fixed out of reach, against the ceiling and never near any element that can serve as a possible foothold. The lights to be used in the cells to be a vandal proof fluorescent light with a built in PL9 night-light (with a guaranteed working life of 4000 hours) See Annexure "D".
- 2.5.3 A shorter light fitting, but of the same type as for the cell, to be used in the wc cubicle. See Annexure "A" and "D" (without a night light).
- 2.5.4 All light fittings to be positioned similar to Annexure "A"

**2.6 PLUMBING**

- 2.6.1 Drinking fountains: To be installed in all cells in accordance with drawing POL2012/S2. Drinking fountains to be of the approved type, and equipped with push button faucets, serviceable from the front, built into drinking fountain. Fountains to be installed with the underside, at a min height of **1200mm** from finished floor level.
- 2.6.2 All toilets to be vandal proof stainless steel toilets, as specified in drawing POL2012/S1.
- 2.6.3 Toilets to be activated with push button type flush valves, only letting through measured amounts of water under high pressure and stopping automatically, concealed toilet flush valve with integral non-hold open, vacuum breaker and shut front-entry

hidden and closed flow control valve or similar approved valves, for pressures between **30 kPa** and **250 kPa** at a height of **1500mm** above floor level in the cell. See drawing POL2012/S1.

- 2.6.3.1 Alternately in areas with a high lime content use low level cistern with 1.75" High Flow Flush Valve only to SABS 1509-1990 or 1.75" Kingfisher Syphonic Valve. To be mounted in secure service duct.
- 2.6.4 Where any sanitary fittings, e.g. wc's are to be fitted against an external wall, Provide steel mesh between brick skins, in accordance with drawing POL2012/S1.
- 2.6.5 Warm water has to be laid and a proper water mixer provided. One **200 Litre** warm water cylinder and a heatpump has to be provided for every 2 cells, a **200 Litre** warm water cylinder and an heatpump to be added for every 2 cells thereafter. The engineer must determine if solar heating panels with geysers at the cell block can be utilised. Such solar panel systems must comply with the latest Standard Building Regulations. Refer to Annexure "F".
- 2.6.6 Showers to be activated with push button metre valve that allows only measured and pre-mixed amounts of water and automatically cuts off, e.g. a push button metering non hold open valve and with extension ring, fixed at a height of **1500mm** above shower floor level. See drawing POL2012/S3.
- 2.6.7 A **50mm** diameter sleeve has to be poured into the concrete, to house a stainless steel showerhead, as on drawing no. POL2012/S3.
- 2.6.8 Installations where push button flush and metre valves are used and the water pressure is less than **30 kPa**, see 2.6.3 and 15.1.
- 2.6.9 Where the provision of a pressure tank and -pump is not possible, externally mounted low level cisterns can be used, after consultation with SAPS: Expert Services. (See 2.6.3.1).
- 2.6.10 Where the water pressure exceeds **250 kPa**, a pressure reducing valve is to be installed on the water supply line.
- 2.6.11 A water filter/in line strainer, easily serviceable and cleanable, to be provided in ALL water supply networks to cells and exercise yards to intercept any impurities and ensuring the effective use of push button flush- and metre valves.
- 2.6.12 Where push button flush- and water valves are used, the total water supply network has to be **PROPERLY** rinsed before use, to remove any dirt and impurities, under the supervision of the responsible consultant.
- 2.6.13 The service of the water filter, pressure pump (if installed), all pipes, valves and faucets; must be possible from outside the cell and exercise yard except where practically impossible.

- 2.6.14 All water pipes to be chased into walls and serviceable from outside the exercise yards. Normal screw type taps to be replaced with push button faucets.
- 2.6.15 The consultant responsible must investigate the frequency of water shortages, and supply a buffer tank, with a **36 hour** reservoir capacity, under the contract if the need exists.
- 2.6.16 The quality of the water has to be tested, and if it is of poor quality, or **ANY** lime is present, SAPS: Expert Services, has to be contacted with the proposed solutions, for discussion and approval.

### 3. EXERCISE YARDS

#### 3.1 GENERAL REQUIREMENTS

- 3.1.1 Each cell must have a separate exercise yard, the full width of the cell, and built out to a length of **3,5 m** in front of the cell. See Annexure "A" and "B".

#### 3.2 GENERAL CONSTRUCTION

- 3.2.1 The height of the walls of the cell yards to be min **4500mm** high. Where the finish of the walls is face brick, the joints have to be filled in flush with the surface (**new cells**). The last eight (8) inner brick layers of the 230mm brick walls at the following areas: cell exercise yards; kitchen yard; cell passage; maintenance passage and off-loading area are to be of solid bricks. If hollow bricks are used, holes must be filled with cement to ensure that mesh screens can be properly installed.
- 3.2.2 If the existing finish of the walls is plaster and paint, the walls are to be prepared and painted with a heavy-duty oil base paint. (Annexure E ) (**THIS ONLY APPLIES FOR UPGRADING OF EXISTING POLICE CELLS**).
- 3.2.3 The approved type of high tensile metal mesh screen to be installed at a min height of **4000mm** from finished floor level (see drawing POL 2012/G1). A **3mm** solid steel plate of at least **1,2m x 1,2m**, is to be welded to the mesh, over all door openings into the cell yard, according to POL 2012/G1. **All steel to be hot dipped galvanised and welding spots to be finished with cold galvanising on site.**

3.2.4 **Approved Type Mesh:**

- a) Galvanised Carbon Hardened Woven Steel Mesh (Screenex see "Annexure G")
- b) Mesh Aperture: 10.00mm x 10.00mm
- c) Wire Diameter: 4.80mm
- d) Coating : High Carbon (Spring Steel)  
Hot Dipped Galvanised SABS 763  
(Before weaving) ISO 1461
- e) Weave Type: SW
- f) Company: Screenex wire Weaving Manufacturers
- g) Assist. Sales Manager:  
Basil Shelper  
Tel number : (011) 864 2773  
Fax number: (011) 864 6800

3.2.5 **358 Betafence Doubleskin (Zincalu) Welded Mesh**

(see "Annexure H")

- a) Mesh Aperture: 8.7mm x 8.7mm
- b) Wire Diameter: 3.96mm Zincalu
- c) Company: Betafence
- d) Sales Consultant:  
Johan Goosen  
Cell: 082 560 5656  
E-mail: Johan@betafence.co.za
- Tap Nortier  
Cell: 082 889 0733  
Tap@betafence.co.za

3.2.6 Floors of yards (only plastered walls) are to be finished in a wooden trowel grano finish with a **250mm high monolithic** upwards sloping concave skirting. The floor is to have a fall towards the door to the passage, to drain water under the door and into the passage.

3.2.7 The finished floor levels at the lowest point of the exercise yards, are to be at least **170mm** lower than the floor level of the cells, and **85mm** higher than the floor level of the passage.

3.2.8 Concrete capping to be provided on all external walls against weather with water drip.

3.3 **WINDOWS**

3.3.1 All screens to cell windows are to be in accordance with drawing no. POL 2012/W1 to W3. No protrusions are allowed, that may serve as a possible foothold. Screens and windows between yards and cells are to be installed at a soffit height of **2100mm** from finished floor level.

### 3.4. DOORS AND GATES

- 3.4.1 Hinges in accordance with the specifications as per drawing no. POL 2012/D4.
- 3.4.2 Frames, doors, gates or trellis work are to be in accordance with drawings POL2012/D1, D2, D3, D4 and D5.
- 3.4.3 The cell door and gate lock box to have a keyhole only on the exercise yard side. Cell side to be blocked off.
- 3.4.4 ALL doors and gates have to open against the wall, see Annexure "A" and "B".
- 3.4.5 The finishes and specifications of doors and gates, are the same as in 2.4.
- 3.4.6 ALL trellis gates are to be supplied with an opening to pass a plate through, see drawing no. POL 2012/D1.

### 3.5 ELECTRICAL

- 3.5.1 Lights in exercise yard to be fixed against the walls between the yard and passage, directly under steel mesh, preferably at a minimum of **3,7 metres** from the finished floor level. The type of light fitting to be installed is the same as for the cells. See Annexure "D".
- 3.5.2 All light fittings to be positioned similar to Annexure "A".

## 4. SECURITY PASSAGE

### 4.1 GENERAL REQUIREMENTS

- 4.1.1 A **1,5m** wide security passage has to be provided in front of all exercise yards, for the length of the cell block. See Annexure "A - C".
- 4.1.2 The passage to be divided into a high security area and a lower security lobby. The different zones to be divided by trellis gates. The two trellis gates have to be built in, one at the entrance to the passage, and the other in the passage, between the entrances to the kitchen yard and the first of the exercise yards. See Annexure "A".

### 4.2 GENERAL CONSTRUCTION

- 4.2.1 The height of the walls of the passage to be minimum **3000mm** high. The walls are to be flush jointed, smooth face brick.
- 4.2.2 The passage is to be covered with a conventional roof structure, e.g. tiles or corrugated iron. "Mentex 70" mesh screen to be installed as a ceiling, at a min height of **2700mm** from finished floor level (see drawing POL 2012/G1) Preferable directly below trusses. Before installation of "Mentex 70" mesh all trusses to be

treated with Carbolinium paint. **All steel to be hot dipped galvanised and welding spots to be finished with cold galvanising on site.**

4.2.3 The floor is to be finished with a wooden trowel grano finish with a **250mm high monolithic** upwards sloping concave skirting. The floor is to have a fall towards the seep holes in the external wall, or covered drains in the passage, with outlets to the exterior. Lid on drain to be bolted onto drain framework.

4.2.4 The finished floor level of the passage is to be at least **85mm** lower than the finished floor level of the exercise yards.

#### 4.3 WINDOWS

4.3.1 Breezeblock openings can be built into the external wall, but **Not** directly opposite any doors to exercise yards, and **Not** in the wall between the yards and passage. Expanded metal screens (Annexure G and H) in angle iron frames, are to be bolted to the inside wall over the full area of the openings. Screens and breeze openings are to be installed as high as possible, and should not extend to below **1500mm** from finished floor level.

#### 4.4. DOORS AND GATES

4.4.1 A solid cell door with viewing panel and grill gate combination (as on drawing no. POL2012/D1 to D4) has to be built in, as entrance to the admission area and secured passage. Door handles on both sides of solid doors.

4.4.2 Hinges in accordance with the specifications on drawing no. POL 2012/D4.

4.4.3 Frames, gates or trelliswork are damaged beyond repair, it has to be replaced in accordance with drawings POL2012/D1, D2, D3, D4 and D5.

4.4.4 Only trellis gates (no solid doors) are to be installed in the passage. The gates have to open against the wall, see Annexure "A".

#### 4.5 ELECTRICAL

4.5.1 Lights in the passage are to be fixed directly under the mesh, against the external walls, opposite the doors to the yards. See Annexure "A". The lights are to be the same as used in the cells (see Annexure "D") but without a night light.



- 4.5.2 Two light switches (one for the cell lights and one for the yard lights) have to be positioned in the passage outside each door, out of reach of persons in custody inside the yards, 500 mm away from door frame. **Light switches to be watertight rotatable switchgear, of an industrial type. The switches for the cell lights to be two-way switches, to allow for the operation of the night-light.**

- 4.5.3 No power points allowed.

#### 4.6 PLUMBING

- 4.6.1 A fire hose reel has to be provided in accordance to the National Building Regulations, but must not be accessible from the exercise yards. (All cells must be reached).

### 5. CELL KITCHEN AND PANTRY

#### 5.1 GENERAL REQUIREMENTS

- 5.1.1 The cell kitchen must preferably be built next to the first cell, with the same depth as the cells. The pantry is to be accessed off the cell kitchen. The kitchen is to be accessed via the kitchen yard, via a secured lobby off the admissions area. See Annexure "A".

#### 5.2 GENERAL CONSTRUCTION

- 5.2.1 The walls are to be **230mm** conventional brickwork, with a concrete ceiling over the kitchen and pantry. A conventional roof structure is to be installed over all concrete ceilings.
- 5.2.2 Walls to be painted in heavy duty, light coloured oil base coating. Proposed colours: ivory, light grey, etc. Approved undercoat Alkali resistant primer. No Contractors PVA. "See Annexure E"
- 5.2.3 All floors have to be finished in a steel trowel grano finish with a **250mm high monolithic** upwards sloping concave skirting.
- 5.2.4 Architect to ensure that all door frames between off loading and kitchen (see drw. POL2012/D1A/Annexure A) to be a minimum of 1100 mm to accommodate an oil jacketed boiling pot, if specified under contract.

#### 5.3 GENERAL EQUIPMENT

- 5.3.1 A stainless steel work top with shelf below is to be provided (Length  $\pm 1500\text{mm}$  min).
- 5.3.2 A stainless steel (PS-L or PS-R) double combination pot sink is

to be built in with bib tap extension peaces and flange. All equipment to be stainless steel grade 304.

- 5.3.3 A handheld **4,5kg CO<sub>2</sub>** and **DCP** fire extinguishers are to be fixed to a wall in an accessible position.

- 5.3 Meranti or Supawood shelves (**350mm**) have to be provided in the pantry, in accordance with drawing no. POL 2012/F1. The room has to be properly ventilated.

- 5.3.5 Coastal Manufacturing GT700 or similar approved Stainless Steel grade 304 grease trap with a flow rate of 1.8l/sec. to be installed in the kitchen.

#### 5.4 WINDOWS

- 5.4.1 Cell windows have to be built into the wall between the kitchen and yard, at a soffit height of **2100mm**. The pantry is to be provided with ventilation bricks built into the external wall.

#### 5.5. DOORS AND GATES

- 5.5.1 Both the kitchen and the pantry have to be provided with a solid meranti door, type T4 fitted with a cylinder lock and aluminium louver (**300mm x 300mm**) in bottom half.
- 5.5.2 When a oil jacketed boiling pot is specified for the kitchen, a wider door and frame to be installed. (See POL2012/D1A).

#### 5.6 ELECTRICAL

- 5.6.1 At least two double plugs have to be provided in the kitchen.
- 5.6.2 A double plug has to be provided in the pantry, to make provision for a fridge or freezer. An alternative position for the fridge needs to be provided in the cell kitchen as well.
- 5.6.3 The approved type of cell light (without night light) has to be installed in the kitchen and pantry. See Annexure "D". Light switches to be watertight rotatable switchgear, of an industrial type, as used for the cells.

#### 5.7 ELECTRICAL EQUIPMENT

- 5.7.1 The kitchen is to be fitted with a three phase industrial type stove, with solid plates without oven, type Vulcan RE-3, T **OR** Bakers Price equipment **OR** similar and approved product. Other types of stoves can be investigated and the proposals submitted to SAPS: Expert Services for final approval.
- 5.7.2 A Stainless steel extractor hood with isolator has to be provided over stove and boiler pan in kitchen.

## 5.8 PLUMBING

- 5.8.1 The double combination pot wash sink to be provided with heavy duty bib taps, extension pieces and flanges. (1 x hot and 1 x cold for **each bowl**)
- 5.8.2 One **100 litre** geyser to be installed for kitchen.

## 6. KITCHEN YARD

### 6.1 GENERAL REQUIREMENTS

- 6.1.1 A yard has to be built out to a length of **3,5m** in front of the kitchen.
- 6.1.2 The kitchen yard is of a similar construction to the exercise yards. The kitchen has to be accessed from the yard. The yard is accessed from a secured lobby off the admissions area. See Annexure "A".
- 6.1.3 A concrete double bowl washing trough to be installed with heavy duty 19mm bib taps. Only the cold-water tap to be a hose type tap and hot water a union tap. (See 6.6.1).

### 6.2 GENERAL CONSTRUCTION

- 6.2.1 The height of the walls of the kitchen yards to be min **4500mm** high. Where the finish of the walls is face brick, the joints have to be filled in flush with the surface (**new cells**).
- 6.2.2 Finishing of the walls is plaster and paint. Walls to be painted in heavy-duty, light coloured oil base coating. Proposed colours: ivory, light grey, etc. Approved undercoat Alkali resistant primer. No Contractors PVA. "See Annexure E" (**existing cells**).
- 6.2.3 The approved type of high tensile metal mesh screen to be installed at a min height of **4000mm** from finished floor level (see drawing POL 2012/G1) similar as exercise yards. **All steel to be hot dipped galvanised and welding spots to be finished with cold galvanising on site.**
- 6.2.4 The floors of the yard, are to be finished in a steel trowel grano finish with a **250mm high monolithic** upwards sloping concave skirting. The floor is to have a fall towards the door to the passage to drain water under the door and into the passage.
- 6.2.5 The finished floor levels of the kitchen yards, is to be at least **170mm** lower than the floor level of the kitchen.
- 6.2.6 A drying line, constructed of R10 reinforcing rods, or solid rods, welded to **50mm x 50mm** mild steel angle iron sections, bolted to the walls, has to be provided in a corner of the yard as indicated on Annexure "A".

### 6.3 WINDOWS

- 6.3.1 Cell windows have to be built into the wall between the kitchen and yard, at a soffit height of **2100mm**. The pantry is to be provided with ventilation bricks built into the external wall.

### 6.4. DOORS AND GATES

- 6.4.1 A cell trellis gate to be provided from the passage, with the door swing against the wall. No solid cell door to be provided.

### 6.5 ELECTRICAL

- 6.5.1 Lights in the kitchen yard to be fixed against the walls between the yard and passage, directly under steel mesh, preferably at a minimum of **3,7 metres** from the finished floor level. The type of light fitting to be installed is the same as for the cells. See Annexure "D".
- 6.5.2 All light fittings to be positioned similar to Annexure "A".

### 6.6 PLUMBING

- 6.6.1 A concrete double bowl wash trough with bib taps has to be built in as shown on Annexure "A". (**Cold water**, hose type, Bib-tap to be provided for hosing down of cell block).

## 7. VISITOR'S ROOM

### 7.1 GENERAL REQUIREMENTS

- 7.1.1 The visitor's room is to be accessed from two sides, one from the secured passage or -lobby by the detainee and the other from the outside by the public. No contact can take place between the two parties. See Annexure "A". Dividing walls between cubicles to be **230mm** brick walls built up to underside of concrete ceiling. Room to be accessible for disabled. **No electrical points at detainee's side.**

### 7.2 GENERAL CONSTRUCTION

- 7.2.1 The walls to be conventional **230mm** brick work walls, with a concrete ceiling, with conventional roof structure over the slab.
- 7.2.2 Walls to be painted in heavy duty, light coloured oil base coating. Proposed colours: ivory, light grey, etc. Approved undercoat Alkali resistant primer. No Contractors PVA. "See Annexure E"

- 7.2.3 The floor to be finished in a steel trowel grano finish with a **250mm high monolithic** upwards sloping concave skirting.
- 7.2.4 The finished floor level of the visitor's room is to be at least **85mm** higher than the floor level of the passage.
- 7.2.5 The entrance from the visitor's side is to be ramped, to allow for disabled access.
- 7.2.6 Seats and counters to be built in according to drawing no. POL2012/V1, V2, & V3.

### 7.3 WINDOWS

- 7.3.1 Cell windows and grilles have to be built into an external wall, on the detainee's side, as high as possible, in accordance with the standard drawings. The visitor's side is to be provided with a conventional window in an external wall. The security window between the two areas to be in accordance with POL2012/V1 to V3 with **16mm** diameter mild steel vertical bars at **80mm** centres over glass on detainees side.

### 7.4. DOORS AND GATES

- 7.4.1 A cell trellis gate to be provided from the passage, on the detainee's side. A solid meranti door type T4 with a cylinder lock to be provided on the visitor's / public's side.

### 7.5 ELECTRICAL

- 7.5.1 Cell type light to be fixed on the detainee's side, similar to cells, against concrete ceiling. See Annexure "D" Conventional bulkhead to be fixed on visitor's side, on ceiling. **No plugs are needed in detainees side.**

### 7.6 PLUMBING

- 7.6.1 Nothing to be noted.

## 8. PRISONER'S PROPERTY STORE (SAP22)

### 8.1 GENERAL REQUIREMENTS

- 8.1.1 The prisoner's property store is a secured store with built in shelves, and steel cabinets (min 4 x 300w x 450d x 1.8h) with 4 louver lockable doors preferably off the admissions area. See Annexure "A".

### 8.2 GENERAL CONSTRUCTION

- 8.2.1 The walls to be conventional **230mm** brick work walls, with a concrete ceiling, with conventional roof structure over the slab.

225

- 8.2.2 Walls to be painted in heavy duty, light coloured oil base coating. Proposed colours: ivory, light grey, etc. Approved undercoat Alkali resistant primer. No Contractors PVA. "See Annexure E"
- 8.2.3 The floor to be finish in a steel trowel grano finish with a **250mm high monolithic** upwards sloping concave skirting.
- 8.2.4 Shelving (**+350mm**) to be in accordance with drawing no. POL2012/F1.

### 8.3 WINDOWS

- 8.3.1 The room must be well ventilated, by means of vent bricks, or similar and approved methods, while still ensuring the security of the room.

### 8.4. DOORS AND GATES

- 8.4.1 A solid meranti door type T4 with a cylinder lock to be provided.

### 8.5 ELECTRICAL

- 8.5.1 Conventional bulkhead to be fixed to ceiling. No plugs are needed.

### 8.6 PLUMBING

- 8.6.1 Nothing to be noted.

## 9. BLANKET STORE

### 9.1 GENERAL REQUIREMENTS

- 9.1.1 The blanket store is for the storage of blankets and mattresses. It can be provided off the admissions area, or off the secured passage. See Annexure "

### 9.2 GENERAL CONSTRUCTION

- 9.2.1 The walls to be conventional **230mm** brick work walls, with a concrete ceiling, with conventional roof structure over the slab.
- 9.2.2 Walls to be painted in heavy duty, oil base coating. Proposed colours: ivory, light grey, etc. Approved undercoat Alkali resistant primer. No Contractors PVA. "See Annexure E"
- 9.2.3 The floor to be finished in a steel trowel grano finish with a **250mm high monolithic** upwards sloping concave skirting.
- 9.2.4 Shelving (**+450mm**) to be in accordance with drawing no. POL2012/F1.

### **9.3 WINDOWS**

- 9.3.1 The room must be well ventilated, by means of vent bricks, or similar and approved methods, while still ensuring the security of the room.

### **9.4. DOORS AND GATES**

- 9.4.1 A solid meranti door type T4 with a cylinder lock to be provided.

### **9.5 ELECTRICAL**

- 9.5.1 Conventional bulkhead to be fixed to ceiling. No plugs are needed.

### **9.6 PLUMBING**

- 9.6.1 Nothing to be noted.

## **10. HOT WATER GEYERS AND HEATPUMPS**

### **10.1 GENERAL REQUIREMENTS**

- 10.1.1 The Cell hot water system will consist of a 5Kw heatpump and a 200 Litre geyser for every two cells. (Refer to Annexure "F").
- 10.1.2 The water to be pre mixed to an acceptable temperature. (Max 25° – 30°). The engineer must determine if solar heating panels with geysers at the cell block can be utilised. Such solar panel systems must comply with the latest Standard Building Regulations.

### **10.2 GENERAL INSTALLATION**

- 10.2.1 The 200 Litre geyser will be wall mounted with wall mounting brackets on the outside of the 230mm cell wall inside the secure service passage/duct. Refer to Annexure "F"
- 10.2.2 The heatpump will be wall mounted with wall mounting brackets on the outside of the 230mm cell wall inside the secure service passage/duct. Refer to Annexure "F"
- 10.2.3 The geyser to be fully wrapped with an appropriate geyser blanket for the purpose of hot water geyser isolation. Refer to Annexure "F".
- 10.2.4 The installation shall comprise a fully functional installation consisting of all items as required for the successful operation of the system. The exclusion of any material and/or the installation thereof shall render the system incomplete and be for the account of the installer. Refer to Annexure "F"

### 10.3 ELECTRICAL

- 10.3.1 The electrical supply of the heatpump will be the normal power section of the main distribution board of the cell block complex. Refer to Annexure "F"

### 10.4. PLUMBING

- 10.4.1 Refer to Annexure "F"

## 11. ADMITTANCE AREA

### 11.1 GENERAL REQUIREMENTS

- 11.1.1 This room is to be built onto all cell blocks under Project Five Star. This room is for the processing and booking of detainees before they are admitted to the cells. It also serves as access control for the cell block. See Annexure "A".
- 11.1.2 See POL2012/A – Admission Counter

### 11.2 GENERAL CONSTRUCTION

- 11.2.1 The walls to be conventional **230mm** brick work walls, with the approved high tensile steel mesh between the skins. A concrete ceiling at  $\pm 3,0\text{m}$  high is to be provided over the area, with a conventional roof structure over the slab.
- 11.2.2 Walls to be painted in heavy duty, light coloured oil base coating. Proposed colours: ivory, light grey, etc. Approved undercoat Alkali resistant primer. No Contractors PVA. "See Annexure E"
- 11.2.3 The floor to be finished in a steel trowel grano finish with a **250mm high monolithic** upwards sloping concave skirting. The finished floor level has to be **85mm** higher than the secured passage.
- 11.2.4 A counter with brick support and steel trowel grano, with a drop in stainless steel prep bowl, has to be constructed in accordance with POL2012/A. See Annexure "A".
- 11.2.5 A concrete bench, similar to those in the cells has to be built against one of the walls. See Annexure "A" and POL2012/B1

### 11.3 WINDOWS

- 11.3.1 Cell windows and screens according to drawing no. POL2012/W1 to W3 has to be built in as high as possible from finished floor level.
- 11.3.2

### 11.4. DOORS AND GATES

- 11.4.1 A solid cell door with viewing panel and grill gate combination (as on drawing no. POL2012/D1 to D4) has to be built in, as



entrance to the admission area and secured passage. Door handles on both sides of solid doors. A trellis gate has to be built in as access to the secured lobby. See Annexure "A". When an oil jacketed boiling pot is specified for the kitchen, a wider door and frame to be installed. (See POL2012/D1A).

## 11.5 ELECTRICAL

- 11.5.1 Vandal proof wall and ceiling lights, as for cells, but without night-lights, are to be used throughout. See Annexure "D".
- 11.5.2 Lights to be fixed out of reach, against the ceiling and never near any element that can serve as a possible foothold. The lights to be a vandal proof fluorescent light without a night-light. See Annexure "A" and "D".
- 11.5.3 A lock-able sub-distribution board is to be installed behind the counter to house the network for the entire cell block. Two plugs and one computer plug must be provided in cell guard office. (Power skirting as per specification.)
- 11.5.4 3 way power skirting to be installed (data cable, IT cable and power point).

## 11.6 PLUMBING

- 11.6.1 The taps used with the prep bowl have to be robust and vandal proof as far as possible. See POL2012/A.

## 12. TEMPORARY HOLDING CELL

### 12.1 GENERAL REQUIREMENTS

- 12.1.1 This room is for the holding of detainees while they are being processed/booked. It should be directly off the admittance area. See Annexure "A".

### 12.2 GENERAL CONSTRUCTION

- 12.2.1 The side and back walls to be conventional **230mm** brick work walls, with the approved high tensile steel mesh between the skins in the exterior walls. The front face to be manufactured of 16 mm round bar framework, 90mm centre to centre with steel bracing, and a grill gate similar to cells. A concrete ceiling ( $\pm$  **3,0m** high) is to be provided over the area, with a conventional roof structure over the slab.
- 12.2.2 Walls to be painted in heavy duty, light coloured oil base coating. Proposed colours: ivory, light grey, etc. Approved undercoat Alkali resistant primer. No Contractors PVA. "See Annexure E"
- 12.2.3 The floor to be finished in a steel trowel grano finish with a

**250mm high monolithic** upwards sloping concave skirting. The finished floor level has to be **85 mm** higher than the secured passage.

- 12.2.4 A concrete bench, similar to those in the cells, **see Annexure "A"**

### **12.3 WINDOWS**

- 12.3.1 No windows are necessary, as the area is ventilated via the gate.

### **12.4. DOORS AND GATES**

- 12.4.1 A trellis gate (as on drawing no. POL2012/D1 to D4) has to be built in according to Annexure "A". Blank off inside keyhole.

### **12.5 ELECTRICAL**

- 12.5.1 Vandal proof ceiling lights, as for cells, are to be used throughout. See Annexure "D".
- 12.5.2 Lights to be fixed out of reach, against the ceiling and never near any element that can serve as a possible foothold. The lights to be a vandal proof fluorescent light without a night-light. See Annexure "A" and "D".
- 12.5.3 No plugs are needed.

### **12.6 PLUMBING**

- 12.6.1 No plumbing to this area.

## **13. SECURED SERVICE DUCT**

### **13.1 GENERAL REQUIREMENTS**

- 13.1.1 A secured service duct is to be built behind all external windows, to prevent access to the windows and plumbing services. See Annexure "A".

### **13.2 GENERAL CONSTRUCTION**

- 13.2.1 The walls to be conventional **230mm** face brick walls of **±3m** high (height will be dictated by roof height and -overhang), with flush joints. Wall to be built in 3000 mm segments with an expansion joint between sections. A 460mm column to be built on each end of segment.
- 13.2.2 "Mentex 70" steel mesh to be hot dipped galvanised (according to drawing no. POL2012/G1) and to be built in over entire duct area.

**230**

- 13.2.3 A concrete apron to be provided around cell block, and extended to the screen wall in the service duct, to serve as a floor for this area.

### 13.3 WINDOWS

- 13.3.1 No windows are necessary.

### 13.4. DOORS AND GATES

- 13.4.1 A trellis gate (as on drawing no. POL2012/D1 to D4) has to be built in according to Annexure "A", at one end of the duct.

### 13.5 ELECTRICAL

- 13.5.1 1 Waterproof (outdoor) plug is needed in the duct.
- 13.5.2 Bulkhead light fitting to be fixed above the trellis gate and linked to the existing external lighting circuit.  
One bulkhead light has to be provided between windows at max. **6 metre** centres.

### 13.6 PLUMBING

- 13.6.1 No plumbing to this area. The main sewerage line from the cell block to be either located inside this duct or just outside it, according to National Building Regulations, with the cleaning eyes, etc. clearly marked.

## 14. ELECTRICAL GENERAL

- 14.1 The electrical consultant must inspect the condition of the electrical reticulation for compliance with Regulations. Everything found to be non-compliant, to be replaced or repaired under the contract. The contractor has to leave at least **10 lamps** of each type on site after completion of the contract. These are to be handed to the station commissioner for safekeeping.
- 14.2 The external lighting, especially around the cell block, has to be sufficient to ensure a secure environment. The lighting can either be wall-mounted fittings against the cell block, but not positioned as to blind any person doing inspections of the area. Another alternative is to provide conventional post top lighting on powder coated galvanised poles.
- 14.3 Where conduit has to be laid/chased in the walls or slabs (inside cells), a SABS approved PVC conduit has to be used for wiring. Where wiring has to be surface mounted (only allowed in rare circumstances, and only on external surfaces and out of reach of detainees) the type of conduit to be of the galvanised type.

- 14.4 The present bulk electricity supply has to be investigated in terms of consistency of supply, the installation of a new emergency generator needs to be investigated and included under the contract. This generator has to be able to service the essential areas in the station and cell block. (Entire cell block, security/external/passage lights, station commissioner office, entire community service centre, radio room and computer rooms). See Annexure "D". To ensure uniformity nationally, the type and size of generator to be discussed with:
- 14.5 Where needed 3-way power skirtings to be installed (data cable, IT cable and power point).

## **15. SECURE OFF-LOADING AREA**

### **15.1 GENERAL REQUIREMENTS**

The off-loading area must be built on to the cell admittance area under Project Five Star. This area is for save off-loading of detainees before processing and booking take place (see Annexure "A").

### **15.2 GENERAL CONSTRUCTION**

The height of the walls of the secure off-loading to be minimum 3500 mm high x 10500 mm long. The vehicle entrance minimum 3000mm high x 4250 mm wide. The walls to be conventional 230 mm face brick walls with flush joints. (The height closer to the admittance area will be dictated by roof height and overhang) See Annexure A.

- 15.3 The floor to be finished in a steel trowel grano finish. The finished floor level has to be 85 mm lower than the cell admittance area.
- 15.4 "Mentex 70" steel mesh to be hot dipped galvanised (according to drawing No POL2012/G1) and to be built in over the entire off-loading area and to Engineer Specification.
- 15.5 Steel doors to be manufactured to POL2012/D1A.
- 15.6 Vehicle entrance gates to be manufactured to POL2012/D6, position of building and space available will determine if either a sliding gate or swing gates will be used.

## **16. IDENTIFICATION PARADE ROOM**

### **16.1 GENERAL REQUIREMENTS**

This room is to be built on to cell block complex under Project Five Star. It is mainly used for identification purposes.

### **16.2 GENERAL CONSTRUCTION**

- 16.2.1 The walls to be conventional 230mm brick work walls, with the approved high tensile steel mesh between the skins.
- 16.2.2 A concrete ceiling is to be provided over the area with a

conventional roof structure over the slab.

- 16.2.3 1200x600mm acoustic suspended ceilings tiles hung from standard aluminium hangers fixed to concrete slab in only the Control Room and Waiting Rooms. (See DRW IPR/100)
- 16.2.4 To ensure that sound transfer between rooms are eliminated the walls in the Control Room to be clad with 500x500mm Needlepoint Stain proof fibre tiles to total thickness of 6mm laid in accordance with the SABS 0186-2000 fitting code of practice and fixed with an approved acrylic emulsion adhesive.
- 16.2.5 Lighting in Parade Room to be minimum seven (7) times additional intensity to those in the Control Room.
- 16.2.6 All rooms except toilets to be air-conditioned.  
(Refer to **DRW IPR/100** for information and typical layout)

### 16.3 WINDOWS

- 16.3.1 The Viewing Panel to be min. **6000mm x 1300mm aluminium frame**. The underside of the lintol to be **2100mm from FFL**. The Viewing Panel to be positioned in the middle of the wall dividing the Control Room and Parade Room. (See DWG IPR/100)
- 16.3.2 Glazing to be provided in the aluminium Viewing Panel frame to consist of min. 9.5mm one way laminated reflective safety glass (High Impact). Colour of reflective coating to be **silver**.
- 15.3.3 Conventional steel frame windows to be used in toilets. Windows to be fitted with 12mmØ burglar bars. Windows must be positioned as far as practically possible away from each other to prohibit communication between witnesses in toilets.

### 16.4 DOORS AND GATES

- 16.4.1 Solid steel door to be provided for detainees entering Parade Room from cell block complex. (See DRW POL2012/D1)
- 16.4.2 All other door in ID Parade to be solid timber doors except in toilets. Toilets to receive hollow core timber doors.
- 16.4.3 Door from Control Room entering Parade Room to be a **solid timber door with handle only provided on the Control Room side**.
- 16.4.4 All doors in the Control Room to be clad with 500x500mm Needlepoint Stain proof fibre tiles to total thickness of 6mm laid in accordance with the SABS 0186-2000 fitting code of practice and fixed with an approved acrylic emulsion adhesive.

#### 16.5 ELECTRICAL

- 16.5.1 Two way intercom system to be installed in the Control Room and Parade Room. Position of the system to be similar as indicated in DRW IPR/100.
- 16.5.2 Power points to be provided only in the Control Room and Waiting Rooms, **NO power points to be provided in Parade Room.** (See: DRW: IPR/100)
- 16.5.3 Green and Red indicator lights to be provided in the Waiting Rooms. (See: DRW IPR/100)
- 16.5.4 Please refer to Annexure "D": 'Technical Specification for Luminaries for Cell Block and Police Parade Rooms' for additional information.

#### 16.6 RECORDER EQUIPMENT

- 16.6.1 All electrical recording equipment to be supplied by SAPS and does not form part of the building contract unless otherwise stated in writing.

#### 16.7 PLUMBING

- 16.7.1 All plumbing in the ID Parade Room complex to be conventional plumbing fixtures and fittings to comply with SANS 10400.

### 17. GENERAL NOTES

- 17.1 Where the suitability of the water supply is suspect, a consultant has to be appointed as a disbursement under the architect's appointment, to do a complete investigation and compile a report about the suitability of the water for human consumption, the water pressure, the lime concentration, the consistency of the water supply, and any other relevant factors. Recommendations have to be made about booster pumps, filtering systems, de-liming systems, etc. (see 2.6.3)
- 17.2 Screen frame to be bolted at least a minimum of 6 brick layers below top edge of wall. The last eight (8) inner brick layers of the 230 mm brick walls at the following areas: cell exercise yards; kitchen yard; cell passage; maintenance passage and off-loading area are to be of solid bricks. If hollow bricks are used, holes must be filled with cement to ensure that mesh screens can be properly installed.
- 17.3 All plumbing and storm water drainage must be inspected by the consultant responsible, and be supplied under the contract. An adequate number of manholes must be provided, to enable easy cleaning, as foreign objects often block the sewerage system.
- 17.4 A **1 metre** wide apron is to be built around the cell block, where possible, but especially where there are entrances to the building.

- 17.5 Should circumstances necessitate it, changes to all or some of the aforementioned requirements will be determined by the surveying team during inspections.
- 17.6 Proposals for **similar approved products or materials** to be submitted to Division: Supply Chain Management, Expert Services, South African Police Service, through the regional office of the Department of Public Works, for evaluation and approval.
- 17.7 The perimeter- or boundary wall adjacent to the cell block has to be built as part of the contract, to ensure strict security of the area around the cell block.
- 17.8 Concrete capping must be provided on all external walls against weather with water drip.
- 17.9 Where there is no concrete roof/ceiling, and it is not possible to install a concrete ceiling, a **3mm thick mild steel plate** has to be fixed, under the existing ceiling. 3mm thick mild steel plate to be welded to steel framework and built into walls, similar to drawing POL2012/G1 (Upgrading of cells only)

**THE FINAL DOCUMENTATION HAS TO BE APPROVED AND SIGNED BY SAPS: EXPERT SERVICES, PRIOR TO TENDERS. THIS SECTION HAS TO BE INFORMED OF ALL SITE MEETINGS AND PROGRESS OF THE PROJECT.**

- 17.10 Signage also has to be provided under the contract. All exercise yards have to be numbered and named in the passage, namely: Male and Female. All other rooms also have to be named, e.g. Kitchen, Pantry, Visitor's Room, etc. Signage components, like plates, screws, etc. must not be accessible to detainees in the cell yards. **No cell capacity indications allowed.**
- 17.11 For more information on cell blocks or questions on this document, contact:

**Expert Services**

Division: Supply Chain Management  
Private Bag X254  
**Pretoria**  
0001

**Lt.Col. Dirk Els**  
(012) 845-8726 (T)  
(012) 845-8762 (F)  
(082) 499-0335 (C)  
[elsd@saps.org.za](mailto:elsd@saps.org.za)

**Capt. Kobus Swart**  
(012) 349-6068 (T)  
(012) 845-8762 (F)  
(071) 688-7000 (C)

[SwartKobus@saps.gov.za](mailto:SwartKobus@saps.gov.za)

235

- 17.12 The abovementioned office has to be kept informed as to **dates** for **site hand over**, and **ALL** dates for **site meetings**, during the construction phase. **All** site meeting minutes, etc are to be forwarded to the above address and/or fax numbers.
- 17.13 **Initial concept layouts** can be faxed to the above numbers for **inputs/comments**, to enable possible changes to be made at an early stage of the project.
- 17.14 **All steelwork and door frames** to be inspected by Expert Services at manufacturers' premises before galvanizing. (SAPS to supply certificate of approval).
- 17.15 **Manufacturers of cell windows**, using manganese bars and overhead screens for the entire cell complex have to submit certificates from material suppliers stating that correct material used as specified in the 5-Star specification 2012 before payment certificate can be issued.
- 17.16 The principal agent and contractor will be held responsible and liable for any deviations and additional costs due to any unapproved deviations from this 5 Star Specification.
- 17.17 This 2012 version of the 5 STAR Specification with all attached drawings and annexure's, supersedes the previous 2006 5 STAR Specifications with all drawings and annexure's. The principal agent and contractors must ensure that they work from the latest specifications. The principal agent and contractor will be held responsible and liable for any deviations and additional cost due to work conducted from older specifications.



**SAPS  
5-STAR PROJECT**

**PAINT SPECIFICATIONS**

**UPGRADE OF PAINTED SURFACES**

## SPECIFICATIONS FOR THE UPGRADE OF PAINTED SURFACES

### Cleaning of unsound surfaces - plaster cracks and holes, peeling paint, lichen and algae, dirt and debris, greasy, chalky, and powdery surfaces.

Dirty, greasy surfaces, as well as paint coatings that have chalked, should be washed with a solution of SUGAR SOAP, or a water-soluble degreaser.

Rinse the complete wall surface thoroughly with clean water, removing residues of the cleaning solution and at the same time cleaning off dirt and debris from the walls.

The following conditions may cause poor adhesion of paint:

Moisture within the structure.

Friable or powdery substrate.

Numerous or excessively thick paint coatings.

Plaster cracks.

All loose and flaking paint should be removed down to sound substrate, using a sharp paint scraper and firm hand pressure. It is not necessary to remove well-bonded layers of paint.

Any existing waterproofing membrane must be completely removed.

Chalked and friable filling material must be removed.

It is recommended that crosshatch tests be done on all areas where the adhesion of paint is suspect.

Edges of tightly bonded paint are to be “feathered” with coarse to medium grit sandpaper to smooth them off and provide an even surface. The sanding will also serve to provide a profile.

Opened cracks, as well as all damp areas should be scrubbed with either of the following solutions in order to kill lichen and fungal growth: HTH (chlorine) and water 1 - 4 (20% solution), or JIK (sodium hypochlorite).

Ensure that the cracks are completely saturated, and allow the solution to react for a minimum of four (4) hours.

Rinse the complete wall surface thoroughly with clean water, removing residues of the cleaning solution and at the same time cleaning off dirt and debris from the walls.

The best method of cleaning away debris from walls is by high-pressure water blast - using a rotating nozzle, at a pressure of between 150 to 250 bars.

**Filling of unsound surfaces - plaster cracks and holes, as well as the treatment of delaminating plaster.**

It is recommended that all existing plaster with extensive crazed cracking be removed and re-plastered. Parapet wall tops between cells should be waterproofed (see below).

Every crack must be opened as follows:

Fine hair cracks (-0,3 mm) may just be sanded lightly.

Medium cracks (+0,3 mm and -2 mm) are to be raked out with a scraper blade.

Large cracks (+2 mm) must be opened out with a carborundum disk in an inverted V-shape to 3 mm or larger.

Medium cracks and holes should be filled with PROFILL, in accordance with the manufacturer's instructions.

Large cracks, as well as cracks occurring at joints or around windows, which are subject to movement, are to be filled with a soft, flexible crack filler, such as PRATLEY FLEXISEAL. Ensure that the FLEXISEAL is forced right inside the crack and filled to the top. An industrial pump-gun may be used for this purpose.

It is recommended that all filling material be removed from joints and replaced with PRATLEY FLEXISEAL, or similar.

VERY LARGE CRACKS may be cleaned and wetted, then filled with a sand/cement mix.

Plaster of which the adhesion is suspect (de-lamination) must be removed down to sound brickwork, and replaced.

Mortar, which is soft and friable, must be scraped out between the bricks and replaced.

**Water ingress on parapet wall tops**

After all defects have been remedied in accordance with the instructions in this specification, all causes of water ingress must be established and cured. The waterproofing should be done after cleaning and filling; and just before the final finishing coats of paint.

One of the recommended methods of waterproofing is with an approved high build and membrane water proofing system. The system should be taken up, over, and down parapets, and extended 10 cm down the sides. Special care should be taken to work the waterproofing system well into the substrate to prevent capillary reaction (water cohesion), thereby causing water ingress again.

### Unsound Concrete

Concrete where carbonating occurs must be chipped away and removed. Ensure that all concrete areas with a negative Ph (less than 12) be removed and repaired.

Damaged and rusted steel reinforcing is to be prepared and painted in accordance with an approved paint supplier specification for structural steel. If left un-remedied, it may lead to further contamination of the concrete.

V-Joints, and medium to large cracks and holes may be filled with a flexible exterior crack filler in accordance with the manufacturer's instructions. We recommend PRATLEY FLEXISEAL - pure acrylic mastic.

### Suspected water leaks within the structure or on roofs.

All causes of water ingress and leaks on roofs or within the structure, such as blocked or rusted pipes, must be established and repaired, or replaced. The walls must be allowed to dry out thoroughly - no more than 12% moisture content.

Rising dampness at or near ground level.

**Floors in showers, toilets, and kitchens: In order to protect the walls from rising dampness, it is recommended that the floors be given an upwards sloping, concave skirting.**

Rising dampness is a common cause of paint failure at or near ground level if the plaster has been continued below ground level, thereby breaching the damp proof course.

A reputable waterproofing specialist should remedy the problem in accordance with approved waterproofing methods. Alternatively, the following reasonably simple method may be used to remedy the situation:

Using an angle grinder, cut a slot through the plaster as near to ground/paving level as possible, the entire length of the wall (the width of a masonry disc is sufficient), until red brick dust is noticed.

Blow out all dust and debris, and fill the slot with PRATLEY FLEXISEAL, or similar product, flush with surrounding plaster.

Allow to dry/cure thoroughly. This acts as a second damp proof course and should prevent further problems.

Below the slot, remove all the paint and coat with a RUBBERISED WATERPROOFER.

Above the slot, remove all paint and efflorescence and allow the wall to dry out thoroughly. Fill any cracks or holes in the bare plaster with PROFILL, or similar product, and allow to dry/cure. Finish with the required coating system.

240



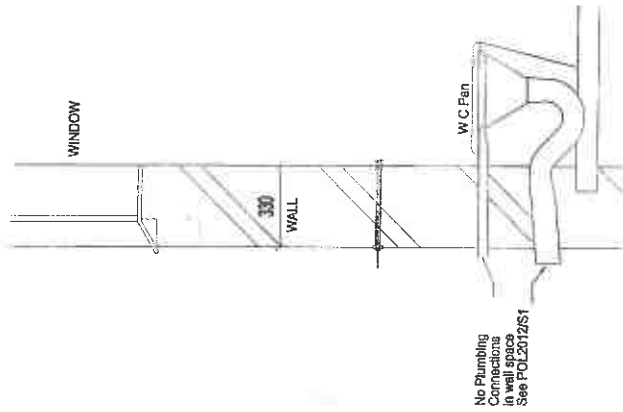
**SOUTH AFRICAN POLICE SERVICE  
PROJECT 5 STAR 2012  
DRAWING REGISTRAR**

DRAWING NR.		DESCRIPTION	SAP NUMBER
1	5-ST-A.DRW	Ground Floor Plan Complete Cell Block	Annexure A
2	5-ST-B.DRW	Ground Floor Plan 2 x Cell blocks with shower on outside of cell	
3	5-ST-C.DRW	Ground Floor Plan 2 x Cells with shower in exercise yard	
4	Admission.drw	Type Cell Admission Counter	POL 2012/A
5	Bench.drw	Type Cell Bench	POL 2012/B1
6	Trellis1.drw	Type Cell Door Elevations - Door type T2 & T3	POL 2012/D1
7	Trellis1a.drw	Type Cell Door Elevations - Door type T1 & T3/1	POL 2012/D1a
8	Trellis4.drw	Type Cell Door Plans & Sections 1 - 10	POL 2012/D2
9	Trellis2.drw	Type Cell Door Section B - B	POL 2012/D3
10	Trellis3.drw	Type Cell Door Section A - A & Details	POL 2012/D4
11	Lockset1.drw	Type Cell Door Lock & Lock Box	POL 2012/D5
12	Off-Loading Gate.drw	Sliding and Swing Gate Details at Secure Off-Loading Area	POL2012/D6
12	Shelving.drw	Type Cell Block Shelving Section	POL 2012/F1
13	Exercise Roof.drw	Type Cell Overhead Grills	POL 2012/G1
14	Toilet.drw	Type Cell WC Pan Detail, Section & Elevation	POL 2012/S1
15	Drinking Fountain.drw	Type Cell Hand Wash Basin	POL 2012/S2
16	Shower.drw	Type Cell Shower Detail Section	POL 2012/S3
17	Visitors1.drw	Type Cell Counter Section	POL 2012/V1
18	Visitors2.drw	Type Cell Counter For Visitors Plan	POL 2012/V2
19	Visitors3.drw	Type Cell Elevation Of Desk Window & Stool	POL 2012/V3
20	Cell Window1.drw	Type Cell Window Detail	POL 2012/W1
21	Cell Window2.drw	Type Cell Window Detail Plan Details	POL 2012/W2
22	Cell Window3.drw	Type Cell Window Detail Section	POL 2012/W3
23	ID Parade Room	Ground Floor Plan, Section A, Section B	IPR/100

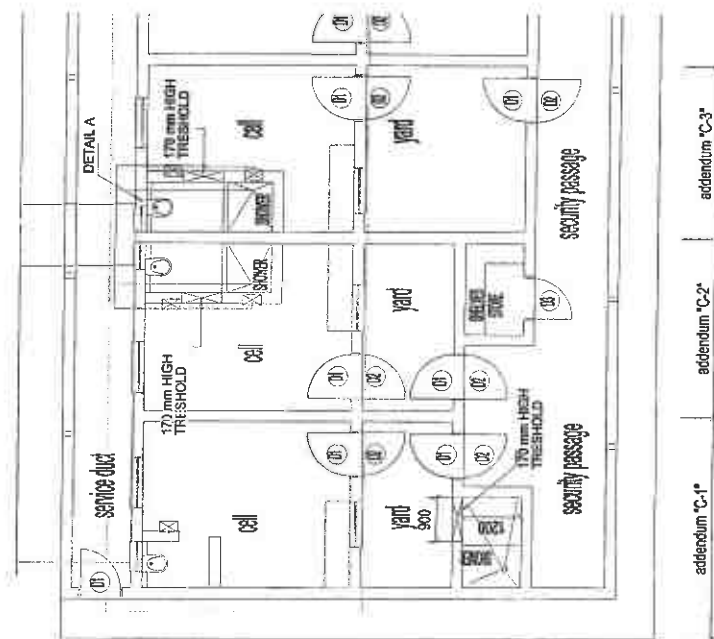
242 GROUND FLOOR PLAN  
ANNEXURE "A"  
SCALE 1:100

[illegible]

NO.	DATE	ADMINISTRATIVE	EPH
<p>Copyright vested in the Department of Public Works</p> <p><b>NOTE</b> References to trade names are used only to simplify detailing. Various similar and approved products are available and can be substituted with prior approval from SACS 5021 (Open Services) Pretoria Tel (012) 945 6726 Fax (012) 945 6762</p>			
<p>drawn by: <b>S-41 S.DRW</b> <b>ANNEXURE "C"</b></p>			
<p>DEPARTMENT OF PUBLIC WORKS Private Bag X35 Pretoria 0001 Tel (012) 337 2000 Contract-Owner: T.M. Soludu</p>			
<p>drawn by: <b>ARCHITECTURAL</b> SERVICES</p>			
<p><b>SOUTH AFRICAN POLICE SERVICE</b></p>			
<p>WCS number: _____ drawing title: _____</p>			
<p><b>ANNEXURE "C" GROUND FLOOR PLAN</b></p>			
drawn by:	designed:	checked:	approved:
A/S Shown	K. SWART		
date:	JULY 2012	checked:	
type number:			
drawing number:			



**DETAIL A**  
SCALE 1: 20



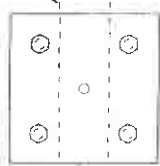
**GROUND FLOOR PLAN**  
**ANNEXURE "C"**  
SCALE 1:100

244





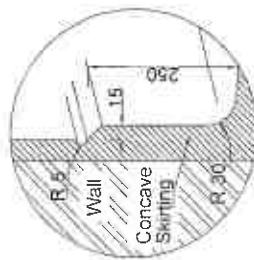
150 x 150 x 6 mm  
Mild Steel 20 mm solid  
roundbar welded to  
baseplate and cuff rail  
4 x M10 full threaded  
bolts, chemically  
anchored to wall



**Detail A**

DETAIL A  
For use in  
admittance  
area only

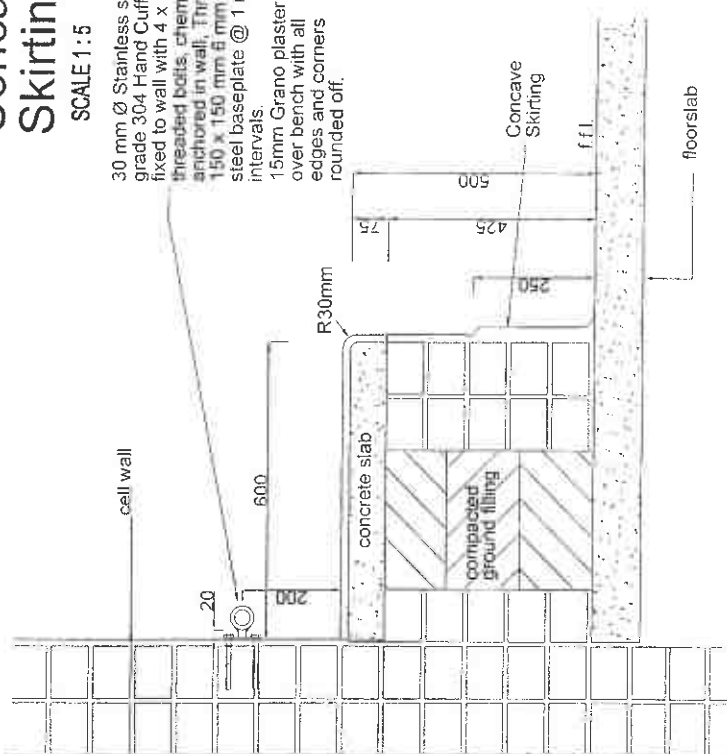
30 mmØ (2 mm Wall  
Thickness) Stainless  
Steel Hand Cuff Rail



**Concave Skirting**

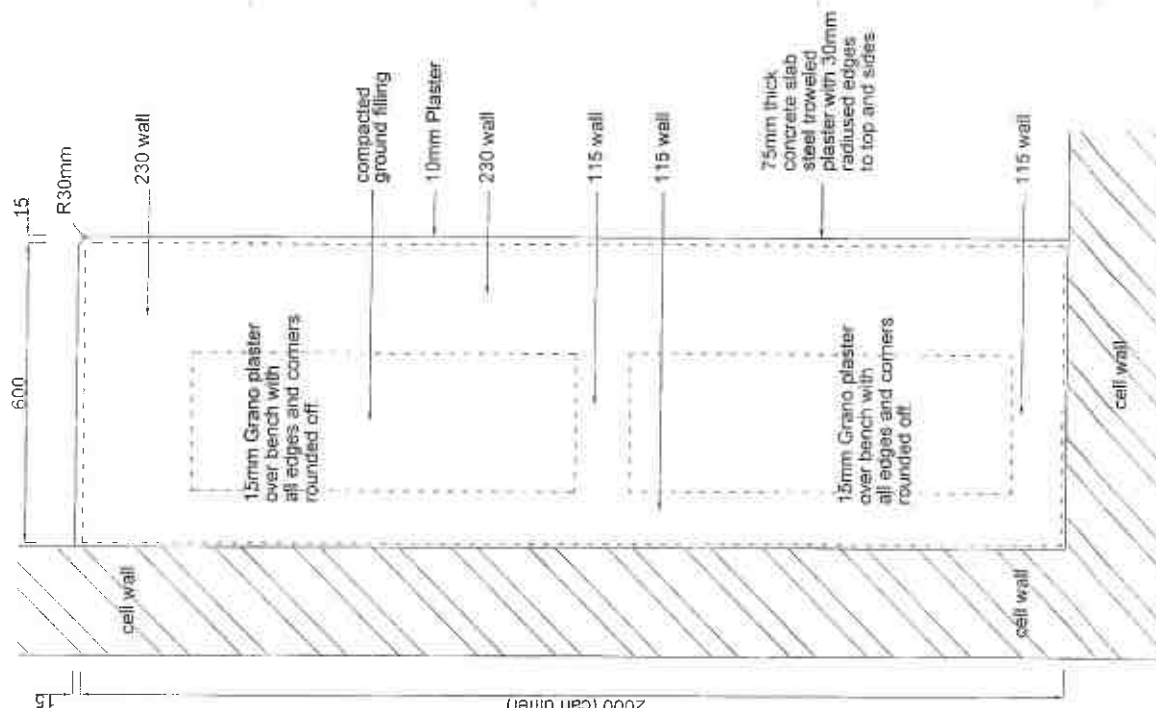
SCALE 1:5

30 mm Ø Stainless steel  
grade 304 Hand Cuff Rail  
fixed to wall with 4 x M10 full  
threaded bolts, chemically  
anchored in wall. Through  
150 x 150 mm 6 mm stainless  
steel baseplate @ 1 m  
intervals.  
15mm Grano plaster  
over bench with all  
edges and corners  
rounded off.



**BENCH DETAIL SECTION**

SCALE 1:10



**BENCH DETAIL PLAN**

SCALE 1:10

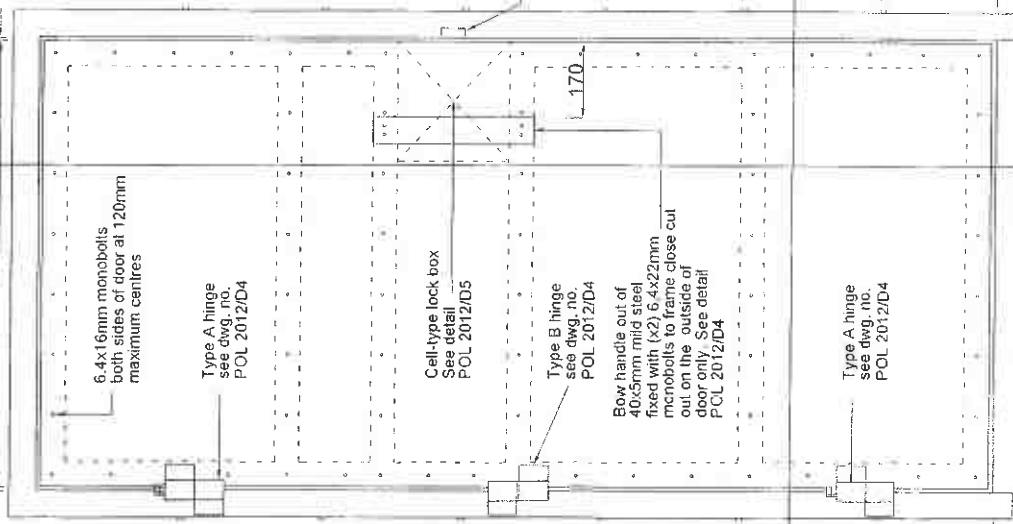
DATE	REVISION	10/04/11
Copyright reserved in the Department of Public Works		
<p><b>NOTE</b></p> <p>References to trade names are used only to simplify detailing. Various similar and approved products are available and can be substituted with prior approval from SACS SCM (Expert Services) Pretoria. Tel (012) 645 8726 Fax (012) 645 8722</p>		
<p>PROJECT: POL 2012/81/000 CELL BENCH</p>		
<p>DEPARTMENT OF PUBLIC WORKS Private Bag X65 Pretoria 0001 Tel (012) 337 2000 Cellular Number T.M. Sobhu</p>		
<p>ARCHITECTURAL SERVICES SOUTH AFRICAN POLICE SERVICE</p>		
<p>TYPE CELL BENCH</p>		
DATE	BY	FOR
10/04/11	A. S. S. S. S.	E. S. S. S.
10/04/11	10/04/11	10/04/11
POL 2012/81		

246

# NOTE:

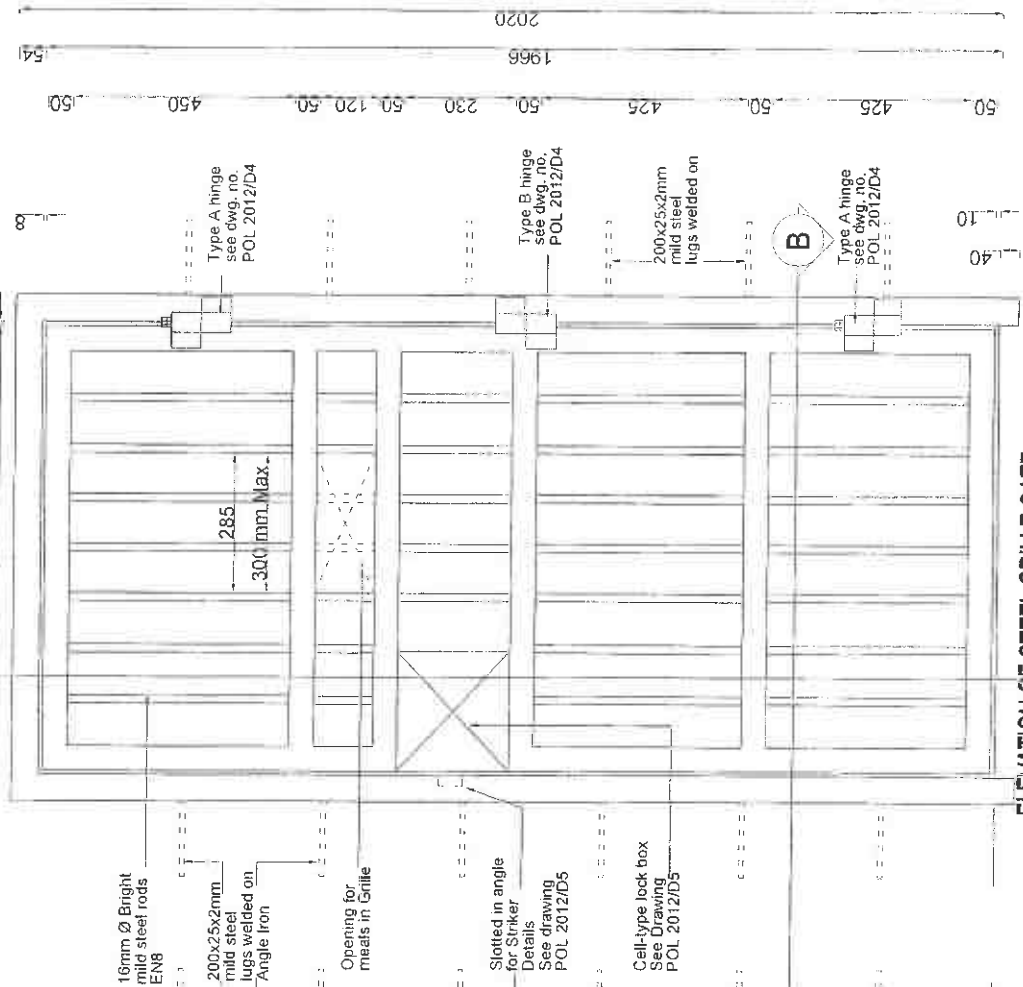
All work according to Departmental Specification PW 371  
All steel to be Galvanised  
All steel work to be hot dipped galvanised, all in accordance with SANS Specification 121 (SABS ISO 1461).  
- see PW 371 Section 12 Clause 12.1 to 12.3

1018  
54  
910  
894  
8



**ELEVATION OF SOLID STEEL DOOR (TYPE T2)**  
SCALE 1:10

1018  
54  
910  
894  
8



**ELEVATION OF STEEL GRILLE GATE (TYPE T3)**  
SCALE 1:10

DATE	APPROVED BY	DESIGNED BY

Copyright vests in the Department of Public Works

**NOTE**  
References to trade names are used only to simplify reading. Various similar and approved products are available and can be substituted with other approved items SANS 3001 (South African Standard) for Cell Door Hardware. Tel: (012) 367 8725 Fax: (012) 367 8726

CELL DOOR  
POL 2012-01.DRW

DEPARTMENT OF PUBLIC WORKS  
Private Bag 205  
Pretoria  
0001  
Tel: (012) 367 8000  
Director-General  
T.M. Molema

ARCHITECTURAL  
SERVICE  
SOUTH AFRICAN  
POLICE SERVICE

TYPE CELL DOOR  
ELEVATIONS

WCS number

drawing file

ref no

scale

date

type number

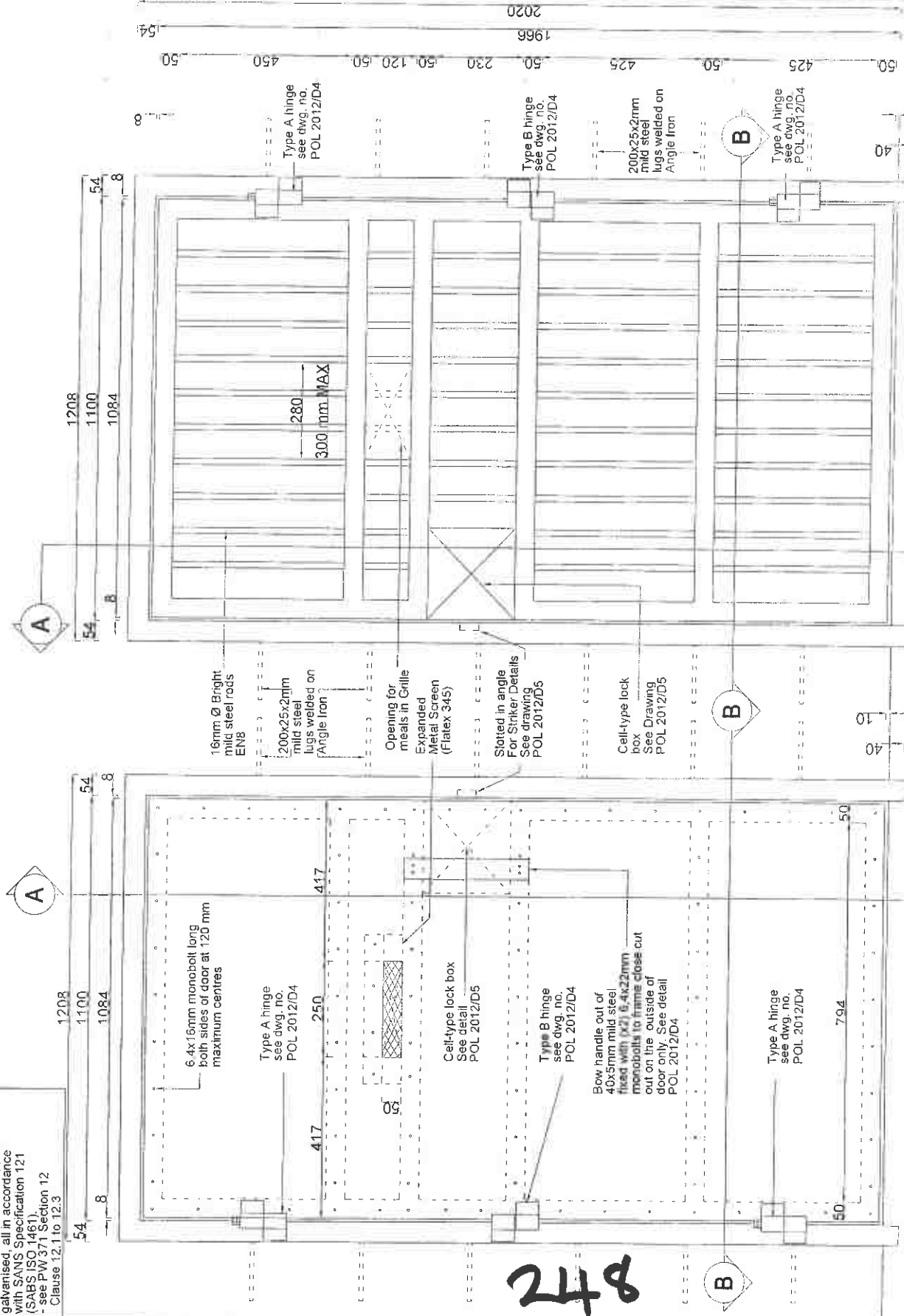
drawing number

designed  
drawn  
checked  
approved

K. SWART  
JULY 2012  
POL 2012/D1

247

**NOTE:**  
All work according to Departmental Specification PW 371  
All steel to be Galvanised  
All steel work to be hot dipped galvanised, all in accordance with SANS Specification 121 (SABS ISO 1461).  
- see PW 371 Section 12  
Clause 12.1 to 12.3



248

IN	DATE	APPROVED	BY

**NOTE**  
References to trade names are used only to simplify detailing. Various similar and approved products are available and can be substituted with prior approval from SANS SOI. (SANS 10165-1:2011)  
Tel: 011 833 8726  
Fax: 011 833 8722

**Copyright 2012 by the Department of Public Works**

**CELL DOOR**  
POL 2012-D1a-DRW

**DEPARTMENT OF PUBLIC WORKS**  
Private Bag 200  
Pretoria 0001  
Tel: 011 833 8726  
Fax: 011 833 8722  
T.M. Schutte

**ARCHITECTURAL**  
SOUTH AFRICAN  
POLICE SERVICE

**TYPE CELL DOOR ELEVATIONS**

**TYPE T1**  
As shown  
Date: JULY 2012  
By: K. SWART  
For: POL 2012/D1a

5.4x16mm long monobolt  
both sides of door at 120 mm  
maximum centres

See Detail POL2012/D4



SCALE 1:10

CELL DOOR &  
GRILLE GATE

SCALE 1:10

GRILLE GATE  
ONLY



**PLAN B-B**  
**Cell Grille Gate Only**

SCALE 1:10

Frame manufactured from steel angles and 2mm thick steel sheet shaped into sizes as per Detail Drawings

3 hinges per leaf with middle hinge up side down as per  
Hinge Detail Drawing No POL 2012/D5

Door & Grille manufactured from steel tubing, bars and steel sheet metal shaped into sizes as per Detail Drawings Nos POL 2012/D1 /D3 & D4

Grille manufactured from steel tubing, bars and  
shaped into sizes as per Detail Drawings  
No POL 2012/D1, /D3 & /D4

lockbox can be ordered from SAPS Logistics and welded into Door & Gate. Supply of locks to be co-ordinated and required by Scm (Building Services) Pretoria against the contract budget. See also Drawing POL 2012/D5

Handle as detailed on Drawing No POL 2012/D4 to be supplied only to the outside of solid door leaf

All work according to Departmental Specification PW371

All steel to be Galvanised  
All steel work to be hot dipped  
galvanised, all in accordance  
with SANS Specification 121  
SABS JSQ 1461  
see PW 371 Section 12  
Clause 12.1 to 12.3

**NOTE**  
References to trade names are used only to simplify detailing. Various similar and approved products are available and can be substituted with prior approval from SACS SCM (Expert Services) Pretoria.  
Tel: (012) 845 8726  
Fax: (012) 845 8762

POLYMER LETTERS  
 VOL. 1, NO. 1  
 1963

DEPARTMENT OF  
PUBLIC WORKS  
Pondia Bag and  
Pondia  
0001  
Pondia Bag and  
T.M. 2001

—

ARCHITECTURAL



**SOUTH AFRICAN  
POLICE SERVICE**

1995

TYPE CELL DOOR  
PLANS & SECTIONS

1

\_\_\_\_\_ **ALL SHOWS** \_\_\_\_\_  
\_\_\_\_\_ **6:25 PM K SMART** \_\_\_\_\_

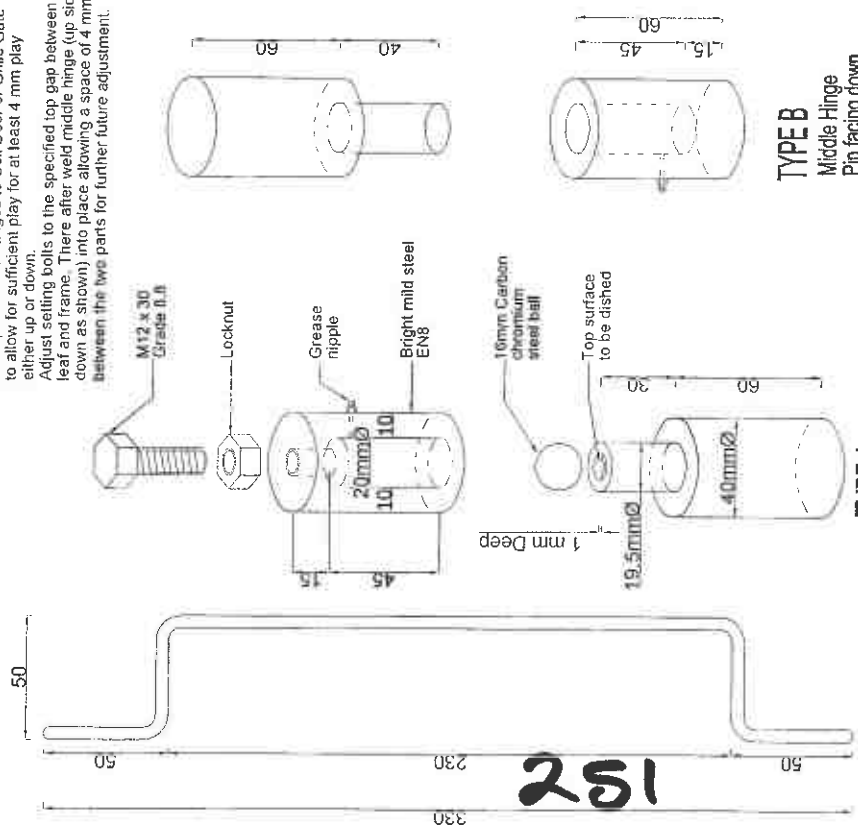
JULY 2012

POL 2012/D2



**NOTE:**  
All work according to Departmental Specification PW 371  
**All steel to be Galvanised**  
All steel work to be hot dipped galvanised, all in accordance with SANS Specification 121 (SABS ISO 1461)  
- see PW 371 Section 12  
Clause 12.1 to 12.3

**NOTE:**  
Fit Top & Bottom Hinges to Cell Door or Grille Gate to allow for sufficient play for at least 4 mm play either up or down.  
Adjust setting bolts to the specified top gap between leaf and frame. There after weld middle hinge (up side down as shown) into place allowing a space of 4 mm between the two parts for further future adjustment.

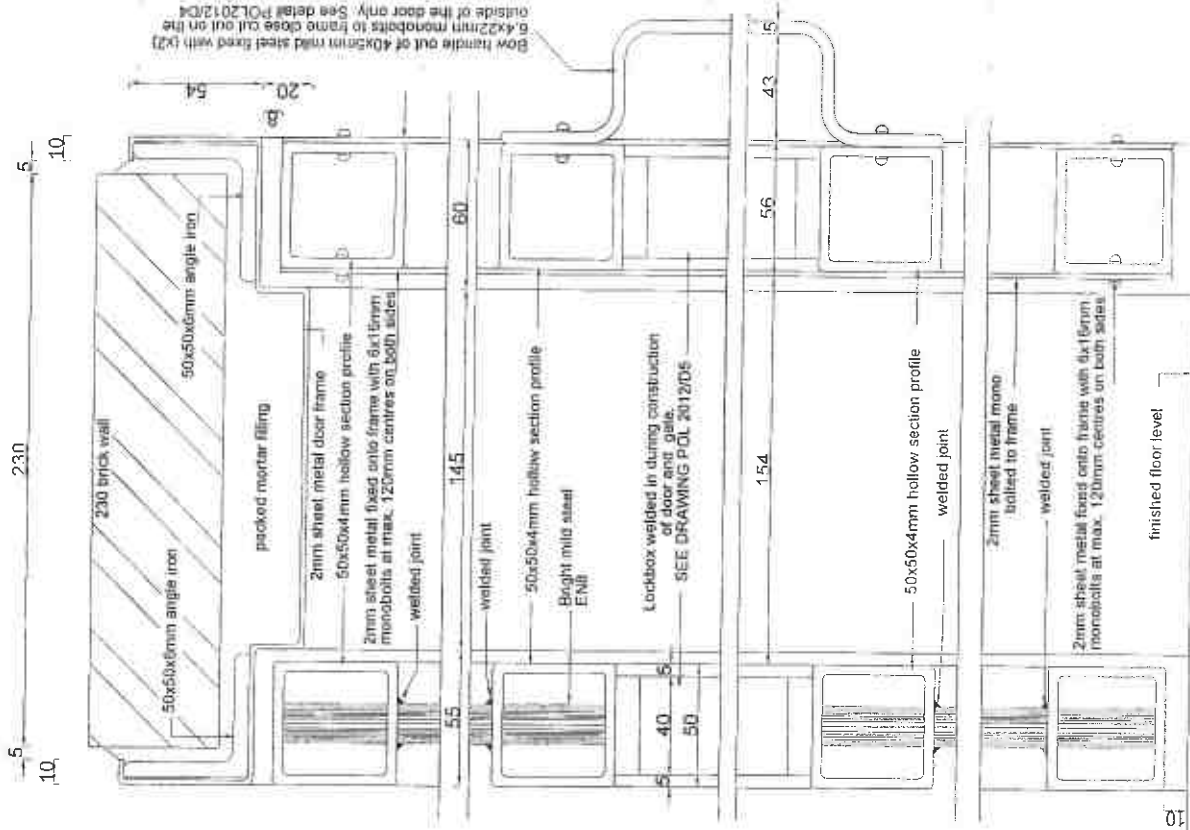


**DETAIL OF BOW HANDLE**  
SCALE 1:2

**TYPE A**  
Top & Bottom Hinge  
Pin facing up

**TYPE B**  
Middle Hinge  
Pin facing down

**DETAIL OF CELL DOOR HINGES**  
SCALE 1:2



**DETAIL SECTION A-A**  
SCALE 1:2

NO.	SHEET	ASSIGNMENT	DATE

Copyright reserved in the Department of Public Works

**NOTE**  
References to trade names are used only to simplify detailing. Various similar and approved products are available and can be substituted with prior approval from SANS SQA Expert Services Practice. Tel: 012 345 6789 Fax: 012 345 6782

and for more POL 12-D4 DRAW POL 12-D4 SECTION A-A AND DETAILS

**DEPARTMENT OF PUBLIC WORKS**  
Private Bag 785  
Pretoria  
0001  
Tel: 012 345 6789  
Stellenbosch  
T.M. 2000

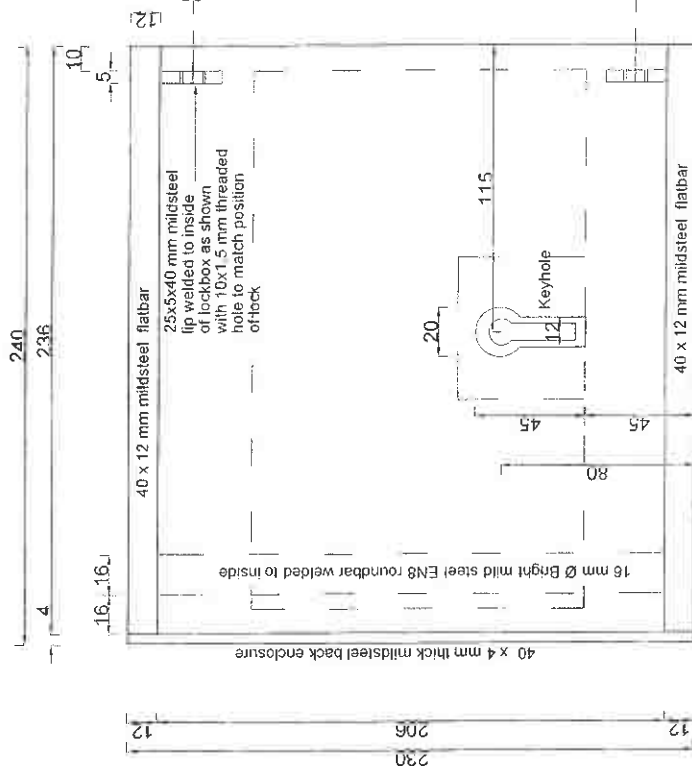
**ARCHITECTURAL**  
SOUTH AFRICAN  
POLICE SERVICE

**TYPE CELL DOOR SECTION A-A AND DETAILS**

DATE: 1 JULY 2012  
DRAWN: A. SHAW  
CHECKED: A. SHAW  
PROJECT: POL 2012D4

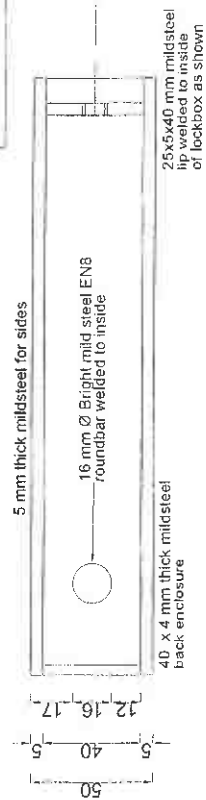
# NOTE:

LOCKS AND LOCKBOXES CAN BE SUPPLIED BY SAPS LOGISTICS (PRETORIA) WELDED INTO DOOR AND GATE. ORDER AND SUPPLIES TO BE CO-ORDINATED AND ACQUIRED BY SCM (BUILDING SERVICES) PRETORIA  
TEL: (012) 841 7368, BUT PROCURED FROM THEM AGAINST THE CONTRACT BUDGET.

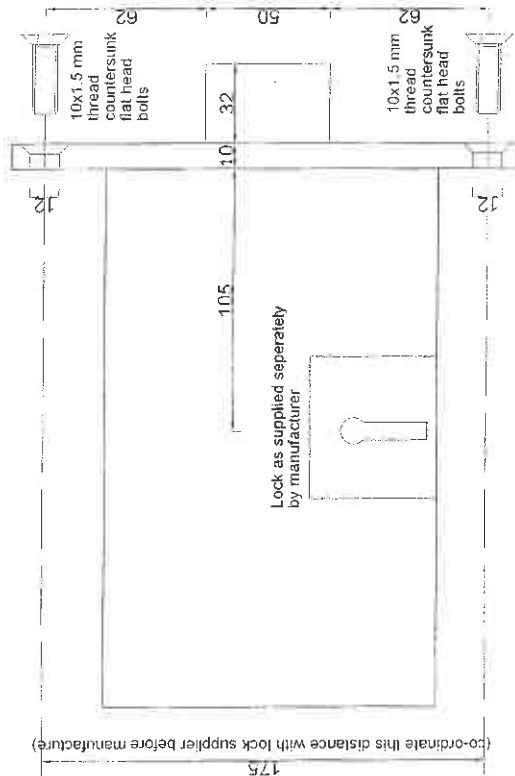


**LOCK BOX - FRONT ELEVATION**  
SCALE 1:2

NOTE:  
THE CELL DOOR & GATE LOCK BOX TO HAVE A KEYHOLE ONLY ON THE EXERCISE YARD SIDE. CELL SIDE TO BE BLOCKED OFF.



**LOCK BOX - TOP ELEVATION**  
SCALE 1:2



**LOCK - SIDE ELEVATION**  
SCALE 1:2



**LOCK - TOP ELEVATION**  
SCALE 1:2

NO.	DATE	REVISION	BY

Copyright vested in the  
Department of Public Works

**NOTE**  
References to trade names are  
used only to simplify drawing.  
Various similar and approved  
products are available and can  
be substituted with prior  
approval from SAPS SCM  
Expenditure Services Pretoria.  
Tel: (012) 843 6726  
Fax: (012) 844 5752

cell 10 mm  
POL2012/05 DRW  
CELL DOOR LOCK  
& LOCK BOX

DEPARTMENT OF  
PUBLIC WORKS  
Private Bag X05  
Pretoria  
0001  
Tel: (012) 357 2000  
Direct General  
T.M. Solodu

ARCHITECTURAL  
SERVICE

SOUTH AFRICAN  
POLICE SERVICE

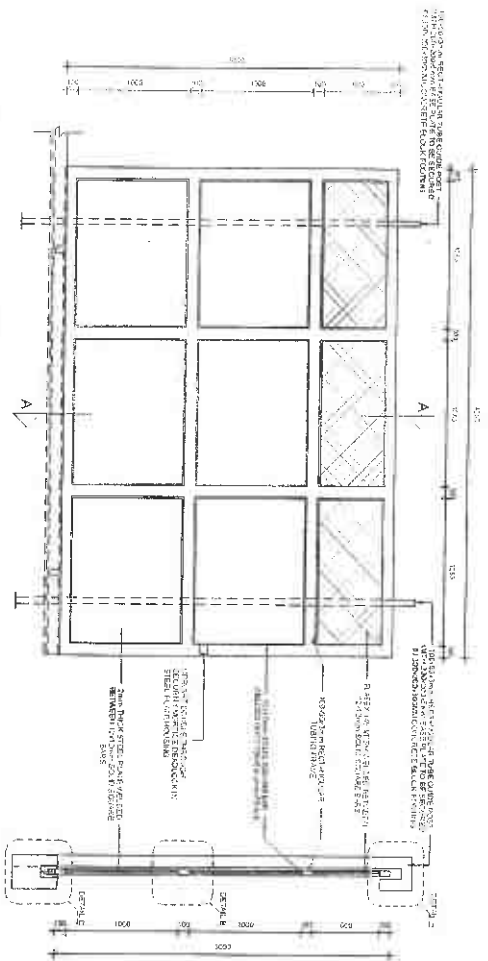
WCS number

drawing title  
TYPE CELL DOOR  
LOCK & LOCK BOX

drawn  
checked  
date  
JULY 2012  
K. SMART  
POL 2012/D5

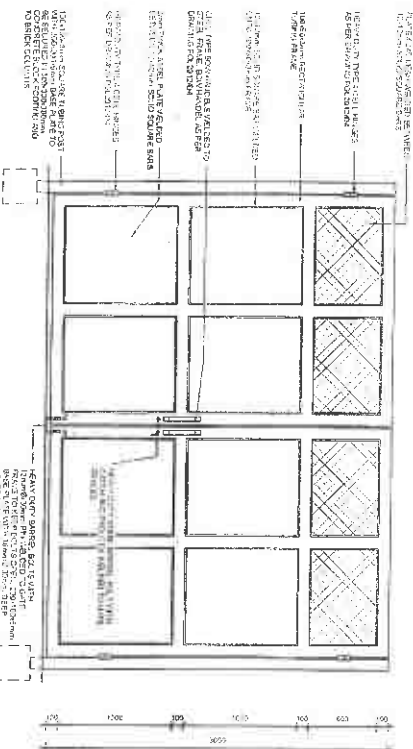
252



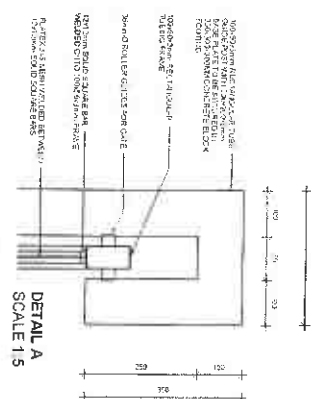


ELEVATION OF SLIDING GATE  
SCALE 1:20

SECTION A-A  
SCALE 1:20



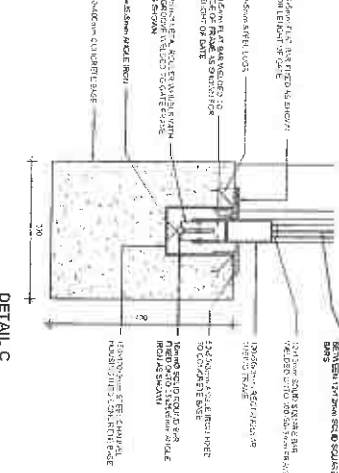
ELEVATION OF SWING GATE  
SCALE 1:20



DETAIL A  
SCALE 1:5



DETAIL B  
SCALE 1:5



DETAIL C  
SCALE 1:5

STEEL GATE FINISH  
APPLY TWO COATS OF EPOXY PRIMER  
APPLY TWO COATS OF GLOSS ENAMEL

NO.	DATE	BY	REVISION
1	2010/08/10	AD	1

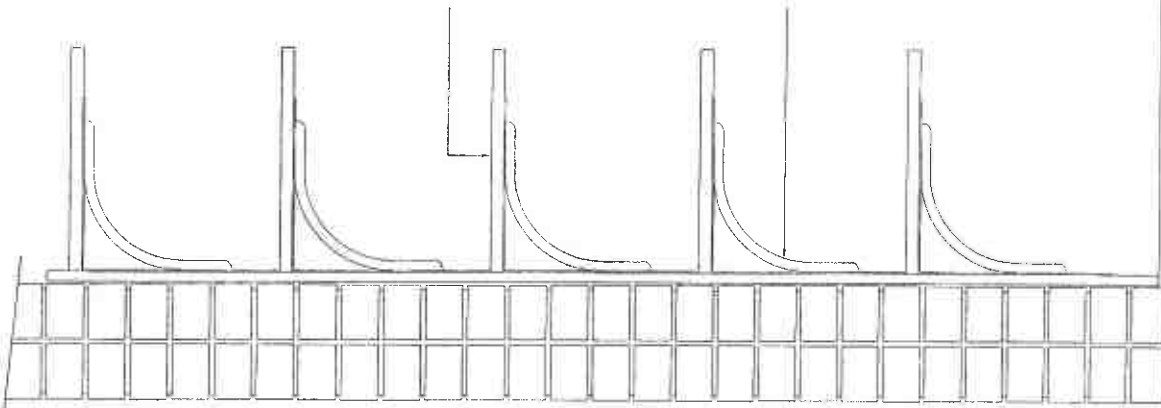
**NOTE**  
1. ALL DIMENSIONS ARE IN METERS  
2. ALL DIMENSIONS ARE TO FACE UNLESS OTHERWISE SPECIFIED  
3. ALL DIMENSIONS ARE TO BE VERIFIED BY THE CONTRACTOR  
4. ALL DIMENSIONS ARE TO BE VERIFIED BY THE CONTRACTOR  
5. ALL DIMENSIONS ARE TO BE VERIFIED BY THE CONTRACTOR

253



**SOUTH AFRICAN  
POLICE SERVICE**

PROJECT	SECURE OFF-LOADING AREA
DATE	2010/08/10
BY	AD
CHKD BY	AD
DATE	2010/08/10
PROJECT NO.	POL 201/2008



#### NOTE:

5x sleeves up to height of 2275 mm from finished floor level shelves to be supported with 350x400 mm mild steel supports on 50x25 mm thick strips at 1000 mm max. centres with self tapping screws

22mm thick meranti/supwood top finished and varnished with 2x polyurethane varnish fixed to bracket with 30mmxNO.6 self-tapping countersunk woodscrews.

350x400mm mild steel shelf support fixed against 50x25mm thick hardwood wood beam with self tapping wood screws.

+ 450mm SHELVES DETAIL IN STORE ROOM  
(Blanket & General Stores)

SCALE 1:10

#### NOTE:

5x sleeves up to height of 2275 mm from finished floor level shelves to be supported with 250x250 mm mild steel supports on 50x25 mm thick strips at 1000 mm max. centres with self tapping screws

22mm thick meranti/supwood top finished and varnished with 2x polyurethane varnish fixed to bracket with 30mmxNO.6 self-tapping countersunk woodscrews.

250x250mm mild steel shelf support fixed against 50x25mm thick hardwood wood beam with self tapping wood screws.

+ 350mm SHELVES DETAIL IN STORE ROOM  
(Pantry & Prisoners Property Store)

SCALE 1:10

FILE	DATE	REVISION	01/10/10
Copyright: made in the Republic of South Africa			
<p><b>NOTE</b></p> <p>References to trade names are used only to simplify reading. Various similar and approved products are available and can be substituted with prior approval from SANS 5011 (Paints and Coatings) and SANS 5012 (Paints and Coatings) and SANS 5013 (Paints and Coatings).</p> <p>18 (012) 665 8728 Fax (012) 665 8762</p>			

<p>OLD SHEET NO.</p> <p>POLISHING UNIT</p> <p>CELL BLOCK</p> <p>SHELVING SECTION</p>
--

<p>DEPARTMENT OF PUBLIC WORKS</p> <p>Private Bag 205 Pretoria 0001</p> <p>Tel (012) 357 2000</p> <p>Tel (012) 357 2000</p> <p>Tel (012) 357 2000</p>
--

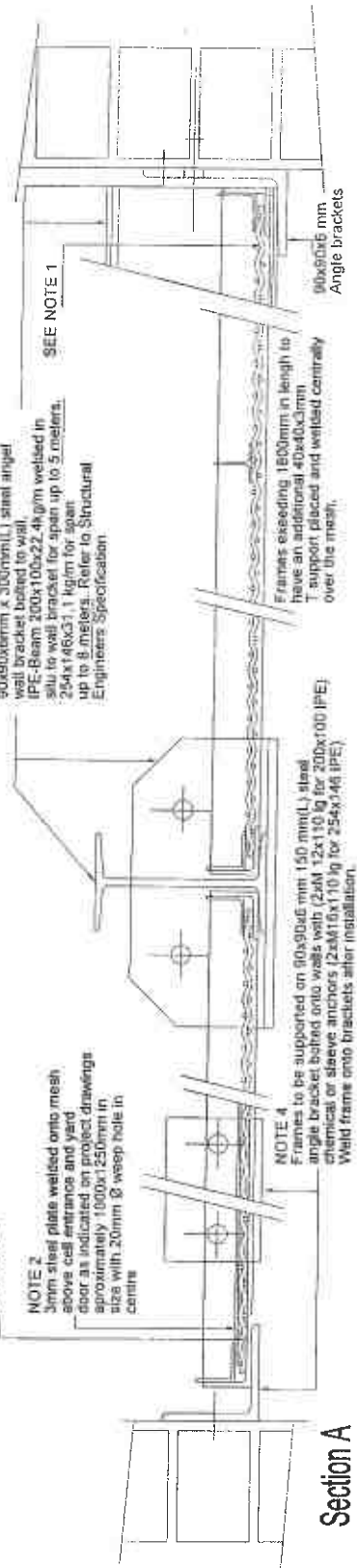
<p>ARCHITECTURAL</p> <p>WORKS</p> <p>SOUTH AFRICAN POLICE SERVICE</p>
---

<p>TYPE CELL BLOCK SHELVING SECTION</p>
<p>DESIGNED BY: K SWART</p> <p>CHECKED BY: K SWART</p> <p>DATE: JULY 2012</p> <p>TYPE NUMBER: POL 2012/F1</p> <p>REVISION NUMBER:</p>

NOTE: Measure building sizes and squareness on site before manufacturing

SEE NOTE 1

NOTE 2  
3mm steel plate welded onto mesh above cell entrance and yard door as indicated on project drawings approximately 1000x1250mm in size with 20mm Ø weep hole in centre



### Section A

### Detail Sections: I Beam & Bracket

Scale 1:5

### Section B

Scale 1:5

### Section D

Scale 1:5

### Section C

Scale 1:5

### NOTE:

All work according to Departmental Specification PW 371

All steel to be Galvanised

All steel work to be hot dipped galvanised, all in accordance with SABS Specification 763.

• see PW 371 Section 13

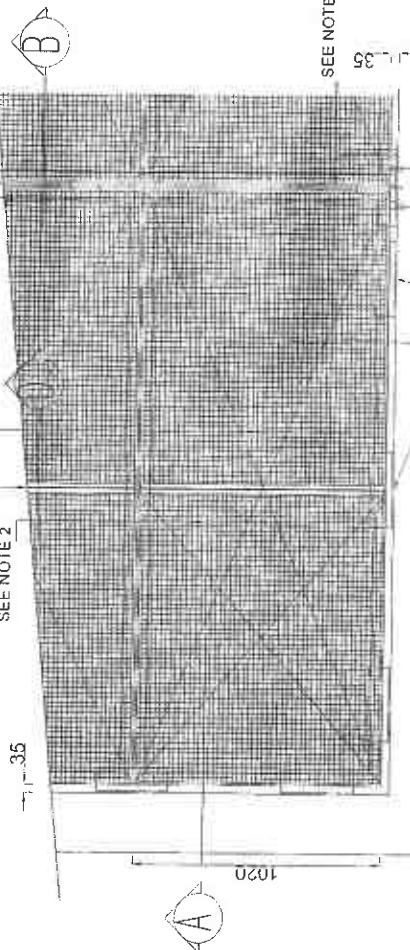
Clause 13.1 to 13.3

### NOTE 1

Scraper Galvanised or Betalence 358 Double Skin Zincalume Steel mesh or similar & approved lead into 40x50x5 mm angle iron frames in units 1020 mm wide x 2500 mm maximum long into pattern indicated on the project drawings. Mesh second frame 40x40x3 mm angle welded to mesh and main frame. Frames exceeding 1800 mm in length to have an additional 40x40x3 mm angle T-support placed and welded centrally onto the mesh.

Frames exceeding 1800mm in length to have an additional 40x40x3mm T-support placed and welded centrally over the mesh.

SEE NOTE 2



### Typical Plan: Cell Passage Overhead Security Grilles

Scale 1:20

### Typical Plan: Overhead Security Grilles

Scale 1:20

SEE NOTE 4

DATE	PROJECT	DESCRIPTION

Copyright 2012 by the Department of Public Works

**NOTE**  
References to trade names are used only to simplify detailing. Various sizes and approved products are indicated and can be substituted with prior approval from SABS SCSJ (Capital Services) Pretoria. Tel: (012) 845 8726 Fax: (012) 845 8782

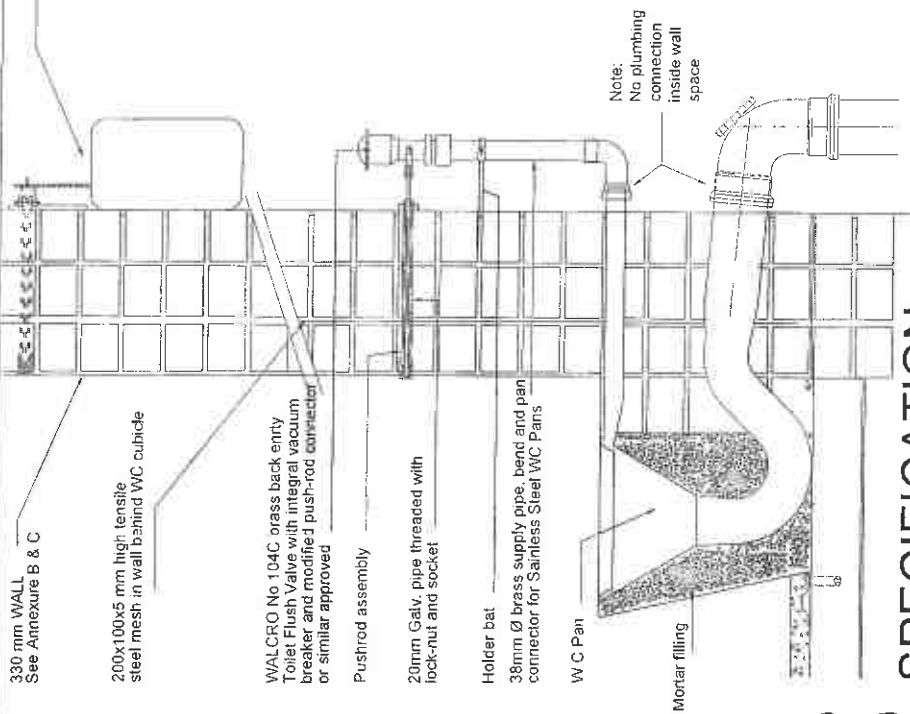
PROJECT NO. POL 2012-G1 DRW OVERHEAD GRILLES

DEPARTMENT OF PUBLIC WORKS  
Private Bag 205  
Pretoria 0001  
Tel: (012) 307 2000  
Fax: (012) 307 2000  
T.M. SABS

ARCHITECTURAL SERVICE  
SOUTH AFRICAN POLICE SERVICE

TYPE CELL OVERHEAD GRILLES

DATE: 2012-07-01  
DRAWN: K. SWART  
CHECKED: J. JULY 2012  
TYPE NUMBER: POL 2012/G1  
DRAWING NUMBER:



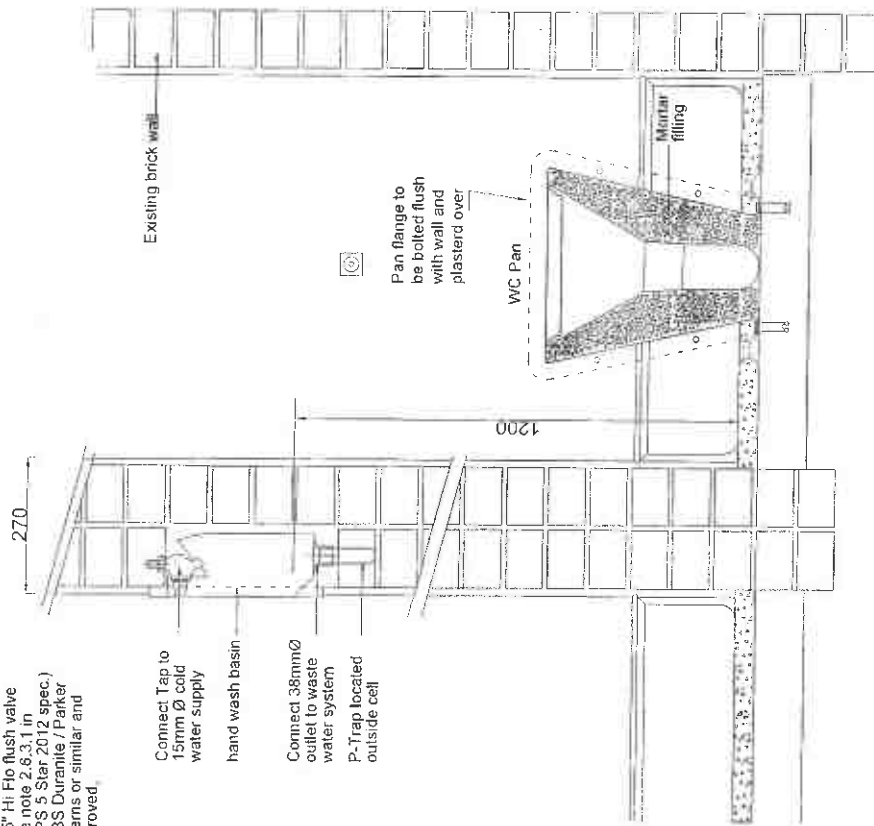
## SPECIFICATION

OVE Model DSPA1 or FRAMKE Model 350 195 or similar and approved ventral proof WC pan manufactured from 1.2mm grade 304 (18/10) stainless steel, fully welded and polished to a no. 4 satin finish. L=485mm, W=190mm, H=435mm with circular flushing rim & bowl, full flow P-trap, 38mm Ø supply flush pipe: both with sufficient length to protrude through the wall. (All connections to be outside). Integral 35mm wide fixing flange to bottom sides & top. 7 times bolted to wall & floor complete with expanded metal mesh for mechanical bond for plaster/screed to the pan flange. Required pipe lengths to be determined on site.

WALCRO No104C or similar and approved brass back entry non hold open Toilet Flush Valve with integral vacuum breaker & modified push-rod connector, complete with 38mm flushpipe, bend & pan connector. Prison type brass finished ECONOFUSH as type KF3 404 is an approved alternative including elbow, straight pipe and pan connector.

## WC PAN DETAIL SECTION

SCALE 1:10



## SECTION THROUGH TOILET CUBICLE WITH WASH HAND BASIN DETAIL (Drinking Fountain)

SCALE 1:10

### NOTE

References to trade names are used only to simplify detailing. Various similar and approved products are available and can be substituted with prior approval from SACS SQA (Food Services) Pretoria. Tel: (012) 445 8123 Fax: (012) 445 8162

Drawn by: POL 2012-S1.DRW  
WC PAN DETAIL SECTION  
8 ELEVATION

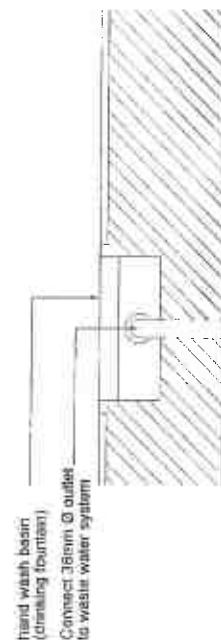
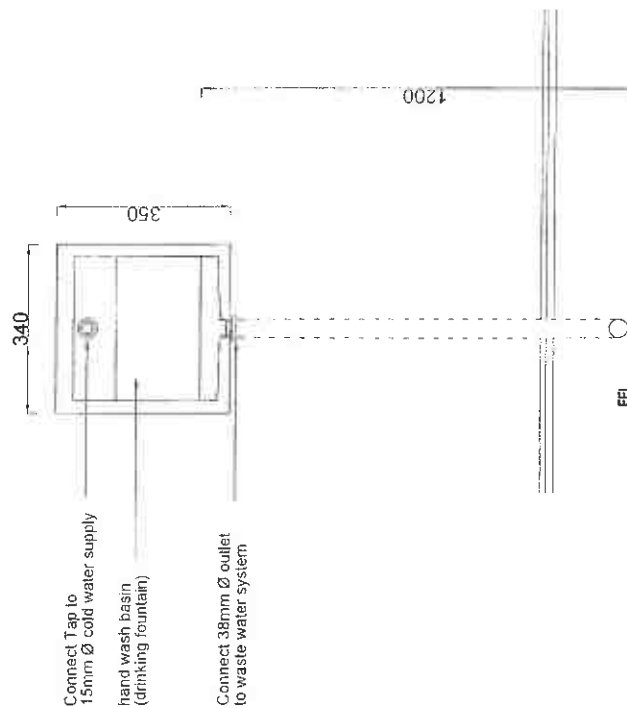
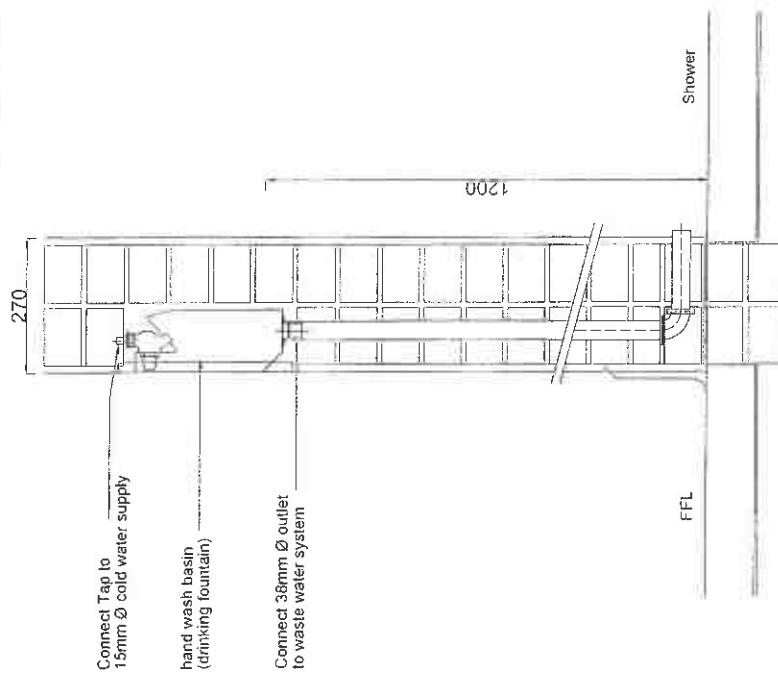


Discipline: ARCHITECTURAL

Project: SOUTH AFRICAN POLICE SERVICE

TYPE CELL WC PAN  
DETAIL SECTION  
& ELEVATION

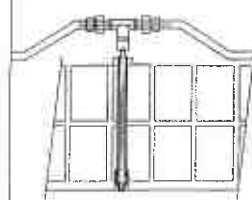
Author: J. SWART  
Date: JULY 2012  
Project: POL 2012/S1  
Drawing number:



## SPECIFICATION

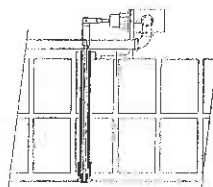
OVE Model OSB1A/125 or similar and approved vandal proof hand wash basin manufactured from 102 mm Grade 304 AISI (18/10) stainless steel, fully welded and polished to a no. 4 satin finish, size 340x350x125 mm, including a fitted 15 mm push-button tap mounted at top with 38 mm CP brass waste outlet, built flush into brick wall and secured with steel lugs.

DATE	ASSIGNMENT	Copyright notice to the Department of Public Works
<p><b>NOTE</b></p> <p>References to trade names are used only in simplifying teaching. Various similar and approved products are available and can be substituted with those approved from SAPS SCM (Expert Services) Pretoria.</p> <p>Tel (012) 845 3726 Fax (012) 845 3762</p>		
<p>and the name of the person who has signed for HAND WASH BASIN (Drinking Fountain)</p>		
<p>DEPARTMENT OF PUBLIC WORKS Private Bag 2008 Pretoria 0001 Tel (012) 317 7000</p> <p>Classified T.M. Swartz</p>		
<p>contracting department</p>		
<p>location SOUTH AFRICAN POLICE SERVICE</p>		
<p>WCS member Contracting Co.</p>		
<p>TYPE CELL HAND WASH BASIN (Drinking Fountain)</p>		
<p>assigned</p>		
date	As Shown	drawn by K SWARTZ
city	JULY 2012	checked
job number		
		POL 2012/S2
<p>copy to send</p>		



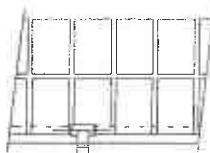
**Alternative layout for low quality water supply to existing Showers**

(outside of cell block only)  
In-Line Demand non hold open type stopcock as Walcro type 111D with prison type push rod assembly or similar and approved, with unions both sides for servicing



**Alternative for existing Showers with surface piping layout (outside of cell block only)**

Push-button metering non hold open valve as Walcro 150 C with prison type push rod assembly or similar and approved. Secured to wall with 100x65x7mm MS angle 100mm long and shaped around valve



**Alternative for Shower concealed piping layout within Cells for low quality water supply**

In-Line Demand non hold open type stopcock as Walcro type 111D or similar and approved.



**Alternative for Shower Rose in existing Cell Blocks**

Walcro metering Shower rose CIRS-V2 with 150x10x5 shower valve or similar and approved min 2400mm above FFL

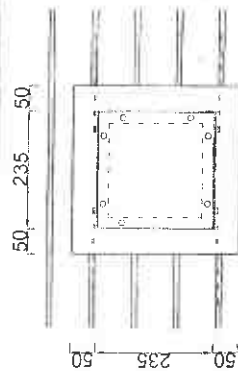
258

## NOTE: WATER SUPPLY TO SHOWERS

Where the quality, pressure and sustained supply of the water at a given project is suspect, refer to Guidelines set out in the SPEC 2012

1. Use high pressure geysers throughout, (200 lps)
2. Low quality water supply with low pressure. Supply only hot water to the showers with the thermostat of the geyser set to an appropriate temperature. Use push button in-line demand type stopcock as Walcro type 111D with prison type push rod assembly or similar and approved.
3. Good quality water supply and sufficient pressure. Use push button mixing valves as Mastertherm II or similar and approved to set the water temperature. Use push button metering valve as Walcro 150 Prison type or similar and approved.

The type of suitable fittings and the capacities of the valve to be determined in conjunction with the Head of Department. Plumbing, SAPS Building Services (012) 841 7517.



**Section Alternative for existing Showers with concealed piping layout with Service Hatch (in secure passages only)**

50x50x4mm angle frame  
25x25x3mm angle frame  
230x230x2mm steel cover plate  
6x12mm long bolts with allen key head and threaded iron

## Elevation



**Top View of Valve Box Built Into Wall**

200x25x2mm lugs  
Secured with saddles



Walcro CIRS Hexs overhead ceiling shower with riser sleeve

230mm brick wall

Inside shower walls and floor to be waterproof with Duralflex, ABE product or similar approved

Push-button metering non hold open valve as prison type Walcro 150 with extension ring or similar and approved.

Concrete screed laid to fall towards outlet as indicated and finished with Duralflex-ABE product after floors have dried out sufficiently, all to manufacturers specification

Connect 36mmØ stainless steel or brass outlet to waste water system with the trap outside the Cells

Suitable S or P Trap to be outside of the cells

## SHOWER DETAIL - SECTION

SCALE 1 : 10

DATE	AMENDMENT	NO.

Copyright vests in the Department of Public Works

**NOTE**  
References to trade names are used only to simplify detailing. Various similar and approved products are available and can be substituted with prior approval from SAPS SC24 (Expert Services) Pretoria.  
Tel (012) 845 8026  
Fax (012) 845 8062

PO 2012/83 DWWS  
SAPS SHOWER DETAILS  
A SECTION

DEPARTMENT OF PUBLIC WORKS  
Private Bag 965  
Pretoria 0001  
Tel (012) 337 2000  
Director-General  
T.M. Schabru

ARCHITECTURAL  
SOUTH AFRICAN  
POLICE SERVICE

WDS number  
Drawing No.

**TYPE CELL SHOWER DETAILS & SECTION**

Author	Drawn	Checked	Approved
By: J. B. B. B.	By: J. B. B. B.	By: J. B. B. B.	By: J. B. B. B.
Date: JULY 2012	Date: JULY 2012	Date: JULY 2012	Date: JULY 2012
Project	Project	Project	Project
PO 2012/83	PO 2012/83	PO 2012/83	PO 2012/83

NOTE:

All hardwood to be prepared and varnished with 2 coats polyurethane varnish

DETAINEE SIDE

Concrete Slab to Structural Engineers detail

VISITORS SIDE

Timber spacer as required

6.4mm thick laminated glass

16 mm Ø Bright mild steel bars  
80 mm C/C

700x1000 mm frame 100x50 mm steel open channel as indicated on DRW 2012N/3

Corbeled reinforced brickwork and top and sides plastered with 15mm thick Grano with 15mm filleted edges and steel trowel finish.

50x400mm dia hardwood seat on 100Ø x3mm steel pipe with 300Ø x6mm top flange and 300x300x8mm bottom flange bolted to floor with M12 expansion bolts. Seat screwed to base with 6x 40mm long wood screws. Seat top edges to be radiused 15mm

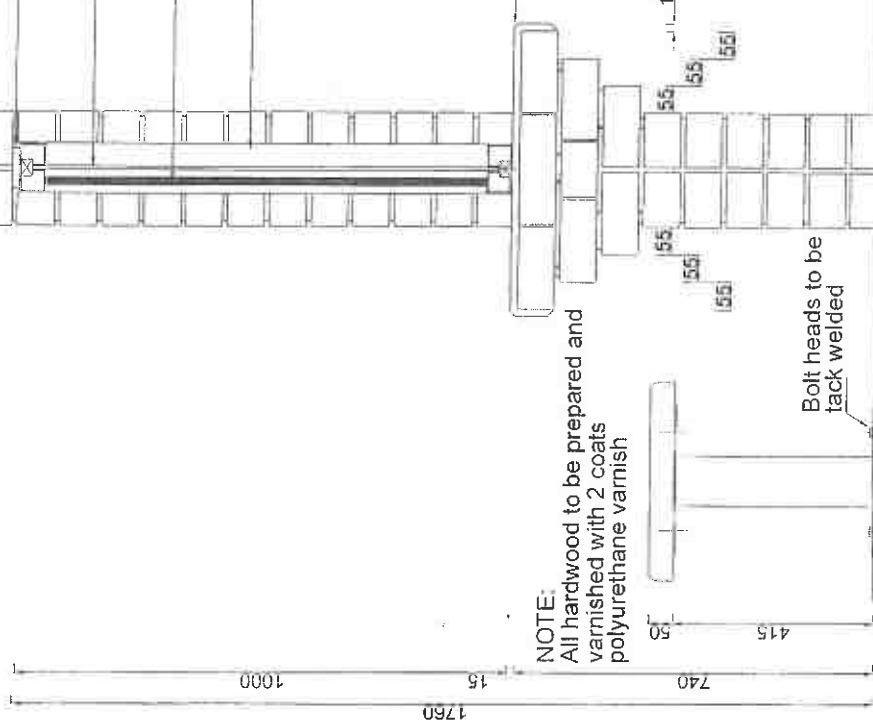
NOTE:

All hardwood to be prepared and varnished with 2 coats polyurethane varnish

Bolt heads to be tack welded

**SECTION THROUGH VISITORS COUNTER**

SCALE 1:10



259

DATE	AUTHOR	DATE

Copyright made in the  
Department of Public Works

**NOTE**  
References to trade names are  
used only to identify existing  
products and approved  
products are available and can  
be substituted with prior  
approval from SAPS SQA  
Export Services Pretoria.  
Tel (012) 846 8726  
Fax (012) 846 8762

Old file name  
PUBLIC WORKS  
VISITORS COUNTER  
SECTION

DEPARTMENT OF  
PUBLIC WORKS  
Private Bag 103  
Pretoria  
0001  
Tel (012) 357 2000  
Internet  
T.M. SOLOU

ARCHITECTURAL  
SERVICE  
SOUTH AFRICAN  
POLICE SERVICE

WCS number

Drawn by: Dr

**TYPE CELL  
VISITORS COUNTER  
SECTION**

Ref no

Scale As Shown

Date JULY 2012

Type number

Drawing number

POI 2012N/1

**NOTE**

References to trade names are used only to simplify detailing. Various similar and approved products are available and can be substituted with prior approval from SANS SCAI (Cape Town) Pretoria. Tel: (012) 645 8726 Fax: (012) 645 8722

**DEPARTMENT OF PUBLIC WORKS**

**PROVINCE OF KZN**

**VISITORS COUNTER**

**PLAN**



Project No: 0001  
Tel: (012) 877 2000  
Project Manager: T.M. Sibiya

Discipline: ARCHITECTURAL

Service: SOUTH AFRICAN POLICE SERVICE

**TYPE CELL COUNTER FOR VISITORS - PLAN**

Scale: As Shown  
Date: JULY 2012  
Type number: POL 2012/V2  
Drawing number:

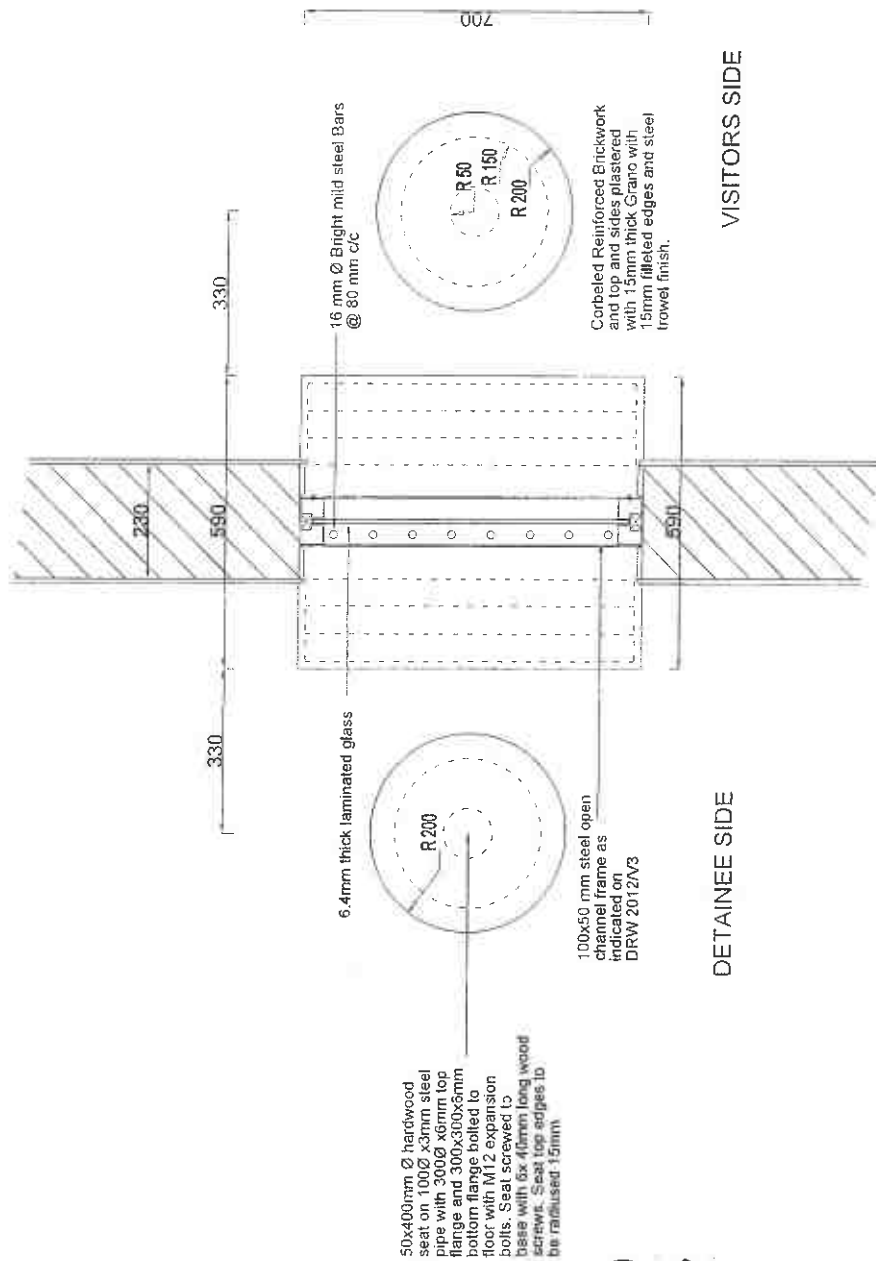
WCS number: 07-000 000

Drawing ID: 07-000 000

Author: K. SWART

Checked: K. SWART

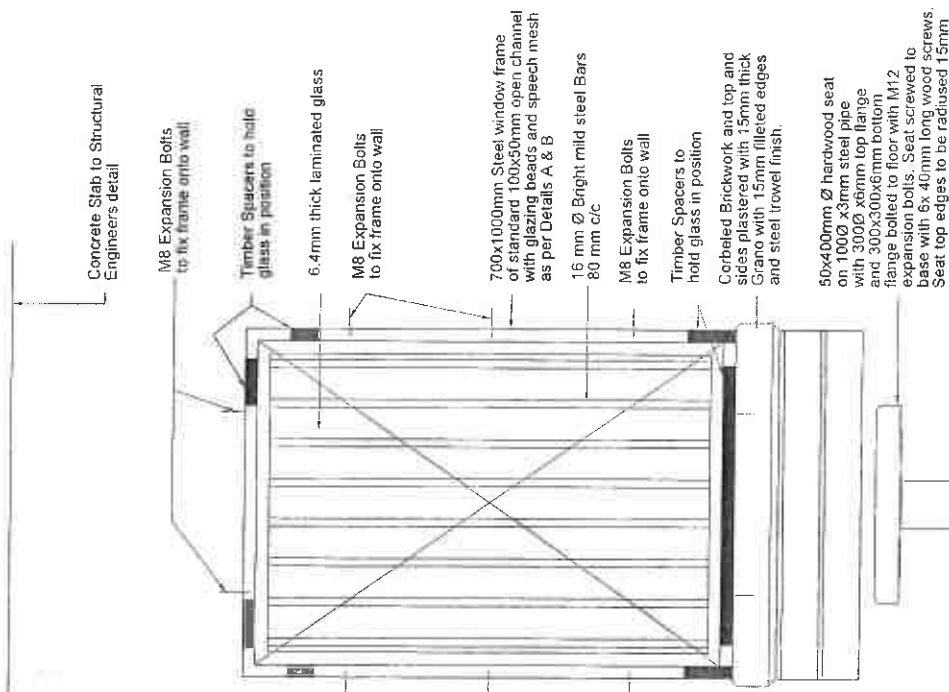
Drawn: K. SWART



**PLAN OF VISITORS COUNTER**  
SCALE 1:10



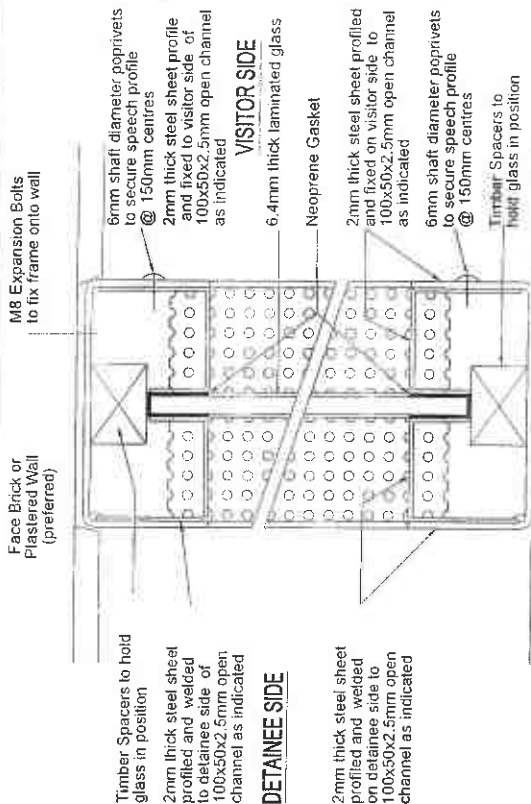
NOTE: Plastered wall option shown  
Facebrick option see DRW POL 2012N/1



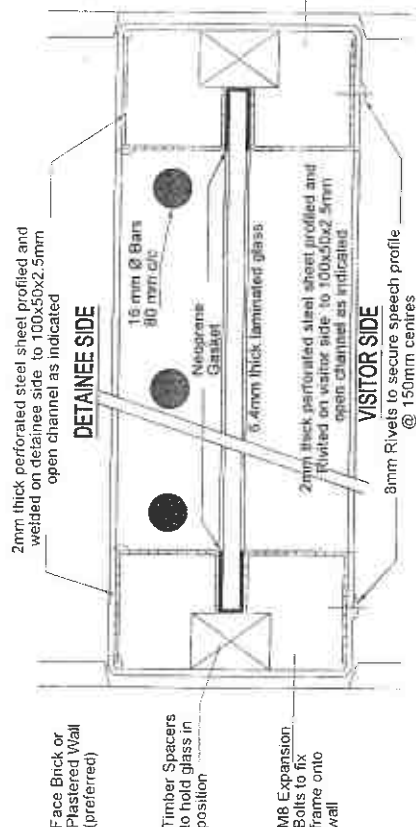
NOTE:  
All hardwood to be prepared and varnished with 2x polyurethane varnish

NOTE:  
All work according to Departmental Specification PW 371.  
All steel to be Galvanised  
All steel work to be hot dipped galvanised, all in accordance with SABS Specification 121 (SABS ISO 1461).  
- see PW 371 Section 12  
Clause 12.1 to 12.3

ELEVATION: VISITORS COUNTER  
SCALE 1:10



Top & Bottom Detail B through Frame  
SCALE 1:2



Side Detail A through Speech Frame  
SCALE 1:2

Steel Plate with 2mm radius perforations @ 8mm pitch

Speech Screen Aperture Detail  
SCALE 1:2

**NOTE**  
References in trade names are used only to simplify detailing. Various similar and approved products are available and can be substituted with those approved from SABS SCL (Super Services) Pretoria.  
Tel: (012) 665 0726  
Fax: (012) 665 0762

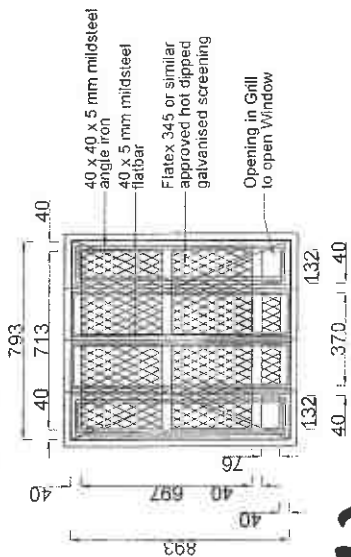
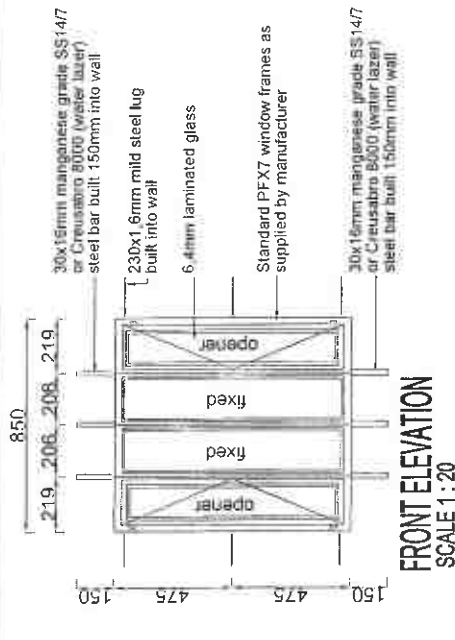
**DEPARTMENT OF PUBLIC WORKS**  
PUBLIC WORKS  
Pretoria  
Tel: (012) 307 2000  
Fax: (012) 307 2000  
T.M. Siphiso

**ARCHITECTURAL**  
SOUTH AFRICAN  
POLICE SERVICE

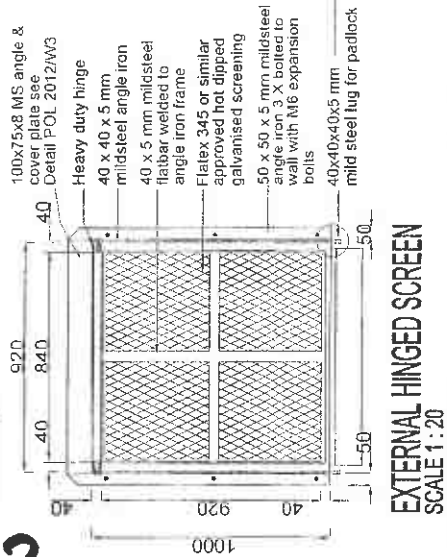
**TYPE CELL VISITORS ELEVATION & DETAILS OF ALUMINUM FRAME**

**PROJECT**  
Name: As Shown  
Date: JULY 2012  
Site Address: POL 2012N/3  
Drawing Number: 12.1

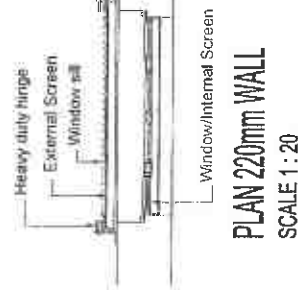
**REVISIONS**



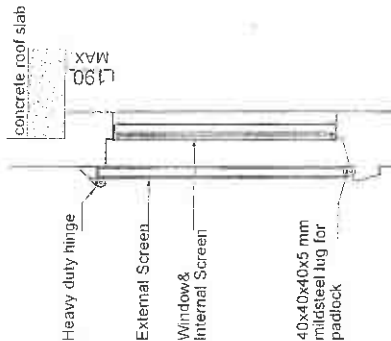
INTERNAL FIXED SCREEN  
SCALE 1:20



EXTERNAL HINGED SCREEN  
SCALE 1:20



PLAN 220mm WALL  
SCALE 1:20



SECTION  
(External Windows)  
SCALE 1:20

## WINDOW FRAME

Purpose made Window to Specification, Size & Details as Standard Drawing POL 2012/W2 & W3

## GLASS

6.4 mm Laminated Safety Glass

## FURNITURE

Purpose made Handle & Hinges to Specification, Size & Details as per Standard Drawing POL 2012/W2

## PUTTY

Putty to be primed and painted with Emulgel paint Colour to match either galvanising or painted frames - see PW 371

## INTERIOR SCREEN

Purpose made Fixed Screen to Specification, Size & Details as Standard Drawing POL 2012/W2 and POL 2012/W3

## EXTERIOR SCREEN

Purpose made Screen to Specification, Size & Details as Standard Drawing POL 2012/W2 and POL 2012/W3

## FURNITURE

2x Cylinder Padlocks (Solid 630 or similar & approved). One key to pass all padlocks per project (Duplicate keys)

**NOTE**  
Cell Windows in External Walls to be maximum of 2 brick courses below Concrete Slab Top of Cell Window between Cell & Cell Yards to be at Door height.

**NOTE:**  
All work according to Departmental Specification PW 371  
**All steel to be Galvanised**  
All steel work to be hot dipped galvanised, all in accordance with SABS Specification 751 - see PW 371 Section 13  
Clause 13.1 to 13.3

MS.	DATE	AUTHOR/REV	1:20
Copyright reserved by the Department of Public Works			
<b>NOTE</b> References to trade names are used only to simplify detailing. Various similar and approved products are available and can be substituted with prior approval from SAPS SCM (Expert Services) Pretoria. Tel (012) 845 8726 Fax (012) 845 8782			
<b>DEPARTMENT OF PUBLIC WORKS</b>  <b>POLICE/PAJ/JOJO</b> <b>CELL WINDOW</b> <b>DETAIL PLAN &amp; DETAILS</b>			
<b>DEPARTMENT OF PUBLIC WORKS</b> <b>PRIVATE BAG 306</b> <b>PRETORIA</b> <b>0001</b> <b>TEL (012) 87 2000</b> <b>WWW.PW.GOV.ZA</b> <b>T.M. SIKHOSI</b>			
<b>ARCHITECTURAL</b> <b>SOUTH AFRICAN</b> <b>POLICE SERVICE</b>			
<b>TYPE CELL WINDOW</b> <b>DETAIL PLAN</b> <b>&amp; DETAILS</b>			
DATE	BY	CHKD BY	APPROVED BY
JULY 2012	SHAW	SHAW	SHAW
PROJECT NUMBER			POL 2012/W1

**NOTE**

References to trade names are used only to simplify detailing. Various similar and approved products are available and can be substituted with prior approval from SAPS SCM (Expert Services) Pretoria. Tel: (012) 845 9725 Fax: (012) 845 9762

**DEPARTMENT OF PUBLIC WORKS**

**POLICE WINDOW DETAIL**

Project No: 0011

Tel: (012) 337 2000

Drawn: T.M. MAMBA

**ARCHITECTURAL SERVICES**

**SOUTH AFRICAN POLICE SERVICE**

WCS number: \_\_\_\_\_

Drawing No: \_\_\_\_\_

**TYPE CELL WINDOW DETAIL PLAN**

WCS number: \_\_\_\_\_

As Shown: \_\_\_\_\_

Checked: \_\_\_\_\_

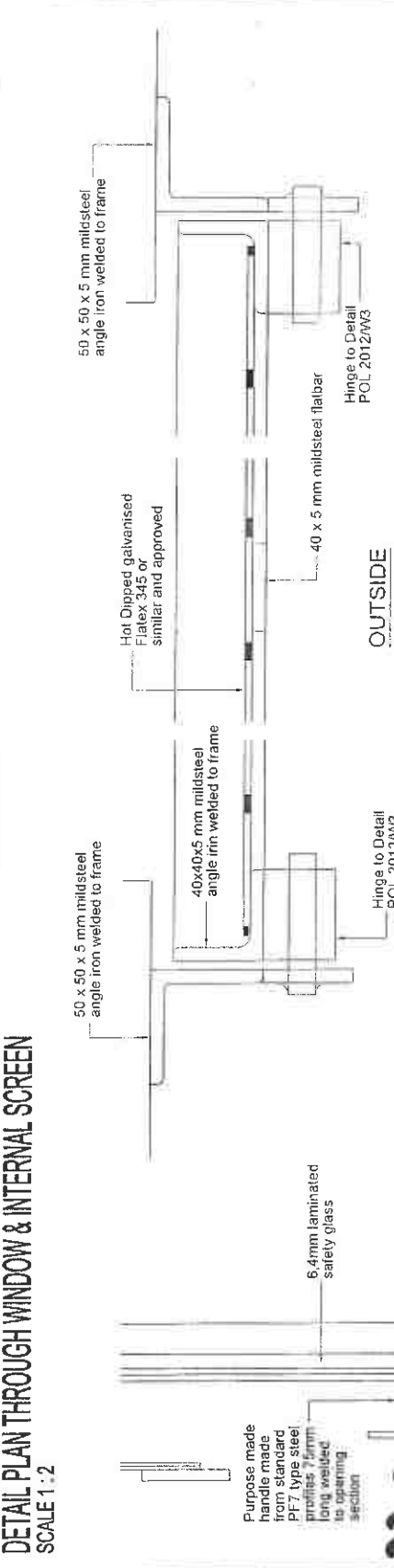
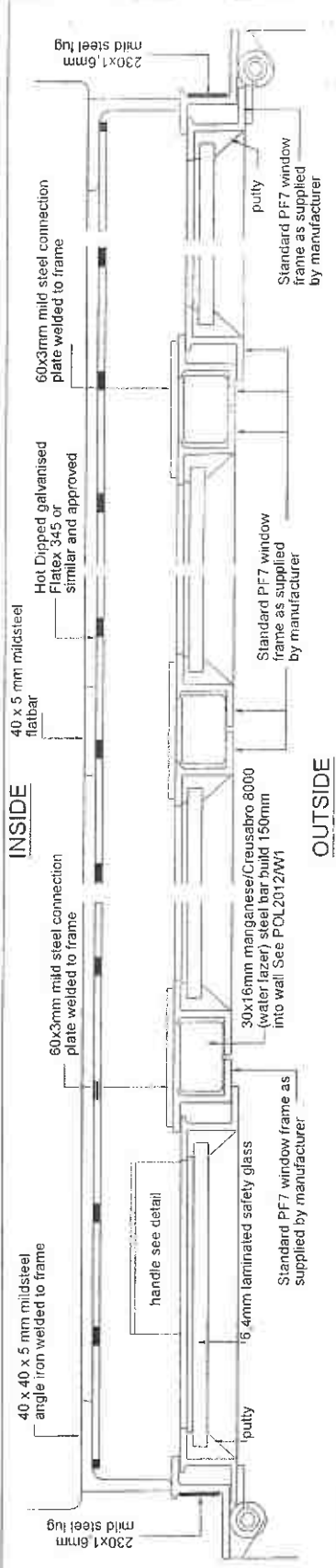
By: K. SWART

Date: JULY 2012

Version number: \_\_\_\_\_

Project number: POL 2012W2

Drawing number: \_\_\_\_\_



**NOTE:**

All work according to Departmental Specification PW 371

**All steel to be Galvanised**

All steel work to be hot dipped galvanised, all in accordance with SABS Specification 763. - see PW 371 Section 13 Clause 13.1 to 13.3

263

NO.	DATE	APPROVED BY	3/7/16
-----	------	-------------	--------

Copyright used in the Department of Public Works

**NOTE**  
References to trade names are used only to simplify detailing. Various sizes and approved products are available and can be substituted with prior approval from SANS SCA (Contact: Sanyal Pretoria Tel: (012) 945 8726 Fax: (012) 945 8782)

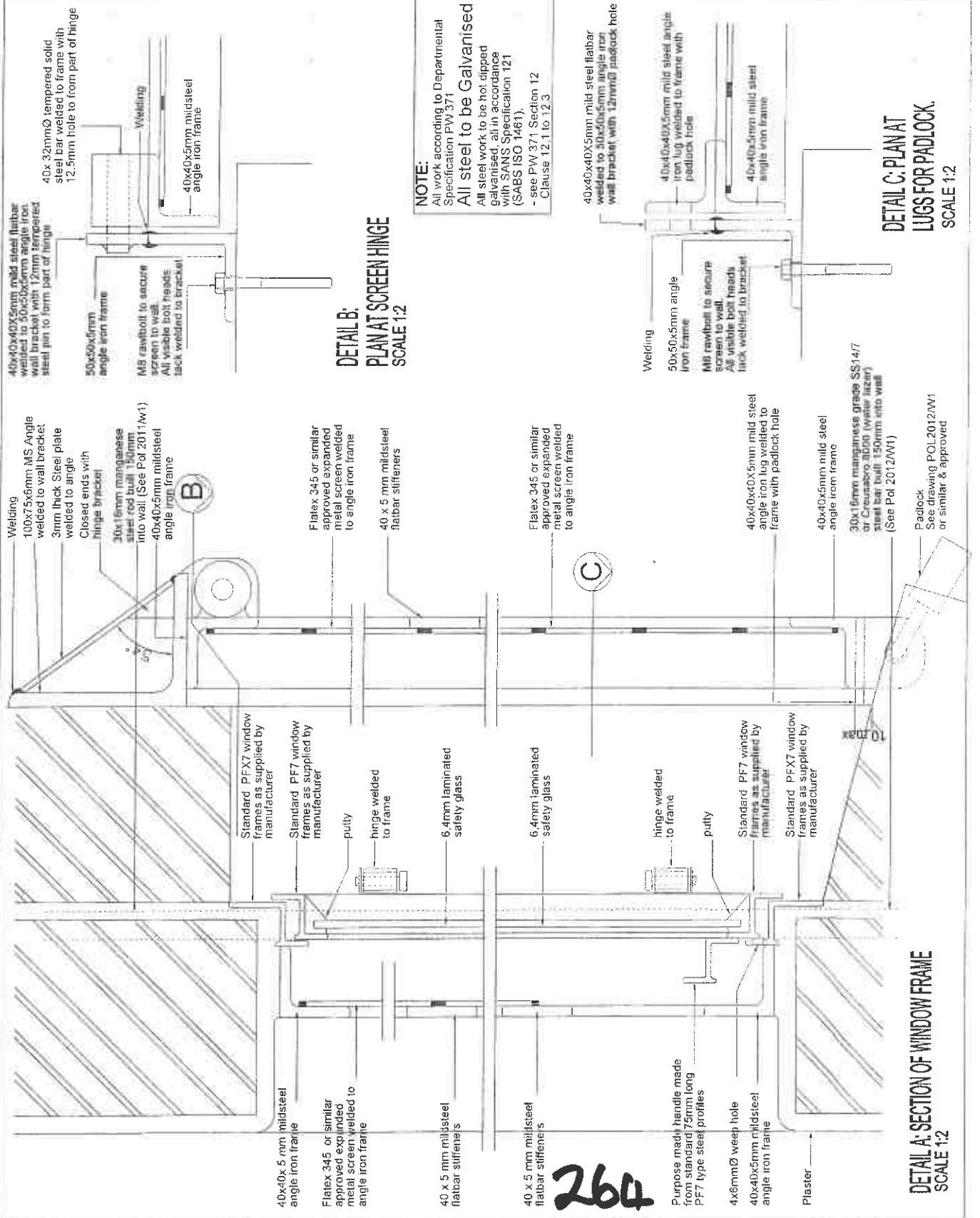
POL2012-W1.DRW  
CELL WINDOW DETAIL SECT.  
HINGE & LOCK DETAILS

DEPARTMENT OF PUBLIC WORKS  
Private Bag 202  
Pretoria  
0001  
Tel: (012) 300 2600  
Classified General  
T.M. Sakhala

ARCHITECTURAL  
SOUTH AFRICAN  
POLICE SERVICE

WCS number  
drawing title  
TYPE CELL WINDOW  
DETAIL SECTION  
HINGE & LOCK DETAILS

drawn by  
checked by  
date  
scale  
drawing number  
POL 2012/W3



264



**APPOINTMENT OF CONTRACTOR FOR SECURITY UPGRADE AT  
INGOGO POLICE STATION IN KWAZULU NATAL PROVINCE**

**BID: 19/1/9/1/10TB(23)**

**PART C**

**CONTRACT**

**PART C 3**

**OCCUPATIONAL HEALTH AND SAFETY**



# HEALTH & SAFETY SPECIFICATION

## FOR CAPITAL WORKS AND PLANNED MAINTENANCE PROJECTS MANAGED ON BEHALF OF SOUTH AFRICAN POLICE SERVICE (THE "CLIENT")

Rev 2 H&S Specification

20 Lockout System.....	34
21 Important Lists & Records to be kept.....	34
1. PREAMBLE.....	

In terms of Construction Regulation 5(1) (b) of the Occupational Health and Safety Act, 1993 (Act 85 of 1993), South African Police Service, as the Client must prepare a suitable, documented and coherent site specific health and safety specification for the intended construction work based on the baseline risk assessment.

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

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

Due to the wide scope and definition of construction work, every construction activity and site will be different, and circumstances and conditions may change even on a daily basis. Therefore, due caution is to be taken by the Principal Contractor when drafting the Health and Safety Plan based on these Health and Safety Specifications. Prior to drafting the Health and Safety Plan, and in consideration of the information contained here-in, the contractor shall set up a Risk Assessment Program to identify and determine the scope and details of any risk associated with any hazard at the construction site, in order to identify the steps needed to be taken to remove, reduce or control such hazard. This Risk

Rev 2 H&S Specification: 2018

3

## TABLE OF CONTENT

1. Preamble.....	3
2. Scope of health & safety specification document.....	4
3. Purpose.....	5
4. Definitions.....	6
5. Occupational health & safety management.....	8
5.1 Structure and organization of OHS responsibilities.....	8
5.1.1 Overall supervision and responsibility OHS.....	8
5.1.2 Required appointment as per the construction regulation.....	9
5.2 Communication, participation & consultation.....	10
6. Interpretation.....	11
7. Responsibilities.....	11
7.1 Client.....	11
7.2 Principal contractor.....	12
7.3 Contractor.....	14
7.4 Construction Health & Safety Agent (SACPCMP).....	14
8. Scope of work.....	15
9. Preparing Health & Safety Plan.....	15
10. Health & Safety Plan.....	7
11. OH&S Goals & Objective & Arrangements for Monitoring & Reviewing OH&S Performance.....	18
11.1 Identification of hazards & development of Risk Assessment, Standard working Procedures (SWP) & Method Statement.....	18
11.1.1 Monthly audit by client and/or its agent.....	18
11.1.2 Health & Safety incident/accident reporting and investigation.....	19
12. Review.....	19
12.1 Site Rules & other Restrictions.....	21
12.1.1 Appointment of Health & Safety Reps.....	22
12.1.2 Duties and functions of the Health & Safety Reps.....	22
12.1.3 Establishment of Health & Safety Committee.....	23
12.1.4 Training & Awareness.....	23
13. Project Site Specific Requirements.....	24
14. Outlined Data References & information on Certain & Specific Obligatory Requirements to ensure compliance.....	25
15. Principal Contractor General duties.....	29
16. The Principal Contractor Specific Duties.....	29
17. The Principal Contractor Specific Responsibilities with regard to hazardous activities.....	29
18. General Notes to the Principal Contractor.....	30
19. House Keeping.....	31
20. Facilities.....	32

Rev 2 H&S Specification: 2018

2

Assessment and the steps identified will be the basis or point of departure for the Health and Safety Plan.

The South African Police Service is tasked to provide accommodation and operational facilities to a very large proportion of its members. A very large number of State employees and public users of the facilities and the services provided there-in directly interacts with the facilities provided by the well-being, health and safety of a great number of people. This Department thus has directly or indirectly, an impact on the Republic of South Africa as well as the National Parliament.

In this a high premium is to be placed on the health and safety of the most valuable assets of the South African Police Service. These are its personnel, the personnel of its Clients and the physical assets of which it is the custodian and may also include the public as well. The responsibilities the Department and relevant stakeholders have toward its employees and other people present in the facilities or on the sites are captured further in this specification document. These responsibilities stem from both moral, civil and a variety of legal obligations. The Principal Contractor is to take due cognizance of the above statement.

Every effort has been made to ensure that this specification document is accurate and adequate in all respects. Should it however, contain any errors or omissions they may not be considered as grounds for claims under the contract for additional reimbursement or extension of time, or relieve the Principal Contractor from his responsibilities and accountability in respect of the project to which this specification document pertains. Any such inaccuracies, inconsistencies and/or inadequacies must immediately be brought to the attention of the Agent and/or Client.

## 2. SCOPE OF HEALTH AND SAFETY SPECIFICATION DOCUMENT

These Specifications should be read in conjunction with the Act, the Construction Regulations and all other Regulations and Safety Standards which were or will be promulgated under the Act or incorporated into the Act and be in force or come into force during the effective duration of the project. The stipulations in this specification, as well as those contained in all other documentation pertaining to the project, including contract

Rev 2 H&S Specification: 2018

4



documentation and technical specifications shall not be interpreted, in any way whatsoever, to contradict or nullify any stipulation of the Act, Regulations and Safety Standards which are promulgated under or incorporated into the Act.

### 3. PURPOSE

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

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

- a) Safety considerations affecting the site of the project and its environment;
- b) Health and safety aspects of the associated structures and equipment;
- c) submissions on health and safety matters required from the Principal Contractor (and his/her contractor); and
- d) the Principal Contractor's (and his/her contractor) health & safety plan.

To serve to ensure that the Principal Contractor (and his/her contractor) is fully aware of what is expected from him/her with regard to the Occupational Health and Safety Act, 1993 (Act No. 85 of 1993) and the Regulations made there-under including the applicable safety standards, and in particular in terms of Section 6, 7 and 8 of the construction regulation (2014).

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

**Construction Work Permit** – means a document issued by the Provincial Director of Department of Labour

**"Contractor"** – means an employer, as defined in Section 1 of the Act, who performs construction work and includes Principal Contractors.

**"Contract Amount"** Financial value of the contract at the time of the award of the contract, exclusive of all allowance and any value added tax or sales tax which the law requires the employer to pay to the contractor.

**"Practical Completion Certificates"** A certificates issued in terms of a contract by the employer, signifying that the whole of the construction works have reached a state of readiness for occupation or use for the purposes intended, although some minor work may be outstanding.

**"Accident"** – means unplanned occurrence that happens due to the unsafe condition and may cause injury to a person, damage to the property, material, plant, equipment and the environment.

**"Hazard"** – means anything including work activities and practices with the potential to cause harm;

**"Risk"** – means the likelihood that harm will occur and the subsequent consequences.

To inform the Principal Contractor that the Occupational Health and Safety Act, 1993 (Act No. 85 of 1993) in its entirety shall apply to the contract to which this specification document applies. The Construction Regulations promulgated on 07 February 2014.

4. DEFINITIONS – The most important definitions in the Act and Regulations pertaining to this specification document are hereby extracted.

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

**"Health & Safety Specification"** – means a document that includes information required under the construction regulation and obtained from the clients & designers during the early planning & design stage for a specific project on a specific site for use by the contractors when preparing their tenders or bids to clients.

**"Health & Safety Plan"** – means a site, activity or project documented plan in accordance with the clients health and safety specification

**"Agent"** – means any person who acts as a representative for a client;

**"Client"** – means any person for whom construction work is performed;

**"Construction Health & Safety Agent (SACPCMP)"** – The person or entity appointed by the client through the Agent and who has a full authority and obligation to act on the clients behalf in terms of the construction regulations;

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

**"Risk assessment"** – means a process to determine any risk associated with any hazard at a construction site in order to identify the steps needed to be taken to mitigate, reduce or control such hazards.

**Health and Safety File** – means a file, or other record containing the information in writing required by Construction Regulations

## 5. OCCUPATIONAL HEALTH & SAFETY MANAGEMENT

### 5.1 Structure and Organization of OH&S Responsibilities

#### 5.1.1 Overall Supervision and Responsibility for OH&S

a) The Client and/or its Agent on its behalf to ensure that the Principal Contractor, appointed in terms of Construction Regulation 5(1)(k), implements and maintains the agreed and approved H&S Plan. Failure on the part of the Client or Agent to comply with this requirement will not relieve the Principal Contractor from any one or more of his/her duties under the Act and Regulations.

b) The Chief Executive Officer of the Principal Contractor in terms of Section 16 (1) of the Act to ensure that the Employer (as defined in the Act) complies with the Act. The pro forma Legal Compliance Audit may be used for this purpose by the Principal Contractor or his/her appointed contractor.

c) All OH&S Act (85 /1993), Section 16 (2) appointee/s as detailed in his/her/their respective appointment forms to regularly, in writing, report to their principals on matters of health and safety per routine and ad hoc inspections and on any deviations as soon as observed, regardless of whether the observation was made during any routine or ad hoc inspection and to ensure that the reports are made available to the principal Contractor to become part of site records (Health & Safety File).

d) The Construction Supervisor and Assistant Construction Supervisor/s appointed in terms of Construction Regulation 8 to regularly, in writing, report to their principals on matters of health and safety per routine and ad hoc inspections and on any

268



deviations as soon as observed, regardless of whether the observation was made during any routine or ad hoc inspection and to ensure that the reports are made available to the principal Contractor to become part of site records (Health & Safety File)

- e) All Health and Safety Representatives (SHE-Rep's) shall act and report as per Section 18 of the Act.

#### 5.1.2 Required appointments as per the Construction Regulations:-

Item	Regulation	Appointment	Responsible Person
1	3	Application Construction work permit	Client
2	5(1)(k)	Principal contractor for each phase of project	Client
3	5(6)	Construction Health & Safety Agent	Client
4	7 (1)(c)	Contractor	Principal Contractor
5	7(3)	Contractor	Contractor
6	8(1)	Construction manager	Contractor
7	8(2)	Assistance Construction manager	Contractor
8	8(5)	Construction Safety Officer	Contractor
9	8(7)	Construction Supervisor	Contractor
10	8(8)	Responsible employee	Contractor
11	9(1)	Competent risk assessor	Contractor
12	10(1)	Fall protection planner	Contractor
13	12(1)	Temporal work designer	Contractor
14	12(2)	Supervisor of temporal work operation	Contractor
15	12(3)(F)	Competent temporary works inspector	Contractor
16	13(1)(a)	Excavation supervisor	Contractor
17	13(2)(k)	Competent person in the use of explosive for excavations	Contractor
18	14(1)	Competent demolition supervisor	Contractor
19	14(1)(i)	Explosives expert	Contractor
20	16(1)	Scaffold supervisor	Contractor
21	17(1)	Suspended platform supervisor	Contractor
22	18(1)a	Rope access Supervisor	Contractor

Rev 2: H&S Specification: 2018

9

23	19(8)(a)	Maintenance inspector	Contractor
24	20(1)	Bulk handling plant supervisor	Contractor
25	21(2)(b)	Explosive actuated fastening device inspector	Contractor
26	21(2)(g)	Explosive actuated fastening device cartridge, nails and studs, issuer & collector	Contractor
27	23 (1)	Operator construction vehicle and mobile plant	Contractor
28	25 (a)	Stacking and storage supervisor	Contractor
29	26 (iv)	Fire equipment inspector	Contractor
OTHER APPOINTMENTS			
AC REGULATION		APPOINTMENT	
1	16(1)	CEO	
2	16(2)	Deputy CEO	
3	17	Health and safety representatives	
4	19	Health and Safety committee members	
5	37(2)	Mandatory agreement	
6	GAR 9(2)	Incident investigator	
7	GSR 3	Competent First aider	
8	GSR 5(1)	Competent Confined space inspector	
9	DMR 18(5)(a)	Lifting machine inspector	
10	DMR 18(5)(a)	Lifting machine entity	
11	GMR 2	Supervisor of machinery	

#### 5.2 Communication, Participation & Consultation

5.2.1 Occupational Health & Safety matters/issues shall be communicated between the Employer, the Principal Contractor, the other Contractors, the Designer and other concerned parties shall be through the H&S Committee or other means determined by the client.

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

Rev 2: H&S Specification: 2018

10

5.2.3 Consultation with the workforce on OH&S matters will be through their Supervisors and H&S Representatives ('SHE - Reps')

5.2.4 The Principal Contractor will be responsible for the dissemination of all relevant OH&S information to the other Contractors e.g. design changes agreed with the Client and/or its Agent on its behalf and the Designer, instructions by the Client and/or his/her agent, exchange of information between Contractors, the reporting of hazardous/dangerous conditions/situations etc.

#### 6. INTERPRETATION

- The Occupational Health and Safety Act and all its Regulations, with the exception of the Construction Regulations, distinguish between the roles, responsibilities and functions of employers and employees respectively. It views consultants and contractors as employees of the "owner" of a construction or operational project, the "owner" being regarded as the employer.
- (The position taken by the Construction Regulations is that the "owner", in terms of its instructions, operates (has to operate) in the role of client as per relevant definition. The contractors working for the "client" are seen to be in two categories, i.e. the Principal Contractor and Contractors
- The Principal Contractor has to take full responsibility for the health and safety on the site of the relevant project / contract. This includes monitoring health and safety conditions and overseeing administrative measures required by the Construction Regulations from all contractors on the project site.

#### 7. RESPONSIBILITIES

##### 7.1 Client

- The Client or his appointed Agent on his behalf will appoint each Principal Contractor for this project or phase/section of the project in writing for assuming the role of Principal Contractor as intended by the Construction Regulations.

Rev 2: H&S Specification: 2018

11

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

##### 7.2 Principal Contractor

- The Principal Contractor shall accept the appointment under the terms and Conditions of Contract. The Principal Contractor shall sign and agree to those terms and conditions and shall, before commencing work, notify the Department of Labour of the intended construction. Annexure 2 of this construction regulation contains a "Notification of Construction Work" form. The Principal Contractor shall submit the notification in writing prior to commencement of work and inform the Client or his Agent accordingly.

Rev 2: H&S Specification: 2018

12

269

- b) The Principal Contractor shall ensure that he is fully conversant with the requirements of this Specification and all relevant health and safety legislation
- c) The Principal Contractor will in no manner or means be absolved from the responsibility to comply with all applicable sections of the Act, the Construction Regulations or any Regulations proclaimed under the Act or which may perceivable be applicable to this contract.
- d) The Principal Contractor shall provide and demonstrate to the Client a suitable and sufficiently documented health and safety plan based on this Specification, the Act and the Construction Regulations which shall be applied from the date of commencement of and for the duration of execution of the works. This plan shall as appendices, include the health and safety plans of all Sub-contractors for which he has to take responsibility in terms of this contract.
- e) The Principal Contractor shall provide proof of his registration and good standing with the Compensation Fund or with a licensed compensation insurer prior to commencement with the works.
- f) The Potential Principal Contractor shall, in submitting his tender, demonstrate that he has made provision for the cost of compliance with the specified health and safety requirements, the Act and Construction Regulations. (Note: This shall have to be contained in the conditions of tender upon which a tenderer's offer is based.)
- g) The Principal Contractor shall consistently demonstrate his competence and the adequacy of his resources to perform the duties imposed on the Principal Contractor in terms of this Specification, the Act and the Construction Regulations.
- h) The Principal Contractor shall ensure that a copy of his health and safety plan is available on site and is presented upon request to the Client, an Inspector, Employee or Sub-contractor.
- i) The Principal Contractor shall ensure that a health and safety file, which shall include all documentation required in terms of the provisions of this Specification, the Act

Rev 2: H&S Specification: 2018

13

- c) H&S responsibilities: Prior to accepting the H&S agent appointment from clients, H&S agents need to ensure that they brief clients fully on the client's particular responsibilities in terms of the OH&SA of 1993 and Construction Regulations as amended from time to time. In the absence of acceptance by clients of these responsibilities, H&S agents will not be able to adequately meet their own H&S responsibilities and duties.
- d) H&S information: H&S agents must provide the designer or design team with all H&S information to enable them to conduct a design HIRA to identify the significant hazards that need to be included in the H&S specification. This information may be gathered from multiple sources such as, for example, discussion with the client, previous historical use of the site or facility, previous surveys and investigations and past H&S files.

## 8. SCOPE OF WORK

These specifications are applicable to the specific scope of work pertaining to the above-mentioned project as detailed in the tender documents.

Construction Regulation 5(1)(g) determines that potential contractors submitting tenders have made adequate provision for the cost of health and safety measures during the construction process. The Principal Contractor shall on tendering make provision for the cost of health and safety measures in terms of his/her documented Health and Safety Plan and measures based on these Health and Safety Specifications during the period of the project. The cost shall be duly quantified and clearly identified for such identifiable purpose.

## 9. PREPARING A HEALTH & SAFETY PLAN

- (a) The level of detail required for a H&S plan will depend on how complex the workplace is (in particular, the number of contractors at the workplace at any one time) and the risks involved in the work. The plan must be easily accessible in a construction site and it must be clearly understood by management, supervisors & workers on construction site.

Rev 2: H&S Specification: 2018

15

and the Construction Regulations, is opened and kept on site and made available to the Client or Inspector upon request. Upon completion of the works, the Principal Contractor shall hand over a consolidated health and safety file to the Client.

- j) The Principal Contractor shall, throughout execution of the contract, ensure that all conditions imposed on his Sub-contractors in terms of the Act and the Construction Regulations are complied with as if they were the Principal Contractor.
- k) The Principal Contractor shall from time to time evaluate the relevance of the Health and Safety Plan and revise the same as required, following which revised plan shall be submitted to the Client and/or his/her Agent for approval.

## 7.3 Contractor

The contractor must demonstrate to the Principal Contractor that he has the Necessary competencies and resources to perform the construction work safely

## 7.4 Construction Health & Safety Agent (SACPCMP)

The construction Health & Safety Agent act as a link between the client, Principal Contractor and the project team members with respect to health & Safety. They are Required to ensure that the client carry out its H&S responsibilities in terms of Legislation as well as to co-ordinate and ensure good H&S practices are maintained Throughout the duration of the project. In many cases this role starts from project Initiation to project close-out.

- a) H&S competence: In the event that the client is unable to satisfy the requirements of the Construction Regulations for whatever reasons, the construction H&S agent may be appointed to perform these functions on behalf of the client. Given the need to appoint a registered construction H&S agent that is competent and adequately resourced with respect to H&S matters.
- b) H&S goals: It is important that the construction H&S agents demonstrate clearly to clients how they are going to contribute to the achievement of any client H&S goals and objectives. They should also set their own H&S goals.

Rev 2: H&S Specification: 2018

14

- (b) The plan must be implemented, maintained and kept up to date during the construction of the project.

- (c) The principal contractor should prepare a H&S plan that includes

- project information;
- client requirements for H&S management on the project; Environmental restrictions and existing on-site risks arrangements, imposed by others or developed by the principal contractor, to control significant site H&S risks; H&S file & project H&S review.

- (d) The H&S plan should include the following information:

- details of the client, that is the person commissioning the construction work, for example their name, representative and contact details;
- details of the principal contractor;
- details of the construction project, for example address of the workplace, anticipated start and end date and a brief description of the type of construction work that the H&S plan will cover;
- details on how subcontractors will be managed and monitored, including how the principal contractor intends to implement and ensure compliance with the H&S plan such as checking on the performance of subcontractors and how non-compliance will be handled; and
- details on how the risks associated with falls, falling objects, moving plant, electrical work and all high risk construction work that will take place on a construction project will be managed.

- (e) The H&S plan should also include information on:

- the provision and maintenance of a hazardous chemicals register, safety data sheets and hazardous chemicals storage;
- the safe use and storage of plant;
- the development of a construction project traffic management plan;
- obtaining and providing essential services information – electrical, gas, telecom, water and similar services;

Rev 2: H&S Specification: 2018

16

270

- workplace safety and public safety; and
- ensuring workers have appropriate licences and training to undertake the construction work.

(f) The H&S plan must contain:

- a general description of the type of work activities involved in the project and not just a description of the facility to be constructed;
- the project program or schedule details, including start and finish dates, showing principal activities;
- details of client, design team, principal contractor, subcontractors, and major suppliers; and
- extent and location of relevant existing records, surveys, site investigation and geotechnical reports, 'as-built' plans, H&S files;

## 10. HEALTH AND SAFETY FILE

- The H&S file is a document prepared by the principal contractor containing important project H&S information for use by the owner of the completed structure after construction has been completed.
- The principal contractor is responsible for producing an H&S file. It contains important project H&S information for use by the owner of the completed structure after construction has been completed. It is essential that the process of compiling the file commences as early as possible to ensure sufficient time to gather the required information.
- The Principal Contractor must, in terms of Construction Regulation 7(2) (b), keep a Health & Safety File on site at all times that must include all documentation required in terms of the Act and Regulations and must also include a list of all Contractors on site that are accountable to the Principal Contractor and the agreements between the parties and details of work being done. A more detailed list of documents and other legal requirements that must be kept in the Health & Safety File.

Rev 2: H&S Specification: 2018

17

5(1)(r) to ensure that the principal Contractor has implemented, is adhering to and is maintaining the agreed and approved OH&S Plan.

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

### 11.1.2 Health & Safety incident/accident reporting & investigations

- The Principal Contractor shall report all incidents where an employee is injured on duty to the extent that he/she:
  - dies
  - becomes unconscious
  - loses a limb or part of a limb
  - is injured or becomes ill to such a degree that he/she is likely either to die or to suffer a permanent physical defect or likely to be unable for a period of at least 14 days either to work or continue with the activity for which he/she was usually employed

OR where:

- a major incident occurred
- the health or safety of any person was endangered
- where a dangerous substance was spilled
- the uncontrolled release of any substance under pressure took place
- machinery or any part of machinery fractured or failed resulting in flying, falling or uncontrolled moving objects

Rev 2: H&S Specification: 2018

19

- The contractor must ensure that the client's format and layout of the H&S file is adhered to. The contractor must identify the responsible person that will prepare the H&S file and who will be responsible for the drafting of as-built drawings. The contractor must establish procedures.

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

## 11. OH&S GOALS AND OBJECTIVES AND ARRANGEMENTS FOR MONITORING AND REVIEWING OH&S PERFORMANCE

The Principal Contractor is required to maintain an acceptable disabling incident frequency rate (DIFR) and report on this to the Client and/or its Agent on its behalf on a monthly basis.

### 11.1 IDENTIFICATION OF HAZARDS AND DEVELOPMENT OF RISK ASSESSMENTS, STANDARD WORKING PROCEDURES (SWP) AND METHOD STATEMENTS

The Principal Contractor is required to develop Risk Assessments, Standard Working Procedures (SWP) and Method Statements for each activity executed in the contract or project.

The identification of hazards is over and above the hazards identification programme and those hazards identified during the drafting of the Health and Safety Plan.

#### 11.1.1 Monthly Audit by Client and/or its Agent.

The Client and/or its Agent on its behalf will be conducting Periodic Audits at times agreed with the Principal Contractor Audit to comply with Construction Regulation

Rev 2: H&S Specification: 2018

18

- Machinery ran out of control, to the Provincial Director of the Department of Labour within seven days and at the same time to the Client and/or its Agent on its behalf.

- The Principal Contractor is required to provide the Client and/or its Agent on its behalf with copies of all statutory reports required in terms of the Act and the Regulations.

- The Principal Contractor is required to provide the Client and/or its Agent on its behalf with a monthly "SHE Risk Management Report".

- The Principal Contractor is required to provide a.s.a.p. the Client and/or its Agent on its behalf with copies of all internal and external accident/incident investigation reports. The Principal Contractor is responsible to oversee the investigation of all accidents/incidents where employees and non-employees were injured to the extent that he/she/they had to receive first aid or be referred for medical treatment by a doctor, hospital or clinic. (General Administrative Regulation 9)

- The results of the investigation to be entered into the Accident/Incident Register listed above. (General Administrative Regulation 9)

- The Principal Contractor is responsible for the investigation of all non-injury incidents as described in Section 24 (1) (b) & (c) of the Act and keeping a record of the results of such investigations including the steps taken to prevent similar incidents in future.

- The Principal Contractor is responsible for the investigation of all accidents relating to the construction site and keeping a record of the results of such investigations including the steps taken to prevent similar accidents in future.

- Notwithstanding the requirements of Section 24 of the Act, ALL incidents shall be investigated and reported on in writing, irrespective of whether such incident gave rise to injury or damage.

Rev 2: H&S Specification: 2018

20

271

(i) Reporting Of Near-Misses

- **South African Police Service** views the reporting of near misses as a critical component in creating a positive health and safety awareness culture on site.
- **South African Police Service** retains the right to enforce the reporting of near misses within 24 hours of occurrence.

12. Review

The Principal Contractor is to review the Hazard Identification, Risk Assessments and Standard Work Procedures at each Production Planning and Progress Report meeting as the construction work develops and progresses and as time changes are made to the designs, plans and construction methods and processes.

The Principal Contractor must provide the Client and/or its Agents on its behalf, other Contractors and all other concerned parties with copies of any changes, alterations or amendments as contemplated in the above paragraph.

12.1 Site Rules and other Restrictions

a) Site OH&S Rules

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

- H&S Representatives must form part of the incident/accident investigating team.

12.1.3 Establishment of H&S Committee(s)

- The Principal Contractor must establish H&S Committees consisting of designated H&S Representatives together with a number of Employers Representatives appointed as per Section 19(3) that are not allowed to exceed the number of H&S Representatives on the committee.
- The persons nominated by the employer on a H&S Committee must be designated in writing for such period as may be determined by him. The H&S Committee shall co-opt advisory (temporary) members and determine the procedures of the meetings including the chairmanship.
- The H&S Committee must meet minimum monthly and consider, at least, an agreed Agenda for the first meeting. Thereafter the H&S Committee shall determine its own procedures.

12.1.4 Training & Awareness

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

a) Training & Induction

All employees performing work or task on site that potentially impact on H&S must be competent & have the necessary appropriate education, training & experience.

All the training must be closely aligned with the risk profile of the project; procedures must be put in place to ensure that all workers are aware of the consequences of their work activities & benefits of improved H&S performance.

All employees of the Principal and other Contractors must be in possession of proof of General Induction training

b) Security Arrangements

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

If not already tasked to the H&S Officer appointed in terms of Construction Regulation, the Principal Contractor must appoint a competent person who must develop contingency plans for any emergency that may arise on site as indicated by the risk assessments.

12.1.1 Appointment of Health & Safety Representatives

a) H&S Representatives ('SHE - Reps')

Where the Principal Contractor employs more than 20 persons (including the employees of other Contractors (sub-contractors) he has to appoint one H&S Representatives for every 50 employees or part thereof. (Section 17 of the Act and General Administrative Regulation 6 & 7)

H&S Representatives must be appointed in writing and the designation shall be in accordance with the Collective Agreement as concluded between the parties as is required in terms of General Administration Regulation 6.

12.1.2 Duties and Functions of the H&S Representatives

- The Principal Contractor must ensure that the designated H&S Representatives conduct at least a weekly inspection of their respective areas of responsibility using a checklist developed by a Principal Contractor.
- The report must be consolidated and submitted to the Health & Safety Committee.

b) Site Specific Induction Training

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

c) Other Training

All operators, drivers and users of construction vehicles, mobile plant and other equipment must be in possession of valid proof of training.

13. PROJECT/SITE SPECIFIC REQUIREMENTS

The following is a list of specific activities and considerations that have been identified for the project and site and for which Risk Assessments, Standard Working Procedures (SWP), management and control measures and Method Statements (where necessary) have to be developed by the Principal Contractor:

- a) Clearing & grubbing the area/site
- b) Site establishment
- c) Dealing with existing structures
- d) Location of existing services
- e) Boundary & Access control/Public liability exposures
- f) Protection against heat exhaustion, dehydration, wet & cold conditions
- g) Dealing with HIV & aids other related diseases
- h) Use of portable electrical & explosive tools
- i) Any Excavation work and Demolition work
- j) Any welding work
- k) Loading & offloading of trucks
- l) Driving & operations of Construction vehicles & mobile plant
- m) Temporal works and
- n) Construction work as defined in the construction regulation 2014

272

# 14 OUTLINED DATA REFERENCES AND INFORMATION TO CERTAIN AND/OR SPECIFIC OBLIGATORY REQUIREMENTS TO ENSURE COMPLIANCE

## Administrative & Legal Requirements

OH&S Act/Section/Regulation	Subject	Requirements
Construction Regulation 1	Notice of carrying out Construction work	• Department of Labour notified • Copy of Notice available on Site
General Safety Regulation 4	Copy of OH&S Act (act as well as Regulations)	• Printed copy of Act & Regulations on site • Readily available for manual by employees
Construction Regulation 5 & 7(1)	Registration with Compensation Insurer	• Written proof of registration/letter of good standing on display on Site
Construction Regulation 5 & 7(1)	H&S Application & Progression	• H&S Specimen to be signed and stamped as per the OH&S Act • OH&S Specimen to be signed & stamped as per the OH&S Act
Construction Regulation 9	Hazard Identification & Risk Assessment	• Hazard Identification recorded and recorded • Risk Assessment and - Plan drawn up/updated • RA Plan available on Site • Employees Safe/Competent/Trained
Construction Regulation 10	Assigned Duties (Managers)	• Responsibility of complying with OH&S Act assigned to other persons by CEO
Construction Regulation 11	Designation of Person Responsible for OH&S	• Competent person appointed in writing as Person Responsible with job description
Construction Regulation 12	Designation of Assistant for above	• Competent person appointed in writing as Assistant Construction Supervisor with job description
Section 17 & 18 General Administrative Regulations 5 & 7	Designation of Health & Safety Representatives	• More than 20 employees, one H&S Representative, one additional H&S Rep. for each 50 employees or part thereof • Designation in writing, period and area of responsibility specified in terms of OAR 5 & 7 • Monthly H&S Rep. reports • Reports actioned by Management

Rev 2 - H&S Specification

Section 19 & 20 General Administrative Regulations 5	Health & Safety Committees	<ul style="list-style-type: none"> <li>H&amp;S Committees established</li> <li>At least 3 employees still be members of H&amp;S Committees</li> <li>Appointive members are appointed in writing</li> <li>Minutes kept</li> <li>Appointed in writing</li> </ul>
Section 37(1) & 7(1)	Agreement with Insurers/Contractors (Sub-Contractors)	<ul style="list-style-type: none"> <li>Written agreement with (Sub-)Contractors</li> <li>Written agreement with (Sub-)Contractors</li> <li>Result of inspection with Compensation Insurer/letter of Good Standing</li> <li>Written agreement with (Sub-)Contractors</li> <li>Written agreement with (Sub-)Contractors</li> <li>Written agreement with (Sub-)Contractors</li> </ul>
Section 32 & 33 General Administrative Regulation 5 & 7(1) & 10 & 11	Reporting of Incidents (Dept. of Labour)	<ul style="list-style-type: none"> <li>Written agreement with (Sub-)Contractors</li> <li>Written agreement with (Sub-)Contractors</li> <li>Written agreement with (Sub-)Contractors</li> <li>Written agreement with (Sub-)Contractors</li> <li>Written agreement with (Sub-)Contractors</li> <li>Written agreement with (Sub-)Contractors</li> </ul>
General Admin Regulation 9	Investigation and recording of incidents	<ul style="list-style-type: none"> <li>Written agreement with (Sub-)Contractors</li> <li>Written agreement with (Sub-)Contractors</li> <li>Written agreement with (Sub-)Contractors</li> <li>Written agreement with (Sub-)Contractors</li> <li>Written agreement with (Sub-)Contractors</li> <li>Written agreement with (Sub-)Contractors</li> </ul>
Construction Regulation 10	Fire Prevention & Protection	<ul style="list-style-type: none"> <li>Written agreement with (Sub-)Contractors</li> <li>Written agreement with (Sub-)Contractors</li> <li>Written agreement with (Sub-)Contractors</li> <li>Written agreement with (Sub-)Contractors</li> <li>Written agreement with (Sub-)Contractors</li> <li>Written agreement with (Sub-)Contractors</li> </ul>
Construction Regulation 10	Cranes & Lifting Machines Equipment	<ul style="list-style-type: none"> <li>Written agreement with (Sub-)Contractors</li> <li>Written agreement with (Sub-)Contractors</li> <li>Written agreement with (Sub-)Contractors</li> <li>Written agreement with (Sub-)Contractors</li> <li>Written agreement with (Sub-)Contractors</li> <li>Written agreement with (Sub-)Contractors</li> </ul>

Rev 2 - H&S Specification

25

Regulations 18		<ul style="list-style-type: none"> <li>Cranes &amp; Lifting tackle identified/numbered</li> <li>Register kept for Lifting Tackle</li> <li>Log Book kept for each individual Crane</li> <li>Inspection: All cranes - daily by operator</li> <li>Tower Cranes - after erection/monthly</li> <li>Other cranes - annually by competent person</li> <li>Lifting tackle/hoists inspected every 12 months or before every new installation</li> </ul>
General Safety Regulation 8(1)(a)	Designation of Stacking & Storage Supervisor	<ul style="list-style-type: none"> <li>Competent Person with specific knowledge and experience designated to supervise all Stacking &amp; Storage</li> <li>Written Proof of Competence of above appointee available on Site</li> </ul>
Construction Regulation 9	Designation of a Person to Co-ordinate Emergency Planning And Fire Protection	<ul style="list-style-type: none"> <li>Person with specific knowledge and experience designated to co-ordinate emergency contingency planning and execution and fire prevention measures</li> <li>Emergency Evacuation Plan developed</li> <li>Drills/Practiced</li> <li>Plan &amp; Records of Drills/Practices available on Site</li> <li>Fire Risk Assessment carried out</li> <li>All Fire Extinguishing Equipment identified and on register</li> <li>Inspector weekly - Inspection Register kept</li> <li>Serviced annually</li> </ul>
General Safety Regulation 3	First Aid	<ul style="list-style-type: none"> <li>Every workplace provided with sufficient number of First Aid boxes (Required where 5 persons or more are employed)</li> <li>First Aid facility available</li> <li>Equipment as per the list in the OH&amp;S Act</li> <li>One qualified First Aider appointed for every 50 employees. (Required where more than 10 persons are employed)</li> <li>List of First Aid Officers and Qualifications</li> <li>Name of person/s in charge of First Aid boxes displayed</li> <li>Location of First Aid boxes clearly indicated</li> <li>Signs instructing employees to report all Injuries/illness including first aid sources</li> </ul>

Rev 2 - H&S Specification, 2016

27

General Safety Regulation 2	Personal Safety Equipment (PSE)	<ul style="list-style-type: none"> <li>PSE Risk Assessment carried out</li> <li>Items of PSE prescribed/enforced</li> <li>Records of issue kept</li> <li>Understanding by Employee to use/wear PSE</li> <li>PSE remain property of Employer, not to be removed from premises (OSR 2(4))</li> </ul>
General Safety Regulation 9	Inspection & Use of Welding/Flame Cutting Equipment	<ul style="list-style-type: none"> <li>Competent Person with specific knowledge and experience designated to inspect all Welding and Flame Cutting Equipment</li> <li>Written Proof of Competence of above appointee available on Site</li> <li>All new vessels checked for leaks, leaking vessels NOT taken into stock but returned to supplier immediately</li> <li>Equipment identified/numbered and entered into a register</li> <li>Equipment inspected weekly - Inspection Register kept</li> <li>Separate, numbered made, stored, available for full and empty vessels</li> </ul>
General Safety Regulation 12A	Inspection of Ladders	<ul style="list-style-type: none"> <li>Competent person appointed in writing to inspect Ladders</li> <li>Ladders inspected at arrival on site and weekly thereafter - Inspections register kept</li> <li>Application of the types of ladders (wooden, aluminium etc.) regulated by framing and instructions and noted in register</li> </ul>
General Safety Regulation 13B	Ramps	<ul style="list-style-type: none"> <li>Competent person appointed in writing to supervise the erection &amp; inspection of Ramps - Inspection register kept</li> <li>Daily inspected and noted in register</li> </ul>

Rev 2 - H&S Specification, 2016

28



## 15. THE PRINCIPAL CONTRACTOR'S GENERAL DUTIES

- The Principal Contractor shall at all times ensure his status of an "employer" as referred to in the Act and will abide by his/her responsibilities, duties and functions as per the requirements of the Act and Regulations with specific reference to Section 8 of the Act.
- The Principal Contractor shall keep, and on demand make available, a copy of the Act on site at all times and in addition to that he/she will introduce and maintain a file titled "Health and Safety File", or other record in permanent form which shall contain all relevant aspects and information as contemplated in the Construction Regulations. He/she will make this file available to the client or his representative whenever necessary or on request to an interested party.
- The project under control of the Principal Contractor shall be subject to periodic health and safety audits that will be conducted by the client at intervals agreed upon between the Principal Contractor and the client, provided such intervals will not exceed periods of one month.
- The Principal Contractor is to ensure that he/she and all persons under his control on the construction site shall adhere to the above specifications.
- The Principal Contractor should note that he/she shall be held liable for any anomalies including costs and resulting deficiencies due to delays caused by non-conformance and/or non-compliance to the above Health and Safety Specifications and the Health and Safety Plan based on these specifications.

## 16. THE PRINCIPAL CONTRACTOR'S SPECIFIC DUTIES

The Principal Contractor's specific duties in terms of these specifications are detailed in the Construction Regulations as published under government notice 07 February 2014, stipulated in Section 7.

## 17. THE PRINCIPAL CONTRACTOR'S SPECIFIC RESPONSIBILITIES WITH REGARD TO HAZARDOUS ACTIVITIES

Rev 2: H&S Specification

- d. The National Building Regulations and Building Standards Act 1977 (Act 103 of 1977) as amended and relevant proclaimed Regulations (SABS 0400)
- e. The Post Office Act 1958 (Act 44 of 1958) as amended
- f. The Electricity Act 1984, Act 41 of 1984
- g. The Regulations of Local Gas Board(s), including Publications of the SABS Standards and Codes of Practice, with specific reference to GNR 17468 dated 4<sup>th</sup> October 1997
- h. Legislation pertaining to water usage and the environment
- i. Legislation governing the use of equipment, which may emit radiation (e.g. X-Rays etc.)
- j. Common Law

## 19. HOUSEKEEPING

Good housekeeping will be maintained at all times as per Construction Regulation No. 27. Poor housekeeping contributes to three major problems, namely, costly or increased accidents, fire or fire hazards and reduction in production. Good housekeeping will enhance production time.

In promotion of environmental control all waste, rubble, scrap etc., will be disposed of at a registered dump site and records will be maintained. Where it is found to be impractical to use a registered dump site or it is not available, the Principal Contractor will ensure that the matter is brought to record with the client or his representative, after which suitable, acceptable alternatives will be sought and applied.

Dross and refuse from metals, and waste matters or by-products whose nature is such that they are poisonous or capable of fermentation, putrefaction or constituting a nuisance shall be treated or disposed of by methods approved of by an inspector.

NOTE: No employer (Principal Contractor) shall require or permit any person to work at night or after hours unless there is adequate, suitable artificial lighting including support services in respect of Health and Safety.

Rev 2: H&S Specification: 2018

31

The following examples of activities are identified as hazardous in terms of the Construction Regulations. The contractor shall execute the activities in accordance with the following Construction Regulations and other applicable regulations of the Act:

- Fall protection
- Structures
- Excavation work
- Demolition work
- Scaffolding
- Construction vehicles & mobile plant
- Water environments
- Housekeeping on construction sites
- Fire precautions on construction sites.

This list must not be taken to be exclusive or exhaustive. All of the above requirements will be read in conjunction with the relevant regulations and health and safety standards as required by the Act. All documents and records required by the Construction Regulations will be kept in the Health and Safety File and will be made available at any time when required by the client or his representative, or on request to an interested party.

## 18. GENERAL NOTES TO THE PRINCIPAL CONTRACTOR

### Legal Framework

#### Part of legal obligations

The more important Acts and relevant subordinate/secondary legislation as well as other (inter alia Local Government) legislation that also apply to the State as well as to State owned buildings and premises: -

- a. The latest issue of SABS 0142: "Code of Practice for the Wiring of Premises"
- b. The Local Government Ordinance 1939 (Ordinance 17 of 1939) as amended and the municipal by-laws and any special requirements of the local supply authority
- c. The Fire Brigade Services Act 1987, Act 99 of 1987 as amended

Rev 2: H&S Specification: 2018

30

## 20. FACILITIES

The site establishment plan shall make provision for:

### 20.1 Dining room facilities

The contractor shall make provision for adequate dining room facilities for his employees on site.

### 20.2 Change rooms

The contractor shall make provision for adequate change rooms for his employees on site.

### 20.3 Ablution facilities

The contractor shall make provision for adequate ablution facilities for his employees on site.

### 20.4 Smoking Areas

Designated smoking areas shall be established by Principal Contractor

### 20.5 Drinking Water Facilities

The provision of drinking water facilities shall be negotiated between the Contractor and client.

### 20.6 Equipment Compliance Certificate

Before equipment is brought on site valid certificates of compliance issued by a competent person shall be presented. The equipment includes but shall not be limited to:

- i. lifting equipment and lifting tackle
- ii. power driven machinery
- iii. electrical equipment
- iv. testing and monitoring equipment

274

Rev 2: H&S Specification: 2018

32

## 20.7 Barricading

All barricading shall be of the rigid type unless the use of non-rigid barricading has been approved in writing by South African Police Service Project Manager. The contractor's barricading standard shall be included in the Health and Safety Plan.

Where more than one contractor is working on a site, the fixed barricading shall be clearly marked with the company's name, site contact person as well as the contact number/s.

## 20.8 Erection of Structures for Logistic Support

Prior to site establishment South African Police Service shall approve the contractor's site plan.

South African Police Service shall approve all structures erected for logistical support by the contractor. These structures include fences, workshops, tool sheds, offices, ablution facilities, etc.

## 20.9 Salvage Yard Management

Depending on the site specific arrangements and procedures, South African Police Service may provide the salvage yard and the resources to manage it.

The salvage yard management shall conform to safety, health and environmental requirements. The contractors are required to move the equipment from the place of work to the salvage yard.

## 20.10 Fall Arrest and Prevention Equipment

Approved fall prevention equipment shall be used at heights of less than 2.0 metres. Above heights of 2.0 metres fall prevention equipment shall include fall arrest Equipment. Users of fall arrest equipment shall, amongst other things be trained in what an appropriate load bearing point is for connecting fall prevention equipment. Any deviation from this requirement shall be negotiated and agreed with South African Police Service in writing.

Rev 2: H&S Specification: 2018

33

## 20.11 Hazardous Chemical Substances Waste Removal

South African Police Service shall provide a facility to collect all hazardous chemical waste material. The contractor shall provide adequately marked and sealable containers to transport the hazardous chemical waste from the source to the approved South African Police Service disposal point.

## 20.12 Personal Protective Equipment (PPE)

Personal protective equipment issued shall be specific to the risks associated with the work to be performed and specific to conditions on site and shall comply with South African National Standards (SANS).

## 21. LOCKOUT SYSTEMS

A system of control shall be established in order that no unauthorized person can energize a circuit, open a valve, or activate a machine on which people are working or doing maintenance, even if equipment, plant or machinery is out of commission for any period, thus eliminating injuries and damage to people and equipment as far as is reasonably practicable.

Physical/mechanical lock-out systems shall be part of the safety system and included in training. Lockouts shall be tagged and the system tested before commencing with any work or repairs.

## 22. IMPORTANT LISTS AND RECORDS TO BE KEPT

The following are lists of several records that are to be kept in terms of the Construction Regulations. The lists are:

- List of appointments
- List of record keeping responsibilities
- Inspection checklist

### a) Contractor Risk Assessment Process

The risk assessment process shall include:

Rev 2: H&S Specification: 2018

34

- an evaluation of the method of the work to be conducted
- the method statement on the procedure to be followed in performing the task shall be developed
- the risk assessment will also include activities like:
  - Transportation of passengers and goods to and from site
  - Site establishment
  - Physical and mental capabilities of employees
  - Others as may be specified.
- the hazards as listed in the paragraph – Site Specific Health and Safety Hazards
- a review plan for risk assessments shall provide for:
  - the quarterly review of all applicable risk assessments
  - the review of an assessment if there is reason to believe that the previous assessment is no longer valid, or there has been a change in a process, work methods, equipment or procedures and working conditions
  - Risk assessment/s to be reviewed if the outcome of incident investigations and audits etc. requires such action.

A pre - task risk assessment shall be conducted in writing on every task and be facilitated by the team leader. All risk assessments and pre-task risk assessments shall be filed and be available on site.

### b) Risk Profile

All contractors shall submit a risk profile of the work to be conducted with their Health and Safety Plan.

### c) Risk Based Inspection Program

The inspection programme shall be risk based. The inspection plan shall form part of the Health and Safety Plan.

Rev 2: H&S Specification: 2018

35

## IMPORTANT CONTACT DETIALS

### (FOR HEALTH & SAFETY ASPECTS ONLY)

The contractor is to add all the important contact information about essentials services, support and assistance.

	SERVICE	NUMBER	CONTACT PERSON
	Hospital		
	Ambulance		
	Water Electricity		
	Police		
	Fire Brigade		
	Engineer		

Rev 2: H&S Specification: 2018

36

SECTION 37(2) AGREEMENTS  
CONCLUDED BETWEEN  
**SOUTH AFRICAN POLICE SERVICE**  
*(hereinafter referred to as South African Police Service)*

AND

(Name of contractor/supplier/Agent)

I, \_\_\_\_\_  
(name) representing \_\_\_\_\_ [insert name of  
contractor/supplier], do hereby acknowledge that \_\_\_\_\_  
[insert name of contractor/supplier] is an employer in his/her own right, with duties as prescribed in  
the Occupational Health and Safety Act No. 85 of 1993 ("the Act"), as amended, and agree to ensure  
that all work will be performed and/or machinery or plant used in accordance with the provisions of  
the Act.

I undertake that \_\_\_\_\_ [insert name of contractor/supplier]  
shall strictly adhere to, and ensure that his/her employees adhere to, the provisions of the  
Occupational Health and Safety Act, 1993 (Act 85 of 1993).

I have been provided with SHE specifications for project/service \_\_\_\_\_ [insert  
brief details of project/service, for example, name, contract/project number]  
\_\_\_\_\_ and will comply with the requirements set out in these.

I accept and agree that the SHE specifications constitute arrangements and procedures between  
\_\_\_\_\_ [insert name of contractor/supplier/Agent  
Safety Manager/Safety Officer] and South African Police Service which will ensure compliance by  
\_\_\_\_\_ [insert name of contractor/supplier] with the  
provisions of the Act, as contemplated in section 37(2) of the Act.

This agreement constitutes the sole agreement between the parties, and no variation, modification,  
or waiver of any of the provisions of this agreement or consent to any departure from these shall,  
in any manner, be of any force or effect, unless confirmed in writing and signed by both parties, and

such variation, modification, ~~waiver~~, or consent shall be effective only in the specific instance and  
for the specific purpose and to the extent for which it was made or given.

This agreement is signed on behalf of the parties, each signatory to this warranting that he/she has  
the requisite authority to do so.

Signed this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_ at \_\_\_\_\_

\_\_\_\_\_ (Place)

(Full name) \_\_\_\_\_ (Signature) \_\_\_\_\_ on

behalf of \_\_\_\_\_ (Supplier/contractor/Agent)

Contractor Responsible Manager (responsible for signing the South African Police Service  
contract on behalf of the contractor)

Witnesses

1. \_\_\_\_\_

2. \_\_\_\_\_

Signed this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_

at \_\_\_\_\_ (Place)

(Full name) \_\_\_\_\_ (Signature) \_\_\_\_\_ on

Behalf of South African Police Service.

(Contracts and/or Project Manager or South African Police Service representative)

Witnesses

1. \_\_\_\_\_

2. \_\_\_\_\_

PROJECT: \_\_\_\_\_  
(full name AND site address of project)  
(and full or proper description of project)

WCS NO: \_\_\_\_\_ (works control system number)

**SUPERVISION BY THE SOUTH AFRICAN POLICE SERVICE:**

Mr /Ms/Me \_\_\_\_\_ - CONSTRUCTION PROJECT MANAGER  
(add full details of the project manager)

Mr /Ms/Me \_\_\_\_\_ - CONSTRUCTION MANAGER  
(add full details )

Mr /Ms/Me \_\_\_\_\_ AGENT  
(full particulars of agent)

**SUPERVISION BY THE PRINCIPAL CONTRACTOR:**

PRINCIPAL CONTRACTOR: \_\_\_\_\_ (full particulars of principle contractor / contractor)

Mr /Ms/Me \_\_\_\_\_ - CONSTRUCTION HEALTH & SAFETY OFFICER  
(add full details and contact of this officer)

Mr /Ms/Me \_\_\_\_\_ - CONSTRUCTION HEALTH & SAFETY MANAGER  
(add full details of this officer)



Mr /Ms/Me

- CONSTRUCTION MANAGER  
(add full details of the head of the project)

**APPOINTMENT OF CONTRACTOR FOR SECURITY UPGRADE AT  
INGOGO POLICE STATION IN KWAZULU NATAL PROVINCE**

**BID: 19/1/9/1/10TB(23)**

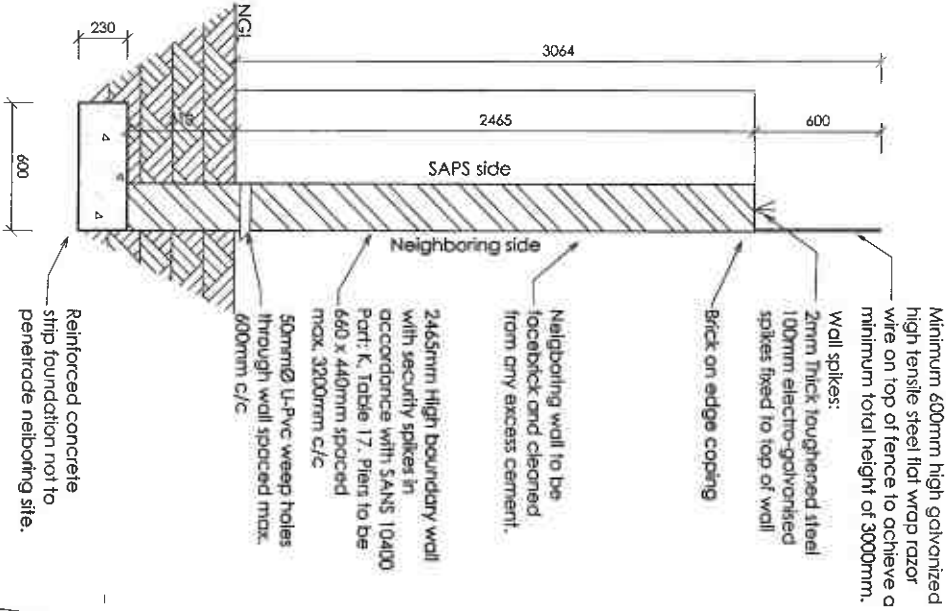
**PART C**

**CONTRACT**

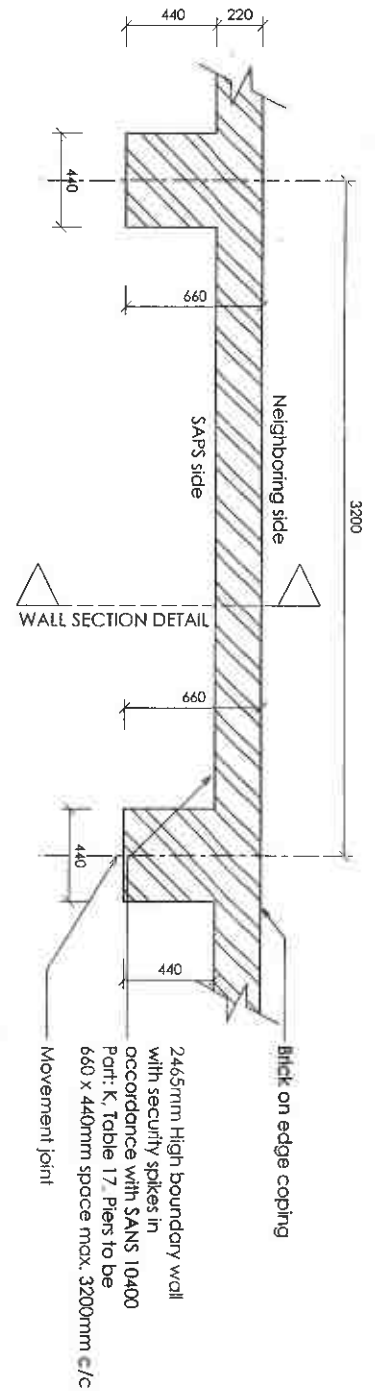
**PART C.3.1**

**DRAWINGS**

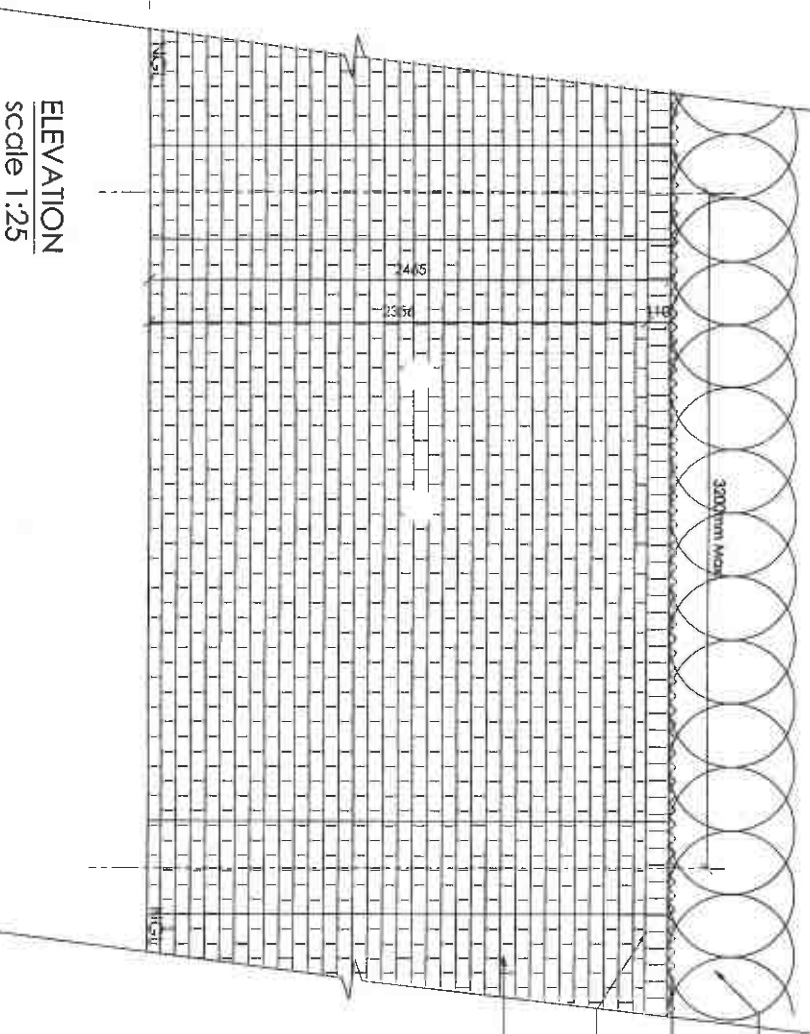
SECTION  
scale 1:25



PLAN  
scale 1:25



ELEVATION  
scale 1:25



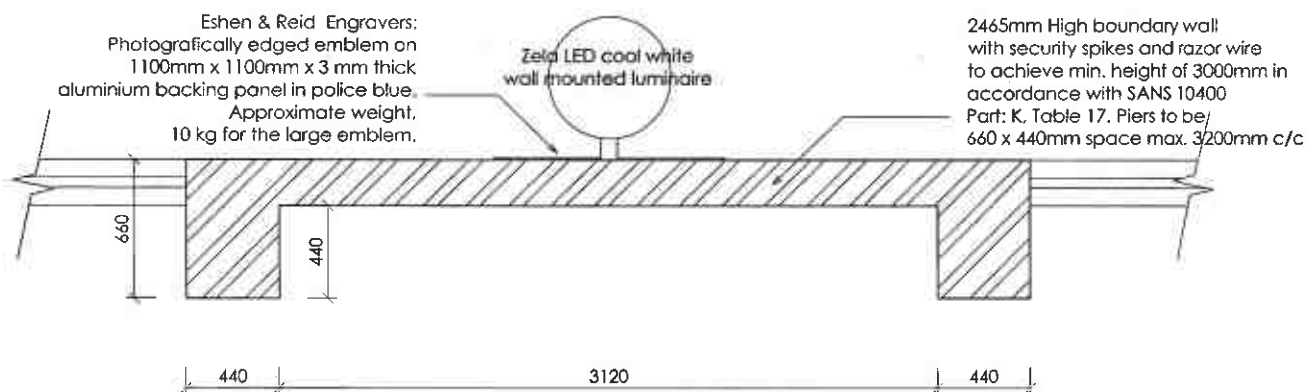
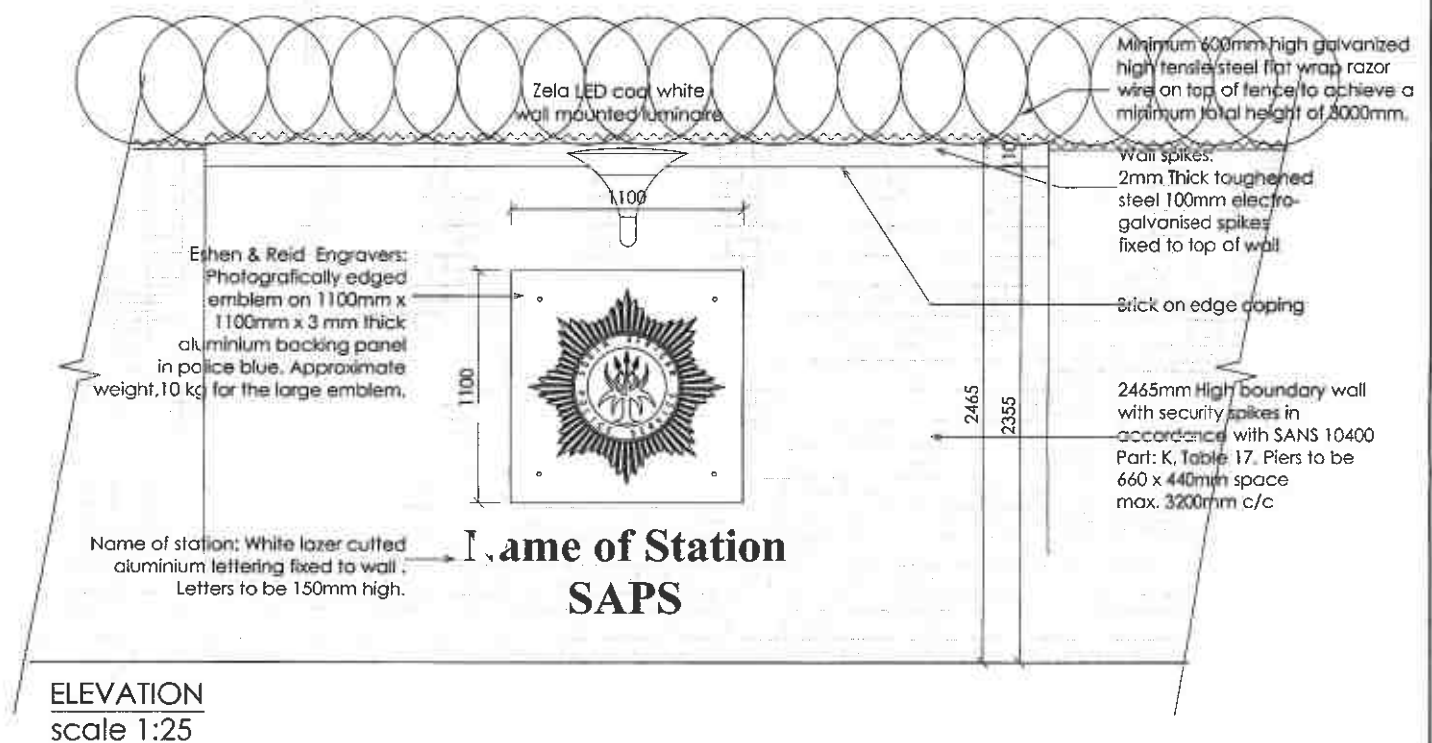
Minimum 600mm high galvanized high tensile steel flat wrap razor wire on top of fence to achieve a minimum total height of 3000mm.

Wall spikes:  
2mm thick toughened steel 100mm electro-galvanized spikes fixed to top of wall

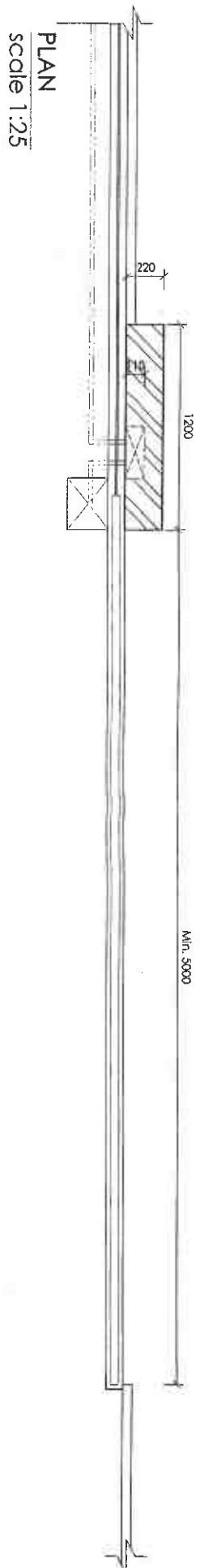
Brick on edge coping

2465mm High boundary wall with security spikes in accordance with SANS 10400 Part K, Table 17. Plans to be 660 x 440mm spaced max. 3200mm c/c

279



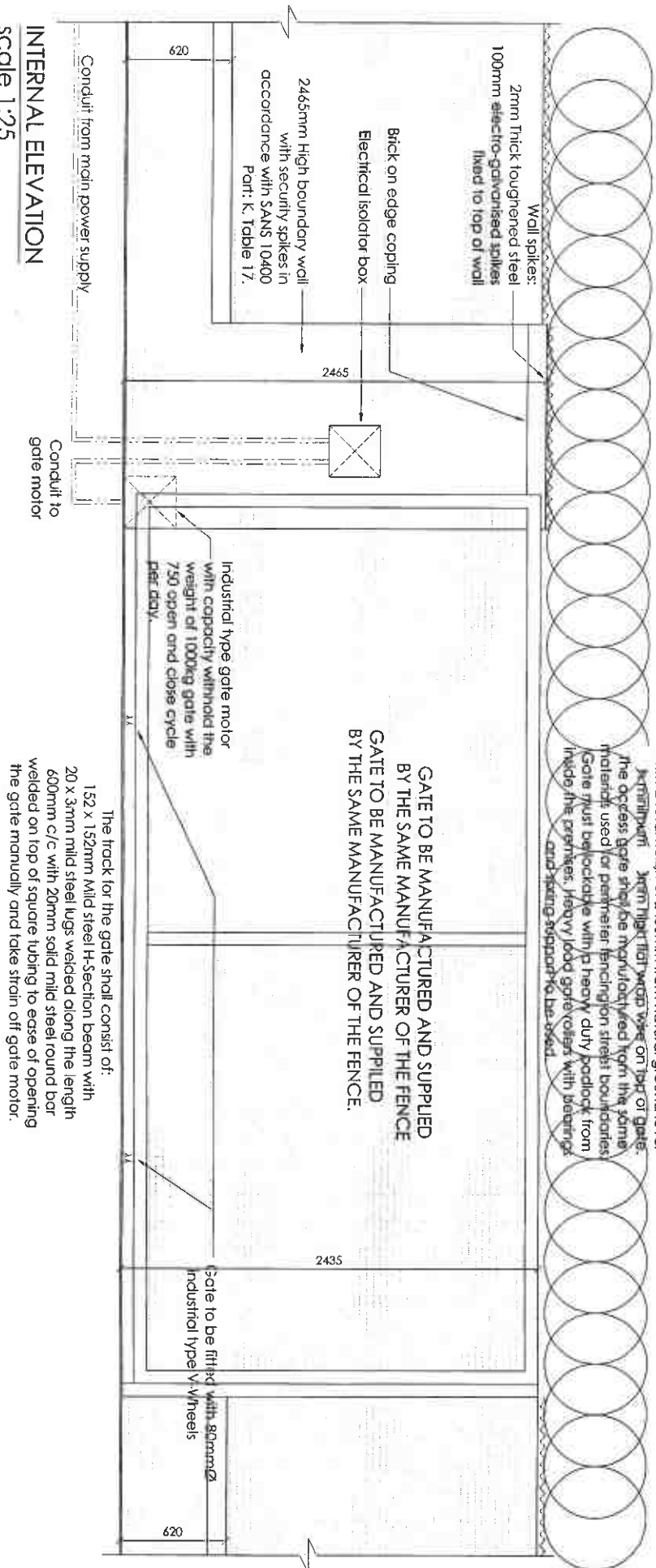
290



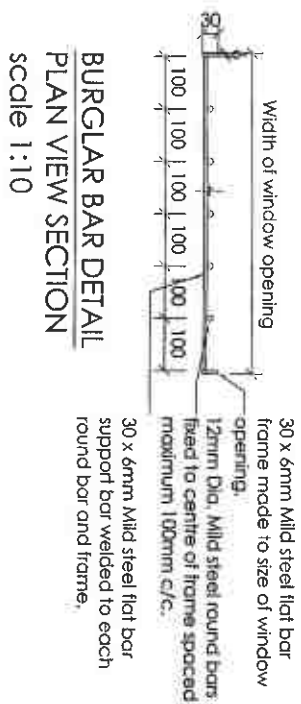
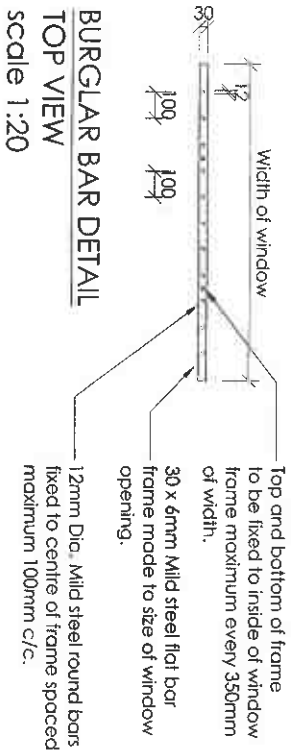
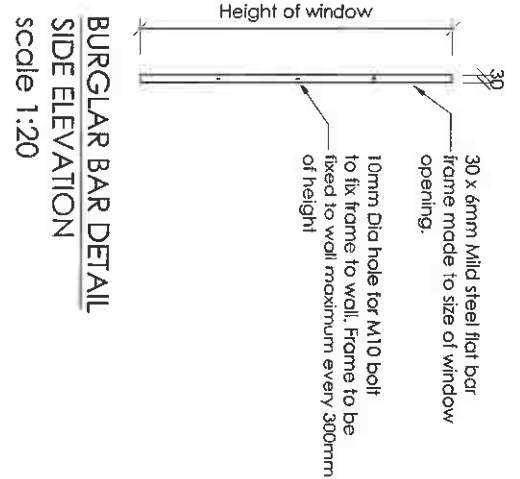
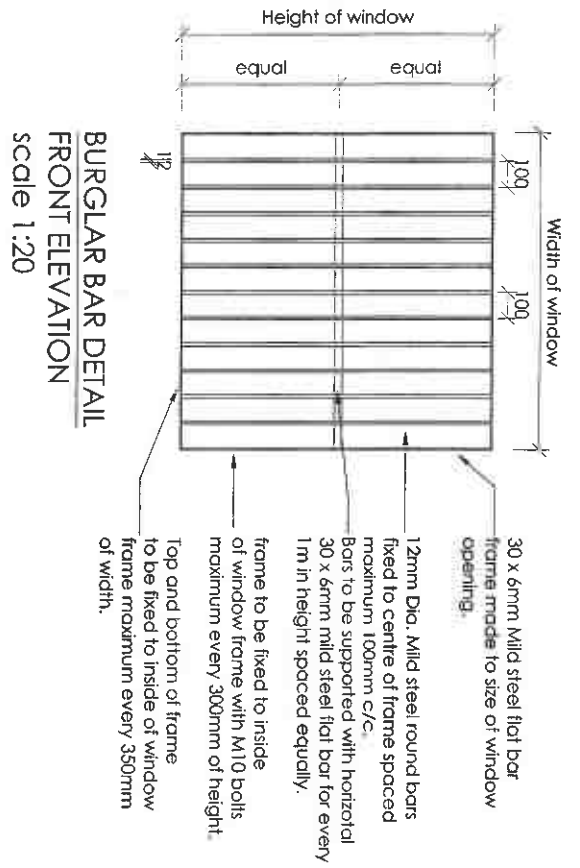
A motorized sliding gate to be provided for vehicle access with a minimum width of 5000 mm with a total height of 2400mm from natural ground level.

**Material:** Jern flat bar made use on top of gate. The access gate shall be manufactured from the same material used for perimeter fencing/street boundaries. Gate must be lockable with a heavy duty padlock from inside the premises. Heavy load gate rollers with bearings and fixing supports to be used.

**GATE TO BE MANUFACTURED AND SUPPLIED BY THE SAME MANUFACTURER OF THE FENCE. GATE TO BE MANUFACTURED AND SUPPLIED BY THE SAME MANUFACTURER OF THE FENCE.**

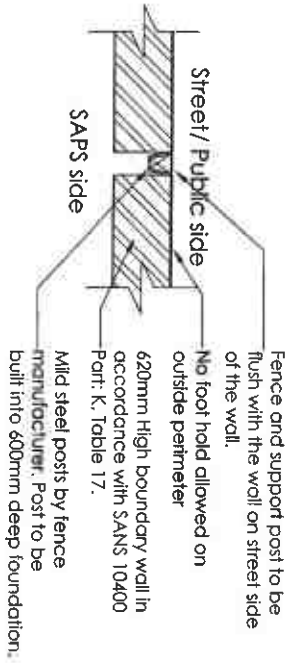


291

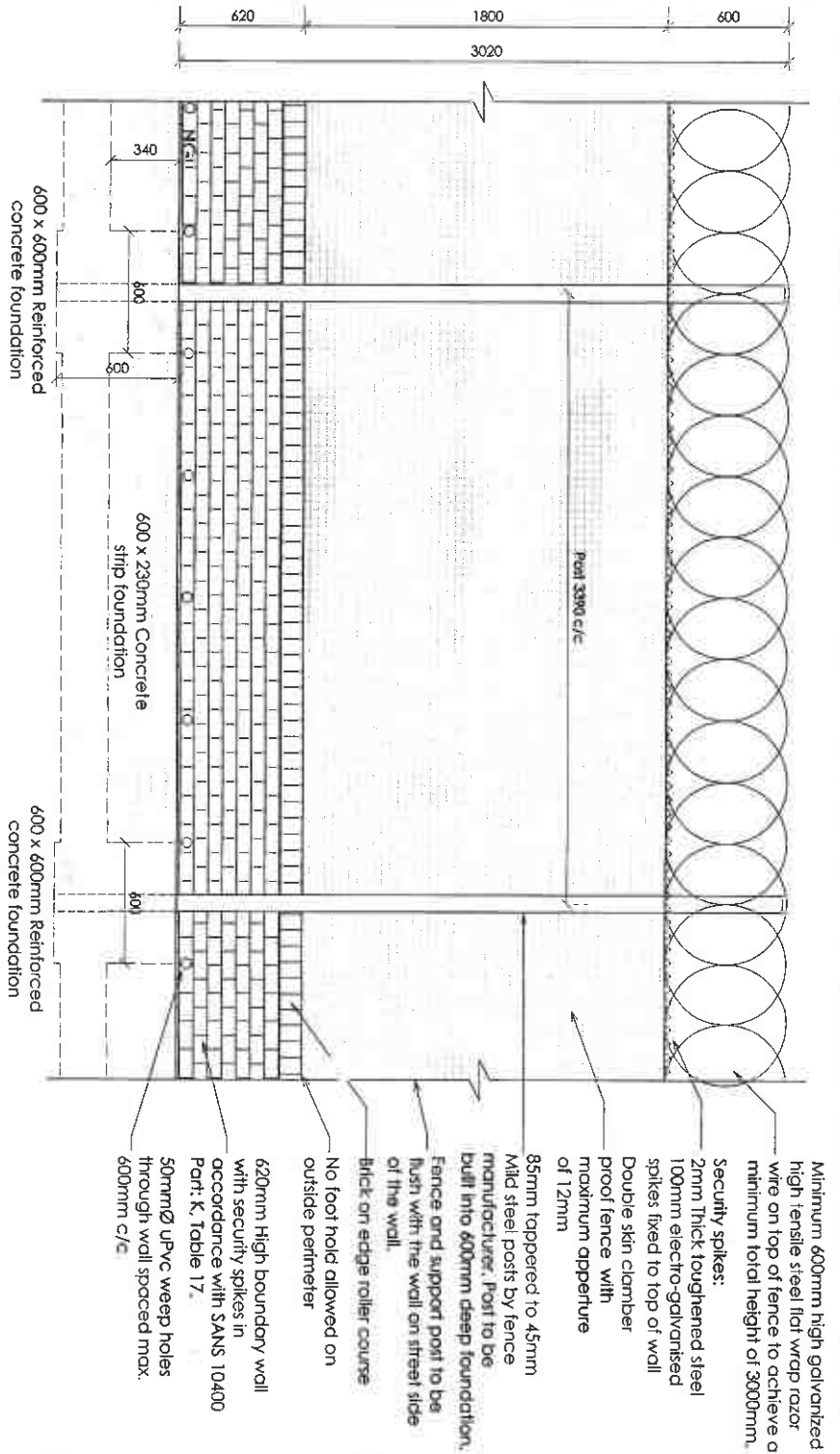


282

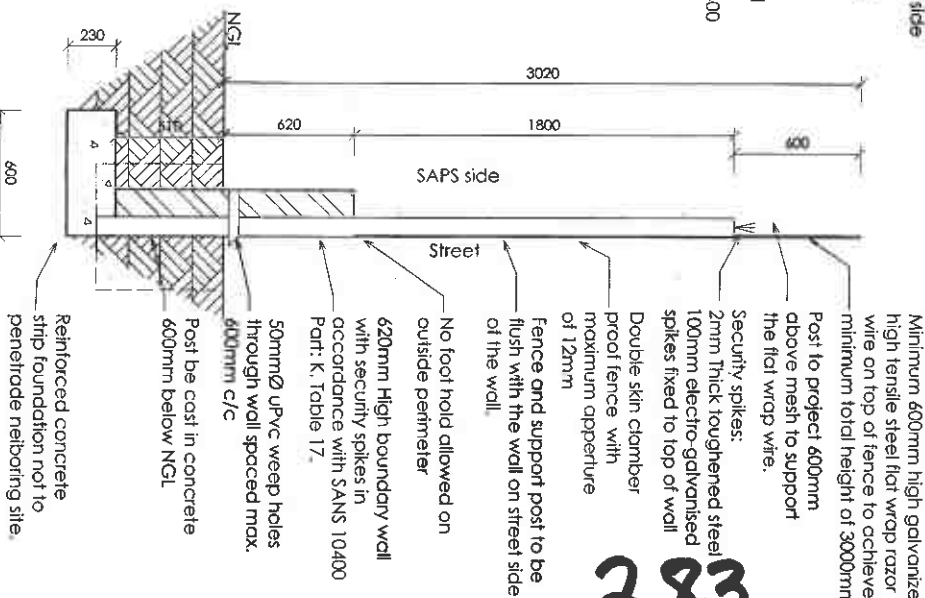
**PERIMETER WALL/ FENCE**  
**PLAN DETAIL**  
scale 1:20



**PERIMETER FENCE ELEVATION 1**  
scale 1:25



**PERIMETER FENCE SECTION 1**  
scale 1:25



283

