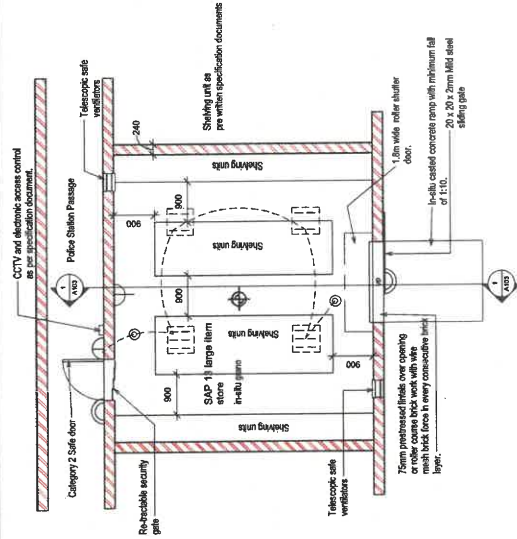
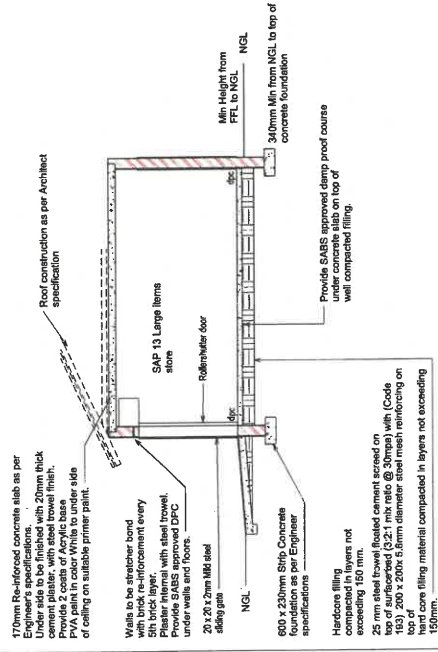


2

SPECIFICATION WALLS



2 Floor Plan
1 : 50

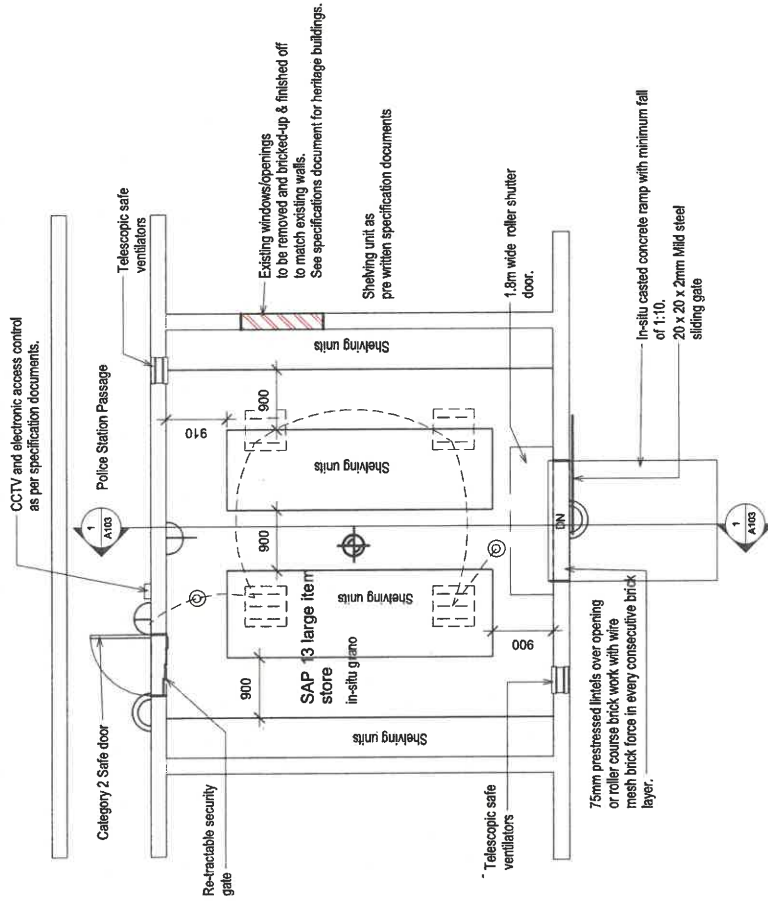


1 Section 1
1 : 50

Drawings not for construction purposes.
Guideline documents only.
Construction drawings by registered building professional in compliance with SANS 10400.
Drawings to be read in conjunction with typed minimum standards; store; documents.

Electrical Legend	
	Luminaire: 600 x 600mm LED with cool white color rendering
	LED red/green indicator light above door
	Bulb: 100 x 120 recessed socket with steel face plate, 300mm dia
	Occupancy sensor
	Smoke detector

SAPS 13 LARGE ITEM EXHIBIT STORE - (EXISTING FACILITIES) ANNEXURE 2

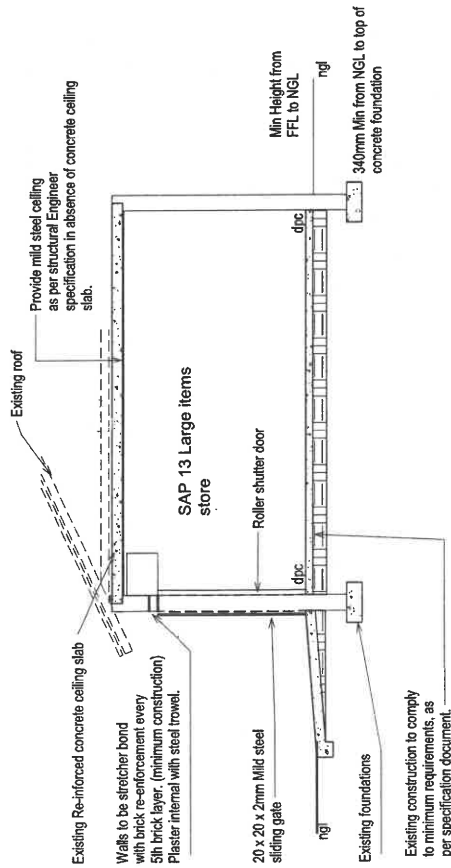


2 Floor Plan

1 : 50

Drawings not for construction purposes.
Guideline documents only.
Construction drawings by registered building professional in compliance with SANS 10400.
Drawings to be read in conjunction with typed minimum standards; store; documents.

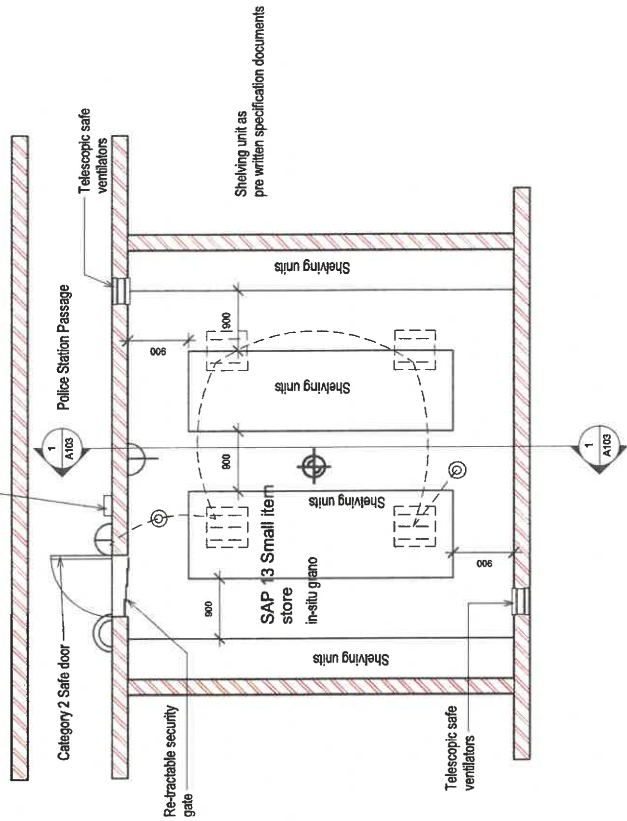
Electrical Legend	
	Luminaries: 600 x 600mm LED with cool white color rendering
	LED red/green indicator light above door
	Bulkhead lighting LED with cool white 2300 AFPL
	Single 100 x 100 recessed socket with steel face plate, 300mm air
	Occupancy sensor
	Smoke detector



1 Section 1

1 : 50

SAPS 13 SMALL ITEM EXHIBIT STORE - (NEW CONSTRUCTION) ANNEXURE 3



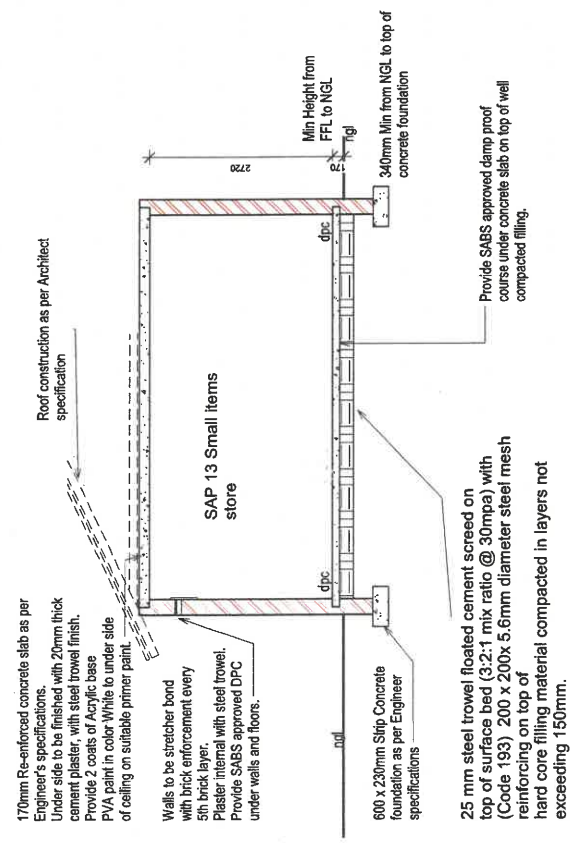
Floor Plan

2 1 : 50

Drawings not for construction purposes.
Guideline documents only.
construction drawings by registered building professional in compliance with SANS 10400.

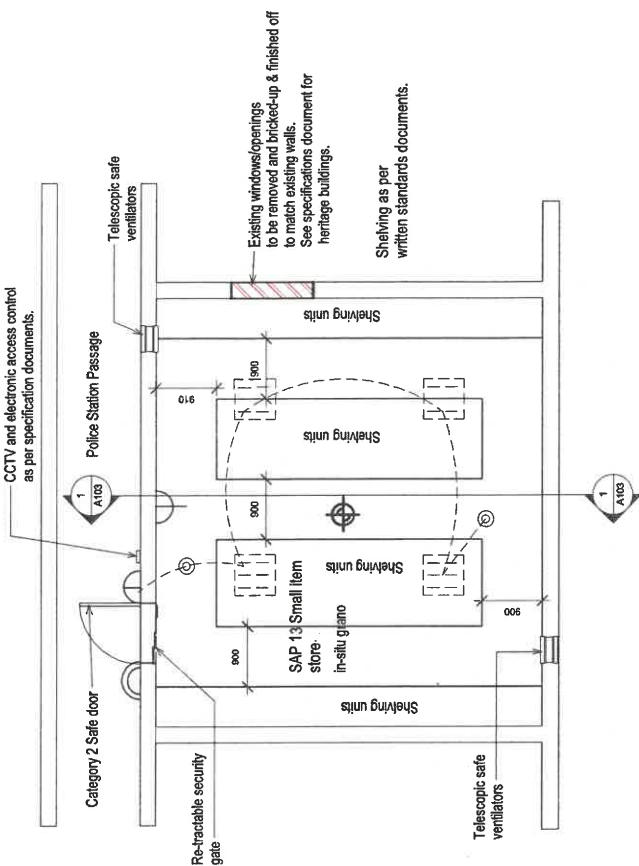
Drawings to be read in conjunction with typed minimum standards; store; documents.

Electrical Legend	
	Luminaires: 600 x 600mm LED with cool white color rendering
	LED red/green indicator light above door
	Bulkhead lighting LED with cool white 2300 AFLL
	Single 100 x 100 recessed socket with steel face plate, 300mm affi
	Occupancy sensor
	Smoke detector



Section 1

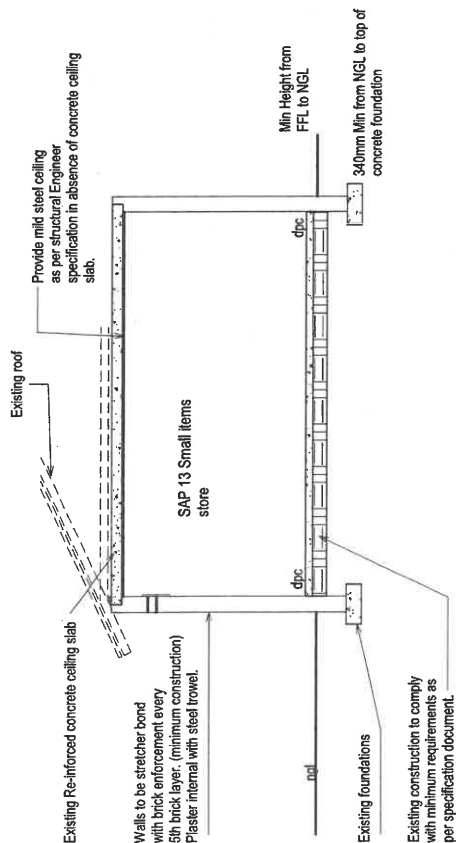
1 1 : 50



Floor Plan

1 : 50

2



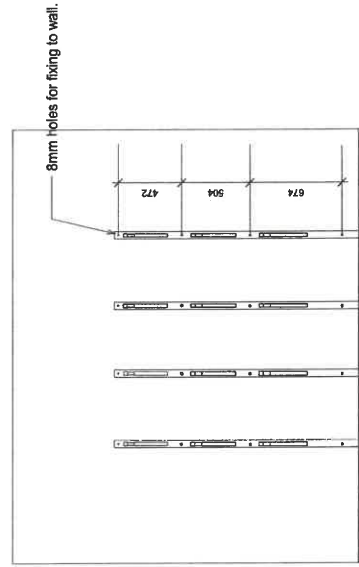
Section 1

1 : 50

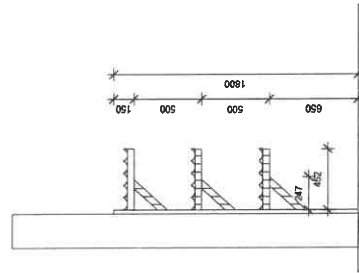
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Drawings not for construction purposes.
Guideline documents only.
Construction drawings by registered building professional in compliance with SANS 10400.
Drawings to be read in conjunction with typed minimum standards; store; documents.

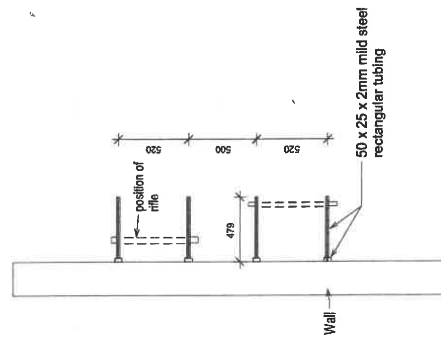
Electrical Legend	
	Luminaires: 600 x 600mm LED with cool white color rendering
	LED red/green indicator light above door
	Bulkhead lighting LED with cool white 2300 AFLL
	Single 100 x 100 recessed socket with steel face plate, 300mm air
	Occupancy sensor
	Smoke detector



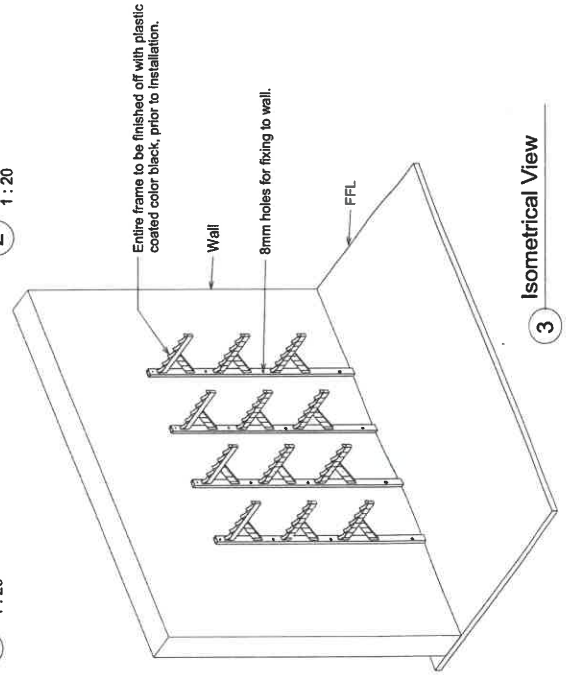
2 Front Elevation
1 : 20



4 Side Elevation
1 : 20

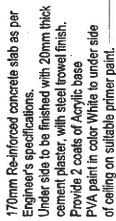


1 Floor Plan
1 : 20



3 Isometrical View

ANNEXURE 7



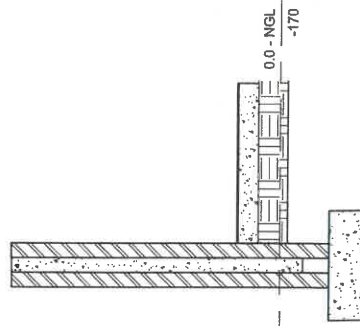
Section 1
1 1 : 50

Drawings not for construction purposes.
Guideline documents only.
Construction drawings by registered building professional in compliance with SANS 10400.
Drawings to be read in conjunction with typed minimum standards; store; documents.



Floor Plan

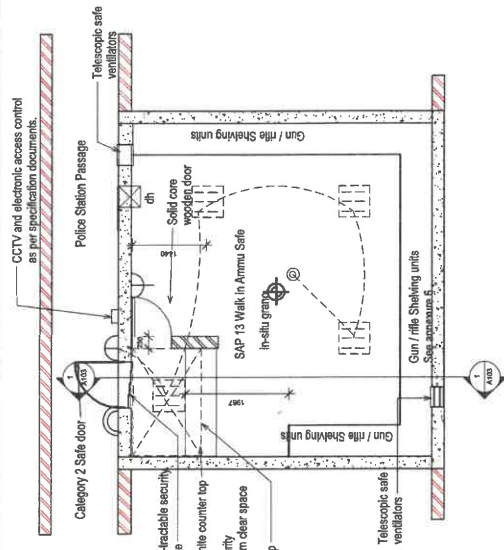
Electrical Legend



Floor plan (Alternative construction method)

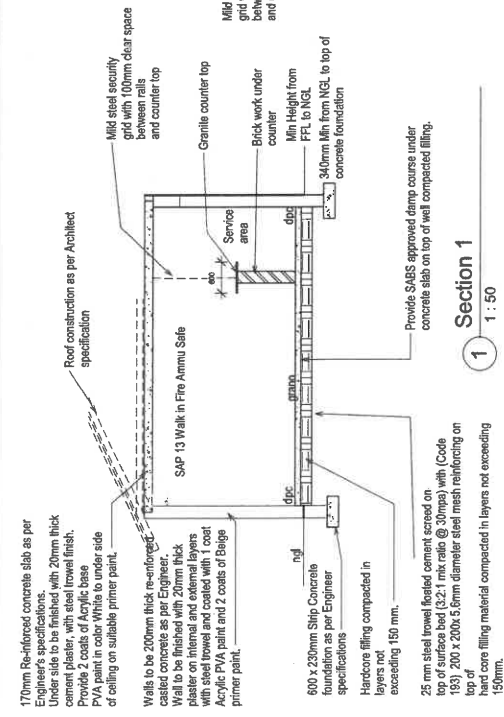
Section 2 (Alternative)

SAPS 13 WALK-IN AMMUNITION EXHIBIT SAFE & STATION WALK-IN ANNEXURE 8



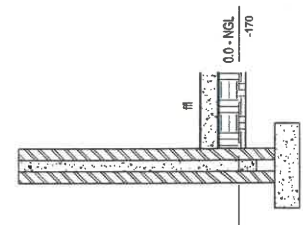
2 Floor Plan
 1 : 50

Electrical Legend	
	Luminaries: 600 x 600mm LED with cool white color rendering
	LED red/green indicator light above door
	Bulkhead lighting LED with cool white 2300 AFPL
	Single 100 x 100 recessed socket with steel face plate, 300mm
	Occupancy sensor
	Smoke detector
	De humidifier

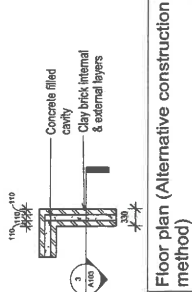


1 Section 1
 1 : 50

Drawings not for construction purposes.
 Guideline documents only.
 Construction drawings by registered building professional in compliance with SANS 10400.
 Drawings to be read in conjunction with typed minimum standards; store; documents.

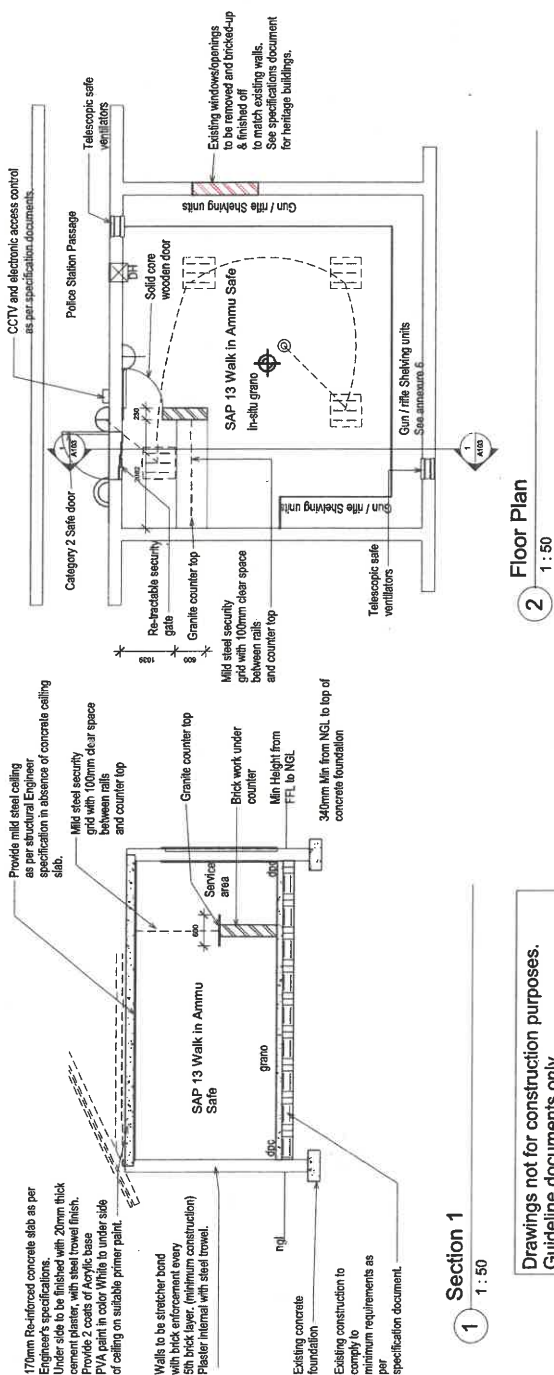


3 Section 2 (Alternative)
 1 : 25



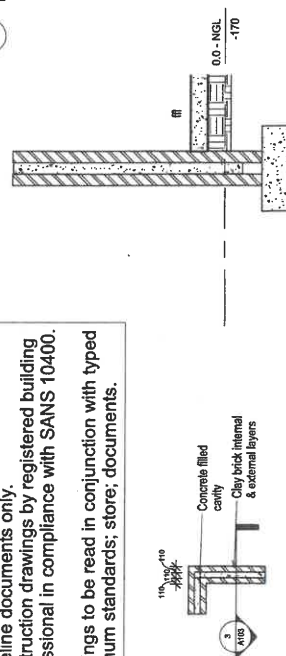
Floor plan (Alternative construction method)

SAPS 13 WALK-IN AMMUNITION EXHIBIT SAFE & STATION WALK-IN AMMUNITION SAFE (EXISTING FACILITIES)



2 Floor Plan 1:50

Electrical Legend	
	Luminaries: 600 x 600mm LED with cool white color rendering
	LED red/green indicator light above door
	Bulkhead lighting LED with cool white 2300 AFPL
	Single 100 x 100 recessed socket with steel face plate, 300mm afft
	Occupancy sensor
	Smoke detector
	De-Humidifier

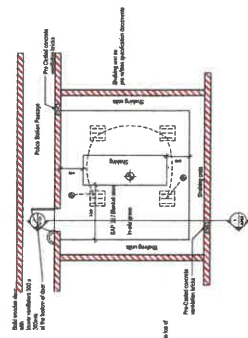


Floor plan (Alternative construction method)

3 Section 2 (Alternative) 1:25

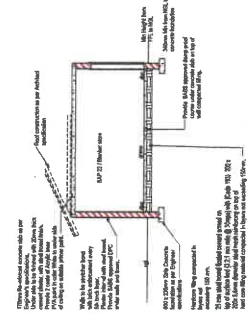
Drawings not for construction purposes.
Guideline documents only.
Construction drawings by registered building professional in compliance with SANS 10400.
Drawings to be read in conjunction with typed minimum standards; store; documents.

SAPS 22 PERSONAL PROPERTY & BLANKET STORE AT CELL BLOCK
(NEW CONSTRUCTION)
ANNEXURE 10



2 Floor Plan 1:50

Electrical Legend	 120V AC  240V AC  480V AC  600V AC  120V AC and 240V AC  120V AC and 480V AC  120V AC and 600V AC  240V AC and 480V AC  240V AC and 600V AC  480V AC and 600V AC  120V AC, 240V AC, and 480V AC  120V AC, 240V AC, and 600V AC  120V AC, 240V AC, 480V AC, and 600V AC
-------------------	--

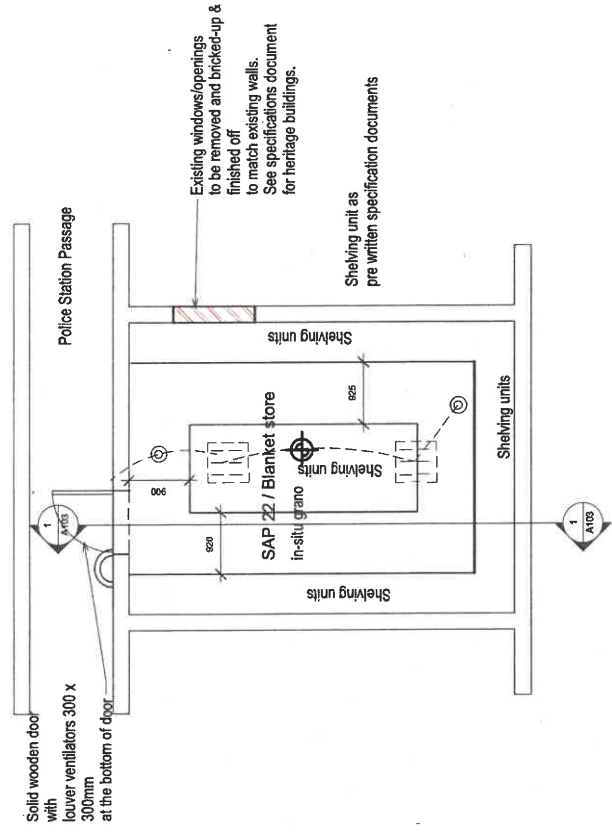


Section 1
1:50

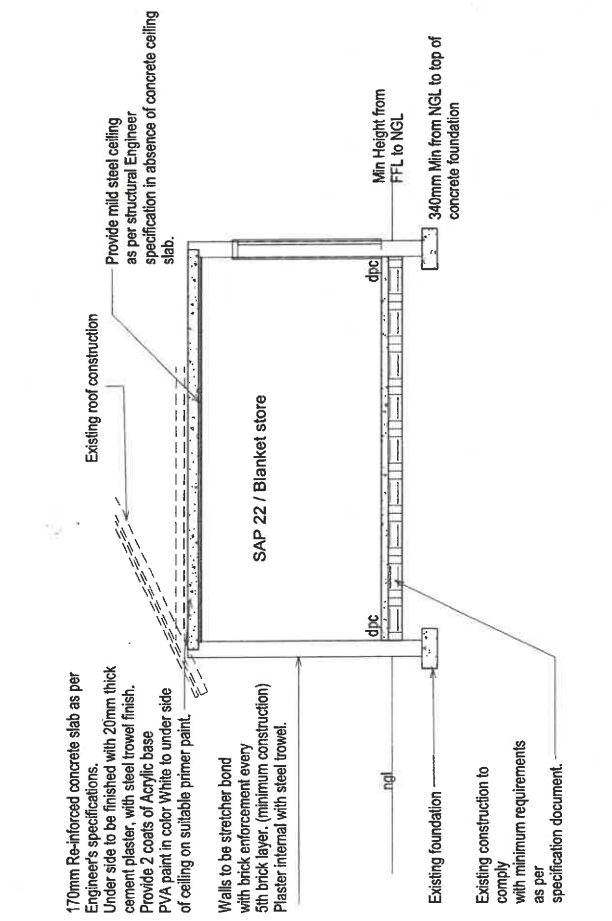
Drawings not for construction purposes.
Guideline documents only.
Construction drawings by registered building
professional in compliance with SANS 10400.
Drawings to be used in conjunction with typed
minimum standards; stone, documents.

SAPS 22 PERSONAL PROPERTY & BLANKET STORE AT CELL BLOCK (EXISTING FACILITIES)

ANNEXURE 11



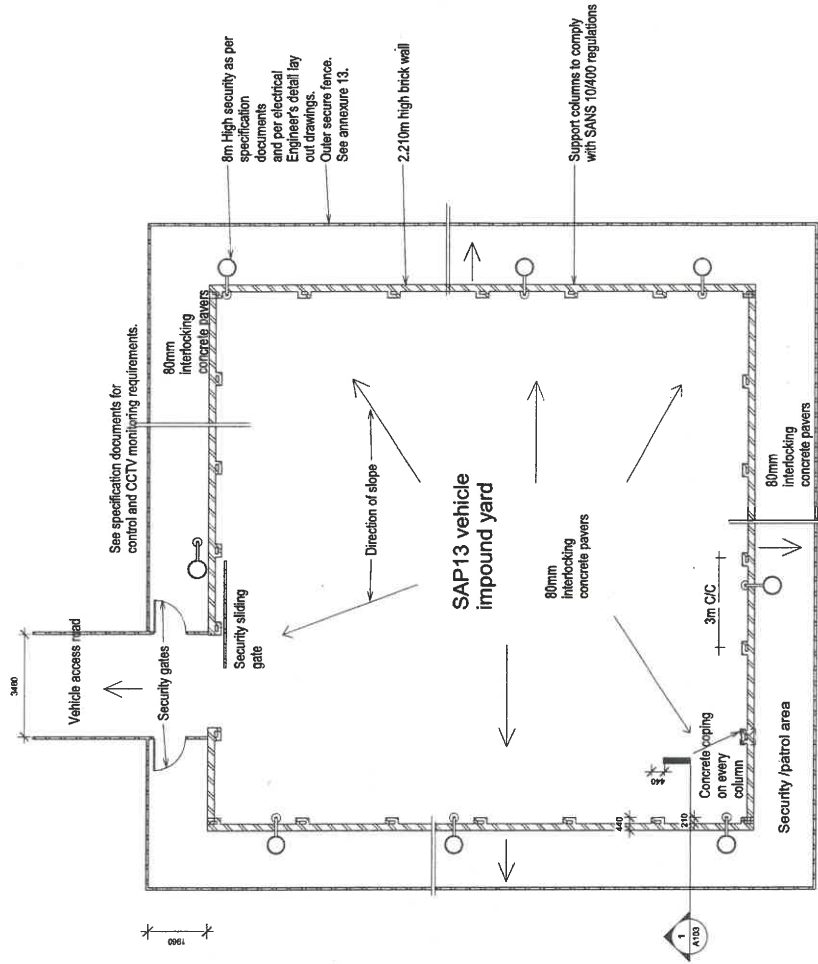
2 Floor Plan
1 : 50



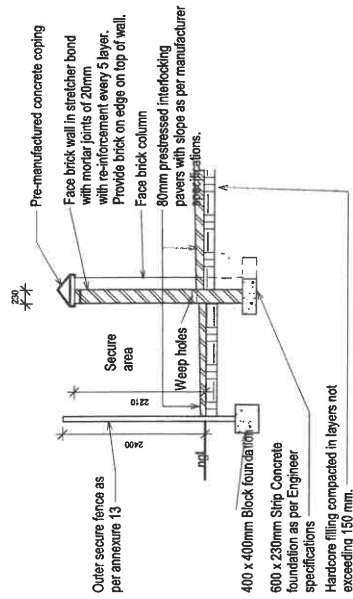
1 Section 1
1 : 50

Drawings not for construction purposes.
Guideline documents only.
Construction drawings by registered building professional in compliance with SANS 10400.
Drawings to be read in conjunction with typed minimum standards; store; documents.

Electrical Legend	
	Luminaires: 600 x 600mm LED with cool white color rendering
	Bulkhead lighting LED with cool white 230 AFFL
	Occupancy sensor
	Smoke detector



2 Floor Plan
1 : 100



1 Section 1
1 : 50

ALL STEEL TO BE HOT DIPPED
GALVANIZED

**Drawings available from
Divisional Supply Chain management
Program and project management**

MINIMUM OUTER SECURITY FENCE ANNEXURE 13

MINIMUM OUTER SECURITY FENCE ANNEXURE 13

Amendments		
AM	ALIVE	DESCRIPTION

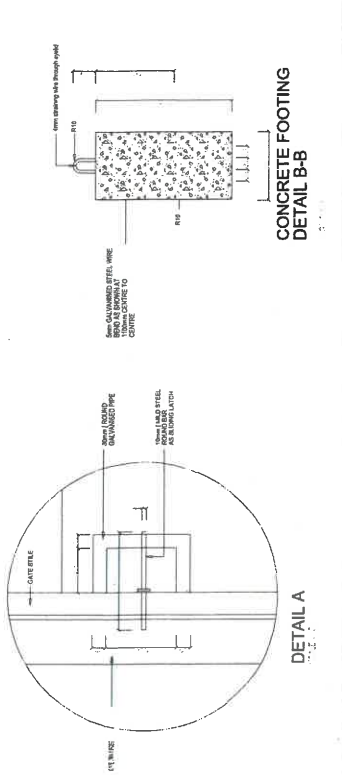
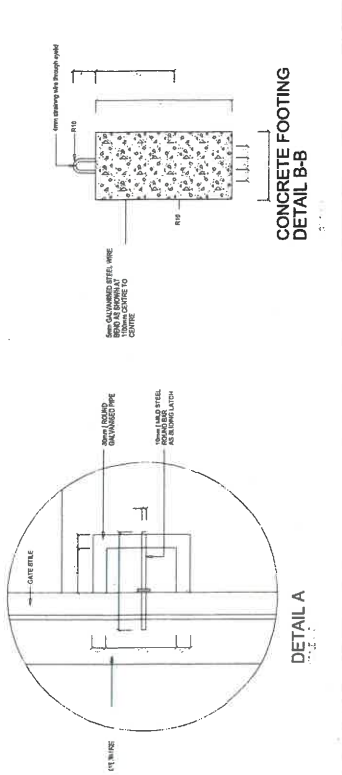
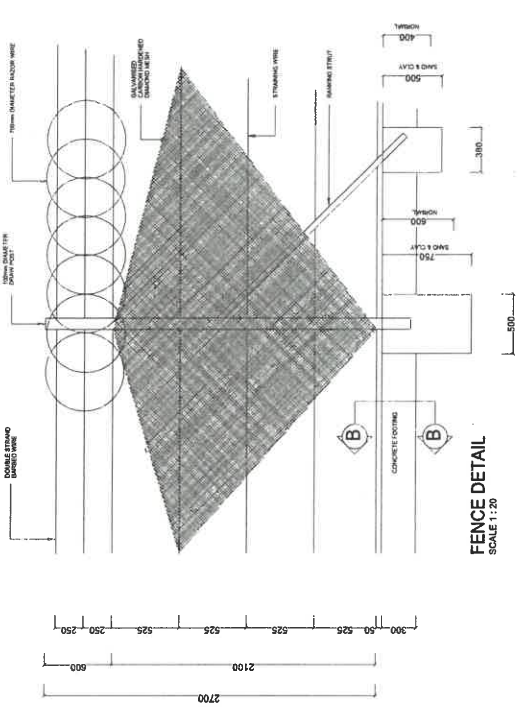
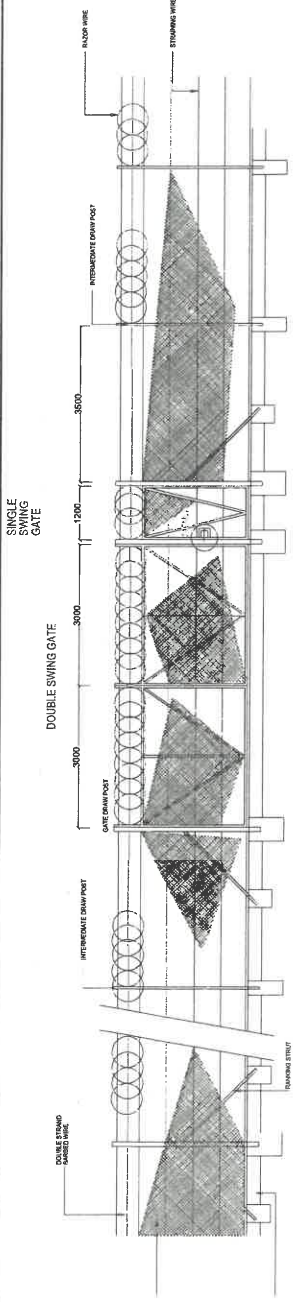


SAPS DETAILS

TITLE WELDMESH FENCE
--

233-0000
FENCE DETAIL
CONCRETE FOOTING
DETAIL A
ELEVATION

SCALE	CAD REFERENCE
SHOWN	1855/09/02/09/02
DATE -	1855/09/02/09/02
JANUARY 2005	1855/09/02/09/02
FRAMING	SHEET 1 OF 1
CUT	0/1000



NORMAL:

SECURITY FENCE:

RAZOR WIRE:

METAL POSTS:

GATES:
BUT I KNOW IT'S

BOLTS: (note all bolt nuts should be spot welded)

15 MPa MASS CONCRETE

INTERMEDIATE POSTS:

DAVID L. FORBES, JR.

6270010

[illegible]

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0-7704-5000-0

SAND & CLAY:

SECURITY FENCE:

METAL POSTS:

GATES:
2015-2016

BOLTS: (note all bolt nuts should be spot welded)

15 MPa MASS CONCRETE:

INTERMEDIATE POSTS:

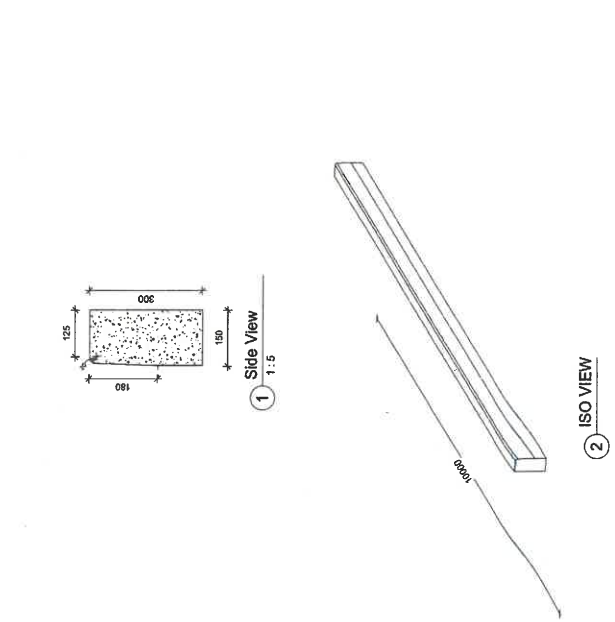
BANKING STRIPITS.

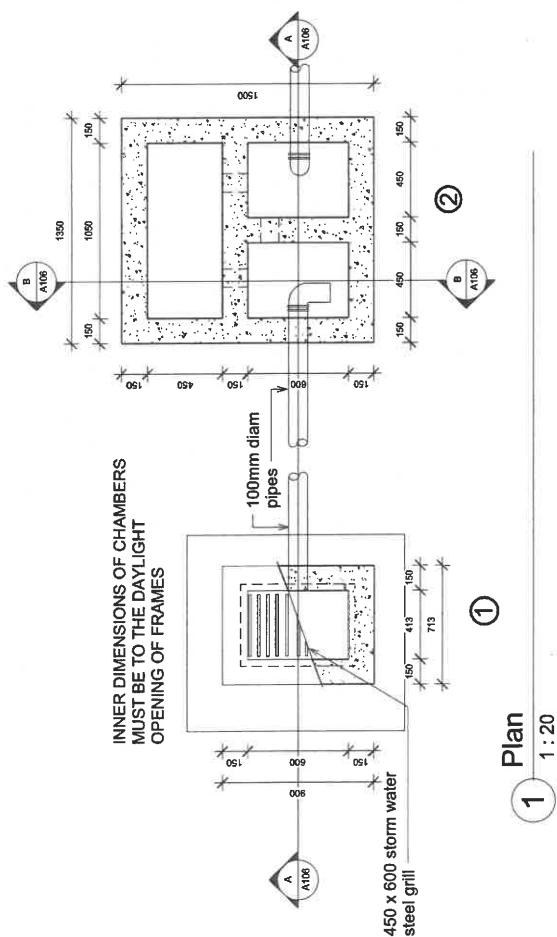
2000年12月

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Journal of Internal Medicine 258: 105–112

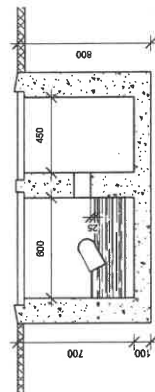
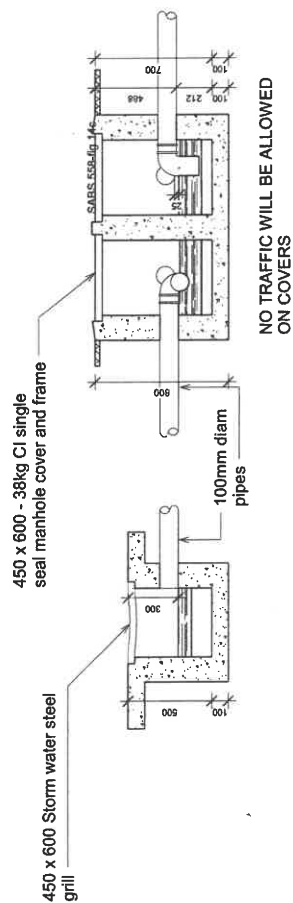
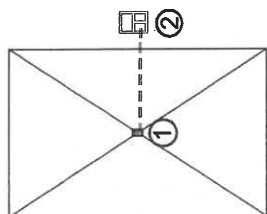
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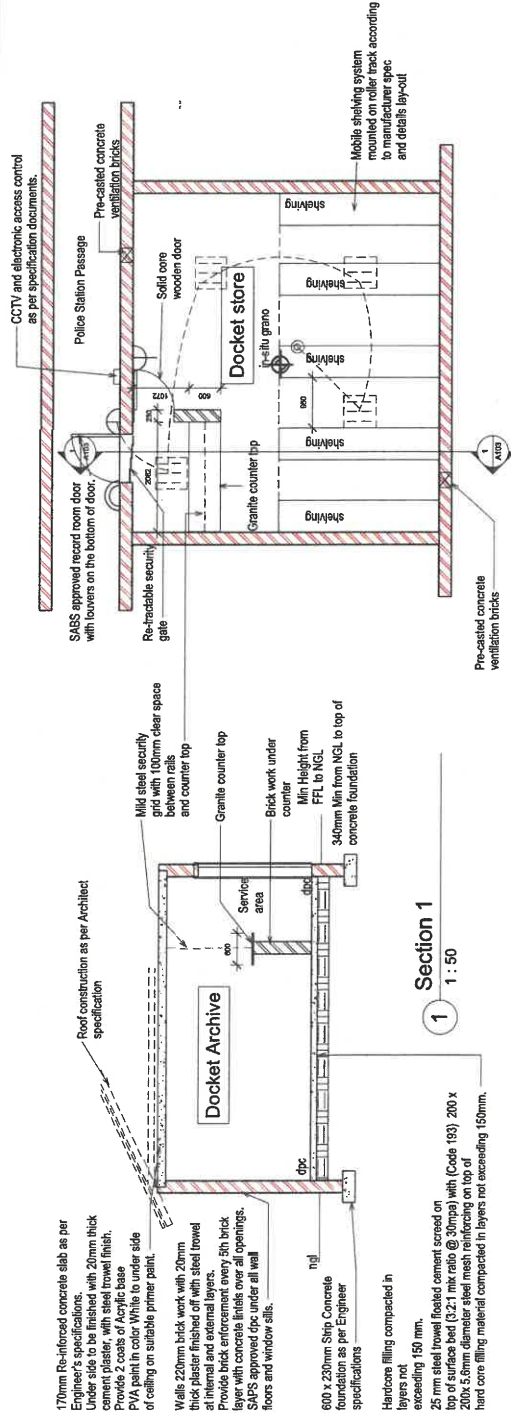
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Journal of Internal Medicine 260: 179–187





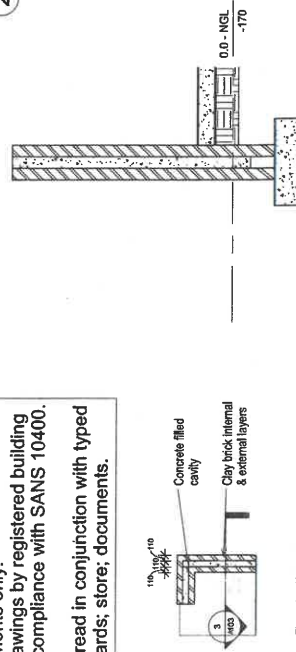
Plan of wash bay



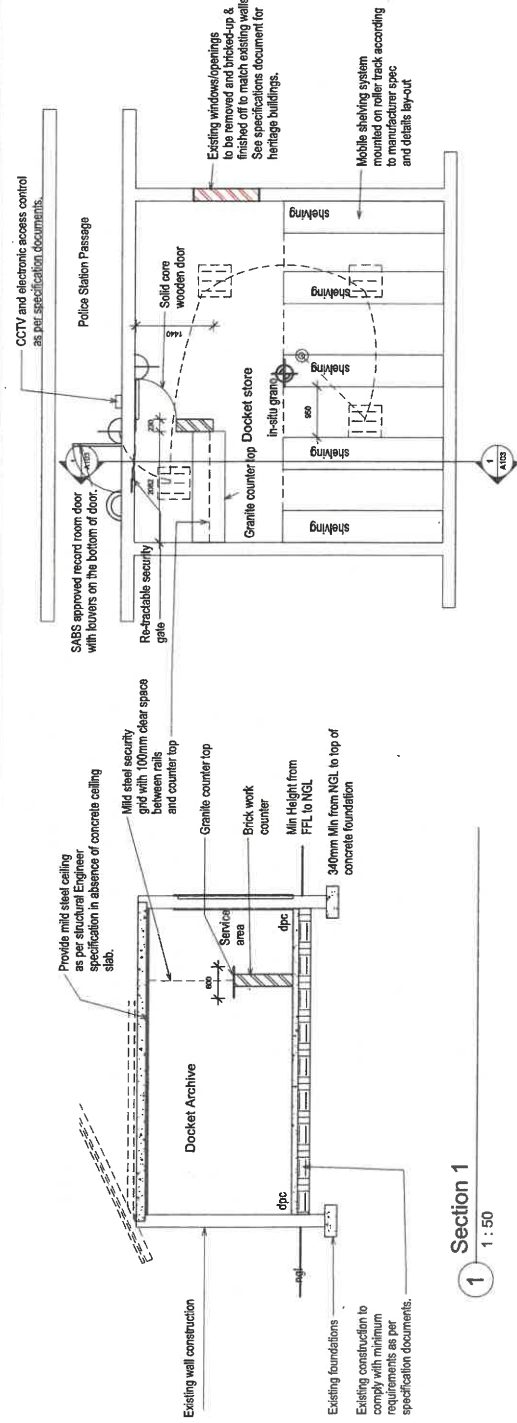


Drawings not for construction purposes.
Guideline documents only.
Construction drawings by registered building professional in compliance with SANS 10400.
Drawings to be read in conjunction with typed minimum standards; store; documents.

Electrical Legend	
Luminaries: 600 x 600mm LED with cool white color rendering	
LED red/green indicator light above door	
Bulkhead lighting LED with cool white 2300 AFPL	
Single 100 x 100 recessed socket with steel face plate, 300mm	
Occupancy sensor	
Smoke detector	



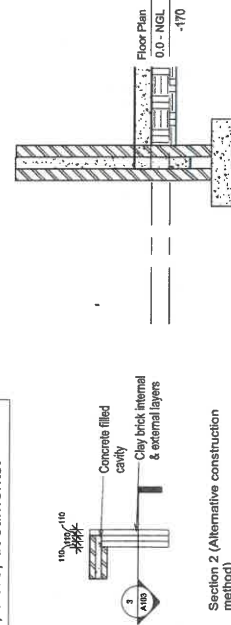
Floor plan (Alternative construction method)



Drawings not for construction purposes.
Guideline documents only.
Construction drawings by registered building professional in compliance with SANS 10400.
Drawings to be read in conjunction with typed minimum standards; store; documents.

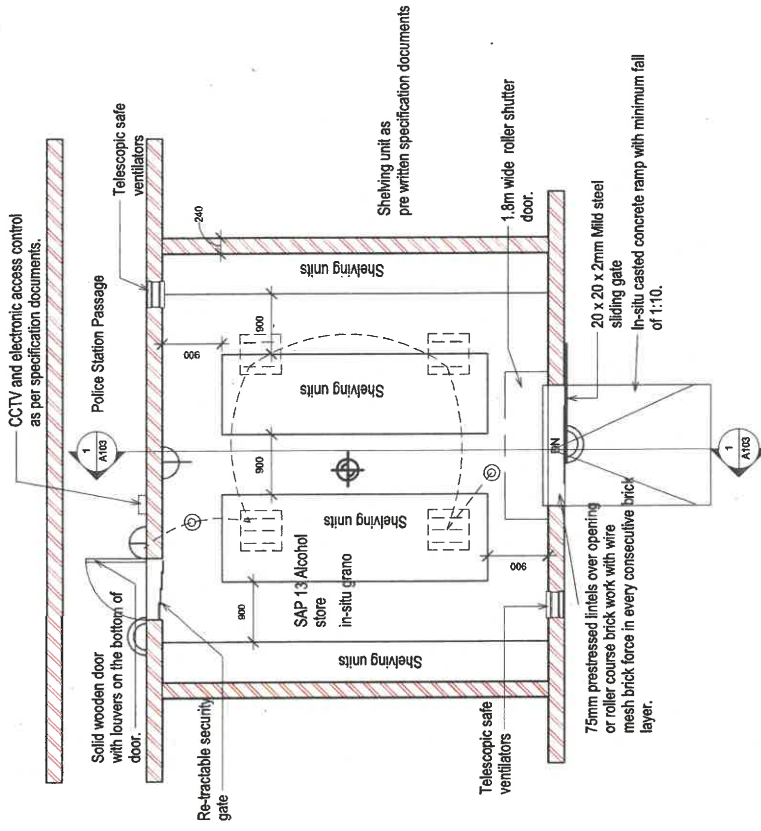
2 Floor Plan
1:50

Electrical Legend	
	Luminaires: 600 x 600mm LED with cool white color rendering
	LED red/green indicator light above door
	Bulkhead lighting LED with cool white 230 AFPL
	Single 100 x 100 recessed socket with steel face plate, 300mm affl
	Occupancy sensor
	Smoke detector



3 Section 2 (Alternative)
1:25

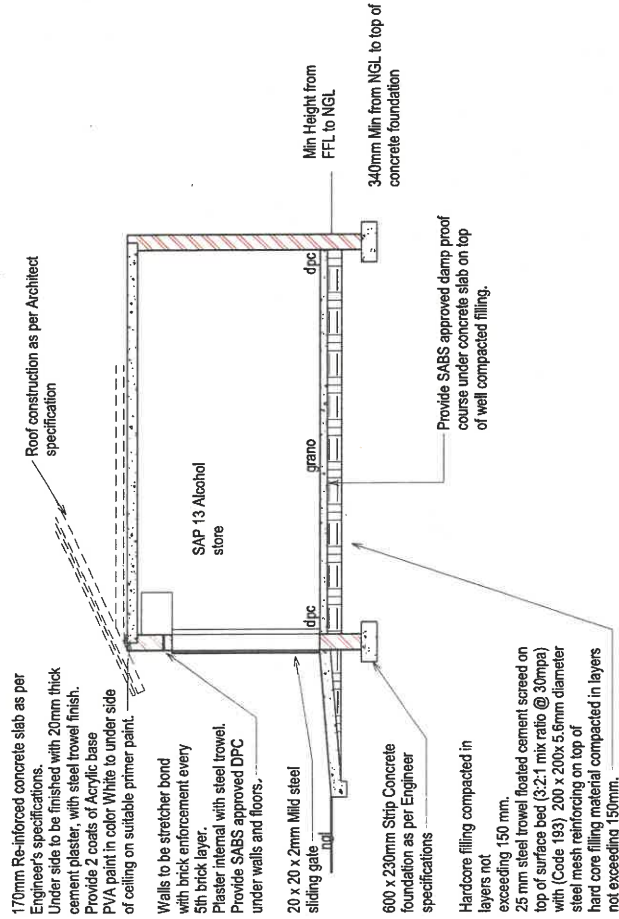
SAPS 13 ALCOHOL EXHIBIT STORE - (NEW CONSTRUCTION) ANNEXURE 19



Floor Plan

2 1 : 50

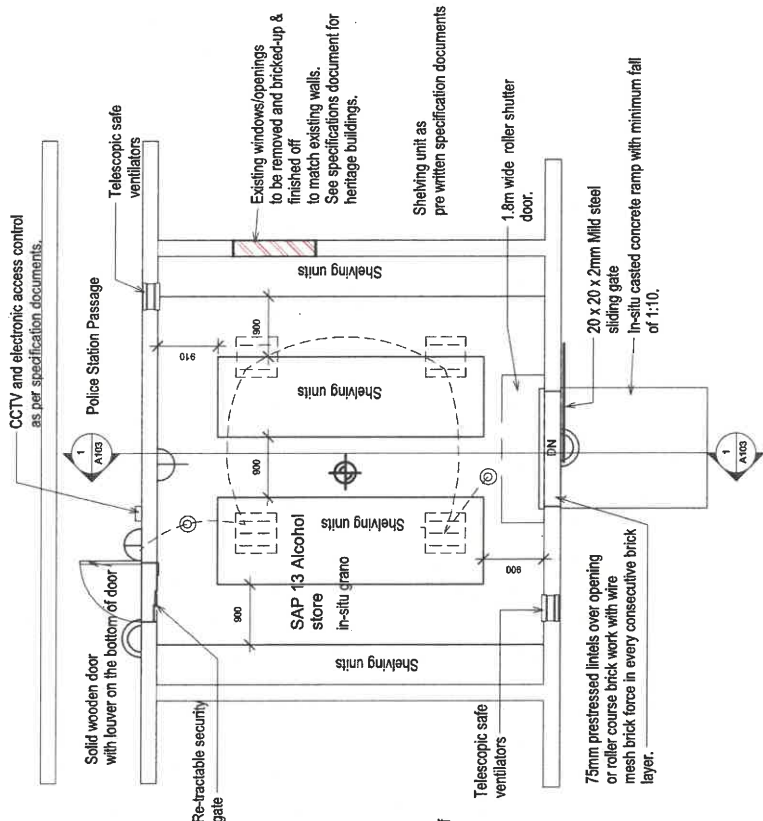
Electrical Legend	
	Luminaries: 600 x 600mm LED with cool white color rendering
	LED red/green indicator light above door
	Bulkhead lighting LED with cool white 2300 AFPL
	Single 100 x 100 recessed socket with steel face plate, 300mm affl
	Occupancy sensor
	Smoke detector



Section 1

1 1 : 50

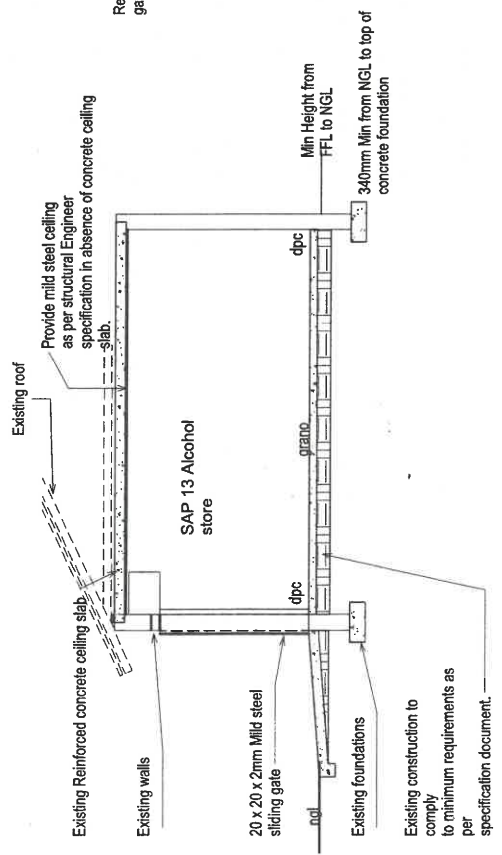
Drawings not for construction purposes.
Guideline documents only.
Construction drawings by registered building professional in compliance with SANS 10400.
Drawings to be read in conjunction with typed minimum standards; store; documents.



Floor Plan

1 : 50

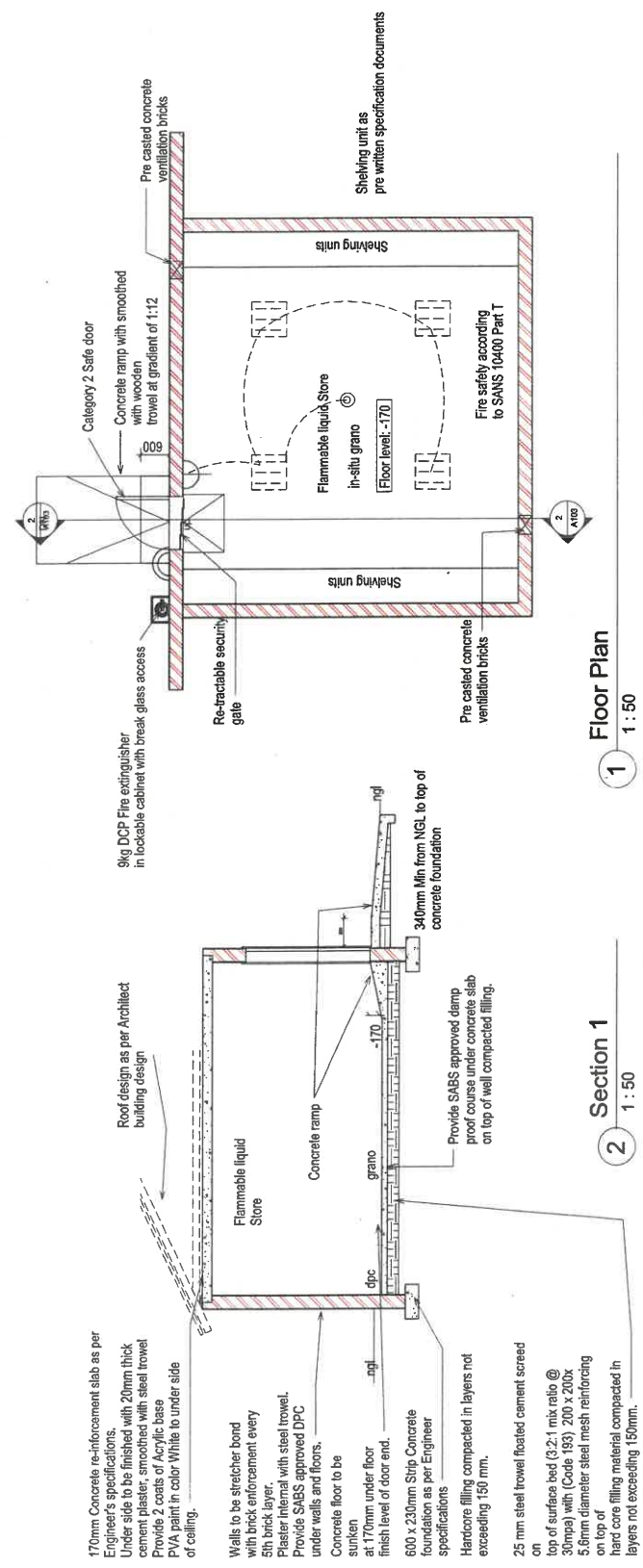
Electrical Legend	
	Luminaires: 600 x 600mm LED with cool white color rendering
	LED red/green indicator light above door
	Bulkhead lighting LED with cool white 2300 AFFL
	Single 100 x 100 recessed socket with steel face plate, 300mm aff
	Occupancy sensor
	Smoke detector



Section 1

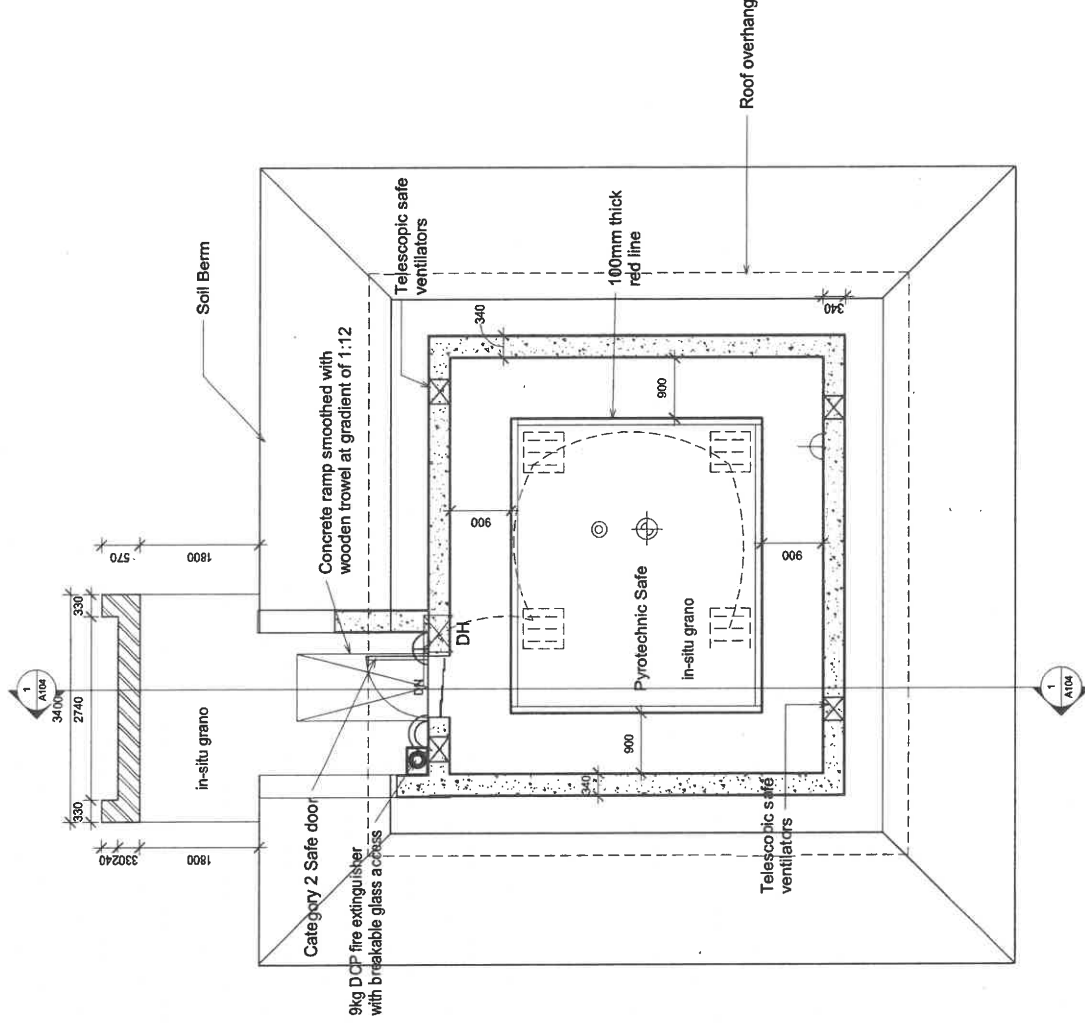
1 : 50

Drawings not for construction purposes.
Guideline documents only.
Construction drawings by registered building professional in compliance with SANS 10400.
Drawings to be read in conjunction with typed minimum standards; store; documents.



Electrical Legend	
	Luminaries: 600 x 600mm LED with cool white color rendering
	Bulkhead lighting LED with cool white 230 AFLL
	Single 100 x 100 recessed socket with steel face plate, 300mm affi
	Occupancy sensor
	Smoke detector

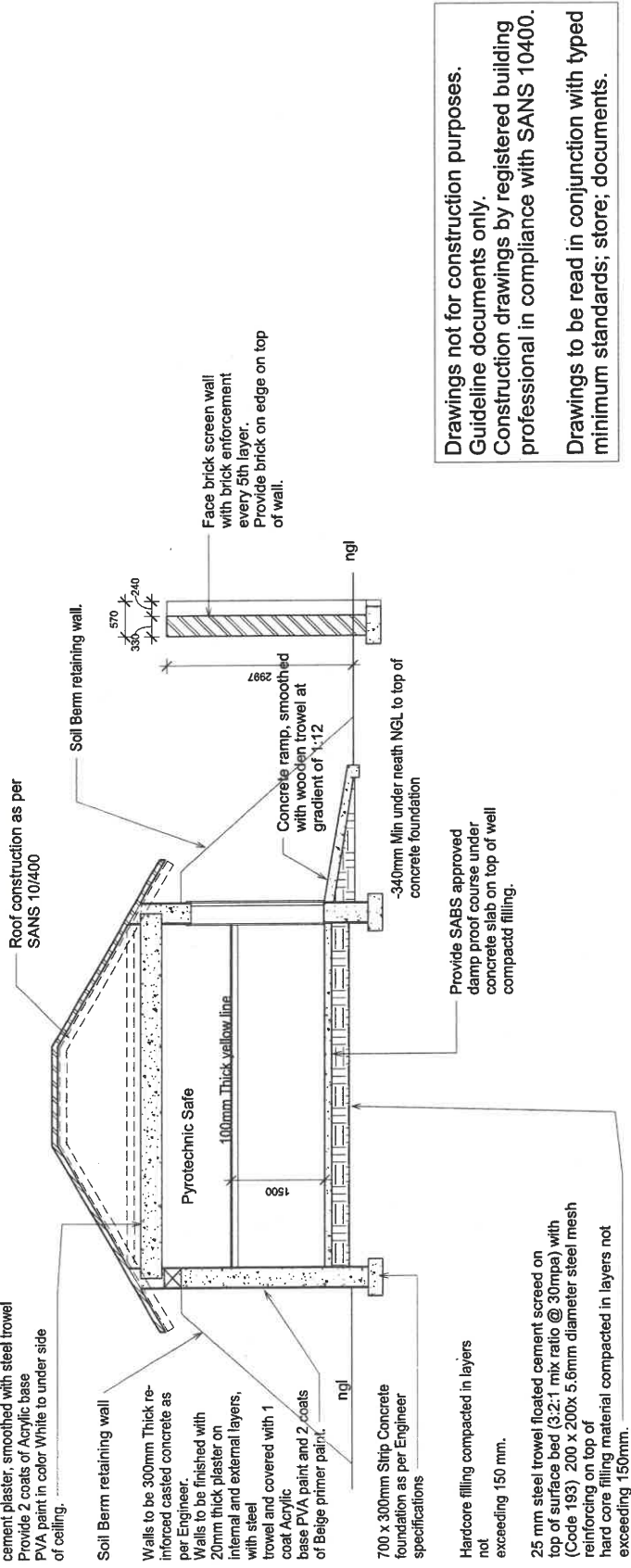
Drawings not for construction purposes.
Guideline documents only.
Construction drawings by registered building professional in compliance with SANS 10400.
Drawings to be read in conjunction with typed minimum standards; store; documents.



Electrical Legend	
	Luminaries: 600 x 600mm LED with cool white color rendering
	LED red/green indicator light above door
	Bulkhead lighting LED with cool white 2300 AFFL
	Single 100 x 100 recessed socket with steel face plate, 300mm affl
	Occupancy sensor
	Smoke detector
	De humidifier

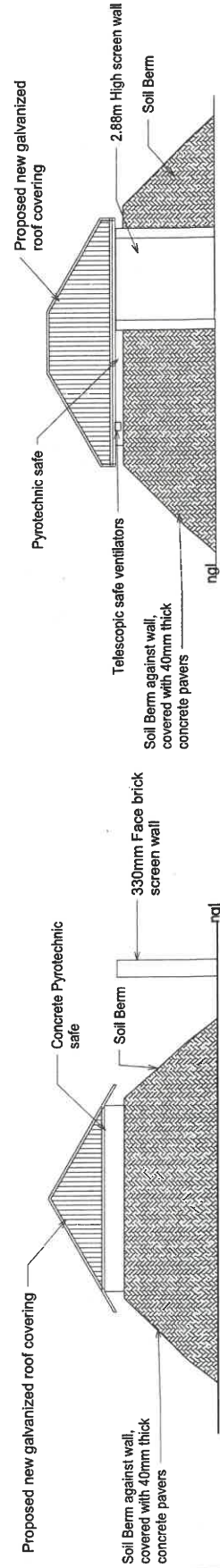
1 Floor Plan
1 : 50

344mm Concrete re-inforced slab as per Engineer's specifications.
Under side to be finished with 20mm thick cement plaster, smoothed with steel trowel
Provide 2 coats of Acrylic base
PVA paint in color White to under side of ceiling.



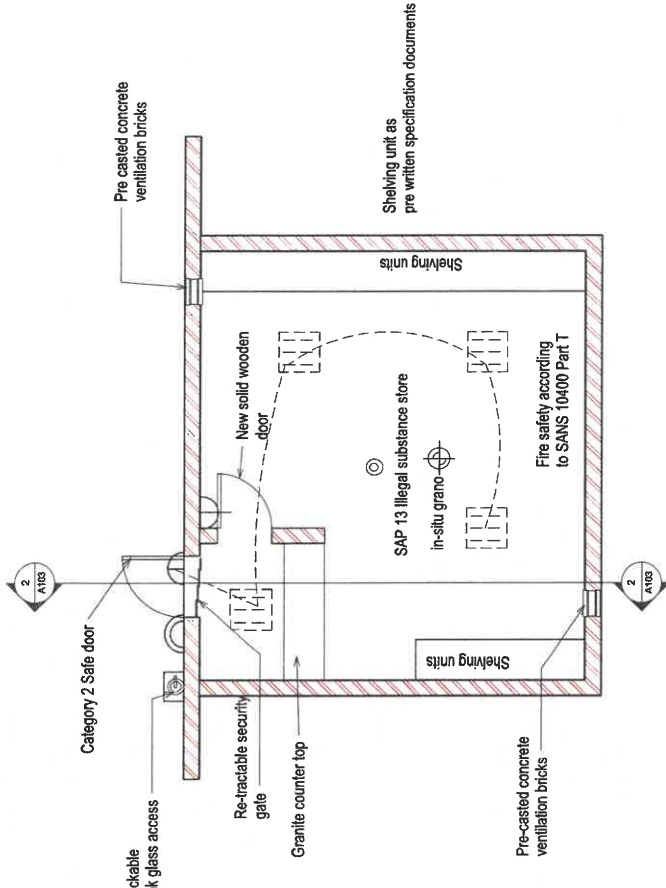
Drawings not for construction purposes.
Guideline documents only.
Construction drawings by registered building professional in compliance with SANS 10400.
Drawings to be read in conjunction with typed minimum standards; store; documents.

1
Section 1
1 : 50

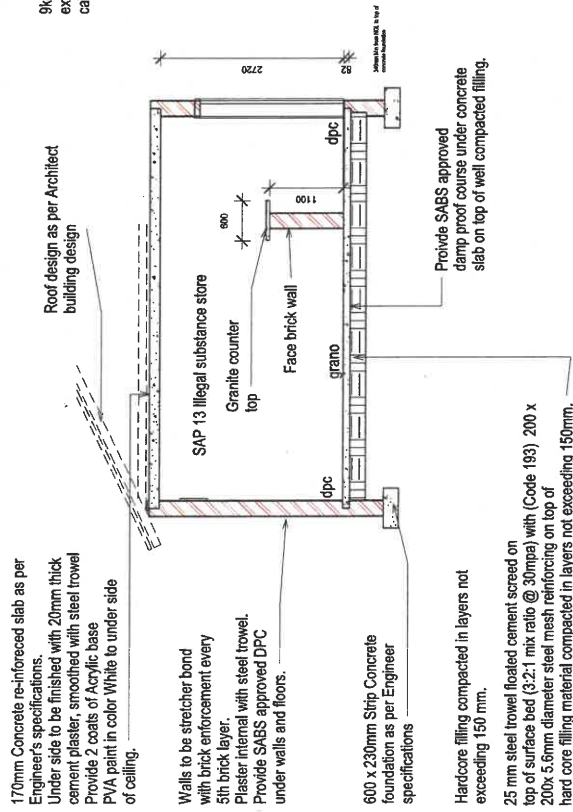


2
Typical Side elevation
1 : 100

3
Typical Front Elevation
1 : 100



1 Floor Plan 1:50



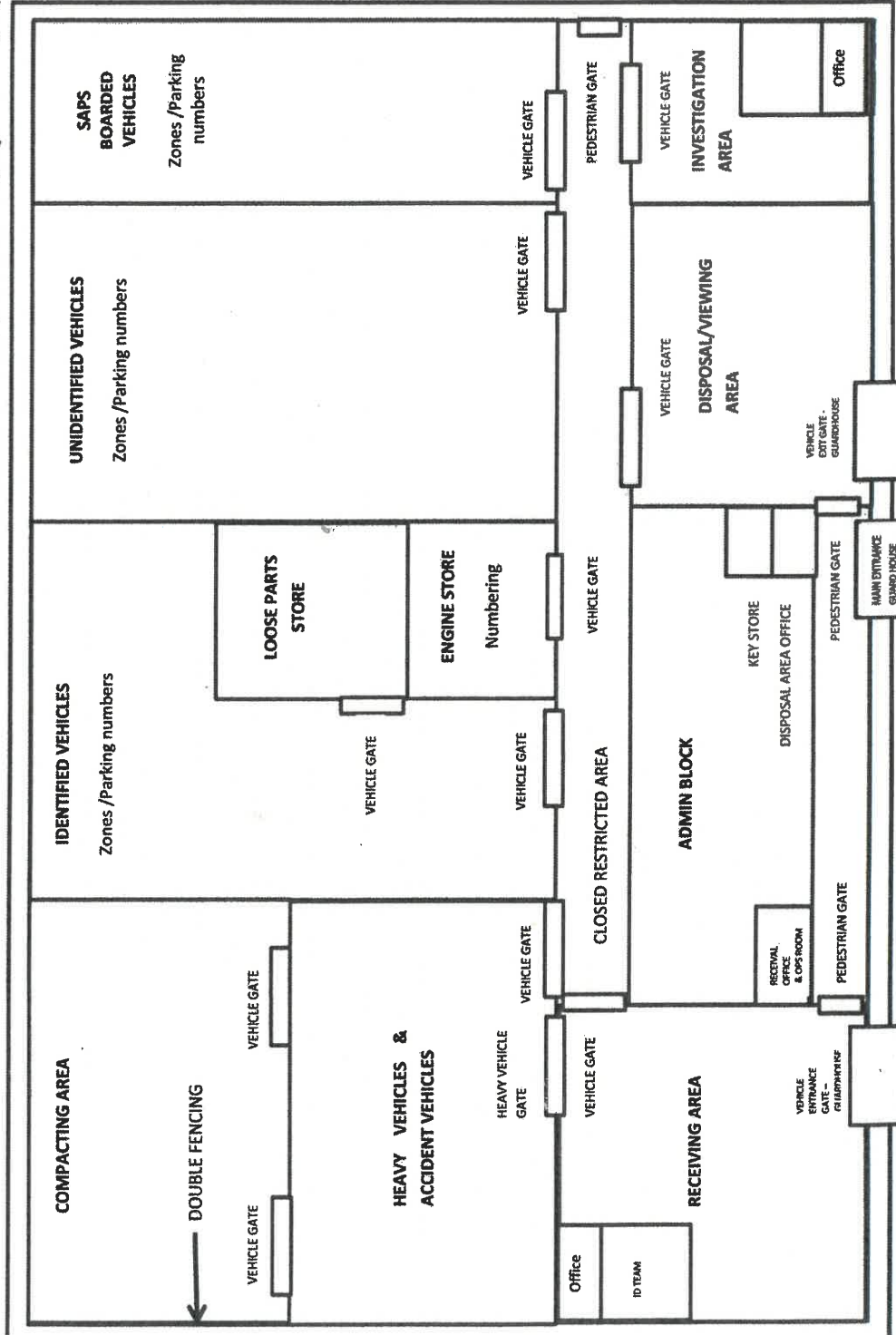
2 Section 1 1:50

Electrical Legend	
	Luminaries: 600 x 600mm LED with cool white color rendering
	LED red/green indicator light above door
	Bulkhead lighting LED with cool white 2300 AFFL
	Single 100 x 100 recessed socket with steel face plate, 300mm affl
	Occupancy sensor
	Smoke detector

Drawings not for construction purposes.
Guideline documents only.
construction drawings by registered building professional in compliance with SANS 10400.
Drawings to be read in conjunction with typed minimum standards; store; documents.

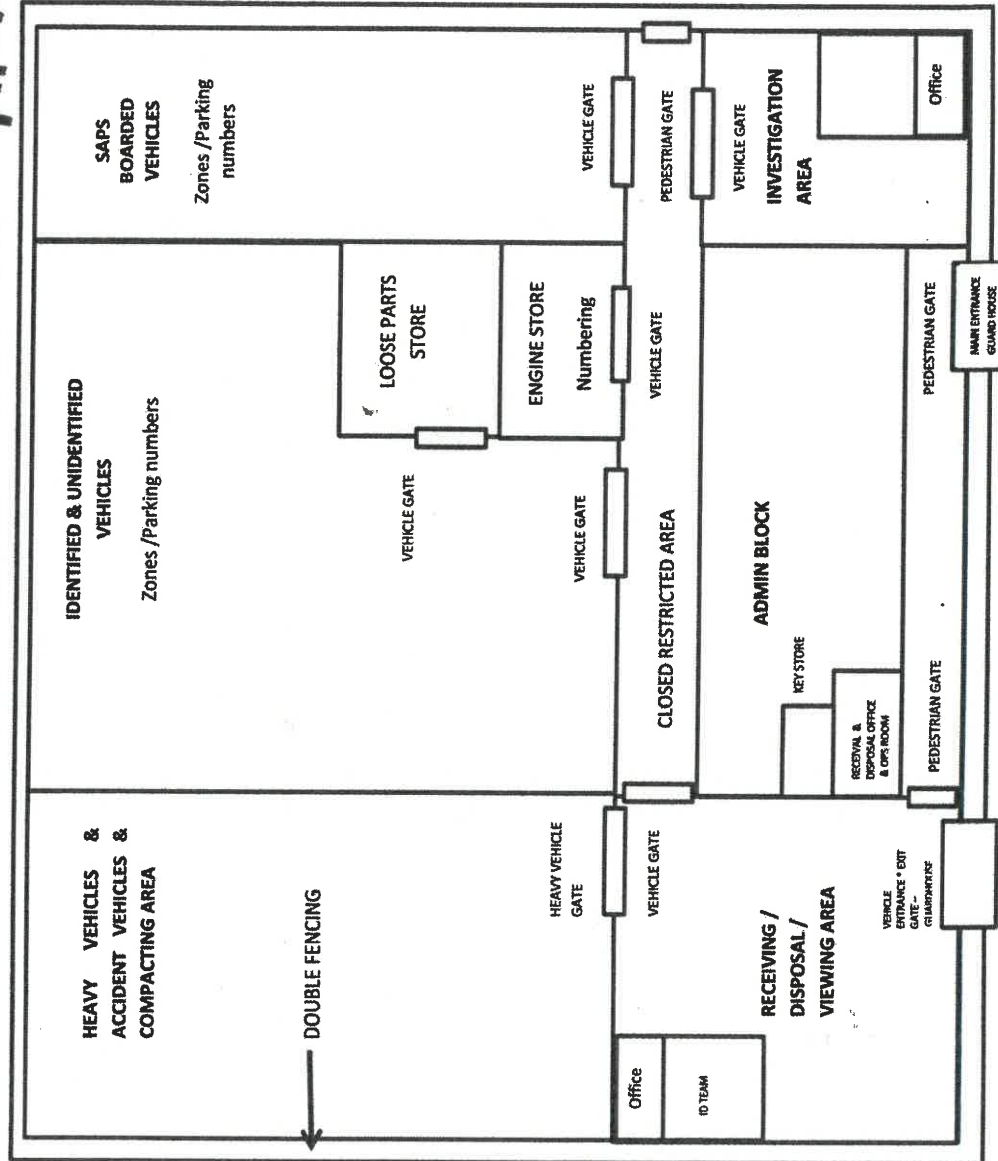
ANNEX 14

PROPOSE GENERIC LAY-OUT : VEHICLE SAFEGUARDING SERVICES (BIG VSS)

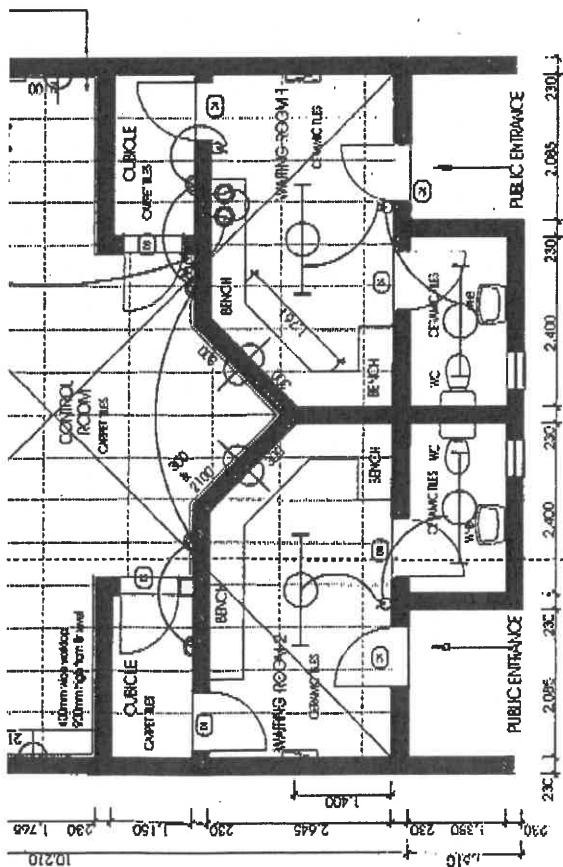


ANNEX 14

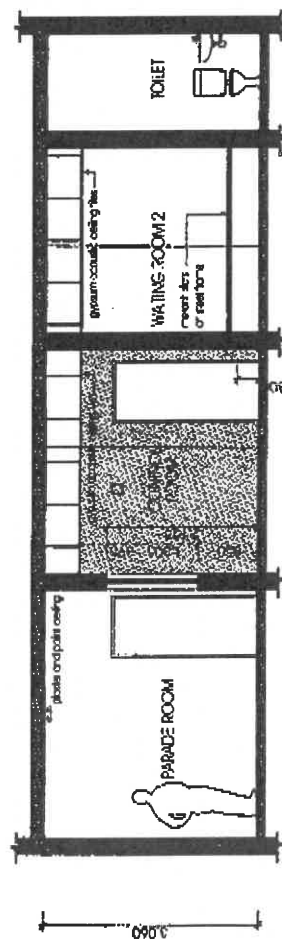
PROPOSE GENERIC LAY-OUT : VEHICLE SAFEGUARDING SERVICES FACILITIES: SMALL AND MEDIUM VSS



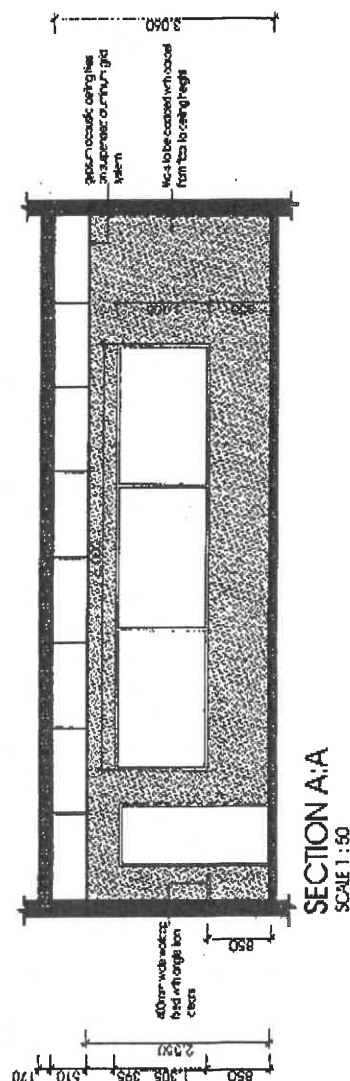
ID PARADE ROOM



FLOOR PLAN
SCALE 1:50



SECTION B:B
SCALE 1:50



SECTION A:A
SCALE 1:50

CONTROL ROOM:
FLOOR: CARPET TILES 900x500 NEEDLEPUNCH, STAINPROOF FIBRE.
TOTAL THICKNESS 6mm LAD IN ACCORDANCE TO SABS 01 86-2000
WALLS: CLAUDED IN CARPET BROADLOOM NEEDLEPUNCH, STAINPROOF FIBRE.
TOTAL THICKNESS 6mm LAD IN ACCORDANCE TO SABS 01 86-2000
CEILING: ACOUSTIC CEILING TILES ON SUSPENDED SYSTEM
FITTINGS: AIRCON TO MEQ: ENG SPEC
LOUDSPEAKER = INTERCOM.

WAITING ROOM 1:
FLOOR: NON-SLIP-CERAMIC FLOOR TILES
WALLS: ENAMEL PAINT ON PLASTER
CEILING: ACOUSTIC CEILING TILES ON SUSPENDED SYSTEM
FITTINGS: AIRCON TO NECH; ENG SPECS
GREEN AND RED INDICATOR LIGHTS
TIMBER SLATS BENCH

WAITING ROOM 2:
FLOOR: NON-SLIP CERAMIC FLOOR TILES
WALLS: ENAMEL PINT ON PLASTER
CEILING: ACOUSTIC CEILING TILES ON SUSPENDED SYSTEM
FITTINGS: AIRCON TO MECH ENG SPECS
TIMBER SLATS BENCH

VIEWING PANEL:
ANODISED ALUMINIUM FRAME AS PER INDICATED SIZE.
ONE WAY GLASS: LAMINATED REFLECTIVE COATED SAFETY
GLASS. MIN THICKNESS 9.5mm (HIGH IMPACT)
COLOUR OF REFLECTIVE COATING: SILVER

GENERAL:
ALL ROOMS EXCEPT BATHROOMS TO BE AIR-CONDITIONED.
ENSURE THAT SOUND TRANSFER BETWEEN ROOMS IS ELIMINATED.
CONCRETE SLAB TO BE PROVIDED OVER FACILITY AS INDICATED.
LIGHTING IN PADDOCK ROOM TO BE MINIMUM SEVEN TIMES ADDITIONAL
INTENSITY TO THOSE IN THE CONTROL ROOM.

HN Parade Room

PERIMTER SECURITY AT POLICE STATION



**MINIMUM BUILDING CONSTRUCTION STANDARDS:
SOUTH AFRICAN POLICE SERVICE:
PERIMETER SECURITY AT POLICE STATIONS**

2018-10-10 Rev4

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1. PERIMETER FENCING:

1.1 External clear zones

Any vegetation in the immediate vicinity of the perimeter causing visual obstruction in terms of security observation must be cut back on a regular basis or removed to avoid any scaling.

1.2 Around street boundaries at the entrance to CSC See Annexure 1 & 12

Accommodation such as the CSC or high risk facilities adjacent to a street, should be screened from public and street view with a double skin fence to secure the area from external attacks but still have visibility to the external areas. Provide a fence with a total height of minimum 3000mm consisting of the following items:

Brick wall

- **Minimum brick specification:** Face brick with satin finish manufactured from burnt clay in terracotta colour or similar approved to match and tie-in with existing structures.
- Foundation wall to be minimum 340mm deep with reinforced concrete strip foundation below to achieve minimum depth of 570mm.
- Wall to be built in between mild steel posts used for the fence spaced 3390mm c/c. Posts to be built into concrete foundation, 600mm deep. The post to be 3000mm above natural ground level. Spacing of posts as per manufacturer's specifications.
- Brick wall to be built 620mm high with brick on edge roller course on top. The wall to be built in stretcher bond with recessed mortar joints, provide brick force in every brick course.
- The fence and support post to be built flush with external face of the wall, the wall must not have a foot hold to the street/ public side. Refer to Annexure 12 for detail drawing.
- Provide minimum 50mmØ uPVC weep holes spaced maximum 600mm c/c to the bottom of the wall to accommodate storm water flow-off.
- *In-situ* concrete foundations as specified by a registered *structural engineer*.
- The perimeter wall must be designed by a registered *architect* with lateral support columns and expansion joints, all in compliance with the minimum standards and regulation of SANS10400, part: K, table 17.

Fence

- Provide an 1800mm(h) x 3305(w) double skin fencing panel consisting of carbon hardened and galvanised steel mesh panels and support posts with security spikes and flat wrap razor wire on top. Mesh to be installed above wall.
- Support posts to project 600mm above the top edge of the steel mesh panels as support for the high tensile steel flat wrap razor wire. Overall height to be minimum 3000mm.
- Support post to be 85mm front face, tapering to 45mm with depth of 85mm. Post shall include locking recess mechanism to secure panel. Post to be space 3390mm c/c.

- The fence and support post to be built flush with external face of the wall, the wall must not have a foot hold to the street/ public side. Refer to Annexure 12 for detail drawing.
- Fence panel to have 70° flanges along the sides, 90° flange along the top and 30° flange along the bottom.
- The panel facing the street must be in a horizontal position and the internal panel to be in a vertical position to reduce the aperture size of the panel.
- Fence panels to be clamber proof with see-through capabilities and have a top coat finish of marine fusion bond coat in dove grey colour or as per approved colour.
- Mesh strands to be 3mm diameter minimum, cut resistant and with an aperture not exceeding 12 x 12mm.
- Provide 100mm electro-galvanised, 2mm thick, toughened steel spikes on top of fence.
- Provide minimum 600mm high galvanized high tensile steel flat wrap razor wire on top of fence to achieve a minimum total height of 3000mm.

The products specified must be manufactured and installed in accordance with the manufacturers specifications and should carry at least a SABS or higher standards certificate.

1.3 Around street boundaries (Not facing CSC entrance) See Annexure 1 & 13

General accommodation such as offices, parking etc. adjacent to a street, should be screened from public and street view a single skin fence. Provide a fence with a total height of minimum 3000mm consisting of the following items:

Brick wall

- **Minimum brick specification:** Face brick with satin finish manufactured from burnt clay in terracotta colour or similar approved to match and tie-in with existing structures.
- Foundation wall to be minimum 340mm deep with reinforced concrete strip foundation below to achieve minimum depth of 570mm.
- Wall to be built in between mild steel posts used for the fence spaced 3390mm c/c. Posts to be built into concrete foundation, 600mm deep. The post to be 3000mm above natural ground level. Spacing of posts as per manufacturer's specifications.
- Brick wall to be built 620mm high with brick on edge roller course on top. The wall to be built in stretcher bond with recessed mortar joints, provide brick force in every brick course.
- The fence and support post to be built flush with external face of the wall, the wall must not have a foot hold to the street/ public side. Refer to Annexure 12 for detail drawing.
- Provide minimum 50mmØ uPVC weep holes spaced maximum 600mm c/c to the bottom of the wall to accommodate storm water flow-off.
- *In-situ* concrete foundations as specified by a registered *structural engineer*.

- The perimeter wall must be designed by a registered *architect* with lateral support columns and expansion joints, all in compliance with the minimum standards and regulation of SANS10400, part: K, table 17.

Fence

- Provide an 1800mm(h) x 3305mm(w) single skin fencing panel consisting of carbon hardened and galvanised steel mesh panels and support posts with security spikes and flat wrap razor wire on top. Mesh to be installed above wall.
- Support posts to project 600mm above the top edge of the steel mesh panels as support for the high tensile steel flat wrap razor wire. Overall height to be minimum 3000mm above natural ground line.
- Support post to be 85mm front face, tapering to 45mm with depth of 85mm. Post shall include locking recess mechanism to secure panel. Post to be space 3390mm c/c.
- The fence and support post to be built flush with external face of the wall, the wall must not have a foot hold to the street/ public side. Refer to Annexure 12 for detail drawing.
- Fence panel to have 70° flanges along the sides, 90° flange along the top and 30° flange along the bottom.
- The panel facing the street must be in a horizontal position and the internal panel to be in a vertical position to reduce the aperture size of the panel.
- Fence panels to be clamber proof with see-through capabilities and have a top coat finish of marine fusion bond coat in dove grey colour or as per approved colour.
- Mesh strands to be 3 mm diameter minimum, cut resistant and with an aperture not exceeding 12 x 75 mm.
- Provide 100mm electro-galvanised, 2mm thick, toughened steel spikes on top of fence.
- Provide minimum 600mm high galvanized high tensile steel flat wrap razor wire on top of fence to achieve a minimum total height of 3000mm.

The products specified must be manufactured and installed in accordance with the manufacturers specifications and should carry at least a SABS or higher standards certificate.

1.4 Boundaries to adjacent sites **See Annexure 1 & 4**

Minimum brick specification: Face brick with satin finish manufactured from burnt clay in terracotta colour or similar approved to match and tie-in with existing structures.

Provide a 2465mm high face brick wall built in stretcher bond with recessed mortar joints, provide brick force every fourth brick course. Foundation wall to be minimum 340mm deep with reinforced concrete strip foundation below to achieve minimum depth of 570mm. The perimeter wall must be designed by a registered *architect* with lateral support columns and expansion joints, all in compliance with the minimum standards and regulation of SANS10400, part: K, table 17. Provide a brick on edge roller course to the top of the wall and lateral support columns. The wall must be secured with 100mm electro-galvanised, 2mm thick, toughened steel security spikes

on top of roller course. Provide minimum 600mm high galvanized high tensile steel flat wrap razor wire on top of wall to achieve a minimum total height of 3000mm. Provide minimum 50mmØ uPVC weep holes spaced maximum 600mm c/c to the bottom of the wall to accommodate storm water flow-off. *In-situ* concrete foundations as specified by a registered *structural engineer*.

At facilities with an extremely high security risk, alternative building materials and techniques should be sourced to provide a more durable and secured perimeter wall at adjacent sites and holding facilities.

1.5 Holding facilities

See Annexure 1 & 4

Minimum brick specification: Face brick with satin finish manufactured from burnt clay in terracotta colour or similar approved to match and tie-in with existing structures.

Accommodation such as cell blocks adjacent to a street, should be screened from public and street view with a 2465mm high face brick wall built in stretcher bond with recessed mortar joints, provide brick force every fourth brick course. Foundation wall to be minimum 340mm deep with reinforced concrete strip foundation below to achieve minimum depth of 570mm. The perimeter wall must be designed by a registered *architect* with lateral support columns and expansion joints, all in compliance with the minimum standards and regulation of SANS10400, part: K, table 17. Provide a brick on edge roller course to the top of the wall and lateral support columns. The wall must be secured with 100mm electro-galvanised, 2mm thick, toughened steel security spikes on top of roller course. Provide minimum 600mm high galvanized high tensile steel flat wrap razor wire on top of wall to achieve a minimum total height of 3000mm. Provide minimum 50mmØ uPVC weep holes spaced maximum 600mm c/c to the bottom of the wall to accommodate storm water flow-off. *In-situ* concrete foundations as specified by a registered *structural engineer*.

At facilities with an extremely high security risk, alternative building materials and techniques should be sourced to provide a more durable and secured perimeter wall at adjacent sites and holding facilities.

1.6 Signage wall

See Annexure 1 & 8

Minimum brick specification: Face brick with satin finish manufactured from burnt clay in terracotta colour or similar approved to match and tie-in with existing structures.

Provide a 2465mm high face brick wall built in stretcher bond with recessed mortar joints, provide brick force every fourth brick course. Foundation wall to be minimum 340mm deep with reinforced concrete strip foundation below to achieve minimum depth of 570mm. The perimeter wall must be designed by a registered *architect* with lateral support columns and expansion joints, all in compliance with the minimum standards and regulation of SANS10400, part: K, table 17. Provide a brick on edge roller course to the top of the wall and lateral support columns. The wall must be secured with 100mm electro-galvanised, 2mm thick, toughened steel security spikes on top of roller course. Provide minimum 600mm high galvanized high tensile steel flat

wrap razor wire on top of wall to achieve a minimum total height of 3000mm. Provide minimum 50mmØ uPVC weep holes to the bottom of the wall to accommodate storm water flow-off. *In-situ* concrete foundations as specified by a registered *structural engineer*.

1.7 Perimeter Lighting

Street Perimeter Lighting (see through fences)

Zela LED luminaires of 37 Watt power rating are used for the fenced street side (front) perimeter. The luminaire is SABS approved and is available in symmetrical and a-symmetrical lighting distribution configuration. LED light source will be of cool white type. Luminaires will be constructed from high pressure die-cast aluminium with powder coated finish and high impact acrylic protector. The luminaires will have an IP rating of at least IP66, have integrated thermal protection and available with internal photocell.

Where building on the premises are within a distance of 12m from the perimeter structure bulkhead lighting on external building walls will provide lighting towards the perimeter. If bulkhead lighting is deemed as not being sufficient, perimeter lighting will also be provided in such areas to complement the existing lighting.

The fenced section of the perimeter will be lit with a-symmetrical lighting. Symmetrical lighting will be used in areas where official vehicle parking is directly on the inside of the fenced perimeter.

Luminaires will be mounted at a height of 2.325 m (top of luminaire) on glass fibre reinforced (GRP) poles and with a 6.780 m spacing. Post tops will be positioned on the inside of the perimeter and approximately 1 m from the fence. Poles will have the following features:

- Non-conductive
- Low inertia
- High bending strength
- Vandal resistant
- SANS 1749 compliant finishing coat
- Available with an access opening with a cover manufactured from glass filled nylon, impregnated in the same colour as the surface coat
- Cable entry
- Circuit breaker protection

All luminaires to be connected to emergency power supply.

Walled Perimeter lighting.

BEKA Series 21 LED luminaires of 20 Watt power rating are used for the walled perimeter sections. The luminaire is SABS approved. The LED light source will be of cool white type. Luminaires will be constructed from high pressure die-cast aluminium with powder coated finish and high impact acrylic protector. The diffuser will be of clear or prismatic type. The luminaires will have an IP rating of at least IP65 and will be available with an additional OEM base section with integrated photocell. The base section will be manufactured from the same material as the body of the luminaire and will have the same finish.

Series 21 luminaries will be mounted on the internal side of the perimeter wall and at a height of 2.3 m (top of luminaire). Spacing will generally be 6 m between luminaries. Where a perimeter wall forms the rear boundary of covered parking, the spacing of luminaries will coincide with the centre of every group of two parking bays (approximate spacing of 4.8 m between luminaries).

The *SAPS* version of the Zela luminaire will be mounted on the external wall of the guardhouse, next to the pedestrian entrance. The *SAPS* version has a blue protector and is of 19 Watt power rating for the specific purpose of indicating the public entrance to the premises to passers-by. The *SAPS* blue version will also be of a-symmetrical configuration.

All luminaires to be connected to emergency power supply.

Signage wall lighting
See Annexure 8

Same luminaire to be used as on the fenced perimeter, in a-symmetrical configuration. A 37 Watt, cool white, Zela *LED* to be wall mounted in the middle of the signage wall right above the *SAPS* emblem. The luminaire shall be fixed with an OEM wall mounted bracket to provide sufficient lighting on signage.

1.8 Public parking within the perimeter of the site
See Annexure 1

Public parking will only be provided within the perimeter of the site where the public parking on the street front/ sidewalk are not allowed or the demand is higher than the parking allocated on the street front/ sidewalk. For safety it is preferred that members of the public park outside the perimeter of the station.

At police stations where the public parking are located within the perimeter of the station:

The public parking shall be located as close as possible to the guard kiosk's pedestrian access gate. The parking area shall be open to the street for access and shall be fenced off from the rest of the police station. Access may only be allowed through pedestrian gate at the guard kiosk. The fence to comply with the scenarios mentioned above in paragraph 1.1, 1.2 and 1.3.

The parking area must be covered with CCTV camera surveillance as per *TMS*'s requirements and specifications.

The parking area must have sufficient illumination. Refer to section 4 of this document for description of illumination.

Official/ Staff parking within the perimeter of the site

- The official/ staff parking must be clearly demarcated and marked.
- These parking areas must be monitored by CCTV camera system.
- The said parking must have sufficient illumination and accessible firefighting equipment.

1.9 Burglar Proofing

See Annexure 10

All windows at a police station must be fitted with high quality burglar proofing. The burglar proofing to be installed to the inside of the building, inside the opening of the window. The burglar proofing to consist of the following:

- 30 x 6mm Mild steel flat bar frame.
- 12mmØ Mild steel round bar welded to frame in a vertical position spaced maximum 100mm c/c.
- Vertical round bars to be supported with 30 x 6mm mild steel flat bar welded to each round bar and side of the frame. The support bar to be welded to round bar using the face area of the flat bar. Provide horizontal support bar maximum every 1000mm in height. Space horizontal support equally.
- Frame fixed to inside of window opening with M10 bolts with tack welds on every bolt.
- The vertical frame to be fixed to wall with bolts spaced maximum every 300mm c/c.
- The horizontal frame to be fixed to wall with bolts spaced maximum every 350mm c/c.

The burglar proofing must comply with the SANS 10400 regulations. All exposed metal at inland areas must be treated against rust, apply primer coat and final coat/s prior to installation. The *architect* to match existing colour scheme used at the police station.

Exposed metal at coastal and high humidity areas must receive hot dip galvanized treatment, primer coat and final coat/s prior to installation.

1.10 Grenade screens

See Annexure 11

All street facing windows at a police station to be fitted with high quality grenade screen. The grenade screen to be installed to the outside of the windows. All sides of the grenade screen to be 100mm wider than the window opening except the top to be 200mm higher than the window opening. The burglar proofing to consist of the following:

- 25 x 25 x 2.5mm Mild steel angle frame as per Annexure 11.
- Frame to be fitted with galvanised welded wire mesh.
- Wire mesh to be 2.5mm thick welded wires with an aperture size of 25 x 50mm.
- Mesh to be fixed to frame by clamping the mesh between the inside of mild steel angle frame with a 3 x 16mm mild steel flat bar. The mild steel flat bar to be fixed to main frame with 3mm stainless steel bolt and nut. See detail on Annexure 11.
- Frame to be fixed to wall with 125 x 100 x 5mm mild steel base plate with 10mmØ hole for M10 bolt. Base plate to be welded to frame. All bolts to be tack welded for security.
- Provided vertically a fixing base plate minimum every 900mm and horizontally minimum every 600mm.

- Frame to be supported with two back to back 3 x 30mm mild steel flat bars horizontally every 900mm of additional height. Wire mesh to fitted between flat bar as per Annexure 11.
- Frame to be supported with two back to back 3 x 30mm mild steel flat bars vertically minimum every 600mm of additional width. Wire mesh to fitted between flat bar as per Annexure 11.

The grenade screen must comply with the SANS 10400 regulations. All exposed metal at inland areas must receive treatment against rust, primer coat and final coat/s prior to installation. The *architect* to match existing colour scheme used at the police station.

Exposed metal at coastal and high humidity areas must receive hot dip galvanized treatment, primer coat and final coat/s prior to installation.

1.11 ACCESS DOORS AND GATES

Entrances/ exits in and around SAPS buildings

External gates

- All external gates leading to and from the CSC and around the rest of the surrounding buildings must be fitted with a high quality cylinder lockset with biometric access control.
- Provide that the gate be fitted with a minimum 5 lever, double cylinder lockset for manual locking abilities.
- Gate to be fitted with self-closer and magnetic locking system together with the biometric system.
- All gates with biometric access control to be covered with CCTV camera to control and monitor persons entering and exiting SAPS premises.
- All hinges to be concealed, not to be exposed for tampering.
- All gates forming part of a fire route or emergency exit to comply with the fire regulations in SANS 10400, Part T.

External doors

- All external doors (Except CSC entrance door) leading to and from SAPS buildings should be high quality solid timber doors.
- Provide that all doors be fitted with a minimum 5 lever, double cylinder lockset for manual locking abilities.
- Door to be fitted with self-closer and magnetic locking system together with the biometric system.

- All doors with biometric access control to be covered with CCTV camera to control and monitor persons entering and exiting SAPS premises.
- All hinges to be concealed, not to be exposed for tampering.
- All fire and emergency exit doors to comply the fire regulations in SANS 10400, Part T and clearly marked with fire signage.
- Provide that all external doors (Except CSC door) be fitted with high quality security gates to match the burglar bar design. Gates only to be provided at doors that are not a fire exit or in a fire route. Gates to comply with SANS 10400, Part T.

Internal doors

- Internal doors leading to sensitive areas and doors behind the CSC counter should be high quality solid timber doors.
- Provide that all doors be fitted with a minimum 5 lever, double cylinder lockset for manual locking abilities.
- Doors to be fitted with self-closer and magnetic locking system together with the biometric system. Doors to be closed at all times to monitor persons entering and exiting the SAPS building.
- All doors with biometric access control to be covered with CCTV camera to control and monitor persons entering and exiting SAPS premises.
- All hinges to be concealed, not to be exposed for tampering.
- All fire and emergency exit doors to comply the fire regulations in SANS 10400, Part T and clearly marked with fire signage.

Community Service Centre (CSC) entrance/ exit door

The entrance/ exit to the CSC must be secured to the following minimum specifications:

- The entrance to the CSC must consist of an aluminium double leaf swing door with glazing panels and high security cylinder lock.
- Manufacturer to supply design of doors for approval before installation.
- Aluminium glass doors must be in compliance with **SANS 1263:2006** part 1 (Human Impact) and fitted with a minimum 5 lever, double cylinder lockset for manual locking abilities.
- The said entrance must consist of one way glass to prevent people from identifying police officials on the inside during night time.

- The entrance to the operational area behind the service counter in the CSC must be controlled with physical security barriers.
- The foyer and counter area must be monitored with CCTV cameras.
- The entrance/ exit door to the CSC must be included in the SOP determining under which emergency situation it can be closed off.

2 GUARD KIOSK (New construction) See Annexure 2

General

Room size as indicated on an approved needs assessment.

In order to construct a guard kiosk, the police station should ideally be declared a *firearm free zone* in terms of the FIREARMS CONTROL ACT, 2000 - Firearms Control Regulations, 2004. Refer to clause 109. (Refer to the act in terms of application requirements).

The identified police station should ideally be an explosive, firearm, knife and weapon free zone for members of the public. Last mentioned will be required to be handed in at the security kiosk using a register and receipt system, prior to a member of public entering the premises.

Fire arms and ammunitions intended for destruction will be received by the relevant DPO officer at the security kiosk for further processing.

One male and one female police officer will attend the security kiosk in order to exercise access and security control, fire arm and other weapons control as well as frisking of individuals if required.

Where a guard kiosk is constructed at an existing police station, the aesthetics of the new structure shall match and tie-in with the existing structures on the premises, without jeopardising the integrity of security characteristics. Only conventional constructed structures shall be used.

2.1 Construction

Foundations to be a minimum 600 x 230mm concrete strip foundations (3:3:1 mix ratio @ 30 Mpa) with the top surface of the foundation 340mm minimum below the natural ground level, for stable soil conditions. Where suspect soil conditions exist, a qualified and registered *structural engineer* must be appointed to design a suitable foundation.

Plinth walls to be constructed of a burnt clay brick, laid in stretcher bond brick laying pattern, with wire mesh brick reinforcing in every consecutive brick layer from foundation up to floor screed height.

External walls to be constructed of a satin finish face brick, laid in stretcher bond brick laying pattern, with wire mesh brick reinforcing in every fifth consecutive brick layer, with recessed mortar joints. All joints between bricks to be properly filled with mortar. All corners to be properly tied-in with overlapping brick work.

External wall to be in accordance with SANS 10400 Part T to comply with all fire protection regulations.

Provide 600mm wide and 85mm thick in-situ casted **concrete apron** around the building with a 1:100 fall away from the building and 10mm soft board expansion joints at centres not exceeding 1000mm. Finish with a wood trowel and rounded stroke tool to front edges.

Internal walls to be constructed of a burnt clay brick, laid in stretcher bond brick laying pattern, with wire mesh brick reinforcing in every fourth consecutive brick layer. All joints between bricks to be properly filled with mortar. All corners to be properly tied-in with overlapping brick work. Walls to be finished with a 20mm thick cement plaster finished with a steel trowel and covered with 2 x coats Acrylic base PVA paint in light colour (Beige etc.) on a suitable universal primer paint.

Ceiling to be 170mm minimum thick reinforced concrete slab as specified by registered *structural engineer*, finished on the underside with 20mm thick cement plaster, finished with a steel trowel and covered with 2 x coats Acrylic base PVA paint in colour: White on a suitable universal primer paint.

Floor to ceiling height to be minimum 2720mm (32 brick layers).

Roof construction and covering to match the roof of the existing/ main buildings on site as per *architect's* specifications.

Floor to be 25mm steel trowel floated cement screed on top of 85mm thick *in-situ* casted concrete surface bed (3:3:1 mix ratio @ 30 Mpa) with (Code 193) 200 x 200 x 5.6mm diameter mild steel mesh reinforcing, on top of hard core filling material compacted in layers not exceeding 150mm. Cement screed to be finished with first grade porcelain tiles with 100mm high tiled floor skirting to surround walls.

Street facing window to be 35mm thick ballistic glass by an approved supplier with natural anodized frame as per manufacturer's details. Provide for the window to be tinted to reduce vision from the outside.

Reception window to be 35mm thick ballistic glass with 75mm diameter communication hole at 1600mm high from floor by an approved supplier with natural anodized frame as per manufacturers details and specifications. Window to be installed on top of countertop. Provide for the window to be tinted to reduce vision from the outside.

Window within the SAPS perimeter to be 6mm thick laminated safety glass by an approved supplier with natural anodized frame as per manufacturer's details. Provide for the window to be tinted to reduce vision from the outside. Provide burglar proofing as per detail on Annexure 10.

External window sills to be face brick on edge with smooth stroked mortar joints and 25 mm minimum overhang and SABS approved damp proof course sheeting.

Internal window sills to be 152 x 12 mm fibre cement finished with 2 x coats Acrylic PVA paint on 1 x coat universal primer paint in colour as specified by *architect*.

External doors and door frames as per *architect's* specifications.

Internal doors and door frames as per *architect's* specifications.

Sanitary fittings as specified by *architect* with a SABS minimum product quality standard.

Wall mounted safes for hand guns with a SABS minimum product quality standard and as approved by SAPS Supply Chain Management Division, to be mounted against the guard kiosk internal wall.

Slider tray to be 660mm(L) x 440mm(W) x 330mm(D) movable 304 stainless steel transfer drawer with 3 locking position. Built into counter. Top of counter at 1020mm high. Tray to be installed in accordance with manufacturer's details and specifications.

Wall mounted bullet trap to be mounted to pedestrian passage wall to at 750mm high to accommodate all commercial calibre fire arms. Product also to meet SABS minimum product quality standards.

Internal guard kiosk countertops to be 30mm – 35mm thick Rustenburg swart granite counter tops on mild steel frame at 750mm high with 50mmØ hole for cabling. Refer to Annexure 7.

Reception countertop to be Rustenburg swart granite counter top with transfer tray. Cut size of transfer tray as per manufacturer's details and specifications. Top of counter at 1020mm high. Underside of reception counter to be built closed with single brick wall after the installation of the transfer tray.

Fire extinguisher to be 4,5kg DCP.

Panic button to be installed at the guard kiosk and linked with the CSC to notify staff on duty of any emergency at the guard kiosk. The panic button will consist of:

- Two buttons at the guard kiosk, one on the external wall by the entrance door of the guard kiosk and one on the inside next to the entrance door of the kiosk.
- One strobe siren installed in the CSC.

The complete system to be designed, supplied and installed by TMS. The contractor to allow sufficient conduits for the connection between the guard kiosk and the CSC.

Security Camera to be installed within the guard kiosk. A ceiling mounted wide angle dome IP camera with smoke glass cover (or as per latest TMS specifications) to be installed to the underside of the guard kiosk ceiling. The camera to be installed to have all areas of the kiosk visible.

The complete system to be designed, supplied and installed by *TMS*. The contractor to allow sufficient conduits for the connection between the guard kiosk and the *CSC*.

3 MECHANICAL

ROOM TYPE AIR CONDITIONERS - AIR COOLED

3.1 General

Mechanical ventilation to be provided in accordance with *mechanical engineer's* specifications.

Room type air conditioners shall be completely self-contained units of the direct expansion unitary or split type design, air-cooled.

The air conditioners shall generally be in accordance with *SABS 1125-1977* with sound levels not exceeding the values specified in the Supplementary Specification and/or this Standard Specification as applicable.

Room air side shall be equipped with a suitable and easily accessible filter, two speed fan, adjustable directional air discharge grille, adjustable outside air intake damper, control thermostat, electric heating elements (if not specified as reverse cycle heating) (where applicable), drain pan and drain piping, cooling coil, controls and control panel and complete wiring, including interlocking with outdoor unit.

The outdoor unit shall contain the matching compressor unit, air-cooled condenser, condenser fan within a waterproof painted and corrosion protected casing.

The indoor/outdoor units shall be interconnected with refrigerant piping (separately insulated suction and delivery piping for reverse cycle units), electric wiring and interlocking control cabling.

Where visible and/or exposed to the weather or possible mechanical damage refrigerant piping and cabling shall be run inside galvanised sheet steel trunking, neatly erected and painted as specified.

Where applicable provision shall be made in the unit design to re-evaporate condensate from the condenser.

Provision shall however be made in all cases for the drainage of excessive condensate to the nearest building drain by means of copper or *uPVC* tubing not less than 18mmØ.

For reverse cycle heating units, including split type units, a proper drip pan with drainage piping as above shall be provided for the outdoor units where dripping can create unacceptable conditions.

Where drainage piping is required to be installed flush mounted, positioning and chasing shall be done in good time to meet construction programmes.

Drainage to points other than a proper building drain shall comply with *SABS O400*.

All panels shall be neat fitting with hardwearing exposed surfaces of baked enamel or equal finish of approved colour.

Electrical interlocking shall be provided to ensure that;

- Compressor cannot run without both indoor and outdoor fans running,
- No electric heating of areas- use air/con/heat pump units (only standby elements).
- It shall not be possible to switch cooling and heating on simultaneously.

Unless otherwise specified in the Supplementary Specification room type air conditioners in the cooling mode shall be rated at 35°C ambient dry bulb air temperature on to the condenser, 27°C dry bulb and 19°C wet bulb air entering conditions to evaporator, all at sea level with the cooling capacities specified at these conditions. For reverse cycle heating the rating shall be based on 7°C ambient dry bulb and 6°C wet bulb air on to the outdoor coil with 21°C dry bulb air on to the indoor coil.

Unless otherwise detailed on the drawings or in the Supplementary Specification units installed through a wall shall be installed with a sub frame built in to the wall (hardwood or steel) and neat finishing architraves inside and outside. The external architrave shall be of aluminium angle and shall be mitred at corners and shall cover the sub frame and opening completely. The architrave and sub frame surround shall be sealed with clear silicone sealant.

3.2 Unit Types

Split Type Units

Split type units shall consist of a direct expansion indoor fan coil unit and a separate (remote) externally located air-cooled condensing unit.

The indoor fan coil unit shall be floor-mounted, wall mounted, under-ceiling mounted, and ceiling cassette mounted or above ceiling ducted type as specified. Above ceiling units shall be properly insulated, particularly where exposed to high roof or lighting heat loads.

No remote control units are allowed for air conditioners units. Hard wired fixed control units to be supplied / or remote fixed with cable to holder on wall.

All conduit and draw boxes shall be installed flush in the walls or partitions. Surface mounted wiring in trunking or the like will only be accepted if specified as such.

No joints will be allowed in the control wiring.

Suction lines shall be insulated as specified. Suction and delivering lines may not be insulated grouped together as for a single line. Vapour barrier integrity will be critical to prevent dripping.

Gas piping (insulated as specified) and wiring shall be installed in galvanised steel trunking throughout for protection, painted as specified where exposed or visible.

Outdoor units shall be installed on raised plinths or where wall mounted on unistrut or approved galvanised steel brackets, properly braced and fixed.

Refrigerant piping shall be sized and fitted with the necessary oil traps strictly in accordance with the manufacturer's requirements.

4 ELECTRICAL

Guard kiosk electrical requirements
See annexure 3

4.1 Internal lighting

Paraplegic walkway shall have 2 x 10 Watt Beka Series 21 luminaires fitted to the underside of the ceiling.

Main pedestrian walkway shall have 2 x 600mm x 600mm, 30 Watt Beka Dari luminaires with surface mount bracket fixed to the underside of the ceiling.

Guard kiosk shall have 2 x 600mm x 600mm, 30 Watt Beka Dari luminaires with pre-set dimmable capability and surface mount frames fixed to the underside of the ceiling.

Toilet shall have 1 x 10 Watt Beka Series 21 luminaire fitted to the underside of the ceiling. The toilet light will be activated/deactivated by means of a dual type occupancy detector.

4.2 External lighting

Guard kiosk shall be supplied with 3 x 20 Watt Beka Series 21 luminaires fitted to the respective external walls at 2300mm high. The lights shall be connected to an external photocell switch.

External façade at main pedestrian access gate shall be supplied with 1 x 19 Watt wall mounted Zela LED luminaire, the luminaire shall be the SAPS version. The SAPS version has a blue protector for the specific purpose of indicating the public entrance to the premises to passers-by. The luminaire shall be supplied with wall mounted bracket and available with internal photocell.

All luminaires to be connected to emergency power supply.

4.3 Plugs

Power skirting shall be supplied above the general counter top with the following points:

- 3 x Emergency plug points
- 2 x Normal plug points
- 1 x Network point
- 1 x Telephone point

Wall plug at 300mm A.F.F.L shall be supplied within the guard kiosk. Only 1 x plug to be supplied.

4.4 Distribution board

The guard kiosk shall be supplied with two distribution boards. The one distribution board shall be for normal municipal electricity supply and the second distribution board shall be for emergency electricity supply.

4.5 Manhole

Provide the guard kiosk with a manhole at the external area closest to the distribution board on the inside for the purpose of providing the kiosk with the following from the main building:

- Data line
- Telephone line
- Access control
- Electricity

Provide that the manhole shall be supplied with 2 x 110mmØ Nextube sleeves for the cables from the main building.

5 Pedestrian Access

See Annexure 2

Walk through multi scanner shall be of high performance and be able to detect any metal items. The metal detector shall be waterproof with strong anti-interference for indoor and outdoor use.

General specification:

- 2100mm(H) x 850mm(opening)
- Adjustable zone sensitivity
- Waterproof
- High quality finishing material for high traffic areas
- Adjustable width

Turnstile gate shall be installed at the pedestrian entrance of the kiosk and will consist of 2 x turn style gates (Refer to annexure 2), gates to have outside dimensions of 1400mm (W) x 2125mm (H). The gate shall be a 3 arm rotary gate with 32mm diameter U-tube arms spaced 165mm apart. The finish of the gate to be 316 grade brushed stainless steel.

The turnstile gate shall have the following included:

- Access control reader mounting position for biometrics
- Mechanical key override
- Anti-Trap safety system
- Manually lockable

Security Camera to be installed to the underside of the walkway ceiling, above the turnstile gate as indicated on Annexure 3. A ceiling mounted wide angle dome IP camera with smoke glass cover (or as per latest TMS specifications) to be installed. The camera to be installed to have visibility to the main pedestrian access gate.

The complete system to be designed, supplied and installed by TMS. The contractor to allow sufficient conduits for the connection between the guard kiosk and the CSC.

6 Paraplegic
See Annexure 2

A paraplegic access gate shall be provided as the opening of a turnstile gate will not be sufficient for access with a wheelchair. The access gate shall be manufactured from the same materials used for perimeter fencing on street boundaries. Gate opening to be 1200mm minimum wide. Provide an electronic magnetic locking system controlled from the kiosk with the option of a manual heavy duty padlock lock in case of emergencies. Gate to be fitted with self-closing mechanism for optimal security.

Paraplegic access gate shall be controlled from the guard kiosk by means of an intercom system.

Intercom system shall be an industrial/ robust type system with a brushed aluminium casing, the system shall consist of the following:

- One way camera control from kiosk. The external unit shall have a camera fitted within the unit with a *LCD* screen at the kiosk for visual identification.
- 2 Way voice communication.
- Control unit to be installed and controlled within the guard kiosk.
- Control unit to be installed in the CSC if no kiosk are provided at the police station.
- Control unit at guard kiosk to have expandable function to operate motorized gate together with the pedestrian gate.
- The intercom unit at the pedestrian gate shall have a call button with voice communication abilities to the guard kiosk.

7 Vehicle access gates
See Annexure 1 & 9

A motorized sliding gate to be provided for vehicle access with a minimum width of 5000mm. The access gate shall be manufactured from the same materials used for perimeter fencing on street boundaries. Gate to be the same height as the perimeter fence with minimum 600mm high galvanized high tensile steel flat wrap razor wire on top of gate to achieve a minimum total height of 3000mm. Provide that the gate must be lockable with a heavy duty padlock from inside the premises. Gate to be fitted with 80mmØ industrial type V-Wheel. Addition wheels to be fitted to gate when exceeding the gate weight of 1100kg. The track for the gate shall consist of:

- 152 x 152mm Mild steel H-Section beam cast in reinforced concrete foundation.
- The mild steel H-Section beam to be levelled prior to casting the beam in concrete.
- 20 x 3mm Mild steel flat bar lugs to be welded along the length of the beam at maximum 600mm c/c. Lugs to be cut minimum 150mm lengths.
- 20mmØ Mild steel solid round bar welded on top of mild steel H-Section beam to ease opening the gate manually and take strain off gate motor..

Sliding gate motor shall be an industrial type motor to withstand weight of a 1000kg gate, daily operation of 750 opening and closing cycles with battery backup.

Provide a 220mm face brick wall 2460mm (H) x 1200mm (W) at the side of the gate motor. An isolator box, with sliding panel to be built into wall for all connect to and from

the gate motor. The wall shall also provide security to the motor to prevent any tampering. Refer to Annexure 9 for complete specifications.

A combination of access controlled booms and spikes must be installed at the vehicle entrances.

Intercom system at vehicle entrance gate shall be an industrial/ robust type system with a brushed aluminium casing, the system shall consist of the following:

- One way camera control from kiosk. The external unit shall have a camera fitted within the unit with a *LCD* screen at the kiosk for visual identification.
- 2 Way voice communication.
- Control unit to be installed and controlled within the guard kiosk.
- Control unit to be installed in the CSC if no kiosk are provided at the police station.
- Control unit at guard kiosk to have expandable function to operate motorized gate together with the pedestrian gate.
- The intercom unit at the pedestrian gate shall have a call button with voice communication abilities to the guard kiosk.

8 Signage **See Annexure 8**

Provide an 1100 x 1100mm square photographically etched *SAPS CREST* emblem against the brickwork boundary wall adjacent to the pedestrian entrance. Crest to be fixed against wall with chemical bond (Epoxy) and masonry anchors (Rawl bolts).

The name of the station as well as "*SAPS*" to be fixed against the same wall under the crest with chemical bond (Epoxy) and pins, flush to brick surface. Lettering to be laser cut from 3 mm thick aluminium and finished with baked enamel in colour: White. Letter to be 150mm high.

9 Flag poles **See Annexure 5 & 6**

Two (x2) ground mounted swivel flagpoles manufactured from aluminium to be supplied at a police station inside the premises and in close proximity of the main public (pedestrian) entrance, with specifications as follows:

- Total height to be 9000mm.
- 4.2 mm wall thickness for top 4000mm pipe section.
- 4.2 mm wall thickness for bottom 5000mm pipe section.
- Two aluminium channels 201mm x 50mm x 8mm thick, complete with each 9000mm swivel flagpole footing.
- All material to be aluminium allo 6061T guaranteed except pulleys, ropes and bolts and nuts.

- The following items must be included and supplied with the aluminium 9000mm flag pole:
 - Aluminium caps and cleats.
 - 5mm Nylon ropes in colour: White.
 - Galvanised pulleys, bolts and nuts.
 - All requirements must function as a unit.

Minimum safety distance:

- Flag poles to be minimum 1000mm from any boundary wall.
- Flag poles to be minimum 2000mm from any ground floor build and 3000mm from any multi storey building.
- The minimum distance between two flag poles to be 3000mm.

10 Annexures

Annexure 1	-	Schematic Site Plan
Annexure 2	-	Guard Kiosk: Floor Plan, Section & Elevation
Annexure 3	-	Guard Kiosk: Electrical Plan
Annexure 4	-	Boundary Wall Detail
Annexure 5	-	Flagpole Details & Specifications
Annexure 6	-	Flagpole Safety Distances
Annexure 7	-	Counter Detail
Annexure 8	-	Signage Wall Detail & Specifications
Annexure 9	-	Vehicle Access Gate Detail
Annexure 10	-	Burglar Proofing Detail
Annexure 11	-	Grenade Screen Detail
Annexure 12	-	Perimeter Fence Detail 1
Annexure 13	-	Perimeter Fence Detail 2
Annexure 14	-	Window Schedule
Annexure 15	-	Fire Arm Legislative Signage (Pending legal services)

11 Definitions

AFFL

Above finished floor level

Agrément Certificate

Argrement South Africa is an independent organisation that evaluates the fitness for the purpose of non-standardised building and construction products and systems by applying performance based criteria in its assessment procedure.

Architect

A professional architect registered in terms of the Architectural Profession Act 2000 (Act No. 44 of 2000)

AZ150 Coating

AZ150 indicates the coat weight of 150g/m² per double side.

Building professional

A qualified Architect, Electrical Engineer, Mechanical Engineer, Civil/Structural Engineer or Quantity Surveyor who is registered in terms of the relevant professions act.

CCTV

Closed circuit television

C/C

Centre to Centre

CSC

Community service centre

Fire engineer

A professional fire engineer registered with the *Fire Engineer Association of South Africa* (FEASA) as well as the *Engineering Council of South Africa* (ECSA), capable of performing rational fire safety design within the built environment.

DPO

Data Protection Officer

GRP

Glass Fibre Reinforced

Heritage building

A building older than 60 years with significant historical value, protected under the National Heritage Resources Act (No. 25 of 1999).

'In-situ'

On site

IP

Ingress Protection

LCD

Liquid Crystal Display

LED

Light - Emitting Diode

Mechanical engineer

A professional Mechanical engineer registered in terms of the Engineering Profession Act 2000 (Act No. 46 of 2000)

Mpa

Mega pascal – Unit to measure pressure ranges and ratings of hydraulic systems.

PVC

Polyvinyl Acrylic

SAHRA

The *South African Heritage Resources Agency* is a statutory organization established in terms of the National Heritage Resources Act (No. 25 of 1999) as the national body responsible for the protection of South Africa's cultural heritage resources, represented through provincial offices.

SABS

South African Bureau of Standards

SANS

South African National Standards

SAPS

South African Police Service

Structural engineer

A professional Structural engineer registered in terms of the Engineering Profession Act 2000 (Act No. 46 of 2000)

TMS

Technical Management Services Division of the South African Police Service

uPVC

Unplasticized Polyvinyl Chloride

Watt

Unit of measuring power, equivalent to one joule per second, corresponding to the rate of consumption of energy in an electrical circuit.

12 Legislation

- **SANS 10400**
Compliance with the requirements of the SANS 10400 document will be deemed to be compliance with the requirements of part A of the National Building Regulations, issued in terms of the National Building Regulations and Building Standards Act, 1977 (Act No. 103 of 1977).
- Occupational Health and Safety Act, 1993, (Act No. 85 of 1993)
- National Heritage Resources Act, 1999 (Act No. 25 of 1999)
- National Heritage Council Act, 1999 (Act No.11 of 1999)
- Public Finance Management Act, 1999 (Act No 1 of 1999) and updated April 2010.
- Local municipal bye-laws.
- Firearms Control Act, 2000 & Firearms Control Regulations, 2004.

13 Pest control

Proper measures should be taken at all SAPS facilities to effectively control pests such as pigeons, rodents and insects, all in accordance with the Occupational Health and Safety Act, 1993, (Act No. 85 of 1993).

14 General

The written and drawn specifications captured inside this document shall under no circumstances be used for construction purposes, but only serves as a minimum standards specification guideline.

The designs for alterations to existing structures and construction of new accommodation and the preparation of municipal drawings, construction drawings and specification documents, shall be executed by a registered *building professional* such as an *architect* in compliance with the above mentioned legislative requirements and minimum standards guidelines.

Building plans shall be submitted to the local municipality for approval, prior to commencing with construction.

Construction to be overseen by the relevant appointed *building professionals*.

Alterations and additions to buildings older than 60 years (Heritage buildings), should be referred to the *South African Heritage Resources Agency (SAHRA)* in order to determine if additional regulations are applicable for the intended development.

15 Enquiries & approval

Enquiries related to the content of this document may be forwarded to:

The Divisional Commissioner
Supply Chain Management
Private Bag X 254
Pretoria 0001
SOUTH AFRICAN POLICE SERVICE

Section: Programme and Project Management
Acacia Building
Persequor Techno Office Park
18 De Havilland Crescent
Lynnwood Manor Pretoria

**MINIMUM BUILDING CONSTRUCTION STANDARDS: SOUTH AFRICAN POLICE
SERVICE: PERIMETER SECURITY AT POLICE STATIONS: APPROVAL AND
ACCEPTANCE**

BRIGADIER
SECTION HEAD: PROGRAMME AND PROJECT MANAGEMENT
C JUGGADESAN

Date:

MAJOR GENERAL
COMPONENT HEAD: FACILITY MANAGEMENT
CT SITHOLE

Date:

LIEUTENANT GENERAL
DIVISIONAL COMMISSIONER: SUPPLY CHAIN MANAGEMENT
RJ MOKWENA

Date:

LIEUTENANT GENERAL
DEPUTY NATIONAL COMMISSIONER: SOUTH AFRICAN POLICE SERVICE
FN VUMA

Date:

**MINIMUM BUILDING CONSTRUCTION STANDARDS: SOUTH AFRICAN POLICE
SERVICE: PERIMETER SECURITY AT POLICE STATIONS: APPROVAL AND
ACCEPTANCE**

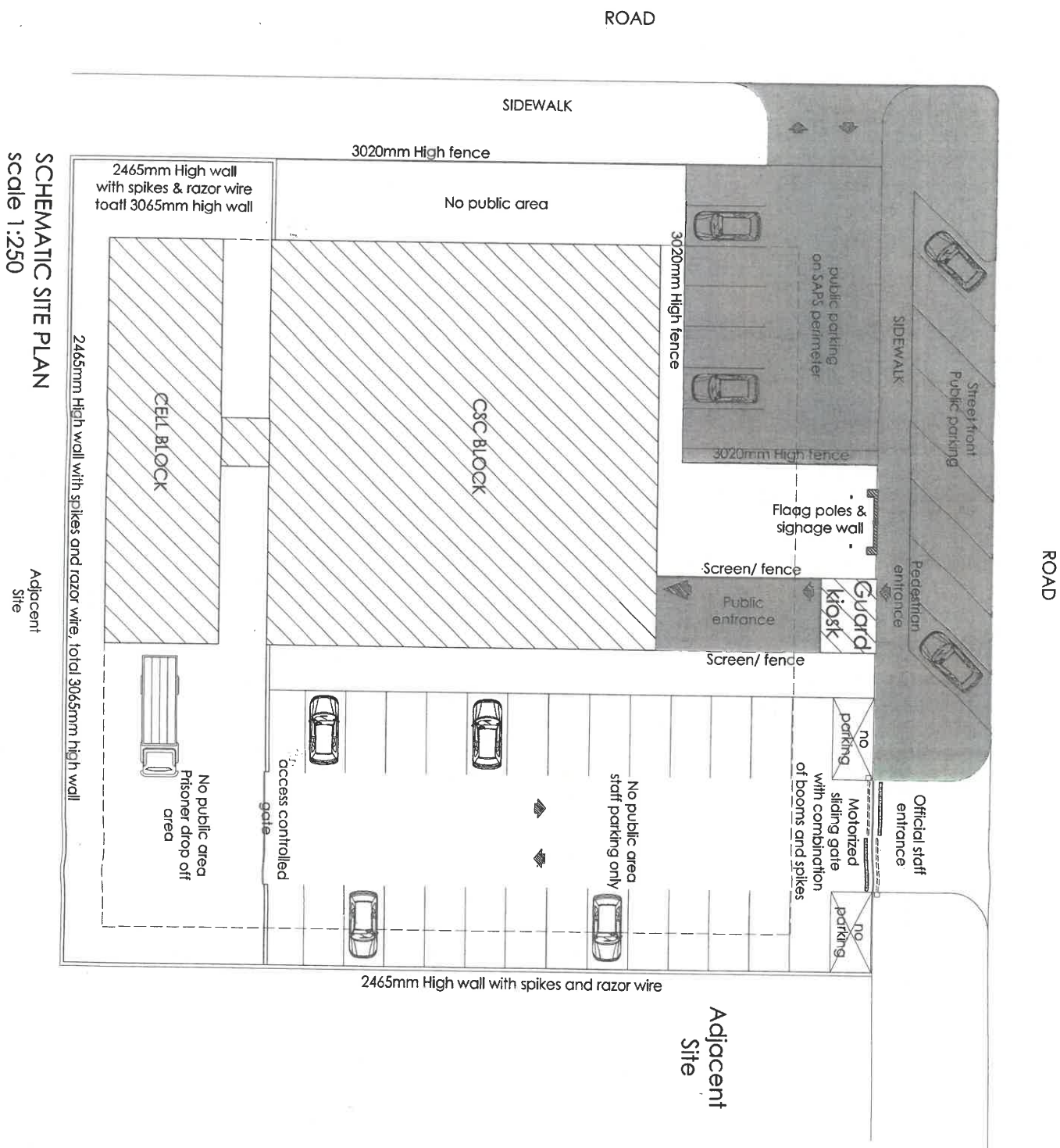
GENERAL
NATIONAL COMMISSIONER: SOUTH AFRICAN POLICE SERVICE
KJ SITOLE

Date:

Public area

PERIMETER LIGHTING TO BE SITE SPECIFIC. REFER TO WRITTEN DOCUMENT: MINIMUM SECURITY STANDARDS: PERIMETER SECURITY AT POLICE STATIONS FOR COMPLETE SPECIFICATION.

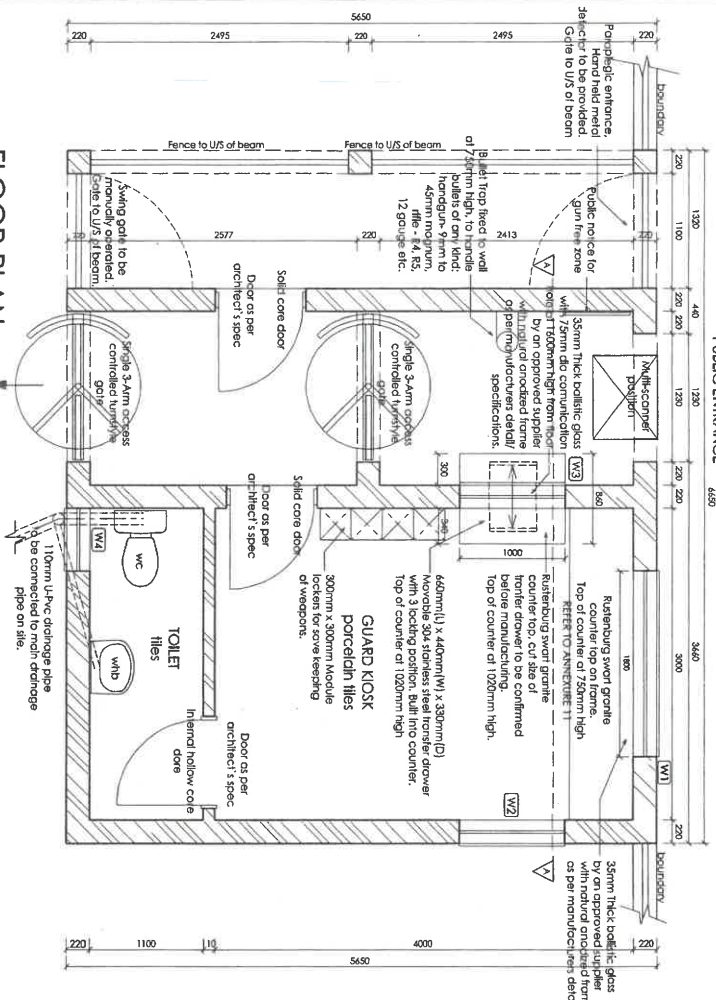
CCTV ALONG THE PERIMETER OF THE SITE TO BE ALOCATED AND SPECIFIED BY TMS.



SCHEMATIC SITE PLAN
scale 1:250

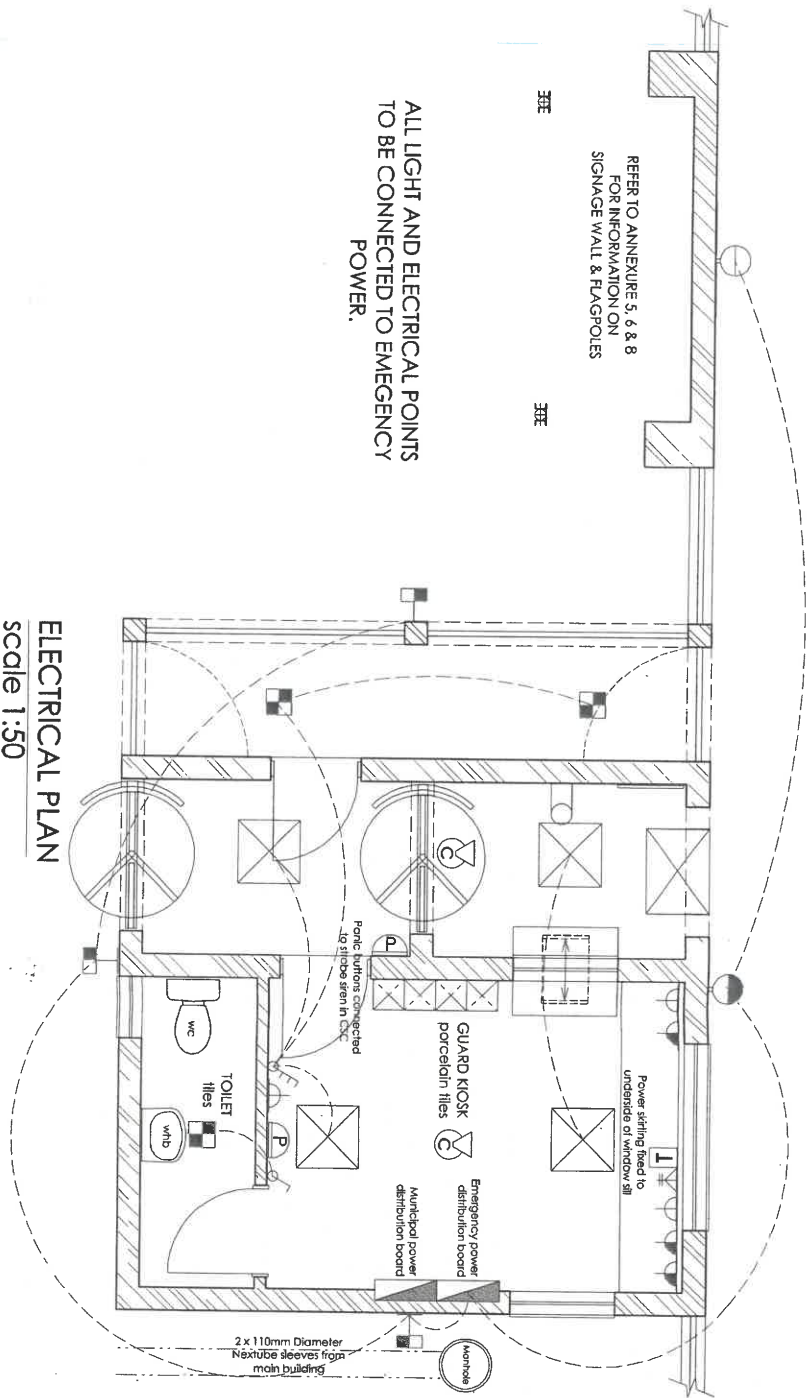
Adjacent
Site

Adjacent
Site

[illegible][illegible]

170mm thick reinforced concrete slab, under side to be skimmed and painted.

PERIMETER LIGHTING TO BE
SITE SPECIFIC. REFER TO WRITTEN
DOCUMENT: MINIMUM SECURITY
STANDARDS: PERIMETER SECURITY
AT POLICE STATIONS FOR COMPLETE
SPECIFICATION.



SMB	LEGEND
	Distribution board position
	600 x 600 35Watt Beka Doni Luminaire Ceiling Mounted
	Series 21-Beka 10Watt Luminaire Ceiling Mounted
	Series 21-Beka 20Watt Luminaire External wall Mounted
	37Watt external wall mounted cool white Zela LED luminaire
	19Watt external wall mounted Blue SAPS version Zela LED luminaire
	Emergency power, single 220V power socket
	Normal municipal power, single 220V power socket
	Network/ DATA point
	Telephone point
	Single lever light switch
	Two lever light switch
	Security camera
	Panic button

[illegible]

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-galvanised spikes fixed to top of wall

Brick on edge coping

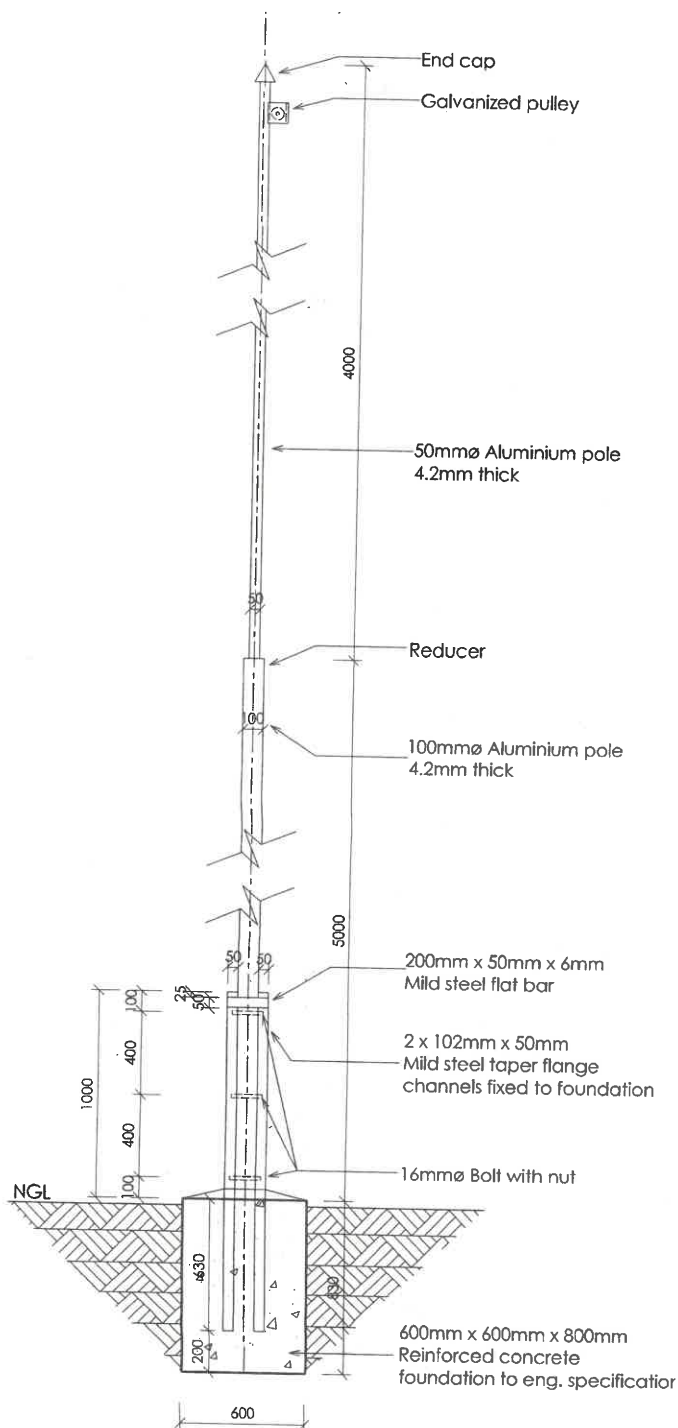
2465mm High boundary wall with security spikes in accordance with SANS 10400 Part K, Table 17. Piers to be 660 x 440mm space max. 3200mm c/c

2465
2356

NGL

3200mm Max

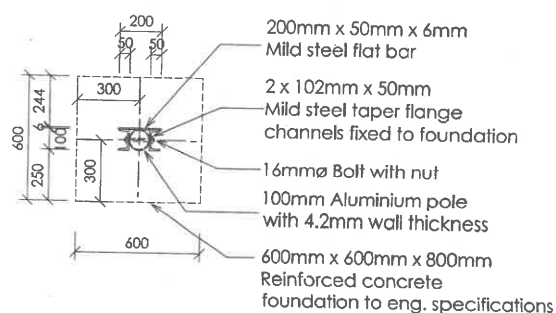
Technical drawing of a wall section detail. The drawing shows a cross-section of a wall with a total height of 3200mm. The wall is composed of a 2465mm high boundary wall with security spikes, and a brick on edge coping. The wall is labeled "WALL SECTION DETAIL". Dimensions are indicated: 440mm for the top and bottom sections, 220mm for the top section, 660mm for the middle section, and 3200mm for the total height. The wall is labeled "Neighboring side" and "Brick on edge coping". The wall is also labeled "SAPS side". The wall is labeled "Movement joint".



ELEVATION
scale 1:25

Aluminium ground mounted swivel flagpole:

- Total height of aluminium flagpole: 9m
- 4.2mm Wall thickness for top 4 m
- 4.2mm Wall thickness for bottom 5m
- Two aluminium channels 102mm x 50mm 8mm thick complete for each 9m swivel flagpole footing.
- All material to be aluminium allo 6061T guaranteed, except pulleys, ropes, bolts and nuts
- The following items must be included and supplied with 9m flagpole:
Aluminium caps and cleats
5mm Nylon ropes: white
Galvanized pulleys, bolts and nuts



PLAN
scale 1:25