

**SPECIFICATION FOR ALTERNATIVE BUILDING METHOD  
(PRE-MANUFACTURED PANELS ASSEMBLED ON SITE)  
DATE: 17-10-2019 REV: 00**

**SPEC 32242/19**

NR	REQUIREMENT	PARTICULARS OF BID	
STATE UNDER PARTICULARS OF BID AGAINST EACH REQUIREMENT WHETHER THE BIDDER COMPLY OR DO NOT COMPLY WITH THE REQUIREMENT OF THE SPECIFICATION		COMPLY	DO NOT COMPLY
3.6.2.4	All door frames to be manufactured from minimum 3mm thick natural anodised aluminium to fit the opening for the door.		
3.6.2.5	All locks on doors to be at least 3 lever locks. Double doors to be provided with stay latch at the top of the door.  State: Type of locks .....		
3.6.2.6	All doors to be supplied with minimum 3 hinges, 1 x at the top of door, 1 x at the bottom of door and 1 x in the centre of the door.		
3.6.2.7	All doors to be fitted with appropriate heavy-duty aluminium door handle and cover over lock.		
3.6.2.8	All external door openings to be fitted with Galvanized mild steel burglar swing gates as per the attached annexure for burglar proofing. The swing gate to be supplied with heavy duty locking mechanism. The double door gates will consist of two swing gates, one gate to have a stay to lock one gate in place.		
3.7	<b><u>WINDOWS:</u></b>		
3.7.1	<b><u>Window type 1</u></b>		
3.7.1.1	All window frames to be of natural anodized aluminium with minimum 6mm thick safety glass.		
3.7.1.2	All window glazing to comply with SANS 10400 (bathroom windows to be frosted or obscure glass panels).		

SIGNATURE:  
BIDDER .....

DATE :.....PAGE 16 OF 51

151

**SPECIFICATION FOR ALTERNATIVE BUILDING METHOD  
(PRE-MANUFACTURED PANELS ASSEMBLED ON SITE)  
DATE: 17-10-2019 REV: 00**

**SPEC 32242/19**

NR	REQUIREMENT	PARTICULARS OF BID	
STATE UNDER PARTICULARS OF BID AGAINST EACH REQUIREMENT WHETHER THE BIDDER COMPLY OR DO NOT COMPLY WITH THE REQUIREMENT OF THE SPECIFICATION		COMPLY	DO NOT COMPLY
3.7.1.3	The window area in all habitable rooms must be at least 10% of gross floor area and not more than 15% of the total floor area as per SANS10400.		
3.7.1.4	All windows to be fitted with burglar guards on inside of all openable windows (maximum dimensions 150 mm X 200 mm of openings). If windows are not supplied with standard burglar bar from manufacturer, please refer to annexure B for standard burglar proofing specification.		
3.7.1.5	All windows to be fitted with vertical blinds with tracks.		
3.7.1.6	The contactor shall supply the client, SAPS, with a glazing certificate upon final completion of the project.		
3.7.2	<b><u>Window type 2: Cell windows</u></b>		
3.7.2.1	Cell block window frames must be hot dipped galvanised mild steel frames. Frame to consist of expanded mild steel mesh and burglar bars as per spec.		
3.7.2.2	Minimum 6mm thick wired glass to be installed.  Alternative product suggested by contractor: ..... .....		
3.7.2.3	All windows to be fitted with burglar guards on inside of all openable windows (maximum dimensions 150 mm X 200 mm of openings). Window to be fitted with expanded mild steel mesh for detainees not to reach the glass.		
3.7.2.4	The contactor shall supply the client, SAPS, with a glazing certificate upon final completion of the project.		
3.2	<b><u>Floors:</u></b>		

SIGNATURE:

BIDDER ..... DATE :.....PAGE 17 OF 51

**152**

**SPECIFICATION FOR ALTERNATIVE BUILDING METHOD  
(PRE-MANUFACTURED PANELS ASSEMBLED ON SITE)  
DATE: 17-10-2019 REV: 00**

**SPEC 32242/19**

NR	REQUIREMENT	PARTICULARS OF BID	
STATE UNDER PARTICULARS OF BID AGAINST EACH REQUIREMENT WHETHER THE BIDDER COMPLY OR DO NOT COMPLY WITH THE REQUIREMENT OF THE SPECIFICATION		COMPLY	DO NOT COMPLY
3.2.1	The internal floor of the unit will be constructed from 25mm thick cement screed on top of the concrete surface bed after the installation of the wall panels.		
3.2.2	The threshold of the door and the finished floor level be flush without any step into the building. The floor height difference between the aprons will be minimum 85mm to prevent any water damage. The landing of the ramp will be level with the internal floor level of the unit.		
3.2.3	The 1000mm apron around the building will have a 1:40 fall away from the building/ structure. The apron shall have a wood float finish to prevent slipping.		
3.2.4	<p>The floor finish shall be minimum 4mm thick continues PVC flooring (no vinyl tiles) with high wearing resistant, non-slip and stain resistant. Samples of the flooring material to be provided to the client (SAPS) architect prior to installation on the floor surface.</p> <p>Alternative floor finish spec by contractor:</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p>		
3.3	<b><u>Ramps:</u></b>		

SIGNATURE:  
BIDDER .....

DATE : .....PAGE 18 OF 51

**153**

**SPECIFICATION FOR ALTERNATIVE BUILDING METHOD  
(PRE-MANUFACTURED PANELS ASSEMBLED ON SITE)  
DATE: 17-10-2019 REV: 00**

**SPEC 32242/19**

NR	REQUIREMENT	PARTICULARS OF BID	
STATE UNDER PARTICULARS OF BID AGAINST EACH REQUIREMENT WHETHER THE BIDDER COMPLY OR DO NOT COMPLY WITH THE REQUIREMENT OF THE SPECIFICATION		COMPLY	DO NOT COMPLY
3.3.1	<p>Accessibility for the disabled to all units must be accessible via a ramp of a gradient not steeper than 1:10 if the rise is less than 400 mm and 1:12 for a rise exceeding 400 mm. A landing with a minimum size of 1200 mm x 1500 mm must be provided. (Where applicable)</p> <p>The ramp shall be constructed from concrete (25MPa) with wood float finish or in steel of chequered plate supported by a framework of adequate strength. All steel to be hot dip galvanized.</p>		
3.3.2	<p>The ramp shall have a hot dipped galvanised hand rail around the edge of the ramp and landing. The rail to consist of an industrial type guard rail with a top, middle and bottom rail space equally to be minimum 1100mm high with posts every 150mm minimum. The rail to be fixed to the ramp with a 50mm x 150mm x 5mm baseplate with appropriate bolts.</p> <p>The handrail to comply with the minimum requirements of SANS10400 for disabled access.</p> <p>Contractor to submit drawings of handrail prior to installation and manufacturing.</p> <p>Alternative handrail spec by contractor: ..... ..... ..... .....</p>		
4.	<b><u>BOUNDARY WALL &amp; FENCE:</u></b>		
4.1	<b><u>External clear zone:</u></b>		

SIGNATURE:  
BIDDER .....

DATE : .....PAGE 19 OF 51

**154**

**SPECIFICATION FOR ALTERNATIVE BUILDING METHOD  
(PRE-MANUFACTURED PANELS ASSEMBLED ON SITE)  
DATE: 17-10-2019 REV: 00**

**SPEC 32242/19**

NR	REQUIREMENT	PARTICULARS OF BID	
STATE UNDER PARTICULARS OF BID AGAINST EACH REQUIREMENT WHETHER THE BIDDER COMPLY OR DO NOT COMPLY WITH THE REQUIREMENT OF THE SPECIFICATION		COMPLY	DO NOT COMPLY
4.1.1	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.		
4.2	<b><u>Boundary Fence/ Wall Type 1: Around street boundary at entrance to CSC</u></b>		
4.2.1	Face brick wall to be 620mm high with brick on edge coping course with 2 layers of 1800mm high fencing panels, above wall, in accordance with Annexure "A". Top of fence to be completed at the top with 600mm high flat wrap razor wire to form a total fence height of minimum 3000mm from natural ground line. Materials must be as per Annexure "A"		
4.2.2	Fence to be supported with steel posts, maximum span to be 3390mm c/c between posts. Wall to be built in between posts below the fence panel as per Annexure "A". Post material to be in accordance with Annexure "A".		
4.2.3	Foundations and wall construction to be confirmed at approved by a registered professional structural engineer. Wall to be in accordance with minimum requirements of SANS 10400.		
4.3	<b><u>Boundary Fence/ Wall Type 2: Around street boundaries (Not facing CSC entrance)</u></b>		
4.3.1	Face brick wall to be 620mm high with brick on edge coping course with a single 1800mm high fencing panel, above wall, in accordance with Annexure "A". Top of fence to be completed at the top with 600mm high flat wrap razor wire to form a total fence height of minimum 3000mm from natural ground line. Materials must be as per Annexure "A"		

SIGNATURE:  
BIDDER .....

DATE : .....PAGE 20 OF 51

**155**

**SPECIFICATION FOR ALTERNATIVE BUILDING METHOD  
(PRE-MANUFACTURED PANELS ASSEMBLED ON SITE)  
DATE: 17-10-2019 REV: 00**

**SPEC 32242/19**

NR	REQUIREMENT	PARTICULARS OF BID	
STATE UNDER PARTICULARS OF BID AGAINST EACH REQUIREMENT WHETHER THE BIDDER COMPLY OR DO NOT COMPLY WITH THE REQUIREMENT OF THE SPECIFICATION		COMPLY	DO NOT COMPLY
4.3.2	Fence to be supported with steel posts, maximum span to be 3390mm c/c between posts. Wall to be built in between posts below the fence panel as per Annexure "A". Post material to be in accordance with Annexure "A".		
4.3.3	Foundations and wall construction to be confirmed at approved by a registered professional structural engineer. Wall to be in accordance with minimum requirements of SANS 10400.		
4.4	<b><u>Boundary Fence/ Wall Type 3: Boundaries to adjacent sites and holding facilities</u></b>		
4.4.1	Refer to Annexure "A" for full specification of the perimeter fence and walls. The bidder must price in accordance with the minimum requirements of Annexure "A".		
4.4.2	The wall will consist of: 2465mm high face brick wall with 600mm high flat wrap razor wire to have a minimum total height of 3000mm from natural ground level. Foundation wall to be minimum 340mm deep with total minimum depth of 570mm. Materials must be as per Annexure "A"		
4.4.3	Foundations and wall construction to be confirmed at approved by a registered professional structural engineer. Wall to be in accordance with minimum requirements of SANS 10400.		
4.5	<b><u>Boundary Fence/ Wall Type 3: Boundary signage wall at pedestrian entrance</u></b>		
4.5.1	Refer to Annexure "A" for full specification of the perimeter fence and walls. The bidder must price in accordance with the minimum requirements of Annexure "A".		

SIGNATURE:

BIDDER ..... DATE : .....PAGE 21 OF 51

**156**

**SPECIFICATION FOR ALTERNATIVE BUILDING METHOD  
(PRE-MANUFACTURED PANELS ASSEMBLED ON SITE)  
DATE: 17-10-2019 REV: 00**

**SPEC 32242/19**

NR	REQUIREMENT	PARTICULARS OF BID	
STATE UNDER PARTICULARS OF BID AGAINST EACH REQUIREMENT WHETHER THE BIDDER COMPLY OR DO NOT COMPLY WITH THE REQUIREMENT OF THE SPECIFICATION		COMPLY	DO NOT COMPLY
4.5.2	The wall will consist of: 2465 high face brick wall with 600mm high flat wrap razor wire to have a minimum total height of 3000mm from natural ground level. Foundation wall to be minimum 340mm deep with total minimum depth of 570mm. Wall to be built at main pedestrian access of the station.  Materials must be as per Annexure "A"		
4.5.3	Wall to be supplied with signage as per Annexure "D". Signage wall to be as close as possible to main pedestrian entrance.		
4.5.4	Foundations and wall construction to be confirmed at approved by a registered professional structural engineer. Wall to be in accordance with minimum requirements of SANS 10400.		
5.	<b><u>GATES:</u></b>		
5.1	<b><u>Pedestrian access gate:</u></b>		
5.1.1	The pedestrian gate shall be in accordance with the minimum requirements, sizes and materials of Annexure "A". The pedestrian gate shall be placed as close as possible to the entrance of the Community Service Centre's public access door and guard kiosk for access control.		
5.1.2	The pedestrian gate to be minimum 1200m wide x 2400mm high, constructed from the same material as the fence, with 600mm high flat wrap wire to match fence.		
5.2	<b><u>Vehicle access gate:</u></b>		
5.2.1	The vehicle access gate to be in accordance with the minimum requirements of Annexure "A".		

SIGNATURE:  
BIDDER .....

DATE :.....PAGE 22 OF 51

**157**

**SPECIFICATION FOR ALTERNATIVE BUILDING METHOD  
(PRE-MANUFACTURED PANELS ASSEMBLED ON SITE)  
DATE: 17-10-2019 REV: 00**

**SPEC 32242/19**

NR	REQUIREMENT	PARTICULARS OF BID	
STATE UNDER PARTICULARS OF BID AGAINST EACH REQUIREMENT WHETHER THE BIDDER COMPLY OR DO NOT COMPLY WITH THE REQUIREMENT OF THE SPECIFICATION		COMPLY	DO NOT COMPLY
5.2.2	The vehicle access gate to be minimum 5000mm wide x 2400mm high, constructed from the same material as per the boundary fence, with 600mm high flat wrap wire to match fence.		
5.3	<b><u>Intercom system:</u></b>		
5.3.1	Intercom system to be in accordance with the minimum requirements of Annexure "A" installed at the pedestrian gate and vehicle access gate.		
5.3.2	Contractor to include price for all cabling, conduit etc. to install the intercom system controlled from the Community Service Centre (CSC).		
6.	<b><u>WINDOW &amp; DOOR SECURITY:</u></b>		
6.1	<b><u>Burglar proofing:</u></b>		
6.1.1	Burglar proofing to be in accordance with the minimum requirements of Annexure "B". The burglar proofing shall be custom to fit various window sizes, contractor to supply a price per/m <sup>2</sup> of burglar proofing as per spec.		
6.1.2	Windows and doors that are not provided with standard burglar proofing by manufacturer shall be supplied with the burglar proofing as per Annexure "B"		
6.1.3	Burglar proofing gates at doors to be supplied with industrial type locking mechanism with minimum 3 barrel bolt hinges.		
7.	<b><u>Grenade screens:</u></b>		
7.1	Grenade screens to be in accordance with the minimum requirements of Annexure "C". The grenade screen shall be custom to fit various window sizes, contractor to supply a price per/m <sup>2</sup> of grenade screens as per spec.		
7.2	Grenade screens to be fitted on windows facing the street front or as required by client.		

SIGNATURE:

BIDDER ..... DATE :.....PAGE 23 OF 51

158



**SPECIFICATION FOR ALTERNATIVE BUILDING METHOD  
(PRE-MANUFACTURED PANELS ASSEMBLED ON SITE)  
DATE: 17-10-2019 REV: 00**

**SPEC 32242/19**

NR	REQUIREMENT	PARTICULARS OF BID	
	STATE UNDER PARTICULARS OF BID AGAINST EACH REQUIREMENT WHETHER THE BIDDER COMPLY OR DO NOT COMPLY WITH THE REQUIREMENT OF THE SPECIFICATION	COMPLY	DO NOT COMPLY
8.	<b><u>SIGNAGE &amp; FLAG POLES:</u></b>		
8.1	<b><u>External wall signage at entrance gates:</u></b>		
8.1.1	Signage to be in accordance with the minimum requirements of Annexure "D" installed on the signage wall.		
8.2	<b><u>Flag Poles:</u></b>		
8.2.1	Flag poles to be in accordance with the minimum requirements of Annexure "E". The flag poles, signage wall, pedestrian access, guard kiosk and boundary signage should be constructed together as per Annexure "E". Refer to minimum construction dimensions.		
9.	<b><u>INTERNAL ROADS AND WALKWAYS:</u></b>		
9.1	<b><u>Paving:</u></b>		
9.1.1	All areas requiring paving must be in accordance with detail specification of Annexure "F". Contractor to provide a price per/m <sup>2</sup> for installation of paving.		
9.1.2	Paving installation and layering to be confirmed and approved by a registered professional civil engineer. Contractor to provide certificate of compliance upon completion of a project.		
9.2	<b><u>Kerbing:</u></b>		
9.2.1	All areas requiring kerbing must be in accordance with detail specification of Annexure "F". Contractor to provide a price per running meter for installation of kerbing.		

SIGNATURE:

BIDDER ..... DATE : ..... PAGE 24 OF 51

**159**

**SPECIFICATION FOR ALTERNATIVE BUILDING METHOD  
(PRE-MANUFACTURED PANELS ASSEMBLED ON SITE)  
DATE: 17-10-2019 REV: 00**

**SPEC 32242/19**

NR	REQUIREMENT	PARTICULARS OF BID	
STATE UNDER PARTICULARS OF BID AGAINST EACH REQUIREMENT WHETHER THE BIDDER COMPLY OR DO NOT COMPLY WITH THE REQUIREMENT OF THE SPECIFICATION		COMPLY	DO NOT COMPLY
9.2.2	Kerb installation and layering to be confirmed and approved by a registered professional civil engineer. Contractor to provide certificate of compliance upon completion of a project.		
10.	<b><u>CARPORTS:</u></b>		
10.1	<b><u>Standard single parking carport:</u></b>		
10.1.1	Contractor to provide price for a single 2500mm x 5000mm parking bay.		
10.1.2	<p>Carport to be as follow designed and approved by a registered professional engineer:</p> <ul style="list-style-type: none"> <li>• The carport to be a cantilever structure with 2 posts in the front of parking, not penetrating in area of parking bay, with support cross sections for roof structure.</li> <li>• The entrance of the parking to be free of columns to prevent collusions.</li> <li>• Roof covering to be minimum 0.6mm thick Chromadek IBR, corrugated or Kliplock roof sheet with manufacturer's warranty against rust and material failure.</li> <li>• Roof to have a minimum fall of 5-degree angle.</li> <li>• Main frame, post and support members to be Mild steel sections.</li> <li>• Shop drawing to be supplied to client prior to manufacturing and installation for approval.</li> </ul> <p>Contractor to supply certificate of compliance from a registered structural engineer upon final completion.</p> <p>State: Type of material and finish</p> <p>.....</p> <p>.....</p>		

SIGNATURE:  
BIDDER .....

DATE :.....PAGE 25 OF 51

**160**

**SPECIFICATION FOR ALTERNATIVE BUILDING METHOD  
(PRE-MANUFACTURED PANELS ASSEMBLED ON SITE)  
DATE: 17-10-2019 REV: 00**

**SPEC 32242/19**

NR	REQUIREMENT	PARTICULARS OF BID	
	STATE UNDER PARTICULARS OF BID AGAINST EACH REQUIREMENT WHETHER THE BIDDER COMPLY OR DO NOT COMPLY WITH THE REQUIREMENT OF THE SPECIFICATION	COMPLY	DO NOT COMPLY
10.2	<b><u>PARAPLEGIC CARPORTS:</u></b>		
10.2.1	<b><u>Single Paraplegic parking carport:</u></b>		
10.2.2	Contractor to provide price for a single 3000mm x 5000mm parking bay.		
10.2.3	<p><b>Carport to be as follow designed and approved by a registered professional engineer:</b></p> <ul style="list-style-type: none"> <li>• The carport to be a cantilever structure with 2 posts in the front of parking, not penetrating in area of parking bay, with support cross sections for roof structure.</li> <li>• The entrance of the parking to be free of columns to prevent collusions.</li> <li>• Roof covering to be minimum 0.6mm thick Chromadek IBR, corrugated or Kliplok roof sheet with manufacturer's warranty against rust and material failure.</li> <li>• Roof to have a minimum fall of 5 degree angle.</li> <li>• Main frame, post and support members to be Mild steel sections.</li> <li>• Shop drawing to be supplied to client prior to manufacturing and installation for approval.</li> </ul> <p>Contractor to supply certificate of compliance from a registered structural engineer upon final completion.</p> <p>State: Type of material and finish</p> <p>.....</p> <p>.....</p>		
10.2.4	Units, where applicable, must be fitted with high pressure SABS approved hydro boil units with all pressure relief valves and heat pump units. Refer to general layout of units.		

SIGNATURE:

BIDDER ..... DATE : .....PAGE 26 OF 51

161

**SPECIFICATION FOR ALTERNATIVE BUILDING METHOD  
(PRE-MANUFACTURED PANELS ASSEMBLED ON SITE)  
DATE: 17-10-2019 REV: 00**

**SPEC 32242/19**

NR	REQUIREMENT	PARTICULARS OF BID	
STATE UNDER PARTICULARS OF BID AGAINST EACH REQUIREMENT WHETHER THE BIDDER COMPLY OR DO NOT COMPLY WITH THE REQUIREMENT OF THE SPECIFICATION		COMPLY	DO NOT COMPLY
10.2.5	One external, rigidly mounted, easily accessible and visible isolating valve to be provided per mobile unit.		
11.	<b><u>STORM WATER:</u></b>		
11.1	A storm water system will be installed in between all units to eliminate any water damping and flooding.		
11.2	The storm water system will consist of 110mm inlets with a full-bore drain and industrial type grid to withstand high volume traffic. The grid to be flush with the paving or concrete level.		
11.3	100mm U-Pvc pipes to be used at a minimum slope of 1:40 and discharged outside the boundary line of the site in an appropriate position not to hamper any structure and neighbouring properties. The pipes to be minimum 200mm below the top of concrete slab or paving.		
11.4	The registered professional Civil Engineer will be responsible for the design and approval of the storm water system. Contractor to supply the client with certificate of compliance upon completion of the project.		
12.	<b><u>ELECTRICAL:</u></b>		
12.1	All electrical installations will comply with SANS 10142.		
12.2	All electrical components and equipment installed will be SABS approved.		
12.3	Each kiosk will have a double sided construction with a lockable door and cabinet space on each side. The one side will be utilised for the distribution of normal power (NPS) and the other side will be utilised for the distribution of emergency power (EPS).		

SIGNATURE:

BIDDER ..... DATE : .....PAGE 27 OF 51

162

**SPECIFICATION FOR ALTERNATIVE BUILDING METHOD  
(PRE-MANUFACTURED PANELS ASSEMBLED ON SITE)  
DATE: 17-10-2019 REV: 00**

**SPEC 32242/19**

NR	REQUIREMENT	PARTICULARS OF BID	
	STATE UNDER PARTICULARS OF BID AGAINST EACH REQUIREMENT WHETHER THE BIDDER COMPLY OR DO NOT COMPLY WITH THE REQUIREMENT OF THE SPECIFICATION	COMPLY	DO NOT COMPLY
12.4	Electrical certification will require the issuing of Certificates of Compliance (COC's) per individual electrical distribution board and per individual electrical distribution kiosk. Certification will be done after connection to mains power.		
12.5	Each cabinet of a double sided kiosk is considered to be an individual distribution board and will be certified (COC) separately.		
12.6	Electrical warning signage will be provided on all kiosks and distribution boards in accordance of SANS 10142 requirements.		
12.7	An electrical distribution kiosk must be installed centrally at each location on site where more than one unit is constructed.		
12.8	A single sided kiosk may be installed where distribution will only take place to single quarters and/or married quarters accommodation, since such units are only supplied with normal power.		
12.9	Separate supply circuit breakers and electrical supply cables will be installed from the distribution kiosk to each electrical distribution board within the units. No distribution boards will be sub-distribution boards to others.		
12.10	The distribution kiosks will be of weatherproof type and lockable. Distribution kiosks will be installed with padlocks supplied. All distribution kiosks on the same site will utilise padlocks with the same keys. Each padlock to be supplied with three keys, key rings and marked up key tags.		

SIGNATURE:  
BIDDER .....

DATE :.....PAGE 28 OF 51

163

**SPECIFICATION FOR ALTERNATIVE BUILDING METHOD  
(PRE-MANUFACTURED PANELS ASSEMBLED ON SITE)  
DATE: 17-10-2019 REV: 00**

**SPEC 32242/19**

NR	REQUIREMENT	PARTICULARS OF BID	
STATE UNDER PARTICULARS OF BID AGAINST EACH REQUIREMENT WHETHER THE BIDDER COMPLY OR DO NOT COMPLY WITH THE REQUIREMENT OF THE SPECIFICATION		COMPLY	DO NOT COMPLY
12.11	Metallic kiosks will be suitably hot dipped galvanised to ensure a prolonged life cycle without deterioration / corrosion during a twenty-year period. This will also apply in coastal regions.		
12.12	Metallic kiosks will be suitable earthed.		
12.13	Synthetic kiosks will be constructed from suitable UV treated material to ensure a prolonged life cycle of no less than twenty years.		
12.14	Double sided kiosks will be installed on top of the 1-meter-wide concrete apron surrounding the most centrally located unit. 50mm Sleeves must be cast into concrete apron to provide entry to the kiosk for the supply cable and to provide cable exit routes from the kiosk to the distribution boards within the units. The kiosk will be installed 80mm away from the outer edge of the concrete apron with kiosk doors in the same directions as the apron.		
12.15	Kiosk to be properly mounted to concrete surface by means of coach screws or raw bolts and panel washers of sizes appropriate to the mounting holes in kiosk body. The mounting position on the apron must not be in front of a doorway or hinder access to ramps.		
12.16	The contractor will ensure that power is connected from existing distribution boards with sufficient capacity to accommodate the additional load.		
12.17	A circuit breaker of appropriate rating will be installed in existing distribution boards to supply power to a unit or to a distribution kiosk.		
12.18	The legend of the supply distribution board will be updated to indicate the addition.		

SIGNATURE:  
BIDDER .....

DATE : .....PAGE 29 OF 51

164

**SPECIFICATION FOR ALTERNATIVE BUILDING METHOD  
(PRE-MANUFACTURED PANELS ASSEMBLED ON SITE)  
DATE: 17-10-2019 REV: 00**

**SPEC 32242/19**

NR	REQUIREMENT	PARTICULARS OF BID	
STATE UNDER PARTICULARS OF BID AGAINST EACH REQUIREMENT WHETHER THE BIDDER COMPLY OR DO NOT COMPLY WITH THE REQUIREMENT OF THE SPECIFICATION		COMPLY	DO NOT COMPLY
12.19	All isolators, earth leakage protection units and circuit breakers will have prospective fault current ratings not lower than 6 kA.		
12.20	Where the mains power supply is taken from sources with prospective fault current ratings higher than 6 kA the contractor will ensure that upstream and downstream circuit breaker selection will offer the correct cascading to allow the use of 6 kA equipment beyond the downstream cascading paired breaker.		
12.21	Only where cascading requirements can be met with a specific brand of circuit breakers will a deviation from this specification be allowed.		
12.22	All isolators and circuit breakers to be Hydraulic-Magnetic type from CBI QF range to ensure future availability.		
12.23	All distribution boards within units will have closable lids.		
12.24	All electrical conduit, wiring must be inside the wall / ceiling panels, unless stated otherwise.		
12.25	Hydro boil units manufactured without plug tops and installed internally to the units will have recessed isolators with integrated cable glands.		
12.26	Split type air conditioning units with condenser units installed externally to the mobile units will have surface mounted WACO ERA 20 A two-pole enclosed isolators (Model MED220).		
12.27	Non-power skirting switched socket outlets as well as light switches shall be installed recessed (flush mounted), bottom edge of face plate shall respectively be 300 mm and 1200 mm from finished floor level (unless specifically indicated otherwise on layout).		

SIGNATURE:  
BIDDER .....

DATE : .....PAGE 30 OF 51

**165**

**SPECIFICATION FOR ALTERNATIVE BUILDING METHOD  
(PRE-MANUFACTURED PANELS ASSEMBLED ON SITE)  
DATE: 17-10-2019 REV: 00**

**SPEC 32242/19**

NR	REQUIREMENT	PARTICULARS OF BID	
STATE UNDER PARTICULARS OF BID AGAINST EACH REQUIREMENT WHETHER THE BIDDER COMPLY OR DO NOT COMPLY WITH THE REQUIREMENT OF THE SPECIFICATION		COMPLY	DO NOT COMPLY
12.28	In the absence of tiled wall skirting all power skirting shall be of type two-compartment PVC and surface mounted 100mm AFFL. All window and console air conditioning positions to allow for sufficient space below for this requirement.		
12.29	Where floor to wall edges are provided with a tiled skirting not lower than 80 mm the power skirting will be installed directly on top of the tiled skirting.		
12.30	Where work top surfaces are provided (Guard Kiosk; CSC) at a height of 750 mm the power skirting will be installed above the work tops with the bottom of the power skirting at a height of 885 mm AFFL.		
12.31	Power skirting top channel will ALWAYS be utilised for small power installation and bottom channel will be reserved for telephone and data installations.		
12.32	Where console air conditioning units are installed above power skirting the air conditioning isolators will be of power skirting type and installed in power skirting. The isolator unit installed within the power skirting will also have an integrated cable gland to hold the electrical cable when exiting the power skirting.		
12.33	Two 25mm conduits for access of data and telephone cabling with conduit ends (conduit male adaptors) will be CONNECTED to the back plane of the bottom power skirting channel and horizontally exit towards the external surface of the wall. The conduits will be CONNECTED with conduit male adaptors to the back surface of a synthetic type weather resistant box mounted on the external wall surface. Weather resistant boxes will not have a slide lid. The construction of the box will make provision for a lid with four retaining brass bolts/screws.		

SIGNATURE:

BIDDER ..... DATE :.....PAGE 31 OF 51

166



**SPECIFICATION FOR ALTERNATIVE BUILDING METHOD  
(PRE-MANUFACTURED PANELS ASSEMBLED ON SITE)  
DATE: 17-10-2019 REV: 00**

**SPEC 32242/19**

NR	REQUIREMENT	PARTICULARS OF BID	
STATE UNDER PARTICULARS OF BID AGAINST EACH REQUIREMENT WHETHER THE BIDDER COMPLY OR DO NOT COMPLY WITH THE REQUIREMENT OF THE SPECIFICATION		COMPLY	DO NOT COMPLY
12.34	Weather resistant boxes will not be smaller than 300 mm (w) x 200 mm (h) x 120 mm (d).		
12.35	Such entries will be provided where power skirting is installed at different locations of the same unit.		
12.36	Alternative products will only be accepted if absolutely equal or better in all aspects than stated within this specification.		
12.37	Documented proof will be provided that alternative equipment offered are equal or better in all regards.		
13.	<b><u>Mechanical</u></b>		
13.1	All air-conditioners (split units) must be <b>inverter-controlled</b> units and provide cooling and heating. Heating must be done by the heat pump principle and <b>not electric elements</b> . Each air-conditioning system shall be provided with at least one automatic control device for regulation of temperature.		
13.2	Each habitable room and office must be provided with air-conditioner(s) of adequate capacity. See under Mechanical for positions, type and sizes of units to be installed.		
13.3	Split units to be supported to the structure of the unit to prevent transfer of vibration to the walls of the units. Vibration dampers to be utilized to prevent transfer of vibration from the unit.		
13.4	Console units to be properly mounted to the wall of the unit (on the inside) to avoid easy removal of the unit from outside to gain access to the office.		

SIGNATURE:

BIDDER ..... DATE : .....PAGE 32 OF 51

**167**

**SPECIFICATION FOR ALTERNATIVE BUILDING METHOD  
(PRE-MANUFACTURED PANELS ASSEMBLED ON SITE)  
DATE: 17-10-2019 REV: 00**

**SPEC 32242/19**

NR	REQUIREMENT	PARTICULARS OF BID	
STATE UNDER PARTICULARS OF BID AGAINST EACH REQUIREMENT WHETHER THE BIDDER COMPLY OR DO NOT COMPLY WITH THE REQUIREMENT OF THE SPECIFICATION		COMPLY	DO NOT COMPLY
13.5	Mid wall split units to be installed neatly and fixed properly. Refrigerant piping and electric cables to be neatly and rigidly covered in metal trunking. External unit to be mounted to the chassis of the unit at least 300 mm above apron surface.		
13.6	Refrigerant piping to be separately and properly isolated thermally.		
13.7	Condensate drain lines to be properly fixed to the outside of the wall of the unit.		
13.8	All air-conditioning installations shall comply with the National Building Regulation SANS 10400 on energy efficiency Part XA, read in conjunction with SANS 204		
13.9	<p><b>Quality Control of Air Conditioners</b></p> <p>On delivery to the site or storage area, the equipment shall be inspected by the contractor.</p> <p>Damage or defects of any kind shall be repaired by the contractor of such items to the satisfaction of the SAPS.</p> <p>Where damage is such that in the opinion of the SAPS satisfactory repairs are not practicable, the damaged item shall be replaced at no cost to the SAPS, who shall not accept any responsibility for any loss or damage that may be suffered as a result of delays in obtaining the necessary replacements.</p>		
13.10	<p><b>Testing and Commissioning after Installation</b></p> <p>On completion of installation of the equipment the contractor will commission and test all equipment and certify that equipment perform according to manufacturer's specifications.</p>		

SIGNATURE:

BIDDER ..... DATE : .....PAGE 33 OF 51

168

**SPECIFICATION FOR ALTERNATIVE BUILDING METHOD  
(PRE-MANUFACTURED PANELS ASSEMBLED ON SITE)  
DATE: 17-10-2019 REV: 00**

**SPEC 32242/19**

NR	REQUIREMENT	PARTICULARS OF BID	
STATE UNDER PARTICULARS OF BID AGAINST EACH REQUIREMENT WHETHER THE BIDDER COMPLY OR DO NOT COMPLY WITH THE REQUIREMENT OF THE SPECIFICATION		COMPLY	DO NOT COMPLY
13.11	The air-conditioning systems will make use of R410A gas. Reasonable care should be taken during installation, maintenance and repair to prevent the venting of R410A gas into the atmosphere.		
13.12	Connect indoor and outdoor units with copper pipes by means of flare connections. Use insulated seamless refrigeration grade pipe only, (Cu DHP type according to ISO1337), degreased and deoxidized, suitable for operating pressures of the units. Under no circumstances must sanitary type copper pipe be used. Smooth the cut edges.		
13.13	All equipment to be installed to allow easy and proper maintenance and repair during the life time of the equipment.		
14.	<b><u>FIRE FIGHTING</u></b>		
14.1	All units must be equipped with a 4.5 kg dry powder fire extinguisher with wall mounted bracket and correct signage fixed to the walls. (SHE Management) move to appropriate section		
15.	<b><u>WATER SERVICES</u></b>		
15.1	<b><u>Borehole</u></b>  Where applicable water exploration in the form of a drilled borehole should be undertaken. The said borehole should be fully equipped to ensure functionality. Refer to Annexure H for a technical specification.		

SIGNATURE:

BIDDER ..... DATE : ..... PAGE 34 OF 51

169

NR	REQUIREMENT	PARTICULARS OF BID	
STATE UNDER PARTICULARS OF BID AGAINST EACH REQUIREMENT WHETHER THE BIDDER COMPLY OR DO NOT COMPLY WITH THE REQUIREMENT OF THE SPECIFICATION		COMPLY	DO NOT COMPLY
15.2	<p><b><u>Integrated Water System and Storage</u></b></p> <p>Water storage tanks and a fully functional integrated water system should be completed and connected with all the associated fittings, pipes and accessories which are necessary for a fully functional installation. These would also include a concrete plinth (base), Galvanised fence and an IBR rooftop. Refer to Annexure G for specification.</p>		
15.3	<p><b><u>Booster Pump</u></b></p> <p>The Booster Pump should be a high-quality, reliable and energy-efficient addition to the water system. It should supply 3, 6 to 4 bar pressure at a flow of 34 litres per minute and comes standard with a flow control. This switch automatically starts the pump when pressure decreases, then switches it off when there is no flow.</p> <p><b>Features</b></p> <ul style="list-style-type: none"> <li>• Energy Efficient</li> <li>• Easy to Operate</li> <li>• Automatic Start/ Stop Function</li> <li>• Dry Running Protection</li> <li>• Overcurrent Protection</li> <li>• Prewired</li> <li>• Motor Power of 0.37 kw</li> <li>• 3,6 – 4 bar Pressure</li> <li>• 34 l/m flow</li> <li>• Brass Impeller</li> <li>• Stainless Steel Shaft</li> </ul>		
16.	Omitted		
17.	<b><u>Layout Office Block – 4 offices unit (Fig 2)</u></b>		

SIGNATURE:  
BIDDER .....

DATE : .....PAGE 35 OF 51

**170**

**SPECIFICATION FOR ALTERNATIVE BUILDING METHOD  
(PRE-MANUFACTURED PANELS ASSEMBLED ON SITE)  
DATE: 17-10-2019 REV: 00**

**SPEC 32242/19**

NR	REQUIREMENT	PARTICULARS OF BID	
STATE UNDER PARTICULARS OF BID AGAINST EACH REQUIREMENT WHETHER THE BIDDER COMPLY OR DO NOT COMPLY WITH THE REQUIREMENT OF THE SPECIFICATION		COMPLY	DO NOT COMPLY
17.1	See Fig 2 for details.		
17.2	<b><u>Electrical</u></b>		
17.2.1	Office units (4 offices) will be provided with a Normal Power Supply DB (DB-NPS) and an Emergency Power Supply DB (DB-EPS). Distribution boards will be recessed.		
17.2.2	DB-NPS will include the following equipment: 63 A two-pole main isolator; 63 A earth leakage protection; 2 x 20 A switched socket outlets circuit breaker; 4 x 20A air conditioner units' circuit breakers.		
17.2.3	DB-EPS will include the following equipment: 63A two-pole main isolator; 1 x 10 A lighting circuit breaker; 2 x 20 A switched socket outlets circuit breaker		
17.3	<b><u>Mechanical</u></b>		
17.3.1	The following air conditioners to be installed in positions indicated on Fig 2: ACC004 console type 9 000 Btu/h ACC005 console type 9 000 Btu/h ACC006 console type 9 000 Btu/h ACC007 console type 9 000 Btu/h		
18.	<b><u>Layout Double Wide Office Block – Open Plan with 2 offices unit (Fig 3)</u></b>		
18.1	See Fig 3 for details.		
18.2	<b><u>Electrical</u></b>		

SIGNATURE:  
BIDDER .....

DATE : .....PAGE 36 OF 51

171

**SPECIFICATION FOR ALTERNATIVE BUILDING METHOD  
(PRE-MANUFACTURED PANELS ASSEMBLED ON SITE)  
DATE: 17-10-2019 REV: 00**

**SPEC 32242/19**

NR	REQUIREMENT	PARTICULARS OF BID	
STATE UNDER PARTICULARS OF BID AGAINST EACH REQUIREMENT WHETHER THE BIDDER COMPLY OR DO NOT COMPLY WITH THE REQUIREMENT OF THE SPECIFICATION		COMPLY	DO NOT COMPLY
18.2.1	Office units (2 offices) will be provided with a Normal Power Supply DB (DB-NPS) and an Emergency Power Supply DB (DB-EPS). Distribution boards will be recessed.		
18.2.2	DB-NPS will include the following equipment: 63 A two-pole main isolator; 63 A earth leakage protection; 2 x 20 A switched socket outlets circuit breakers; 5 x 20 A air conditioner units' circuit breakers.		
18.2.3	DB-EPS will include the following equipment: 63 A two-pole main isolator; 1 x 10 A lighting circuit breaker; 2 x 20 A switched socket outlets circuit breakers		
18.3	<b><u>Mechanical</u></b>		
18.3.1	The following air conditioners to be installed in positions indicated on Fig 3: ACC008 console type 12 000 Btu/h ACC009 console type 12 000 Btu/h ACC010 console type 9 000 Btu/h ACC011 console type 9 000 Btu/h ACC012 console type 12 000 Btu/h		
19.	<b><u>Layout Double Wide Office Block – Open Plan with 1 office unit (Fig 4)</u></b>		
19.1	See Fig 4 for details.		
19.2	<b><u>Electrical</u></b>		
19.2.1	Open plan office units (1 office) will be provided with a Normal Power Supply DB (DB-NPS) and an Emergency Power Supply DB (DB-EPS). Distribution boards will be recessed.		

SIGNATURE:  
BIDDER .....

DATE : .....PAGE 37 OF 51

172

**SPECIFICATION FOR ALTERNATIVE BUILDING METHOD  
(PRE-MANUFACTURED PANELS ASSEMBLED ON SITE)  
DATE: 17-10-2019 REV: 00**

**SPEC 32242/19**

NR	REQUIREMENT	PARTICULARS OF BID	
STATE UNDER PARTICULARS OF BID AGAINST EACH REQUIREMENT WHETHER THE BIDDER COMPLY OR DO NOT COMPLY WITH THE REQUIREMENT OF THE SPECIFICATION		COMPLY	DO NOT COMPLY
19.2.2	DB-NPS will include the following equipment: 63 A two-pole main isolator; 63 A earth leakage protection; 1 x 20 A switched socket outlets circuit breaker; 3 x 20 An air conditioner units' circuit breakers.		
19.2.3	DB-EPS will include the following equipment: 63 A two-pole main isolator; 1 x 10 A lighting circuit breaker; 2 x 20 A switched socket outlets circuit breakers		
19.3	<b><u>Mechanical</u></b>		
19.3.1	The following air conditioners to be installed in positions indicated on Fig 4: ACC013 console type 9 000 Btu/h ACC014 console type 12 000 Btu/h ACC015 console type 12 000 Btu/h		
20.	<b><u>Layout Ablution Block unit (Fig 5)</u></b>		
20.1	Male: One (1) WC suite, one (1) basin, one (1) urinal and two (2) showers.		
20.2	Female: Two (2) WC suites, two (2) basins and two (2) showers.		
20.3	Disabled: One (1) WC suite and one (1) basin. (Layout as to standard Building Regulations SANS 10400)		
20.4	One (1) x toilet paper holder - Three (3) roll with lock in each toilet.		
20.5	Paper dispenser to be installed close to hand wash basin/s for hand drying.		
20.6	One (1) x Soap dish holder in each shower.		

SIGNATURE:

BIDDER ..... DATE : .....PAGE 38 OF 51

**173**

**SPECIFICATION FOR ALTERNATIVE BUILDING METHOD  
(PRE-MANUFACTURED PANELS ASSEMBLED ON SITE)  
DATE: 17-10-2019 REV: 00**

**SPEC 32242/19**

NR	REQUIREMENT	PARTICULARS OF BID	
STATE UNDER PARTICULARS OF BID AGAINST EACH REQUIREMENT WHETHER THE BIDDER COMPLY OR DO NOT COMPLY WITH THE REQUIREMENT OF THE SPECIFICATION		COMPLY	DO NOT COMPLY
20.7	Shower units to be fitted and properly sealed. Shower heads will be of water saving type.  State: type of unit .....		
20.8	<b><u>Electrical</u></b>		
20.8.1	Ablution units will be provided with a Normal Power Supply DB (DB-NPS) and an Emergency Power Supply DB (DB-EPS). Distribution boards will be recessed.		
20.8.2	DB-NPS will include the following equipment: 63 A two-pole main isolator; 1 x 20 A heat pump unit circuit breaker.		
20.8.3	DB-EPS will include the following equipment: 63 A two-pole main isolator; 1 x 10 A lighting circuit breaker		
19.9	<b><u>Mechanical</u></b>		
20.9.1	150 litre horizontal hot water storage vessel to be installed at the back of the unit close to showers. Mount on support frame of sufficient strength on apron at least 300 mm above apron surface level.		
20.9.2	3,5 kW heat pump unit to be installed at the back of the unit close to the showers at least 300 mm above apron surface level and supported to the chassis of the unit. Install vibration dampers to isolate vibrations from the chassis.		
20.9.3	Install 500 mm x 500 mm door grilles in entrance doors to male, female and paraplegic units. Bottom of door grille to be 250 mm above finished floor level.		

SIGNATURE:  
BIDDER .....

DATE : .....PAGE 39 OF 51

174



**SPECIFICATION FOR ALTERNATIVE BUILDING METHOD  
(PRE-MANUFACTURED PANELS ASSEMBLED ON SITE)  
DATE: 17-10-2019 REV: 00**

**SPEC 32242/19**

NR	REQUIREMENT	PARTICULARS OF BID	
	STATE UNDER PARTICULARS OF BID AGAINST EACH REQUIREMENT WHETHER THE BIDDER COMPLY OR DO NOT COMPLY WITH THE REQUIREMENT OF THE SPECIFICATION	COMPLY	DO NOT COMPLY
21.	<b><u>Layout Single Quarters Unit (Fig 6)</u></b>		
21.1	Each room must have its own shower, toilet and hand wash basin as per layout, Fig 6. Shower heads will be of water saving type.		
21.2	<b><u>Electrical</u></b>		
21.2.1	Distribution boards will be recessed.		
21.2.2	Single quarter units – Room 1 & Room 3, will each be provided with a Normal Power DB (DB-NPS) and will include the following equipment: 63 A two-pole main isolator; 63 A earth leakage protection; 1 x 20 A switched sockets outlets circuit breaker; 30 A hob circuit breaker; 1 x 10 A lighting circuit breaker		
21.2.3	Single quarter units – Room 2, will be provided with a Normal Power DB (DB-NPS) and will include the following equipment: 63 A two-pole main isolator; 63 A earth leakage protection; 1 x 20 A switched sockets outlets circuit breaker; 30 A hob circuit breaker; 1 x 10 A lighting circuit breaker; 1 x 20 A heat pump unit circuit breaker.		
21.3	<b><u>Mechanical</u></b>		
21.3.1	150 litre horizontal hot water storage vessel to be installed at the back of the unit close to showers. (See position on Fig 6) Mount on support frame of sufficient strength on apron at least 300 mm above apron surface level.		

SIGNATURE:  
BIDDER .....

DATE : .....PAGE 40 OF 51

**175**

**SPECIFICATION FOR ALTERNATIVE BUILDING METHOD  
(PRE-MANUFACTURED PANELS ASSEMBLED ON SITE)  
DATE: 17-10-2019 REV: 00**

**SPEC 32242/19**

NR	REQUIREMENT	PARTICULARS OF BID	
STATE UNDER PARTICULARS OF BID AGAINST EACH REQUIREMENT WHETHER THE BIDDER COMPLY OR DO NOT COMPLY WITH THE REQUIREMENT OF THE SPECIFICATION		COMPLY	DO NOT COMPLY
21.3.2	3,5 kW heat pump unit to be installed at the back of the unit close to the showers at least 300 mm above apron surface level and supported to the chassis of the unit. Install vibration dampers to isolate vibrations from the chassis.		
21.3.3	Two plate (solid plates) stove hob unit (DEFY Domino range – DHD317 stainless or similar approved) to be installed in kitchen unit top according to manufacturer's instructions.		
21.3.4	Each Single Quarter's room to be fitted with a 1 200 mm diameter four blade ceiling fan, centrally mounted in the living space located between the kitchen cabinetry and bathroom. The fan and lighting will be powered from a single wall switch and have on board pull switches for light on/off and fan speed controls. The ceiling fan will have a central light with opaque diffuser with a 10 Watt cool white ES27 type light fitting.		
22.	<b><u>Layout CSC Block Unit (Fig 7)</u></b>		
22.1	See Fig 7 for details.		
22.2	<b><u>Electrical</u></b>		
22.2.1	CSC units will be provided with a Normal Power Supply DB (DB-NPS) and an Emergency Power Supply DB (DB-EPS). Distribution boards will be recessed.		
22.2.3	DB-NPS will include the following equipment: 63 A two-pole main isolator; 63 A earth leakage protection; 2 x 20 A switched socket outlets circuit breakers; 4 x 20 A air conditioner units' circuit breakers		

SIGNATURE:  
BIDDER .....

DATE : .....PAGE 41 OF 51

176

**SPECIFICATION FOR ALTERNATIVE BUILDING METHOD  
(PRE-MANUFACTURED PANELS ASSEMBLED ON SITE)  
DATE: 17-10-2019 REV: 00**

**SPEC 32242/19**

NR	REQUIREMENT	PARTICULARS OF BID	
STATE UNDER PARTICULARS OF BID AGAINST EACH REQUIREMENT WHETHER THE BIDDER COMPLY OR DO NOT COMPLY WITH THE REQUIREMENT OF THE SPECIFICATION		COMPLY	DO NOT COMPLY
22.2.4	DB-EPS will include the following equipment: 63 A two-pole main isolator; 1 x 10 A lighting circuit breaker; 2 x 20 A switched socket outlets circuit breakers		
22.3	<b><u>Mechanical</u></b>		
22.3.1	The following air conditioners to be installed in positions indicated on Fig 7: ACC016 mid wall split type 12 000 Btu/h ACC017 mid wall split type 12 000 Btu/h ACC018 mid wall split type 12 000 Btu/h ACM001 mid wall split type 9 000 Btu/h		
22.3.2	Install a 15 litre under counter type hydro boil unit in staff kitchenette.		
23.	<b><u>Open Plan Office Block – with 2 offices and walk-in safe unit (Fig 8)</u></b>		
23.1	The walls and roof of the walk-in safe must be reinforced according to spec. (give details e.g. walls and safe door)  State: Method of reinforcing .....		
23.2	<b><u>Electrical</u></b>		
23.2.1	Office units (2 offices and walk in safe) will be provided with a Normal Power Supply DB (DB-NPS) and an Emergency Power Supply DB (DB-EPS). Distribution boards will be recessed.		
23.2.2	DB-NPS will include the following equipment: 63 A two-pole main isolator; 63 A earth leakage protection; 2 x 20 A switched socket outlets circuit breakers; 5 x 20 An air conditioner units' circuit breakers		

SIGNATURE:  
BIDDER .....

DATE : .....PAGE 42 OF 51

**177**

**SPECIFICATION FOR ALTERNATIVE BUILDING METHOD  
(PRE-MANUFACTURED PANELS ASSEMBLED ON SITE)  
DATE: 17-10-2019 REV: 00**

**SPEC 32242/19**

NR	REQUIREMENT	PARTICULARS OF BID	
STATE UNDER PARTICULARS OF BID AGAINST EACH REQUIREMENT WHETHER THE BIDDER COMPLY OR DO NOT COMPLY WITH THE REQUIREMENT OF THE SPECIFICATION		COMPLY	DO NOT COMPLY
23.2.3	DB-EPS will include the following equipment: 63 A two-pole main isolator; 1 x 10 A lighting circuit breaker; 2 x 20 A switched socket outlets circuit breakers		
23.3	<b><u>Mechanical</u></b>		
23.4	The following air conditioners to be installed in positions indicated on Fig 8: ACC019 console type 12 000 Btu/h ACC020 console type 12 000 Btu/h ACC021 console type 12 000 Btu/h ACC022 console type 9 000 Btu/h ACC023 console type 9 000 Btu/h		
24.	<b><u>Layout Male and Female Temporary Holding Cells Unit (Fig 9)</u></b>		
24.1	The walls and doors of the holding cells unit must be reinforced with mild steel plate or mild steel mesh, with maximum 50mm apertures to prevent escapes (see layout in Fig 9). <b>Foundations for this unit to be designed for additional weight of reinforcing steel structures in the walls.</b>  State: Method of reinforcing for wall ..... .....		
24. 2	The roof of the holding cells unit must be reinforced with mild steel mesh, with maximum 50mm apertures to prevent escapes to prevent escapes (see layout in Fig 9).  State: Method of reinforcing for roof ..... .....		

SIGNATURE:  
BIDDER .....

DATE : .....PAGE 43 OF 51

178

**SPECIFICATION FOR ALTERNATIVE BUILDING METHOD  
(PRE-MANUFACTURED PANELS ASSEMBLED ON SITE)  
DATE: 17-10-2019 REV: 00**

**SPEC 32242/19**

NR	REQUIREMENT	PARTICULARS OF BID	
STATE UNDER PARTICULARS OF BID AGAINST EACH REQUIREMENT WHETHER THE BIDDER COMPLY OR DO NOT COMPLY WITH THE REQUIREMENT OF THE SPECIFICATION		COMPLY	DO NOT COMPLY
24.3	Doors and windows openings to be enclosed/ secured with security gates, burlar bars and expanded steel mesh with mild steel frame/ grenade screens as specified in this document. Detainees must not be able to have access to the windows or glass.		
24.4	Water cistern of toilets to be mounted on the outside of the unit and be flushed by a push button on the inside.		
24.5	<b><u>Electrical</u></b>		
24.5.1	Distribution boards will be recessed.		
24.5.2	The DB will be located in the foyer next to the main entrance.		
24.5.3	The DB will have steel faceplate and steel lockable cover. Padlock with three keys, key ring and key tag will be provided.		
24.5.4	Temporary holding cell units will be provided with an Emergency Power Supply DB (DB-EPS) and will include the following equipment: 63 A two-pole main isolator; 1 x 10 A lighting circuit breaker.		
25.	<b><u>Guard Kiosk (Fig 10)</u></b>		
25.1	Unisex: One (1) WC suite and one (1) basin		
25.2	One (1) x toilet paper holder - Three (3) roll with lock in each toilet.		
25.3	Paper dispenser to be installed close to hand wash basin/s for hand drying.		
25.4	<b><u>Electrical</u></b>		

SIGNATURE:

BIDDER ..... DATE : ..... PAGE 44 OF 51

**179**

**SPECIFICATION FOR ALTERNATIVE BUILDING METHOD  
(PRE-MANUFACTURED PANELS ASSEMBLED ON SITE)  
DATE: 17-10-2019 REV: 00**

**SPEC 32242/19**

NR	REQUIREMENT	PARTICULARS OF BID	
STATE UNDER PARTICULARS OF BID AGAINST EACH REQUIREMENT WHETHER THE BIDDER COMPLY OR DO NOT COMPLY WITH THE REQUIREMENT OF THE SPECIFICATION		COMPLY	DO NOT COMPLY
25.4.1	Distribution boards will be recessed.		
26.4.2	Guard kiosk units will be provided with an Emergency Power Supply DB (DB-EPS) and will include the following equipment: 63 A two-pole main isolator; 1 x 20 A switched socket outlets circuit breaker; 1 x 10 A lighting circuit breaker.		
26.	<b><u>Showers unit (Fig 11)</u></b>		
26.1	Male: One (1) open plan dressing area, one (1) basin, one (1) and two (2) showers.		
26.2	Female: One (1) open plan dressing area, one (1) basin, one (1) and two (2) showers.		
26.3	Paper dispenser to be installed close to hand wash basin/s for hand drying.		
26.4	One (1) x Soap dish holder in each shower.		
26.5	Shower units to be fitted and properly sealed. Shower heads will be of water saving type.  State: type of unit .....		
26.6	<b><u>Electrical</u></b>		
26.6.1	Shower units will be provided with a Normal Power Supply DB (DB-NPS) and an Emergency Power Supply DB (DB-EPS). Distribution boards will be recessed.		
26.6.2	DB-NPS will include the following equipment: 63 A two-pole main isolator; 1 x 20 A heat pump unit circuit breaker.		

SIGNATURE:

BIDDER ..... DATE : .....PAGE 45 OF 51

180