

CHIEF DIRECTOR: PHYSICAL RESOURCE MANAGEMENT

Steve Vukile Tshwete Complex, Zone 6 Zwelitsha, 5608, Private Bag X0032, Bhisho, 5605 REPUBLIC OF SOUTH AFRICA: **Website:** <u>www.ecdoe.gov.za</u> : Tel: 040 608 4284

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1.SPECIFICATION

RFQ NO:2022/07/696

Closing Date: 07 September 2023 Time: 11h00 am

Specification for quotation for the Appointment of a service provider for the repairs and maintenance at Elundini Lothukela Day care centre- chris Hani east, Intsikayethu local municipality.

Directorate	Name & Extension	End User/ Functionary	Signature	Date
PRM		Approved /Not Approved		

2. REQUIREMENTS / CONDITIONS

• NO SERVICES MUST BE RENDERED WITHOUT AN OFFICIAL ORDER.

- Quotations must reflect your Logis and CSD Supplier Number.
- Quotations are to be valid for 60 days.
- Total tender offer on pricing schedule must be completed failure to do so will results in elimination of the RFQ.
- Service provider must be registered and active with the required CIDB grading.
- CIDB grading required 1GB or Higher.
- Certified ID copies of the company's shareholder must be submitted.
- Quotation is only valid when signed/stamped by the service provider.
- Please also sign and submit the attached declaration of interest form SBD 4 failure to do so will results in elimination of the RFQ.
- Please indicate percentage discount (if any)
- All invoices issued must reflect unique invoice number and order number.
- Please indicate in writing/ e-mail if you are unable to provide service (1 working day);
- All goods/services excluding terms contract requested must be delivered within 30 days on receipt of an official order to prevent automatic cancellation of the order.







- Payment will only be affected on banking details reflected on the Centralised Supplier Database hosted by National Treasury.
- Specific goal form must be signed and completed.
- For reconciliation purposes please ensure that the reference number for this specification is appended on your quotation.
- Prices on your quotation should indicate price per unit inclusive of VAT if the supplier is a VAT Vendor; and
- The closing date for the submission of the tender documents is 07 September 2023 at 11H00 at the tender box situated at the offices the Department of Education, Steve Tshwete Complex, Zone 6, Zwelitsha.
- To be completed by the Supply Chain Management Unit
- Enquiries...
- Telephone (040)6084284 _____ Fax (040) 608 4284 for _____







3. QUOTATIONS EVALUATION CRITERIA

4. POINTS AWARDED FOR SPECIFIC GOALS

4.1. In terms of Regulation 4(2); 5(2); 6(2) and 7(2) of the Preferential Procurement Regulations, preference points must be awarded for specific goals stated in the tender. For the purposes of this tender the tenderer will be allocated points based on the goals stated in table 1 below as may be supported by proof/ documentation stated in the conditions of this tender:

4.2. In cases where organs of state intend to use Regulation 3(2) of the Regulations, which states that, if it is unclear whether the 80/20 or 90/10 preference point system applies, an organ of state must, in the tender documents, stipulate in the case of—

(a) an invitation for tender for income-generating contracts, that either the 80/20 or 90/10 preference point system will apply and that the highest acceptable tender will be used to determine the applicable preference point system; or
(b) any other invitation for tender, that either the 80/20 or 90/10 preference point system will apply and that the lowest acceptable tender will be used to determine the applicable tender will be used to determine the applicable tender will be used to determine the applicable tender will be used to determine the lowest acceptable tender will be used to determine the lowest acceptable tender will be used to determine the lowest acceptable tender will be used to determine the lowest acceptable tender will be used to determine the applicable tender will be used to determine the lowest acceptable tender will be used to determine the applicable tender will be used to determine the applicable tender will be used to determine the applicable preference point system,

then the organ of state must indicate the points allocated for specific goals for both the 90/10 and 80/20 preference point system







Table 1: Specific goals for the tender and points claimed are indicated per the table below. (Note to organs of state: Where either the 90/10 or 80/20 preference point system is applicable, corresponding points must also be indicated as such.

Note to tenderers: The tenderer must indicate how they claim points for each. preference point system.)

The Specific goals allocated points in terms of this tender	Number of points Allocated (90/10 system) (To be completed by organ of state)	Number of points Allocated (80/20 system) (To be completed by organ of state)	Number of points Allocated (90/10 system) (To be completed by the tenderer)	Number of points Allocated (80/20 system) (To be completed by the tenderer
Woman Ownership	2	5		
Ownership with Disabilities	1	2		
Youth Ownership	3	5		
Enterprises located in the Eastern Cape Province	3	6		
Ownership by Military Veterans	1	2		

DECLARATION WITH REGARD TO COMPANY/FIRM

- 4.3. Name of company/firm.....
- 4.4. Company registration number:
- 4.5. TYPE OF COMPANY/ FIRM
- □ Partnership/Joint Venture / Consortium
- □ One-person business/sole propriety
- □ Close corporation
- □ Public Company
- □ Personal Liability Company
- □ (Pty) Limited
- □ Non-Profit Company
- □ State Owned Company
- [TICK APPLICABLE BOX









4.6. I, the undersigned, who is duly authorized to do so on behalf of the company/firm, certify that the points claimed, based on the specific goals as advised in the tender, qualifies the company/ firm for the preference(s) shown and I acknowledge that:

i) The information furnished is true and correct.

ii) The preference points claimed are in accordance with the General Conditions as indicated in paragraph 1 of this form.

iii) In the event of a contract being awarded as a result of points claimed as shown in paragraphs 1.4 and 4.2, the contractor may be required to furnish documentary. proof to the satisfaction of the organ of state that the claims are correct.

iv) If the specific goals have been claimed or obtained on a fraudulent basis or any of the conditions of contract have not been fulfilled, the organ of state may, in addition to any other remedy it may have –

(a) disqualify the person from the tendering process.

(b) recover costs, losses or damages it has incurred or suffered as a result of that person's conduct.

(c) cancel the contract and claim any damages which it has suffered as a result of having to make less favorable arrangements due to such cancellation.

(d) recommend that the tenderer or contractor, its shareholders and directors, or only the shareholders and directors who acted on a fraudulent basis, be restricted from obtaining business from any organ of state for a period not exceeding 10 years, after the audi alteram partem (hear the other side) rule has been applied; and (e) forward the matter for criminal prosecution, if deemed necessary.

SURNAME AND NA	SIGNATURE(S) OF TENDERER(S)
SURNAME AND NA	AME:
DATE:	
ADDRESS:	





SBD 4



BIDDER'S DISCLOSURE

1. PURPOSE OF THE FORM

Any person (natural or juristic) may make an offer or offers in terms of this invitation to bid. In line with the principles of transparency, accountability, impartiality, and ethics as enshrined in the Constitution of the Republic of South Africa and further expressed in various pieces of legislation, it is required for the bidder to make this declaration in respect of the details required hereunder.

Where a person/s are listed in the Register for Tender Defaulters and / or the List of Restricted Suppliers, that person will automatically be disqualified from the bid process.

2. Bidder's declaration

2.1 Is the bidder, or any of its directors / trustees / shareholders / members / partners or any person having a controlling interest1 in the enterprise, employed by the state?

YES/NO

2.1.1 If so, furnish particulars of the names, individual identity numbers, and, if applicable, state employee numbers of sole proprietor/ directors / trustees / shareholders / members/ partners or any person having a controlling interest in the enterprise, in table below.

Full Name	Identity Number	Name institution	of	State

¹ the power, by one person or a group of persons holding the majority of the equity of an enterprise, alternatively, the person/s having the deciding vote or power to influence or to direct the course and decisions of the enterprise.





- 2.2 Do you, or any person connected with the bidder, have a relationship with any person who is employed by the procuring institution? **YES/NO**
- 2.2.1 If so, furnish particulars:
- 2.3 Does the bidder or any of its directors / trustees / shareholders / members / partners or any person having a controlling interest in the enterprise have any interest in any other related enterprise whether or not they are bidding for this contract? **YES/NO**

2.3.1 If so, furnish particulars:

3 DECLARATION

I, the undersigned, (name)..... in submitting the accompanying bid, do hereby make the following statements that I certify to be true and complete in every respect:

- 3.1 I have read, and I understand the contents of this disclosure;
- 3.2 I understand that the accompanying bid will be disqualified if this disclosure is found not to be true and complete in every respect;
- 3.3 The bidder has arrived at the accompanying bid independently from, and without consultation, communication, agreement or arrangement with any competitor. However, communication between partners in a joint venture or consortium2 will not be construed as collusive bidding.
- 3.4 In addition, there have been no consultations, communications, agreements or arrangements with any competitor regarding the quality, quantity, specifications, prices, including methods, factors or formulas used to calculate prices, market allocation, the intention or decision to submit or not to submit the bid, bidding with the intention not to win the bid and conditions or delivery particulars of the products or services to which this bid invitation relates.

2 Joint venture or Consortium means an association of persons for the purpose of combining their expertise, property, capital, efforts, skill and knowledge in an activity for the execution of a contract.





- 3.4 The terms of the accompanying bid have not been, and will not be, disclosed by the bidder, directly or indirectly, to any competitor, prior to the date and time of the official bid opening or of the awarding of the contract.
- 3.5 There have been no consultations, communications, agreements or arrangements made by the bidder with any official of the procuring institution in relation to this procurement process prior to and during the bidding process except to provide clarification on the bid submitted where so required by the institution; and the bidder was not involved in the drafting of the specifications or terms of reference for this bid.
- 3.6 I am aware that, in addition and without prejudice to any other remedy provided to combat any restrictive practices related to bids and contracts, bids that are suspicious will be reported to the Competition Commission for investigation and possible imposition of administrative penalties in terms of section 59 of the Competition Act No 89 of 1998 and or may be reported to the National Prosecuting Authority (NPA) for criminal investigation and or may be restricted from conducting business with the public sector for a period not exceeding ten (10) years in terms of the Prevention and Combating of Corrupt Activities Act No 12 of 2004 or any other applicable legislation.

I CERTIFY THAT THE INFORMATION FURNISHED IN PARAGRAPHS 1, 2 and 3 ABOVE IS CORRECT.

I ACCEPT THAT THE STATE MAY REJECT THE BID OR ACT AGAINST ME IN TERMS OF PARAGRAPH 6 OF PFMA SCM INSTRUCTION 03 OF 2021/22 ON PREVENTING AND COMBATING ABUSE IN THE SUPPLY CHAIN

MANAGEMENT SYSTEM SHOULD THIS DECLARATION PROVE TO BE

FALSE.

Signature

Date

.....

Position

Name of bidder





PROJECT NAME: ELUNDINI LOTHUKELA DAYCARE CENTRE

REPAIRS AND MAINTENANCE CHRIS HANI EAST, INTSIKAYETHU LOCAL MUNICIPALITY, ESIXHOTYENI LOCATION, TSOMO

ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
	PRELIMINARIES				
	The JBCC Preliminaries Code 213, May 25 edition for use with the JBCC Principal Building Agreement Edition 4.1 Code 211, March 25 is taken to be incorporated herein. The tenderer is deemed to have referred to these documents for the full intent and meaning of each clause.				
	Fixed: Value related: Time related:	Item	1,00		
	Subtotal				

I NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
	ALTERNATIVE BUILDING TECHNOLOGY				
	The Tenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (1999 Edition), the Department of Public works document No. PW 371 Specification of Materials and Methods to be used and to the Supplementary Preambles which are incorporated at the front of these Bills of Quantities.				
	The Tenderer must make reference to Architects Drawings attached for desired layout and look.				
	All prices for the Prefabricated Building Bill of Quantities must include for all establishment and overhead charges to be incurred by the specialist supplier and sub-contractor. No additional charge will be entertained by the Employer for failure to price accordingly.				
	SUPPLEMENTARY PREAMBLES				
	Proprietary products in descriptions: Proprietary products shall be used as specified. Substitute products of similar quality and specification may only be used with prior approval by the Principal Agent.				
	PREFABRICATED BUILDING STRUCTURES				
	NOTE: All the alternative building technology buildings are design build therefore the contractor must employ a competent qualified design team for the design, construction supervision and commissioning of the buildings. The Modular Structures Specifications for Design, Manufacture, Supply, Deliver and Erect Prefabricated Structures attached to these Bills must be applied by the design team. JBCC principal building agreement clause will not apply on the alternative building technology buildings.				
	Description of erection process:				
	All material, workmanship, etc are to be of highest quality and must comply with SANS 11400 and SANS 204:2011.				

A Temporary Floor Construction Method is to be used for this Project, where temporary suspended floors constructed out of 19mm Treated Shutterboard (or similar approved) are placed on an Engineer Designed Galvanised Steel Structure.The area under the floor structure is to be closed off with a durable side wall material.(Breathable Allow for Ventilation) Shop drawings and designs: Successful Contractor must provide the Principal Agent with shop drawings and floor designs before commencing with works on site. The Contractor must resume with the works only after the Client / Principal agent has approved the design of the buildings. Quality certificates:			
1. Contractor must provide compaction certificate for density. 2. Certificate of compliance for fire Extinguishers. 3. Contractor must provide a structural walling certificate. 4. Contractor must provide a roof covering certificate. 5. Contractor must provide a certificate of compliance for electrical installation. 6. Contractor must provide a lightining protection certificate where applicable. 7. Contractor must provide a confirm the life expectancy of the building which be not less than 50 years.			
One (1) Classroom block "Prefabricated structure" Construction of prefabricated structure for classrooms (60m ² per classroom) building size 8,18mm x 8,88mm wide x 3,mm high overall with 100mm thick walls , building width is inclusive of verandah 1,6mm wide with verandah poles encased in concrete. Prefabricated structure complete including prefabricated walling, doors, windows, ceilings, roofs, Electrical and finishes. Structure to include 2.4m x 2.4m partition for a sickbay area with a window to allow for ventilation and light. Structure to conform to the NHBRC and SANS standards. Each classroom must have a pinning board size 48 x 12mm high, steel cabinet 9 x 45 x 18mm high. Include 1 x 4.5kg fire extinguisher mounted to the wall. The structures must also include barge boards, fascia boards, gutters and downpipes. Refer to T2.2W for further specifications	No	1	
Subtotal			

EXTERNAL WORK (PROVISIONAL) The Tenderer is referred to the relevant Clauses in the separate document Model Preadbes for Trades (1999 Edition), the Department of Public Works document No. OW 371 Specification of Materials and Methods to be used and to the Supplementary Preambles which are incorporated at the front of these Bills of Quantities. SUPPLENTARY PREAMBLES Proprietary products in descriptions: Proprietary products of similary quality and specification may only be used with prior approval by the Principal Agent. BULK EARTHWORKS, PLATFORMS, CUT-OFF DRAINS, ETC Clearing of site: 1 Allow for clearing the area of the site to be built upon of all grass, weeds, shrubs, tnees with trunks not exceeding 200mm girth, debris, etc., including grubbing up all roots, scoffing up as required and cant away all vegetation and debris. Open face excavation not exceeding 2m deep: m3 15 2 Over site to reduce levels and depositing excavated material in prescribed stock piles on site. m3 15 3 Soft rock. m3 1 15	AMOUNT	RATE	QUANTITY	UNIT	DESCRIPTION	ITEM NO
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A.A.S.H.T.O. density.					Earth filling supplied by the contractor under pavings etc.	
Compaction of surfaces.			15	m3		7
					Compaction of surfaces.	
8 Compaction of ground surface under roads etc including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material from excavated material where necessary and compacting to 95% Mod AASHTO density.			150	m2	scarifying for a depth of 150mm, breaking down oversize material, adding suitable material from excavated material where	8
PROTECTION AGAINST TERMITES					PROTECTION AGAINST TERMITES	
Soil insecticide:					Soil insecticide:	

9	Under floors, etc including forming and poisoning shallow furrows against foundation walls, etc and filling in furrows and ramming	m2	150	
	STORMWATER CHANNELS			
	Precast concrete finished smooth on exposed surfaces including bedding, jointing and pointing:			
10	150 x 240mm high x 145mm internal diameter Precast Half-Round Channel (30Mpa) with 30mm Mortar infill between channel and brickwork on 75mm thick 3:1 (sand/cement) bedding projecting 100mm beyond channel including all necessary excavations, backfilling, compaction, carting away, etc.Code (C103)	m	16	
11	Extra over for angles, intersections, ends, dressing into sides of catchpits, etc.	No	4	
	WALKWAYS AND VERANDAH			
	Earth filling supplied by the contractor under pavings etc:			
12	Over site of SUBGRADE (G6) material compacted to 95% Mod A.A.S.H.T.O. density.	m3	5	
	Prescribed density tests on filling:			
13	In-situ dry density test.	No	2	
	FENCING			
14	Allow for clearing site for the width of 1000mm where fencing runs are to be erected including removing trees, shrubs etc. not exceeding 200mm girth, grubbing up roots and roughly levelling.	m	153	
	Posts:			
15	75 - 100mm Diameter creosote treated gumpole intermediate post 2400mm long holed as necessary for wire or straining eye bolts and embedded 600mm deep in ground in and including 400 x 400 x 600mm deep cement concrete (15 MPa/19 mm stone) base including all excavations in earth, backfilling and ramming etc.	No	51	

16	75 - 100mm Diameter creosote treated gumpole gate post 2400mm long holed as necessary including 75 - 100 mm stay post, for wire or straining eye bolts and embedded 600mm deep in ground in and including 400 x 400 x 600mm deep cement concrete (15 MPa/19 mm stone) base including all excavations in earth, backfilling and ramming etc.	No	5	
17	Corner straining frame formed of three 75 - 100mm diameter vertical posts 2400mm long and two horizontal braces each 1200mm long with bottom ends of posts embedded in concrete and braced as last described including all excavations in earth, backfilling and ramming.	No	16	
	Fencing:			
18	Fencing formed of 50 x 100 x 2.5mm diameter galvanised weldmesh 1,800 m high with vertical wires facing outwards secured with "Howgring" clips or 1.6mm galvanised binding wire at 300 mm centres to top and bottom straining wires and 700 mm centres to four intermediate straining wires (straining wires elsewhere measured) including holes through posts.	m	153	
19	Six strands of 4mm galvanised straining wires secured to fencing posts with doubled 2mm galvanised wire inserted through hole in post and turned a minimum of four turns around straining wire and attached to straining frame at one end with not less than four turns and the other end to straining bolts (elsewhere measured).	m	153	
	Gates:			
20	Single pedestrain gate, size 900mm wide x 1800 mm high, formed of 50 mm diameter nominal bore x 3,25 mm wall thickness hot dip galvanised mild steel pipe framing all round with mitred and welded angles and cross braces mullion and transome, scribed and welded into angles and at cross intersections, fixed gate posts, the gate covered with 50 x 100 x 2.5mm diameter galvanised weldmesh , leaf fitted with three 24 mm diameter x 300 mm long eyebolt hinges including all holes, etc. 500 mm long approved chain spot fitted to gate with 48mm padlock.	No	1	
21	Vehicle gate, size 3000mm wide x 1800 mm high, formed of 50 mm diameter nominal bore x 3,25 mm wall thickness hot dip galvanised mild steel pipe framing all round with mitred and welded angles and cross braces mullion and transome, scribed and welded into angles and at cross intersections, fixed gate posts, the gate covered with 50 x 100 x 2.5mm diameter galvanised weldmesh, both leafs fitted with three 24 mm diameter x 300 mm long eyebolt hinges including all holes, etc. 500 mm long approved chain spot fitted to gate with 48mm padlock.	No	1	
22	Sundries: 12mm Diameter galvanised mild steel straining eye bolt with hook, threaded portion and two nuts and washers, including hole through post or drilled and fixed into wall.	No	108	
	RAIN WATER HARVESTING TANK AND STAND			
23	5000 litre Polyproline water tank with 35mm diameter inlet at top and 50mm overflow outlet and 25mm outlet at base of tank including access hatch on top fitted with vernim-proof vent, and including 1.6 x 50mm galvanised hoop iron or other approved holding down material secured around pedestal complete including pedestal, including concrete, brickwork as per engineer's or Architect's drawings.	No	1	

Construct 2000mm x 2000mm tank stand built with stock bricks plastered and painted, built on 750mm x 250mm footings in 750mm deep trenches. Stand to 500mm above ground level with 150mm thick imported fill with 25mm sandfill, DPM and 85mm thick reinforced concrete slab.	No	1		
SUBTOTAL				

ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
	PROVISIONAL AMOUNTS				
	ELECTRICAL INSTALLATION				
1	Provide the amount of R30,000.00 (Thirty Thousand Rand) for Electrical Connection.	Item	1	30 000	30 000,00
2	Allow for profit.	Item	1		
3	Allow for attendance.	Item	1		
	Gas Installation				
4	Provide an amount of R 18 000.00 (Eighteen thousand Rands) for the complete Gas Installation to the Kitchen, including a galvanized framed metal gas cylinder cage suitable for storing two (2) 19kg gas cylinders, including providing training, operating and maintenance manuals, testing and provision of a Certificate of Compliance (COC) on completion.	ltem	1	18 000	18 000,00
5	Profit	Item	1	18 000	18 000,00
6	Attendance	Item	1		
0	Allendance	nem	I		
	First Aid Kit				
7	Provide an amount of R1500 (One thousand five hundred rands) for a first aid kit, mounted on the sickbay wall.		1	1 500	1 500,00
8	Profit	Item	1		
9	Attendance	Item	1,00		
	Early Learning Resource Materials				
10	Provide and amount of R5000 (Five thousand rands) <i>for</i> <i>Supply stimulation material</i> (Books, fiction books, multilingual alphabet poster, life skills poster, puzzles, fiction/story books, nonfiction factual books, multilingual alphabet poster, life-skills posters)	Item	1	5 000	5 000,00
11	Profit	Item	1		
12	Attendance	Item	1		
13	Provide an amount of R5000.00 for supply of <i>fantasy</i> and make-believe (child-size furniture, old clothes and shoes, soap/tea boxes, puppets, dolls, prams, pot-and- pan set, playfood, plastic animals, train sets, cars, airplanes)		1	5 000	5 000,00
14	Profit	Item	1		
15	Attendance	Item	1		
	Outdoor Active Play (Wooden Jungle Gyms)				

16 17	Allow for R 25 000.00 (Twenty five thousand Rands) for outdoor active play equipment (Provisional) Profit	ltem Item	1	25 000	25 000,00	
18	Attendance	Item	1			
19	ABLUTION FACILITIES: Provide the amount of R40,000.00 (Forty Thousand Rand) for two precast toilets delivery and assemble on site comprising of top structure with metal roof and lockable metal door, vent pipe with fly screen, handwash container average size 1200mm x1200mm x 2000mm high. Including 2000 deep pit lined with 140mm plastered blockwall, with 30mm leaching gaps. Complete with one (1) adult VIP pedestal and one (1) Junior VIP pedestal.	Item	1	40 000	40 000,00	
20	Allow Profit	Item	1			
21	Allow Attendance	Item	1			
	SUBTOTAL					

ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOU	NT
1	0					
2	0					
3	Prescribed density tests on filling:					
4	0					
5	CONTINGENCIES					
	Allow the sum of R10,000.00 (Ten Thousand Rand) for Contingencies to be used or deducted in full at the Principal Agent's discretion.				R	10 000
	Sub Total					
	Add Value Added Tax at the rate of 15%		0,15			
	TOTAL					

SPECIFICATION PREFABS (T2.2W)

NOTE: TENDERER TO SIGN EACH PAGE AND RETURN WITH BID/TENDER INCLUDING THE DESIGN MANUAL COMPLYING WITH T2.2W

GENERAL SPECIFICATION

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1. GENERAL

- 1.1 All materials, workmanship, etc are to be of the highest quality and must comply with the relevant SANS specification (SABS 0400 1990, SA Standard Code of Practice for the application of National Building Regulations) etc and the Specification of Materials and Methods used (PW371), which is obtainable from the Department of Public Works, and shall be read in conjunction with the Bills of Quantities and shall be referred to for the full descriptions of work to be done and materials to be used.
- 1.2 The structure must comply with all municipal, and fire regulations, etc and it is the responsibility of the contractor to comply with these regulations.
- 1.4 On completion of the project, the contractor must issue to the employer the following certificates:
 - 1.4.1 Certificate of Compliance relevant Installer as to the suitability of design as per item 2.2, 2.3 and 2.4.
 - 1.4.3 All certificates required to be issued by the local Municipalities.
 - 1.4.4 The contractor must supply certificates for the treatment of all timber against termites and dry rot.
 - 1.4.5 Roof truss certificate see 2.5
- 1.5 The Contractor must be registered with the CIDB, proof of registration must be submitted with the tender documents or JV Partner.
- 1.6 The Contractor must be registered with the CIPRO, proof of registration must be submitted with the tender documents.
- 1.7 The Contractor must submit a valid original Tax Clearance certificate.

The contractor must include for all items that may be required to ensure a functional building to comply with the building regulations

2. CLASSROOMS, OFFICE AND STORE

2.1 **PHYSICAL REQUIREMENTS**

- 2.1.1 Classrooms shall be a minimum of 60m² in size with 2400mm x2400mm sick bay. The floors to ceiling height shall not be less than 2.60 m above finished floor level. A covered verandah 1,5 m wide must be constructed for the entire length to the entrance side of the building.
- 2.1.2 Office and Store shall have a combined minimum area of 30m². A wall with a semi-solid door should divide the rooms. The floor to ceiling height shall not be less than 2.60 m above finished floor level. A covered verandah 1,5 m wide must be constructed for the entire length to the entrance side of the building.

2.2 FOUNDATIONS

No soil tests are available. The contractor to undertaken their own soil testing to determine the size and type of foundations required. All foundations must be designed by a Registered Engineer, who must issue an approval certificate at completion. Two foundation construction methods are recommended, a) Strip footings and b) Raft foundations. The contractor to supply foundations details with his tender.

All surfaces under buildings to be treated with termite proofing. The contractor to supply a certificate from registered applicators.

2.2.1 STRIP FOOTINGS

- 2.2.1.1 The minimum size of strip footing assumed to be 700 x 250mm. The depth of excavation from formation level is 750mm, if due to soil conditions the depth is increased or decreased; the cost to the contractor will be adjusted based on the schedule of rates.
- 2.2.1.2 All concrete in footings to have minimum 28 day strength of 20MPa and the contractor must supply test cube results to comply for every 24m³ of concrete cast. The first set of cubes to be tested at 7 days with the minimum required 7 day test strength of 13 MPa and if the tests comply with these specifications then the remaining cubes to be tested at 28 days for a minimum 28 day strength of 20MPa.
- 2.2.1.3 All foundation brickwork to be 220mm wall of well burnt bricks, with a minimum strength of 14MPa. Foundation walls to project a minimum of 300mm above the finished platform level or natural ground level. Brick force to be supplied in every course and shall be galvanised welded fabric formed of two hard drawn wire of diameter not less than 2.8mm and not more than 3.55mm held apart by cross wires at 300mm centres.
- 2.2.1.4 The exposed plinth to be constructed with hard burnt face bricks, quality of a FBS brick, of an approved colour and a minimum strength of 14 MPa.

- 2.2.1.5 The damp proof course to be 375 micron embossed waterproof sheeting.
- 2.2.1.6 All backfilling of trenches to be of suitable granular materials in maximum 150mm thick layers and compacted to 95% mod AASHTO.

2.2.2 RAFT FOUNDATIONS

- 2.2.2.1 The foundation to be constructed according to the Engineer's specification and Design.
- 2.2.2.2 The Design to comply fully with the National Building Regulations, SABS 0161, the Joint Structural Division (SAICE/IStructE)'s Code of Practice, and the NHBRC's Home Building Manual.
- 2.2.2.3 All concrete to be a minimum of 25MPa and the design of the Raft Foundation to cater for the required differential heave as determined by the Soils Investigation.
- 2.2.2.4 The contractor to provide details of a raft foundation designed for a differential heave of 15mm. The details provided must include beam sizes, beam spacing, floor slab thickness and reinforcing. The cost of any deviation from this due to an increased or decreased differential heave will be adjusted based on the schedule of rates.

2.3 FLOOR CONSTRUCTION

Two types of floor construction must be considered. Concrete floors for buildings with an accepted life period of more than 24 months. There must be a step of a minimum height of 170mm between the Finished Floor Level or Walkway level and the level of the Platform.

2.3.1 CONCRETE FLOORS

- 2.3.1.1 The platform under the slab is to be compacted to a minimum of 95% mod AASHTO density.
- 2.3.1.2 An approved fill should be used under the slab, (selected from the excavated material on site or imported material) and to be deposited in layers not exceeding 150mm thick, well-watered and compacted to 95% mod AASHTO density.
- 2.3.1.3 A 20mm thick layer of clean dry sand filling selected and supplied by the manufacturer/contractor, watered and consolidated to be laid under the floor.
- 2.3.1.4 The concrete to be a minimum of 20MPa but greater if needed to comply with the manufacturer/contractor's design.

- 2.3.1.5 The thickness of the concrete in the floor construction to be a minimum of 90mm.
- 2.3.1.6 Any bar or mesh reinforcement required to comply with the manufacturer/contractors' design must be incorporated into the slab.
- 2.3.1.7 The surface to be finished in a screed not less than 30mm thick to suit the floor finish (vinyl tiles). Power floated finish will be allowed, should the finished not be approved by the Principal Agent, a screed with a minimum thickness will have to be applied.
- 2.3.1.8 300 x 300 x 2,5mm semi-flexible reinforced vinyl floor tiles, or equal approved, laid to manufacturers specification in patterns to colour of the Project Manager.
- 2.3.1.9 The manufacturer/contractor to allow for any contraction and expansion joints as required.
- 2.3.1.10 Finish Floor Level must be a minimum of 170mm above concrete aprons/or channels.
- 2.3.1.11 1,5m wide Walkway surface bed to be constructed as above and finished off with a wood float finish. The surface bed to fall 35mm from the building to the edge of the walkway and a 30mm step to be provided at the threshold (ie 30mm step from the finished floor level in the classroom to the top of the finished level on the walkway).
- 2.3.1.12 Steps to be provided should the level of the walkway be more than 200mm above the surrounding ground level. Individual steps height should be maximum of 200mm and the width not less than 250mm.

2.3.2 TEMPORY FLOOR CONSTRUCTION

- 2.3.2.1 Temporary floors to be constructed out of 19mm thick treated shutter board or similarly approved material, on an engineered designed galvanized steel structure. The underside of the floorboards must be treated with two coats of carbolineum, or an equally approved product. The construction method used, must be so that the structure can be removable, erectable and transportable to an alternative site.
- 2.3.2.2 The temporary floors to be provided with a support structure for the galvanized steel structure. Details of the support structure to be provided.

2.3.2.3 The area under the floor structure to be closed with a durable side wall material (Breathable allow For Ventilation). Vermin proof area under floor structure.

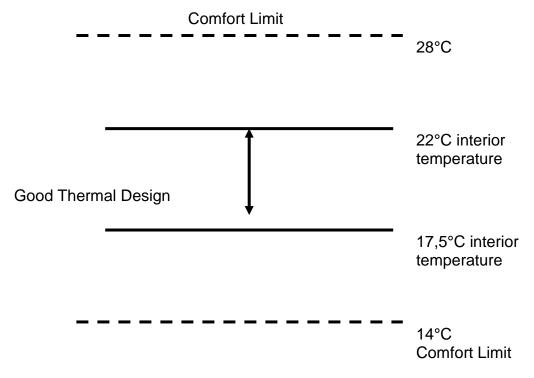
2.4 EXTERNAL AND INTERNAL WALLING

The wall construction method contemplated must allow for the dismantling, transportation.

2.4.1 WALLING

All external walling to comply with the thermal design as detailed below.

2.4.1.1 Interior Comfort Limit / Interior temperatures:



 C Value = effective heat storage capacity per square metre of building skin area (kJ/m²K)

Example for 1)	Durban area – Hot humid
	C value = 300

2) Winter rainfall area region (Cape) C value = 500 Highveld region (Pretoria) and inland C value = 800

Recommendation for Eastern Cape: Coastal C value = 400 Inland Eastern Cape C value = 600

- 2.4.1.2 The external walls to be cladded in a weather proof, impact resistance material, consisting of; pre-painted fibre cement sheeting (shiplap profile), or a treated timber boarding, or a pre-painted metal sheeting and or an equivalent system subject to approval by the Principal Agent in conjunction with the relevant Government Stakeholders.
- 2.4.1.3 The external walling to contain suitable vapour barriers between the floor and the walling. At the wall plate level, the wall should be properly sealed. The anchoring system specified to secure the wall panels into position must be of a non corrosive material.
- 2.4.1.4 All internal walls to have a smooth finish, and be constructed out of a weatherproof durable impact resistant material. (Gypsum boarding is not an acceptable material)
- 2.4.1.5 The construction method used, must allow for the structure to be relocated at any given time.

2.4.2 External Doors

All external doors to be 44mm x 813 x 2032mm meranti framed ledged and braced doors formed of 44 x 220mm top and bottom rail, 22 x 100mm bracing rail and stiles, 22 x 69mm tongued grooved and V jointed one side boarding, twice countersink screwed at intersection with internal panels rebated and filled with 6mm Sapele veneered plywood or similar approved door.

All joints between rails and stiles to be of mortise and tenon construction.

All doors fitted with an approved durable door handle and a 3 level-lockset, three brass butt hinges, and rubber doorstop fixed to floor/weather bar.

2.4.3 Windows

Window areas are to comply with NBR requirements. Where steel windows are used, members must be constructed out of FX7 sections and be hot dipped galvanised. Other window types will be considered for approval. Tenderres to ensure that different metals are isolated with a neoprene strip.

It is recommended that three 889w x 854h mm (on the walkway side) and four 889w x 1248h mm (on the opposite side) are used per classroom, two 889 x 1248h mm for the Office and two 889w x 854h mm for the Store. It is further advised that an outwards opening pivot type window be used on the walkway side of the classrooms and offices. This is to ensure that no opening sections

open onto the walkway at a head height level.

All windows to be fully burglar proofed with an approved burglar bar system.

2.4.4 Dado Rail

All internal walls to have a dado rail of a minimum dimension of 19×100 mm, fitted \pm 900 mm above floor level (height to be adjusted to the chair height for primary or secondary schools). Dado rail to be manufactured from hardwood or an approved durable impact resistant material, twice angle rounded and finished with and acceptable finish. Dado rail to be secured to the walls with minimal holes into the wall surface.

2.5 **ROOF CONSTRUCTION AND COVERING**

Two types of roof constructions will be required; a) Conventional roof structures and b) Roof structures for areas with a high snow fall and hurricane winds.

2.5.1 TYPE A - CONVENTIONAL ROOF CONSTRUCTION

- 2.5.1.1 The construction of the roof can be conventional prefabricated timber trusses with bracings (to SABS 0163-1980), or a steel construction (to SABS 0162-1984). The design and erection to be approved by a Registered Engineer and a certificate of compliance issued on completion.
- 2.5.1.2 The roof pitches to be not less than 15° and the Live and Wind Loads to be in accordance with SABS0160-1989.

- 2.5.1.3 The roof covering must consists of 0.58mm Nominal thickness corrugated iron roofing sheets with silicone polyester top finish or colomet equal, colour "Approved by DRPW" to one side and standard grey backing coat to other side, etc., with 275g/m2 galvanising to both sides with one and a half corrugation side lap including fixing to timber purlins at approximately 1,000mm centres including all screws, bolts, washers, etc, strictly in accordance with manufacturer's specification. If the contractor wishes to use an alternative, he must supply the information with his tender for consideration
- 2.5.1.4 All capping, eaves closure, barge boarding etc to be included and comply with the specifications.
- 2.5.1.5 All roofs to have a 600mm eaves overhang, and 300mm verge overhang.
- 2.5.1.6 15 x 225 Fibre cement or other similar approved fascias to be fitted, painted to paint manufactures specifications. (See also notes to tenders)
- 2.5.1.7 The roofs to be fitted with 125 x 150 x 125mm x 0.80mm thick pre-painted sheet iron or other similar approved gutter with 75mm wide laps fixed to falls to fascia with brackets not exceeding 1000mm centres, including all ends, outlets, etc.
- 2.5.1.8 Pre-painted rainwater downpipe must be provided. Number off downpipes to be calculated in accordance with the rainfall average of the area, not exceeding 15m in length.
- 2.5.1.9 All roofs to have 38 x 228mm gangboarding along entire length of building if an attic is created.

2.5.2 TYPE B - ROOF IN AREAS WITH A HIGH SNOW FALL AND HURRICANE WINDS

- 2.5.2.1 Roofs to be constructed as described in 2.5.1, with the following changes.
- 2.5.2.2 The roof pitches to be not less than 35°.
- 2.5.2.3 In areas with a high snowfall, a 450mm wide 0.8mm thick pre-painted flat sheet, colour to match the roof sheets, to be securely fixed into position above the corrugations, to the bottom end purlin, over the gutter. This will ensure that the snow falls over the gutter and does not rest on the gutter.
- 2.5.2.4 The Registered Engineer must be informed that the area of the school is exposed to snowfalls and or hurricane winds. The design and erection of the roof structure must be amended accordingly by the Registered Engineer and a certificate of compliance issued on completion.

2.5.2.5 The roofs ties to be provided in order to ensure that the roof structure is correctly tied to the supports or alternatively to the slab as per the requirements to the Engineer.

2.6 **CEILINGS**

All classrooms, offices and stores to be fitted with ceilings. Ceilings could be an integrated system with the roof sheeting or a conventional ceiling construction.

2.6.1 6,4mm Gypsum board sheets with hardwood cover strips, continuous in one direction and cut in between in the other direction, between sheets and fixed to 38 x 38mm brandering at 400mm centres including additional brandering at outer edge of rooms and along joints of ceiling plates.

If the contractor wishes to use alternative, e.g. suspended ceilings, he must supply the information with his tender for consideration.

- 2.6.2 An approved painted cornice at junction of wall and ceilings must be provided.
- 2.6.3 All ceilings to be insulated with 50mm glass fibre blanket or similar approved.
- 2.6.4 Provide one trap door in conventional ceilings per block.

2.7 FLOOR COVERING

- 2.7.1 All floors to be finished with semi flexible vinyl floor tiles size 300 x 300 x 2.5mm thick (colour samples submitted to principal agent for approval) laid with an adhesive to pattern and two coats approved sealer to be applied prior to handover.
- 2.7.2 Skirting to be 19 x 69mm hardwood screwed to framework and finished with three coats polyurethane suede varnish all-round. If the contractor wishes to use an alternative, he must supply the information with his tender for consideration.

2.8 **PLASTERING**

2.8.1 All thresholds to be grano with reedings.

2.9 ELECTRICAL INSTALLATION

- 2.9.1.1 All fittings and accessories must be presented to and approved by the Departmental Representative or the Consulting Engineer prior to installation.
- 2.9.1.2 Fluorescent fittings are to be twin-tube, or as specified elsewhere, open-channel, fitted with electronic ballasts (Professional). The fittings are to be adequately secured with wood screws, screwed into timber. "Butterfly" screws will not be accepted. Timber supports to be provided between the steel beams, the fittings are not to be screwed to the suspended ceiling frame-work. The contractor must allow for a typical classroom (6,9M x 7,4M) 6No. Luminaries mounted at ceiling height. For Offices, 2No. Luminaries mounted at ceiling height. For Store Areas, 1No. Luminaries mounted at ceiling height.

Approved 2 x 58watt open channel fluorescent fitting; ILM lighting – ILM/ATL/FMII/258 **OR ANY EQUAL OR OTHER APPROVED FITTING**

2.9.1.3 For the external lighting to the classrooms, 2 x PL9 fittings must be round, aluminium, deep base, with polycarbonate lens fitted with 3 screws. The lens must not discolour. The fitting must be fitted with 2 ballasts and be fitted complete with lamps. The contractor must allow for 1No. Luminaire

fitted externally adjacent to the classroom door. Where Classrooms are constructed in clusters, allowance must be made for 1No. Luminaire to be fitted to the gable ends of the blocks of classrooms and 1No. Luminaire fitted per pair of classrooms on the rear elevation. All external lighting is to be operated by a daylight photocell. The contractor must allow for 1 x photocell and 1 x contactor per 10 external light fittings. The Contractor is to ensure that all external fittings are adequately sealed to prevent ingress of insects and moisture. A minimum IP rating of IP65 required.

Approved 2 x PL9 fitting; Beacon Lighting - BL/RD -NB 2 X PL9W, **OR ANY EQUAL OR OTHER APPROVED FITTING**

- 2.9.1.4 Fluorescent tubes and lamps are to be of the highest quality. No inferior or "noname" brands will be accepted. All fitting/s requested must be provided complete with tubes. Contractor must allow for Phillips or Osram lamps color White
- 2.9.1.5 Timber must be provided to secure fittings where necessary. Fittings must be mounted flush with the ceiling and cover-strips must be neatly cut to accommodate the fittings.
- 2.9.1.6 The single-lever light switches are to be <u>equal or other approved</u> to Crabtree type 2471, complete with steel cover-plates and steel screws. The contractor must allow for 1 x single lever switch complete with 50mm x 100mm box and

white faceplate per classroom, Office and Store. The light switch is to be mounted next to the door and at 1400mm above floor level to the centre of the switch.

- 2.9.1.7 Socket outlets are to be <u>equal or other approved</u> to Crabtree type 6861 complete with steel cover-plates and steel screws. The contractor must allow for 1 x duo 16A socket outlet complete with 100mm x 100mm box and white faceplate per classroom. The socket outlet is to be mounted adjacent to the classroom blackboard and at 1200mm to the centre of the outlet box. In the office areas, 2No. Socket outlets must be allowed for mounted adjacent to the desk position. The Store Areras will also require 1No. socket outlet mounted adjacent to the door.
- 2.9.1.8 All socket outlets, switches etc are to be fitted with steel cover plates and steel screws.
- 2.9.1.9 The new DB is to be custom-made, complete with door and "Swing-lever" door catch. Color: White. Allowance must be made for at least six (6) spare MCB spaces. The spares are to be fitted with blanks. The contractor must allow for 4 x 20mm spare conduits to be taken into the roof space. The circuit breakers are to be labeled with engraved Perspex/PVC type labels, fastened by means of screws. In addition to the numerals, labels shall be mounted under each MCB, identifying the circuits they control. A typed legend card shall be placed in the holder provided and shall indicate the type and location, e.g. No.1. ...Main, No.2.....Lights Drawing office etc. An engraved danger sign is to be screwed to the face-plate. An engraved label is to be screwed to the outside of the door, identifying the DB as "SDB-B" etc. The Contractor must allow for one DB for each classroom blocks or where a classroom is constructed as a single unit at any particular site.
- 2.9.1.10 The new supply cable trench must be a minimum depth of 600mm X 300mm wide and cleared of all injurious material with a 75mm bed of sand to follow. The new cable must be installed on the sand bed. A sand backfill of at least 100mm is required above the cable. Danger tape must be laid at this level. The trench is to be properly filled and compacted with backfill free of any injurious materials. If a dedicated earth conductor is installed, the dedicated earth conductor must be secured to the cable by means of cable ties at intervals not exceeding 1m. The trench must be inspected by the Departmental Representative prior to the installation of the cable. Where the trench crosses roadways, concreted/paved areas, PVC sleeves must be installed, and the road concreted/paved areas must be 'made good' to the satisfaction of the Departmental Representative.
- 2.9.1.11 Cables must be drawn through 'galvanized kick-pipes' for all surface entry/exits to buildings. 'Kick-pipes' to be neatly saddled at intervals not exceeding 1m.
- 2.9.1.12 The installation is to be properly tested and commissioned on completion and an 'original' Certificate of Compliance issued for the installation.

- 2.9.1.13 All work to be strictly in accordance with SANSI 0142, Departmental Standards and Norms (General Technical Specification-Provincial Administration/Quality Specification for Electrical Installations) and Municipal by-laws. Departmental documents are available for scrutiny at the offices of Department of Public Works, Regional Office, Port Elizabeth.
- 2.9.1.14 The Contractor must ensure that the premises are left in a clean, neat and tidy condition on completion of the installation. All expended materials no longer required must be removed from site unless specifically requested by the Departmental Representative not to do so.
- 2.9.1.15 On completion of the contract, the successful contractor shall notify the Department at least 7 days in advance before delivery will be taken.
- 2.9.1.16 The successful bidder shall not take any instructions from anyone other than the Departmental Representative or Consulting Engineers. No

variation/s must be entertained by the Contractor without a written Site Instruction and approved Variation Order from the Departmental Representative.

- 2.9.1.17 Minimum standard for all materials used must conform to S.A.N.S. standards and must bear the S.A.N.S. mark.
- 2.9.1.18 Expended hazardous materials e.g. Fluorescent tubes, etc must be removed from site and disposed of in the legally required manner as prescribed by the Occupational Health and Safety Act.
- 2.9.1.19 The use of 'twin & earth' will NOT be permitted. 'Surfix' will be permissible with the approval from the Departmental Representative or Consulting Engineer.

2.9.1.20	Wire sizes:	Lighting circuit	-1,5mm ² PVC conductor + 2,5mm ² earth (with I0A.MCB)
		Plug circuit	- 2,5mm ² PVC conductor + 2,5mm ² earth (with 20A MCB)

2.9.1.21 The use of PVC flexible hose as a substitute for PVC or any other type/s of conduit will <u>not</u> be permitted. However, in situations where the use of regular conduit is either impractical/impossible, written permission <u>must</u> be obtained from the Departmental Representative/Consulting Engineer prior to the installation thereof.

- 2.9.1.22 Should it be necessary to utilize the contingency sum, a detailed breakdown of costs must be submitted to the Department. Written approval from the Departmental Representative must be obtained before such sum is utilized.
- 2.9.1.23 With all 3 phase supply installations, it is the responsibility of the Contractor to ensure that the loading is 'balanced' over the 3 phases.
- 2.9.1.24 Note: The structure is to be protected against lightning, a certificate of compliance for a lightning protection system must be issued upon installation of lightning protection system.

2.9.2 ELECTRICAL SUMMARY -The contractor must allow the following for each classroom:

2.9.2.1 6No. Luminaries mounted at ceiling height. Approved 2 x 58watt open channel fluorescent fitting; ILM lighting – ILM/ATL/FMII/258 OR ANY EQUAL OR OTHER APPROVED FITTING

1No. one way, single lever light switch located adjacent to the door.

1No. External Luminaire mounted outside the classroom door. 1No. Luminaire at each gable end. (Where classrooms are constructed more than 2, an additional light fitting per pair of classrooms is to be allowed)

Approved 2 x PL9 fitting; Beacon Lighting - BL/RD -NB 2 X PL9W, **OR ANY EQUAL OR OTHER APPROVED FITTING**

1No. 16A Duo socket outlet mounted adjacent to the blackboards

- 2.9.3 <u>The contractor must allow the following for each office area:</u>
- 2.9.3.1 2No. Luminaries mounted at ceiling height. Approved 2 x 58watt open channel fluorescent fitting; ILM lighting ILM/ATL/FMII/258 OR ANY EQUAL OR OTHER APPROVED FITTING
- 2.9.3.2 1No. one way, single lever light switch located adjacent to the door.
- 2.9.3.3 2No. 16A Duo socket outlet mounted within the office space adjacent to the desk position.
- 2.9.4 <u>The contractor must allow the following for each store area:</u>

- 2.9.4.1 1No. Luminaries mounted at ceiling height. Approved 2 x 58watt open channel fluorescent fitting; ILM lighting ILM/ATL/FMII/258 OR ANY EQUAL OR OTHER APPROVED FITTING
- 2.9.4.2 1No. one way, single lever light switch located adjacent to the door.
- 2.9.4.3 1No. 16A Duo socket outlet mounted within the store area adjacent to the door.

2.10 **GLAZING**

All glazing to be in accordance with, SANS 10 400 Part N, as affective from the 1st March 2006.

2.11 PAINTING

All surfaces that require painting to be painted in accordance with the paint manufactures specifications.

2.12 **FINISHES**

2.12.1 <u>Writing Boards</u>

Supply a set of two standard Vitreous enamel magnetic chalkboards with aluminium chalkrail including setting up and fixing to walls complete and securing bottom of each board with two fixing brackets in accordance with the manufacturer's instructions, size 4,800 x 1,140 mm high overall. Writing boards to be secured to the walls with minimal holes into the wall surface, chalk rail to be not more than 900mm above FFL.

2.12.2 Pinning boards

Supply and fit 12mm thick x 1,2m high softboard, or similarly approved pinning board across the full width of the rear of each classroom. Pinning boards to have a 44 x 22mm rebated hardwood surround, finished with three coats polyurethane suede varnish. Pinning boards to be secured to the walls with minimal holes into the wall surface.

2.12.3 <u>Fire extinguisher</u>

Supply and fit one 4,5kg CO² fire extinguisher per room, fixed to a hardwood backing-board, 1 200mm above FFL, securely fixed to the wall.

2.12.4 Long-arms

Should windows be of pivot type, supply and fit one 600mm long-arm per classroom. Fitted behind the door with two brackets.

2.12.5 <u>Cupboards</u>

Supply and fit one pre-painted steel stationary cabinet size 900 x 450 x 1,800mm, painted in a light approved paint colour, to each classroom and office. Screw cupboard to the wall.

2.12.9 <u>Partitioning Wall</u>

- 2.12.9.1 Partitioning wall of the approved prefabricated material as per manufacturer's specification at 1.8mhigh to be used to configure office accommodation.
- 2.12.9.2 Partitioning wall of the approved prefabricated material as per manufacturer's specification at ceiling height