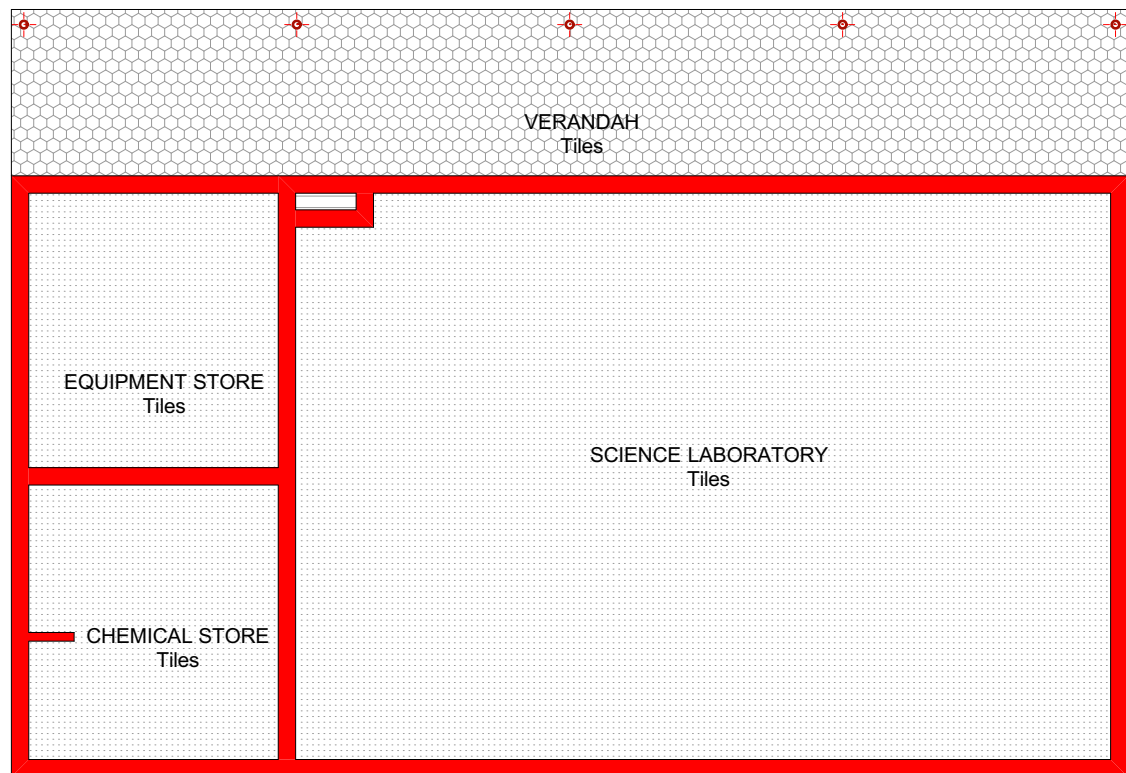


SCIENCE LABORATORY
Scale 1:100



SCIENCE LABORATORY CEILING LAYOUT
Scale 1:100

KEY

CL-01	1 layer Gypsum plasterboard 6.4mm is fixed to timber branding installed at maximum 400mm centres. Fix Gypsum plasterboard to manufacturer's recommendations. All joints shall be staggered. Timber branding shall be suitably fixed to the tie beam/joint. Timber branding shall be suitably fixed to the tie beam/joint. PW371-A: 9.1.2. Refer to Specification No. CF002
CL-02	EMULSION (PVA) PAINT ON PLASTERED SLAB- Admin Strong Room- 3 No. coats of PVA emulsion ceiling paint in matt finish on 6mm thick light weight hemi-hydrate gypsum plaster on concrete slab soffit. All to be manufactured and installed in strict compliance to the latest SABS approved standards.
CL-03	Anti-theft Steel ceiling mesh to be installed BY SPECIALIST.

KEY

FL-01	HARDWOOD- Ex 75mm x 20mm moulded hardwood skirting to comply with SABS 1099, fixed to walls in long lengths with splayed heading joints and mitred corners with screws and plugs at centres not exceeding 600mm, and fitted with a 19mm x 19mm quadrant beading. The skirting to be varnished with 3 no. Coats of eggshell clear varnish to comply to SABS 381 type 1.
FL-02	H11. GRANO : Stucco Grano Floor Screed: Self leveling cement based floor applied onto new concrete floor substrate that should be 100% sound and clean. Concrete floor substrate must be cleaned thoroughly free of sealers, grime, bitumen, dust, fungal growth, oil and mould.
FL-03	CERAMIC TILES TYPE 2(Floor tiles): Johnson Tiles Urban Collection Walkway Bone non slip ceramic floor tiles (Code: WW-470) (or equal approved) with PEI Class 4 rating, size 330 x 330mm, fixed to wood floated 1:4 cement and sand screed with tile adhesive (elsewhere specified) on concrete surface bed (elsewhere specified), with 5mm joints continuous in both directions grouted with tile grout (elsewhere specified) with minimum 5mm expansion joints at perimeter, all structural expansion and construction joints and maximum 5m centres internally and at 3m centres externally, in both directions.
FL-04	SEMI-FLEXIBLE VINYL TILES 300 x 300 x 2.5 mm "Kalahari Quartz" colour type "10-Glacier", OR EQUAL AND APPROVED, quartz reinforced semi-flexible vinyl floor tiles to SABS Specification 581:1992 (or later revision), and laid to SABS 070 (or later revision) and in accordance to manufacturer's specifications on cement screed subfloor.
FL-05	NON-SLIP VINYL SHEETING: 2.5mm thick x 2000mm slip resistant vinyl sheeting impregnated with carborundum particles, laid on cement screed with acrylic adhesive with joints butted/grooved and heat welded in strict accordance to manufacturer's recommendations. Installation complete with matching tread/riser tiles and at steps and staircases. All to be manufactured and installed in Cogitatingsitric compliance to the latest SABS approved standard
FL-06	CEMENT SCREED: 30 mm thick polished cement sand screed to comply with standard specifications.
FL-07	Floor Sunk Dust Trap mat glued onto screed with 12mm Brass Strip Edging laid level with porcelain tiles
FL-08	75mm x 20mm Tile skirting

NOTES

Foundations

A1. Strip foundations - for load bearing walls: min 700 x 250mm25 MPA reinforced concrete.

- for non load bearing walls: min 450x250mm 25 MPA reinforced concrete, or 400x200mm thickening in slab

Note: Engineer shall design all foundations. Engineer to be consulted before construction.

A2. Filling approved hard-core filling compacted in layers of Max 150 mm filling to be treated with SABS approved insecticide and weedkiller to comply with SABS 1164 and 1165 (Ref.3.4 in gen spec)

Surface beds and floors:

B1. Surface bed- 85 mm thick 25 Mpa concrete surface bed with ref 193 mesh on one layer of Gundle@ APIA.T USB Green 250pm damp proof membrane under concrete surface beds conforming to SANS 952-1:2011(see 5.1 in gen. spec.)

B2. Screed and floor finish: steel trowel power floated 1:4 cement sand screed. Thickness of screed 30 mm

B3. Screed and floor finish- ceramic tiles on 1:4 cement sand screed to total thickness of 30 mm

B4. Apron- 1000 mm wide 15 Mpa concrete apron with wood float finish apron to be cast in length of max 3 m to have a

1:100 fall away from the building

Skirtings

C1. Skirting- 100 mm high ceramics tiles to match floor tiles, fixing, adhesive and grouting acc to 19.1 in gen. spec.

Walls

D1 External walls approved face brick walls in stretcherbond to receive 10 mm wide x 6 mm deep square recessed joint in both directions

D2. Brick force-BRC to 230 and 115 Walls, Foundations walls- Every course, Superstructure every third course.

Over openings formed in brickwork- Every course for four courses extending 500 mm beyond opening in both directions ref 6.2 of gen. spec

D3. 228x76mm SAP beam to be built in and tied down to face brick columns with 2.5 mm galvanised wire ties. Beam to be creosote treated prior to being built in

D4. Lintel and facebrick roller course- lintels over all windows and door openings, brick work to receive 10x6mm square recessed joints

D5. DPC- Gundle APIA.T brickgrip DPC 375pm damp proof course conforming to SANS 952-1:2011 at Floor level&under all external window sills.

D6. Internal walls- approved Stockbrick walls in stretcher Bond to receive 12 mm cement sand plaster (gen.spec. 12.1) and dulux rockgrip Soft velvet (Color to be selected)

D7. Wall tiles- Tile Africa or similar light grey ceramic floor tiles (code: 1009-1000) with 4 PEI rating, size 300x300x9mm thick.

Window sills

E1. Internal window sill - Everite nutec window Internal sill size window with x 175mm x 15 mm thick (code: 013-517)

Dulux Rockgrip universal gloss enamel (gen.spec.7.5)

E2. External window sill- Approved face brick on edge to match walls joints to be square and recessed.

Ceiling and cornice

F1. Cornice- Orac Decor Basixx Durofoam polyurethane (or similar approved) cornice moulding,overall size 70x70mm fixed to surface with Decofix Pro (gen.spec.13.5) painted like ceiling

F2. Ceiling- Everite Nutec 6mm thick plain ceiling boards, manufactured in accordance with SANS 9001:2000 carrying SANS 803:2005 provide galvanised H-profile jointing strips to be prepainted, Deluxe acrylic PVAmodified acrylic paint (colour to be selected) to interior fibre cement surfaces.(gen.spec.13)

Roof and fascia:

G1. Roof sheeting-to match existing roofs fixed to timber purlins at 1200 mm centres "MI-TEK or similar approved pre-fabricated roof truss system.

G2. Ridge capping- standard factory manufactured ridges and flashings in finish to match roof coverings

G3. Fascia- Everite medium density plain, ungrooved nutec fascia boards (code:041-202) size 225x12mm, fixed to 38x38mm filter batten and 38x38mm support battens (gen.spec.9.1) Deluxe rockgrip soft velvet

G4. Truss system- timber patent and approved prefabricated system at 1100 mm c/c. Purlins- 50 x 76 mm on 1200c/c All SA pine (see item 9 in gen.spec)

Wallplate- 114 x 38 mm SA pine to be creosote treated before fixing. Certificate and guarantee for design and erection to be supplied by truss manufacturer. All exposed timber sections as well as sections in contact with wet trades to be creosote treated before fixing into position, truss to be secured to walls at wall plate with 2.5 mm galv steel wire ties, built into walls min 6 brick courses

G5. 15mm thick roof insulation sheeting blanket under tiles

GENERAL NOTES

THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECT 'S AND ENGINEER 'S DRAWING .

ALL DIMENSIONS , LEVELS, ETC ARE TO BE CHECKED BEFORE ANY WORK IS COMMENCED AND ANY DICREPANCIES NOTED TO BE BROUGHT TO THE ARCHITECT 'S ATTENTION .

ONLY FIGURED DIMENSIONS TO BE USED, SCALING OF DRAWINGS IS NOT ADVISABLE .

ALL RIGHTS RESERVED, NO PART OF THIS DESIGN SHALL BE REPRODUCED , USED ELSEWHERE AND / OR IN ANY WAY WITHOUT PRIOR PERMISSION FROM THE ARCHITECT / ENGINEER .

GEOTECH INFORMATION

SOIL TYPE: _____
ASSUMED SOIL BEARING CAPACITY : _____ kPa
RECOMMENDED FOUNDATION TYPE: _____
RECOMMENDED FOUNDATION DEPTH : _____

REV. NO.	DATE	DESCRIPTION

DBSA	Signature
Architect	
OHS	
NWDoE	Signature

MUNICIPAL APPROVAL

NAME :
SIGNATURE : DATE :

STAMPS :

PRINCIPAL AGENT
PROJECTNEERS
PROJECTNEERS CONSULTING ENGINEERS
& PROJECT MANAGERS
BUILDING 2, 1ST FLOOR, THORNHILL OFFICE PARK
94 BEKKER ROAD, MIDRAND, 1685
+27 11 043 1307
technical@projectneers.com
www.projectneers.com
COMPETENT CONTACT PERSON : CONT. No : 078 519 4077
BRIGHTON FIRM REG. No : 2014/035628/07

education
Lefapha la Thuto la Bokone Bophirima
Noord-Wes Departement van Onderwys
North West Department of Education
NORTH WEST PROVINCE
NORTH-WEST DEPARTMENT OF EDUCATION

DISCIPLINE ARCHITECTURAL

PROJECT NAME
PROPOSED ADDITIONAL SCHOOL INFRASTRUCTURE,
RENOVATIONS AND REFURBISHMENTS AT GOAKGANYA
PRIMARY SCHOOL ON PORTION 85 OF PORTION 4 OF
THE FARM KLIPGAT No. 249-JQ ON BEHALF OF THE
NORTH WEST DEPARTMENT OF EDUCATION (NW D&E)

PROJECT STATUS	STAGE 1-3	STAGE 4	STAGE 5-6
CONCEPT		TENDER	CONSTRUCTION

DESCRIPTION SCIENCE LABORATORY	SCALE : AS SHOWN
-----------------------------------	---------------------

DRAWN : NAME OF COMPETENT PERSON : FRANK	CHECKED : NAME OF COMPETENT PERSON : NIKILE
--	---

REG No : PAT20779 SIGNATURE	REG No : PrArch24750099 SIGNATURE
--------------------------------	--------------------------------------

PROJECT NUMBER RFP268-2019	DATE : 18/10/2021
-------------------------------	----------------------

OCCUPANCY CLASSIFICATION A3-PLACE OF INSTRUCTION	DWG No : 2020_2003 P.N. ZA : DBSA GPS_ARCH_ S2001_R00 REV No : R00
---	--

SANS 10400 & XA COMPLIANCE	OTHER APPROVALS	WATER SUPPLIER	SANITATION / SEWER	SITE INFORMATION	STAGES	PROJECT TEAM
CONDUTANCE Rational Des Standard Cal Y N Y N	Environmental Impact Assessment (EIA) Yes No X	MUNICIPALITY Yes No X	MUNICIPALITY Yes No X	ERF No . PORTION 85 OF PORTION 4 OF THE FARM KLIPGAT No. 249-JQ	SIPDM 0 1 2 3 4 5 6 7 8 9	COMPETENT CONTACT PERSON ARCHITECT NIKILE KEITH MPOFU Q. SURVEYOR TASARA GWENHURE STRUCT. ENG BRIGHTON TSHUMA CIVIL ENG SIZWE ZUNGU MECH . ENG STENFORD MUTARINGE ELECT. ENG FORTUNE MPOFU OHS MPH0 CHABANA CONTRACTOR
SOLAR HEAT GAIN Rational Des Standard Cal Y N Y N	South African Heritage Resources Agency (SAHRA) Department of Water and Sanitation (DWS) South African National Roads Agency (SANRAL) Other	BOREHOLE Yes No X	SEPTIC TANKS Yes No X	COVERAGE 15%	SACAP 1 2 3 4 5 6 7 8 9	REGISTRATION No. PrArch24750099 SACOSP 4457 ECSA 201570206 ECSA 20185430 ECSA 20030388 ECSA 20140343 CHSO/1205/2017
GEOGRAPHICAL ZONE NBRs COMPLIANCE Yes No X		PRESSURE Number Total Capacity BARS	PIT LATRINES Yes No X	VILLAGE NAME PHASHA VILLAGE	Mark with X X	COMPANY NAME PROJECTNEERS PROJECTNEERS PROJECTNEERS PROJECTNEERS PROJECTNEERS PROJECTNEERS
SITE PLAN Yes No X		TANKS Yes No X	OTHER Yes No X	DISTRICT BOJANALA		SIGNATURE
OTHER DRAWINGS Yes No X		LITERS Specify below X		COORDINATES S 25°26'32.06" E 27°58'43.85"		