



Norms and standards for Secondary School (ANNEXURE G)													
ENROLMENT RANGE	ENROLMENT RANGE PER GENDER	GIRLS TOILETS	GIRLS BASINS	BOYS TOILETS	BOYS URINALS	BOYS BASINS	UNISEX DISABLED TOILETS & BASINS	FEMALE STAFF TOILETS	FEMALE STAFF BASINS	MALE STAFF TOILET	MALE STAFF URINALS	MALE STAFF BASINS	TOTAL TOILETS
800 - 1000	401 - 501	18	8	8	9	4	4	4	2	2	5	1	36

Name	Area m ²
FD8	47.94
F10	48.55
SD4	31.41
SD2	31.90
MD4	40.70
M4	31.41
TOTAL M ²	231.91

ENROLLMENT			
	Male	Female	TOTAL
LEARNERS	352	391	743
EDUCATORS	12	11	23
SUPPORT STAFF	2	4	6

AREA SCHEDULE	
DESCRIPTION	AREA
Site area	1.7 ha
Existing classroom blocks	508.1m ²
Existing ablution blocks	42m ²
New ablution blocks	231.91m ²
Future ablution blocks	0.00m ²
Total building area	782.01m ²

SCHEDULE INDICATING DEMOLITION AREAS	
1	Existing 15 pit toilet, female learners
2	Existing 12 pit toilet, male learners.

BENCHMARKS			
Name	Y-Coord	X-Coord	Z-Coord
BM A1	100 688.59	+2 612 085.14	820.00
BM B1	+100 709.35	+2 612 058.46	819.79

COORDINATES OF NEW BUILDINGS		
Building	Y-Coord	X-Coord
SD2	a	100 805.85 +2 612 435.18
	b	100 801.45 +2 612 435.18
	c	100 801.45 +2 612 584.41
	d	100 805.85 +2 612 584.41
MD4	e	100 816.35 +2 612 435.18
	f	100 808.23 +2 612 435.18
	g	100 808.23 +2 612 584.41
	h	100 816.35 +2 612 584.41
M4	i	100 821.05 +2 612 435.18
	j	100 822.20 +2 612 435.18
	k	100 822.20 +2 612 584.41
	m	100 821.05 +2 612 584.41
SD4	n	100 805.85 +2 612 415.55
	p	100 801.95 +2 612 415.55
	q	100 801.95 +2 612 417.55
	r	100 805.85 +2 612 417.55
FD8	s	100 818.75 +2 612 415.55
	t	100 808.23 +2 612 415.55
	u	100 808.23 +2 612 417.55
	v	100 818.75 +2 612 417.55
F10	w	100 865.15 +2 612 415.55
	x	100 821.05 +2 612 415.55
	y	100 821.05 +2 612 417.55
	z	100 865.15 +2 612 417.55

FUTURE ABLUTION BLOCKS

MAXIMUM ENROLMENT FOR HIGH SCHOOL=1001, TOTAL ABLUTION SEATS REQUIRED = 34 AND CURRENT ENROLMENT FOR KGOLAKALELEME HIGH SCHOOL = 743 TOTAL ABLUTION SEATS PROVIDED= 40 INCLUDING THE EXISTING SANITATION. THEREFORE NO FUTURE ABLUTIONS REQUIRED SCHOOL HAS ADEQUATE SANITATION.



Key:	
	Drinking fountain
	New water pipes
	RWHT - Rain water harvesting tank
	Existing tree(s)
	Elevated water tank
	Existing building
	New building
	New walkway
	Existing paved walkway or Apron slab
	School location

NOTES AND SPECIFICATIONS:

GENERAL

- Use dimensions provided and do not scale drawing.
- All work to comply with SANS 10400, 10401, and 10402.
- All dimensions, levels and positions to be verified on site prior to construction.
- All concrete work to be as per Engineer's details and specifications.
- All pits to face North.
- All brickwork have brickforce at every 2nd course in pit lining and 3rd course in superstructure.

PIT EXCAVATION

- All stages of pit excavation to be inspected and approved by Engineer and signed off.
- All pit lining to be inspected by EnviroLoo Services before slab casting.

COMPACTATION OF SURFACES

All ground surfaces receiving concrete floors / slab should be compacted to 150mm layers 93% ModASHTO density before casting concrete.

CONCRETE WORKS

- All concrete to be as per Engineer's details and specifications.
- 25 MPa strength concrete to be used throughout construction.

Concrete Mixes: Proportions

Concrete Strength at 28 Days 25Mpa:

1 bag cement : 5.00m³ Sand : 0.00m³ Stone (Volume/Bag)

385 kg cement : 820 kg sand : 960 kg stone (Mass/m³)

- Pre-cast concrete lintels to be used as support under top slab of pit.
- All concrete aprons to be 1000mm wide.

MORTAR

Mixes proportions to be:

1 cement : 3 sand

1x1 bag cement : 3 wheelbarrows (37 litres) sand)

BRICKWORK

Sub-structure

- All pit lining / foundation brickwork to be solid NFP clay brick.
- All internal surface of pit lining to be painted with two coats black epoxy paint installing Enviro-Loo units.

Super-structure

- All external walls / partitions to be of clay face brick to SABS quality.
- All outside partition walls to be 3 courses above door height.
- All brickwork above door openings should have brickforce on every course at least 3 courses.
- Any bricks: Standard 230X152mm terra-cotta vermin proofed haired air grating to be used above all window openings.

ROOF SHEETING

- 0.6mm kilolock chromadek roof sheeting.

ROOF TIMBER / CEILING

- All roof timbers to be machined SABS treated wood with three coats of approved wood preservative.
- Timber connections (Hurricane Clips) are required at intersections between timber rafters and purlins.
- Slatation is to be applied interval under all roof surfaces.

METALWORK

- All metalwork should be primed before installation.
- All steel window should have 6x20mm flat bar burglar proofing.

PLUMBING

- Double concrete wash trough to be used.
- All wash troughs should be connected to the school's water supply system and the waste water should be piped to a soakaway.
- The soakaway should be as per Engineer's detail and position to be determined on site.
- Only 200mm and approved pipework should be used as connection from wall to the discharge points.

GLAZING

- 6.38mm obscure safety glass
- Stainless steel mirrors size 350x450mm high.

PAINTING

- All paintwork to comply with SABS and PA371 specification.
- All steel window and door frames including doors and fascias / barge boards to be discharge points.

CONSULTANTS

CLEAR WATER CONSULTING ENGINEERS (PTY) LTD

Registration No. 2015/100292/07

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	SIGNATURE	DATE	SHEET SIZE
DESIGNED	MR FANKIE MASHABANE	14-01-2020	A1
DRAWN	MR FANKIE MASHABANE	14-01-2020	SCALE
VERIFIED	MR ANSELMO MUNGUAMBE	15-01-2020	1:300
VALIDATED	MR ANSELMO MUNGUAMBE	15-01-2020	STATUS LEGEND
			+ INFORMATION
			+ FINISH
			+ CONSTRUCTION
			+ AS BUILT

IMPLEMENTED BY

THE MVULA TRUST

A leading developmental NGO

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SPONSOR

LIMPOPO

PROVINCIAL GOVERNMENT

REPUBLIC OF SOUTH AFRICA

DEPARTMENT OF

EDUCATION

PROJECT NUMBER

TMT-LPDE-2019/20- LPCL14C

PROJECT

LPDE 2019/20 SCHOOL WATER AND SANITATION

PROGRAMME KGOLAKALELEME SECONDARY

SCHOOL

PROVINCE: LIMPOPO

DRAWING TITLE

SITE DEVELOPMENT PLAN FOR

KGOLAKALELEME SECONDARY SCHOOL

EMIS NUMBER	DISCIPLINE	DRAWING No.	STATUS	REVISION
9901340449	CIVIL ENGINEERING	SDP	I	0

