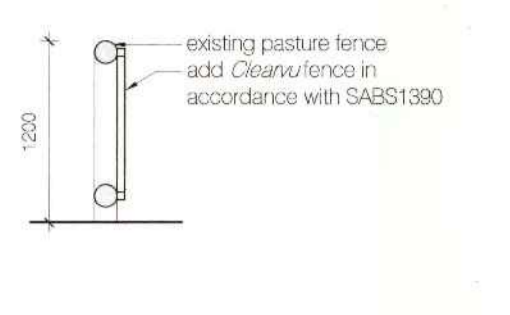


SECTION AND ELEVATION OF BOUNDARY AND SCREEN WALLS AND GATE
SCALE 1:50



SECTION THROUGH PASTURE FENCE
SCALE 1:50

R-VALUE CALCULATION OF ROOF ASSEMBLY HORIZONTAL CEILING

outside air film (moving)	0.030
sheet metal roofing	0.300
Aluminium flash (double sided)	1.454
100mm (isotherm)	1.900
gypsum board ceiling	0.050
indoor air film (still)	0.110
total R-value	3.844

R-VALUE CALCULATION OF WALL ASSEMBLY RENDEROED OUTSIDE AND PLASTERED INSIDE

outside air film (moving)	0.030
15mm exterior render	0.120
230mm brick wall	0.340
15mm interior plaster	0.020
indoor air film (still)	0.110
total R-value	0.520

R-VALUE CALCULATION OF ROOF ASSEMBLY CONCRETE FLAT ROOF

outside air film (moving)	0.030
70mm polyurethane board	3.200
170mm concrete	0.030
15mm interior plaster	0.020
indoor air film (still)	0.110
total R-value	3.390

R-VALUE CALCULATION OF WALL ASSEMBLY NOT RENDEROED OUTSIDE / FACE BRICK AND PLASTERED INSIDE

outside air film (moving)	0.030
230mm brick wall	0.340
15mm interior plaster	0.020
indoor air film (still)	0.110
total R-value	0.500

AREA SCHEDULE

	2	5	3	4
STAND				1,255.0m ²
LOWER GROUND STOREY				87.1m ²
GROUND STOREY				
HOUSE				194.0m ²
GARAGE				54.3m ²
STAFF ROOM				40.1m ²
ENCLOSED PORCH				8.5m ²
SUBTOTAL				296.9m²
VERANDA				31.5m ²
VERANDA (BAR)				20.7m ²
SUBTOTAL				52.2m²
COVERAGE AREA				349.1m²
COVERAGE				27.8%
FIRST STOREY				
HOUSE				160.8m ²
SUBTOTAL				160.8m²
FIRST TO GROUND STOREY RATIO (177.1/296.9)				59.65%
FAR				0.36
TOTAL DEVELOPMENT AREA				597.0m²

GENERAL ALL MATERIALS AND METHODS SHALL COMPLY WITH SANS10400 AND THE APPLICABLE SABS STANDARDS. THE ORIENTATION OF THE PRIMARY LIVING AREAS SHALL BE IN ACCORDANCE WITH THE SET BACKS EXPRESSED IN SANS304 FIGURE A1 AND TABLE 1 AND SHALL BE:

READ IN CONJUNCTION WITH LOCAL BY-LAWS AND REGULATIONS ALL LEVELS & DIMENSIONS TO BE CHECKED ON SITE BEFORE COMMENCING WORK. FINAL LEVELS, HEIGHT OF PLUMB, DEPTH OF EXCAVATION TO BE DETERMINED ON SITE AND SHALL BE CONVEYED TO THE ARCHITECT.

7/5% DPC TO ALL EXTERNAL WALLS. FINISHES SHALL BE AS PER THE ARCHITECT'S SPECIFICATION AND ANY CHANGES SHALL BE APPROVED PRIOR TO WORK BEING COMMENCED.

ALL CHIMNEYS SHALL COMPLY WITH SANS10400-V2010. THE CHIMNEY FLUE OF AN OPEN SOLID FUEL FIREPLACE SHALL BE FITTED WITH A CLOSABLE DAMPER/FLAP IN ACCORDANCE WITH SANS204. USE ONLY GIVEN DIMENSIONS AND DO NOT SCALE. ALL DIMENSIONS SHALL BE CHECKED ON SITE BEFORE COMMENCING WORK. LARGE SCALE DRAWINGS HAVE PREFERENCE TO SMALL SCALE DRAWINGS. THIS DRAWING SHALL BE READ WITH THE APPLICABLE CONSULTANT'S DRAWINGS. ALL DISCREPANCIES ON THIS DRAWING SHALL BE REPORTED TO THE ARCHITECT FOR ALL CONCRETE WORK AND STRUCTURAL STEEL REFER TO STRUCTURAL ENGINEER'S DRAWINGS AND SPECIFICATIONS.

SOIL POISONING FOUNDATIONS SHALL BE ACCORDING TO ENGINEER'S DETAILS AND SPECIFICATIONS DEMONSTRATING COMPLIANCE WITH SANS10400 REGULATION A24).

FLOORS TOP OF CONCRETE FLOOR SLAB SHALL BE MIN 150mm ABOVE NATURAL GROUND LEVEL. 70mm THICK MIN CONCRETE FLOOR SLAB. 250V USB GREEN DPC WITH OVERLAPS OF 150mm MIN ON BACKFILL IN COMPACTED LAYERS OF MAX 150 AT OPTIMUM MOISTURE CONTENT TO 93% OF MOD A5/10H MAX DENSITY.

WATERPROOFING OF FLOORS WATERPROOFING OF FLOORS SHALL BE IN ACCORDANCE WITH SANS10400-J2010. 300g SMARTEK ACRYLIC BASED EMULSION WATERPROOFING AND BACKING MIXED AND APPLIED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS INCLUDING COMPLEX FABRIC OR SIMILAR APPROVED.

GLAZING NOTE GLAZING SHALL BE IN ACCORDANCE WITH SANS10400-N2010. 0 - 0.75m² = 3mm, 0.75 - 1.5m² = 4mm, 1.5 - 2.1m² = 5mm, 2.1m² and over = 6mm. GLAZING SHALL FURTHER COMPLY WITH SANS10400-XX-2011 AND APPLICABLE SANS204 REQUIREMENTS.

DRAINAGE ALL DRAINAGE SHALL BE IN ACCORDANCE WITH SANS10400-P2010. ALL DRAINAGE BRANCHES LONGER THAN 3m SHALL HAVE ACCESS EYES. ALL VENT VALVES TO BE INSTALLED ON 100g UPVC PIPES. PIPES FOR WASTEWATER SHALL BE 150mm HIGH. ALL WASTE PIPES SHALL BE FULLY ACCESSIBLE ALONG THEIR ENTIRE LENGTH. PROVIDE WASTE FITTINGS WITH REGULAR TRAPS. INSPECTION EYES SHALL BE PROVIDED AT ALL BENDS AND JUNCTIONS ALONG THE SEWER LINE AND SHALL BE SUITABLY MARKED AT GROUND LEVEL. NO BENDS OR JUNCTIONS PERMITTED IN SOIL PIPES BELOW FLOOR SLABS. SOIL PIPES UNDER FLOOR SLABS SHALL BE PROTECTED FROM LOAD. MINIMUM INVERT LEVEL OF SOIL PIPE AT HEAD OF DRAIN TO ALL FIRST STOREY FITTINGS SHALL BE SUPPLIED WITH ANTI-VACUUM TRAPS AT 450mm FALL OF SOIL PIPE SHALL BE A MIN OF 1:80. ALL SOIL PIPES SHALL BE 100g UPVC PIPES. ALL WASTE PIPES TO BE DA 50 g UPVC PIPES. ALL SOIL PIPES BELOW BUILDING TO BE CAST IN CONCRETE. ALL PLUMBING WORK TO BE CARRIED OUT IN STRICT ACCORDANCE WITH LOCAL AUTHORITY REQUIREMENTS. ALL SPACING BETWEEN 100MM FROM FOUNDATION AND BELOW FOUNDATION TO BE CAST IN CONCRETE.

WOOD WOOD SHALL COMPLY WITH SANS10163.

INSULATION THE BUILDING ENVELOPE INSULATION SHALL BE IN ACCORDANCE WITH SANS10400-XX-2011 AND THE APPLICABLE REQUIREMENTS OF SANS204. ROOFS, EXTERNAL WALLS AND FLOORS THAT FORM THE BUILDING AND ANY OPENINGS IN THE EXTERNAL FABRIC SUCH AS WINDOWS AND DOORS SHALL BE CONSTRUCTED TO MINIMIZE AIR LEAKAGE IN ACCORDANCE WITH SANS204. ALL DOORS SHALL HAVE A FOAM RUBBER SEAL OR PERIPLUS STRIP TO RESTRICT AIR LEAKAGE IN ACCORDANCE WITH SANS204. WINDOW UNIT AIR LEAKAGE SHALL COMPLY WITH SANS10400-XX-2011 AND THE APPLICABLE REQUIREMENTS OF SANS204.

Hot Water Services Note

Annual Hot Water Consumption Calculations

Building Classification	H4 - High Rental
Occupation	10
Assumed consumption per capita	115 litres
Assumed total daily consumption	1,150 litres/day
Assumed annual consumption	419,7 kilolitres/year
Supplied by electrical resistance heating	209,8 kilowatt-hours/year or 575 litres/day
Supplied by alternative heating	209,8 kilowatt-hours/year or 575 litres/day

Hot Water Storage Vessel Size

In accordance with SANS 10252-1: 2012, Table 5 the vessel size is calculated as follows:

Building Classification	Residential - High
Recommended storage volume (60°C)	50 litres/capita
Recommended heater power	2 - 5 kW/unit
Required storage volume (at 60°C)	10 x 50 litres = 500 litres

Thus the building requires 500 litres storage volume; 250 litres heated by electric resistance and 250 litres by alternative heating.

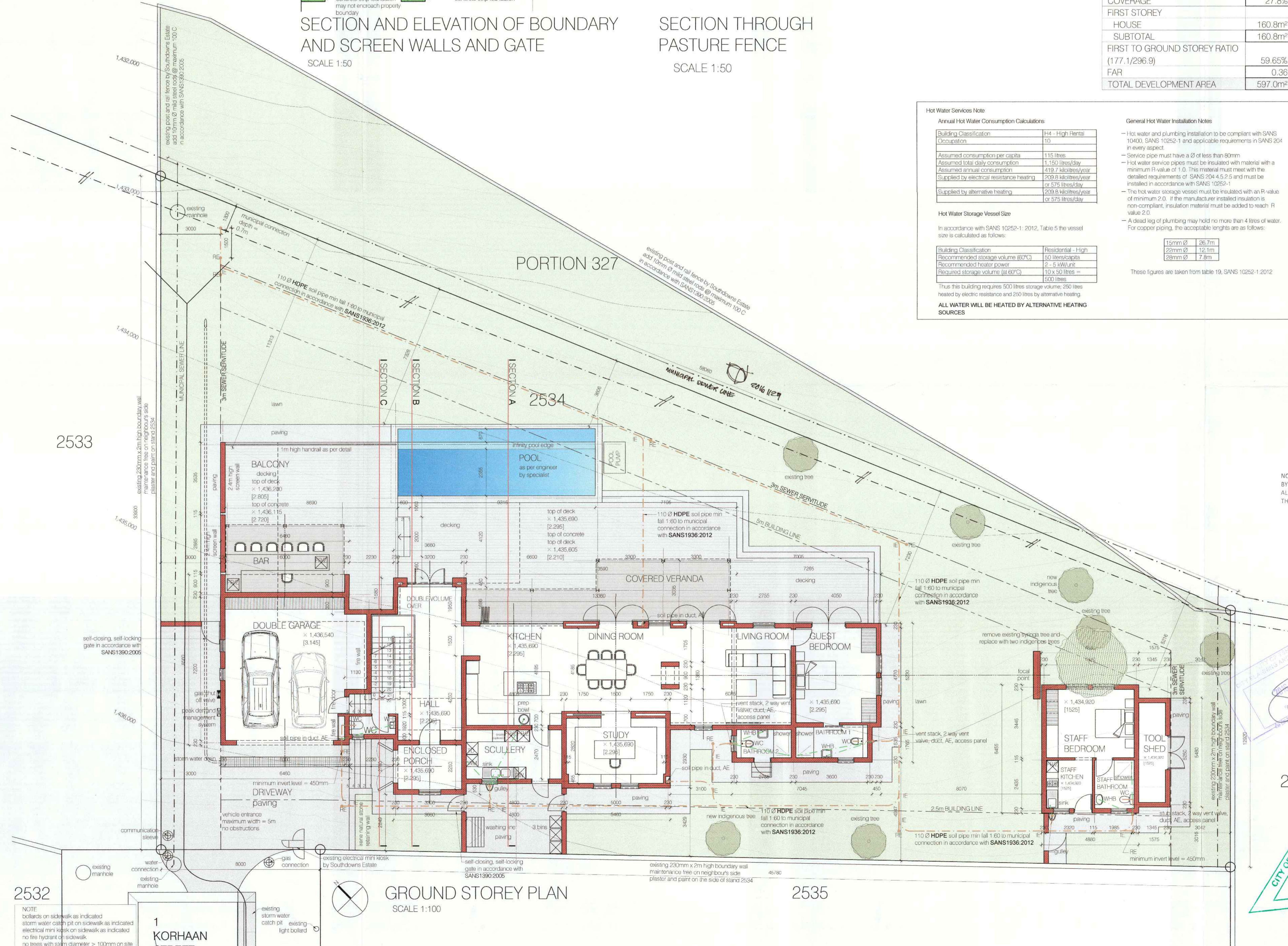
ALL WATER WILL BE HEATED BY ALTERNATIVE HEATING SOURCES

General Hot Water Installation Notes

- Hot water and plumbing installation to be compliant with SANS 10400, SANS 10252-1 and applicable requirements in SANS 204 in every aspect.
- Service pipes must have a Ø of less than 80mm.
- Hot water service pipes must be insulated with material with a minimum R-value of 1.0. This material must meet with the detailed requirements of SANS 204 4.5.2.5 and must be installed in accordance with SANS 10252-1.
- The hot water storage vessel must be insulated with an R-value of minimum 2.0. If the manufacturer installed insulation is non-compliant, insulation material must be added to reach R value 2.0.
- A dead leg of plumbing may hold no more than 4 litres of water. For copper piping, the acceptable lengths are as follows:

15mm Ø	26.7m
22mm Ø	12.1m
28mm Ø	7.8m

These figures are taken from table 19, SANS 10252-1:2012.



GROUND STOREY PLAN
SCALE 1:100

NOTWITHSTANDING THE APPROVAL GRANTED BY THE SOUTHDOWNS BUILDING COMMITTEE, ALL PLANS MUST CONFORM TO ALL ASPECTS OF THE LATEST ESTATE GUIDELINES.

PLAN APPROVED BY

ESTATE MANAGER

25 NOV 2016

ON BEHALF OF SOUTHDOWNS BUILDING COMMITTEE

2016.11.24

2016.11.24

DEVILLIERS DU TOIT ARCHITECT

OWNER

DEVILLIERS DU TOIT CONSULTING

10 River's Edge, 93 Wild Avenue, Newlands, Pretoria 0049

PO Box 1905, Brooklyn Square 0075

Devilliers du Toit, H. Fourie, Pr.Eng. 980158, BestCIV Eng. Gauteng, Reg No. 2009/021054-04

Devilliers du Toit, H. Fourie, Pr.Eng. 980158, BestCIV Eng. Gauteng, Reg No. 2009/021054-04

LEED Green Associate

devilliers@devilliersdutoit.com

083 232 6554

1 2016 -11- 25

R4/1849/16

PROJECT HOUSE McCORMICK, STAND 2534, CORNER OF KORHAAN STREET AND TSHWANE STREET

DRAWING TITLE SITE PLAN AND GROUND STOREY PLAN BOUNDARY WALL AND FENCE DETAILS

2016-12-19

BUILDING PLAN AND MANAGEMENT REGION 4

DATE 24 NOVEMBER 2016

DRAWING NUMBER 100

REVISION 1

SCALE 1:100, 1:50

ORIGINAL SIZE OF DRAWING A1

CITY OF TSHWANE WATER AND SANITATION

30-11-2016

Municipal sewer not affected by proposed construction as per ZS plan. Subject to section 140 of Local Government Ordinance 17 of 1993, as amended.