

**ENERGY EFFICIENCY**

- occupancy classification = h3
- climatic zone 5 = subtropical coastal
- orientation and shading = north to south
- external walls
  - external wall to have min. r-value of 0.35  
ie. > 140mm thick with 20mm plaster internally and externally.
- roof assemblies
 

approved insulation shall be installed so that it abutts, overlaps adjoining insulation or is sealed and shall be installed in accordance with the manufacturers instructions.

  - roof assemblies to have min. r-value of 2.7
  - metal sheeting roof assemblies:
    - direction of heat flow - down
    - r-value of roof covering material = 0.36
    - r-value of approved insulation = 2.29
    - r-value of ceiling = 0.05

TOTAL = 2.7
- hot water supply
 

thermal insulation shall be installed in accordance with the manufacturers instructions.

  - All water installations in buildings shall be in accordance with sams 10400, 10252-1, 1352 and sams 10254.
  - dwelling to be supplied with 100 litre full pressure geyser which is supported across the bath room walls in the roof space above the bathroom.
  - a heat pump is also to be installed according to manufacturers instructions as the 50% alternate water heating requirements next to the geyser.
  - all hot water service pipes to be max. 22mm dia copper & shall be clad with an approved insulation with a minimum r-value of 1.00
- dwelling Unit : total hot water demand : storage vol @ 60° c : heater power
 

low rental : 80 - 115 l/capita/d : 100 - 150 l/unit : 2-3 kw/unit  
medium - high : 115 -140 l/capita/d : 40 - 50 l/capita : 2-5 kw/unit
- All installation work to be undertaken by registered / responsible plumber Durban municipality
- All fittings to be SABS / Jasvic approved.
- No galvanised fitting or pipe is to be used.
- WC overflows to discharge externally.
- minimum spec on fire is class 12.
- First 50m / 100dia thereafter 75dia.
- All pipes in chase to be copper/1.
- All copper tubing in a chase is to be lagged.

**SERVICES:**

- The electricity supply cable and water supply pipe is to be in buried pvc sleeves installed within the property.
- Telephone wires to be in a 20mm buried conduit installed within the property to the nearest distribution point in the verge
- Weather proof junction box to be installed on boundary for digital services and provide 2 x 50mm pvc sleeve pipes from junction box to ripple box
- SETTING OUT:**  
Benchmark / heighted control points as submitted by Visick Moodie are to be used for setting out.  
The levels as shown on the manholes on Visick Moodie's drawings are not always correct. It is the contractor's responsibility to check the datum level with the surveyor prior to any setting out taking place.  
The building to be set out by professional land surveyor using electronic media.

**HEALTH NOTES:**

where not ventilated directly to open air, to be mechanically vented with fresh air at a minimum rate of 7.5 l/s per person, with a velocity not exceeding 0.5 m/s or less than 0.2 m/s  
artificial lighting to be minimum 350 lux.

**DRAINAGE**

- all sanitary fittings to be trapped in accordance with local authority by-laws  
inspection eyes to be provided at all bends, junctions and change in direction  
all gully surrounds and manhole covers to be 75mm above grd.  
anchor blocks to be provided where gradient exceeds 1:5  
1100 upvc ribbed pipe laid where any structure passes over sewer line being protected from any loads imposed on the drain
- Ø 110 PVC SEWER PIPE @ MIN 1:60 FALL
  - Ø 110 PVC STORMWATER PIPE @ MIN 1:60 FALL
  - 1100 upvc ribbed pipe laid where any structure passes over sewer line being protected from any loads imposed on the drain

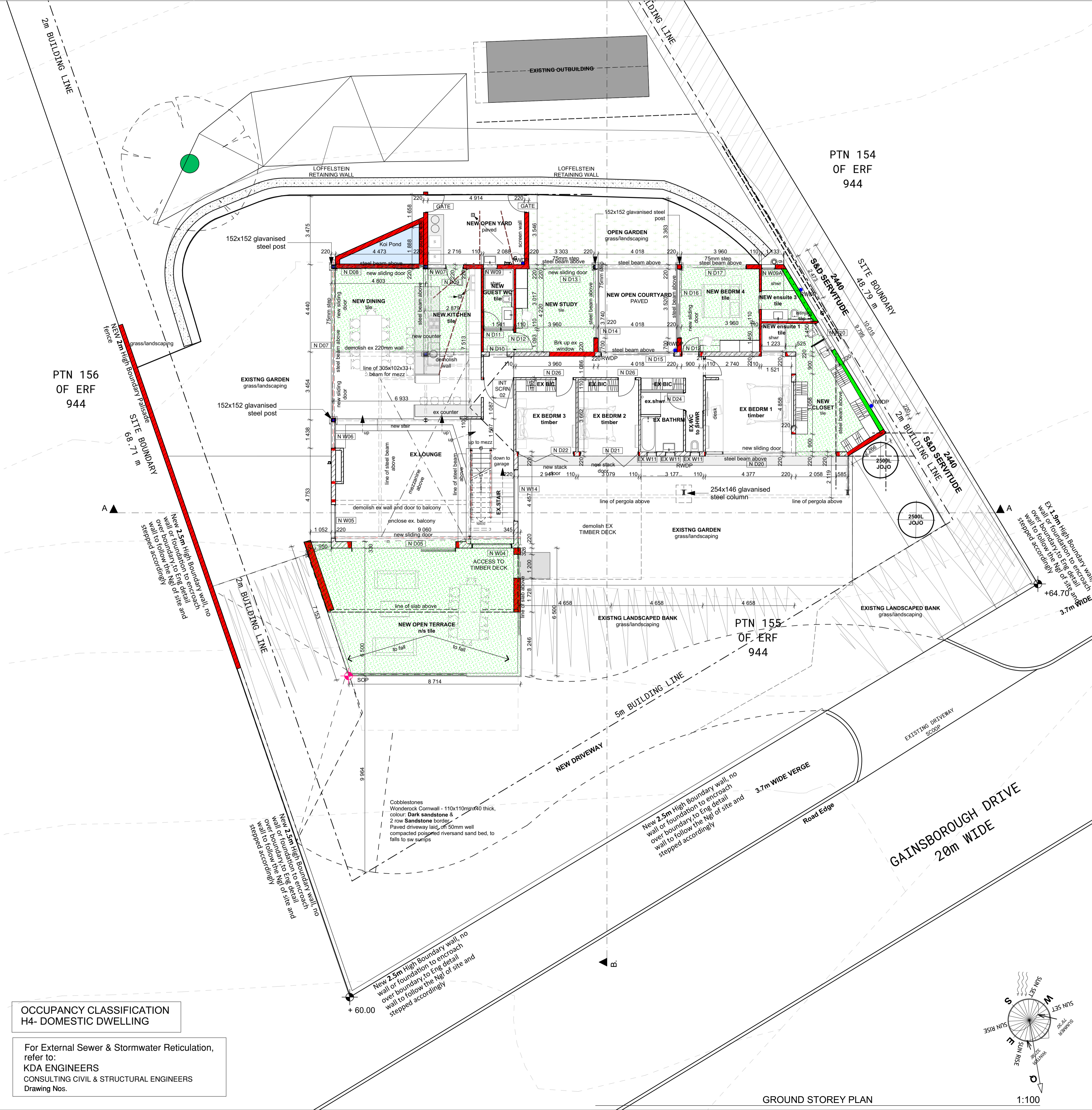
**GENERAL NOTES:**

- All work to comply with SANS 10400 and Local Municipal By-Laws.
- Boundary beacons to be exposed and checked, prior to the commencement of work.
- All dimensions, angles and levels to be checked on site before work is put to hand.  
Architect to be notified of discrepancies prior to the undertaking any work.
- Drawings are not to be scaled; Figured dimensions to be used only.  
All dimensions are, unless otherwise specified, in millimeters.
- Drawings are to be read in conjunction with Structural, Civil drawings.
- All glazing to comply with NBR SANS 10400-N 2010 3RD Edition.
- All safety glazing in accordance with SANS 10400 - N
- All balustrading to be minimum one meter high and to comply with the requirements of SANS 10400 - D
- All stairs to comply with SANS 10400 - M
- Soil Poisoning in to be in accordance with SANS 10400

**STRUCTURAL NOTES:**

- The following to Professional Structural Engineer's Detail:
  - Soil Excavation and Filling.
  - Foundations, RC Floor Slabs, Beams and Columns.
  - Structural steel.
- Note: Certificate of Stability to be issued on completion.
- Note: Foundations are not to encroach Servitudes and or Boundaries.
- pc lintels to all non beam openings
- off shutter conc. to be cleaned and rubbed down

paving to verge for driveways must incorporate 2 x 1000 heavy duty PVC ducts at 600mm below the ground level and approximately 1500mm from the road edge. these ducts should protrude a minimum of 500mm on either side of the paving. the PVC pipes must have stop ends on both sides. this measure is to ensure that should any of the service providers need to lay a cable/pipe in the verge in the future, then they will be able to traverse the driveway without having to lift the paving



**OCCUPANCY CLASSIFICATION**  
H4- DOMESTIC DWELLING

For External Sewer & Stormwater Reticulation, refer to:  
**KDA ENGINEERS**  
CONSULTING CIVIL & STRUCTURAL ENGINEERS  
Drawing Nos.

KWAZULU NATAL  
**AMAFA**  
APPROVED

CASE ID: 22460  
09 October 2023  
**APPROVED**

CLIENT Ms N. Kader for  
SUN TRUST IT 235/2005  
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**SUBMISSION**

Turnkey property development specialists

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**URBAN**  
DEVELOPMENT GROUP

PROJECT  
**PROPOSED ADDITIONS AND ALTERATIONS TO EXISTING DWELLING**  
ON 27 GAINSBOROUGH DRIVE, ATHLONE  
PTN 155 OF ERF 944, DURBAN NORTH  
FOR  
MS N.KADER FOR SUN TRUST

TITLE <b>GROUND STOREY PLAN</b>	
DRAWN JS	CHECKED SB
DATE 15 MARCH 2023	DRAWING NUMBER
SCALE 1:100 A1	UDG > 70 101 REV 6

GROUND STOREY PLAN

