

**WINDOW SCHEDULE**  
 All glass sizes to conform to SANS 0400:1990 Part N Glazing Regulations & SWS 10000

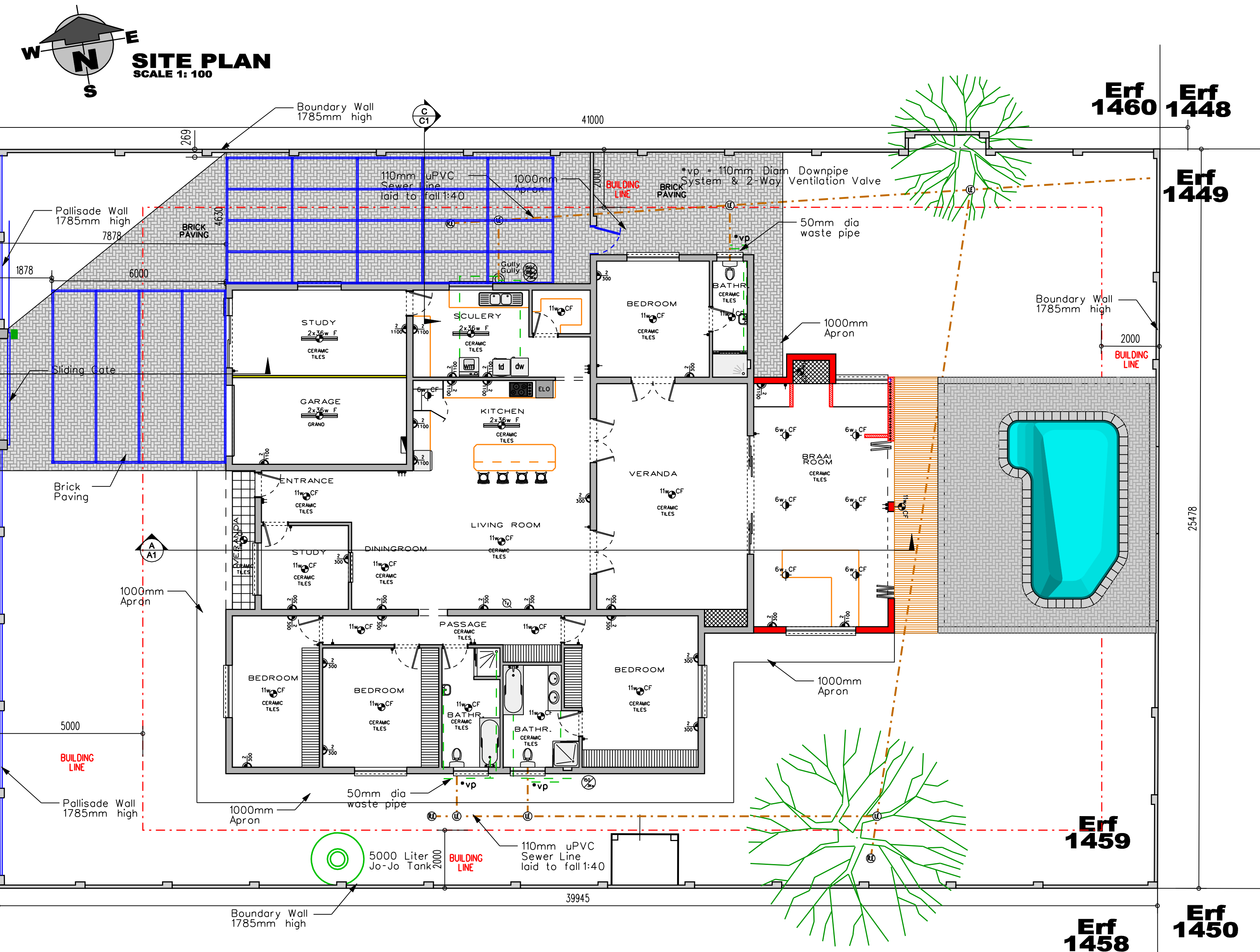
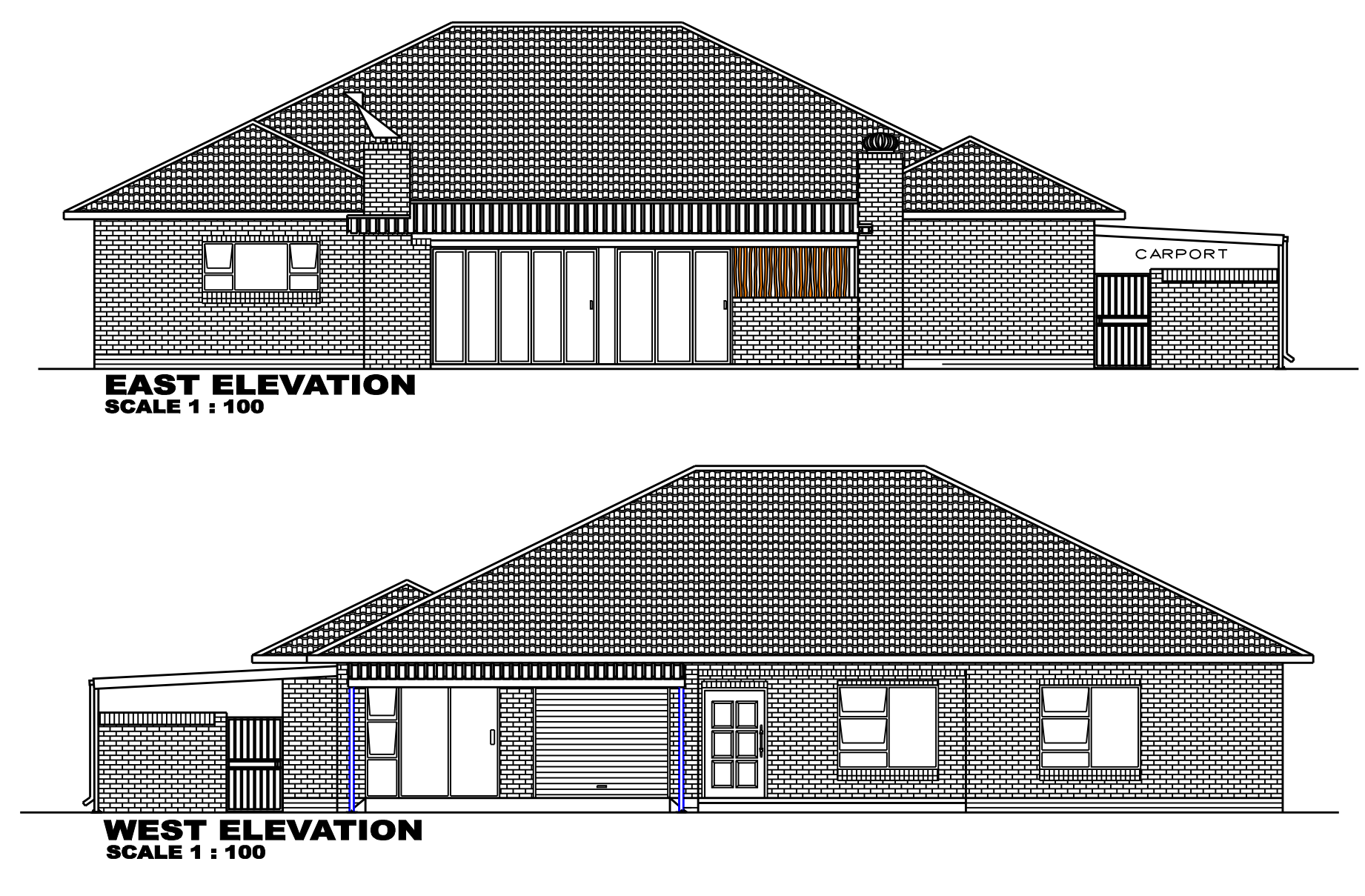
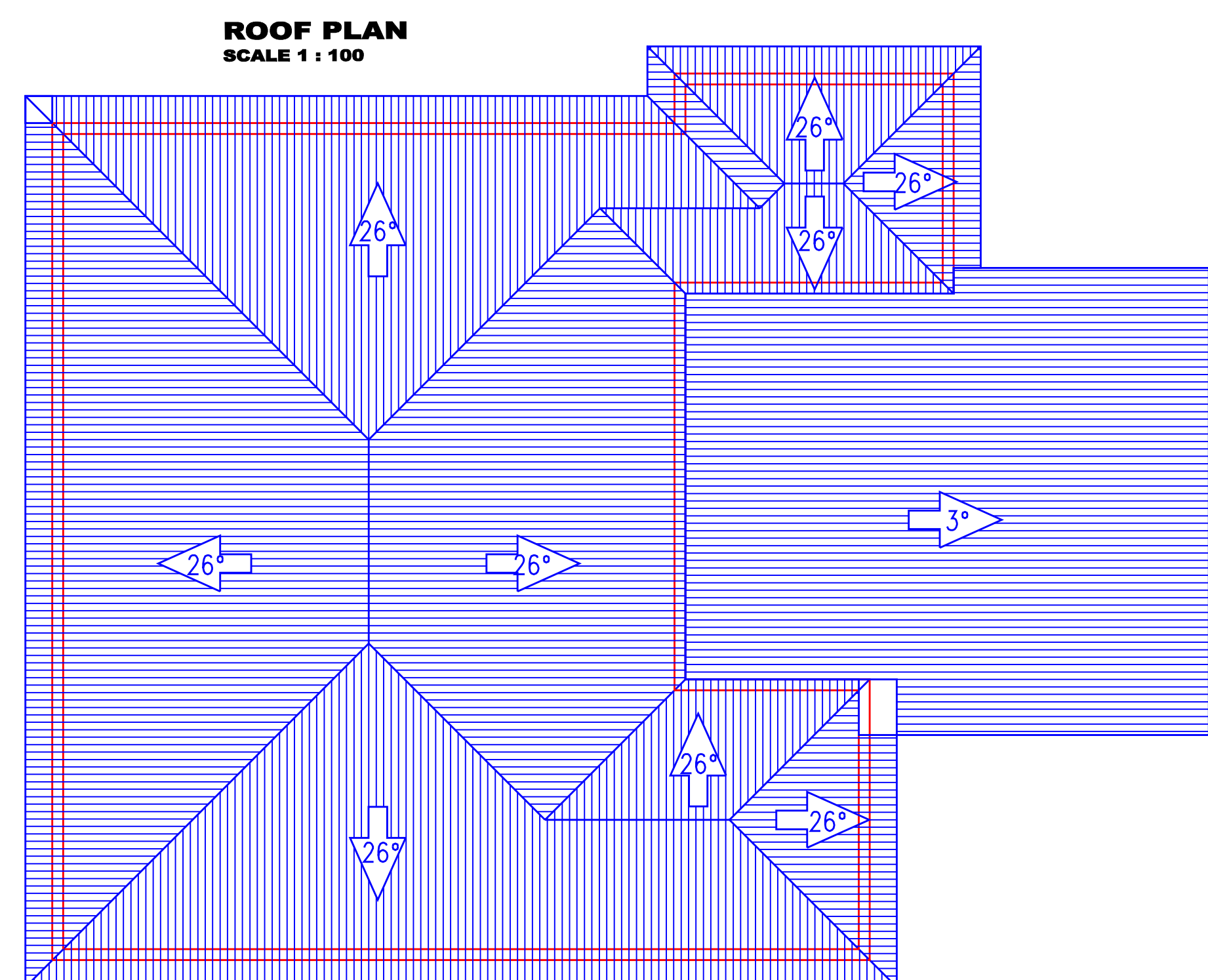
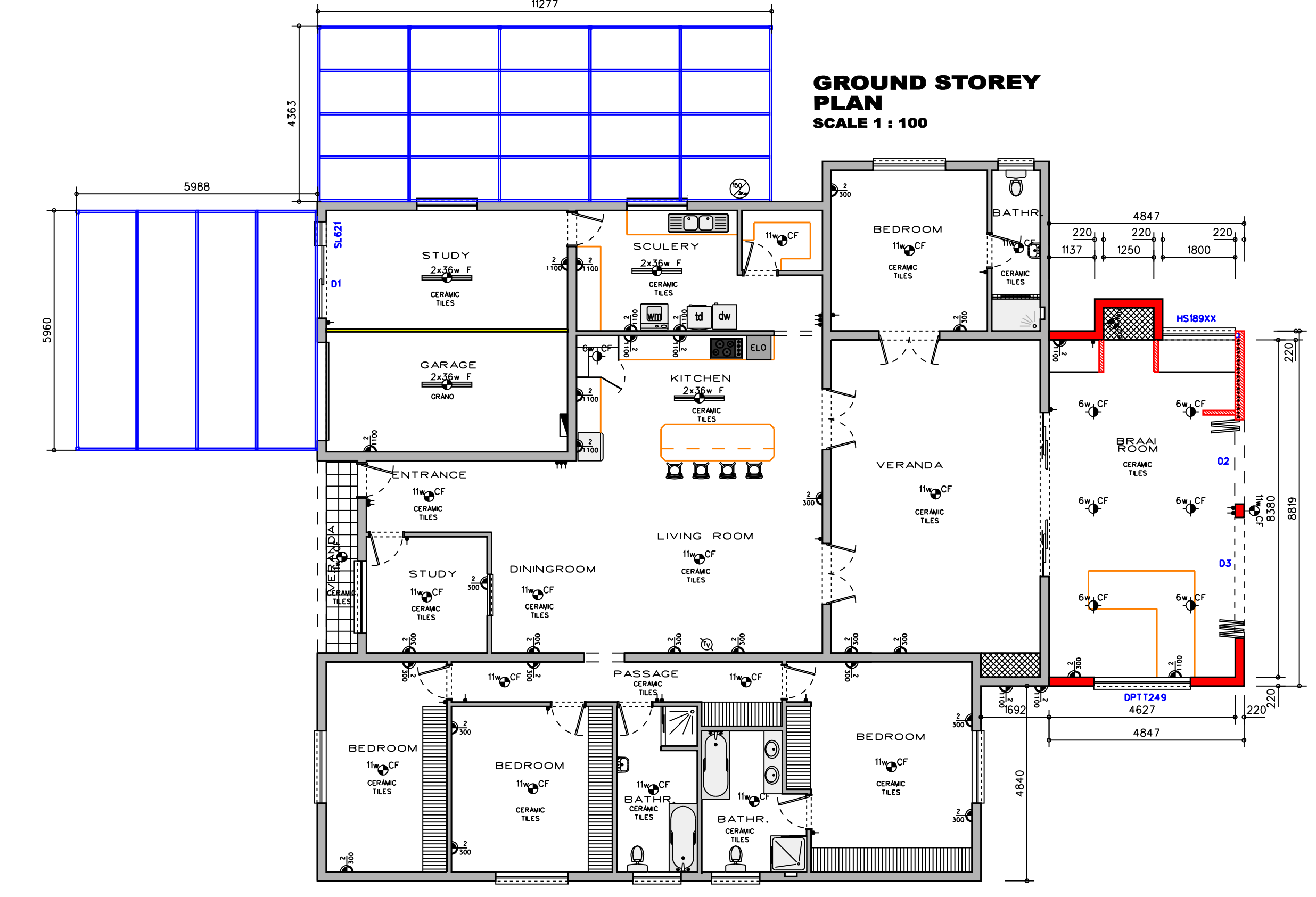
TYPE	REQUIRED	U-VAL	TYPE	REQUIRED	U-VAL	TYPE	REQUIRED
SLIGHT	1	1.80	HEAVYBOX	1	1.80	DP17240	1

**DOOR SCHEDULE**

TYPE	REQUIRED	U-VAL	TYPE	REQUIRED	U-VAL
D1 x 1	1	1.80	D2 x 2	1	1.80
D3 x 1	1	1.80			

**Glazing Elements**

Storey Level	Identifier No.	No. of Units	Window No.	Width (m)	Height (m)	Area	U-value	SHGC	Orientation	Projection (m) (P)	Height <sup>1</sup> (m) (H)	Height <sup>2</sup> (m) (G)	PH	Solar Exposure Factor (E)	Conductance	SHG
Ground Storey	1.000	1.000	W2	1.800	0.900	1.620	3.4	0.38	North	0.250	1.152	0.252	0.217	0.430	5.508	0.265



**Energy Efficiency in Buildings - Building Design - Services**

Occupancy: 14 Hours per day  
 Design Occupancy Time: 24 Days per week  
 Climatic Zone: 6  
 Total Floor Area of Building: 343.67 m<sup>2</sup>  
 Max. Energy Demand: 1718.35 kWh-Permissible  
 Max. Energy Consumption per Annum: 1718.35 kWh-Permissible

Lamp power (W) rating	No. of lamps	Hours in use / day
6	1	3.0
11	9	4.0
11	7	5.0
11	2	6.0
36	6	4.0
36	2	5.0

Total lamp energy demand (W): 528 Energy demand acceptable.  
 Total lamp energy demand (W/m<sup>2</sup>): 1.54 Energy demand acceptable.  
 Available energy demand - Lights: 1190 W  
 Total annual energy consumption - Lights (kWh): 849.94 Energy consumption acceptable.  
 Total energy consumption - Lights (kWh/m<sup>2</sup>): 2.02 Energy consumption acceptable.  
 Available annual energy consumption - Lights: 868.41 kWh

**Achieved Aggregate Conductance / Solar Heat Gain**

Conductance (C <sub>a</sub> ) for Storey / Room	196.185	Conductance (C <sub>a</sub> ) for Storey / Room	178.983
Solar Heat Gain (C <sub>sg</sub> ) for Storey / Room	18.147	Solar Heat Gain (C <sub>sg</sub> ) for Storey / Room	22.496

Acceptable & refer SANS 204 (4.3.4)

**Hot Water Services** (Use actual measured data where available)

Types of Accommodation: 7  
 Assumed Hot Water Consumption: 40.0 L Per Day  
 No. of Persons: 4  
 Assumed Daily Hot Water Consumption: 160.0 L  
 Assumed Annual Hot Water Consumption: 58.24 kl - Based on daily design occupancy per week  
 50% of Annual Hot Water Consumption: 29.12 kl - Minimum volume of hot water to be provided by means other than electrical resistance heating  
 Daily Hot Water Consumption: 80.0 L - To be provided by means other than electrical resistance heating

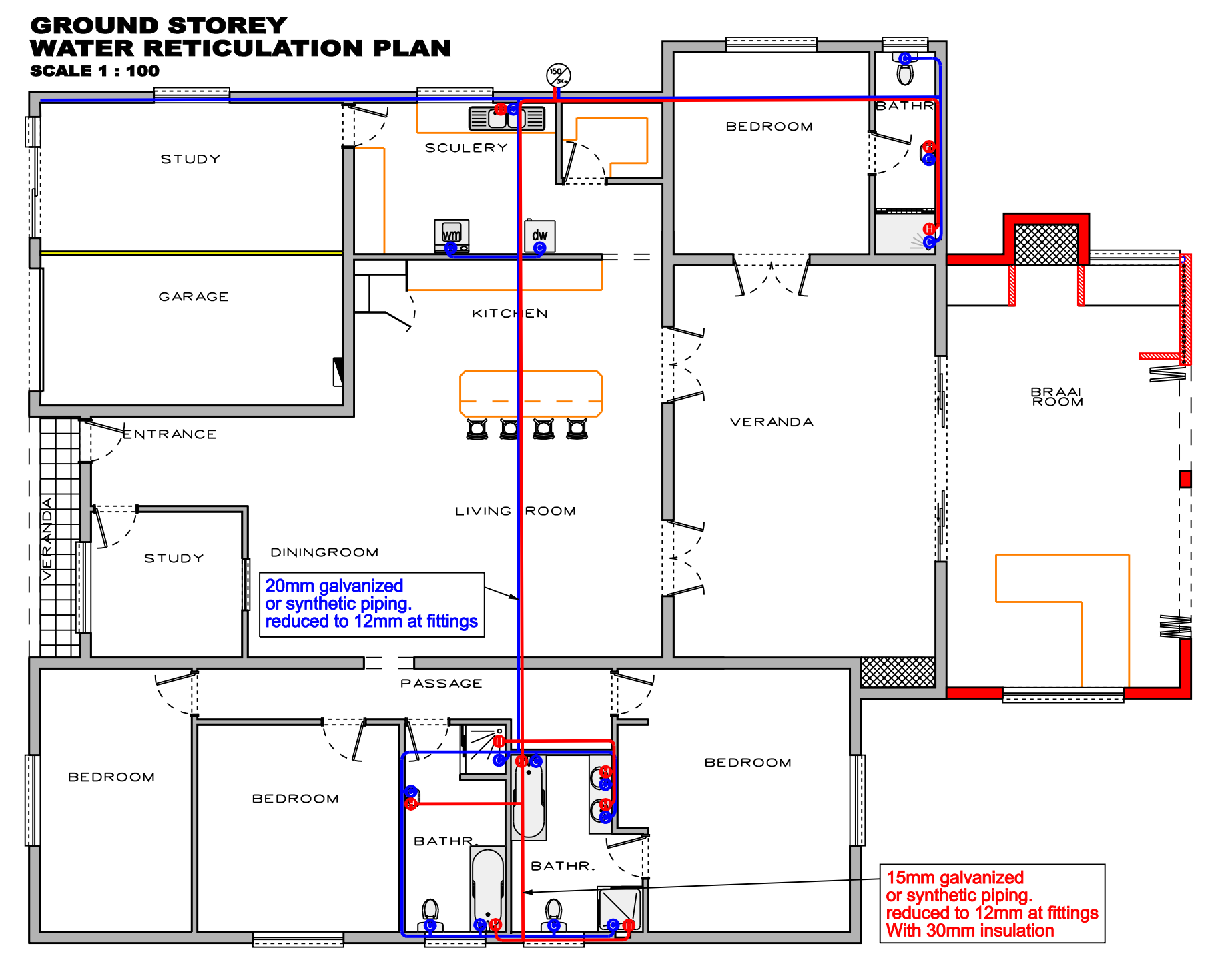
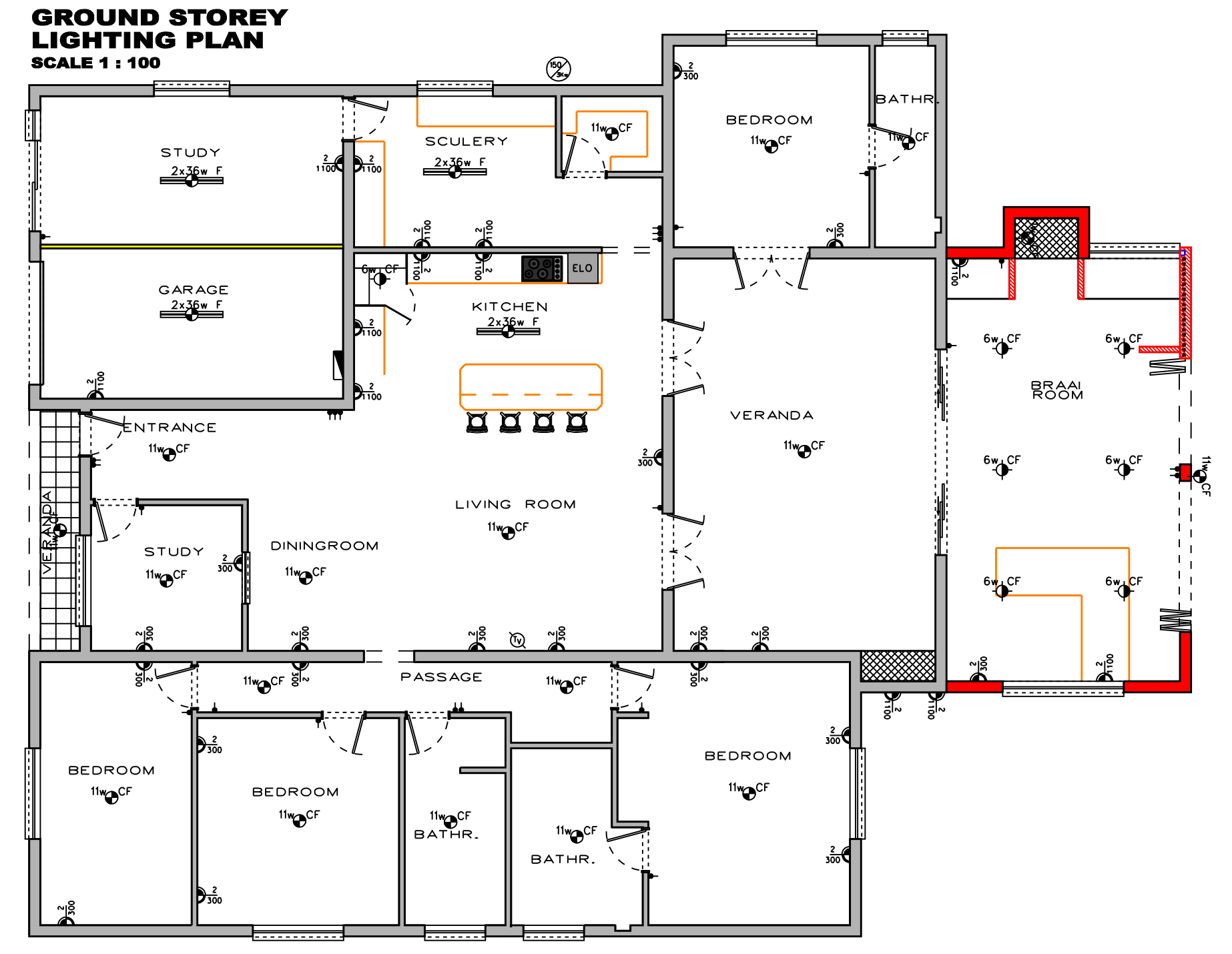
Insulation Requirements:  
 Internal diameter of Hot Water Service Pipe: 7.50  
 Minimum Required R-value for Pipe Insulation: 1.0 Refer SANS 204 (4.5.2)

Hot Water Vessels / Tanks:  
 Minimum Required R-value for Vessel / Tank: 7

**Ground Storey Façade**

Orientation	Facade Length (m)	Facade Area	Allowable Air-conditioning Energy Value	Achieved Air-conditioning Energy Value
North	23.028	2.576	59.320	13.666
East	17.880	2.484	44.414	10.082
South	23.028	2.612	60.149	13.654
West	17.880	2.672	47.775	10.845

Acceptable & refer SANS 204 (4.3.4)  
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**ELECTRICAL LEGEND**

- 150V/1kV Geysers (3kW) Zitted
- 150V/1kV Solar Geysers on Roof
- Shower Head - Hot & Cold Water
- Ceiling Light
- Recessed downlighter
- Weather proof walkmount light
- 36w Flush Mount Fluorescent Light
- Damp Double Wall Socket (Height above floor)
- Air Conditioner Wall Socket (Height above floor)
- Airconditioning Unit (BTU)
- Lightswitch
- Distribution board
- Stove Connection cable
- TV Point
- Telephone point

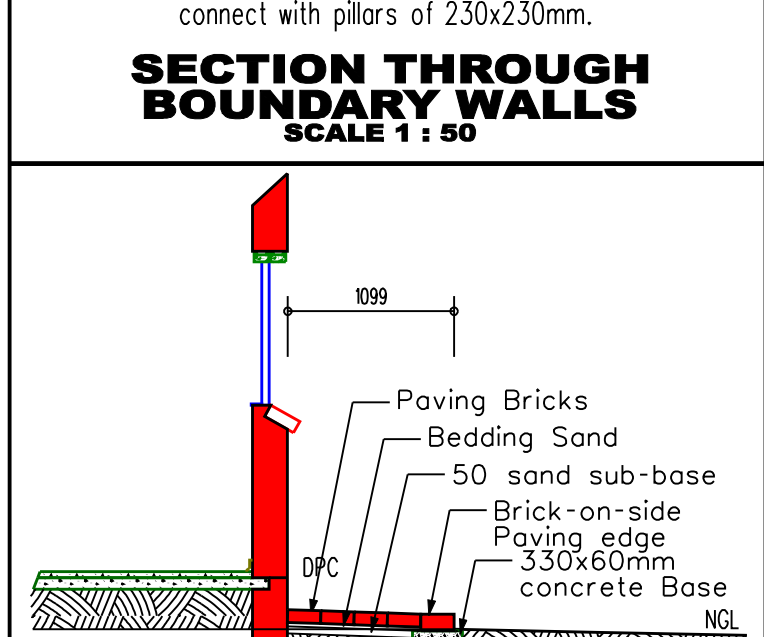
**ROOF NOTES**  
 PITCH OF ROOF IS DEGREES.  
 0.6mm Chromadek BR sheeting on 50x76mm SA Pine purlins at max 1200mm c/c on 228x38mm Ganganaltype rooftrusses at max 1000mm c/c on 114x38mm wallposts fixed with 4mm gauge wire built & bricked into wall.  
 NOTE: The manufacturer's instructions should be followed.

**CEILING NOTES**  
 30mm Thick Polystyrene ISO Board fixed to 38x38mm SA Pine battens on max. 400mm c/c.  
 65x65mm Polystyrene Cornices.  
 Optional: Flexible fibre glass blanket above ceiling Ref: SANS 204 (4.3.6.2) 100-130mm Thickness, 10-8kg/m<sup>3</sup>

**GENERAL NOTES**  
 Keep unauthorized persons of the site at all times.  
 Minimise disturbance and nuisance from dust and noise.  
 Prevent structural or other damage to remaining portions of the building/ make good existing work damaged during alterations.  
 Ensure that service connections (electrical, telephone, water supply, sewer, etc.) are not interfered with. Give notice to the local authority and the architect of disconnection or alteration if necessary.  
 Remove all removable fittings that could be damaged, mark and store until after painting, and re-fit where applicable.

**DRAINAGE NOTES**  
 1. E's & C's to abutments & junctions & provided with suitable covers & markers of ground level.  
 2. Minimum lateral sewer pipes to be 160 or as indicated on floor plans and elevations.  
 3. All waste pipes to have resealing traps and must be accessible at all times & along the entire length of the pipe.  
 4. R's & C's to be provided at start & at all direction changes of sewer line.  
 5. All sewer pipes below buildings to be encased in 300mm 20mpa concrete all round.  
 6. Minimum diameter of pipes:  
 Domestic sewer pipes: 100mm  
 Industry sewer pipes: 150mm  
 Waste pipes: 38mm ASVP's: 150mm SVPA's & OVPS: 110mm  
 7. Vent pipes: 100mm 2 way vent valve  
 Sol pipes: 100mm 2 way vent valve  
 Waste pipes: 50mm 2 way vent valve  
 8. Invert level of start of sewer line to be minimum 350mm below natural ground level.

**FOUNDATION NOTES**  
 700x230 Concrete strip foundations below all 230mm walls & 800x250 below all double storey walls.  
 300x230 Concrete foundations below all 100mm walls.  
 Concrete reinforced with 4 x 12mm of longitudinal bars @ 28 days.  
 25mm Concrete screed on 85mm concrete multiple bed @ 28 days.  
 (Strength 20mpa @ 28 Days)



**BRICK PAVED APRON SCALE 1:50**

Remarks:  
 New Structures: [ ]  
 Existing Structures: [ ]  
 Structures to be demolished: [ ]

**AREAS**

MAIN HOUSE: 190 m<sup>2</sup> STAND: 1019 m<sup>2</sup>  
 VERANDAH'S: 5 m<sup>2</sup> FOOTPRINT: 304 m<sup>2</sup>  
 OUTBUILDINGS: 42 m<sup>2</sup> COVERAGE: 29.83 %  
 PHASE 2: 67 m<sup>2</sup>  
 TOTAL: 304 m<sup>2</sup>

**Proposed extensions to the property of NR Heating on Erf 1459 Jan Frederik Street Kathu**

**SITE PLAN, SCHEDULES GROUND STOREY PLAN ELEVATIONS, ENERGY EFF. WATER & LIGHTING PLANS**

CLIENT: HEIN PIENEAR DATE: 2025/06/09  
 PROJECT NO: ERF1459-2025 REV: 1  
 DRAWING NO: NRH 002