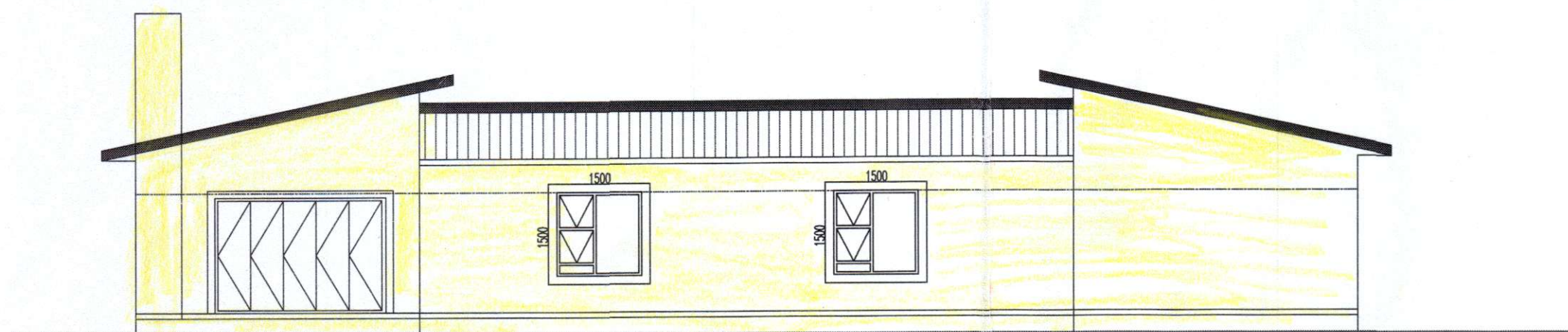
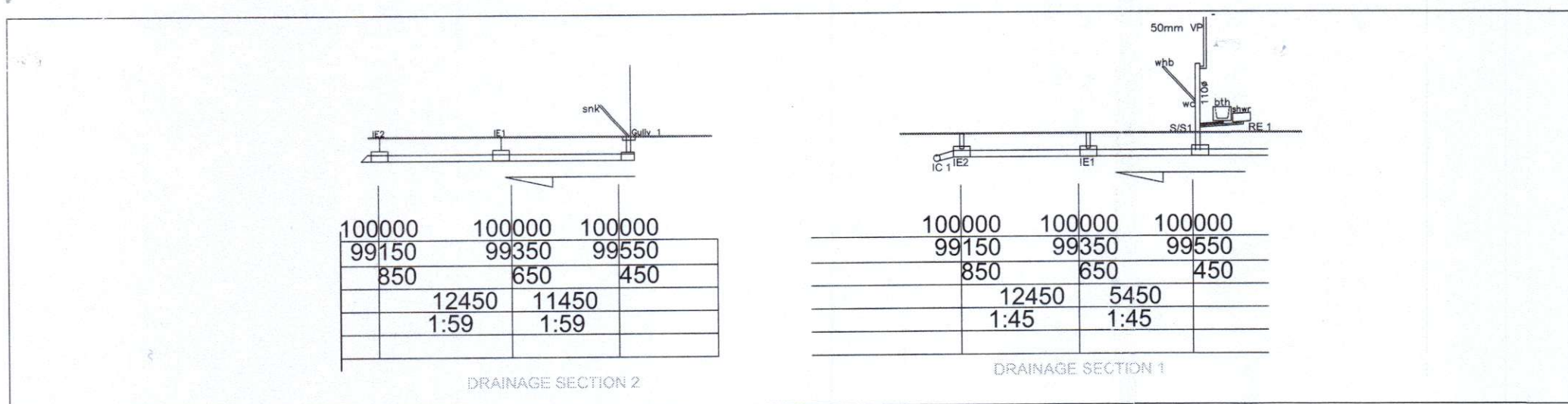
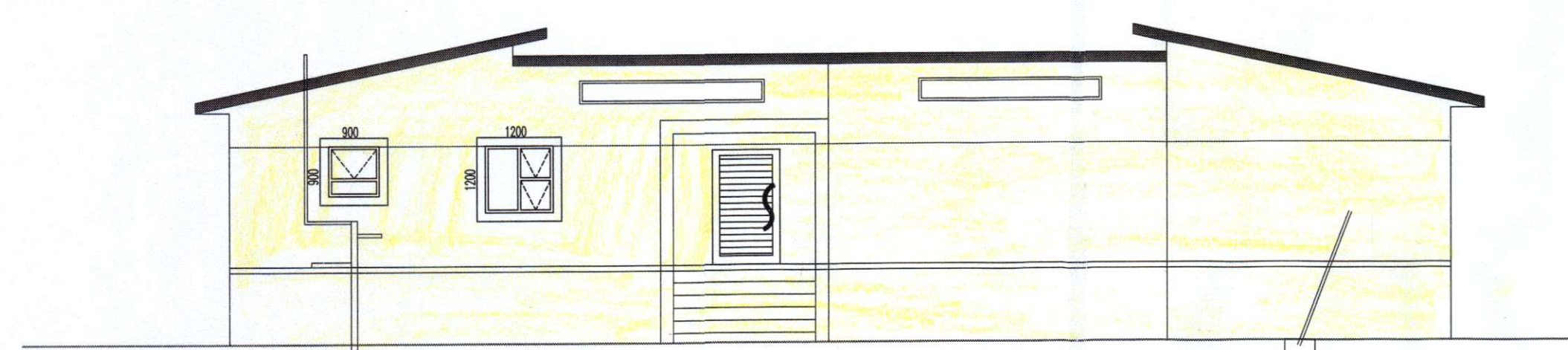




WEST ELEVATION
SCALE 1/100



EAST ELEVATION
SCALE 1/100

TABLE 5 -HOT WATER DEMAND

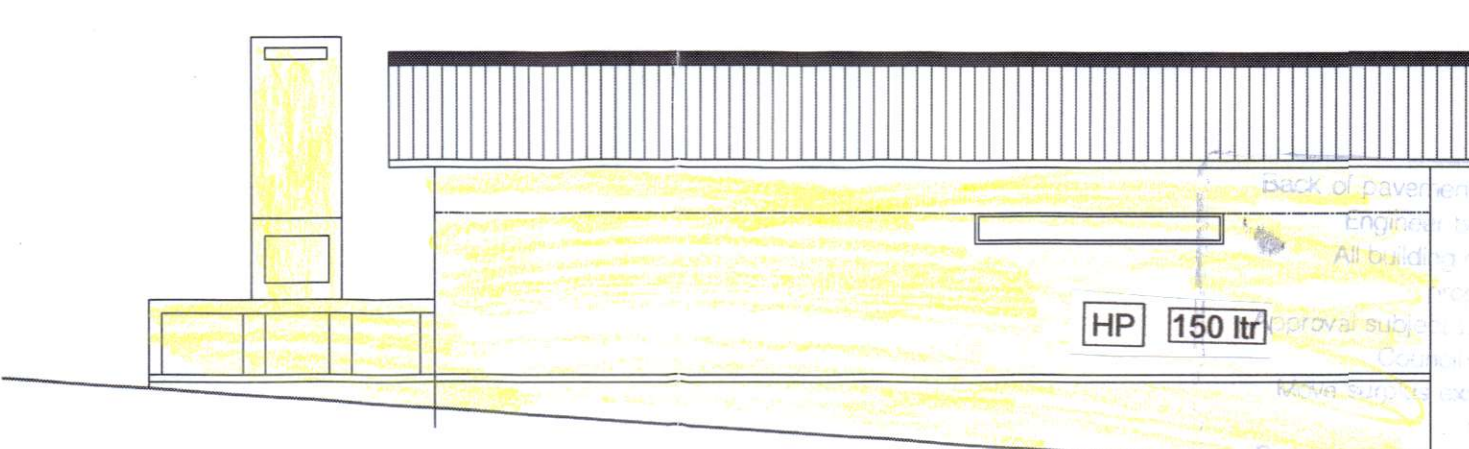
TYPE OF ACCOMMODATION:	LOW RENTAL 80-115L Capital/day
ASSUMED DAILY WATER CONSUMPTION:	= 80L
NUMBER OF PEOPLE:	= 4
ASSUMED DAILY HOT WATER:	= 320L
ASSUMED ANNUAL DAILY HOT WATER:	= 16 800L
50% OF ANNUAL DAILY HOT WATER:	= 8 400L
DAILY WATER CONSUMPTION:	= 160L

WATER FEED PIPE SIZES

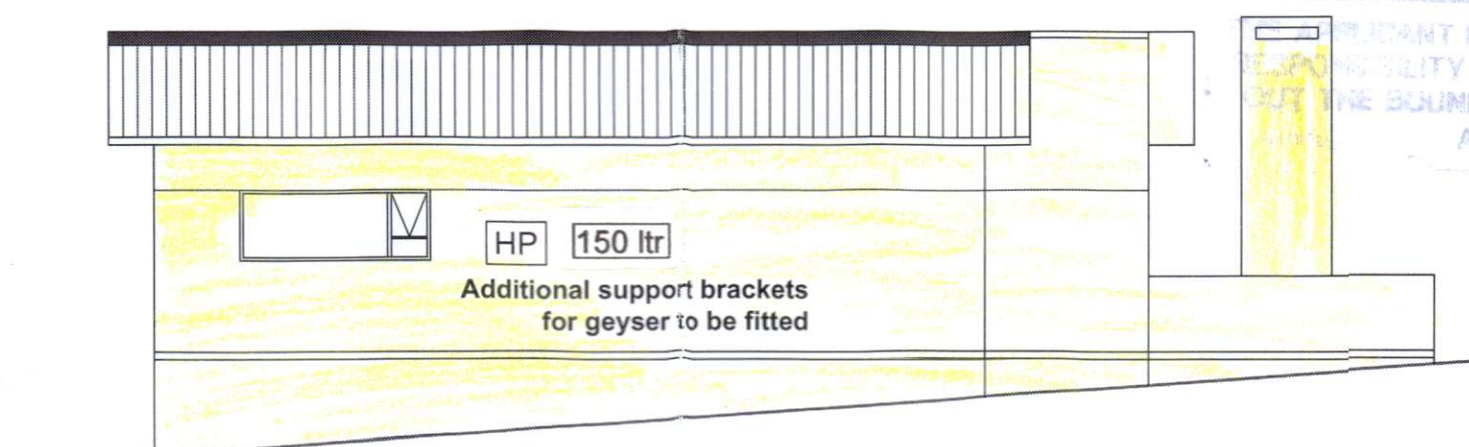
MAIN FEED FROM METER = 25MM
INTERNAL COLDWATER FEEDS 22MM
HOTWATER INSULATED FEEDS 22MM
FINAL DROPS 15MM

HOT WATER SERVICES

A minimum of 50 % by volume of the annual average hot water heating requirement shall be provided by means other than electrical resistance heating, including, but not limited to solar heating, heat pumps, heat recovery from other systems or processes.
Hot water usage shall be minimised and the system maintained in accordance with the requirements as per SANS 10252-1.
-Insulation to be protected against the effects of weather and sunlight.
-Be able to withstand the temperatures within the piping & achieve the min R-Value as specified above.
Hot water vessels and tanks tp be insulated with a material achieving min.R-value of 2. Insulation of vessels, tanks and piping containing cooling water to be protected by a vapour barrier on the outside of the insulation.
Piping insulation requirements do not comply to space heating water piping if
- Located within the space being heated where the piping is to provide heating to that space.
- Encased within the floor slab or masonry.
-These pipes to comply with SANS 10252-1



SOUTH ELEVATION
SCALE 1/100



NORTH ELEVATION
SCALE 1/100

ROOF-R-VALUE 5.07

Cellulose fibre loose fill 135mm. Thick bulk insulation to be installed Roof assembly to have an R - Value of 3.7m, k/W direction of flow up.
THERMAL INSULATION
Insulation to comply with the min.required R-Values & be installed so that:
-it abuts or overlaps adjoining insulation or is sealed.
-it forms a continuous barrier with ceiling walls,bulkheads or floors that contribute to the thermal barrier.

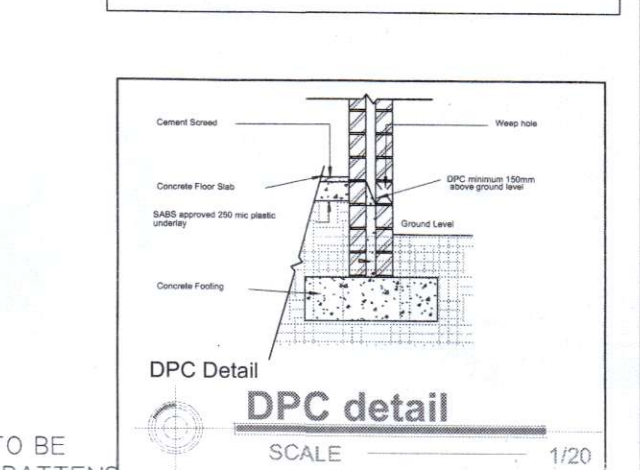
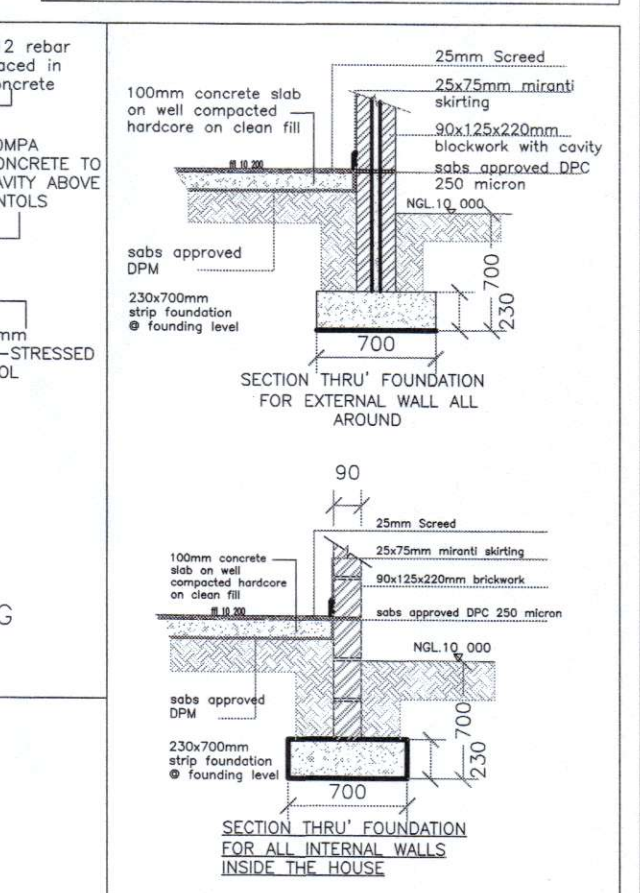
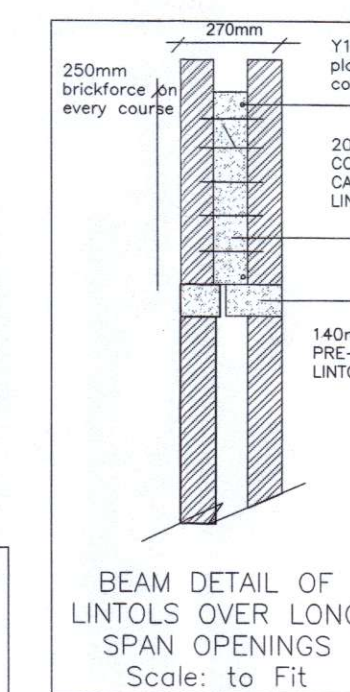
Roof truss bracing 114 x 38mm diagonal end bracing 45° nailed to underside of rafters @ each end of the roof & in both planes.
Roof anchoring: Heavy roofs to be tied down with two strands of 4mm galvanised steel wire embedded 300mm into the wall.
Roof anchoring: Light roofs to be tied down with 30mm x 1.6mm galvanised steel strap embedded 600mm into the wall.
Gable end walls to be tied back to roof structure with galvanised hoop iron straps 3x30mm @ 320 c/c embedded 300mm in wall bent over and fixed to two rafters.
Roof truss bracing: 114x38 diagonal bracing 45° nailed to underside of roof trusses at each end of the roof & in both planes

*NB: R.C. Lintels over all openings (max. 3m opening)with 4 courses of brick work with brickforce above the Lintel. Stresso Lintels with 6 courses brick work. Timbers built into walls to be adequately protected.
*NB: Internal 90mm walls to be built on 700 x 230mm CONCRETE FOOTINGS TIED INTO EXTERNAL WALL FOOTINGS. 250 micron DPM under floor slab. Access doors to be fitted with safety glass. Gable walls to be adequately laterally supported. Parapet wall not to exceed 500mm height.
Glazing:
All the panels in doors larger than 1 square meter or less than 300mm above FFL to be glazed in safety glass having a nominal thickness of not less 6mm. All other glazing to comply with Part N of the NER.
Pitch = 22.5°
Rafters: 114x38 grade 5 & 7 timber
Tie-beams: 152x38 grade 5 & 7 timber
Walls: 114x38 grade 5 & 7 timber
Heel & splice joint connections: 3x16mm bolts
All other joint connections: 1x10mm bolt + 4 (80mmx4mm) -clinch nails.
Prefab type trusses @ 760c/c tied down on 114x38 wallplate.
IBR ROOF SHEETS on 38x50 purlines @ 760 c/c with approved plastic underlay.

ENERGY EFFICIENCY

CONDUCTANCE
NET FLOOR AREA = 160sqm
AT x U = 0.13 = 224 w/k
160m2 x 1.4 = 224 w/k
52.5 w/k > 32.2sqm
SOLAR HEAT GAIN
AT x SHGC
41 x 0.13 = 4.68
= 0.2
FENESTRATION
WINDOW AREA X 100
NET FLOOR AREA
23.9m2 X 100
160m2
14.9 %

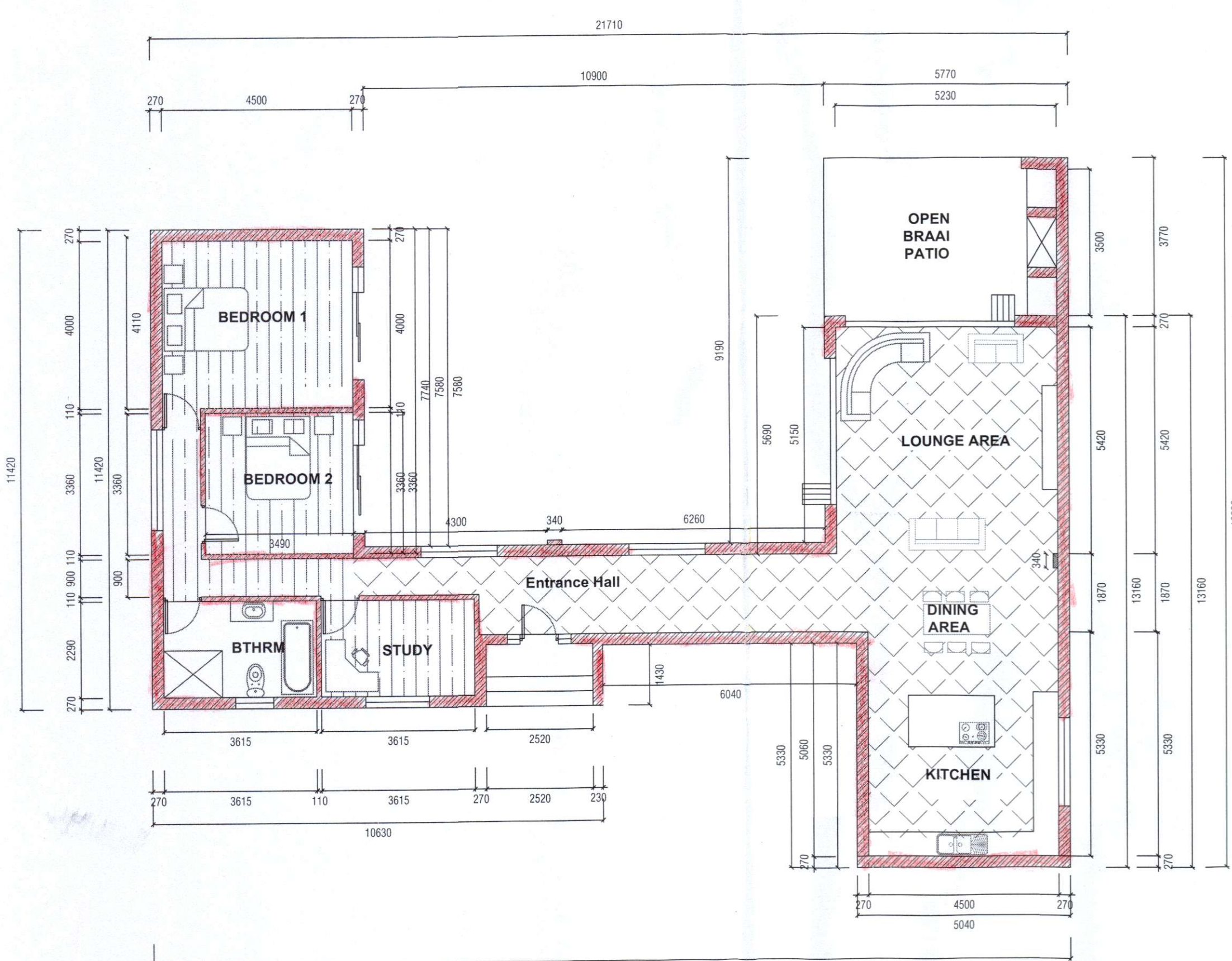
INSTALLATION OF HOT WATER CYLINDER & SOLAR PANEL AS PER SANS 10254 AND SANS 1352 RESPECTIVELY.
HOT WATER CYLINDER AS PER SANS 151
BALANCED HOT WATER SUPPLY TO TERMINAL FITTINGS
BALANCED COLD WATER SUPPLY



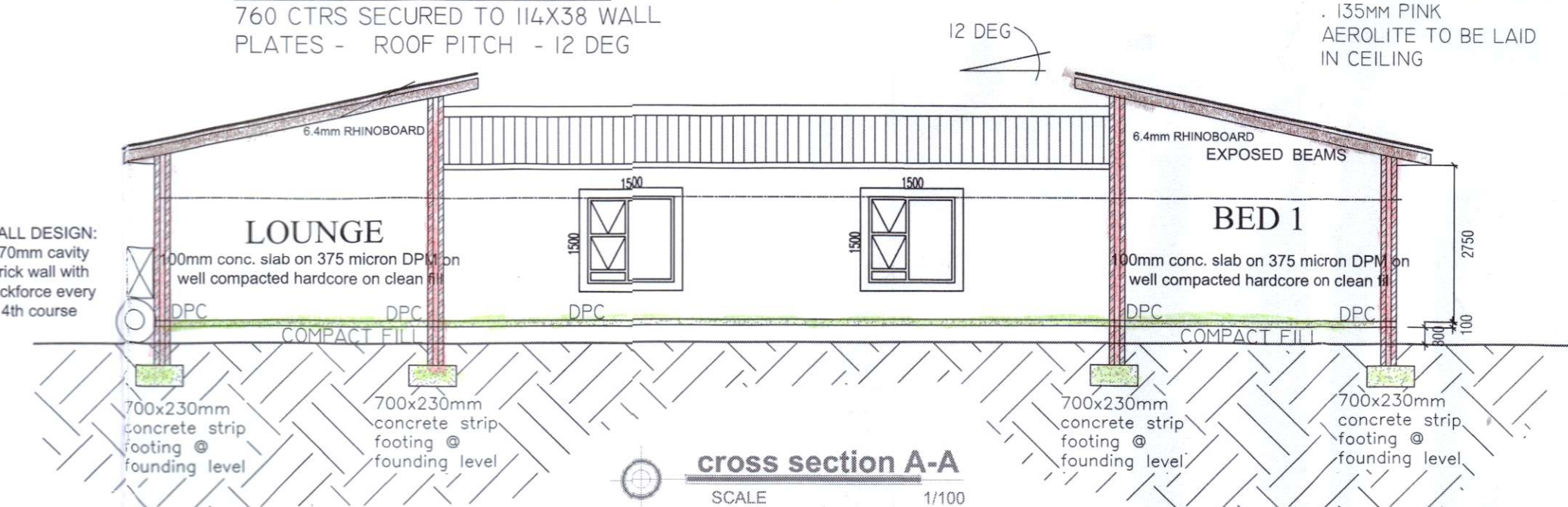
ALL TIMBER USED IN THE ERECTION OF BUILDING BE TREATED AGAINST TERMITE AND WOOD BORER ATTACK & FUNGAL DECAY IN ACCORDANCE WITH SANS 10005

INSULATION: SILATION TO BE LAID BELOW BATTENS 135mm PINK AEROLITE TO BE LAID IN CEILING

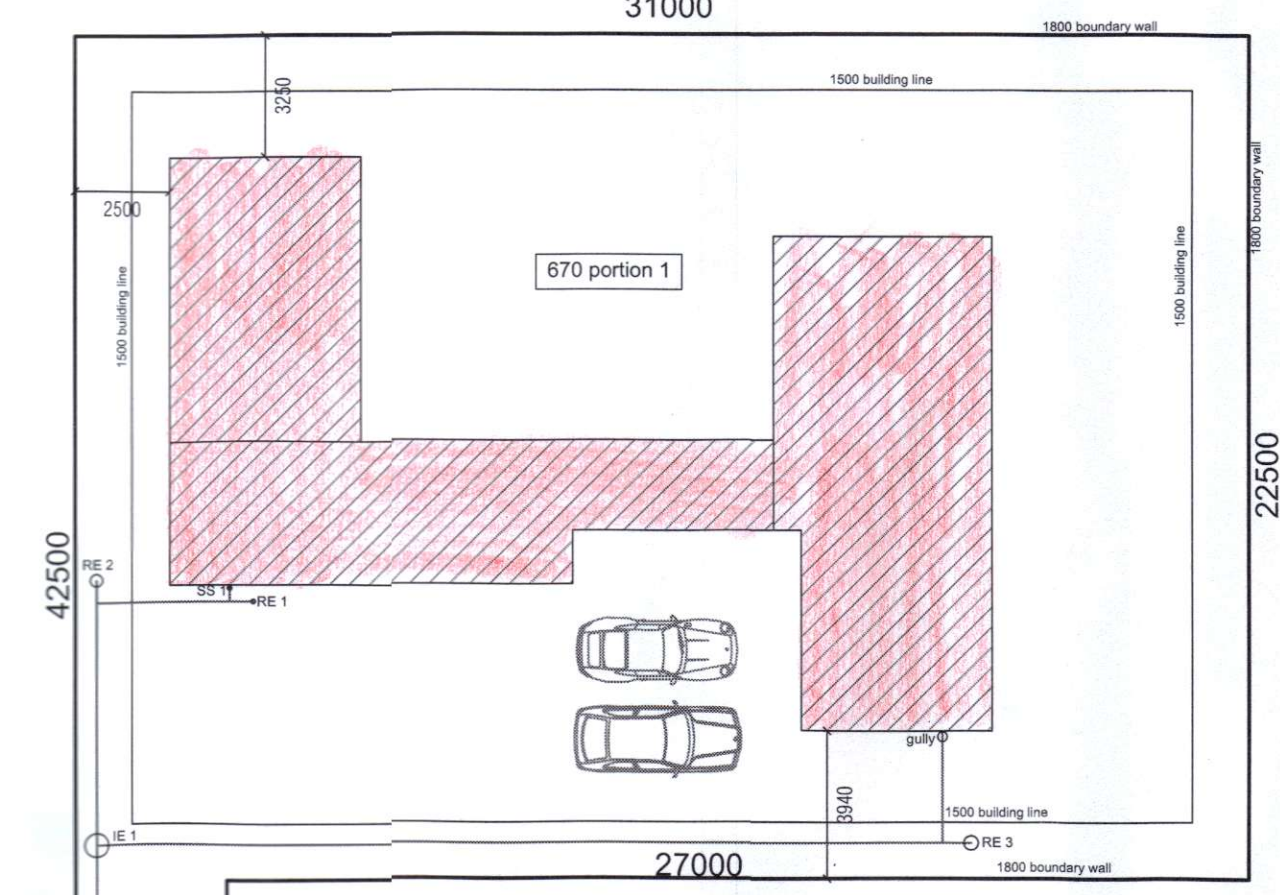
Exposed Eave detail eaves to be finished off with metal corner flashing as per roof sheet colour. Beams exposed with clodit between beams



GROUND FLOOR
SCALE 1/100



CROSS SECTION A-A
SCALE 1/100



TOTAL FLOOR AREA = 160m2

14a Delphinium Dr

SITE PLAN
SCALE 1/200

notes

ALL WORK TO COMPLY WITH THE NATIONAL BUILDING REGULATIONS ACT 103 OF 1977 & AMENDMENTS THERETO AS WELL AS THE BY-LAWS OF THE RELEVANT LOCAL AUTHORITY AND THE LAWS SET BY THE N.B.R.C.

THESE DRAWINGS ARE TO BE READ IN CONJUNCTION WITH STRUCTURAL, CIVIL & MECHANICAL ENGINEERS OR PLUMBING CONSULTANTS DRAWINGS WHERE SPECIFIED.

ALL DIMENSIONS SHOWN ARE STRUCTURAL SIZES. ALLOW FOR PLASTER AND WALL FINISH TO OBTAIN FINAL ROOM SIZE.

CONTRACTOR TO KEEP A FULL SET OF DRAWINGS ON SITE AND IS RESPONSIBLE FOR THE CORRECT SETTING OUT OF THE BUILDING ON THE SITE WITH REFERENCE TO BOUNDARY BUILDING LINES ALL CONTOURS AND BOUNDARY PEGS AS WELL AS BUILDING SETTING OUT TO BE CONFIRMED BY A REGISTERED LAND SURVEYOR.

ALL NEW HEALTH AND SAFETY REGULATIONS TO BE STRICTLY COMPLIED WITH.

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revisions		
NO.	DATE	DISCRIPTION

TITLE BLOCK

Mr C van Loggenberg
ERF 2802 PORTION OF 670
14 Delphinium Dr
Westering
Port Elizabeth
CEL:0736313891
SIGN: _____

ERF

SITE AREA 845m2
Proposed new Dwelling 160m2

TOTAL AREA 160m2

COVERAGE

EXISTING 0%
PROPOSED 19%
TOTAL NEW 19%

PLAN FOR SUBMISSION PURPOSES ONLY

Senior Architect: Reynier Koen Arch NMMU
contacts
cell: 082 822 5422
studio
1b chapman rd humeral port elizabeth
practice
reg @ institute of architects / reg @ council 4 architects
sacop reg no. 4853 / practice reg no. PK 2130
mail
reynarchitects@gmail.com

HOUSE VAN LOGGENBERG

PROPOSED NEW DWELLING

PROFESSIONAL ARCHITECT
REYNIER STEPHANUS KOEN

SCALE	DATE	DRWN
AS SHOWN	3 Mar 2021	N

PROJECT NO.	DRAWING NO.	REV.
		01

inspected and approved by:

senior architect i.s. koen (4853)
this drawing is not valid without an official signature

inspected and approved by:

client or principal agent