

SCALE 1:200

CALCULATION AVERAGE NATURAL GROUND LEVEL :

SW CNR + 47.6  
NW CNR + 49.3  
NE CNR + 47.1  
SE CNR + 46.4

$$\begin{array}{r} +47.675 \text{ AVERAGE} + 8m \text{ MAX HEIGHT} = +55.675 \\ \hline \text{RIDGE LEVEL} = +55.524 \end{array}$$

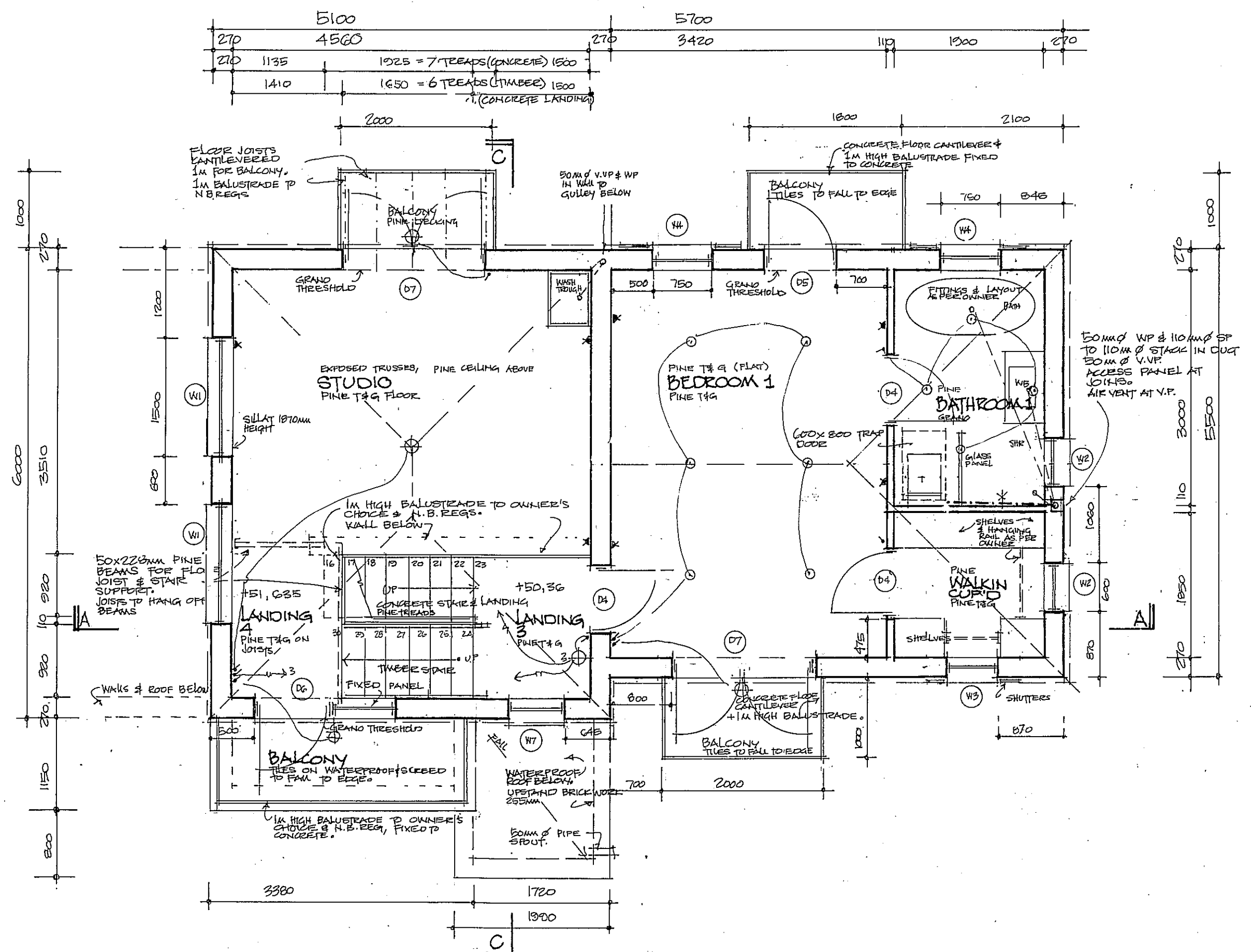
SCALE 1:50

WINDOW & DOOR SCHEDULE				
W no	quan	size	description	glass
W1	2	600x425	Aluminium horizontal sliding	single clear/solar
W2	7	600x900	Aluminium side hung	s/c
W3	2	600x1200	Aluminium vertical sliding	s/c
W4	4	750x1200	As above.	s/c
W5	1	900x1200	As above.	s/c
W6	4	600x1500	As above.	s/c
W7	1	700x1800	Floored glass panel	solar E
D1	1	1000x2100	Hardwood ½ glass panel door	low E
D2	1	813x2032	Hardwood ½ glass stable door	low E
D3	2	813x2032	Hardwood door (1x fireproof panel)	
D4	7	813x2032	Internal panel door, h/w/wood frame	
D5	8	800x2100	Aluminium glass door	low /solar E
D6	1	1800x2100	As above with 1 fixed panel	solar E
D7	5	1800x2100	Aluminium double doors	low /solar E

- ALL GLAZED WINDOWS AND DOORS MANUFACTURED FROM ALUMINIUM, POWDER COATED FINISH COLOUR TO OWNER'S CHOICE.
- ALL GLASS TO CONFORM WITH SANS 204 & NATIONAL BLDG REGULATIONS.

PENETRATION CALCULATIONS							
GROUND FLOOR							
Nett area: 95.56 m <sup>2</sup>							
x1.4 total conductance = <b>132.38</b>				x0.13 total shgc = <b>12.29</b>			
U	Area	F/H	E	Glass	Shutter	Shgc	
quant							
<b>NORTH ELEVATION</b>							
all windows have shutters = 80% shgc reduced							
W4 x2	1.8	0.02	0.79	Single	12.06		0.21
W5	1.08	0.02	0.79	s/c	7.24		0.13
W4 x2	1.8	0.05	0.71	s/c	12.06		0.19
D2	4.57	0.02	0.79	safety	2.81		0.05
D5	1.52	0.02	0.38	low E		5.68	0.47
D7	3.34	0.04	0.79	low E		11.35	1.83
<b>WEST ELEVATION</b>							
W1 x2	1.276	0.07	1.27	s/c	8.94		1.19
<b>SOUTH ELEVATION</b>							
W2 x2	1.08	0	0.61	s/c	7.24		0.39
W3	0.72	0.02	0.57	s/c	4.82		0.40
D1	0.55	1.0	0.23	safety	3.68		0.09
D7 x2	3.34	0.4	0.36	low E		22.71	0.89
D7	3.34	0.04	0.54				1.33
<b>EAST ELEVATION</b>							
W2 x2	1.08	0.02	1.11	s/c	7.24		0.88
W3	0.72	0	1.15	s/c	4.82		0.61
<b>TOTALS</b>							
				<b>134.75</b>		<b>8.66</b>	
				<b>COMPLIES</b>		<b>COMPLIES</b>	

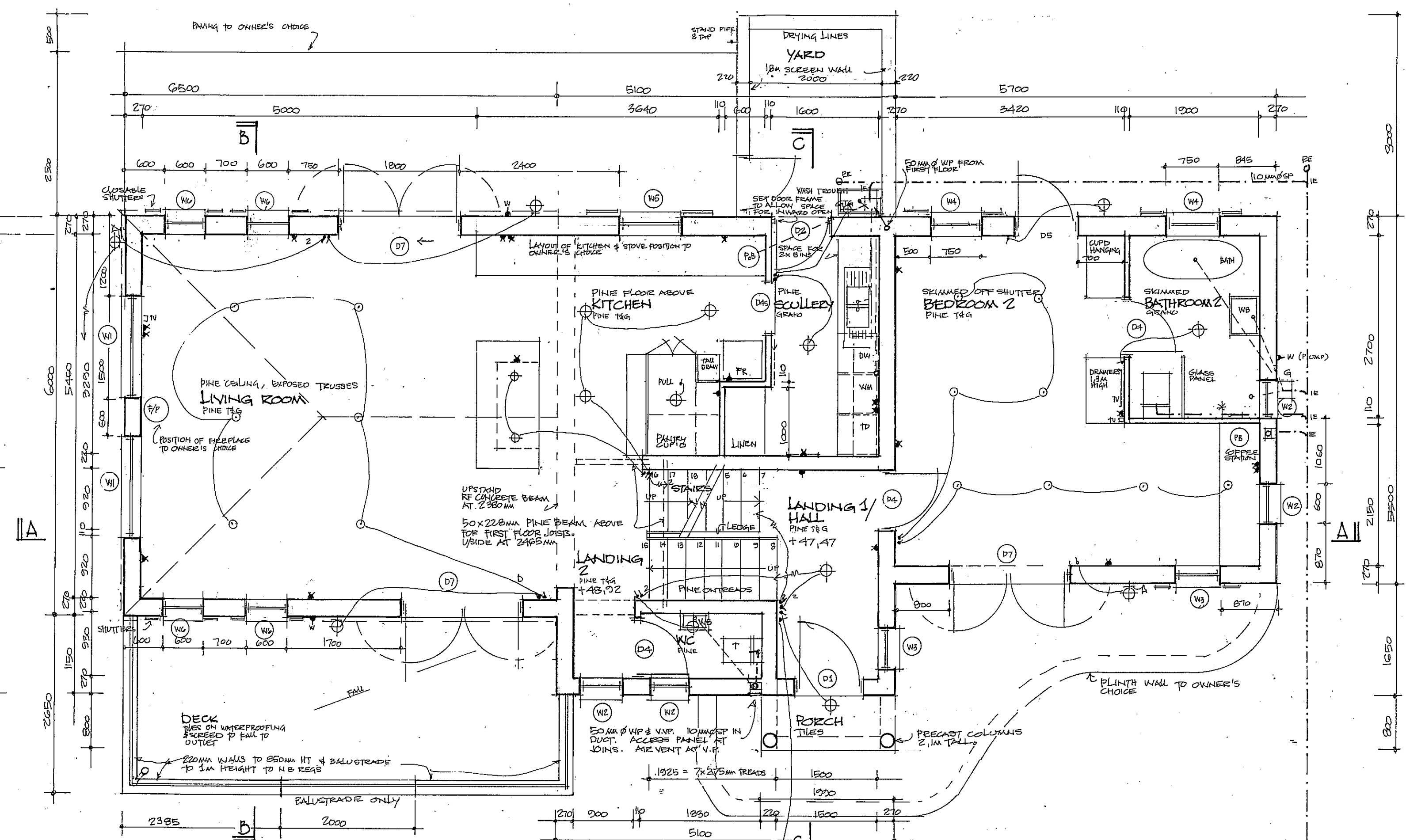
FIRST FLOOR						
Net Area = 33.39 m <sup>2</sup>						
x1.4 total conductance = <b>74.75</b> x0.13 total shpc = <b>6.94</b>						
W no	Area	P/H	E	Glass (shutter)	Conductance 6.2w 10wE 3.4	Shgc 0.74 solarE 0.58
<b>NORTH ELEVATION</b>						
all windows have shutters = 4.82 shgc reduced						
W4x2 1.8	0.05	0.71	single	12.06		0.19
D5	1.67	0.04	0.74	solarE	5.68	0.72
D7	3.34	0.04	0.74	solarE	11.35	1.43
<b>WEST ELEVATION</b>						
W1	1.275	0.07	1.27	solar E	4.92	0.74
<b>SOUTH ELEVATION</b>						
W3	0.72	0.06	0.61	s/c		0.33
W7	1.26	0.04	0.54	solarE	4.28	0.39
D6	3.34	0.04	0.54	solarE	11.35	1.04
D7	3.34	0.04	0.54	solarE	11.35	1.04
<b>EAST ELEVATION</b>						
W2 x2 1.08	0.07	1.03	s/c	7.24	0.82	
<b>TOTALS</b>				<b>72.06</b>	<b>6.94</b>	
				<b>COMPLIES</b>	<b>COMPLIES</b>	



## FIRST FLOOR PLAN

SCALE 1:50

NOTE: ALL ELECTRICAL POINTS POSITION TO BE DETERMINED BY OWNER.



## GROUND FLOOR PLAN

SCALE 1:50

**GENERAL NOTES**  
All work to be in accordance with National Building Regulations and SANS10400 & 204.  
V Thompson & S van Blerk are not responsible for any deviation by owner or builder from approved plan.  
Figured dimensions to be taken in preference to scaled dimensions.  
All levels, dimensions & positions to be checked on site before work commences. Discrepancies or errors to be reported to designer immediately.  
Drawings to be read in conjunction with engineer's or consultant's drawings where applicable.  
Electrical and plumbing work to be done by registered tradesmen.

## FOUNDATIONS

1. 20mpa concrete strip footings into natural ground, 230x800mm with reinforcing to engineer's detail.

## FLOOR

2. 20mpa concrete surface bed 85mm thick with mesh reinforcing.
3. Consolidated fill in 15m 150mm layers well compacted to engp specs.
4. 150mm 150mm 150mm concrete bed and underlayment taken up to dc.
5. Reinforced concrete slabs to engineer's design & *concrete balcons*
6. Expansion joint at junction of surface beds & *concrete slabs*
7. Reinforced concrete stairs to engineer's design. Treads 275mm min.
8. Risers to suit lights. Allow for 22mm plane tread finish, with 20mm nosing.
9. 1.4 x 1cm concrete strand 22mm thick, finished with steel trowel on par in garage & wet areas. To fall to show outlet in bathroom.
10. 22mm 150mm 150mm concrete bed to fall to outlet on concrete deck & balcony with "torch-on" waterproofing and the finish.
11. Studio floor joists 38x28mm at max 450mm c/c. Support beams 22mm 150mm 150mm.
12. 22mm 150mm 150mm floor joists & 20mm leveling strip battens on concrete slab. Allow for ventilation of flooring at wall edges. 75mm moulding plus skirting painted.
13. *Candleluster* joists for studio joists. 22mm plane planking finish.
14. Brick paving to owners choice on compacted sand base layer with outer edge bricks set in cement.
15. **WALLS**
16. Retaining walls to eng's design & spec.
17. Vertical pvc. Agricultural drain on north wall.
18. 270mm brick cavity walls, foundations at base of cavity with 1m concrete. 5 wire ties per 1m. Foundations casted filled with conc.
19. 220 & 110mm internal brick walls.
20. External finish "french powder" cement smeared.
21. Plaster porch arch & brickwork above, brickwork on deck.
22. Internal finish plaster.
23. Masonry primer & 2 c acrylic paint.
24. Damp-proof "gumplas brickwork" at floor level full width all walls, stopping at cavity walls.
25. Damp-proof every 3 courses & every course window head to wallplate.
26. Precast concrete lintels at all openings for plaster walls.
27. Precast Reinforced concrete columns.
28. 150mm 150mm concrete beams to suit door & window detail.
29. Windows & glazed doors aluminium frame. Glazing on SANS 10400 & fenestration schedule.
30. External doors hardwood.
31. Aluclac (aluminium) garage doors, automated opening.
32. Plaster slits in fit wpc with dpc underlayment.
33. **ALUMINIUM SHUTTERS**

## 31 Play





















31. Master ~~Exposed~~ & plaster ~~can~~ burnm above all openings with 1/2" shutter. Refer to drawings.
32. Plaster corbelled moulding as per elevations.
33. 1" high wrought iron balustrades to N Bays, to owner's choice. ROO
34. Zincalume 0.53mm colourclad sheathing on 50x76mm purlins at 800mm c/c. colour to owners choice. Pitch 20°
35. Gable-type trusses by specialist 38x121mm x 25mm bedroom, ...
36. Gabled exposed trusses & rafters 38x152mm studs ... roof plan
37. 38x121 & 38x76mm wall/joint and girth strapping as roof studs fixing built & courses down inside ...
38. 100mm thick underside of roof to be fixed to wall with 100mm thick above ceiling. Insulation 3", 7mm<sup>2</sup>/kg for comply SANS 204.
39. Pine ceiling above exposed ~~trusses~~ & rafters & fixed to underside of bedroom trusses.
40. All items to comply as per "Poly Products" to owners' choice.
41. Nutec fibre cement fascias & bargeboards.
42. Aluminium gutters and rvsps. 100mm<sup>2</sup> rainwater tank.
43. Solar geyser panels on north roof/door.
44. Solar cells for battens on north roof.
45. Aluminium flashing at all roof/wall junctions.

## DRAINAGE

50. Soil pipes 110mm pvc, waste pipes 40/50mm pvc, with inspection eyes at all junctions and bends, and rodding eye at head of drain.
51. No junctions under floor, and all pipes under floor or foundation to be encased in concrete, with I.E's at each end as near as possible to foundations.
52. Min fall 110mm s.p.@1:50 and min cover 300mm.
53. Septic tank and french drain soakaway.
54. All drainage to conform with National Building Reg.

## ELECTRICAL

- Solar electrical system by specialist
- Geyser to comply with SANS 204: 50% non electrical element heating of hot water. Solar panel + geyser. Gas geyser in basement
- All exposed hot water pipes insulated to R-1.0.
- All light fittings to be low energy type.
- Energy demand 5 W/m<sup>2</sup> Energy consumption 5 Kwh/m<sup>2</sup>
- Position of plugs & light fittings to be determined by owner.

Position of plugs & light fittings to be defined by owner:		distribution board	
	ceiling light		stove connection
	Led light in pelmet		geyser connection
	foot light		door bell
	downlighter		heated towel rail
	light switch		airconditioning
	dimmer switch		t v connection
	2-way switch		telephone point
	plug point		garage door motor
	double plug point		motion sensor light
	waterproof plug		manual override

A: EXPOSED TRUSSES LIVING RM. SHUTTERS ALUMINUM  
GARGIE REDUCED. BASEMENT STAIR ADDED. DECK  
ALTERED & SUPPORT ADDED. BALCONIES CONCRETE.  
DECK WALLS ADDED. WINDOW W/2 ALTERED.  
AREAS AMENDED. Mike 7/5/2015

REVISIONS: A

new house  
MS H BUCHANAN  
erf 267 brenton on sea  
steenbras street  
KNYSNA

AREAS	Sq m.		
House ground flr	106.81m <sup>2</sup>	site area	1050m <sup>2</sup>
House first flr	61.95m <sup>2</sup>		
Outbuild basement	69.5m <sup>2</sup>	footprint	114.28m <sup>2</sup>
open deck/balconies	22.42m <sup>2</sup>	coverage	10.8%
<b>TOTAL (roofed)</b>	<b>238.26m<sup>2</sup></b>		

thompson &amp; van blerk

ARCHITECTURAL DESIGN & DRAFTING : S.A.C.A.P. REGISTERED  
P.O. BOX 156 HOEKWIL 6538

- valerie thompson (h q arch) 51 0980
- shane van blerk (consultant)

TEL 044 883 1071 cell 076 767 7919

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DATE  
april 2015