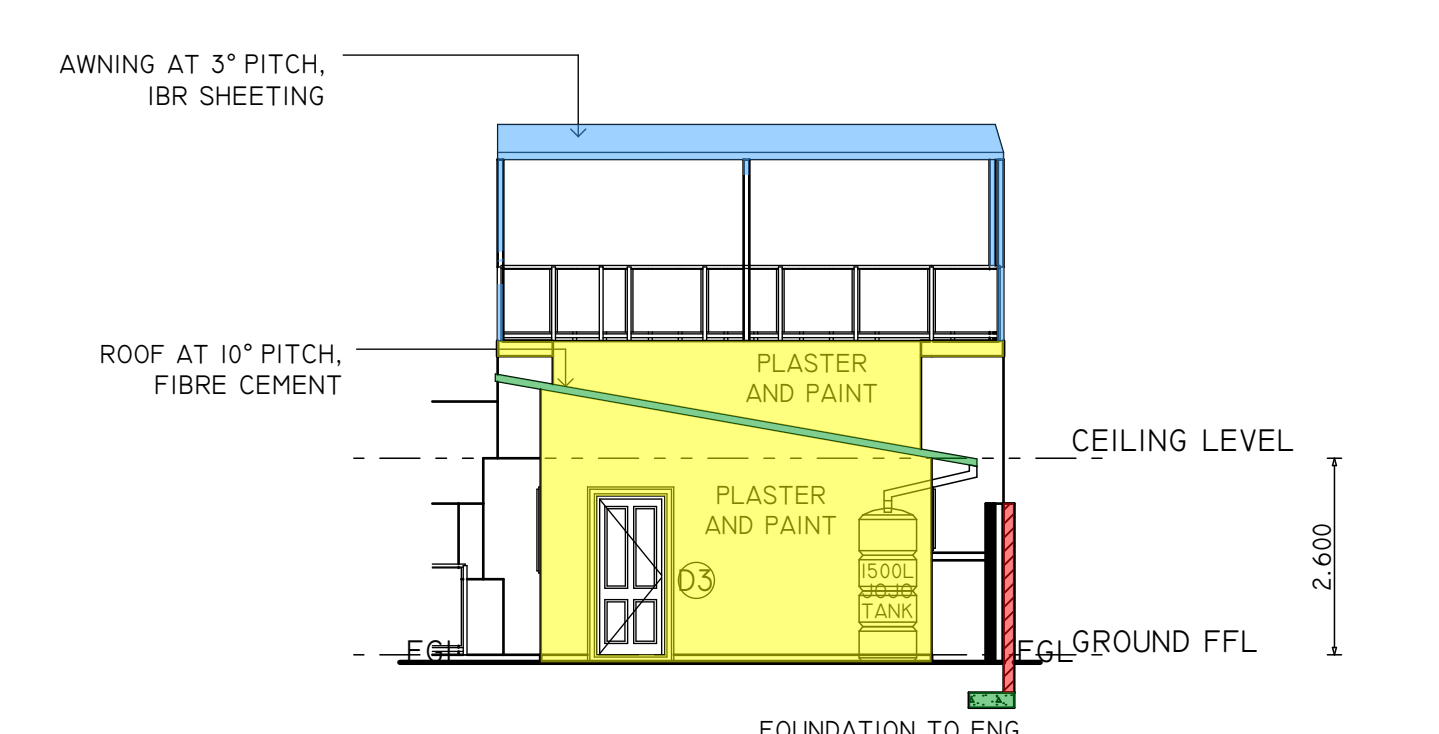
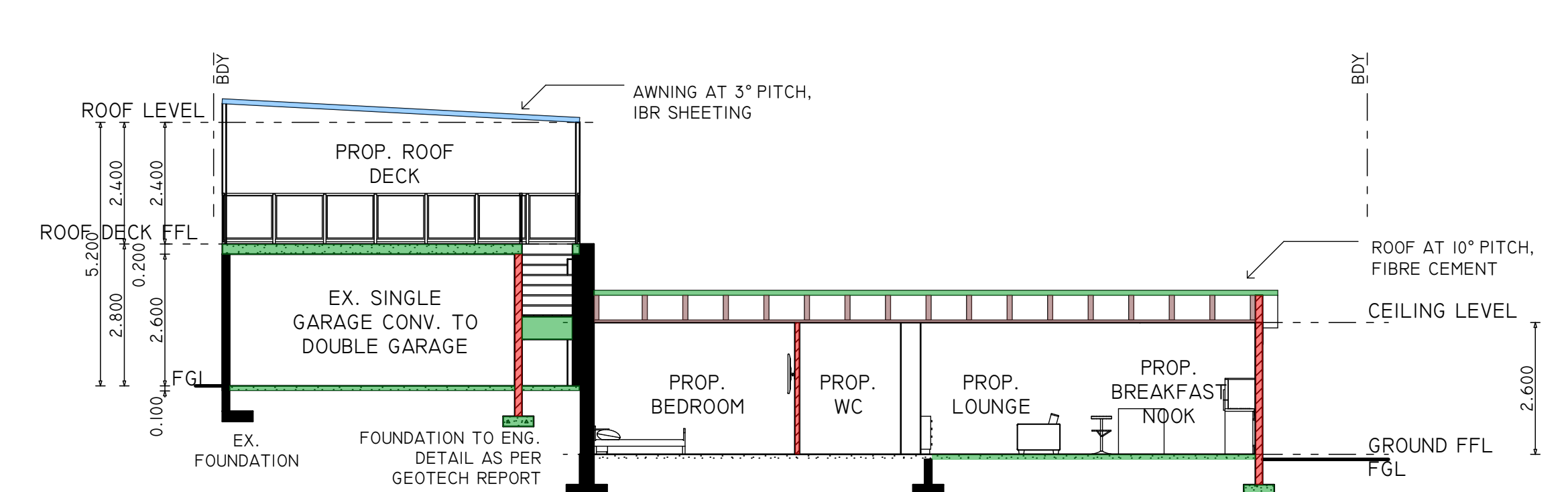


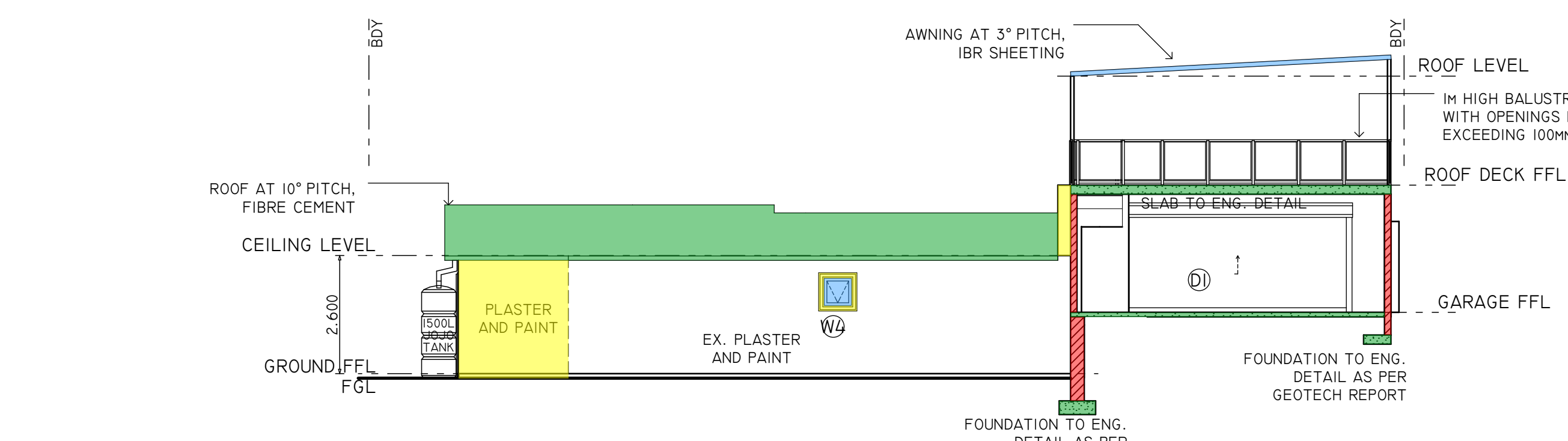
NORTH EAST ELEVATION  
SCALE 1:100



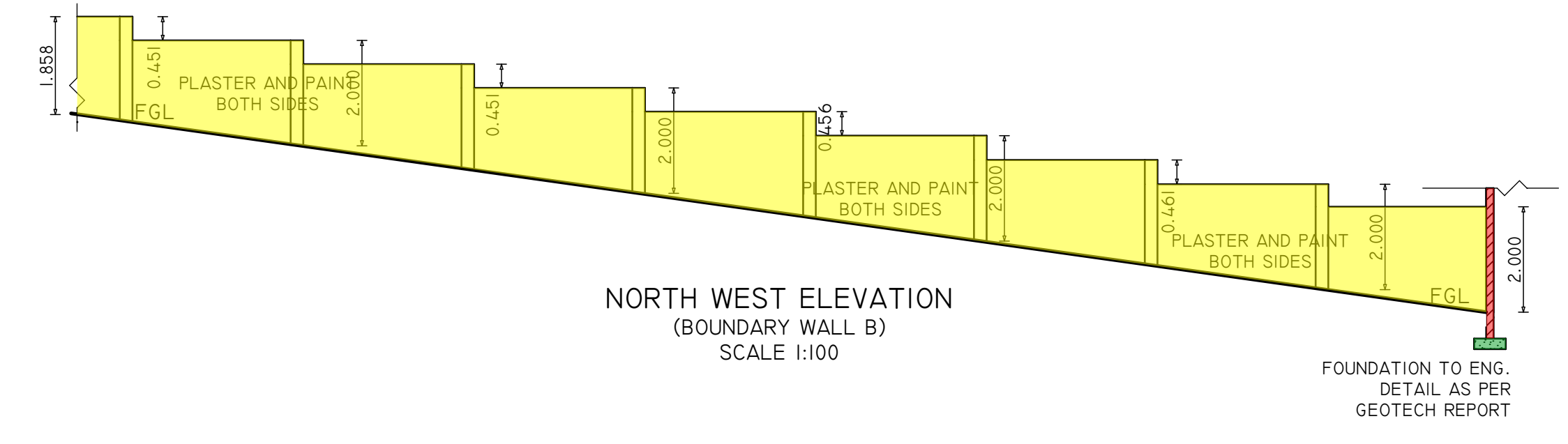
NORTH WEST ELEVATION  
SCALE 1:100



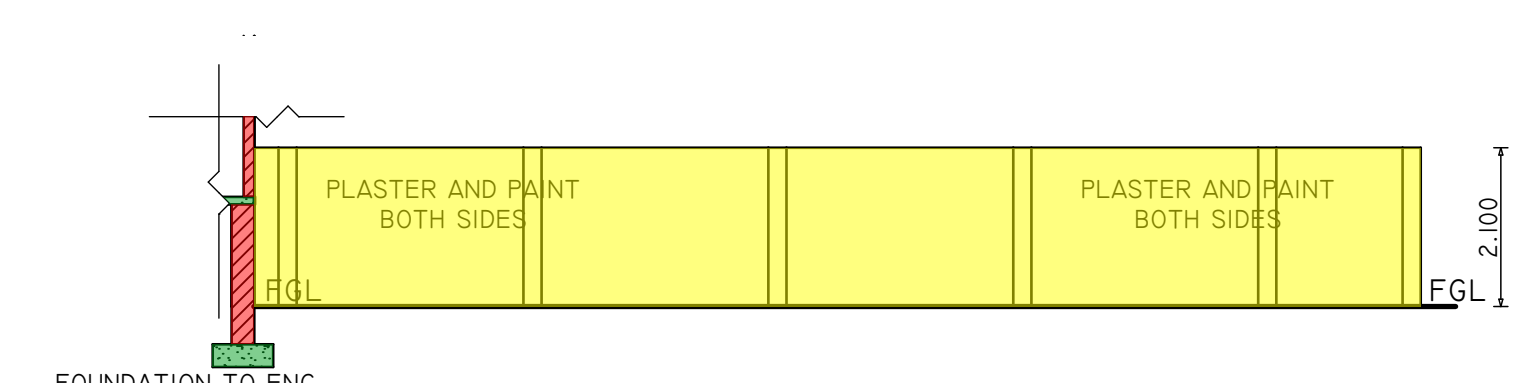
SECTIONAL ELEVATION A-A  
SCALE 1:100



SOUTH WEST ELEVATION  
SCALE 1:100



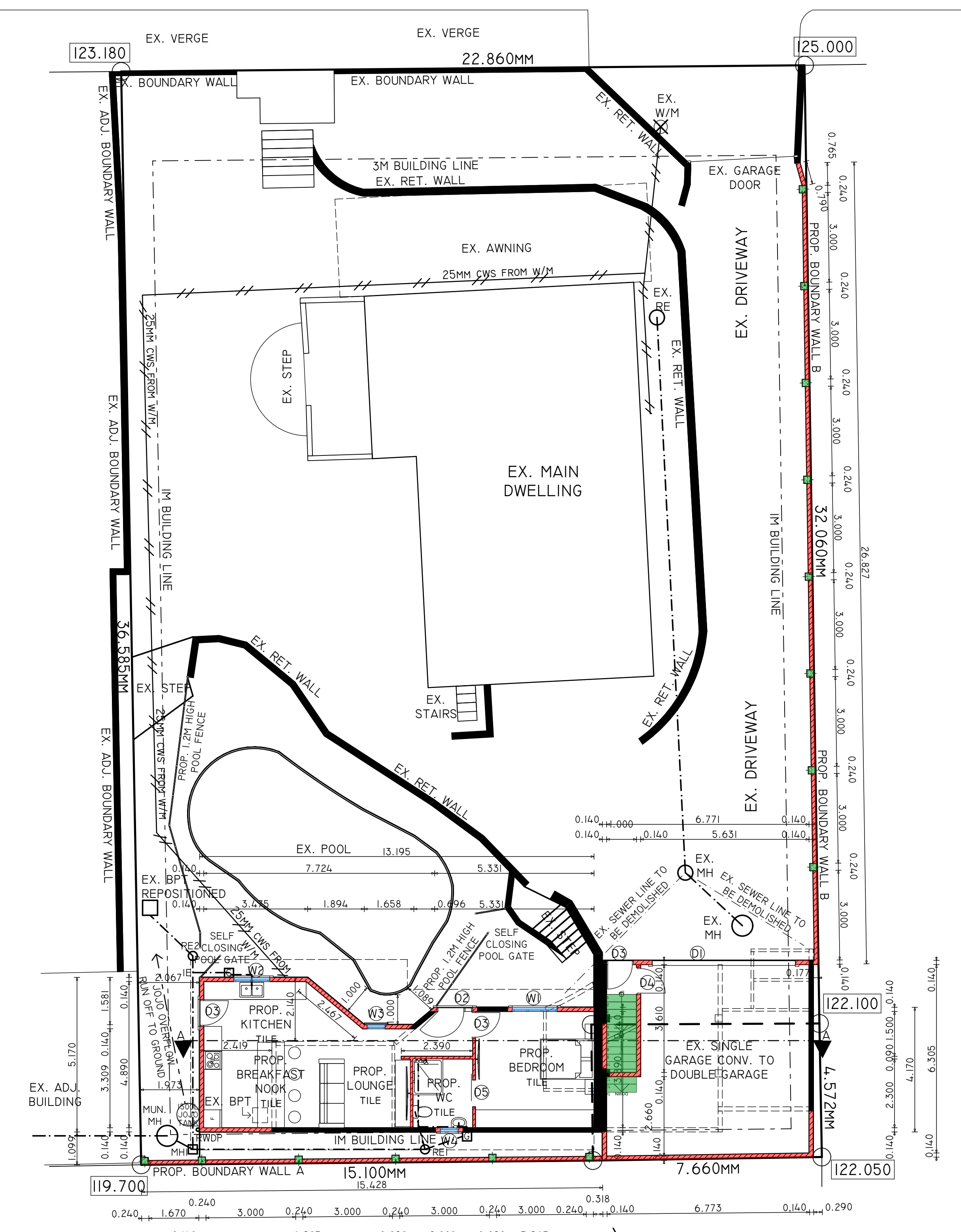
NORTH WEST ELEVATION  
(BOUNDARY WALL B)  
SCALE 1:100



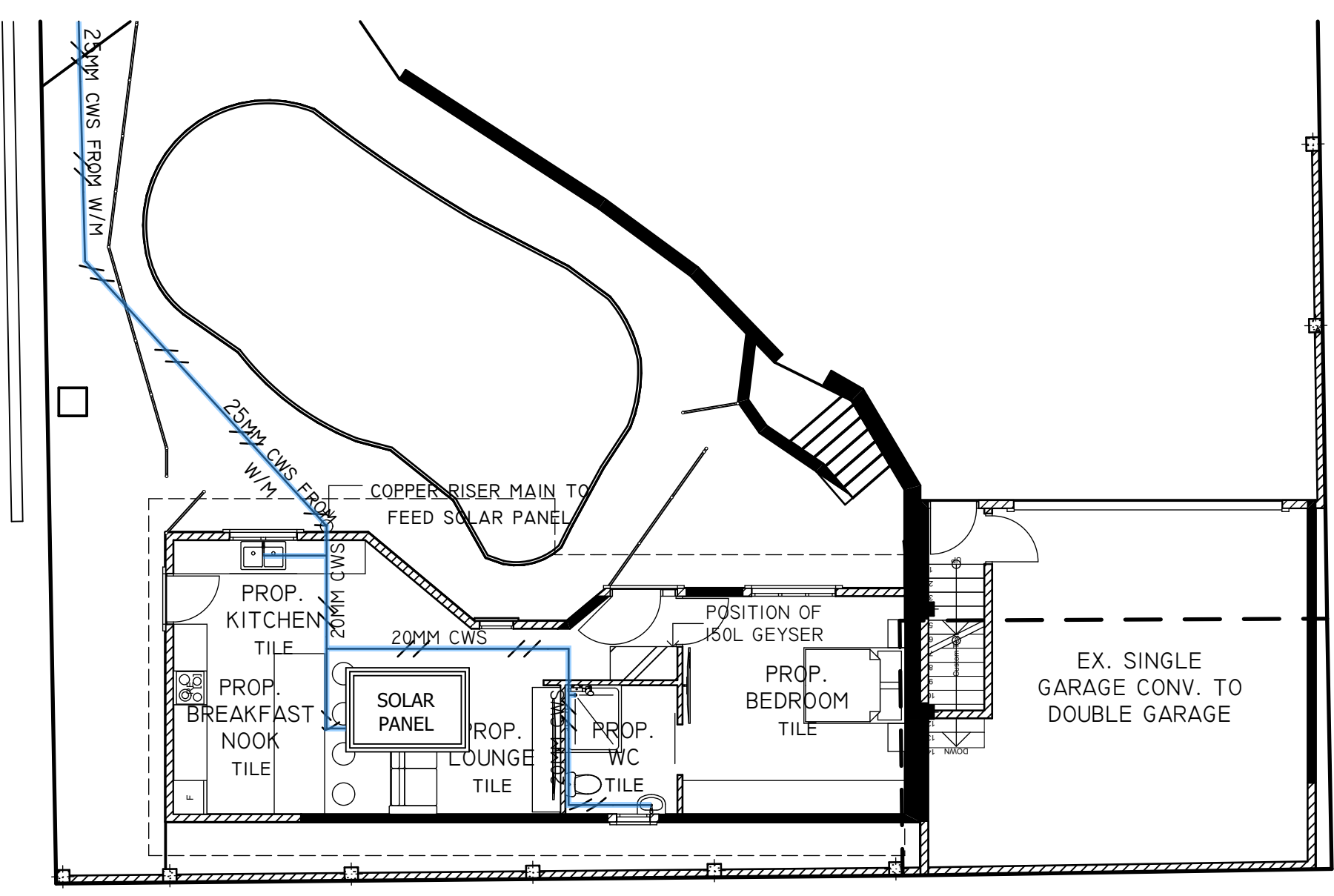
NORTH EAST ELEVATION  
(BOUNDARY WALL A)  
SCALE 1:100

LIST OF NEIGHBOURS	
NAME:	
ADDRESS:	
SIGNATURE:	
TEL:	

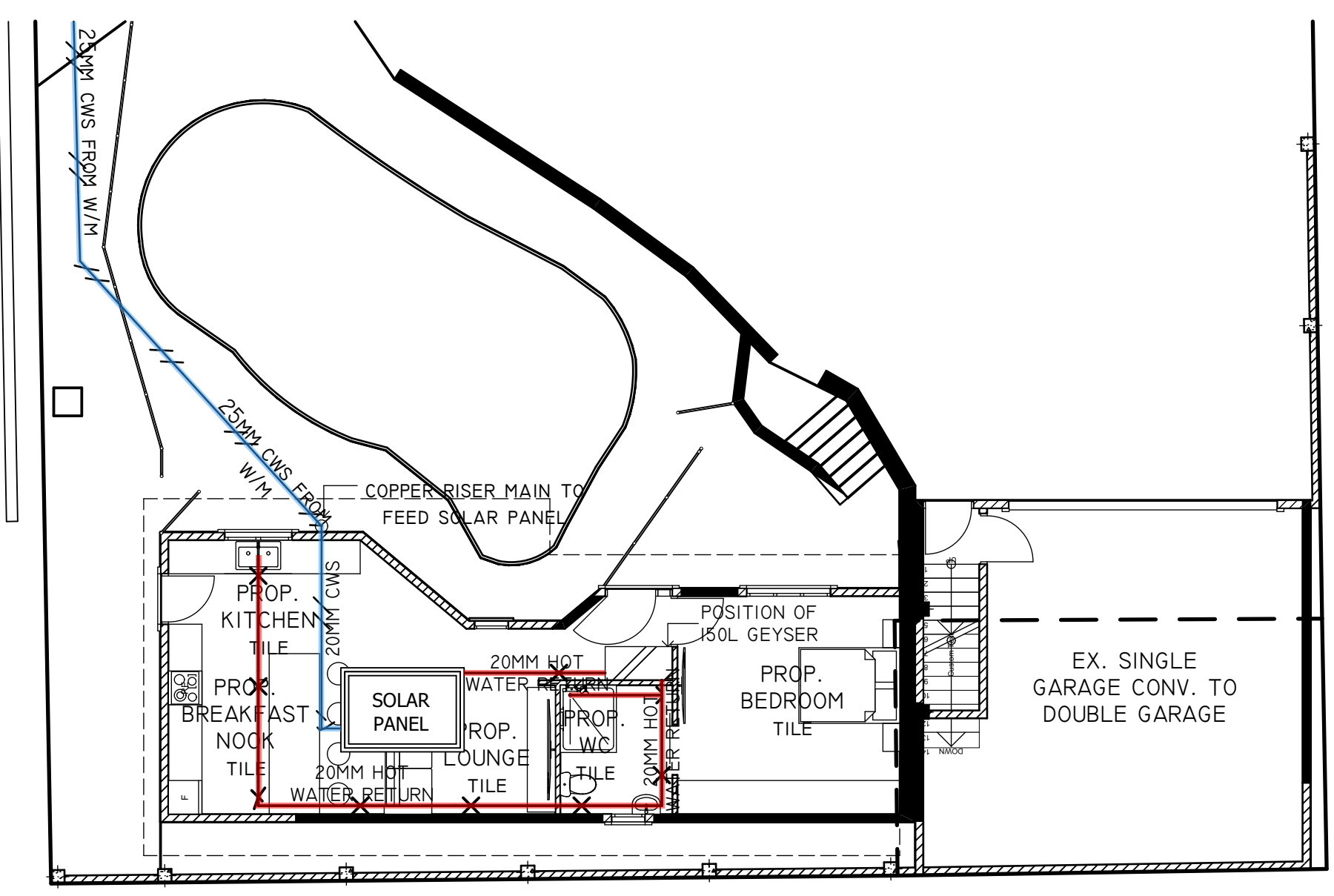
JULIA ROAD



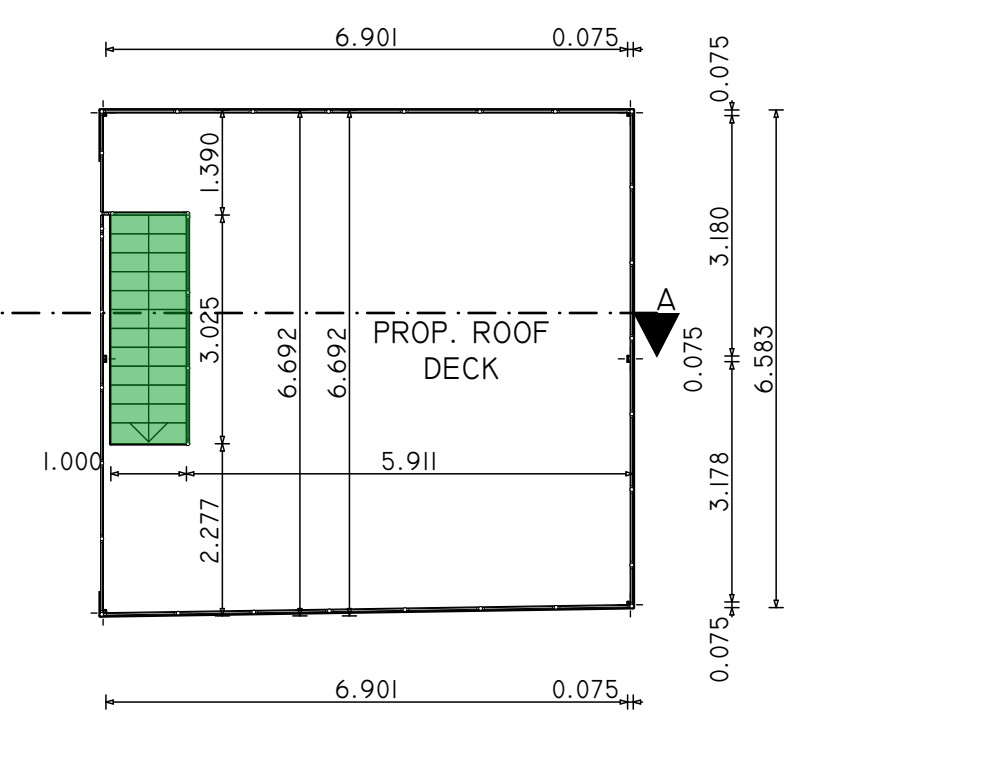
SITE PLAN & GROUND FLOOR PLAN  
SCALE 1:100  
CLASSIFICATION: H4



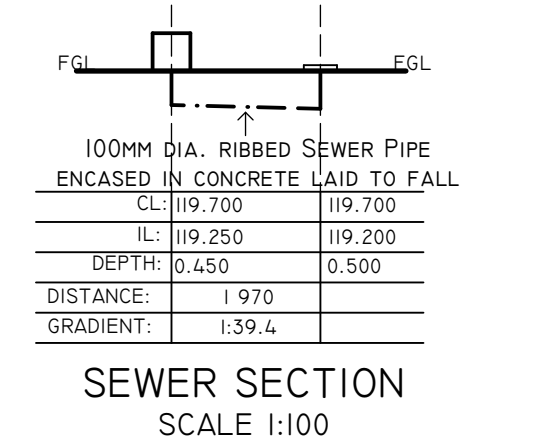
GROUND FLOOR PLAN  
COLD WATER RETICULATION  
SCALE 1:100



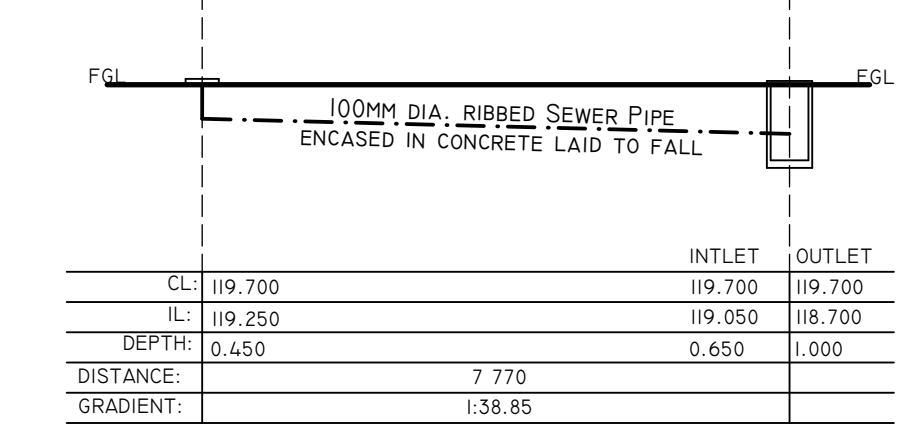
GROUND FLOOR PLAN  
HOT WATER RETICULATION  
SCALE 1:100



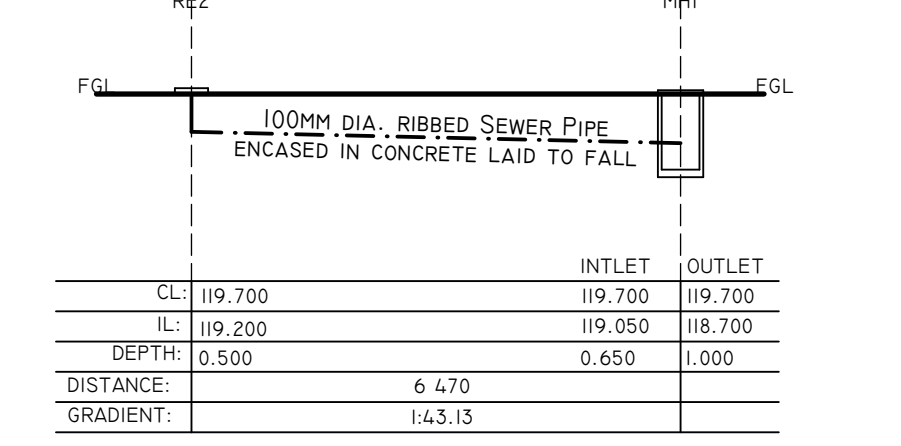
FIRST FLOOR PLAN  
SCALE 1:100



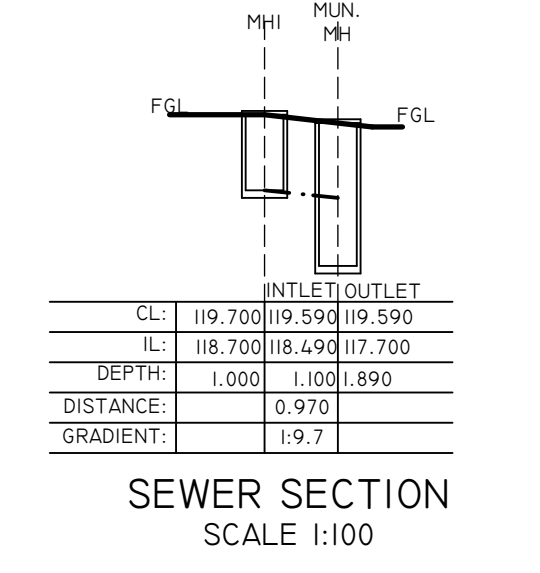
SEWER SECTION  
SCALE 1:100



SEWER SECTION  
SCALE 1:100



SEWER SECTION  
SCALE 1:100



SEWER SECTION  
SCALE 1:100

STORMWATER CALCULATIONS  
COVERAGE = 28.364m<sup>2</sup>  
THEREFORE = (28.364m<sup>2</sup>/4.0) x 1.67  
= 1.18m<sup>3</sup> WATER STORAGE TANK REQUIRED  
1 X 1500L JOJO TANK SPECIFIED WITH  
OVERFLOW TO GULLEY PIPE

AREA SCHEDULE	
SITE AREA:	834.000m <sup>2</sup>
EX. AREA:	187.931m <sup>2</sup>
PROP. AREA:	72.777m <sup>2</sup>
TOTAL AREA:	242.705m <sup>2</sup>
COVERAGE:	1.17
PERMITS:	(50%)
EX. COVERAGE:	187.931m <sup>2</sup>
PROP. COVERAGE:	28.364m <sup>2</sup>
TOTAL:	216.295m <sup>2</sup>

REVISION 3:	
REVISION 2:	
REVISION 1:	

PROJECT: PROP. ADDITIONALS TO EXISTING OUT BUILDING, EX. GARAGE CONV. TO DOUBLE GARAGE, PROP. ROOF DECK ABOVE GARAGE

ADDRESS: 29 JULIA ROAD  
TEL: NO: 083 786 8890

CADASTRAL DESCRIPTION: SITE CLASS  
PTN 12 (OF 3) OF ERP S31 BRICKFIELD

CLIENT: S. DAVIDS & F. SIMJEE

SIGNATURE: *S. Reddy*

SHEET: 20 SCALE: AS SHOWN DWG NO.: S.REDDY

**S.R. Design Consultants**  
For All Your Architectural Needs

OFFICE: 41 Diddie Road, Hilliers, Queensland 4055

DIRECTOR: Selvan Reddy  
SACP - 7078 (P17)WAS120  
No. 1 (Class 1) (Class 2) (Class 3) (Class 4) (Class 5) (Class 6) (Class 7) (Class 8) (Class 9) (Class 10) (Class 11) (Class 12) (Class 13) (Class 14) (Class 15) (Class 16) (Class 17) (Class 18) (Class 19) (Class 20) (Class 21) (Class 22) (Class 23) (Class 24) (Class 25) (Class 26) (Class 27) (Class 28) (Class 29) (Class 30) (Class 31) (Class 32) (Class 33) (Class 34) (Class 35) (Class 36) (Class 37) (Class 38) (Class 39) (Class 40) (Class 41) (Class 42) (Class 43) (Class 44) (Class 45) (Class 46) (Class 47) (Class 48) (Class 49) (Class 50) (Class 51) (Class 52) (Class 53) (Class 54) (Class 55) (Class 56) (Class 57) (Class 58) (Class 59) (Class 60) (Class 61) (Class 62) (Class 63) (Class 64) (Class 65) (Class 66) (Class 67) (Class 68) (Class 69) (Class 70) (Class 71) (Class 72) (Class 73) (Class 74) (Class 75) (Class 76) (Class 77) (Class 78) (Class 79) (Class 80) (Class 81) (Class 82) (Class 83) (Class 84) (Class 85) (Class 86) (Class 87) (Class 88) (Class 89) (Class 90) (Class 91) (Class 92) (Class 93) (Class 94) (Class 95) (Class 96) (Class 97) (Class 98) (Class 99) (Class 100)

Office: 031 464 1200 Cell: 041 483 7305  
Email: sreddy@srdesign.com.au Email: redy.andy@gmail.com

DOOR SCHEDULE / WINDOW SCHEDULE											
	D1	D2	D3	HARDWOOD FIRE DOOR		D4	D5	W1	W2	W3	W4
DESCRIPTION	D1	D2	D3	HARDWOOD FIRE DOOR		D4	D5	W1	W2	W3	W4
DIMENSIONS	4800mm x 2100mm	1200mm x 2100mm	900mm x 2100mm	900mm x 2100mm		900mm x 2100mm	900mm x 2100mm	1500mm x 1200mm	1200mm x 900mm	600mm x 2000mm	600mm x 600mm
QUANTITY	1	1	3	1		1	1	1	1	1	1
GLAZING (Type)		TOUGHENED SAFETY GLASS						TOUGHENED SAFETY GLASS	TOUGHENED SAFETY GLASS	TOUGHENED SAFETY GLASS	TOUGHENED SAFETY GLASS
GLAZING (Thickness)		6MM						6MM	6MM	6MM	6MM
AREA(m <sup>2</sup> )	10.08	2.52	1.89	1.89		1.89	1.89	1.80	1.08	0.60	0.36

### Energy Efficiency in Buildings Maximum Energy Demand & Consumption

**Occupancy:**

**Design Occupancy Time:**  Hours per day  
 Days per week

**Climatic Zone:**

**Maximum Energy Demand & Consumption - Design Assumption for Building Classification**

Maximum Energy Demand:  VA/m<sup>2</sup>  
Maximum Energy Consumption:  kWh/(m<sup>2</sup>)

**Building Total Nett Floor Area:**

Ground Storey:  m<sup>2</sup>  
Total Nett Floor Area:

**Building - Total Floor Area:**  
Total Floor Area:  m<sup>2</sup>

**Services -**

Building Floor Area  
Total Floor Area of Building:  m<sup>2</sup>

**Lighting and Power**

Max. Energy Demand:  W – Permissible  
Max. Energy Consumption per Annum:  kWh – Permissible

Lamp power (W) rating:	No. of lamps:	Hours in use / day:
<input type="text" value="11"/>	<input type="text" value="7"/>	<input type="text" value="7.0"/>
Total lamp energy demand (W): <input type="text" value="77"/> Energy demand acceptable.		
or		
Total lamp energy demand (W/m <sup>2</sup> ): <input type="text" value="1.30"/> Energy demand acceptable.		
Available energy demand – Lights: <input type="text" value="218"/> W		

Total annual energy consumption – Lights (kWh):  Energy consumption acceptable.  
or  
Total energy consumption – Lights (kWh/m<sup>2</sup>):  Energy consumption acceptable.  
Available annual energy consumption – Lights:  kWh

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

Type of Accommodation?

Assumed Hot Water Consumption?  L

**No. of Persons:**  Per Day

Assumed Daily Hot Water Consumption:  L

Assumed Annual Hot Water Consumption:  kL – Based on daily design occupancy per week  
 kL – Minimum volume of hot water to be provided by means other than electrical resistance heating

50 % of Annual Hot Water Consumption:

or

Daily Hot Water Consumption:  L – To be provided by means other than electrical resistance heating

**Insulation Requirements :**

Internal diameter of Hot Water Service Pipe?  mm

Minimum Required R-value for Pipe Insulation?  Refer SANS 204 (4.5.2)

**Hot Water Vessels / Tanks :**

Minimum Required R-value for Vessel / Tank?  Additional insulation to manufacturer's insulation may be required to achieve this value.

**Floor Construction -**

**Slab-on-ground**

Concrete slab-on-ground?

In-slab heating to be provided?

**Suspended floor**

Suspended floor as building envelope?

In-slab heating to be provided?

**External Wall Construction - SANS 10400-XA Required R-value**

Wall Type?

Minimum R-value required:

Refer SANS 10400-XA (4.4.3) & SANS 204 - Table 4 and Advisory Note.  
Double-skin masonry wall, no cavity, plastered internally or rendered externally, or  
Compliant masonry walling: Single-leaf masonry wall, nominal wall thickness not < 140 mm, plastered internally and rendered externally.

**SANS 204 Required CR-value**

Minimum CR-value required:  Hours

Advisory Note - *Applicable to masonry walls only in terms of SANS 204*

Double brick wall types:

CR-value:  CR-value of wall insufficient.

**Roofs Assemblies - SANS 10400-XA Required R-value**

Minimum Total R-value required:  m<sup>2</sup>-K/W

Direction of heat flow:

**Construction Type R-value**

Basic roof assembly:

R-value for roof covering material:  m<sup>2</sup>-K/W

R-value for ceiling:  m<sup>2</sup>-K/W

Required added R-value for insulation:  m<sup>2</sup>-K/W

**SANS 204 Required R-value Construction Type R-value**

Roof venting?

Basic roof construction?

**Basic R-value for Roof**

Direction of heat flow:

Outdoor air film (7m/s)	<input type="text" value="0.03"/>
Metal cladding	<input type="text" value="0.00"/>
Roof air space (100 mm to 300 mm, non-reflective)	<input type="text" value="0.22"/>
Plasterboard, gypsum (10 mm, 880 kg/m <sup>3</sup> )	<input type="text" value="0.06"/>
Indoor air film (still air)	<input type="text" value="0.16"/>
Total R-value	<input type="text" value="0.47"/> m <sup>2</sup> K/W

**Fenestration - Buildings with Natural Environmental Control Constants**

Conductance (C<sub>u</sub>) constant:

Solar Heat Gain (C<sub>SHGC</sub>) constant:

**Max. Conductance / Solar Heat Gain**

Ground Storey

Net Floor Area of Storey / Room: m<sup>2</sup>

Fenestration Area of Storey / Room: m<sup>2</sup>

% Fenestration Area to Nett Floor Area: %

**Achieved Aggregate Conductance / Solar Heat Gain**

Ground Storey

Conductance (C<sub>u</sub>) for Storey / Room:

Solar Heat Gain (C<sub>SHGC</sub>) for Storey / Room:

NOTE !! NO FURTHER CALCULATION REQUIRED.

Max. Conductance (C<sub>u</sub>) for Storey / Room:  Permissible

Max. Solar Heat Gain (C<sub>SHGC</sub>) for Storey / Room:  Permissible

**Conductance / Solar Heat Gain Available**

Ground Storey

Conductance (C<sub>u</sub>) for Storey / Room:  Acceptable & refer SANS 204 (4.3.4)

Solar Heat Gain (C<sub>SHGC</sub>) for Storey / Room:  Acceptable & refer SANS 204 (4.3.4)

**TABLE 1 - FENESTRATION : NATURALLY VENTILATED BUILDING - Allowance made for 75 fenestration elements**

Storey Level	Identifier No.	No. of Units	Glazing Element Size			Glazing Element Rating		Sector	Shading				Solar Exposure		Proposed	
			Width (m)	Height (m)	Area	U-value	SHGC		Orientation	Projection (m) (P)	Height (m) (H)	Height (m) (G)	P/H	Factor (E)	Conductance	SHG
Ground Storey	W2	1.000	1.200	0.900	1.080	7.9	0.81	North East	0.600	1.400	0.500	0.429	0.450	8.532	0.394	
Ground Storey	W3	1.000	0.600	2.000	1.200	7.9	0.81	North East	2.181	2.600	0.600	0.419	0.450	9.480	0.437	
Ground Storey	D2	1.000	1.200	2.100	2.520	7.9	0.81	North East	0.600	2.600	0.500	0.231	0.590	19.908	1.204	
Ground Storey	W1	1.000	1.500	1.200	1.800	7.9	0.81	North East	0.600	1.700	0.500	0.353	0.490	14.220	0.714	
Ground Storey	W4	1.000	0.600	0.600	0.360	7.9	0.81	South West	0.600	1.100	0.500	0.545	0.670	2.844	0.195	
					6.960							1.977				

LIST OF NEIGHBOURS

NAME:	ADDRESS:	SIGNATURE:	TEL:

REVISION 3:
REVISION 2:
REVISION 1:

PROJECT: PROP. ADDS/ALTS TO EXISTING OUT BUILDING, EX. GARAGE CONV. TO DOUBLE GARAGE, PROP. ROOF DECK ABOVE GARAGE

ADDRESS: 29 JULIA ROAD  
TEL NO: 083 786 8890

CADASTRAL DESCRIPTION	SITE CLASS
PTN 12 (OF 3) OF ERF 531 BRICKFIELD	

CLIENT:

SIGNATURE: *Singee Birds*

SHEET	SCALE	DWG NO.	AUTHOR
AI	AS SHOWN		S.REDDY

**S.R Design**  
Consultants  
For All Your Architectural Needs

OFFICE: 41 Dippedale Road, Malvern, Queensburgh 4055

DIRECTOR: Selvan Reddy  
SACAP - TOP56 (PAT)/MSAIBD  
*(Reg. Energy Efficiency competent professional)*

Office: 031 464 1209 Cell: 061 483 7365  
Email: srdesignconsultants@gmail.com Email: reddy.srdesign@gmail.com