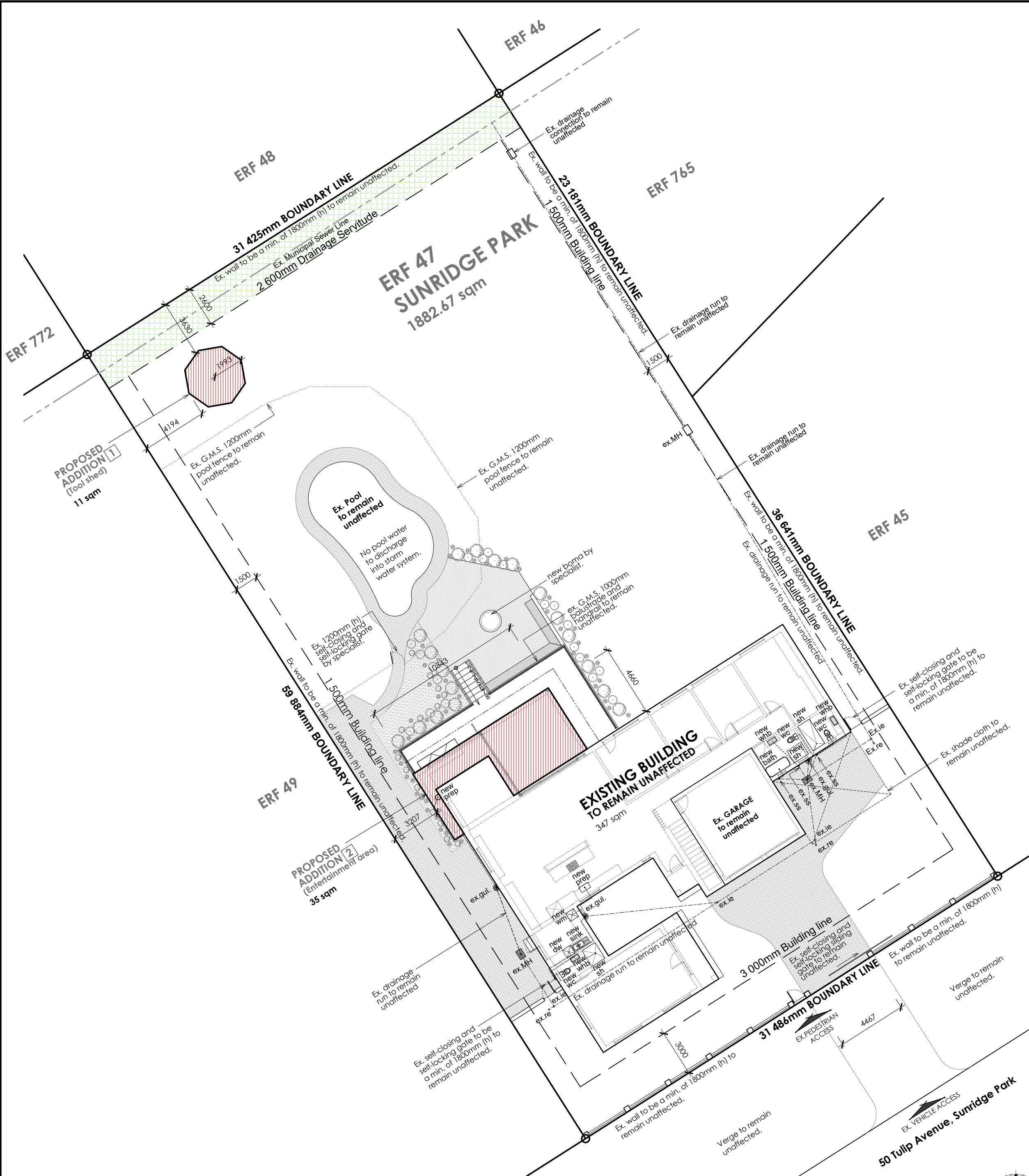
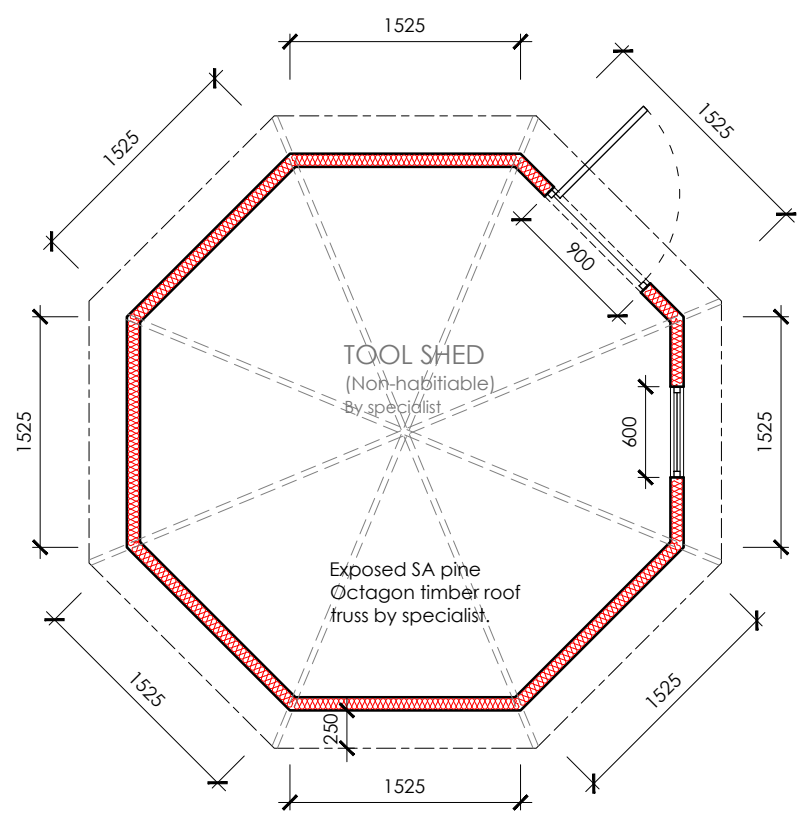




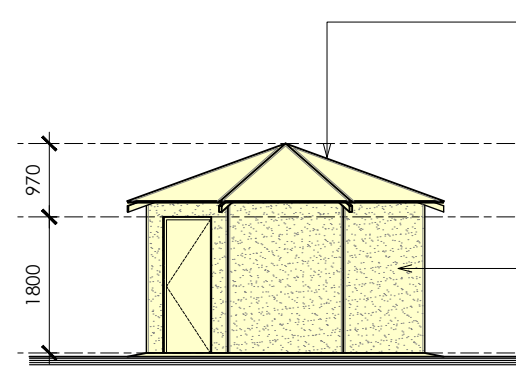
SITE PLAN
SCALE 1:200



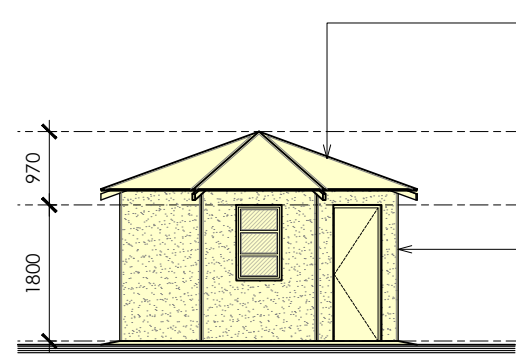
SITE LOCALITY
SCALE N/A



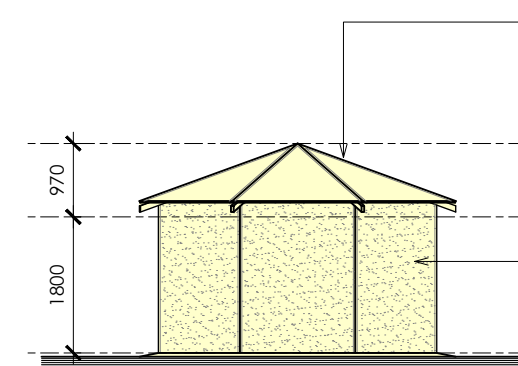
FLOOR PLAN / Tool shed
SCALE 1:50



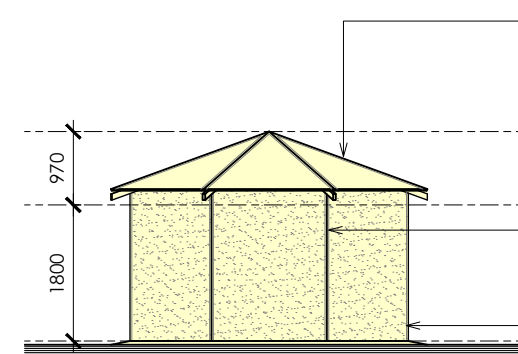
NORTH ELEVATION
SCALE : 1:100



EAST ELEVATION
SCALE : 1:100



SOUTH ELEVATION
SCALE : 1:100



WEST ELEVATION
SCALE : 1:100

FENESTRATION CALCULATIONS - Main House										
Tag	Width	Height	A	P-Value	G	O	M-Value	Min. P	U-Value	SHGC
D1/1	900,00	2125,00	1,91	425,00	500,00	SW	0,54	1417,5	4,40	Any Solution
D2/1	1628,65	2390,00	3,89	400,00	500,00	NW	0,54	1560,6	4,40	0,44
D2/2	2322,90	1400,00	3,25	400,00	500,00	NW	0,54	1026	4,40	0,44
D3/1	4900,00	2125,00	10,41	5086,11	500,00	NW	0,54	1417,5	4,40	0,44
D4/1	4600,00	2390,00	10,99	6000,00	500,00	NE	0,54	1560,6	4,40	0,44
D7/1	1265,00	2125,00	2,69	1963,00	500,00	SE	0,54	1417,5	4,40	Any Solution
Ex. W1	1950,00	1194,00	2,33	985,00	500,00	NW	0,54	914,76	4,40	0,44
Ex. W2	1950,00	1194,00	2,33	985,00	500,00	NW	0,54	914,76	4,40	0,44
W1/1	600,00	2125,00	1,28	945,00	500,00	SE	0,54	1417,5	4,40	Any Solution
W3/1	979,00	1100,00	1,08	425,00	500,00	SW	0,54	864	4,40	Any Solution
W4/1	1800,00	1100,00	1,98	445,00	500,00	SW	0,54	864	4,40	Any Solution
W5/1	1852,00	1244,00	2,30	985,00	500,00	NW	0,54	941,76	4,40	0,44
W6/1	1887,00	1194,00	2,25	985,00	500,00	NW	0,54	914,76	4,40	0,44
W7/1	600,00	900,00	0,54	945,00	500,00	SE	0,54	756	4,40	Any Solution
W7/2	600,00	900,00	0,54	945,00	500,00	SE	0,54	756	4,40	Any Solution
W7/3	600,00	900,00	0,54	945,00	500,00	SE	0,54	756	4,40	Any Solution
W8/1	1500,00	1000,00	1,50	945,00	500,00	SE	0,54	810	4,40	Any Solution
W9/1	4600,00	510,00	2,35	6001,87	500,00	NE	0,54	545,4	4,40	0,44

Summary					
City/Town	Latitude	Zone	Nett Floor Area	Fenestration Area	Glazing %
Port Elizabeth	33.962	4	193,14	52,16	27,01

FENESTRATION CALCULATIONS - Study										
Tag	Width	Height	A	P-Value	G	O	M-Value	Min. P	U-Value	SHGC
Ex W4	2071,00	1147,00	2,38	545,00	500,00	SE	0,54	889,38	4,40	Any Solution
Ex. W3	1739,00	910,00	1,58	425,00	500,00	SW	0,54	761,4	4,40	Any Solution
Ex. W5	2066,00	1147,00	2,37	545,00	500,00	SE	0,54	889,38	4,40	Any Solution
Ex. W6	933,00	1715,00	1,60	1707,00	500,00	NE	0,54	1196,1	4,40	0,53
Ex. W7	933,00	1715,00	1,60	1707,00	500,00	NE	0,54	1196,1	4,40	0,53
W3/1	600,00	1100,00	0,66	425,00	500,00	SW	0,54	864	4,40	Any Solution

Summary					
City/Town	Latitude	Zone	Nett Floor Area	Fenestration Area	Glazing %
Port Elizabeth	33.962	4	35,83	10,19	28,44

FENESTRATION CALC'S
SCALE: N/A

APPLICATION OF SANS 10400-XA - Ed.2																																												
ZONE 4 - CLASSIFICATION H4 / Dwelling Houses																																												
	REQUIREMENTS	ACTUAL	STATUS																																									
1	DESIGN	Building facing North/South with longest axis orientated East/West	In order																																									
2	SHADING	The shading is in accordance with the requirements of 5.1	In order																																									
3	FENESTRATIONS & ROOF LIGHTS	See Fenestration calculations	In order																																									
4	FLOOR INSULATION for under floor heating	The floors are in accordance with the requirements of 5.4 5.4.1. Surface bed (Heated) 5.4.2. Suspended (Exposed) R-value => 1.00	<table><tr><td>Under slab:</td><td>mm</td><td>W/m.K</td><td>R-Val.</td></tr><tr><td>EPS (tover insulation)</td><td>15</td><td>0,038</td><td>0,39</td></tr><tr><td>EPS (tover insulation)</td><td>30</td><td>0,033</td><td>0,91</td></tr><tr><td>Total R-value:</td><td>Req. =>1.0</td><td>1.30</td><td>N/A</td></tr></table>	Under slab:	mm	W/m.K	R-Val.	EPS (tover insulation)	15	0,038	0,39	EPS (tover insulation)	30	0,033	0,91	Total R-value:	Req. =>1.0	1.30	N/A																									
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Total R-value:	Req. =>1.0	1.30	N/A																																									
5	EXTERNAL WALLS Surface density > 270kg/m²	The external walls are in accordance with the requirements of 5.5 Zone 4: 50mm Cavity wall: R-value => 0,6	<table><tr><td>External wall:</td><td>mm</td><td>W/m.K</td><td>R-Val.</td></tr><tr><td>Outer Air-film (1/20)</td><td>1000</td><td>20</td><td>0,05</td></tr><tr><td>10mm plaster</td><td>10</td><td>0,75</td><td>0,01</td></tr><tr><td>110mm Brick</td><td>110</td><td>0,82</td><td>0,13</td></tr><tr><td>Air-spaces</td><td>1000</td><td>6,8</td><td>0,15</td></tr><tr><td>tover cavity insulation</td><td>000</td><td>0,04</td><td>0,00</td></tr><tr><td>110mm Brick</td><td>110</td><td>0,82</td><td>0,13</td></tr><tr><td>10mm plaster</td><td>10</td><td>0,75</td><td>0,01</td></tr><tr><td>Inner Air-Film (1/9.4)</td><td>1000</td><td>9,4</td><td>0,11</td></tr><tr><td>Total R-value:</td><td>Req. =>0.6</td><td>0.6</td><td>In order</td></tr></table>	External wall:	mm	W/m.K	R-Val.	Outer Air-film (1/20)	1000	20	0,05	10mm plaster	10	0,75	0,01	110mm Brick	110	0,82	0,13	Air-spaces	1000	6,8	0,15	tover cavity insulation	000	0,04	0,00	110mm Brick	110	0,82	0,13	10mm plaster	10	0,75	0,01	Inner Air-Film (1/9.4)	1000	9,4	0,11	Total R-value:	Req. =>0.6	0.6	In order	
External wall:	mm	W/m.K	R-Val.																																									
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EXTERNAL WALLS Surface density < 270kg/m²	The external walls are in accordance with the requirements of 5.5 Zone 4: External Drywall: R-value => 1,9	<table><tr><td>External wall:</td><td>mm</td><td>W/m.K</td><td>R-Val.</td></tr><tr><td>Outer Air-film (1/20)</td><td>1000</td><td>20</td><td>0,05</td></tr><tr><td>10mm plaster</td><td>000</td><td>0,75</td><td>0,00</td></tr><tr><td>110mm Brick</td><td>10</td><td>0,30</td><td>0,03</td></tr><tr><td>Air-spaces</td><td>1000</td><td>6,2</td><td>0,16</td></tr><tr><td>tover cavity insulation</td><td>063</td><td>0,038</td><td>1,66</td></tr><tr><td>110mm Brick</td><td>009</td><td>0,30</td><td>0,03</td></tr><</table>	External wall:	mm	W/m.K	R-Val.	Outer Air-film (1/20)	1000	20	0,05	10mm plaster	000	0,75	0,00	110mm Brick	10	0,30	0,03	Air-spaces	1000	6,2	0,16	tover cavity insulation	063	0,038	1,66	110mm Brick	009	0,30	0,03														
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