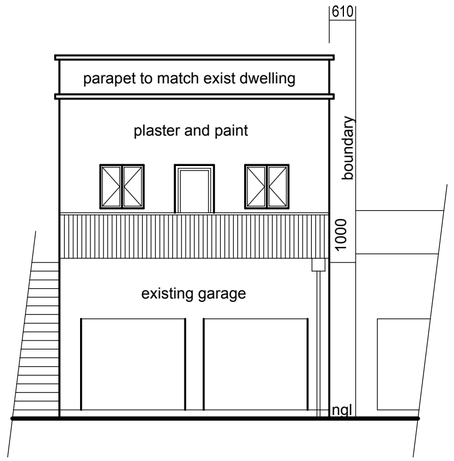
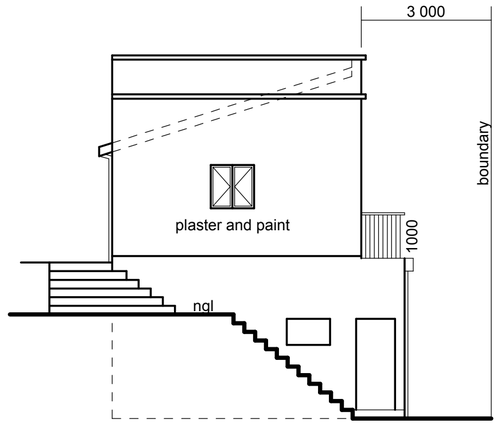
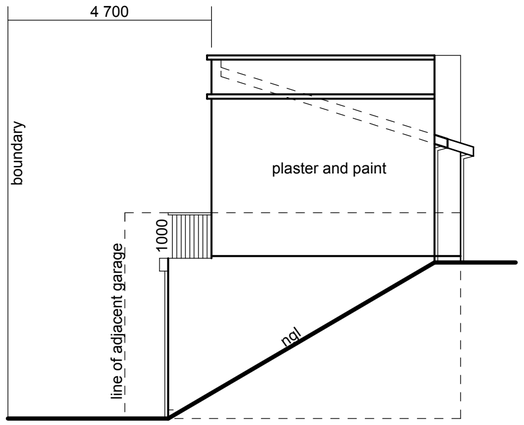


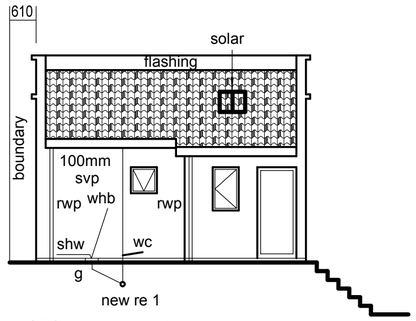
SE ELEVATION - 1:100



SW ELEVATION - 1:100



NE ELEVATION - 1:100



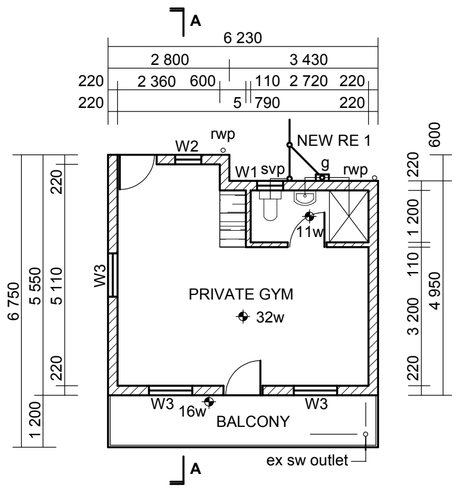
GROUND LEVEL 104.200
INVERT LEVEL 103.700
DEPTH 0.500

NW ELEVATION - 1:100

WINDOW SCHEDULE

CLEAR GLASS IN THERMAL BREAK ALUMINUM FRAMES			
WINDOW No	AREA	No. OFF	MIN GLASS THICKNESS
600 / 600 W1	0.36m.sq.	1	4mm toughened safety glass
600 / 1000 W1	0.60m.sq.	1	4mm monolithic annealed glass
1000 / 1000 W3	1.00m.sq.	3	5mm monolithic annealed glass

FENESTRATION
NETT FLOOR AREA = 27.19m.sq.
GLAZING AREA = 3.96m.sq. (14.56 %)
COMPLIES WITH SANS 10400 XA CLAUSE 4.4.4.1



GROUND FLOOR PLAN - 1:100

AIR LEAKAGE
SHALL NOT EXCEED 2 litres/s/m.sq. OF FENESTRATION AREA
0.306 litres/s/m.sq. OF FIXED GLAZING AND 5 litres/s/m.sq.
FOR SWING DOORS AS PER SANS 613 CLAUSE 4.4.

PIPING
TO BE INSULATED WITH ISOVER SNAP- ON
GLASSWOOL (R - VALUE OF 1) INLCLUDES
ALL FLOW AND RETURN PIPING WITHIN 1m OF GEYSER
AND PRESSURE RELIEF PIPING WITHIN 1m OF GEYSER
ALL PIPE LENGTHS TO BE MINIMISED

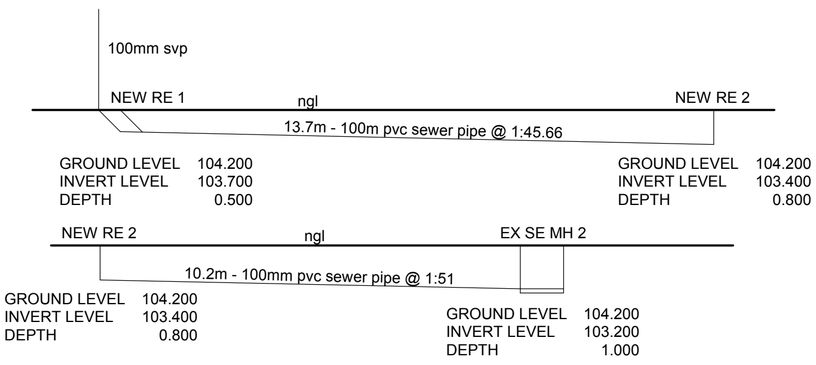
GEYSER
TO BE INSULATED WITH ISOVER GLASSWOOL BLANKET
(R - VALUE 0F 2) WITH FOIL FACING

HOT WATER CONSUMPTION
30 litres x 4 PERSONS = 120 litres per day
120 x 365 days = 43.8 kl
THEREFORE 21.9 kl BY SOLAR HEATING
SOLAR SYSTEMS TO COMPLY WITH SANS 1307 AND SANS 10105
AND THE INSTALLATION THEREOF SHALL COMPLY WITH SANS 10254

LIGHTING : NETT FLOOR AREA = 27.19m.sq.
11w x 1 = 11w
16w x 1 = 16w
32w x 1 = 32w
TOTAL = 59w

ENERGY DEMAND = 5w/m.sq.
5w x 27.19m.sq. = 135.95w
59w/27.19m.sq. = 2.17w/m.sq. (< 5w/m.sq.)

ENERGY CONSUMPTION = 5kWh/m.sq.a
5kWh/m.sq.a x 217.19m.sq. = 135.95kWh.a
ASSUME LIGHTS ON FROM 5pm TO 10pm (5 HOURS PER DAY)
52 weeks x 7 days x 5 hour day = 1 820h.a
LAMPS 59w OR 0.059kW
0.059kW x 1 820h.a = 107.38kWh.a (< 135.95kWh.a)



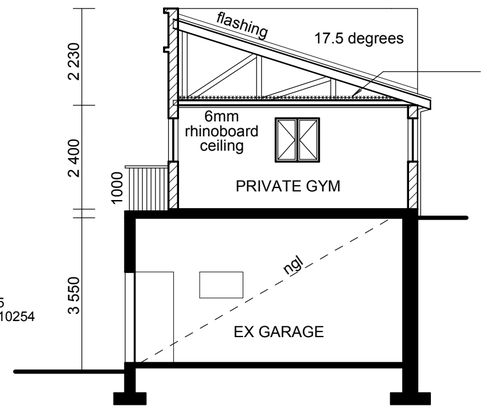
GROUND LEVEL 104.200
INVERT LEVEL 103.700
DEPTH 0.500

GROUND LEVEL 104.200
INVERT LEVEL 103.400
DEPTH 0.800

GROUND LEVEL 104.200
INVERT LEVEL 103.400
DEPTH 0.800

GROUND LEVEL 104.200
INVERT LEVEL 103.200
DEPTH 1.000

SEWER SECTIONS - 1:100



SECTION AA - 1:100

GENERAL SPECIFICATION

ROOF (TO BE CERTIFIED BY ENGINEER)
CONCRETE ROOF TILES ON 38x38 BATTENS
ON UNDERLAY ON GANG-NAILED ROOF TRUSSES
@ 750mm MAX c/c - ROOF PITCH 17.5 DEGREES.

ROOF INSULATION AS PER SANS 204 CLAUSE 4.3.6 TABLE 10
MINIMUM TOTAL R-VALUE OF 2.7W/m.K
100mm THICK FLEXIBLE FIBRE GLASS BLANKET WITH A
DENSITY OF 10-18kg/cubic metre AND THERMAL
CONDUCTIVITY OF 0.004W/m.K

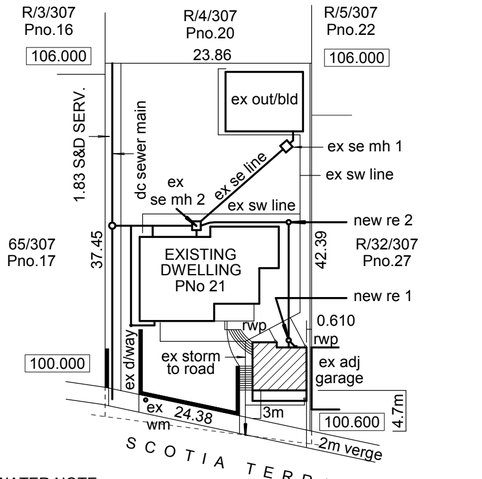
WALLS (TO ENGINEER'S DETAIL)
220mm BRICKWORK EXTERNALLY.
110mm BRICKWORK INTERNALLY.
MIN R-VALUE OF 0.35
PLASTER AND PAINT BOTH SIDES.
COMPLIES WITH SANS 10400-XA CLAUSE 4.4.3.2 (a)

SUSPENDED FLOOR
EXISTING SLAB (LOADING TO ENGINEER'S DETAIL)

FOUNDATIONS
230x700 STRIP FOOTINGS TO EXTERNAL WALLS. (ENG'S DETAIL)
200x600 STRIP FOOTINGS TO INTERNAL WALLS. (ENG'S DETAIL)

WINDOW FRAMES
THERMAL BREAK ALUMINIUM WINDOW FRAMES

DOOR FRAMES
4.4mm ALUSEC CHANNEL



STORMWATER NOTE :
NO INCREASE IN HARDENED SURFACE
EXISTING STORMWATER TO ROAD

SITE PLAN 1:500

PHONE 0736349644 OWNER'S SIGNATURE B.S Shewels

PROPOSED PRIVATE GYM FOR B.S. ; A.S. ; & M.C. SHEWELS ON REM OF PTN 37 OF ERF 307 DUIKERFONTEIN

21 SCOTIA TERRACE

SCHEDULE OF AREAS

SITE	954.00m.sq.
EXISTING DWELLING	150.24m.sq.
EXISTIND OUT-BUILDING	61.28m.sq.
EX GARAGE LOWER GROUND	40.00m.sq.
NEW PRIVATE GYM	**32.52m.sq.**
COVERAGE (26.36%)	**251.52m.sq.**

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