

KLAASENS ROAD

93 050 BOUNDARY

80 820 BOUNDARY

71 000 BOUNDARY

PRIVATE ROAD

DRIVEWAY

PARKING

ERF 10373 CONSTANTIA

Floor space  
Existing house: 730 m<sup>2</sup>  
Existing staff accommodation: 100 m<sup>2</sup>  
Proposed dwelling: 402 m<sup>2</sup>  
Total: 1,232 m<sup>2</sup>

PLANTER

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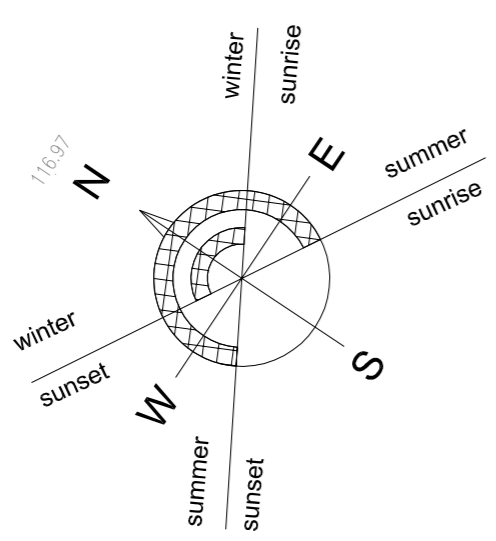
COURTYARD

NEW DWELLING

PATIO

POOL

**DRAINAGE LEGEND**  
 (BLUE) STORMWATER  
 (GREEN) WASTEWATER  
 (BROWN) SEWAGE



man-made reed bed & pond to specialist design  
 REED BED & POND FOR WASTEWATER TREATMENT & AMBIENT SOUND

CONSTRUCTION NOTES: HOUSE + GARAGE

**ROOFS: PITCHED**  
 HOUSE + GARAGE: NATURAL SLATE, PETERLO SYSTEM, BY APPROVED SLATE ROOFING SPECIALIST ON BITUMINOUS FELT ON 38X38 BATTENS AT 225mm CRS ON TRUSSES AT 30° PITCH TO MANUFACTURER SPECIFICATIONS AT MAX 750mm CRS.  
 ENTRY ONLY: SPECIAL TRUSSES TO ENGINEER'S DETAILS.  
 LEAN-TO ROOF: AS MAIN ROOFS BUT AT 15° PITCH.  
 TRUSSES TIED TO WALLS WITH 30X1.2mm GALV. HOOP IRON STRAPS BUILT INTO WALL MIN 300mm DEEP AT TRUSS CENTRES.  
 CEILING: 9.5mm GYPSUM PLASTERBOARD ON 38X38 BATTENS AT 400mm CRS ON TRUSS TIES WITH 5mm CRESTONE SKIN.  
 INSULATION: 145mm ISOTHERM (R-VALUE = 3.35)  
 GARAGE: OMIT CEILING + INSULATION

**ROOFS: FLAT**  
 WARM DECK CONSTRUCTION: 60mm STONE BALLAST ON 80mm LAMDBOARD (R-VALUE = 3.33) ON 4mm DERBIGUM TORCH-ON BY APPROVED WATERPROOFING SPECIALIST ON SCREED TO FALL (140, MIN 20mm)  
 ON REINFORCED CONCRETE SLAB TO ENGR'S DETAILS.  
 CEILING: 9.5mm GYPSUM BOARD ON GALV STEEL BRANDING AT 500mm CRS ON 25X25 GALV STEEL ANGLES FXED TO CONCRETE SOFFIT.  
 ADDITIONAL INSULATION: 20 LAMDBOARD (R-VALUE = 0.83) TO CONCRETE SOFFIT  
 VERANDA: OMIT CEILING AND INSULATION

**WALLS: CAVITY**  
 300mm CAVITY CONSTRUCTION (110-80-110) WITH 30mm LAMDBOARD (R-VALUE = 1.25) FIXED TO OUTER FACE OF INNER SKIN.  
 200mm GALV BUTTERFLY WIRE TIES AT MAX 450mm CRS VERTICALLY MAX 600mm CRS HORIZONTALLY. TIES WITHIN 150mm OF OPENINGS + WALL INTERSECTIONS AT MAX 300mm CRS VERTICALLY.  
 GALV BRICKFORCE TO ENGR'S DETAILS.  
 380 micr DPC IN EACH LEAF, LEVEL WITH TOP OF GROUND SLAB AND 150mm DEPTH OF CAVITY TO LEVEL OF EXTERNAL FINISHED SURFACE, ALSO AT CILLS, OPENINGS AND LINTELS.  
 EXTERNAL RENDER: 15-20mm SAND-CEMENT-LIME PLASTER  
 INTERNAL PLASTER: 15mm SAND-CEMENT-LIME UNDERCOAT + 5mm GYPSUM SKIM FINISH  
 INTERNAL CAVITY WALLS: OMIT DPC AT GROUND SLAB LEVEL ONLY

**WALLS: SOLID**  
 INTERNAL WALLS: 230mm STRUCTURAL COLLAR-JOINTED BRICK WITH GALV CRIMP WIRE TIES AT 5 PER M<sup>2</sup> + MAX 25mm MORTAR-FILLED CAVITY OR 115mm NON-STRUCTURAL WALLS.  
 RETAINING WALLS: TO STRUCT ENGR'S DETAILS  
 BOUNDARY WALL: 1.8m HIGH ZIGZAG ON PLAN, TO STRUCT ENGR'S DETAILS

**FLOOR**  
 CONCRETE SURFACE BED TO ENGR'S DETAILS ON 250micr DPM ON 50mm SAND BLINDING, DPM TO LINKED TO DPC IN WALLS.  
 TIMBER FINISH: ENGINEERED HARDWOOD FLOORING ON DPM ON 30mm LEVELLED SCREED  
 TILE FINISH: 20-30mm CLAY TILES IN 40mm SAND-CEMENT MORTAR.  
 SHEETED FINISH: PRE-FINISHED LINOLEUM ON 30mm LEVELLED SCREED  
 POLISHED CONCRETE FINISH: 25MPa CONCRETE, TOP SURFACE MECHANICALLY GROUND SMOOTH BY SPECIALIST

**FOUNDATIONS**  
 TO STRUCT ENGR'S DETAILS

**WINDOWS, EXTERNAL DOORS + DOOR-FRAMES, SKYLIGHTS**  
 WINDOWS + EXTERNALS DOORS CUSTOM-MADE FROM RHINWOOD (R-VALUE FOR 44mm THICKNESS = 2.54) WITH RUBBER SEALS TO KEEP AIR LEAKAGE BELOW 2L/SEC/M<sup>2</sup>  
 GLAZING: ALL WINDOWS + GLAZED DOORS: 6mm LAMINATED 'INTRUDERPRUF' LOW-E SKYLIGHTS: 700X1210 DOUBLE-GLAZED

**ROOFLIGHTS**  
 TIMBER WITH ALUMINIUM CASING, DOUBLE-GLAZED TOUGHENED, 700X1210

**DRAINAGE**  
 DISCHARGE FROM TOILETS AND WASTE WATER FROM KITCHEN SINKS, DISHWASHER AND WASHING MACHINE TO 100mm PVC SOIL PIPE TO MUNICIPAL SEWER.  
 ALL OTHER WASTE WATER TO GULLIES TO 75mm PVC W/PS TO DISCHARGE TO MAN-MADE REED-BED WETLAND BY SPECIALIST.  
 40mm VENT PIPE/VENT VALVES AT THE HEAD OF THE MAIN DRAINS OR ANY BRANCH DRAIN LONGER THAN 6m. WASTE PIPES SIZED ACCORDING TO DISTANCE TO MAIN DRAINS

**RAINWATER**  
 ROOF RAINWATER IN CLOSED SYSTEM VIA UNDERGROUND PIPES TO WATER STORAGE TANKS IN UTILITY BUILDING. SIZING + TYPE OF GUTTERS, DOWNPIPES + SWFS AS SHOWN ON DRAWINGS.

**WATER SUPPLY**  
 DOMESTIC WATER TO BE SUPPLIED FROM RAINWATER COLLECTED IN 3X 10,000L TANKS, FILTERED AND CLEANSED BY MEANS OF INTENA AQUALOOP SYSTEM IN UTILITY BUILDING + PUMPED TO HOUSE AT 5 BAR.  
 THERE WILL BE ONE MUNICIPAL WATER CONNECTION TO THE KITCHEN AND ONE MUNICIPAL WATER CONNECTION TO THE INTENA SYSTEM IN THE UTILITY BUILDING.

**HOT WATER + SPACE HEATING**  
 HOT WATER TO 55°C + HOT WATER RADIATORS BY MEANS OF HEAT PUMPS AND SOLAR WATER HEATING PANELS IN COMBINATION. DOMESTIC HOT WATER PIPES TO BE 22mm ID PE-Xa INSULATED TO R-VALUE > 1 m<sup>2</sup>.KW

**ELECTRICITY**  
 ELECTRICITY GENERATED BY PV PANELS WITH GRID-TIE, SUFFICIENT FOR THE DAILY RUNNING OF ALL EQUIPMENT, APPLIANCES AND LIGHTS. ALL APPLIANCES TO BE LOW ENERGY RATED, ALL LIGHTS TO BE LED.

**GAS**  
 NATURAL GAS FOR HOB, INSTALLED BY REGISTERED GAS PLUMBER.

**FIREPLACE + CHIMNEY**  
 WOOD-BURNING HYDRONMIC FIREBOX LINKED TO RADIATORS, WITH DOOR IN FIREPLACE + FLUE IN CHIMNEY TO 1m ABOVE RIDGE OF ROOF IT PASSES THROUGH SLATE HEARTH 500mm IN FRONT OF FIREPLACE AND 300mm EACH SIDE.

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<b>NEW DWELLING ON ERF 10373 CONSTANTIA</b>		
Client:	GLEN DIRK ESTATE (PTY) LTD	
Title:	SITE & ROOF PLAN	
Scale:	Drawing no.	Rev no.
1 : 200	65.01	A
Date:	16/02/2015	
<b>COUNCIL SUBMISSION DRAWING</b>		