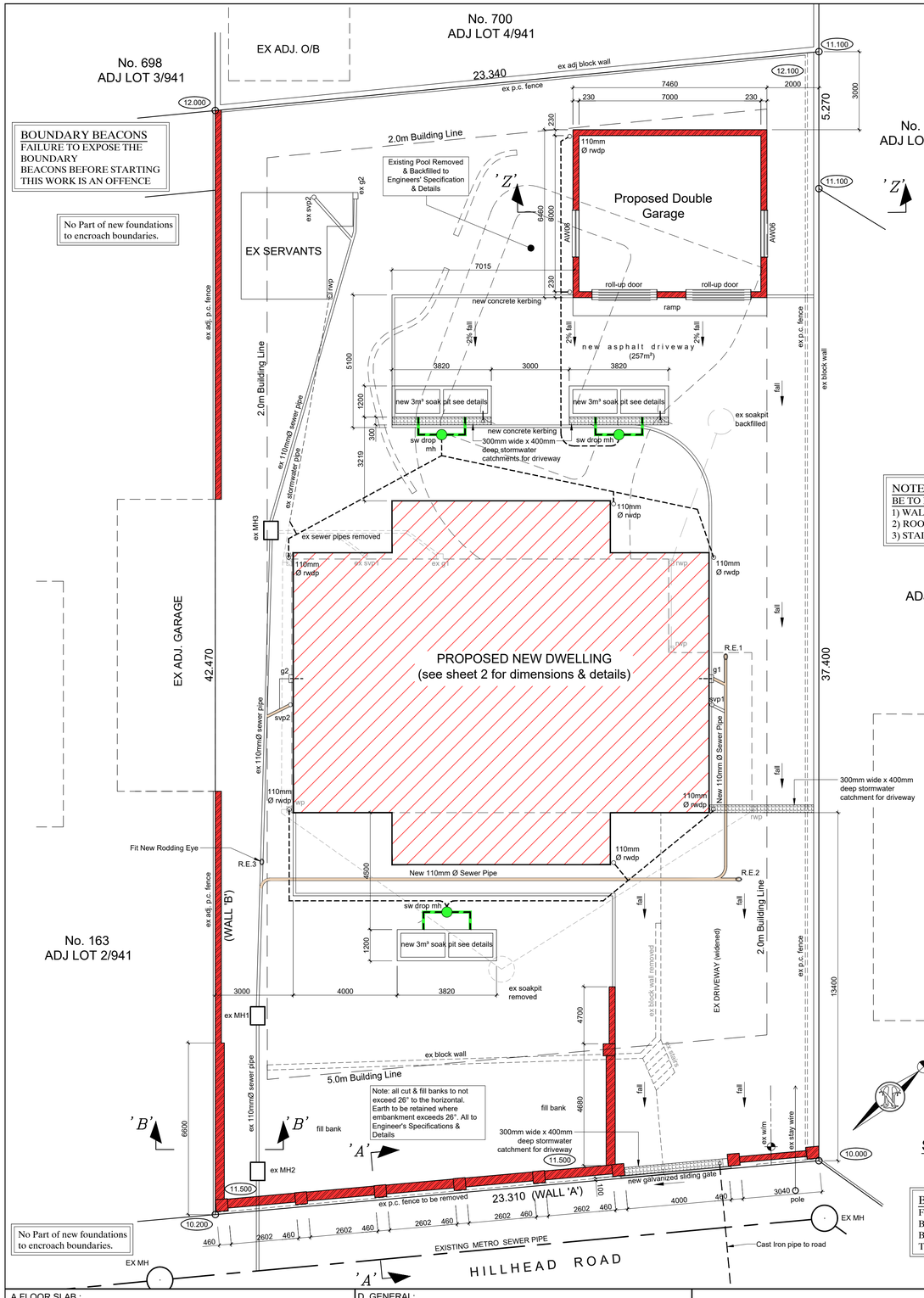

SITE PLAN
(1 : 100)

NOTE : THE FOLLOWING ARE TO BE TO ENGINEERS' DETAILS
1) WALLS & LINTELS (Sans 10400 K)
2) ROOF STRUCTURES (Sans 10400 L)
3) STAIRS (Sans 10400 M)

BOUNDARY BEACONS
FAILURE TO EXPOSE THE BOUNDARY
BEACONS BEFORE STARTING
THIS WORK IS AN OFFENCE

Water Services:
* All plumbing to be undertaken by ticketed and registered plumber.
* All taps and fittings to be SABS / JASWIC approved.
* All WCs to be fitted with external overflow.
* Geyser to comply with SANS 10254 / 10400. All plumbing undertaken is to be to local authority water supply bylaws.

NOTE:
ALL INTERNAL PLUMBING TO COMPLY WITH SANS 10400-P (DRAINAGE).

WATER RETICULATION TO COMPLY WITH SANS 10252

SEWER & STORMWATER CONNECTIONS:
Contractor to prove Tie-In point invert levels of services before commencing of this project & laying of service pipes.
Contractor to lay pipes from Tie-In back to house fittings so that adequate flow is achieved.
Note: If any pipe is less than 450mm to the invert, that length of pipe to be encased in concrete.

SOIL CLASIFICATION:

SHOWERS:
Shower Cubicles and Glazing to be of Safety Glass (SANS 10400N) 6mm laminated annealed safety glass

Invert of all new Sanitary Fittings Connecting into Existing to have min invert of 450mm

SERVICES
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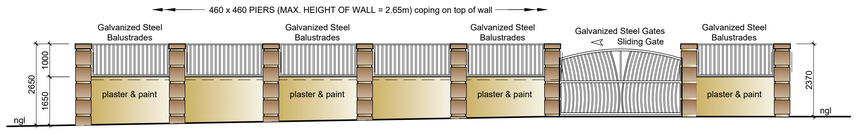
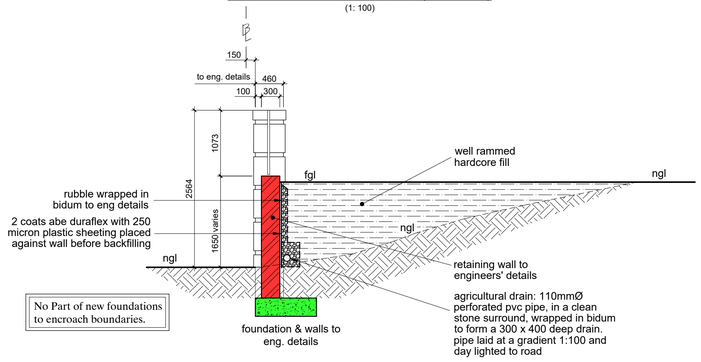
2) ALL NEW SERVICES TO BE LAID 1.5m FROM PERIMETER OF BUILDINGS.

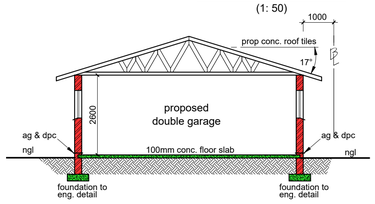


NORTH WEST ELEVATION (WALL 'A')
(1: 100)



No Part of new foundations to encroach boundaries.

SECTION 'A' - 'A'
(1: 50)



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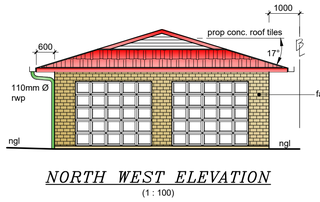
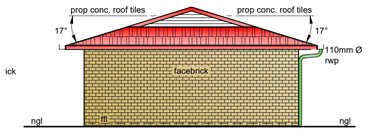
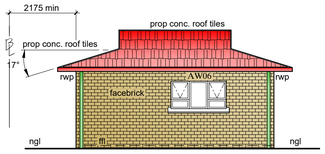
(1 : 100)



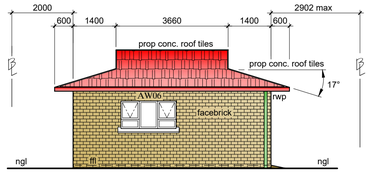
NORTH WEST ELEVATION
(1 : 100)



SOUTH EAST ELEVATION
(1 : 100)



NORTH EAST ELEVATION
(1 : 100)



SOUTH WEST ELEVATION
(1 : 100)

A FLOOR SLAB :
* 30mm SCREED ON100mm CONCRETE SLAB REINFORCED WITH BRC MESH ON 250MIC DAMPROOF MEMBRANE ON 50mm BLINDING LAYER OF CLEAN RIVER SAND TO BE LAID ON WELL RAMMED HARDCORE FILL.

B WALLS :
* 2 COURSES OF BRICKWORK (BLOCKWORK EVERY COURSE) REINFORCED WITH BRICKFORCE WITH SOLID JOINTS IN CEMENT MORTAR TO BE PROVIDED IN ALL WALLS AT BOTH WINDOWSILL & WALL PLATE LEVELS.

C ROOF :
ALL ROOFING MEMBERS AND FIXTURES TO ENGINEERS' DETAILS AND SPECIFICATIONS
* TILES ON 38 x 38 TIMBER BATONS ON 400 MICRON GUNPLAS DAKSEEL WATER PROOFING MEMBRANE, ON SAP GANG NAIL TRUSSES OR EQUIVALENT AT (TILES ◦ 17.5° PITCH), MAX 686mm CENTERS, ON 114 x 38mm V5 WALL PLATES & TIED INTO MIN OF 3 COURSES OF BRICKWORK (2 COURSES OF BLOCKWORK) USING GALVANISED STEEL STRAPS, ALL TO ENGINEERS SPECIFICATION & DETAILS.

* SANS 10400 APPROVED GUTTERS AND DOWNPIPES.
* SANS 10400 APPROVED BARGE AND FASCIA BOARDS.

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6 CONTRACTOR IS TO CONFIRM AND ENSURE CORRECTNESS OF FLOOR AND ENTRANCE LEVELS PHYSICALLY ON SITE WITH LOCAL AUTHORITY INSPECTOR BEFORE COMMENCING WORK TO CONSIDER ALL SERVICE DRAINAGE HAS ADEQUATE FALLS TO CONNECTING SERVICES.
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BOUNDARY WALLS:
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DRAINAGE :
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2. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT STORMWATER DAMAGE TO THE WORK IN PROGRESS OR NEIGHBOURING PROPERTIES DOES NOT OCCUR DURING CONSTRUCTION AND THAT THE SURFACE WATER DRAINAGE INSTALLED IS ADEQUATE.
3. ALL SANITARY FITTINGS TO BE TRAPPED AND/OR VENTED TO LOCAL AUTHORITY REQUIREMENTS.
4. ALL BENDS AND JUNCTIONS IN DRAINS TO BE PROVIDED WITH INSPECTION EYES.
5. ADEQUATE ACCESS PANELS TO BE FITTED IN ALL DUCTS OVER INSPECTION EYES.

CERTIFICATES OF COMPLIANCE
1. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT ALL CERTIFICATES, OR CERTIFICATES OF COMPLIANCE THAT ARE REQUIRED BY THE LOCAL AUTHORITY ARE OBTAINED BY HIM FROM ALL REGISTERED SERVICE PROVIDERS AND HANDED TO THE LOCAL AUTHORITY ON REQUEST.

SCHEDULE OF AREAS (m²)

SITE AREA	990.00
EXISTING :	
Main Dwel & Garage (Demolished)	-161.00
Out-Building	14.80
TOTAL :	14.80
PROPOSED:	
New Dwelling storey plan	193.60
1st storey plan	190.70
New Double Garage	48.20
TOTAL :	432.50
EXIST COVER	14.80
PROP COVER	241.80
TOTAL COVERAGE :	256.60
F.A.R.	

SBD
ShauBridge Designs
ARCHITECTURAL AND DRAUGHTING SERVICES
N. Adams: Prof. Arch. Tech. Reg. No. T1154
26 MARIA CRESCENT
AUSTERVILLE
DURBAN
4052 cell : 083 7850276

PROJECT :
DEMOLISH EX DWELL. & GARAGE
PROPOSED NEW DWELLING,
DOUBLE GARAGE AND
BOUNDARY/RETAINING WALLS

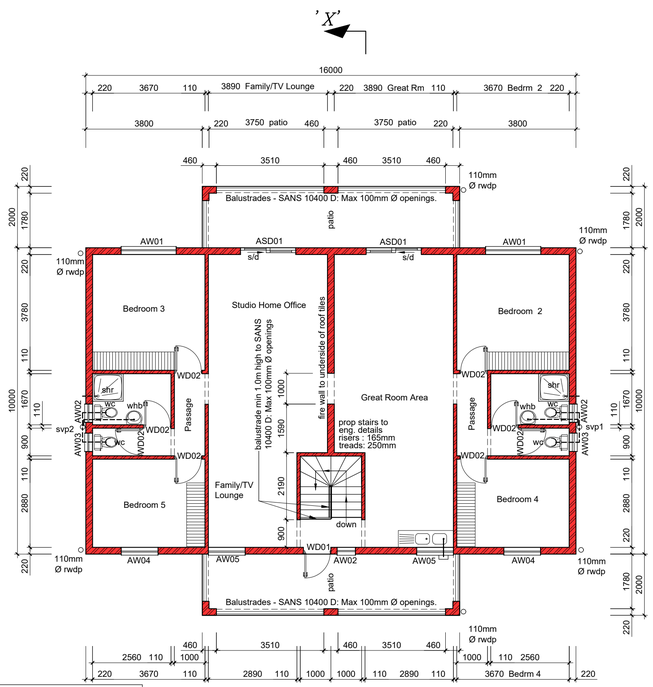
STREET ADDRESS :
169 HILLHEAD ROAD

LOT DISCRIPTION :
REMAINDER OF ERF 941 OF WENTWORTH

CLIENT :	CLIENT TEL :
MARLIN DEON KINSEY	. 072 465 0215
RATE NUMBER : .	CLIENT SIGNATURE :

SHEET 1 OF 3

DRAWN :	CHECKED BY:	SCALE :
N.A.	N. Adams	AS SHOWN
DATE	DRG No.	
16-05-2023	SBD 16052023	



FIRST STOREY PLAN
(1 : 100)

NOTE : THE FOLLOWING ARE TO BE TO ENGINEERS' DETAILS
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2) ROOF STRUCTURES (Sans 10400 L)
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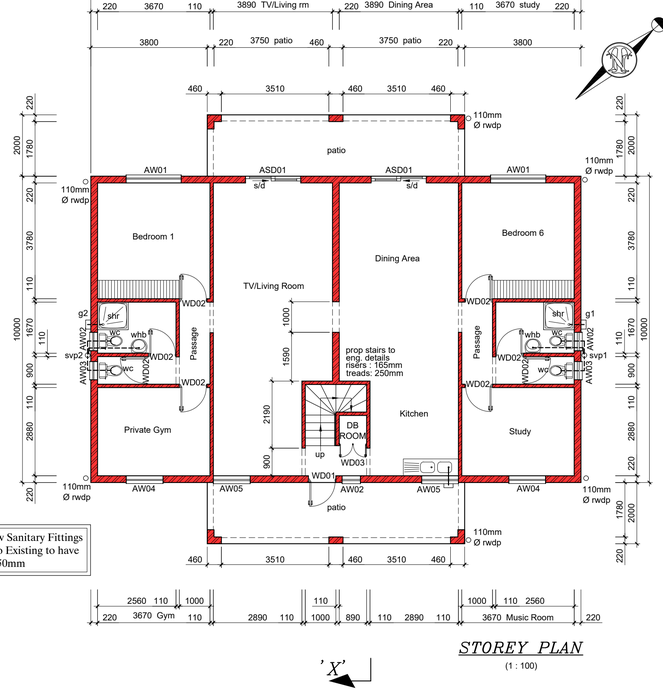


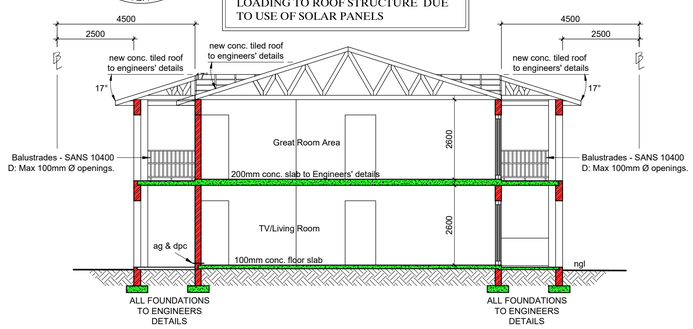
Invert of all new Sanitary Fittings Connecting into Existing to have min invert of 450mm

STOREY PLAN
(1 : 100)

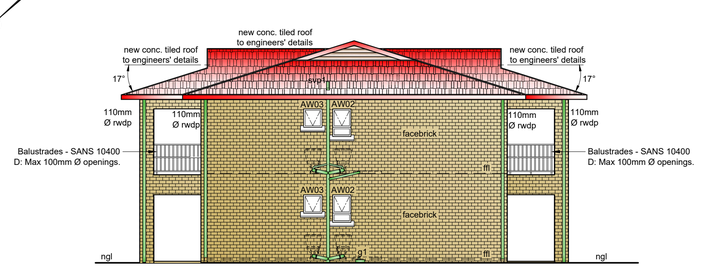
SHOWERS ENCLOSURES:
Shower Cubicles and Glazing to be of Safety Glass (SANS 10400 N) 6mm laminated annealed safety glass

INSTITUTE FOR TIMBER CONSTRUCTION
PLEASE USE A QUALIFIED ITC-SA ROOF ERECTOR TO ERECT YOUR TIMBER ROOF
0800 TIMBER (846237)

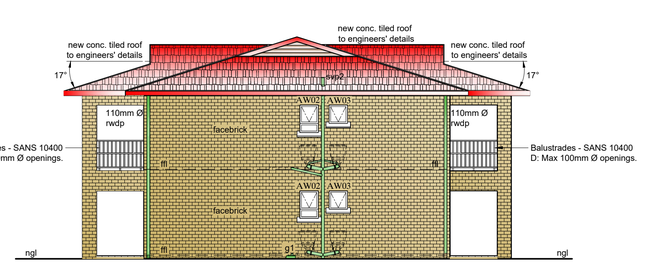
NOTE :
ENGINEER TO CERTIFY ADDITIONAL LOADING TO ROOF STRUCTURE DUE TO USE OF SOLAR PANELS



SECTION 'X' – 'X'
(1 : 100)



SOUTH WEST ELEVATION
(1 : 100)



NORTH EAST ELEVATION
(1 : 100)

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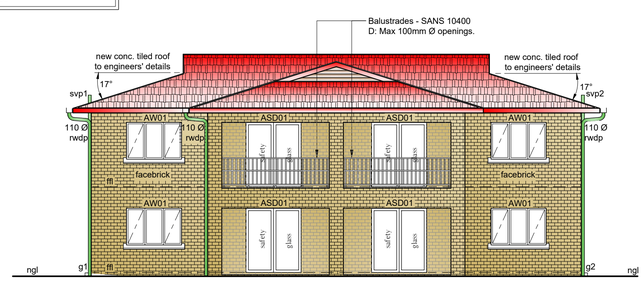
Shower Cubicles and Glazing to be of Safety Glass (SANS 10400 N) 6mm laminated annealed safety glass



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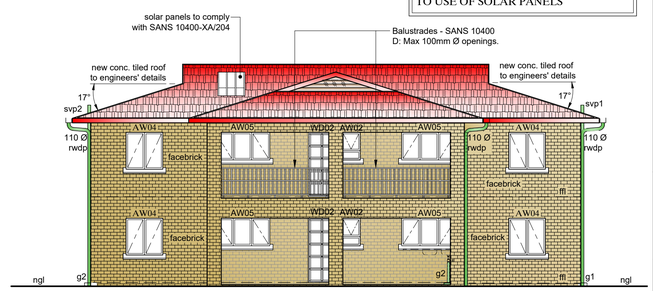


NORTH WEST ELEVATION
(1 : 100)

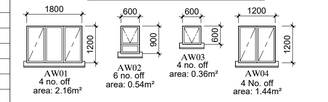
GLAZING

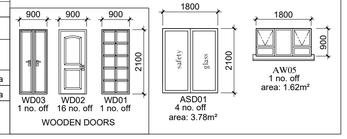
Component	Type of glass	Max Size m²	Material Type	Thickness
AW01	non-safety glass	0.720	Monolithic annealed glass	3mm
AW02	safety glass	0.360	Laminated annealed safety glass	6mm
AW03	safety glass	0.360	Laminated annealed safety glass	6mm
AW04	non-safety glass	0.720	Monolithic annealed glass	3mm
AW05	non-safety glass	0.540	Monolithic annealed glass	3mm
ASD01	safety glass	1.890	Laminated annealed safety glass	6mm

FENESTRATION:

Floor	Nett Floor Area	Total Area of Glazing	15% of nett fl area	Glazing area to Net Floor Area
Storey Plan	142.14m²	21.42m²	21.32m²	Glazing area < Net Floor Area
1st Storey Plan	146.2m²	21.42m²	21.93m²	Glazing area < Net Floor Area

EXTERNAL DOOR & WINDOW SCHEDULES FOR DWELLING
(All windows are of Aluminum)





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SBD
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ARCHITECTURAL AND DRAUGHTING SERVICES
N. Adams: Prof. Arch. Tech. Reg. No. T1154
26 MARIA CRESCENT
AUSTERVILLE
DURBAN
4052 cell : 083 7850276

PROJECT :
DEMOLISH EX DWELL. & GARAGE PROPOSED NEW DWELLING, DOUBLE GARAGE AND BOUNDARY/RETAINING WALLS

STREET ADDRESS :
169 HILLHEAD ROAD

LOT DISCRIPTION :
REMAINDER OF ERF 941 OF WENTWORTH

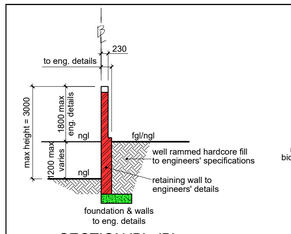
CLIENT : MARLIN DEON KINSEY
CLIENT TEL : . 072 465 0215

RATE NUMBER : .
CLIENT SIGNATURE :

SHEET 2 OF 3

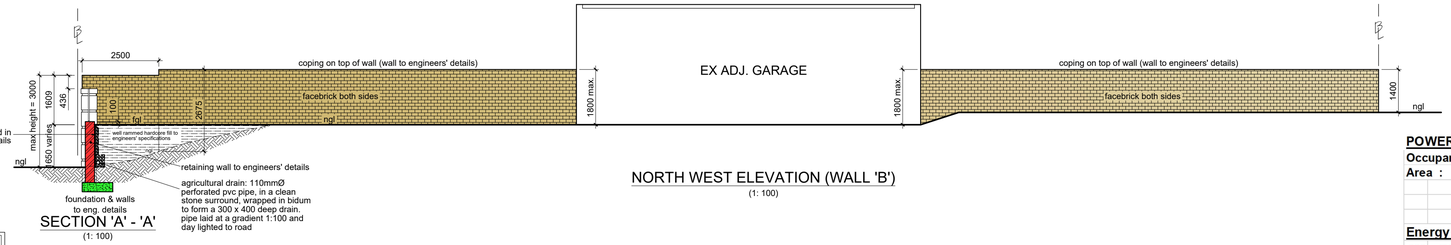
DRAWN : N.A.
CHECKED BY: N. Adams
SCALE : AS SHOWN

DATE 16-05-2023
DRG No. SBD 16052023



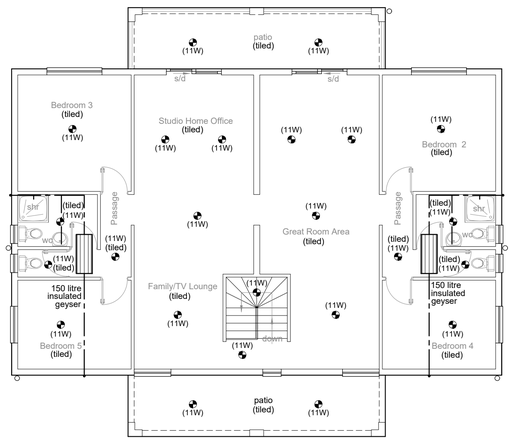
SECTION 'B' - 'B'
(1: 100)

No Part of new foundations to encroach boundaries.



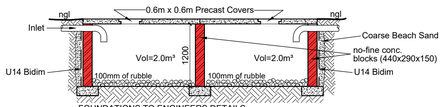
SECTION 'A' - 'A'
(1: 100)

NORTH WEST ELEVATION (WALL 'B')
(1: 100)



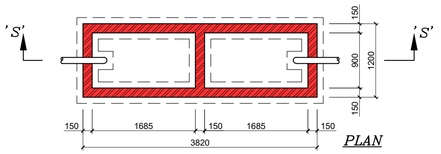
FIRST STOREY PLAN
(1 : 100)

Notes :
1m³ per 40m² Roof Area.
1m³ of Soakpit per 40m² of Hardened Area



FOUNDATIONS TO ENGINEERS DETAILS

SECTION 'S' – 'S'



PLAN

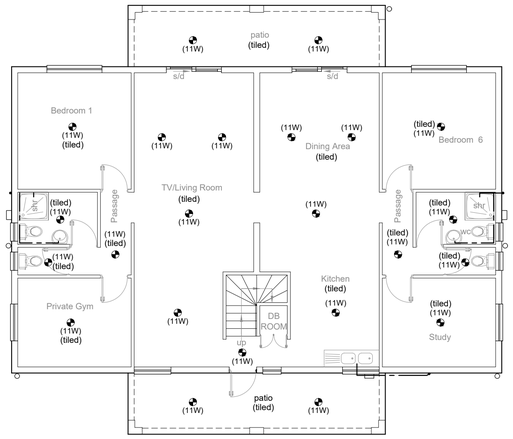
DETAILS OF 3m³ SOAKAWAY
Surround Soakaway with Bidim U14

STORMWATER MANAGEMENT CONTROL			
	Area (m²)	m²	m²
Site Area	990		
Site Area (40%)	396		
Roof Area	257		
Hardened Area	257		
Roof + Hardened Area	514		
Less 40% of Site Area	118		
Soakaway (1m³ = 40m²)	360	9	40
Less 4m soakaway (160m²)	-242		

-242 / 40 x 1.667 = -10.085

Size of Water Tank req = -10085 Litres
No Water Tank Needed

SERVICES
1) ALL PLUMBING TO COMPLY WITH SANS 10400.
2) ALL NEW SERVICES TO BE LAID 1.5m FROM PERIMETER OF BUILDINGS.

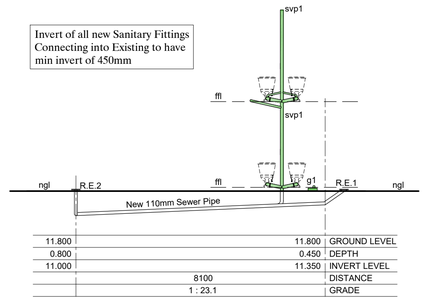


STOREY PLAN
(1 : 100)

Legend	
	ELECTRICAL LIGHT FITTING
	HOT WATER PIPES (insulated) 20mm Ø External Pipework 10mm Ø Internal Pipework

HOT WATER/ELECTRICAL/FINISHES LAYOUT
(1 : 100)

Invert of all new Sanitary Fittings Connecting into Existing to have min invert of 450mm



11.800	11.800	GROUND LEVEL
0.800	0.450	DEPTH
11.000	11.350	INVERT LEVEL
	8100	DISTANCE
	1 : 23.1	GRADE

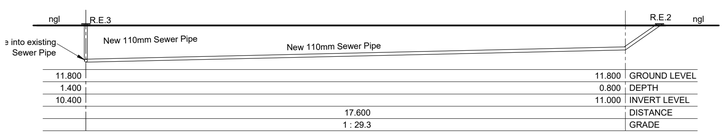
SEWER SECTION
(from RE 1 to RE 2)
(1 : 100)

Water Services:
- All plumbing to be undertaken by ticketed and registered plumber.
- All taps and fittings to be SABS / JASWIC approved.
- All WCs to be fitted with external overflow.
- Geyser to comply with SANS 10254 / 10400. All plumbing undertaken is to be to local authority water supply bylaws.

NOTE:
ALL INTERNAL PLUMBING TO COMPLY WITH SANS 10400-P (DRAINAGE).

ffl WATER RETICULATION TO COMPLY WITH SANS 10252

SEWER & STORMWATER CONNECTIONS:
Contractor to prove Tie-In point invert levels of services before commencing of this project & laying of service pipes.
Contractor to lay pipes from Tie-In back to house fittings so that adequate flow is achieved.
Note: If any pipe is less than 450mm to the invert, that length of pipe to be encased in concrete.



11.800	11.800	GROUND LEVEL
1.400	0.800	DEPTH
10.400	11.000	INVERT LEVEL
	17.600	DISTANCE
	1 : 29.3	GRADE

SEWER SECTION
(from RE 2 to RE 3)
(1 : 100)

POWER & LIGHTING CALCULATIONS FOR DWELING

Occupancy :		**H4**			
Area :		**Storey Plan=**		**320**	**m²**
		Total =		**320**	**m²**

Energy Demand

320 x 5W/m = 1600 W

Energy Consumption

320 x 5W/m = 1600 kwh

List of Rooms

Bedroom 1	**1**	**x**	11W =	11	W
Bedroom 2	**1**	**x**	11W =	11	W
Bedroom 3	**1**	**x**	11W =	11	W
Bedroom 4	**1**	**x**	11W =	11	W
Bedroom 5	**1**	**x**	11W =	11	W
Shr/Toilet x 4	**4**	**x**	11W =	44	W
Toilet x 4	**4**	**x**	11W =	44	W
Kitchen / Dining Room	**4**	**x**	11W =	44	W
TV/Living Room	**4**	**x**	11W =	44	W
Great Room Area	**4**	**x**	11W =	44	W
Studio Home Office	**2**	**x**	11W =	22	W
Family/TV Lounge	**2**	**x**	11W =	22	W
Passage x 4	**4**	**x**	11W =	44	W
Private Gym	**1**	**x**	11W =	11	W
Study	**1**	**x**	11W =	11	W
Music Room	**1**	**x**	11W =	11	W
Stairwell	**3**	**x**	11W =	33	W
patio x 2	**4**	**x**	11W =	44	W
DB Room	**1**	**x**	11W =	11	W
Total :	**43**	**x**	**11W =**	**473**	**W**

Light Usage : Morning 2hrs + Evening 5hrs = Total 7hrs

Annual Usage : 7hrs @ 7 days @ 52 weeks = 2548 hrs

Annual Consumption : 473 W x 2548 hrs = 1205204 WH
= 1205.204 KWH

Result :

Maximum Energy Demand : 473 W
Maximum Energy Consumption : 1205.204 WH
Achieved Demand < Permitted Demand
473 W < 1600 W
Achieved Consumption < Permitted Demand
1205.204 KWH < 1600 KWH

Hot Water Supply

1. All internal hot water supply pipes (19mm) to be insulated with a material with a minimum 'R' Value of 1,000 (40 x 40 x 6mm pvc or fibre glass pipe insulation.)
2. All hot water vessels/tanks to be insulated with a material achieving a minimum 'R' Value of 2,000 (foil faced glasswool blanket)

(All to manufacturers specifications and to comply with SANS 10400-Part XA)

Consumption

12 persons @ 30 litres per person @ 365 days
= 131400 litres per annum (total consumption)
Hot water per person = 15 litres
12 persons x 15 litres per person x 365 days
= 65700 litres per annum (total hot water consumption)

50% of hot water to be by solar panels:
0,5 x 65700
= 32850 litres

Roof Insulation

Ventilation : Unvented
Climatic Zone : 5
Orientation : South East

R' Values

Clay Roof Tiles :	**0.48**
Plaster Board Gypsium Ceiling	**0.06**
80mm Roof Insulation - Fibreglass blanket at 300mm Overlap (Required R Value)	**2.83**
Total 'R' Value for roof	**3.37**
Direction of heat flow	**downwards**

Ceiling

Ceiling insulation :	**11,5**
Thermal Conductivity :	**0,046w/mk**
Ceiling insulation is to be by 80mm flexible Polyester blanket with a density of :	**11,5kg/m³**

Walls

Walls to have a 'CR' Value of 60 and to have an 'R' Value of 0,35

SBD
ShauBridge Designs
ARCHITECTURAL AND DRAUGHTING SERVICES
N. Adams: Prof. Arch. Tech. Reg. No. T1154
26 MARIA CRESCENT
AUSTERVILLE
DURBAN
4052 cell : 083 7850276

PROJECT :
DEMOLISH EX DWELL. & GARAGE
PROPOSED NEW DWELLING, DOUBLE GARAGE AND BOUNDARY/RETAINING WALLS

STREET ADDRESS :
169 HILLHEAD ROAD

LOT DISCRIPTION :
REMAINDER OF ERF 941 OF WENTWORTH

CLIENT : MARLIN DEON KINSEY
CLIENT TEL : 072 465 0215
RATE NUMBER : .
CLIENT SIGNATURE :

SHEET 3 OF 3
DRAWN : N.A.
CHECKED BY: N. Adams
SCALE : AS SHOWN
DATE 16-05-2023
DRG No. SBD 16052023

A FLOOR SLAB :
* 30mm SCREED ON100mm CONCRETE SLAB REINFORCED WITH BRC MESH ON 250MIC DAMPROOF MEMBRANE ON 50mm BLINDING LAYER OF CLEAN RIVER SAND TO BE LAID ON WELL RAMMED HARDCORE FILL.

B WALLS :
* 2 COURSES OF BRICKWORK (BLOCKWORK EVERY COURSE) REINFORCED WITH BRICKFORCE WITH SOLID JOINTS IN CEMENT MORTAR TO BE PROVIDED IN ALL WALLS AT BOTH WINDOWSILL & WALL PLATE LEVELS.

C ROOF :
ALL ROOFING MEMBERS AND FIXTURES TO ENGINEERS' DETAILS AND SPECIFICATIONS
* TILES ON 38 x 38 TIMBER BATONS ON 400 MICRON GUNPLAS DAKSEEL WATER PROOFING MEMBRANE, ON SAP GANG NAIL TRUSSES OR EQUIVALENT AT (TILES - 17.5° PITCH), MAX 686mm CENTERS, ON 114 x 38mm V5 WALL PLATES & TIED INTO MIN OF 3 COURSES OF BRICKWORK (2 COURSES OF BLOCKWORK) USING GALVANISED STEEL STRAPS, ALL TO ENGINEERS SPECIFICATION & DETAILS.

* SANS 10400 APPROVED GUTTERS AND DOWNPIPES.
* SANS 10400 APPROVED BARGE AND FASCIA BOARDS.

D. GENERAL:
1 ALL WORK TO COMPLY WITH N.B.R. & SANS 10400
2 THIS DRAWINGS IS TO BE READ IN CONJUNCTION WITH ALL RELEVANT PROFESSIONAL ENGINEER'S DRAWINGS, DETAILS & REPORTS, THE SPECIFICATION FOR THE WORKS, THE RELEVANT ARCHITECT'S DRAWINGS & ANY OTHER SPECIALIST'S DRAWINGS & REPORTS.
3 ALL WORK TO COMPLY WITH THE NATIONAL BUILDING REGULATIONS AND TO BE TO THE SATISFACTION OF THE LOCAL AUTHORITY RESIDENT BUILDING INSPECTOR.
4 USE FIGURED DIMENSIONS IN PREFERENCE TO SCALING.
5 CONTRACTOR IS TO CHECK ALL DIMENSIONS AND LEVELS PRIOR TO ANY COMMENCEMENT OF WORK AND REPORT ANY DISCREPANCIES TO THE DRAUGHTS PERSON.
6 CONTRACTOR IS TO CONFIRM AND ENSURE CORRECTNESS OF FLOOR AND ENTRANCE LEVELS PHYSICALLY ON SITE WITH LOCAL AUTHORITY INSPECTOR BEFORE COMMENCING WORK TO CONSIDER ALL SERVICE DRAINAGE HAS ADEQUATE FALLS TO CONNECTING SERVICES.
7 ENTRANCE LEVEL TO BE 270mm ABOVE EDGE OF ROAD DIRECTLY OPPOSITE PROPOSED ENTRANCE.
8 ALL CUT AND FILL BANKS TO BE 26 DEGREES TO THE HORIZONTAL.
9 ALL FOUNDATIONS TO BE TAKEN DOWN TO HARD VIRGIN GROUND AND TO BE INSPECTED BY THE PROJECT ENGINEER BEFORE ANY CONCRETE IS POURED.
10 PROVIDE A MINIMUM OF TWO AIR BRICKS PER ROOM.
11 ALL REINFORCED CONCRETE, FOUNDATIONS, BASES, COLUMNS, BEAMS, SLABS AND RETAINING WALLS ARE TO BE BUILT STRICTLY IN ACCORDANCE WITH PROFESSIONAL ENGINEER'S DETAILS AND UNDER HIS SUPERVISION THEREOF.
12 OWNER TO ENSURE THAT ALL MUNICIPAL CONNECTION FEES ARE PAID AND ALL ASPECTS OF LICENCING LEGAL REQUIREMENTS ARE ATTENDED TO.
13 THE ATTENTION OF THE OWNER IS DRAWN TO THE FACT THAT CHANGES TO THE PLAN AND/OR SPECIFICATIONS AFTER OFFICIAL APPROVAL BY LOCAL AUTHORITY RENDERS THIS PLAN INVALID AND TO BE RESUBMITTED AS A DEVIATION PLAN AT OWNERS COST.

BOUNDARY WALLS:
1 NO PART OF BOUNDARY WALLS OR THEIR FOUNDATIONS ARE TO ENCROACH OVER BOUNDARY LINE.
2 WALLS SPANNING SERVITUDES TO BE BUILT ON CONCRETE LINTOLS.
3 BOUNDARY WALL FOOTINGS PARALLEL WITH SERVITUDE MUST NOT PROJECT MORE THAN 600mm INTO THE SERVITUDE.

DRAINAGE :
1 THE CONTRACTOR IS REQUIRED TO ENSURE THAT THE LOCAL AUTHORITY INSTALLS THE NECESSARY STORMWATER AND OR SEWER CONNECTIONS BEFORE DRAINAGE WORK IS COMMENCED, IT IS THERE AFTER THE CONTRACTORS RESPONSIBILITY TO ENSURE ADEQUATE FALLS TO THESE CONNECTIONS.
2. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT STORMWATER DAMAGE TO THE WORK IN PROGRESS OR NEIGHBOURING PROPERTIES DOES NOT OCCUR DURING CONSTRUCTION AND THAT THE SURFACE WATER DRAINAGE INSTALLED IS ADEQUATE.
3. ALL SANITARY FITTINGS TO BE TRAPPED AND/OR VENTED TO LOCAL AUTHORITY REQUIREMENTS.
4. ALL BENDS AND JUNCTIONS IN DRAINS TO BE PROVIDED WITH INSPECTION EYES.
5. ADEQUATE ACCESS PANELS TO BE FITTED IN ALL DUCTS OVER INSPECTION EYES.

CERTIFICATES OF COMPLIANCE
1. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT ALL CERTIFICATES, OR CERTIFICATES OF COMPLIANCE THAT ARE REQUIRED BY THE LOCAL AUTHORITY ARE OBTAINED BY HIM FROM ALL REGISTERED SERVICE PROVIDERS AND HANDED TO THE LOCAL AUTHORITY ON REQUEST.

SCHEDULE OF AREAS (m²)

SITE AREA	990.00
EXISTING :	
Main Dwel & Garage (Demolished)	-161.00
Out-Building	14.80
TOTAL :	14.80
PROPOSED:	
New Dwelling storey plan	193.60
1st storey plan	190.70
New Double Garage	48.20
TOTAL :	432.50
EXIST COVER	14.80
PROP COVER	241.80
TOTAL COVERAGE :	256.60
F.A.R.	