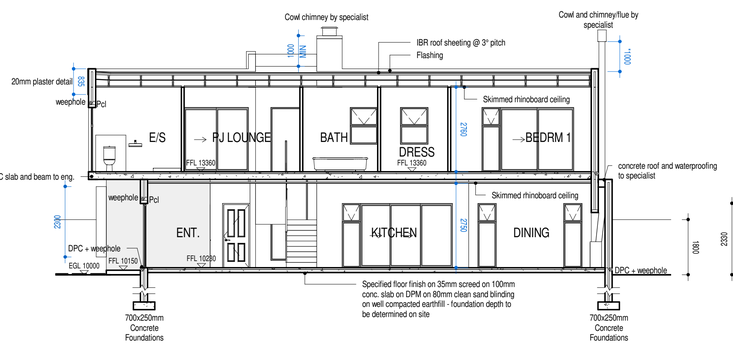
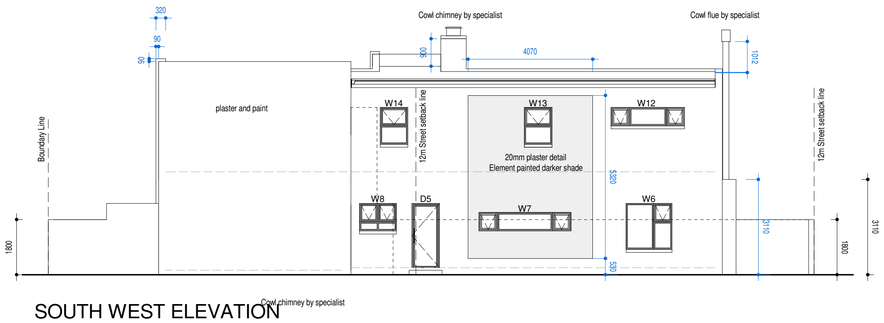
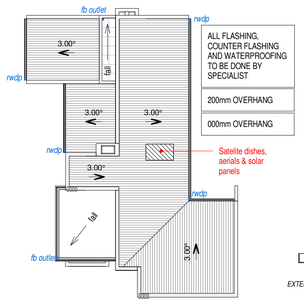
Municipal Stamp



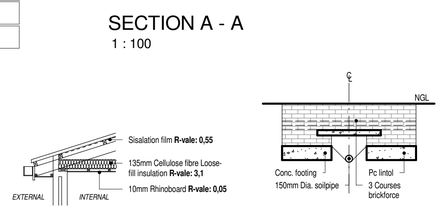
SECTION A - A
1 : 100



SOUTH WEST ELEVATION
1 : 100

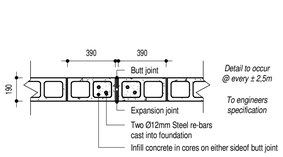


ROOF PLAN
1 : 200

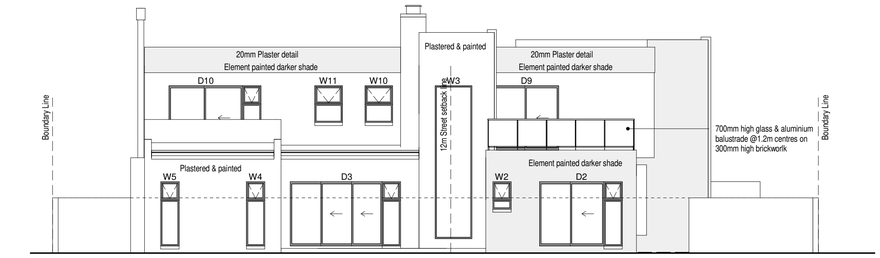


Roof Insulation Detail
1 : 50

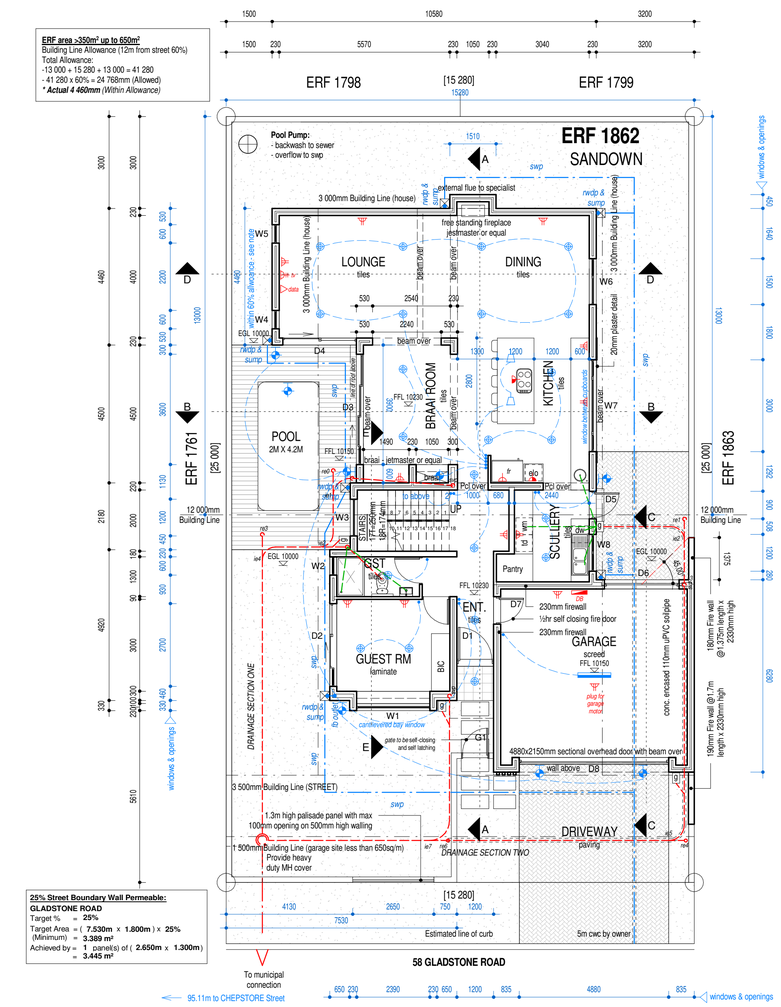
SEWERPIPE BRIDGE DETAIL
1 : 50



TYPICAL BLOCK BOUNDARY WALL DETAIL
Scale 1:20



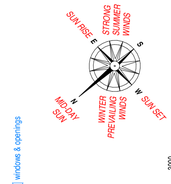
WEST ELEVATION
1 : 100

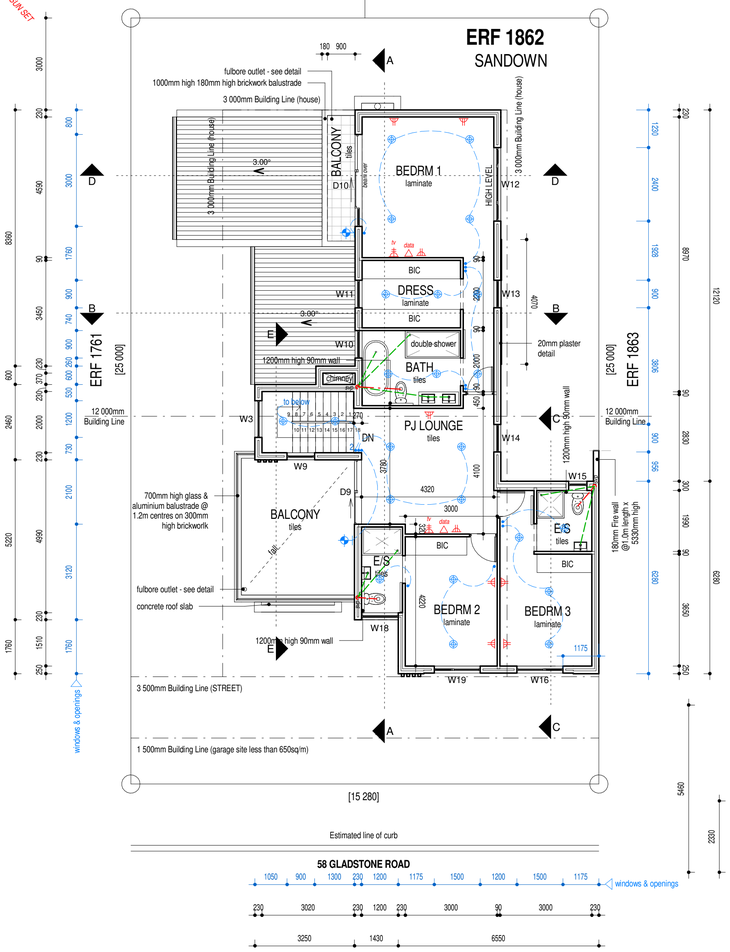


GROUND STOREY
1 : 100

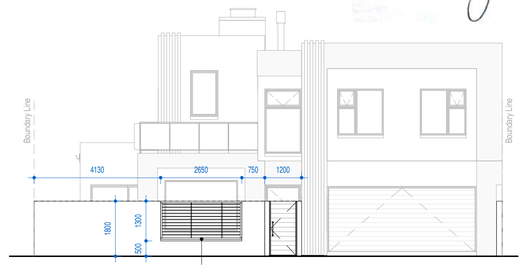
ERF area >350m² up to 650m²
Building Line Allowance (12m from street 60%)
Total Allowance:
-13 000 + 15 280 + 13 000 = 41 280
- 41 280 x 60% = 24 768mm (Allowed)
** Actual 4 460mm (Within Allowance)*

25% Street Boundary Wall Permeable:
GLADSTONE ROAD
Target % = **25%**
Target Area = (**7.530m** x **1.800m**) x **25%** (Minimum) = **3.389 m²**
Achieved by = **1** panel(s) of (**2.650m** x **1.300m**) = **3.445 m²**

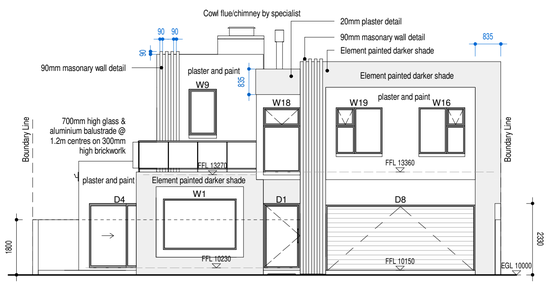




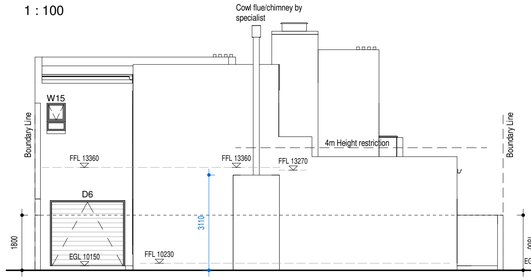
FIRST STOREY
1 : 100



NORTH WEST ELEVATION - STREET VIEW
1 : 100



NORTH WEST ELEVATION
1 : 100



SOUTH EAST ELEVATION
1 : 100

ALL STRUCTURAL SUPPORT SYSTEMS TO BE DESIGNED AND VERIFIED BY ENGINEER.

NOTE:
LOW-E REQUIRED FOR GLAZING

NOTES:

All work to be carried out in strict accordance with local authority regulations and by-laws. Contractor must check all levels and dimensions on site before the commencement of any work. Any such oversight resulting in errors in levels or dimensions will be the responsibility of the contractor. Written dimensions should be used in preference to scaling the drawings. All work to be carried out in strict accordance with the drawings. Any discrepancies or incorrect information detected on the drawing should be reported to the Architect prior to construction. Should any portion of the drawing be unclear or contain insufficient information for construction it should be reported to the Architect immediately. Drainage connection point and levels to be verified by the plumbing contractor before commencement of any work.

Roof construction (First Floor House):
Galvanised Chromadek IBR Roof Sheeting in grey colour @ 3° pitch fixed to 75x50mm SA Pine Purlins @ 1000mm c/c with 76mm Clout Nails on SANS 10400 approved 405 Sisalation lapped 200mm on 228x76mm SA Pine *Timber Grade 7* Mono -Trusses and rafters @1000mm c/c (MAX). To specialist detail. Tied into brickwork with 32x1,6mm Galv. hoop iron bult minimum 600mm into brickwork. Timber ends bult into brickwork to be treated with Carbolinium and wrapped in DPC. All waterproofing to be managed by a specialist. Roof fixing to be in accordance with Part K 4.2.11. Roof sheets at less than 11° to be single length by specialist. Size and spacing of trusses/rafters in accordance with SANS 10400-L 4.4 . Provide flashings as per SANS 10400 Part-L (refer Annex B).

Roof construction (Ground Floor House):
Galvanised Chromadek IBR Roof Sheeting in grey colour @ 3° pitch fixed to 75x50mm SA Pine Purlins @ 1000mm c/c with 76mm Clout Nails on SANS 10400 approved 405 Sisalation lapped 200mm on 228x50mm SA Pine *Timber Grade 5* rafters @1000mm c/c (MAX). To specialist detail. Tied into brickwork with 32x1,6mm Galv. hoop iron bult minimum 600mm into brickwork. Timber ends bult into brickwork to be treated with Carbolinium and wrapped in DPC. All waterproofing to be managed by a specialist. Roof fixing to be in accordance with Part K 4.2.11. Roof sheets at less than 11° to be single length by specialist. Size and spacing of trusses/rafters in accordance with SANS 10400-L 4.4 . Provide flashings as per SANS 10400 Part-L (refer Annex B).

Walls:
External walls maxi bricks- 230 cavity walls unless shown otherwise, internal walls - 90mm or 180mm solid walls. External cavity walls to have stepped DPC's at floor level and around all openings. Cavity walls to have 2.5 galvanized wire ties per m². Cavities to be concrete filled to the underside of stepped DPC at ground level. Weepholes @ 1150mm c/c to all stepped DPC's. Prestressed concrete lintel's over all openings in brickwork where no RC beams are with minimum of 4 courses of brickwork over. Support over openings > 3m to be in accordance with SANS 10400 Part K 4.2.9.3 or alternatively an RC beam to engineers specification. All Masonry walls to be accordance with Part K 4.2.2 and 4.2.4.

Floor Construction:
SA Pine skirting on floor covering on 25mm screed on 100mm concrete slab on SANS 10400 approved 275 micron DPM on 50mm clean sand blinding on well compacted earth fill. *Lower lip of 375micron damp proof course under cavity walls must be min. 150mm above finished ground level and cavity beneath DPC must be concrete filled.*

Balcony:
Waterproofing to Balconies to be in accordance with SANS 10400-L 4.3

Gutters & Downpipes:
Gutters and downpipes to be in accordance with SANS 10400-L 4.3.2.

Chimney:
Chimneys to be min. 1000mm above roof pitch and flashed with acrylic flashing and counter flashing. In terms of SANS 10400-Y 4.3.5 Chimneys laterally unsupported and higher than 4.0m shall be designed in accordance with SANS 10400-B. No combustible material, such as timber joist, timber roof trusses shall be built within 200mm of the inside of such chimney.

Ceilings:
Ceiling branders to be in accordance with 4.4.1.6 and Table 16. Max spacing for 6.5mm thick gypsum = 400mm c/c.

Close Cavities:
All cavities to be closed min. 3 courses below wall plates. Hoop-iron for fixing roof to go through closure and to locate 7 to 10 courses below wall plate level alternatively.

Windows and Doors:
All standard windows and doors in aluminium ex. wispeco catalogue or equal. All standard internal doors in timber (to be patterned 40mm hollow core) lighting and ventilation to comply with local authority requirements. DPC to be wrapped around all window and door openings.

Glazing:
Glazing Installations to be in accordance with SANS 10400-N 4.2 Specify Safety glazing to be in accordance with SANS 10400-N 4.4 Safety Glazing.

Precast Lintels:
Reinforced Lintels, to all openings to a maximum of 3000mm to have minimum four courses of brickwork with brickforce in every course in accordance with Part K 4.2.9

Glazing:
All glazing to comply with part n of SANS 10400. All glazed areas exceeding 1m² or less than 500mm above FFL to be safety glazed.

Light & Ventilation
Minimum natural light to be 10% of the floor area. Minimum ventilation to be 5% of the floor area. Artificial Ventilation to be in accordance with SANS 10400-O 4.3.2. Energy usage in buildings to demonstrate compliance in terms of Part XA1. Fenestration Calculations to be in Accordance with SANS 10400-XA 5.3 and Table 4. Roof insulation (provide breakdown of thickness used and indicate how Rvalue of 3.7 is achieved.)

Fire Protection
Any separating element (wall and floor) between any garage and any habitable room shall have a fire resistance of not less than 30 min and the wall shall extend to the underside of the roof. Note wall between Garage, Kitchen, Scullery and Entrance hall to provide 30 minute fire resistance. Any door between such garage and any such room shall have a fire resistance of not less than 30 min and such doorway shall require a threshold of not less than 10 mm.

Pool Notes:
- Pool to be constructed in strict accordance with local authority regulation.
- Contractor to check all levels and dimensions on site before the commencement of work.
- Contractor to check positioning of pool with client before commencement of work.
- Excavations to be dug by hand, all excavated soil to be removed from site, no soil to be banked against boundary walls or fences.
- Pool constructed from 190mm block work and plaster.
- Mild steel rods 10mm dia. to be placed at 400mm center centrally in blockwork, secured with wire ties.
- Pool lining to be waterproofed fibre lining in approved colour.
- All gates to pool area to be self-closing and self latching.

Boundary wall length 63.137m

ELECTRICAL LEGEND	
Light switch-two way	• 2
Light switch	•
Ceiling mounted light	
Watertight wall mounted light	
Chandelier	
Recessed downlighter	
Flouresscent light fitting	
Pendant	
Distribution board	DB
Single power point	
1m (h) Double power point	*1,2m*
Double power point	
Double power point 12 voltage	*12v*
Stove point	
Solar Hot water cylinder	HWC
Solar Panel	
TV point	*tv*
Data point	*data*
Heated Towel Rail	HTR

NOTE
- External garden lighting to be designed & fitted by specialist.
- For kitchen cupboard layout, plug & light positions refer to specialist.

SANDOWN
16 DEC 2024
DESIGN REVIEW COMMITTEE
APPROVED:

REVISION LIST:

REV:	DATE:	DRAWN:	DETAILS:
2.0.0	2024/12/06	EJ	FIRST COUNCIL SUBMISSION

AREAS:

Ground Floor	170.60 m²
First Floor	112.50 m²
TOTAL AREA	291.50 m²
Site Area	382.00 m²
Coverage m²	170.60 m²
Coverage	44.7%
Floor Factor	0.76

Areas for Council Submission

POOL	8.4 m²
UNCVD WALKWAY	4.1 m²
UNCVD BALCONY 2	4.8 m²
UNCVD BALCONY 1	17.7 m²

SIGNATURE(S):

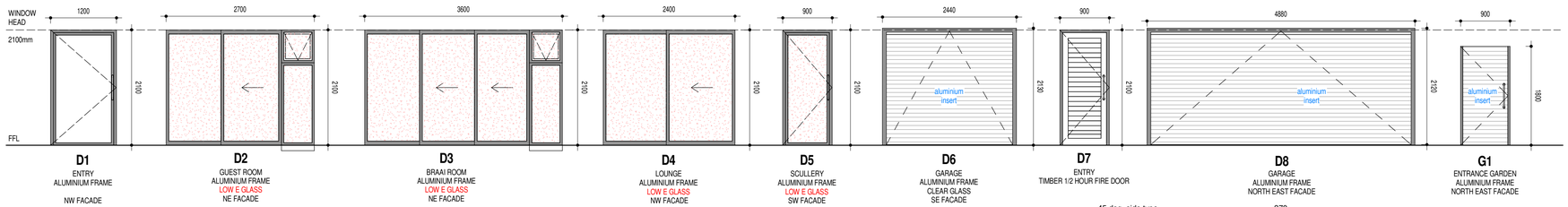
PROJECT

PROPOSED NEW HOUSE FOR CASTELLI CONSTRUCTION ERF 1862 - SANDON (58 GLADSTONE ROAD)

Graham Holland
Architectural design
Pr.S.Arch.T (B. Tech) (SACAP Reg. Nr. ST0364)
P.O. Box 20147, Big Bay, 7448
Tel (021)554 494, Fax (021)554 2898, Cell 082 493 67
graham@ghad.co.za www.ghad.co.za

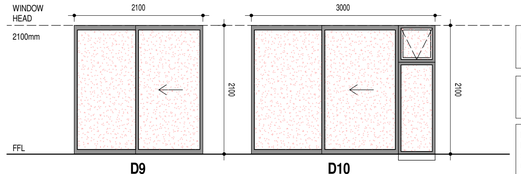
DRAWN:	SCALE :	TYPE & REV:
EJ	As indicated	2.0
SHEET :	START DATE :	PROJECT No :
1 of 2	2024/11/15	20-23

Municipal Stamp



DOOR SCHEDULE

1 : 50

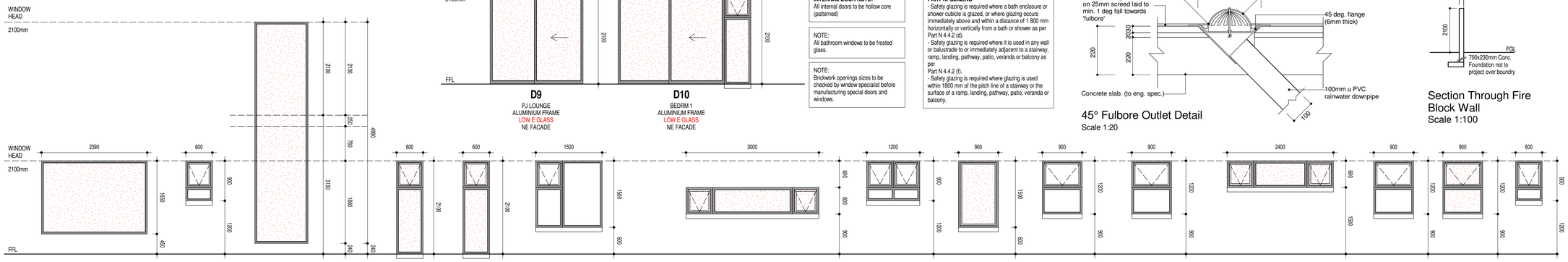


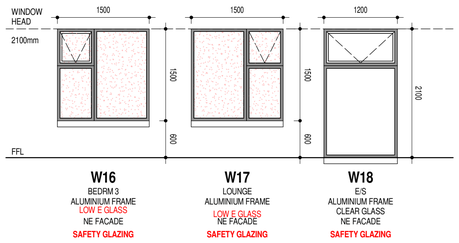
INTERNAL DOOR NOTE:
All internal doors to be hollow core (patterned)

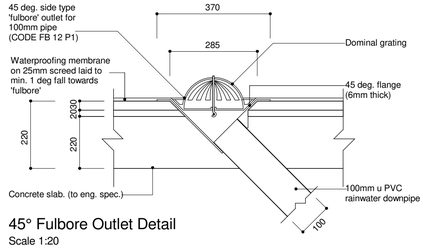
NOTE:
All bathroom windows to be frosted glass.

NOTE:
Brickwork openings sizes to be checked by window specialist before manufacturing special doors and windows.

PART N: GLAZING
- Safety glazing is required where a bath enclosure or shower cubicle is glazed, or where glazing occurs immediately above and within a distance of 1 800 mm horizontally or vertically from a bath or shower as per Part N 4.4.2 (d).
- Safety glazing is required where it is used in any wall or balustrade to or immediately adjacent to a stairway, ramp, landing, pathway, patio, veranda or balcony as per Part N 4.4.2 (f).
- Safety glazing is required where glazing is used within 1800 mm of the pitch line of a stairway or the surface of a ramp, landing, pathway, patio, veranda or balcony.

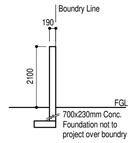






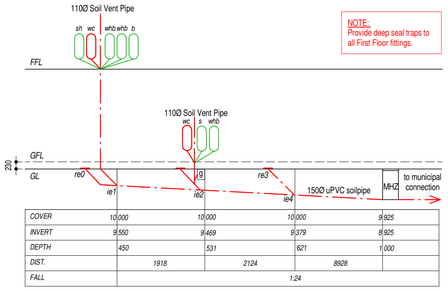
45° Fulbore Outlet Detail

Scale 1:20

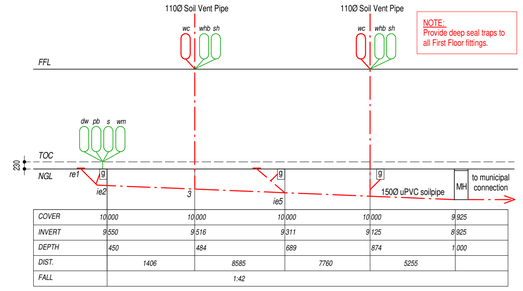


Section Through Fire Block Wall

Scale 1:100



NOTE:
Provide deep seal traps to all First Floor fittings.

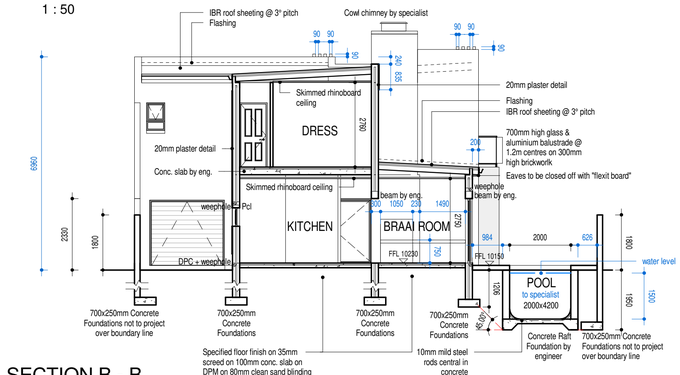


NOTE:
Provide deep seal traps to all First Floor fittings.

SANDOWN
16 DEC 2024
DESIGN REVIEW COMMITTEE
APPROVED:

WINDOW SCHEDULE

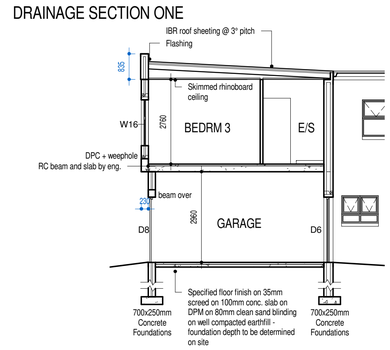
1 : 50



SECTION B - B

1 : 100

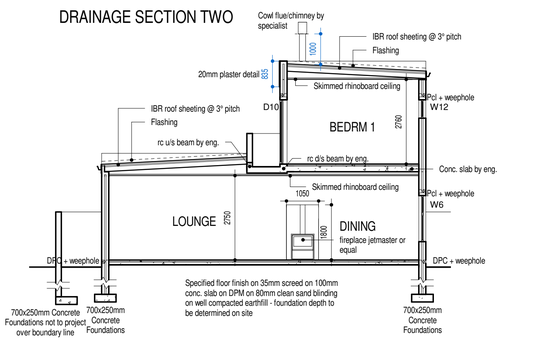
ALL STRUCTURAL SUPPORT SYSTEMS TO BE DESIGNED AND VERIFIED BY ENGINEER.



DRAINAGE SECTION ONE

SECTION C - C

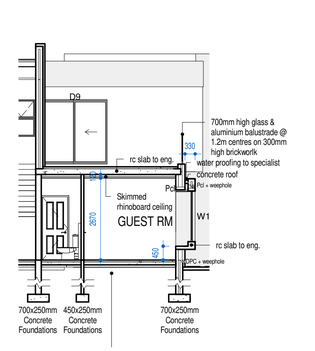
1 : 100



DRAINAGE SECTION TWO

SECTION D - D

1 : 100



SECTION E - E

1 : 100

XA AND FENESTRATION CALCULATIONS

SANS 10400/XA CALCULATIONS (ZONE4)	TARGET VALUE:	ACTUAL VALUE:	EXTRAS:
NETT FLOOR AREA (EXCL. STORE, GARAGES)		218.01m² - New Building	
ROOF INSULATION	3.7	- Sisalation film **R-value: 0,55** - 135mm Cellulose fibre Loose-fill insulation **R-value: 3,1** - 10mm Rhinoboard **R-value: 0,05** **Total R factor = 3.7** *(deemed to satisfy)*	
HOT WATER AND PIPE INSULATION: -50% hot water generation by alternate source (solar panel and geyser) -Insulated hot water piping to conform to SANS 204			-Neoprene insulation to be used -Fit water saving nozzles to all showers
LIGHTING: -Lighting to be max 5w per sq/m as per SANS 204			-LED Energy saving lights to be used

FENESTRATION: (Solar heat gain / conductance)			"GROUND FLOOR"
TARGET: (per floor)			
FLOOR AREA	TOTAL OPENING VALUE (SQ/M)	CONDUCTANCE	SOLAR HEAT GAIN
-	-	165.91	71.23
ACTUAL: (ground floor)			
FLOOR AREA	TOTAL OPENING VALUE (SQ/M)	CONDUCTANCE	SOLAR HEAT GAIN
118.51m²	39.56m² (33.38%)	71.23	14.70
Resultant materials:	- Single Clear glass (5,8 W/m² and SHGC 0,8 as per "Glass Warehouse" specifications) - Low-E glass (35% Charcoal Semi Reflective = U Value - 1.03 and SHGC - 0.32)		

Total fenestration exceeds maximum deemed to satisfy value of 20% of nett floor area, but remains within the SANS 10400 standard requirements for XA.
Please note that the Actual values must be lower than the Target values.

FENESTRATION: (Solar heat gain / conductance)			"FIRST FLOOR"
TARGET: (per floor)			
FLOOR AREA	TOTAL OPENING VALUE (SQ/M)	CONDUCTANCE	SOLAR HEAT GAIN
-	-	139.30	12.94
ACTUAL: (ground floor)			
FLOOR AREA	TOTAL OPENING VALUE (SQ/M)	CONDUCTANCE	SOLAR HEAT GAIN
99.5m²	30.96m² (31.12%)	61.94	12.36
Resultant materials:	- Single Clear glass (5,8 W/m² and SHGC 0,8 as per "Glass Warehouse" specifications) - Low-E glass (35% Charcoal Semi Reflective = U Value - 1.03 and SHGC - 0.32)		

Total fenestration exceeds maximum deemed to satisfy value of 20% of nett floor area, but remains within the SANS 10400 standard requirements for XA.
Please note that the Actual values must be lower than the Target values.

Hot Water Calculation:

• People	- 4
• Usage per person (L)	- 115 L
• Daily Consumption (L)	- 460 L
• Water Input Temperature (degC.)	- 20 degC.
• Water Output Temperature (degC.)	- 55 degC.
• Temperature Difference (degC.)	- 35 degC.
• Specific Heat 1L Water (KJ/KG.K)	- 4.182
• Daily Energy Usage (KJ)	- 67 330.00 KJ
• KWH Per Day	- 18.7 KWH
• Annual Usage (KWH)	- 6826.53 KWH

[3 413 KWH (50%) - to be provided with a solar panel as per SANS XA/201]

Proposed Installation:

• 200L Solar panel and Geyser with 2KW Backup Electric element. Collector to be 2.5m2
• Solar useful energy rating (KWH/m2) per day = 4.19
• Annual solar energy available for a 2.5m2 Solar collector (KWH) = 3823.375
• Solar Energy 3823 KWH > 3413 KWH (50% of required consumption)
• Outstanding energy to be provided by 2KW electric geyser

• Kwiksol solar panel efficiency	= 4.19 KWH/M2
• Solar collector area	= 2.5m2
• Water inlet temperature	= 20degC.
• Water storage temperature	= 55deg.C

Demand management system:

HOUSE
• Schedule of water efficient showerheads and taps to be used
• Water efficient dual flush cistern to be used
• E.G.-Dual flush cistern with a 3 liter and 6 ltr Taps with maximum flow rate of 6 ltr/min, Shower heads with maximum flow rate of 7ltr/min and Demand or metering taps at wash hand basin.

POOL
Popping up or filling of swimming pools with municipal drinking water allowed subject to:
• The pool being covered with a non-permeable solid pool cover when not in use.
• Recovery of backwash water and the use of rainwater for pool topping up where practically possible.

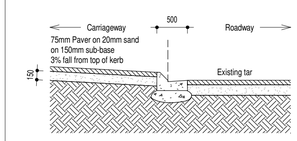
NOTE:
LOW-E REQUIRED FOR GLAZING
(SEE SCHEDULE)

NOTES:

Continued from page 1.

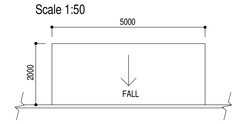
General Notes:
1. Water meter and connection pipe to be min. 19mm i.d.
2. All plumbing pipes to be concealed.
3. External steps max. risers 180mm, min. treads 250mm.
4. Expansion joints to be provided to boundary walling at max. 5000mm centers.
5. Light switches to be 1200mm above f.f.l unless otherwise shown.
6. Wall sockets to be 400mm above f.f.l unless otherwise shown.
7. WM and DW waste to be min. 600mm above FFL
8. Supply and waste to w/m and DW to be in 90mm deep recess. Stopcock to be above counter.
9. All structural work to be referred to engineer.
10. All design work to be in accordance with 'developers' and homeowners association design guideline and approved colour chart.
11. Weepholes to be min. 150mm above NGL
12. No foundation or any portion of the building to extend over the site boundary.
13. All timber built into brickwork to be wrapped in DPC.
14. Provide 1000mm high aluminium balustrades with max. 100mm openings to all balconies & staircases.
15. 40mm 1/2 hr fire rated door to be provided between the garage and the dwelling.
16. Doors & sidelights to be glazed with safety glazing.
17. All flashing and waterproofing to be done by specialist.
18. Plumber to provide min. class 1 copper water pipes to building.
19. Rhinoboard ceilings fixed to 38x38mm brandering to u/s of concrete slab to be provided to all ceilings.

COUNCIL DETAILS



Kerb Section Detail

Scale 1:50

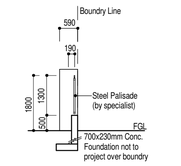


Plan of rollover kerb CWC - CK5

Scale 1:100

Elevation of rollover kerb CWC - CK5

Scale 1:100



Section Through Palisade Block Wall

Scale 1:100

REVISION LIST:

REV:	DATE:	DRAWN:	DETAILS:
2.0.0	2024/12/02	EJ	FIRST COUNCIL SUBMISSION

AREAS:

Ground Floor	170.60 m²
First Floor	112.50 m²
TOTAL AREA	291.50 m²
Site Area	382.00 m²
Coverage m²	170.60 m²
Coverage	44.7%
Floor Factor	0.76

Areas for Council Submission

POOL	8.4 m²
UNCVD WALKWAY	4.1 m²
UNCVD BALCONY 2	4.8 m²
UNCVD BALCONY 1	17.7 m²

SIGNATURE(S):

PROJECT

PROPOSED NEW HOUSE FOR CASTELLI CONSTRUCTION ERF 1862 - SANDOWN (58 GLADSTONE ROAD)

Graham Holland
Architectural design
Pr.S.Arch.T (B. Tech) (SACAP Reg. Nr. ST0364)
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DRAWN:	SCALE :	TYPE & REV:
EJ	As indicated	2.0
SHEET :	START DATE :	PROJECT No :
2 of 2	2024/11/15	20-23