BUILDING CERTIFIERS

form

11/02/13

Pittwater Council
PO Box 882
Mona Vale NSW 2103

Dear Sir or Madam

RE: Lodgement of CC 2012-253 for DA No. N0090/12
Site address: No. 21 Wallumatta Road, Newport NSW 2106

Please find attached all required documentation relied upon to issue Construction Certificate and Notice of Commencement for the above development:

- Part 4A Lodgement Fee $36.00 payable to Council
- Copy of Home Owners Warranty Insurance
- Sydney Water approval
- 1 full set of Council approved plans/Construction Certificate plans
- 1 Structural Engineers plans & certificate of adequacy
- ~~1 receipt showing payment for Development Bond & section 94A Contributions~~
- 1 Geotechnical Form 2A & 2B
- 1 Schedule of finishes
- 1 Basix certificate

Yours faithfully

Craig Formosa

RECEIVED
13 FEB 2013
PITTWATER COUNCIL

$36 REC: 336488 13/2/13

POSTED 11/02/13

BUILDING CERTIFIERS form

CONSTRUCTION CERTIFICATE

Approved **11/02/13**

Issued in accordance with the provisions of the Environmental & Assessment Act 1979 under Sections 109C(1)(b) and 109F

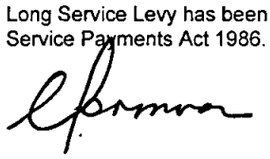
Date Application Received	23/11/12				
Council	Pittwater				
Development Consent No.	N0090/12	Date Approved	06.07.12		
Certifying Authority	Craig Formosa	Accredited Certifier	Craig Formosa - BPB0124		
Accreditation Body	Building Professionals Board	BCA In Force	BCA2012		
APPLICANT DETAILS					
Name	Glenda Hanks	Ph No.	0433 800522		
Address	21 Wallumatta Road, Newport NSW 2106				
OWNER DETAILS					
Name	Glenda Hanks				
Address	21 Wallumatta Road, Newport NSW 2106				
DEVELOPMENT DETAILS					
Subject Land	21 Wallumatta Road, Newport NSW 2106	Lot No.	8	DP	8184
Description of Development	Alterations & additions to the existing dwelling including swimming pool.				
Class of Building	1a, 10a, 10b	Value of Work	$224,400.00		
BUILDER DETAILS					
Name	Planbuilt Pty Ltd				
Address	33 Argyle Street, Bilgola NSW 2107				
Contact Number	0459 408 881	License No.	227143C		
APPROVED PLANS & DOCUMENTS					
Plans Prepared By	Anna Henry – AH Design				
Drawing Numbers	A-935 sheets 1 of 2, 2 of 2	Dated	11.10		
Engineer Details Prepared By	Mario F Benitez - VDM	Manfred Hausmann – Geotechnical Engineer - VDM			
Drawing Numbers	SD1201-002 1/3 – 3/3, 4/4, Form 2A & B	Dated	08.12, 07/02/13		
Basix Certificate No.	A945596	Dated	30.11.10		

CERTIFICATION

I, Craig Formosa, as the certifying authority am satisfied that;

(a) The requirements of the regulations referred to in s81A (5) have been complied with. That is, work completed in accordance with the documentation accompanying the application for this certificate (with such modifications verified by the certifying authority as may be shown on that documentation) will comply with the requirements of the Regulation as referred to in section 81A (5) of the Act, and

(b) Long Service Levy has been paid where required under s34 of the Building & Construction Industry Long Service Payments Act 1986.

Signed: 

Date: 11/02/13

GEOTECHNICAL RISK MANAGEMENT POLICY FOR PITTWATER
FORM NO. 2 – PART A – To be submitted with detailed design for Construction Certificate

Development Application for Ms Glenda Hanks
Name of Applicant

Address of site 21 Wallumatta Rd, Newport, NSW, 2106

PART A: Declaration made by Structural ~~or Civil~~ Engineer in relation to the incorporation of the Geotechnical issues into the project design

I, Mario F Benitez **on behalf of** VDM Consulting Engineers Pty Ltd
(insert name) (trading or company name)

on this the Thursday, 7 February 2013
(date)

certify that I am a Structural ~~or Civil~~ Engineer as defined by the Geotechnical Risk Management Policy for Pittwater - 2009. I am authorised by the above organisation/company to issue this document and to certify that the organisation/company has a current professional indemnity policy of at least $2million. I also certify that I have prepared the below listed structural documents in accordance with the recommendations given in the Geotechnical Report for the above development and that

Please mark appropriate box

☑ the structural design meets the recommendations as set out in the Geotechnical Report or any revision thereto.
☑ the structural design has considered the requirements set out in the Geotechnical Report for Excavation and Landfill both for the excavation/construction phase and the final installation in accordance with Clause 3.2 (b)(iv) of the Geotechnical Risk Management Policy.

Geotechnical Report Details:

Report for Glenda Hanks – Geotechnical Assessment (According to Pittwater Council 2009)
Report Date: 8th March 2012
Author: Dr. Manfred Hausmann
Author's Company/Organization: VDM Consulting Engineers P/L

Structural Documents list:

Structural - Construction Notes, Plan Views, Sections & Details pages 1 to 5
Swimming Pool -Structural - Construction Notes, Plan Views, Sections & Details pages 1 to 1

I am also aware that Pittwater Council relies on the processes covered by the Geotechnical Risk Management Policy, including this certification as the basis for ensuring that the geotechnical risk management aspects of the proposed development have been adequately addressed to achieve an "Acceptable Risk Management" level for the life of the structure taken as at least 100 years unless otherwise stated and justified.

Signature

Name Mario F Benitez

Chartered Professional Status *CPEng, MIEAust, IPENZ*

Membership No. 418917, 111943

Company VDM Consulting Engineers P/L

GEOTECHNICAL RISK MANAGEMENT POLICY FOR PITTWATER
FORM NO. 2 – PART B – To be submitted with detailed design for Construction Certificate

PART B Declaration made by Geotechnical Engineer or Engineering Geologist and/or Coastal Engineer (where applicable) in relation to the incorporation of the Geotechnical issues into the project design

I, Dr Manfred Hausmann on behalf of VDM Consulting Engineers Pty Ltd
(insert name) (trading or company name)

on this the Thursday, 7 February 2013
(date)

certify that I am a Geotechnical Engineer ~~or Engineering Geologist and/or Coastal Engineer~~ as defined by the Geotechnical Risk Management Policy for Pittwater - 2099 and I am authorised by the above organisation/company to issue this document and to certify that the organisation/company has a current professional indemnity policy of at least $2million. I also certify that I have reviewed the design plans and structural design plans for the Construction Certificate Stage and that I am satisfied that:

Please mark appropriate box

☑ the structural design meets the recommendations as set out in the Geotechnical Report or any revision thereto.
☑ the structural design has considered the requirements set out in the Geotechnical Report for Excavation and Landfill both for the excavation/construction phase and the final installation in accordance with Clause 3.2 (b)(iv) of the Geotechnical Risk Management Policy.

Geotechnical Report Details:

Report Title: Glenda Hanks – Geotechnical Assessment (According to Pittwater Council 2009) Report Date: 8th March 2012 Author: Dr. Manfred Hausmann

Documentation which relates to or is relied upon in report preparation:

Architectural – AHDesign – pages A1 to A2 project #935-21
Structural - Construction Notes, Plan Views, Sections & Details pages 1 to 3
Swimming Pool -Structural - Construction Notes, Plan Views, Sections & Details pages 1 to 1

I am also aware that Pittwater Council relies on the processes covered by the Geotechnical Risk Management Policy, including this certification as the basis for ensuring that the geotechnical risk management aspects of the proposed development have been adequately addressed to achieve an "Acceptable Risk Management" level for the life of the structure taken as at least 100 years unless otherwise stated and justified.

Signature mhausmann

Name Dr. Manfred Hausmann

Chartered Professional Status - *CPE MIEAust*

Membership No 339258

Company VDM Consulting Engineers ~~P/L~~

THIS PLAN / DOCUMENT FORMS PART OF FORM BUILDING CERTIFIERS CC / CDC

NSW GOVERNMENT | Home Warranty Insurance Fund

calliden group

NSWBIBHWI/145157-PermitAuthority 25/01/2013

Planbuilt Pty Ltd
33 Argyle Street
BILGOLA NSW 2107

Calliden Insurance Ltd
ABN 47 004 125 268 AFS Licence 234438
Level 9, 11-33 Exhibition Street
MELBOURNE VIC 3000
Phone: (03) 9637 1300 FAX: 1300 662 215

Certificate of Insurance

RESIDENTIAL BUILDING WORK BY CONTRACTORS

A contract of insurance complying with sections 92 and 96A of the *Home Building Act 1989* has been issued by ***Calliden Insurance Limited*** *(ABN 47 004 125 268) (AFSL 234438)* as agent for and on behalf of the NSW Self Insurance Corporation (SICorp) (ABN 97 369 689 650) who is responsible for management of the Home Warranty Insurance Fund.

In respect of:	Structural Alterations/Additions
At:	21 Wallumatta Road NEWPORT NSW 2106
Carried out by:	Planbuilt Pty Ltd
Licence Number:	227143C
ABN:	142896544
For:	Adam & Glenda Hanks
In the amount of:	$224,400.00

Subject to the Act and the Home Building Regulation 2004 and the conditions of the insurance contract, cover will be provided to:

- a beneficiary described in the contract and successors in title to the beneficiary,

OR

- the immediate successor in title to the contractor or developer who did the work and subsequent successors in title.

Authorisation: Signed by Calliden Insurance Ltd (ABN 47 004 125 268) (AFSL 234438) as agent for and on behalf of the NSW Self Insurance Corporation (SICorp) (ABN 97 369 689 650)

Issued on the 25th day of January, 2013.

NOTICE: To download a copy of your insurance policy wording visit http://www.policywording.com.au.

VDM
CONSULTING ENGINEERS
Structural-Civil-Geotechnical

VDM Consulting Engineers Pty Ltd
ABN 40 101 544 763
94 Bassett Street
Mona Vale, NSW, 2103
T: (02) 9999 4285
F: (02) 9999 0193
E:vdm1@optusnet.com.au

CERTIFICATE OF ADEQUACY

Re: 21 WALLUMATTA RD.

NEWPORT, NSW, 2106

Project N°: SD1101-002

Reference: 120112-A

Date: 4 February 2013

1. Aim

To assess the structural integrity and stability of the existing dwelling and to ensure that the proposed additions and alterations to 21 Wallumatta Rd, Newport can be carry out without causing structural damages.

2. Introduction

The existing residence is a two storeys / split level dwelling consisting of a Lower Ground Floor brick veneer external walls with single timber stud internal walls and Ground Floor timber framed and weatherboard clad founded on brick piers on concrete footings for the main building and timber posts on mass and reinforced concrete for the external decks.

The alterations encompass mainly internal changes to the Lower and Ground Floors. In addition a new swimming pool will be built on the existing South Deck.

VDM Consulting Engineers Pty Ltd (VDM) inspected the dwelling on 15th February 2012 taken photographic records and geometrical measurements. The inspection (by VDM) focused mainly on sections of the existing residence where additions and alterations have been built as well as future plans.

Calculations and analyses were carry-out in order to ascertain the capability of the existing footings and structural components and to maintain its integrity, stability and adequate load-bearing capacity as determined by:

- AS/NZS 1170.0:2002: *Structural design actions – General principles,*
- AS/NZS 1170.1:2002: *Structural design actions – Permanent, imposed and other actions,*
- AS/NZS 1170.1:2002: *Structural design actions – Wind actions,*
- AS 1720:2010: *Timber structures – Part 1- design methods,*
- AS 3600:2001: *Concrete Structures Codes,*
- AS 3700:2001: *Masonry structures,*
- AS 4100:1998: *Steel structures,*
- Building Code of Australia (BCA),
- Pittwater Council consent conditions,
- Principles of structural mechanics.

Loads used for the analysis included:

- Dead load (DL) – 0.70kPa (69 kg/m^2) self weight
- Live load (LL) – 3.0kPa (294 kg/m^2) (Deck / Balcony)
- Live load (LL) – 1.5kPa (147 kg/m^2) elsewhere
- Concrete self weight (sw) – 25 kN/m^3 (2,453 kg/ m^3) includes steel reinforcement
- Steel - f_s = 300MPa
- Concrete – f'_c = 25MPa

Serviceability factors:

- Short term ψ_s = 0.7
- Long term ψ_l = 0.4

Strength factors

- Dead load – 1.2
- Live load – 1.5

3. Conclusions

The structural condition of the existing dwelling footings and structural elements inspected was generally found to be satisfactory. Based on the analyses results and the visual inspection it is our opinion that the existing structure shall resist the proposed loads.

This analysis has been based on loads applied on areas inspected and mentioned in this report only, any attempt to place these loads elsewhere shall required further analysis to ensure the integrity of the structure is maintain.

This certificate shall not construe as relieving any other party of their responsibilities, liabilities, or contractual obligations.

Mario F. Benítez, *(B.E.(Structural)), CPEng., MIEAust. (418917) MIPENZ*
Senior Structural Engineer

BASIX Certificate

Building Sustainability Index www basix nsw gov au

Alterations and Additions

Certificate number A94596

This certificate confirms that the proposed development will meet the NSW government's requirements for sustainability if it is built in accordance with the commitments set out below Terms used in this certificate or in the commitments have the meaning given by the document entitled BASIX Alterations and Additions Definitions dated 29/9/2006 published by Department of Planning This document is available at www basix nsw gov au

Director General
Date of issue Tuesday 30 November 2010

NSW | Planning

Description of project

Project address	
Project name	Wallumatta
Street address	21 Wallumatta Road Newport 2106
Local Government Area	Pittwater Council
Plan type and number	Deposited Plan 8184
Lot number	8
Section number	0
Project type	
Dwelling type	Separate dwelling house
Type of alteration and addition	My renovation work is valued at $50 000 or more and includes a pool (and/or spa)

THIS PLAN / DOCUMENT FORMS
PART OF FORM BUILDING
CERTIFIERS CC / CDC

Pool and Spa	Show on DA Plans	Show on CC/CDC Plans & specs	Certifier Check
Rainwater tank			
The applicant must install a rainwater tank of at least 2100 litres on the site This rainwater tank must meet and be installed in accordance with the requirements of all applicable regulatory authorities	✓	✓	✓
The applicant must configure the rainwater tank to collect rainwater runoff from at least 78 square metres of roof area		✓	✓
The applicant must connect the rainwater tank to a tap located within 10 metres of the edge of the pool		✓	✓
Outdoor swimming pool			
The swimming pool must be outdoors	✓	✓	✓
The swimming pool must not have a capacity greater than 50 kilolitres	✓	✓	✓
The applicant must install a pool pump timer for the swimming pool		✓	✓
The applicant must not incorporate any heating system for the swimming pool that is part of this development		✓	✓

Fixtures and systems	Show on DA Plans	Show on CC/CDC Plans & specs	Certifier Check
Lighting			
The applicant must ensure a minimum of 40% of new or altered light fixtures are fitted with fluorescent, compact fluorescent, or light emitting-diode (LED) lamps		✓	✓
Fixtures			
The applicant must ensure new or altered showerheads have a flow rate no greater than 9 litres per minute or a 3 star water rating		✓	✓
The applicant must ensure new or altered toilets have a flow rate no greater than 4 litres per average flush or a minimum 3 star water rating		✓	✓
The applicant must ensure new or altered taps have a flow rate no greater than 9 litres per minute or minimum 3 star water rating		✓	

Construction	Show on DA Plans	Show on CC/CDC Plans & specs	Certifier Check

Insulation requirements

The applicant must construct the new or altered construction (floor(s) walls and ceilings/roofs) in accordance with the specifications listed in the table below except that a) additional insulation is not required where the area of new construction is less than 2m2 b) insulation specified is not required for parts of altered construction where insulation already exists			✓	✓	✓

Construction	Additional insulation required (R-value)	Other specifications
suspended floor with open subfloor framed (R0 7)	R0 8 (down) (or R1 50 including construction)	
external wall framed (weatherboard fibro metal clad)	R1 30 (or R1 70 including construction)	
raked ceiling pitched/skillion roof framed	ceiling R1 74 (up) roof foil backed blanket (75 mm)	medium (solar absorptance 0 475 - 0 70)

Glazing requirements	Show on DA Plans	Show on CC/CDC Plans & specs	Certifier Check
Windows and glazed doors			
The applicant must install the windows glazed doors and shading devices in accordance with the specifications listed in the table below Relevant overshadowing specifications must be satisfied for each window and glazed door	✓	✓	✓
The following requirements must also be satisfied in relation to each window and glazed door		✓	✓
Each window or glazed door with improved frames or pyrolylic low e glass or clear/air gap/clear glazing or toned/air gap/clear glazing must have a U-value and a Solar Heat Gain Coefficient (SHGC) no greater than that listed in the table below Total system U-values and SHGCs must be calculated in accordance with National Fenestration Rating Council (NFRC) conditions The description is provided for information only Alternative systems with complying U-value and SHGC may be substituted		✓	✓
For projections described in millimetres the leading edge of each eave pergola verandah balcony or awning must be no more than 500 mm above the head of the window or glazed door and no more than 2400 mm above the sill	✓	✓	✓
For projections described as a ratio the ratio of the projection from the wall to the height above the window or glazed door sill must be at least that shown in the table below	✓	✓	✓
Pergolas with polycarbonate roof or similar translucent material must have a shading coefficient of less than 0 35		✓	✓
Pergolas with fixed battens must have battens parallel to the window or glazed door above which they are situated unless the pergola also shades a perpendicular window The spacing between battens must not be more than 50 mm		✓	✓
Overshadowing buildings or vegetation must be of the height and distance from the centre and the base of the window and glazed door as specified in the overshadowing column in the table below	✓	✓	✓

Windows and glazed doors glazing requirements

Window / door no	Orientation	Area of glass inc frame (m2)	Overshadowing Height (m)	Overshadowing Distance (m)	Shading device	Frame and glass type
W1	E	3 24	13	3 8	none	improved aluminium single clear (U value 6 44 SHGC 0 75)
W2	N	2 7	0	0	projection/height above sill ratio >=0 43	improved aluminium single clear (U value 6 44 SHGC 0 75)
W3	N	1 26	0	0	awning (adjustable) >=900 mm	improved aluminium single clear (U-value

Glazing requirements							Show on DA Plans	Show on CC/CDC Plans & specs	Certifier Check
Window / door no	Orientation	Area of glass inc. frame (m2)	Overshadowing Height (m)	Overshadowing Distance (m)	Shading device	Frame and glass type			
W4	E	1 8	13	3 8	none	6 44 SHGC 0 75) improved aluminium single clear (U-value			
W5	E	1 26	13	3 8	none	6 44 SHGC 0 75) improved aluminium single clear (U-value			
W6	S	8 64	0	0	eave/verandah/pergola/balcony >=900 mm	6 44 SHGC 0 75) improved aluminium single clear (U-value			
Skylights									
The applicant must install the skylights in accordance with the specifications listed in the table below							✓	✓	✓
The following requirements must also be satisfied in relation to each skylight								✓	✓
Each skylight may either match the description or have a U value and a Solar Heat Gain Coefficient (SHGC) no greater than that listed in the table below								✓	✓

Skylights glazing requirements

Skylight number	Area of glazing inc. frame (m2)	Shading device	Frame and glass type
S1	0 6	no shading	aluminium moulded plastic single clear (or U-value 6 21 SHGC 0 608)

Legend
In these commitments applicant means the person carrying out the development
Commitments identified with a ✓ in the Show on DA plans column must be shown on the plans accompanying the development application for the proposed development (if a development application is to be lodged for the proposed development)
Commitments identified with a "✓" in the "Show on CC/CDC plans & specs" column must be shown in the plans and specifications accompanying the application for a construction certificate / complying development certificate for the proposed development
Commitments identified with a ✓ in the Certifier check column must be certified by a certifying authority as having been fulfilled before a final occupation certificate for the development may be issued

AH DESIGN
ANNA HENRY • 22 WANDEEN RD • CLAREVILLE NSW 2107

Schedule of Colours

Proposed alterations & additions at
21 Wallumatta Road
Newport

for
Mr. & Mrs. Hanks

Specification
This schedule is to be read in conjunction with the enclosed plans.

Materials and Colours
Provide material and colours as set out in the following schedule

Items	Material and Description	Colour	Sample
ROOF	COLORBOND CUSTOMORB ROOF SHEETING ON BATTENS & INSULATION (SEE BASIX)	TO MATCH EXISTING WOODLAND GREY	[redacted]
GUTTERING & DOWNPIPES	QUAD GUTTERING WITH ROUND DOWNPIPES & LEAFGUARDS	SEE ABOVE	SEE ABOVE
ROOF FASCIA & BARGE BOARDS	FINGERJOINTED PRE-PRIMED TIMBER FASCIA	TO MATCH EXISTING	
EAVES LINING	6mm F.C. SHEETING	SEE ABOVE	N/A
WINDOWS & DOORS	ALUMINIUM FRAMED FOR DETAILS - SEE BASIX	WHITE	N/A
CLADDING	WEATHERBOARDS TO MATCH EXISTING FIXED TO TIMBER STUD WALLS WITH INSULATION (SEE BASIX)	TO MATCH EXISTING	
MASONRY WALLS	CEMENT RENDERED OR STONEFACED BLOCKWORK	'DULUX' LINSEED OR EQUAL	

QUICK CHECK

Application Lodgement Summary

Sydney WATER

Reference Number 8274089 **Date Requested:** Fri October 26 2012

Agent	Reece Mona Vale, 10 Taronga Pl Mona Vale
Applicant	AJ HANKS G HANKS, 21 WALLUMATTA RD NEWPORT 2106
Property/Asset	21 Wallumatta Rd, Newport 2106 (Aj Hanks G Hanks) PNum: 3460924 150 mm VC Sewer Main - (2808927) (WasteWater)
Product	Building Plan Approval Application

Charge	Product Cost	GST	Total
Building Plan Approval Application	$16.71	$0.00	$16.71

Property Special Conditions for Plumbers

Boundary Trap Required	No
Watercharged/Tidal area	No
Partial Drainage area	No
Aggressive Soil area	No
Cast Iron Pipe area	Yes
Sewer Surcharge area	No
Minimum Gully Height area	No
Sewer Available	Yes
Connection Type	Gravity

You must contact Sydney Water to clarify the property special conditions where the property special conditions are not shown (yes or no), are shown as "unset", "unknown" or "not available" or if the proposed development is being built over more than one existing property.

Please note that boundary traps must be fitted for all commercial and industrial properties and you must ensure that all plumbing/drainage and building works are carried out in accordance with the relevant codes and standards.

A water meter is required to be fitted to the property during construction. You will need to ensure that your licensed plumber carries out this work in accordance to the relevant codes and standards.

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Levy Online Payment Receipt

LONG SERVICE

Thank you for using our Levy Online payment system. Your payment for this building application has been processed.

Applicant Name:	GLENDA HANKS
Levy Application Reference:	5035156
Application Type:	DA
Application No.:	N0090/12
Local Government Area/Government Authority:	PITTWATER COUNCIL
Site Address:	21 WALLUMATTA RD
	NEWPORT
	NSW
	2106
Value Of Work:	$181,000
Levy Due:	$633
Levy Payment:	$633
Online Payment Ref.:	672210949
Payment Date:	26/10/2012 12:53:39 PM

THIS PLAN / DOCUMENT FORMS
PART OF FORM BUILDING
CERTIFIERS CC / CDC

VDM CONSULTING ENGINEERS
94 Bassett Street
Mona Vale, NSW, 2103
Ph: (02) 9999 4285
Fax: (02) 9999 0193
ACN 101 544 763
ABN 40 101 544 763

This is the plan/spec. referred to in Form Building Certifiers Certificate
Certificate No. 2012-253
Plan Nos SD1201-002 1/3-3/3, 1414
11/02/13
Craig Formosa BPB0124 DATED

I certify that work completed in accordance with these plans and specifications will comply with the regulations referred to in Section 81A(5) of the Environment Planning and Assessment Act 1979

CONSTRUCTION NOTES

GENERAL
G1 These drawings is to be read in conjunction with the architectural drawings.
G2 During construction the structure shall be maintained in a stable condition and no part shall be over stressed. Builder to ensure stability of exisitng structuresin the vicinity of excavation works.
G3 U.N.O. stands for unless noted otherwise.
G4 The structural elements shown on these drawings have been designed for live loads as follows:
- a. Balconies & Stairs - 4.0kPa
- b. Office & Garage - 3.0kPa
- c. Roofs - 0.25kPa
- d. Elsewhere -1.5/1.8/2.0kPa
- e. as required in accordance with AS 1170

G5 Dimensions shall not be obtanied by scaling from the drawings. All setting out dimensions shall be verified and any discrepancies shall be referred to the Engineer prior to commencement of works.

G6 Annual probabilities of exceedance - Importance level
The importance level for this structure has been ascertained using AS/NZS 1170.0 Structural design actions Part 0: General Principles and the Building Code of Australia (BCA) as described below:
- Consequence of failure - Ordinary
- Description - Medium consequence for loss of human life, or considerable economic, social or environmental consequences
- Importance level - 2

G7 Probability of Exceedance
- Design working life - 50 years
- Importance level - 2
- Wind (non-cyclonic) - 1/1000 (Category - N3)
- Earthquake - 1/1000

CONCRETE
G1 All workmanship and materials shall be in accordance with current editions of A S3600 except as varied by contract documents.
C2 Cement to Type 'A' U.N.O. Concrete components and quality shall be as follows:-

Element	f'c MPa	Slump mm	Max Size Agg.	Density (kg/cu.m)
Piers	25	80	20	2400
Footings	25	80	20	2400
Slabs on ground	32	80	20	2400
Suspended concrete	32	80	20	2400
Columns	32	80	20	2400
Beams	32	80	20	2400

Notes:
- Pumped concrete shall have a minimum slump of 170mm (±25mm)
- Flood curing of concrete 14 days minimum with **NO** curing agents

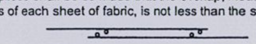
C3 Clear cover to reinforcement unless otherwise shown shall be:

Element	Exposure classi-fication	Formed not Exposed to Weather	Formed exposed to weather or Earth backfill	Not formed Poured against Membrane
Slab on ground	A1	30	40	45
Susp Slabs (ext)	B1	30	40	45
Susp Slabs (Int.)	A1	25	40	45
Beams	A1	25	40	45
Columns	A2	30	40	45
Piers	A1	30	40	45
Footings	A1	40	60	45

C4 Mechanically vibrate all concrete in the forms to give maximum compaction without segregation.
C5 Conduits shall not be placed between reinforcement and concrete surfaces (between cover) unles shown on drawings or specifically approved by the Engineer.
C6 Construction joints shall be properly formed and used only where shown or specifically approved by the Engineer.
C7 No holes, chases or embedment of pipes, other than those shown on the structural drawings, shall be made in concrete members without prior approval by the Engineer.
C8 Splices in reinforcement shall be made only in the positions shown or as otherwise approved by the Enginner.

INSPECTION BY ENGINEER
48 HOURS NOTICE IS REQUIRED BEFORE ANY SITE INSPECTION
1. Bearing strata of all footings prior to concrete pour
2. Any reinforcement prior to concrete pour
3. Timber & Steel framing prior to cladding and/or lining
4. Lintels after instalation
5. CONTACT YOUR PCA (Principal Certifying Authority) AS TO REQUIREMENTS FOR MANDATORY CRITICAL STAGE INSPECTIONS IN ACCORDANCE WITH REVISED EP&A ACT REGULATIONS EFFECTIVE JULY 1, 2004

C9 Lapped fabric splices shall be so made that the overlap, measured between outermost transverse wires of each sheet of fabric, is not less than the spacing of the wires plus 25mm.



C10 Reinforcement is shown diagramatically: it is not necessarilly shown in true projection

C11 All reinforcement fabric shall be to AS 1304 **Galvanized where external**
All reinforcement bars shall be to AS 1302 **Galvanized where external**
Symbols SL: wire reinforcing fabric, R: structural grade round bar, N: ribbed bar 500MPa structural grade, Y: ribbed bar 410MPa structural, BTM: bottom, T: Top, TM/L#TM trench mesh. Example of designation code for reinforcing bars:-

No of bars in group — bar grade and type
17N20 - 350
nominal bar size in mm — spacing in mm

C12 Where transverse tie bars are not shown, provide N12-400. Splice where necessary and lap with main bars for 400mm.
C13 All concrete shall be placed and "cured" in accordance with AS 3600. Where curing compound is used it must applied (a) onto slabs within 2 hours of finishing operation, (b) onto walls and columns immediately after removal of formwork.
C14 Horizontal formwork shall be stripped when approved by the Engineer.
C15 Slabs and beams shall bear only on the beams, walls,etc., shown on the drawings; all other building elements shall be kept 15mm clear from soffit os structure
C16 All slabs-on-ground shall be placed on 200 μm damp proof membrane over 50mm layer of compacted sand.
C17 No concrete shall be placed directly with the ground. Isolate all surfaces from contact with Forticon (or similar) with taped joints.
C18 Compact fill areas and subgrade under building and pavement to minimum 98% standard maximum dry density in accordance with AS 1289 Cl 5.2.1

EXCAVATION
E1 All excavation and backfill shall be carried out neatly to the lines. Levels and grades specified
E2 Any backfill material required or specified shall be compacted generally to at least 95% of its maximum dry density (test method in accordance with AS 1289-E1.1 - Standard Compactive effort).
E3 Fill material beneath edge beams to be compacted in accordance with clause 6.4.2 of AS 2810-1996 and as specified in E2 above.
E4 All top soil, vegetation and deleterious material shall be stripped from the building platform prior to the commencement of earthworks.

FOUNDATIONS
F1 Footings have been designed for a uniform allowable bearing pressure of **96-192kPa** as recommended on the Geotech report by VDM clause 6. Foundation material shall be approved for this pressure before placing concrete in footings.
F2 Footings must bear into undisturbed natural ground clear of organic material.
F3 Footings to be constructed and back filled as soon as practical following excavations to avoid softening by rain or drying out by exposure.

STRUCTURAL CONCRETE REINFORCEMENT STEELWORK
SR1 All reinforcement specified is Grade 500 U.N.O
SR2 Reinforcement is represented diagramatically it is not necessarily shown in true projection.
SR3 Top reinforcement is to be continuous over supports.
SR4 Welding of reinforcement is not permitted unles shown on the structural drawings.
U.N.O. all structural steel work bearing on mansory to be bedded on 20mm thick and full width non-shrinkable cement mortar grout pad.
SR5 Except where steelwork is concrete encased or where noted otherwise all **structural steelwork to be Galvanized Steel**. Should welding *in-situ* is required on any galvanized material the affected area MUST be painted/coated using galvanized paint in accordance with AS/NZS 4680 .
SR6 Two copies of checked workshop drawing to be submited to the Engineer and approval obtained in writing from him/her before fabrication is commenced. Approval covers structural sufficiency of joints and members and not dimensioning accuracy.
SR7 Trench mesh shall be spliced where necessary by a lap of 500mm. All cross wires to trench mesh shall be cut flush with outer main wires.
SR8 All reinforcement shall be supported @ **750mm maximum centres** to maintain the nominated position and covers. Reinforcement shall be tied at alternate intersections.
SR9 Splices in reinforcement shall be made in accordance with the provisions of Table 13.1.2.2.A of AS3600-2000 or in accordance with the following table:

Bar Size	N12	N16	N20	N24	N28	N32
Splice Length (in mm)	400	600	800	1200	1200	1200

MASONRY
M1 Provide sliding surface consisting of 2 layers of galvanised iron sheets with graphite grease in between top an bottom of all load bearing masonry walls in contact with suspended slabs. Prior to application of sliding surface the concrete or masonry shall be level and smooth.
M2 No masonry walls to be erected on suspended slabs and beams until all propping has been removed.
M3 Bricks used in load bearing construction shall have a minimum compressive strength (as per A.S. 3700) of 20 MPa unless otherwise noted.
M4 Provide 12mm polystyrene bond breaker between vertical face of masonry walls and concrete.

REGISTERED PROFESSIONAL ENGINEER
Mario F. Benitez, *BE (Struct.) MIEAust., CPEng.,(418917) MIPENZ (111943)*
I am appropriately qualified to certify this component of the project.
I hereby state that these plans or details comply with the conditions fo development consent provisions of the BCA (Building Code of Australia), AS1170.1, AS1170.2, AS1684, AS1720, AS3600 & AS4100

STRUCTURAL TIMBER
T1 All workmanship and materials to be in accordance with current editions of AS 1720 and AS 1684,
T2 All timber to be minimum stress grade F7 U.N.O. All hardwood to be minimum stress grade F14 U.N.O.,
T3 No timber beams or joists to be notched unless specified by the Engineer,
T4 Provide double joists around openings and under walls above U.N.O.,
T5 External timber to be durability class 1 or 2,
T6 Treat all exposed cut ends with Reseal by Protin to manufacturer's specifications to achieve required hazard level exposure classification,
T7 Joists deeper than 150mm shall be bloked over supports and at a maximum of 3,000mm centres,
T8 All holes for bolts to be exact size. Washers shall be 3.0mm thickness (min.) and at least 2 ½ times the bolt diameter. All bolts shall be M16 Grade 4.6 U.N.O.,
T9 Hot dip galvanized nails/clouts/screws to be used with all the timber connections.

BLOCKWORK
B1 Block walls shall be constructed with Double "U" blocks throughout.
B2 "Clean-Out" openings shall be provided at the base of the wall to permit removal of mortar droppings.
B3 Where horizontal reinforcement is used, special block units with recessed webs are to be provided.
B4 Grout shall have a 28 day compressive strength of 25 MPa (min) and a slump of 120 mm.
B5 Mortar shall be composed of one part cement, one tenth part lime and three parts sands.
B6 Mortar droppings at joints to be rodded and removed at bottom of blocks through clean out openings prior to filling all cores.
B7 Where vertical reinforcement is to be provided in both faces, bars are to be located in alternate cores.
B8 Where horizontal reinforcement is to be provided in both faces it shall be provided in staggered courses.
B9
- a. total cover to outside of blockwork shall 65mm,
- b. vertical & horizontal bars shall be galv. & if inspection reveals the vertical steel cannot be placed accurately the wall must be demolished
- c. starter bars must be accurately positioned by templates or similar means. Starter bars must be approved by Council's Building Surveyor and by the Structural Engineer prior to commencement of blockwor,
- d. vertical bars shall be tied to starter bars through inspection openings at the base of the wall & also accurately fixed in position at the top by an appropriate method.
- e. steel shall be accurately placed and firmly held into position to a tolerance of 10mm
- f. grout shall be compacted by vibrating or rodding

STRUCTURAL STEELWORK
S1 All workmanship and materials to be in accordance with AS 4100, AS 1554 and for tubular members AS 1163.
S2 Unless otherwise noted all structural steel shall be Fy = 300MPa in accordance with AS 3679, tubular members AS1163, black bolts AS1111 and high strength bolts AS1252.
S3 Unless shown otherwise minimum connection shall be 2M16 Grade 8.8S bolts, 10mm gusset plates, and 6mm CFW (continuous fillet weld)
S4 Bolt designation
- a. 4.6S - commercial bolts Grade 4.6, snug tighened,
- b. 8.8S - high strength structural bolts Grade 8.8, snug tightened,
- c. 8.8TB - high strength structural bolts Grade 8.8, fully tightened to AS 1511 and acting as a bearing joint,
- d. 8.8TF - high strength structural bolts Grade 8.8, fully tensioned to AS 1511 abd acting as a bearing joint.

S5 All welds to be min. 6.0mm continuous filet U.N.O. and welding to be in accordance with AS1554.
S6 U.N.O. all structural steel work bearing on mansory to be bedded on 20mm thick and full width non-shrinkable cement mortar grout pad.
S7 Except where steelwork is concrete encased, used internally or where noted otherwise all **structural steelwork to be Galvanized Steel**. Should welding *in-situ* is required on any galvanized material the affected area MUST be painted/coated using galvanized paint in accordance with AS/NZS 4680 .
S8 Two copies of checked workshop drawing to be submited to the Engineer and approval obtained in writing from him/her before fabrication is commenced. Approval covers structural sufficiency of joints and members and not dimensioning accuracy.
S9 Rolled steel sections including steel plates shall comply with AS 1538-1988
S10 UNO all welds shall be category SP using E41xx electrodes. All butt welds shall be complete penetration category SP.
S11 Grouting of anchor bolt sleevesand base plates shall be completed by the contractor using high strength, non-shrinkable grout.
S12 Purlin bolts shall be M12 - 4.6S
S13 Steel work shall have one of the following grades of corrosion protection:-

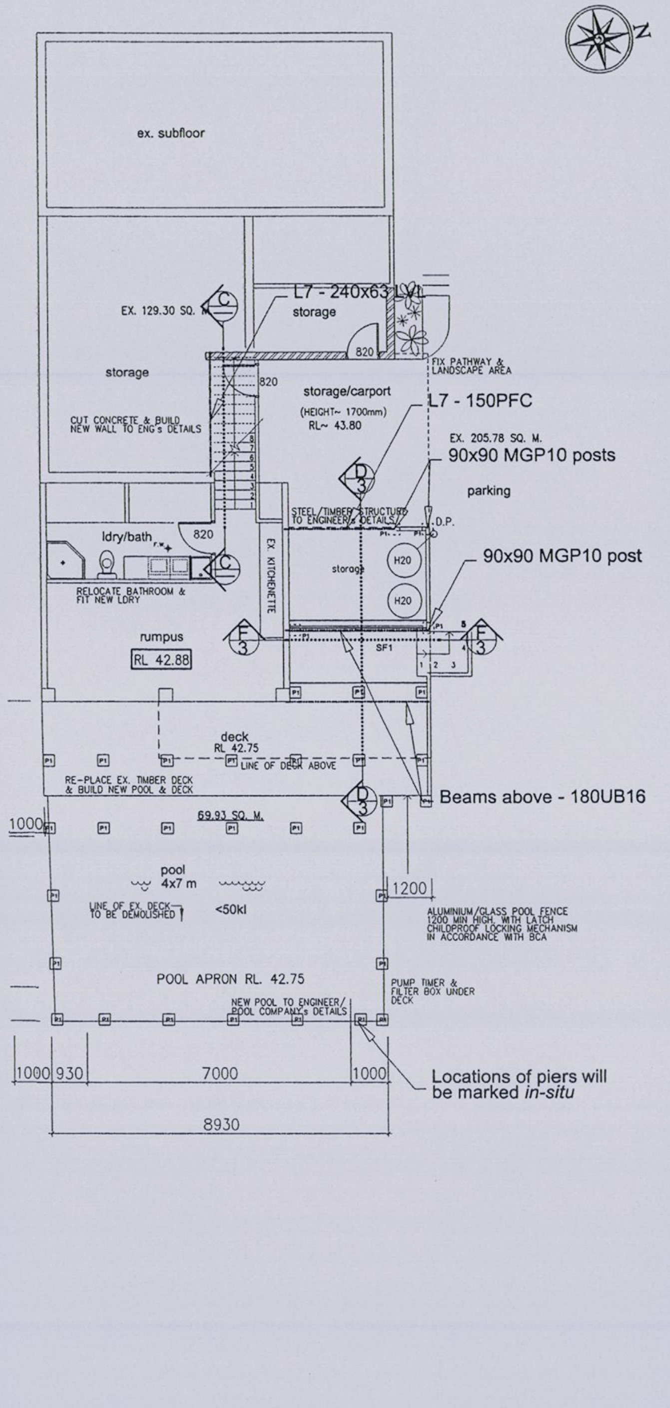
INTERNAL
- a. thoroughly cleaned wire brushing, followed by two coats of zinc phosphate primer equivalent to Dulux Luxaprime applied by hand using brushes to achieve a total dry film thickness (dft) of 70μm (microns)

EXTERNAL ELEMENTS & ELEMENTS WITHIN EITHER SKIN OF EXTERNAL CAVITY WALLS
- b. Preparation blast clean to a minimum standard class 2.5 in accordance with AS 1627 Part 4,
  Primer 2-pack epoxy phosphate at dft of 75μm (Dulux Durepon P14)
  Barrier coat 2-pack epoxy micaeous iron oxide, dft of 100μm
  Finish coat 2-pack epoxy high gloss acrylic to dft of 75μm(e.g. Dulux Acrathane 1 F) in an approve colour.
- c. Hot dipped galvanized to AS 4680
  Where the galvanic (hot dip galvanized) coating is compromised by welding, bolting or damage, inorganic zinc-rich paint (minimum 95% zinc content) is to be applied after wire brushing affected area (use 3 coats minimum) or hot metal spray in accordance with AS 4680.
- d. As specified by others e.g. architect, etc.

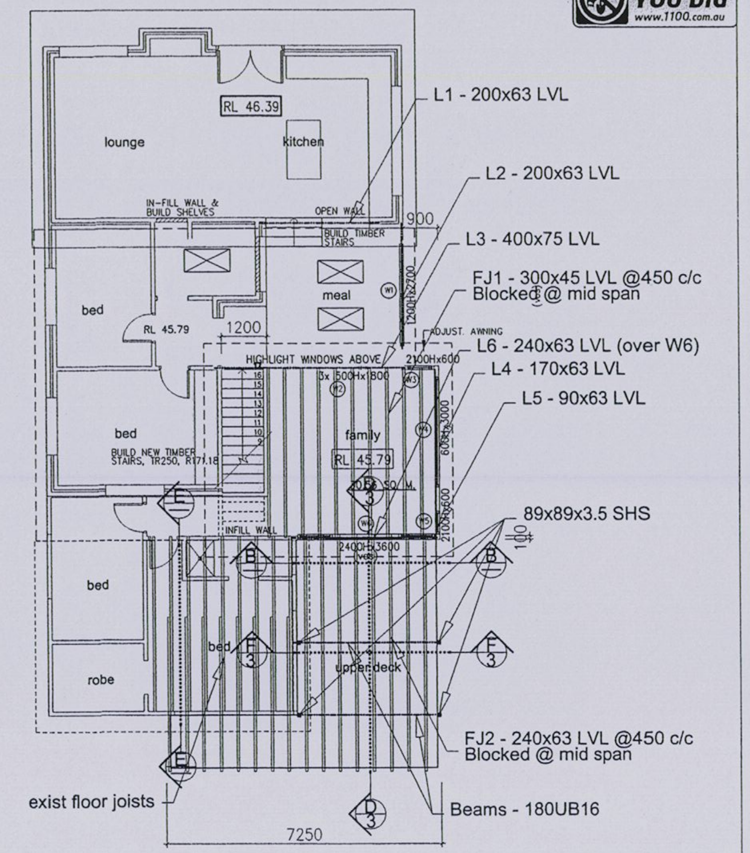
DRAWINGS
1. CONSTRUCTION NOTES
2. BASEMENT & GROUND FLOOR - PLAN VIEW - SUSPENDED SLABS & SECTIONS
3. UPPER FLOOR + ROOFING - PLAN VIEW - SUSPENDED SLAB, FRAMING + SECTIONS

Mario F. Benitez BE(Struct), CPEng., MIEAust., (418917), MIPENZ(111943)		
APPROVED / DRAWN: M.F.B.	DATE: August 2012	
ISSUE: A	SCALE	A1
PROJECT	ADDITIONS & ALTERATIONS for: Ms Glenda Hanks 21 Wallumatta Rd Newport NSW 2106	
DETAILS	CONSTRUCTION NOTES	
DRAWING No. 1 / 3	JOB No. SD1204-007	

notes-A1, 9/08/2012 2:09:13 PM, ISO A1, 1:100

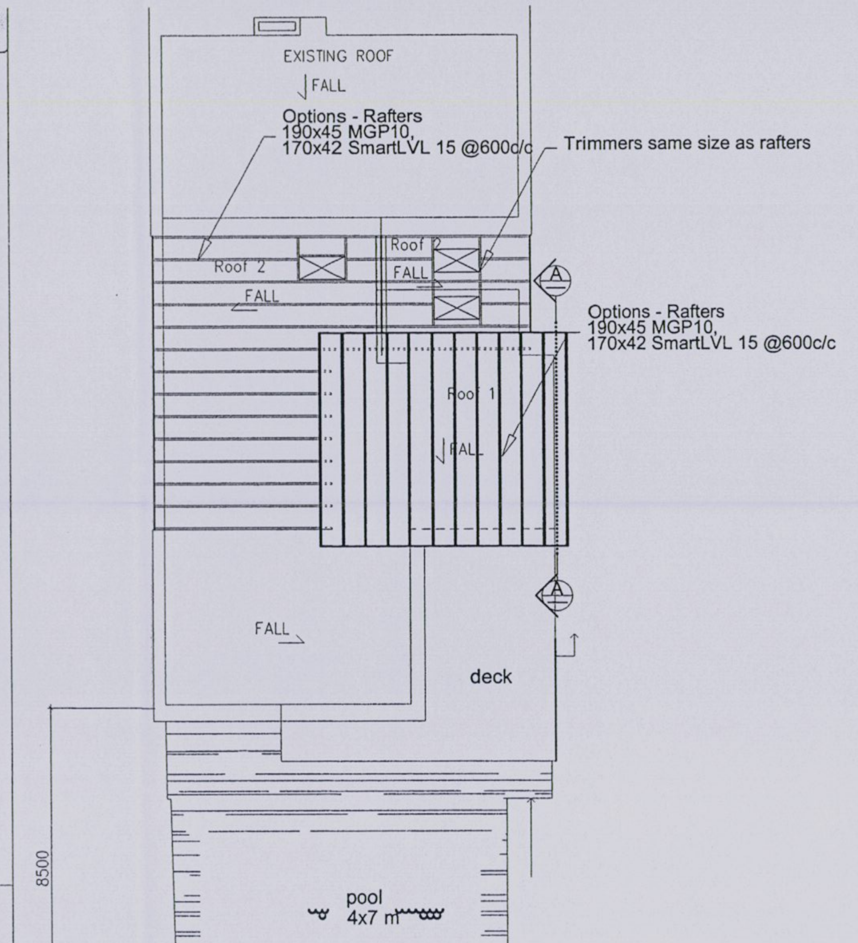


GROUND FLOOR - PLAN VIEW Scale 1:100

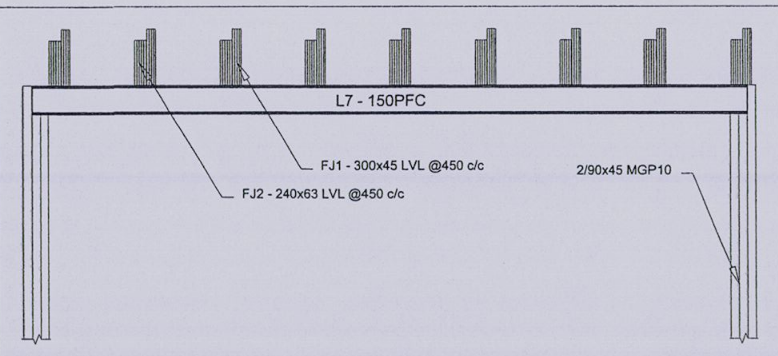


GROUND FLOOR - PLAN VIEW Scale 1:100

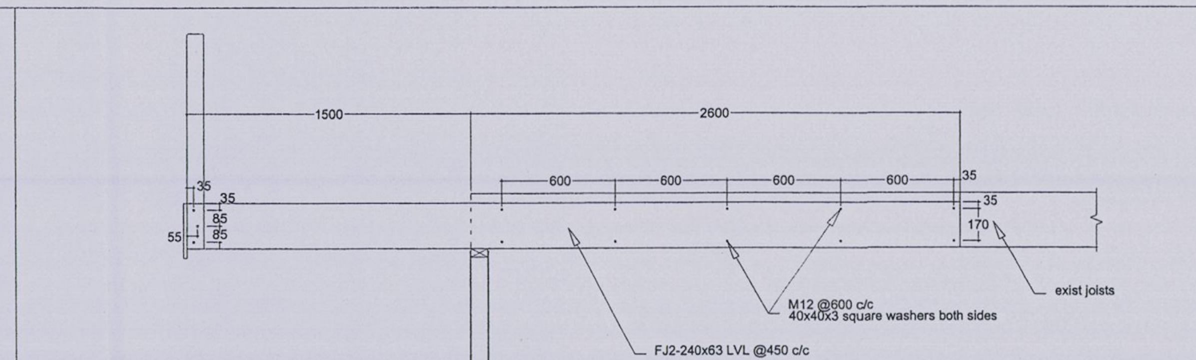
Notes:
Wind bracing 4mm hardwod plywood
On top of W4, W5 and W6
See P3 for details



ROOF - PLAN VIEW Scale 1:100



SECTION B-B Scale 1:20



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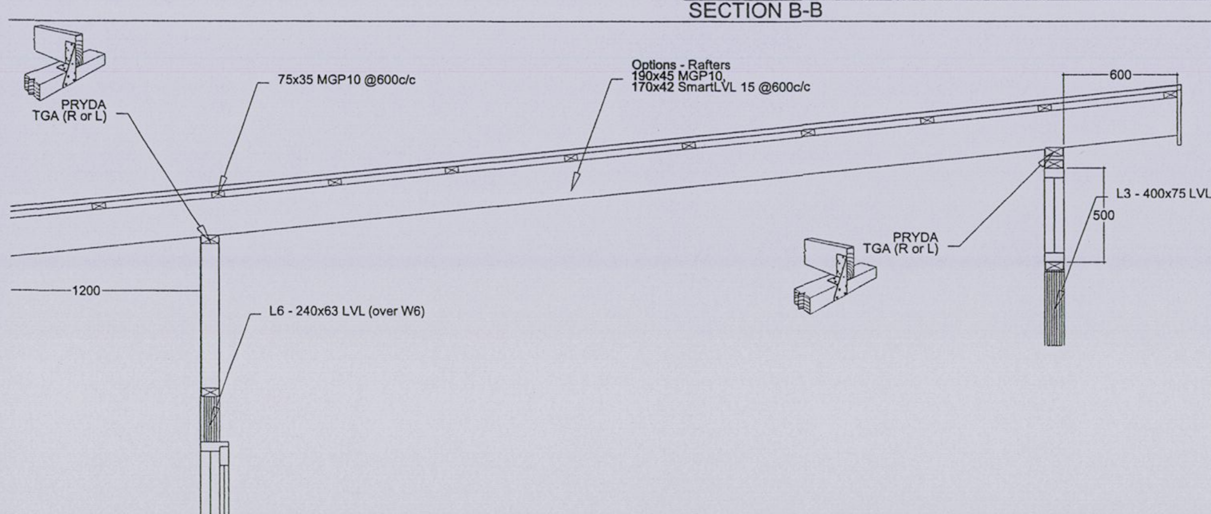

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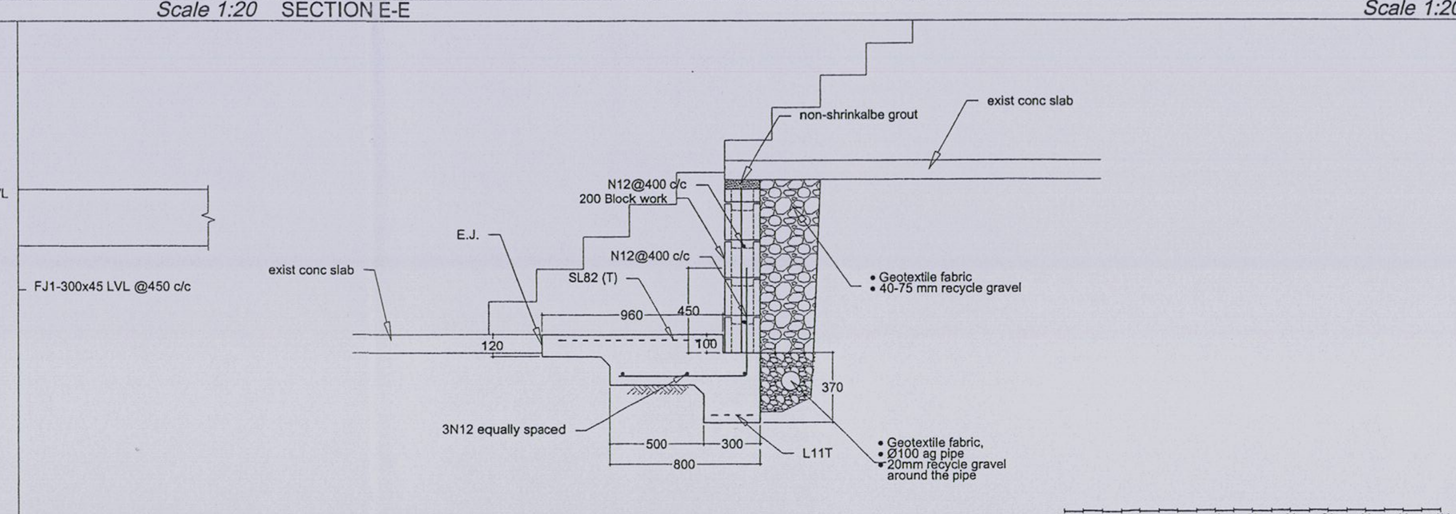
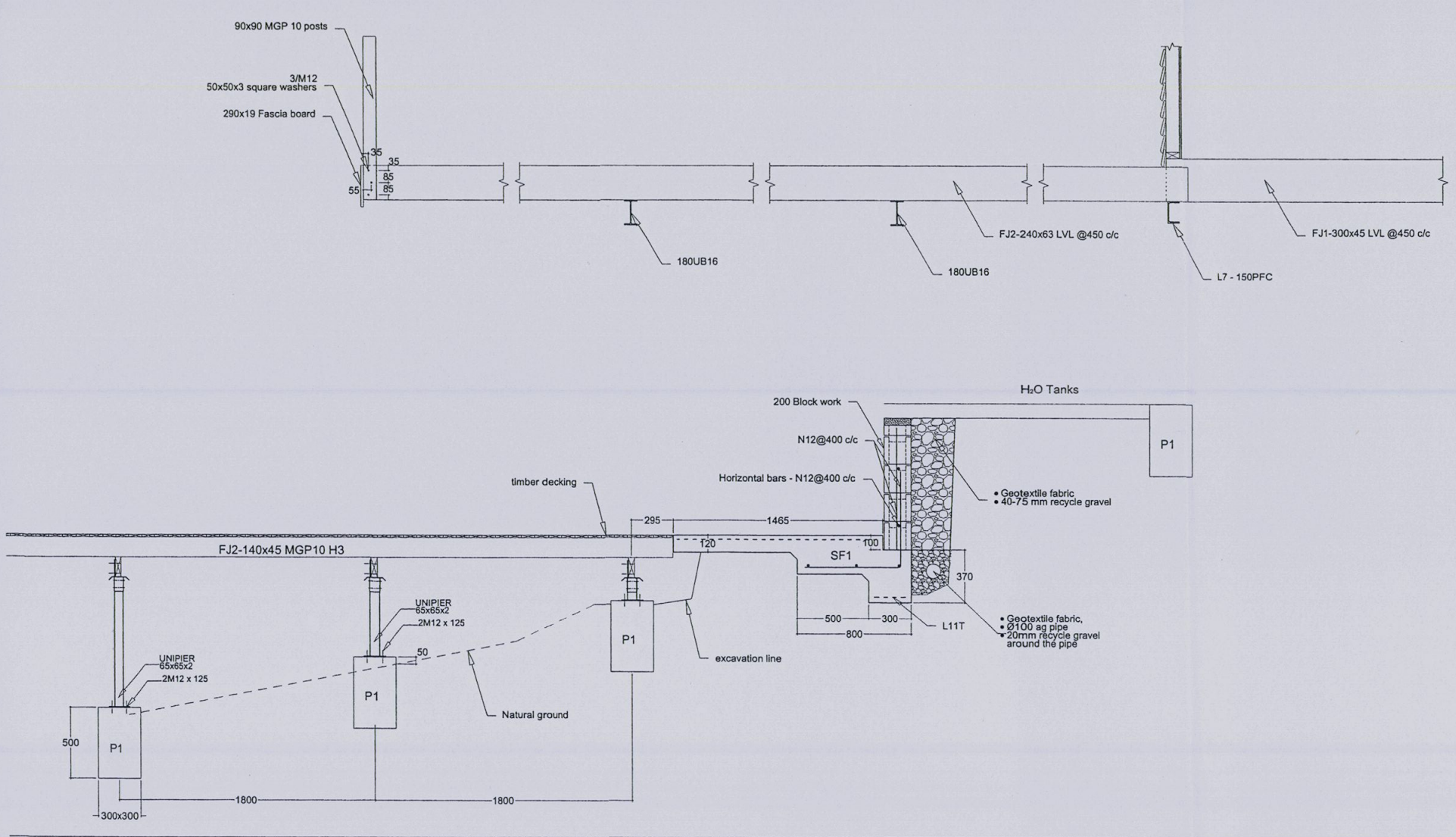


SECTION C-C Scale 1:20

VDM CONSULTING ENGINEERS
94 Bassett Street
Mona Vale, NSW, 2103
Ph: (02) 9999 4285
Fax: (02) 9999 0193
ACN 101 544 763
ABN 40 101 544 763

Mario F. Benitez
BE(Struct), CPEng., MIEAust., (418917), MIPENZ(111943)

ISSUE	A
DATE	August 2012
SCALE	1 : 20 / 1 : 100
SIZE	A1
PROJECT	ADDITIONS & ALTERATIONS for: Ms Glenda HANKS 21 Wallumatta St Newport NSW 2106
DETAILS	GF, FF & ROOF PLAN VIEW & SECTIONS
DRAWING No.	2 / 3
JOB No.	SD1201-002



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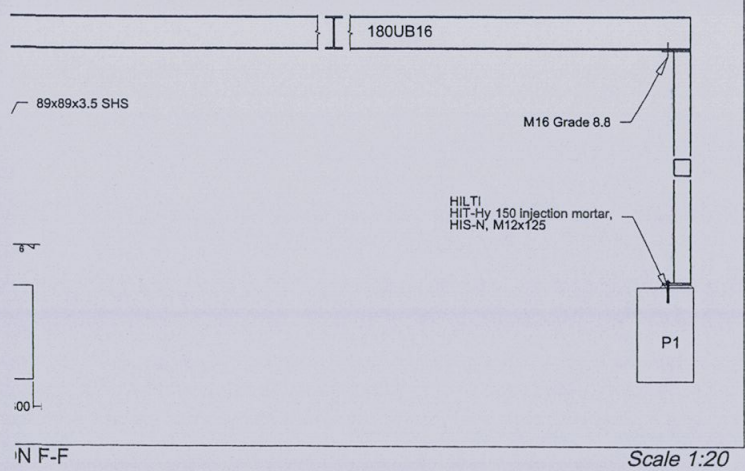

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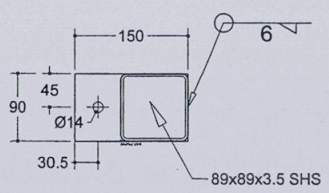
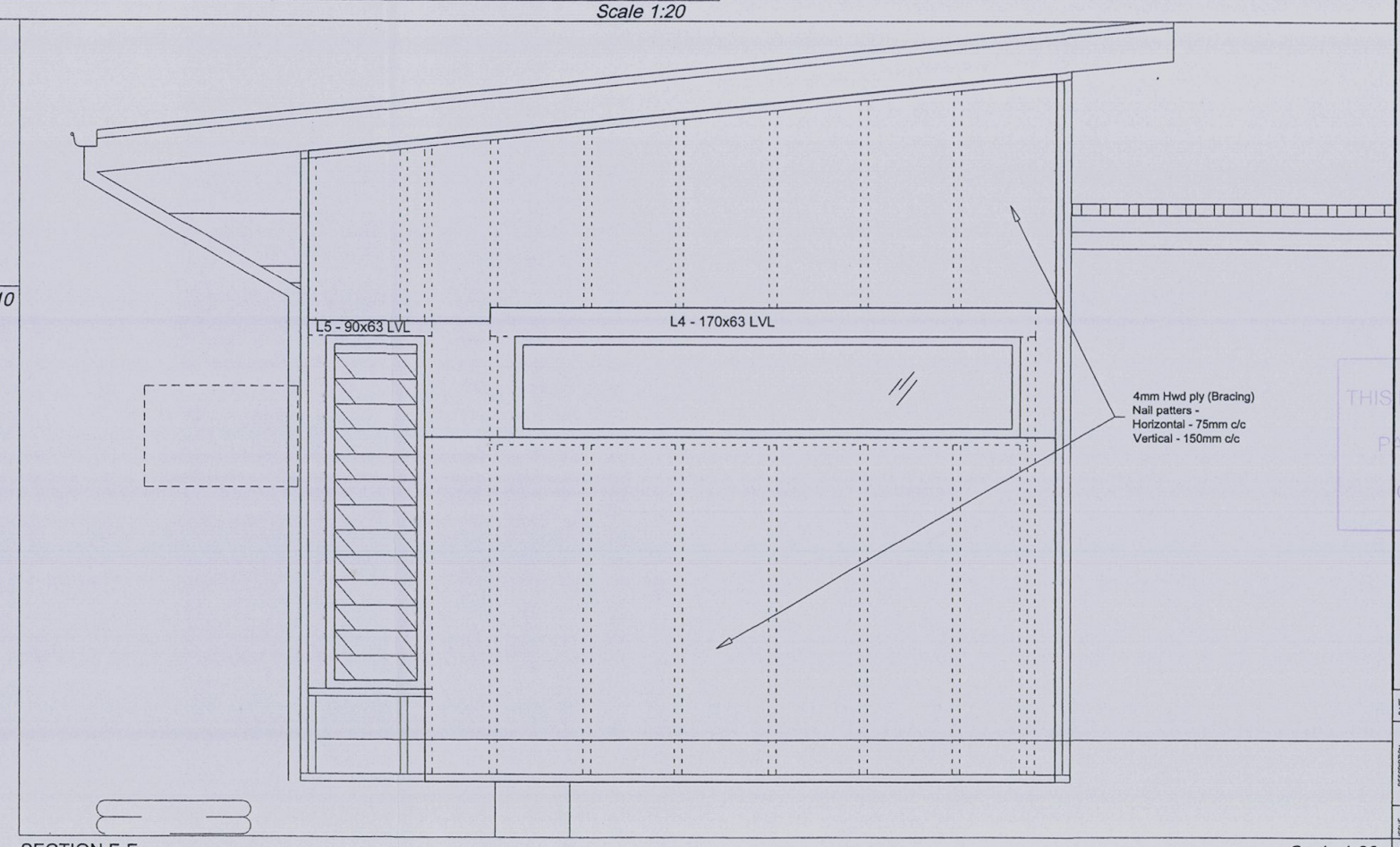


Top & Btm plates *Scale 1:10*



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0.0 1.0 2.0 3.0 4.0 5.0 6.0 7.0 8.0 9.0 10.0m

VDM CONSULTING ENGINEERS
94 Bassett Street
Mona Vale, NSW, 2103
Ph: (02) 9999 4285
Fax: (02) 9999 0193
ACN 101 544 763
ABN 40 101 544 763

THIS PLAN / DOCUMENT FORMS PART OF FORM BUILDING CERTIFIERS CC / CDC

Mario F. Benitez
BE(Struct), CPEng., MIEAust., (418917), MIPENZ(111943)

APPROVED: DRAWN: M.B. DATE: August 2012
ISSUE: A SCALE: 1:10 1:20 A1

PROJECT
ADDITIONS & ALTERATIONS
for: Ms Glenda HANKS
21 Wallumatta St
Newport NSW 2106

DETAILS
GROUND & FIRST FLOOR SECTIONS_2

DRAWING No. 3 / 3 JOB No. SD1201-002

3-OCT-2012 2:42:50 PM, ISO A1 1:100

VDM CONSULTING ENGINEERS
94 Bassett Street
Mona Vale, NSW, 2103
Ph: (02) 9999 4283
Fax: (02) 9999 0133
ACN 101 544 763
ABN 40 101 544 763

3S12 bent bars each way

650

3S12

600

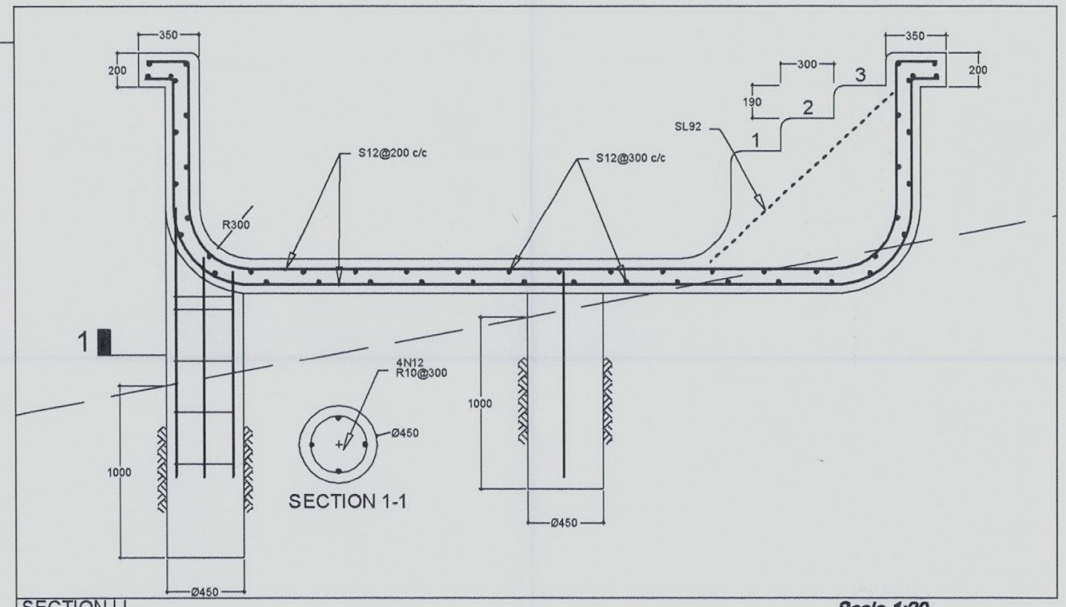
SECTION SKIMMER

650

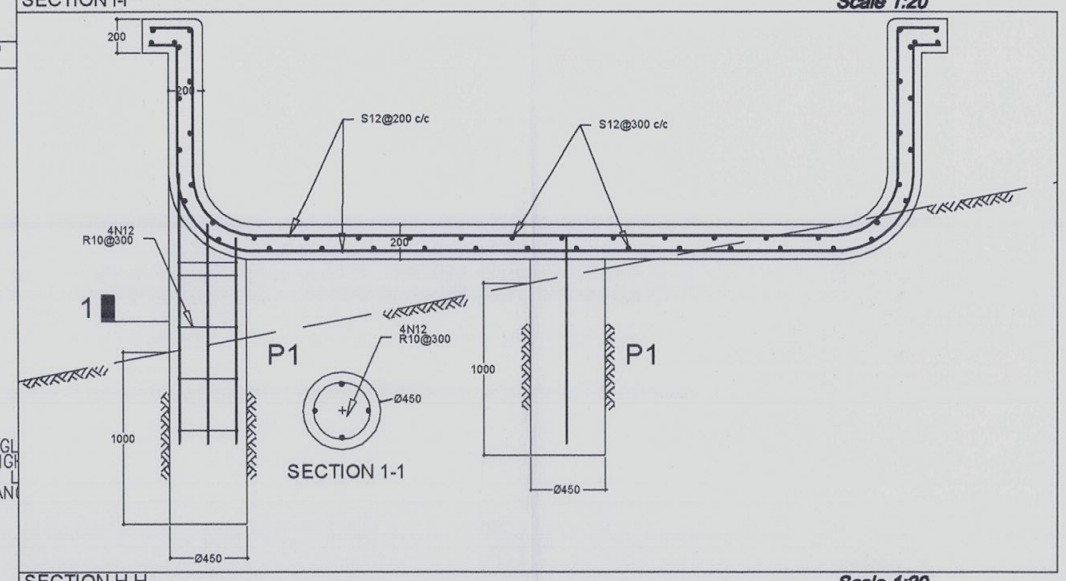
3S12 1500 long

ELEVATION SKIMMER

SKIMMER DETAILS — Scale 1:20



SECTION I-I — Scale 1:20



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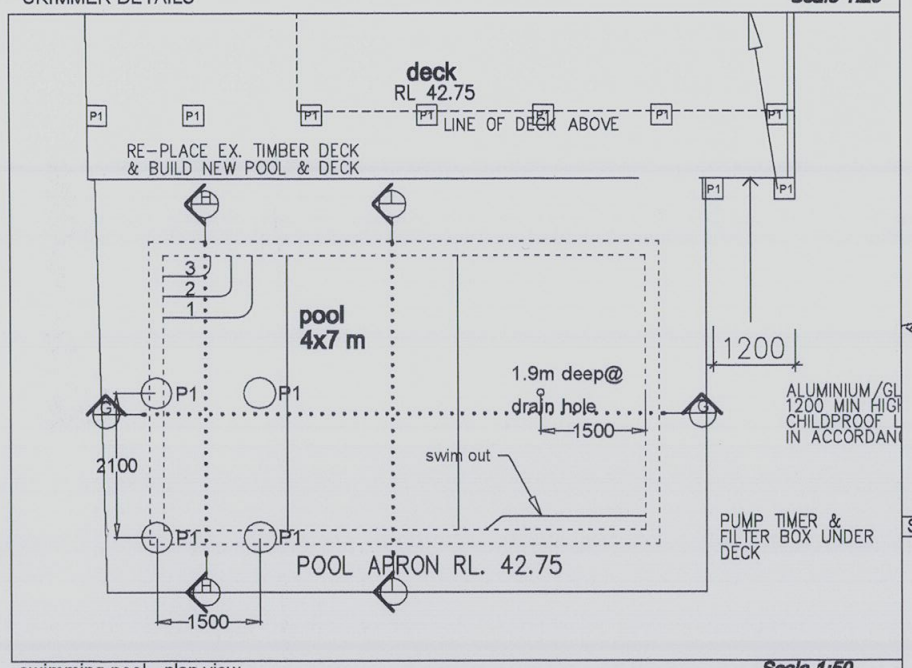
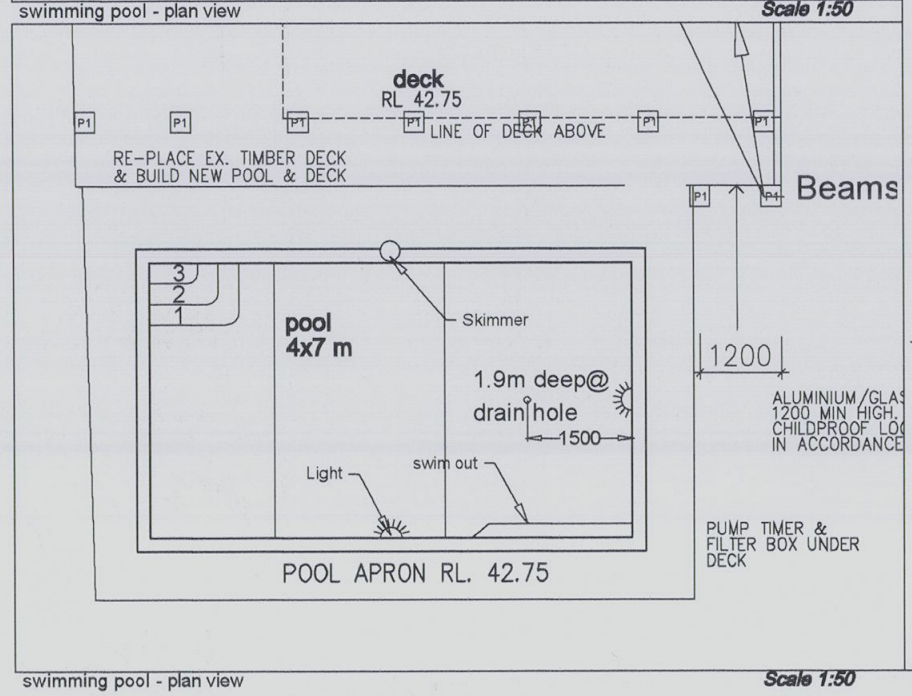
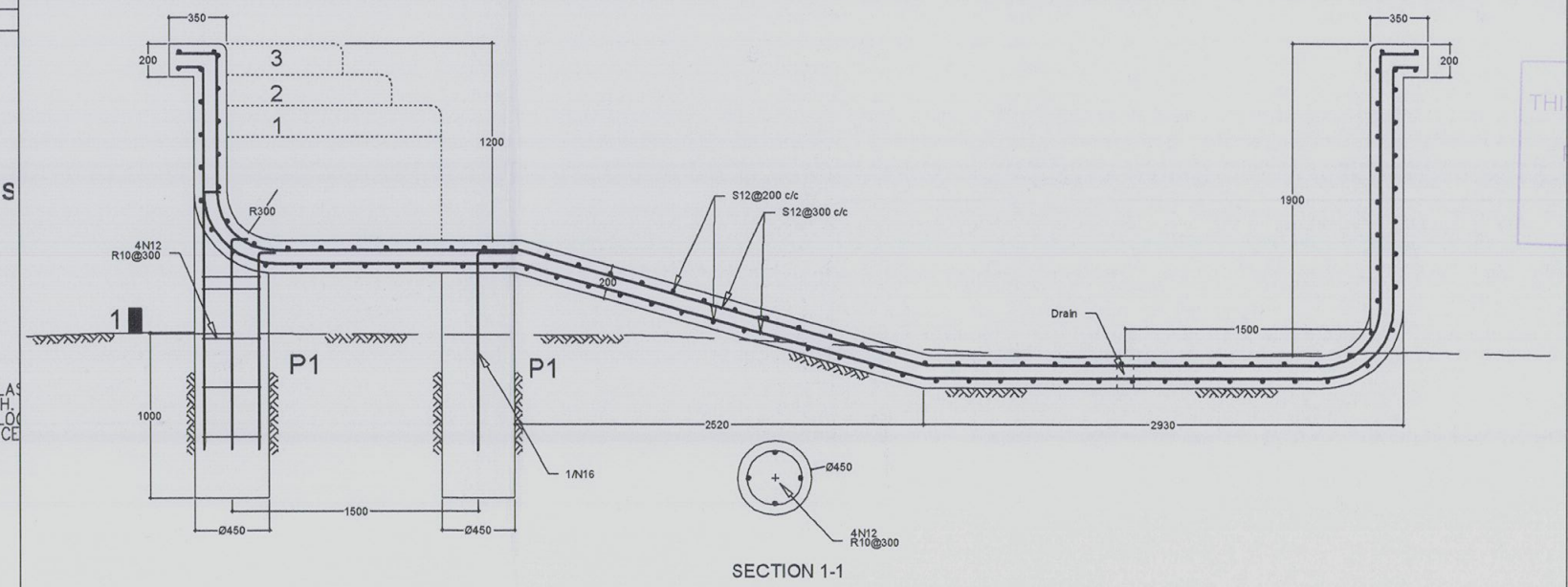


swimming pool - plan view — Scale 1:50



swimming pool - plan view — Scale 1:50



SECTION G-G — Scale 1:20

Martin F. Bentley
BE(Struct), CPEng, MIEAust, (418917), MPEN(111943)

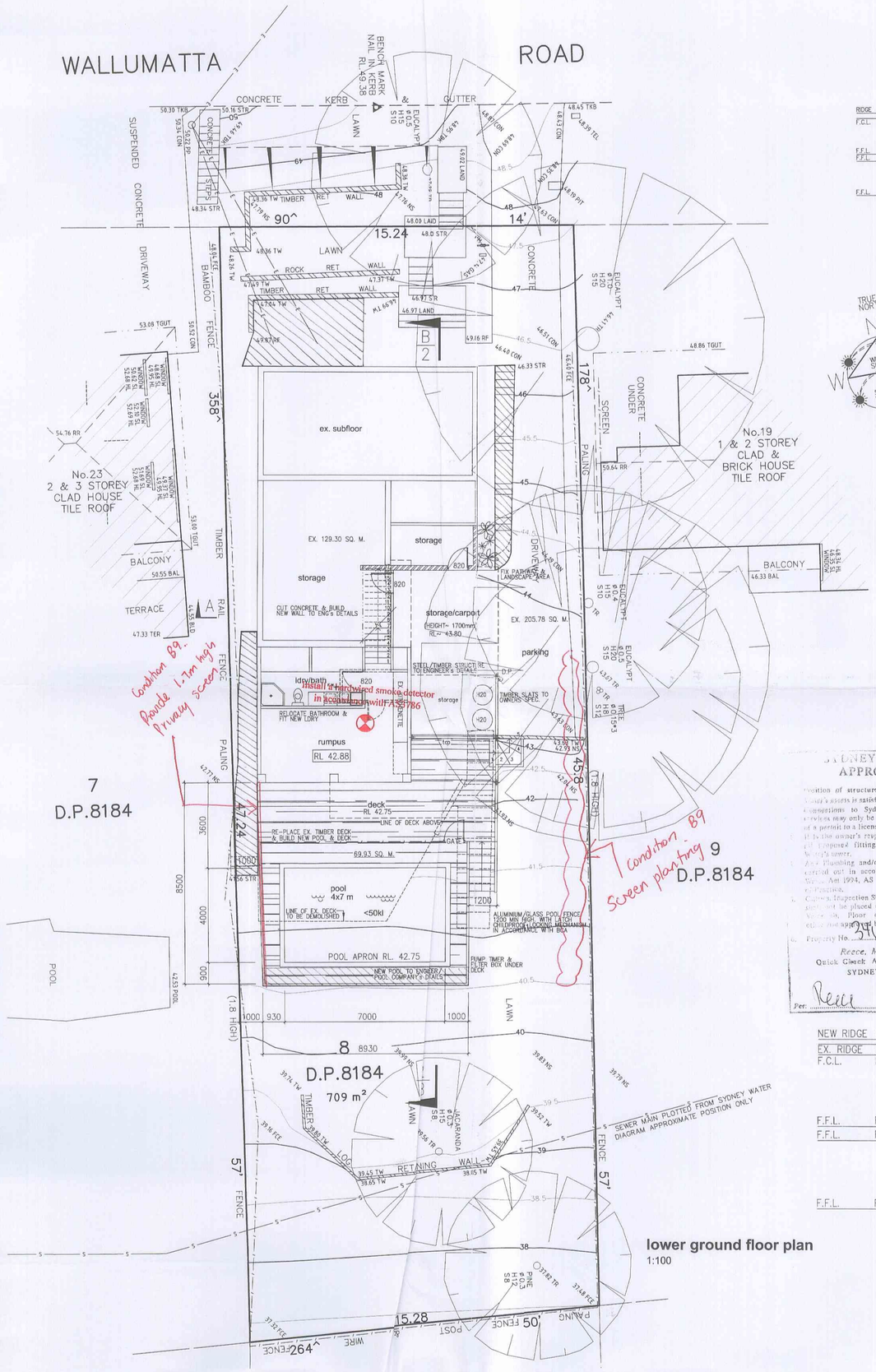
DATE: November 2012
SCALE: 1:20, 1:100
A1

PROJECT
ADDITIONS & ALTERATIONS
for: Ms Glenda HANKS
21 Wallumatta St
Newport NSW 2106

DETAILS: SWIMMING POOL
PLAN VIEW & SECTIONS

DRAWING No. 4 / 4
JOB No. SD1201-002

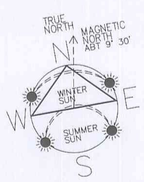
4-pool, 14/11/2012 1:18:38 PM, A3, 1:219.599



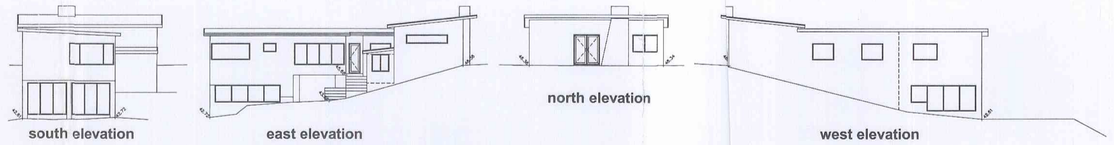
lower ground floor plan
1:100

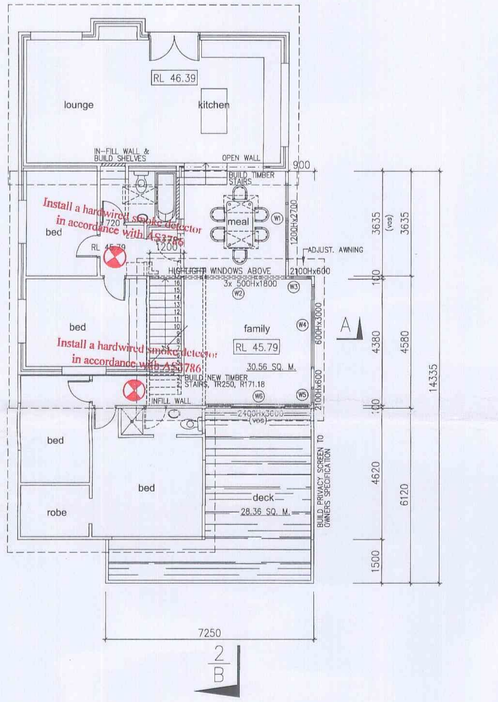
SYDNEY WATER
APPROVED
Position of structure in relation to Sydney Water's assets is satisfactory.
Conditions to Sydney Water sewer/water services may only be made following the issue of a permit to a licensed plumber/drainer.
It is the owner's responsibility to ensure that all proposed fittings will drain to Sydney Water's sewer.
Any Plumbing and/or Drainage Work to be carried out in accordance with the Sydney Water Act 1994, AS 3500 and the NSW Code of Practice.
Grease Inspection Shafts and Boundary Traps must not be placed under any Roof, Balcony, Verandah, Floor or other cover unless approved by Sydney Water.
Property No. 3460424
Per: Reece, Mona Vale
Quick Check Agent on behalf of SYDNEY WATER
26/10/12

NEW RIDGE R.L. 50.08
EX. RIDGE R.L. 49.87
F.C.L. R.L. 49.42
3030
3686
F.F.L. R.L. 46.39
F.F.L. R.L. 45.79
600
2910
F.F.L. R.L. 42.88

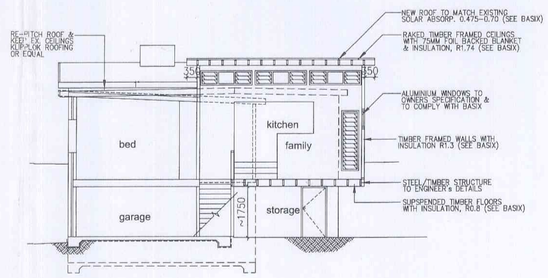


existing elevations
1:200





ground floor plan
1:100



section A-A
1:100

SURVEY INFORMATION PROVIDED BY:-
C.M.S. SURVEYORS PTY. LTD.
P.O. BOX 463
DEE WHY N.S.W. 2099
PH. 9971-4802 FAX. 9971-4822
REF. 6775

NEWPORT LOCALITY
ALLOWABLE SITE COVERAGE 40% + 6% LANDSCAPING

SITE CALCULATIONS

SITE AREA	709.00 SQ. M
EXISTING:	
FLOOR AREA	129.30 SQ. M
DRIVEWAY & CONC. AREA	205.78 SQ. M
EX. TOTAL BUILT UPON AREA	335.08 SQ. M
	47%
PROPOSED:	
EXISTING FLOOR AREA	129.30 SQ. M
EXISTING DRIVEWAY AREA	63.17 SQ. M
EXISTING PAVED/DECKED AREA	12.00 SQ. M*
NEW FLOOR AREA	30.56 SQ. M
NEW UPPER DECK AREA	28.36 SQ. M
NEW POOL & DECK AREA	69.93 SQ. M*
TOTAL BUILT UPON AREA	333.32 SQ. M.
	40% + 7%
CARPARKING	2 CARS

* INCLUDED IN THE 6% LANDSCAPED AREA (D1.14)

NOTES
1. ALL DIMENSIONS ARE IN MILLIMETRES U.N.O. AND SHOULD BE VERIFIED ON SITE BY THE BUILDER WHO WILL BE RESPONSIBLE FOR THE ACCURATE SETTING OUT OF THE JOB. ANY DISCREPANCIES MUST BE RESOLVED PRIOR TO COMMENCEMENT OF WORK.
2. ALL CONSTRUCTION IS TO COMPLY WITH THE BUILDING CODE OF AUSTRALIA (BCA) AND TO THE LOCAL COUNCIL REQUIREMENTS AND OTHER AUTHORITIES CONCERNED.
3. ALL DIMENSIONS THAT RELATE TO SITE BOUNDARIES AND EASEMENTS ARE SUBJECT TO VERIFICATION BY A SITE SURVEY.
4. IT IS THE OWNERS RESPONSIBILITY TO DETERMINE THE LOCATION OF ANY SEWER MAINS OR EASEMENTS OR ANY OTHER CONDITIONS WHICH WILL AFFECT THE BUILDING DESIGN.
5. FIGURED DIMENSIONS TAKE PRECEDENCE OVER SCALED READINGS.
6. ALL TIMBER CONSTRUCTION IS TO BE IN ACCORDANCE WITH THE 'NATIONAL TIMBER FRAMING CODE A.S.1684.
7. ROOF WATER AND SUB SOIL DRAINAGE TO BE DISPOSED OF IN THE APPROVED MANNER OR AS DIRECTED BY LOCAL INSPECTORS.
8. FINAL POSITION OF ALL DOWNPIPES TO BE DECIDED BY ROOF PLUMBER.
9. ANY STRUCTURAL DETAILS OR DESIGN IS TO BE SUPPLIED BY A STRUCTURAL ENGINEER.
10. ALL LEVELS ARE TO AUSTRALIAN HEIGHT DATUM.
11. ALL ELECTRICAL, POWER & LIGHT OUTLETS AS DETERMINED BY OWNER.
12. MAKE GOOD & REPAIR ALL EXISTING FINISHES AFFECTED BY NEW WORK. RE-USE EXISTING MATERIALS WHERE POSSIBLE.
13. ANY DETAILING IN ADDITION TO WHAT IS SUPPLIED ON THIS DRAWING SHALL BE RESOLVED BETWEEN THE OWNER & THE BUILDER.

mark	date	ammendments.
-	29/11/10	issue to client for council approval

project.
Alterations & additions
for
Mr. & Mrs. Hanks
at 21 Wallumatta Road
NEWPORT NSW 2106

This is the plan/spec. referred to in Form Building Certifiers Certificate Certificate No. 2012-263 Plans A-935 sheets 1 of 2 012 11/02/13 Craig Formosa BPB0124 DATED

I certify that work completed in accordance with these plans and specifications will comply with the requirements referred to in Section 81A(5) of the Environment Planning and Assessment Act 1979

drawing title.
WORKING DRAWINGS-
Existing elevations, floor plans & section

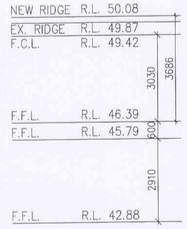
MANLY COUNCIL
APPROVED DEVELOPMENT CONSENT PLANS
NOTE: THESE PLANS MUST BE READ IN CONJUNCTION WITH THE CONDITIONS OF DEVELOPMENT CONSENT.
THIS APPROVAL DOES NOT AUTHORISE ANY WORKS ON THE ADJACENT ROAD RESERVE OR COUNCIL RESERVE.

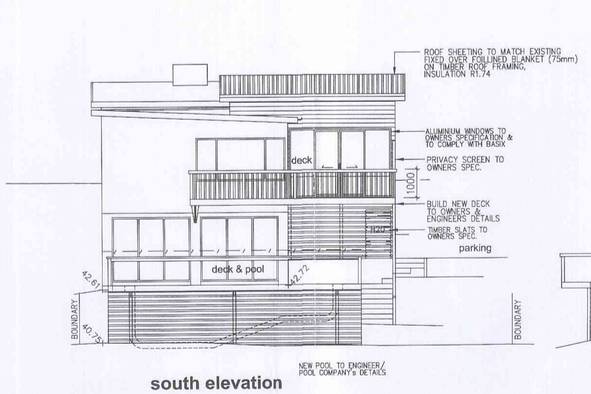
scale.
1:100

date.
NOV. 2010

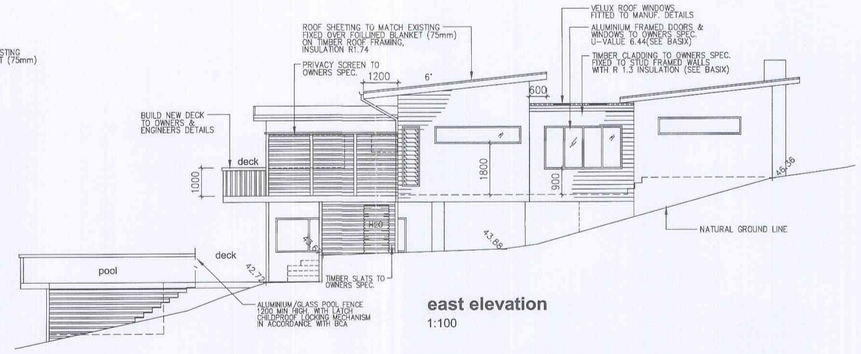
Draftperson.
ANNA HENRY
AH DESIGN
22 WANDEEN ROAD, CLAREVILLE NSW 2107
T. 02 9918 5790
E. ahdesign@email.com

project no. **A-935**
sheet no. **1**
of **2**
ammendments. -





south elevation
1:100



east elevation
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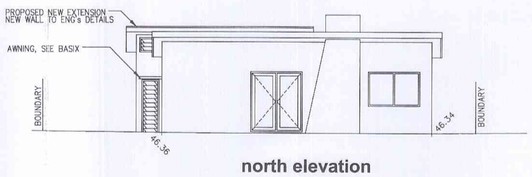
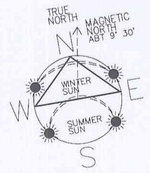
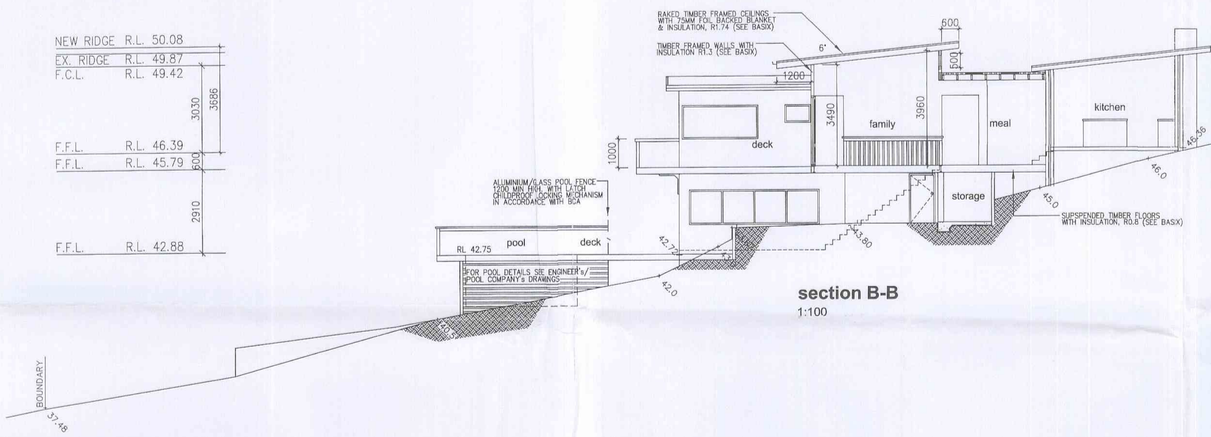
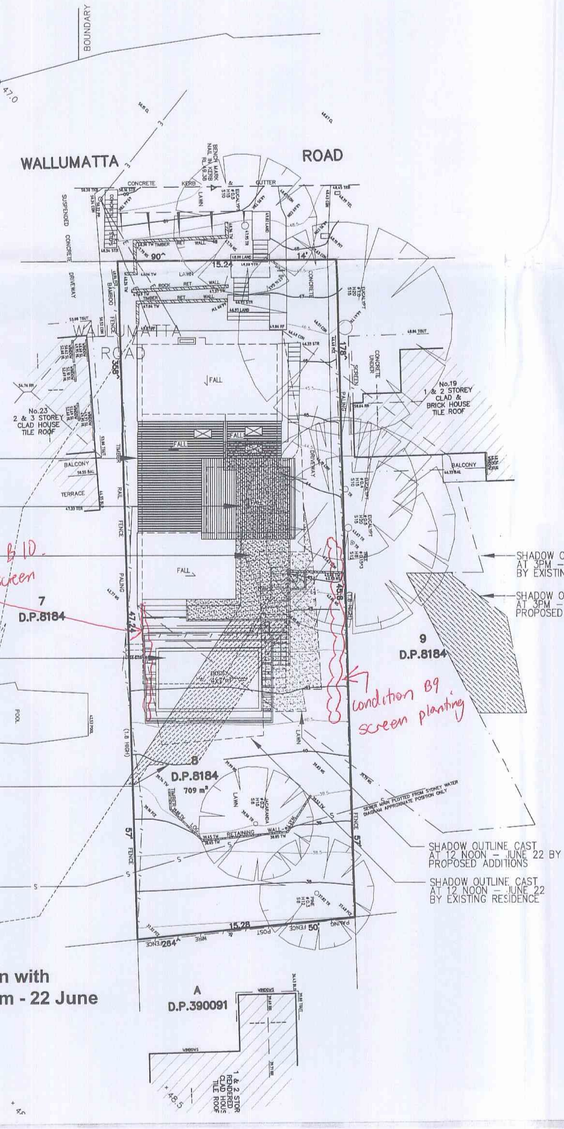


north elevation
1:100

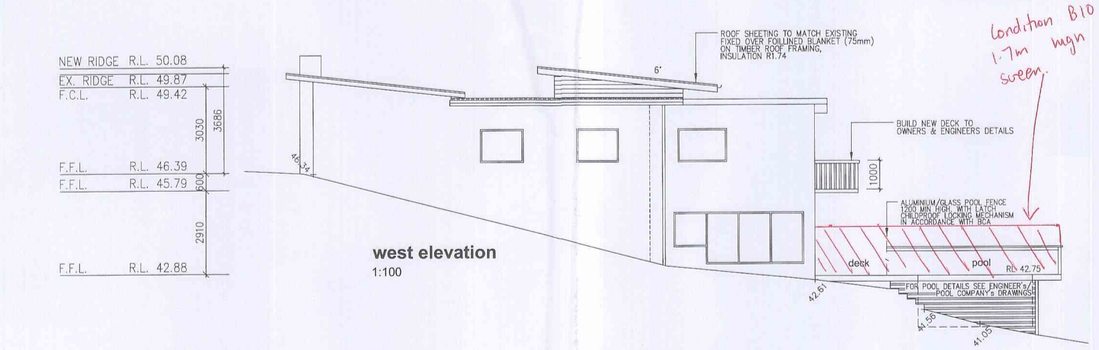




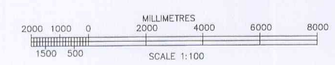
section B-B
1:100



site- & roof plan with shadow diagram - 22 June
1:200



west elevation
1:100



BASIX:
THE DRAWINGS SHOULD BE READ IN CONJUNCTION WITH THE CORRECT BASIX CERTIFICATE (A COPY IS ATTACHED). ALL WORKS TO BE CARRIED OUT IN ACCORDANCE WITH THE REPORT.

NOTES:

*ALUMINIUM FRAMED DOORS & WINDOWS WITH SINGLE CLEAR GLASS, U-VALUE 6.44

*ALL ALTERED TOILETS, TAPS & FIXTURES FITTINGS TO BE MIN. RATING OF 3 STARS.

*RAINWATER TANKS OF AT LEAST 2100L TO BE INSTALLED COLLECTING RAIN RUNOFF FROM MINIMUM 78sq.m. OF ROOF.

*RAINWATER TANK TO BE CONNECTED TO A TAP LOCATED WITHIN 10m OF THE EDGE OF THE POOL.

*40% OF NEW OR ALTERED LIGHT FIXTURES ARE TO BE FITTED WITH FLOURESCENT, COMPACT FLOURESCENT, OR LIGHT-EMITTING-DIODE (LED) LAMPS.

mark	date	ammendments.
-	29/11/10	issue to client for council approval

project.
Alterations & additions
for
Mr. & Mrs. Hanks
at 21 Wallumatta Road
NEWPORT NSW 2106

drawing title.
WORKING DRAWINGS- Elevations, section & shadow diagram - 22 June

scale.
1:100

date.
NOV. 2010

Draftperson.
ANNA HENRY
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T. 02 9918 5790
E. ahdesign@email.com

THIS PLAN / DOCUMENT FORMS PART OF FORM BUILDING CERTIFIERS CC / CDC

project no. **A-935**
sheet no. **2** of **2**
ammendments. -