INsight building certifiers pty ltd

7 February 2011

General Manager
Pittwater Council
PO Box 882
MONA VALE NSW 1660

Dear Sir/Madam,

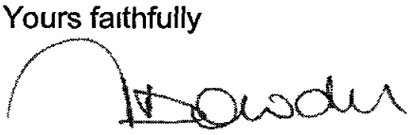
Development Application No N0288/10
11 Whale Beach Road, Avalon

For Council's information, please find enclosed Construction Certificate No 2011/4166 issued for alterations & additions to an existing dwelling at the above address, accompanied by

- Copy of Construction Certificate application form
- Notice of Commencement of Work and Appointment of Principal Certifying Authority
- Home Warranty Insurance Certificate
- Cheque for $30 00 being the prescribed fee to receive the above certificate

NB Please forward receipt for the above fee to **Insight Building Certifiers Pty Ltd, PO Box 326, Mona Vale 1660**

Yours faithfully



Tom Bowden
Insight Building Certifiers Pty Ltd

RN · 296437

Suite 13/90 Mona Vale Road Mona Vale NSW 2103 PO Box 326 Mona Vale NSW 1660 **ph 9999 0003** fax 9979 1555
email info@insightcert com au **web** www insightbuildingcertifiers com au **ABN** 54 115 090 456

INsight building certifiers pty ltd

Construction Certificate
Determination

issued under the Environmental Planning and Assessment Act 1979
Section 109C (1) (b) 81A (2) and 81A (4)

Certificate No. 2011/4166

Council	**Pittwater**
Determination	**Approved**
Date of issue	**7 February 2011**
Subject land	
Address	**11 Whale Beach Road, Avalon**
Lot No, DP No	**Lot 127 DP 17189**
Applicant	
Name	**Mr Brad White & Ms Rebecca Lennon**
Address	**11 Whale Beach Road, Avalon NSW 2107**
Contact No	**0414 209 282 / 0416 124 663**
Owner	
Name	**Mr Brad White & Ms Rebecca Lennon**
Address	**11 Whale Beach Road, Avalon NSW 2107**
Contact No	**0414 209 282 / 0416 124 663**
Description of Development	
Type of Work	**Alterations & Additions to an Existing Dwelling**
Builder or Owner/Builder	
Name	**Northern Beaches Homes**
Contractor Licence No/Permit	**174674C**
Value of Work	
Building	**$225,000 00**

Attachments

- **Copy of completed Construction Certificate Application Form**
- **Pittwater Council receipt no 296117 for payment of Long Service Levy**
- **BASIX Certificate no A85002 dated 25 May 2010**

COUNCIL COPY

Suite 13/90 Mona Vale Road Mona Vale NSW 2103 PO Box 326 Mona Vale NSW 1660 **ph 9999 0003** fax 9979 1555
email info@insightcert com au **web** www insightbuildingcertifiers com au **ABN** 54 115 090 456

Plans & Specifications certified

The development is to be carried out in compliance with the following plans and documentation listed below and endorsed with *Insight Building Certifiers* stamp

- **Architectural Details & Construction Specification reference no's 1290-1 1290-2 1290-3 1290-4 1290-5 1290-6 1290-7 1290-8 & 1290-9 prepared by J D Evans & Company Pty Ltd dated 12 May 2010**
- **Structural Engineers Details reference no 101145 Drawing no's S01 S02 S03 S04 S05 S06 S07 S08 & S09 prepared and endorsed by Northern Beaches Consulting Engineers Pty Ltd dated January 2011**
- **Certificate of Structural Adequacy issued by Northern Beaches Consulting Engineers Pty Ltd dated 28 January 2011**
- **Copy of Access Driveway Profiles and Section 139 Consent as issued by Pittwater Council dated 31 January 2011**
- **Sydney Water Approval dated 31 January 2011**

Certificate

I hereby certify that the above Plans documents or Certificates satisfy

- The relevant provisions of the Building Code of Australia
- The relevant conditions of this Development Consent

and that work completed in accordance with the documentation accompanying the application for this Certificate (and any modifications as verified by me and shown on that documentation) will comply with the requirements of the Environmental Planning & Assessment Regulation referred to in Section 81A(5) of the Environmental Planning & Assessment Act 1979

Signed

Date of endorsement -7 FEB 2011

Certificate No **2011/4166**

Certifying Authority

Name of Accredited Certifier	Tom Bowden
Accreditation No	BPB0042
Accreditation Authority	Building Professionals Board
Contact No	(02) 9999 0003
Address	13/90 Mona Vale Road, Mona Vale NSW 2103

Development Consent

Development Application No	**N0288/10**
Date of Determination	**30 September 2010**

BCA Classification **1a & 10a**

insight building certifiers pty ltd

APPLICATION FOR A CONSTRUCTION CERTIFICATE

02 FEB 2011

Construction Certificate ☑

Modified Construction Certificate ☐

1. Applicant's details

It is important that we are able to contact you if we need more information. Please give us as much details as possible

Mr ☐ Mrs ☐ Ms ☑ Dr ☐ Other: Brad White

Given Names (or ACN): Rebecca

Family Name (or Company): Lennon

Postal Address (we will post all mail to this address)

11 Whale Beach Road

Avalon Post Code: 2107

Daytime telephone:

Alternate no: 0416 124 663

Mobile no: 0414 209 282

2. Owner's consent

Every owner of the land must sign this form. If the owner is a company the form must be signed by an authorised director and the common seal must be stamped on this form. If the property is a unit under the strata title or a lot in a community title then in addition to the owner's signature, the common seal of the body corporate must be stamped on this form over the signature of the owner and signed by the Chairman or Secretary of the Owners Corporation or the appointed Managing Agent

Owner(s): Rebecca Lennon & Brad White

Address: 11 Whale Beach Rd Avalon 2107

As owner(s) of the land to which this application relates, I/We consent to this application. I/We also consent for the Principal Certifying Authority and/or Accredited Certifier to enter the land to carry out inspections relating to this application

Signature(s): [signature] [signature]

** Without the owner's consent we will not accept the application. This is a very strict requirement for all applications. If you are signing on the owner's behalf as the owner's legal representative you must state the nature of your legal authority and attach documentary evidence (eg, power of attorney executor trustee company director etc)

3. Location of property

Unit/Street no: 11

Street name: Whale Beach Road

Suburb: Avalon

Post code: 2107

Legal Property Description (these details are shown on your rate notices property deeds, etc)

Lot no: 127

DP no: 17189

4. Description of work

What type of work do you propose to carry out?

Please describe briefly everything that you want approved.

New garage & second storey addition

5. Estimated cost of work

The estimated cost of the development or contract price may be subject to review

Estimated cost of work $ 225,00

6. Development Consent

Council Consent no 288/10

Date of Determination 4/2/11

7. Building Code of Australia classification

This can be found on the development consent

BCA Classification 1a & 10a

8. Builder's details

If known to be completed in the case of residential building work

Name Brad White,

Licence no 174674C,

Owner/builder permit no

9. Applicant's declaration

I apply for a Construction Certificate to carry out building works as described in this application. I declare that the above Development Consent is valid and that no building works associated with this application have commenced. To the best of knowledge all the information in this application and checklist is true and correct

Signature

Date 2-2-11

SUBMISSION REQUIREMENTS

A GENERAL

Are the plans submitted with the Construction Certificate Application in accordance with the Development Consent?

Yes ☐ No ☐

Have all the conditions of Development Consent relating to the issue of the Construction Certificate been fully complied with?

Yes ☐ No ☐

If you have answered NO to either of the above questions, then you will need to speak with the Accredited Certifier BEFORE LODGING YOUR APPLICATION

B ALL PROPOSALS (has the following required information been submitted?)

Yes	No	Not Applicable	In the case of an application for a Construction Certificate for building work
☐	☐	☐	Three (3) copies of detailed architectural plans and specifications
☐	☐	☐	The plan for the building must consist of a general plan drawn to a scale not less than 1 100 and a site plan drawn to a scale not less than 1 200 The general plan of the building is to a) show a plan of each floor section b) show a plan of each elevation of the building c) show the levels of the lowest floor and of any yard or unbuilt on area belonging to that floor and the levels of the adjacent ground d) indicate the height design and full construction details e) indicate the provision for fire safety and fire resistance (if any)
☐	☐	☐	Where the proposed building work involves any alteration or addition to or rebuilding of an existing building all copies of the general plan are to be coloured or otherwise marked to the satisfaction of the Council to adequately distinguish the proposed alteration addition or rebuilding with a separate letter listing the proposed changes being submitted
☐	☐	☐	3 copies of a specification a) to describe the construction and materials of which the building is to be built and the method of drainage sewerage and water supply b) state whether the materials proposed to be used are new or second hand and give *particular*
☐	☐	☐	Where the proposed building work involves a modification to previously approved plans and specifications the general plans must be coloured or otherwise marked to the satisfaction of the Accredited Certifier to adequately distinguish the modification
☐	☐	☐	If the proposed building work involves a modification to previously approved plans and specification which were subject of a Development Consent has the original Development Consent been modified by Council?
☐	☐	☐	Except in the case of an application for or in respect of domestic building work a) a list of any fire safety measures that are proposed to be implemented in the building or on the land on which the building is situated and b) if the application relates to a proposal to carry out any alteration or rebuilding of or *addition to an existing building a separate list of such of those measures as are* currently implemented in the building or on the land on which the building is situated This list must specify the standard of design of each of those fire safety measures to which they were originally installed c) This list must describe the extent capability and basis of design of each of the measures concerned
☐	☐	☐	Copy of BASIX Certificate & Schedule of BASIX Commitments
☐	☐	☐	Copy of signed BASIX Compliance Statement
☐	☐	☐	All other documentation to satisfy conditions of Development Consent

HOME BUILDING ACT 1989 (as amended) OWNER/BUILDER REQUIREMENTS

Applicants for work at a residential property with a value of work over $12 000 require insurance as specified in the Home Building Act 1989

Owner Builders require Property Owner Builder s Permit issued by the Department of Fair Trading for all projects over $5 000 In addition to this permit all projects valued in excess of $12 000 may also require a contract of insurance under the provisions of the Home Building At 1989 as amended This requirement will take effect should the property owner offer the property for sale in the ensuing period of 7 years

Enquiries on any matters relevant to this section should be taken up with the Department of Fair Trading at Level 21 Astra House 227 Elizabeth Street Sydney (ph 133220)

LONG SERVICE LEVY (applies to all classes of buildings)

A Long Service Levy at 0 35% of the cost of works is payable on projects valued $25 000 or more This sum can be paid directly to the Long Service Payments Corporation or to Council acting as an agent to the Corporation Partial exemption from the levy may be granted to non profit organizations churches and to owner/builders The levy may also be paid in instalments Application forms for these exemptions are available from Council but all enquiries in this regard should be address to the Long Service Payments Corporation

THE CONSTRUCTION CERTIFICATION CANNOT BE ISSUED UNLESS THE LONG SERVBICE LEVY AND HOME BUILDING ACT 1989 INSURANCE (APPLICABLE TO RESIDENTIAL PROPERTIES) HAVE BEEN PAID OR EVIDENCE OF THE EXEMPTION PROVIDED TO COUNCIL

PARTICULARS OF THE PROPOSAL

What is the area of the land (m^2)? 610 SQ	Gross floor area of building (m^2) as proposed 210 Sq mts
What are the current uses of all or parts of the building(s)/land? Dwelling	Location Avalon Use House
Does the site contain a dual occupancy? NO	What is the gross floor area of the proposed addition or new building (sq metres)? 210
What are the proposed uses of all parts of the building(s land? Dwelling	Number of pre-existing dwellings one
Number of dwellings to be demolished 1	How many dwellings proposed? one
How many storeys will the building consist of? 2	Will the new building be attached to the existing building? yes Will the new building be attached to any new building?

MATERIALS TO BE USED

The following information must be supplied for the Australian Bureau of Statistics

Place a tick (√) in the box which best describes the materials the new work will be constructed of

WALLS		FLOOR		ROOF		FRAME	
Brick veneer	☑	Concrete	☐	Aluminium	☑	Timber	☐
Full brick	☐	Timber	☐	Concrete		Steel	☑
Single brick	☐	Other	☑	Concrete tile	☐	Other	☐
Concrete block	☐	Unknown	☐	Fibrous cement	☐	Unknown	☐
Concrete/masonry	☐			Fibreglass	☐		
Concrete	☑			Masonry/terracotta shingle	☐		
Steel	☑			Tiles	☐		
Fibrous cement	☑			Slate	☐		
Hardiplank	☐			Steel	☐		
Timber/weatherboard	☑			Terracotta tile	☐		
Cladding aluminium	☑			Other	☐		
Curtain glass	☐			Unknown	☐		
Other	☐						
Unknown	☐						

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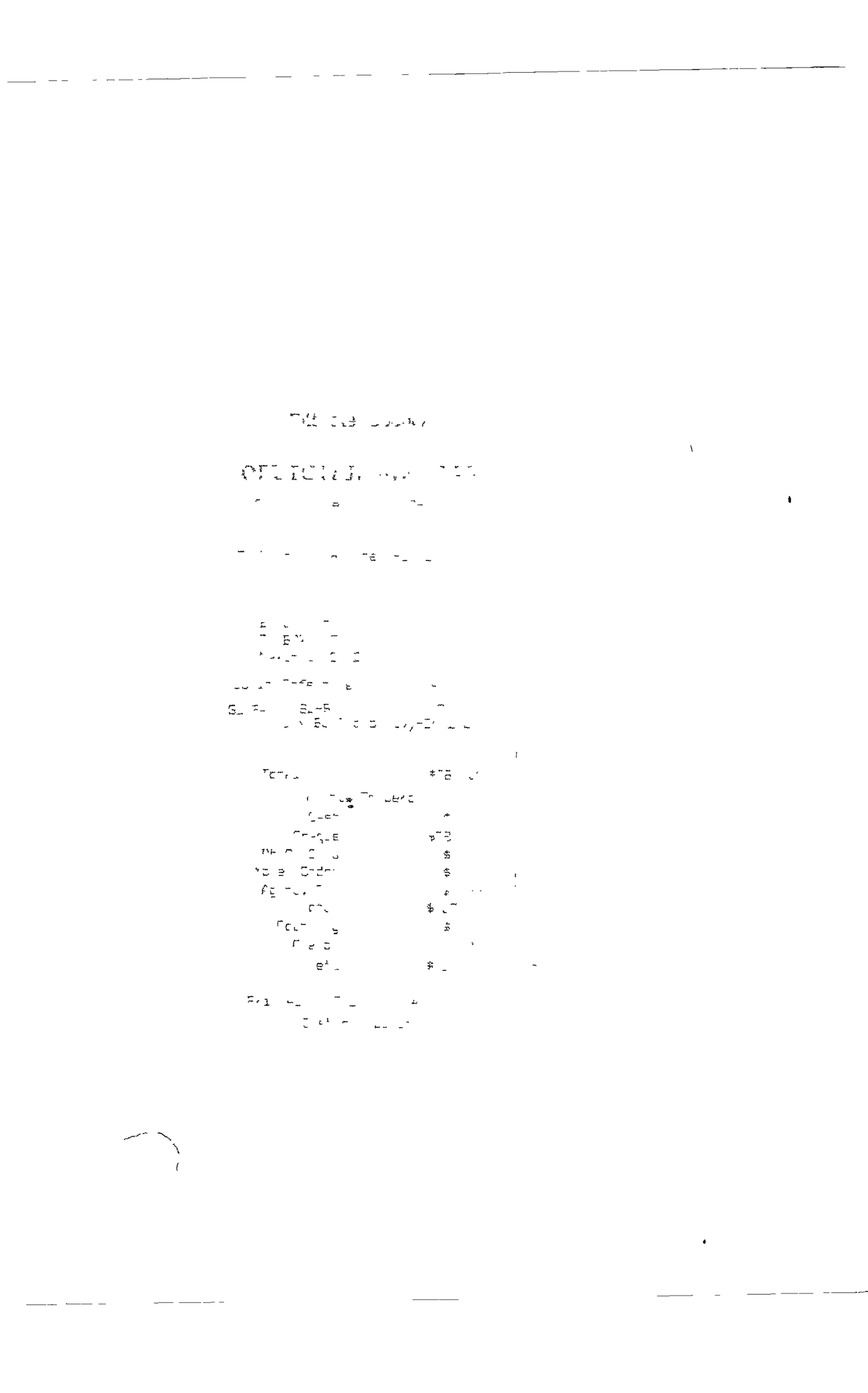


BASI Certificate

Building Sustainability Index www basix nsw gov au

Alterations and Additions

Certificate number A85002

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 25 May 2010

NSW GOVERNMENT | Planning

Project address	
Project name	Brad White & Rebecca Lennon
Street address	11 Whale Beach Road Avalon Beach 2107
Local Government Area	Pittwater Council
Plan type and number	Deposited Plan 17189
Lot number	127
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 does not include a pool (and/or spa)

Fixtures and systems	Show on DA Plans	Show on CC/CDC Plans & specs	Certifier Check
Hot water			
The applicant must install the following hot water system in the development gas instantaneous	✓	✓	✓
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 enclosed subfloor framed (R0 7)	R0 60 (down) (or R1 30 including construction)	
suspended floor above garage framed (R0 7)	nil	
floor above existing dwelling or building	nil	
external wall external insulated façade system (EIFS)(façade panel 75 mm)	nil	
raked ceiling pitched/skillion roof framed	ceiling R2 24 (up) roof foil backed blanket (55 mm)	dark (solar absorptance > 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 pyrolytic 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	✓	✓	✓
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	NW	5 76	0	0	eave/verandah/pergola/balcony >=900 mm	improved aluminium, single clear, (U-value 6 44, SHGC 0 75)
W2	NE	2 25	0	0	eave/verandah/pergola/balcony >=450 mm	improved aluminium, single pyrolytic low-e, (U-value 4 48 SHGC 0 46)
W3	NE	3 6	0	0	eave/verandah/pergola/balcony >=450 mm	improved aluminium, single pyrolytic low-e, (U-value 4 48, SHGC 0 46)
W4	NE	0 81	0	0	eave/verandah/pergola/balcony	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			
					>=450 mm	6 44 SHGC 0 75)			
W5	NE	2 16	0	0	eave/verandah/pergola/balcony >=450 mm	improved aluminium, single pyrolytic low-e, (U-value 4 48, SHGC 0 46)			
W6	SE	14 8	0	0	eave/verandah/pergola/balcony >=900 mm	improved aluminium, single clear, (U-value 6 44, SHGC 0 75)			
W7	SW	1 8	0	0	eave/verandah/pergola/balcony >=450 mm	improved aluminium, single clear, (U-value 6 44, SHGC 0 75)			
W8	SW	7 92	0	0	eave/verandah/pergola/balcony >=450 mm	improved aluminium single clear, (U-value 6 44, SHGC 0 75)			
W9	SW	1 44	6	3	eave/verandah/pergola/balcony >=450 mm	improved aluminium, single clear, (U-value 6 44 SHGC 0 75)			
W10	NW	3 6	0	0	eave/verandah/pergola/balcony >=750 mm	improved aluminium, single pyrolytic low-e, (U-value 4 48, SHGC 0 46)			
W11	SW	1 26	6	5	eave/verandah/pergola/balcony >=450 mm	improved aluminium, single clear, (U-value 6 44, SHGC 0 75)			
W12	NW	1 57	0	0	eave/verandah/pergola/balcony >=750 mm	improved aluminium, single pyrolytic low-e, (U-value 4 48, SHGC 0 46)			
W13	NW	4 05	0	0	eave/verandah/pergola/balcony >=750 mm	improved aluminium, single pyrolytic low-e, (U-value 4 48, SHGC 0 46)			
W14	NE	1 44	0	0	eave/verandah/pergola/balcony >=450 mm	improved aluminium, single pyrolytic low-e, (U-value 4 48, SHGC 0 46)			
W15	NW	1 12	0	0	eave/verandah/pergola/balcony >=750 mm	improved aluminium single pyrolytic low-e, (U-value 4 48 SHGC 0 46)			
W16	NE	3 6	0	0	eave/verandah/pergola/balcony >=450 mm	improved aluminium, single pyrolytic low-e, (U-value 4 48 SHGC 0 46)			
W17	SE	3 6	0	0	eave/verandah/pergola/balcony	improved aluminium, single clear, (U-value			

Glazing requirements

Window / door no.	Orientation	Area of glass inc. frame (m2)	Overshadowing Height (m)	Overshadowing Distance (m)	Shading device	Frame and glass type
					>=750 mm	6 44, SHGC 0 75)
W18	SW	1 26	0	0	eave/verandah/pergola/balcony >=450 mm	improved aluminium single clear, (U-value 6 44, SHGC 0 75)
W19	SW	1 57	0	0	eave/verandah/pergola/balcony >=450 mm	improved aluminium, single clear (U-value 6 44, SHGC 0 75)
W20	SW	1 26	6	3	eave/verandah/pergola/balcony >=450 mm	improved aluminium, single clear, (U-value 6 44, SHGC 0 75)
W21	NW	2 4	0	0	eave/verandah/pergola/balcony >=750 mm	improved aluminium, single pyrolytic low-e, (U-value 4 48, SHGC 0 46)

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

Skylights

The applicant must install the skylights in accordance with the specifications listed in the table below ✓ ✓ ✓

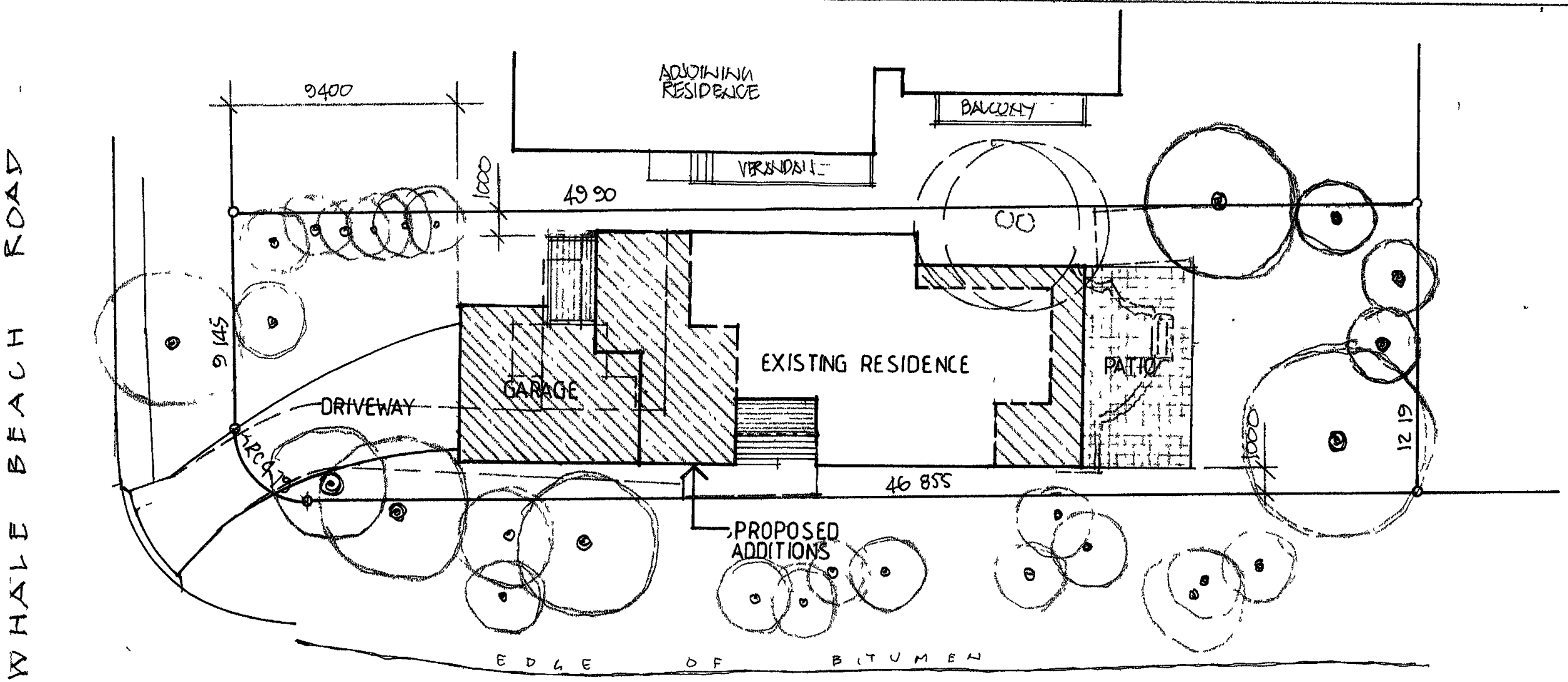
The following requirements must also be satisfied in relation to each skylight ✓ ✓

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

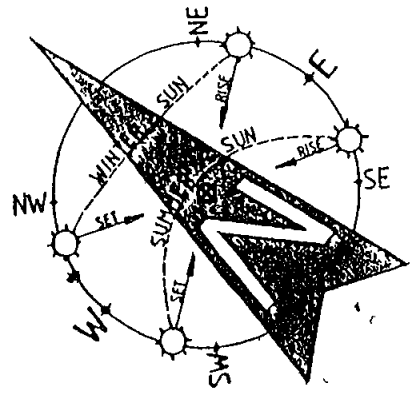
Skylight number	Area of glazing inc. frame (m2)	Shading device	Frame and glass type
S1	1 2	no shading	timber, double clear/air fill, (or U-value 4 3, SHGC 0 5)

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



SITE PLAN

LOT 127 IN PD 17180



NOTES

1. THE BUILDER IS TO CHECK AND CONFIRM ALL NECESSARY DIMENSIONS AND LEVELS ON SITE PRIOR TO ORDERING MATERIALS AND COMMENCING CONSTRUCTION **DO NOT SCALE OFF THE DRAWING**
2. SHOULD ANY DEVELOPMENT OR CONSTRUCTION OCCUR ON OR NEAR BOUNDARIES THE BOUNDARIES SHOULD BE CLEARLY MARKED ON SITE BY THE REGISTERED LAND SURVEYORS

The ... of this plan by Insight Building Certifiers Pty Ltd does not ...

insight building certifiers pty ltd
CONSTRUCTION CERT NO 2011/4166
CONSTRUCTION CERTIFICATE PLANS
I certify that the work completed in accordance with these plans & specifications will comply with the regulations referred to in Section 81A(5) of the Environmental Planning & Assessment Act 1979
FEB 2011
T Bowden Accreditation No BPB0042

DEVELOPMENT CALCULATIONS		
SITE AREA	606 40 SQUARE METRES	
DESCRIPTION	EXISTING SQM	PROPOSED SQM
FLOOR	111.30	174 43
ROOF	111 30	174 43
PARKING	14 25	—
SHED	8 74	—
DRIVEWAY	48 10	39 90
DECKING	61 40	—
PORCH	—	9 86
GARAGE	—	44 10
PATIO	10 25	42 50
VERANDAH	—	6 60
TOTAL HARD SURFACE	333 28 (55 13%)	317 89 (52 42%)

COUNCIL COPY

1 Builder to check and confirm all necessary dimension on site prior to construction Do ot scale the drawing
2 All dimensions that relate to its boundaries and easements are subject to verificatio by site survey
3 All work to be in accordance ith BUILDING CODE f AUSTRALIA & to the satisfaction of local council requirements & other authorities.
4 All timbe c nstructio l be in accordance with the TIMBER FRAMING cod
5 Any detailing in addition to what is supplied shall be resolved between the owner nd the build r l the owner's approval except for ny structural details or desig which is to be supplied by a Structural Engineer
6 Roof water & sub-soil drainage to be disposed of in the approved manner or as directed by local council inspectors
7 All electrical power & light outlets to be determined by ow er
8 Make good and repair all existing finishes damaged by new work Reus existing materials wher possible.

N.	AMENDMENT	DATE

J D EVANS and COMPANY PTY LTD
BUILDING DESIGN CONSULTANTS
74 RIVIERA AVE AVALON BEACH 2107
Ph (02) 9918 9206 F (02) 9973 2454
M obile 0418 976 596 WWW jdeco com au
MEMBER BUILDING DESIGNERS ASSOCIATION OF NEW SOUTH WALES

PROJECT
PROPOSED ALTERATIONS/ADDITIONS
No 11 WHALE BEACH ROAD
AVALON BEACH N S W 2107
CLIENT
BRAD WHITE & REBECCA LENNON

DATE 12/5/2010 | SCALE 1 200
DRAWN JDE | CHECKED
DRAWING No 1290-1 | ISSUE

SCHEDULE OF BASIX COMMITMENTS

WATER COMMITMENTS

FIXTURES

1 ALL NEW & ALTERED SHOWER HEADS TO HAVE A FLOW RATE NO GREATER THAN 9 LITRES PER MINUTE OR **3 STAR** WATER RATING

2 ALL NEW & ALTERED TOILET FLUSHING SYSTEMS TO HAVE A FLOW RATE NO GREATER THAN 4 LITRES PER AVERAGE FLUSH OR A MINIMUM **3 STAR** WATER RATING

3 ALL NEW & ALTERED TAPS TO HAVE A FLOW RATE NO GREATER THAN 9 LITRES PER MINUTE OR **3 STAR** WATER RATING

THERMAL COMFORT COMMITMENTS

CONSTRUCTION INSULATION REQUIREMENTS

1 THE PROJECT MUST BE CONSTRUCTED IN ACCORDANCE WITH ALL THERMAL PERFORMANCE SPECIFICATIONS SET OUT IN THE CERTIFICATE NUMBER **A85002** AND IN ACCORDANCE WITH THOSE ASPECTS OF THE DEVELOPMENT APPLICATION WHICH WERE USED TO CALCULATE THOSE SPECIFICATIONS

WINDOWS & GLAZED DOORS GLAZING REQUIREMENTS

1 THE APPLICANT MUST INSTALL THE WINDOWS GLAZED DOORS AND SHADING DEVICES IN ACCORDANCE WITH THE SPECIFICATIONS LISTED IN THE CERTIFICATE NUMBER **A85002** RELEVANT OVERSHADOWING SPECIFICATIONS MUST BE SATISFIED FOR EACH WINDOW AND GLAZED DOOR

2 FOR PROJECTIONS DESCRIBED IN MILLIMETRES THE LEADING EDGE OF EACH EAVE PERGOLA VERANDAH BALCONY OR AWNING MUST NOT BE OR MORE THAN 500MM ABOVE THE HEAD OF A WINDOW OR HEAD OF A GLAZED DOOR & NO MORE THAN 2400MM ABOVE THE SILL

ENERGY COMMITMENTS

HOT WATER

1 THE APPLICANT MUST HAVE A HOT WATER SYSTEM WITH A HIGH ENERGY RATING OF **GAS INSTANTANEOUS**

LIGHTING

1 THE APPLICANT MUST HAVE A MINIMUM OF 40% OF NEW AND ALTERED LIGHT FIXTURES ARE FITTED WITH FLUORESCENT COMPACT FLUORESCENT OR LIGHT EMITTING DIODE (LED) LAMPS

VENTILATION

1 THE APPLICANT MUST HAVE INSTALLED THE FOLLOWING EXHAUST SYSTEM

- a AT LEAST 1 BATHROOM NO MECHANICAL VENTILATION (IE NATURAL)
- b KITCHEN INDIVIDUAL FAN NOT DUCTED OPERATION CONTROL MANUAL SWITCH ON/OFF
- c LAUNDRY NATURAL VENTILATION ONLY

NATURAL LIGHTING

1 THE DEVELOPMENT MUST HAVE A WINDOW IN THE KITCHEN FOR NATURAL VENTILATION

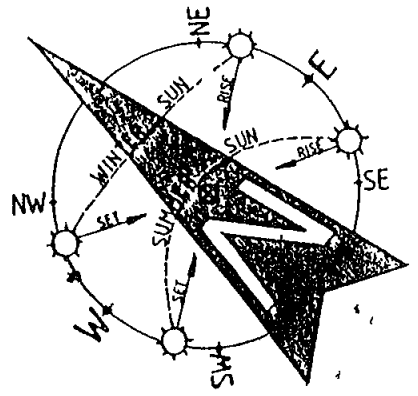
2 THE DEVELOPMENT MUST HAVE A WINDOW IN ALL BATHROOMS AND TOILETS FOR NATURAL VENTILATION

OTHER

1 THE APPLICANT MUST INSTALL A GAS COOKTOP AND ELECTRIC OVEN IN THE KITCHEN

2 THE APPLICANT MUST CONSTRUCT THE REFRIGERATOR SPACE IN THE RESIDENCE SO THAT IT IS WELL VENTILATED AS DEFINED IN THE **BASIX** DEFINITIONS

3 THE APPLICANT MUST HAVE INSTALLED A FIXED OUTDOOR CLOTHES DRYING LINE



NOTES

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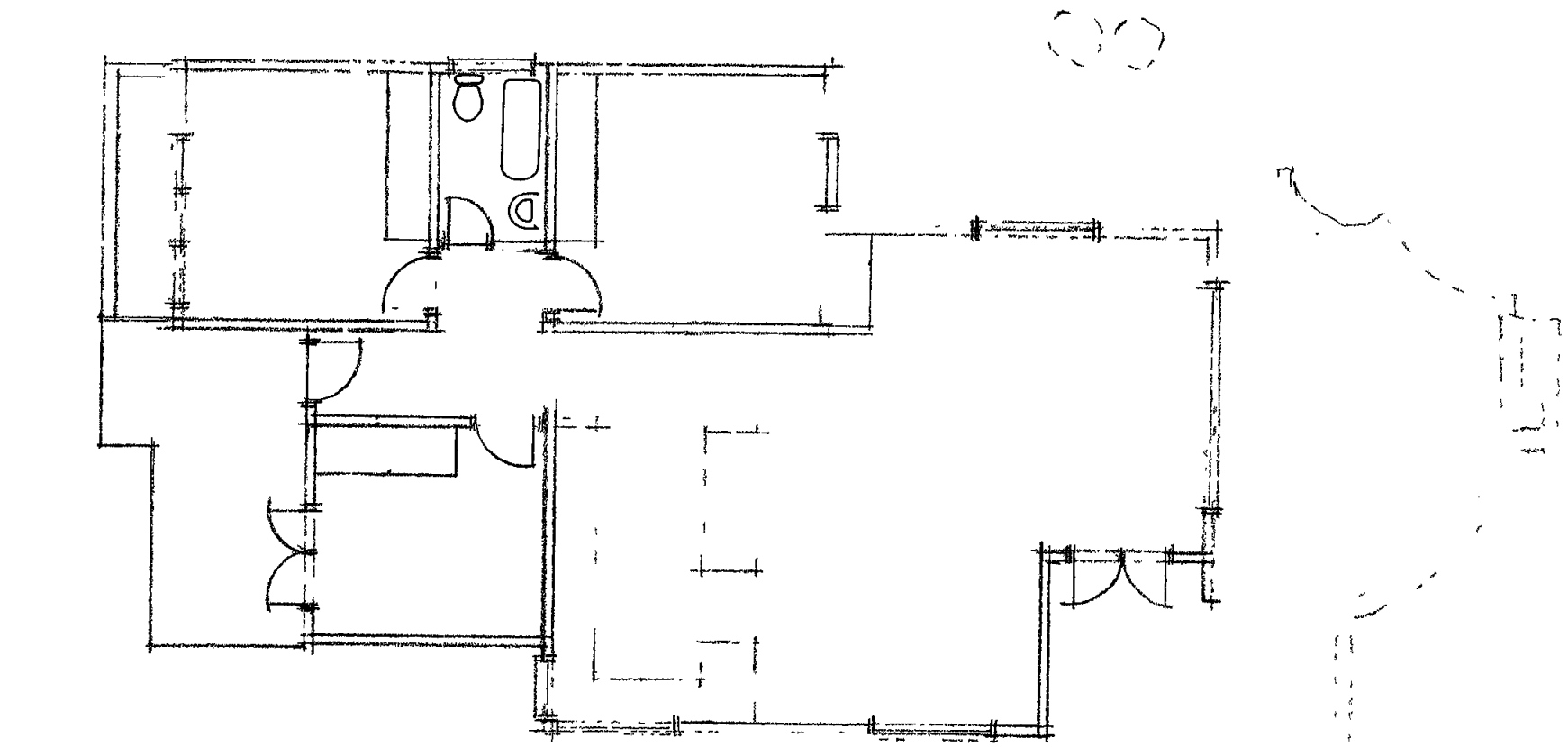

EXISTING GROUND FLOOR

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4 All timber construction to be in accordance with the TIMBER FRAMING ode
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6 Roof water & sub-soil drainage to be disposed of in th approved manner or s directed by local council inspectors
7 All electrical power & light outlets to be determined by owner
8 Make good and repair all existing finishes damaged by new work. Reuse existing materials where possible.

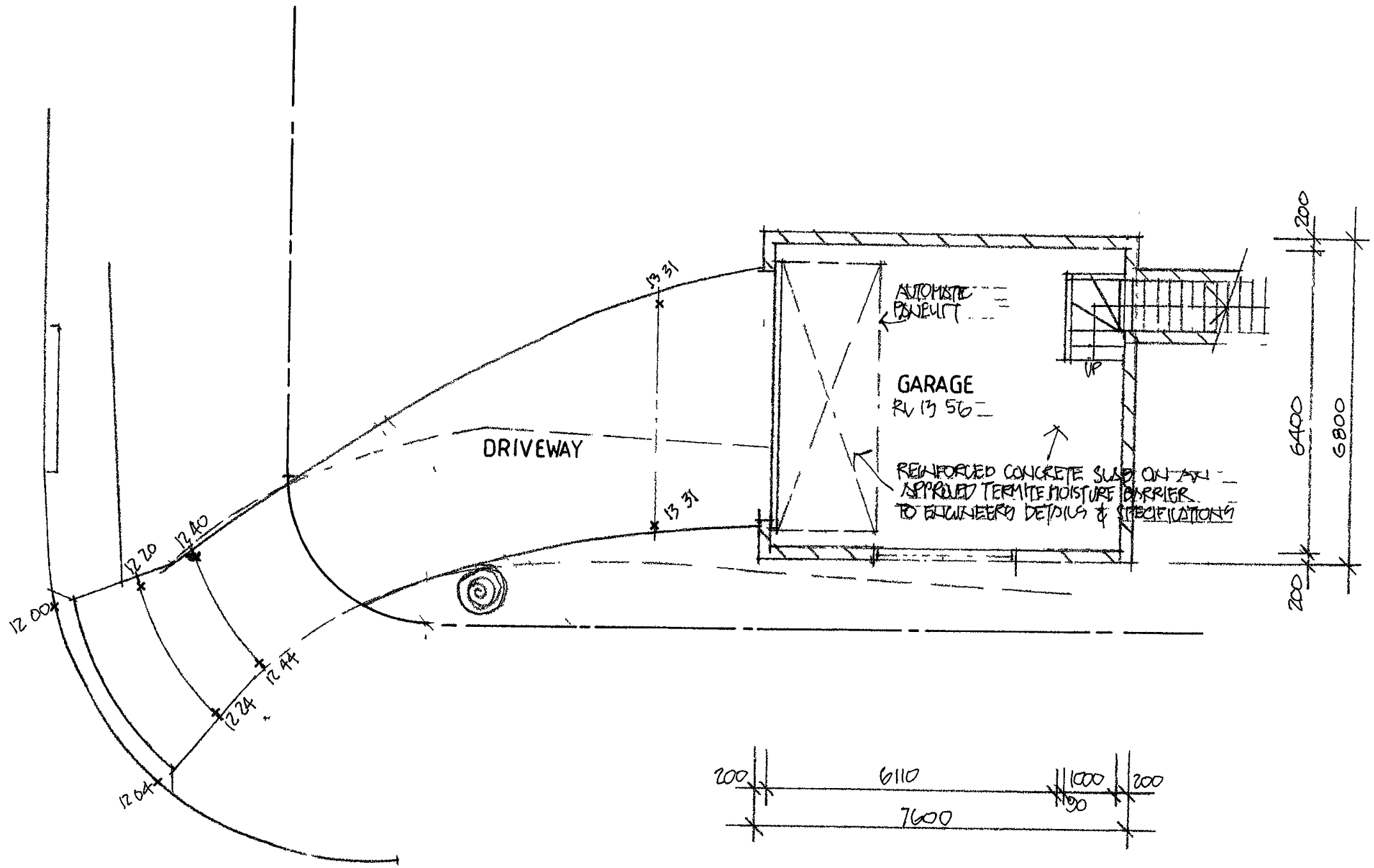
No.	AMENDMENT	DATE

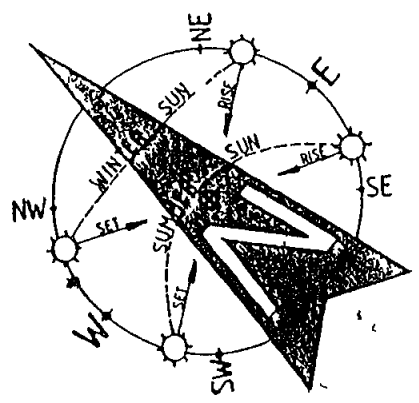
J D EVANS and COMPANY PTY LTD
BUILDING DESIGN CONSULTANTS
74 RIVIERA AVE AVALON BEACH 2107
Phone (02) 9918 9206 F (02) 9973 2454
Mobile 0410 976 536 www jdeco com au
MEMBER BUILDING DESIGNERS ASSOCIATION

PROJECT
PROPOSED ALTERATIONS/ADDITIONS
No 11 WHALE BEACH ROAD
AVALON BEACH N S W 2107
CLIENT
BRAD WHITE & REBECCA LENNON

DATE 12/5/2010	SCALE 1:100
DRAWN JDE.	CHECKED

DRAWING No 1290-2 ISSUE





DRIVEWAY & GARAGE FLOOR PLAN

NOTES

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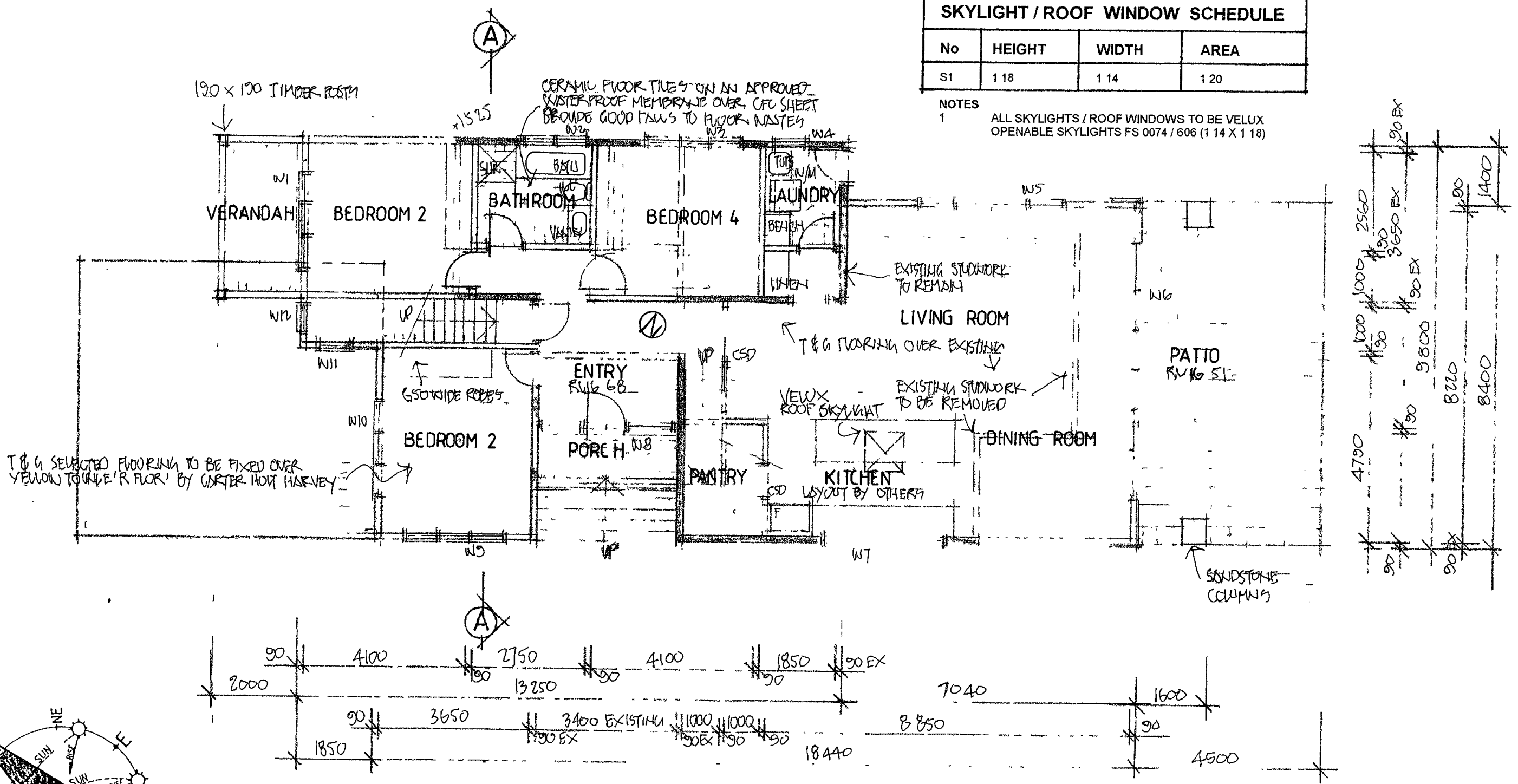
Ph n (02) 9918 9206 Fa (02) 9973 2454
M b l 0418 976 596 WWW jdeco com au
MEMBER BUILDING DESIGNERS ASSOCIATION OF NEW SOUTH WALES INC.

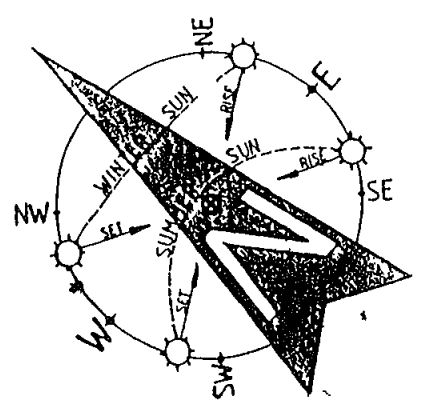
PROJECT
PROPOSED ALTERATIONS/ADDITIONS
No 11 WHALE BEACH ROAD
AVALON BEACH N S W 2107
CLIENT
BRAD WHITE & REBECCA LENNON

DATE 12/5/2010	SCALE 1 100
DRAWN JDE.	CHECKED
DRAWING No 1290-3	ISSUE

SKYLIGHT / ROOF WINDOW SCHEDULE			
No	HEIGHT	WIDTH	AREA
S1	1 18	1 14	1 20

NOTES
1 ALL SKYLIGHTS / ROOF WINDOWS TO BE VELUX OPENABLE SKYLIGHTS FS 0074 / 606 (1 14 X 1 18)





GROUND FLOOR PLAN

FOR SCHEDULE OF BASIX COMMITMENTS REFER TO DRAWING NUMBER 1290 - 2

NOTES
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Ⓢ smoke alarm

NOTES
1 LIGHTING OF BATHROOM AND WC TO BE IN ACCORDANCE WITH PART 3 8 4 OF THE BUILDING CODE OF AUSTRALIA AND AS / NZS 1680 0
2 VENTILATION OF BATHROOM AND WC TO BE IN ACCORDANCE WITH PART 3 8 3 3 OF THE BUILDING CODE OF AUSTRALIA AND AS / NZS 1680 2
3 THE DOOR TO THE BATHROOM IS REQUIRED TO COMPLY WITH AND IN ACCORDANCE WITH THE BUILDING CODE OF AUSTRALIA AMENDMENT 3 PART 3 8 3 3 (TO EITHER OPEN OUTWARDS SLIDE OR BE READILY REMOVABLE FROM THE OUTSIDE OF THE COMPARTMENT)

1 Builde to check and confirm all necessary dimension on all prior to construction Do not scale th drawing
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3 All work to be in accordance with BUILDING CODE of AUSTRALIA & to the satisfaction of local council requirements & ther utherities
4 All timbe onstruction t be i accordance with the TIMBER FRAMING" code
5 Any detailing i addition to what is supplied shall be resolved between the owner and th builder to the owner' approval, except for any structural details or design hich is to be supplied by Structural Engi eer
6 Roof water & sub-soil drainage to be disposed of in the approved manner or as directed by local coun il inspectors
7 All electrical power & light outlets to be determined by owner
8 Make good and repair all existing finishes damaged by new work Reuse existing material here possibl

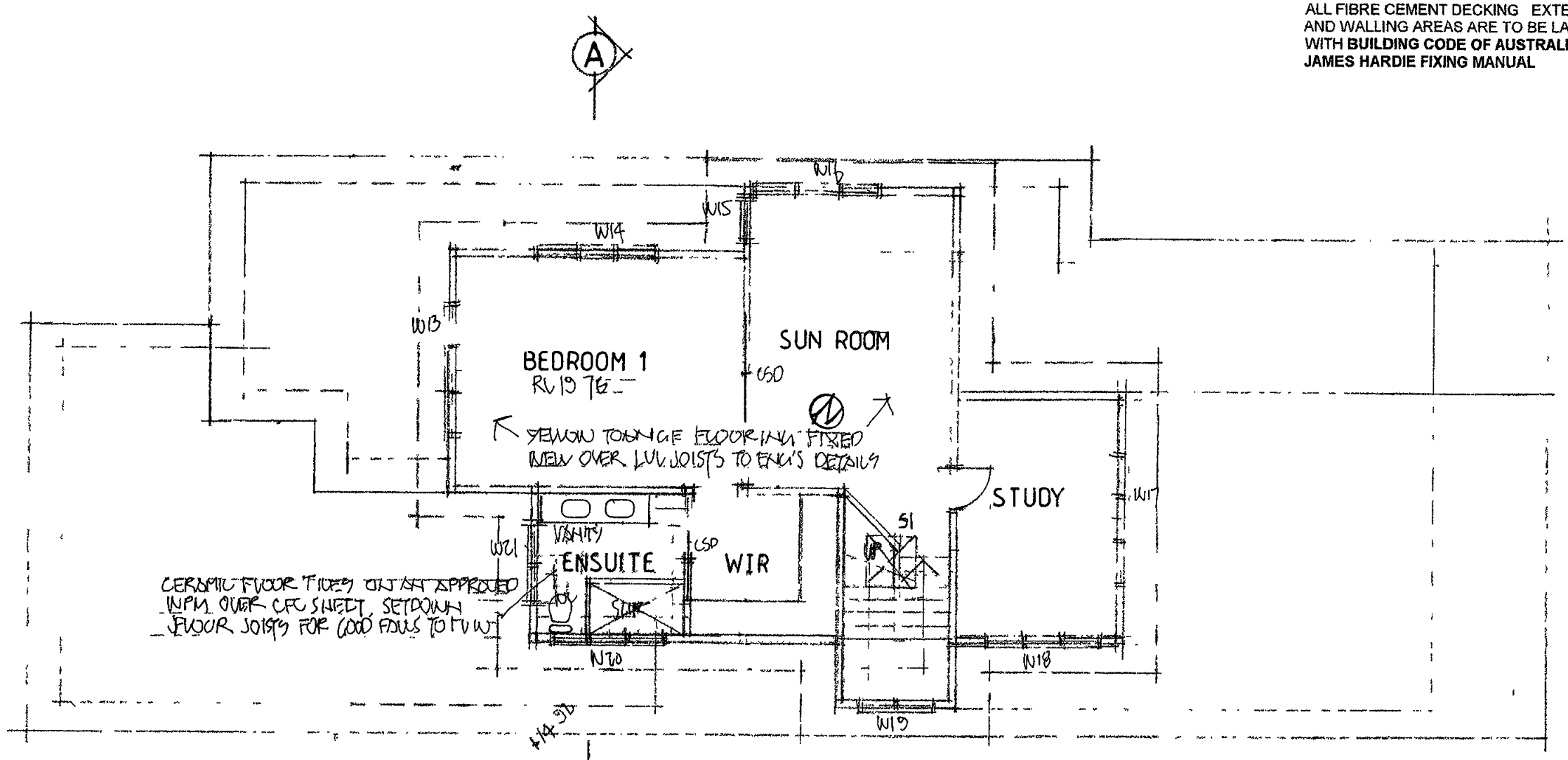
No	AMENDMENT	DATE

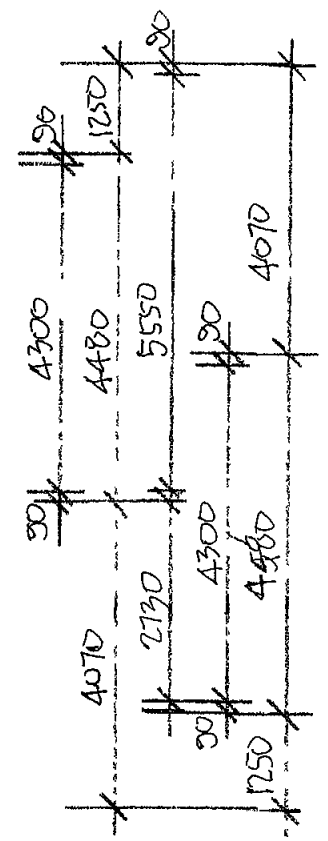
J D EVANS and COMPANY PTY LTD
BUILDING DESIGN CONSULTANTS
74 RIVIERA AVE AVALON BEACH, 2107
Ph n (02) 9918 3206 F (02) 9973 2454
M b i 0418 976 596 WWW jdeco com au
MEMBER BUILDING DESIGNERS ASSOCIATION OF NEW SOUTH WALES INC.

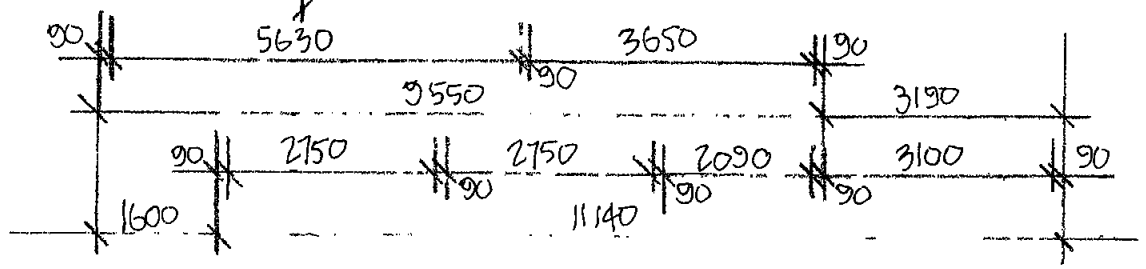
PROJECT
PROPOSED ALTERATIONS/ADDITIONS
No 11 WHALE BEACH ROAD
AVALON BEACH N S W 2107
CLIENT
BRAD WHITE & REBECCA LENNON

DATE 12/5/2010 SCALE 1 100
DRAWN JDE. CHECKED
DRAWING N 1290-4 ISSUE

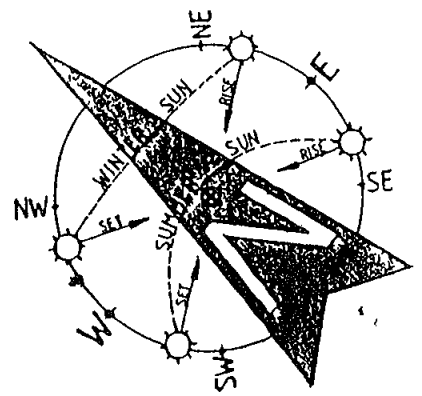
NOTE
ALL FIBRE CEMENT DECKING EXTERNAL CLADDING WET FLOORING AND WALLING AREAS ARE TO BE LAID AND FIXED IN ACCORDANCE WITH **BUILDING CODE OF AUSTRALIA** AND THE APPROPRIATE **JAMES HARDIE FIXING MANUAL**







FIRST FLOOR PLAN



NOTES
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⊘ SMOKE ALARM

NOTES
1. SMOKE ALARMS TO BE IN ACCORDANCE WITH PART 3 7 2 OF THE BUILDING CODE OF AUSTRALIA AND AS / NZS 3786 / 1993
2. TERMITE RISK MANAGEMENT TO BE IN ACCORDANCE WITH PART 3 1 3 OF THE BUILDING CODE OF AUSTRALIA
3. SOUND INSULATION TO BE IN ACCORDANCE WITH PART 3 8 6 OF THE BUILDING CODE OF AUSTRALIA
4. ALL EXTERNAL GLAZING TO HAVE A MAXIMUM REFLECTIVITY INDEX OF 25%
5. ALL GLAZED ASSEMBLIES TO COMPLY WITH AS 2047 AND AS 1288
6. WATERPROOFING OF ALL WET AREAS TO COMPLY WITH AS 3740 2004

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4 All timbe c nstruction to be in accordance with the TIMBER FRAMING code
5 Any detailing in addition to what is supplied shall be reached betwee the owner d the builder t the owner' approval except for any structural details or design which is to be supplied by a Structural Engineer
6 Roof water & sub-soil drainage to be disposed of in the approved manner or directed by local au cil inspectors
7 All electrical power & light outlets to be determined by owner
8 Make good and repair all existing finishes damaged by new work Reuse existing material where possible

No	AMENDMENT	DATE

J D EVANS and COMPANY PTY LTD
BUILDING DESIGN CONSULTANTS
74 RIVIERA AVE AVALON BEACH 2107
Ph n (02) 9918 9206 F (02) 9973 2454
Mob l 0418 276 576 WWW jdeco com au
MEMBER BUILDING DESIGNERS ASSOCIATION OF NEW SOUTH WALES INC.

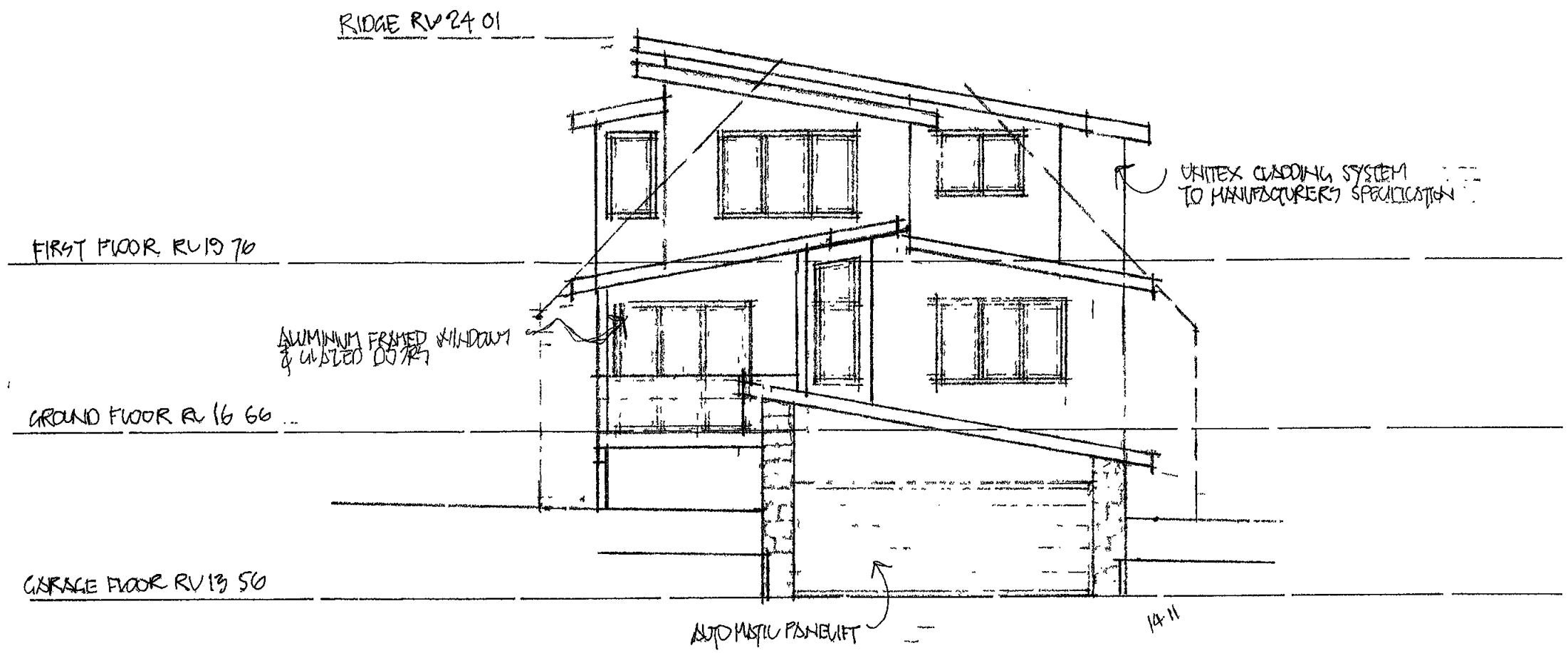
PROJECT
PROPOSED ALTERATIONS/ADDITIONS
No 11 WHALE BEACH ROAD
AVALON BEACH N S W 2107
CLIENT
BRAD WHITE & REBECCA LENNON

DATE 12/5/2010 SCALE 1 100
DRAWN JDE. CHECKED
DRAWING No 1290-5 ISSUE

WINDOW & GLAZED DOOR SCHEDULE			
No	HEIGHT	WIDTH	AREA
W1	2 40	2 40	5 76
W2*	1 50	1 50	2 25
W3*	1 50	2 40	3 60
W4	0 90	0 90	0 81
W5*	0 60	3 60	2 16
W6	2 40	6 20	14 88
W7	0 60	3 00	1 80
W8	2 40	3 30	7 92
W9	0 60	2 40	1 44
W10*	2 40	1 50	3 60
W11	2 10	0 60	1 26
W12*	2 10	0 75	1 57
W13*	1 50	2 70	4 05
W14*	0 60	2 40	1 44
W15*	1 50	0 75	1 12
W16*	1 50	2 40	3 60
W17	1 50	2 40	3 60
W18	0 60	2 10	1 26
W19	2 10	1 50	1 57
W20	0 60	2 10	1 26
W21*	0 90	1 50	2 40

NOTE

1 ALL WINDOWS & GLAZED DOORS TO BE **IMPROVED ALUMINIUM**
2 WINDOWS & GLAZED DOORS TO BE FITTED WITH **SINGLE CLEAR** GLAZED (U - VALUE 6 44 SHGC 0 75)
3 WINDOWS & GLAZED DOORS DENOTED THUS * TO BE FITTED WITH **SINGLE PROLYTIC LOW E** GLAZING (U - VALUE 4 48 SHGC 0 46)



NORTH - WEST ELEVATION

NOTES

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BUILDING DESIGN CONSULTANTS
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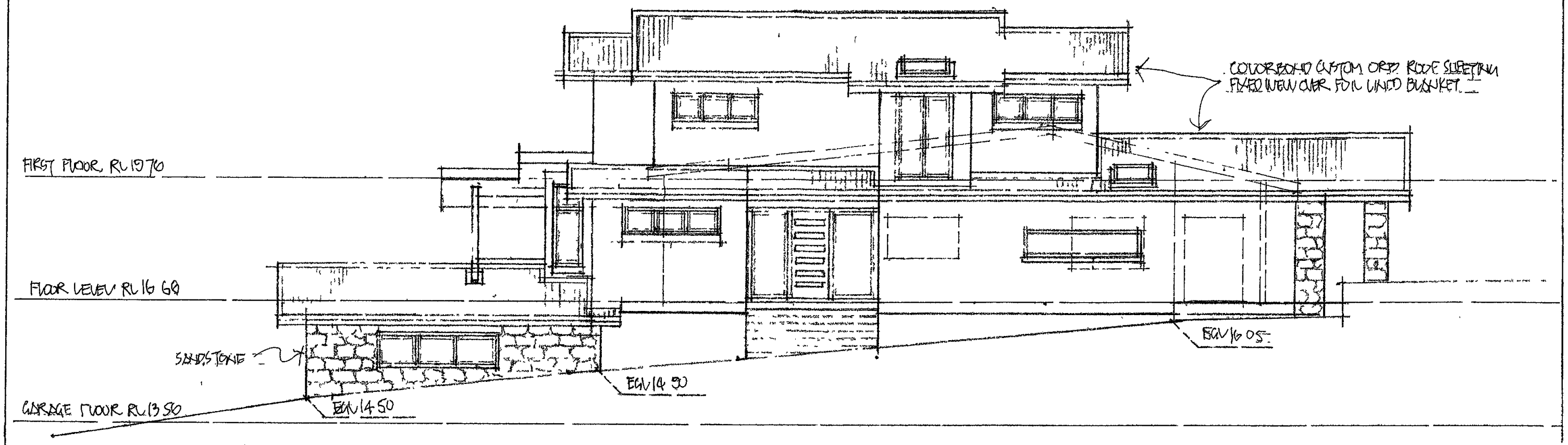
P/o (02) 9918 9206 F (02) 9973 2454
M b/i 0418 976 596 WWW jdeco com au
MEMBER BUILDING DESIGNERS ASSOCIATION OF NEW SOUTH WALES INC.

PROJECT
PROPOSED ALTERATIONS/ADDITIONS
No 11 WHALE BEACH ROAD
AVALON BEACH N S W 2107
CLIENT
BRAD WHITE & REBECCA LENNON

DATE 12/5/2010	SCALE 1 100
DRAWN JDE	CHECKED
DRAWING No 1290-6	ISSUE



SOUTH-WEST ELEVATION

NOTES

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PROJECT
PROPOSED ALTERATIONS/ADDITIONS
No 11 WHALE BEACH ROAD
AVALON BEACH N S W 2107
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BRAD WHITE & REBECCA LENNON

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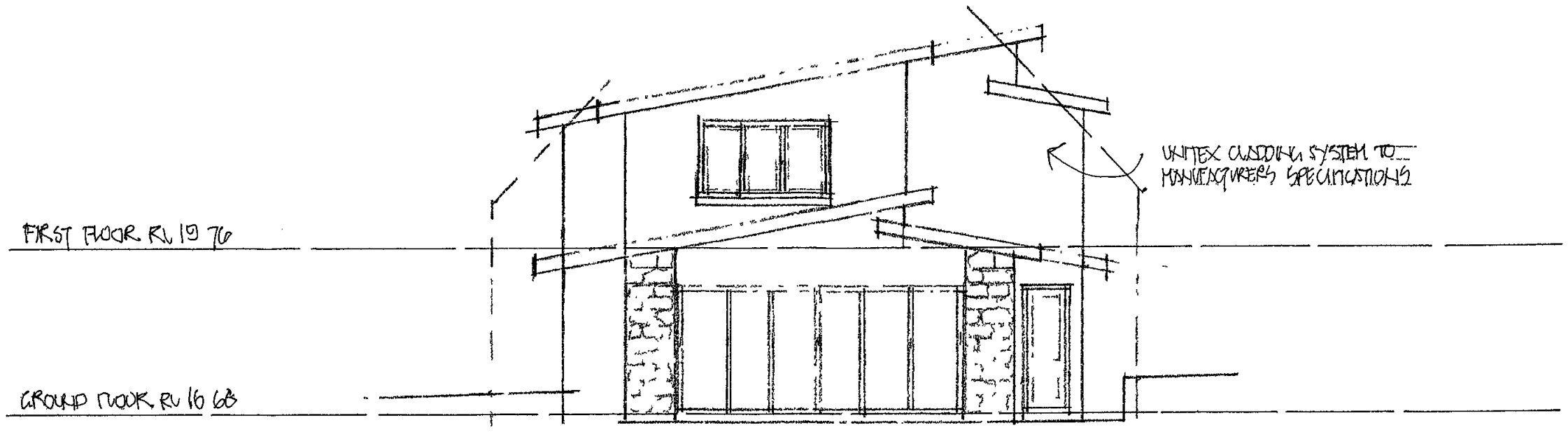
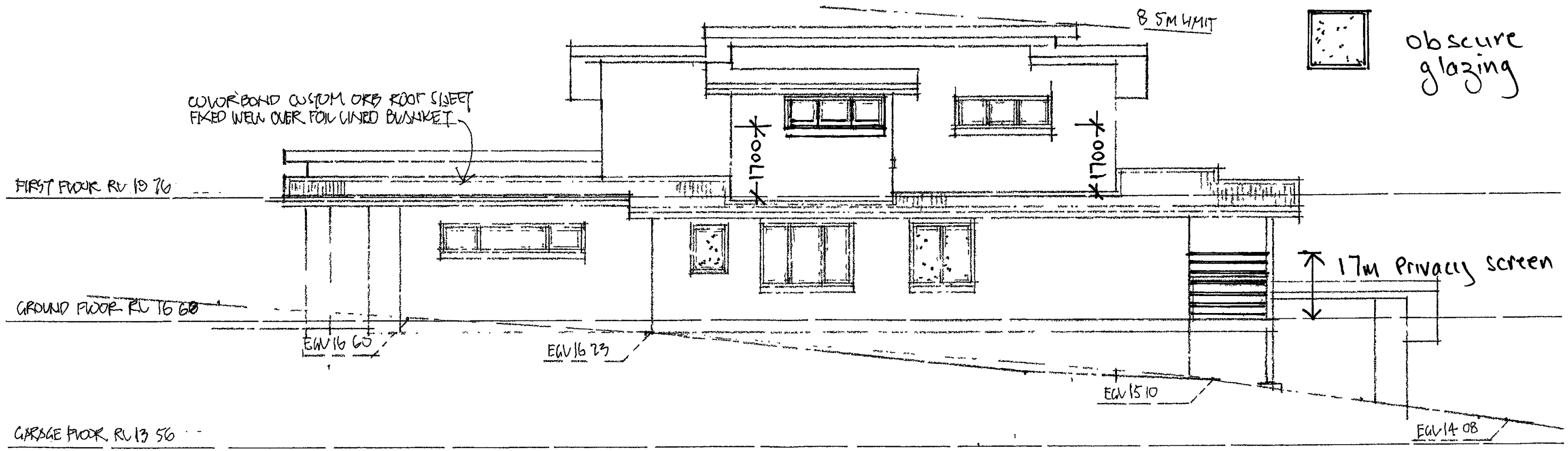
DRAWN JDE	CHECKED
DRAWING No. 1290-7	ISSUE



SOUTH - EAST ELEVATION



NORTH - EAST ELEVATION

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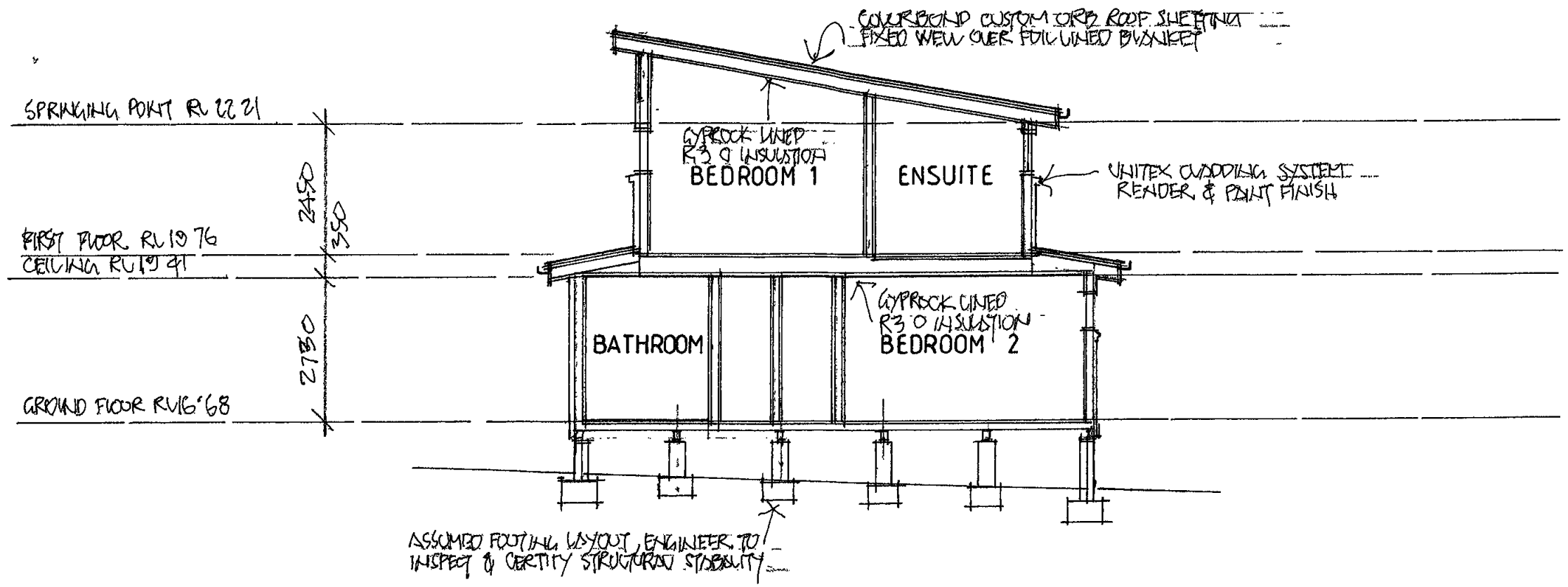
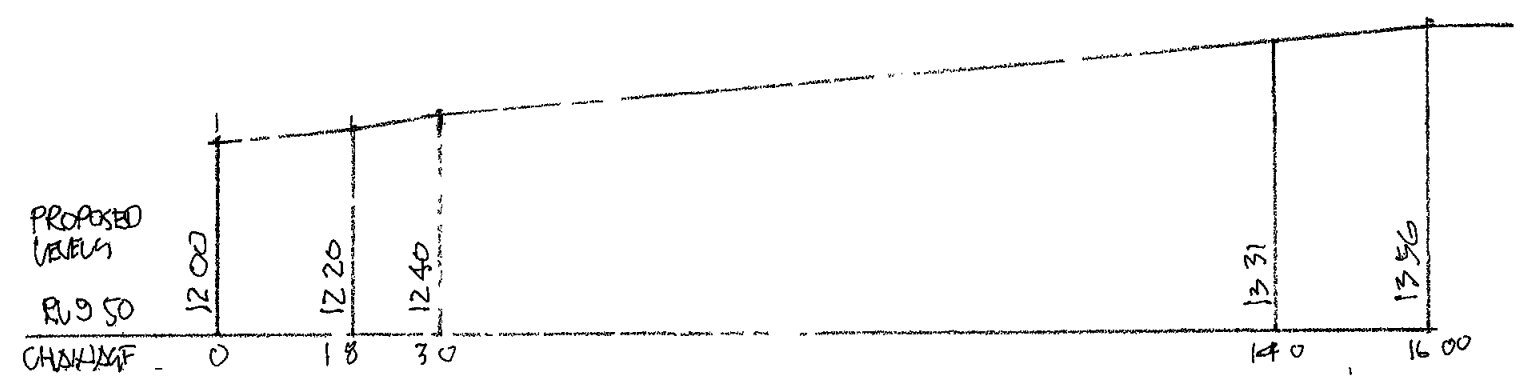
DRAWING No 1290-8 ISSUE



SECTION A - A



LONGITUDINAL SECTION THROUGH DRIVEWAY

NOTES

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PROJECT
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CLIENT
BRAD WHITE & REBECCA LENNON

DATE 12/5/2010	SCALE 1:100
DRAWN JDE	CHECKED
DRAWING No 1290-9	ISSUE

DIRECTORS
Stewart McGeady Rick Wray Brad Seghers

Certificate of Existing Structural Adequacy

Date	28th January 2011	Job No	101145
Client	Brad White	Engineer	Rick Wray

Site 11 Whale Beach Rd, Avalon Beach

Rick Wray of Northern Beaches Consulting Engineers P/L carried out a site inspection at the above residential premises The purpose of the visit was to inspect and comment on the capacity of the existing structure to support the proposed additions and alterations as per approved architectural plans

The assessment consisted of a walk over style inspection of the building

In summary, the dwelling is considered sound and provides an adequate structure for the proposed works, provided that engineering plans are complied with and that all structural works are certified during construction Some minor cracking may occur as the building adjusts to the new load distribution, however, this is not expected to adversely affect the buildings overall structural integrity

Note This certification does not cover any defects to the structure that were not accessible at the time of inspection If in the event that defects are uncovered during construction or become apparent after construction is complete, then the engineer should inspect the areas of concern and prepare a specification for remedial works (These works will be carried out at hourly rates)

If the building is founded on clays of classification 'M' or 'H' movement and cracking is to be expected with changes in the moisture content of the supporting clay

We trust that this certificate meets with your requirements Please contact the author if further clarification is required

NORTHERN BEACHES CONSULTING ENGINEERS P/L

Rick Wray
BE CPEng NPER Director

X \ENG NBC\2010\101145\Cert of Exist doc

PITTWATER

ABN 61 340 837 871
02 9970 1111
02 9970 7150

PO Box 882
Mona Vale NSW 1660
DX 9018 Mona Vale

Ross McWhirter, Project Leader – Road Reserve Management
8am to 4 30pm Mon - Fri
Phone 9970 1207 Mobile 0419 629 007

31 January 2011

Brad White
11 Whale Beach Road
AVALON NSW 2107

Dear Sir,

Re SECTION 139 CONSENT *(Roads Act 1993)* – 11 Whale Beach Road, Avalon

Council grants the applicant(s), Brad White consent to construct a driveway crossing at 11 Whale Beach Road, Avalon

This Section 139 Consent is granted subject to the following conditions -

1 The Applicant(s) shall, at all times, keep indemnified Council from and against all actions, suits, proceedings, losses, costs, damages, changes, claims and demands in any way arising out of or by reason of anything done or omitted to be done by the Applicant(s) in respect of the work in question

2 The Applicant(s), at all times for the duration of this Consent, will not interrupt or otherwise disturb the traffic flow on the road without first obtaining the consent of Council

3 In the event that the driveway requires the use of a mobile concrete pump in the road reserve, separate approval must be obtained from Council for that activity Form No UI 313 (*Application to Stand Construction Plant on a Public Road Reserve*) must be lodged with the applicable fees

4 The Applicant(s) shall be responsible for the cost of all service and utility adjustments associated with the construction of the driveway Contact Dial Before You Dig (1100) at least two working days before the works are due to start for information on the location of underground pipes and cables

5 The Applicant(s) shall make good any damage caused to the property of any person or any property of Council by reason of the carrying out of any work by the Applicant(s) under the Conditions of this Consent

6 Should the Applicant(s) fail to comply with any of these conditions or any requirement of Council as provided then this Consent shall permanently lapse and any part of the work remaining within the road at that time shall be deemed to be an obstruction or encroachment under *Section 107* of the *Roads Act 1993*

7 This Consent receipt must be held on the job and produced to any officer of Council when called upon

8 The Applicant(s) shall accept all responsibility for public safety during the construction of the works

9 Compliance with the conditions of Development Consent N0288/10 that relate to the road reserve

10 A FINAL INSPECTION OF THE COMPLETED WORK IS REQUIRED

Yours faithfully

R McWhirter

Ross McWhirter
PROJECT LEADER – ROAD RESERVE MANAGEMENT

Enclosures - Information for Access Driveway Profiles
- Driveway profile (H)
- List of Council Authorised Concrete Contractors for Vehicle Footpath Crossings and Associated Works

PITTWATER COUNCIL

Information for Access Driveway Profiles
1 July 2010 – 30 June 2011

To	Brad White	**Date**	31 January 2011
Postal Address	11 Whale Beach Road AVALON 2107		
		Receipt No	**296017**
		Amount	$100

ACCESS DRIVEWAY PROFILE AT **11 Whale Beach Road, Avalon**

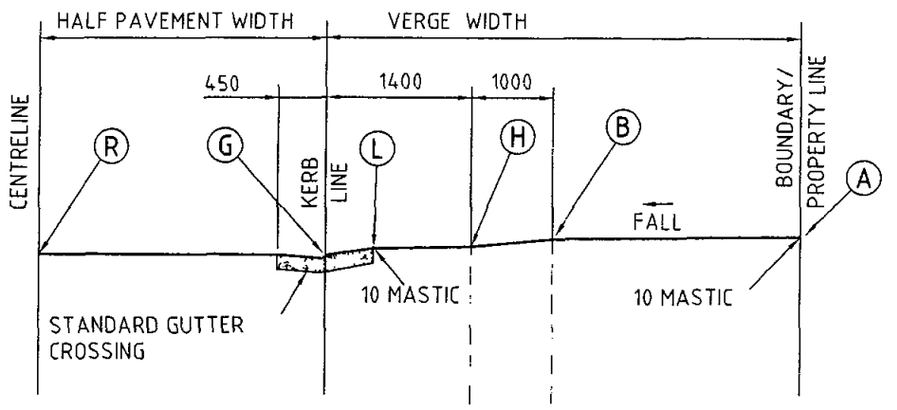
- The proposed vehicular access driveway profile shall be as per the enclosed plan **H**
- **Type of Construction** Domestic
    - **For Residential single & dual occupancy** - 20MPa Concrete, 150mm thick with SL82 mesh
- **Slab Construction** Vehicular access slab 5 2 metres long, 3 metres wide at gutter crossing to 3 metres wide at the boundary
- Council will only permit an absolute maximum gradient of 25% (1 in 4) measured at any point on the driveway and that an ease may be required for access into the car stand area, carport or garage Refer to relevant attached profile
- All work within the road reserve (including excavation) in connection with the above, is to be carried out by authorised Contractors only,
- Quotations for the work specified above should be obtained from any of the contractors on Council's list and should be for the whole of the work stated
- Construction of vehicular access will be strictly in accordance with the profile supplied, and
- A formwork inspection by Council is required prior to construction (Provide minimum 24 hours notice)

1	**NOTE THAT THIS INFORMATION SHEET DOES NOT CONSTITUTE AN APPROVAL TO COMMENCE OR PROCEED WITH ANY WORK ON SITE**
2	**A SECTION 139 CONSENT UNDER THE ROADS ACT – 1993 IS REQUIRED (FORM UI302)**
3	**FAILURE TO OBTAIN SUCH CONSENT PRIOR TO COMMENCING WORK WILL INCUR A PENALTY**

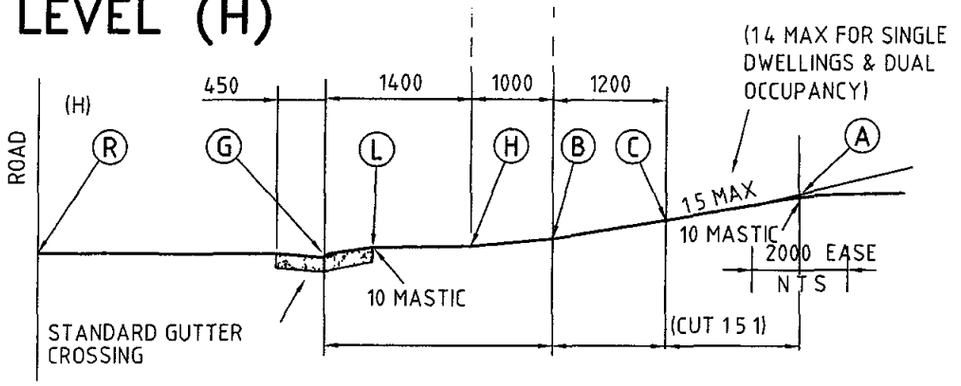
R McWhirter

Ross McWhirter
PROJECT LEADER – URBAN INFRASTRUCTURE
Telephone 9970 1207

NORMAL (N)



HIGH LEVEL (H)



(MAX BATTER FROM EDGE OF DRIVEWAY TO FINAL G L)
(WHERE THERE IS NO CONSTRUCTED FOOTPATH)

(1 6) (1 6 — 1 2) (FILL 1 2)

POINT	REMARKS	LEVELS
R	ROAD CENTRELINE	
G	INVERT OF GUTTER	
L	BACK OF LAYBACK	100 ABOVE G
H	1000 FROM BACK OF LAYBACK	130 ABOVE G
B	2400 FROM KERB LINE	MAX 200 ABOVE G
C	3600 FROM KERB LINE	MAX 400 ABOVE G
A	BOUNDARY	EASE REQUIRED AT GRADE CHANGE

NOTE

- To be read in conjuntion with Pittwater 21 Development Controls

PITTWATER COUNCIL

Standard Driveway Profile

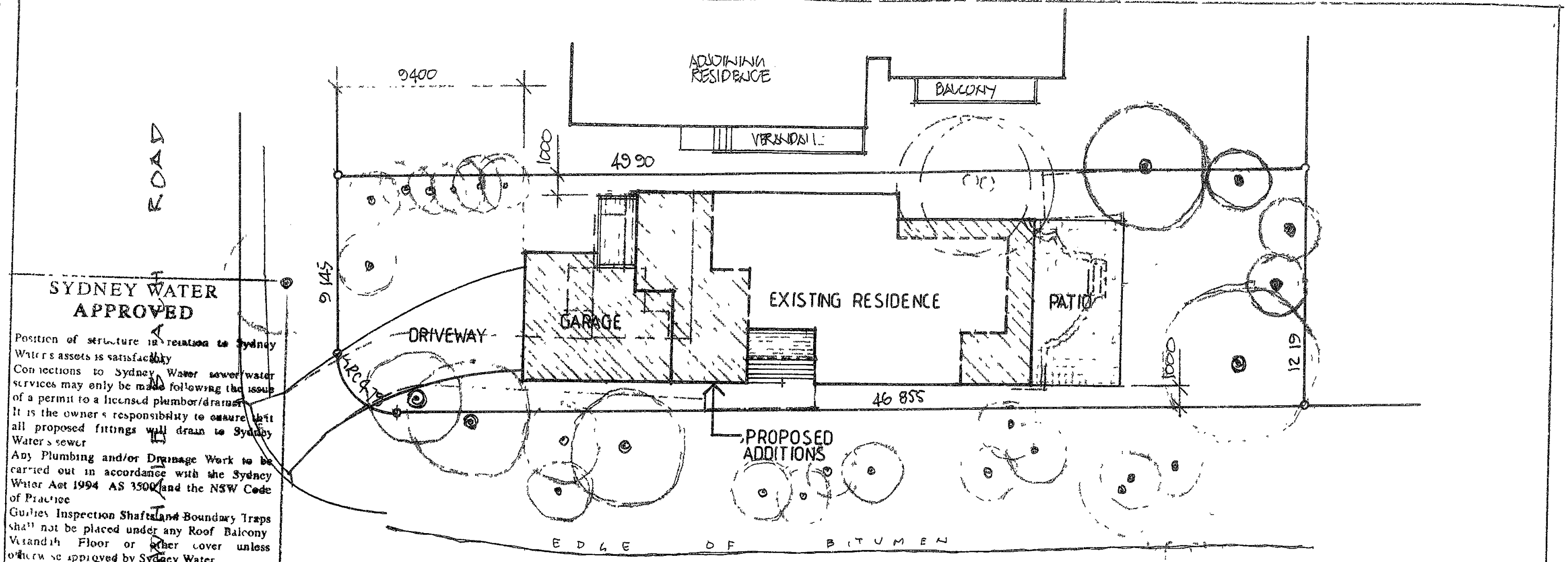
NORMAL TO HIGH

PLAN No PWC-DW01

REV No B

DATE 17/08/07

Cad File No O:\Urban\Drawings Current\Blocks & Standards\Standards\Driveways\ PWC-DW01.dwg Plot Date 10 March 2008 - 2:47 PM



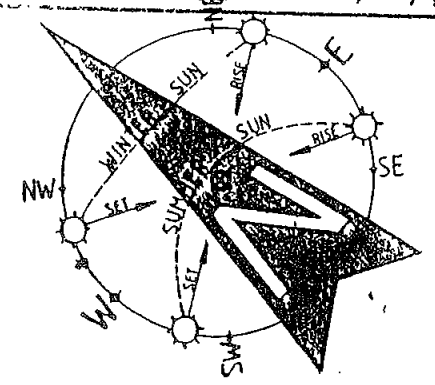
SYDNEY WATER
APPROVED

Position of structure in relation to Sydney Water's assets is satisfactory
Connections 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
Gullies Inspection Shafts and Boundary Traps shall not be placed under any Roof Balcony Verandah Floor or other cover unless otherwise approved by Sydney Water

Property no. 3464008

Area: Mona Vale
Quick Check Agent on behalf of
SYDNEY WATER

31/01/11



SITE PLAN

LOT 127 IN PD 17180

NOTES

1. THE BUILDER IS TO CHECK AND CONFIRM ALL NECESSARY DIMENSIONS AND LEVELS ON SITE PRIOR TO ORDERING MATERIALS AND COMMENCING CONSTRUCTION **DO NOT SCALE OFF THE DRAWING**
2. SHOULD ANY DEVELOPMENT OR CONSTRUCTION OCCUR ON OR NEAR BOUNDARIES THE BOUNDARIES SHOULD BE CLEARLY MARKED ON SITE BY THE REGISTERED LAND SURVEYORS

DEVELOPMENT CALCULATIONS		
SITE AREA	606 40 SQUARE METRES	
DESCRIPTION	EXISTING SQM	PROPOSED SQM
FLOOR	111 30	174 43
ROOF	111 30	174 43
PARKING	14 25	—
SHED	8 74	—
DRIVEWAY	48 10	39 90
DECKING	61 40	—
PORCH	—	9 36
GARAGE	—	44 10
PATIO	10 25	42 50
VERANDAH	—	7 60
TOTAL HARD SURFACE	334 28 (55 13 %)	317 89 (52 42%)

1 Builder to check and confirm all necessary dimensions on site prior to construction. Do not scale the drawing
2 All dimensions that relate to site boundaries and easements are subject to verification by site survey
3 All work to be in accordance with BUILDING CODE OF AUSTRALIA & to the satisfaction of local council requirements & other authorities
4 All timber construction to be in accordance with the TIMBER FRAMING Code
5 Any detailing / addition to what is supplied shall be resolved between the owner and the builder / the owner approves / accepts for any structural details or drawings which is to be supplied by Structural Engineer
6 Roof water & sub-soil drainage to be disposed of in the approved manner or as directed by local council Building Inspectors
7 All electrical power & light outlets to be determined by owner
8 Make good and repair all existing finishes damaged by new work. Reuse existing materials where possible

No	AMENDMENT	DATE

J D EVANS and COMPANY PTY LTD
BUILDING DESIGN CONSULTANTS
79 RIVIERA AVE AVALON BEACH 2107
Phone (02) 9918 9206 Fax (02) 9973 154
Mobile 0416 976 596 WWW jdeco com au
MBA BUILDING DESIGNERS ASSOCIATION OF NEW SOUTH WALES

PROJECT
PROPOSED ALTERATIONS/ADDITIONS
No 11 WHALE BEACH ROAD
AVALON BEACH N S W 2107
CLIENT
BRAD WHITE & REBECCA LENNON

DATE 12/5/2010 | SCALE 1:200
DRAWN JDE | CHECKED
DRAWING No 1290-1 | ISSUE

PROPOSED ADDITION

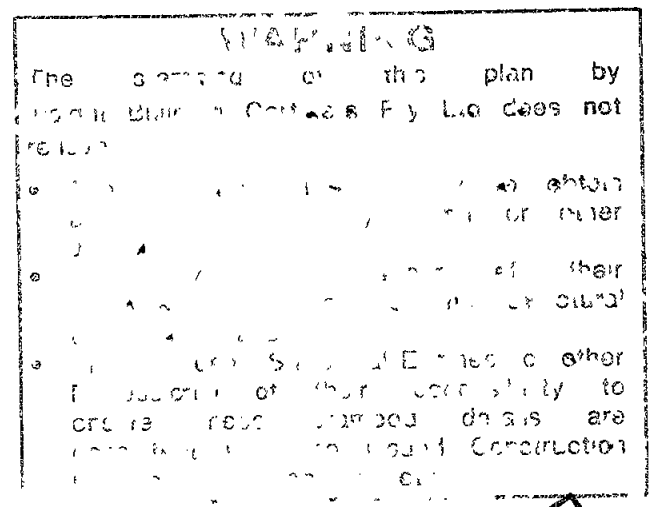
At: 11 Whale Beach Road, Avalon Beach.

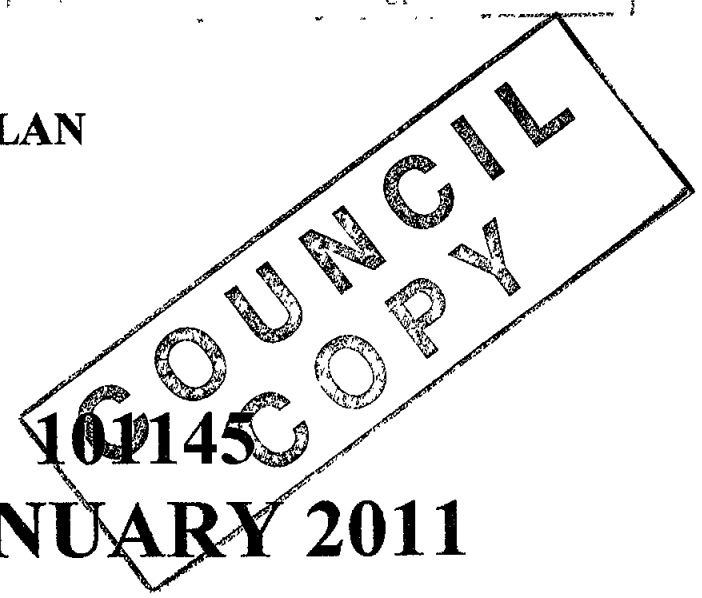
Prepared By:

NORTHERN BEACHES
Consulting Engineers P/L.
A C N 076 121 616 A B N 24 076 121 616
Suite 207, 30 FISHER ROAD
DEE WHY N S W 2099
Ph (02) 9984 7000 Fax (02) 9984 7444
e-mail nb@nbconsulting com au
web page www nbconsulting com au

DRAWING SCHEDULE:

S01 – GENERAL NOTES
S02 – GARAGE AND DRIVEWAY SLAB PLAN AND DETAILS
S03 – SLAB PREPARATION DETAILS
S04 – SECTION A-A
S05 – GARAGE ROOF FRAMING PLAN AND DETAILS
S06 – GROUND FLOOR FRAMING AND PATIO SLAB PLAN
S07 – FIRST FLOOR FRAMING AND LOWER ROOF FRAMING PLAN
S08 – FIRST FLOOR ROOF FRAMING PLAN
S09 – TYPICAL DETAILS





101145

JANUARY 2011

GENERAL NOTES:

GENERAL

G1 The drawings are to be read together with all Architects drawings and specifications

G2 Dimensions shall not be obtained by scaling from the drawings All setting out dimensions shall be verified and discrepancies shall be referred to the Engineer prior to commencement of work

G3 Care is required during construction so that structural elements are not over stressed and that the works and excavations required therefore are kept stable at all times

G4 Design, materials and workmanship are to be in accordance with current S A A standards and statutory authority regulations except where varied by these documents

G5 Design live loads are in accordance with AS 1170 1

G6 Builder to ensure stability of existing structures in the vicinity of excavation works

FOOTINGS

F1 FOUNDATION STRATA IS ASSUMED FOR DESIGN PURPOSES IN ACCORDANCE WITH AS 2870-1996 "RESIDENTIAL SLAB AND FOOTINGS-CONSTRUCTION" SEE FOOTNOTE CLASSIFICATION TO BE VERIFIED BY A GEOTECHNICAL ENGINEER COMMISSIONED BY THE CLIENT FOR CERTIFICATION OF FOUNDATIONS

F2 Footings to be constructed and back filled as soon as possible following excavation to avoid softening by rain or drying out by exposure

F3 Footings must bear into undisturbed natural ground clear of organic material Refer to details

F4 If rock or variable bearing strata is encountered during excavation of the footings all footings/piers are to be excavated to similar material of greater bearing capacity
The Engineer is to be contacted at that time for approval or review

F5 Footings to be cast in approved material having an allowable capacity as follows:

Sand Foundations

SA1 Required bearing capacity 100 kPa
SA2 Trenches must be cleaned of all debris and hand compacted prior to placement of reinforcement

Clay Foundations

CL1 Required bearing capacity 150 kPa
CL2 Trenches must be cleaned of all debris Soft spots must be cut out and filled as per compacted fill notes, prior to placement of reinforcement

Shale Foundations

SH1 Required bearing capacity 400 kPa
SH2 Excavation for footings into shale must be cast or capped with plain concrete on the same day as excavation

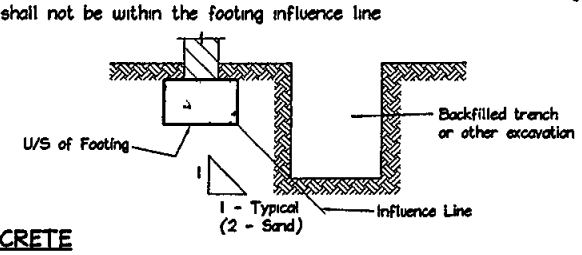
Sandstone Foundations

SS1 Required bearing capacity 600 kPa
SS2 Scrape weathered surface to remove cleaved sandstone under footings

Refer adjacent for assumed Design bearing strata

F6 Future development of neighboring properties may affect ground water conditions on this site Consequently, reactivity in subgrade beneath footings may be locally altered therefore putting footing at risk of differential settlement We recommend that, particularly in clay subgrades, agricultural drainage is installed to the upstream perimeter of the building at a distance from the building which is outside the zone of influence of the footings
The agricultural drain must be installed below the fluctuating seasonal zone which should be identified by geotechnical investigation

F7 UNLESS OTHER WISE APPROVED Excavations near new or existing footings shall not be within the footing influence line



CONCRETE

C1 All workmanship and materials shall be in accordance with AS 3600

C2 Concrete quality shall be as follows and shall be verified by tests

C3 All concrete unless otherwise noted shall have a slump of 80mm at point of placement, a max aggregate size of 20 mm
No water shall be added to the mix prior to or during placement of concrete Strength as specified on plans

C4 Clear concrete cover to reinforcement shall be as follows unless otherwise shown-

ELEMENT	INTERIOR	EXTERIOR	EXTERIOR CAST AGAINST GROUND
FOOTINGS	-	-	50
COLUMNS/PEDESTALS	30 UNO	REFER TO PLAN	-
SLABS/WALLS	25	REFER TO PLAN	40 ON MEMBRANE
BEAMS	25 UNO	REFER TO PLAN	50
BLOCKWORK	55 FROM APPROPRIATE FACE		

C5 Sizes of concrete elements do not include thickness of applied finishes

C6 All Construction Joints locations shall be approved by the Structural Engineer

C7 Beam depths are written first and include slab thickness, if any

C8 No holes or chases other than those shown on the structural drawings shall be made in concrete elements without the prior approval of the engineer

C9 Shrinkage reducing admixtures such as 'Eclipse' or approved equivalent, if specified, must be added to mix prior to pour

C10 Water reducing agents, if specified, must be added to mix prior to pour No extra water is to be added to increase slump

C11 Where vertical slab/beam surfaces are formed against a masonry (or other) wall, provide 10 mm styrene separation material

C12 Water must not be added to concrete mix prior to placement of concrete

C13 Above covers may have to be adjusted if fire rating is a requirement

REINFORCEMENT

R1 All reinforcement specified is Grade D500 unless noted otherwise

R2 Reinforcement is represented diagrammatically it is not necessarily shown in true projection

R3 Top reinforcement is to be continuous over supports
Bottom reinforcement to be lapped at supports

R4 Welding of reinforcement shall not be permitted unless shown on the structural drawings

R5 Pipes or conduits shall not be placed within the zone of concrete cover to the reinforcement without the approval of the engineer

R6 All reinforcing bars and fabric shall comply with AS 4671-2001

R7 Reinforcement symbols
N - Grade 500N deformed bar (D500) Normal Ductility
R - Grade 250N plain round bar (R250) Normal Ductility
SL - Grade 500L welded deformed ribbed mesh (D500) Square Low Ductility
RL - Grade 500L welded deformed ribbed mesh (D500) Rectangular Low Ductility
The number immediately following these symbols is the number of millimeters in the bar diameter
Example : 8 N12-250
Denotes 8, Grade 500N deformed bars, 12 mm diameter at 250 cts

R8 Fabric reinforcement to be lapped 1 complete square + 25 mm unless noted otherwise

R9 All reinforcement shall be firmly supported on bar chairs spaced at a maximum of 750 centres both ways under rod and fabric reinforcement Reinforcement shall be tied at alternate intersections

FORMWORK

FW1 Formwork must be cleaned of all debris prior to casting of concrete

FW2 Minimum stripping times for form work shall be as recommended in AS 3610 - 1990 or as directed by the engineer

FW3 The finished concrete shall be a dense homogeneous mass, completely filling the form work, thoroughly embedding the reinforcement and free of stone pockets All concrete elements including slabs on ground and footings shall be compacted with mechanical vibrators

FW4 Curing of all concrete is to be achieved by keeping surfaces continuously wet for a period of 3 days, followed by prevention of loss of moisture for seven days followed by a gradual drying out Approved sprayed on curing compounds may be used where no floor finishes are proposed Polythene sheeting or wet hessian may be used if protected from wind and traffic

BRICKWORK

BR1 Brickwork is to be constructed to AS 3700

BR2 Two layers of approved greased metal based slip material shall be used over all load bearing walls that support concrete slabs and placed on smooth brickwork or trowelled mortar finish Non load-bearing walls shall have 10 mm compressible material and ties to the slab soffit

BR3 No brickwork shall be constructed on suspended slabs until all propping has been removed from the underside of the slab and the concrete has the specified 28 day cylinder strength verified by tests

BR4 Control joints to be placed at a maximum of 8m centres or in accordance with AS 3700

BR5 Exposure grade bricks to be used below damp proof course

BR6 Vertical control joint material where specified on plan between slabs and brick walls shall be 10 mm Spandex External UNO
Bituminastic fibreboard internal UNO

BR7 Provide stainless steel wall ties below DPC to AS 3700 Provide galvanized wall ties above DPC to AS 3700 & Local Council Specifications

BR8 Dry Pressed Bricks should always be use for brick retaining walls In addition we recommend that dry pressed bricks be used for all types of construction where possible Dry pressed bricks grow only half as much as extruded bricks Extruded bricks are difficult to fix to and excessive brick growth leads to cracking in walls and render

BLOCKWORK

BL1 Concrete blocks shall have a minimum compressive strength of 15 MPa and conform to AS 1500 Masonry to be constructed to AS 3700

BL2 Where cores of hollow blocks are to be filled, properly compacted 20MPa concrete with 10 mm aggregate and 230 mm slump shall be used Clean out openings must be utilized for all cores

BL3 Location of actual starters is critical to suit block cores, allow 55 mm cover from the outside face of blockwork All reinforcement lap lengths to conform to AS 3600

BL4 Control joints to be placed at a maximum of 8 m centres or in accordance with AS 3700

BL5 Vertical control joint material where specified on plan between slabs and brick walls shall be 10 mm Spandex External UNO
Bituminastic fibreboard internal UNO

BL6 Retaining walls or any reinforced and concrete core filled block walls to be of Double 'U' Block Construction

BL7 No blockwork shall be constructed on suspended slabs until all propping has been removed from the underside of the slab and the concrete has the specified 28 day cylinder strength verified by tests unless approved by the Structural Engineer

BL8 Max pour height for unrestrained blockwork is 2000

STEEL

S1 All Structural steelwork to be Grade 300 or greater
Design, fabrication and erection to be in accordance with AS 4100

S2 Materials and workmanship shall comply with AS 1250 - 1981, SAA Steel Structures Code and the specification for Structural Steel

S3 Rolled steel sections including steel plates shall comply with AS 3678-1990

S4 Cold formed steel sections shall be Grade 450 Zinc coated in accordance with AS 1538-1988

S5 Welded and seamless steel hollow sections shall comply with AS 1163 Grade 350

S6 Bolt Designation
4 6S - Commercial bolts Grade 4 6, snug tightened
8 8S - High Strength structural bolts Grade 8 8, snug tightened
8 8TB - High Strength structural bolts Grade 8 8, fully tightened to AS 1511 and acting as a Bearing Joint
8 8TF - High Strength structural bolts Grade 8 8, fully tensioned to AS 1511 and acting as a Bearing Joint
Unless noted otherwise, all bolts will be 8 8S

S7 Unless shown otherwise, minimum connection shall be 2M16 bolts, 10 thick gusset plates, 6mm continuous fillet welds

S8 Load indicating washers shall be used in all fully tensioned joints (8 8TF & 8 8TB)

S9 All welding shall be carried out in accordance with AS 1554 SAA Structural Steel Welding Code

S10 Unless noted otherwise all welds shall be category SP using E4xx Electrodes All butt welds shall be complete penetration butt welds category SP

S11 Grouting of anchor bolt sleeves and base plates shall be completed by the contractor using High Strength, Non-Shrink grout

S12 Fabrication and erection tolerances for Structural Steelwork shall be in accordance with AS 4100

S13 Purlin bolts shall be M12 - 4 6S galvanised

S14 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 of 70 microns

EXTERNAL ELEMENTS, & ELEMENTS WITHIN EITHER SKIN OF EXTERNAL CAVITY WALLS GREATER THAN 2 km FROM SEA WATER

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 75 microns (Dulux Durepon P14)
Barrier Coat 2-pack epoxy micaceous iron oxide, dft 100 microns
Finish Coat 2-pack epoxy high gloss acrylic to dft 75 microns
(e g Dulux Acrathane 1 F)

c Hot dipped galvanized to AS 4680
Where the galvanic (Hot Dip Galvanized) coating is compromised by welding, bolting or damage, two pack zinc rich epoxy primer (Dulux Zincanode 202) is to be be applied after wire brushing affected area (use 3 coats minimum) or Hot Metal Spray in accordance with AS 4680
PAINTING OVER HOT DIP GALVANISED STEEL:
Degrease and preparation whip blast Application of a general purpose epoxy (Dulux Duremax GPE) thickness 125 microns Application of a high build polyurethane (Dulux Weathermax HBR) thickness 100 microns

EXTERNAL ELEMENTS, & ELEMENTS WITHIN EITHER SKIN OF EXTERNAL CAVITY WALLS LESS THAN 2 km FROM SEA WATER

d Preparation blast clean to minimum Class 2 5
Application of a two pack zinc rich epoxy primer (Dulux Zincanode 402) thickness 75 microns Application of a general purpose epoxy (Dulux Duremax GPE) thickness 125 microns Application of a high build polyurethane (Dulux Weathermax HBR) thickness 100 microns

S15 Workshop drawings shall be prepared and two copies submitted to the engineer for review prior to fabrication commencement

TIMBER

T1 All workmanship and materials to be in accordance with AS 1684, AS 1720 and as 3959 All soft wood to be Grade F7 unless noted otherwise All hardwood to be minimum Grade F14 unless otherwise noted Exposed timber to be CCA treated (to AS 1604) redried after full impregnation, or durability class 1, 2 or 3
ALL SOFTWOOD TIMBER FRAMING TO HAVE A MINIMUM TREATMENT PROTECTION OF H2 or T2 TREATED FOR TERMITE PROTECTION UNLESS NOTED OTHERWISE

T2 All joists deeper than 150 to have blocking over support bearers and at a maximum 3000 centres

T3 Roof trusses to be designed by the manufacturer to the relevant standards Pre camber to be an amount equal to dead load deflection unless otherwise noted

T4 All holes for bolts to be exact size Washers to be used under all heads and nuts and to be at least 2 5 times the bolt diameter Bolts to be M16 grade 4 6 unless noted otherwise

T5 Treat all exposed cut ends with Reseal by Protim to manufacturers specification to achieve required Hazard Level Exposure Classification

T6 Battens for T & G to be Kiln Dried to 12 % 38mm minimum deep treated pine or as recommended by supplier Flooring to be installed no sooner than 28 days after slab pour

T7 Hot dip galvanized nails/clouts/screws to be used with all timber connections

T8 Continuous nailing must not be used for any timber connections

T9 All exposed CCA treated pine to have an application of penetrating sealer to reduce warping and twist of the timber due to varying moisture content in service

T10 All Stud walls to be 90x45 F7 Kiln Dried
T2 Treated at 450 Cts and noggings to AS 1684

COMPACTED FILL

CF1 Only to be used with approval by Engineer & to be certified by a geotechnical Engineer

CF2 Clear organic material, topsoil and any uncontrolled existing fill under proposed slabs/footings

CF3 Filling shall be granular material compacted in not more than 200 mm layers to a minimum dry density ratio (AS 1289/E4 2 1982) of 98 percent standard maximum dry density

CF4 During clearing and excavation for slabs and footings cut out soft spots and fill as above

INSPECTIONS BY ENGINEER

48 HOURS NOTICE IS REQUIRED BEFORE ANY SITE INSPECTION

1 Bearing strata of all footings prior to concrete pour by Geotechnical Engineer
2 Any reinforcement prior to concrete pour
3 Timber and Steel framing prior to cladding or lining
4 Steel lintels after installation
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
6 Inspection by Geotechnical Engineer over 1 5m of vertical cut through Sandstone bed rock to permit identification of defects and remedial measures initiated

ASSUMED FOUNDATION CLASSIFICATION FOR DESIGN PURPOSES - CLASS 'A'
ASSUMED BEARING STRATA FOR DESIGN PURPOSES - ROCK 600 kPa
CONTRACTOR TO ENGAGE GEOTECHNICAL CONSULTANT TO VERIFY FOUNDATION CLASSIFICATION

A3

Date	Rev	Amendment:	By

DOCUMENT CERTIFICATION
Date : JAN 11'
Rick G Wray
BE(Civil),CPEng,MIEAust ,NPER
(Director Northern Beaches Consulting Engineers)

NORTHERN BEACHES
Consulting Engineers P/L
A C N 076 121 616 A B N 24 076 121 616
Suite 207 30 FISHER ROAD
DEE WHY N S W 2099
Ph (02) 9984 7000 Fax (02) 9984 7444
e mail nb@nbconsulting com au
web page www nbconsulting com au

Architect: JD EVANS

Client: BRAD WHITE

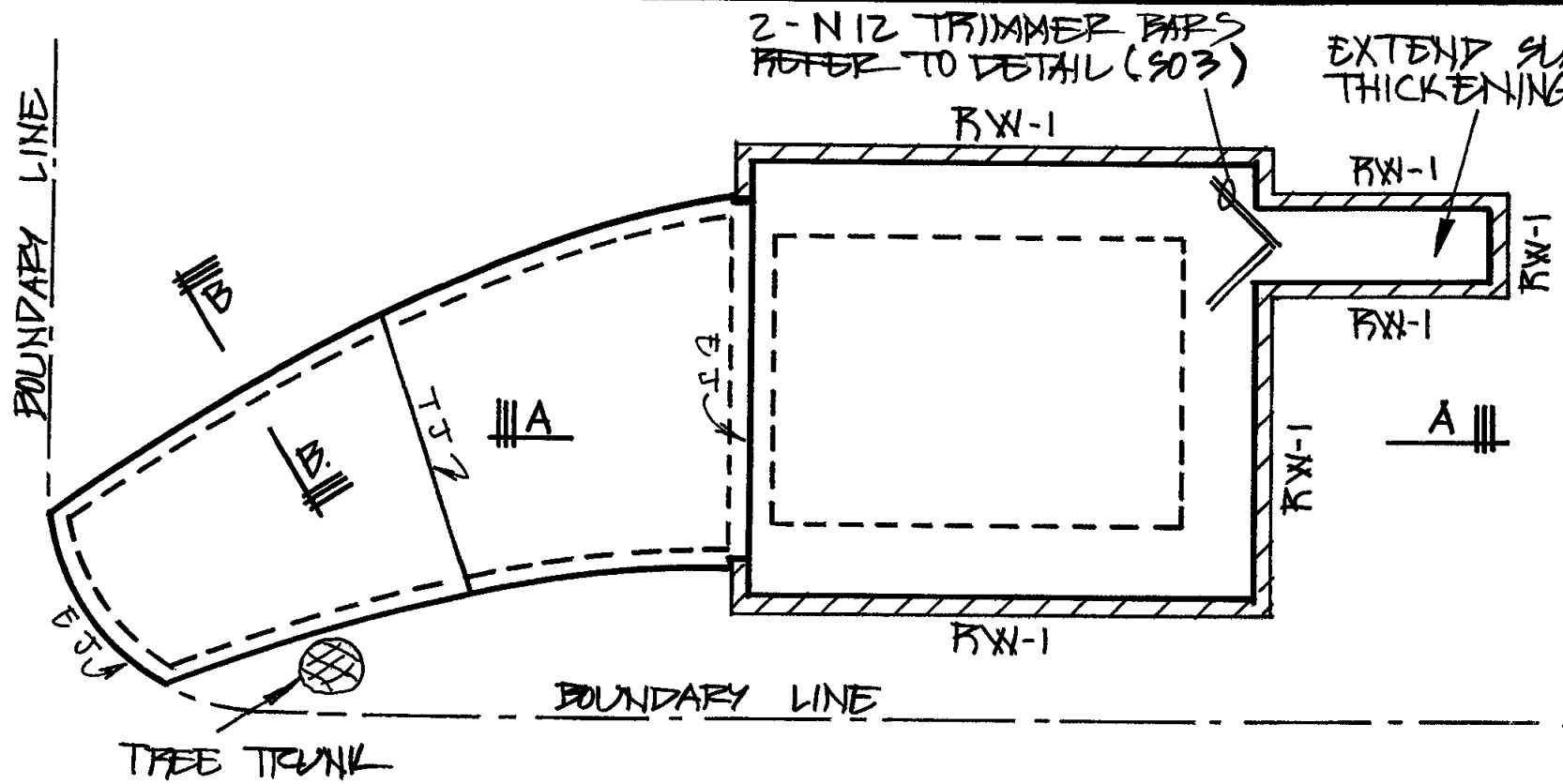
Project: PROPOSED ADDITION
11 WHALE BEACH ROAD
AVALON BEACH

Drawing Title: GENERAL NOTES

Date	Design	Drawn	Checked
JANUARY 2011	BG	NK	RGW

Job No	Drawing No	Rev
101145	S01	

Northern Beaches Consulting Engineers Pty Ltd.



NOTES

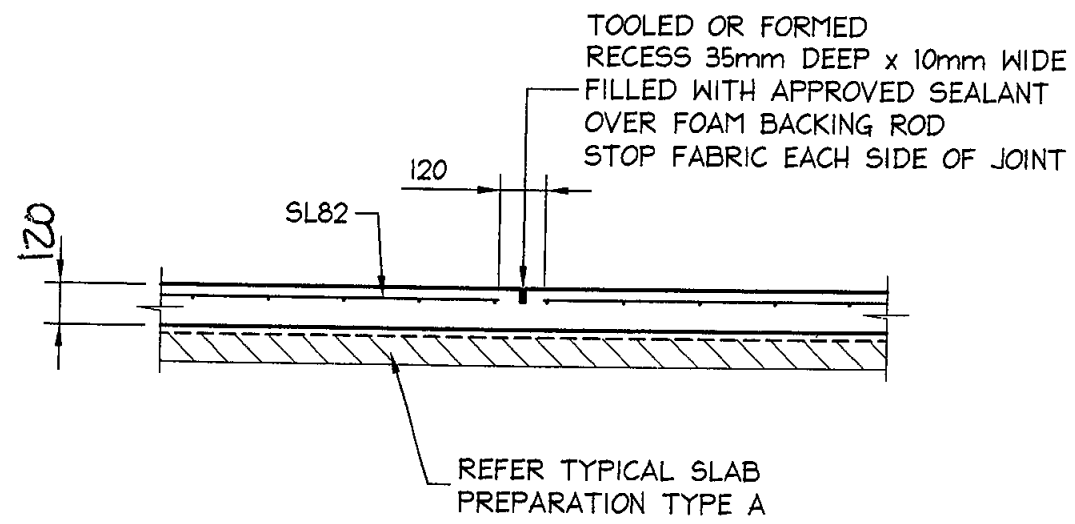
1 ALL DIMENSIONS TO BE VERIFIED ON SITE BY BUILDER BEFORE COMMENCING WITH WORK

2 FOR GENERAL NOTES REFER TO DRAWING NUMBER S01

SLAB DETAILS

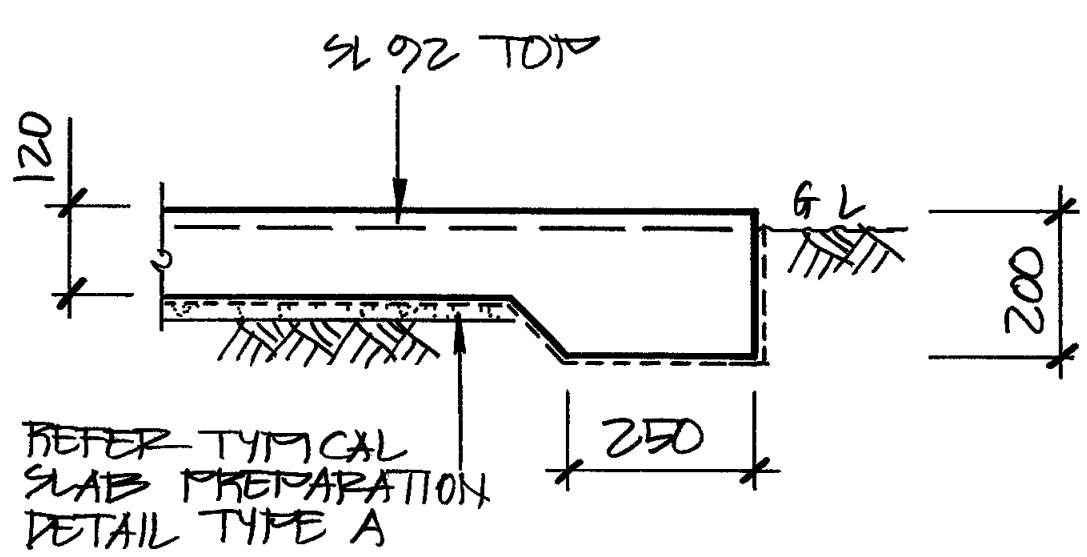
-GARAGE SLAB REINFORCEMENT = SL 92 TOP
-DRIVEWAY SLAB REINFORCEMENT = SL 92 TOP
-GARAGE = 25 MPa
-DRIVEWAY = 25 MPa
-GARAGE CONCRETE COVER = 30mm
-DRIVEWAY CONCRETE COVER = 45mm
-GARAGE SLAB THICKNESS = 120mm
-DRIVEWAY SLAB THICKNESS = 120mm

DRIVEWAY AND GARAGE SLAB PLANS SCALE 1 100



TOOLED JOINT DETAIL DENOTED T.J ON PLAN

SCALE = 1 20



SECTION B-B

SCALE 1 10

IF IN DOUBT ASK

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Date : JAN 11
Rick G Wray
BE(Civil),CPEng,MIEAust ,NPER
(Director Northern Beaches Consulting Engineers)

NORTHERN BEACHES
Consulting Engineers P/L
A C N 076 121 616 A B N 24 076 121 616
Suite 207 30 FISHER ROAD
DEE WHY N S W 2099
Ph (02) 9984 7000 Fax (02) 9984 7444
e mail nb@nbconsulting com au
web page www nbconsulting com au

Architect: J D EVANS	Project: PROPOSED ADDITIONS 11 WHALE BEACH ROAD AVALON BEACH	Date: JANUARY 2011	Design: B S	Drawn: N K	Checked: RGW
Client: BRAD WHITE	Drawing Title: GARAGE & DRIVE SLAB PLAN & DETAILS	Job No: 101145		Drawing No: S02	Rev:

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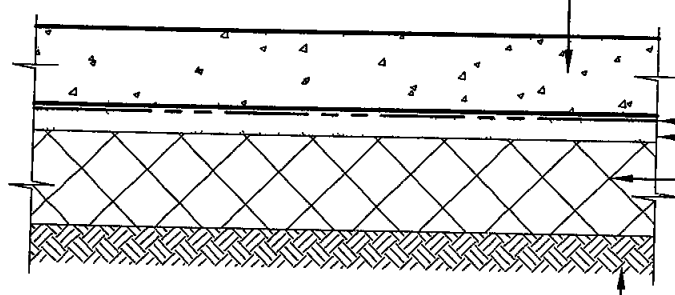
NOTES

1 ALL DIMENSIONS TO BE VERIFIED ON SITE BY BUILDER BEFORE COMMENCING WITH WORK

2 FOR GENERAL NOTES REFER TO DRAWING NUMBER S01



REINFORCED CONCRETE SLAB
REFER DETAILS

0 2mm IMPERVIOUS MEMBRANE

30mm COMPACTED SAND BLINDING LAYER

FILLING IF REQUIRED SHALL BE GRANULAR MATERIAL COMPACTED IN NOT MORE THAN 150mm LAYERS TO A MINIMUM DRY DENSITY RATIO OF 98% TO AS 1289/E4 2 1982

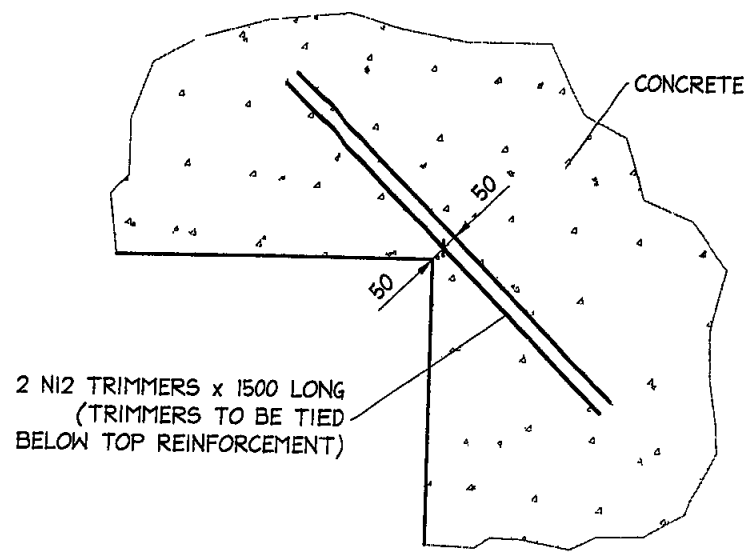
SUBGRADE SHALL BE STRIPPED OF ALL TOPSOIL, DELETERIOUS MATTER AND UNCONTROLED FILL
APPROVAL SHALL BE OBTAINED FROM THE ENGINEER PRIOR TO PLACING FILL

NOTE

SAND BLINDING, SUB-BASE, FILLING AND SUB GRADE TO BE MECHANICALLY COMPACTED TO A DRY DENSITY RATIO OF NOT LESS THAN 98% STANDARD MAXIMUM DRY DENSITY TO A S 1289/E4 2 1982
ALL AREAS TO BE TESTED BY GEOTECHNICAL ENGINEER AND RESULTS FORWARDED TO STRUCTURAL ENGINEER PRIOR TO POURING CONCRETE

TYPICAL SLAB PREPARATION TYPE A SLAB ON GRADE

NTS



TYPICAL TRIMMER DETAIL

NOT TO SCALE

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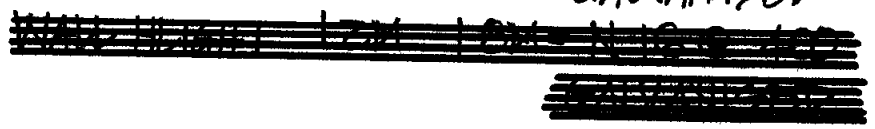
Rick G Wray
BE(Civil),CPEng,MIEAust ,NPER
(Director Northern Beaches Consulting Engineers)

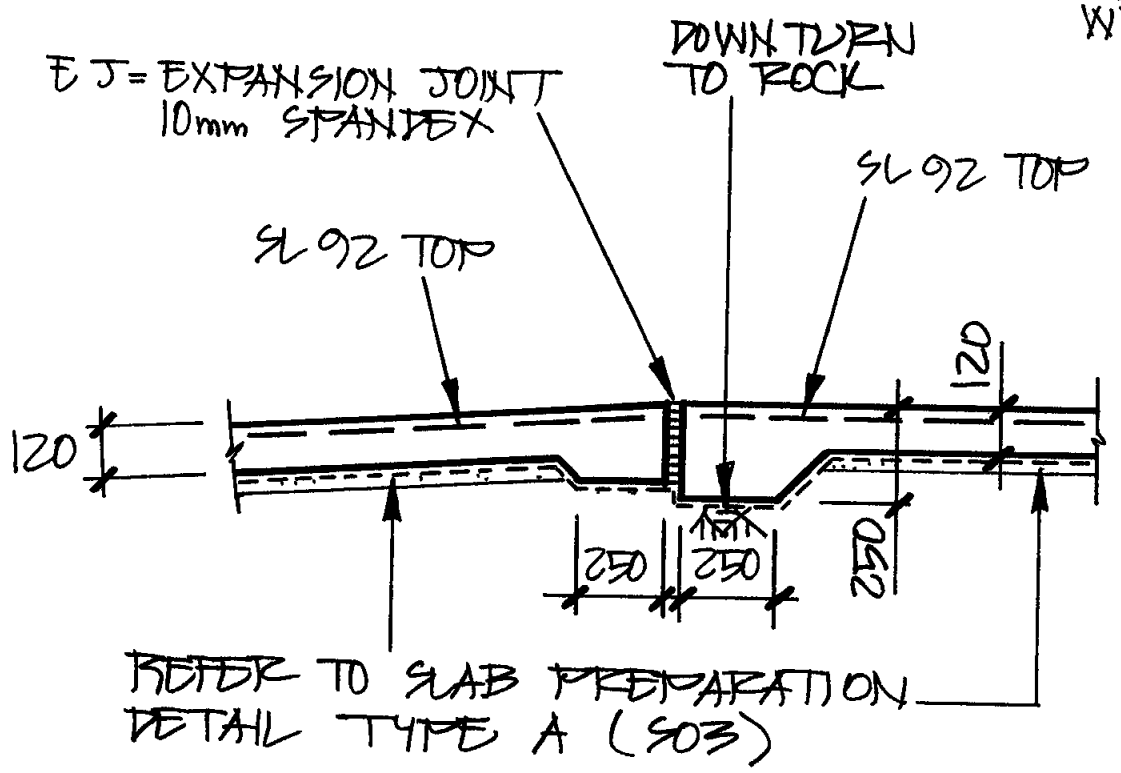
NORTHERN BEACHES
Consulting Engineers P/L
A.C.N 076 121 616 A.B.N 24 076 121 616
Suite 207 30 FISHER ROAD
DEE WHY N.S.W 2099
Ph (02) 9984 7000 Fax (02) 9984 7444
e mail nb@nbconsulting.com.au
web page www.nbconsulting.com.au

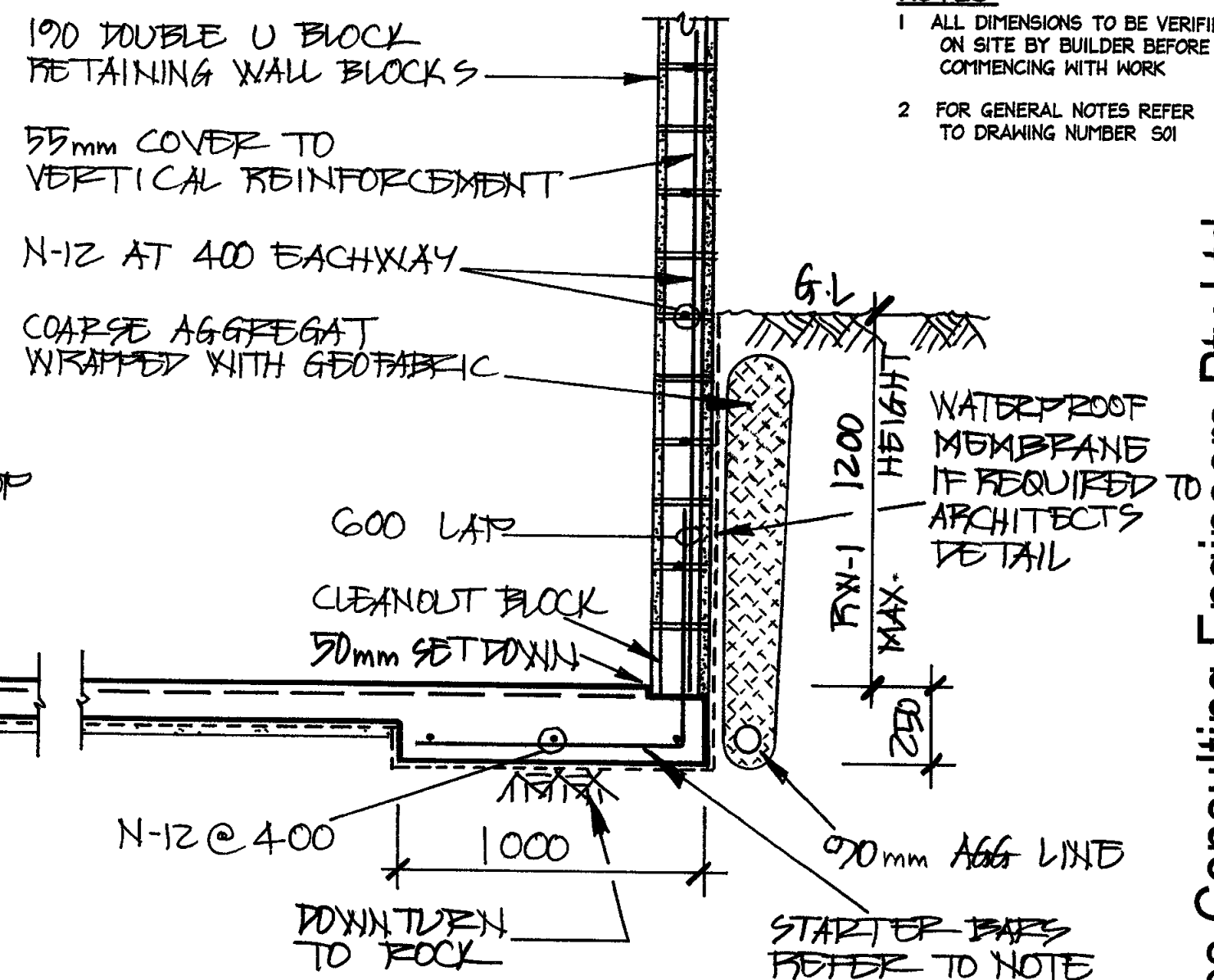
Architect. J D EVANS	Project PROPOSED ADDITIONS 11 WHALE BEACH ROAD AVALON BEACH	Date JANUARY 2011	Design BS	Drawn N K	Checked. REW
Client BRAD WHITE	Drawing Title SLAB PREPARATION DETAIL TYPE A	Job No 101145		Drawing No S03	Rev

STARTER BARS

WALL HEIGHT 0-12M = N-12 @ 400 GALVANISED







SECTION A-A

SCALE 1:20

NOTES

1 ALL DIMENSIONS TO BE VERIFIED ON SITE BY BUILDER BEFORE COMMENCING WITH WORK

2 FOR GENERAL NOTES REFER TO DRAWING NUMBER S01

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DOCUMENT CERTIFICATION
Date JAN 11' R Wray
Rick G Wray
BE(Civil),CPEng,MIEAust ,NPER
(Director Northern Beaches Consulting Engineers)

NORTHERN BEACHES
Consulting Engineers P/L
A C N 076 121 616 A B N 24 076 121 616
Suite 207 30 FISHER ROAD
DEE WHY N S W 2099
Ph (02) 9984 7000 Fax (02) 9984 7444
e mail nb@nbconsulting com au
web page www nbconsulting com au

Architect: J D EVANS	Project: PROPOSED ADDITIONS 11 WHALE BEACH ROAD AVALON BEACH	Date: JANUARY 2011	Design: BS
Client: BRAD WHITE	Drawing Title: SECTION A-A	Job No: 101145	Drawing No: S04

Drawn	Checked	Rev
N.K	R&W	

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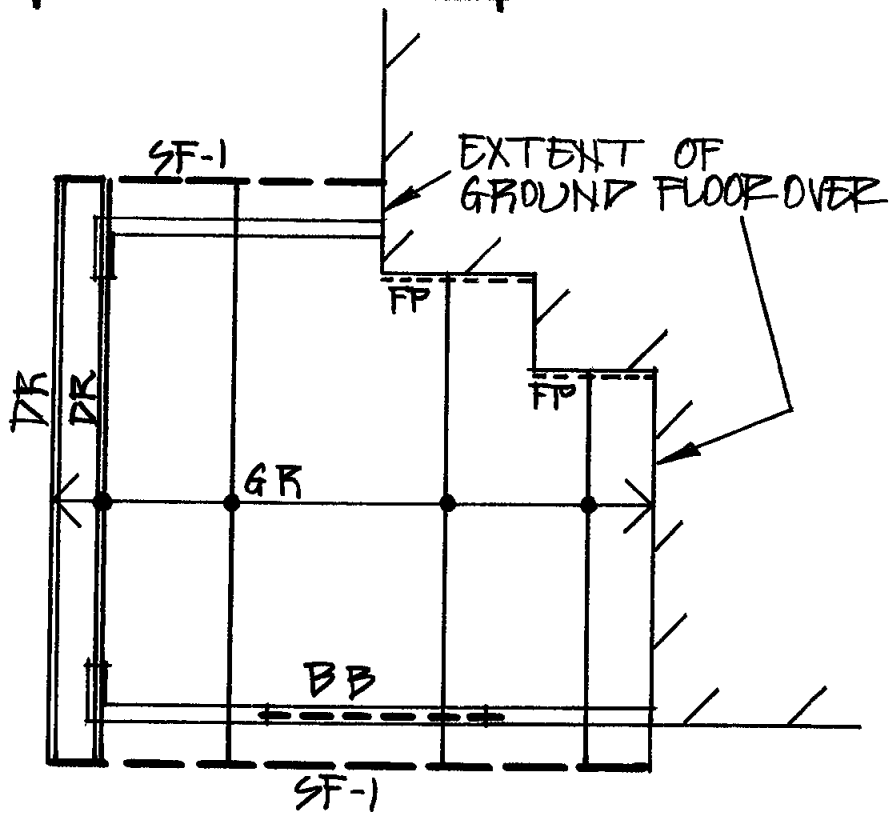
ROOF BRACING TO AS1684

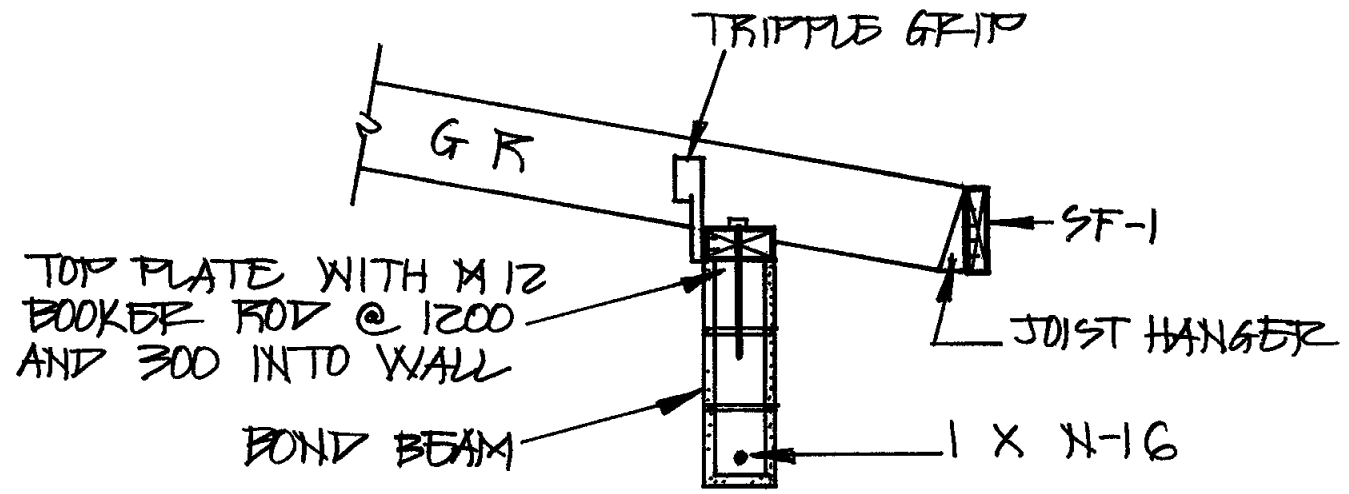


GARAGE ROOF FRAMING PLAN
SCALE 1:100

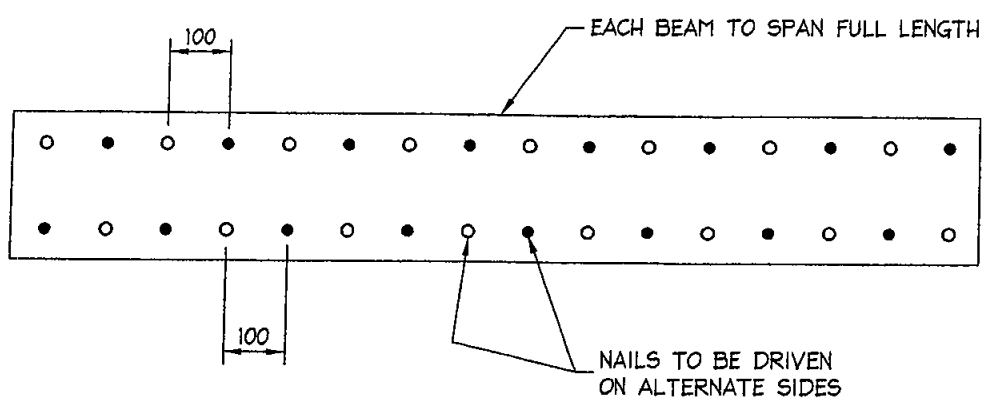
MEMBER LEGEND

GR = GARAGE RAFTER 240 X 45 HYSPAN LVL @ 600
DR = DOUBLE RAFTERS NAIL & GLUE LAMINATED
SF-1 = STRUCTURAL FASCIA 240 X 45 HYSPAN LVL
FP = 140 X 45 MGP 10 WITH 12mm BOLTS @ 600 INTO GROUND FLOOR FRAMING
BB = BOND BEAM REFER TO DETAIL

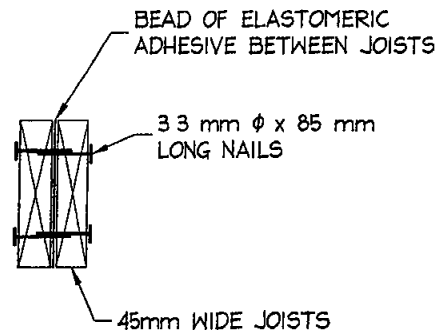
NOTES
1 ALL DIMENSIONS TO BE VERIFIED ON SITE BY BUILDER BEFORE COMMENCING WITH WORK
2 FOR GENERAL NOTES REFER TO DRAWING NUMBER S01



BOND BEAM DETAIL
SCALE 1:20



BEAM ELEVATION



BEAM SECTION

TYPICAL GLUE AND NAIL LAMINATED MEMBER DETAILS
NOT TO SCALE

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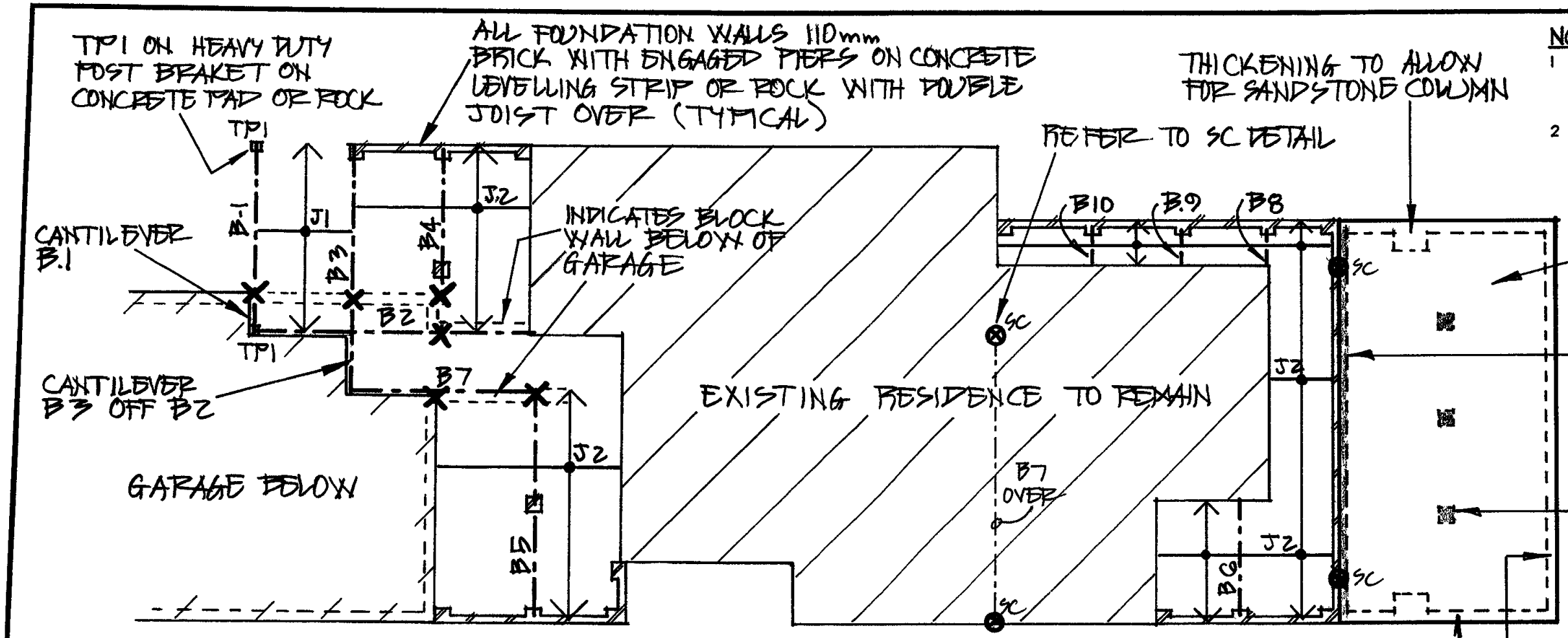
DOCUMENT CERTIFICATION
Date JAN'11 R. Wray
Rick G Wray
BE(Civil),CPEng,MIEAust,NPER
(Director Northern Beaches Consulting Engineers)

NORTHERN BEACHES
Consulting Engineers P/L
A C N 076 121 616 A.B.N 24 076 121 616
Suite 207 30 FISHER ROAD
DEE WHY N S W 2099
Ph (02) 9984 7000 Fax (02) 9984 7444
e mail nb@nbconsulting com au
web page www nbconsulting com au

Architect: J D EVANS	Project: PROPOSED ADDITION 11 WHALE BEACH ROAD AVALON BEACH	Date: JANUARY 2011	Design: BS	Drawn: NK	Checked: RGW
Client: BRAD WHITE	Drawing Title: GARAGE ROOF FRAMING PLAN & DETAILS	Job No: 101145		Drawng No: S05	Rev:



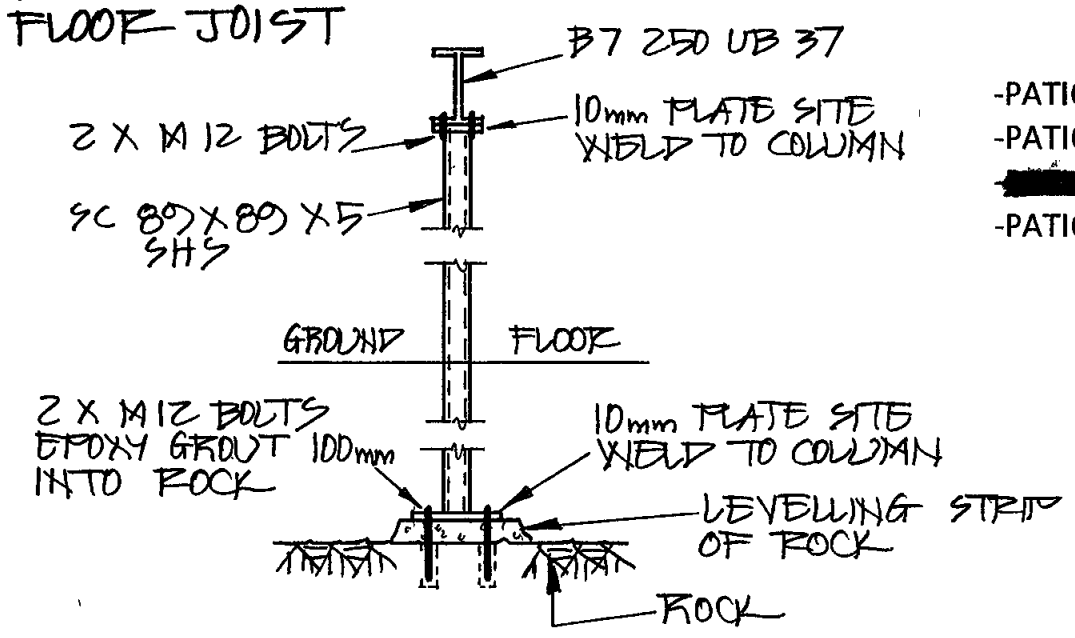
GROUND FLOOR FRAMING & PATIO SLAB PLAN

SCALE 1:100

MEMBER LEGEND

B = BEARER
J = FLOOR JOIST

B-1 = 200 X 63 HYSPAN LVL
B2 = 240 X 63 HYSPAN LVL OR 150 PFC
B3 = 240 X 63 HYSPAN LVL OR 150 PFC
B4 = 140 X 70 MGP 10
B5 = 150 X 63 HYSPAN LVL
B6 = 150 X 63 HYSPAN LVL
B7 = 200 X 63 HYSPAN LVL
B8 - B9 - B10 = 90 X 70 MGP 10
J1 = 95 X 45 HYSPAN LVL @450
J2 = 140 X 45 MGP 10 @450
X DENOTES TRIPLE STUDS DOWN TO GARAGE BLOCK WALL



SC TYPICAL DETAIL NOT TO SCALE

NOTES

1 ALL DIMENSIONS TO BE VERIFIED ON SITE BY BUILDER BEFORE COMMENCING WITH WORK

2 FOR GENERAL NOTES REFER TO DRAWING NUMBER S01

SLAB DETAILS

-PATIO SLAB REINFORCEMENT = SL 92 CENTRAL
-PATIO SLAB = 40 MPa
-PATIO SLAB THICKNESS = 130mm

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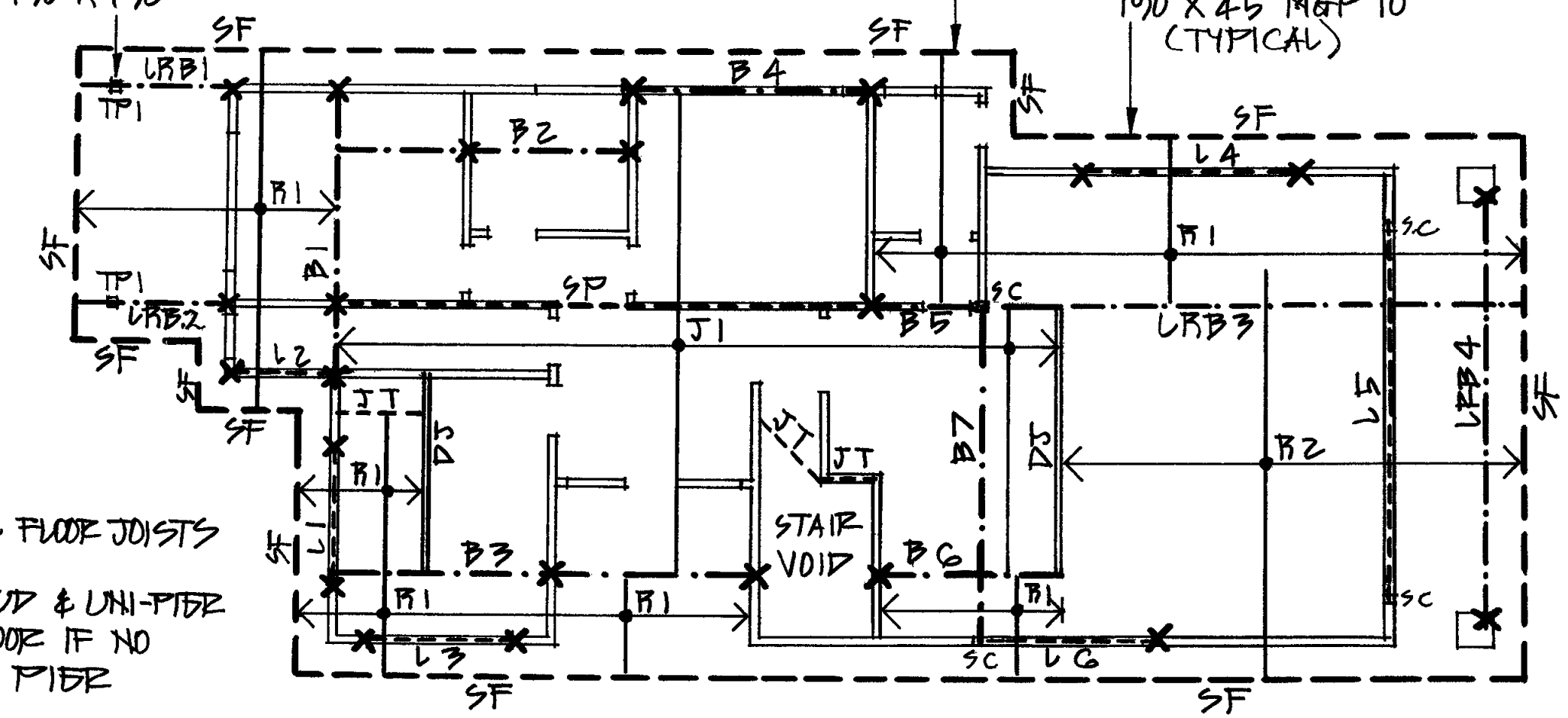
Rick G Wray
BE(Civil), CPEng, MIEAust, NPER
(Director Northern Beaches Consulting Engineers)

NORTHERN BEACHES
Consulting Engineers P/L
A C N 076 121 616 A.B N 24 076 121 616
Suite 207 30 FISHER ROAD
DEE WHY N S W 2099
Ph (02) 9984 7000 Fax (02) 9984 7444
e mail nb@nbconsulting.com.au
web page www.nbconsulting.com.au

Architect: J D EVANS	Project: PROPOSED ADDITION 11 WHALE BEACH ROAD AVALON BEACH	Date: JANUARY 2011	Design: BS	Drawn: N K	Checked: RGW
Client: BRAD WHITE	Drawing Title: GROUND FLOOR FRAMING & PATIO SLAB PLAN	Job No: 101145		Drawing No: S06	Rev:

TP1 = TIMBER POST 190 X 190

SF = STRUCTURAL FASCIA 190 X 45 MGP 10 (TYPICAL)



NOTE

DJ = DOUBLE FLOOR JOISTS

X = DOUBLE STUD & UNI-PIER IN SUBFLOOR IF NO EXISTING PIER

JT = JOIST TRIMMER 240 X 45 HYSPAN LVL

NOTES

1 ALL DIMENSIONS TO BE VERIFIED ON SITE BY BUILDER BEFORE COMMENCING WITH WORK

2 FOR GENERAL NOTES REFER TO DRAWING NUMBER S01

FIRST FLOOR FRAMING & LOWER ROOF FRAMING PLAN

SCALE 1:100

MEMBER LEGEND

J1 = FLOOR JOIST HJ 240 63 HYJOIST @ 450 CONTINUOUS (Max Span = 4600)
B1 = BEAM 2 X 240 X 45 HYSPAN LVL NAIL AND GLUE LAMINATED
B2 = BEAM 240 X 63 HYSPAN LVL
B3 = BEAM 2 X 240 X 45 HYSPAN LVL NAIL AND GLUE LAMINATED
B4 = BEAM 300 X 63 HYSPAN LVL
B5 = BEAM 300 X 75 HYSPAN LVL CANTILEVER OFF B7
B6 = BEAM 300 X 63 HYSPAN LVL CANTILEVER OF B7
B7 = BEAM 250 UB 37
SP = SPREADER 95 X 63 HYSPAN LVL

LRB1 = ROOF BEAM 140 X 70 MGP 10
LRB2 = ROOF BEAM 140 X 70 MGP 10
LRB3 = ROOF BEAM 250 PFC SUPPORT OF CANTILEVERING B5, L5, & LRB4
LRB4 = 300 PFC
L1 = LINTEL 2 X 200 X 45 HYSPAN LVL NAIL AND GLUE LAMINATED
L2 & L3 = LINTEL 2 X 140 X 45 MGP 10 NAIL AND GLUE LAMINATED
L4 = LINTEL 2 X 190 X 45 MGP 10 NAIL AND GLUE LAMINATED
L5 = LINTEL 300 PFC
L6 = LINTEL 2 X 190 X 45 MGP 10 NAIL AND GLUE LAMINATED
R1 = RAFTER 190 X 45 MGP 10 @ 600
R2 = RAFTER 200 X 45 HYSPAN LVL @ 450 MAX 6M SPAN OR 240 X 45 HYSPAN LVL @ 600

SC = 89 X 89 X 5 SHS

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Date	Rev	Amendment.	By
	A3	SP = SPREADER 95 X 63 HYSPAN LVL	

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Rick G Wray
BE(Civil), CPEng, MIEAust, NPER
(Director Northern Beaches Consulting Engineers)

NORTHERN BEACHES Consulting Engineers P/L
A C N 076 121 616 A B N 24 076 121 616
Suite 207 30 FISHER ROAD
DEE WHY N S W 2099
Ph (02) 9984 7000 Fax (02) 9984 7444
e mail nb@nbconsulting com au
web page www nbconsulting com au

Architect: JD EVANS	Project: PROPOSED ADDITION 11 WHALE BEACH ROAD AVALON BEACH
Client: BRAD WHITE	Drawing Title: FIRST FLOOR FRAMING & LOWER ROOF FRAMING PLAN

Date	Design	Drawn	Checked
JANUARY 2011	BS	NK	RGW

Job No	Drawing No	Rev
101145	S07	

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NOTES
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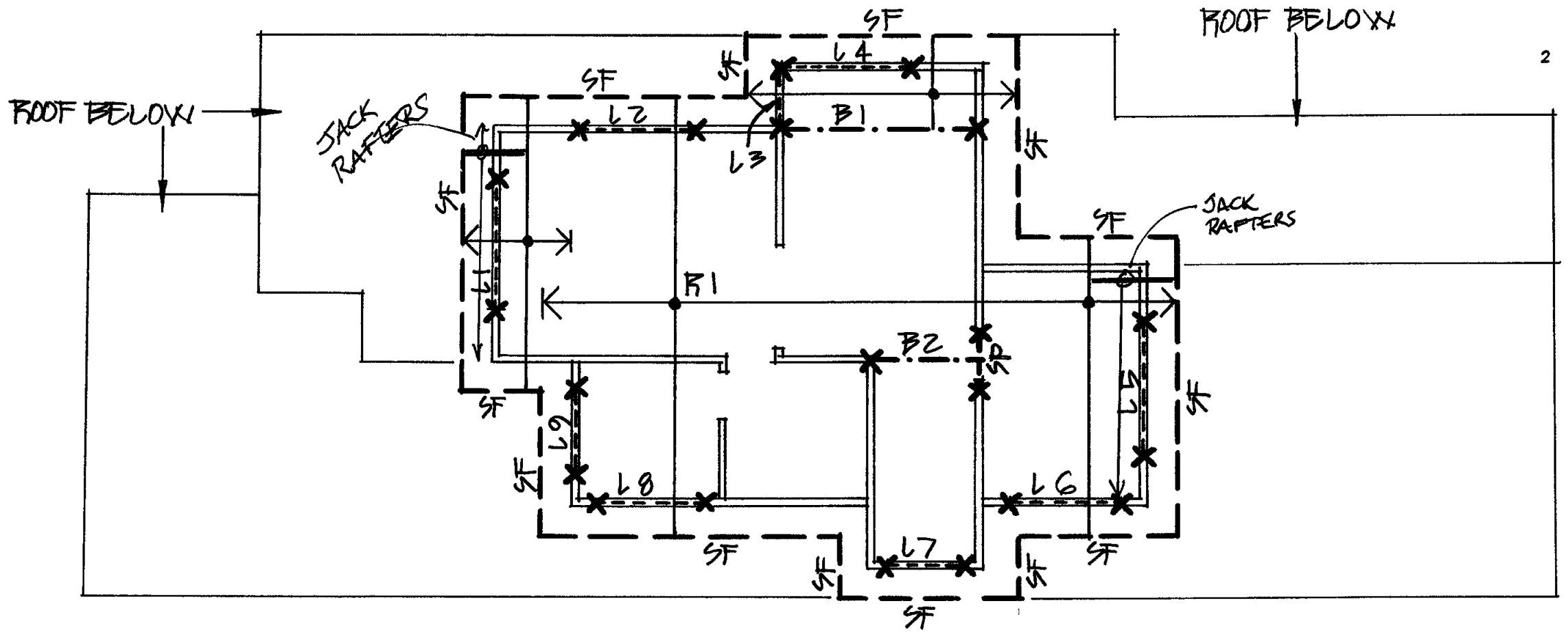

FIRST FLOOR ROOF FRAMING PLAN

SCALE 1:100

MEMBER LEGEND

B1 = BEAM 2 X 200 X 45 HYSPAN LVL
NAIL AND GLUE LAMINATED
B2 = BEAM 2 X 140 X 45 MGP 10
NAIL AND GLUE LAMINATED
R1 = RAFTER 190 X 45 MGP 10 @ 600 MAX SPAN 4.5M
OR 200 X 45 HYSPAN LVL @ 600 MAX SPAN 5.6M
SF = STRUCTURAL FASCIA 190 X 45 MGP 10
[redacted]
LINTELS - L1, L2, L4, L5, L6, L7, L8, L9 = 2 X 140 X 45 MGP 10
NAIL AND GLUE LAMINATED
LINTELS - L3 = 2 X 90 X 45 MGP 10
NAIL AND GLUE LAMINATED
SP = SPREADER 2 X 140 X 45 MGP 10 NAIL & GLUE LAMINATED

NOTE:

PLY BRACE ENTIRE PERIMETER WALL AS PER WALL PLY BRACING DETAIL (509)

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Date JAN 11
Rick G Wray
BE(Civil),CPEng,MIEAust ,NPER
(Director Northern Beaches Consulting Engineers)

NORTHERN BEACHES
Consulting Engineers P/L
A C N 076 121 616 A B N 24 076 121 616
Suite 207 30 FISHER ROAD
DEE WHY N S W 2099
Ph (02) 9984 7000 Fax (02) 9984 7444
e mail nb@nbconsulting com au
web page www nbconsulting com au

Architect: J D EVANS	Project: PROPOSED ADDITION 11 WHALE BEACH ROAD AVALON BEACH	Date: JANUARY 2011	Design: BS	Drawn: N K	Checked: RGW
Client: BRAD WHITE	Drawing Title: FIRST FLOOR ROOF FRAMING PLAN	Job No: 101145		Drawing No: 508	Rev:

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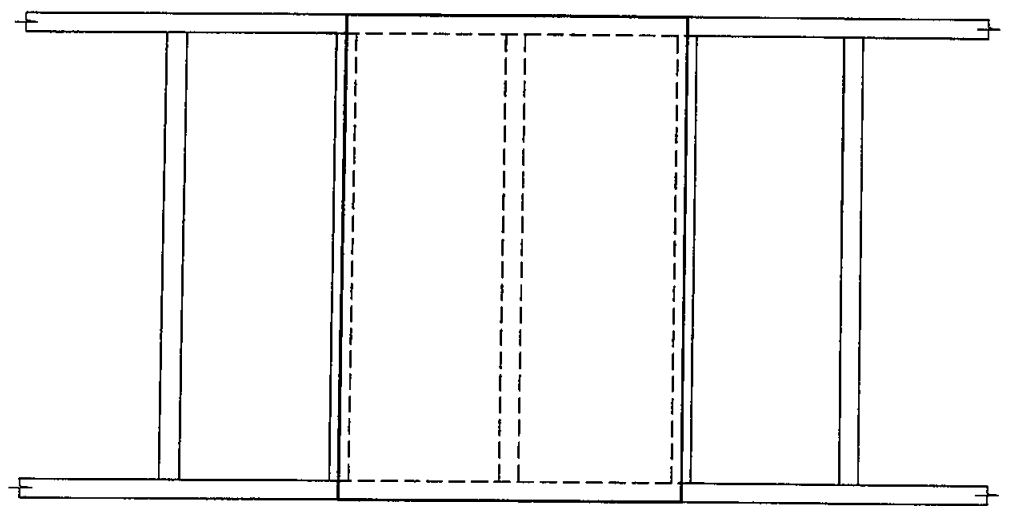
PLYWOOD BRACING

FIX PLYWOOD PANELS WITH GALVANISED FLATHEAD NAILS
ϕ2 8mm x 30mm LONG MINIMUM OR EQUIVALENT AT 50mm CENTRES ALONG TOP AND BOTTOM PLATES, 150mm CENTRES ALONG VERTICAL EDGES AND 300mm CENTRES ALONG INTERMEDIATE STUDS
NAILS SHALL BE LOCATED A MINIMUM OF 7mm FROM PANEL EDGES
POWER DRIVEN GALVANISED NAILS OR COATED STAPLES MAY BE USED WHERE THEY PROVIDE AT LEAST THE EQUIVALENT STRENGTH TO HAND DRIVES ϕ2 8mm x 30mm LONG GALVANISED CLOUTS OR FLATHEAD NAILS IN THE CASE OF POWER DRIVEN STAPLES, STAPLE SPACING SHALL BE 35mm CENTRES AT TOP AND BOTTOM PLATES, 100mm CENTRES AT VERTICAL PLYWOOD EDGES AND 200mm CENTRES ALONG INTERMEDIATE STUDS



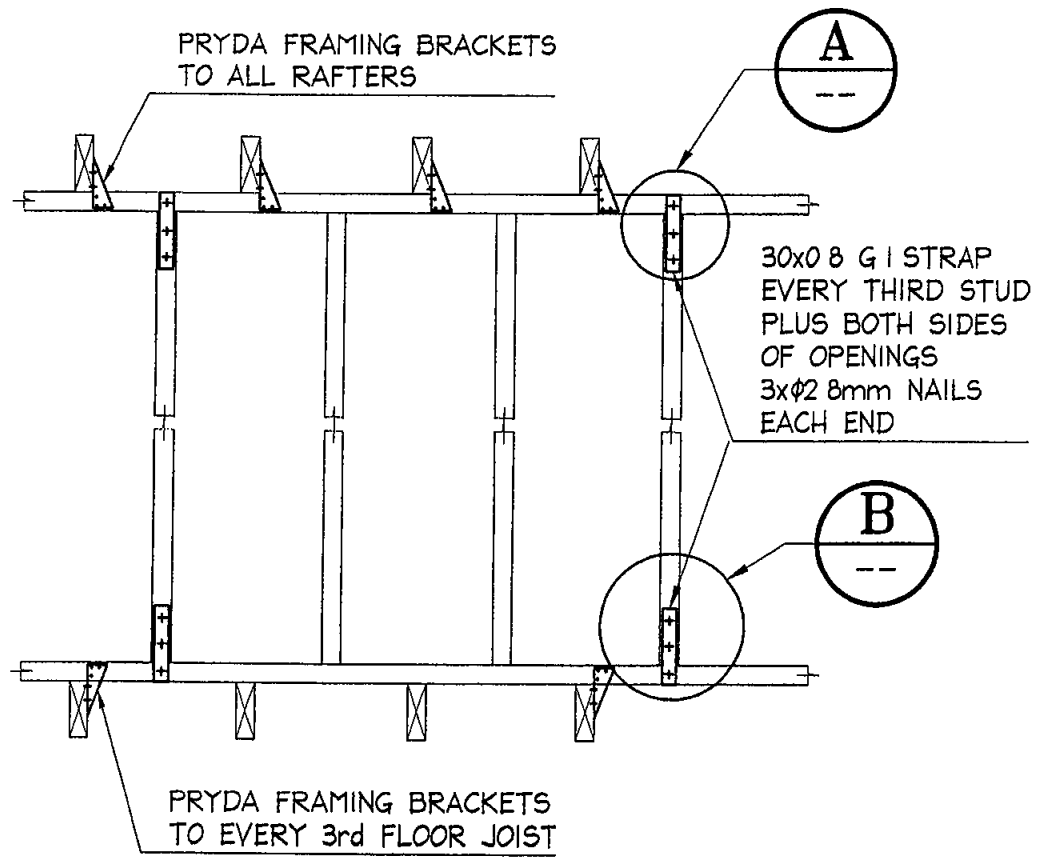
PLYWOOD THICKNESS		
PLYWOOD STRESS GRADE	PLYWOOD THICKNESS	
	MAXIMUM STUD SPACING	
	450mm	600mm
F8	7 0mm	9 0mm
F11	6 0mm	7 0mm
F14	4 0mm	6 0mm
F27	4 0mm	4 5mm

NOTES

1 FOR PLYWOOD THICKNESS REFER TO TABLE
2 FOR POWER DRIVEN NAILS AND STAPLES REFER ABOVE
3 PANEL EDGES SHALL BE SUPPORTED BY STUDS
4 NOGGINGS HAVE BEEN OMITTED FOR CLARITY

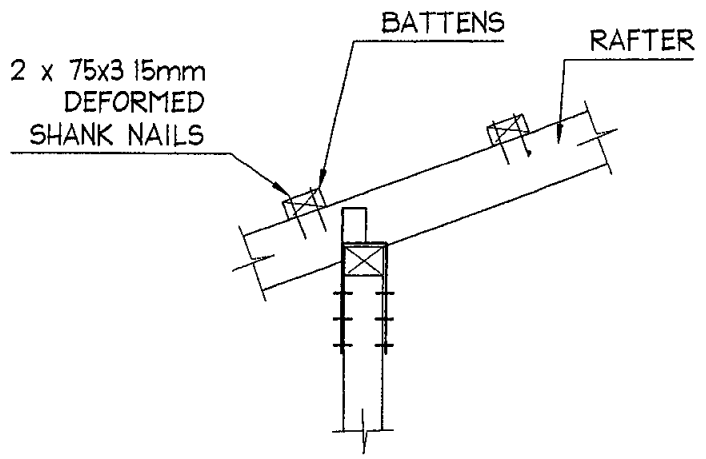
EACH 900 mm PANEL EQUALS FOUR TYPE A BRACING UNITS AS PER AS1684 4-2006

WALL PLY BRACING DETAILS



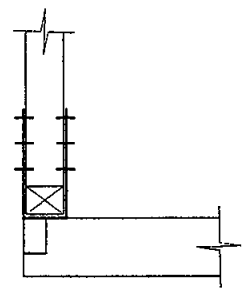
TYPICAL TIE DOWN DETAIL

SCALE = 1 20



DETAIL A

SCALE = 1 20



DETAIL B

SCALE = 1 20

NOTES

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Date JAN 11' R Wray
Rick G Wray
BE(Civil),CPEng,MIEAust ,NPER
(Director Northern Beaches Consulting Engineers)

NORTHERN BEACHES
Consulting Engineers P/L
A C N 076 121 616 A B N 24 076 121 616
Suite 207 30 FISHER ROAD
DEE WHY N S W 2099
Ph (02) 9984 7000 Fax (02) 9984 7444
e mail nb@nbconsulting com au
web page www nbconsulting com au

Architect: J D EVANS	Project: PROPOSED ADDITION 11 WHALE BEACH ROAD AVALON BEACH	Date: JANUARY 2011	Design: BS	Drawn: N K	Checked: RGW
Client: BRAD WHITE	Drawing Title: TYPICAL DETAILS	Job No: 101145		Drawing No: S09	Rev: