

# Construction Certificate Determination

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

RTI 190269

**Certificate No. 2006/1179**

<b>Council</b>	Pittwater
<b>Determination</b> date of determination	Approved 7 April 2006
<b>Subject land</b> Address Lot No, DP No.	71 Wimbledon Avenue, North Narrabeen Lot 18 DP 17768
<b>Applicant</b> Name Address Contact No. (phone)	Michael & Merica Bucknell 71 Wimbledon Avenue, North Narrabeen NSW 2100 9999 6180 / 9999 6185
<b>Owner</b> Name Address Contact No. (phone)	Michael & Merica Bucknell 71 Wimbledon Avenue, North Narrabeen NSW 2100 9944 8049 / 0418 462 209
<b>Description of Development</b> Type of Work	Alterations & Additions to Existing Dwelling
<b>Builder or Owner/Builder</b> Name Contractor Licence No/Permit	Michael Charles Bucknell 299394P
<b>Value of Work</b> Building	\$80,000.0

## Attachments

**COUNCIL  
COPY**

1. Copy of completed Construction Certificate Application Form
2. Pittwater Council receipt no. 181316, dated 23 November 2005, for payment of Long Service Levy
3. Department of Infrastructure Planning & Natural Resources correspondence, reference ERM2004/5053 re Exemption Order, dated 29 November 2005

**Plans & Specifications  
certified**List plans no(s) & specifications  
Reference


1. Architectural Plans & Construction Specifications, reference no. WIM-01, Sheets 2 of 3 dated May 2004 & 3 of 3, dated June 2004, prepared by PLANART
2. Structural Engineers Plans & Details, reference 050702, Drawing nos. S01-S07, dated July 2005, prepared by Northern Beaches Consulting Engineers Pty Ltd
3. Certificate of Structural Adequacy, dated 28 July 2005, reference 050702, prepared by NB Consulting Engineers Pty Ltd
4. Sydney Water approval dated 23/11/2005

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## Certificate

I certify that the work if completed in accordance with these plans and specifications will comply with the requirements of S81A(5) of the Environmental Planning and Assessment Act 1979.

**Signed** 1-7 APR 2005**Date of endorsement  
Certificate No.**

2006/1179

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**Certifying Authority**Name of Accredited Certifier  
Accreditation No.  
Accreditation AuthorityContact No.  
AddressStephen Pinn  
POO40  
Dept of Infrastructure, Planning & Natural Resources  
(NSW Accreditation Scheme)  
(02) 9999 0003  
13/90 Mona Vale Road, Mona Vale NSW 2103

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**Development Consent**Development Application No.  
Date of DeterminationDA NO453/04  
24 November 2004

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**BCA Classification**1a

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Pittwater Council

ABN: 61340837871

**TAX INVOICE**  
**OFFICIAL RECEIPT**

23/11/2005 Receipt No 18131A

To MICHAEL BUCKNELL

71 WIMBLEDON AVE  
NORTH NARRABEEN

Qty/ Applic	Reference	Amount
	QLSL-Buil	\$160.00
GL Rec	LSL # NO453/04:71 WIMBLEDON	
1	CCGST-CCa	\$1.45
GL Rec 1		
	GST	\$0.15
GL Rec		
To GL Receipt:		

Total Amount:	\$161.60
Includes GST of:	\$0.15

Amounts Tendered	
Db/Cr Card	\$161.60
Total	\$161.60
Rounding	\$0.00
Change	\$0.00
Nett	\$161.60

Printed 23/11/2005 3:18:10 PM  
Cashier SBrowne

**COUNCIL  
COPY**



Department of  
**Infrastructure, Planning and Natural Resources**

Contact: Jo Ann Moore  
Phone: (02)9895 5016  
Fax: (02) 9895 6270  
Email: [JoAnn.Moore@dipnr.nsw.gov.au](mailto:JoAnn.Moore@dipnr.nsw.gov.au)

The General Manager  
Pittwater Council  
PO Box 882  
MONA VALE NSW 1660

Your reference: DA0453/04  
Our reference: ERM2004/5053

Attention: Andrew Piggott

29 November 2005

Dear Mr Ferguson

**Subject: Development Application DA0453/04 – Lot 18 DP17768, 71 Wimbledon Avenue, North Narrabeen.**

Reference is made to the above development consented to by Council on 24 November 2004.

Please be advised that as of 24 December 2004, an exemption Order under Section 22B of the Rivers and Foreshores Improvement Act 1948 (the Act) has come in to effect relating to single dwelling houses or dual occupancy developments. A copy of the Order is attached.

The effect of the Order is that the subject Development Application (DA) no longer requires a permit issued under Part 3A of the Act. Additionally, this DA does not propose any instream works for Narrabeen Lagoon.

Should you have any questions in relation to this matter, please contact Jo Ann Moore on telephone 9895 5016.

Yours sincerely

Jo Ann Moore  
Natural Resource Officer,  
South Coast Region

cc. Mr M. Bucknell  
Fax: 9999 6140

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**COUNCIL  
COPY**



**RIVERS AND FORESHORES IMPROVEMENT ACT 1948****Order under section 22B****WORKS WHERE PERMIT NOT REQUIRED**

PURSUANT to section 22B of the *Rivers and Foreshores Improvement Act 1948* ('RFI Act'), the Water Administration Ministerial Corporation specifies the works identified in Schedules A and B of this Order for the purposes of section 22B(4) of that Act, being works where a permit under Part 3A is not required.

Schedule A applies where the *Constructing Authority* is the person identified in paragraph (b) or (c) of the definition of that term in section 22A.

Schedule B applies where:

- (a) the *Constructing Authority* is the Minister identified in paragraph (a) of the definition of that term in section 22A, and
- (b) the land or water on, in or under which the work is to be carried out is within or adjacent to Sydney Harbour and its tributaries.

For the purposes of this Order, Sydney Harbour and its tributaries means, Sydney Harbour and all tidal bays, rivers and their tributaries connected or leading thereto bounded by the mean high water mark as vested in the Waterways Authority.

This Order takes effect 7 days following the date of publication in the Government Gazette.

Dated at Sydney this 8<sup>th</sup> day of December 2004.

CRAIG JOHN KNOWLES, MP  
Minister for Natural Resources  
(in the capacity of Water Administration Ministerial Corporation)

## SCHEDULE A

Any **work** (as defined in section 2 of the RFI Act) being a work:

- 1) that is to be carried out in relation to **protected land** or **protected waters** (as defined in section 22A of the RFI Act), and
- 2) that is in any area zoned under an **environmental planning instrument** (as defined in section 4 of the Environmental Planning and Assessment Act 1979 ('EP&A Act')) where development for the purpose of a dwelling house is permissible, and
- 3) that is the subject of a **development application**, or a **complying development certificate**, or that is **exempt development** (pursuant to the definition of each term in section 4 of the EP&A Act) concerning:
  - a) a single dwelling house,
  - b) dual occupancy development,
  - c) any alterations or additions to an existing dwelling house or dual occupancy development,
  - d) any ancillary developments to an existing dwelling house or dual occupancy development being:
    - i) driveways,
    - ii) carports,
    - iii) awnings,
    - iv) detached sheds or garages,
    - v) pergolas or gazebos,
    - vi) verandahs, patios or decks,
    - vii) barbecues,
    - viii) swimming pools, tennis courts or dressage arenas,
    - ix) acoustic barriers,
    - x) inclinators,
    - xi) clothes lines,
    - xii) antennae.

## SCHEDULE B

Any **work** (as defined in section 2 of the RFI Act) being a work:

- 1) that is to be carried out in relation to **protected land** or **protected waters** (as defined in section 22A of the RFI Act), and
- 2) that is in any area zoned under an **environmental planning instrument** (as defined in section 4 of the Environmental Planning and Assessment Act 1979 ('EP&A Act')) where development for the purpose of a dwelling house is permissible, and
- 3) that is the subject of a **development application**, or a **complying development certificate**, or that is **exempt development** (pursuant to the definition of each term in section 4 of the EP&A Act) concerning:
  - a) any alterations or additions to an existing dwelling house or dual occupancy development that do not alter the building footprint of the existing development,
  - b) any ancillary developments to an existing dwelling house or dual occupancy development that is to be carried out more than 10 metres from **protected waters** being:
    - i) driveways,
    - ii) carports,
    - iii) awnings,
    - iv) detached sheds or garages,
    - v) pergolas or gazebos,
    - vi) verandahs, patios or decks,
    - vii) barbecues,
    - viii) above ground swimming pools, tennis courts or dressage arenas,
    - ix) acoustic barriers,
    - x) inclinators,
    - xi) clothes lines,
    - xii) antennae.

## APPLICATION FOR A 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

Given Names (or ACN)

Michael &amp; Merica

Family Name (or Company)

Bucknell "Adze" PTY LTD

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

71 Wimbledon Ave

North Narrabeen NSW

Post Code

2101

Daytime telephone

9999 6180-9999 6185

Alternate no.

9944 8049 home

Mobile no.

0418 462209

## 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 authorized 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 Body Corporate or the appointed managing agent.

Owner(s)

Michael &amp; Merica Bucknell

Address

71 Wimbledon Avenue North Narrabeen NSW 2101

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)

 Merica Bucknell

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.

71

Street name

Wimbledon Avenue

Suburb

North Narrabeen NSW

Post code

2101

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

Lot no.

18

DP no.

17768

71 Wimbledon Ave Nth. Narrabeen

COUNCIL COPY



#### 4. Description of work

What type of work do you propose to carry out?

Please describe briefly everything that you want approved.

Garage and first floor. ~~1~~ 1 bedroom + ensuite and a  
Double garage

#### 5. Estimated cost of work

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

Estimated cost of work \$ 80,000

#### 6. Development Consent

Council Consent no. N0453/04

Date of Determination 24-11-2004

#### 7. Building Code of Australia classification

This can be found on the development consent

BCA Classification

#### 8. Builder's details

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

Name

License no.

Owner/builder permit no.

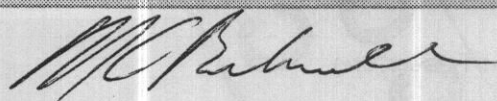
299394P

#### 9. Applicant's declaration

I apply for a Construction Certificate to carry out building works as described in this application. I declare that all the information in this application and checklist is, to the best of my knowledge, true and correct.

Signature

Date



12 DEC 2005



## 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
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<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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#### 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:

- show a plan of each floor section
- show a plan of each elevation of the building
- 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
- indicate the height, design, and full construction details
- 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:

- to describe the construction and materials of which the building is to be built and the method of drainage, sewerage and water supply
- 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 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
- 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.
- This list must describe the extent, capability and basis of design of each of the measures concerned.

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 Act 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 0.2% 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 SERVICE 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 <sup>2</sup> )? <b>613.40 m<sup>2</sup></b>	Gross floor area of building (m <sup>2</sup> ) as proposed: <b>261.62 m<sup>2</sup></b>
What are the current uses of all or parts of the building(s)/land? <b>Home &amp; garage</b>	Location: Use:
Does the site contain a dual occupancy? <b>NO</b>	What is the gross floor area of the proposed addition or new building (sq metres)?
What are the proposed uses of all parts of the building(s) land? <b>Residence</b>	Number of pre-existing dwellings: <b>One</b>
Number of dwellings to be demolished: <b>N/A</b>	How many dwellings proposed? <b>One</b>
How many storeys will the building consist of? <b>2</b>	Will the new building be attached to the existing building? <b>Yes</b>
	Will the new building be attached to any new building? <b>N/A</b>

### 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	<input checked="" type="checkbox"/>	Concrete	<input type="checkbox"/>	Aluminium	<input type="checkbox"/>	Timber	<input checked="" type="checkbox"/>
Full brick	<input type="checkbox"/>	Timber	<input checked="" type="checkbox"/>	Concrete	<input type="checkbox"/>	Steel	<input type="checkbox"/>
Single brick	<input type="checkbox"/>	Other	<input type="checkbox"/>	Concrete tile	<input type="checkbox"/>	Other	<input type="checkbox"/>
Concrete block	<input type="checkbox"/>	Unknown	<input type="checkbox"/>	Fibrous cement	<input type="checkbox"/>	Unknown	<input type="checkbox"/>
Concrete/masonry	<input type="checkbox"/>			Fibreglass	<input type="checkbox"/>		
Concrete	<input type="checkbox"/>			Masonry/terracotta shingle	<input type="checkbox"/>		
Steel	<input type="checkbox"/>			Tiles	<input type="checkbox"/>		
Fibrous cement	<input type="checkbox"/>			Slate	<input checked="" type="checkbox"/>		
Hardiplank	<input type="checkbox"/>			Steel	<input type="checkbox"/>		
Timber/weatherboard	<input type="checkbox"/>			Terracotta tile	<input type="checkbox"/>		
Cladding-aluminium	<input type="checkbox"/>			Other	<input type="checkbox"/>		
Curtain glass	<input type="checkbox"/>			Unknown	<input type="checkbox"/>		
Other	<input type="checkbox"/>						
Unknown	<input type="checkbox"/>						



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 AS 2870. 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. Scarpe weathered surface to remove cleaved sandstone under footings. Refer adjacent for assumed Design bearing strata.
- F6. Future development of neighboring properties may effect 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.

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
A3 BLOCKWORK	55 FROM APPROPRIATE FACE		

DOCUMENT CERTIFICATION

I am a qualified Structural/Civil Engineer.  
I hold the following qualifications:  
BE(Civil), CPEng, MIEAust, NPER.  
Institute of Engineers Membership No. 803998  
I hereby state that this drawing is in compliance with the provisions of the Building Code of Australia and/or relevant Australian/Industry Standards.

Date: 5 July 05  
Rick G. Wray  
(Director Northern Beaches Consulting Engineers)



**NORTHERN BEACHES**  
Consulting Engineers P/L.  
A.C.N. 078 121 616 A.B.N. 24 076 121 616  
Suite 207, 30 FISHER ROAD  
DEE WHY N.S.W. 2099  
Ph: (02) 9884 7000 Fax: (02) 9884 7444  
e-mail: nb@nbconsulting.com.au  
web page: www.nbconsulting.com.au

Project:

**ADDITIONS TO**  
**71 WIMBLEDON AVE**  
**NARRABEEN**  
**FOR: MR M.C. BUCKNELL**

ASSUMED FOUNDATION CLASSIFICATION FOR DESIGN PURPOSES -  
ASSUMED BEARING STRATA FOR DESIGN PURPOSES -  
CONTRACTOR TO ENGAGE GEOTECHNICAL CONSULTANT TO VERIFY FOUNDATION CLASSIFICATION

Drawing Title:

**GENERAL NOTES AND DRAWING SCHEDULE**

The copyright of this drawing remains with Northern Beaches Consulting Engineers P/L.

- 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.
- R4. Bottom reinforcement shall not 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 1509 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 grouted 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. Bitumastic 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.

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. Bitumastic 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 Edlxx 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 Dilux Luxaprima applied by hand using brushes to achieve a total dry film thickness of 70 microns.
- 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 (Dilux 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. Dilux Acrothane I F) in an approved 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.

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

EXTERNAL ELEMENTS, & ELEMENTS WITHIN EITHER SKIN OF EXTERNAL CAVITY WALLS

- a. Thoroughly cleaned wire brushing, followed by two coats of zinc phosphate primer equivalent to Dilux Luxaprima applied by hand using brushes to achieve a total dry film thickness of 70 microns.
- 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 (Dilux 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. Dilux Acrothane I F) in an approved colour.
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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.

- 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 or 2.

- 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 un.o.

- 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 Resol by Protim to manufacturers specification to achieve required Hazard Level Exposure Classification.
- T6. Battens for T & G to be Klin 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.

COMPACTED FILL

- CF1. Only to be used with approval Engineer & to be certified by a geotechnical Engineer.
- CF2. Clear organic material and topsoil 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.
- CF4. During clearing and excavation for slabs and footings cut out soft spots and fill as above.

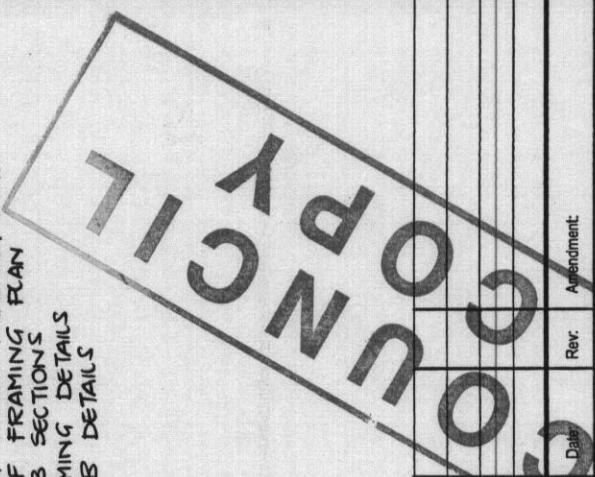
INSPECTIONS BY ENGINEER

- 48 HOURS NOTICE IS REQUIRED BEFORE ANY SITE INSPECTION

1. Bearing strata of all footings prior to concrete pour.  
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.

DRAWING SCHEDULE:

- S01 - GENERAL NOTES AND DRAWING SCHEDULE  
S02 - GROUND FLOOR PLAN  
S03 - FIRST FLOOR FRAMING PLAN  
S04 - ROOF FRAMING PLAN  
S05 - SLAB SECTIONS  
S06 - FRAMING DETAILS  
S07 - SLAB DETAILS



Date	Rev.	Amendment
July '05	D.I.	
Date:	Design:	Drawn:
Job No:	Drawing No:	Checked:
050702	S01	R&W



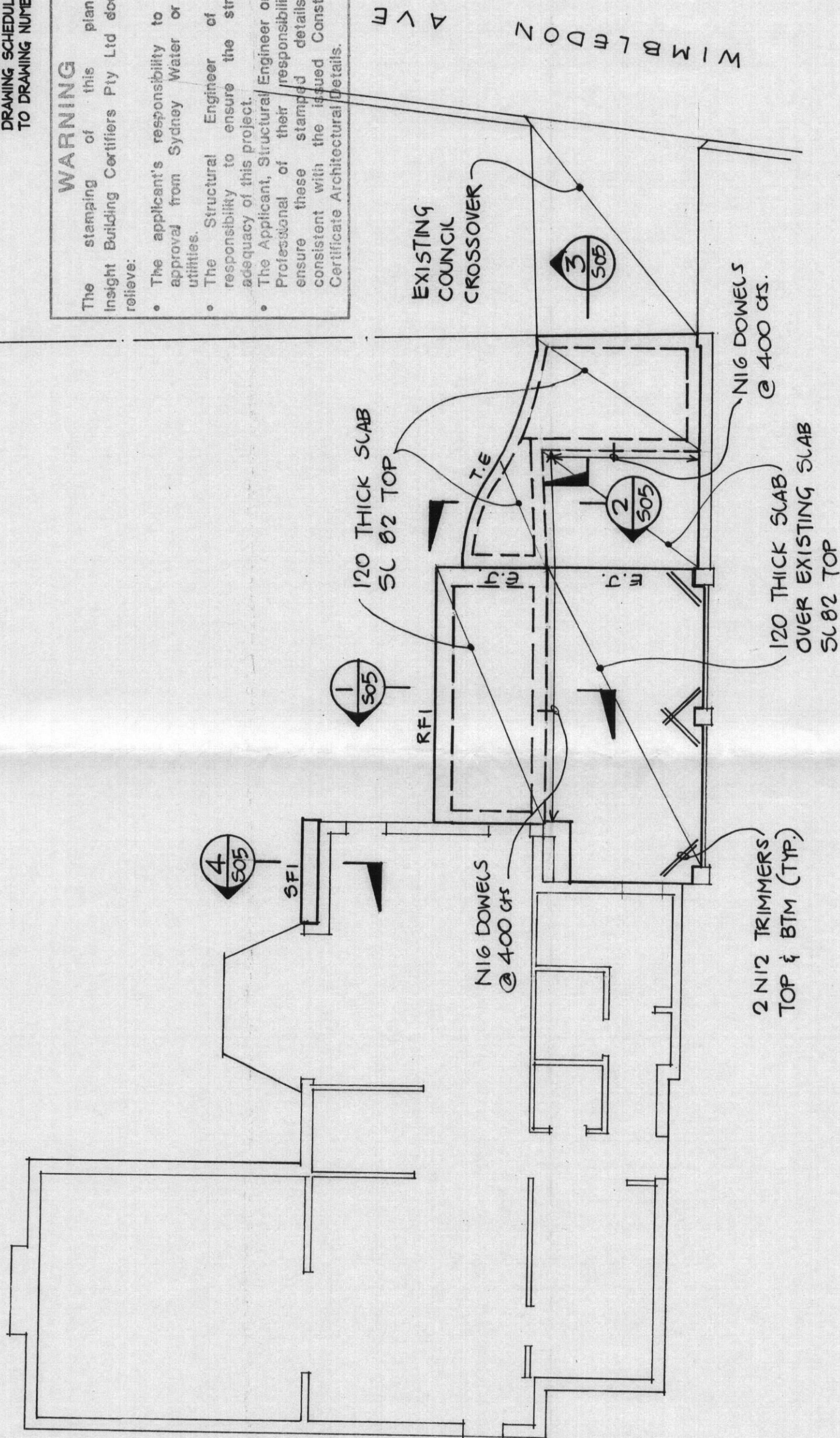
# NOTES:

1. ALL DIMENSIONS TO BE VERIFIED ON SITE BEFORE COMMENCING WITH WORK.
2. FOR GENERAL NOTES AND DRAWING SCHEDULE REFER TO DRAWING NUMBER: S01.

## WARNING

The stamping of this plan by Insight Building Certifiers Pty Ltd does not relieve:

- The applicant's responsibility to obtain approval from Sydney Water or other utilities.
- The Structural Engineer of their responsibility to ensure the structural adequacy of this project.
- The Applicant, Structural Engineer or other Professional of their responsibility to ensure these stamped details are consistent with the issued Construction Certificate Architectural Details.



## GROUND FLOOR PLAN

1:100

A3

### DOCUMENT CERTIFICATION

Date: July 05  
 Rick G. Wray  
 (Director Northern Beaches Consulting Engineers)

I am a qualified Structural/Civil Engineer.  
 I hold the following qualifications:  
 BE(Civil), CPEng, MIEAust, NPER  
 Institute of Engineers Membership No. 803938  
 I hereby state that this drawing is in compliance with the provisions of the Building Code of Australia and/or relevant Australian/Industry Standards.



**NORTHERN BEACHES**  
 Consulting Engineers P/L.  
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 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

Project: ADDITIONS

TO  
 71 WIMBLEDON AVE  
 NARRABEEN  
 FOR: MR M.C. BUCKNELL

Drawing Title:

GROUND FLOOR PLAN

Date: JULY '05

Design: D.I.

Drawn: LFC

Checked: RGM

Job No:

050702

Drawing No:

S02

The copyright of this drawing remains with Northern Beaches Consulting Engineers PL

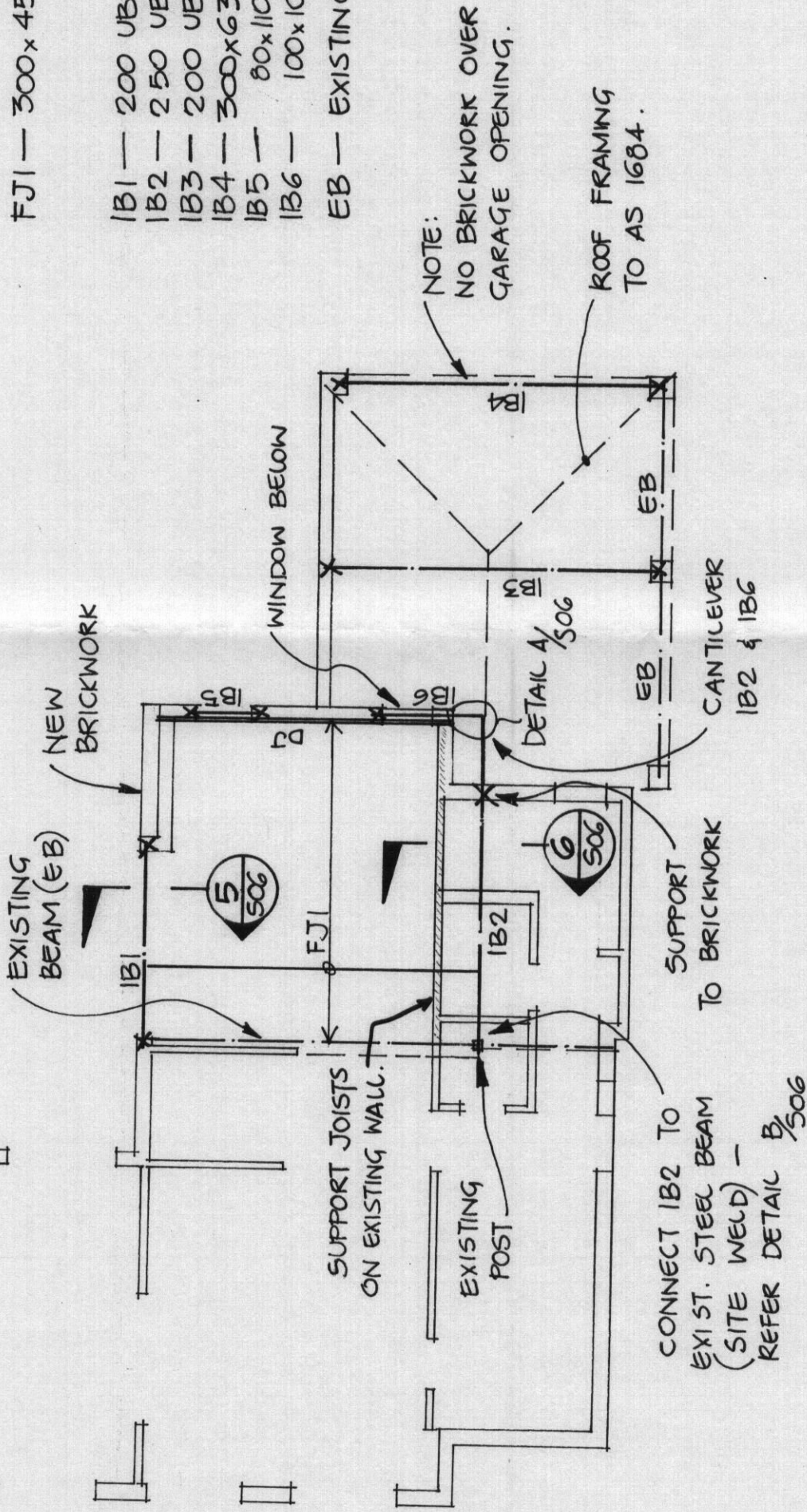


# NOTES:

1. ALL DIMENSIONS TO BE VERIFIED ON SITE BEFORE COMMENCING WITH WORK.
2. FOR GENERAL NOTES AND DRAWING SCHEDULE REFER TO DRAWING NUMBER: S01.

FJ1 — 300x45 HYPAN LVL JOISTS @ 450ds

IB1 — 200 UB 25  
 IB2 — 250 UB 25  
 IB3 — 200 UB 22  
 IB4 — 300x63 HYPAN LVL LINTEL  
 IB5 — 80x110 ULTRA LINTEL + DOUBLE JOIST  
 IB6 — 100x100x12 EA + DOUBLE JOIST  
 EB — EXISTING BEAMS



## FIRST FLOOR FRAMING PLAN

1:100

A3

### DOCUMENT CERTIFICATION

Date: 20/05/05  
 Rick G. Wray  
 (Director Northern Beaches Consulting Engineers)

I am a qualified Structural/Civil Engineer.  
 I hold the following qualifications:  
 BE(Civil), CPENG, MIEAust., NPER.  
 Institute of Engineers Membership No. 809386  
 I hereby state that this drawing is in compliance with the provisions of the Building Code of Australia and/or relevant Australian Industry Standards.



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 e-mail: nb@nbconsulting.com.au  
 web page: www.nbconsulting.com.au

### Project:

ADDITIONS  
 TO  
 71 WIMBLEDON AVE  
 NARRABEEN  
 FOR MR. M.C. BUCKNELL

### Drawing Title:

FIRST FLOOR FRAMING  
 PLAN

### Amendment:

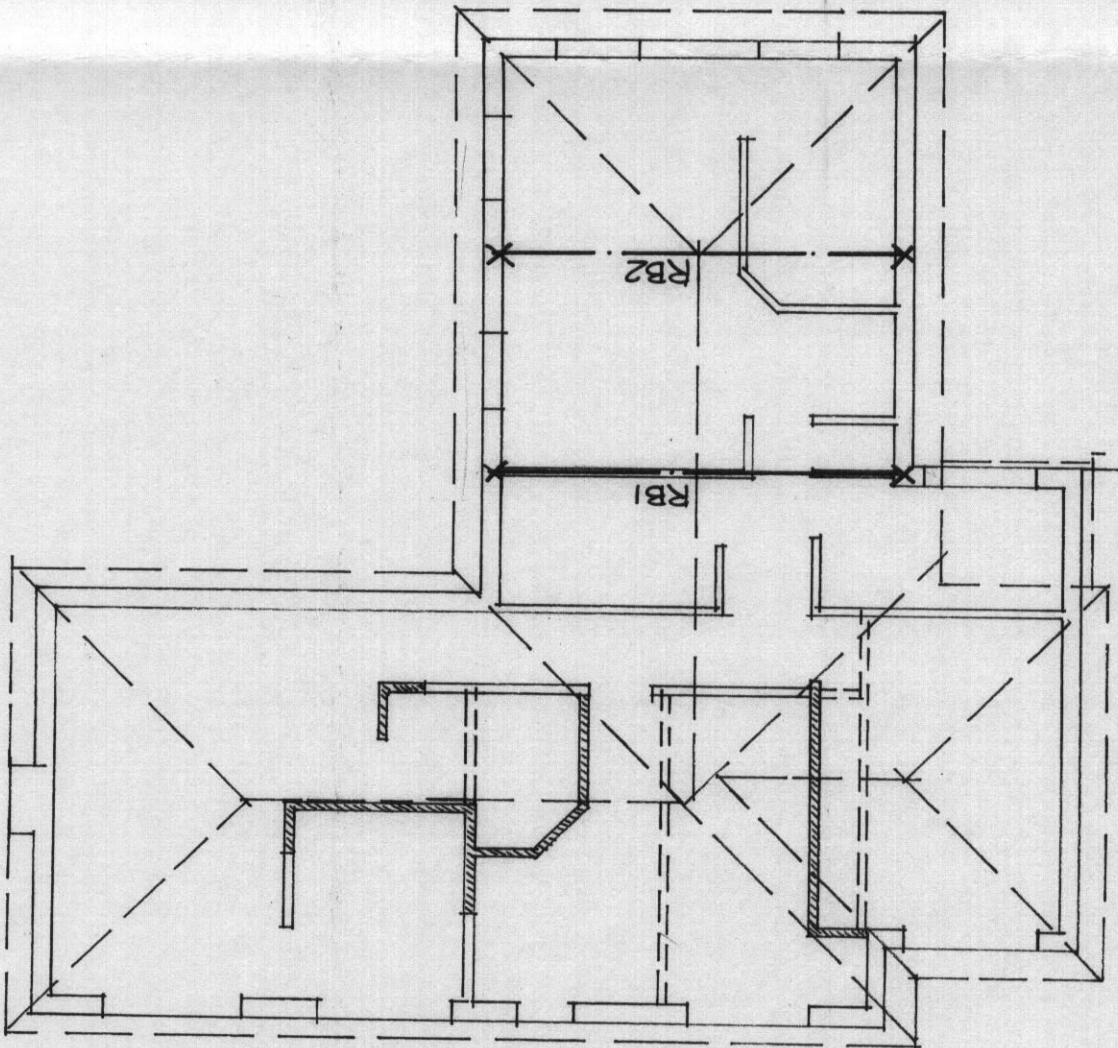
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JULY 05	D.I.	UFC	UFC	RW
Job No:		Drawing No:		Rev:
050702		S03		

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NOTES:

1. ALL DIMENSIONS TO BE VERIFIED ON SITE BEFORE COMMENCING WITH WORK.
2. FOR GENERAL NOTES AND DRAWING SCHEDULE REFER TO DRAWING NUMBER: S01.



ROOF FRAMING PLAN

RB1/RB2 - 260 x 65 HTNE BEAM HANGING / STRUTTING BEAMS  
1:100  
17C

A3

DOCUMENT CERTIFICATION

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I hold the following qualifications:  
BE(Civil), CPENG, MIEAust., NPER,  
Institute of Engineers Membership No. 803938  
I hereby state that this drawing is in compliance  
with the provisions of the Building Code of  
Australia and/or relevant Australian Industry  
Standards.

Date: July 05  
Rick G. Wray  
(Director Northern Beaches Consulting Engineers)

**NB**  
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Consulting Engineers P/L  
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Project: ADDITIONS  
TO  
71 WIMBLEDON AVE  
NARRABEEN  
FOR: MR M.C. BUCKNEU

Drawing Title:  
ROOF FRAMING PLAN

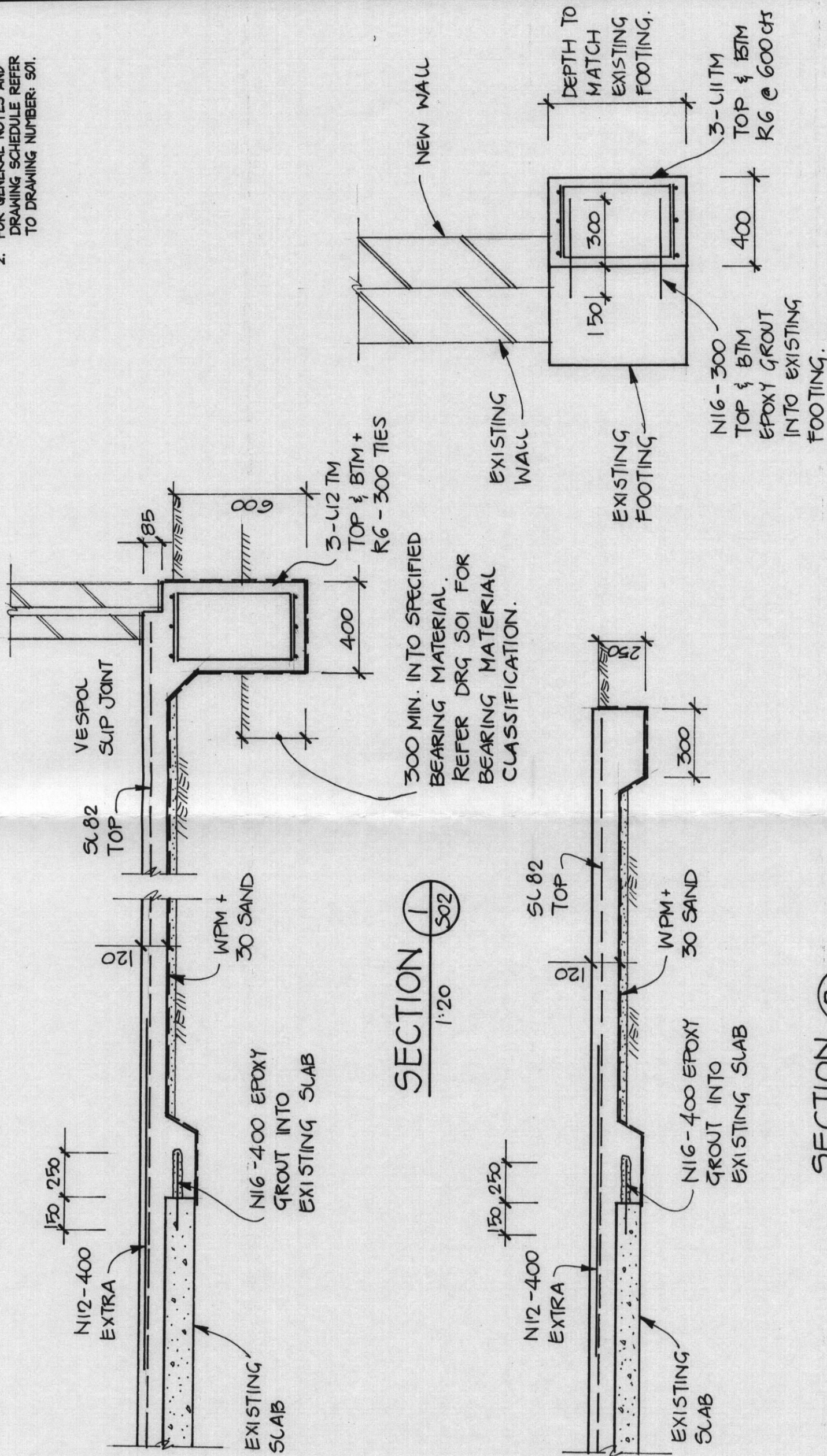
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Job No:	050702	D.I.	UFC
Rev:	S04		

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# NOTES:

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2. FOR GENERAL NOTES AND DRAWING SCHEDULE REFER TO DRAWING NUMBER: S01.



SECTION 1  
1:20 S02

SECTION 2  
1:20 S02

(SECTION 3 - SIMILAR)

SECTION 4  
1:20 S02

## DOCUMENT CERTIFICATION

I am a qualified Structural/Civil Engineer.  
I hold the following qualifications:  
BE(Civil), CPENG, MIEAust., NPER.  
Institute of Engineers Membership No. 8099936  
I hereby state that this drawing is in compliance with the provisions of the Building Code of Australia and/or relevant Australian/Industry Standards.

Date: July 05  
Rick G. Wray  
(Director Northern Beaches Consulting Engineers)

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Project: ADDITIONS TO  
71 WIMBLEDON AVE  
NARRABEEN  
FOR: MR M.C. BUCKNELL

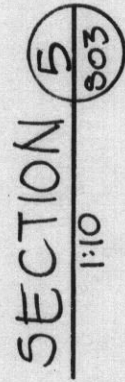
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Date:	Rev:	Amendment:	Design:	Drawn:	Checked:
July 05	P.I.		UFC		RW
Job No:				Drawing No:	Rev:
050702				S05	

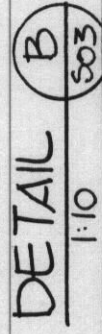


1. ALL DIMENSIONS TO BE VERIFIED ON SITE BEFORE COMMENCING WITH WORK.

2. FOR GENERAL NOTES AND DRAWING SCHEDULE REFER TO DRAWING NUMBER: S01.



SECTION 6  
1:10  
SOS



DOCUMENT CERTIFICATION

Date : July 05' *K. Wray*  
Rick G. Wray .....  
(Director Northern Beaches Consulting Engineers)

I am a qualified Structural/Civil Engineer.  
I hold the following qualifications:  
BE(Civil), CPEng, MIEAust., NPER.  
Institute of Engineers Membership No. 803988  
I hereby state that this drawing is in compliance  
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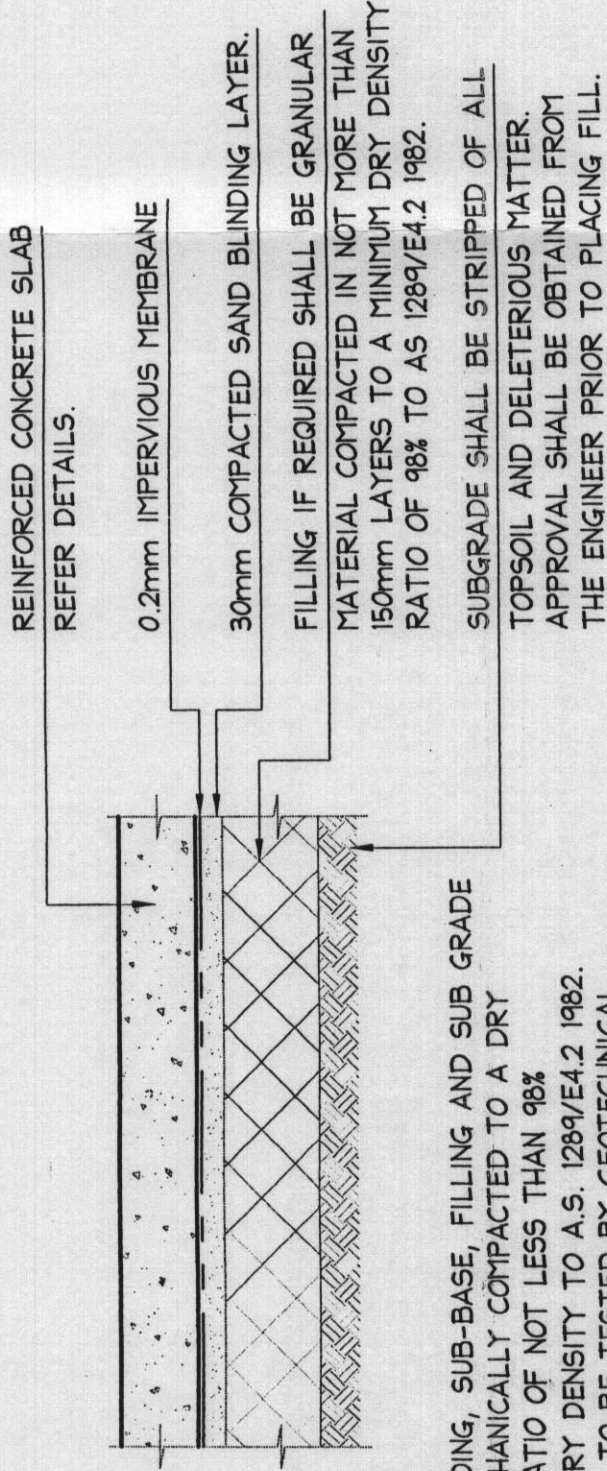
Project: ADDITIONS  
TO  
71 WIMBLEDON AVE  
NARRABEEN  
FOR MR M. C. BUCKNELL

Drawing Title:

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Date:	Rev:	Amendment:	
Date:	JULY '05	Design:	D.I.
Job No:		Drawing No:	S06
Checked:		Drawn:	UFC
Rev:		Rev:	

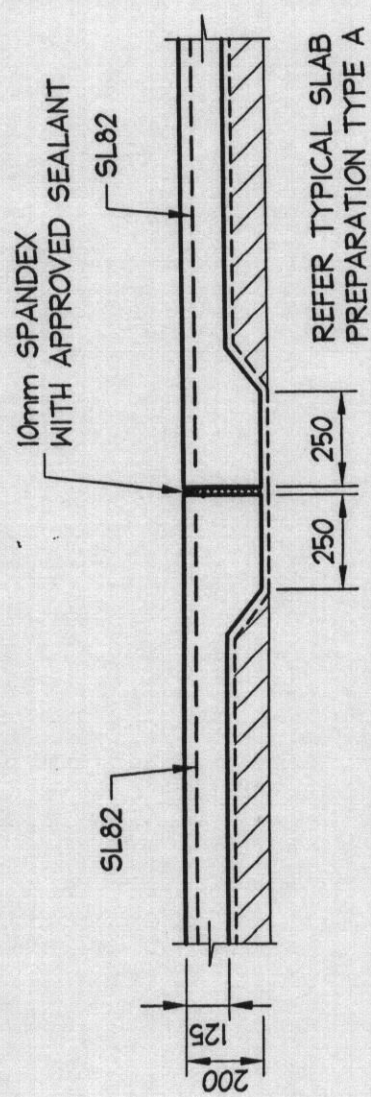




**NOTE :**  
 SAND BLINDING, SUB-BASE, FILLING AND SUB GRADE TO BE MECHANICALLY COMPACTED TO A DRY DENSITY RATIO OF NOT LESS THAN 98% MAXIMUM DRY DENSITY TO A.S. 1289/E4.2 1982. ALL AREAS TO BE TESTED BY GEOTECHNICAL ENGINEER AND RESULTS FORWARDED TO STRUCTURAL ENGINEER PRIOR TO POURING CONCRETE.

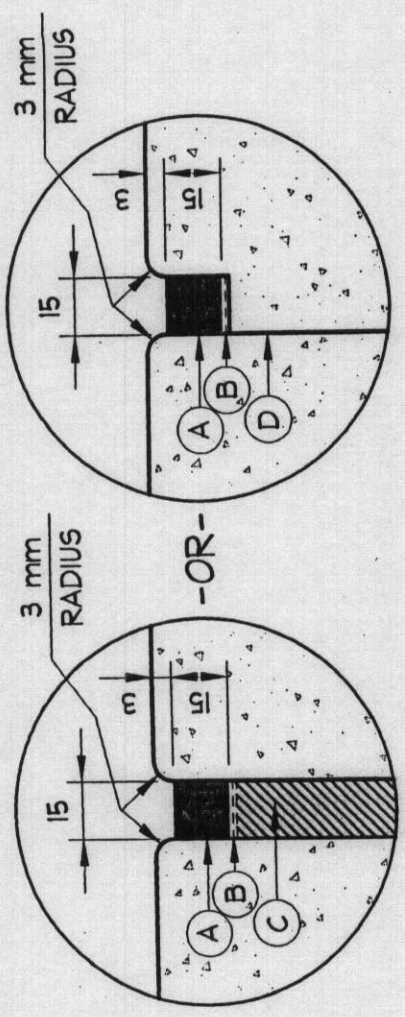
# TYPICAL SLAB PREPARATION TYPE A SLAB ON GRADE

N.T.S.



# EXPANSION JOINT DETAIL DENOTED E.J. ON PLAN

SCALE = 1 : 20



- (A) - THIOFLEX 600 POURING OR GUN GRADE SEALANT BY PARBURY TECHNOLOGIES OR APPROVED EQUIVALENT.
- (B) - POLYETHYLENE TAPE BOND BREAKER
- (C) - FLEXIBLE FOAM OR SELF EXPANDING CORK REFER DETAILS
- (D) - KEYED JOINT OR SAW CUT JOINT

**NOTE :**  
 THIOFLEX 600 POURING GRADE IS SUITABLE ONLY FOR HORIZONTAL JOINTS WITH SOUND BACKING. FOR INCLINED OR VERTICAL JOINTS THIOFLEX 600 GUN GRADE SHOULD BE USED. BOTH GRADES OF THIOFLEX 600 SHALL BE USED IN STRICT ACCORDANCE WITH THE MANUFACTURER'S REQUIREMENTS.

# TYPICAL JOINT SEALANT DETAILS

N.T.S.

**DOCUMENT CERTIFICATION**  
 Date July 05  
 Rick G. Wray  
 (Director Northern Beaches Consulting Engineers)

I am a qualified Structural/Civil Engineer.  
 I hold the following qualifications:  
 BE(Civil), CPENG, MIEAust., NPER.  
 Institute of Engineers Membership No. 803988  
 I hereby state that this drawing is in compliance with the provisions of the Building Code of Australia and/or relevant Australian/Industry Standards.

**NB**  
**NORTHERN BEACHES**  
**Consulting Engineers P/L**  
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 Suite 207, 30 FISHER ROAD  
 DEERWAY N.S.W. 2099  
 Ph: (02) 9984 7000 Fax: (02) 9984 7444  
 e-mail: nb@nbconsulting.com.au  
 web page: www.nbconsulting.com.au

**Project:** ADDITIONS TO  
 71 WIMBLEDON AVE  
 NARRABEEN  
 FOR MR. M. C. BUCKNELL

**Drawing Title:** SCAB DETAILS

Date:	Rev:	Amendment:	Design:	Drawn:	Checked:
JULY 05	D.I.			LFC	RW
Job No:				Drawing No:	Rev:
				507	

# **SYDNEY WATER APPROVED**

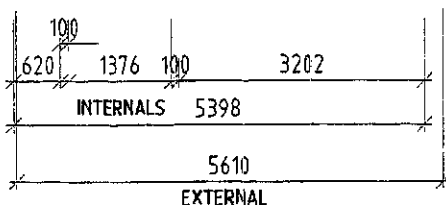
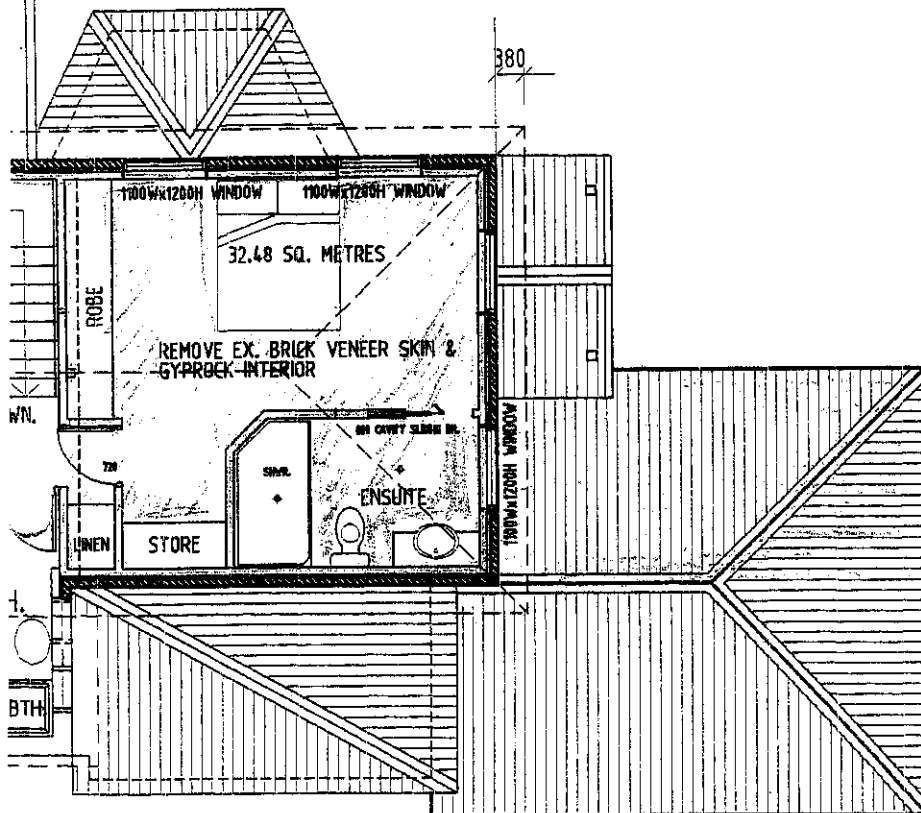
1. Position of structure in relation to Sydney Water's assets is satisfactory.
  2. Connections to Sydney Water sewer/water services may only be made following the issue of a permit to a licensed plumber/drainier.
  3. It is the owner's responsibility to ensure that all proposed fittings will drain to Sydney Water's sewer.
  4. 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.
  5. 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. 3464965

**Reece, Mona Vale**  
Quick Check Agent on behalf of  
**SYDNEY WATER**

Per: Reece 23/11/05

## **SITE CALCULATIONS**

SITE AREA	613.40 SQ. M
EX. BUILDING FOOTPRINT:	
INCLUDES COVERED PATIOS:	198.34 SQ.M
EX. FORESHORE PAVE & STAIR:	16.65 SQ. M
EX. BRICK OUT BUILDING & PAVE:	29.91 SQ. M
EX. DRIVEWAY:	16.72 SQ. M
TOTAL EX. BUILT UPON	261.62 SQ. M
DEMOLITION:	42.65%
EX. BRICK OUT BUILDING & PAVE:	29.91 SQ. M
TOTAL EX. BUILT UPON	231.71 SQ. M
PROPOSED:	37.70%
ADDITIONAL CAR SPACE (GARAGE):	12.72 SQ. M
ADDITIONAL DRIVEWAY:	4.32 SQ. M
TOTAL PROPOSED BUILT UPON AREA	17.04 SQ. M.
TOTAL BUILT UPON AREA	248.75 SQ. M.
	40.55%



**FLOOR PLAN**

**COUNCIL  
COPY**





DIRECTORS

## Certificate of Existing Structural Adequacy

Date: 28th July 2005

Job No. 050702

Builder:

Engineer: Rick Wray.

**Site: 71 Wimbledon Ave, Narrabeen.**

Rick Wray of NB 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. However, some minor cracking may occur as the building adjusts to the new load distribution. 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.)

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

**NB CONSULTING ENGINEERS P/L**  
**Rick Wray.**

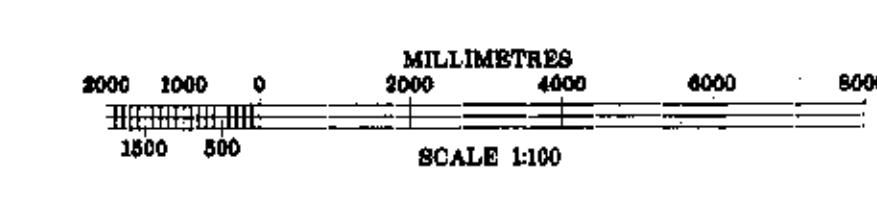
BE CPEng NPER Director

NA\ENG NBC\2005\050702\SA001.doc

**COUNCIL  
COPY**



NARRABEEN LAGOON



EX. RIDGE BY SURVEY R.L. 10.00

CEILING HT. R.L. 8.55

FIRST FLOOR F.F.L. R.L. 5.87

CEILING HT. R.L. 5.27

GROUND F.F.L. R.L. 2.63

ARCHITECTURAL BASE LINE R.L. 0.00 (APPROX. HIGH WATER MARK NARRABEEN LAKE)

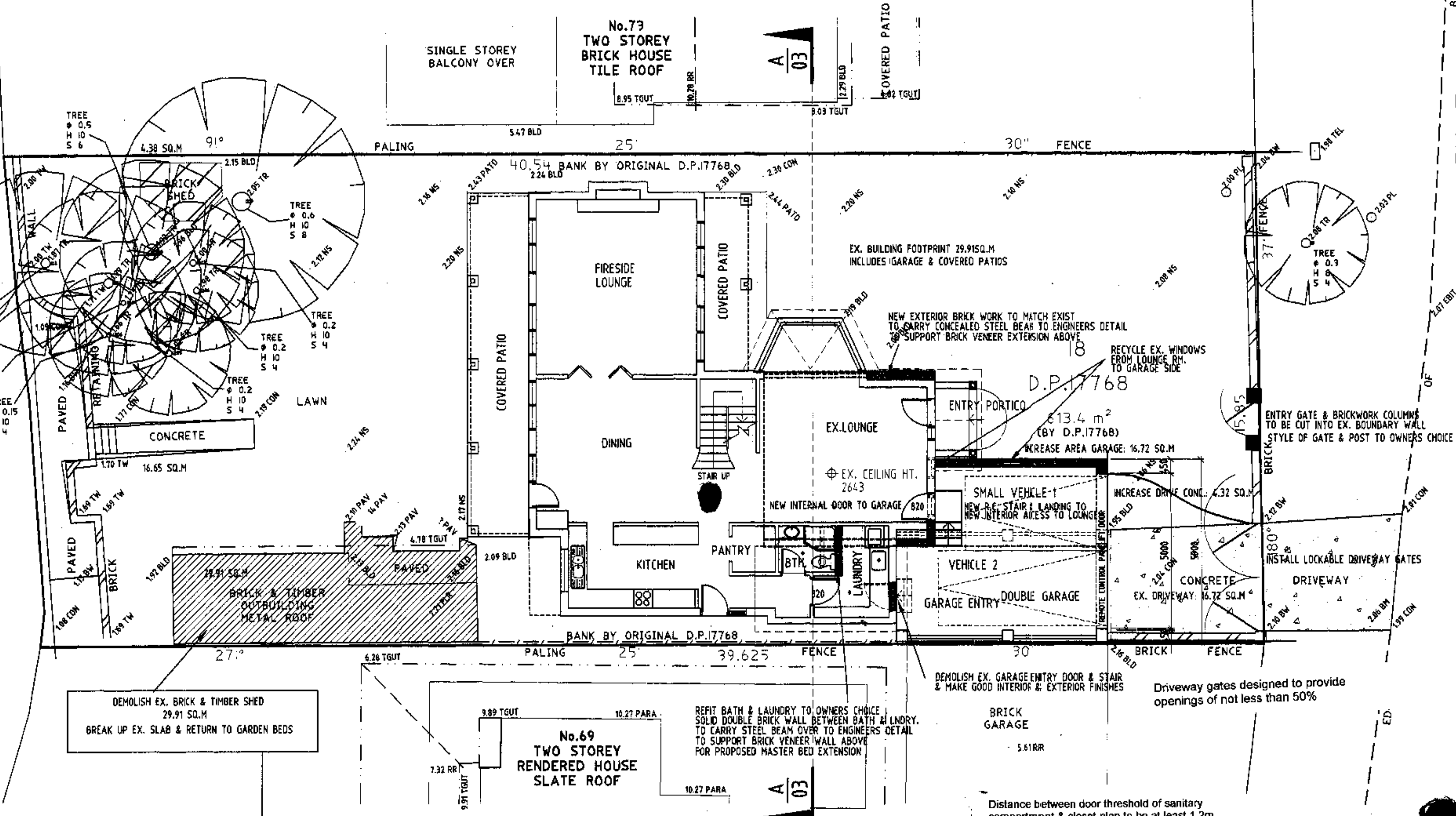
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CEILING HT. R.L. 8.55

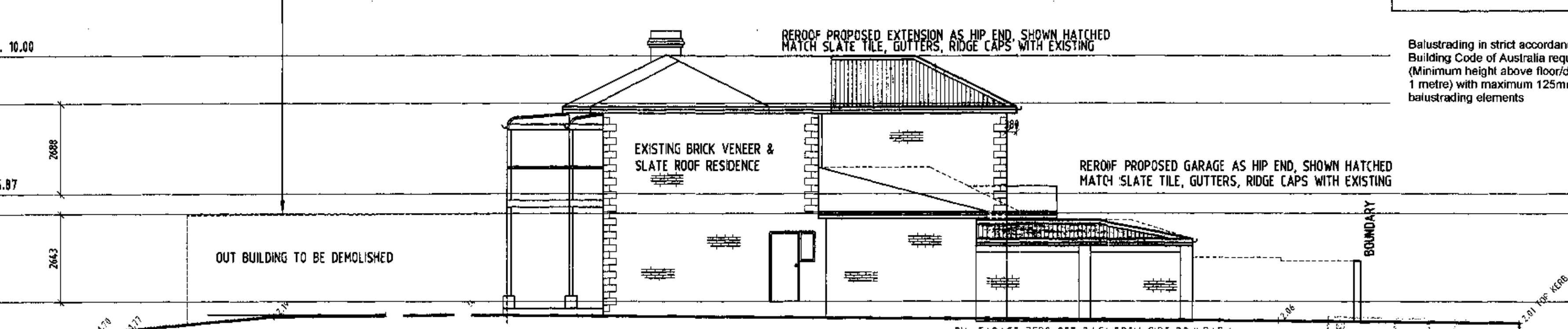
FIRST FLOOR F.F.L. R.L. 5.87

CEILING HT. R.L. 5.27

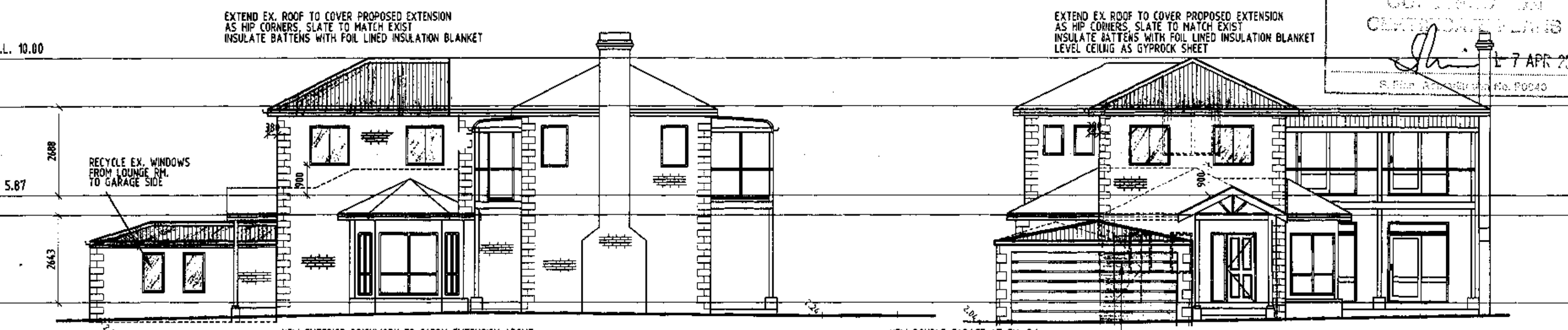
GROUND F.F.L. R.L. 2.63



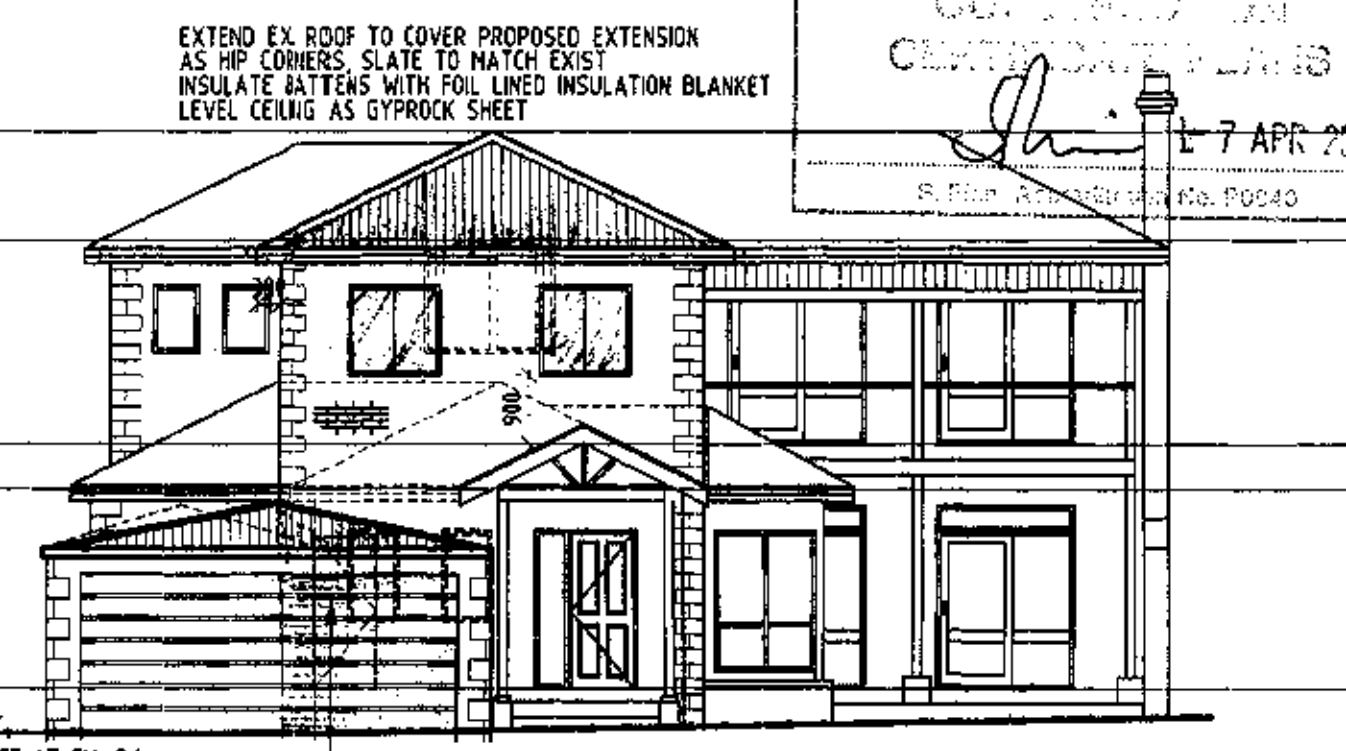
PROPOSED GROUND FLOOR PLAN OVER SURVEY



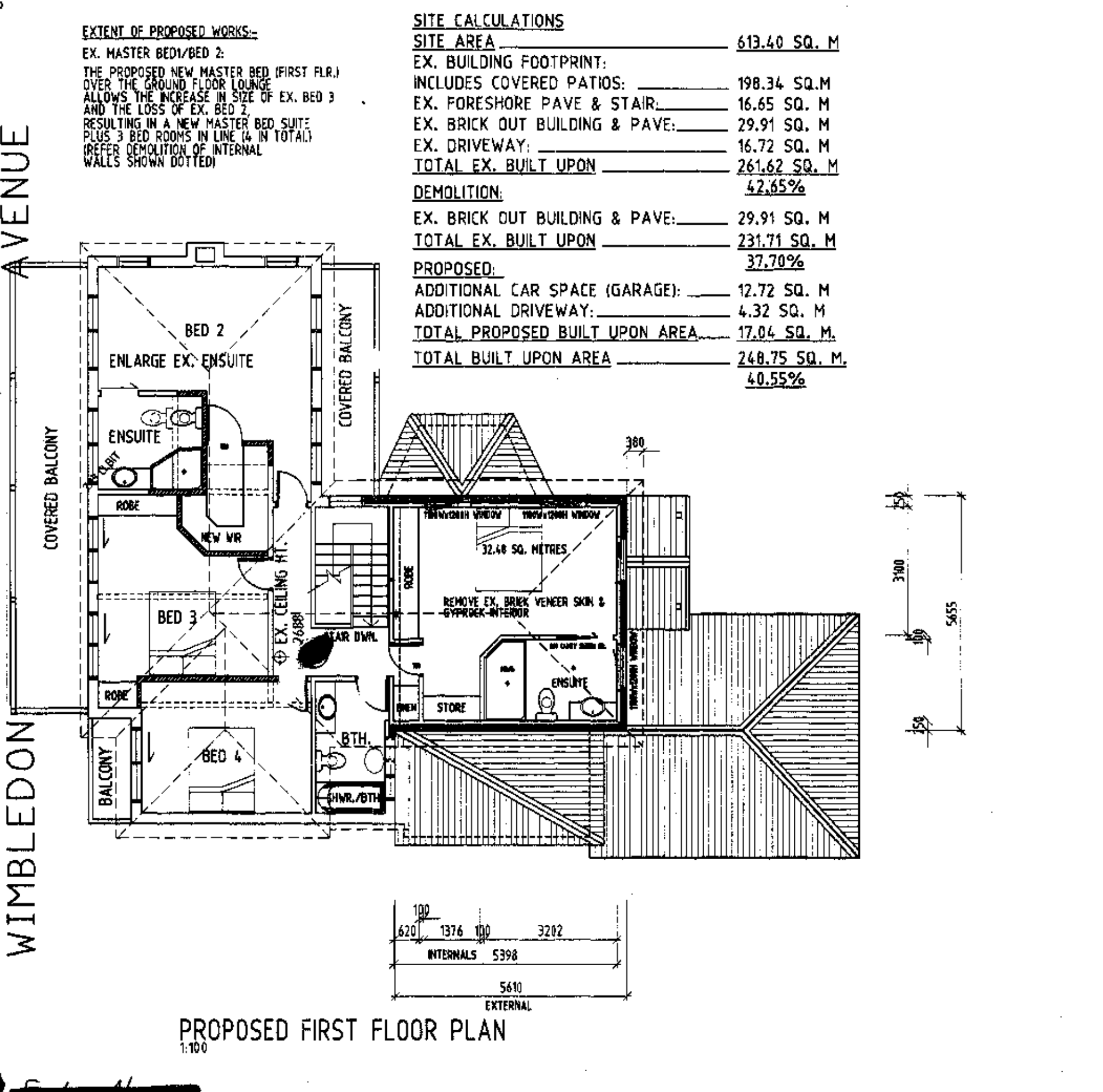
EXISTING SOUTH ELEVATION



EXISTING NORTH ELEVATION



EXISTING EAST ELEVATION



PROPOSED FIRST FLOOR PLAN



EXISTING WEST ELEVATION

**HARGROVES**  
INTERIOR DESIGN CONSULTANTS  
P.O. BOX 418 SPIT JUNCTION NSW 2058  
Ph. 02 9907-6311 Fax. 02 9907-6711  
Email: hargroves@bigpond.com

PLAN OR DOCUMENT CERTIFICATION  
I am a qualified BUILDING DESIGNER AND DRAFTER  
I hold the following qualifications or Licence No. BUILDING CONTRACTOR 300130  
Further I am appropriately qualified to certify this component of the project  
I hereby state that these plans or details comply with the conditions of development consent, the provisions of the Building Code of Australia and/or relevant Australian industry standards.  
PETER BARKER 18/5/2004  
Name Date Signature  
PETER BARKER Architectural Drafting & Building Consultant  
27/27-00 004 Barnersley Rd. Avalon Beach  
P.O. Box 5 Avalon Beach NSW 2107  
Ph. 0407 238 036 or 0875 4745  
Builders Licence No. 38880c ARB 74 813 424 788

PITTWATER 21 - NORTH NARRABEEN LOCATION  
RESIDENTIAL PROTECTION SITE COVERAGE ALLOWABLE  
40% BUILT UPON AREA +3.36% LANDSCAPING 43.36%

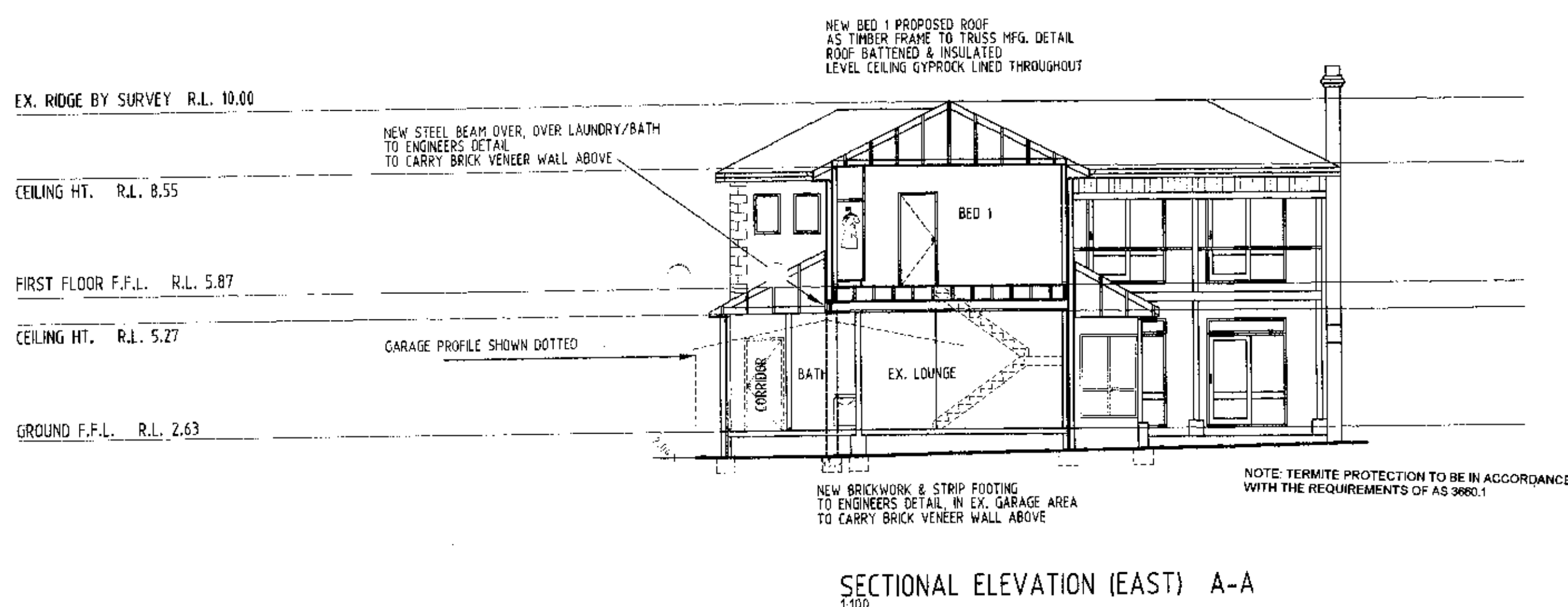
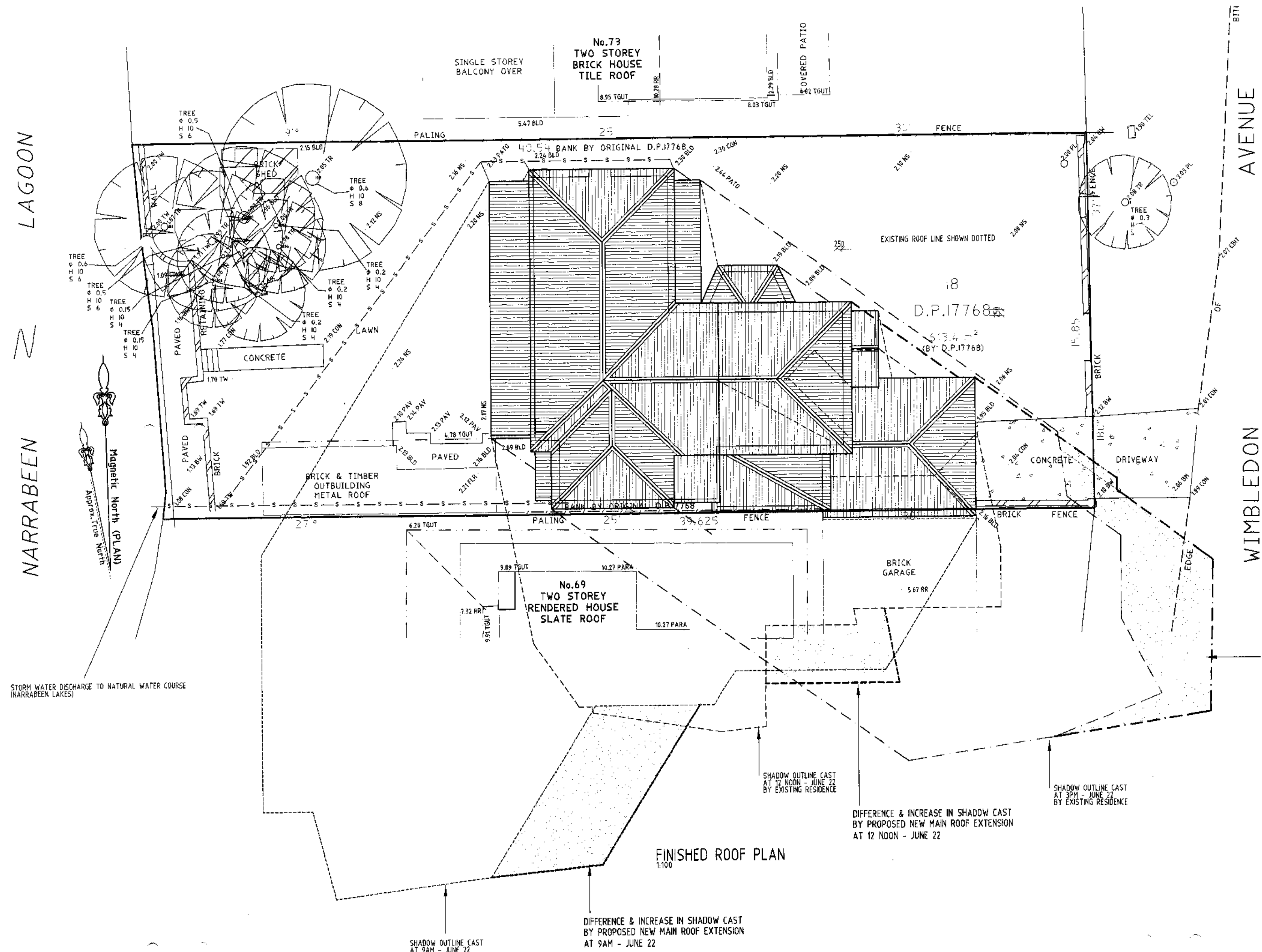
-	20.04	DA LODGE WITH NOTATED CONDITIONS	NOTE: THESE PLANS MUST BE READ IN CONJUNCTION WITH THE CONDITIONS OF DEVELOPMENT CONSENT	
MARK	DATE	AMENDMENT		
PROJECT PROPOSED ALTERATIONS AND ADDITIONS AT 71 WIMBLEDON AVENUE, NARRABEEN NSW 2101 MR. M.C. BUCKNELL				
THIS DRAWING PROPOSED FIRST FLOOR ADDITION PROPOSED ADDITION TO CARPORT PROPOSED FIRST FLOOR FIT OUT				
SCALE 1:100	DATE MAY 2004	SHEET No. 2	OF 3	Covered
DRAWN P.B.	CHECKED	PROJECT No. WIM-01	AMENDMENT	

COUNCIL COMPLAINT

PITTWATER COUNCIL  
APPROVED DEVELOPMENT CONSENT PLANS

NOTE: THESE PLANS MUST BE READ IN CONJUNCTION WITH THE CONDITIONS OF DEVELOPMENT CONSENT

Coloured



- 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 RELEVANT SAA BUILDING CODES 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.

**HARGROVES**  
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**PITTWATER COUNCIL**  
**APPROVED DEVELOPMENT CONSENT PLANS**

STORM WATER AS 100% UPVC  
 EXISTING STORM WATER ROOF DRAINAGE IS TO NARRABEEN LAKES

**NOTE: THESE PLANS MUST BE READ IN CONJUNCTION WITH THE CONDITIONS OF DEVELOPMENT CONSENT**

PROJECT: PROPOSED ALTERATIONS AND ADDITIONS AT 71 WIMBLEDON AVENUE, NARRABEEN NSW 2101 MR. M.C. BUCKNELL

THIS DRAWING: EXISTING & PROPOSED SHADOWS SECTIONAL ELEVATION A-A SITE CALCULATIONS

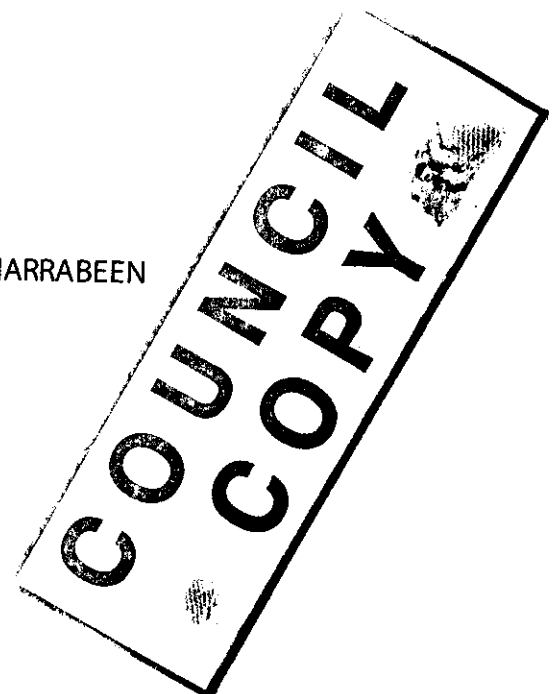
SCALE: 1:100	DATE: MAY 2004	SHEET No. 3 OF 3
DRAWN: P.B.	CHECKED:	PROJECT No. WIM-01

COPY

# SPECIFICATIONS DOCUMENT

SITE: 71 WIMBLEDON AVENUE NORTH NARRABEEN

Mr M and Mrs M Bucknell



## SUMMARY

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Alterations & Additions to  
71 Wimbledon Ave. Narrabeen

(i)

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DEMOLITIONSPECIFICATIONDEMOLITION

- A The Tenderer is referred to the Drawings and the Schedule of Finishes for the extent of the works, and he is to allow in his prices for complying with these documents.

ScopeGround Floor

- B Allow for the demolition of existing outbuilding approx. 30 m2 consisting of brick and timber wall and metal. Remove from site.
- C Break up and remove concrete floor to outbuilding approx. 30 m2 and remove from site.
- D Remove existing stairs in Garage.
- E Remove metal garage door.
- F Remove Entry door and frame from Garage.
- G Remove door and frame [2 no.] to w.c. and laundry.
- H Carefully remove slates from Garage and Lounge room roof, and stack for re-use. :[approx, 100 m2]
- J Carefully remove timber windows [2 no.] to Lounge (East Elevation) and store for building into new garage.
- K Remove timber roof framing from garage and Lounge.
- L Demolish timber screen in garage wall [approx. 10 m2 and remove].
- M Demolish brick piers [3 no.] in Garage.
- N Demolish 110mm rendered brick walls to w.c. and laundry [approx. 10 m2]
- P Remove flooring to w.c./laundry approx. [12 m2] to allow for new CFC flooring.
- Q Remove plasterboard ceiling to w.c./laundry approx. [12 m2] to allow for new CFC flooring.
- R Form new opening for gate in front boundary wall.
- S Allow for all propping and supports to roof over laundry area during re-construction.

Alterations & Additions to  
71 Wimbledon Ave. Narrabeen

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DEMOLITION (Cont)First Floor

- A Allow for the demolition of existing Ensuite fittings. Removal of floor and wall tiles. Demolish internal walls as instructed by the Architect.
- B Allow for the demolition of existing bathroom fittings. Removal of floor and wall tiles as instructed by the Architect.
- C Remove flooring to ensuite approx. [7 m2] to allow for new CFC flooring.
- D Remove flooring to bathroom approx. [6 m2] to allow for new CFC flooring.
- E Demolish walls between existing Bedrooms 1,2,3,4 as shown on the drawings. :[approx. 42 m2]
- F Demolish external skin of brick veneer walls to below first floor between existing Bathroom and west wall of stair as shown on the drawings. :[approx. 19 m2]
- G Demolish internal skin of timber stud and plasterboard veneer walls to below first floor between existing Bathroom and west wall of stair as shown on the drawings. :[approx. 19 m2]
- H Allow for all propping and supports during the construction period to roof over stairs and landing area and also to ceilings and roof where bedroom walls are removed.

Prices

- J Prices are to include for removing all rubbish and debris, making good all work disturbed, temporary shoring, support and the like to the premises and adjoining buildings if necessary.

Generally

- K All demolished material, except where otherwise noted, shall become the property of the Contractor and shall be removed from site.
- L Allow for cleaning the building thoroughly on completion of demolition.
- M Allow for co-ordinating with other trades affected by the demolitions and alterations.
- N Allow for disconnection of all existing services by appropriate other trades.

Alterations & Additions to  
71 Wimbledon Ave. Narrabeen

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DEMOLITION (Cont)(Cont) Generally

- A Allow for the protection by all means available of surrounding property, footpaths, streets, kerbs, the public, occupants and workmen as required, due to the demolition and alteration carried out in this trade, all as specified.
- B Allow for keeping public footpaths, roads etc. clean at all times.
- C Allow for paying all fees due to any Authority requiring same in connection with the work in this trade.
- D Allow for protecting existing stairs and landing, balustrades, windows doors, polished floors etc.
- E Allow for waterproofing existing work for the duration of the works.
- F Allow for keeping the existing premises locked up and secure during construction.

EXCAVATIONSPECIFICATIONPrices

- A All earthworks shall be designed and constructed in accordance with the guidelines of AS3798. Stormwater and other surface water drainage by underground piping etc. shall be in accordance with AS/NZS3500.
- B Allow for excavation as necessary for new concrete stair to Ground Floor terrace.
- C Allow for filling as necessary for new concrete stair to Ground Floor terrace.

Scope

- D Excavate for driveway, carport slab, extra footings for new walls and pad footings.
- E Allow for cultivating under demolished slab of outbuilding and import top soil to for new garden bed.

Generally

- F Allow for keeping excavations free from rain and percolating water by pumping or otherwise
- G Locate and protect existing services from damage during excavation.
- H Allow for clean up as specified
- J Allow for erosion control

Termite Treatment

- K Allow for spray termite treatment to new floor in accordance with AS3660 2000.
- L Seal around penetrations.
- M Provide 10 year guarantee in writing.



CONCRETE WORKSPECIFICATION

- A The Contractor is referred to the Drawings for the extent of the work and he is to allow in his prices for complying with these documents and Australian Standards contained in this trade

Scope

- B Construct new concrete driveway, new concrete slab and steps in Garage, concrete footings for new walls as shown on Drawings.

CONCRETEPrices

- C Prices are to include for mixing, hoisting, placing, pour joints, holes, casting in metal, and making good after removal of formwork

Generally

- D All concrete workmanship and materials shall be in accordance with AS3600 2001 including supplement, AS 2870 1996.
- E Allow for protecting concrete from damage
- F Allow for taking samples and testing of materials, concrete and the like in accordance AS 1141, AS 1012 1991 - 2000.
- G Allow for pumping.
- H Allow for curing concrete surfaces.

FORMWORK

- J Forms shall be constructed in accordance with the requirements of the ACSE Specification and Australian Standard AS 3610 1995 and in forms complying with AS 1509 Formwork code, to produce concrete to the shape and dimensions detailed on the Engineer's drawings within specified tolerances, and to produce surface finishes as listed hereunder.
- K Formwork to surfaces permanently concealed (eg footings, rear faces of retaining walls) to be Class 5.
- L To all exposed corners and angles unless otherwise specified form a 45 degree bevel, 25mm on the face, by chamfering and filleting the forms as per the code.
- M Class 3 formwork to all other exposed fromwork

CONCRETE WORK (Cont)

REINFORCEMENT

Prices

- A Bar reinforcement shall be in accordance with the Engineer's drawings and comply with AS1302 and fabric shall comply with AS1304 1991.
- B Prices for reinforcement are to include for cleaning, cutting, bending, fabricating, scheduling, tie wire and bar chairs etc, placing and the provision of all necessary temporary fixings and supports
- C Prices for fabric reinforcement are to include for laps, bar chairs and tie wire.
- D Make allowance for rolling margin
- E All quantities are measured nett, no allowance for laps or waste.

BRICKWORKSPECIFICATION

- A The Contractor is referred to the Drawings for the extent of the work and he is to allow in his prices for complying with these documents and Australian Standards contained in this trade

Scope

- B Build brick walls to new w.c./laundry configuration.
- C Build up door and window openings with face bricks to match existing.
- D Build new face brick external skin of cavity walls to match existing in Lounge, garage, and new first floor bedroom
- E Build new gate pillars in front boundary wall to match existing face bricks
- F Build new sandstone quoins to corners of external walls to match existing.

Prices

- G Prices for brickwork are to include for plumbing angles, square cutting, raking cutting, forming acute and obtuse angles, saw cutting, forming rebated reveals, plain ends to blockwork at ends openings, raking out joints for plastering and flashings, building in or cutting holes or pipes and the like
- H Prices for brickwork/blockwork are to include for ties to concrete walls, columns, soffits.
- J Masonry structures shall comply with AS 3700 2001 with supplement 1999.
- K Clay common bricks shall comply with AS 1225.
- L Prices are to include of cement in cement mortar to be white to AS 3972 GP and strength tested in accordance with AS A123.
- M Masonry work shall not rise more than 1 metre above adjacent work and allowance made for temporary bracing if necessary.
- N Dampproof courses shall Comply with AS/NZS 2904 1995.

Samples and Tests

- P Provide sample panel for face brickwork
- Q Allow for all tests required
- R Allow to protect the brick from spatters, discolouration from other materials etc.

Alterations & Additions to  
71 Wimbledon Ave. Narrabeen

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BRICKWORK (Cont)

(Cont) Samples and Tests

- A Allow for cleaning brick and sandstone surfaces to remove stains, spatters with approved solvent/acid as recommended by the manufacturer.

STEELWORKSPECIFICATION

- A The Contractor is referred to the Drawings for the extent of the work and he is to allow in his prices for complying with these documents and Australian Standards contained in this trade
- B Materials and workmanship shall conform to the requirements of the following codes and specifications except where superseded by the Specified Bill of Quantities:-
- C SAA HB48 1999 - Steel structures design handbook.
- D Materials and workmanship generally - AS 4100 - 1998
- E Welding - AS/NZS 1554
- F Structural steel in rolled sections - AS 3679 (Grade 250 unless otherwise noted)
- G Steel plates - AS 3678 (Do.)
- H Steel tubes - AS 1163
- J Bolts, nuts and washers - AS 1111, 1112 & 1252
- K Electrodes - AS 1553
- L AS/NZS 4680 1999 Hot dip galvanised (zinc) coatings on fabricated ferrous articles.
- M Metal finishing AS 1627 - preparation and pre-treatment of surfaces.
- N Comply throughout with the current edition of the Building Code.
- P Allow for keeping copies of codes in good order on the site.
- Q Bolts, nuts and washers, including those supplied for fixing plates, purlins and the like, shall generally be as specified above but all bolts, nuts and washers shall be cleaned in accordance with AS 1627 and hot dip galvanized minimum in accordance with AS 4680.
- R The Builder shall be responsible for, and check in conjunction with the structural steel fabricator, the accuracy of all dimensions shown on the drawings and dimensions of all work constructed on site. He shall notify the Engineer immediately if any discrepancies should be found.
- S Welding shall be done by a tradesman, holding a welder's A-Grade certificate, in a manner minimising distortion and construction stress.

STEELWORK (Cont)(Cont) SPECIFICATION

- A Welds shall show a good even contour and slag inclusion must be cut and re-welded. There shall be no breaks in the continuity of the weld between two electrodes, after each run and at completion all slag is to be removed by chipping and brushing.
- B Exposed welds shall have nibs on exposed surface ground off flush and finished ground flush or to even rounded fillets.

Scope

- C Insert new steel beams to support first floor extension as per Engineer's drawings.
- D Allow for coating new steel beams as directed by Engineer including touching up any damage, scratches etc. incurred during installation.

Shop Drawings

- E Shop drawings shall be prepared by the structural steel fabricator and shall adequately show details of all members, parts and connections. Shop drawings shall be submitted to the Engineer for approval at least seven (7) days prior to commencement of fabrication.
- F On approval by the Engineer (which will not include approval of dimensions) two (2) copies of the drawings will be returned to the Builder, one of the copies of which is to be kept on site.
- G Allow for providing and submitting to the Engineer for approval, three (3) copies of shop drawings, amending and re-submitting drawings requiring correction and obtaining approval prior to commencing fabrication.

Prices

- H Prices are to include for all fabrication work, delivery, unloading, handling, hoisting, fitting, and fixing in position. Prices for bolts shall include for nuts and any type of washer

Generally

- J Allow for quality assurance as specified
- K Allow for data submissions as specified
- L Allow for protection as specified

Alterations & Additions to  
71 Wimbledon Ave. Narrabeen

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Date of Printing: 15/03/2005

METALWORKSPECIFICATION

- A The Contractor is referred to the Drawings for the extent of the work and he is to allow in his prices for complying with these documents and Australian Standards contained in this trade

Scope

- B Supply and install galvanised steel balustrade to new stair consisting of balusters at 900mm centres, 48mm diameter top rail in garage.
- C Supply and install powdercoated galvanised steel pedestrian gate complete with hinges, locks etc. as per Architect's design.
- D Supply and install powdercoated galvanised steel pedestrian gate complete with hinges, locks etc. as per Architect's design.
- E Supply and install powdercoated galvanised steel driveway gate complete with hinges, drop bolts, locks etc. as per Architect's design.
- F Supply and install galvanised steel stub columns under timber deck as per Architect's design.

Prices

- G Prices are to include for all fabrication work, delivery, unloading, handling, hoisting, fitting, and fixing in position. Prices for bolts shall include for nuts and any type of washer

Generally

- H Materials and workmanship shall conform to the requirements of the following codes and specifications except where superseded by the Specified Bill of Quantities:-
- J SAA HB48 1999 - Steel structures design handbook.
- K Materials and workmanship generally - AS 4100 - 1988
- L AS/NZS 4680 1999 Hot dip galvanised (zinc) coatings on fabricated ferrous articles.
- M Metal finishing AS 1627 - preparation and pre-treatment of surfaces.
- N Allow for keeping copies of codes in good order on the site.
- P Allow for quality assurance as specified
- Q Allow for data submissions as specified
- R Allow for protection as specified

Alterations & Additions to  
71 Wimbledon Ave. Narrabeen

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WOODWORKSPECIFICATION

- A The Contractor is referred to the Drawings for the extent of the work and he is to allow in his prices for complying with these documents and Australian Standards contained in this trade

Prices

- B Prices are to include for all fabrication work, delivery, unloading, handling, hoisting, fitting, and fixing in position. Prices for bolts shall include for nuts and any type of washer

Generally

- C SAA HB44 1993 guide to AS 1684 1992 The National timber framing code.
- D SAA HB108 1998 - timber design handbook in accordance the Australian limit state timber design code AA 1720.1 1977.
- E AS 1684 National timber framing code.
- F Hardwood flooring to AS 1702.
- G AS/NZS 1491 1996 - finger jointed structural timber.
- H Fibre cement products to AS/NZS 2908 2000.
- J Mastic adhesives to AS 2329 1999.
- K Timbers used are to be the best of their respective kinds, sound, well seasoned (maximum moisture content 15%) and free from sapwood, knots, shakes, gum veins, white ant, borer and other defects, sawn die square and to the approval of the Architect.
- L Except where finished sizes are stated, carpentry timbers shall be of the size stated less reasonable allowance for saw cuts and joinery timbers shall be of the sizes indicated less fair trade allowance for working dressed faces.
- M All the work throughout is to be framed, trimmed and finished in accordance with the best trade practice with all mortising, tenoning, halving, scribing, and labours as required or implied even though not particularly specified. Timbers exposed to view shall be wrot, cleaned up by hand and finished in the best manner.
- N Joinery that is to be painted shall be primed on all faces before being dispatched from the joinery shop and an additional coat of paint shall be given to all faces which are to be "built in".
- P All timber in partitions and wall framing shall be thickened.
- Q Supply and use necessary nails, screws, bolts, nuts, hoop iron straps and metal and wood fixings.

Alterations & Additions to  
71 Wimbledon Ave. Narrabeen

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Date of Printing: 15/03/2005



WOODWORK (Cont)(Cont) Generally

- A Unless otherwise specified bolts shall be 10mm diameter spaced not more than 750 apart and plates, battens, framing and associated members described as bolted shall be so fixed. Plugs used are to be of dry cedar or an approved expanding metal sleeve type.
- B Joinery and mouldings shall comply with the requirements of the Timber Marketing Act of N.S.W. 1045-1952
- C Timber grading shall comply with SAA int. Specification 360, 361 and 362, whichever is applicable.
- D Dimensional tolerances for Sawn Hardwood shall comply with AS082 and AS083.
- E Dimensional tolerances for Sawn Oregon and Hemlock shall comply with AS0106.
- F Structural timbers shall be banded N.S.W. hardwood complying with AS082 of strength group S.D3 and of stress grade F14 in accordance with AS1720-1975.

ScopeTimber Framing

- G Floor joists and trimmers shall be LVL joists to sizes indicated by the Engineer's drawings
- H Wall Framing shall be 75mm x 50mm F7 softwood.
- J Supply and install 75mm thick Sonomatt or equal acoustic insulation to partition walls.

Flooring

- K Supply and install selected hardwood tongue and grooved flooring secret nail fixed to joists to new bedroom as instructed by the Architect.
- L Supply and install selected hardwood tongue and grooved flooring secret nail fixed to joists in repair to existing floors as instructed by the Architect.
- M Fine sand timber new and existing flooring and apply three coats Tung oil and Gemini wax coating.
- N Supply and install 15mm CFC flooring to wet areas

Alterations & Additions to  
71 Wimbledon Ave. Narrabeen

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Date of Printing: 15/03/2005

WOODWORK (Cont)Timber Trims

- A Supply and fix finger-jointed pine architraves and skirtings as indicated on the drawings.

Decking

- B Supply and fix treated pine H3 framing to new deck [approx. 22 m2] and bolting to galvanised steel stub columns.
- C Supply and fix tallowwood decking to new framing.

Fixtures and Fittings

- D Supply and install vanity cupboards to Architect's design with laminated HMR carcassing, doors and shelving with stone top as selected.
- E Supply and install wardrobes to Architect's design with laminated HMR carcassing, doors and shelving as selected.
- F Supply and install other storage units, linen cupboards to Architect's design with laminated HMR carcassing, doors and shelving as selected.

SLATE ROOFINGSPECIFICATION

- A The Contractor is referred to the Drawings for the extent of the work and he is to allow in his prices for complying with these documents and Australian Standards contained in this trade

Prices

- B Measurement and prices are deemed to include for: all laps (all measurements are nett), accessories, separation strips, thermal movement, nails, screws, fastening clips, rivets, straps and similar items
- C Measurement and prices are also deemed to include for: raking and circular cutting, forming of penetrations including all necessary collar flashings, sealants, etc

Scope

- D The new and existing roof areas shall be roofed with salvaged Bangor blue slates supplemented with new slates of equal size and colour to match existing. Re-cycled slates may be used subject to approval of Architect.
- E Strip back existing roof as necessary to install new sarking and flashings. Maintain weather and waterproofing at all times.
- F Slates shall be nailed every course.

Generally

- G The works shall be carried out in accordance with the relevant Australian Standards including BCA part 3.5.1 installation :-
- H BCA part 3.5.1.2 installation code
- J AS 1170 - SAA Loading Code
- K AS 1736 double faced aluminium foil covered reinforced fabric.
- L Bangor blue slates.
- M 20kg. Lead slates and flashing shall be used.
- N AS 2179 - Metal rainwater goods ;
- P AS 2180 1986 - Code of Practice for Selection and Installation of Metal Rainwater Goods.
- Q SAA HB63 1994 home insulation in Australia.
- R AS 26270.1 1993 Thermal insulation of dwellings.

Alterations & Additions to  
71 Wimbledon Ave. Narrabeen

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Date of Printing: 15/03/2005

SLATE ROOFING (Cont)(Cont) Generally

- A Give minimum three (3) working days notice to carry out inspections on roof insulation, completion of slate roofing, gutters and steel downpipes; allow accordingly.
- B Provide a guarantee for a period of not less than Ten Years (10) for watertightness of roofing installation including all accessories; allow accordingly.
- C Allow for quality assurance as specified
- D Allow for data submissions as specified
- E Allow for protection and cleaning as specified
- F Allow for tests as specified
- G

TIMBER WINDOWSSPECIFICATION

- A The Contractor is referred to the Drawings for the extent of the work and he is to allow in his prices for complying with these documents and Australian Standards contained in this trade

Prices

- B Prices are to include for all fabrication work, delivery, unloading, handling, hoisting, fitting, and fixing in position. Prices for bolts shall include for nuts and any type of washer

Generally

- C SAA HB44 1993 guide to AS 1684 1992 The National timber framing code.
- D SAA HB108 1998 - timber design handbook in accordance the Australian limit state timber design code AA 1720.1 1977.
- E Timbers used are to be the best of their respective kinds, sound, well seasoned (maximum moisture content 15%) and free from sapwood, knots, shakes, gum veins, white ant, borer and other defects, sawn die square and to the approval of the Architect.
- F Joinery that is to be painted shall be primed on all faces before being dispatched from the joinery shop and an additional coat of paint shall be given to all faces which are to be "built in".
- G AS 1170 - SAA Loading Code - Terrain Category 3.
- H AS 1288 1994 Amended 1997 glass in buildings.
- J AS 2047 1999 windows in buildings.
- K AS 4405 1992 -wind loadings.
- L AS/NZS 2208 1996 -safety glazing materials in buildings.
- M AS 4420 1996 - methods of testing windows.

Shop Drawings

- N Allow for the supply of shop drawings

Guarantee

- P Provide 10 year guarantee for workmanship and materials.

Scope

- Q Timber shall be Western Red Cedar shop fabricated with tinted glass and safety glass similar to Trend or Airlite Joinery

Alterations & Additions to  
71 Wimbledon Ave. Narrabeen

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Date of Printing: 15/03/2005

TIMBER WINDOWS (Cont)

(Cont) Scope

- A New windows to additional bedroom
- B Re-fix salvaged windows in garage.

DOORS & FRAMESSPECIFICATION

- A The Contractor is referred to the Drawings for the extent of the work and he is to allow in his prices for complying with these documents and Australian Standards contained in this trade

Prices

- B Prices are deemed to include for: hole, indents and backplates to receive hardware and fittings etc., strike plates with mortar guards, rubber buffers, stiffener plates, removable bottom spreaders, switch boxes, cavity flashings, fixing brackets, ties for building in frames, filling voids at back of jambs and heads with mortar as work proceeds, all fixings

Generally

- C The works shall be carried out in accordance with the relevant Australian Standards :-
- D AS 2688 1984 - timber doors and timber doorsets.
- E Allow for quality assurance as specified
- F Allow for data submissions as specified
- G Allow for protection as specified

Door Frames

- H Supply and install rebated finger-jointed door frames.

Doors

- J Supply and install 40mm thick solid core external doors with edge strips
- K Supply and install 35mm MDF or solid core internal doors.
- L Supply and install new steel framed timber faced Panelift garage door complete with remote electronic control.

Hardware

Supply and fix the following hardware  
[Refer to Hardware schedule]

- M Lockwood passage latches, lever furniture and hinges to internal doors.
- N Lockwood privacy sets, lever furniture and hinges to bathroom doors.

Alterations & Additions to  
 71 Wimbledon Ave. Narrabeen

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DOORS & FRAMES (Cont)

(Cont) Supply and fix the following  
hardware [Refer to Hardware schedule]

- A Lockwood dead locks, locking latch, lever furniture and hinges to external doors.



CEMENT RENDERSPECIFICATION

- A The Contractor is referred to the Drawings for the extent of the work and he is to allow in his prices for complying with these documents and Australian Standards contained in this trade

Prices

- B Prices are to include for all temporary rules, temporary grounds, temporary screeds and the like, labour to internal angles, cutting and making good around pipes, sanitary fixtures and the like
- C Prices are also to include for normal bedding and pointing materials, cleaning down and making good, including expansion and control joints

Generally

- D The works shall be carried out in accordance with the relevant Australian Standards :-
- E SA27: Code of Recommended Practice for Internal Plastering on Solid Backgrounds
- F AS 3972 1997 - portland and blended cements.
- G Remove all splatterings and droppings from work.
- H Leave floors broom cleaned at completion.
- J The Builder shall provide samples of cement render as required by the Architect.
- K Allow for samples and sample panels as above.

Making Good

- L If any cracks appear in the applied render or set plaster before completion of work or before expiration of maintenance period, they are to be cut out and made good to the satisfaction of the Architect, and the walls which the cracks occur must be repainted at the instructions of the Architect.

Preparation of Surfaces

- M All masonry surfaces which are to be rendered and set plastered shall be wetted and prepared before plastering.
- N Rendering shall be composed of 3 parts of approved clean sand, one (1) part of cement and one-tenth (1/10th) part of hydrated lime thoroughly mixed and used only when freshly mixed.

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CEMENT RENDER (Cont)(Cont) Preparation of Surfaces

- A All salient angles shall be slightly rounded and all vertical internal angles pencil rounded. Where indicated to abut brick walls, steel columns and at metal window frames form neat vee joint.

Cement Render

- B Cement render shall be one (1) coat 12mm thick, well pressed on, wood float trowelled perfectly smooth, and finally sponged and finished to match an approved sample.
- C Form 'V' control joint at junction of differing background materials, in the same plane.
- D Wrap steel lintels and columns to receive render with expanded galvanised metal lathing, lapped 150mm at joins and over masonry walling, fixed with galvanised nails or power driven fasteners and washers spaced at max. 300 centres. Fix lathing before first coat of render.

Scope

- E Render to all new internal brickwork.
- F Allow to patch existing rendered work where disturbed by demolition work.

CEILINGS & PARTITIONSSPECIFICATION

- A The Contractor is referred to the Drawings for the extent of the work and he is to allow in his prices for complying with these documents and Australian Standards contained in this trade

Prices

- B Prices are to include for cutting and making good around sprinkler heads, pipes, columns and the like, all fabrication work, cutting at perimeters and providing additional suspension system for light fittings and perimeters of ceilings where necessary.
- C No deductions have been made in ceiling areas for light fittings, air conditioning outlets, nor other openings except where exceeding 1 m<sup>2</sup>

Generally

- D Allow for complying with Australian Standards
- E AS 3972 1997 : Mastic Adhesives for Fixing Wallboards
- F AS/NZS 2588 1998 - Gypsum Plasterboard
- G AS 2592 1983 - Gypsum Plaster plaster for building purposes
- H AS 2589.1 1997 - Application and Finishing of Gypsum Plasterboard in Framed Dwelling Construction
- J AS 1530 - methods for fire tests on building materials, components and structures.
- K The Builder shall allow for providing a written warranty for all installations for a period of five (5) years from the date of practical completion of the project against defective workmanship and materials. Undertake to make good promptly and without charge any such defect notified within the warranty period, and any damage to the building resulting directly from the defect or its making good.
- L Allow for supplying and installing prototype samples of each ceiling system as specified
- M Allow for submitting samples as specified
- N Allow for providing written warranty as specified
- P Allow for visiting site, inspecting conditions and rectifying any unsuitable situation as specified
- Q Allow for protecting all finished work and preparing all areas and surfaces against which installation will be constructed as specified

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CEILINGS & PARTITIONS (Cont)

(Cont) Generally

- A Allow for sealing all junctions and penetrations with approved sealant as specified
- B Allow for cleaning and making good damaged sections or panels as specified

Suspended Ceilings

- C 10mm Set plasterboard ceiling fixed to timber joists 2700mm above floor level.
- D P50 shadow line moulding 'Vivid White PW1 H9'.

Partitions

- E 13mm Plasterboard fixed to timber studs.
- F 6mm Villaboard fixed to timber studs.

Acoustic Insulation

- G Sonobatt or equal noise control batts placed into stud partitions

Scope

- H New ceilings to additional bedroom, w.c. laundry.
- J Allow to patch ceiling whrere disturbed by demolition work.
- K Allow for framing around new steel beams and encase with plasterboard as directed by Architect.
- L New plaaterboard/villaboard to new stud partitions.

FLOOR AND WALL TILINGSPECIFICATION

- A The Contractor is referred to the Drawings for the extent of the work and he is to allow in his prices for complying with these documents and Australian Standards contained in this trade

Prices

- B Prices for tiling are deemed to include for: temporary grounds, screeds and similar; bedding, grouting and pointing materials; cutting and/or making good around pipes, sanitary fixtures and similar; labour to internal angles; curing of finished work; cleaning down and polishing; covering, protecting and masking surfaces
- C Prices are also deemed to include for standard border edge and glazed edge tiles
- D Prices are deemed to include for all raking and circular cutting; joints; and division strips

Generally

- E Allow for inspections as specified
- F Allow for quality assurance as specified
- G Allow for samples as specified
- H Allow for sample panels as specified
- J Allow for cleaning and protection as specified
- K The works shall be carried out in accordance with the relevant Australian Standards :-
- L AS 3958 parts 1 and 2 - ceramic tiling.
- M AS 3972 1997 - Portland cement and blended cements
- N AS/NZS 3661 - slip resistance of pedestrian surface.
- P AS/NZS 4586 1999 - slip resistance classification of new pedestrian surface materials.
- Q AS 3740 1994 - waterproofing of wet areas within residential buildings.

Guarantee

- R Guarantee against faulty materials and workmanship for 5 years

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FLOOR AND WALL TILING (Cont)Tiling

- A Supply and lay ceramic floor tiles as selected by the Architect, include bedding and jointing in white cement mortar (1:3 mix) bed in accordance AS 3958 :-
- B Supply and fix wall tiles as selected by the Architect with approved adhesive in accordance with AS 3958 parts 1 and 2 :-
- C Supply and install brass division strips between differing floor finishes.

Waterproofing

- D Supply and fix AGA Superflex or equal waterproof membrane in accordance with the manufacturer's printed instructions to wet area floors and shower recesses.

CARPETSSPECIFICATION

- A The Contractor is referred to the Drawings for the extent of the work and he is to allow in his prices for complying with these documents and Australian Standards contained in this trade

Prices

- B Prices shall include for all cutting, waste, naplocks, strips etc.
- C Prices are deemed to include for all raking and circular cutting; joints; and division strips

Generally

- D The works shall all be carried out in accordance with the relevant Australian Standards.
- E Supply and lay carpet and underlay for the specified products as nominated below.
- F Allow for warranty as specified
- G Allow for inspections as specified
- H Allow for samples as specified
- J Allow for data submissions as specified
- K Allow for tests as specified
- L Allow for cleaning and protection as specified

Samples

- M Allow for all samples as required

Guarantee

- N Guarantee against faulty materials and workmanship for 5 years

Carpet

- P Supply and lay carpet on underlay including all naplocks etc. as directed by the Architect.

PAINTINGSPECIFICATION

- A The Contractor is referred to the Drawings for the extent of the work and he is to allow in his prices for complying with these documents and Australian Standards contained in this trade

Prices

- B Prices are to include for the provision, erection and removal of scaffolding, preparation, rubbing down between coats and similar work, the protection and/or masking of floors, fittings and similar work, removing and replacing door and window furniture and removing splash and spray marks.
- C Prices are to include for the provision, erection and removal of scaffolding, preparation, rubbing down between coats and similar work, the protection and/or masking of floors, fittings and similar work, removing and replacing door and window furniture and removing splash and spray marks.

Generally

- D The works shall be carried out in accordance with the relevant Australian Standards :-
- E AS 1318 1985 - SAA industrial safety colour code.
- F AS/NZS 2310 1995 - glossary of paint and painting terms.
- G AS/NZS 2311 2000 - guide to the painting of buildings.
- H AS/NZS 2312 1994 - guide to the protection of iron and steel against exterior atmospheric corrosion.
- J Clean down and prepare timber surfaces in accordance with "Dulux - DUSPEC" Surface Preparation Manual - Sections PS601, PS607, PS608B.
- K Clean down and prepare plasterboard surfaces in accordance with "Dulux - DUSPEC" Surface Preparation Manual - Section PS628.
- L Allow for the inspection of existing surfaces, clean down, patch with approved fillers prior to re-painting.

Samples

- M Allow for providing samples as specified.

Guarantee

- N Provide to the Proprietor a written 5 year warranty covering satisfactory performance of the complete painting works.

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PAINTING (Cont)Scope

Prepare and paint one coat sealer and two coats wash-n-wear acrylic on :

- A Plasterboard new and existing walls ceilings and bulkheads.
- B Internal new and existing cement render.

Prepare, prime, paint one undercoat and one coat gloss Enamel on :-

- C New and existing windows doors and frames.
- D New and existing timber skirtings, architraves etc,

PLUMBING & DRAINAGESPECIFICATION

- A The Contractor is referred to the Drawings for the extent of the work and he is to allow in his prices for complying with these documents and Australian Standards contained in this trade
- B The contractor will be required to design and construct this trade to comply with all Australian standards. Prepare and submit drawings for approval to the appropriate authorities.
- C AS/NZS 1260 1999 - PVC pipes and fittings.
- D AS 1432 1996 -copper tubes and fittings for plumbing, gas fitting and srainage applications.
- E AS 3500 - National plumbing and drainage code.
- F AS 1464 1984 - plastic pipes and fittings for gas reticulation.
- G AS 2033 1980 -installation of polyethlene pipe systems.
- H The contractor shall be responsible for excavating trenches, backfilling and compacting, saw cutting concrete or brickwork as necessary.
- J The contractor shall be responsible for paying all fees, road opening fees, protection barriers, plate covers to excavation, general safety of the public.
- K The contractor shall comply with all council and statutory authority regulations in connection with this trade.
- L Refer to schedule of finishes for details of fittings etc.

Guarantee

- M Guarantee against faulty materials and workmanship for 5 years

Scope

- N Allow for all cold and hot water services, soil drainage to ensuites, bathroom, w.c. laundry as shown on Architect's drawings.
- P Allow for connections to existing sewer and stormwater drainage systems.
- Q Allow for the installation of sanitary ware. [See separate Schedule]

Roof Plumbing

- R The works shall be carried out in accordance with the relevant Australian Standards including SAA HB39 1997 installation :-

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PLUMBING & DRAINAGE (Cont)

(Cont) Roof Plumbing

- A AS 2179 - Metal rainwater goods ;
- B AS 2180 1986 - Code of Practice for Selection and Installation of Metal Rainwater Goods.

Scope

- C 125mm Colourbond eaves gutter to additional bedroom, garage.
- D 100mm Colourbond rainwater pipe to additional bedroom, garage.

Builder's work

- E Allow for builder's work in making good surfaces and painting works disturbed by this trade.



ELECTRICAL INSTALLATIONSPECIFICATION

- A The Contractor is referred to the Drawings for the extent of the work and he is to allow in his prices for complying with these documents and Australian Standards contained in this trade
- B The contractor will be required to design and construct this trade to comply with all Australian standards. Prepare and submit drawings for approval to the appropriate authorities.
- C AS/NZS 2293 - emergency evacuation lighting as applies to this building.
- D AS/NZS 3000 2000 - electrical installations (Australia and New Zealand wiring rules).
- E AS/NZS 3018 2001 - electrical installations domestic installations.
- F AS 3786 1993 - smoke alarms.
- G Provide all necessary safety or security controls as required to ensure safe work practices and installations.
- H The contractor shall be responsible for paying all fees, overhead protection barriers, and general safety measures to protect the public.
- J The contractor shall comply with all council and statutory authority regulations in connection with this trade.

Scope

- K Provide for all slab and wall penetrations, chasing for conduits, switches and the like, switchboard, upgrading mains supply if necessary, skirting duct to commercial area.
- L Refer to schedule of finishes for details of light fittings, switches, skirting duct, cabling for phones, fax, TV connections.

Guarantee

- M Guarantee against faulty materials and workmanship for 10 years

Scope

- N Electrical work wiring, switches, GPO,s, lighting battens holders only.
- P Supply and fix smoke detectors.
- Q Allowance for fixing light fittings and connection of electrical appliances. [See separate schedule]

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ELECTRICAL INSTALLATION (Cont)

(Cont) Scope

- A Allow for testing existing electrical wiring and ensure that the wiring complies with the current requirements of the Supply Authority.
- B Allow for connection of TV, telephone and data cabling to points as indicated on the drawings.
- C Allow for back to base alarm system as directed by the Architect.

Builder's work

- D Allow for builder's work in making good surfaces and painting works disturbed by this trade.

MECHANICAL SERVICES

SPECIFICATION

- A The Contractor is referred to the Drawings for the extent of the work and he is to allow in his prices for complying with these documents and Australian Standards contained in this trade
- B The contractor is to allow for a design and construct Mechanical airconditioning and ventilation system to comply with all Australian Standards.
- C The contractor shall comply with all council and statutory authority regulations in connection with this trade.
- D Refer to schedule of finishes for details of equipment etc.

Guarantee

- E Guarantee against faulty materials and workmanship for 10 years

Scope

- F Allow to Mechanically exhaust 2 no. ensuites, bathroom, w.c. and laundry including ducting, grilles, and in-line motors..

Builder's work

- G Allow for builder's work in making good surfaces and painting works disturbed by this trade.

PRELIMINARIES, PROFIT & G.S.T.

PRELIMINARIES

- A The Contractor shall included for but not necessary limited to the following preliminary items.

Insurances

- B Statutory Fees.  
C Construction Works insurance  
D Builder's Home Warranty insurance.  
E Workers Compensation insurance.  
F Product and Public Liability insudance  
G Vehicle insurance  
H Professional Indemnity insurance.

Labour

- J Supervisor  
K Labourer.

Site establishment

- L Site fencing  
M Allow for Safety Conditions as required.  
N Site sheds and amenities etc.  
P Temporary Services phone, fax, electricity, water.

Professional Services

- Q Surveyor.

Plant and equipment

- R Motor vehicles  
S Hoists.  
T Mobile Crane.  
U Builder's Equipment.  
V Safety Provisions hoardings etc.

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PRELIMINARIES, PROFIT & G.S.T. (Cont)

(Cont) Plant and equipment

- A Scaffold hire and overhead protection.

Cleaning

- B Remove rubbish.  
C Cleaning for building hand over.

General

- D Allow for Security provisions for the duration of the contract.  
E General Items drawings, stationery, etc.

PROFIT

- F Allow for Overheads and Profit.

G.S.T.

- G Allow for GST allowance.