

Peter J Boyce & Associates

Level 2, 41 Rawson Street Epping 2121

Tel: 9868 2855

(P.O. Box 375, Strathfield 2135)

Mob: 0412 928 500

Building Surveyor Acc. No 6395

Fax 98682655

Your ref D/A NO104/03

17th February 2004

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



Dear Sir,

Re: Copy of Construction Certificate
165A McCarrs Creek Road Church Point

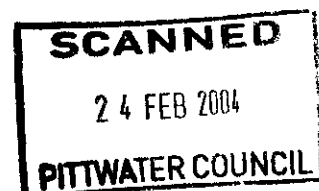
Please find enclosed copy of Construction Certificate issued for the above property under D/A NO104/03.

Please find cheque enclosed for \$30.00 registration of Construction Certificate.

Yours faithfully

A handwritten signature in cursive script, appearing to read "Peter Boyce".

Peter Boyce



①

Application for Construction Certificate

Issued under the Environmental Planning and Assessment Act 1997 Part 3 - Schedule 1

Local Council Area
City, Council or Shire

PITTSWATER COUNCIL

Applicant

Name
Address
Phone

CRAIG STUART MURCHIE.
PO BOX 121 CHURCH POINT NSW 2105
02 9999 0994

Owner

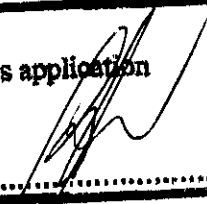
Name
Address
Phone

SAME AS ABOVE.

Consent of all owner(s)

I/we consent to this application

Signature



Subject Land with lot & deposited plan number

Lot 13 DP 243387

Address

165 A MCCARRS CREEK RD CHURCH POINT.

Brief description of development

Type of Development
i.e. Dwelling, Addition

POOL/SPA WITH RETAINING WALL
AWNING OVER FRONT DECK

Building code of Australia

Building Classification. Class

1a.

Development Consent

Development consent number:

Date of Determination:

N 0104/03
15 OCT 2003.

Builder/Owner Builder
Name or Permit number
Address

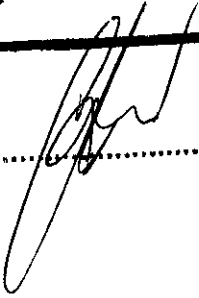
WRIGHT POOLS B/L No. 93482C
PO BOX 269 FRENCHES FOREST NSW 2086
JM & BH READMAN B/L No. 7964C
18 BINALONG AV. ALLAMBIE HEIGHTS NSW 2100

Value of Work \$ 58,000

Required attachments --- Copy of D/A approval with Conditions
Three copies of the plans & Specification.
Plan Nos.
List of supporting documents

Schedule --- The building schedule must be completed as part of this application for the Australian Bureau of Statistics

Applicants Signature



A handwritten signature is written over a dotted line. The signature is cursive and appears to be 'A. J. ...'.

Australian Bureau of Statistics

Particulars of Proposal

---What is the area of land (m²) 4173
 Gross Floor area of existing building (m²) 144.56
 What are the current use of all or part of the building(s)/land
 (If vacant state vacant) RESIDENTIAL

Location ^{Use} RESIDENTIAL

Does the site contain a dual occupancy? NO
 What is the gross floor area of the proposal (m²) 40
 What are the proposed uses of the building?

Location ^{Use} RESIDENTIAL

How many stories will the building consist of? 3

Materials to be used

Place a tick in the box which best describes the material

Walls	code		Roof	code	
Brick veneer	12	<input type="checkbox"/>	Aluminium	70	<input type="checkbox"/>
full brick	11	<input type="checkbox"/>	concrete	20	<input type="checkbox"/>
single brick	11	<input type="checkbox"/>	concrete tiles	10	<input type="checkbox"/>
concrete block	11	<input type="checkbox"/>	fibrous cement	30	<input type="checkbox"/>
			fibreglass	80	<input type="checkbox"/>
concrete/masonry	20	<input type="checkbox"/>	masonry/terracotta shingle		
concrete		<input type="checkbox"/>	tiles	10	<input type="checkbox"/>
<input type="checkbox"/> steel	60	<input type="checkbox"/>	slate	20	<input type="checkbox"/>
fibrous cement	30	<input checked="" type="checkbox"/>	steel	60	<input checked="" type="checkbox"/>
hardiplank	30	<input type="checkbox"/>	terracotta tile	10	<input type="checkbox"/>
timber/weatherboard	40	<input type="checkbox"/>	other	80	<input type="checkbox"/>
cladding aluminium	70	<input type="checkbox"/>	unknown	90	<input type="checkbox"/>
curtain glass	50	<input type="checkbox"/>			
other	80	<input type="checkbox"/>			
unknown	90	<input type="checkbox"/>			
			Frame		
Floor			timber	40	<input checked="" type="checkbox"/>
concrete	20	<input type="checkbox"/>	steel	60	<input type="checkbox"/>
timber	10	<input checked="" type="checkbox"/>	other	80	<input type="checkbox"/>
other	80	<input type="checkbox"/>	unknown	90	<input type="checkbox"/>
unknown	90	<input type="checkbox"/>			

Pittwater Council
NEW BRUNSWICK

TAX INVOICE

OFFICIAL RECEIPT

2007/08 RECEIPT NO. 10000
10/01/08 100000

RECEIVED BY ROYCE & ASSOC
10 MAY 07
BIRCHFIELD 210

NO	REFERENCE	AMOUNT
----	-----------	--------

1	1000-1000	\$27.00
2	1000-1000	\$100.00

Total Amounts
Includes GST 0%

Amounts Tendered	\$127.00
Change	\$100.00
Total	\$27.00
Finance Charge	\$0.00
Net	\$27.00

Printed 25/05/2008 10:05:17 AM
Order 66110

Construction Certificate

Cert No.BP4030

Peter J Boyce & Ass

Planning NSW Blding Surveyor No 6395
P.O. Box 375. Strathfield 2135
Mob.Ph 0412 928 500
Ph 98682855 Fax 98682655

ISSUED: 20 FEB 2004

17th February 2004

To **Mr. Craig Murchie**
PO Box 121
CHURCH POINT NSW 2105

Subject land

Lot 13 DP 243387 H/N 165A McCarrs Creek Road Church Point

Description of Development

Alterations and additions to existing dwelling.

Development Consent

Development consent number:DA NO104/03
Date of Determination: 15th October 2003

Building Code of Australia

Building classification Class 1a

Determination

Pursuant to Section 109C (1) (b), 81A (2) and 81A (4) Of the Environmental Planning & Assessment Act, 1979 the construction certificate has been determined by approval in accordance with the stamped plans and specifications.

Plans and supporting documents

List Plans :

Arch Plans: Avalon Drafting

Date of determination: 17th February 2004

Note:

Prior to commencement of work, Section 81A (2) (b) and/or 81A (4) (b) and (c) Of the Environmental Planning & Assessment Act, 1979 must be satisfied (see form 7 of the Regulation) i.e. name of the Principal Certifying Authority.

Certifying Authority

Peter Boyce

Planning NSW Acc Bldg Surveyor No 6395

P.O. Box 375. Strathfield 2135

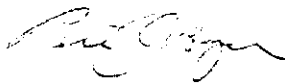
Mob. Ph 0412 928 500

Ph 98682855

Certificate

I certify that the work if completed in accordance with the documents, plans and specifications accompanying the application will comply with the requirements of this regulation as are referred to in Section 81A (5) of the Environmental Planning & Assessment Act 1979

Accredited Certifier



Peter Boyce

Planning NSW Accreditation No 6395



Pittwater Council

ABN 61 340 837 871

All Correspondence to be addressed to General Manager

Units 9, 11 & 12/ 5 Vuko Place
WARRIEWOOD NSW 2102
Avalon Customer Service Centre
59A Old Barrenjoey Road, AVALON 2107

Postal Address
P.O. Box 882
MONA VALE NSW 1660
DX 9018MONA VALE

Telephone (02)9970 1111
Facsimile (02) 9970 7150
Internet www.pittwateriga.com.au
Email: pittwater_council@pittwater.nsw.gov.au

Denise Robertson, Development Officer
8am to 6pm Mon - Thurs, 8am to 5pm Fri
Phone 9970 1116

15 October 2003

Mr C. Murchie,
165A McCarrs Creek Road
CHURCH POINT NSW 2105

Dear Craig,

Re: Deferred Commencement Conditions – Development Application No. N0104/03

Please be advised that pursuant to Regulation 95 (5) of the Environmental Planning and Assessment Regulation 2000, Council considers the details provided in accordance with deferred commencement Conditions 1, 2 and 3 contained in Part 1 of the conditions of Development Consent are satisfactory. The following documentation therefore forms part of the consent documentation:

Geotechnical Risk Management Policy for Pittwater Form No. 1 and 1 (a) and report No. VO20674B by Jack Hodgson dated 2/10/03.

In this regard, the consent becomes operative from the date of this letter, subject to the conditions listed in Part 2 of the consent.

Yours faithfully

A handwritten signature in black ink that reads "D. R. Robertson".

Denise Robertson
DEVELOPMENT OFFICER

5

LONG SERVICE LEVY FEE.

EMPLOYEE NUMBER

OFFICIAL NUMBER

03/10/2003 Payment

To OFFICE

165A NORTH BAY DRIVE
CHURCHVILLE

Applic. Reference	Amount
Sl. Fe 01SL-011	\$1,000.00
NOISE AND VIBRATION SURVEY	

Total: \$1,000.00

Account	Amount
Cash	\$1,000.00
Cheque	\$0.00
Card	\$0.00
Money Order	\$0.00
Agency Rec	\$0.00
Total	\$1,000.00
Routing	\$0.00
Change	\$0.00
Net	\$0.00

Printed 03/10/2003 10:00 AM
Cashier 0000

3

CRAIG MURCHIE

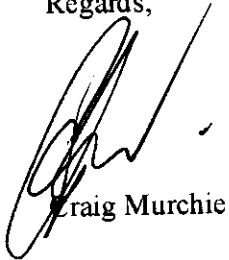
Mr Peter J Boyce & Associates
PO Box 375
Strathfield NSW 2135

Dear Mr Boyce,

Re: 165a McCarrs Creek Road, Church Point

I, Craig Stuart Murchie, owner of 165a McCarrs Creek Road, Church Point, declare that the architectural plans submitted with this Construction Certificate application are generally in accordance with the D/A plans which have been approved by the Pittwater Council.

Regards,



Craig Murchie

PO BOX 121 CHURCH POINT NSW 2105
Ph 02 9999 0994 Fax 02 9999 0995 M 0428 33 0994

CRAIG MURCHIE

Re: Small extensions at 165a McCarrs Creek Road, Church Point

February 16, 2004

Condition D78

Landfill is to be retained behind a concrete block wall as per engineering plans supplied by Chapman Hutchison Pty. Ltd. Drawing Numbers 5878/1-4. Volume of fill approximately 15-20 m3.

PO BOX 121 CHURCH POINT NSW 2015 AUSTRALIA
Phone: (02) 9999 0994 Fax: (02) 9999 0995 Mobile: 0428 330 994

1
8

**GEOTECHNICAL RISK MANAGEMENT POLICY FOR PITTWATER
FORM NO. 1 - To be submitted with Development Application**

Development Application for _____
 Address of site 165A McCarrs Creek Road Church Point Name of Applicant _____

Declaration made by geotechnical engineer or engineering geologist or coastal engineer (where applicable) as part of a geotechnical report

I, J HODGSON on behalf of Jack Hodgson Consultants Pty Limited
 (Insert Name) (Trading or Company Name)

on this the 2-10-03 certify that I am a geotechnical engineer or engineering geologist or coastal engineer as defined by the Geotechnical Risk Management Policy for Pittwater and I am authorised by the above organisation/company to issue this document and to certify that the organisation/company has a current professional indemnity policy of at least \$2million.

Please mark appropriate box

- Prepared the detailed Geotechnical Report referenced below in accordance with the Australia Geomechanics Society's Geotechnical Risk Management Guidelines and the Pittwater Council Policy
- Am willing to technically verify that the detailed Geotechnical Report referenced below has been prepared in accordance with the Australian Geomechanics Society's Geotechnical Risk Management Guidelines and the Pittwater Council Policy
- Have examined the site and the proposed development/alteration in detail and am of the opinion that the Development Application only involves Minor Development/Alterations that do not require a Detailed Geotechnical risk Assessment and hence my report is in accordance with the Policy requirements for Minor Development/Alterations.
- Provided the coastal process and coastal forces analysis for inclusion in the geotechnical report

Geotechnical Report Details:

Report Title: Risk Analysis & Risk Management for Proposed Alterations and Spa Pool at 165A McCarrs Creek Road Church Point

Report Date: 2-10-03

Author: J HODGSON

Documentation which relate to or are relied upon in report preparation:

Survey Plan Architectural Plans

I am aware that the above geotechnical report, prepared for the abovementioned site is to be submitted in support of a Development Application for this site and will be relied on by Pittwater Council as the basis for ensuring that the geotechnical risk management aspects of the proposed development have been adequately addressed to achieve an "Acceptable Risk Management" level for the life of the structure, taken as at least 100 years unless otherwise stated and justified in the Report and that reasonable and practical measures have been identified to remove foreseeable risk.

Signature J Hodgson
 Name J HODGSON
 Chartered Professional Status. M.Eng. Sc. F.I.E. Aust.
 Membership No. 149 788

GEOTECHNICAL RISK MANAGEMENT POLICY FOR PITTWATER
FORM NO. 1(a) - Checklist Of Requirements For Geotechnical Risk Management Report for Development
Application or Part V assessment

Development Application for _____
 Address of site 165A McLarris Creek Road Church Point Name of Applicant _____

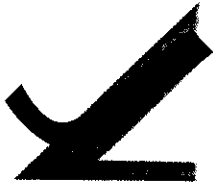
The following checklist covers the minimum requirements to be addressed in a Geotechnical Risk Management Geotechnical Report. This checklist is to accompany the Geotechnical Report and its certification (Form No. 1).

Geotechnical Report Details:
 Report Title: Risk Analysis & Risk Management for Proposed Alterations and Spa Pool at 165A McLarris Creek Road Church Point
 Report Date: 2-10-03
 Author: J HODGSON

- Please mark appropriate box
- Comprehensive site mapping conducted 20-1-03 (date)
 - Mapping details presented on contoured site plan with geomorphic mapping to a minimum scale of 1:200 (as appropriate)
 - Subsurface investigation required
 - No Justification See Report
 - Yes Date conducted
 - Geotechnical model developed and reported as an inferred subsurface type-section
 - Geotechnical hazards identified
 - Above the site
 - On the site
 - Below the site none
 - Beside the site none
 - Geotechnical hazards described and reported
 - Risk assessment conducted in accordance with Council's Policy
 - Consequence analysis
 - Frequency analysis
 - Risk calculation
 - Risk assessment for property conducted in accordance with Council's Policy
 - Risk assessment for loss of life conducted in accordance with Council's Policy
 - Assessed risks have been compared to "Acceptable Risk Management" criteria as defined in the Geotechnical Risk Management Policy for Pittwater
 - Opinion has been provided that the design can achieve the "Acceptable Risk Management" criteria provided that the specified conditions are achieved.
 - Design Life Adopted:
 - 100 years
 - Other specify
 - Development Conditions to be applied to all four phases as described in Pittwater Geotechnical Risk Management Policy have been specified
 - Additional action to remove risk where reasonable and practical have been identified and included in the report.

I am aware that Pittwater Council will rely on the Geotechnical Report, to which this checklist applies, as the basis for ensuring that the geotechnical risk management aspects of the proposal have been adequately addressed to achieve an "Acceptable Risk Management" level for the life of the structure, taken as at least 100 years unless otherwise stated, and justified in the Report and that reasonable and practical measures have been identified to remove foreseeable risk.

Signature J. Hodgson
 Name J. HODGSON
 Chartered Professional Status MEMBER F.I.E.A.S.T.
 Membership No. 149.788



**RISK ANALYSIS & RISK MANAGEMENT
FOR
PROPOSED ALTERATIONS & SPA POOL
AT
165A McCARRS CREEK ROAD, CHURCH POINT**

1. INTRODUCTION.

1.1 This assessment has been prepared to accompany an application for development approval. The requirements of the Interim Geotechnical Risk Management Policy for Pittwater, June 2003 have been met.

1.2 The definitions used in this Report are those used in the Interim Geotechnical Risk Management Policy for Pittwater, June 2003.

1.3 The methods used in this Assessment are based on those described in Landslide Risk Management Concepts and Guidelines, March 2000, published by the Sub-Committee on Landslide Risk Management of the Australian Geomechanics Society and as modified by the Interim Geotechnical Risk Management Policy for Pittwater, June 2003.

1.4 The experience of the author of this Report spans some 46 years in many areas of Australia and in the Pittwater area, particularly in the last 30 years as Principal of Jack Hodgson Consultants Pty Limited.

2. PROPOSED DEVELOPMENT.

2.1 Construct a spa on the northern side of the house with an existing deck extended to the spa.

2.2 Roof in part of the deck on the western side of the house and make alterations to the roof of the western side of the upper level.

2.3 Use the excavated material for landscaping around the pool with a maximum depth of fill of approximately 0.8 metres.

2.4 Details of the proposed development are shown on two drawings numbered C-026-1 and 2 prepared by Avalon Drafting and dated January 2003.

VOLKING PTY LTD

A.B.N. 21 101 150 127

FRED BOSCHKE B.Sc(For), Dip.For(Hons), MIFA
BUSHFIRE MANAGEMENT CONSULTANT

B P O 4 0 3 0

17 FEB 2004

17 Kevin Avenue
Avalon Beach NSW 2107
(02) 9918 6031
fredorara@bigpond.com
4th February 2003

Bushfire Report - 165A McCarrs Creek Road, Church Point.

The site was inspected on 29th January 2003.

The proposed development is an infill development in a fully developed urban situation. Access from McCarrs Creek Road is on private driveways that are steep and narrow but can be negotiated by most vehicles. The house is on mains water and additional water will be available in the proposed spa pool that will contain about 20 000 litres.

There are houses on all adjoining blocks. The proposed development is to a house that has been on the site for many years. The work slightly extends the footprint of the house.

The block slopes steeply downhill to the west at more than 20 degrees.

The house is above a patch of dense forest on the block that continues through several private blocks to the southwest. The close proximity of this forest makes protection of the house difficult. To the west, north and southeast some protection is given by adjoining houses and gardens.

In this case it is not possible to meet the requirements of "Planning for Bushfire Protection-2001". The existing house has no protection zone as required in Table A2.2. From Table A3.3 for a distance of less than 20 metres the site is in the Flame Zone.

Discussion.

As the subdivision of the block occurred prior to the introduction of "Planning for Bushfire Protection-2001", and is unable to meet the minimum required clearance, the development falls in the category of "infill" development.

Modification of adjoining forest vegetation to provide greater protection is not feasible. It is not practical to construct a flame/heat barrier to protect the additions. Construction methods and the provision of roof/wall drenching systems could improve the protection of the additions.

Approval of the Development Application could be considered on the following grounds.

1. The house has been in existence on this site for many years.
2. The extension of the current footprint of the existing house is negligible.
3. It is an infill development as defined in Section 4.6 of "Planning for Bushfire Protection-2001".
4. There are many existing houses in the vicinity in the same situation.
5. Construction to provide greater protection than that provided by Level 3 of AS3959 "Construction of Buildings in Bushfire Prone Areas".
6. Wall drenching/sprinkler systems to be installed.
7. The water in the spa is made readily available for firefighting vehicles.

Recommendation.

It is necessary to recognise this is an infill development so previous land-use decisions impose an obligation for the development to proceed although complete compliance with "Planning for Bushfire Protection-2001" and AS3959 "Construction of Buildings in Bushfire Prone Areas" is impractical. The recommendations are designed to provide the maximum reasonable protection for the property.

1. Windows on the southern and western faces to have toughened glass or non-combustible shutters.
2. Suitable wall drenching/sprinkler systems to be installed connected to the spa, operated by a petrol or diesel pump.
3. A pipe to be installed from the bottom of the spa pool, to the driveway southwest or the driveway west of the house, fitted with a stopcock and a 38mm or 65mm Storz coupling to facilitate connection to firefighting vehicles.
4. Reminder of the construction to meet Level 3 of AS3959 "Construction of Buildings in Bushfire Prone Areas".

The plans on which the assessment is based are Avalon Drafting, Project C-026, Sheets 1 & 2.

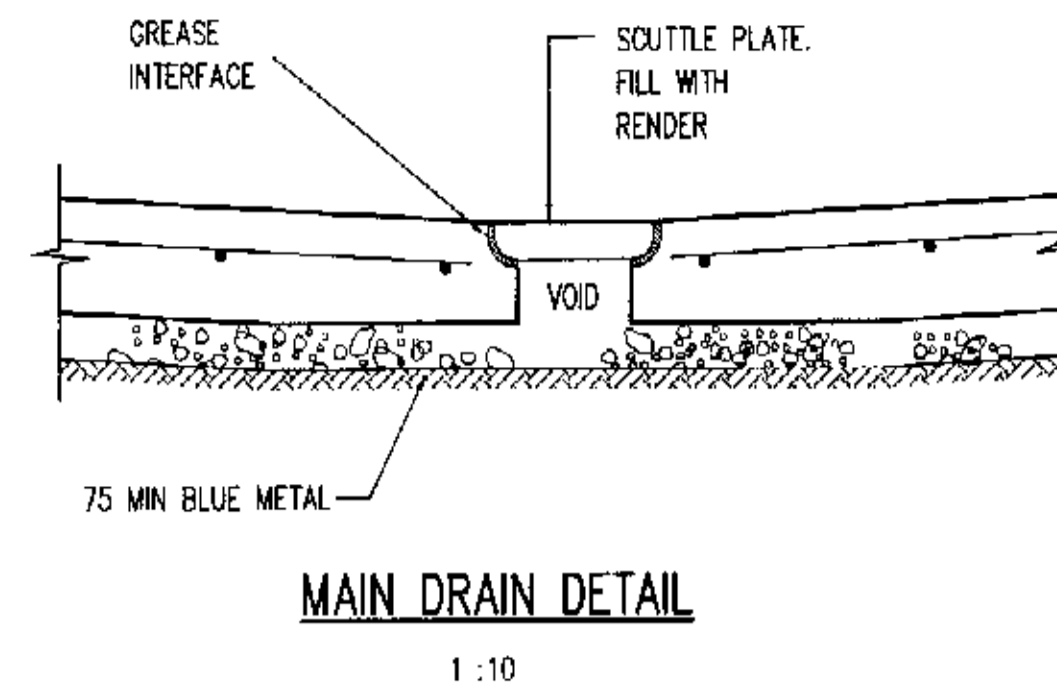
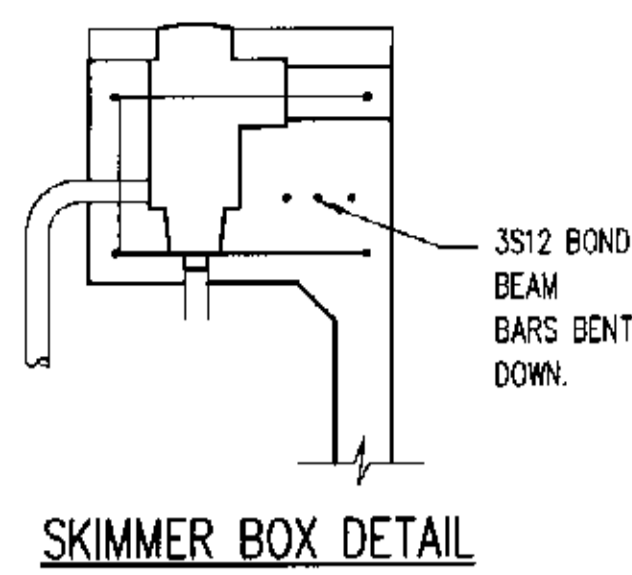
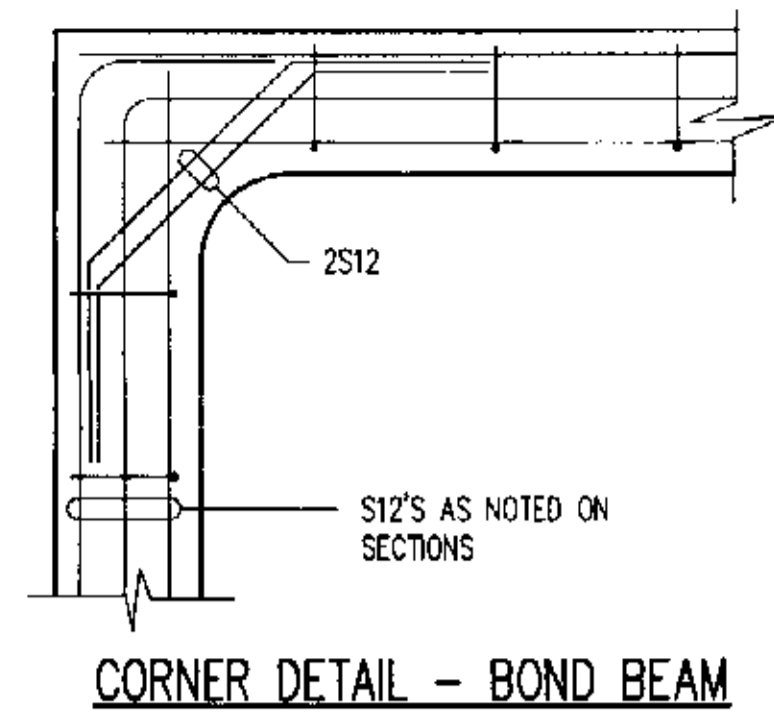
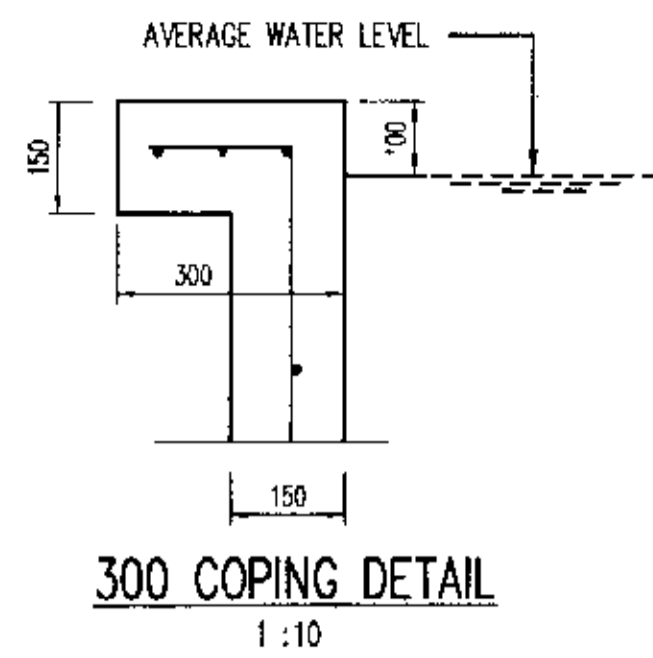
I certify that the appropriate investigation has been carried out and the assessment of the bushfire hazard has been made in accordance with "Planning for Bushfire Protection-2001".

It is not possible to certify that the construction will withstand the passage of a wildfire.

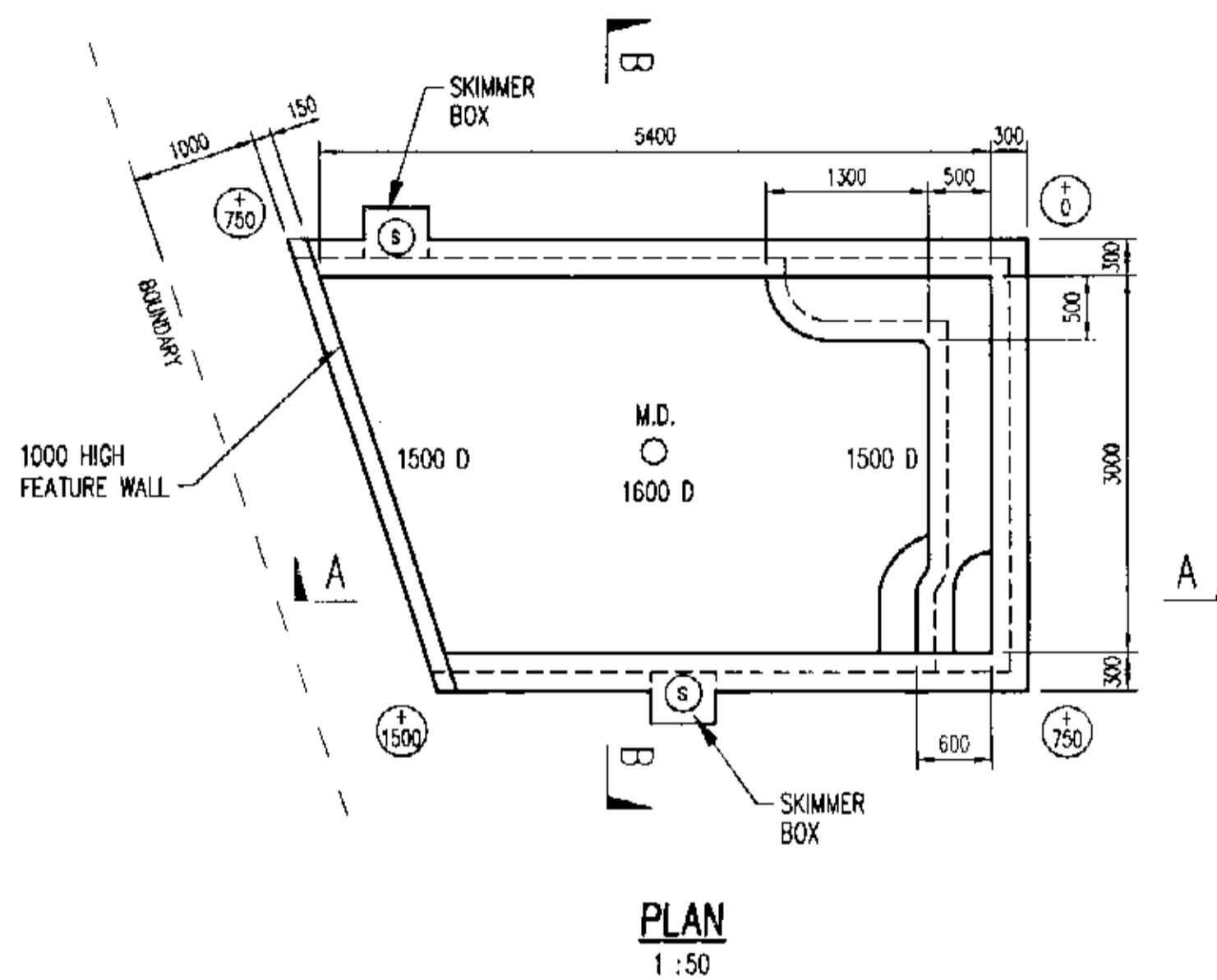
Quote from "Planning for Bushfire Protection-2001": "Notwithstanding the precautions adopted, it should always be remembered that bushfires burn under a wide range of conditions and an element of risk, no matter how small, always remains"



Fred Hoschke
Past Fire Management Officer, Forestry Commission of NSW, Past member of the Bush Fire Council of NSW.

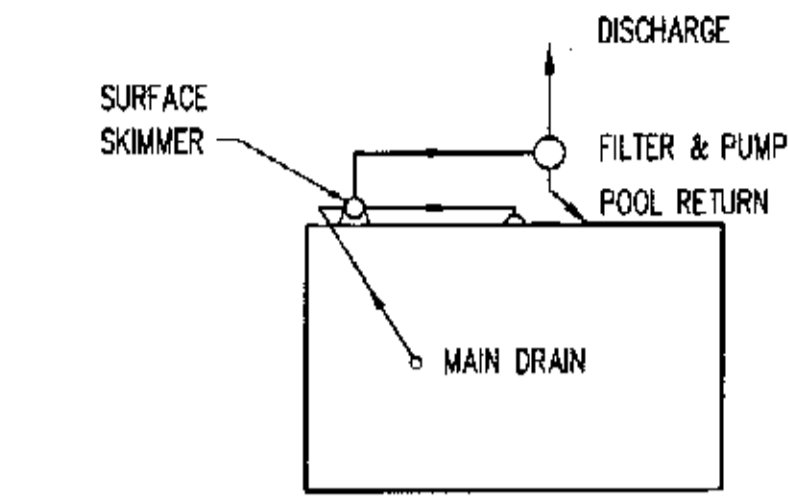


REFER TO ARCHITECTURAL DRAWINGS FOR POOL LOCATION



NOTE
ALL REINFORCEMENT TO BE S12 @ 300 EACHWAY UNLESS NOTED OTHERWISE
POOL SHELL TO BE 150mm THICK UNLESS NOTED OTHERWISE

- LEGEND**
- ⊙ SKIMMER BOX
 - ☼ LIGHT
 - J SPA JET
 - TWL TOP WATER LEVEL
 - M.D. MAIN DRAIN
 - D DEPTH
 - ⊕ LEVEL OF STRUCTURAL COPING ABOVE/BELOW NATURAL SURFACE



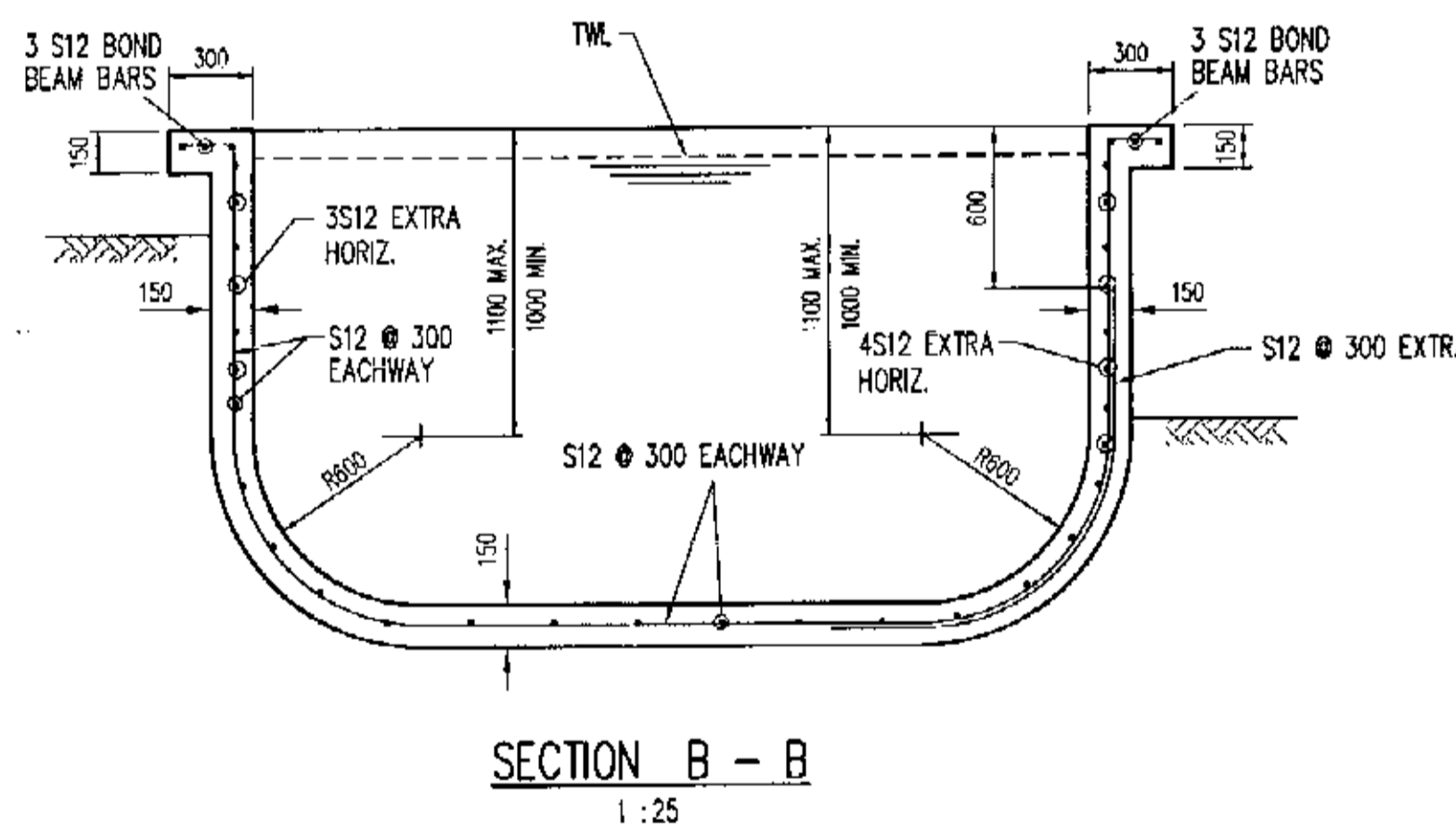
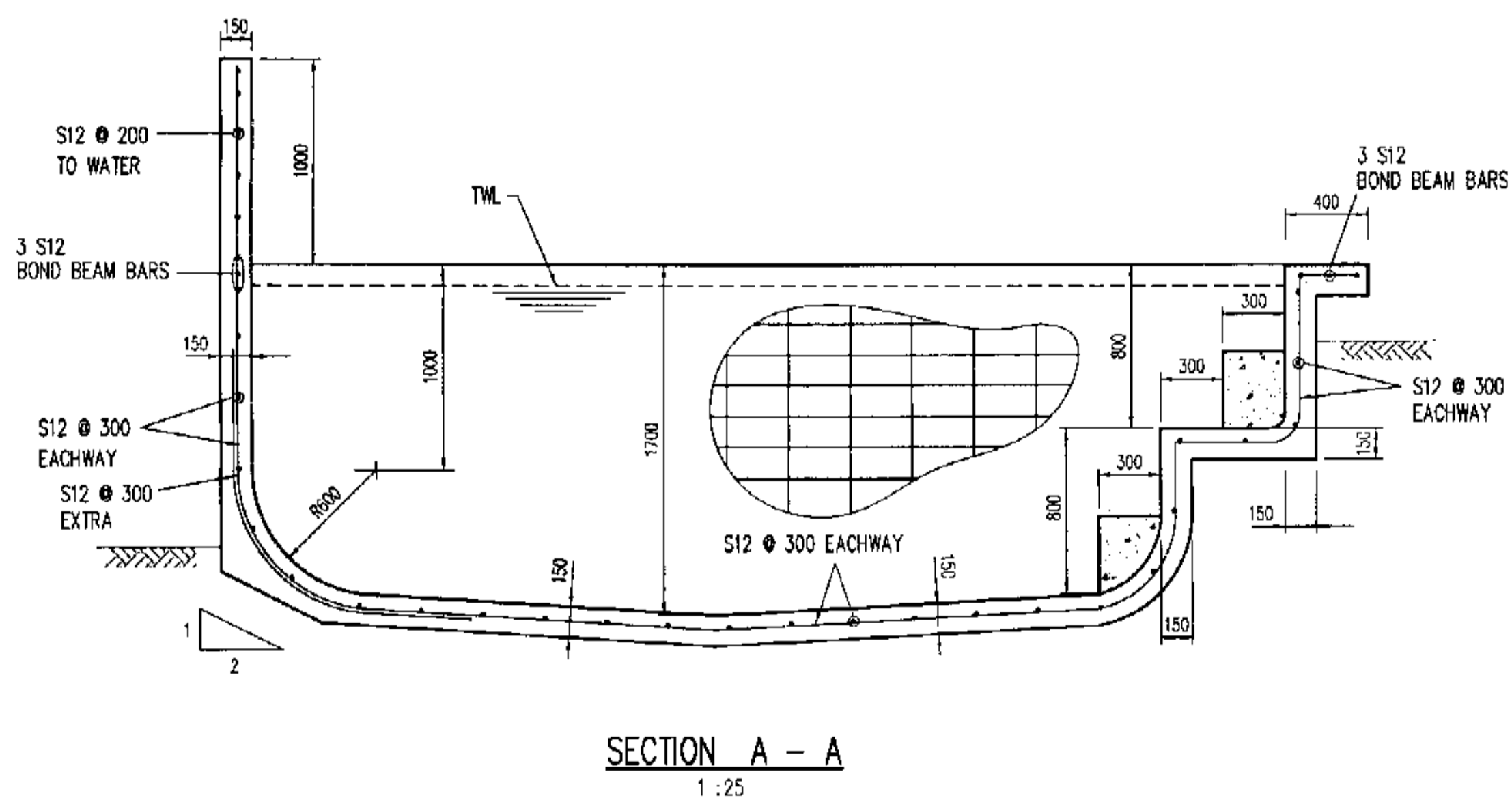
PLUMBING LAYOUT - DIAGRAMMATIC ONLY

NOTES FOR OWNERS

- POOL SET OUT**
Pool set-out site, location and height level is deemed to be acceptable to the owner unless the builder is advised otherwise. Such advice must be prior to placement of reinforcement.
- CURING CONCRETE**
After concreting the pool shell is to be thoroughly wetted down twice daily for at least (7) days (ten (10) days in summer.)
- SAFETY FENCES**
Safety fencing is to be Council approved prior to the pool being filled.
- FILLING POOL**
Hose to be prevented from whipping around during filling. DO NOT use rubber hoses.
- UNDERWATER LIGHTS**
Lights must be fully submerged during use.
- WALKWAYS AND COPINGS**
Walkways and copings are designed for a 2 MPa live load and are not designed to support masonry walls unless noted otherwise.

SPECIFICATIONS

- All workmanship and materials to be in accordance with Australian Standard AS 2783.
- Site Plan dimensions are to water face U.N.D.
- Dimensions shall not be obtained by scaling the details.
- All levels and dimensions are relative to concrete coping level. Fixed Datum represents the fixed coping height/level. Approximate coping levels are represented as follows:
a) NGL +200 represents 200 mm above existing Natural Ground Level.
b) NGL -400 represents 400 mm below existing Natural Ground Level. (classification A)
- Provide filter with matched pump and plumbing to manufacturer's recommendations.
- Supporting soil to be stable natural material with a min. safe bearing capacity of 100 kPa.
- Advise Engineer if excavation in (R) or ground water is encountered. Provide temporary penetrations to floor slab if ground water level exceeds 500 mm above deep floor level.
- The excavation base is to be provided with an underdrain drainage layer as follows:
a) 75 min. blue metal drainage layer, or 50 min. thick layer with plastic over.
b) Compacted iron shavings & membrane if over rock.
c) Plastic layer only if base is entirely in sand.
d) Main Drain pit is to be blue metal filled irrespective of drainage layer type.
- All reinforcement to be of Australian Manufacture in accordance with S.A.A. Standards.
S - Grade 230 structural grade deformed. R - Grade 230 plain grade rod.
Y - Grade 410 tempcore grade bars. F - Grade 450 hard drawn wire fabric.
- Reinforcing bars, unless noted otherwise, are to be lapped 40 bar diameters min., fabric to be lapped 400mm min. All laps should preferably be staggered.
- All reinforcing to be securely supported by bar chairs at 1000 mm c/c.
- Minimum concrete cover to reinforcement from closed concrete surface to be as follows:
Water face Salt Chlorination: 65mm
Water face standard chlorination: 50mm
Coping/interior surface: 50mm
Rear face, formed: 40mm
Rough ground: 65mm.
- Concrete to be pneumatically placed, have a min design strength of FC 25 MPa at 28 days except:
A) Where structure located < 1m from large exposures of water - concrete design strength min. FC 32 MPa at 28 days.
B) Where structure is located in head or splash zone of salt water - 40 MPa at 28 days.
- Upon completion of concreting the hydraulic valve is to be cleaned & checked to ensure correct operation.



WRIGHT POOLS PTY LTD

PO BOX 269, FRENCH FOREST, NSW 2086
PH: 9450 0788 FAX: 9986 3571

Neilly Davies & Partners Pty Ltd
Consulting Civil & Structural Engineers ABN 27084944614
77 Penrhurst Street, Suite 15, Willoughby, NSW 2068
Tel: (02) 99588665 Fax: (02) 99588575
EMAIL: neillydavis@optusnet.com.au

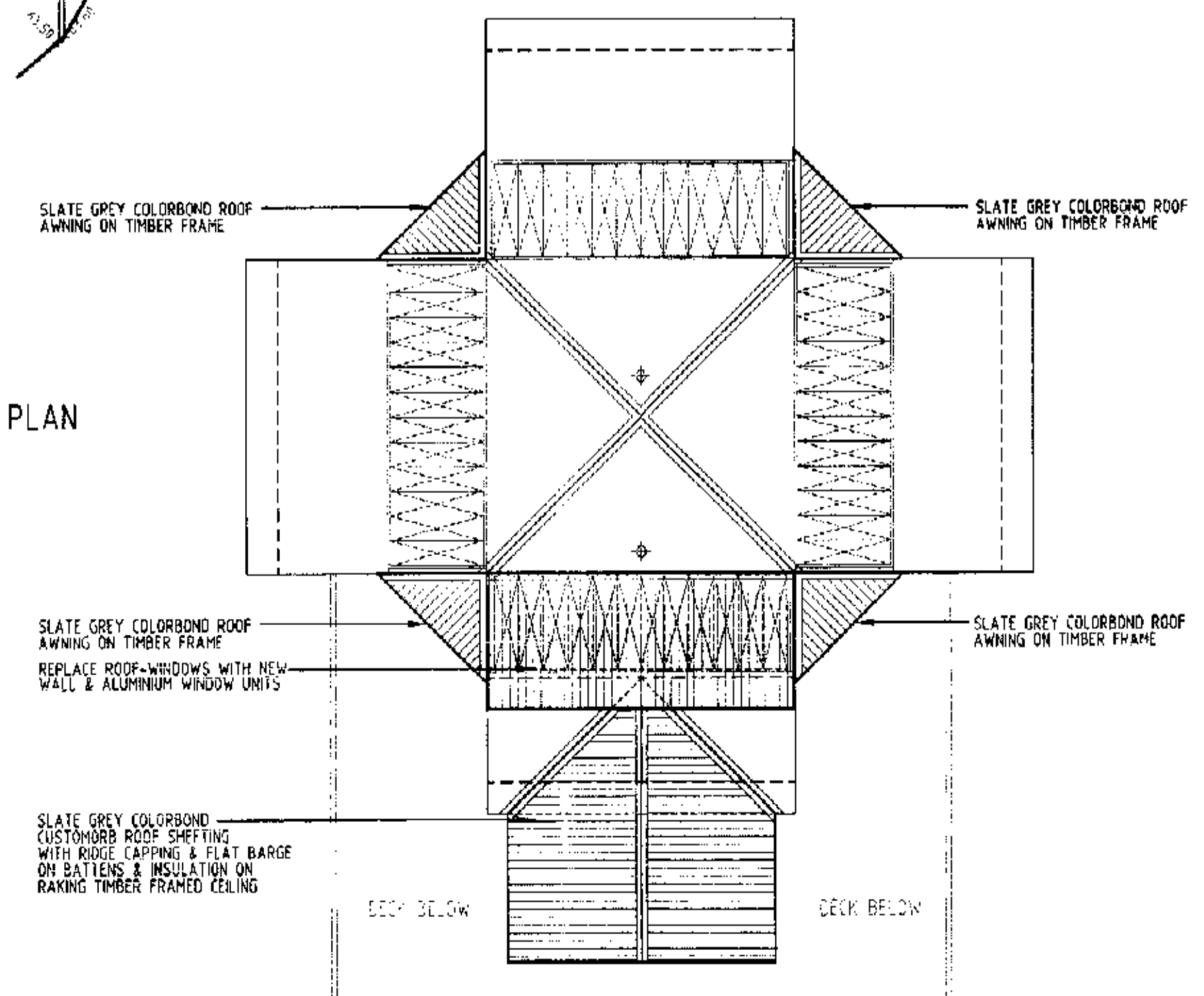
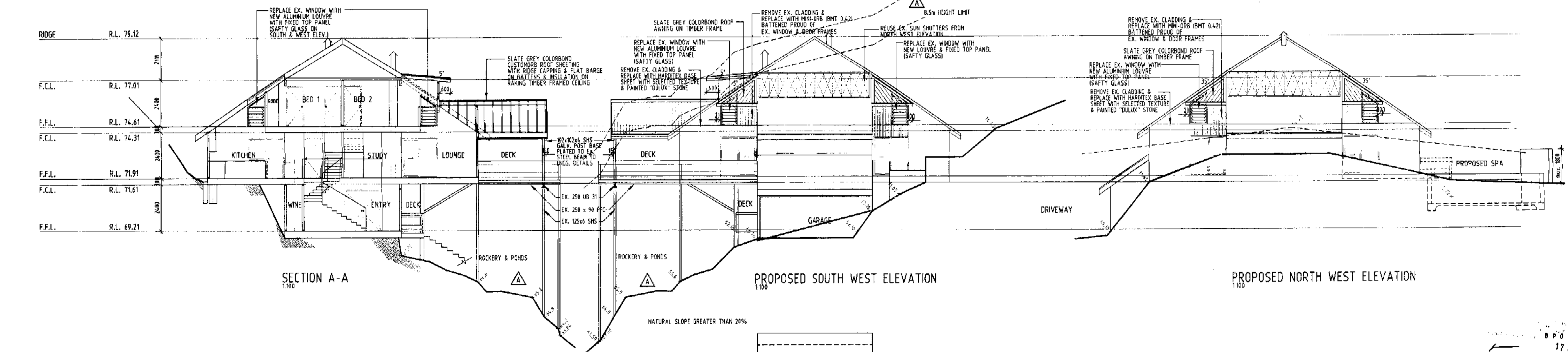
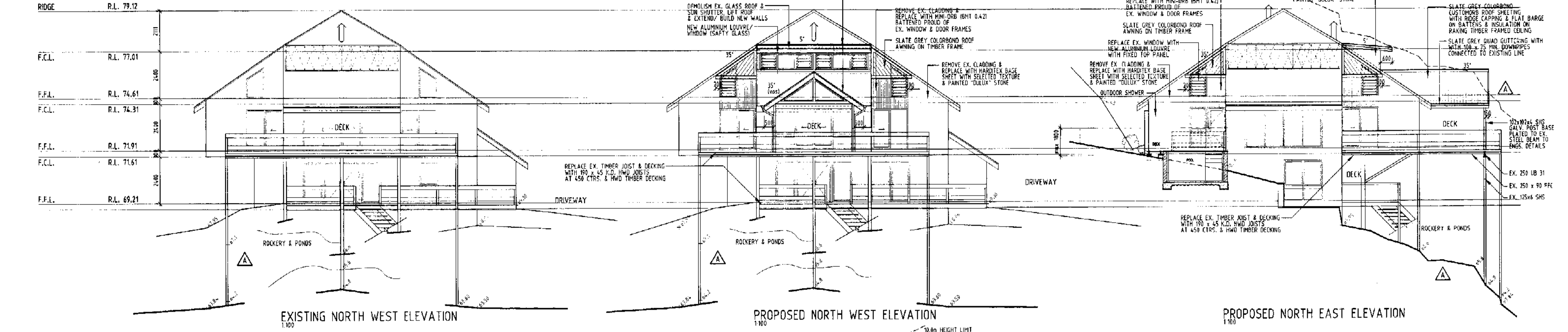
PROPOSED POOL AT
165A McCARRS CREEK ROAD CHURCH POINT
MR MURCHIE

SWIMMING POOL DETAILS

REVISION	DATE	DESCRIPTION	BY	DATE	SCALE	DETAILED	DWG. NO.	JOB NO.
				08.01.04	AS SHOWN	D.T.	1	031215

8 P 0 4 0 3 0
17 FEB 2004

SURVEY INFORMATION PROVIDED BY:-
 PAUL KEEN & COMPANY
 LAND AND ENGINEERING SURVEYORS
 130 WALLAWATTA ROAD, NEWPORT 2106.
 PH. 9597-3010
 REF. 1480



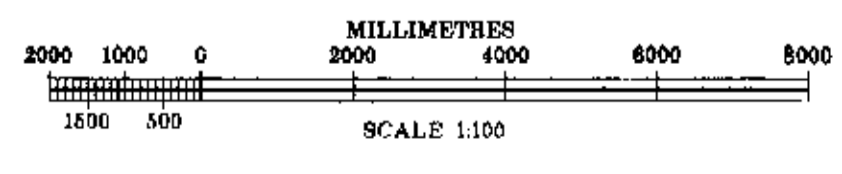
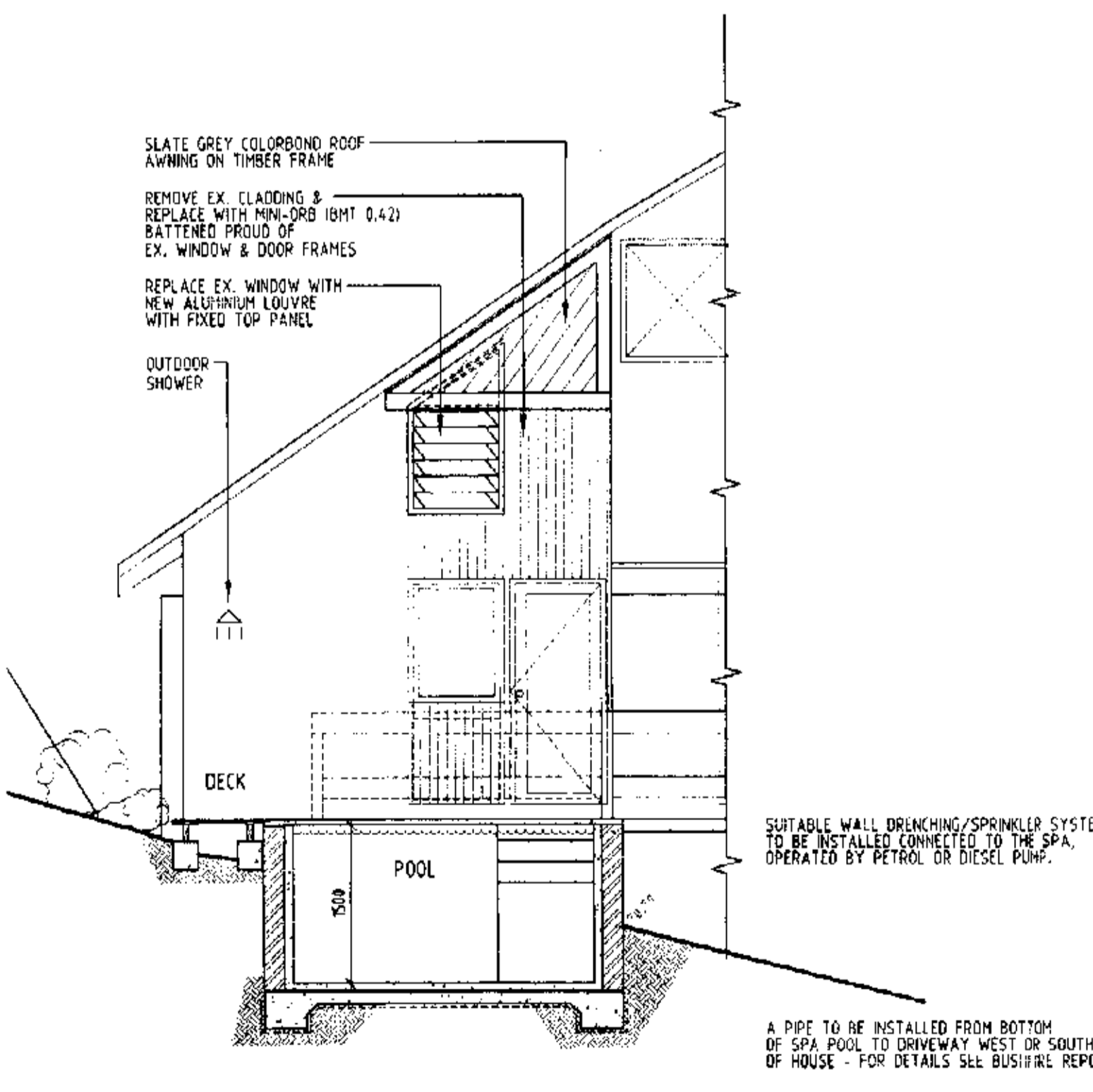
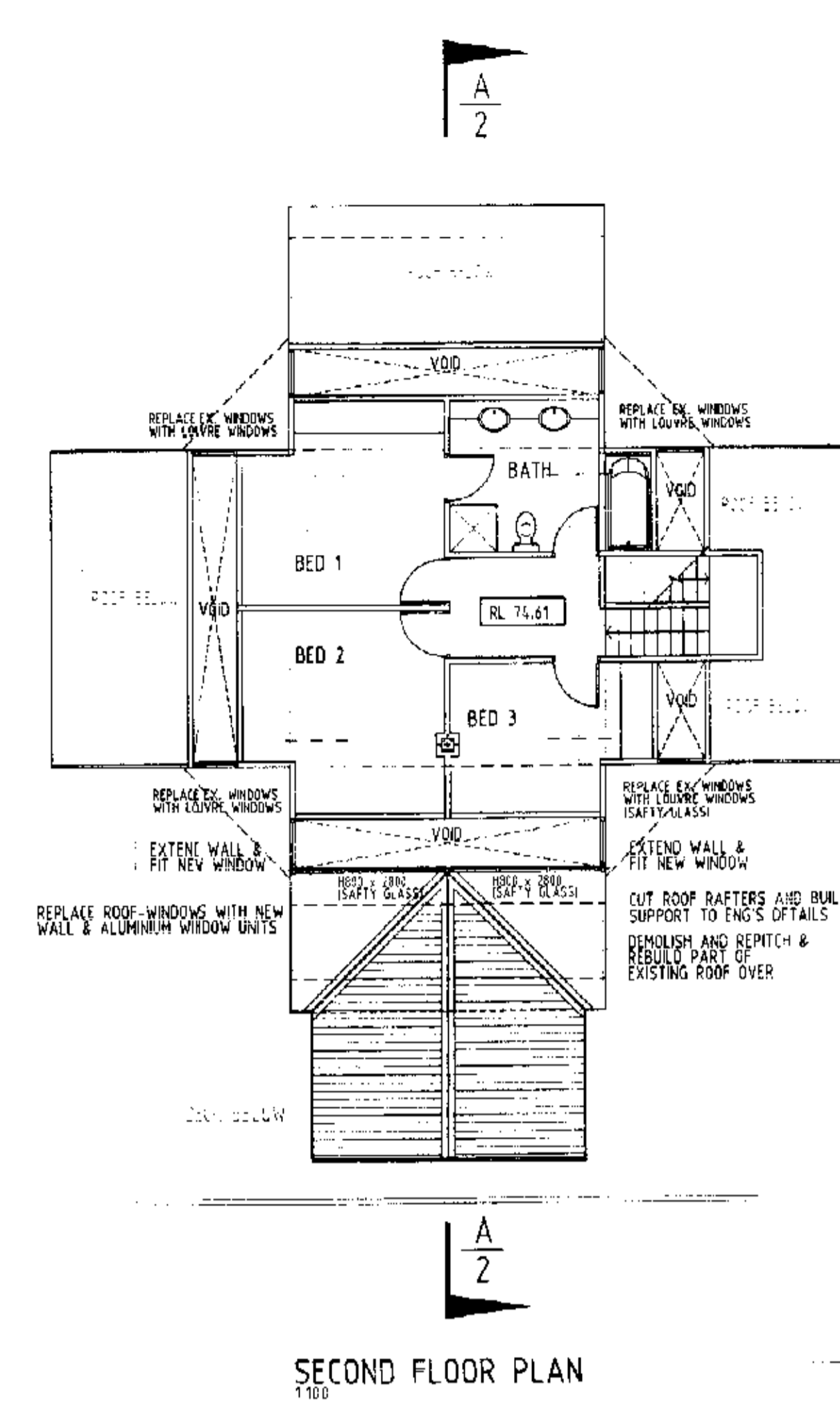
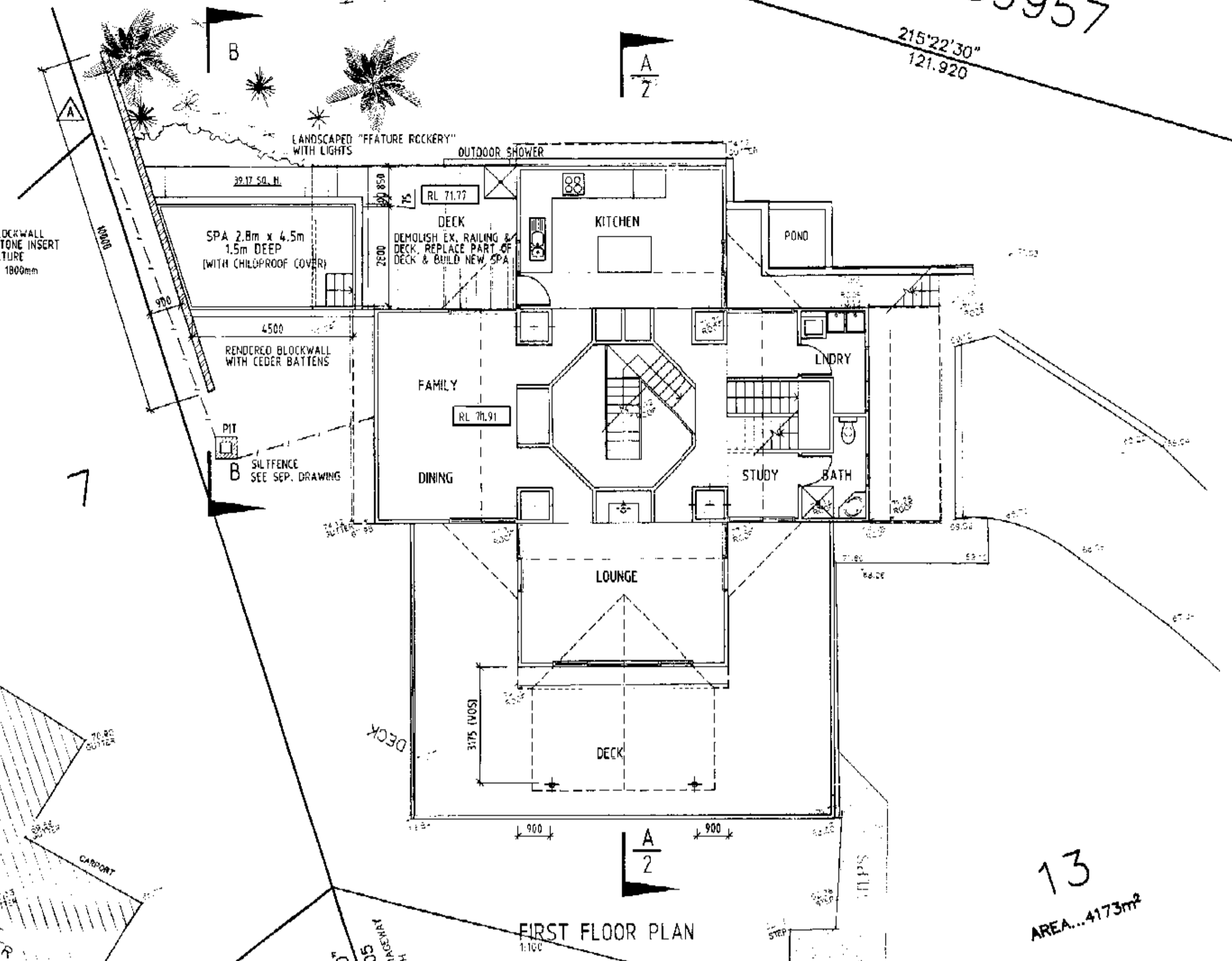
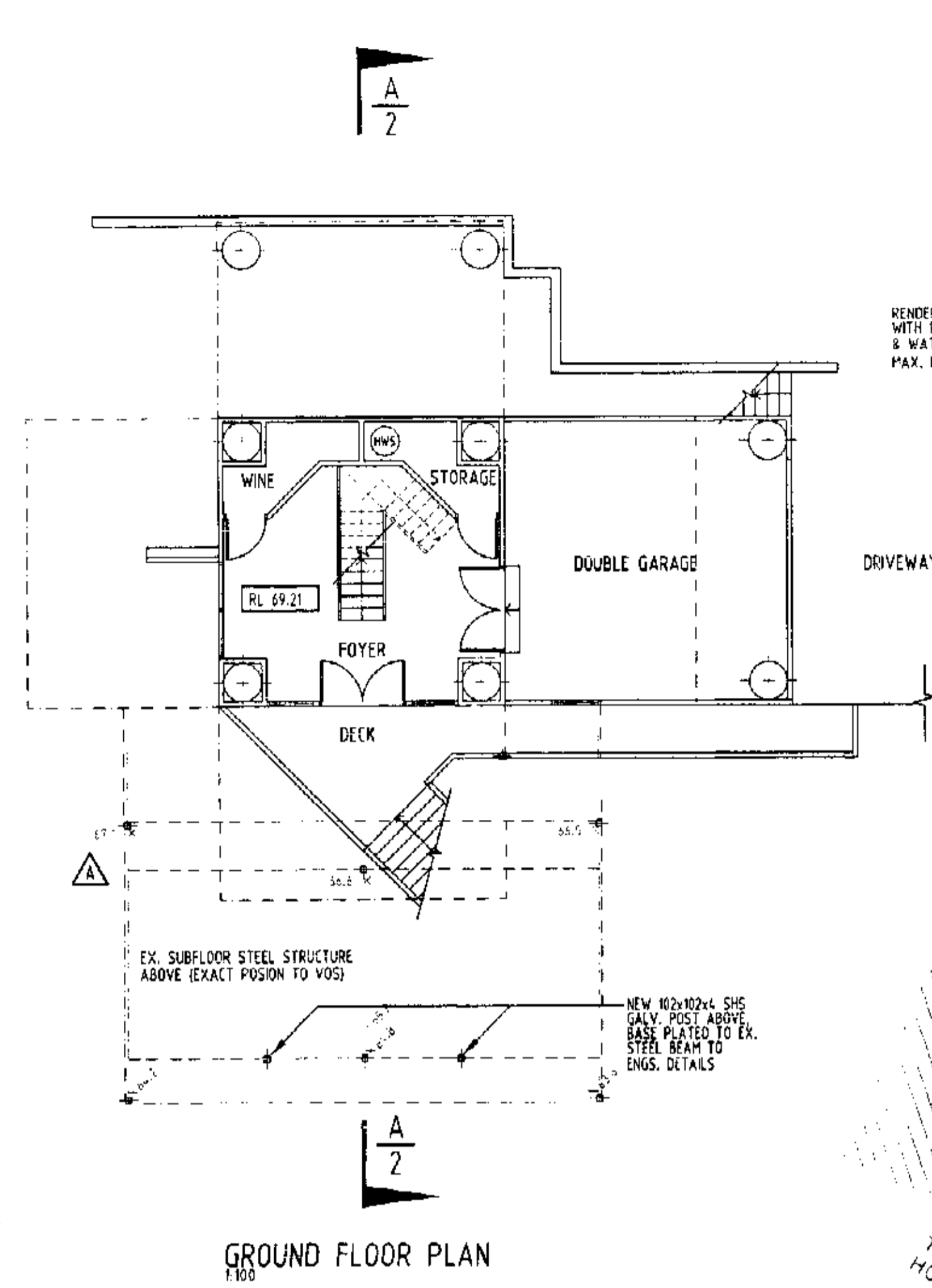
NOTE:
 WINDOWS ON THE SOUTHERN AND WESTERN
 FACES TO HAVE TOUGHENED GLASS OR NON-
 COMBUSTIBLE SHUTTERS (REF. BUSHFIRE REPORT).



MARK	23/05/2003	ADDITION OF SPOTLEVELS, EXTENDED BLOCKWALL ISSUE TO CLIENT FOR COUNCIL APPROVAL.	PROJECT: PROPOSED ALTERATIONS AND ADDITIONS AT 165A MCCARRS CREEK, CHURCH MR. CRAIG MURCHIE	THE COUNCIL OF PITTWATER APPROVED DEVELOPMENT CONSENT PLAN
	07/02/2003			
PLAN OR DOCUMENT CERTIFICATION I am a qualified BUILDING DESIGNER/STRUCTURAL DRAFTSMAN I hold the following qualifications or License No. _____ BUILDING CERTIFICATE - SYDNEY TAFE			THIS DRAWING WORKING DRAWINGS - ROOF PLAN, SECTION & ELEVATIONS	
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.			SCALE 1:100	DATE MAY 2003
Name: ANDREW ROLFE Date: 07/02/2003 Signature: Andrew Rolfe			SHEET No. 2 OF 2	PROJECT No. C-026 AMENDMENT A

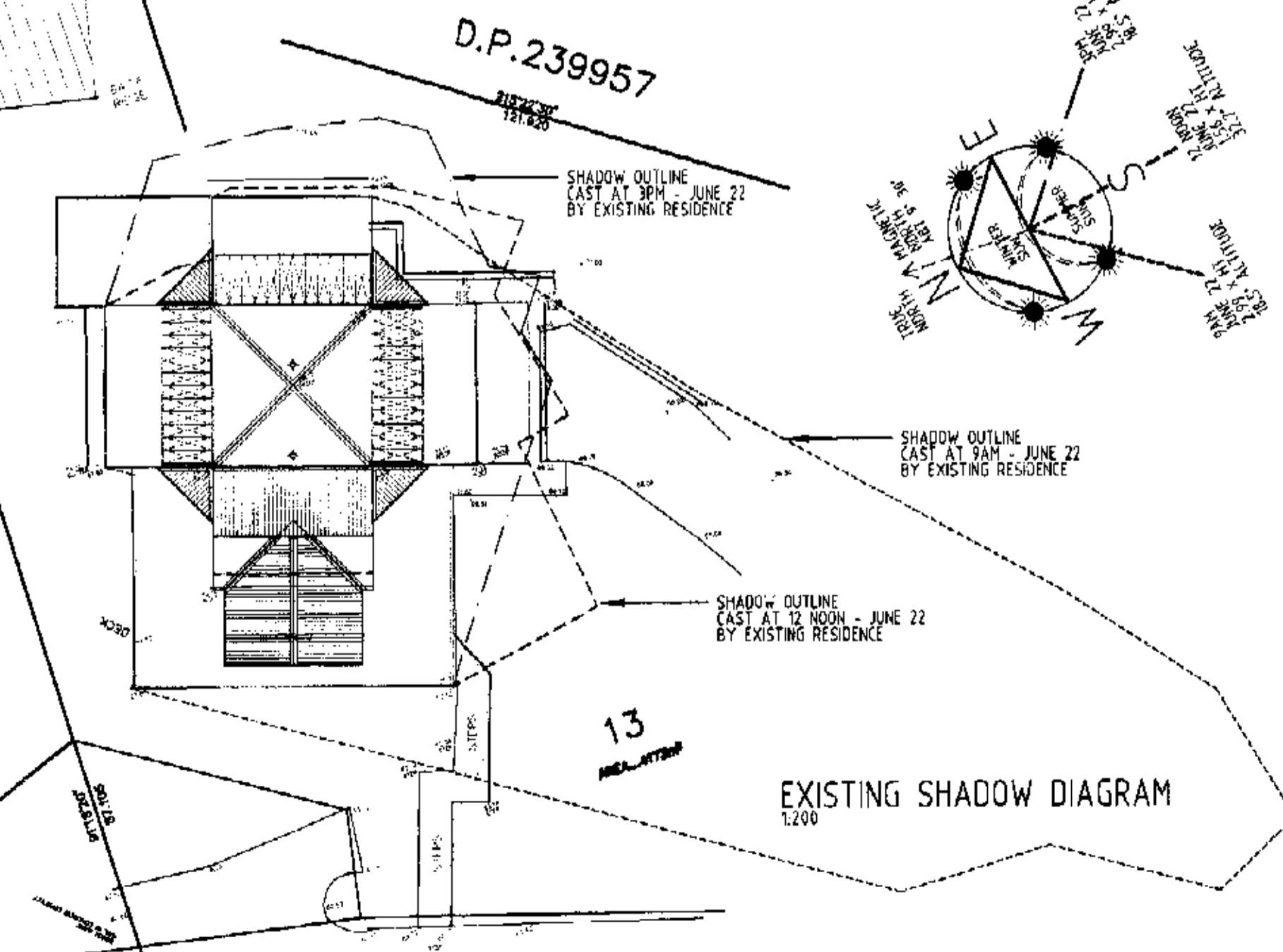
17 FEB 2004

D.P.239957
 215°22'30"
 121.920



NOTE:
 AS LAND SIZE IS OVER 4000 SQ. M. -
 NO SHADOW IMPACTS ON ADJOINING NEIGHBOURS.

RIGHT OF CARRIAGEWAY 4 WIDE AND VARIABLE



DCP No. LP24 - NON-URBAN LOCALITY PLAN

SITE CALCULATIONS

SITE AREA	4173.0 SQ. M
EX. FLOOR AREA	144.56 SQ. M
EX. MAIN DECK AREA	80.76 SQ. M
EX. "KITCHEN" DECK AREA	22.95 SQ. M
EX. PAVED AREA	14.00 SQ. M
EX. DRIVEWAY AREA	487.00 SQ. M
TOTAL EX. BUILT UPON	749.27 SQ. M
	17.96 %
DEMOLISH "KITCHEN" DECK AREA	22.95 SQ. M
REMAINING BUILT UPON	726.32 SQ. M
PROPOSED DECK & SPA AREA	39.17 SQ. M
TOTAL BUILT UPON AREA	765.49 SQ. M
	18.34 %
CARPARKING	2 CARS

NOTES
 1. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE SPECIFIED.
 2. ALL CONSTRUCTION IS TO COMPLY WITH THE RELEVANT SAA BUILDING CODES AND TO THE LOCAL COUNCIL REQUIREMENTS AND OTHER REGULATIONS CONCERNED.
 3. ALL DIMENSIONS THAT RELATE TO SITE BOUNDARIES AND EASEMENTS ARE SUBJECT TO VERIFICATION BY A SITE SURVEY.
 4. FIGURED DIMENSIONS TAKE PRECEDENCE OVER SCALED READINGS.
 5. ALL TIMBER CONSTRUCTION IS TO BE IN ACCORDANCE WITH THE NATIONAL TIMBER FRAMING CODE A.S.1684.
 6. ROOF WATER AND SUB SOIL DRAINAGE TO BE DISPOSED OF IN THE APPROVED MANNER OR AS DIRECTED BY LOCAL INSPECTORS.
 7. FINAL POSITION OF ALL DOWNPIPES TO BE DECIDED BY ROOF PLUMBER.
 8. ANY STRUCTURAL DETAILS OR DESIGN IS TO BE SUPPLIED BY A STRUCTURAL ENGINEER.
 9. ALL LEVELS ARE TO AUSTRALIAN HEIGHT DATUM.
 10. ALL ELECTRICAL, POWER & LIGHT OUTLETS AS DETERMINED BY OWNER.
 11. MAKE GOOD & REPAIR ALL EXISTING FINISHES AFFECTED BY NEW WORK. RE-USE EXISTING MATERIALS WHERE POSSIBLE.
 12. ANY DETAILING IN ADDITION TO WHAT IS SUPPLIED ON THIS DRAWING SHALL BE RESOLVED BETWEEN THE OWNER & THE BUILDER.



MARK	DATE	AMENDMENT
A	23/05/2003	ADDITION OF SPOTLEVELS, EXTENDED BLOCKWALL
-	07/02/2003	ISSUE TO CLIENT FOR COUNCIL APPROVAL.

PROJECT:
 PROPOSED ALTERATIONS AND ADDITIONS AT
 165A MCCARRS CREEK, CHURCH POINT, FOR
 MR. CRAIG MURCHIE

PLAN OR DOCUMENT CERTIFICATION
 I am a qualified BUILDING DESIGNER/STRUCTURAL DRAFTERMAN
 I hold the following qualifications or licence No.
 BUILDING CERTIFICATE - SYDNEY TAFE

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.

ANDREW BOLTE 07/02/2003 Andrew Bolte
 Name Date Signature

THIS DRAWING
WORKING DRAWINGS -
SITE PLAN, GROUND, FIRST &
SECOND FLOOR PLANS, SECTION

SCALE	DATE	SHEET NO.	OF
150/1:100/1:200	MAY 2003	1	2
DRAWN	CHECKED	PROJECT NO.	AMENDMENT
A.B./A.H.		C-026	A

ALTS. & ADDS. TO
1699 MCCARRS CREEK
CHURCH POINT

Location & Project

GENERAL NOTES
SHEET 2

Drawing Title

Scale N.T.S. Drawn by B.A.H. Drg. No. 5878/2

Date 26.09.03 Checked by [Signature] 5878/2

STRUCTURAL ENGINEERING & DESIGN
A.C.N. 096 473 111 A.B.N. 76 096 473 111

182-186 Blues Point Rd
North Sydney 2060
Ph: (02) 9922 6322
Fax: (02) 9923 1270
Email: bah_cha@chester.com.au

CHAPMAN HUTCHISON PTY LTD

CONSTRUCTION NOTES

- STRUCTURE ABOVE TO BE ADEQUATELY SUPPORTED DURING CONSTRUCTION
- NEEDLES TO SUPPORT BRICKWORK OVER TO BE INSTALLED PRIOR TO ANY BRICKWORK BEING REMOVED
- NEEDLES TO BE ADEQUATELY SUPPORTED DURING CONSTRUCTION
- INSTALL LINTEL BEAMS AS SHOWN
- PRELOAD BEAM WITH WEDGES UNTIL LOAD IS JUST REMOVED FROM NEEDLES
- PLACE HARD-PACKED NON SHRINK MORTAR BETWEEN BEAM AND BRICKWORK
- NEEDLES TO REMAIN IN PLACE UNTIL 7 DAYS AFTER PLACEMENT OF MORTAR
- REMOVE NEEDLES AND WEDGES
- MAKE GOOD ANY LOOSE BRICKWORK

TIMBER

- ALL TIMBER FRAMING WORK TO COMPLY WITH AS 1684 AND AS 1720 UNLESS OTHERWISE NOTED
- QUALITY SHALL BE AS TABULATED:

ELEMENT	SPECIES	STRENGTH GROUP	STRESS GRADE
Exposed members	Treated pine	SDS	F7
B&E's	Treated (Hyspan)	LVL	F14
B7-11 & 15	Hyspan	LVL	F14
Remainder	Oregon	SDS	F7

BRICKWORK AND BLOCKWORK

- ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH AS1770
- STRENGTHS OF BRICKS, CLASS OF BLOCKS AND TYPE OF MORTAR SHALL BE AS TABULATED, AND SHALL BE VERIFIED BY TESTS ACCORDING TO RELEVANT STANDARDS

ELEMENT	MATERIAL	STRENGTH (CS) OR CLASS	MORTAR TYPE
Wall	Concrete	30	M4

- BRICKWORK OR BLOCKWORK SUPPORTING CONCRETE OR STEEL MEMBERS SHALL BE TROWELLED SMOOTH AND SEPARATED AT THE BEARING SURFACE BY TWO LAYERS OF

CONCRETE

- CONCRETE MATERIALS SHALL BE IN ACCORDANCE WITH AS 1080 AND AS 1085
- CONCRETE SHALL BE PLACED AND COMPACTED IN ACCORDANCE WITH AS 1080 AND AS 1085
- CONCRETE SHALL BE CURED IN ACCORDANCE WITH AS 1080 AND AS 1085
- CONCRETE SHALL BE TESTED IN ACCORDANCE WITH AS 1080 AND AS 1085
- CONCRETE SHALL BE PROTECTED FROM DAMAGE DURING CONSTRUCTION
- CONCRETE SHALL BE PROTECTED FROM DAMAGE DURING CONSTRUCTION
- CONCRETE SHALL BE PROTECTED FROM DAMAGE DURING CONSTRUCTION
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- CONCRETE SHALL BE PROTECTED FROM DAMAGE DURING CONSTRUCTION

STEEL

- STEEL SHALL BE IN ACCORDANCE WITH AS 1080 AND AS 1085
- STEEL SHALL BE PROTECTED FROM CORROSION
- STEEL SHALL BE PROTECTED FROM CORROSION
- STEEL SHALL BE PROTECTED FROM CORROSION
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WELDS

- WELDS SHALL BE IN ACCORDANCE WITH AS 1554
- WELDS SHALL BE PROTECTED FROM CORROSION
- WELDS SHALL BE PROTECTED FROM CORROSION
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ELEMENT	SURFACE PREPARATION (AS 1627 PART 1)	TREATMENT OR COATING
All	2 1/2	1. Interzinc 215 (19µ) 2. Intergard 475 Hs (25µ) 3. Interline 629 (50µ)

STEELWORK

- STEEL SHALL BE IN ACCORDANCE WITH AS 1080 AND AS 1085
- STEEL SHALL BE PROTECTED FROM CORROSION
- STEEL SHALL BE PROTECTED FROM CORROSION
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PLAN OR DOCUMENT CERTIFICATION

I am a qualified Civil & Structural Engineer
I hold the following qualifications M. Eng. Sc.
F.I.E. Aust. N Per 3 Civil & Structural No. 149788
Further I am appropriately qualified to certify the geotechnical 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 appropriate Australian/Industry standards
JACK HODGSON... [Signature]
Date 12/10/04
Name Signature

B P O 4 0 3 0
17 FEB 2004

GENERAL NOTES

- 1. THESE DRAWINGS SHALL BE READ IN CONJUNCTION WITH ALL ARCHITECTURAL AND CIVIL CONSULTANTS' DRAWINGS AND SPECIFICATIONS AND WITH SUCH OTHER WRITTEN INSTRUCTIONS AS MAY BE ISSUED DURING THE COURSE OF THE CONSTRUCTION. ALL DISCREPANCIES SHALL BE REFERRED TO THE ARCHITECT/ENGINEER FOR DECISION BEFORE PROCEEDING WITH THE WORK.
- 2. DIMENSIONS SHALL NOT BE OBTAINED BY SCALING THE STRUCTURAL DRAWINGS.
- 3. SETTING OUT DIMENSIONS SHOWN ON THE DRAWINGS SHALL BE VERIFIED BY THE BUILDER.
- 4. DURING CONSTRUCTION THE STRUCTURE SHALL BE MAINTAINED IN A STABLE CONDITION AND NO PART SHALL BE OVERSTRESSED.
- 5. ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE CURRENT EDITIONS OF THE SAA CODES AND THE RECOMMENDATIONS AND ORDINANCES OF THE RELEVANT BUILDING AUTHORITY.

FOUNDATIONS AND FOOTINGS

- 1. FOOTINGS HAVE BEEN DESIGNED FOR AN ALLOWABLE INTENSITY OF BEARING PRESSURE OF 800 kPa (BASED ON APPROVAL OF THE FOUNDATION MATERIALS BY THE BUILDER).
- 2. FOOTINGS SHALL BE PLACED CENTRALLY UNDER WALLS AND COLUMNS UNLESS OTHERWISE NOTED.

CONSOLIDATION OF SUBGRADE

- 1. SITE TO BE EXCAVATED TO LEVELS SHOWN ON ARCHITECT'S DRAWINGS. CUT OUT SOFT SPOTS AND REFILL WITH SELECT GRANULAR MATERIAL. WHERE SITE IS CUT CONSOLIDATE AFTER CUTTING TO 95% STANDARD DRY DENSITY. WHERE SITE REMAINS UNCUT CONSOLIDATE NATURAL SURFACE AFTER REMOVAL OF TOP SOIL TO 50mm STANDARD DRY DENSITY BEFORE PLACING ANY FILL. CONSOLIDATE FILL TO 95% STANDARD DRY DENSITY TO 95% STANDARD DRY DENSITY.

WELDING OF REINFORCEMENT

- 1. WELDING OF REINFORCEMENT SHALL NOT BE PERMITTED UNLESS SHOWN ON THE STRUCTURAL DRAWINGS.
- 2. PIPES OR CONDUITS SHALL NOT BE PLACED WITHIN THE CONCRETE COVER TO REINFORCEMENT WITHOUT THE APPROVAL OF THE ENGINEER.

REINFORCEMENT SYMBOLS

- 1. REINFORCEMENT SYMBOLS SHALL COMPLY WITH AS 1532. ALL FABRIC WALL REINFORCEMENT SHALL BE SUPPLIED IN PLAT SHEETS.
- 2. REINFORCEMENT SYMBOLS:
 - R STRUCTURAL GRADE
 - S ROUND BAR
 - F HARD DRAWN
 - Y HIGH STRENGTH
 - D DEFORMED BAR
- 3. THE NUMBER IMMEDIATELY FOLLOWING THESE SYMBOLS IS THE NUMBER OF MILLIMETRES IN THE BAR DIAMETER.
- 4. FABRIC REINFORCEMENT TO BE LAPPED 300 MINIMUM AT ENDS AND SUBSTITUTES IN POSITIONS OF MAXIMUM MOMENT ARE NOT PERMITTED.
- 5. ALL REINFORCEMENT SHALL BE FIRMLY SUPPORTED ON INSULATED STEEL PLASTIC OR CONCRETE CHAIRS GENERALLY AT NOT GREATER THAN 500 CENTRES BOTH WAYS ROOFS SHALL BE TIED AT TERRACE INTERSECTIONS.
- 6. ALL COLUMNS AND BEAMS SHALL BE TIED TO REINFORCEMENT CHAIRS AS SHOWN IN THE ARCHITECT'S DETAILS.

CONCRETE WORK

- 1. ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH AS 3600 AND SHALL BE VERIFIED BY TESTS.
- 2. CONCRETE SHALL BE CAST AS TABLED AND SHALL BE VERIFIED BY TESTS.

CAST IN FORMS COMPLYING WITH AS 1088

ELEMENT	CONDITION 1 NOT TO BE EXPOSED TO WEATHER GROUND WATER OR FRESH WATER			CONDITION 2 TO BE EXPOSED TO WEATHER GROUND WATER OR FRESH WATER		CONDITION 3 CAST AGAINST OTHER FORMWORK OR THE GROUND
	MAX SIZE AGG	CEMENT TYPE	AD MIXTURE	CONCRETE GRADE	CONCRETE GRADE	
PAD FOOTINGS & PILE CAPS	30	GP	-	85	85	85
STRIP FOOTINGS	20	GP	-	85	85	85
BORED OR CAST PIERS	20	GP	-	85	85	85
COLUMNS	20	GP	-	45	45	45
WALLS, INCL. RETAINING WALLS	20	GP	-	45	45	45
SLABS AND BEAMS	20	GP	-	45	45	45

- 1. SLABS COURED OVER A MEMBRANE ON GROUND ARE INCLUDED AS CONDITION 3.
- 2. SLABS EXPOSED TO CORROSIVE VAPOURS, CORROSIVE GROUND WATER, SEA WATER OR SOILS SHALL HAVE REINFORCEMENT COVER AS NOTED ON THE DRAWINGS.

SIZES OF CONCRETE ELEMENTS DO NOT INCLUDE THICKNESS OF APPLIED FINISHES

- 1. CONSTRUCTION JOINTS WHERE NOT SHOWN SHALL BE TO THE APPROVAL OF THE ENGINEER.
- 2. BEAM DEPTHS ARE WRITTEN FIRST AND INCLUDE SLAB THICKNESS, IF ANY.
- 3. NO HOLES OR CHANGES OTHER THAN THOSE SHOWN ON THE STRUCTURAL DRAWINGS SHALL BE MADE IN CONCRETE ELEMENTS WITHOUT THE PRIOR APPROVAL OF THE ENGINEER.
- 4. REINFORCEMENT IS REPRESENTED DIAGRAMMATICALLY. IT IS NOT NECESSARILY SHOWN IN TRUE PROJECTION.
- 5. SPLICES IN REINFORCEMENT MADE IN POSITIONS OTHER THAN SHOWN SHALL BE TO THE APPROVAL OF THE ENGINEER. WHERE THE LAP LENGTH IS NOT SHOWN IT SHALL BE TO THE APPROVAL OF THE ENGINEER.

ALTS. & ADDS. TO
165m MCCARRS CREEK
CHURCH POINT

Location & Project

GENERAL NOTES
ON SHEET 1

Drawing Title

Scale N.T.S. Drawn by B.A.H. Drg. No. 5878/1

Date 26.09.03 Checked by [Signature]

STRUCTURAL ENGINEERING & DESIGN
A.C.N. 096 473 111 A.B.N. 76 096 473 111
182-186 Blues Point Rd
North Sydney 2060
Ph: (02) 9922 6322
Fax: (02) 9923 1270
Email: bah_cha@chester.com.au

CHAPMAN HUTCHISON PTY LTD

PLAN OR DOCUMENT CERTIFICATION

I am a qualified Civil & Structural Engineer
I hold the following qualifications M. Eng. Sc.
F.I.E. Aust. N Per 3 Civil & Structural No. 149788

Further I am appropriately qualified to certify the geotechnical component of the project.

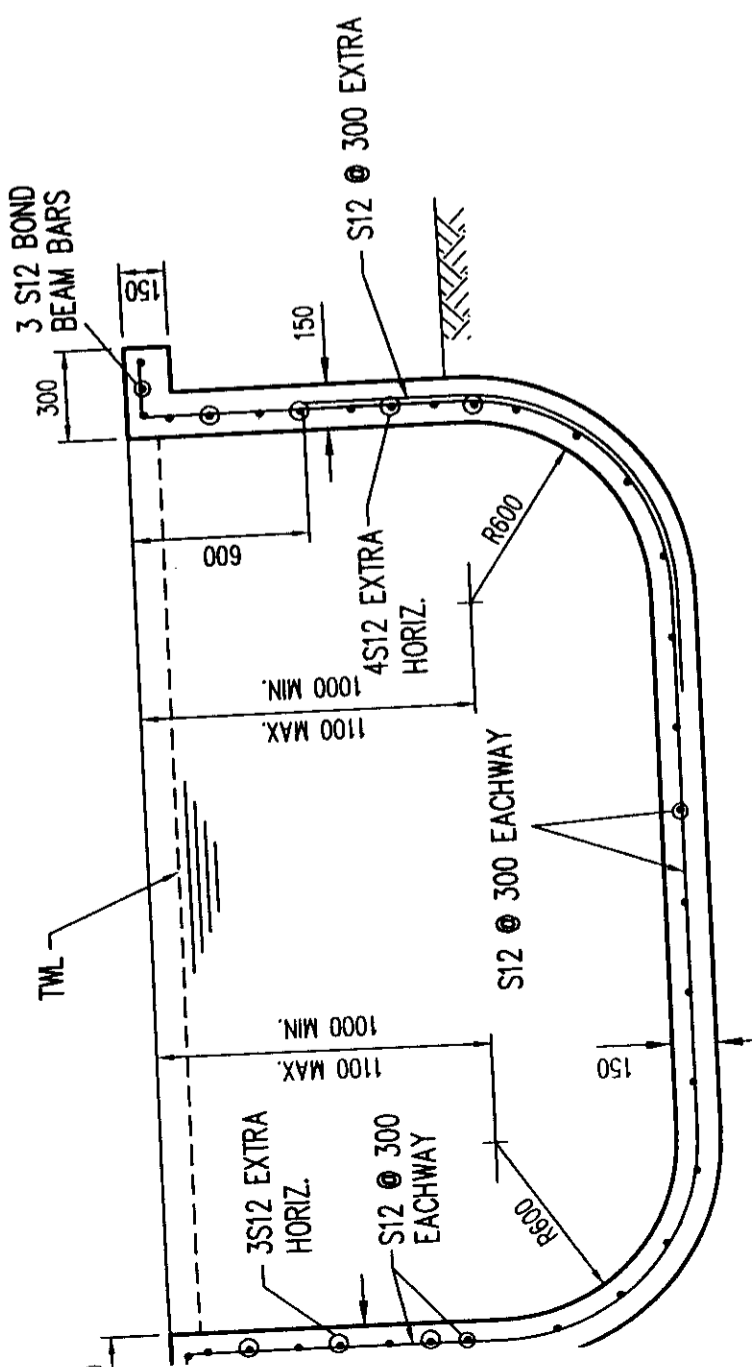
I hereby state that these plans or details comply with the conditions of development consent. The provisions of the Building Code of Australia and/or appropriate Australian/Industry standards.

JACK HODGSON 17/2/04

Name Date Signature

B P 0 4 0 3 0
17 FEB 2004

I hold the following qualifications M. Eng. Sc.
 Eng. 3 Civil & Structural No. 149788
 I am appropriately qualified to certify the geotechnical 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 appropriate Australian/Industry standards.
 JACK HODGSON *J. Hodgson*
 Name Date Signature



SECTION B - B
 1:25
 B P O 4 0 3 0
 17 FEB 2004

WRIGHT POOLS PTY LTD

PO BOX 269, FRENCHS FOREST, NSW 2086
 PH: 9450 0788 FAX: 9986 3571

- 5. UNDERWATER LIGHTS**
 Lights must be fully submerged during use.
- 6. WALKWAYS AND COPINGS**
 Walkways and copings are designed for a 2 kPa live load and are not designed to support masonry walls unless noted otherwise.
- SPECIFICATIONS**
- All workmanship and materials to be in accordance with Australian Standard AS 2783.
 - Site Plan dimensions are to water face U.N.O.
 - Dimensions shall not be obtained by scaling the details.
 - All levels and dimensions are relative to concrete coping level. Fixed Datum represents the fixed coping height/level. Approximate coping levels are represented as follows:
 a) NGL +200 represents 200 mm above existing Natural Ground Level.
 b) NGL -400 represents 400 mm below existing Natural Ground Level. (classification A)
 - Provide filter with matched pump and plumbing to manufacturers recommendations.
 - Supporting soil to be stable natural material with a min. safe bearing capacity of 100 kPa.
 - Advise Engineer if excavation in fill or ground water is encountered. Provide temporary penetrations to floor slab if ground water level exceeds 500 mm above deep floor level.
 - The excavation base is to be provided with an undershell drainage layer as follows:
 a) 75 min. blue metal drainage layer, or 50 min. thick layer with plastic over.
 b) Corrugated iron sheeting & membrane if over rock.
 c) Plastic layer only if base is entirely in sand.
 d) Main Drain pit is to be blue metal filled irrespective of drainage layer type.
 - All reinforcement to be of Australian Manufacture in accordance with S.A.A. Standards.
 S - Grade 230 structural grade deformed.
 R - Grade 230 plain grade round.
 F - Grade 450 hard drawn wire fabric.
 Y - Grade 410 tempcore grade bars.
 - Reinforcing bars, unless noted otherwise, are to be lapped 40 bar diameters min., fabric to be lapped 400mm min. All laps should preferably be staggered.
 - All reinforcing to be securely supported by bar chairs at 1000 max cs.
 - Minimum concrete cover to reinforcement from closest concrete surface to be as follows:
 Water face Salt Chlorination: 65mm
 Water face standard chlorination: 50mm
 Coping/walkway surface: 50mm
 Rear face, formed: 40mm
 Rough ground: 65mm.
 - Concrete to be pneumatically placed, have a min design strength of Fc 25 MPa at 28 days except:
 A) Where structure located < 1km from large expanses of water - concrete design strength min. Fc 32 MPa at 28 days.
 B) Where structure is located in tidal or splash zone of salt water - 40 MPa at 28 days.
 - Upon completion of concreting the hydrostatic valve is to be cleaned & checked to ensure correct operation.

Neilly Davies & Partners Pty Ltd
 Consulting Civil & Structural Engineers
 77 Penhurst Street, Suite 15, Willoughby, NSW 2068
 Tel: (02) 99588665 Fax: (02) 99588575
 EMAIL: neillydaves@optusnet.com.au

PROPOSED POOL AT
165A MCCARRS CREEK ROAD CHURCH POINT
MR MURCHIE

SWIMMING POOL DETAILS

CAD FILE C:\RIF\03-POOLS\MURCHIE
 DWG No. 1, JOB No. 031215

CHECKED *P. B.* DATE 08.01.04 SCALES AS SHOWN DRAIN D.T.
 BY

CONCRETE WORK

2.1 ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH AS 3600 AND SHALL BE VERIFIED BY TESTS

ELEMENT	SLUMP	MAX SIZE AGG	TEMPERATURE	AD MIXTURE	CONCRETE GRADE
Footings	80	20	GP	-	N25
Wall	120	10	GP	-	S25
GROUT					

2.3 CLEAR CONCRETE COVER TO REINFORCEMENT SHALL BE AS FOLLOWS UNLESS OTHERWISE SHOWN

CAST IN FORMS COMPLYING WITH AS 1009

ELEMENT	CONDITION 1 NOT TO BE EXPOSED TO WEATHER GROUND WATER OR FRESH WATER	CONDITION 2 TO BE EXPOSED TO WEATHER GROUND WATER OR FRESH WATER	CONDITION 3 CAST AGAINST OTHER FORMWORK OR THE GROUND
PAD FOOTINGS & PILE CAPS		65	65
STRIP FOOTINGS		65	65
BORED OR CAST PIERS		65	65
COLUMNS	30	45	65
WALLS, INCL. RETAINING WALLS	20	45	65
SLABS AND BEAMS	20	45	65

NOTE 1. SLABS COURED OVER A MEMBRANE ON GROUND ARE INCLUDED AS CONDITION 2
2. SLABS EXPOSED TO CORROSIVE VAPOURS, CORROSIVE GROUND WATER, SEA WATER OR SEWAGE SHALL HAVE REINFORCEMENT COVER AS NOTED ON THE DRAWINGS

2.4 SIZES OF CONCRETE ELEMENTS DO NOT INCLUDE THICKNESS OF APPLIED FINISHES

2.5 CONSTRUCTION JOINTS WHERE NOT SHOWN SHALL BE TO THE APPROVAL OF THE ENGINEER

2.6 BEAM DEPTHS ARE WRITTEN FIRST AND INCLUDE SLAB THICKNESS, IF ANY

2.7 NO HOLES OR CHANGES OTHER THAN THOSE SHOWN ON THE STRUCTURAL DRAWINGS SHALL BE MADE WITHOUT THE PRIOR APPROVAL OF THE ENGINEER

2.8 REINFORCEMENT IS REPRESENTED DIAGRAMMATICALLY, IT IS NOT NECESSARILY SHOWN IN TRUE PROJECTION

2.9 SPLICES IN REINFORCEMENT MADE IN POSITIONS OTHER THAN SHOWN SHALL BE TO THE APPROVAL OF THE ENGINEER WHERE THE LAP LENGTH IS NOT SHOWN IT SHALL BE TAKEN TO DEVELOPE THE FULL STRENGTH OF THE REINFORCEMENT

GENERAL NOTES

1. THESE DRAWINGS SHALL BE READ IN CONJUNCTION WITH ALL ARCHITECTURAL AND OTHER CONSULTANTS DRAWINGS AND SPECIFICATIONS AND WITH SPECIFIC WRITTEN INSTRUCTIONS AS MAY BE ISSUED DURING THE COURSE OF THE CONSTRUCTION. ALL DISCREPANCIES SHALL BE REFERRED TO THE ARCHITECT ENGINEER FOR DECISION BEFORE PROCEEDING WITH THE WORK

2. DIMENSIONS SHALL NOT BE OBTAINED BY SCALING THE STRUCTURAL OR WORKS SETTING OUT DIMENSIONS SHOWN ON THE DRAWINGS SHALL BE VERIFIED BY THE BUILDER.

3. DURING CONSTRUCTION THE STRUCTURE SHALL BE MAINTAINED IN A STABLE CONDITION AND NO PART SHALL BE OVERSTRESSED

4. ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE CURRENT EDITIONS OR THE SAA CODES AND THE PERMITS AND ORDINANCES OF THE RELEVANT BUILDING AUTHORITY

FOUNDATIONS AND FOOTINGS

5.1 FOOTINGS HAVE BEEN DESIGNED FOR AN ALLOWABLE INTENSITY OF BOUNDING PRESSURE OF 600 KILOPASCALS ON SOUND ROCK. THE BUILDER SHALL OBTAIN APPROVAL OF THE FOUNDATION MATERIALS FROM A PLACING CONCRETE

5.2 FOOTINGS SHALL BE PLACED CENTRALLY UNDER WALLS AND COLUMNS UNLESS OTHERWISE NOTED

CONSOLIDATION OF SUBGRADE

5.3.1 SITE TO BE EXCAVATED TO LEVELS SHOWN ON ARCHITECT'S DRAWINGS. CUT OUT SOFT SPOTS AND REFILL WITH SELECT GRANULAR MATERIAL. WHERE SITE IS UNCONSOLIDATE AFTER CUTTING TO 95% STANDARD DRY DENSITY, WHERE SITE REMAINS UNCLUT CONSOLIDATE NATURAL SURFACE AFTER REMOVAL OF TOP SOIL TO 95% STANDARD DRY DENSITY BEFORE PLACING ANY FILL. CONSOLIDATE FILL TO A DENSITY NOT EXCEEDING 20MM TO 95% STANDARD DRY DENSITY

6.10 WELDING OF REINFORCEMENT SHALL NOT BE PERMITTED UNLESS SHOWN ON THE STRUCTURAL DRAWINGS

6.11 PIPES OR CONDUITS SHALL NOT BE PLACED WITHIN THE CONCRETE COVER TO REINFORCEMENT WITHOUT THE APPROVAL OF THE ENGINEER

6.12 ALL REINFORCING BARS SHALL COMPLY WITH AS 3600. ALL FABRIC MESH SHALL BE WITH AS 1303 AND AS 1304 AND SHALL BE SUPPLIED IN PLAT SHEETS

REINFORCEMENT SYMBOLS

- S STRUCTURAL GRADE
- R STRUCTURAL GRADE
- Y HIGH STRENGTH
- F HARD DRAWN WIRE FABRIC

THE NUMBER IMMEDIATELY FOLLOWING THESE SYMBOLS IS THE NUMBER OF MILLIMETRES IN THE BAR DIAMETER

6.13 FABRIC REINFORCEMENT TO BE LAPPED 300 MINIMUM AT ENDS AND OTHER JOINTS. IN POSITIONS OF MAXIMUM MOMENT ARE NOT PERMITTED

6.14 ALL REINFORCEMENT SHALL BE FIRMLY SUPPORTED ON INSULATED STEEL PLASTIC OR CONCRETE CHAIRS GENERALLY AT NOT GREATER THAN 900 CENTRES BOTHWAYS. RODS SHALL BE TIED AT ALTERNATE INTERSECTIONS

6.15 ALL CAMPPIERS, DRAG GROWERS, BE SHEETS ETC. MUST BE DRAWN TO SPECIFICATION OF THE ARCHITECT'S DETAILS

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17 FEB 2004

ALTS. & ADDS. TO
165A MCCARRS CREEK
CHURCH POINT

Location & Project

GENERAL NOTES
2 SHEET 1

Drawing Title

Scale N1:15	Drawn by R.A.H.	Drg. No.
Date 20.09.03	Checked by [Signature]	5878/1

CHAPMAN HUTCHISON PTY LTD

STRUCTURAL ENGINEERING & DESIGN
A.C.N. 096 473 111 A.B.N. 76 096 473 111

182-186 Blues Point Rd
North Sydney 2060
Ph: (02) 9922 6322
Fax: (02) 9923 1270
Email: bah_cha@chester.com.au

ALTS. & ADDS. TO
169A MCCARRS CREEK
CHURCH POINT

Location & Project

GENERAL NOTES
SHEET 2

Drawing Title

Scale M.I.S.	Drawn by B.A.H.	Drg. No.
Date 26.09.03	Checked by [Signature]	5878/2

STRUCTURAL ENGINEERING & DESIGN
A.C.N. 096 473 111 A.B.N. 76 096 473 111
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North Sydney 2060
Ph: (02) 9922 6322
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Email: bah_cha@chester.com.au

CHAPMAN HUTCHISON PTY LTD

STEELWORK

- 1. CONFORM TO THE REQUIREMENTS IN ACCORDANCE WITH AS/NZS 1554 PART 1 AND 2 AND AS/NZS 1554 PART 3 FOR STEELWORK MEMBERS.
- 2. ALL STEEL MEMBERS TO BE IN ACCORDANCE WITH AS/NZS 1554 PART 1 AND 2.
- 3. ALL STEEL MEMBERS TO BE IN ACCORDANCE WITH AS/NZS 1554 PART 3.
- 4. ALL STEEL MEMBERS TO BE IN ACCORDANCE WITH AS/NZS 1554 PART 4.
- 5. ALL STEEL MEMBERS TO BE IN ACCORDANCE WITH AS/NZS 1554 PART 5.
- 6. ALL STEEL MEMBERS TO BE IN ACCORDANCE WITH AS/NZS 1554 PART 6.
- 7. ALL STEEL MEMBERS TO BE IN ACCORDANCE WITH AS/NZS 1554 PART 7.
- 8. ALL STEEL MEMBERS TO BE IN ACCORDANCE WITH AS/NZS 1554 PART 8.
- 9. ALL STEEL MEMBERS TO BE IN ACCORDANCE WITH AS/NZS 1554 PART 9.
- 10. ALL STEEL MEMBERS TO BE IN ACCORDANCE WITH AS/NZS 1554 PART 10.

ALL BOLTS SHALL BE PROVIDED IN ACCORDANCE WITH AS/NZS 1554 PART 1 AND 2. THE REACTION BOLTS SHALL BE PROVIDED IN ACCORDANCE WITH AS/NZS 1554 PART 3. THE BOLTS SHALL BE PROVIDED IN ACCORDANCE WITH AS/NZS 1554 PART 4. THE BOLTS SHALL BE PROVIDED IN ACCORDANCE WITH AS/NZS 1554 PART 5. THE BOLTS SHALL BE PROVIDED IN ACCORDANCE WITH AS/NZS 1554 PART 6. THE BOLTS SHALL BE PROVIDED IN ACCORDANCE WITH AS/NZS 1554 PART 7. THE BOLTS SHALL BE PROVIDED IN ACCORDANCE WITH AS/NZS 1554 PART 8. THE BOLTS SHALL BE PROVIDED IN ACCORDANCE WITH AS/NZS 1554 PART 9. THE BOLTS SHALL BE PROVIDED IN ACCORDANCE WITH AS/NZS 1554 PART 10.

ALL BOLTS SHALL BE PROVIDED IN ACCORDANCE WITH AS/NZS 1554 PART 1 AND 2.

ALL BOLTS SHALL BE PROVIDED IN ACCORDANCE WITH AS/NZS 1554 PART 3.

ALL BOLTS SHALL BE PROVIDED IN ACCORDANCE WITH AS/NZS 1554 PART 4.

ALL BOLTS SHALL BE PROVIDED IN ACCORDANCE WITH AS/NZS 1554 PART 5.

ALL BOLTS SHALL BE PROVIDED IN ACCORDANCE WITH AS/NZS 1554 PART 6.

ALL BOLTS SHALL BE PROVIDED IN ACCORDANCE WITH AS/NZS 1554 PART 7.

ALL BOLTS SHALL BE PROVIDED IN ACCORDANCE WITH AS/NZS 1554 PART 8.

ALL BOLTS SHALL BE PROVIDED IN ACCORDANCE WITH AS/NZS 1554 PART 9.

ALL BOLTS SHALL BE PROVIDED IN ACCORDANCE WITH AS/NZS 1554 PART 10.

ELEMENT	SURFACE PREPARATION (AS 1627 PART 1)	TREATMENT OR COATING
All	2 1/2	1. Interzinc 215 (19µ) 2. Intergard 475Hs (25µ) 3. Interline 629 (50µ)

- 1. THE BUILDER SHALL PROVIDE ALL CLEATS AND HOLES FOR FIXING STEEL TO STEEL AND TIMBER TO STEEL AS REQUIRED BY ENGINEERING AND ARCHITECTURAL DRAWINGS WHETHER OR NOT SHOWN.
- 2. ALL STEELWORK IN THE GROUND SHALL BE CASED A MINIMUM 75 ALL ROUND.
- 3. THE SAFETY OF THE STRUCTURE DURING THE CONSTRUCTION PERIOD SHALL BE ENSURED BY PROPER BRACING OR TIE INS NECESSARY.
- 4. ALL DAMAGED PAINTWORK SHALL BE MADE GOOD.

B P 0 4 0 3
17 FEB 2004

CONSTRUCTION NOTES

- 1. STRUCTURE ABOVE TO BE ADEQUATELY SUPPORTED DURING CONSTRUCTION.
- 2. NEEDLES TO SUPPORT BRICKWORK OVER TO BE INSTALLED PRIOR TO ANY BRICKWORK BEING REMOVED.
- 3. NEEDLES TO BE ADEQUATELY SUPPORTED DURING CONSTRUCTION.
- 4. INSTALL UNFEL BEAMS AS SHOWN.
- 5. PRELOAD BEAM WITH WEDGES UNTIL LOAD IS JUST REMOVED FROM NEEDLES.
- 6. PLACE HARD-PACKED NON SHRINK MORTAR BETWEEN BEAM AND BRICKWORK.
- 7. NEEDLES TO REMAIN IN PLACE UNTIL 7 DAYS AFTER PLACEMENT OF MORTAR.
- 8. REMOVE NEEDLES AND WEDGES.
- 9. MAKE GOOD ANY LOOSE BRICKWORK.

TIMBER

- 1. ALL TIMBER FRAMING WORK TO COMPLY WITH AS 1684 AND AS 1720 UNLESS OTHERWISE NOTED.
- 2. QUALITY SHALL BE AS TABULATED.

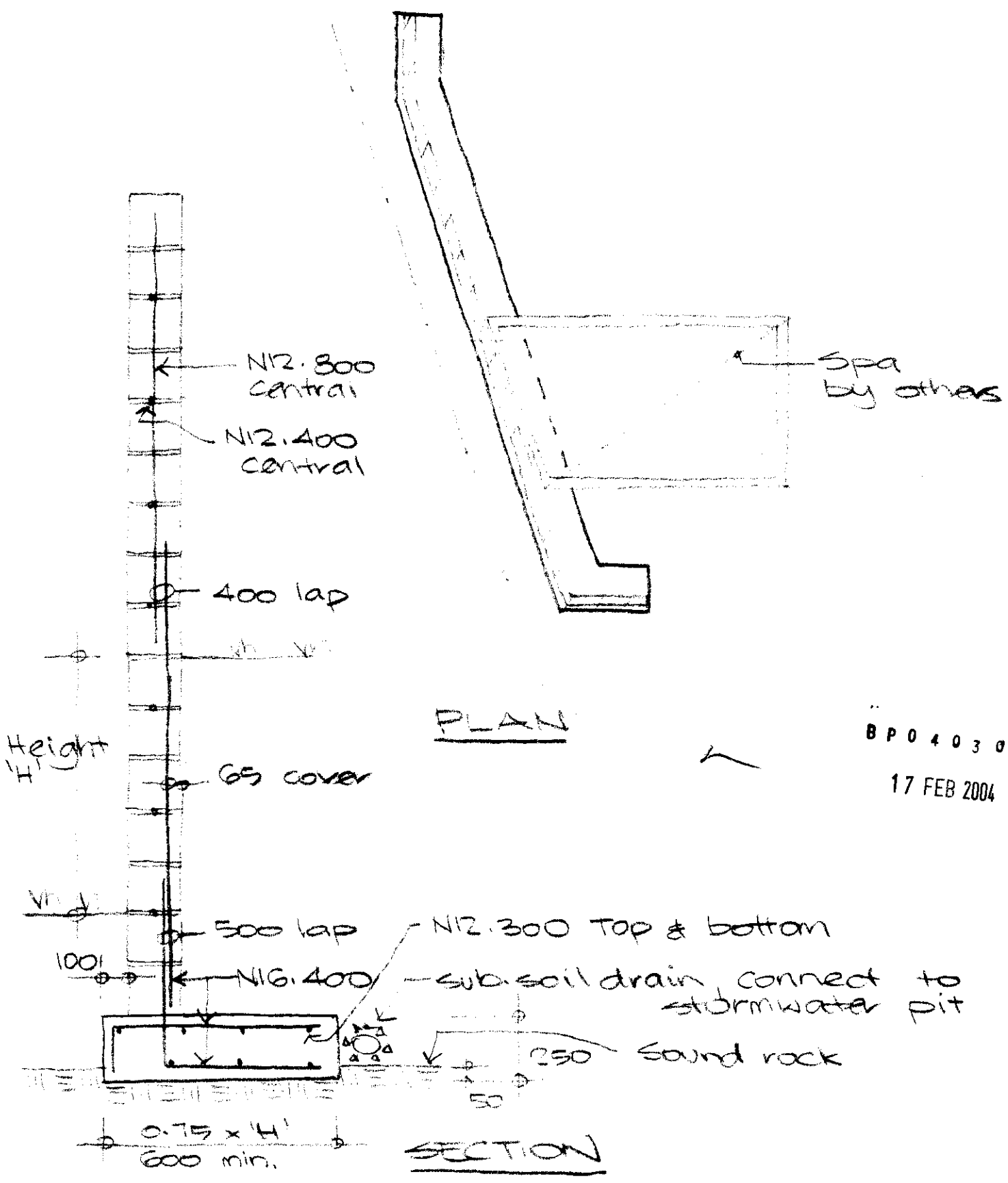
ELEMENT	SPECIES	STRENGTH GROUP	STRESS GRADE
Exposed Members	Treated Pine	SDS	F7
B&E	Treated (Hyspan)	LVL	F14
B7-11 & 15	(Hyspan)	LVL	F14
Remainder	Oregon	SDS	F7

BRICKWORK AND BLOCKWORK

- 1. ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH AS 1720.
- 2. STRENGTHS OF BRICKS, CLASS OF BLOCKS AND TYPE OF MORTAR SHALL BE AS TABULATED, AND SHALL BE VERIFIED BY TESTS ACCORDING TO RELEVANT STANDARDS.

ELEMENT	MATERIAL	STRENGTH (CS) OR CLASS	MORTAR TYPE
Wall	Concrete	30	M4

- 1. BRICKWORK OR BLOCKWORK SUPPORTING CONCRETE OR STEEL MEMBERS SHALL BE FLOWELLED SMOOTH AND SEPARATED AT THE BEARING SURFACE BY TWO LAYERS OF



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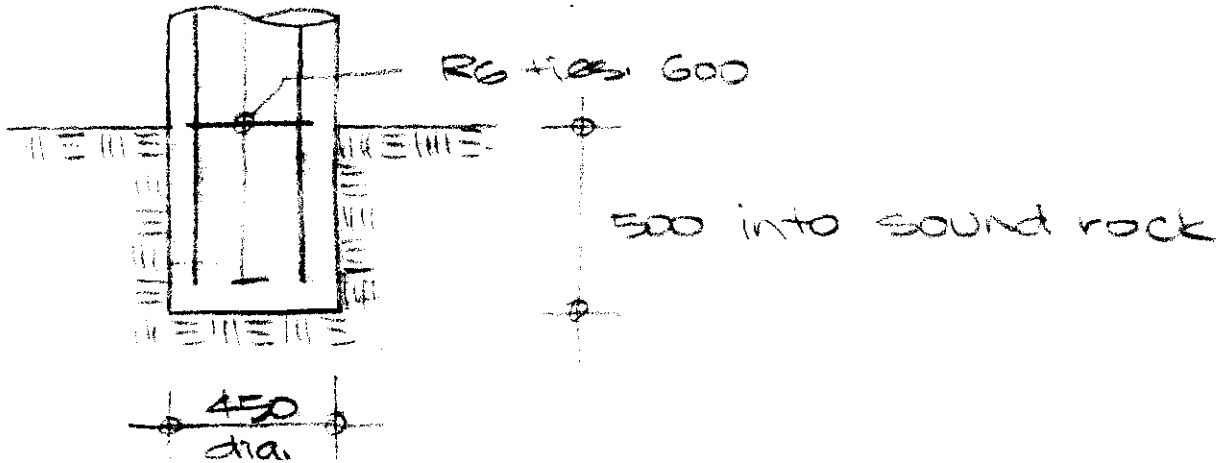
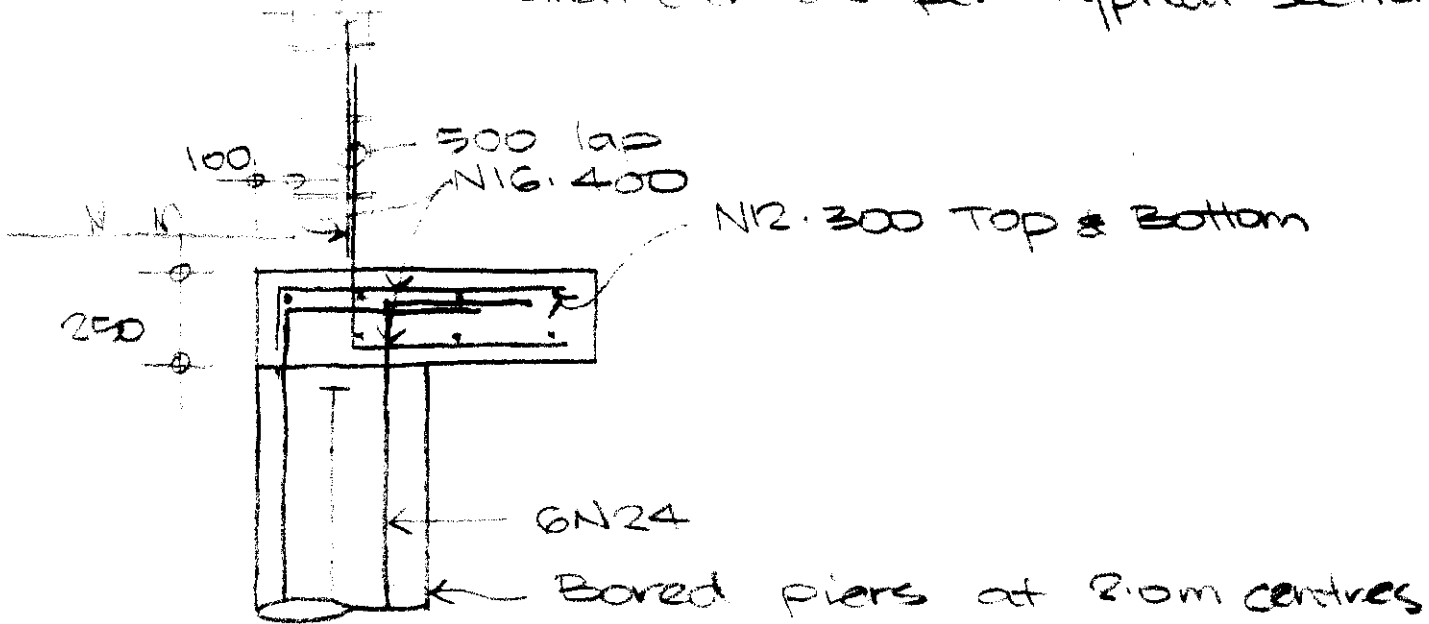
ALTS. & ADDS. TO
 165A MCCARRS CREEK
 CHURCH POINT
 Location & Project

Scale N.T.S.	Drawn by B.A.H.	Drg. No.
Date 26.09.03	Checked by [Signature]	5878/3

WALL DETAILS
 IN SHEET 1
 Drawing Title

STRUCTURAL ENGINEERING & DESIGN
 A.C.N. 086 473 111 A.B.N. 76 086 473 111
CHAPMAN HUTCHISON PTY LTD
 182-188 Blues Point Rd
 North Sydney 2060
 Ph: (02) 9062 6322
 Fax: (02) 9062 1276
 Email: beh_oha@shester.com.au

Remainder as per typical section



ALTERNATE FOOTING SECTION

BPO 4030
17 FEB 2004

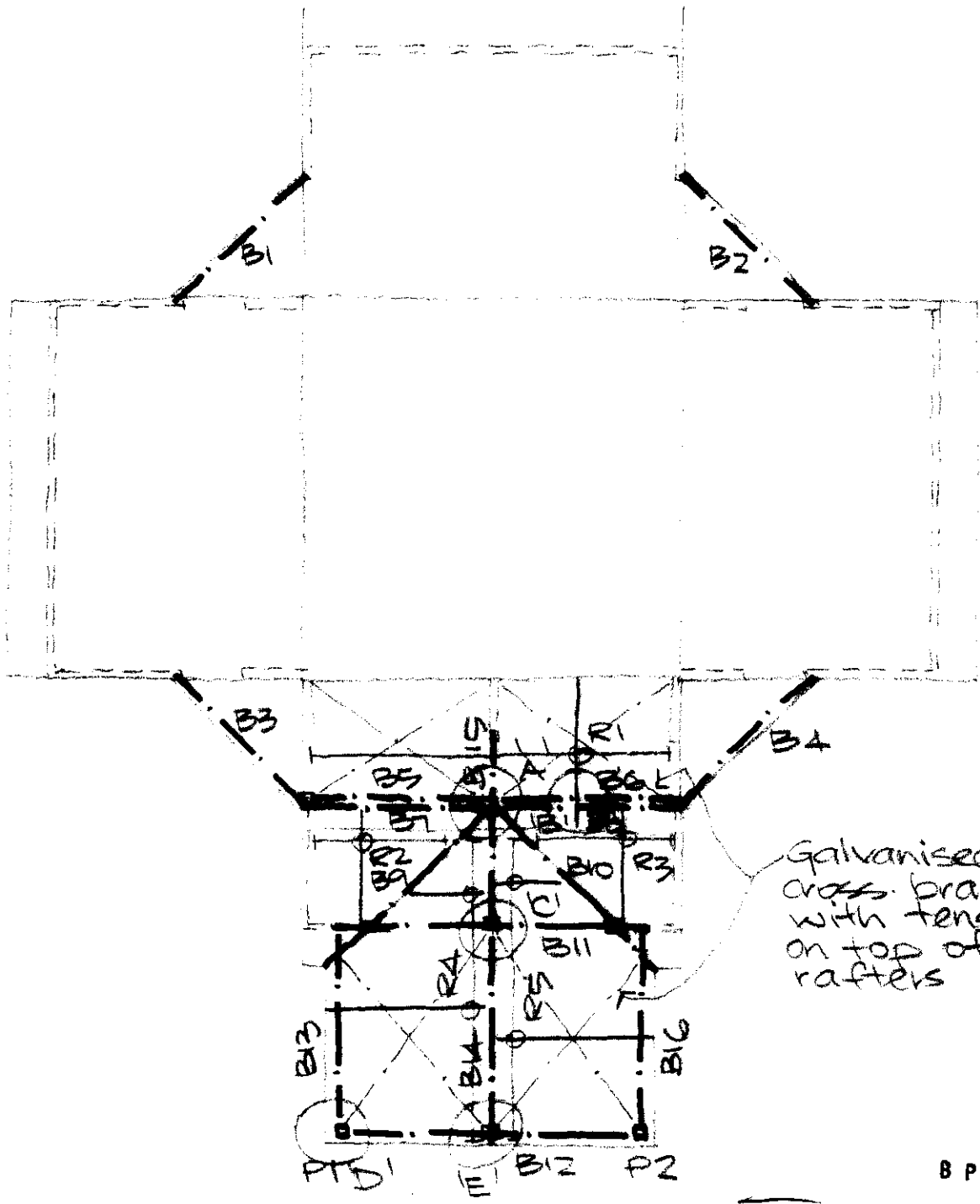
ALTS. & ADDS. TO
109a MCCARES CREEK
CHURCH POINT
Location & Project

Scale N1:5.	Drawn by B.A.H.	Drg. No.
Date 26.09.03	Checked by [Signature]	5878/A

WALL DETAILS
IN SHEET 2
Drawing Title

STRUCTURAL ENGINEERING & DESIGN
A.C.N. 086 473 111 A.B.N. 78 086 473 111
182-188 Blues Point Rd
North Sydney 2060
Ph: (62) 9883 6322
Fax: (62) 9883 1278
Email: sah_cha@shester.com.au

CHAPMAN HUTCHISON PTY LTD



Galvanised strap cross bracing with tensioners on top of rafters

BPO4030
17 FEB 2004

PLAN

ALTS. & ADDS. TO
1650 McCARRS CREEK
CHURCH POINT
Location & Project

ROOF
MARKING PLAN
Drawing Title

Scale N.T.S.	Drawn by B.A.H.	Drg. No.
Date 26.09.03	Checked by [Signature]	5878/5

STRUCTURAL ENGINEERING & DESIGN
A.C.N. 096 473 111 A.B.N. 76 096 473 111
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Email: bob_chapman@chesteer.com.au

MEMBER SCHEDULE

- R1 ~ 90x45 at 600 cts
R2 & R3 ~ 90x45 at 450 cts
R4 & R5 ~ 90x45 Treated pine at 600
B1-B3 ~ 170x45 Treated pine
B5 & B6 ~ 130x63 Treated 'Hyspan'
B7 & B8 ~ 130x63 'Hyspan'
B9 & B10 ~ 150x45 'Hyspan'
B11 ~ 300x63 'Hyspan' [or 150PFC v.i.s.]
B12 ~ 150PFC
B13 & B16 ~ 170x70 Treated pine
B14 ~ 240x70 Treated pine
B15 ~ 240x63 'Hyspan'
P1 & P2 ~ 75x75x4.0 SHS.

B P O 4 0 3 0
17 FEB 2004

ALTS. & ADDS. TO
165a MCCARRS CREEK
CHURCH POINT

Location & Project

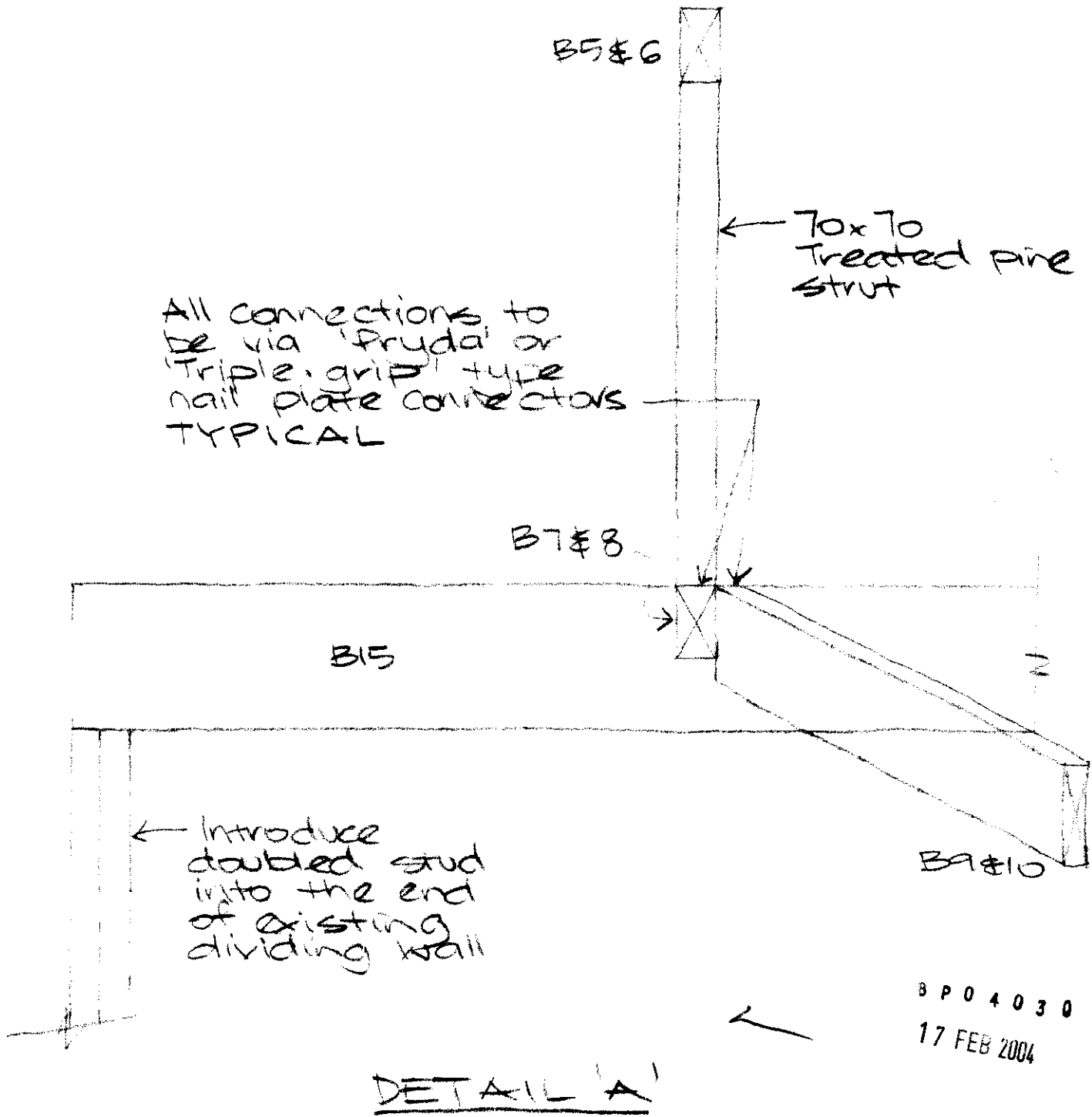
ROOF
MEMBER SCHEDULE

Drawing Title

Scale N.T.S.	Drawn by B.A.H.	Drg. No.
Date 26.09.03	Checked by <i>[Signature]</i>	5878/6

STRUCTURAL ENGINEERING & DESIGN
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CHAPMAN HUTCHISON PTY LTD



ALTS. & ADDS. TO
169a MCCARRS CREEK
CHURCH POINT

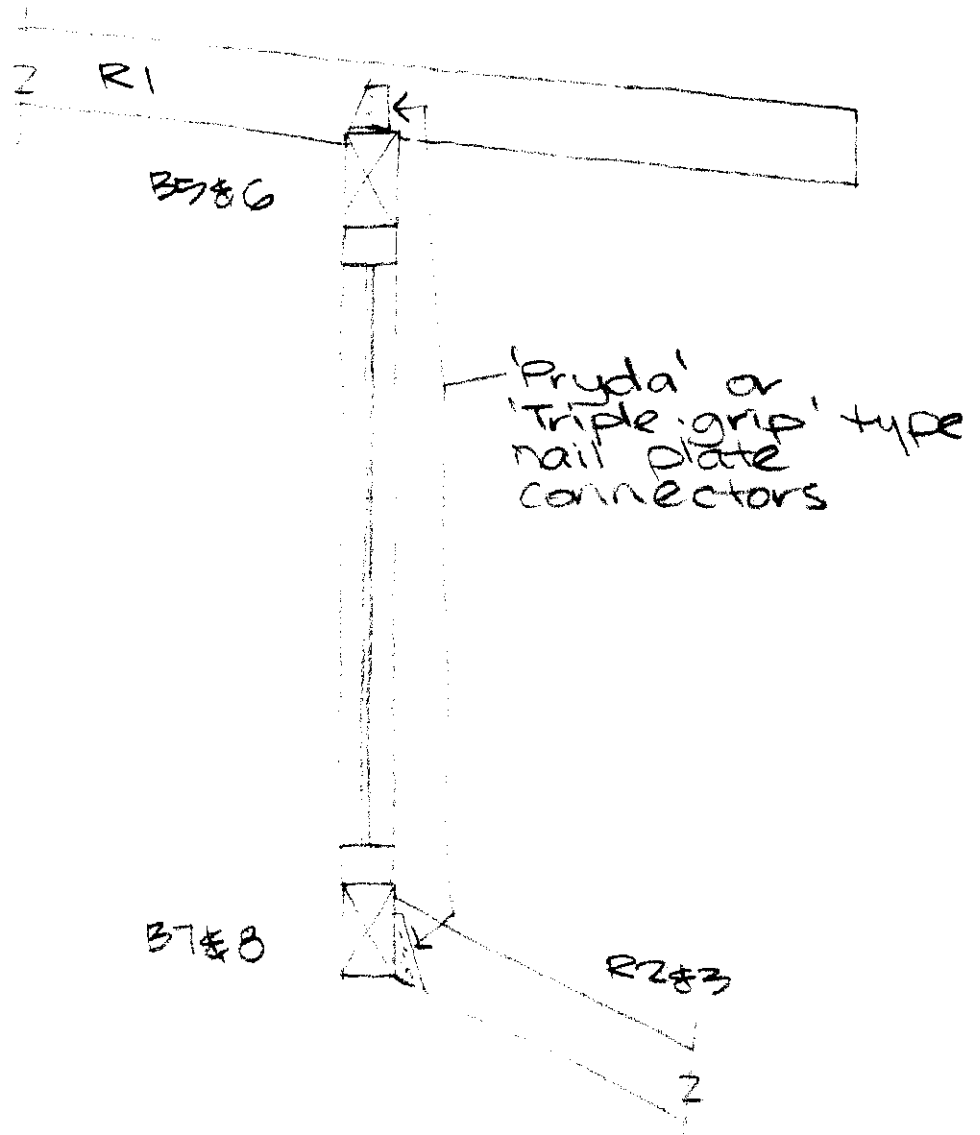
Location & Project

ROOF DETAILS
IN SHEET 1

Drawing Title

Scale N.T.S.	Drawn by B.A.H.	Drg. No.
Date 26.09.03	Checked by <i>[Signature]</i>	5878/7

STRUCTURAL ENGINEERING & DESIGN
A.C.N. 096 473 111 A.B.N. 76 096 473 111
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Fax: (02) 9003 1270
Email: bah_che@shector.com.au



DETAIL 'B'

BP04030
17 FEB 2004

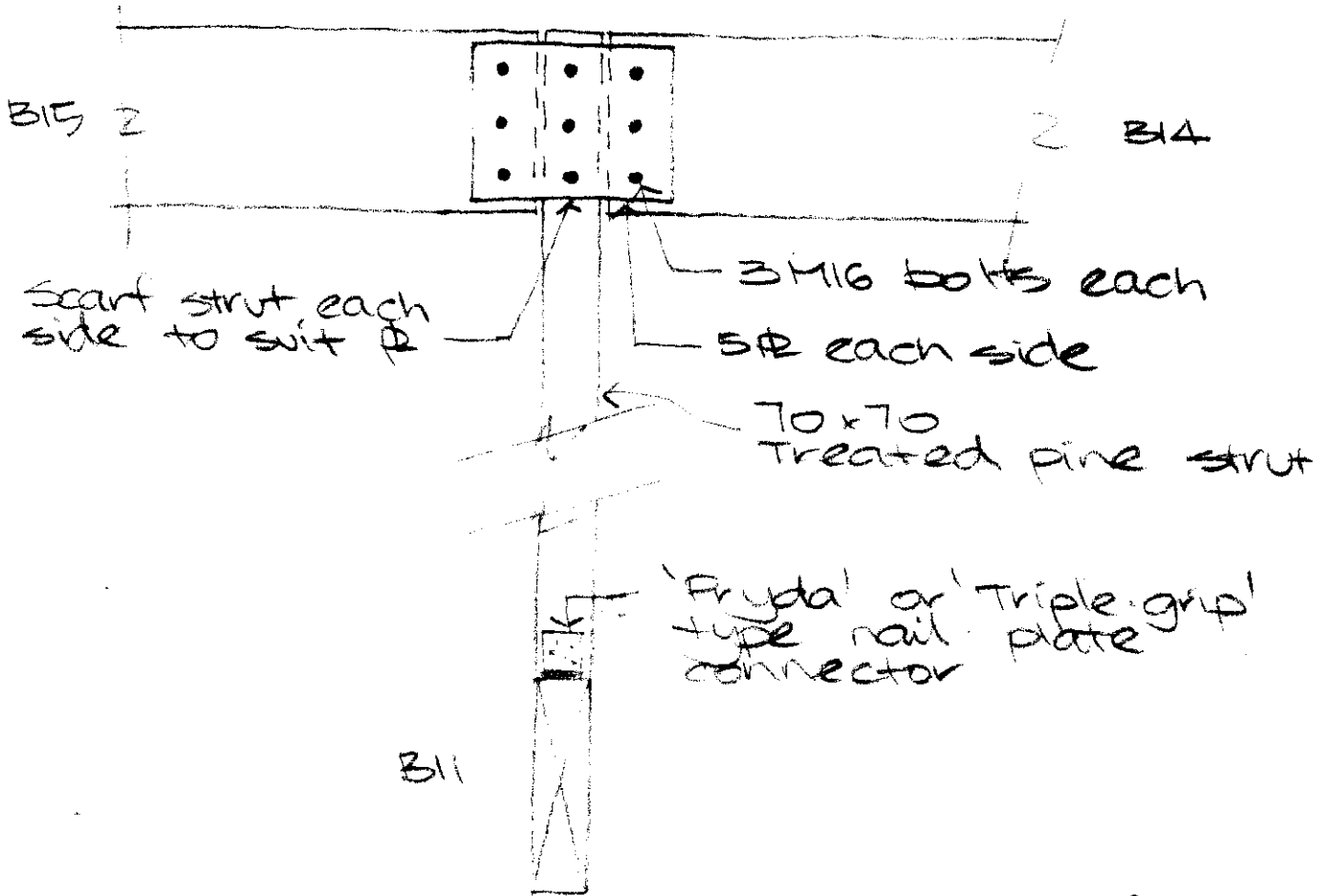
ALTS. & ADDS. TO
165a MCCABES CREEK
CHURCH POINT
Location & Project

Scale N.T.S.	Drawn by B.A.H.	Drg. No.
Date 26.09.03	Checked by [Signature]	5878/B

ROOF DETAILS
IN SHEET 2

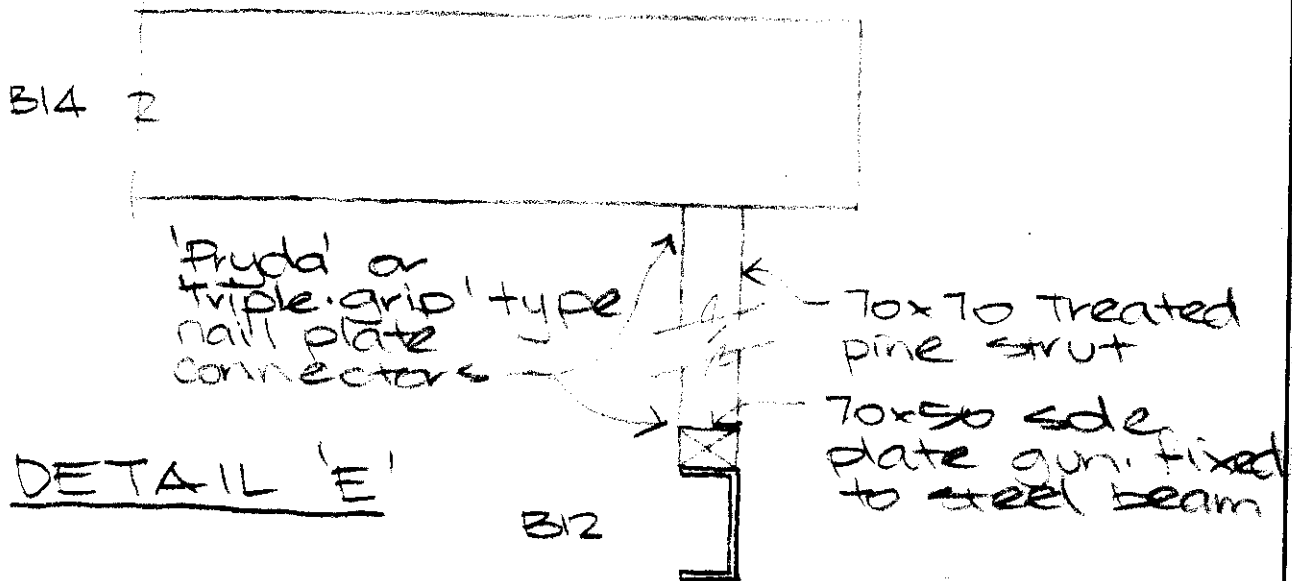
Drawing Title

STRUCTURAL ENGINEERING & DESIGN
A.C.N. 096 473 111 A.B.N. 78 096 473 111
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North Sydney 2060
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Email: beh_ohs@cheater.com.au



DETAIL 'C'

BP04030
17 FEB 2004



DETAIL 'E'

ALTS. & ADDS. TO
1650 MCCARRYS CREEK
CHURCH POINT
Location & Project

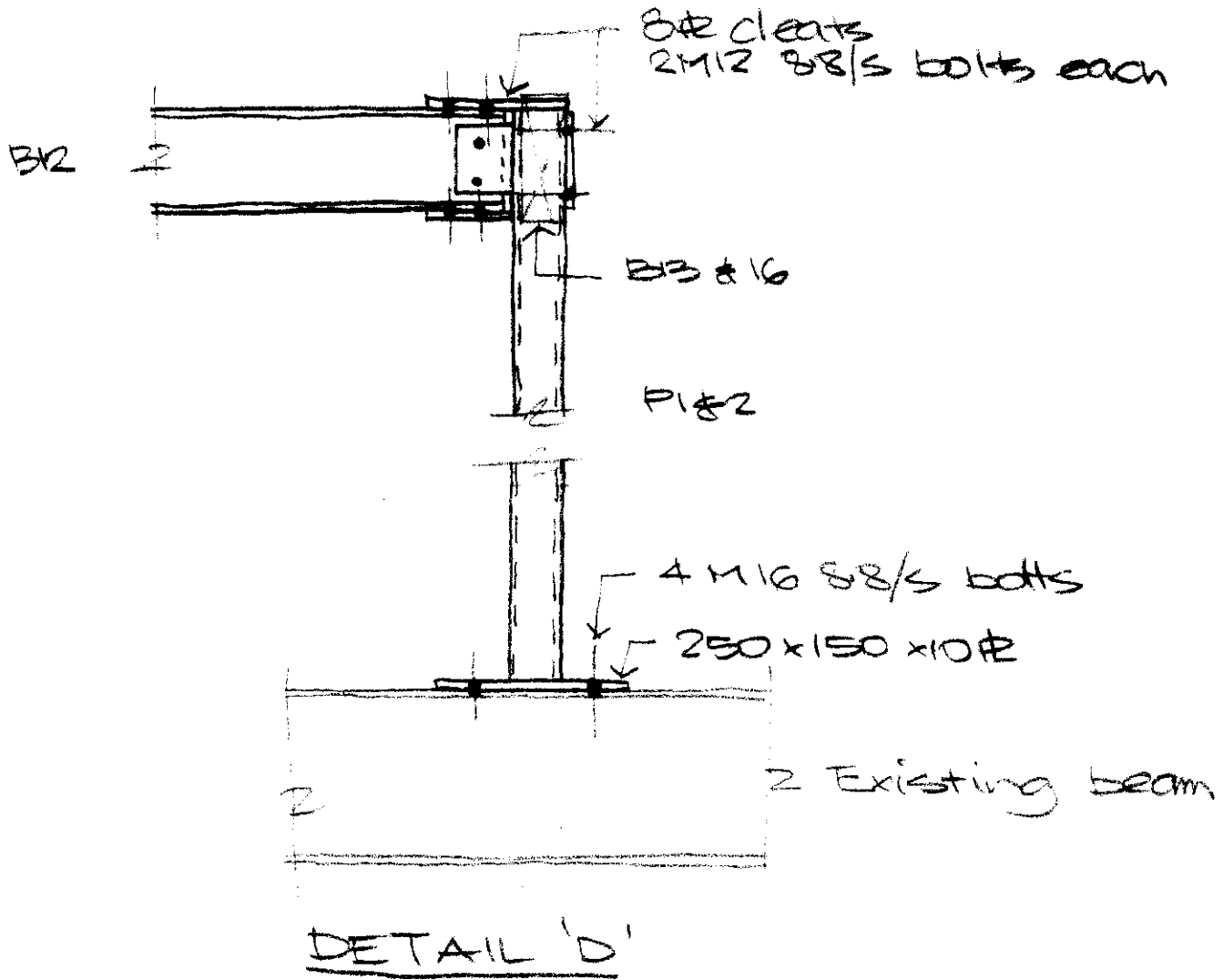
ROOF DETAILS
w SHEET 3

Drawing Title

Scale	N.T.S.	Drawn by	B.A.H.	Drng. No.
Date	26.09.03	Checked by	[Signature]	5878/A

CHAPMAN HUTCHISON PTY LTD

STRUCTURAL ENGINEERING & DESIGN
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188-188 Blue Point Rd
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Ph: (02) 9552 6332
Fax: (02) 9552 1370
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BPO4030
17 FEB 2004

ALTS. & ADDS. TO
1650 MCCARRS CREEK
CHURCH POINT
Location & Project

Scale N.T.S.

Drawn by B.A.H.

Drg. No.

Date 26.09.03

Checked by *[Signature]*

5878/10

ROOF DETAILS
W SHEET 4

Drawing Title

STRUCTURAL ENGINEERING & DESIGN
A.C.N. 096 473 111 A.B.N. 79 096 473 111

CHAPMAN HUTCHISON PTY LTD

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