

R/155262

Construction Certificate

Section 109C(1)(b) of the Environmental Planning and Assessment Act 1979

PCA, Applicant & Site Details

1. Location and Title Description of the Property/Land:

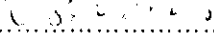
Street No & Street: 17 Orchard Street
Suburb: WARRIEWOOD
Lot(s): 321
Section:
Deposited Plan(s): 1065723
Strata Plan:
Other:

2. Applicant:

Family/Company Name: Maincom Pty Ltd
Given Names/ACN:
Postal Address: 6/119 Coreen Ave
PENRITH 2750

3. Principal Certifying Authority:

Name: Mr Warrick B. Norris, Urban Approvals Pty Limited ACN 096 508 842
Accreditation No.: # 6328
Accreditation Body: Department of Infrastructure Planning and Natural Resources (NSW)

PCA's Signature: 

Certification Details

4. Particulars

Determination: Approved Refused
Construction Certificate: 2 November 2004
Determination Date:

Construction Certificate No.: PC25304
Building Code of Australia: 1a & 10a
Classifications:
DA Consent No. and Date: N0218/04 20th May 2004
Building Details: Two storey dwelling

5. PCA's Certification Statement

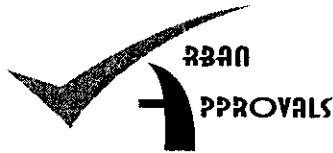
I, Warrick Norris, certify, that building work completed in accordance with the documentation accompanying the Construction Certificate Application made by the Applicant named in this certificate (with such modifications verified by me and Urban Approvals as may be shown on that documentation) will comply with the requirements of the Environmental Planning and Assessment Act Regulation 2000, as required by section 81A (5) of the Environmental Planning and Assessment Act 1979.

PCA's Signature & Date:

..... *Warrick Norris* 3/11/04

6. Construction Certificate Attachments

- Structural Engineer's Plans by Palitha S. Wijesena & Associates Pty Ltd 6915/01 - 6915/17 dated 27/9/04
- ACE Hydraulic Engineer's Plans drawing number 0405-26 (Sheets 1-2) dated 20/10/04
- Signed Urban Approvals Pty Ltd Application Forms
- Photographic Survey by Maincom Pty Ltd
- Plans by Maincom Pty Ltd A101/321- A202/321 Issue A dated 20/09/04 & 27/09/04



Construction Certificate Application

Section 109C(1)(b) of the Environmental Planning and Assessment Act 1979

Receipt of Application

Date:

2/10/04

Delivery by:

Hand Post Electronic Transmission

(Must not be by facsimile)

Signed by Urban Approvals:

[Signature]

Application & Site Details

1. DA, Consent Details:

(You may only make this application if you already have development consent)

DA No.:

N0218/04

Consent No.:

N0218/04

Consent Date:

Building Code of Australia

Classification:

(As specified on the Consent)

2. Applicant:

Family/Company Name:

MAINCOM P/L

Given Names/ACN:

JIMMY DAABAL

Postal Address:

6/119 CORCORAN AVE PENRITH

Phone:

4722 5900

Facsimile:

4722 3200

Contact Person:

JIMMY DAABAL

3. Owner(s) of Property:

Family/Company Name:

STOCKLANDS

Given Names/ACN:

ANDREW BOYD

Postal Address:

197 LIVERPOOL ST.

SYDNEY 2000

Phone:

9020 8260

4. Location and Title Description of the Property/Land:

Street No & Street: 17 ORCHARD ST.
Suburb: WARRIEWOOD.
Lot(s): 321
Section:
Deposited Plan(s): 1065723
Strata Plan:
Other:

5. Description of Building Work:

Detailed Description: TWO STOREY HOUSE

6. If required, have you provided:

- 4 copies of the detailed building plans 2 copies of any compliance certificates to be relied upon
- 4 copies of the specifications proposed/existing fire safety measures
- 2 copies of certified engineering details design verification statement (certain residential flat buildings)
- Other.....

7. Estimated Cost of the Development

\$ 360,000.00

8. Builder/Owner Builder

Name: MAINCOM P/L
Contact Phone No.: 4722 5900
Contractor Licence No.:
OR
Owner Builder Permit No.:
(Required for residential building over exceeding \$5,000)

9. Do you need: (If YES, please attach proof of payment and/or compliance)

(a) to pay the Building Industry Long Service Levy?

(Required if development involves building work which exceeds \$24,999)

Yes

Not Applicable

(b) Home Building Act Insurance?

(Required if using builder for residential building work which exceeds \$12,000. A certificate of insurance must be provided with this Application)

Yes

Not Applicable

(c) to register with the Australian Taxation Office under the prescribed payments scheme?

Yes

Not Applicable

10. Have you complied with all the conditions of development consent that require specific matters to be completed or satisfied before a construction certificate may be issued?

(eg. Landscape & drainage plans, drainage calculations, section 94 contributions)

Yes

Not Applicable

11. List of documents accompanying this Application:

ARCHITECTURAL
STRUCTURAL
HYDRAULIC
PHOTOS

12. Schedule

(The attached schedule is to be completed for the purpose of providing information to the Australian Bureau of Statistics.)

Payment of Fees

13. Fees and Charges:

The Owner/Applicant agrees to pay Urban Approvals the fees and charges set out in the Fee Schedule, as updated and/or amended from time to time.

Execution

14. Owner's Consent:

(Must be signed by the owner of the land. If more than one owner, every owner must sign. If the owner is a company, must be signed by a director of the company)

As owner of the land to which this application relates, I consent to this application. I also give consent for authorised officers of Urban Approvals to enter the land to carry out inspections.

Signature of Owner/s: Date:

If you are signing on the owner's behalf as the owner's legal representative, please state the nature of your legal authority and attach documentary evidence (eg power of attorney, executor, trustee, director).

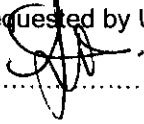
Signature on behalf of Owner/s: Date:

15. Applicant's Declaration

DECLARATION

I apply for a Construction Certificate to carry out the development described in this application. I declare that all the information given is true and correct. I also understand that:

- (a) If incomplete, the application may be delayed or rejected, and
- (b) More information may be requested by Urban Approvals prior to determination.

Signature of Applicant:.....

Notes for Construction Certificate Applications

In accordance with Schedule 1 Part 3 of the Environmental Planning and Assessment Regulation 2000 ("Regulations"), the following documents must accompany ALL applications for a construction certificate.

- (1) An application for a construction certificate must be accompanied by the following documents:**
- (a) if the development involves building work (including work in relation to a dwelling-house or a building or structure that is ancillary to a dwelling-house):
 - (i) a detailed description of the development, and
 - (ii) appropriate building work plans and specifications,
 - (b) if the development involves building work (other than work in relation to a dwelling-house or a building or structure that is ancillary to a dwelling-house or work that relates only to fire link conversion):
 - (i) a list of any existing fire safety measures provided in relation to the land or any existing building on the land, and
 - (ii) a list of the proposed fire safety measures to be provided in relation to the land and any building on the land as a consequence of the building work,
 - (c) if the development involves subdivision work, appropriate subdivision work plans and specifications,
 - (d) in the case of development to which clause 6A of Schedule 1 to the Regulations applies, such other documents as any BASIX certificate for the development requires to accompany the application.
- (2) A detailed description of the development referred to in subclause (1) (a) (i) must indicate the following matters:**
- (a) for each proposed new building:
 - (i) the number of storeys (including underground storeys) in the building,
 - (ii) the gross floor area of the building (in square metres),
 - (iii) the gross site area of the land on which the building is to be erected (in square metres),
 - (b) for each proposed new residential building:
 - (i) the number of existing dwellings on the land on which the new building is to be erected,
 - (ii) the number of those existing dwellings that are to be demolished in connection with the erection of the new building,
 - (iii) the number of dwellings to be included in the new building,
 - (iv) whether the new building is to be attached to any existing building,
 - (v) whether the new building is to be attached to any other new building,
 - (vi) whether the land contains a dual occupancy,
 - (vii) the materials to be used in the construction of the new building (using the abbreviations set out in clause 7 of Schedule 1 of the Regulations).
- (3) Appropriate building work plans and specifications referred to in subclause (1) (a) (ii) include the following:**
- (a) detailed plans, drawn to a suitable scale and consisting of a block plan and a general plan, that show:
 - (i) a plan of each floor section, and

- (ii) a plan of each elevation of the building, and
 - (iii) 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, and
 - (iv) the height, design, construction and provision for fire safety and fire resistance (if any),
- (b) specifications for the development:
- (i) that describe the construction and materials of which the building is to be built and the method of drainage, sewerage and water supply, and
 - (ii) that state whether the materials to be used are new or second-hand and (in the case of second-hand materials) give particulars of the materials to be used,
- (c) a statement as to how the performance requirements of the Building Code of Australia are to be complied with (if an alternative solution, to meet the performance requirements, is to be used),
- (d) a description of any accredited components, processes or design sought to be relied on,
- (e) copies of any compliance certificate to be relied on,
- (f) if the development involves building work to alter, expand or rebuild an existing building, a scaled plan of the existing building,
- (g) in the case of development to which clause 6A applies, such other matters as any BASIX certificate for the development requires to be included in the plans and specifications.
- (3A) An application for a construction certificate that relates only to fire link conversion need only be accompanied by a document that describes the design and construction, and mode of operation, of the new fire alarm communication link.**
- (4) Appropriate subdivision work plans and specifications referred to in subclause (1) (c) include the following:**
- (a) details of the existing and proposed subdivision pattern (including the number of lots and the location of roads),
 - (b) details as to which public authorities have been consulted with as to the provision of utility services to the land concerned,
 - (c) detailed engineering plans as to the following matters:
 - (i) earthworks,
 - (ii) roadworks,
 - (iii) road pavement,
 - (iv) road furnishings,
 - (v) stormwater drainage,
 - (vi) water supply works,
 - (vii) sewerage works,
 - (viii) landscaping works,
 - (ix) erosion control works,
 - (d) copies of any compliance certificates to be relied on.

Lot 321 - 17 ORCHARD ST. WARRIEWOOD.

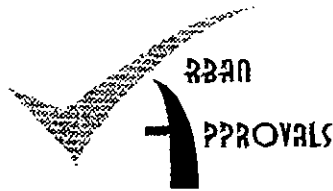
Page 2/4

Building Schedule

Area of Subject Property (m2) 420 m ²	Gross Area of existing building (m2) N/A.
Gross floor area of proposed addition/ building (m2) 219 m ²	Current use(s) of the buildings/ land VACANT LAND.
Proposed use(s) of the building/ Land PRIVATE RESIDENTIAL	Does the site contain or propose a Dual Occupancy? NO.
Number of pre-existing dwellings NIL	Number of buildings to be demolished NIL
Number of buildings proposed ONE	Number of storeys proposed TWO

Please tick materials proposed for construction

Walls		Roof		Floor		Frame	
Brick Veneer (12)	<input checked="" type="checkbox"/>	Aluminium (70)		Concrete (20)	<input checked="" type="checkbox"/>	Timber (40)	<input checked="" type="checkbox"/>
Full Brick (11)	<input type="checkbox"/>	Concrete (20)		Timber (10)	<input checked="" type="checkbox"/>	Steel (60)	<input type="checkbox"/>
Single Brick	<input type="checkbox"/>	Concrete Tile (10)		Other (80)	<input type="checkbox"/>	Other (80)	<input type="checkbox"/>
Concrete Block (11)	<input type="checkbox"/>	Fibrous Cement (30)		Unknown (90)	<input type="checkbox"/>	Unknown (90)	<input type="checkbox"/>
Concrete/Masonry (20)	<input type="checkbox"/>	Fibre Glass (80)					
Steel (60)	<input type="checkbox"/>	Masonry Shingle (10)					
Fibrous Cement (30)	<input type="checkbox"/>	Terracotta Shingle (10)					
Hardi-Plank (30)	<input type="checkbox"/>	Tiles (10)					
Timber (40)	<input type="checkbox"/>	Slate (20)					
Weatherboard (40)	<input checked="" type="checkbox"/>	Steel (80)	<input checked="" type="checkbox"/>				
Aluminium Cladding (70)	<input type="checkbox"/>	Terracotta Tiles (10)					
Curtain Glass (50)	<input type="checkbox"/>	Other (80)					
Other (80)	<input type="checkbox"/>						



Notice of Commencement of Building Works and Appointment of Principal Certifying Authority

*Issued Under the Environmental Planning and Assessment Act 1979
Sections 81A(2)(b)(ii) or (c) and 86(1) and(2)*

Address of Subject Property	
Lot 321 DP1065723 No. 17 Street ORCHARD ST Suburb WARRIEWOOD PC 2102	
Owner(s) of Subject Property STOCKLAND RESIDENTIAL	Postal Address of Owners
Business Hours Contact Phone Number	After Hours Contact Phone Number
Description of Proposed Works PROPOSED TWO STOREY HOUSE	Site Area of Subject Property
I / We the owners of the subject property, hereby nominate of Mr Warrick Norris as the Principal Certifying Authority	
Signed: PLEASE REFER TO LETTER.	Disclaimer at foot of page to be signed also
Nominated Builder MAINCOM	Contact Phone and Fax Numbers Ph: 47226900 Fax: 47223200
Postal Address 6/119 WOREEN AVE PENRITH 2750	Licence Number
DA Consent Number N0218/04	Date of Determination

To Be Completed By 'Urban Approvals Pty Ltd'

Construction Certificate Application Number PC35306	Determination Date 2/11/04
Compliance with DA / CD YES NO	All Relevant Conditions of Consent Satisfied YES NO
Home Building Act 1989 YES NO	PCA Advised of Requirements of Clause 98 YES NO
Proposed Date of Commencement of Work 5/11/04	Principal Certifying Authority Mr Warrick B. Norris
NSW Accreditation Number 6328	Accreditation Body NSW Planning
Contact Telephone Number Ph: 1300 30 44 20 Fax: 1300 30 46 20	Signature of Consent of Appointment <i>W. B. Norris</i>

Disclaimer

The owner(s) are aware that works are not to commence on site until such time as the construction Certificate has been released, and is certifying that work has not commenced on the site. 'Urban Approvals' reserves the right to refuse and or withdraw a Construction Certificate on the basis that information provided within this document or any other document relied upon for the approval process is incorrect or misleading.

All works carried out (inclusive of earthworks) must be in accordance with the stamped approved construction certificate plans and related documentation. Council approval must be sought for Works in addition to or Works that deviate from the stamped plans by form of Section 96, or council issued building certificate. Urban Approvals are obliged under 'Section 121 (1) of the Environmental Planning and Assessment Act 1979', to issue a notice of intention to issue an order for any works of non compliance.

The signing of this document is agreement upon terms and conditions including quotation and payment terms. Inspections carried out by 'Urban Approvals' or a representative on our behalf are listed within the original quotation to a and are limited in accordance with the this quotation. Inspections exceeding the quoter will be billed as necessary and the applicant and owner are aware of the possibility of additional costs in this respect.

SIGNED: _____ DATE: ____/____/____



LONG SERVICE PAYMENTS CORPORATION

LEVY PAYMENT FORM

0233613

Ground Floor, Corner Donnison & Baker Streets Gosford NSW 2250
Telephone: 13 14 41 Facsimile: (02) 9287 5685
All correspondence to: Locked Bag 3000, CCDS, Lisarow NSW 2252

PLEASE PRINT ALL DETAILS USING CAPITALS

Part A - DETAILS OF PERSONS/COMPANY/ORGANISATIONS LIABLE TO PAY LEVY

Surname (if person) or Company/Organisation Name **MAINCOM**

Given Names (if person)

ABN (if applicable) **23090619174**

POSTAL ADDRESS No. and Street or P.O. Box **6-119 LOKEEN AVE**

Town/Suburb **PENRITH**

State **NSW** Postcode **2750** Business Hours Phone No. **47229900**

Part B - ADDRESS OF BUILDING/CONSTRUCTION WORK

No. and Street **17 ORCHARD ST**

Town / Suburb **WARRIEWOOD**

State **NSW** Postcode **2102**

Estimated Start Date **01/11/2004** Estimated Finish Date **05/04/2005**

Part C - DETAILS OF WORK - To be completed by consenting/certifying authority with whom plans lodged for approval

Local Council Area **PENRITH**

DA/C.C./C.D.C. No. (circle which) **C21S/04**

Estimated value of work \$ **3,612,630.00** Levy Payable \$ **722.00**

Signature of Officer/Private Certifier *Warrick Nason* Date: **2/11/04**

Name of Officer/Private Certifier Warrick Nason Business Hours Phone No. (Private Certifier) **1300306420**

NOTE: If CC approved by Private Certifier, council DA number required above.

Part D - DETAILS - To be completed by Dept./authority where applicable - see reverse

Dept./Authority

Contract No. Contract Amount: \$

Levy Payable \$

Contact Person (Print) Signature: Date: / /

Contact Phone Number

Part E - DECLARATION - (To be signed by person liable to pay levy - or authorised officer if Company)

I declare that the information provided on this form is true and correct to the best of my knowledge

Signature: *[Signature]* Date: **1/11/04**

NOTE: Any false or misleading information provided on this form may result in prosecution under Section 58A

Print name: Jimmy Daraboul

Part F - TO BE COMPLETED WHERE APPLICABLE - SEE REVERSE

Exemption Approval Certificate No. _____



Residential Construction Warranty



Certificate of Insurance

Maincom Pty Ltd
Locked Bag 89
PENRITH NEW SOUTH WALES 2751

**Form 1
Section 92
Home Building Act 1989**

Builder's Copy

**Issue Date: 11/10/2004
Certificate No: RCW71600547**

CERTIFICATE IN RESPECT OF INSURANCE

**Contract Of Insurance Complies With: Section 92
Of The: Home Building Act 1989**

**Issued By: Vero Insurance Limited
ABN 48 005 297 807**

Building Contract Details

**Contract Date: October 08, 2004
Declared Building Contract Value: \$361,263.01
(Refer policy for indemnity limit)**

**Carried Out By: Maincom Pty Ltd
ABN: 23080619174
Licence No: 51707C
For: Stockland Development Pty Ltd**

**In Respect Of: Single Dwelling
At: House No. 17
Orchard Street
WARRIEWOOD NEW SOUTH WALES 2102**

Permit Authority: Pittwater Council

Subject to the Act, the Home Building Regulation 1997 and the conditions of the insurance contract, cover will be provided to a beneficiary described in the contract and successors in the title to the beneficiary. Please note when the Insurer has issued this certificate, the Insurer is not entitled to refuse to pay a claim, or to cancel the insurance contract, on the grounds that the premium was not paid. This certificate is to be read in conjunction with the policy wording.

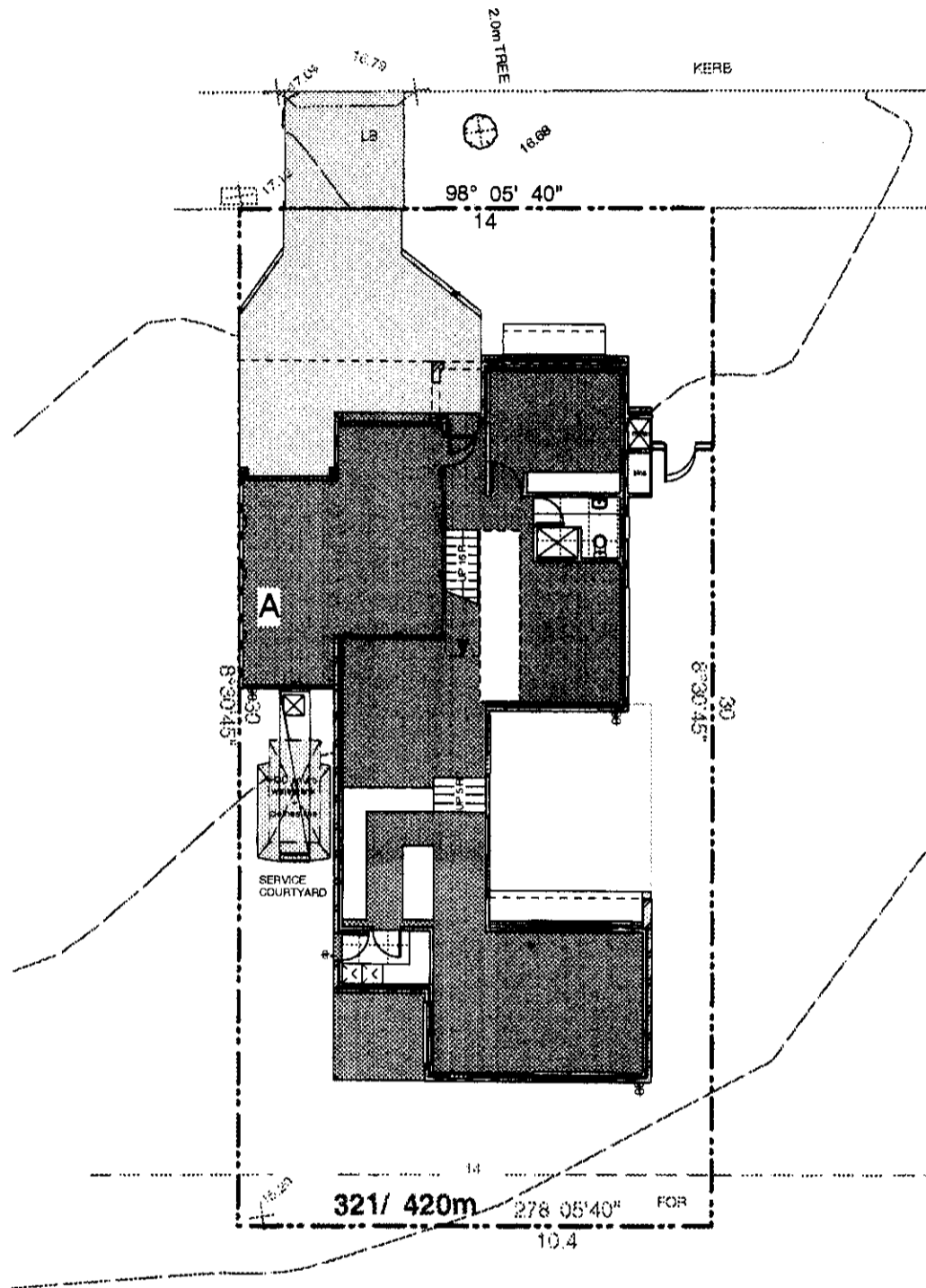
INVOICE
Total Price: \$4,335.81

N JR2M0CA07DEW Printed 11/10/2004

Signed for and on behalf of the Insurer:

Insurer: Vero Insurance Limited ABN 48 005 297 807

Received Time 29.Oct. 17:54



CONSTRUCTION CERTIFICATE

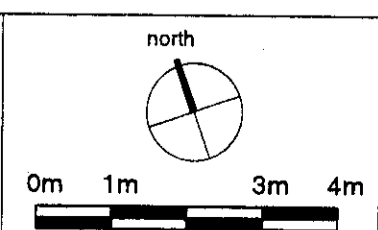
Construction Certificate No. 172520
 Accredited Certifier: Warrick Norris. Accreditation No: 6328

Signed: *W. Norris* Date: 2/11/04

NOTES
 all work to be carried out in accordance with bca, ssa codes and conditions of council. measurements in mm's unless noted. use figured dimensions do not scale drawings. site measure before starting work. refer all discrepancies to the architect.



maincom
 Unit 6, 119 COREEN AVE. PENRITH NSW 2750
 P (02) 4722 6900 F (02) 4722 3200
 E enquire@maincom.net

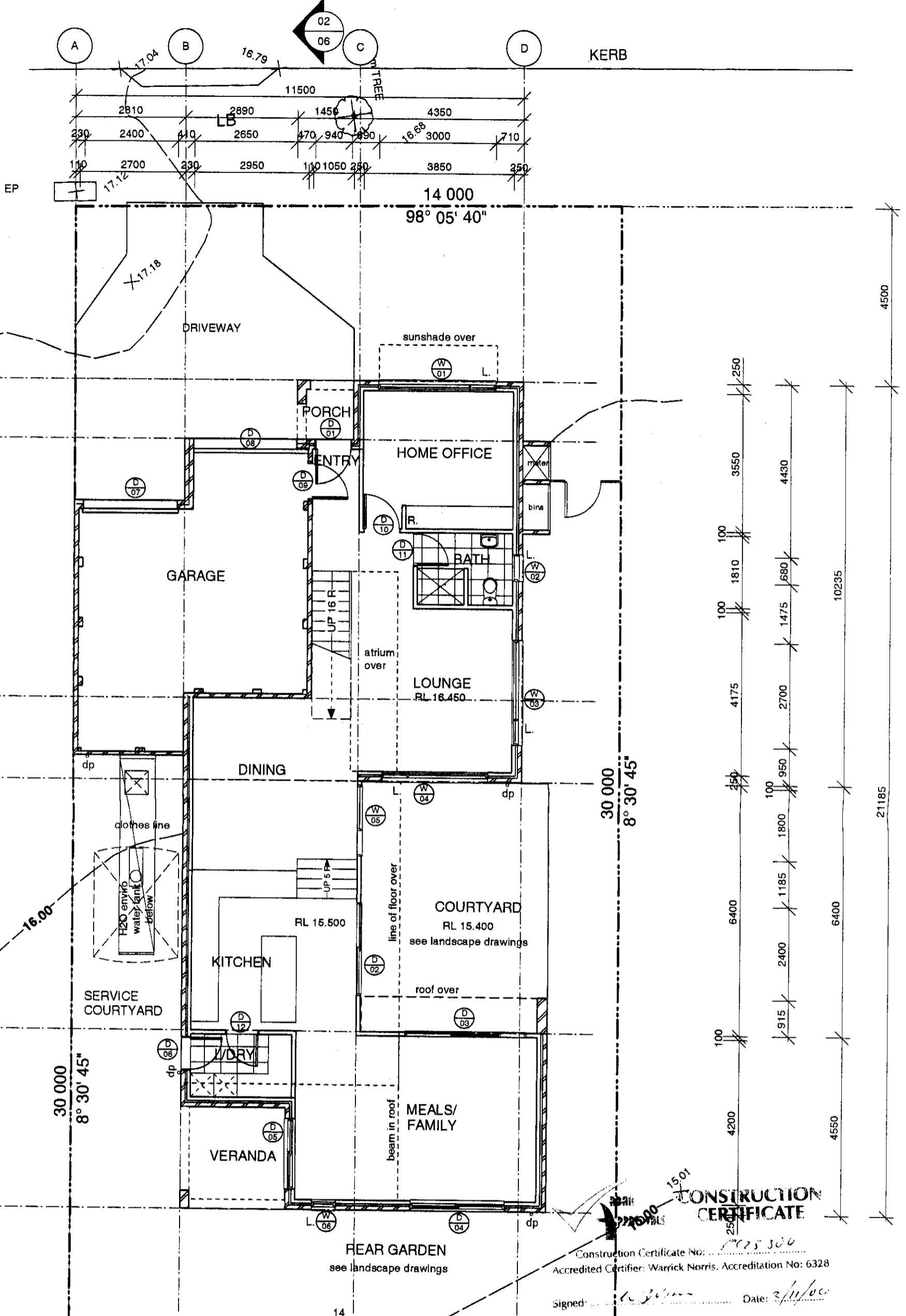


FERNBROOK - WARRIEWOOD
 Lot 321
 project

SITE PLAN
 drawing

1:200
 scale

ISSUE	DATE	REVISION
A	27/09/04	ISSUED FOR CC
	03945	Construction Certificate stage
	TW/TH	A101 - 321
	drawn/checked	dwg no.
	27.09.04	A
	date.	issue.



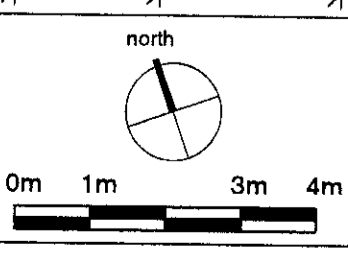
Note: brick wall set 35mm off boundary to allow for render and barge cappings.

CONSTRUCTION CERTIFICATE
 Construction Certificate No: 03945
 Accredited Certifier: Warrick Norris. Accreditation No: 6328
 Signed: [Signature] Date: 2/11/04

SUMMARY	AREA	UNIT
LEVEL 1	126.6	sqm
LEVEL 2	92.30	sqm
TOTAL	218.9	sqm
GARAGE	40.0	sqm

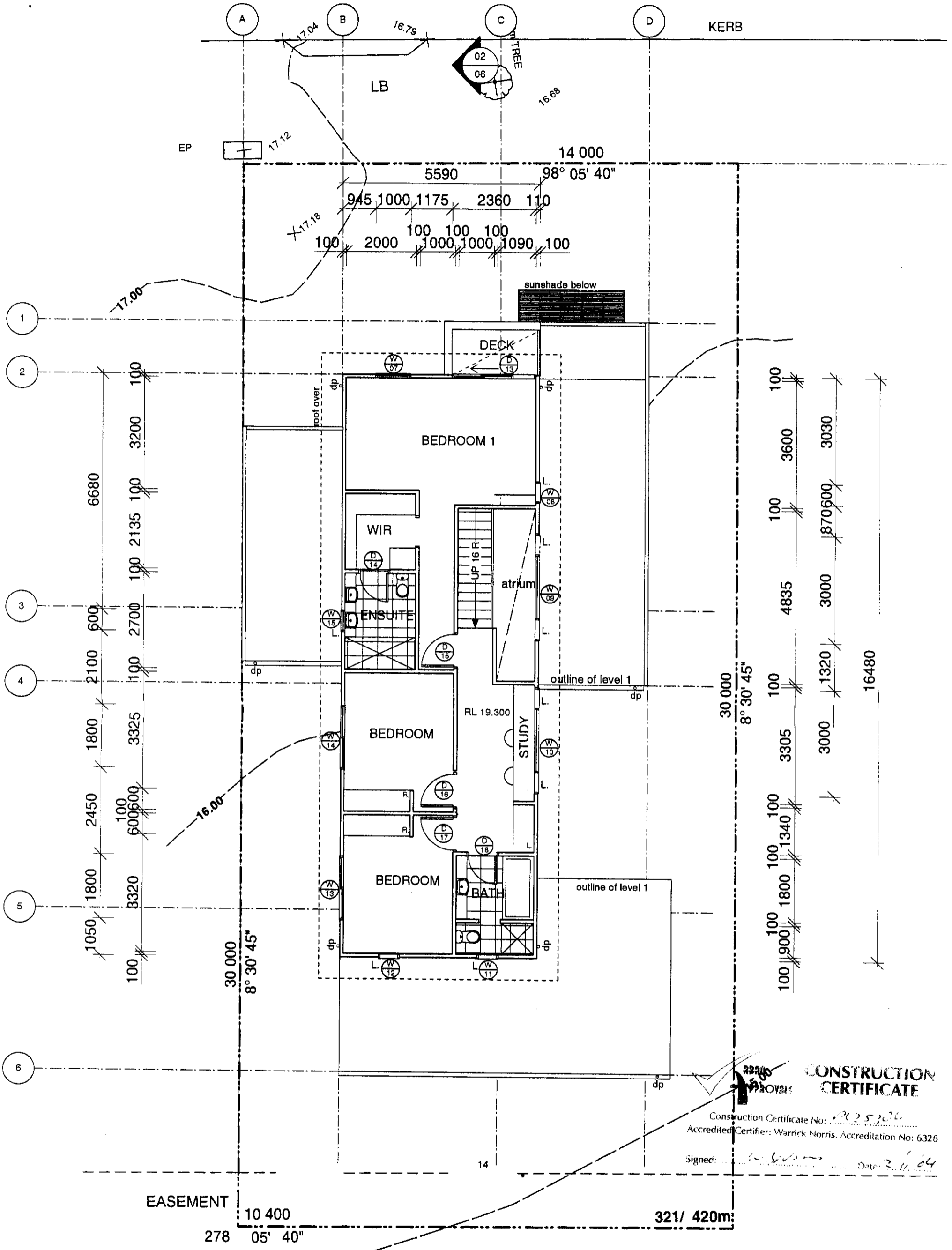
EASEMENT 10 400

NOTES
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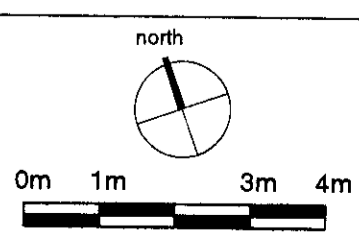
FERNBROOK -WARRIEWOOD
 Lot 321
 project
GROUND FLOOR PLAN
 drawing
 1:100
 scale

ISSUE	DATE	REVISION
A	20/09/04	ISSUED FOR CC
03945		Construction Certificate stage
TW/TH		A102 - 321 dwg no.
20.09.04		A issue



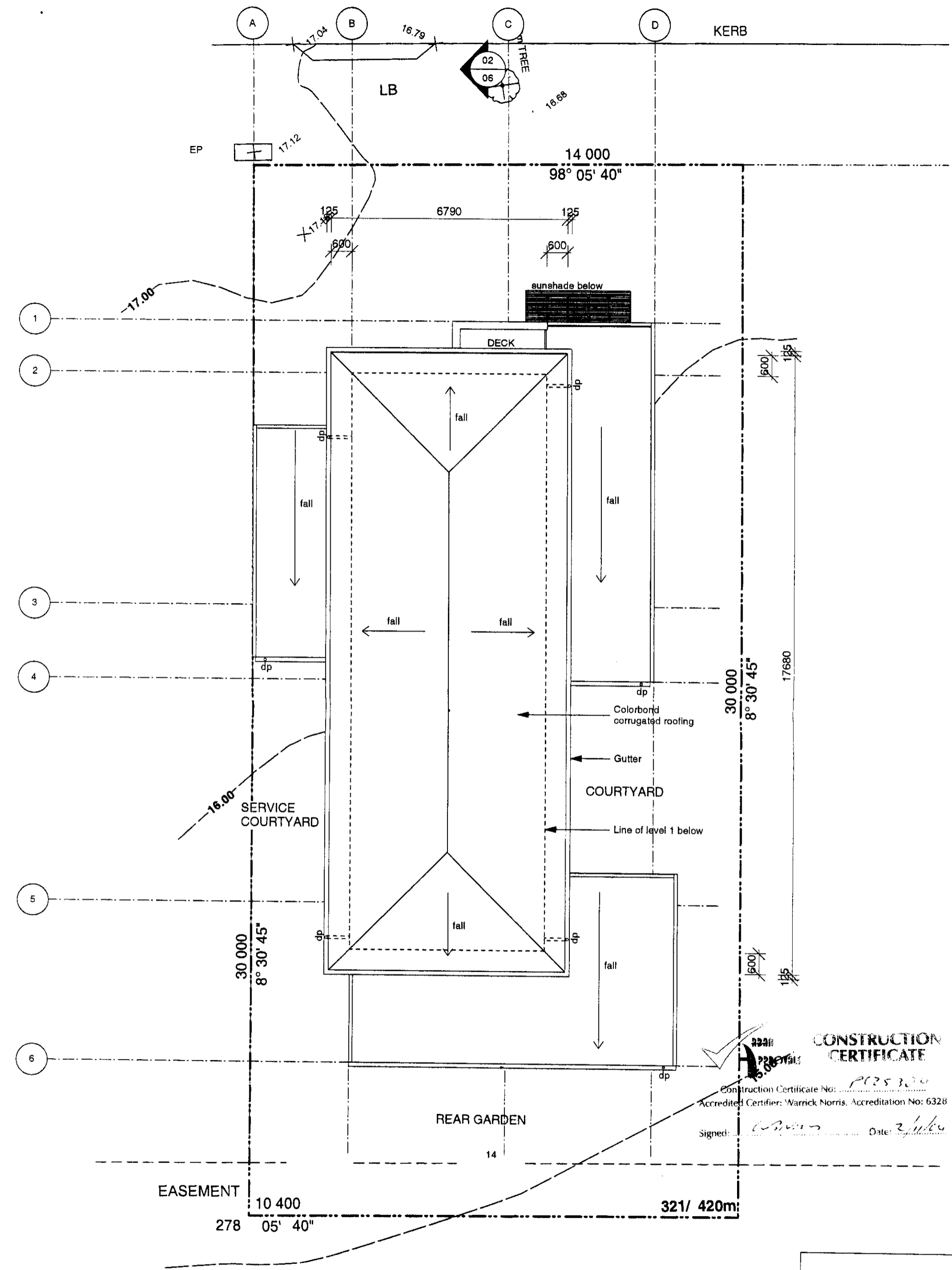
CONSTRUCTION CERTIFICATE
 Construction Certificate No: 03945
 Accredited Certifier: Warrick Norris, Accreditation No: 6328
 Signed: [Signature] Date: 20.09.04

NOTES
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FERNBROOK - WARRIEWOOD LOT 321
 project
LEVEL 1 FLOOR PLAN
 drawing
 1:100
 scale

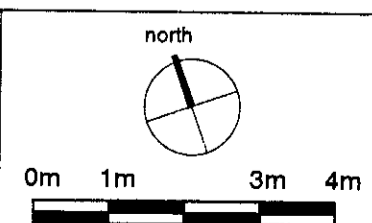
ISSUE	DATE	REVISION
A	20/09/04	ISSUED FOR CC
03945		Construction Certificate stage
TW/TH		A103 - 321
20.09.04		A
		issue



CONSTRUCTION CERTIFICATE

Construction Certificate No: PC25324
 Accredited Certifier: Warrick Norris. Accreditation No: 6328
 Signed: [Signature] Date: 2/10/04

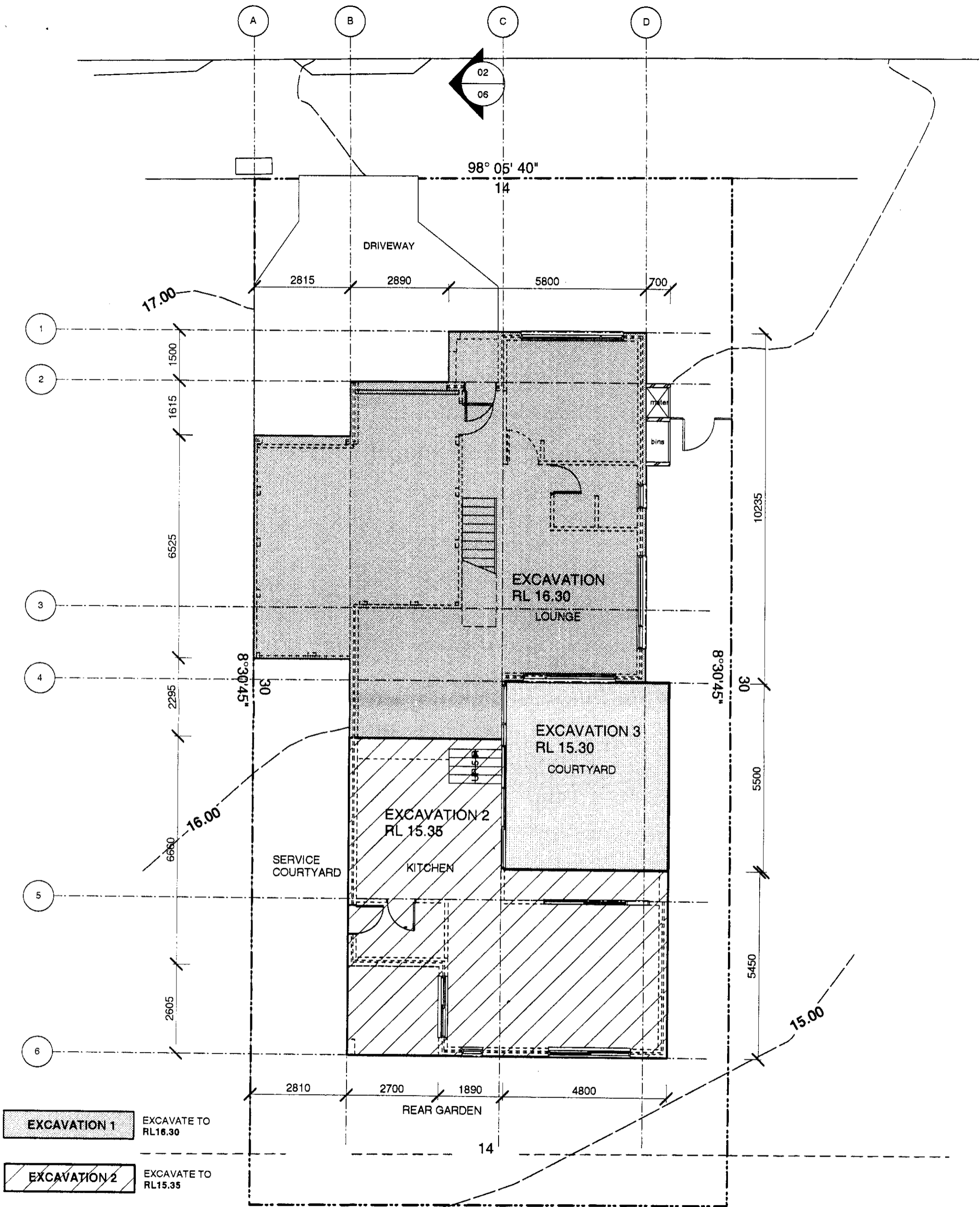
NOTES
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FERNBROOK - WARRIEWOOD
 Lot 321
 project
ROOF PLAN
 drawing
 1:100
 scale

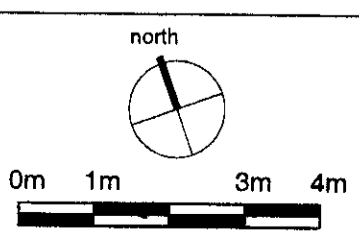
ISSUE	DATE	REVISION
A	20/09/04	ISSUED FOR CC

03945	Construction Certificate stage
TW/TH	A104 - 321
20.09.04	A
date	issue



- EXCAVATION 1** EXCAVATE TO RL16.30
- EXCAVATION 2** EXCAVATE TO RL15.35
- EXCAVATION 3** EXCAVATE TO RL15.30

NOTES
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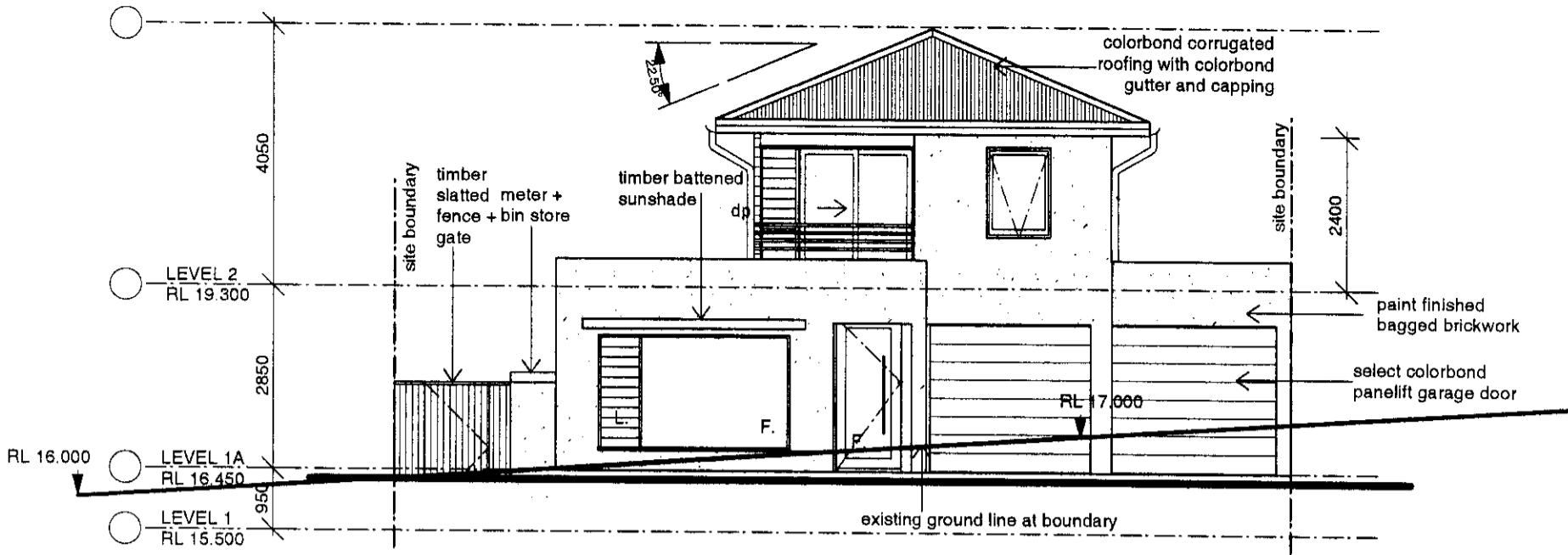


FERNBROOK - WARRIEWOOD LOT 321
 project

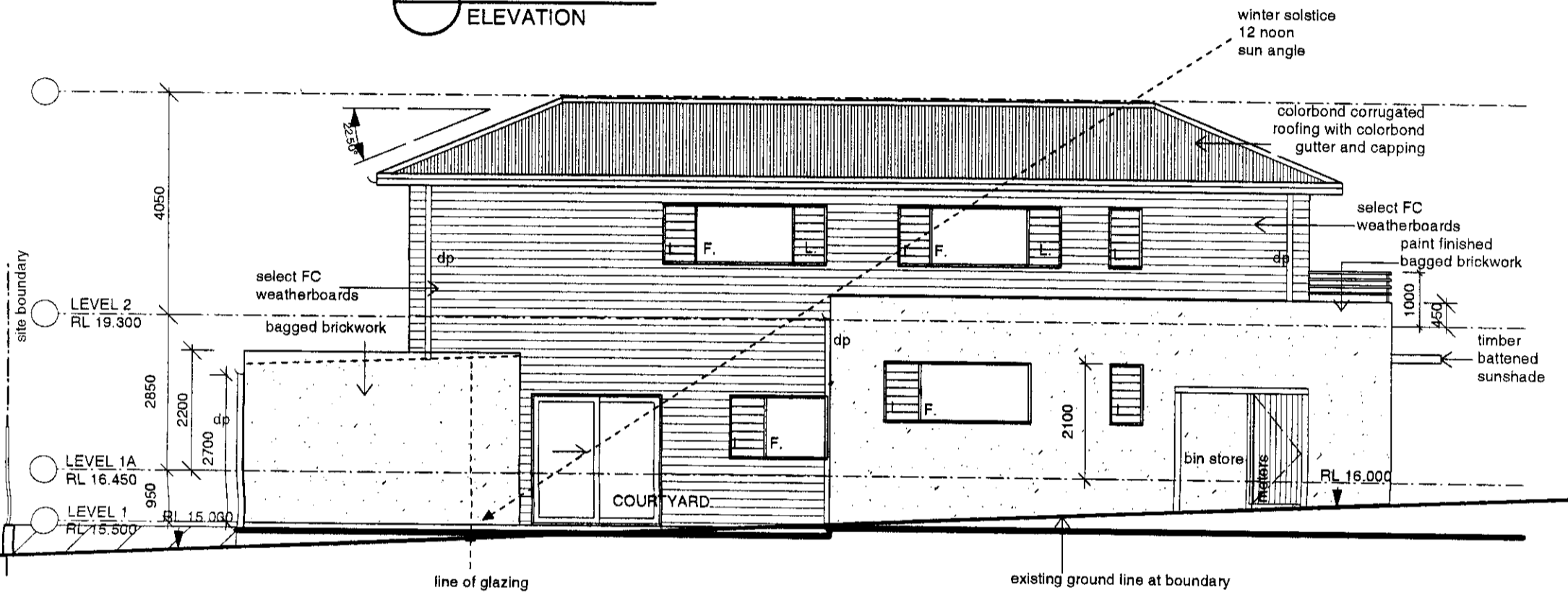
BULK EXCAVATION
 drawing

1:100
 scale

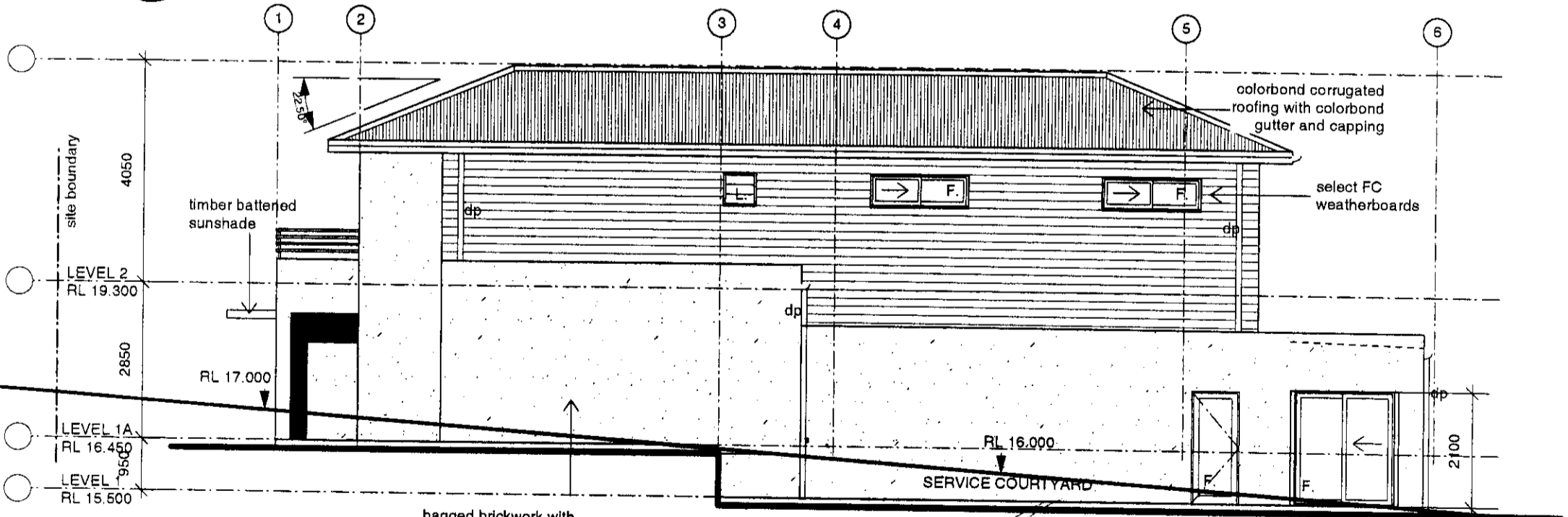
ISSUE	DATE	REVISION
A	09/09/04	ISSUED FOR CC
03945		Construction Certificate stage.
TW/TH		A105 - 321
09.09.04		A
		Issue.



01 NORTH ELEVATION



02 EAST ELEVATION



03 WEST ELEVATION

CONSTRUCTION CERTIFICATE
 APPROVED
 Construction Certificate No: 1925306
 Accredited Certifier: Warrick Norris, Accreditation No: 6328
 signed: [Signature] Date: 3/11/24

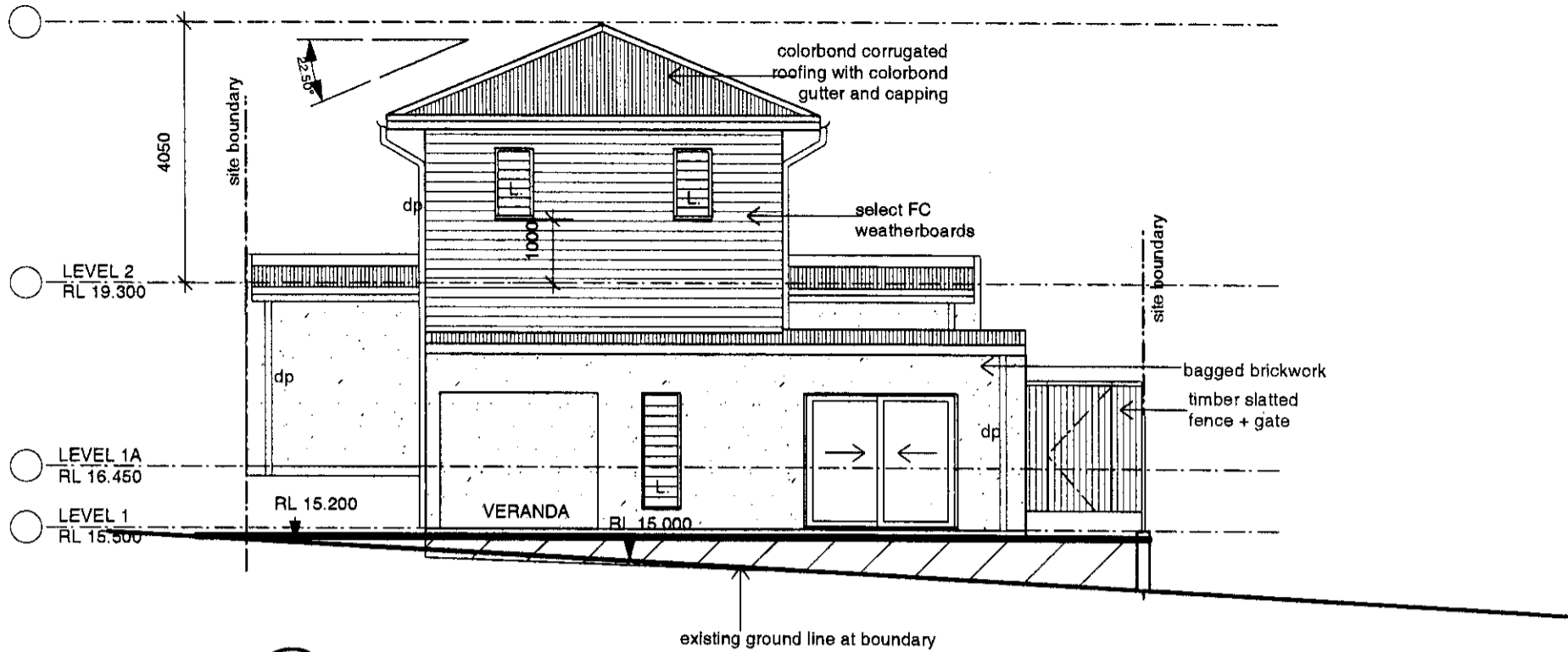
NOTES
 all work to be carried out in accordance with bca, saa codes and conditions of council. measurements in mm's unless noted. use figured dimensions. do not scale drawings. site measure before starting work. refer all discrepancies to the architect.



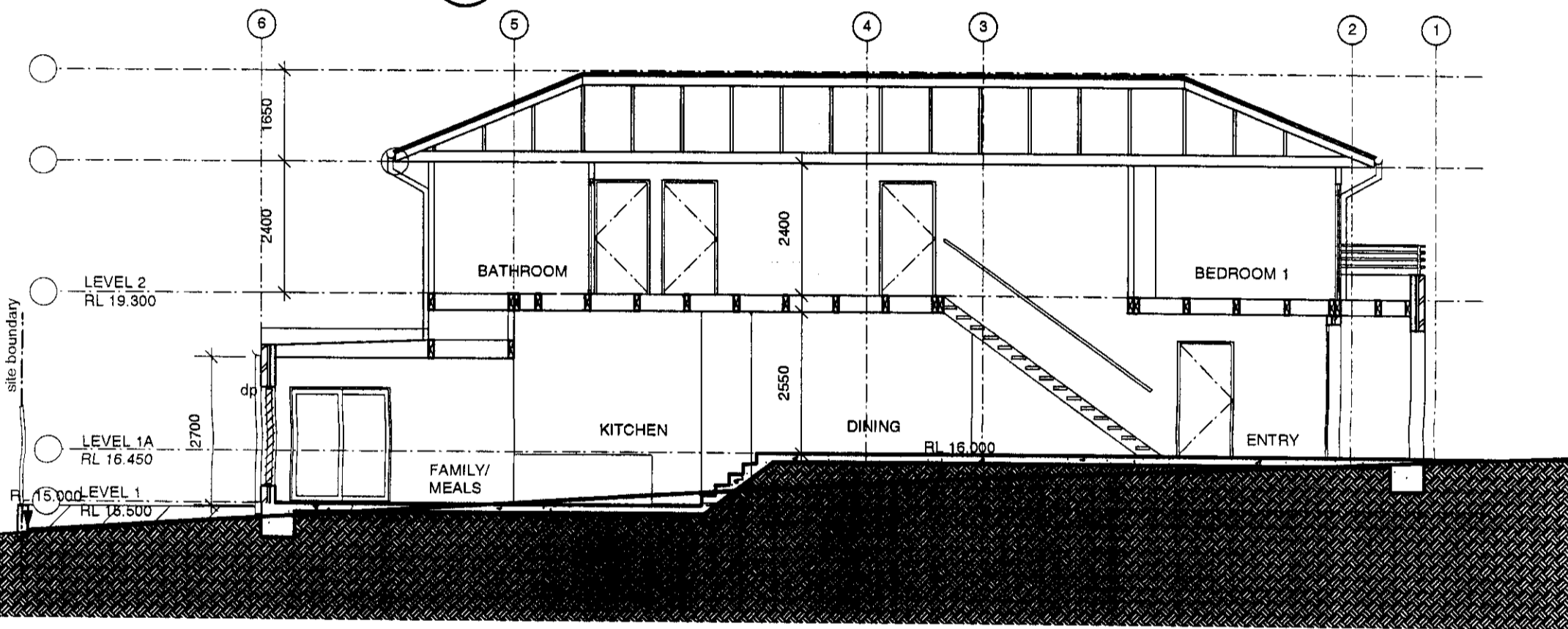
FERNBROOK -WARRIEWOOD LOT 321 project	03945 job no.	Construction Certificate stage.
ELEVATIONS drawing	TW/TH drawn/checked	A201 - 321 dwg no.
1:100 scale	20.09.04 date.	A issue.

FERNBROOK -WARRIEWOOD LOT 321 project	03945 job no.	Construction Certificate stage.
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1:100 scale	20.09.04 date.	A issue.


FERNBROOK -WARRIEWOOD LOT 321 project	03945 job no.	Construction Certificate stage.
ELEVATIONS drawing	TW/TH drawn/checked	A201 - 321 dwg no.
1:100 scale	20.09.04 date.	A issue.



01 SOUTH ELEVATION



02 SECTION


CONSTRUCTION CERTIFICATE
 Construction Certificate No: 1025300
 Accredited Certifier: Warrick Norris, Accreditation No: 6328
 Signed: [Signature] Date: 2/11/04

NOTES
 all work to be carried out in accordance with bca, saa codes and conditions of council. measurements in mm's unless noted. use figured dimensions. do not scale drawings. site measure before starting work refer all discrepancies to the architect.



FERNBROOK - WARRIEWOOD
 LOT 321
 project
ELEVATION & SECTION
 drawing
 1:100
 scale

ISSUE	DATE	REVISION
A	20/09/04	ISSUED FOR CC
03945		Construction Certificate stage.
TW/TH		A202 - 321
20.08.04		A
		issue.

Palitha S. Wijesena & Associates Pty Ltd


ABN 71 067 121 091

Consulting Civil & Structural Engineers

36 Doulton Drive, Cherrybrook, NSW 2126

Tel: 02 9894 8166 Fax: 02 9894 8133 Mob: 0404 047 161

DETAILS NOTED

		PROPOSED RESIDENCE AT: LOT 321		Certified:	
		ALL LOTS		 Palitha S. Wijesena B.Sc.(Eng.): C.P. Eng: M.I.E. Aust.: M.I.C.E. (U.K.): N.P.E.R.	
		FERNBROOK ESTATE			
		WARRIEWOOD			
		FOR STOCKLANDS			
		Builder: MAINCOM			
		Job No:		Date: 27.9.04	
		Design:		Drawn: AR	
		Drawing No: 6915-01			
NOTE					
6915-06	FOR DRWGS -07 ONWARD, SEE DRWG 6915-00				
6915-05	TYP STAIR DETAIL (ALL LOTS)				
6915-04	TYP KOPPER LOG RETAINING WALL (ALL LOTS)				
6915-03	TYP BRICKWORK RETAINING WALL (ALL LOTS)				
6915-02	TYP BLOCKWORK RETAINING WALL (ALL LOTS)				
6915-01	GENERAL NOTES (ALL LOTS)				
DWG No	TITLE BLOCK (ALL LOTS)				
REV.	DESCRIPTION				
	DRAWING SCHEDULE				

DESIGN LIVE LOADS

FLOORS 1.5 Kpa GARAGES 3.0 Kpa BALCONIES STAIR ROOFS

GENERAL NOTES:

- This drawing is to be read in conjunction with Architect's and other Consultant's drawings and specifications and with such other written instructions as may be issued during the course of the contract. any discrepancies in these documents shall be referred to the Engineer for decision before proceeding with the work.
- Dimensions shall not be obtained by scaling.
- All workmanship and materials to be in accordance with all current SAA Codes of Practice and Local Government Ordinances.
- All vegetable soil including organic soil and roots to be removed from beneath all concrete work.
- All footings to be founded in natural ground with bearing capacity specified.
- Footings are not to be constructed in fill material.
- Footings have been designed for allowable equal uniform bearing pressure of 100Kpa on firm natural ground. Foundation material shall be approved for this bearing capacity before placing reinforcement.
- Footings details shown are for the site classification stipulated. Whilst every care has been taken to verify that all the information shown is correct Palitha S. Wijesena & Associates take no responsibility for variations that may occur due to variations in site conditions.
- Depths of structural members are noted first on plan and includes slab thickness, followed by width of member.
- Provide 200 um polythene membrane beneath slab joints, lapped 150 mm minimum and taped continuously.
- Provide one layer of two ply Malthead or similar between brickwork and underside of concrete surfaces.
- Design based upon use of a trussed roof, conventional roof supporting, tiles/metal deck roofing.
- The whole of the area under concrete slabs on ground shall be treated for the prevention of termites. This treatment shall take place after all filling and compaction has been carried out and just prior to placing the waterproof membrane.
- The Owner's attention is drawn to appendix A of AS 2870 performance Requirements and Foundation Maintenance.
- Site classified as Class M.
- The design of the slab details on this drawing has been prepared taking into account the requirements and provisions of AS 2870 and is considered satisfactory for the site conditions.
- Fill used in the construction of the slab except where the slab is suspended shall consist of control or rolled fill in accordance with AS 2870.1-1988.
- Formwork to remain in place for
- Stability of the structure during construction and excavation is the responsibility of the Builder, also, the stability of existing buildings in the vicinity of any excavations.

BLOCKWORK NOTES:

- All blockwork shall be constructed in accordance with AS 1475.
- All blocks to be Class A to AS 1500.
- All blockwork to be constructed in mortar 1:1:6.
- Core filling where specified to be placed in heights not exceeding 1200 mm. Clean out openings to be provided at base of each lift in which is to be filled.

CONCRETE NOTES:

- All concrete work is to comply with AS 3600 and AS 2870.
- Concrete mix to be F_c 20MPa.
Maximum aggregate 20 mm Slump 80 mm.
- Concrete cover to reinforcement in slabs 25 mm.
in footings 65 mm.
- Concrete to be mechanically vibrated during placing.
- Concrete to be cured by being constantly wet for a minimum of 7 days after casting or by any other method approved in writing by the Engineer.

REINFORCEMENT NOTES:

- Mesh reinforcement to comply with AS 1304.
- Y denotes hot rolled deformed bar to AS 1302.
R denotes plain round bar to AS 1302.
- Laps to reinforcement: Mesh sides 300 mm/ends 450 mm Trench Mesh 600 mm
Bars as noted on drawing.
- Reinforcement to be supported on approved plastic tipped chairs at 900 mm centres in both directions.

BRICKWORK NOTES:

- All brickwork shall be constructed in accordance with AS 1640.
- All bricks to be Class A.
- All brickwork to be constructed in mortar 1:1:6.

TIMBER NOTES:

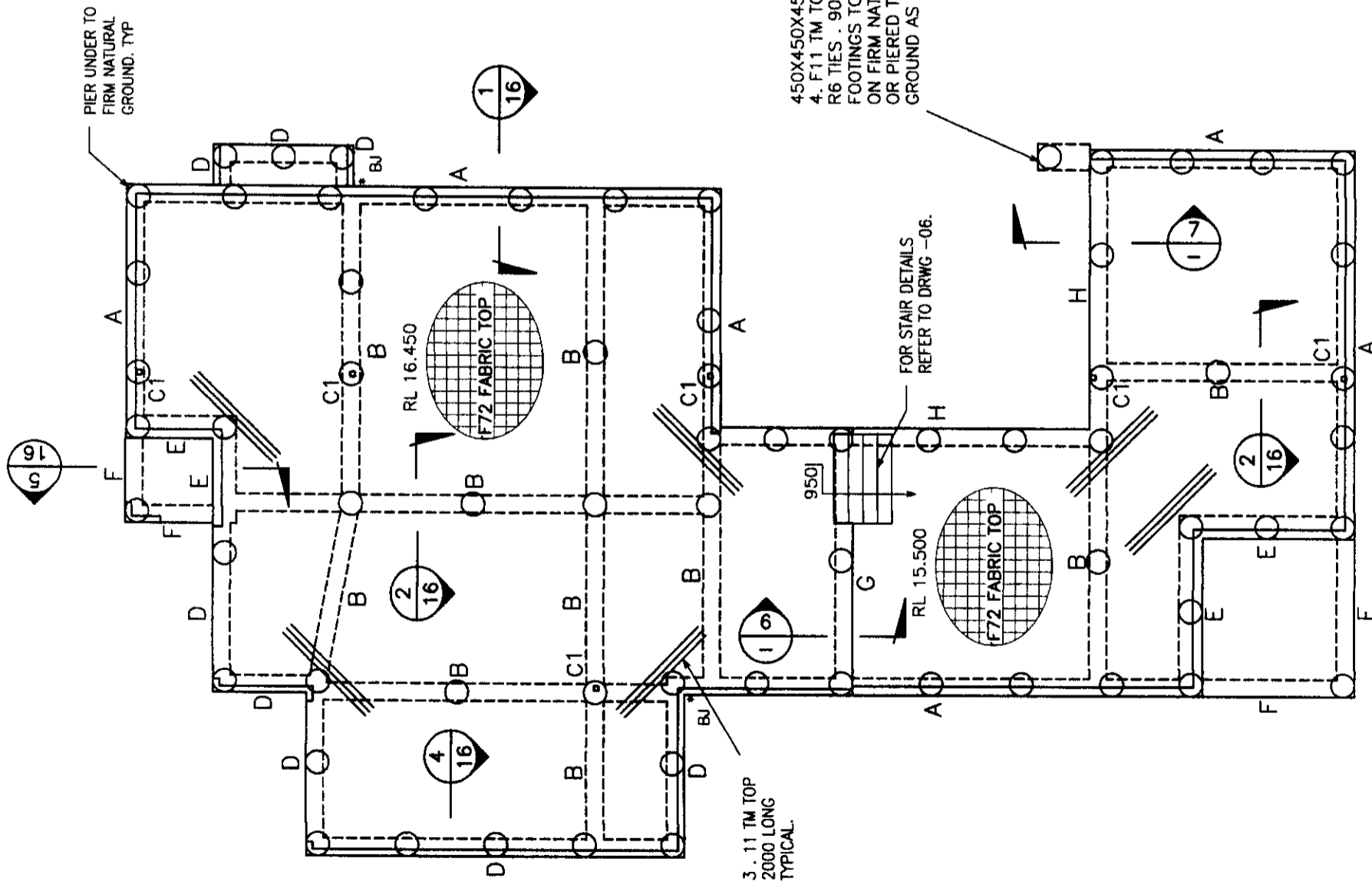
- Timber construction shall be in accordance with the requirements of AS 1684 Light Timber Framing Code and AS 1720 Timber Engineering Code.
- Softwood structural timbers shall be F 7 grade or better and hardwood shall be f 11 grade or better, unless noted otherwise.
- Trussed roofs shall have vertical plane ridge bracing and 45° diagonal rafter bracing from the ridge to the wall plates on each side of the ridge terminating at building corners or cross walls.
- Internal stud walling shall be braced using "Congnail Speed Brace" bracing or similar approved by the Engineer. Braces shall be triple nailed at each end and single nailed to each stud using 2.5 mm diameter nails.
- Timber exposed to decay hazard shall be treated with "Tanolith" Creosote or similar preservative in accordance with AS 1604.
- Anchor rods and tie down straps to the roof shall be installed that ensure uplift forces from wind are transmitted to the foundations unless special fixings are nominated.
- Major structural connections shall be bolted. The Builder shall obtain details from the Engineer if not shown on the drawings.

DETAILS NOTED

THE SITE CLASSIFICATION IS CLASS 'M'
REFER GEOTECH REPORT No G22103/1-D
DATED 26 Nov 2003. PREPARED BY
NETWORK GEOTECHNIC Pty Ltd



REV	DATE	AMENDMENTS
PROPOSED RESIDENCE AT:		
ALL LOTS		
FEENEBOOK ESTATE		
WARRIEWOOD		
FOR STOCKLAND		
Builder:	Job No:	Design:
MAINCOM		
Palitha S. Wijesena & Associates Pty Ltd		
ABN 71 067 121 091		
Consulting Civil & Structural Engineers		
36 Doughton Drive, Cherrybrook, NSW 2126		
Tel: 02 9894 8166 Fax: 02 9894 8133 Mob: 0404 047 161		
Certifier:	Date:	
Palitha S. Wijesena		
B.Sc. (Eng.), C.P. Eng., M.I.E. Aust., M.I.C.E. (U.K.), N.P.E.R.		
Drawing No:	Scale:	Drawing No:
AR	27.9.04	
GENERAL NOTES		
6915-02		



SLAB PLAN

ADDITIONAL REINFORCEMENT AS SHOWN
 PROPOSED PIER LAYOUT AS SHOWN
 TO BE CONFIRMED ON SITE.
 *BJ - INDICATES BRICK JOINT
 C1 - SHS 90X4

SLAB NOTES:

SLAB 100mm THICK WITH 1 LAYER OF F72 FABRIC IN TOP UNLESS NOTED OTHERWISE. LAID ON 200UM WATERPROOF MEMBRANE ON 50mm SAND BLINDING ON WELL COMPACTED GRANULAR FILL. THE FILLING IS TO BE PLACED & COMPACTED TO AVOID ANY DEFLECTION & SETTLEMENT IN THE SLAB.

IF THE SITE IS CUT & FILLED; THE EXTERNAL BEAMS INDICATED, WHERE NOT BEARING ON FIRM NATURAL GROUND, MUST BE PIERED TO FIRM NATURAL GROUND (HAVING A SAFE BEARING CAPACITY OF 300 kPa MINIMUM) BELOW THE FILL & TOP SOIL, USING 400 DIA. PIERS AT 1.8m ctrs.

WHERE DEPTH OF ROLLED FILL BELOW SLAB EXCEEDS 400mm THE INTERNAL BEAMS INDICATED MUST BE PIERED TO FIRM NATURAL GROUND USING 400 DIA. PIERS AT 3.3m max. ctrs.

IF LOAD BEARING BEAMS ARE BEARING ON NON-STRUCTURAL FILL, THE FOLLOWING PIER ARRANGEMENT SHALL BE USED:
 FOR 210 kPa PRESSURE (CLAY STRATUM):
 400 DIA. BORED PIERS AT 1.8m ctrs OR 500x300 BULK PIERS.
 FOR 400 kPa PRESSURE (SHALE OR ROCK):
 300 DIA. BORED PIERS AT 1.8m ctrs OR 500x300 BULK PIERS.

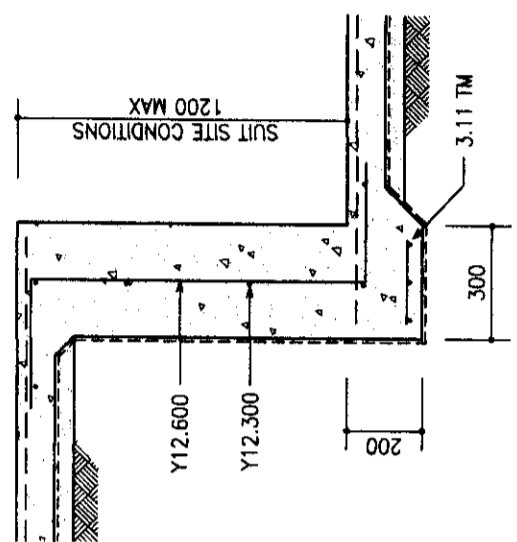
ALL STRIP FOOTINGS ARE TO BE FOUNDED DIRECTLY ON, OR PIERED DOWN TO FIRM NATURAL GROUND WITH AN ALLOWABLE MINIMUM BEARING PRESSURE OF 150 kPa.
 PIERS SHOULD BE 400 DIA. & SPACED AT 1.8m ctrs.

IF SHALE OR ROCK IS ENCOUNTERED IN THE TRENCHES OR PIER HOLES, THE ENTIRE BEAM SYSTEM MUST BE PIERED DOWN TO THIS STRATA.

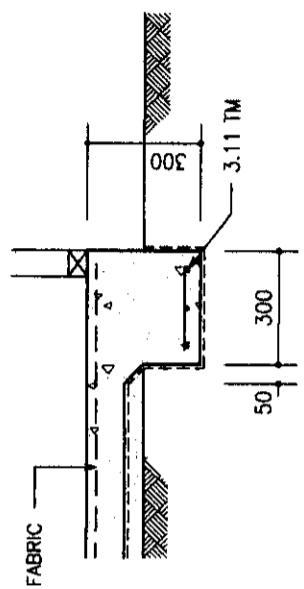
THE EDGE BEAMS ARE TO HAVE A MINIMUM PENETRATION OF 150mm INTO THE FIRM NATURAL GROUND.
 TOP OF SLAB IS TO BE 250mm ABOVE THE EXTERNAL GROUND LEVEL.

PROVIDE ADDITIONAL BRICK ARTICULATION JOINTS AS REQUIRED

THIS DRAWING IS SIGNED SUBJECT TO A INSPECTION CERTIFICATE BEING ISSUED BY THIS OFFICE.
 ALL REINFORCEMENT SHALL BE INSPECTED BY THIS OFFICE PRIOR TO POURING CONCRETE.



SECTION 6
TYPE G



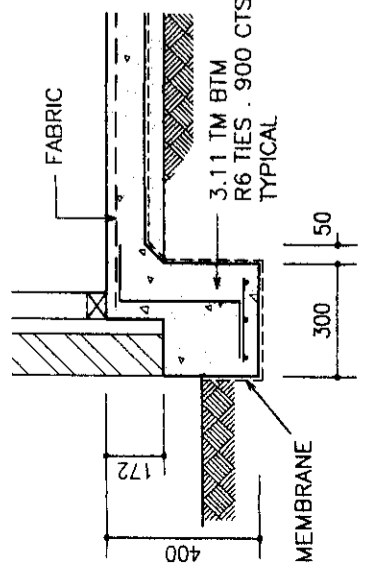
SECTION 7
TYPE H

DETAILS NOTED

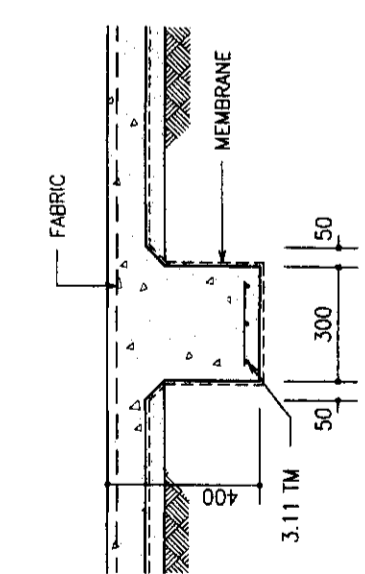
THE SITE CLASSIFICATION IS CLASS 'M'
 REFER GEOTECH REPORT No G22103/1-D
 DATED 26 Nov 2003. PREPARED BY
 NETWORK GEOTECHNIC Pty Ltd



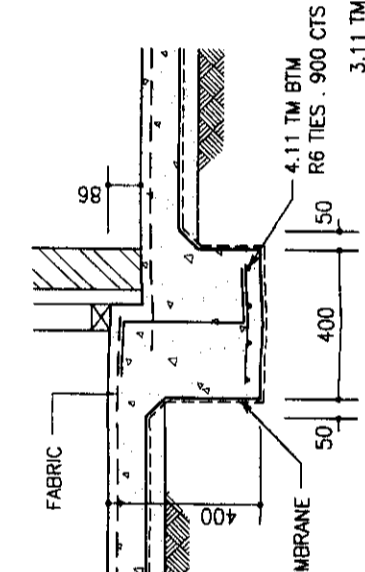
REV	DATE	AMENDMENTS
PROPOSED RESIDENCE AT: LOT 321 FERNBROOK ESTATE WARRIBWOOD FOR STOCKLAND		
Builder:	MAINCOM	
Job No:		
Design:		
Palitha S. Wijesena & Associates Pty Ltd ABN 71 067 121 091 Consulting Civil & Structural Engineers 36 Douiton Drive, Cherrybrook, NSW 2126 Tel: 02 9894 8166 Fax: 02 9894 8133 Mob: 0404 047 161		
Certified:	<i>[Signature]</i>	
Drawn:	AR	30.9.04
Date:		
Scale:		
Drawing No:	6915-15	
Drawing Title:	SLAB PLAN	



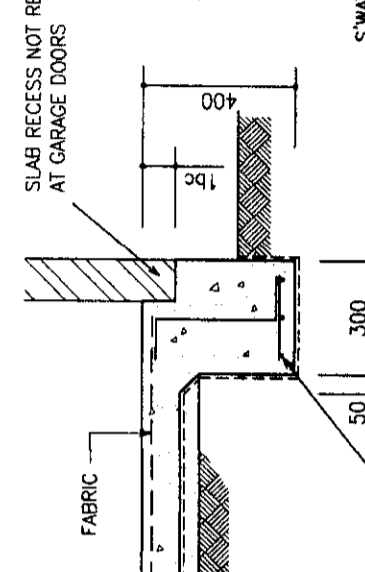
SECTION 1
TYPE A



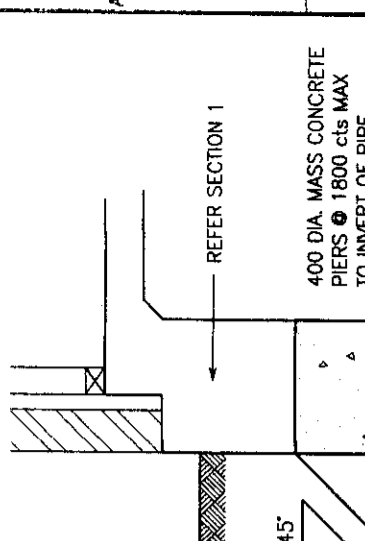
SECTION 2
TYPE B



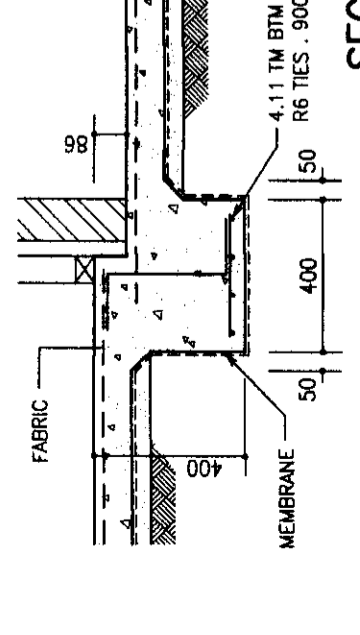
SECTION 3
TYPE C
NOT USED



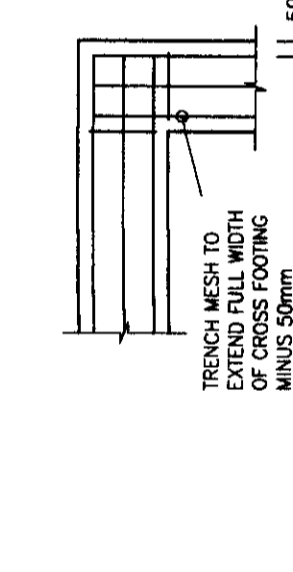
SECTION 4
TYPE D



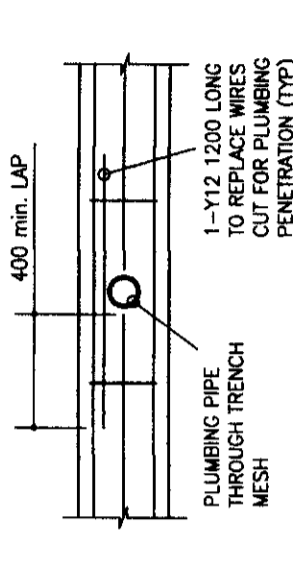
STORMWATER DETAIL



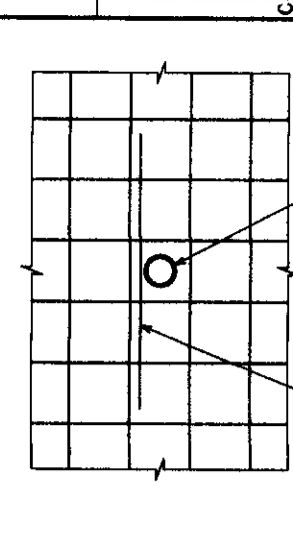
SECTION 5
TYPE E & F



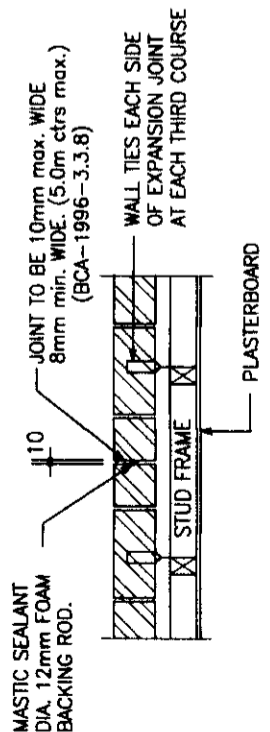
FOOTING PLAN AT INTERSECTION



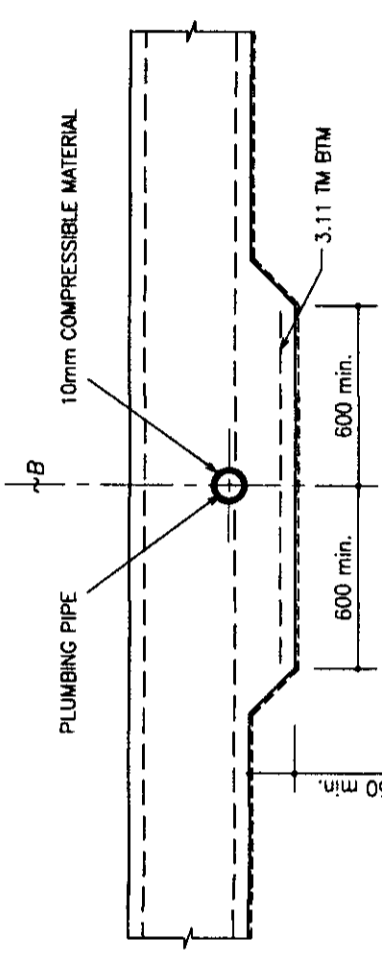
PLAN OF PLUMBING PENETRATION THROUGH FOOTING



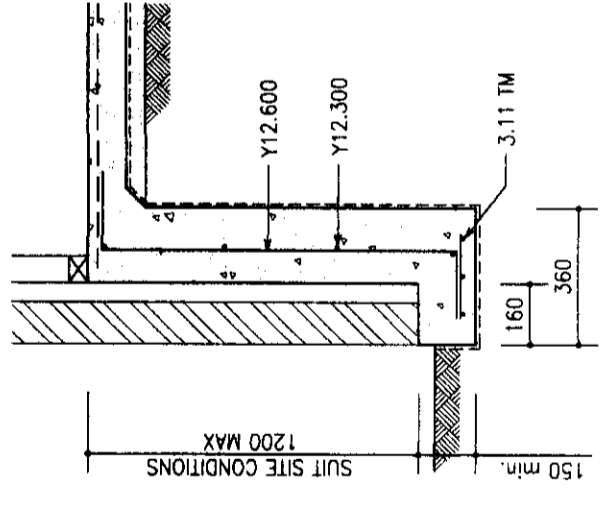
PLAN OF PLUMBING PENETRATION THROUGH SLAB



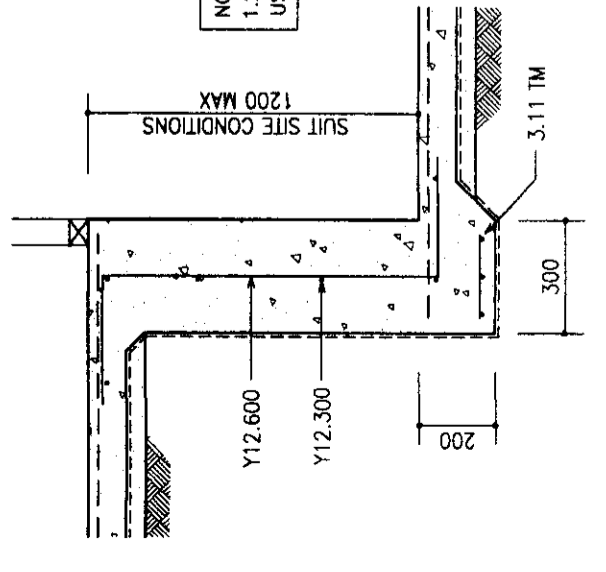
BRICK JOINT DETAIL (BJ*)



DETAIL OF PLUMBING PIPE THROUGH FOOTING



DROPPED EDGE BEAM DETAIL

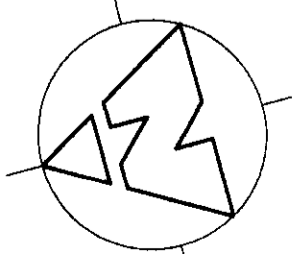
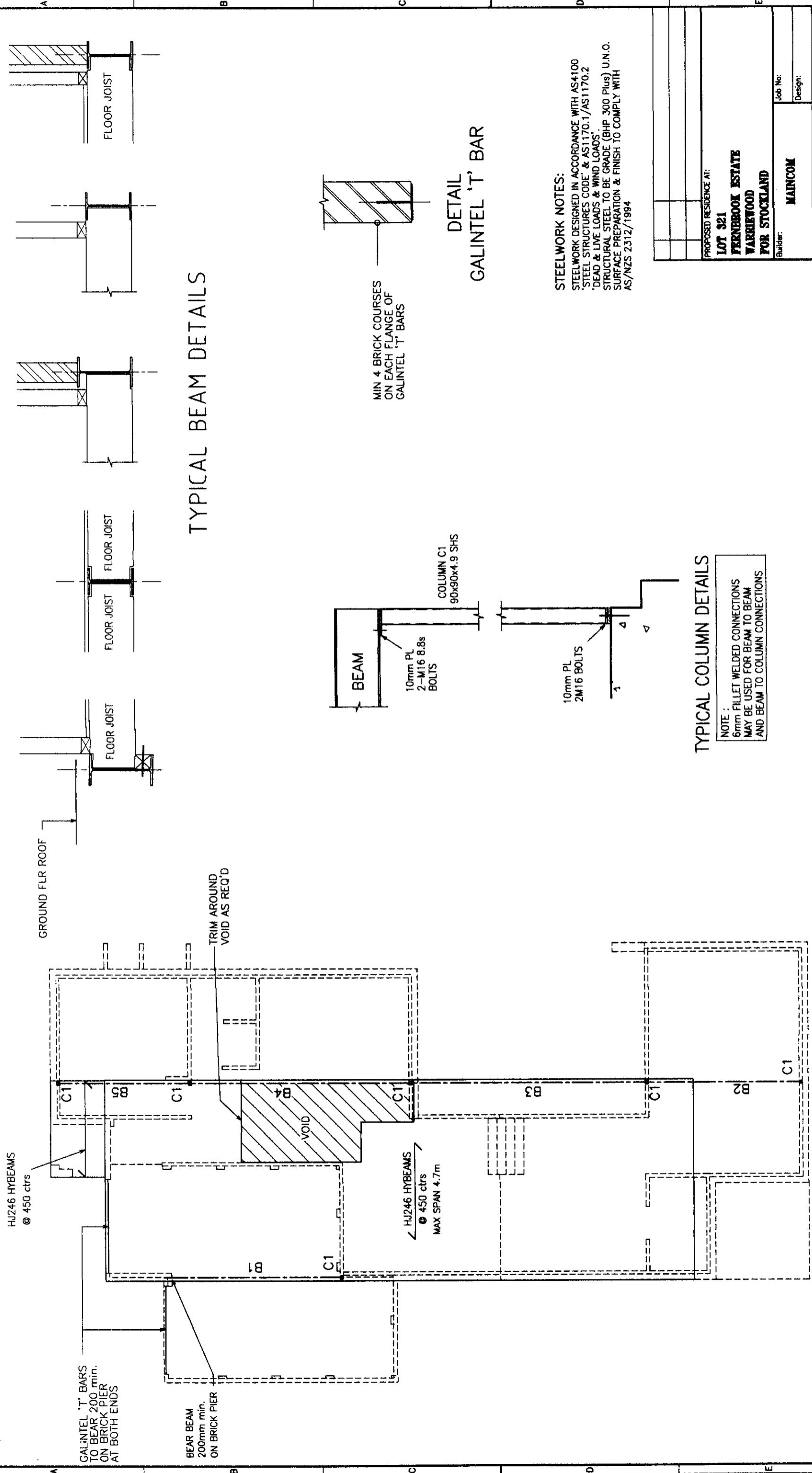


INTERNAL STEPPED EDGE DETAIL

REV	DATE	AMENDMENTS
PROPOSED RESIDENCE AT: LOT 321 FERNBROOK ESTATE WARRIEWOOD FOR STOCKLAND		
Builder:	Job No:	Design:
MAINCOM		
Palitha S. Wijesena & Associates Pty Ltd ABN 71 067 121 091 Consulting Civil & Structural Engineers 36 Douilton Drive, Cherrybrook, NSW 2126 Tel: 02 9894 8166 Fax: 02 9894 8133 Mob: 0404 047 161		
Certified:	Date:	Scale:
<i>[Signature]</i>	30.9.04	
Drawn:	AR	Scale:
Drawing Title:	Drawing No:	
SLAB DETAILS	6915-16	



DETAILS NOTED



FIRST FLOOR FRAMING PLAN

SPECIFICATION, SCHEDULE OF MATERIALS + FINISHES
ERNBROOK STAGE 3 @ WARRIEWOOD, HOUSE TYPE A, LOTS 321, 324, 327

Scope of work/Notes	Groundwork/Excavation	External walls: Brickwork + Brick Veneer	Roofing: Corrugated Colorbond Steel (CCS)
All work as shown in the drawings and schedule, including all necessary work even if not drawn or scheduled. Refer all queries and discrepancies to the architect. All measurements in mm unless noted otherwise.	Bulk excavation and fill removed by others. Implement waste, water and soil management measures. AS 2870.1 Soil classification - Class M (mod. reactive clay) Excavate to levels noted for footings, floors, retaining walls Excavated material retained on site as fill to levels.	All brickwork laid in accordance with Australian Standards. Clay commons suitable for bagged finish throughout. 110 veneer work in stretcher bond to levels indicated. 110 work with attached piers to garage in stretcher bond. Soldier course capping to all walls.	Blue Scope steel Colorbond Custom Orb profile 0.48 steel roofing. Refer colour schedule. Sarking/insulation: Astrofoil double sided anti glare insulation or ACl Parnastop R1.5 Sisalation backed fibreglass. Fascia: Brake pressed Colorbond steel, 100 x 100 angle colour to match roof, no round edges> No timber fascias. Flashings: as per MI, Colorbond steel, colour to match roof. Valley gutters: 0.6 Colorbond Armour Grey steel.
Standard of Work and Regulations	Footings	Brickwork Finish	Roof plumbing + Rainwater Drainage
All work to be carried out in accordance with: • Building Code of Australia 1996 • SAA Codes • Conditions of supply authorities • NATSPEC Housing Specification for each trade.	Concrete strip footings in accordance with AS 2870. Generally 400 d x 300 w with 2 layers F8 TM throughout.	Bagged finish with integral colour equal to Mac render or Moroccan coat finish.	Outboard gutters: 100 quad gutter, Colorbond to match roof. Inboard (box) gutters: custom fold in 0.48 Colorbond. Downpipes: 100 dia Colorbond to match roof. Drainage: 100 dia uPVC pipe to rainwater collection tank.
Terms and Abbreviations	Retaining walls	External cladding: Harditex (HTP)	Internal walls: Timber frame
Abbreviations used on the drawings and in the specifications and schedules are as follows: AFS As further specified BW Bagged Block / Brickwork BC Bright Chrome CB Colorbond (coloured Zincalume steel sheet) CA Copper/Chrome/Arsenate treated timber CR Corrugated Colorbond Roofing CS Corrugated Colorbond Wall Sheeting CC Compressed Fibre Cement sheet CS Cast in situ (concrete) CT Ceramic Tiles CTS Centres EPS Expanded Polystyrene (insulation) FG Fixed glass FC Fibre Cement sheet FL Finished floor level GB Glass blockwork HW Hardwood HDG Hot Dipped Galvanised HDPE High Density Polyethylene (piping) HSC Hardiflex sheet cladding HTP Hardiflex panel GL Glass Louvres (in windows) LOS Light Oil Solvent Preservative = 'Gold' Treated timber LV Laminated Veneer Lumber MDF Medium density fibreboard = customwood MGP Machine Graded Pine framing (Wall/Roof) MI Manufacturer's instructions NI Not in Contract PB Plasterboard PFC Parallel Flange Channel PS Provisional Sum RB Rendered Block / Brickwork RFL Reflective foil laminate RP Radial Pine S+I Supply and Install SC Satin Chrome SHS Square Hollow section SS Stainless Steel T+G Tongue and grooved (flooring/walling) TBA To be advised TT Terracotta Tile UB Universal Beam UC Universal Column UNO Unless noted otherwise VOS Verry on site VR Veneer WRC Western Red Cedar (timber)	Core filled concrete blockwork, per engineer's specification. External joints struck flush and bagged for paint finish. Floor level 1: Concrete slab on ground Concrete slab, cast on ground, per engineer's specification. Slab laid on blinding layer of sand to levels indicated. Polyethylene waterproof membrane to entire area. Under slab termite protection in accordance AS 3660.1. Termimesh' termite protection collars to all penetrations. 30 mm set down for 'wet areas', external walls and door sills. 40 mm set down for external walls and door sills. Finish: steel trowel finish concrete throughout. Floor level 2: Timber framed Floor joists to Timber Framing Code: (MGP or LVL or Hybeam are acceptable). Joists at 600 centres or as required. R 1.5 insulation + 6 FC sheet finish to ceiling of garage under level 2 internal floor area. Ceilings: direct fix, or on Rondo battens as required. Flooring: 18 Particleboard sheet flooring glued and nailed. Wet areas : 16 OFC sheet, glued and screwed. 30 set down. Refer floor finishes schedule.	External cladding: weatherboards Where indicated on drawings, equal to: External: Hardies Primafine weatherboards, laid horizontally. Finish: refer paint schedule. External cladding: flat sheet and cover strips Where indicated on drawings, pre-painted steel equal to: Lamhex Meteon exterior laminate, (Lamhex Tel 132 136), or Seratone Siversaal (Halifax Vogel tel 1300 558 882). Covers: aluminium channel 40 x 20 U shaped, powdercoated Note: painted FC sheet not acceptable. Roof frame All roof bracing in accordance with Code. Hipped roof areas Gang nail softwood trusses @ 900 centres or as required, to Timber Framing Code / engineers spec. Roofing battens: 90 x 45 MGP on flat. Ceiling battens: MGP @ 450 cts or Rondo turning channels. Flat roof areas Timber rafters (MGP or LVL or Hybeam are acceptable), to Timber Framing Code / engineers spec. Roofing battens MGP Graded to falls. Ceiling battens: MGP @ 450 cts or Rondo turning channels.	Internal Linings Rooms: 10 mm plasterboard. Tape and set to MI Wet areas: 6.5 mm Vitraboard with recessed edges. Skirtings + Architraves Skirtings: 90 x 20 finger jointed RP, paint finish. Architraves: 45 x 20 finger jointed RP, paint finish. Ceilings 10 mm plasterboard ceiling equal to Supacell. Insulation: R3.0 polyester insulation above all ceilings. Cornice: living areas: square set. Cornice: all other areas: standard 90 cove. Windows: aluminium Frames/sash: fixed and sliding aluminium equal to Vantage / Capital / Lidco / Bradnams semi commercial series, refer elevations. Finish: powdercoat / natural anodised, refer colour schedule Glazing: in accordance with Aust. Standards. Louvres (L): Brezeway 150, clear 6.38 laminated glazing.

**SPECIFICATION, SCHEDULE OF MATERIALS + FINISHES
FERNBROOK STAGE 3 @ WARRIEWOOD, HOUSE TYPE A, LOTS 321, 324, 327**

Sliding doors: aluminium	Joinery: Wardrobes
Frame/sash: sliding aluminium equal to Vantage / Capral / Lidco / Bradhams semi commercial series.	Carcass: Paint finished MDF. Top shelf @ 1800, sides as required, CP hanging rail. Doors: sliding aluminium, mirror finish.
Note: multiple sliding sashes as shown on elevations.	Joinery: Kitchen
Sash: multiple sliding and fixed (F) as shown	Carcass: Water resistant foil faced MDF. Doors + drawer fronts: 2 pack polyurethane paint finish. Bench tops: mid range select light coloured granite. Splashbacks: colour backed glass.
Glazing: in accordance with Aust. Standards, min 6.38 laminated to all doors.	
Hardware: Integral handles/keyed locks, centre of door.	
Front door: Solid core	Kitchen Appliances
Frame: aluminium equal to Vantage / Capral / Lidco / Bradhams semi commercial series.	Oven: Smeg, SS, SA410X Cooktop: Smeg, SS, SAR64X Exhaust hood: Slim Jim 60 Dishwasher: Smeg, SS, SA623X Excluded: Fridge, microwave, washing machine, clothes dryer
Finish: to match sliding doors.	
Sash: solid core masonite faced door, paint finish.	
Hardware: Lockwood 591 series, latch and deadlock	
Internal doors: swing solid core	Tiling: Bathrooms and Laundries
Frame: 135 x 45 RP rebated frames.	Refer Di Lorenzo Ceramics, contact David Isola tel 8818 2999. Wall: select 100 x 100 ceramic tiles, stack bond, white grout, allow \$50/sqm supply Floor tiles: select 50 x 50 mosaic tiles, square bond, cement grout, allow \$50/sqm supply
Doors: Hollow core, masonite faced for paint finish.	
Architraves: 45 x 20 finger jointed RP, paint finish.	
Hardware: tubular latch and SC lever passage set, privacy latch to bathroom and guest WC.	
Garage Door	Floor finishes Schedule
Colorbond panelift door, motorised remote control.	Living room: Carpet, allow \$80/sqm supply and lay. Entry/Hall, Dining, Family, kitchen: floating timber floor, refer Bell's Carpet, Geoff Arnold 9602 5184, Allow \$120/sqm Bedrooms, corridors: Carpet, allow \$80/sqm supply and lay.
Sunshade	Fittings and Fixtures Schedule
Main frame: ex 125 x 65 Channel, refer detail drawing	All equal in specification and quality to items listed:
Battens: 45 x 45 CCA treated battens @ 60 centres.	
Pergolas	Sanitaryware
Main frame: 200 HDG PFC bolt fix to columns paint finish	Toilet Suite: Fowler Newport Close Coupled WC (3 off) Bath: Caroma Siring 1675 x 770 x 390 (1 off)
Rafters: 20 x 50 CCA, connect to walls, PFC frame	Joinery basins: Caroma Liano square semi recessed (2 off) Wall hung basin : Caroma Flora 500 with shroud (1 off) Kitchen Sink: Franke 1.5 bowl umount ARX 110-33/35 (1 off) Laundry tub: Clark 45 L Single Inset Flushline, (1 off)
Battens: 45 x 45 CCA treated battens @ 100 centres.	
Stairs: timber	Tapware
Timber framed stairs: boxed risers and treads in RP on RP stringers, screw fixed to walls, 20 x 20 trims to stringers.	Shower: Caroma Liano AAA rated/head with mixer Basin: Caroma Liano AAA rated basin mixer Bath: Caroma Liano AAA rated bath spout + mixer Kitchen: Caroma Liano sink mixer
Finish: carpet.	
Balustrade: ex 100 x 100 timber rail, steel brackets to wall.	
Joinery: Bathroom	
Carcass: Water resistant foil faced MDF.	
Doors + drawer fronts: 2 pack polyurethane paint finish.	
Bench tops: 20 reconstituted stone, polished edges.	
Splashbacks: tile to match wall tile.	

Laundry: Tub: Inwell Retro, WM taps: Inwell Retro tapset
Floor wastes: 100 square CP to laundry + bathrooms.
Accessories
Towel rails: Industrial Expressions Conquest
Hand Towel rail: Industrial Expressions Conquest
TRH: Industrial Expressions Conquest
Mirrors: wall mounted mirror over vanity units (2 off)
Shower Screens: Semi frameless, anodised aluminium frame

External works
Refer landscape plan
End of Specification

Hydraulics
Sewer: 100 uPVC pipe to connect all fixtures to sewer.
Water supply: 19 dia copper pipe, insulate for hot lines.
External taps: 3 external taps
Hot Water Supply: Rinnai 26 instantaneous gas
Gas line: gas supply to HWS cooktop, bayonet outlet (2 off).
Stormwater: roof water connected to tank, see below.
Ground drains and sumps connected to stormwater system.

Rainwater tank
Min 6300 Litre underground rainwater tank located as shown, Rain-masta or Halgan tanks, with leaf and dirt screening and fitted with internal pump. Overflow to stormwater system.

Electrical
Underground power supply.
Meter Box: gal. steel top hinged, including ELCB all circuits.
Refer electrical plan, generally as follows:
GPO's + Switches: Clipsal / HPM Excel range
Lights: living: T5 electronic fluorescent in pendants
Bedrooms: ceiling mounted oyster fitting
Kitchen: Bath: 6 off fluorescent downlights.
Smoke detectors: to BCA code requirements
Telephone: category 5 line 3 outlets.
TV aerial/cable TV not included.

Painting
Waltyl paints throughout.
Externally: 2 coats external grade, satin finish.
Hardlex (HTP): Granosite texture coat
External metalwork: 1 coat metal primer, 2 coats gloss enamel
External WRC or HW: 2 coats oil based stain.
Internal plasterboard walls: 2 coats acrylic wash and wear
Ceilings: 2 coats acrylic flat
Internal doors: 1 coat primer, 1 coat gloss enamel
Skirtings etc.: 1 coat primer, 1 coat gloss enamel



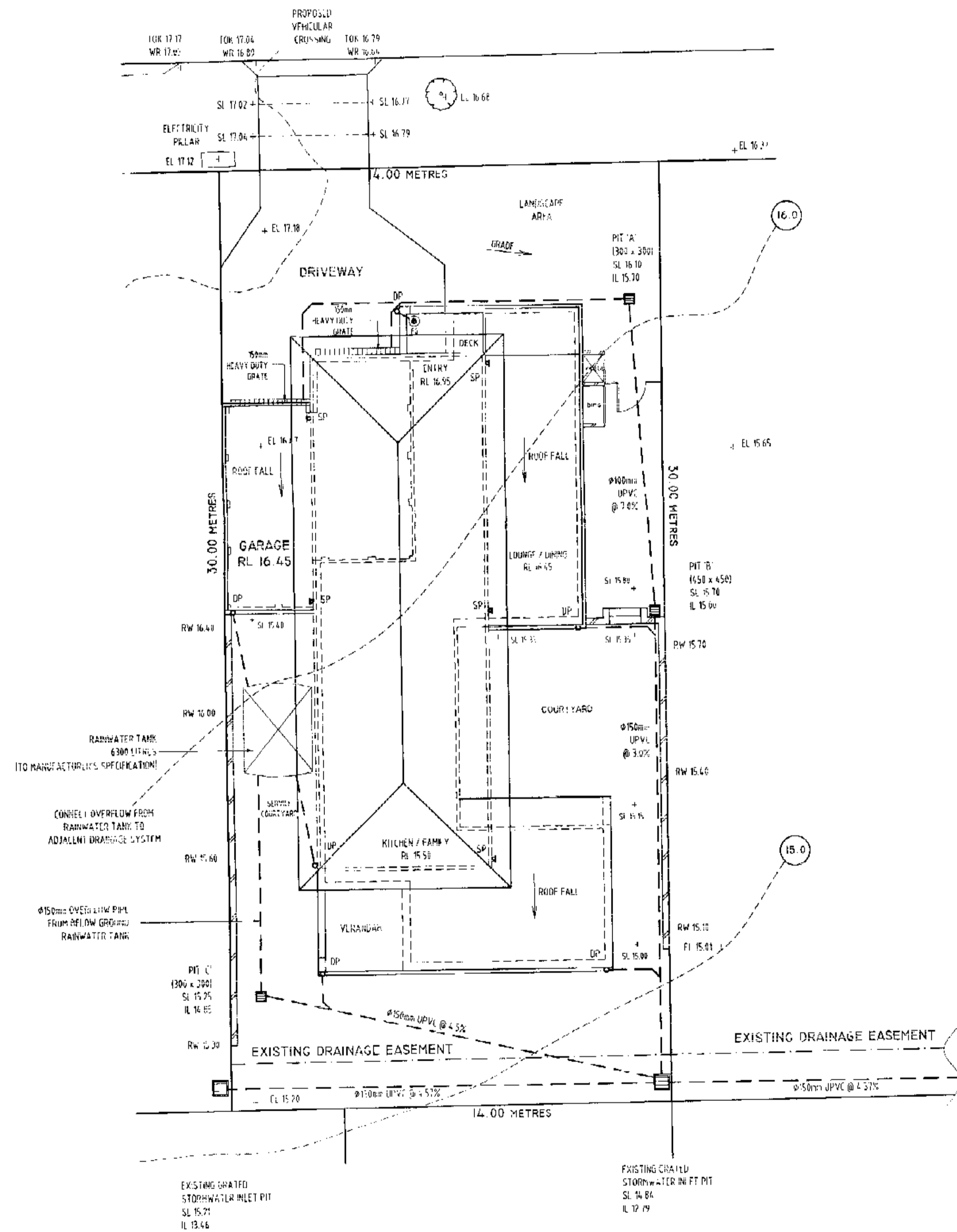
ORCHARD STREET

NOTES: SERVICES
NO EXCAVATION IN FOOTWAY WITHOUT CHECKING FOR DEPTH AND LOCATION OF SERVICES

NOTES: ROAD RESERVE & FOOTWAY DRAINAGE ELEMENTS
ALL DRAINAGE ELEMENTS PROPOSED WITHIN THE ROAD RESERVE AND FOOTWAY SHALL BE CONSTRUCTED UNDER THE SUPERVISION AND TO THE SATISFACTION OF COUNCIL'S ENGINEER

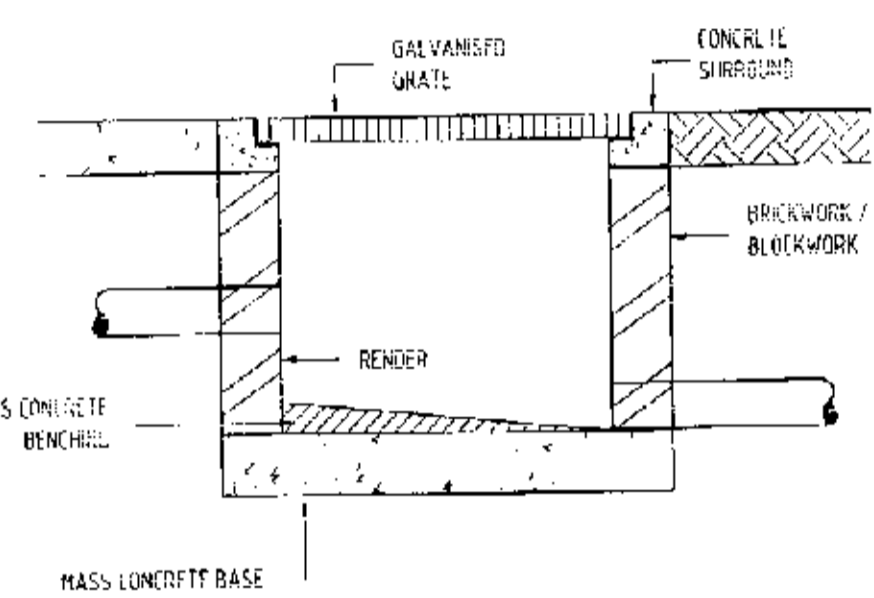
NOTES: COUNCIL ISSUED FOOTWAY DESIGN LEVELS
COUNCIL'S ISSUED FOOTWAY DESIGN LEVELS TO BE INCORPORATED INTO THE FINISHED LEVELS ONCE ISSUED BY MILWAUKEE COUNCIL

NOTE: RETAINING WALLS & 'AGG' LINES
ALL RETAINING WALLS ARE TO BE WATERPROOFED AND CONSTRUCTED WITH 200MM AGRICULTURAL LINES AT THE BASE AND CONNECTED TO THE NEAREST PIT IN THE COURTYARD.

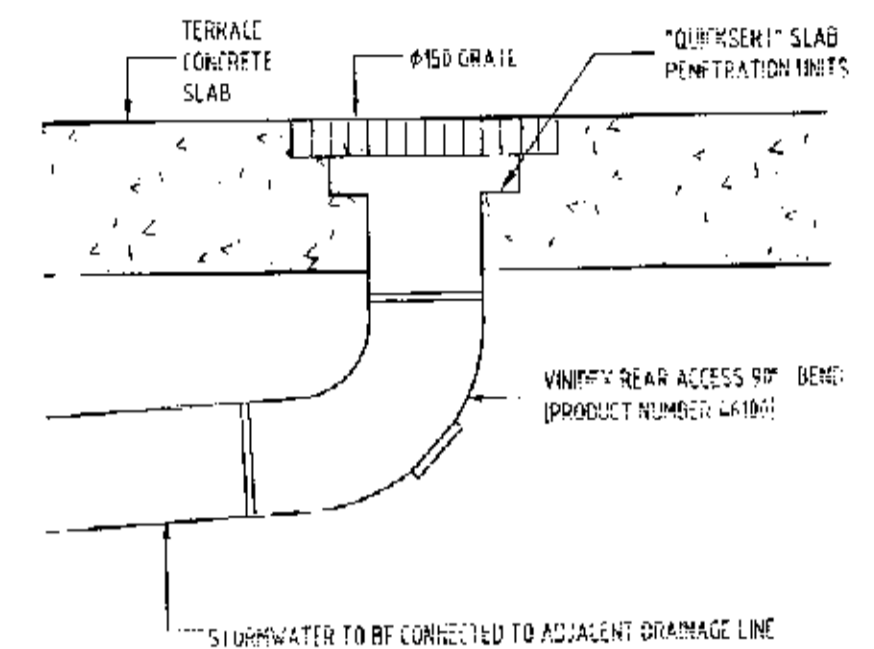


STORMWATER DRAINAGE PLAN

SCALE 1:100



TYPICAL PIT DETAIL
NTS



FLOOR GRATE DETAIL (FG)
NTS

NOTES: RAINWATER TANKS

- RAINWATER TANK CAPACITY OF 6000 LITRES
- THE SYSTEM IS TO BE DESIGNED WITH THE FOLLOWING GUIDELINES:
 - A FIRST FLOOR DIVERSION TO REMOVE ROOF CONTAMINANTS
 - SUDDEN STOPPING TO PREVENT MOSQUITO BREEDING AND ENTRY OF ANIMALS OR FOREIGN MATTER
- TANKS TO BE PUMPED TO TOP UP FROM THE POTABLE WATER SUPPLY DURING DRY PERIODS WHEN THE TANKS ARE 80% EMPTY.
- NO DIRECT CROSS-CONTAMINATION WITH THE SUPPLY WATER POTABLE SUPPLY AND AN AIR GAP MAINTAINED ABOVE THE OVERFLOW IN THE TANK.
- A SIGN TO BE INSTALLED STATING 'NON POTABLE WATER'.
- OVERFLOW FROM THE TANK SHALL BE PIPED TO OVERFLOW PIPING AND DIRECTED TO THE DRAINAGE SYSTEM NEAREST DOWNPIPE.
- PIPE WORK USED SHALL BE COLOURED PURPLE IN ACCORDANCE WITH AS 1547. ALL VALVES AND APERTURES SHALL BE CLEARLY AND PROMINENTLY LABELLED WITH SAFETY SIGNS TO COMPLY WITH AS 1519.
- FUNCTION OF AN AUTOMATIC REGULATION SYSTEM TO THE RAINWATER TANK TO PREVENT FULL UTILISATION OF THE STORED WATER AND TO MAINTAIN THE REQUIRED REGULATION RATE.

LEGEND:

○	150mm UPVC
●	SPRINGER
○	EL - 1.30.00
○	EL - 1.30.00
○	EL - 1.30.00
○	EXISTING LEVEL 49.45
○	PROPOSED SURFACE LEVEL 49.45
○	PROPOSED INVERT LEVEL 49.45
○	PROPOSED WATER MIN LEVEL 49.45
○	TOP OF KERB LEVEL LEVEL 49.45
○	TOP OF RETAINING WALL 49.45
○	KERB SLEET PIT

NOTES:

- ALL WORK SHALL BE IN ACCORDANCE WITH THE BUILDING CODE OF AUSTRALIA AS 1539.3, COUNCIL'S STANDARD SPECIFICATIONS AND THE SATISFACTION OF COUNCIL'S SUPERVISING OFFICER.
- THIS PLAN IS TO BE READ IN CONJUNCTION WITH THE ARCHITECTURAL, LANDSCAPE AND STRUCTURAL PLANS.
- PROPOSED GRADES FOR ALL PIPES - LOS.
- DRAINAGE SURFACE FLOW TO ALL GRATED SURFACE SLEET PITS.
- ALL DESIGN LEVELS SHOWN ON PLANS SHALL BE VERIFIED ON SITE PRIOR TO THE COMMENCEMENT OF ANY WORK.
- ALL DISCREPANCIES OR OMISSIONS SHALL BE REFERRED TO THE DESIGN ENGINEER FOR RESOLUTION.

ACE CIVIL & HYDRAULIC ENGINEERS

PROPOSED RESIDENTIAL DWELLING
AT (LOT 321) 17 ORCHARD STREET
WARRIEWOOD N.S.W. 2102

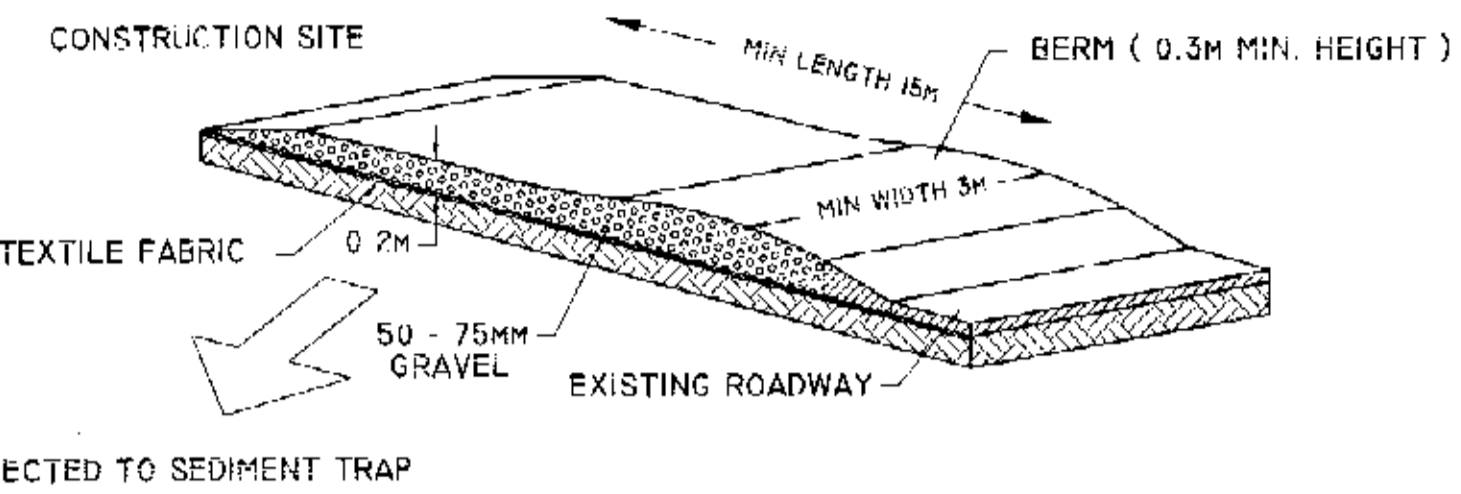
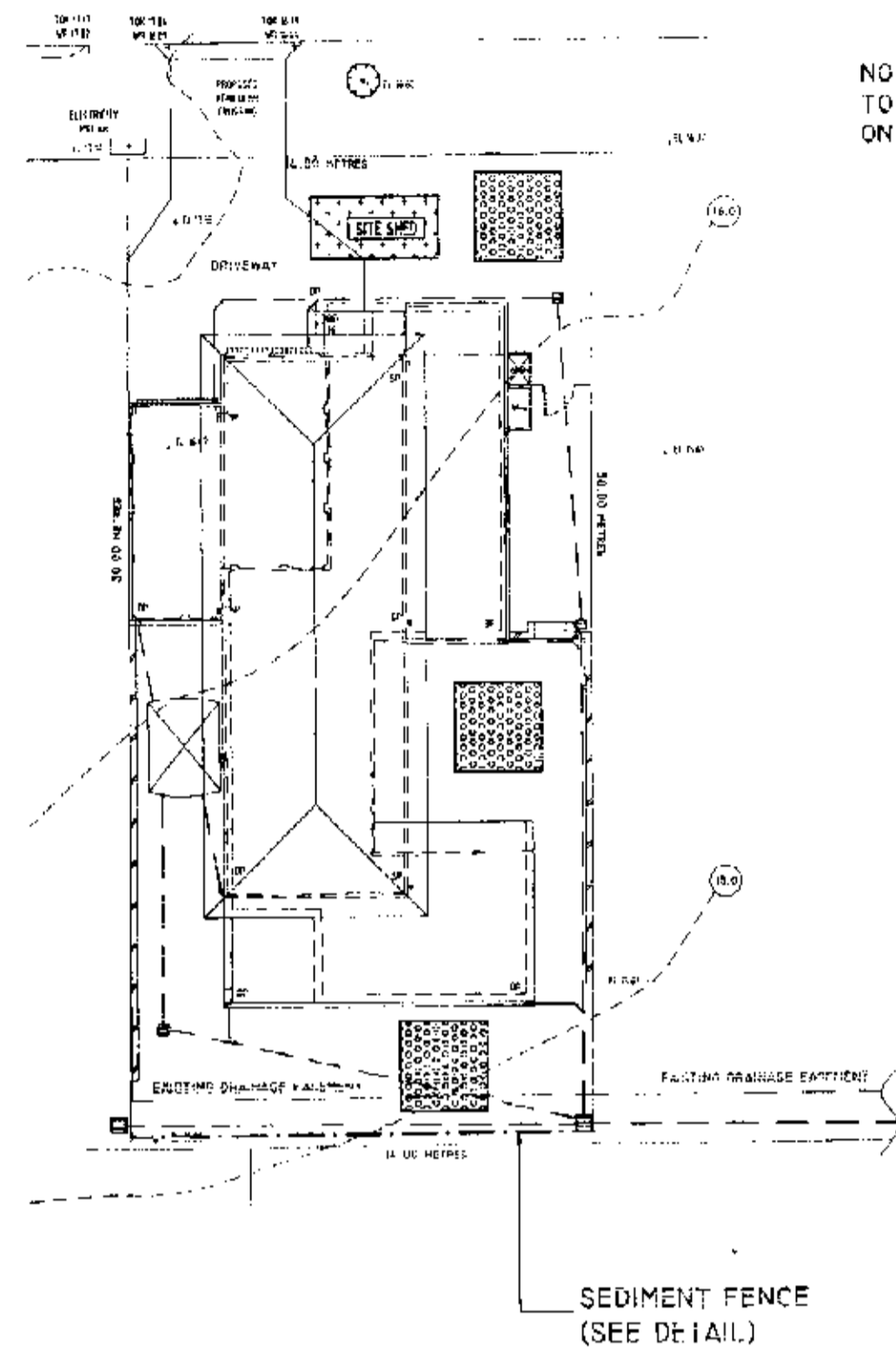
DESIGNED: PAUL ARRAJ	DATE: 20.10.2004
BE, GRADIE(AUST), P. Eng	DRAWN BY: P.A.
ACE - CIVIL & HYDRAULIC ENGINEERS	SCALE: AS SHOWN
8 LEIGHDON STREET BASS HILL, NSW, 2197 PHONE / FAX: (02) 9790 7921 MOBILE: 0412 331151 EMAIL: arraj@smatchat.net.au	0405-26 DRAWING No.: SHEET No. 1 No. OF SHEETS: 2
HYDRAULIC PLAN	A1

ORCHARD STREET

NOTES: SERVICES
 NO MATERIALS OR FOOTPATHS TO BE STORED ON FOOTPATHS FOR ACCESS TO SERVICES

SITE ACCESS
 TEMPORARY CONSTRUCTION
 ENTRY / EXIT
 (SEE DETAIL)

NO MATERIAL
 TO BE STORED
 ON FOOTPATH

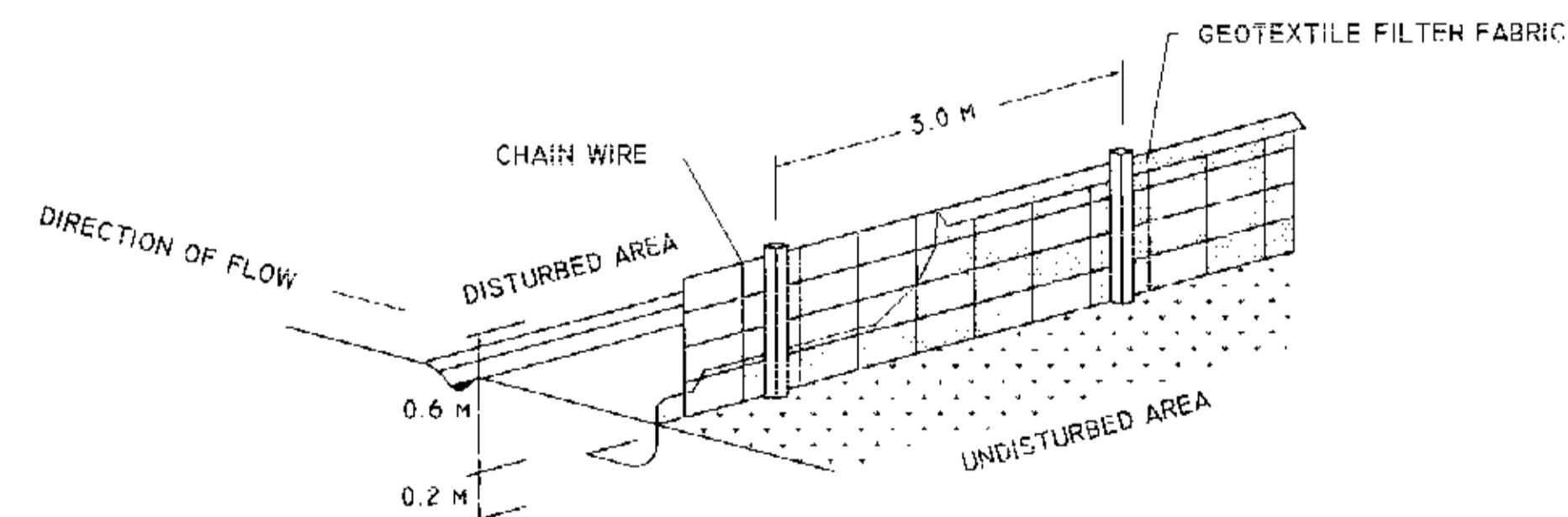


**TEMPORARY CONSTRUCTION
 EXIT / ENTRANCE**
 N.T.S.

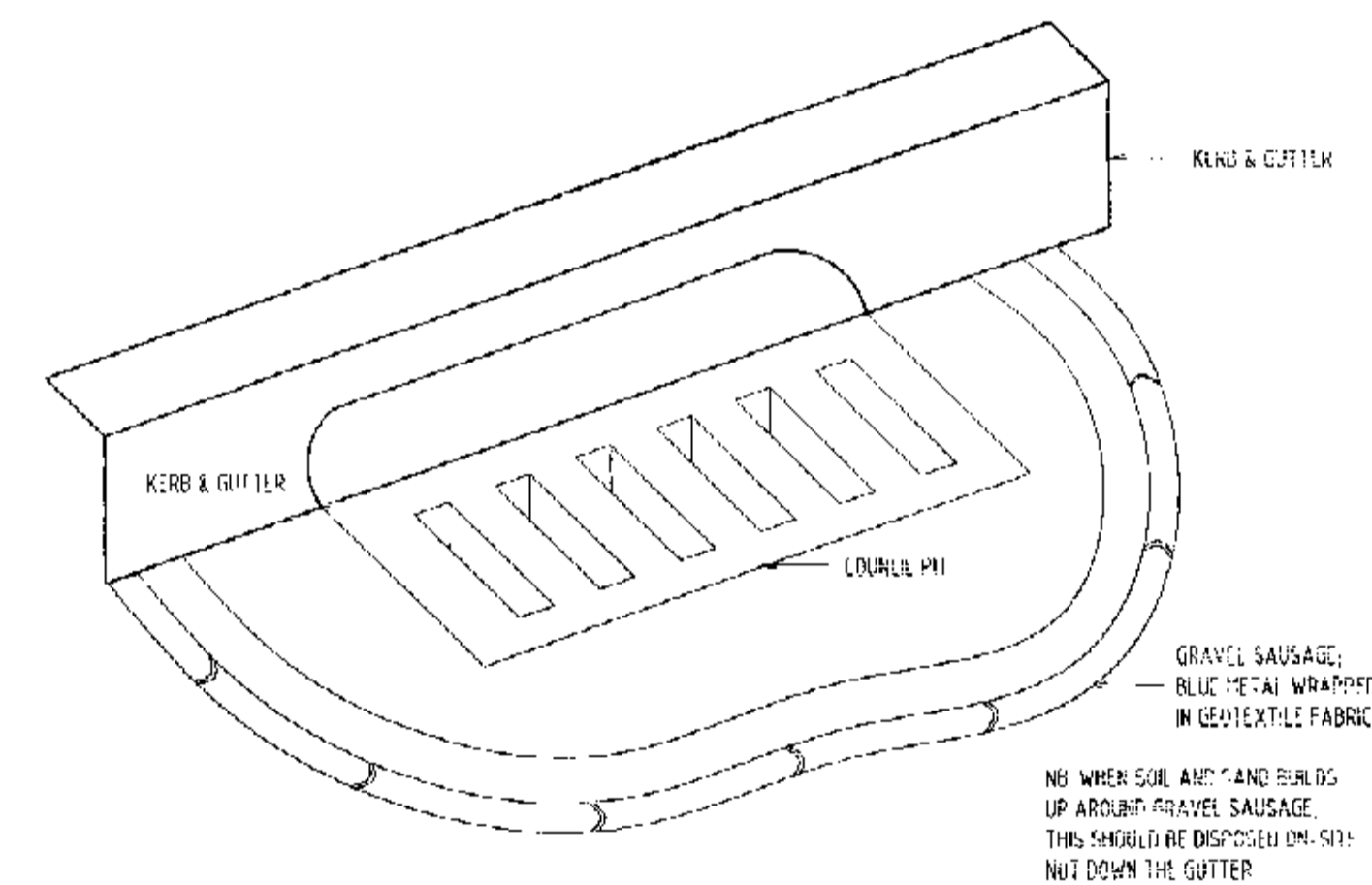
SOIL & WATER MANAGEMENT PLAN

SCALE 1:200

NB: PROVIDE SEDIMENT FENCE ALONG THE FULL LENGTH OF THE SOUTHERN BOUNDARY AND CLEAN AND MAINTAIN DAILY.



SEDIMENT FENCE
 N.T.S.



GRAVEL SAUSAGE - GUTTER PROTECTION
 N.T.S.

NB: PLACE GRAVEL SAUSAGE AROUND THE NEAREST DOWNSTREAM COUNCIL STORMWATER PIT IN ORCHARD STREET & GREVILLEA AVENUE.

LEGEND

DP	DOWN PIPE
SP	SPREADER
[Symbol]	STORMWATER INLET PIT
[Symbol]	STOCKPILE AREA

- NOTES: SOIL & WATER MANAGEMENT**
1. ALL EROSION AND SEDIMENT CONTROL MEASURES TO BE INSPECTED AND MAINTAINED DAILY BY SITE MANAGER.
 2. MINIMISE DISTURBED AREAS.
 3. ALL STOCKPILES TO BE CLEAR FROM DRAINS, GUTTERS AND FOOTPATHS.
 4. DRAINAGE IS TO BE CONNECTED TO STORMWATER SYSTEM AS SOON AS POSSIBLE.
 5. ROADS AND FOOTPATH TO BE SWEEPED DAILY.
 6. NO MATERIAL TO BE STORED ON FOOTPATH.
 7. IF YOU DO NOT COMPLY YOU MAY BE LIABLE TO A \$1500 FINE.

ACE CIVIL & HYDRAULIC ENGINEERS

PROPOSED RESIDENTIAL DWELLING
 AT (LOT 321) 17 ORCHARD STREET
 WARRIEWOOD N.S.W. 2102

DESIGNED: PAUL ARRAV	DATE: 20.10.2004
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HYDRAULIC PLAN	A1

