

URBAN APPROVALS

Principle Certifying Authority: Accredited Consultants, BCA Certification, Marking

21 January 2005

General Manager
Pittwater Council
PO Box 882
Mona Vale 1660

R/160344
\$ 30.00

Dear Sir or Madam,

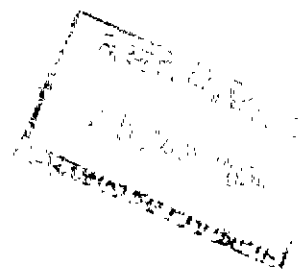
RE: 9 & 11 Orchard Street, Warriewood

Please find enclosed *Construction Certificates* issued in respect of the subject development consents.

Should you have further enquires do not hesitate to contact me on **1300 30 44 20**.

Yours faithfully

Warrick Norris



Enclosure:

URBAN APPROVALS PTY LTD 1/100 DUFF STREET

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: 9 Orchard Street
Suburb: WARRIEWOOD
Lot(s): 325
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:

A handwritten signature in black ink, appearing to read 'W B Norris', is written over a dotted line.

.....

Certification Details

4. Particulars

Determination: ☒ Approved ☐ Refused

Construction Certificate

Determination Date: 21 January 2005

Construction Certificate No.: PC32704

Building Code of Australia

Classifications: 1a & 10a

DA Consent No. and Date: N0222/04

Building Details: Two storey dwelling

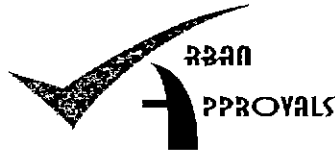
5. PCA's Certification Statement

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:  19 January 2005

6. Construction Certificate Attachments

- ☐ ACE Hydraulic Engineer's Plans drawing number 0405-30 A1 (Sheets 1-2)
- ☐ Signed Urban Approvals Pty Ltd Application Forms
- ☐ Photographic Survey by Maincom Pty Ltd (previously supplied)
- ☐ Plans by Maincom Pty Ltd A101/325- A202/323 Issue A dated 22/11/04
- ☐ Structural engineers plans numbered 6915 – (01, 02, 59a,60,61a & 62)
- ☐ Long Service Levy form numbered 0233617
- ☐ Letter from Maincom dated 18.01.05



Construction Certificate Application

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

Receipt of Application

Date:

Delivery by:

(Must not be by facsimile)

Signed by Urban Approvals:

6/12/04
Hand Post Electronic Transmission
W. Balans

Application & Site Details

1. DA, Consent Details:

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

DA No.:

Consent No.:

Consent Date:

Building Code of Australia

Classification:

(As specified on the Consent)

NO 222/04
07 July 2004

2. Applicant:

Family/Company Name:

Given Names/ACN:

Postal Address:

Phone:

Facsimile:

Contact Person:

MANCOM
23 080 619 174
6-11A GREEN AVE
PENRITH 2750
4722 6900
Jimmy Dargatzis

3. Owner(s) of Property:

Family/Company Name:

Given Names/ACN:

Postal Address:

Phone:

STOCKLAND
157 Liverpool St.
SYDNEY

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

Street No & Street: 9 ORCHARD ST.
Suburb: WARRIEWOOD
Lot(s): 325
Section:
Deposited Plan(s): 1065723
Strata Plan:
Other:

5. Description of Building Work:

Detailed Description: TWO STOREY HOME

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

\$ 359,358.00

8. Builder/Owner Builder

Name: MAINCOM
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
SURVEY

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: 01/12/02

Building Schedule

Area of Subject Property (m2) 420 m²	Gross Area of existing building (m2) 258 m²
Gross floor area of proposed addition/ building (m2)	Current use(s) of the buildings/ land VACANT.
Proposed use(s) of the building/ Land 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)	Aluminium (70)	Concrete (20)	Timber (40)
Full Brick (11)	Concrete (20)	Timber (10)	Steel (60)
Single Brick	Concrete Tile (10)	Other (80)	Other (80)
Concrete Block (11)	Fibrous Cement (30)	Unknown (90)	Unknown (90)
Concrete/Masonry (20)	Fibre Glass (80)		
Steel (60)	Masonry Shingle (10)		
Fibrous Cement (30)	Terracotta Shingle (10)		
Hardi-Plank (30)	Tiles (10)		
Timber (40)	Slate (20)		
Weatherboard (40)	Steel (80)		
Aluminium Cladding (70)	Terracotta Tiles (10)		
Curtain Glass (50)	Other (80)		
Other: (80)			

Certificate of Insurance

Maincom Pty Ltd
Locked Bag 89
PENRITH NEW SOUTH WALES 2751

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

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: November 04, 2004
Declared Building Contract Value: \$359,358 85
(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. 9
Orchard Street
WARRIEWOOD NEW SOUTH WALES 2102

Permit Authority: Pittwater Council

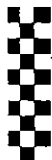
Subject to the Act, the Home Building Regulation 1997 and the conditions of the insurance contract, cover will be provided to a beneficiary described in the contract and successors in the title to the beneficiary. Please note when the Insurer has issued this certificate, the Insurer is not entitled to 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.

N QP08IT4FRCG3

Printed 18/11/2004

Signed for and on behalf of the insurer:

Insurer: Vero Insurance Limited ABN 48 005 297 807



-DEC. '04 (MON) 10:40

ENV. SERVICES

TEL: 97899323

P. 002

p132704

DESIGN STATEMENT

Pursuant to the provisions of Part 4A of the Environmental Planning and Assessment Regulations 2000

Project Description: Residential Dwelling

Project Address Lot 325 - 9 Orchard Street Warriewood

Name of person providing statement: Paul Arraj

Qualifications: B.E. (CIVIL), Grad E, P. Eng

Firm: ACE Civil & Hydraulic Engineers

Address of firm: 8 Leighdon Street Bass Hill, NSW, 2197

Contact details: Ph 9790 7921 or Mobile: 0412 331 151

Hereby certify:

That the hydraulic plan (Job No 0405-30) prepared by ACE Civil & Hydraulic Engineers, is based on the architectural details listed below and has been designed to comply with the Australian Standards, conditions of development consent, Councils Policies, as listed below and the Building Code of Australia.

Architectural details prepared by: edko architecture

Australian Standards: AS/NZ 3500.3.2:1998

Conditions of Development Consent: NO222/04 - (Conditions B20, B23b, B26a, B27a, B29 and B29a)

Council Policy: Pittwater Council

Signature:

Date:

30/11/04



Locked Bag 89
Penrith NSW 2751
6/119 Coreen Ave
Penrith NSW 2750

Phone: (02) 4722 5900
Fax: (02) 4722 3200
Email: info@maincom.net
Web: www.maincom.net

18 January 2004

Mr Warrick Norris
21 Tukara Road.
South Penrith NSW 2750

Dear Mr Norris,

RE: No. 9 and No. 11 Orchard St. Warriewood

Construction Certificate No. PC32804 and PC32704

As per your letter dated on the 07 December 2004 all matters have been resolved and noted below.

1. **Certificate for driveway:** The driveways for No. 9 and 11 orchard street Warriewood Will be constructed in accordance and to satisfy council policy DCP E3 and as per condition B28 of the consent..

I hope all this meets with the requirements.

Yours Faithfully,

Jimmy Daaboul
Project Manager
0425 276 016
MaincomP/L



& Construction Industry

LONG
SERVICE
PAYMENTS
CORPORATION

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

LEVY PAYMENT FORM

0233617

PLEASE PRINT ALL DETAILS USING CAPITALS

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

Surname (if person) or Company/Organisation Name **MAINCOW**
Given Names (if person)
ABN (if applicable) **23080619774**
POSTAL ADDRESS No. and Street or P.O. Box **6/114 COREEN AVE**
Town/Suburb **PENRITH**
State **NSW** Postcode **2750** Business Hours Phone No. **47225900**

Part B - ADDRESS OF BUILDING/CONSTRUCTION WORK

No. and Street **9 ORCHARD ST**
Town / Suburb **WARRIEWOOD**
State **NSW** Postcode **2102**
Estimated Start Date **10/12/2004** Estimated Finish Date **10/07/2005**

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

Local Council Area **PITTWATER**
D.A.C.C./C.D.C. No. (circle which) **N0222/04**
Estimated value of work \$ **359,358:00** Levy Payable \$ **718:00**

Signature of Officer/Private Certifier **Warrick Norris** Date: **2/1/05**
Name of Officer/Private Certifier **Warrick Norris** Business Hours Phone No. **1300304420**
(Private Certifier)

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)
Contact Phone Number
Signature:
Date: / /

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: **Jimmy Danboy** Date: **01/12/04**

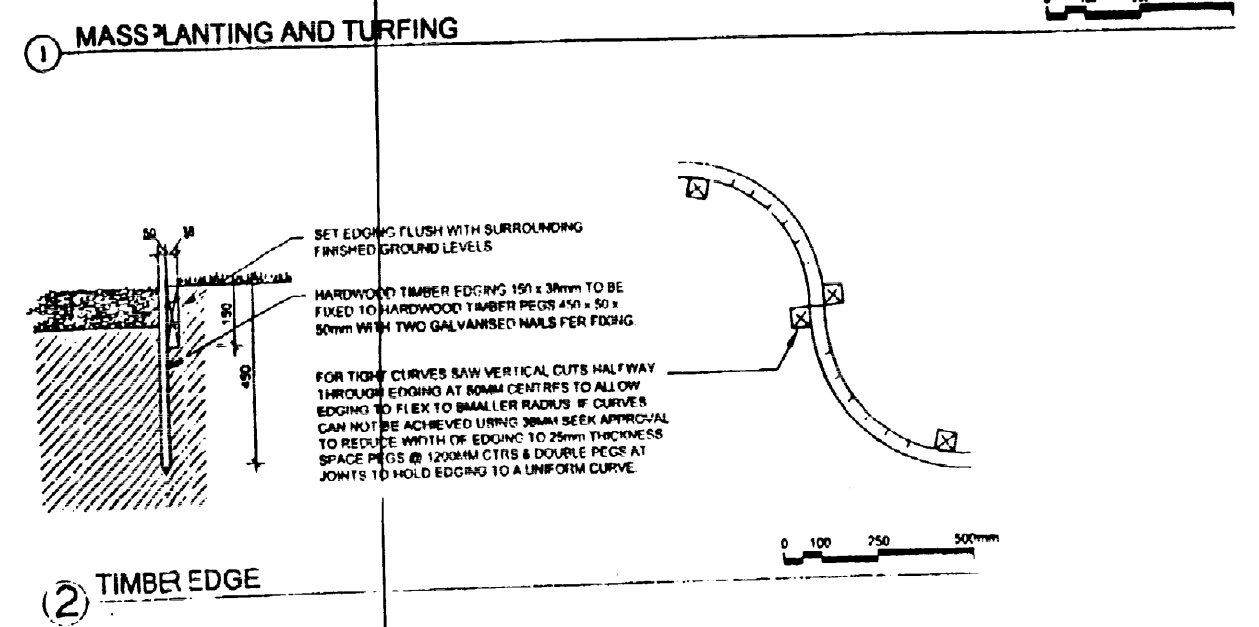
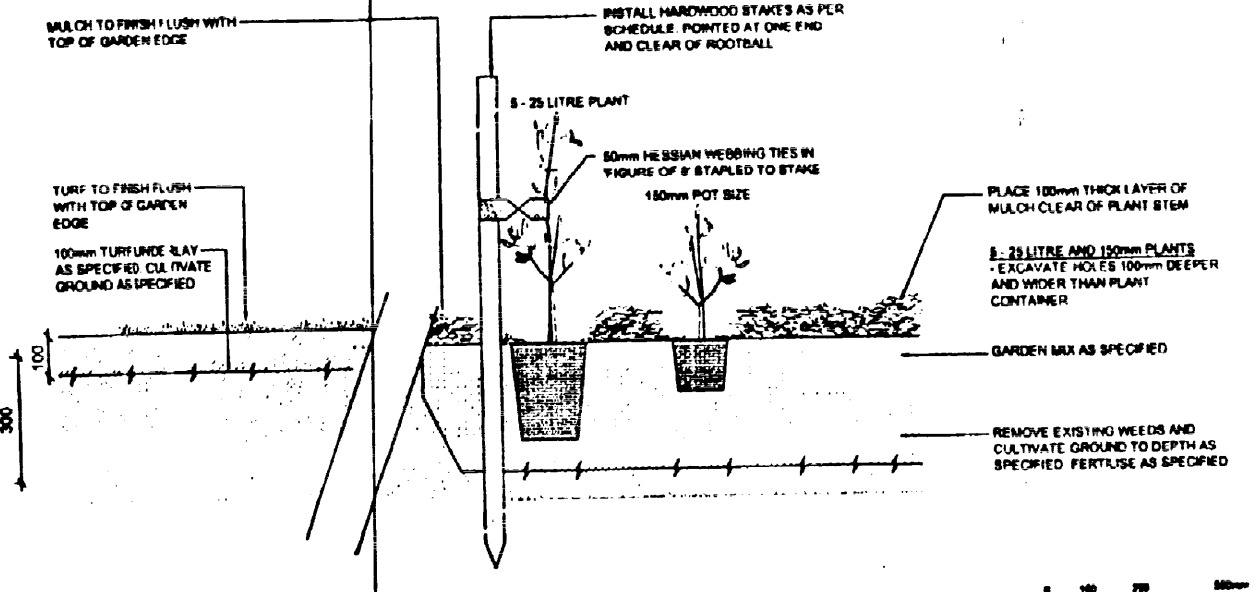
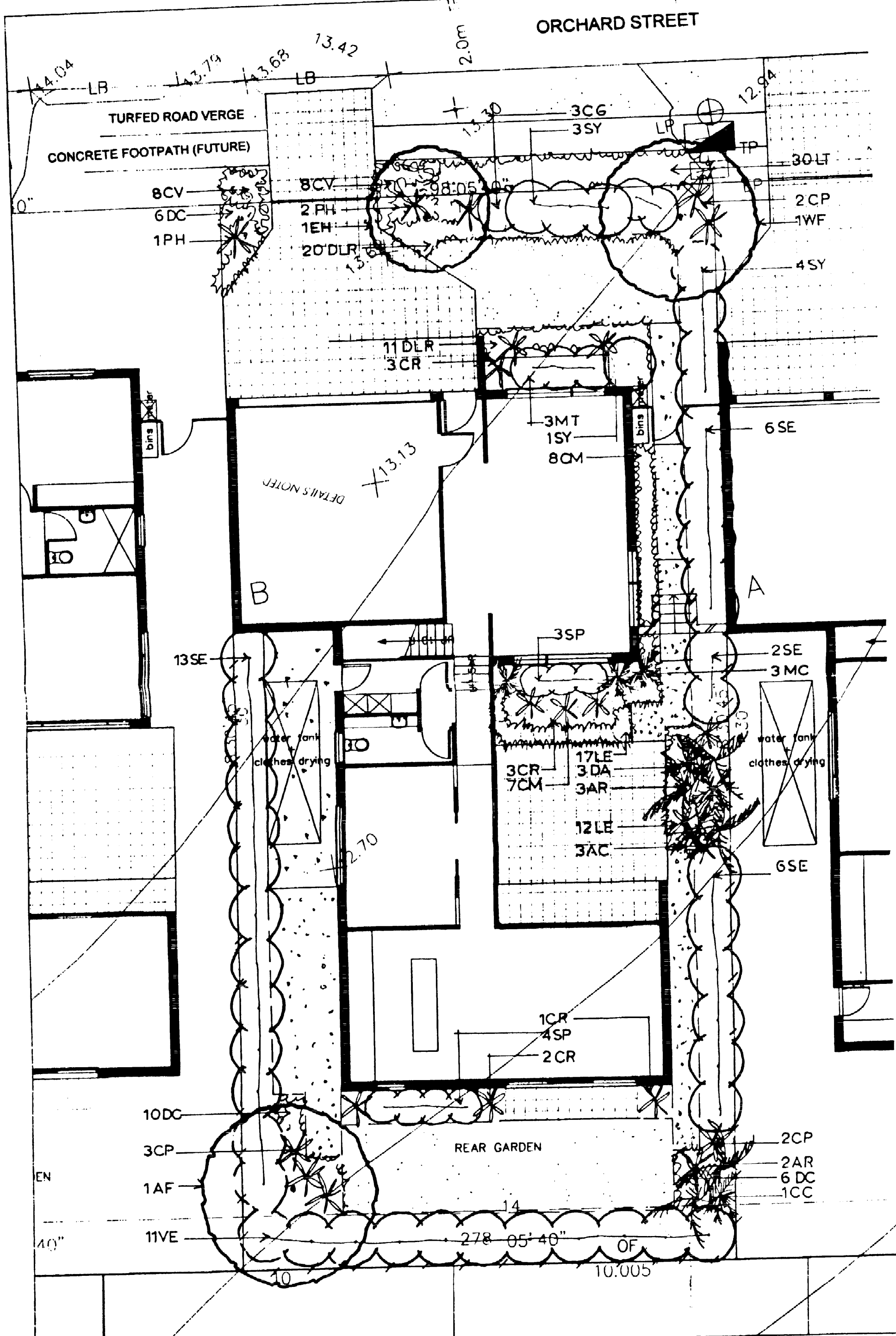
NOTE: Any false or misleading information provided on this form may result in prosecution under Section 58A

Print name: **Jimmy Danboy**

Part F - TO BE COMPLETED WHERE APPLICABLE - SEE REVERSE

Exemption Approval Certificate No.



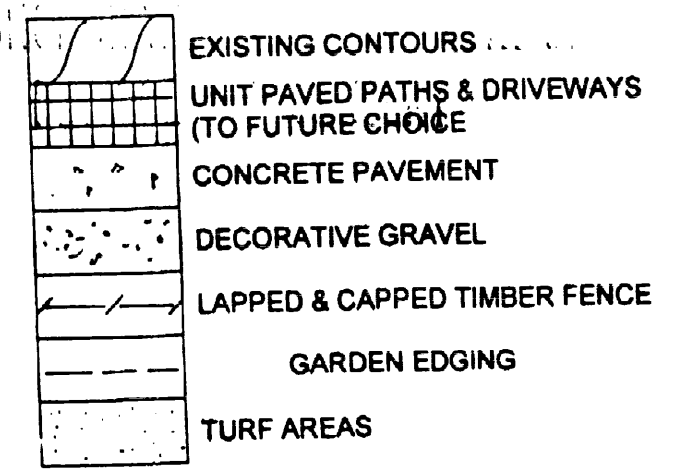


PLANT SCHEDULE

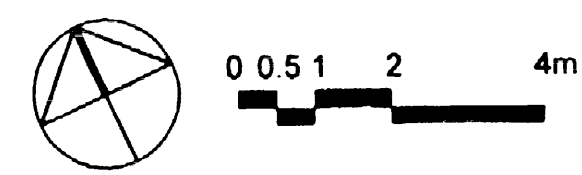
Sym	Species	Common Name	Mature Height	Qty	Pot Size	Spacing	Staking
TREE SPECIES							
AF	Angophora floribunda	Rough Barked Apple	18.0m	1	45 litre	As shown	2 x 50 x 50 x 1800
EH	Eucalyptus haemastoma	Scribbly Gum	15.0m	1	45 litre	As shown	2 x 50 x 50 x 1800
WF	Waterhusia floribunda	Giant Water Gum	15.0m	1	45 litre	As shown	2 x 50 x 50 x 1800
SHRUBS & HEDGES							
CG	Callistemon 'Great Balls of Fire'	Bottlebrush	1.0m	3	5 litre	1.0m	-
MT	Metrosideros 'Tahiti'	Metrosideros	1.5m	3	5 litre	1.2m	-
SY	Syzygium 'Cascade'	Lilly Pilly	1.5m	8	5 litre	1.2m	-
SE	Syzygium 'Elite'	Lilly Pilly	1.5m	27	25 litre	1.2m	-
SP	Syzygium 'Pathfinder'	Dwarf Lilly Pilly	1.0m	7	5 litre	-	-
VE	Viburnum 'Emerald Lustre'	Sweet Viburnum	2.0m	11	25 litre	1.5m	-
DETAIL PLANTS							
AC	Alpinia caerulea	Native Ginger	1.0m	3	5 litre	1.0m	-
CR	Cordyline 'Rubra'	Red Cordyline	1.0m	9	5 litre	1.0m	-
CP	Crinum pedunculatum	Swamp Lily	1.0m	7	5 litre	1.2m	-
CC	Cyathea cooperii	Rough Tree Fern	2.5m	1	25 litre	2.0m	-
DA	Dicksonia antarctica	Soft Tree Fern	1.5m	3	Var. trunk hts	2.0m	-
PH	Phormium 'Maori Maiden'	NZ Flax	1.2m	3	5 litre	1.2m	-
PALMS							
AR	Archontophoenix cunninghamiana	Bangalow Palm	4.0m	5	75 litre	1.5m	-
MC	Macrozamia communis	Burrawang Palm	1.5m	3	5 litre	1.5m	-
GRASSES & GROUNDCOVERS							
CM	Clivia miniata	Kaffir Lily	0.8m	15	5 litre	0.75m	-
CV	Convolvulus mauritanicus	Convolvulus	0.3m	16	150mm	0.5m	-
DC	Dianella caerulea	Flax Lily	0.5m	22	150mm	0.4m	-
DLR	Dianella 'Little Rev'	Dwarf Lilly Pilly	0.5m	31	150mm	0.4m	-
LE	Liriope 'Evergreen Giant'	Lily Turf	0.4m	29	150mm	0.4m	-
LT	Lomandra 'Tanika'	Dwarf Lomandra	0.4m	30	150mm	0.4m	-

APPROVED DEVELOPMENT CONCEPT

NOTE: LEGEND



Issue	Comments	Date
A	FOR D.A. APPROVAL	19-12-03
B	AMEND: REDUCED PAVING AREAS	9-02-04
C	CANOPY TREES AMENDED	21-4-04
	COUNCIL COMMENTS	



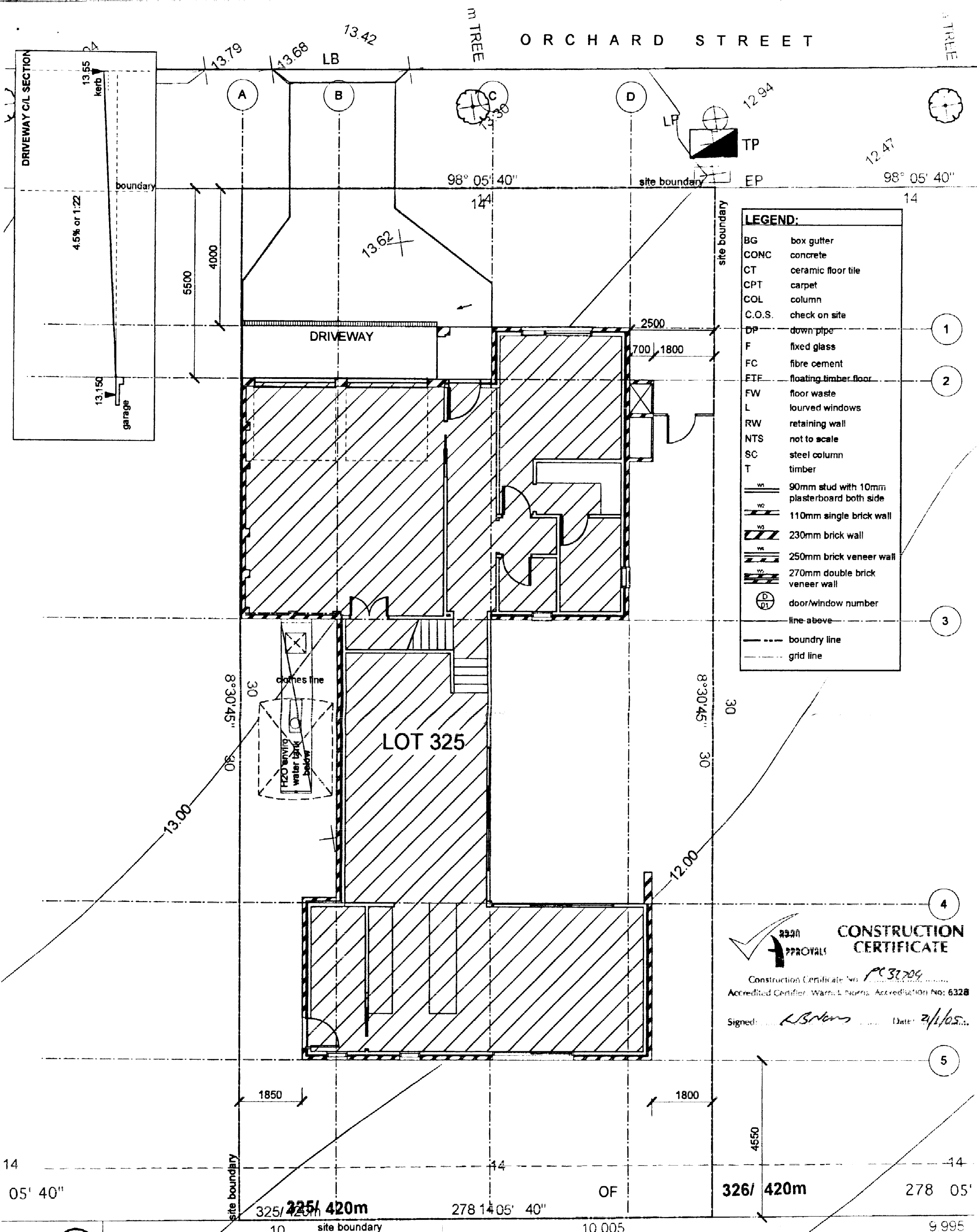
Stockland

Landscape Architects:
MATHUR & ASSOCIATES
LANDSCAPE ARCHITECTS
111 CATHARINE STREET
LEICHHARDT NSW 2040
PH: 02 9554 1100 FAX: 02 9554 5511
EMAIL: mat@mathura.com.au

Client: STOCKLAND TRUST GROUP
Project: FERNBROOK, STAGES 3 WARRIWOOD
Title: LANDSCAPE PLAN - LOT 325

Scale: 1:100
Date: DEC 03
Dwg. No.: L 01
Job No.: 0310105
Designed: DH
Drawn: DH
Checked: JD
Issue: C

12/12/2003 9:28 AM received_jsc@stockland.com.au



LEGEND:	
BG	box gutter
CONC	concrete
CT	ceramic floor tile
CPT	carpet
COL	column
C.O.S.	check on site
DP	down pipe
F	fixed glass
FC	fibre cement
FTF	floating timber floor
FW	floor waste
L	louvered windows
RW	retaining wall
NTS	not to scale
SC	steel column
T	timber
w1	90mm stud with 10mm plasterboard both side
w2	110mm single brick wall
w3	230mm brick wall
w4	250mm brick veneer wall
w5	270mm double brick veneer wall
D 01	door/window number
— — —	line above
---	boundary line
----	grid line

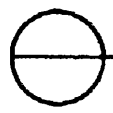
**APPROVALS**

CONSTRUCTION CERTIFICATE

Construction Certificate No. **PC 31704**

Accredited Certifier: **Warwick Morris** Accreditation No: **6328**

Signed: **LB Morris** Date: **2/1/05**

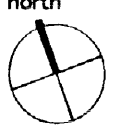
 **SITE PLAN**
SCALE 1:100

NOTES
all work to be carried out in accordance with bcg, sea 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 2760
P (02) 4722 5800 F (02) 4722 3200
E enquiries@maincom.net

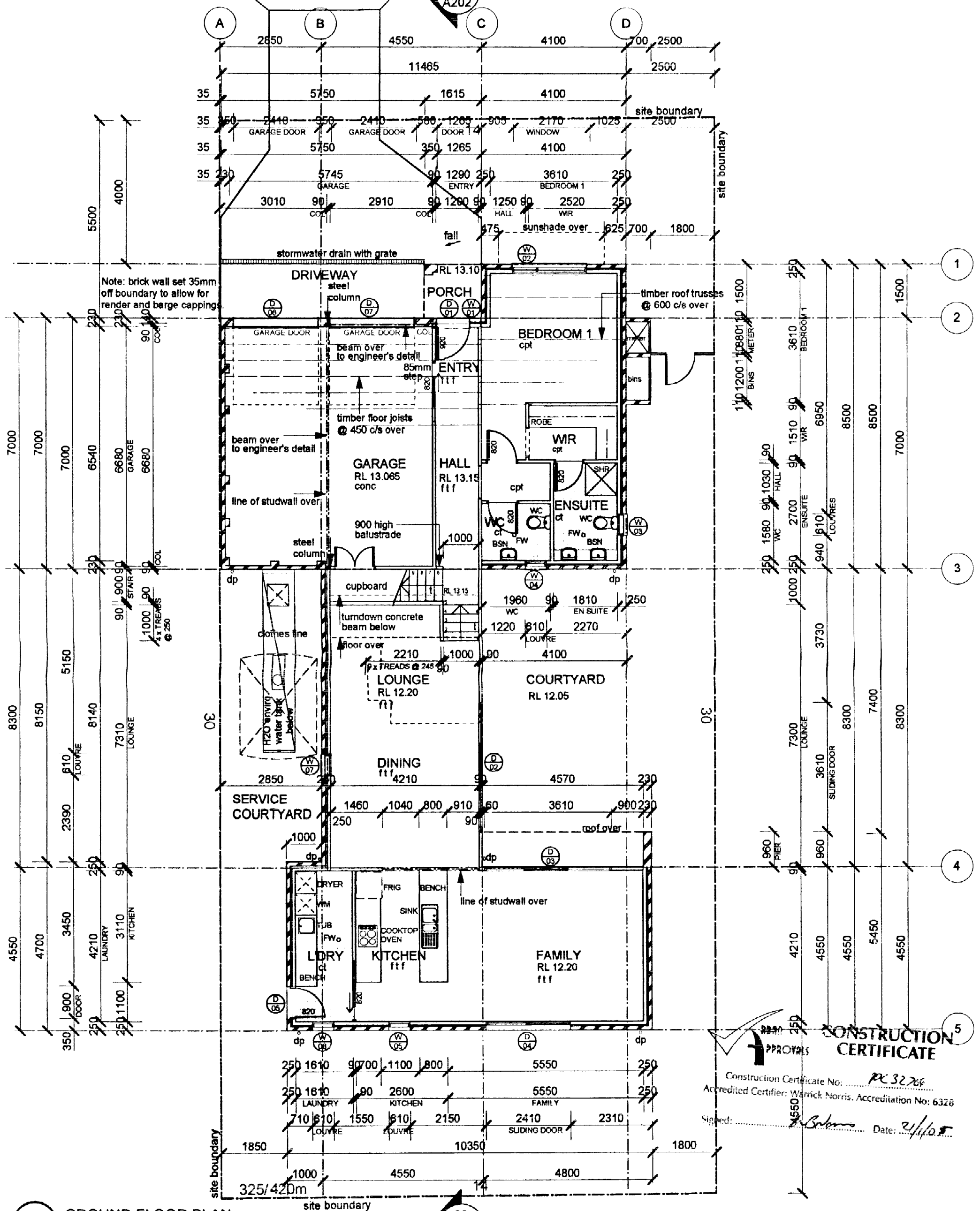
**north**

0m 1m 3m 4m



FERNBROOK -WARRIEWOOD		
Lot 326		
project		
SITE PLAN		
drawing		
1:100		
scale		

ISSUE		DATE		REVISION	
A		22/11/04		ISSUED FOR CC	
1704				Construction Certificate	
				stage	
WL				A101 - 325	
				dwg no.	
22.11.04				A	
				date	
				A	
				issue	



GROUND FLOOR PLAN
SCALE 1:100

NOTES

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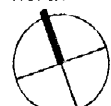


Stockland



Unit 6, 119 COREEN AVE. PENRITH NSW 2750
P (02) 4722 5000 F (02) 4722 3200
E enquiries@maincom.net

north



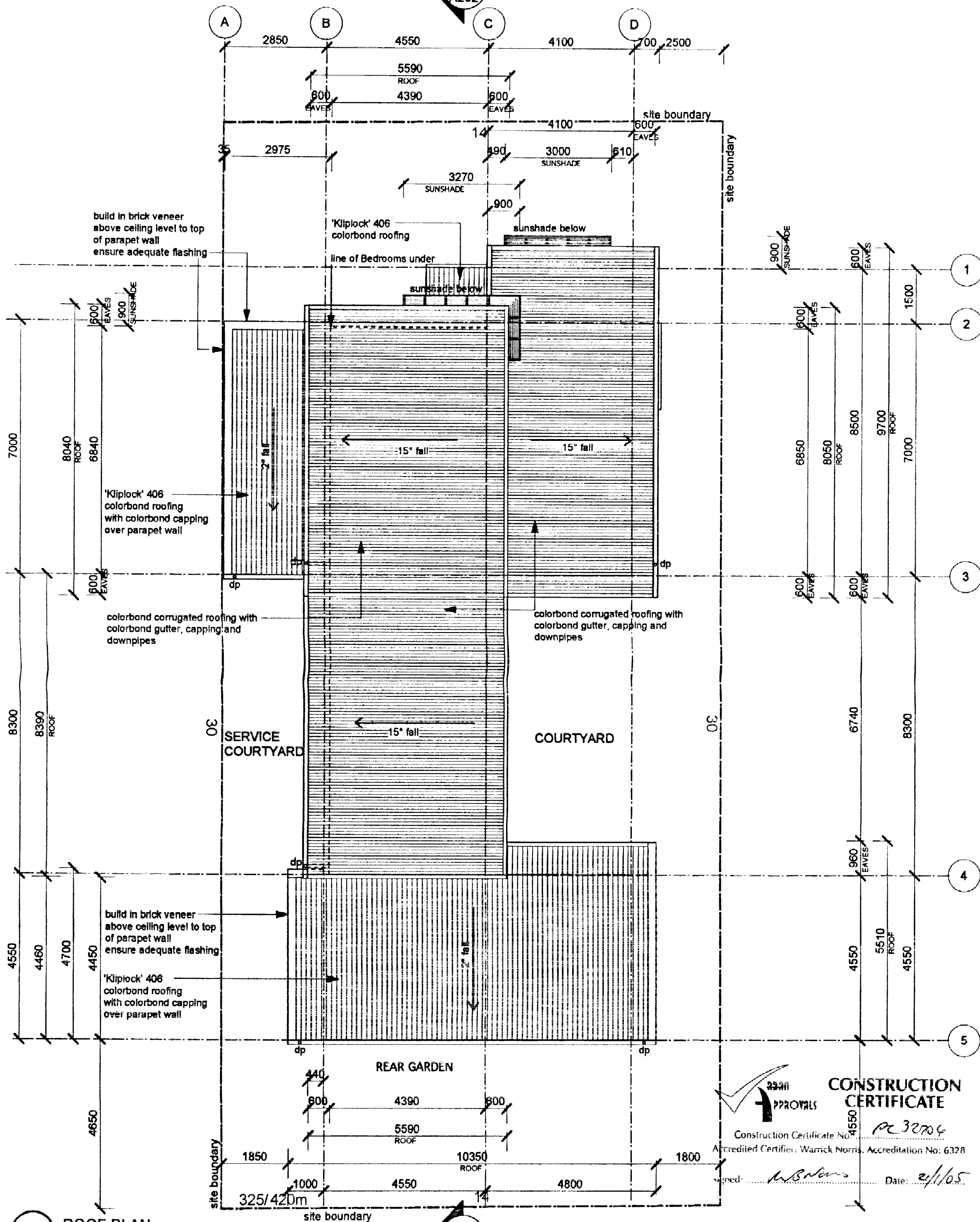
0m 1m 3m 4m

FERNBROOK-WARRIEWOOD
Lot 325
project

LEVEL 1 FLOOR PLAN
drawing

1:100
scale

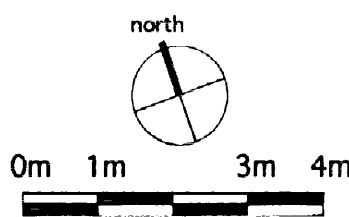
A 22/11/04 ISSUED FOR CC		Construction Certificate	
ISSUE	DATE	REVISION	
1704			stage
WL			stage
drawn/checked			stage
22.11.04			stage
date			stage
A			stage



ROOF PLAN
SCALE 1:100

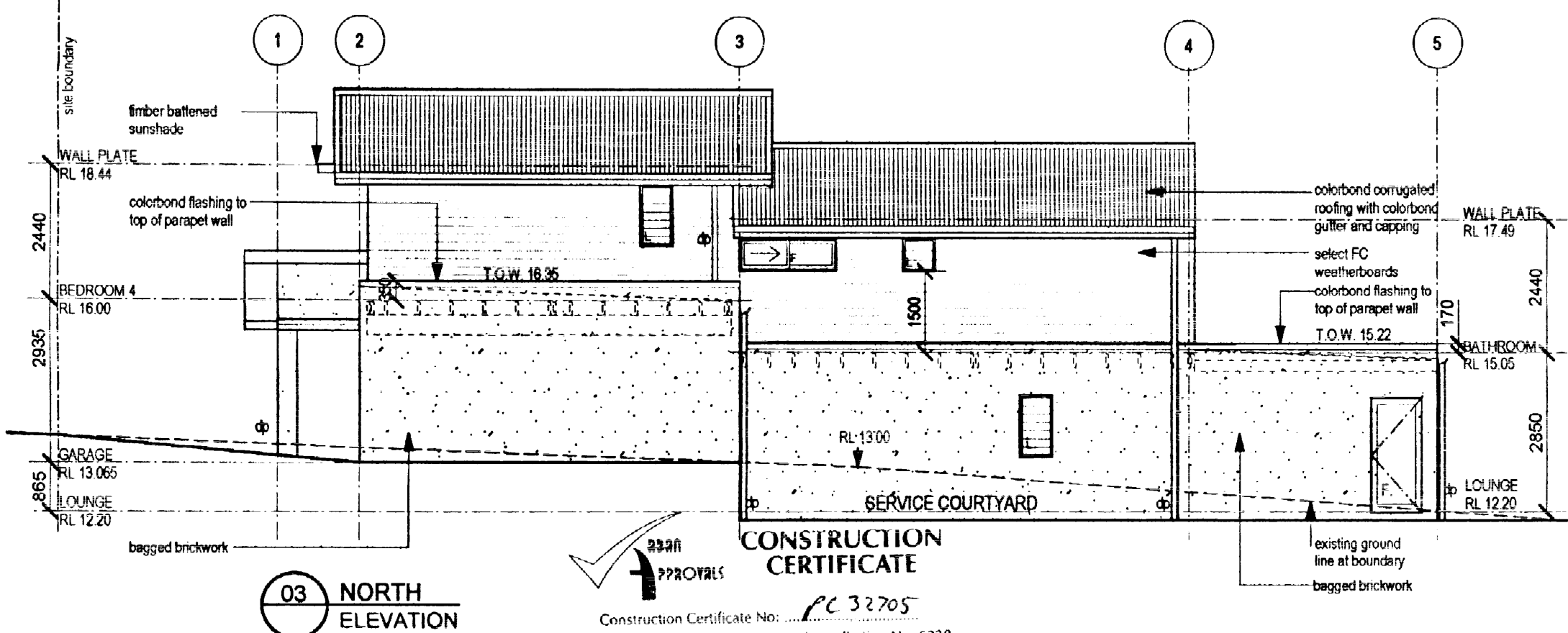
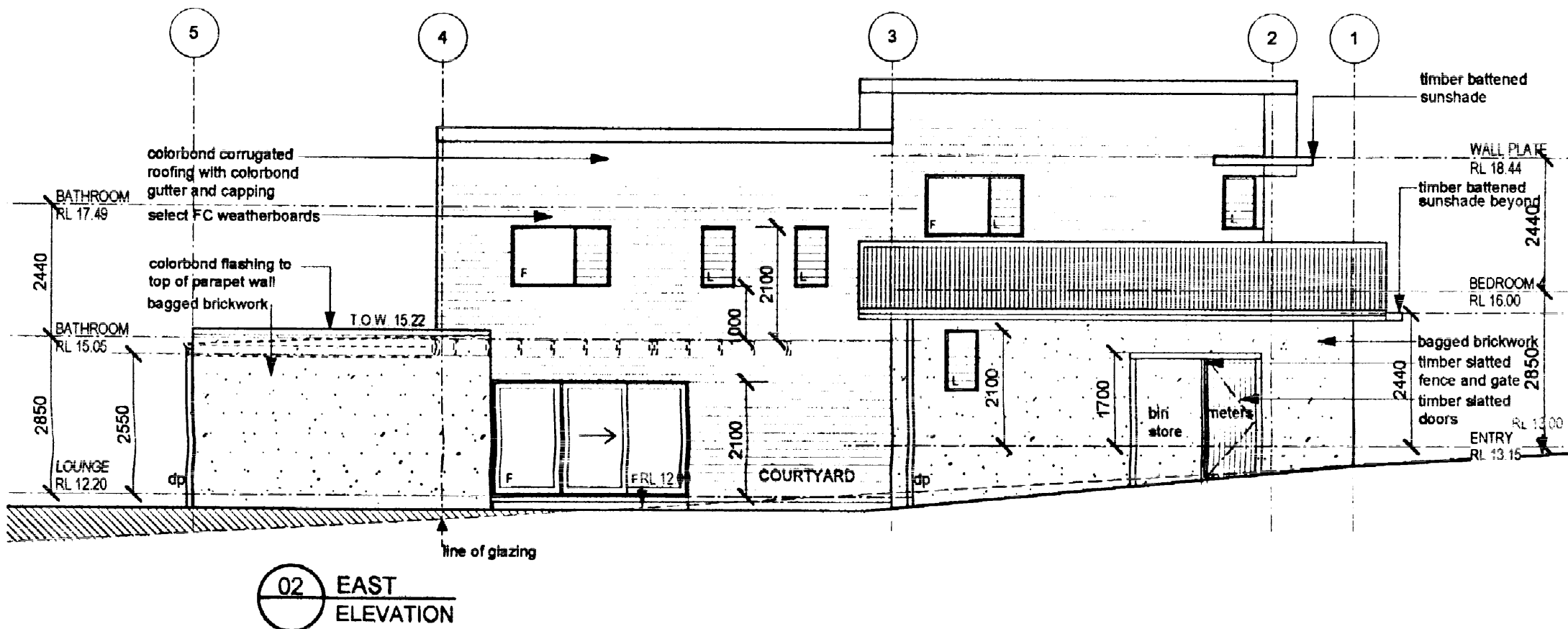
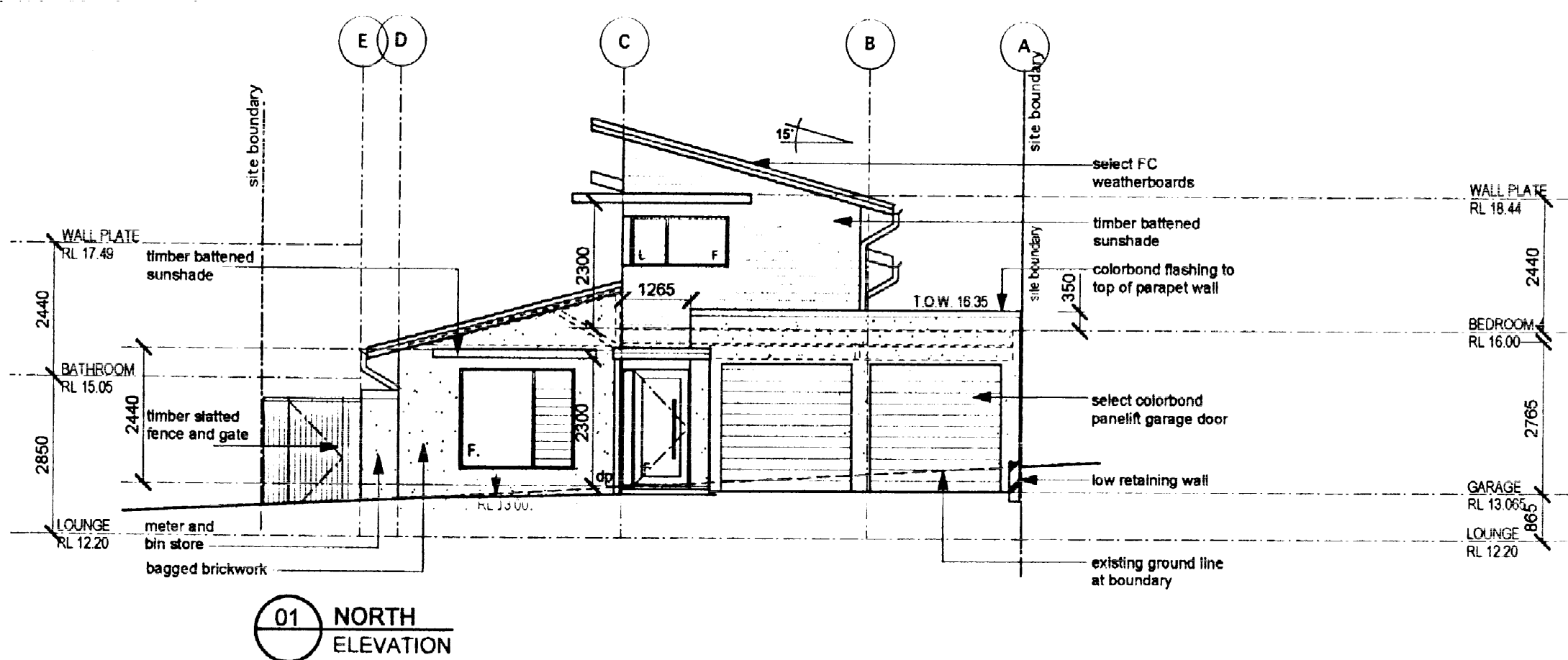
CONSTRUCTION CERTIFICATE
 Construction Certificate No. PC 32704
 Accredited Certifier: Warwick Norris, Accreditation No: 6328
 Signed: W. Norris Date: 2/1/05

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 325 project
ROOF PLAN
 drawing
 1:100 scale

ISSUE	DATE	REVISION
A	22/11/04	ISSUED FOR CC
1704		Construction Certificate stage
WL		A104 - 325 dwg no.
22.11.04		A issue



CONSTRUCTION CERTIFICATE

Construction Certificate No: PC 32705
 Accredited Certifier: Warrick Norris. Accreditation No: 6328
 Signed: W.B. Norris Date: 2/1/05

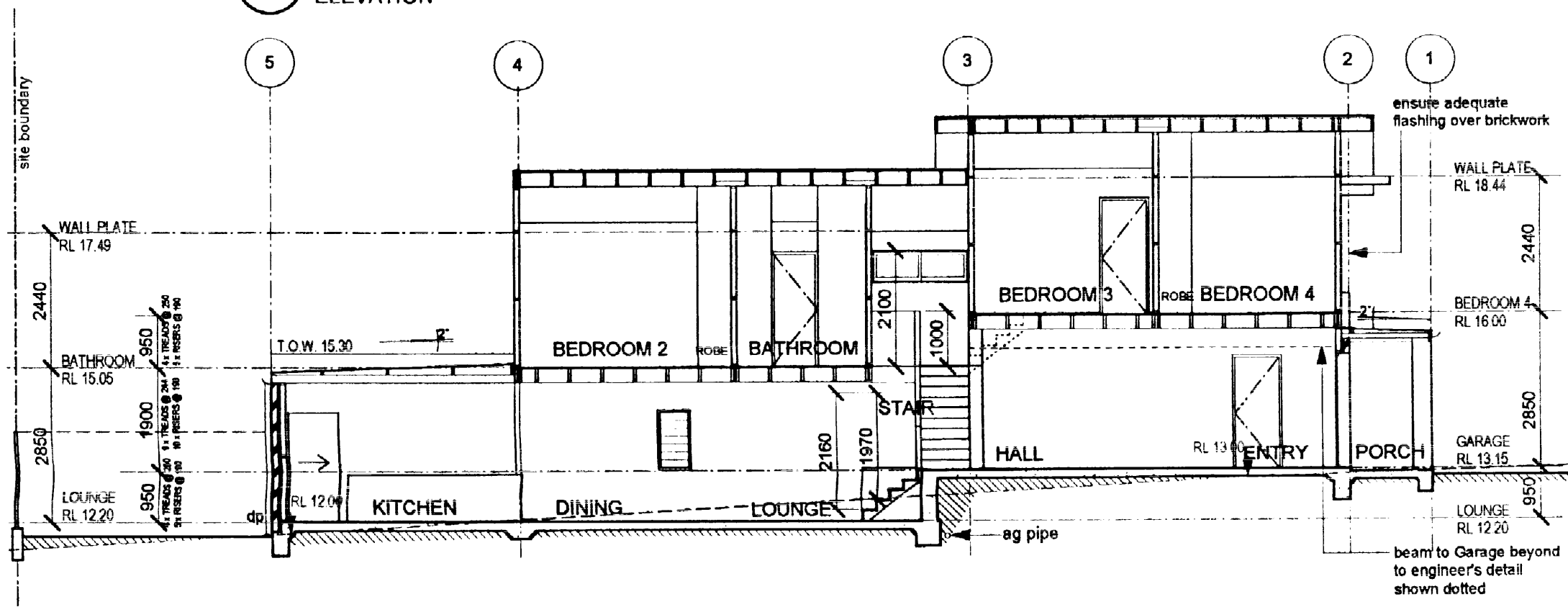
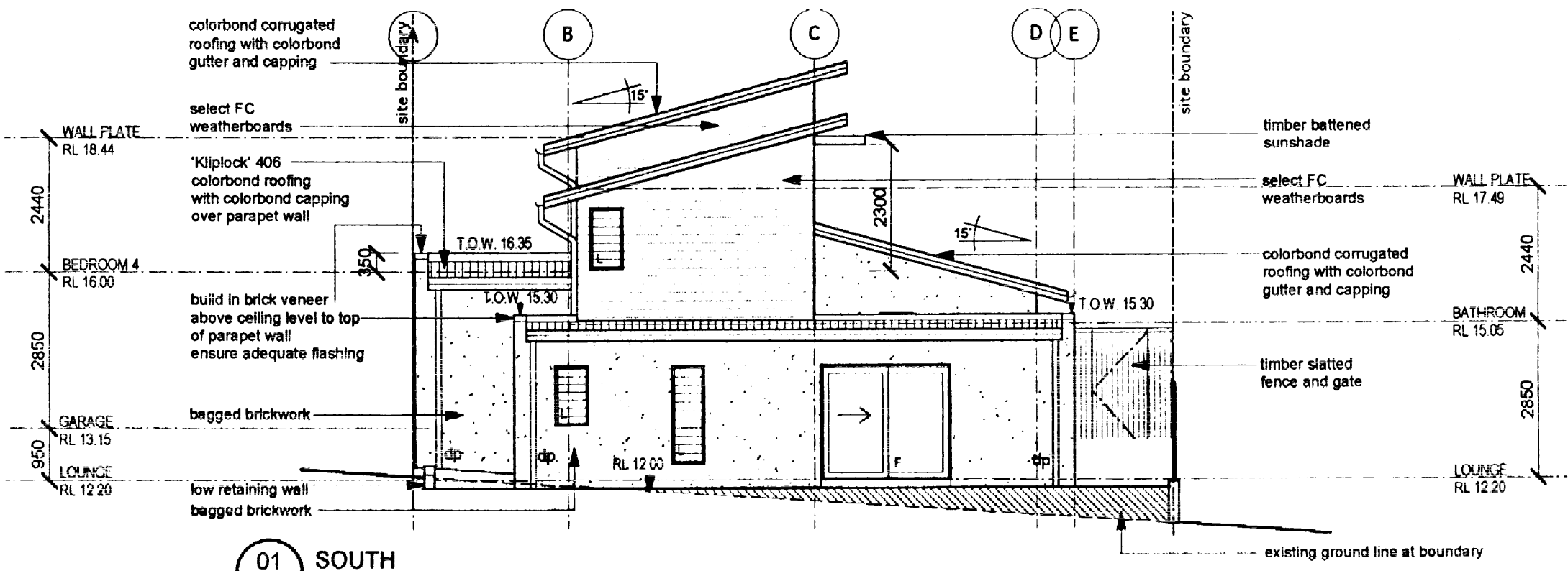
NOTES
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FERNBROOK - WARRIEWOOD
 Lot 325
 project
 NORTH, EAST + WEST ELEVATIONS
 drawing
 1:100
 scale

ISSUE	DATE	REVISION
A	22/11/04	ISSUED FOR CC
1704		job no.
WL		drawn/checked
22.11.04		date
A		rev.

Construction Certificate
 stage
A201 - 325
 dwg no.



CONSTRUCTION CERTIFICATE

Construction Certificate No: PC 32704

Accredited Certifier: Warrick Norris. Accreditation No: 6328

Signed: W. Norris Date: 21/1/25

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 326
project

**SOUTH ELEVATION,
LONGITUDINAL SECTION**
drawing

1:100
scale

A 22/11/04 ISSUED FOR CC	
ISSUE	REVISION
1704	Construction Certificate stage
WL	A202 - 325
drawn/checked	dep. no.
22.11.04	A
date	issue

Palitha S. Wijesena & Associates Pty Ltd

ABN 71 067 121 091

Consulting Civil & Structural Engineers

DETAILS NOTED

36 Doulton Drive, Cherrybrook, NSW 2126

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

			PROPOSED RESIDENCE AT:		Certified:	
			ALL LOTS		Lot 325	
			FERNBROOK ESTATE			
			WARRIEWOOD			
			FOR STOCKLANDS		Palitha S. Wijesena	
NOTE			FOR DRWGS -07 ONWARD, SEE DRWG 6915-00		B Sc.(Eng.): C.P Eng: M.I.E. Aust.: M.I.C.E. (U.K.): N.P.E.R.	
6915-06			TYP STAIR DETAIL (ALL LOTS)		Date:	
6915-05			TYP KOPPER LOG RETAINING WALL (ALL LOTS)		27.9.04	
6915-04			TYP BRICKWORK RETAINING WALL (ALL LOTS)		Drawing No:	
6915-03			TYP BLOCKWORK RETAINING WALL (ALL LOTS)		6915-01	
6915-02			GENERAL NOTES (ALL LOTS)			
6915-01			TITLE BLOCK (ALL LOTS)			
DWG No	REV.	DESCRIPTION	Builder:		Job No:	
			MAINCOM		Design:	
DRAWING SCHEDULE					Drawn:	AR

DESIGN LIVE LOADS

FLOORS 1.5 Kpa GARAGES 3.0 Kpa BALCONIES STAIR ROOFS

GENERAL NOTES:

1. 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.
2. Dimensions shall not be obtained by scaling.
3. All workmanship and materials to be in accordance with all current SAA Codes of Practice and Local Government Ordinances.
4. All vegetable soil including organic soil and roots to be removed from beneath all concrete work.
5. All footings to be founded in natural ground with bearing capacity specified.
6. Footings are not to be constructed in fill material.
7. 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.
8. Footing 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.
9. Depths of structural members are noted first on plan and includes slab thickness, followed by width of member.
10. Provide 200 um polythene membrane beneath slab joints, lapped 150 mm minimum and taped continuously.
11. Provide one layer of two ply Malthoid or similar between brickwork and underside of concrete surfaces.
12. Design based upon use of a trussed roof, conventional roof supporting, tiles/metal deck roofing.
13. 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.
14. The Owner's attention is drawn to appendix A of AS 2870 performance Requirements and Foundation Maintenance.
15. Site classified as Class M.
16. 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.
17. 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.
18. Formwork to remain in place for
19. 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:

1. All blockwork shall be constructed in accordance with AS 1475.
2. All blocks to be Class A to AS 1500.
3. All blockwork to be constructed in mortar 1:1:6.
4. 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:

1. All concrete work is to comply with AS 3600 and AS 2870.
2. Concrete mix to be $F_c' 20\text{MPa}$.
Maximum aggregate 20 mm Slump 80 mm.
3. Concrete cover to reinforcement in slabs 25 mm.
in footings 65 mm.
4. Concrete to be mechanically vibrated during placing.
5. 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:

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

BRICKWORK NOTES:

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

TIMBER NOTES:

1. Timber construction shall be in accordance with the requirements of AS 1684 Light Timber Framing Code and AS 1720 Timber Engineering Code.
2. Softwood structural timbers shall be F 7 grade or better and hardwood shall be f 11 grade or better, unless noted otherwise.
3. 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.
4. Internal stud walling shall be braced using "Gangnail 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.
5. Timber exposed to decay hazard shall be treated with "Tanolith" Creosote or similar preservative in accordance with AS 1604.
6. 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.
7. Major structural connections shall be bolted. The Builder shall obtain details from the Engineer if not shown on the drawings.

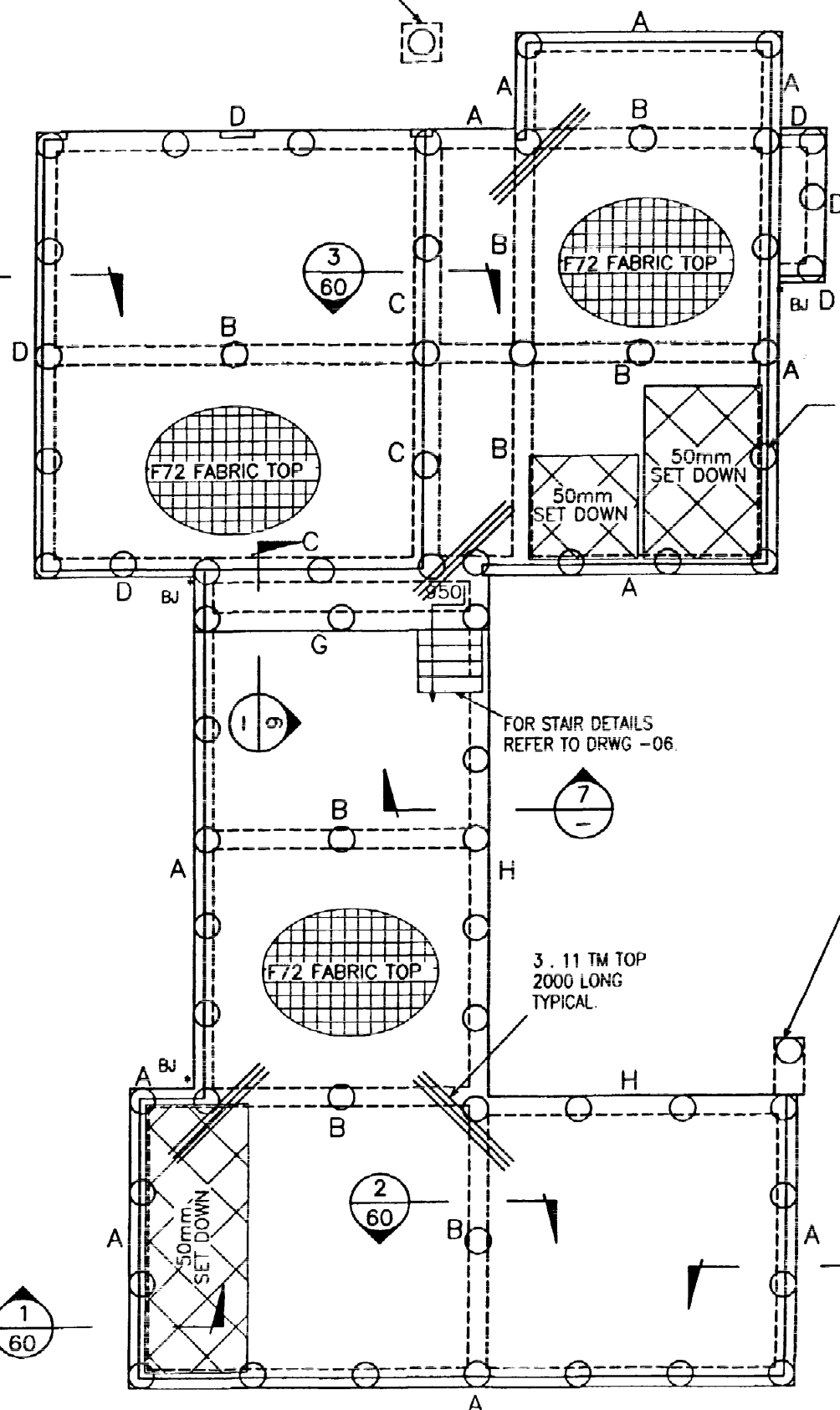
DETAILS NOTED

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 FERNBROOK ESTATE WARRIEWOOD FOR STOCKLAND		
Builder: MAINCOM		Job No: Design:
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		
Certified: Palitha S. Wijesena B.Sc.(Eng); C.P. Eng; M.I.E. Austl.; M.I.C.E. (U.K.); N.P.E.R.		
Drawn: AR	Date: 27.9.04	Scale: Drawing No: Drawing Title: GENERAL NOTES
		6915-02

600X600X450 DEEP
MASS CONCRETE
FOOTING PAD



SLAB PLAN

ADDITIONAL REINFORCEMENT AS SHOWN

PROPOSED PIER LAYOUT AS SHOWN
TO BE CONFIRMED ON SITE.

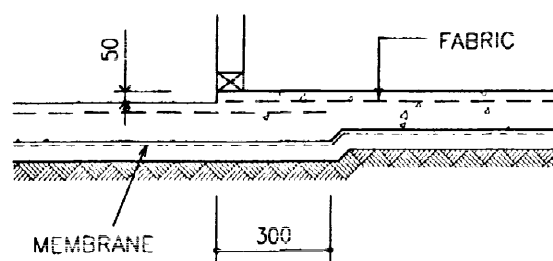
*BJ - INDICATES BRICK JOINT

PIER UNDER TO
FIRM NATURAL
GROUND. TYP

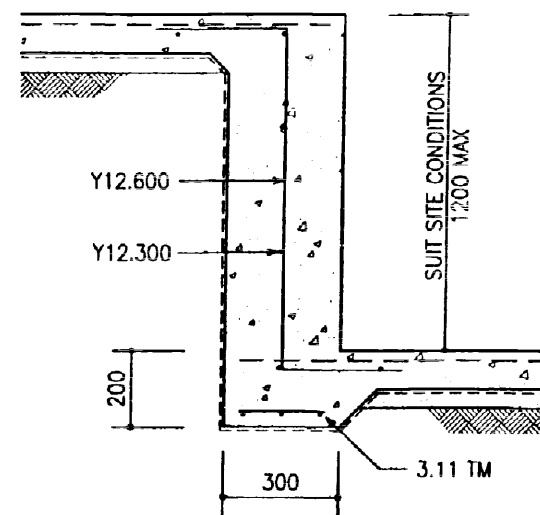
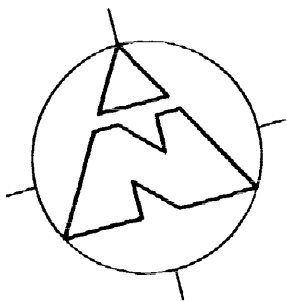
450X450X450 DEEP STRIP FOOTING
4. F11 TM TOP & BTM
R6 TIES . 900 ctrs (TYPICAL)
FOOTINGS TO BE FOUNDED
ON FIRM NATURAL GROUND
OR PIERED TO FIRM NATURAL
GROUND AS PER SPECIFICATION

FOR STAIR DETAILS
REFER TO DRWG -06.

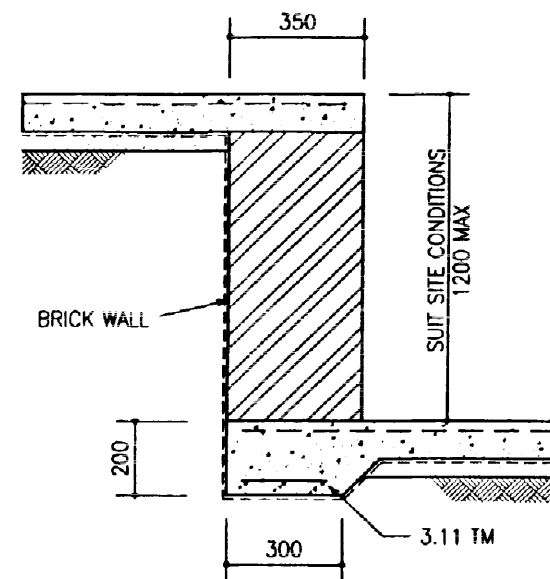
3. 11 TM TOP
2000 LONG
TYPICAL.



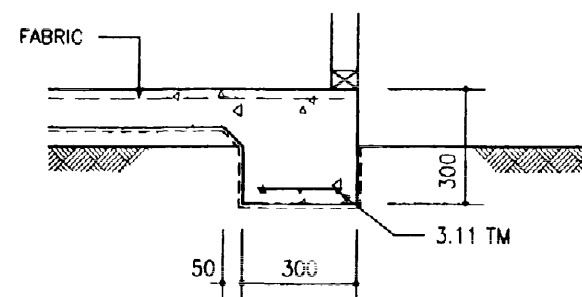
TYPICAL SLAB RECESS DETAILS



SECTION 6 TYPE G



SECTION 6 TYPE G (ALTERNATIVE)



SECTION 7 TYPE H

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.

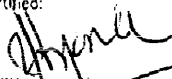
IF SHALE OR ROCK IS ENCOUNTERED IN THE
TRENCHES OR PIER HOLES, THE ENTIRE BEAM
SYSTEM MUST BE PIERED DOWN TO THIS STRATA.

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

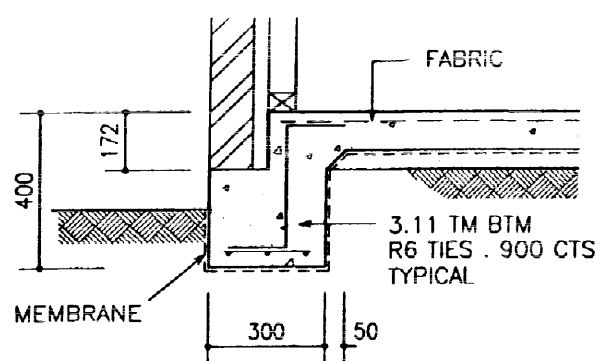
DETAILS NOTED

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.

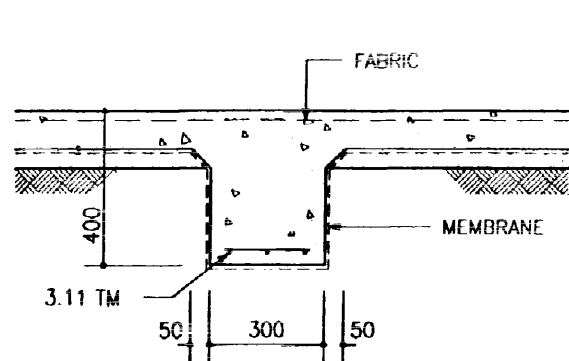
A	1.11.04	REVISED TO SUIT CLIENT
REV	DATE	AMENDMENTS
PROPOSED RESIDENCE AT:		
LOT 325		
FERNBROOK ESTATE		
WARRIEWOOD		
FOR STOCKLAND		
Builder:	Job No:	
MAINCOM		
	Design:	
Palitha S. Wijesena & Associates Pty Ltd		
ABN 71 067 121 091		
Consulting Civil & Structural Engineers		
36 Doulton Drive, Cherrybrook, NSW 2126		
Tel: 02 9894 8166 Fax: 02 9894 8133 Mob: 0404 047 161		
Certified:		
		
Palitha S. Wijesena		
B.Sc. (Eng.) C.P. Eng. M.I.E. Aust. M.I.C.E. (U.K.): N.P.E.R.		
Drawn:	Date:	Scale:
AR	8.10.04	1:100
Drawing Title:		Drawing No:
SLAB		6915-59A

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

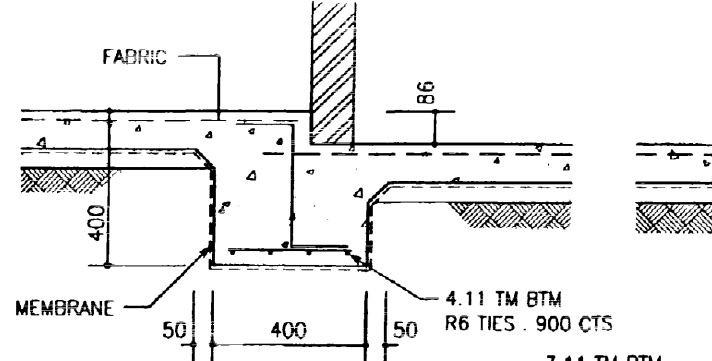




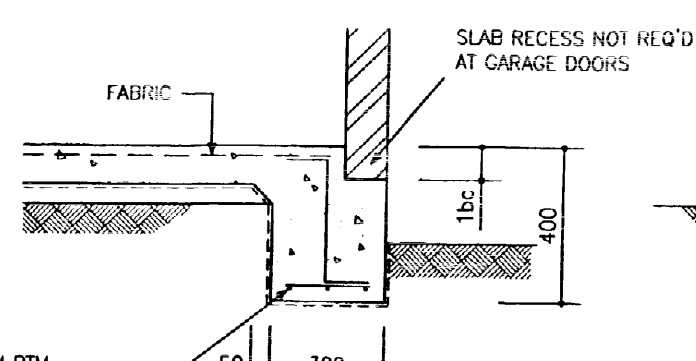
SECTION 1
TYPE A



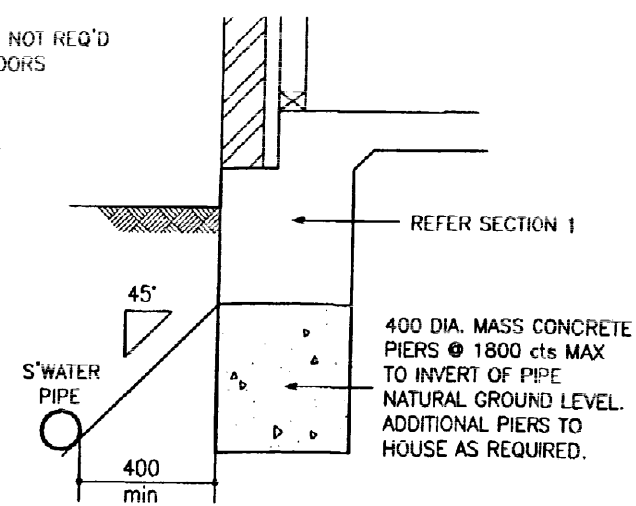
SECTION 2
TYPE B



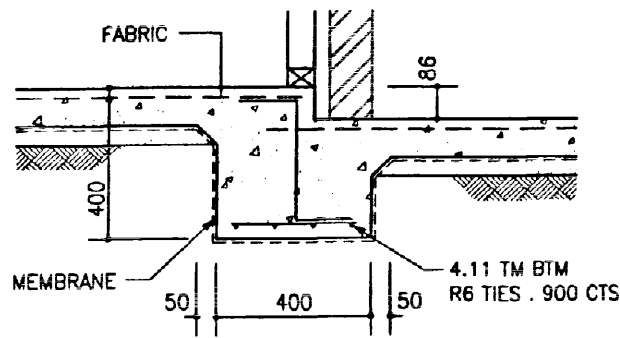
SECTION 3
TYPE C



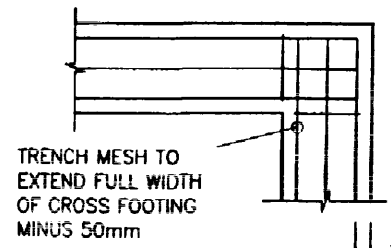
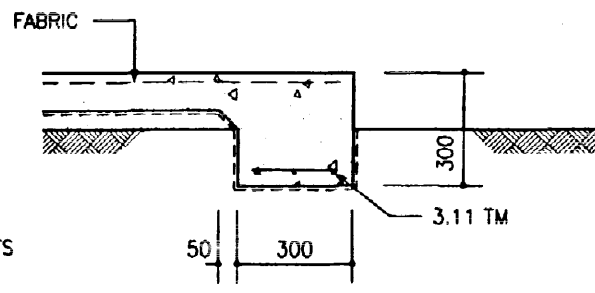
SECTION 4
TYPE D



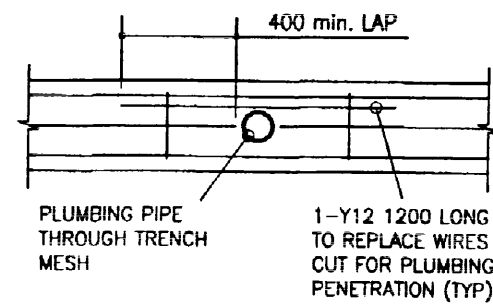
STORMWATER DETAIL



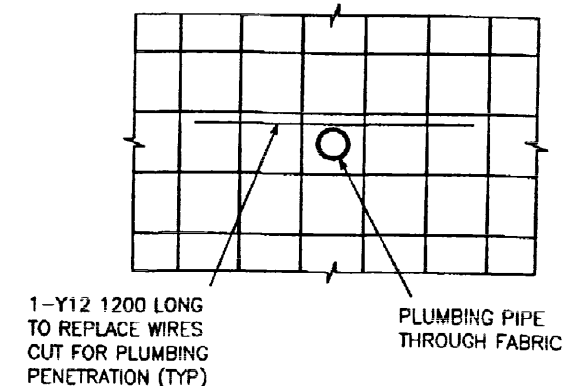
SECTION 5
TYPE E & F
NOT USED



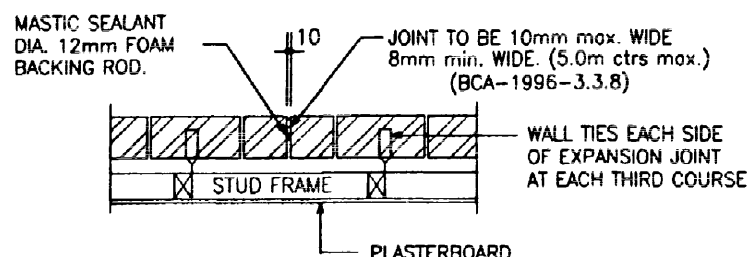
FOOTING PLAN
AT INTERSECTION



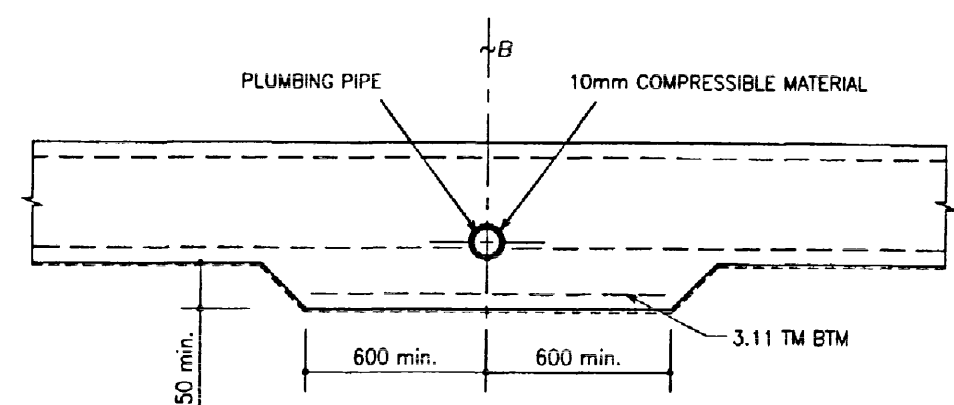
PLAN OF PLUMBING
PENETRATION
THROUGH FOOTING



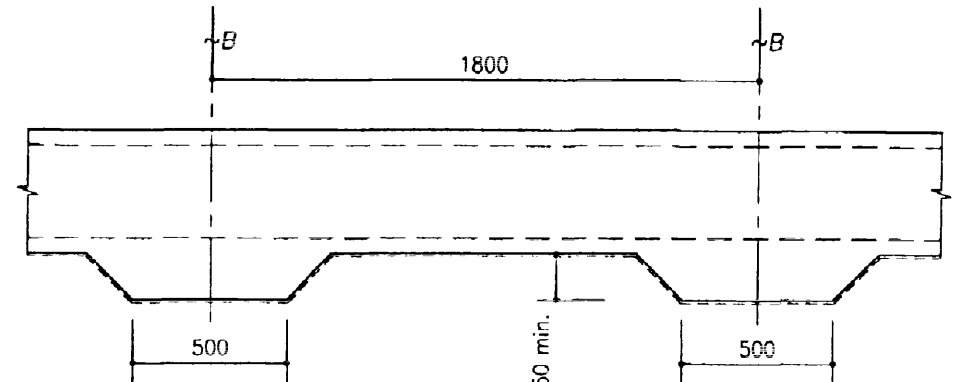
PLAN OF PLUMBING
PENETRATION
THROUGH SLAB



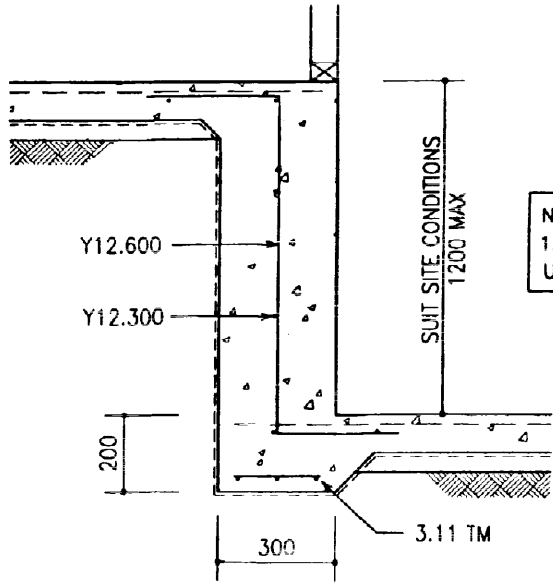
BRICK JOINT DETAIL (BJ*)



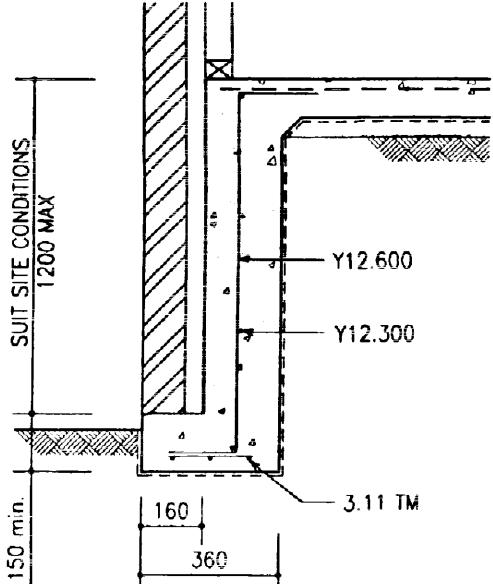
DETAIL OF PLUMBING
PIPE THROUGH FOOTING



BULK PIER DETAIL



INTERNAL STEPPED
EDGE DETAIL

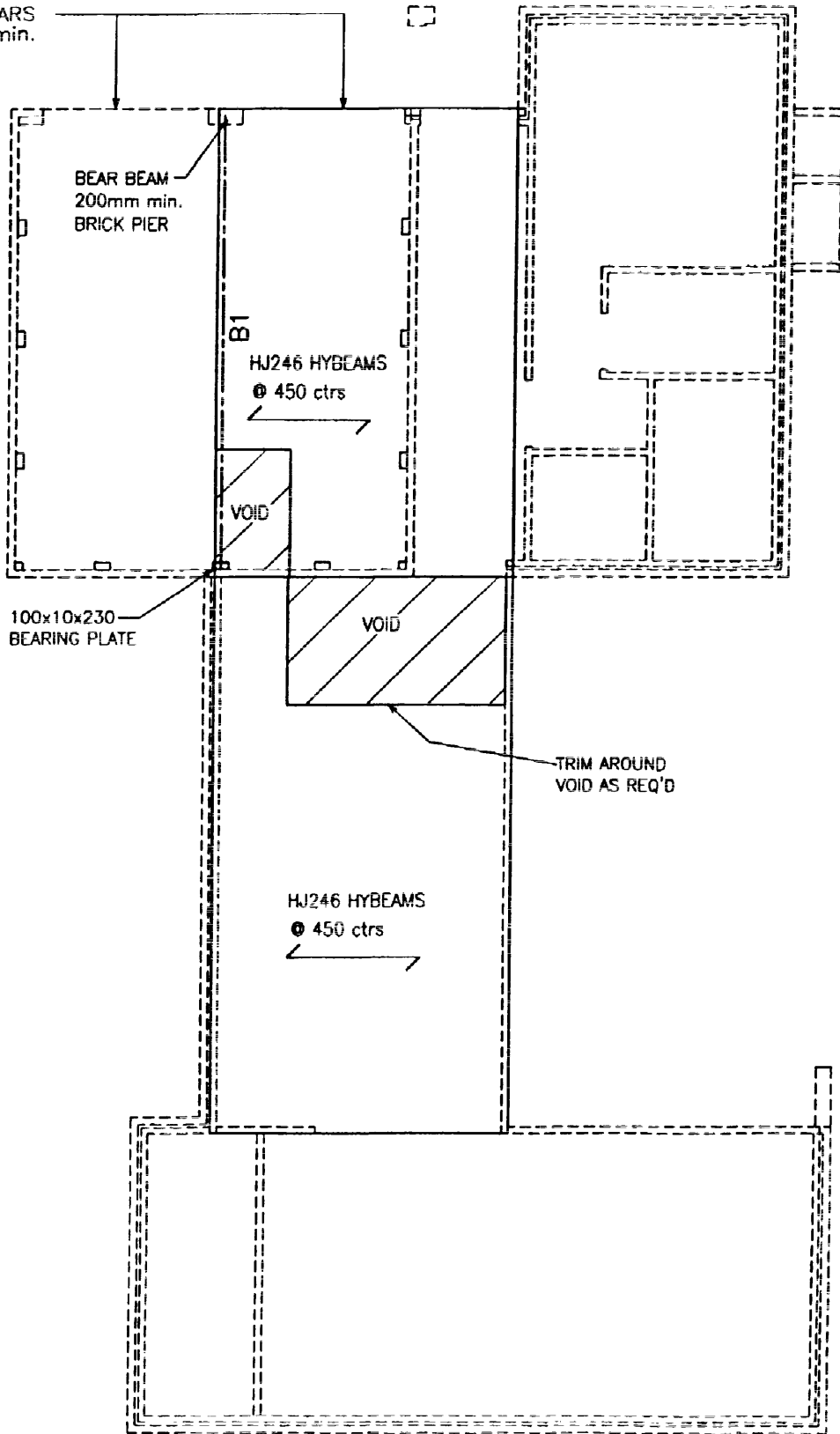


DROPPED EDGE
BEAM DETAIL

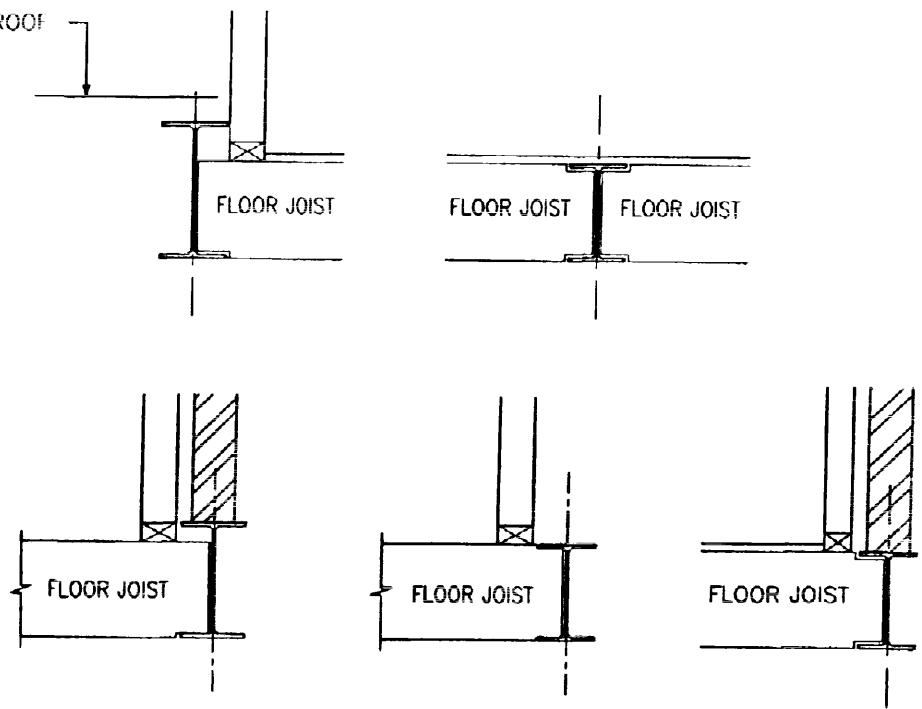
NOTE: FOR DEPTHS OF
1.2m TO 2.0m
USE Y16.400 'Z' BARS

REV	DATE	AMENDMENTS
PROPOSED RESIDENCE AT:		
LOT 325		
FERNBROOK ESTATE		
WARRIEWOOD		
FOR STOCKLAND		
Builder:		Job No:
MAINCOM		Design:
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		
Certified:		
Palitha S. Wijesena		
B.Sc. (Eng.) C.P. Eng. M.I.E. Aust. M.I.C.E. (U.K.): N.P.E.R.		
Drawn:	Date:	Scale:
AR	8.10.04	
Drawing Title:		Drawing No:
SLAB		6915-60

GALINTEL 'T' BARS
TO BEAR 200 min.
ON BRICK PIER
AT BOTH ENDS

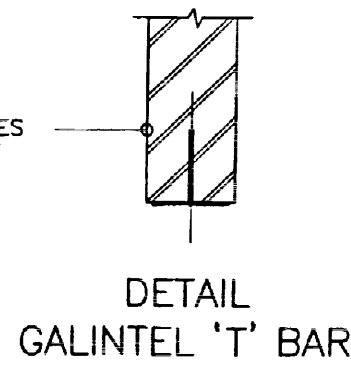


GROUND FLR ROOF



TYPICAL BEAM DETAILS

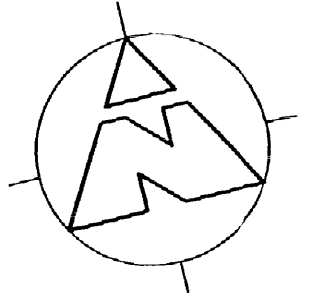
MIN 4 BRICK COURSES
ON EACH FLANGE OF
GALINTEL 'T' BARS



BEAM SCHEDULE

MARK No.	SIZE
B1	360UB45

JOIST ALTERNATIVE
240x45 F7 JOISTS MAY BE USED
IN LIEU OF HYPAN JOISTS



DETAILS NOTE

STEELWORK NOTES:
STEELWORK DESIGNED IN ACCORDANCE WITH AS4100
'STEEL STRUCTURES CODE' & AS1170.1/AS1170.2
'DEAD & LIVE LOADS & WIND LOADS'.
STRUCTURAL STEEL TO BE GRADE (BHP 300 Plus) U.N.O.
SURFACE PREPARATION & FINISH TO COMPLY WITH
AS/NZS 2312/1994

A	1.11.04	REVISED TO SUIT CLIENT
REV	DATE	AMENDMENTS
PROPOSED RESIDENCE AT: LOT 325 FERNBROOK ESTATE WARRIEWOOD FOR STOCKLAND		
Builder:	Job No:	
MAINCOM		
Design:		
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		
Certified: 		
Palitha S. Wijesena B.Sc (Eng), C.P. Eng, M.I.E. Aust., M.I.C.E. (U.K.), N.P.E.R.		
Drawn:	Date:	Scale:
AR	8.10.04	1:100
Drawing title:		Drawing No.
LEVEL 1		6915-61A

(ORCHARD STREET)

PROPOSED RESIDENCE
LOT 325

STAIRS TO AUST
STANDARD

EXTENT & LOCATION OF
RETAINING WALL TO BE
DETERMINED ON SITE

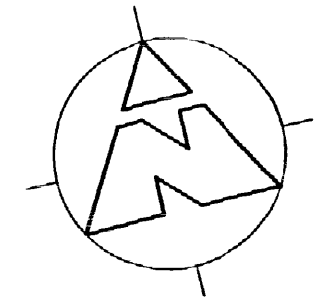
EXTENT & LOCATION OF
RETAINING WALL TO BE
DETERMINED ON SITE

EXTENT & LOCATION OF
RETAINING WALL TO BE
DETERMINED ON SITE

EAVESMENT

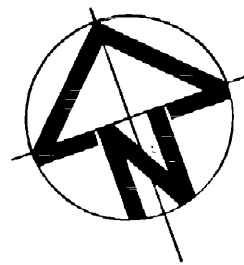
SITE PLAN

NOTE: FOR RETAINING WALL DETAILS
SEE TYP DETAILS ON DRWGS -03,04,05



DETAILS NOTED

PROPOSED RESIDENCE AT:			
LOT 325			
FERNBROOK ESTATE			
WARRIEWOOD			
FOR STOCKLAND			
Builder:		Job No:	
MAINCOM			
Design:			
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			
Certified:			
Palitha S. Wijesena			
B.Sc.(Eng), C.P. Eng, M.I.E. Aust., M.I.C.E. (U.K.), N.P.E.R.			
Drawn:	Date:	Scale:	Drawing No:
AR	8.10.04	1:100	
Drawing Title:			
SITE			6915-62



ORCHARD STREET

NOTES: SERVICES

NO EXCAVATION IN FOOTPATH WITHOUT CHECKING FOR DEPTH AND LOCATION OF SERVICES

NOTES: ROAD RESERVE & FOOTWAY DRAINAGE ELEMENTS

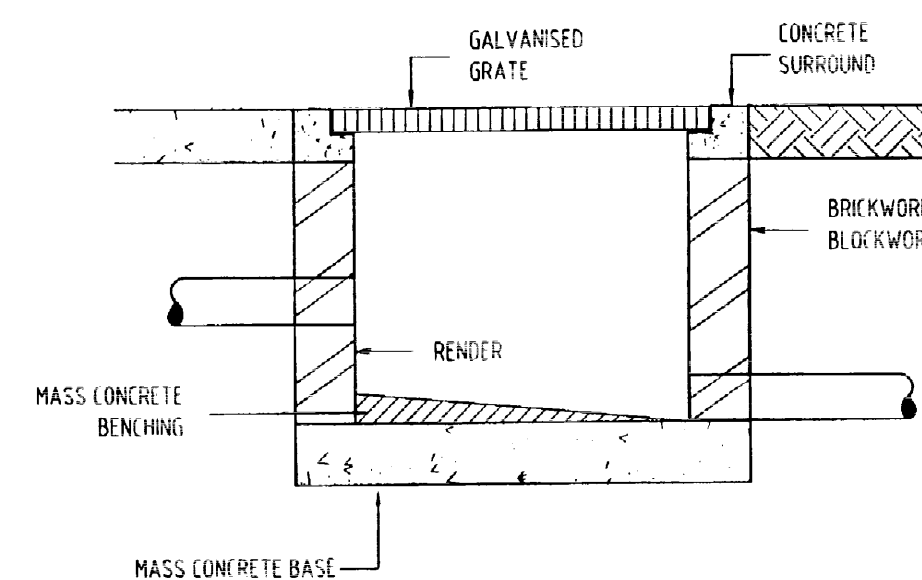
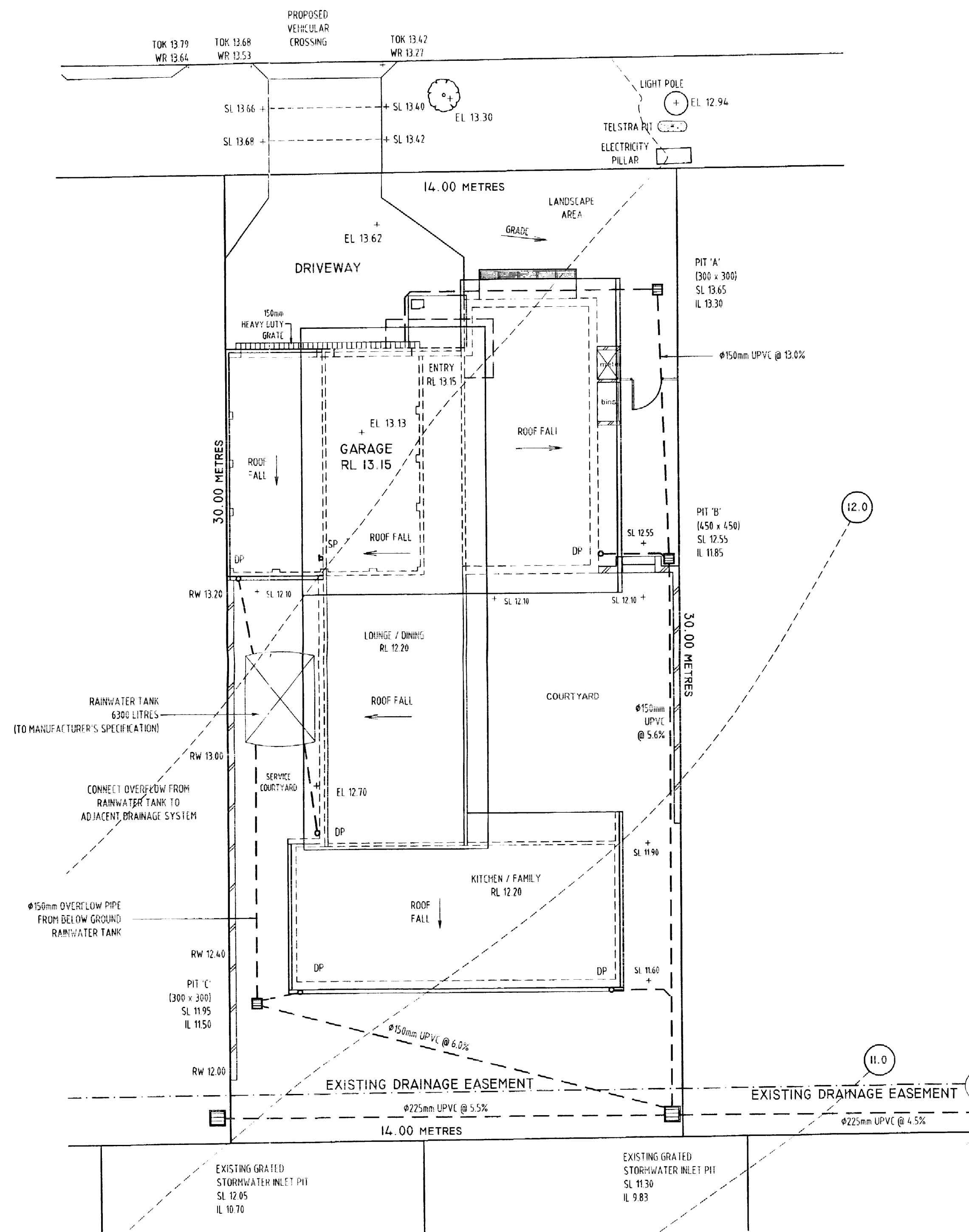
ALL STORMWATER DRAINAGE ELEMENTS PROPOSED WITHIN THE ROAD RESERVE AND FOOTWAY SHALL BE CONSTRUCTED UNDER THE SUPERVISION AND TO THE SATISFACTION OF COUNCIL'S ENGINEER.

NOTES: COUNCIL ISSUED FOOTWAY DESIGN LEVELS

COUNCIL'S ISSUED FOOTWAY DESIGN LEVELS TO BE INCORPORATED INTO THE FINISHED LEVELS ONCE ISSUED BY PITTWATER COUNCIL.

NOTE: RETAINING WALLS & 'AGG' LINES

ALL RETAINING WALLS ARE TO BE WATERPROOFED AND CONSTRUCTED WITH 800mm AGRICULTURAL LINES AT THE BASE AND CONNECTED TO THE NEAREST PIT IN THE COURTYARD.



TYPICAL PIT DETAIL

NTS

NOTES: RAINWATER TANKS

1. RAINWATER TANK CAPACITY OF 6000 LITRES.
2. THE SYSTEM TO BE DESIGNED WITH THE FOLLOWING GUIDELINES:
 - A 'FIRST FLUSH' DIVERSION TO REMOVE ROOF CONTAMINANTS
 - ADEQUATE SCREENING TO PREVENT MOSQUITO BREEDING AND ENTRY OF ANIMALS OR FOREIGN MATTER
3. TANKS TO BE PLUMBED TO TOP-UP FROM THE POTABLE WATER SUPPLY DURING DRY PERIODS WHEN THE TANKS ARE 80% EMPTY.
4. NO DIRECT CROSS-CONNECTION WITH THE SYDNEY WATER POTABLE SUPPLY AND AN AIR GAP MAINTAINED ABOVE THE OVERFLOW IN THE TANK.
5. A SIGN TO BE INSTALLED STATING 'NON POTABLE WATER'.
6. OVERFLOW FROM THE TANK SHALL BE PIPED TO OVERFLOW PIPE AND DIRECTED TO THE DRAINAGE SYSTEM NEAREST DOWNPIPE.
7. PIPE WORK USED SHALL BE FOR DRIPED PURPLE IN ACCORDANCE WITH AS 1345. ALL VALVES AND APERTURES SHALL BE CLEARLY AND PERMANENTLY LABELLED WITH SAFETY SIGNS TO COMPLY WITH AS 1819.
8. CONNECTION OF AN AUTOMATIC IRRIGATION SYSTEM TO THE RAINWATER TANK TO ENSURE FULL UTILISATION OF THE STORED WATER AND TO MAINTAIN THE REQUIRED IRRIGATION RATE.

LEGEND:

- DP DOWN PIPE
- SP SPREADER
- CE - IL 36.00 CLEANING EYE
- EL 49.45+ EXISTING LEVEL 49.45
- SL 49.45+ PROPOSED SURFACE LEVEL 49.45
- IL 49.45+ PROPOSED INVERT LEVEL 49.45
- WR 49.45+ PROPOSED WATER RUN LEVEL 49.45
- TOK 49.45+ TOP OF KERB LEVEL 49.45
- RW 49.45 TOP OF RETAINING WALL 49.45
- KIP KERR INLET PIT

STORMWATER DRAINAGE PLAN

SCALE 1:100

NOTES:

1. ALL WORK SHALL BE IN ACCORDANCE WITH THE BUILDING CODE OF AUSTRALIA A.S.3500.3, COUNCIL'S STANDARD SPECIFICATION CODES AND THE SATISFACTION OF COUNCIL'S SUPERVISING OFFICER.
2. THIS PLAN IS TO BE READ IN CONJUNCTION WITH THE ARCHITECTURAL, LANDSCAPE AND STRUCTURAL PLANS.
3. MINIMUM GRADES FOR ALL PIPE - 1.0%.
4. DIRECT SURFACE FLOW TO ALL GRATED SURFACE INLET PITS.
5. ALL DESIGN LEVELS SHOWN ON PLAN SHALL BE VERIFIED ON SITE PRIOR TO THE COMMENCEMENT OF ANY WORK.
6. ANY DISCREPANCIES OR OMISSIONS SHALL BE REFERRED TO THE DESIGN ENGINEER FOR RESOLUTION.

ACE CIVIL & HYDRAULIC ENGINEERS

PROPOSED RESIDENTIAL DWELLING
AT (LOT 325) 9 ORCHARD STREET
WARRIEWOOD N.S.W. 2102

DESIGNED: PAUL ARRAJ	DATE 28.11.2004
BE, GRAD.IE(AUST), P. Eng	DRAWN BY: P.A.
ACE-CIVIL & HYDRAULIC ENGINEERS 8 LEIGHDON STREET BASS HILL, NSW, 2197 PHONE / FAX: (02) 9790 7921 MOBILE: 0412 331151 EMAIL: arraj@smatchat.net.au	SCALE: AS SHOWN 0405-30 DRAWING No. 1 SHEET No. 1 No. OF SHEETS: 2

HYDRAULIC PLAN **A1**

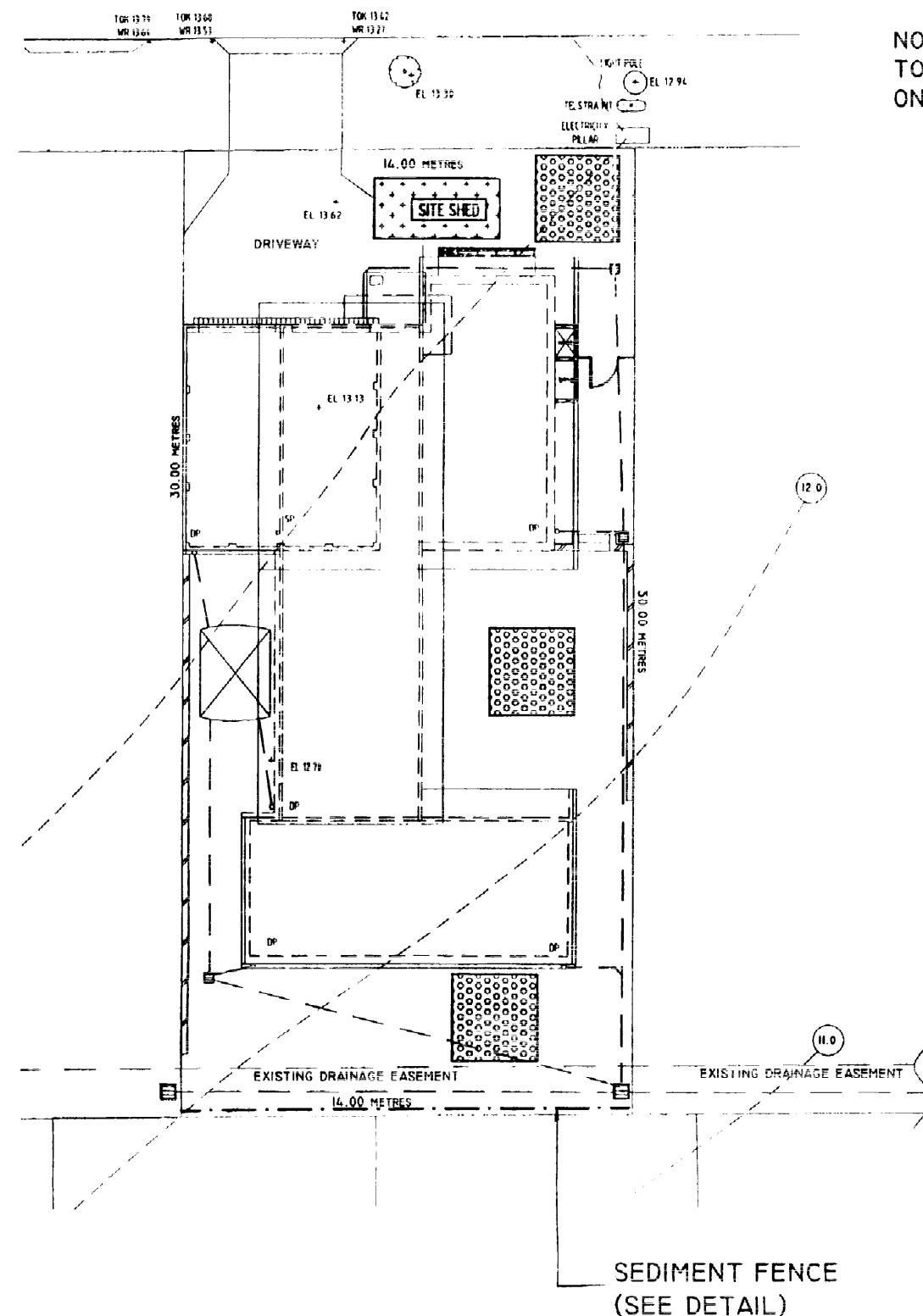


ORCHARD STREET

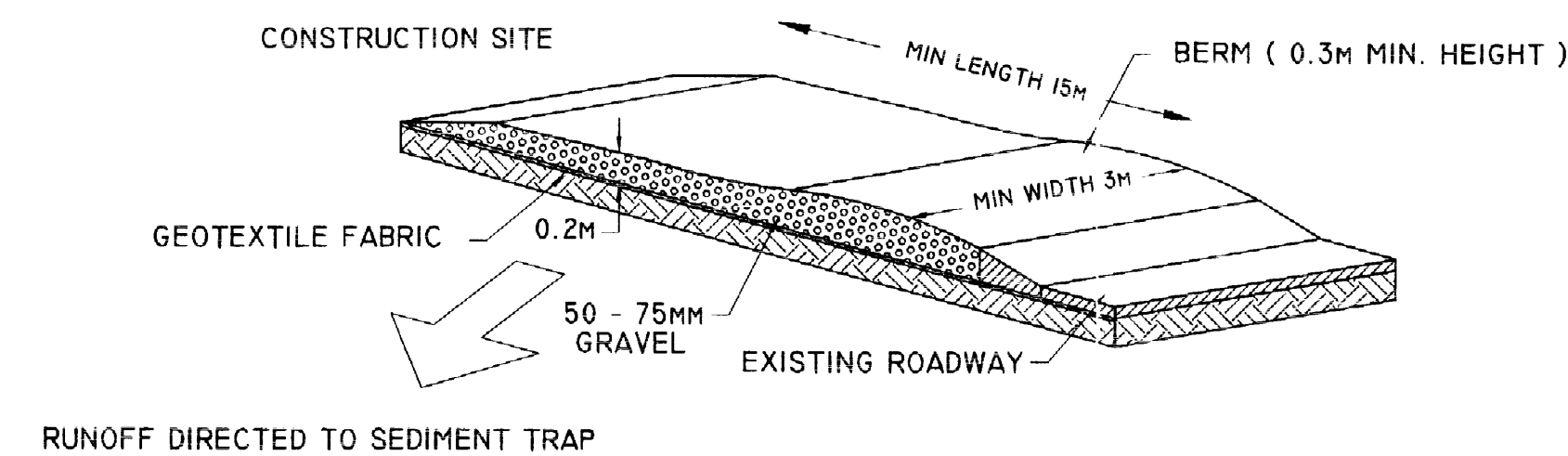
NOTES: SERVICES
NO SEPARATION IN CONCRETE WITHOUT
CHECKING FOR DEPTH AND LOCATION OF SERVICES

SITE ACCESS
TEMPORARY CONSTRUCTION
ENTRY / EXIT
(SEE DETAIL)

NO MATERIAL
TO BE STORED
ON FOOTPATH



NO MATERIAL
TO BE STORED
ON FOOTPATH

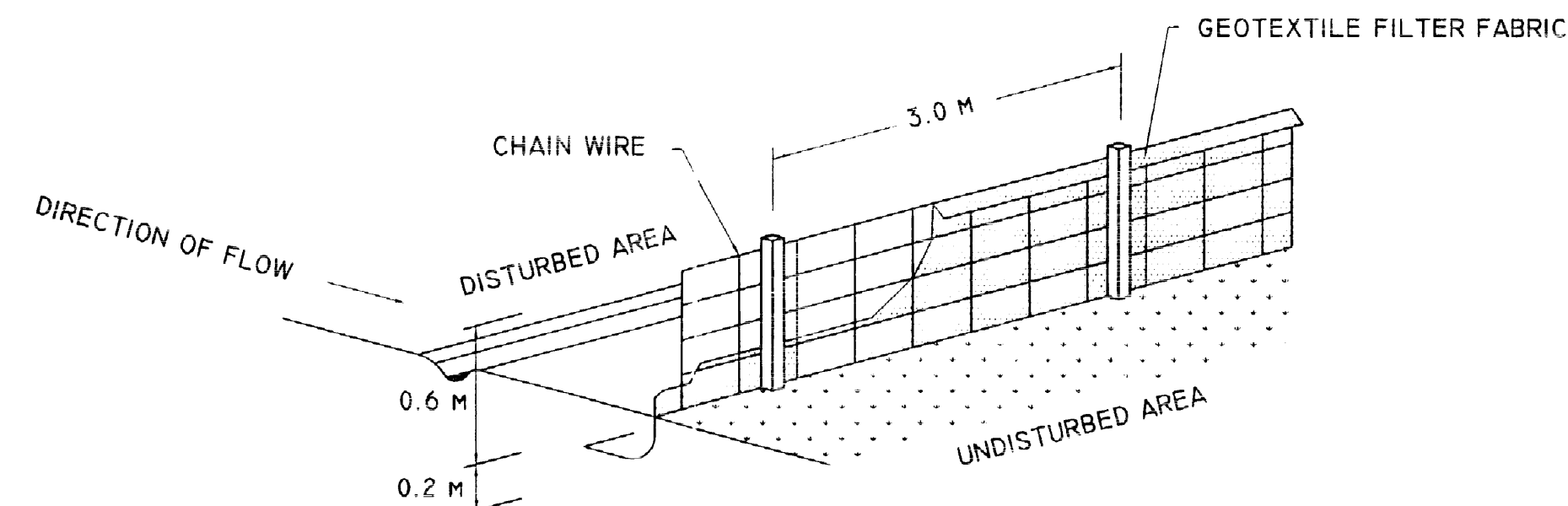


TEMPORARY CONSTRUCTION EXIT / ENTRANCE N.T.S.

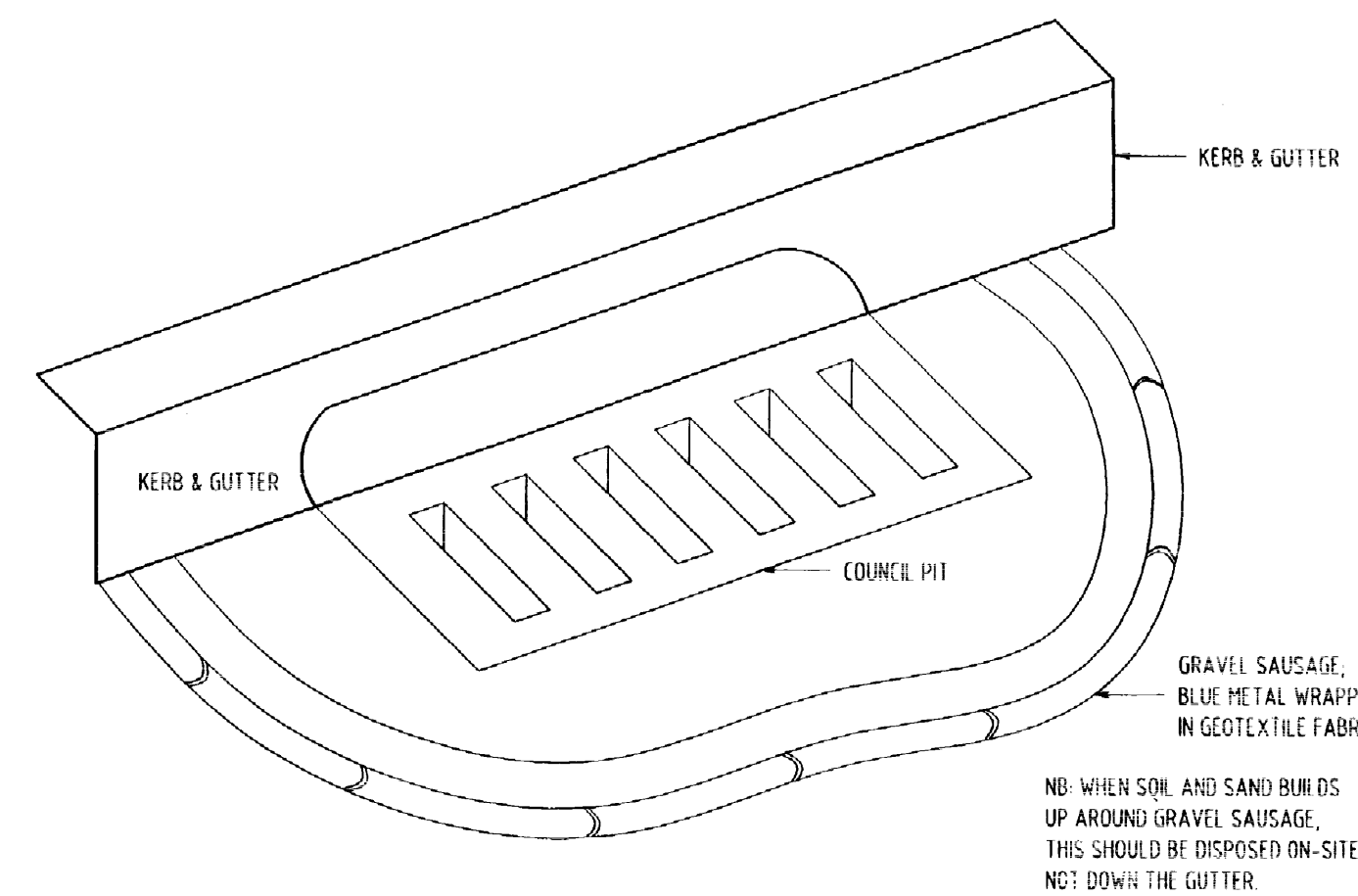
SOIL & WATER MANAGEMENT PLAN

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.

DETAILS NOTED

LEGEND

- DP DOWN PIPE
- SP SPREADER
- STORMWATER INLET PIT
- STOCKPILE AREA

NOTES: SOIL & WATER MANAGEMENT

- ALL EROSION AND SEDIMENT CONTROL MEASURES TO BE INSPECTED AND MAINTAINED DAILY BY SITE MANAGER.
- MINIMISE DISTURBED AREAS.
- ALL STOCKPILES TO BE CLEAR FROM DRAINS, GUTTERS AND FOOTPATHS.
- DRAINAGE IS TO BE CONNECTED TO STORMWATER SYSTEM AS SOON AS POSSIBLE.
- ROADS AND FOOTPATH TO BE SWEEPED DAILY.
- NO MATERIAL TO BE STORED ON FOOTPATH.
- IF YOU DO NOT COMPLY YOU MAY BE LIABLE TO A \$1500 FINE.

ACE CIVIL & HYDRAULIC
ENGINEERS

PROPOSED RESIDENTIAL DWELLING
AT (LOT 325) 9 ORCHARD STREET
WARRIEWOOD N.S.W. 2102

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ACE-CIVIL & HYDRAULIC ENGINEERS 8 LEIGHDON STREET BASS HILL, NSW, 2197 PHONE / FAX: (02) 9790 7921 MOBILE: 0412 331151 EMAIL: arraj@smartchat.net.au	SCALE: AS SHOWN 0405-30 DRAWING No.: SHEET No. 2 No. OF SHEETS: 2

HYDRAULIC PLAN

A1