



## BUILDING CONSENT APPLICATION

BC 021305

Private Bag 1, Leeston | Telephone (03) 324 5839 | Fax (03) 324 3531 | Email: admin@sdc.govt.nz

THIS IS NOT A RESOURCE CONSENT APPLICATION

## APPLICANT

Owners Name:

BRIAN / Jude  
Hayman BRETH  
HAYMAN

Applicant Name:

MALCOLM DAVIS

(agent/contact)

Mailing address:

Building Consent Services

(for correspondence)

66 Beekford Rd

CHA CH 2002

Phone: (daytime)

03 3373522

Fax:

03/3373522

Mobile number:

025 386 148

Email:

\* Under section 30 of the Building Act 1991, the applicant must be the owner of the land on which building work is contemplated or a person who or which has agreed in writing, whether conditionally or unconditionally, to purchase the land or leasehold estate or interest in the land, or to take a lease in the land, while the agreement remains in force.

## SITE LOCATION DETAILS

(refer to your Rates Demand for details)

Street / Road

Cantrey Rd  
Kiwai

Rapid Number

Valuation Roll Number

2490/147/30

Legal description

Lot 71 DP 82067

This could include all or any of the following:- Lot, DP, Section, Block, or Township, etc.

This application is for:

- ☒ Building consent (including Project Information Memorandum)
- ☐ Project Information Memorandum only (PIM)
- ☐ Building consent for PIM N°: \_\_\_\_\_

## TYPE OF BUILDING

Type of building work: (eg dwelling, commercial, farm shed, change of use)

Dwelling with Att Garage

Intended use: (eg domestic use, shop, implement shed, garage to bedroom)

Residential

Life expectancy of building:

Indefinite but not less than 50 years

Or Specified as \_\_\_\_\_ years

Is this project being staged? Yes ☐No ☒

If yes please give us details on the second page of this application in the "notes by applicant" section.

Estimated Value (incl. GST) \$ 320,000.00

## FLOOR AREAS

Floor areas are for new work only:

Ground floor: 340 m<sup>2</sup>

First floor:

Site coverage will be assessed by planning staff.

office use only

## CONFIDENTIALITY &amp; SIGNED BY

We require our plans and/or specifications to remain confidential to protect copyright

Note: If acting "for and on behalf" please read the following declaration before signing:-

"I hereby declare that I am authorised to act as Agent of the Applicant".

Signed by or for and on behalf of the Applicant

Owner



or Agent



Date:

7-10-02

-8 OCT 2002

## KEY PERSONNEL

|                                        |                   |
|----------------------------------------|-------------------|
| Designer: TODAY Homes Ltd              | Phone: 311 6461   |
| Address: PO Box 8043 CHL               | Fax:              |
| Building Certifier: Malcolm DAVIS 1013 | Phone: 3373522    |
| Address: 66 Beckford Rd.               | Fax: 3373538      |
| Builder: TODAY Homes Ltd               | Phone: 311 6461   |
| Address: PO Box 8043 CHL               | Fax:              |
| Registered Drainlayer: Irtson drainage | Phone: 03/3138418 |
| Address: PO Box 32 Rangiora            | Registration No:  |
| Craftsman Plumber: Maxwell Plumbing    | Phone: 3664403    |
| Address: PO Box 7496 CHL               | Registration No:  |

## NOTES BY APPLICANT

Other notes or comments which you as the applicant may wish to add

9/10/02  
 Chq - Deposit for \$100.00 to follow -  
 original chq issued to ccc in error - phonecall  
 to Rodger 9/10/02 to request correct dep ~~for~~  
 \$100.00 held 10/10/02 ~~for~~

10/10/02 Rodger to fax thru Se P agreement.  
~~for~~

## CHECKLIST

Have you enclosed with your application:-

- ☒ A current copy of your Certificate of Title showing your name. If this is not available, a copy of your sale and purchase agreement
- ☒ Advice of the estimated value of the building work (including GST)
- ☒ Two copies of all the information you are supplying.
- ☒ A deposit of \$100.00.
- ☒ Your builders name, and contact details.
- ☒ Your plumber and drainlayers name, and contact details. (if required)
- ☐ Any cultural heritage significance of the building.
- ☐ Specific arrangements for multiple or unusual inspections

*Refer to individual checklists for the specific information required for the type of project you are applying for.*

FILE COPY

**Building Consent**
**021305**
**Section 35, Building Act 1991**
**Application**

 B R & J L HAYMAN  
 C/- BUILDING CONSENT SERVICES  
 66 BECKFORD ROAD  
 CHRISTCHURCH

 Issue date 29/10/02  
 Application date 9/10/02

**Project**

|                   |                                                                      |
|-------------------|----------------------------------------------------------------------|
| Description       | New Construction                                                     |
|                   | Being Stage 1 of an intended 1 Stages                                |
|                   | DOMESTIC DWELLING                                                    |
| Intended Life     | Indefinite, but not less than 50 years                               |
| Intended Use      | 4 Bedroom dwelling with study and garage and conservatory<br>340sqm. |
| Estimated Value   | \$320,000                                                            |
| Location          | COURTENAY ROAD, KIRWEE RAPID:NONE                                    |
| Legal Description | LOT 71 DP 82067 BLK VIII HAWKINS SD                                  |
| Valuation No.     | 2419014730                                                           |

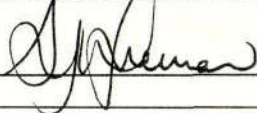
**COUNCIL CHARGES**

This consent will be issued when the quoted costs are paid in full. The quote was sent to you earlier with the Project Information Memorandum Document. Where any work fails to meet required standards a re-inspection of that work may be required. Costs associated with that re-inspection will be invoiced separately as identified in the quote. These inspections are extra charges over and above the quoted costs.

This building consent is a consent under the Building Act 1991 to undertake building work in accordance with the attached plans and specifications so as to comply with the provisions of the building code. It is not a consent under the Resource Management Act and does not affect any duty or responsibility under any other Act nor permit any breach of any other Act.

**Signed for and on behalf of the Council:**

Name:



Date:

29/10/02

 SERVICE  
CENTRES:

 LEESTON  
HIGH STREET, LEESTON  
PH: (03) 324-8080

 DARFIELD  
SOUTH TERRACE, DARFIELD  
PH: (03) 318-8338

 LINCOLN  
GERALD STREET, LINCOLN  
PH: (03) 325-3288

 ROLLESTON COMMUNITY CENTRE  
ROLLESTON DRIVE, ROLLESTON  
PH: (03) 347-9669

FILE COPY

REF No.....

**Project Information Memorandum**
**021305**
**Section 31, Building Act 1991**
**Application**

 B R & J L HAYMAN  
 C/- BUILDING CONSENT SERVICES  
 66 BECKFORD ROAD  
 CHRISTCHURCH

 Issue date 29/10/02  
 Application date 9/10/02

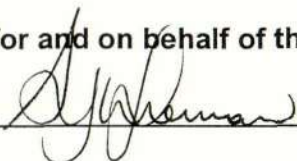
**Project**

|                   |                                                                   |
|-------------------|-------------------------------------------------------------------|
| Description       | New Construction                                                  |
|                   | Being Stage 1 of an intended 1 Stages                             |
|                   | DOMESTIC DWELLING                                                 |
| Intended Life     | Indefinite, but not less than 50 years                            |
| Intended Use      | 4 Bedroom dwelling with study and garage and conservatory 340sqm. |
| Estimated Value   | \$320,000                                                         |
| Location          | COURTENAY ROAD, KIRWEE RAPID:NONE                                 |
| Legal Description | LOT 71 DP 82067 BLK VIII HAWKINS SD                               |
| Valuation No.     | 2419014730                                                        |

This project information memorandum is confirmation that the proposed building work may be undertaken, subject to the provisions of the Building Act 1991, and any requirements of the building consent.

This project information memorandum includes:

\_\_\_ Information identifying relevant special features of the land concerned\_\_

**Signed for and on behalf of the Council:**
**Name:**

**Date:**

29/10/02

**BUILDING INFORMATION**

For buildings designed in accordance with NZS 3604:1999 the following design loadings criteria are indicated as being acceptable on and around the proposed construction site.

Earthquake Zone :B  
Snow Load [Sg] : 0.7 kPa  
Site Wind Speed : 44m/sec High.  
Altitude :160m  
Corrosion Zone :2

- 1] Solid foundation bearing to achieve the capacity specified in NZS 3604:1999 should be available at this site.
- 2] Building Certifier shall check installation of the following work for compliance with the Building Code and report on the Councils behalf: trusses, and garage lintel, and ganglam verandah beams.
- 3] Upon completion of this building project, we require full details of materials used and drawings of any amendments during the course of construction.
- 4] Please provide a truss layout relating to this project for our records.  
Note: The snow loading for this area is 0.7 kPa. Please advise truss manufacturer to amend design.

## ● DRAINAGE & HEALTH INFORMATION

1]

Onsite sewage treatment and disposal will need to meet the requirements of Selwyn District Council (in relation to compliance with the Building Code) and Environment Canterbury (in relation to the Resource Management Act)

You will need to provide to this Council details of the location and method of sewage treatment proposed along with the location and method of effluent disposal so that we may assess compliance with the Building Code. This will include:

- (a) Liquid capacity and any modifications to septic tank.
- (b) Details of sewage effluent disposal system showing location, application rate, profile of soil substrata including soakage characteristics, distribution - gravity or pump etc.
- (c) Location and separation distances of wells on your and adjoining properties.
- (d) Location and separation distances of any onsite sewage treatment and disposal systems on adjoining properties

When Local Authority Staff are satisfied that your proposal will comply with the requirements of the Building Act it will be referred to Environment Canterbury for their assessment and written confirmation that it will meet with their requirements under the Resource Management Act.

If Environment Canterbury require further information they will contact you or the contact person indicated on the application directly.

2] Council Water Supply available.

3] Stormwater to soakholes.

Discharge of stormwater to soakholes from roofs of buildings or structures, is covered by Environment Canterbury General Authorisation. Discharges from other hard standing areas will require a Discharge Consent from Environment Canterbury (phone customer services 3653828)

## ENGINEERING INFORMATION

Sewer - No Council sewage available.

Stormwater to ground disposal

Water supply - Council water supply available. The supply is metered. The application fee is \$56.25. See attached form.

Entranceways – Residential access standard for local roads (Diagram C, Appendix 11) within the Rural Section of the proposed district plan.

# Planning Comments For PIM BC021305

## *Buildings Compliance:*

Resource Consent Required? NO

Based on the plans and information lodged with the building consent application the proposed dwelling and attached garage complies with the relevant planning requirements.

## *Activity:*

**Activity:** Dwelling (NEW)  
**Zoning:** Rural Residential Malvern Transitional District Plan  
Living 2A Proposed District Plan

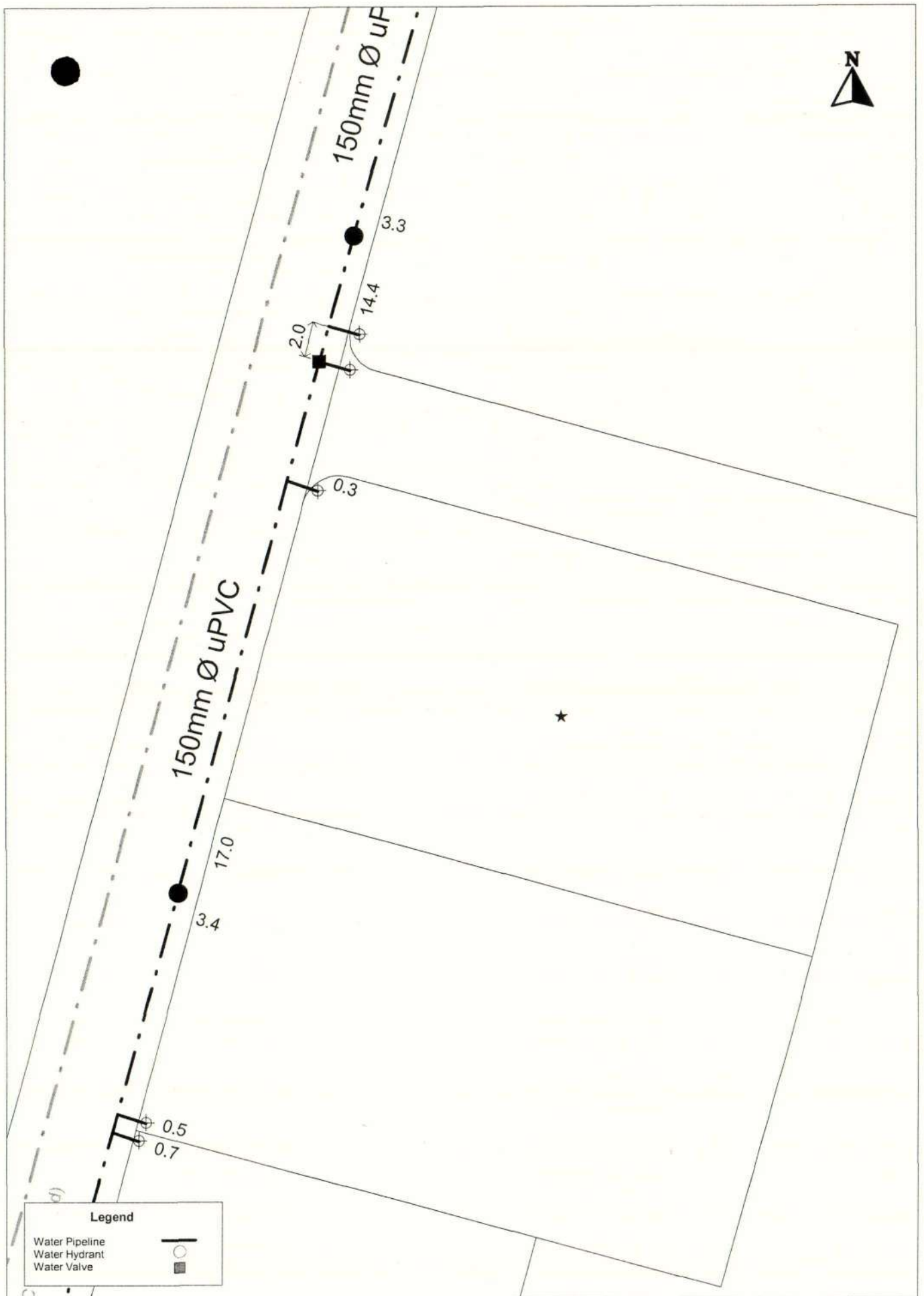
## *Current Resource Consents:*

**Previous resource consents granted/refused for this property?**  
None known relevant to this proposal.

## *Land Features:*

**Designations:**  
N/A

**Special Land Features:**  
N/A



B R & J L HAYMAN  
 C/- BUILDING CONSENT SERVICES  
 66 BECKFORD ROAD  
 CHRISTCHURCH

 GST Number: 53-113-451  
 Invoice Date: 29/10/02  
 Customer No: BC021305

## Tax Invoice 76846

| Quantity | Description                                                     | Rate   | Amount   |
|----------|-----------------------------------------------------------------|--------|----------|
|          | 021305 : COURTENAY ROAD, KIRWEE RAPID:NONE<br>DOMESTIC DWELLING |        |          |
|          | ADMINISTRATION/PROCESSING/ISSUE FEE                             | 218.20 | *        |
|          | PLANNING & ENGINEERING                                          | 37.25  | *        |
|          | BUILDING RESEARCH LEVY                                          | 320.00 | *        |
|          | BIA LEVY                                                        | 208.00 | *        |
|          | PRODUCER STMNT ASSESSMENT                                       | 10.00  | *        |
|          | WATER CONNECTION CHARGE                                         | 56.25  | *        |
|          | (* Incl Gst \$94.41)                                            |        |          |
|          | Cash Received                                                   |        | 100.00CR |

**Total incl. GST 749.70**

(Please detach and return this portion with your payment)

### REMITTANCE ADVICE

 B R & J L HAYMAN  
 C/- BUILDING CONSENT SERVICES  
 66 BECKFORD ROAD  
 CHRISTCHURCH

 Customer No.: BC021305  
 Invoice No.: 76846  
 Total Due: 749.70

**Amount Enclosed:**

29 October, 2002

B R & J L HAYMAN  
C/- BUILDING CONSENT SERVICES  
66 BECKFORD ROAD  
CHRISTCHURCH

**Project Information Memorandum No. 021305 / DOMESTIC DWELLING**  
COURTENAY ROAD, KIRWEE RAPID:NONE

Enclosed is the Project Information Memorandum (PIM) relating to your building project.

This Project Information Memorandum may reveal matters affecting compliance with the N.Z. Building Code and other legislation. You are advised to check the attached documentation thoroughly as this may affect the completion of processing your Building Consent.

If you wish the processing of your Building Consent application not to proceed further, please notify the Council as soon as possible as you will be charged for all administration and processing costs incurred to date.

The remaining fees for processing and inspections relating to your application will be invoiced separately prior to issue of the Building Consent.

Please note the issue of this Project Information Memorandum (PIM) does not constitute issuing of a Building Consent and no work shall commence on site without one.

For any enquiries, please contact Selwyn District Council Building Control on telephone number 324-5839.

**CODE COMPLIANCE CERTIFICATE No :-02/1192.***Issued under section 56 ( 3 ) Building Act 1991**Issued By Malcolm Davis.**Currently Approved and Registered as a Building Certifier.***To :- SELWYN DISTRICT COUNCIL****PROJECT No 021305****PROJECT**

New Dwelling & Attached Garage. ✓  
 Relocated building ☐,  
 Addition & Alteration ☐,

Intended Use(s) Residential. ✓

Intended Life :- Indefinite but not less  
 than 50 years. ✓

Specified as .....years.

Demolition    Yes ☐    No ✓

**PROJECT LOCATION**

Street Address : Courtenay Road.  
 Kirwee.

Legal Description: Lot 71.  
 DP 82067  
 Other

**This is :-**

1. A final code compliance certificate issued in respect of all the building work under the above building consent. ✓
2. An interim code compliance in respect of part only, as specified in the attached particulars , of the building work under the above building consent. ☐
3. This certificate is issued subject to the conditions specified in the attached.....pages headed "Conditions of code compliance Certificate No " ( being this certificate) ☐

**Signed by :-**

**Malcolm Davis.****Building Certifier No 13.****19/05/03 File 021192C**

✓

## **BUILDING CONSENT SERVICES.**

M. G. Davis Registered Building Certifier 13.

19/05/03.

**B & J Hayman,  
Courtenay Road,  
RD  
KIRWEE.**

**Attention Brian & Judie Hayman,**

**Dear Brian & Judie,**

**Re Building Consent Application.  
Courtenay Road.  
021305.**

Please find detailed below the Code Compliance Certificate for the above.

The documentation has been sent to the Council as required.

A form is enclosed for you to sign and return to them also as confirmation that the work under the above building consent is now complete. If you could do this as soon as possible it would be appreciated.

If you require further information please contact the writer.

Thankyou for your instructions.

Yours faithfully,



**Malcolm Davis.**  
Civil Engineer NZCE REA.  
Building Certifier.  
File 021192L

**COPY**

Phone 03 337 3522. Facsimile 03 337 3538 Mobile Phone 025 386 148.  
Office 66 Beckford Road Christchurch. Email malcolm.davis@xtra.co.nz  
A Division of M.G.Davis Engineering Services Ltd.

M.G. Davis Engineering Services Ltd. is a registered company in New Zealand. The company is a member of the Engineering Council of New Zealand. The company is a member of the Engineering Council of New Zealand. The company is a member of the Engineering Council of New Zealand.

**ADVICE of COMPLETION of BUILDING WORK.**  
*Issued under section 43 ( 1 ) , Building Act 1991*

To :- Selwyn District Council

Under Building Consent No :- 021305

From B & J Hayman.

Courtenay Road,  
KIRWEE.



You are hereby advised that :-

✓ **All.** of the building work under the above Building Consent is believed to have been completed to the extent required by that Building Consent.

✓ **A Final.** code of compliance certificate has been issued by the Building Certifier.

The following particulars were provided to you directly by the Building Certifier :-

✓ **Code Compliance Certificate.**

✓ **Conditions associated with code of compliance: -**

**That all products and materials are :-** (1) maintained in accordance with the consent documents. ✓

(2) maintained in accordance with manufacturers / suppliers, guarantee's / Warrantee's. ✓

Signed :- B. R. Hayman

Position :- Owner. Date 11-7-03.

Signed Malcolm Davis Malcolm Davis Building Certifier 13.  
File 021192F

Dated 19/05/03

**Please sign one of these and post to Selwyn District Council.  
This will close the consent.**

**ADVICE of COMPLETION of BUILDING WORK.**  
*Issued under section 43 ( 1 ) , Building Act 1991*

**To :- Selwyn District Council**

**Under Building Consent No :- 021305**

**From B & J Hayman.**

**Courtenay Road,**

**KIRWEE.**

**You are hereby advised that :-**

✓ **All.** of the building work under the above Building Consent is believed to have been completed to the extent required by that Building Consent.

✓ **A Final.** code of compliance certificate has been issued by the Building Certifier.

The following particulars were provided to you directly by the Building Certifier :-

✓ **Code Compliance Certificate.**

✓ **Conditions associated with code of compliance: -**

**That all products and materials are :- (1) maintained in accordance with the consent documents. ✓**

**(2) maintained in accordance with manufacturers / suppliers, guarantee's / Warrantee's. ✓**

**Signed :-** \_\_\_\_\_

**Position :-** \_\_\_\_\_ **Date** \_\_\_\_\_

**Signed** \_\_\_\_\_



**Malcolm Davis Building Certifier 13.**  
**File 021192F**

**Dated 19/05/03**

**COPY**

**Please sign one of these and post to Selwyn District Council.**  
**This will close the consent.**

# CERTIFICATE OF COMPLIANCE FOR DOMESTIC ELECTRICAL WORK

No. D 573900

for prescribed electrical work that is carried out on electrical installations and that involves the placing or positioning or the replacing or repositioning of conductors (including fittings attached to those conductors).

No. of attachments.

## Customer Information Please print clearly

Name of Customer B.R. HAYMAN  
 Telephone 03 358 7836 Fax 03 358 7831  
 Address of Installation COURTENAY ROAD (LOT 71) KIRWICK  
 Postal Address of Customer (if not as above) P.O. BOX 106 KIRWICK

## Work Details

☒ No. of lighting outlets      ☒ No. of ranges  
☒ No. of socket outlets      ☒ No. of water heaters  
 Was any installation work carried out by a homeowner? ☒ Yes ☒ NO ☐ No

Please tick (✓) as appropriate where work includes:  
☒ Mains      ☒ Main earth  
☒ Switchboard      ☒ Electric lines

Use sketch if necessary

Description MAINS FROM DIS BOX AT ROAD TO METER BOX AT HOUSE SITE 25mm 1Ø W/S MAIN EARTH, R.C.D DOUBLE OUTLET IN METER BOX FOR UNMETERED TEMPORARY SUPPLY.

## Certification of Work

I certify that the above electrical work has been carried out in accordance with the requirements of the Electricity Act 1992 and Electricity Regulations 1997.

### Electrical Worker Details

Name R. McKINLAY  
 Registration No. 102 E. 52  
 Company Cherry Hill Electric Ltd  
 Signature [Signature]  
 Date 10 January 2003

### Certification of Electric Lines

(to be completed where "Description of Work" includes "Electric Lines")

Name  
 Registration No.  
 Company  
 Signature  
 Date

## Inspection Details

Electrical work requiring inspection by a registered electrical inspector

Installation work in hazardous areas

I certify that the inspection has been carried out in accordance with the requirements of the Electricity Regulations 1997.

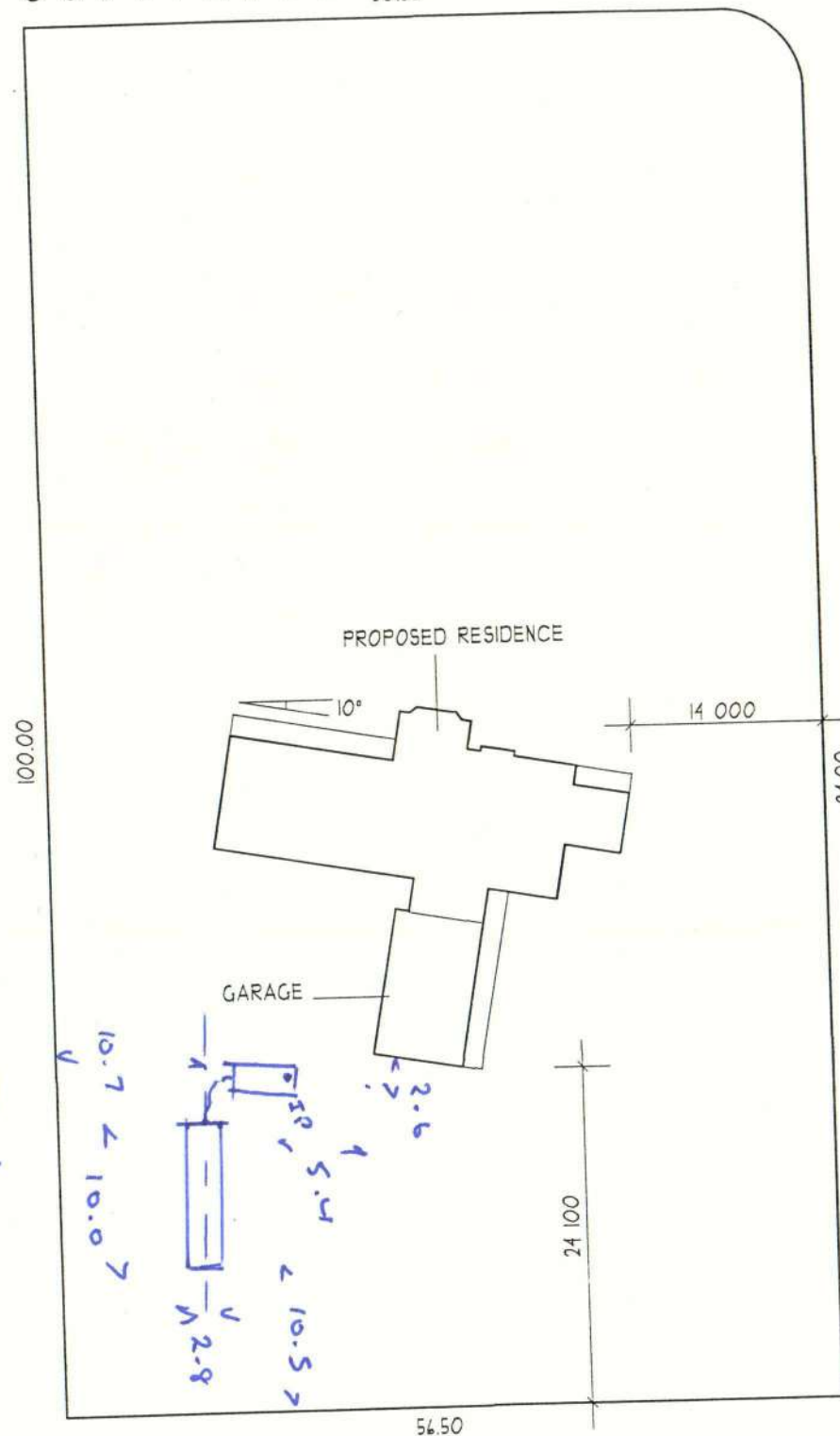
Name CA Chapman  
 Signature [Signature]

Registration No. 1853

Date 20.1.03

TO BE RETAINED BY THE PERSON RESPONSIBLE FOR THE WORK

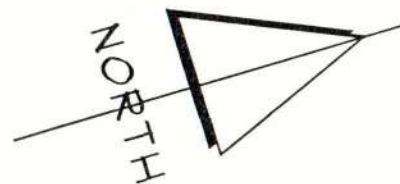
COURTENAY ROAD 50.50



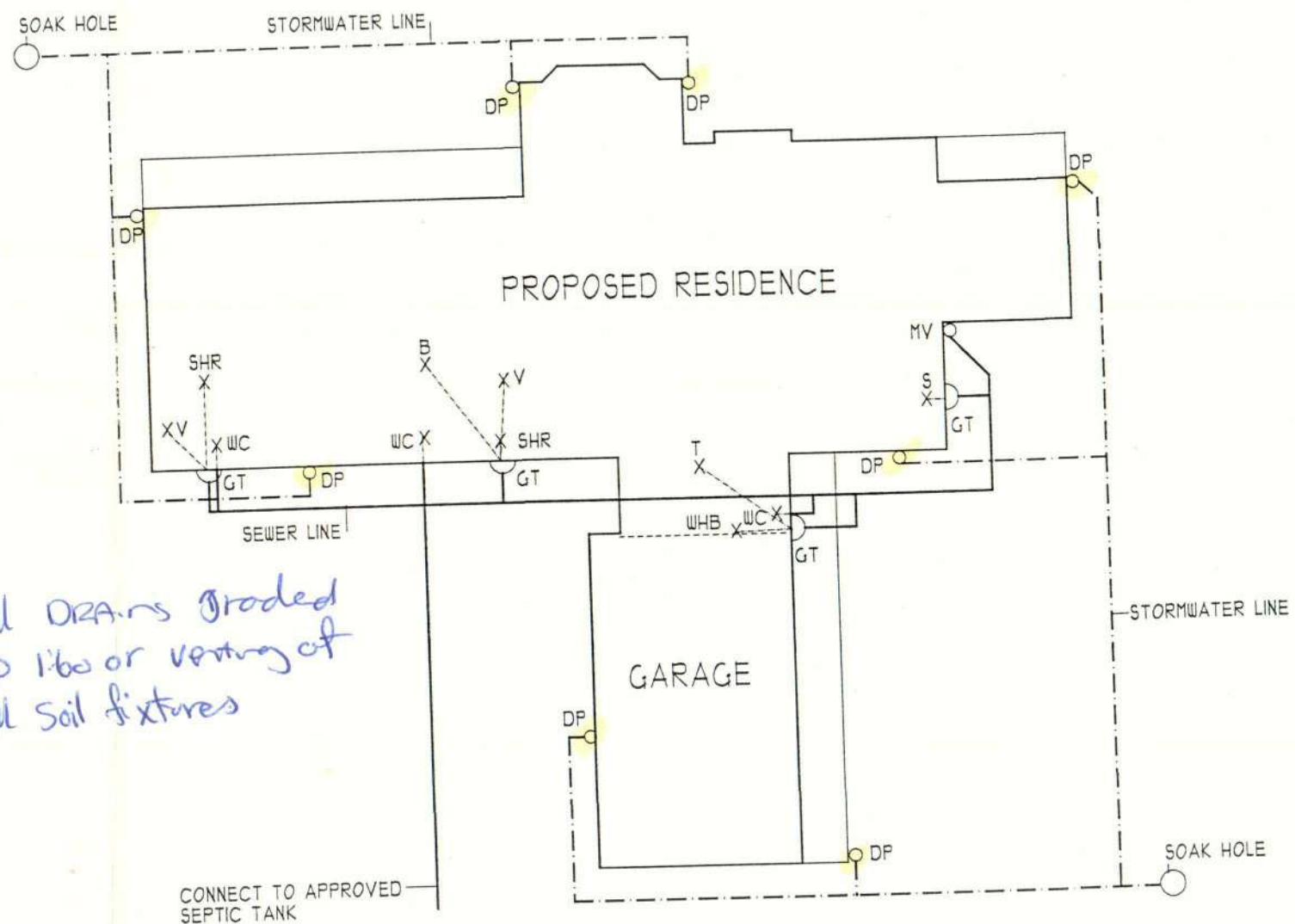
SITE PLAN 1:500

LOT 11

DP 82061



*Equipment shed as per  
Linton Design.  
Tank*



*all DRAINS graded  
to 1:60 or better of  
all soil fixtures*

DRAINAGE PLAN 1:200

NOTE:  
FINAL LAYOUT FOR DRAINS  
TO BE DETERMINED BY DRAINLAYER

*DEPOSAL FIELD  
location note spec.*

| AREAS:             |                       |
|--------------------|-----------------------|
| PROPOSED RESIDENCE | 213.42 M <sup>2</sup> |
| PROPOSED GARAGE    | 67.18 M <sup>2</sup>  |
| TOTAL              | 340.60 M <sup>2</sup> |

| DATE          | AMENDMENTS |
|---------------|------------|
|               |            |
|               |            |
| SALES PERSON: | AC         |

SHEET:  
5 of 5

|           |            |
|-----------|------------|
| DRAWN:    | L.D.       |
| DATE:     | 30/09/2002 |
| REF. NO.: | 2002229    |

## **BUILDING CONSENT SERVICES.**

**M. G. Davis Registered Building Certifier 13.**

**19/05/03.**

**SELWYN DISTRICT COUNCIL,  
Private Bag 1.  
LEESTON.**

**Attention Tony Judd,**

**Dear Tony,**



**Re Consent Application for B & J Hayman .  
Consent No 021305.  
Courtenay Road.**

Please find detailed below the Code Compliance Certificate and final documentation for the above.

If you require further information please contact the writer.

Yours faithfully,

A handwritten signature in blue ink, appearing to read 'Malcolm Davis', written over a circular blue ink stamp.

**Malcolm Davis.**  
Civil Engineer NZCE REA.  
Building Certifier.  
File 021192L

**Phone 03 337 3522. Facsimile 03 337 3538 Mobile Phone 025 386 148.**

Office 66 Beckford Road Christchurch.

A Division of M.G.Davis Engineering Services Ltd.

*Building Consent Processing, Registered Independent Qualified Person, Building Control Services, Project Management, Property Development, Building Act Advice, Building Compliance Auditor.*

# BUILDING CONSENT SERVICES LTD

## BUILDING CERTIFIERS INSPECTION REPORT No. 3858

*Issued by Malcolm Davis, Registered Building Certifier under Section 57 (3) (a), Building Act 1991*

Consent No: 021305 Inspection was made on 11/3/03 at 2.50

Owner's Name: B+J. Haeyman Territory Authority S.D.C

**PROJECT** New Building ☒ Out Building ☐  
 Addition ☐ Alteration ☐ Other ☐  
**Intended use:** Residential ☒  
**Intended Life:**  
☒ Indefinite but not less than 50 years  
☐ Specified as \_\_\_\_\_ years.

**PROJECT LOCATION** Courtney Rd  
 Street Address \_\_\_\_\_  
 Legal Description \_\_\_\_\_ Lot No 71  
 DP No 82067  
 Other \_\_\_\_\_  
 Being Stage 1 of intended 1 stages.  
 Demolition ☐ Yes ☒ No

**This is to report that:** As detailed in the "Scope of Building Certifiers Engagement 02/1192  
 (as filed) the building certifier has been engaged to inspect:  
 1. Specified items of building work. ☒ 2. Listed provisions of the building code. ☒

**That building work:** 1. Has progressed to the extent specified in the attached report No 3858  
 2. The divergence from the plans and specification to date is not material to the Building Consent or project memorandum. ☐

|                                                |                                           |                                              |                                   |
|------------------------------------------------|-------------------------------------------|----------------------------------------------|-----------------------------------|
| Foundations <input type="checkbox"/>           | Ext. Connections <input type="checkbox"/> | Slab <input type="checkbox"/>                | Wastes <input type="checkbox"/>   |
| Brick <input type="checkbox"/>                 | Blockwork <input type="checkbox"/>        | Moisture <input checked="" type="checkbox"/> | Bracing <input type="checkbox"/>  |
| Insulation <input checked="" type="checkbox"/> | Trusses <input type="checkbox"/>          | Stopping <input type="checkbox"/>            | Plumbing <input type="checkbox"/> |
| Final <input type="checkbox"/>                 | Drainage <input type="checkbox"/>         | Prewrap <input type="checkbox"/>             | Other <input type="checkbox"/>    |

|                     |                                                                          |                                         |                                        |
|---------------------|--------------------------------------------------------------------------|-----------------------------------------|----------------------------------------|
| <b>Instructions</b> | All work is in accordance with the building Consent/Certificate          | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/>            |
|                     | Some work is unsatisfactory as detailed below and requires rectification | Yes <input type="checkbox"/>            | No <input checked="" type="checkbox"/> |
|                     | A formal notice to rectify will be issued                                | Yes <input type="checkbox"/>            | No <input checked="" type="checkbox"/> |
|                     | Project requires recheck                                                 | Yes <input type="checkbox"/>            | No <input checked="" type="checkbox"/> |

Signed [Signature] Position Ulg [Signature]

**COMMENTS:** Batts in place ok  
Moisture 12 - 13% ok  
Bracing Complete :-  
H.W.C. Wet back installed in ceiling  
Restraint + Temp Valve ok  
Heads Lagging to Pipes.  
Tray is recommended  
ok to line

3828

02/302  
11/3/03 5.20  
S.D.C

B+T. Hoffman

82025  
11  
continued 18

02/11/20

3828

11/1

W.L.C.

Tray is recommended  
to be lagged to rigid.  
Resistant + temp valve or  
W.L.C. With ball installed in ceiling  
Bracing complete :-  
Moisture is - 12% or  
Baths in place or

on to live

**BUILDING CONSENT SERVICES LTD**  
**BUILDING CERTIFIERS INSPECTION REPORT** No. **3887**

*Issued by Malcolm Davis, Registered Building Certifier under Section 57 (3) (a), Building Act 1991*

Consent No: 021305 Inspection was made on 18/3/03 at 3.00

Owner's Name: B+J. Hayman Territory Authority S.D.C

**PROJECT**  
New Building ☒ Out Building ☐  
Addition ☐ Alteration ☐ Other ☐  
**Intended use:** Residential ☒  
**Intended Life:**  
☒ Indefinite but not less than 50 years  
☐ Specified as \_\_\_\_\_ years.

**PROJECT LOCATION** Courtenay Rd  
Street Address 71  
Legal Description Lot No 82067  
DP No \_\_\_\_\_  
Other \_\_\_\_\_  
Being Stage 1 of intended 1 stages.  
Demolition ☐ Yes ☒ No

**This is to report that:** As detailed in the "Scope of Building Certifiers Engagement (as filed) the building certifier has been engaged to inspect:  
1. Specified items of building work. ☒ 2. Listed provisions of the building code. ☒

**That building work:** 1. Has progressed to the extent specified in the attached report No **3887**  
2. The divergence from the plans and specification to date is not material to the Building Consent or project memorandum. ☐

|                                      |                                           |                                              |                                             |
|--------------------------------------|-------------------------------------------|----------------------------------------------|---------------------------------------------|
| Foundations <input type="checkbox"/> | Ext. Connections <input type="checkbox"/> | Slab <input type="checkbox"/>                | Wastes <input type="checkbox"/>             |
| Brick <input type="checkbox"/>       | Blockwork <input type="checkbox"/>        | Moisture <input type="checkbox"/>            | Bracing <input checked="" type="checkbox"/> |
| Insulation <input type="checkbox"/>  | Trusses <input type="checkbox"/>          | Stopping <input checked="" type="checkbox"/> | Plumbing <input type="checkbox"/>           |
| Final <input type="checkbox"/>       | Drainage <input type="checkbox"/>         | Prewrap <input type="checkbox"/>             | Other <input type="checkbox"/>              |

|                     |                                                                             |                                         |                                        |
|---------------------|-----------------------------------------------------------------------------|-----------------------------------------|----------------------------------------|
| <b>Instructions</b> | All work is in accordance with the building Consent/ <del>Certificate</del> | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/>            |
|                     | Some work is unsatisfactory as detailed below and requires rectification    | Yes <input type="checkbox"/>            | No <input checked="" type="checkbox"/> |
|                     | A formal notice to rectify will be issued                                   | Yes <input type="checkbox"/>            | No <input checked="" type="checkbox"/> |
|                     | Project requires recheck                                                    | Yes <input type="checkbox"/>            | No <input checked="" type="checkbox"/> |

Signed [Signature] Position Deputy DC

**COMMENTS:** All braces as installed & nailed off correctly  
OK to Stop

3887

05/13/02

B+2. Hoffman

85062

85062

05/13/02

3887

85062

85062

85062

85062

85062

85062

# BUILDING CONSENT SERVICES LTD

## BUILDING CERTIFIERS INSPECTION REPORT

No **3961**

*Issued by Malcolm Davis, Registered Building Certifier under Section 57 (3) (a), Building Act 1991*

Consent No: 021305 Inspection was made on 25/3/03 at 9.15.

Owner's Name: B+S. Hayman Territory Authority S.D.C

**PROJECT**

New Building ☒ Out Building ☐

Addition ☐ Alteration ☐ Other ☐

Intended use: Residential ☒

Intended Life:

☒ Indefinite but not less than 50 years

☐ Specified as \_\_\_\_\_ years.

**PROJECT LOCATION** Courtney Rd

Street Address \_\_\_\_\_

Legal Description \_\_\_\_\_ Lot No 71

DP No 82067

Other \_\_\_\_\_

Being Stage 1 of intended 1 stages.

Demolition ☐ Yes ☒ No

**This is to report that:** As detailed in the "Scope of Building Certifiers Engagement (as filed) the building certifier has been engaged to inspect:

1. Specified items of building work. ☒ 2. Listed provisions of the building code. ☒

**That building work:**

1. Has progressed to the extent specified in the attached report No **3961**

2. The divergence from the plans and specification to date is not material to the Building Consent or project memorandum. ☐

|                                           |                                           |                                   |                                   |
|-------------------------------------------|-------------------------------------------|-----------------------------------|-----------------------------------|
| Foundations <input type="checkbox"/>      | Ext. Connections <input type="checkbox"/> | Slab <input type="checkbox"/>     | Wastes <input type="checkbox"/>   |
| Brick <input checked="" type="checkbox"/> | Blockwork <input type="checkbox"/>        | Moisture <input type="checkbox"/> | Bracing <input type="checkbox"/>  |
| Insulation <input type="checkbox"/>       | Trusses <input type="checkbox"/>          | Stopping <input type="checkbox"/> | Plumbing <input type="checkbox"/> |
| Final <input type="checkbox"/>            | Drainage <input type="checkbox"/>         | Prewrap <input type="checkbox"/>  | Other <input type="checkbox"/>    |

**Instructions**

All work is in accordance with the building Consent/Certificate Yes ☒ No ☐

Some work is unsatisfactory as detailed below and requires rectification Yes ☐ No ☒

A formal notice to rectify will be issued Yes ☐ No ☒

Project requires recheck Yes ☐ No ☒

Signed [Signature] Position Wing 22

**COMMENTS:** Cavity for 70 series 40 mm ok  
generally 40+  
ties @ 600% every 1- 4th left  
< 700 :- ok

It has to watch

① Cavity over 50 mm used long  
ties to catch dimples

② Reinforce ties are at 600%  
get extra blocking if required  
in corner

05/30/20

2-D.C.

B+2. Hoffman

15

02/11/20

11/11

The 22

to see the 22  
 to see the 22  
 to see the 22

to see the 22

① to see the 22  
 to see the 22

② to see the 22  
 to see the 22

Consent No: 021305.Applicants Name: HAYMAN.Date: 28 / 4 / 03.

## MEMO

SPOKE TO MALCOLM DAVIS TO CLARIFY 'REMEDIAL' FOUNDATION WORK.

WINDOW AS PER ORIGINAL PLANS WAS TOO LARGE FOR 'NORMAL' GLASS. WINDOW WAS PUSHED OUT & MAIN PANE MADE 200 NARROWER, 2 SIDE (ANGLED) PANEES EACH MADE 100mm LONGER.

FOUNDATION 'REMEDIAL' WORK WAS TO PUSH FOUNDATION LINE 'OUT' AS REQUIRED.

MALCOLM WILL FAX THROUGH A PLAN SHOWING AMENDED BAY WINDOW DIMENSIONS.

Signed 

**BUILDING CONSENT SERVICES.**

M. G. Davis Registered Building Certifier 13.

To :- S.D.C. Fax No :- Auto  
Attention :- Vanessa Beaujon Date :- 10-4-03  
From :- Malcolm Davis on 025 386 148 ☐

Number of Pages 3 (including this page.)

Project :- BC 021305. Reply to letter  
BR + J.L. Hayman 8/4/03Message :- I thought I sent through the  
Engineer's detail.There was no remedial as such  
had terminology by the Engineer.The footing needed to be extended  
as the Bay Window was too large  
The steel beams used would not  
support the size glass required.  
So they extended the two sides of  
the Bay so the front became  
smaller.As this type of construction is specific  
design I had the engineer design +  
approved its construction.

Just this is sufficient

Signed, Malcolm

FILE COPY

Phone 03 337 3522 Facsimile 03 337 3538

Mobile Phone 025 386 148.

Office 66 Beckford Road Christchurch.

E Mail [malcolm.davis@stra.co.nz](mailto:malcolm.davis@stra.co.nz)

A Division of M.G. Davis Engineering Services Ltd.

[www.certifier.co.nz](http://www.certifier.co.nz)Building Consent Processing, Registered Independent Qualified Person, Building Control Services, Project Management,  
Property Development, Building Act Advice, Building Compliance Auditor

Elliot Sinclair & Partners Ltd.

JOB NAME: Todays Homes Ltd

Consulting Engineers & Surveyors  
Ph. 378-4014

NO. 261 002

SUBJECT: Remedial work for support of brick veneer

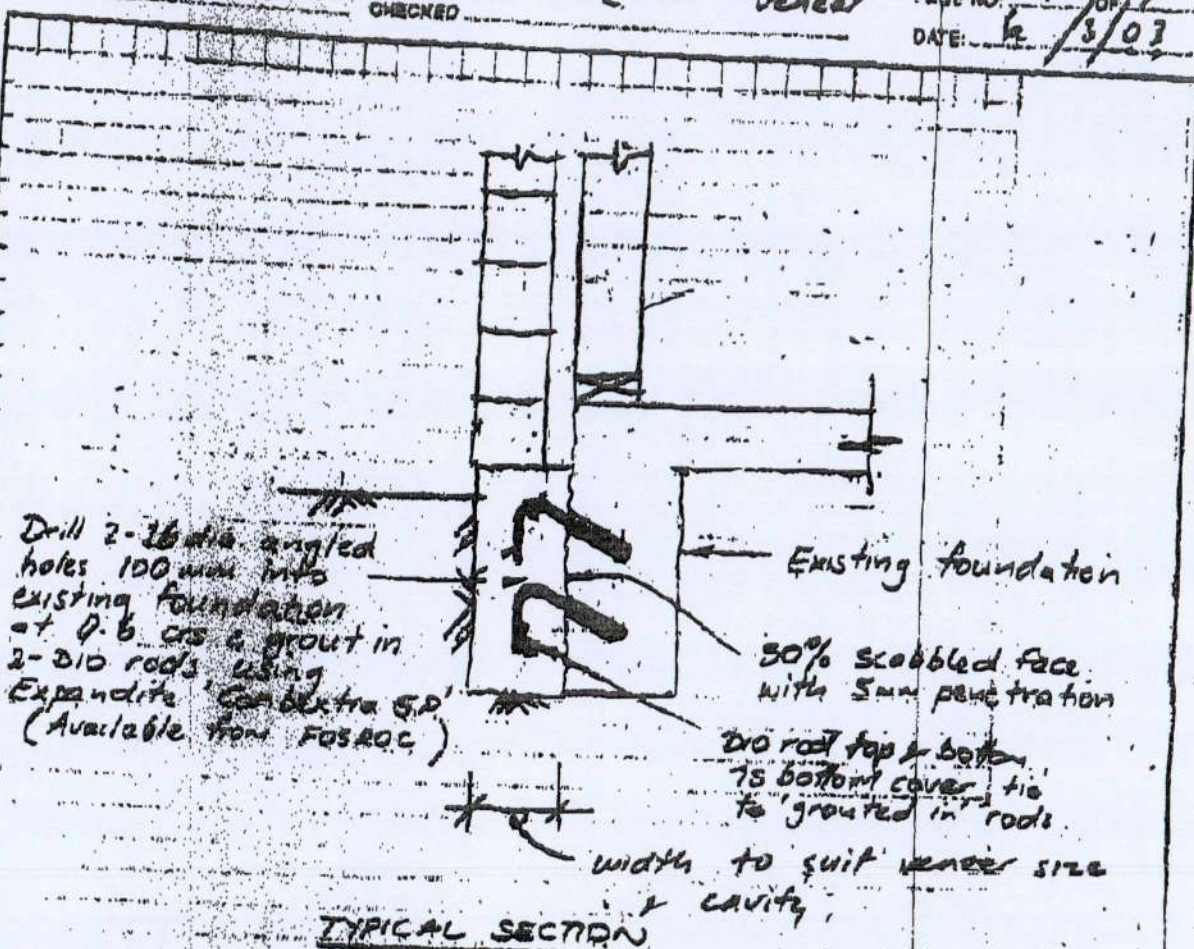
BY: R Wilson

CHECKED

JOB NO: 224332

PAGE NO: 1 OF 1

DATE: 6/3/03



### Notes

- 1) Excavate new foundation to at least the depth of the existing foundation.
- 2) After scabbling face of existing foundation wash down surface to remove loose debris etc.
- 3) Before grouting in anchor rods the fixing holes must be blown clean to remove loose debris etc.
- 4) Before concreting new foundation dampen down face of existing foundation to improve bonding surface.
- 5) Compact concrete with high frequency vibration.
- 6) Engineer to inspect foundation prior to pouring.

FILE COPY

8 April 2003

Building Consent Services  
66 Beckford Road  
**CHRISTCHURCH.**

FILE COPY

Dear Mr Davis,

In reference to BC 021305 for BR & JL Hayman at Courtenay Road, Kirwee.

We have received a Producer Statement Construction Review from Eliot Sinclair for remedial work to the dwelling perimeter foundation, Council require a letter of explanation in regard to this Statement.

Please provide details of what work was involved, the extent of the remedial work and why this was necessary. I note that you have not provided us with any Design information for this work and your inspections sheets on our file do not make mention of any defective areas of work.

Selwyn District Council cannot accept this Producer Statement until we have a clear and complete understanding of what work has been carried out and then if we are satisfied Council may accept the Engineers producer statement.

We look forward to your reply.

Yours faithfully



Vanessa Beavon  
Service Delivery Officer  
Building Control



**Eliot Sinclair  
& Partners Limited**  
Consulting Surveyors • Consulting Engineers

Our Ref.: 224332

31 March 2003

Land Surveyors

Civil, Structural, Geotechnical  
& Environmental Engineers

Land Development Consultants

Hydrographic Surveyors

Advanced Computer Applications  
in Surveying and Engineering

Level 5

151 Kilmore Street

PO Box 4597

Christchurch, New Zealand

Telephone (03) 379-4014

Fax (03) 365-2449

Email esp@eliotsin.co.nz

www.eliotsinclair.co.nz

## PRODUCER STATEMENT - CONSTRUCTION REVIEW Clause B1 Structure

To: Selwyn District Council  
Private Bag 1  
LEESTON



### FOUNDATION REMEDIAL WORK

### LOT 71 COURTNAY ROAD, KIRWEE

### Project No.021305

I, **Richard H J Wilson**, being a Registered Engineer and holding a current Annual Practising Certificate and being an Associate of **Eliot Sinclair & Partners Ltd.**, have been engaged by **Today Homes** to observe the **construction of the remedial work for the perimeter foundation** in respect of the requirements of **Clause B1 of the Building Regulations 1992**.

As an independent design professional covered by a current policy of Professional Indemnity Insurance to a minimum value of \$200,000.00, I confirm that personnel under my control have carried out periodic reviews of the work appropriate to the engagement. Based upon these reviews and information supplied by the contractor during the course of the works, it is my opinion that the work has been carried out in such a manner as to meet the relevant requirements of **Clause B1** and to satisfy the intent of our design as detailed in our **attached drawing reference 224332 sheet 1** dated **6 March 2003**.

Signature

  
Richard H J Wilson  
B.E., M.I.P.E.N.Z.  
Registration No. 209652

FILE COPY

c.c. Today Homes  
Attn G. Braxton

#### Directors:

Marton D. Sinclair B.E. B.Sc. M.I.P.E.N.Z. M.N.Z.I.S. Reg. Eng. Reg. Surv.  
Bruce E. Sinclair B.Sc. M.N.Z.I.S. Reg. Surv.  
Maurice W. Perwick Dip. Surv. M.N.Z.I.S. Reg. Surv. Hydro Surv Lvl 1 S.A.  
Mark A. Allan B.Surv. N.Z.C.L.S. M.N.Z.I.S. Reg. Surv.  
John des C. Brouard B.E. M.I.P.E.N.Z. Reg. Eng.

#### Associates:

Roy E. Garside Dip. Surv. M.N.Z.I.S. Reg. Surv.  
Warren J. Haynes B. Surv. M.N.Z.I.S. Reg. Surv.  
Ken G. Burrows N.Z.C.D. A.N.Z.I.S.  
Richard H.J. Wilson B.E. M.I.P.E.N.Z. Reg. Eng.

24190/147/30

# BUILDING CONSENT SERVICES LTD

## BUILDING CERTIFIERS INSPECTION REPORT No 3713

*Issued by Malcolm Davis, Registered Building Certifier under Section 57 (3) (a), Building Act 1991*

Consent No: 021305 Inspection was made on 14-2-03 at 2.30pm  
 Owner's Name: Hayman Territory Authority: SOC

**PROJECT** New Building ☒ Out Building ☐  
 Addition ☐ Alteration ☐ Other ☐  
**Intended use:** Residential ☐  
**Intended Life:**  
☐ Indefinite but not less than 50 years  
☐ Specified as \_\_\_\_\_ years.

**PROJECT LOCATION**  
 Street Address Courtenay Road  
 Legal Description Lot No 76  
 DP No 22067  
 Other \_\_\_\_\_  
 Being Stage 1 of intended 1 stages.  
 Demolition ☐ Yes ☒ No

**This is to report that:** As detailed in the "Scope of Building Certifiers Engagement (as filed) the building certifier has been engaged to inspect:  
 1. Specified items of building work. ☒ 2. Listed provisions of the building code. ☒ 02/1192

**That building work:** 1. Has progressed to the extent specified in the attached report No 3713  
 2. The divergence from the plans and specification to date is not material to the Building Consent or project memorandum. ☐

|                                      |                                             |                                             |                                             |
|--------------------------------------|---------------------------------------------|---------------------------------------------|---------------------------------------------|
| Foundations <input type="checkbox"/> | Ext. Connections <input type="checkbox"/>   | Slab <input type="checkbox"/>               | Wastes <input type="checkbox"/>             |
| Brick <input type="checkbox"/>       | Blockwork <input type="checkbox"/>          | Moisture <input type="checkbox"/>           | Bracing <input checked="" type="checkbox"/> |
| Insulation <input type="checkbox"/>  | Trusses <input checked="" type="checkbox"/> | Stopping <input type="checkbox"/>           | Plumbing <input type="checkbox"/>           |
| Final <input type="checkbox"/>       | Drainage <input type="checkbox"/>           | Prewrap <input checked="" type="checkbox"/> | Other <input type="checkbox"/>              |

**Instructions** All work is in accordance with the building Consent/Certificate Yes ☒ No ☐  
 Some work is unsatisfactory as detailed below and requires rectification Yes ☐ No ☒  
 A formal notice to rectify will be issued Yes ☐ No ☒  
 Project requires recheck Yes ☐ No ☒

Signed RJL Position CC

**COMMENTS:**

- TRESS fixings -  
 - Purlin Dogs -  
 - TOP PLATE fixings  
 - up-lift fixings - Litch  
 - ALL BRACING UNITS in place. e Correct  
 - FB25H. Fitted e. Fixings complete  
 1/3/TREASON valley Bob in place.  
 OK to WRAP = SHARP JOB =

# BUILDING CONSENT SERVICES LTD

## BUILDING CERTIFIERS INSPECTION REPORT No 3524

*Issued by Malcolm Davis, Registered Building Certifier under Section 57 (3) (a), Building Act 1991*

Consent No: 021305 Inspection was made on 19/12/02 at 4.00

Owner's Name: B+J Hayman Territory Authority: SDC

**PROJECT** New Building ☒ Out Building ☐  
Addition ☐ Alteration ☐ Other ☐

Intended use: Residential ☒

Intended Life:

- ☒ Indefinite but not less than 50 years  
☐ Specified as \_\_\_\_\_ years.

**PROJECT LOCATION** Caertney Rd

Street Address

Legal Description

Lot No 71

DP No 82067

Other \_\_\_\_\_

Being Stage 1 of intended 1 stages.

Demolition ☐ Yes ☒ No

**This is to report that:**

As detailed in the "Scope of Building Certifiers Engagement (as filed) the building certifier has been engaged to inspect:

1. Specified items of building work. ☒ 2. Listed provisions of the building code. ☒

**That building work:**

1. Has progressed to the extent specified in the attached report No 3524  
2. The divergence from the plans and specification to date is not material to the Building Consent or project memorandum. ☐

Foundations ☐  
Brick ☐  
Insulation ☐  
Final ☐

Ext. Connections ☐  
Blockwork ☐  
Trusses ☐  
Drainage ☐

Slab ☒  
Moisture ☐  
Stopping ☐  
Prewrap ☐

Wastes ☒  
Bracing ☐  
Plumbing ☒  
Other \_\_\_\_\_

**Instructions**

All work is in accordance with the building Consent/Certificate

Some work is unsatisfactory as detailed below and requires rectification

A formal notice to rectify will be issued

Project requires recheck

Yes ☒ No ☐  
Yes ☒ No ☐  
Yes ☐ No ☒  
Yes ☐ No ☒

Signed [Signature]

Position [Signature]

**COMMENTS:**

Porches (Verandah) No DPC.  
Mess to All Areas 668.  
Floors to be Cut to Comply  
Corner Bays to be completed  
DPC 250 after Polystyrene  
Unprotected Pipe Through Slab to be  
removed from Slab Area. (Not for Drainage)  
Water over  
No HWC Outlet.

**BUILDING CONSENT SERVICES LTD**  
**BUILDING CERTIFIERS INSPECTION REPORT** No **3574**

*Issued by Malcolm Davis, Registered Building Certifier under Section 57 (3) (a), Building Act 1991*

Consent No: 021305 Inspection was made on 4/12/02 at 10.45

Owner's Name: B+J. Hayman Territory Authority S.D.C

**PROJECT**  
New Building ☒ Out Building ☐  
Addition ☐ Alteration ☐ Other ☐  
Intended use: Residential ☒  
Intended Life:  
☒ Indefinite but not less than 50 years  
☐ Specified as \_\_\_\_\_ years.

**PROJECT LOCATION** Courtenay Rd  
Street Address  
Legal Description Lot No 71  
DP No 82067  
Other \_\_\_\_\_  
Being Stage ✓ 1 of intended 1 stages.  
Demolition ☐ Yes ☒ No

**This is to report that:** As detailed in the "Scope of Building Certifiers Engagement (as filed) the building certifier has been engaged to inspect:  
1. Specified items of building work. ☒ 2. Listed provisions of the building code. ☒

**That building work:** 1. Has progressed to the extent specified in the attached report No 3574  
2. The divergence from the plans and specification to date is not material to the Building Consent or project memorandum. ☐

|                                                 |                                           |                                   |                                   |
|-------------------------------------------------|-------------------------------------------|-----------------------------------|-----------------------------------|
| Foundations <input checked="" type="checkbox"/> | Ext. Connections <input type="checkbox"/> | Slab <input type="checkbox"/>     | Wastes <input type="checkbox"/>   |
| Brick <input type="checkbox"/>                  | Blockwork <input type="checkbox"/>        | Moisture <input type="checkbox"/> | Bracing <input type="checkbox"/>  |
| Insulation <input type="checkbox"/>             | Trusses <input type="checkbox"/>          | Stopping <input type="checkbox"/> | Plumbing <input type="checkbox"/> |
| Final <input type="checkbox"/>                  | Drainage <input type="checkbox"/>         | Prewrap <input type="checkbox"/>  | Other <input type="checkbox"/>    |

|                                                                                                                                                                                                                                             |                                                                     |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------|
| <b>Instructions</b><br>All work is in accordance with the building Consent/Certificate<br>Some work is unsatisfactory as detailed below and requires rectification<br>A formal notice to rectify will be issued<br>Project requires recheck | Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> |
|                                                                                                                                                                                                                                             | Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> |
|                                                                                                                                                                                                                                             | Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> |
|                                                                                                                                                                                                                                             | Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> |

Signed [Signature] Position Ulg DS

**COMMENTS:** Soil. Clay so to Metal Hard > 300kg ok  
Reinf 2. D16 D18 @ 600 ok  
Stirrups in place to vertical ok  
D16 in heel for vertical ok  
W/c Not installed  
Wastes in sleeves  
Size 240+ 400-600 ok Cover so top  
75 but ok  
Some waste to complete all to have  
when completed

some change to complete all to have  
is not all

size 200+ was - was at over 20 lbs  
water in stream

w/c not installed

Die in fuel for recorded at

stoppers in place to be recorded at

Point 2. Die 200 or

201. Day 20 to Metal House 200/100

W.D.

111

3574

05/11/15

85067

11

counted by

B+2. Hoffman

05/13/02

11/15/05

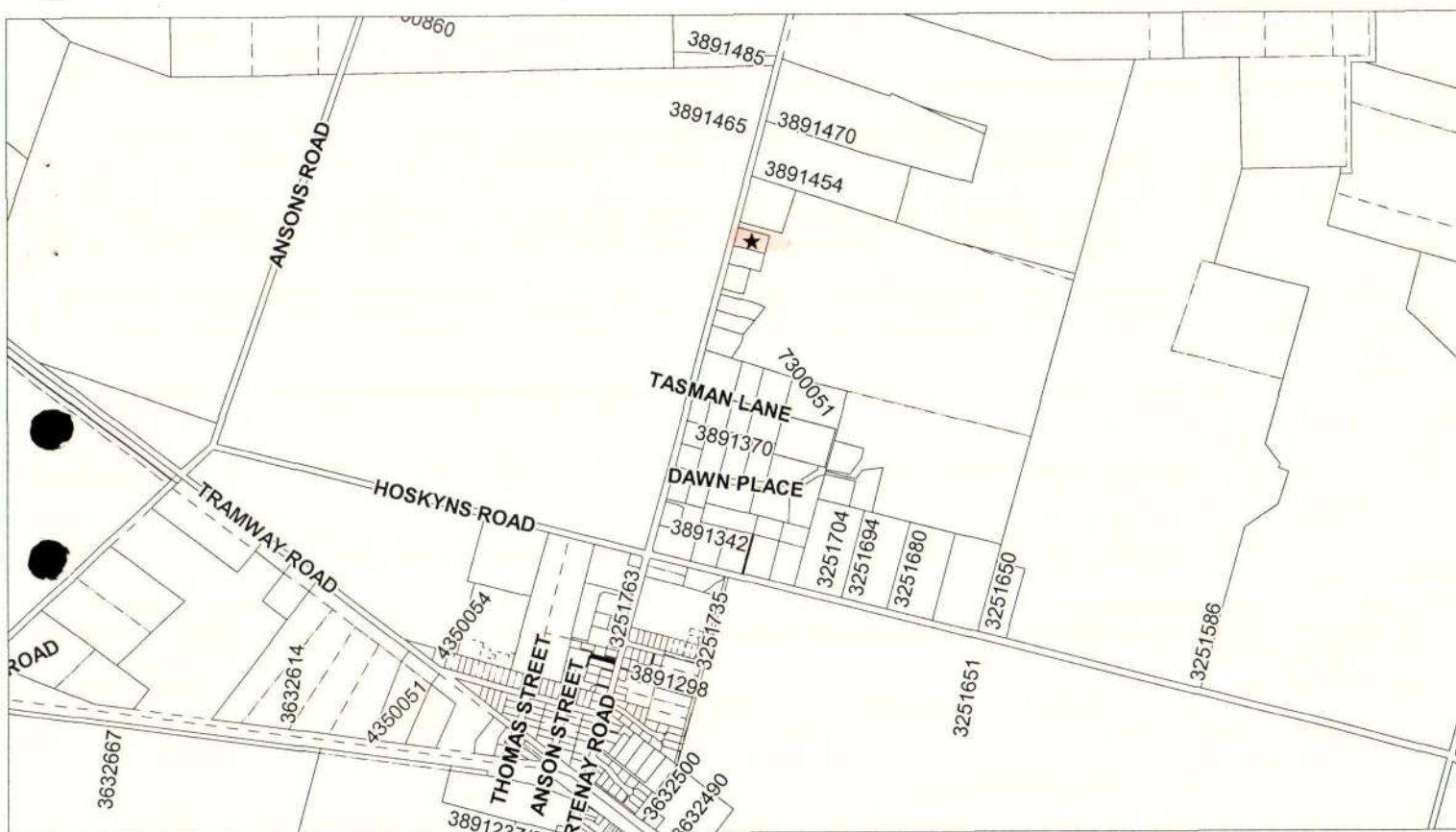
10-12

2-D.C

3574



Debtor No BC021305 CONFIDENTIAL!!  
App Name B R & J L HAYMAN  
Address C/- BUILDING CONSENT SERVICES : 66 BECKFORD ROAD : CHRISTCHURCH  
Phone 3373522 : 025386148 : Fax 3373522  
Balance \$ 0.00 T/Cost \$ 0.00  
Proposal DOMESTIC DWELLING  
Proposed Use  
Intended Life INDEFINITE Being stage 1 of 1  
Stats code New (& prebuilt) House, Unit, Bach, Crib, Town House etc.  
Est value \$ 320,000  
Floor (m2) 340 Units Storeys Pans 3  
Builder Name TODAY HOMES LTD Phone 3416461  
Builder Addr P O BOX 8043, CHRISTCHURCH  
Valuation No 2419014730 1-link  
Owner HAYMAN BRIAN ROBERT & JUDIE LORRAINE  
Location \*\* COURTENAY ROAD, KIRWEE RAPID:NONE  
Legal \*\* LOT 71 DP 82067 BLK VIII HAWKINS SD  
Zone  
Overseer M DAVIS - 025 386148 Certifier? Y  
Status FORMALLY RECEIVED 9/10/02 Deadline 23/10/02  
Note FOR PIM/BC CIRC  
R/Consent? C/Schedule? CONFIDENTIAL



## SIGN OFF BUILDING CONSENT:

BUILDING:

Date

22/10/02

HEALTH:

Date

22/10/02

## CONDITIONS

NO OF INSPECTIONS ALLOWED

EARTHQ:

B

SNOW:

0.7

WIND:

H

ALT:

160

CORROS:

2

## FILE NOTES

INSPECTIONS BY CERTIFIER (M DAYS).

## AMENDMENTS

DATE:

DESCRIPTION:

# PIM APPLICATION WORKSHEET P

NAME:

HAYMAN

CONSENT NO : BC

021305

**BUILDING**

**EHO**

**PLANNING**

**ENGINEERS**

date  
required

17/10/02

16/10/02

15/10/02

14/10/02

completed  
& date

YJB 22/10/02

YJB 22/10/02

JMA 18/10/02

JA 11/10/02

NOTES:

CERTIFIER - M. DAVIS.

14/10/02  
15/10

## PLUMBING & DRAINAGE

NZBC AS1/ G12 & G13

NZBC AS1/ AS 3500

|                                     |     |
|-------------------------------------|-----|
| <input checked="" type="checkbox"/> | P01 |
|                                     | P02 |
|                                     | P03 |
|                                     | P04 |
|                                     | P05 |
|                                     | P06 |
|                                     | P07 |
|                                     | P08 |

|                                     |     |
|-------------------------------------|-----|
|                                     | P09 |
| <input checked="" type="checkbox"/> | P10 |
|                                     | P11 |
|                                     | P12 |
|                                     | P13 |
|                                     | P14 |
|                                     | P15 |
|                                     | P16 |

|                                     |     |
|-------------------------------------|-----|
| <input checked="" type="checkbox"/> | P17 |
|                                     | P18 |
|                                     | P19 |
|                                     | P20 |
|                                     | P21 |
|                                     | P22 |
| <input checked="" type="checkbox"/> | P23 |
|                                     | P24 |

|  |     |
|--|-----|
|  | P25 |
|  | P26 |
|  | P27 |
|  | P28 |
|  | P29 |
|  | P30 |
|  | P31 |
|  | P32 |

|  |     |
|--|-----|
|  | P33 |
|  | P34 |
|  | P35 |
|  | P36 |
|  | P37 |
|  | P38 |
|  | P39 |
|  | P40 |

|  |     |
|--|-----|
|  | P41 |
|  | P42 |
|  | P43 |
|  | P44 |
|  | P45 |
|  | P46 |
|  | P47 |
|  | P48 |

comments

More info

Intended use

## ENGINEERING

|                                     |     |
|-------------------------------------|-----|
| sewer                               |     |
|                                     | E00 |
| <input checked="" type="checkbox"/> | E01 |
|                                     | E02 |
|                                     | E03 |
|                                     | E04 |

|                                     |     |
|-------------------------------------|-----|
| stormwater                          |     |
| <input checked="" type="checkbox"/> | E05 |
|                                     | E06 |
|                                     | E07 |
|                                     | E08 |
|                                     | E09 |

|         |     |
|---------|-----|
| hazards |     |
|         | E10 |
|         | E11 |
|         | E12 |
|         | E13 |
|         | E14 |

|                                     |     |
|-------------------------------------|-----|
| water                               |     |
| <input checked="" type="checkbox"/> | E15 |
|                                     | E16 |
|                                     | E17 |
|                                     | E18 |
|                                     | E19 |

|                                     |     |
|-------------------------------------|-----|
| entrances                           |     |
| <input checked="" type="checkbox"/> | E20 |
|                                     | E21 |
|                                     | E22 |
|                                     | E23 |
|                                     | E24 |

|           |     |
|-----------|-----|
| entrances |     |
|           | E25 |
|           | E26 |
|           | E27 |
|           | E28 |
|           |     |

comments

BUILDING

NZS 3604:1999

NZZ 1900

NZS 4203

NZS 7421

EARTHQUAKE B SNOW 0.7 WIND H ALTITUDE 160 CORROSION 2

| SITE  |      |  | PF05      | SHELL |      |      | PB15 | RELOCATES |            | GENERAL |      | PG15 |           |
|-------|------|--|-----------|-------|------|------|------|-----------|------------|---------|------|------|-----------|
| ✓     | PS01 |  | PF06      |       | PB01 |      | PB16 |           | PR01       |         | PG01 |      | PG16      |
|       | PS02 |  | PF07      |       | PB02 |      | PB17 |           | PR02       |         | PG02 |      | PG17      |
|       | PS03 |  | PF08      |       | PB03 |      | PB18 |           | PR03       |         | PG03 |      | PG18      |
|       | PS04 |  | PF09      |       | PB04 |      | PB19 |           | PR04       |         | PG04 |      | PG19      |
|       | PS05 |  | PF10      |       | PB05 |      | PB20 |           |            |         | PG05 |      | PG20      |
|       | PS06 |  |           |       | PB06 |      | PB21 |           | SOLID FUEL |         | PG06 |      | CERTIFIER |
|       | PS07 |  |           |       | PB07 |      | PB22 |           |            | PH01    |      | PG07 |           |
|       | PS08 |  | STRUCTURE |       | PB08 |      | PB23 |           | PH02       |         | PG08 |      | ✓ PC02    |
|       | PS09 |  |           | PT01  |      | PB09 |      |           |            | PH03    |      | PG09 |           |
| FOUND |      |  | PT02      |       | PB10 |      |      |           | PH04       |         | PG10 |      | PC04      |
|       | PF01 |  | PT03      |       | PB11 |      |      |           | PH05       |         | PG11 |      | PC05      |
|       | PF02 |  | PT04      |       | PB12 |      |      |           | PH06       |         | PG12 |      | PC06      |
|       | PF03 |  | PT05      |       | PB13 |      |      |           | PH07       |         | PG13 |      | ✓ PC07    |
|       | PF04 |  |           |       | PB14 |      |      |           |            |         | PG14 |      |           |

comments

\* ROOF TRUSSES, GARAGE LINTEL,  
GANGLAN VERANDAH BEAMS.

\*2. NOTE THE SNOW LOADING FOR THIS AREA IS 0.7 KPa, PLEASE ADVISE TRUSS MANUFACTURER TO

## AMEND DESIGN

More info / to enable us to process your building consent when received:

Intended use DOMESTIC DWELLING WITH ATTACHED GARAGE (340m<sup>2</sup>)

### Intended use — Planning

# BUILDING CONSENT & PIM COSTING

NUMBER

BC 021305

**COMPLIANCE CERTIFICATE COST**  
(Select and insert a, b or c value in \$ column)

a (Multiple inspections) 60.00  
b (2 -4 inspections) 60.00  
c (1 inspection & SFH's) 40.00

60.00

## ADMINISTRATION

UNITS

Rate/Unit

|                                                    |   |
|----------------------------------------------------|---|
| Processing Consent                                 | 8 |
| Processing PIM                                     | 6 |
| Issue, photocopy & administer consent              | 6 |
| Inspection recording (enter number of inspections) |   |

TOTAL ADMINISTRATION UNITS

A

20 x 4.50

90.00

## BUILDING

|                             |   |
|-----------------------------|---|
| Processing PIM              | 3 |
| Processing Building Consent | 3 |
| Further Information         |   |

TOTAL BUILDING UNITS

B

6

## HEALTH

|                     |   |
|---------------------|---|
| Processing PIM      | 3 |
| Processing Consent  | 2 |
| Further Information |   |

TOTAL HEALTH UNITS

C

3

## AUDIT & APPROVAL OF CONSENT FOR ISSUE

|          |   |
|----------|---|
| SIGN OFF | D |
|----------|---|

2

TOTAL HEALTH & APPROVAL UNITS

B+C+D →

118 x 6.20

68.20

69.60

## INSPECTION CONDITIONS

TYPE DETAIL

ADMIN & PROCESS

TOTAL →

218.20

|   |  |
|---|--|
| 1 |  |
| 2 |  |
| 3 |  |
| 4 |  |
| 5 |  |
| 6 |  |
| 7 |  |
| 8 |  |

TOTAL INSPECTIONS

E

|   |             |   |             |
|---|-------------|---|-------------|
|   | INSPECTIONS | X | TRAVEL TIME |
| E |             | X |             |

F

E+F →

x 6.20

|  |             |   |          |
|--|-------------|---|----------|
|  | INSPECTIONS | X | DISTANCE |
|  |             | X |          |

TOTAL

x 0.45

INSPECTIONS PLUS TRAVEL COSTS

## CONSULTANTS

PLANNING 3 X \$6.75 \$20.25 insert if applicable

ENGINEERING FLAT RATE \$17.00 \$17.00 insert if applicable

PLANNING & ENGINEERING TOTAL

\$

37.25

WATER CONNECTION FEE

\$56-25

insert if applicable

C/T P/S OTHER

\$ \$10.00 \$

insert if applicable

10.00

RE-INSPECTION FEE

\$

GROSS TOTAL

LESS DEPOSIT

NET TOTAL

\$

\$100.00

\$

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(form amended Sept 2002)

| INFORMATION                     |   | COMMENT       |
|---------------------------------|---|---------------|
| <b>Intended Use</b>             |   |               |
| habitable                       | ✓ |               |
| non-habitable                   |   |               |
| definition required (schedule)  |   |               |
| <b>Site</b>                     |   |               |
| flood zone                      | ✗ |               |
| ground bearing                  | ✓ |               |
| notifications other authorities |   |               |
| <b>Fire Wall</b>                |   |               |
| <b>Floor Slab</b>               |   |               |
| mesh                            |   |               |
| DPC                             |   |               |
| <b>Foundation</b>               |   |               |
| reinforcing                     |   |               |
| depth/width                     |   |               |
| engineer certification          |   |               |
| <b>Piles</b>                    |   |               |
| pile bracing                    |   |               |
| pile fixings                    |   |               |
| <b>Truss Design</b>             | ✓ |               |
| wind speed                      | ✓ | HIGH          |
| snow load                       | ✓ | 0.49          |
| roof cladding                   | ✓ | COLORSTEEL    |
| heavy/light                     | ✓ | LIGHT         |
| <b>Bracing</b>                  |   |               |
| calculations                    |   |               |
| layout plan                     |   |               |
| <b>Garage Lintel</b>            | ✓ | 4.8m SPAN     |
| type                            |   | (FB 25H),     |
| P/Statement                     |   |               |
| <b>Lintels/Beams</b>            | ✓ | CANBLAM BEAMS |
| span                            |   | TO VERANDA.   |
| cantilevered lintels            |   |               |
| <b>Producer Statement</b>       |   |               |
| assumptions                     |   |               |
| work covered (specifically)     |   |               |
| drawings                        |   |               |
| <b>Insulation</b>               |   |               |
| <b>Heating Type</b>             | ✓ | LOG FIRE      |
| specifications                  |   |               |
| interior environment G5         |   |               |
| <b>Ventilation</b>              |   |               |
| window safety-glass             |   |               |
| natural lighting                |   |               |
| extract ventilation G4          |   |               |

| INFORMATION                       |   | COMMENT        |
|-----------------------------------|---|----------------|
| <b>Exterior cladding</b>          |   |                |
| masonry veneer                    |   |                |
| 70/100 series                     | ✓ |                |
| stucco/plaster                    |   |                |
| fibre cement                      |   |                |
| weatherboard                      |   |                |
| other                             |   |                |
| <b>2nd storey</b>                 |   |                |
| joist length                      |   |                |
| supporting beams                  |   |                |
| roof bracing                      |   |                |
| 2nd storey bracing                |   |                |
| load bearing walls                |   |                |
| stud sizing, long studs           |   |                |
| stairs/handrails spacings         |   |                |
| balconies/stairs from             |   |                |
| safety from falling               |   |                |
| <b>Fire C1 – C4</b>               |   |                |
| means of escape                   |   |                |
| structural stability              |   |                |
| access routes                     |   |                |
| <b>Access &amp; Facilities D1</b> |   |                |
| <b>Compliance Schedule</b>        |   |                |
| lighting F6                       |   |                |
| warning systems F7                |   |                |
| signs F8                          |   |                |
| <b>Water</b>                      | ✓ |                |
| supply                            |   |                |
| backflow                          |   |                |
| plumbing                          |   |                |
| <b>Sewer</b>                      |   |                |
| drainage                          |   |                |
| disposal effluent                 | ✓ | MALCOLM LINTON |
| <b>Stormwater</b>                 | ✓ | SOAK HOLES     |
| need for consent                  |   |                |
| <b>Food Preparation G3</b>        |   |                |
| <b>Gas G10 – G11</b>              |   |                |
| <b>Sound</b>                      |   |                |
| tenancy separation G6             |   |                |
| <b>Demolition</b>                 |   |                |
| <b>Services</b>                   |   |                |
| <b>Swimming Pools</b>             |   |                |
| fencing                           |   |                |
| hydrostatic valve                 |   |                |
| non-slip surfaces                 |   |                |
| <b>Farm Building</b>              |   |                |
| timber sizes                      |   |                |
| pole hole depth/size              |   |                |
| bracing                           |   |                |

Comments: CERTIFIER (M DAVIS)

Consent No.: 021305

# **BUILDING CONSENT SERVICES.**

**M. G. Davis Registered Building Certifier 13**

7/10/02

**SELWYN DISTRICT COUNCIL,  
Private Bag 1.  
LEESTON**

**Attention Tony Judd,**

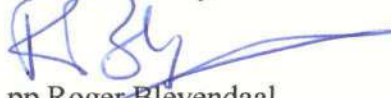
**Dear Tony,**

**Re Consent Application for Brian and Judie Hayman  
Lot 71 Courtney Road  
Kirwee.**

Please find enclosed the documentation for the above consent application and a cheque for \$100.00 as required.

If you require further information please contact the writer.

Yours faithfully,



pp Roger Bleyendaal  
Building Consent Services.  
File 02/1192

BC021305

**FILE COPY**

**Phone 03 337 3522. Facsimile 03 337 3538 Mobile Phone 025 386 148.**

Office 66 Beckford Road Christchurch.

E Mail [malcolm.davis@xtra.co.nz](mailto:malcolm.davis@xtra.co.nz)

A Division of M.G.Davis Engineering Services Ltd.

Web Page [www.certifier.co.nz](http://www.certifier.co.nz)

*Building Consent Processing , Registered Independent Qualified Person , Building Control Services , Project Management, Property Development , Building Act Advice , Building Compliance Auditor.*

**M. G. Davis Engineering Services Ltd.**  
**66 Beckford Road**  
**St Martins**  
**CHRISTCHURCH**

7/10/2002

Phone 03 337 3522

Facsimile

03 337 3538

Mobile Phone

025 386 148

**BUILDING CERTIFICATE No 02/1192.**

**Issued By :-Malcolm Davis**

*Issued under section 56 of the Building Act 1991*

**REGISTERED BUILDING CERTIFIER No 13.**

*Currently approved and registered as a Building Certifier in the area of Residential Construction*

**SELWYN DISTRICT COUNCIL**

**PIM No TBA.**

**Consent No TBA.**

**Project :- Dwelling with Attached Garage.**

**Project Location :- Lot 71 Courtney Road, Kirwee**

**Legal Description :- Lot 71. DP 82067.**

**Type :- Dwelling.**

**Intended Use :- Residential**

**Intended Life :- 50 years.**

**Staged Development :- Stage 1 of intended 1 stages.**

**This is to certify that :-** The Building Certifier has been engaged to inspect specified building work in relation to listed provisions of the Building Code, as detailed in the attached page headed Scope of Building Certifiers Engagement No 01/1192

**I Am Satisfied That On Reasonable Grounds That :-** The proposed building work would comply with the listed provisions of the Building Code, excluding site set-out, if properly completed in accordance with the listed plans and specifications.

**Signed By :-**



**Malcolm Davis.**  
Managing Director.  
Civil Engineer NZCE REA.  
Building Certifier.



File 02/1192 Cert.doc

**BUILDING CONSENT SERVICES.**

*Building Consent Processing, Registered Independent Qualified Person, Building Control Services, Project Management, Property Development, Building Act Advice, Building Compliance Auditor.*

**M. G. Davis Engineering Services Ltd.**

**66 Beckford Road**

**St Martins**

**CHRISTCHURCH**

**7/10/2002**

**Phone**

**03 337 3522**

**Facsimile**

**03 337 3538**

**Mobile Phone**

**025 386 148**

**Scope of Building Certifier's Engagement Certificate No 02/1192.**

**Issued By :-Malcolm Davis**

*Issued under section 53 (4) of the Building Act 1991.*

**REGISTERED BUILDING CERTIFIER No 13.**

*Currently approved and registered as a Building Certifier in the area of Residential Construction*

**Drawings Register** Today Homes Ltd Drawings 1 to 5 incl. and specification.

**Nature of Engagement :-**

**1. Plan Processing.** ( See Exclusions ).

**2. Field Inspections**

a . Building.

b . Plumbing.

c . Drainage.

d . Issue of Code Compliance Certificate.

**Documents Included :-** Producer Statements.

**Exclusions :-** Garage Lintel, Verandah beams (Ganglam Lintels) and Truss Design.

**Amendments :-** Nil

**Signed By :-**

**Malcolm Davis.**

Managing Director.

Civil Engineer NZCE REA.

Building Certifier.

**FILE COPY**

File 02/1192 Eng.doc

**BUILDING CONSENT SERVICES.**

*Building Consent Processing , Registered Independent Qualified Person , Building Control Services , Project Management, Property Development , Building Act Advice , Building Compliance Auditor.*



COMPUTER FREEHOLD REGISTER  
UNDER LAND TRANSFER ACT 1952

Search Copy



Identifier CB47B/847  
Land Registration District Canterbury  
Date Issued 13 November 2000

Prior References  
CB39B/1210

---

|                   |                                 |
|-------------------|---------------------------------|
| Estate            | Fee Simple                      |
| Area              | 5642 square metres more or less |
| Legal Description | Lot 71 Deposited Plan 82067     |
| Proprietors       | Ascot Park Limited              |

---

Interests

Land Covenant in Transfer A361531.6 - 23.7.1998 at 9.05 am

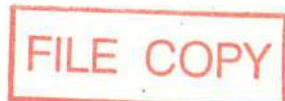
- A481056.4 Bond pursuant to Section 108(2)(b) Resource Management Act 1991 - 13.11.2000 at 11.00 am
- A481056.5 Bond pursuant to Section 108(2)(b) Resource Management Act 1991 - 13.11.2000 at 11.00 am

x  
Manual Search ordered  
- 42751 +  
- 42752  
ref  
pl



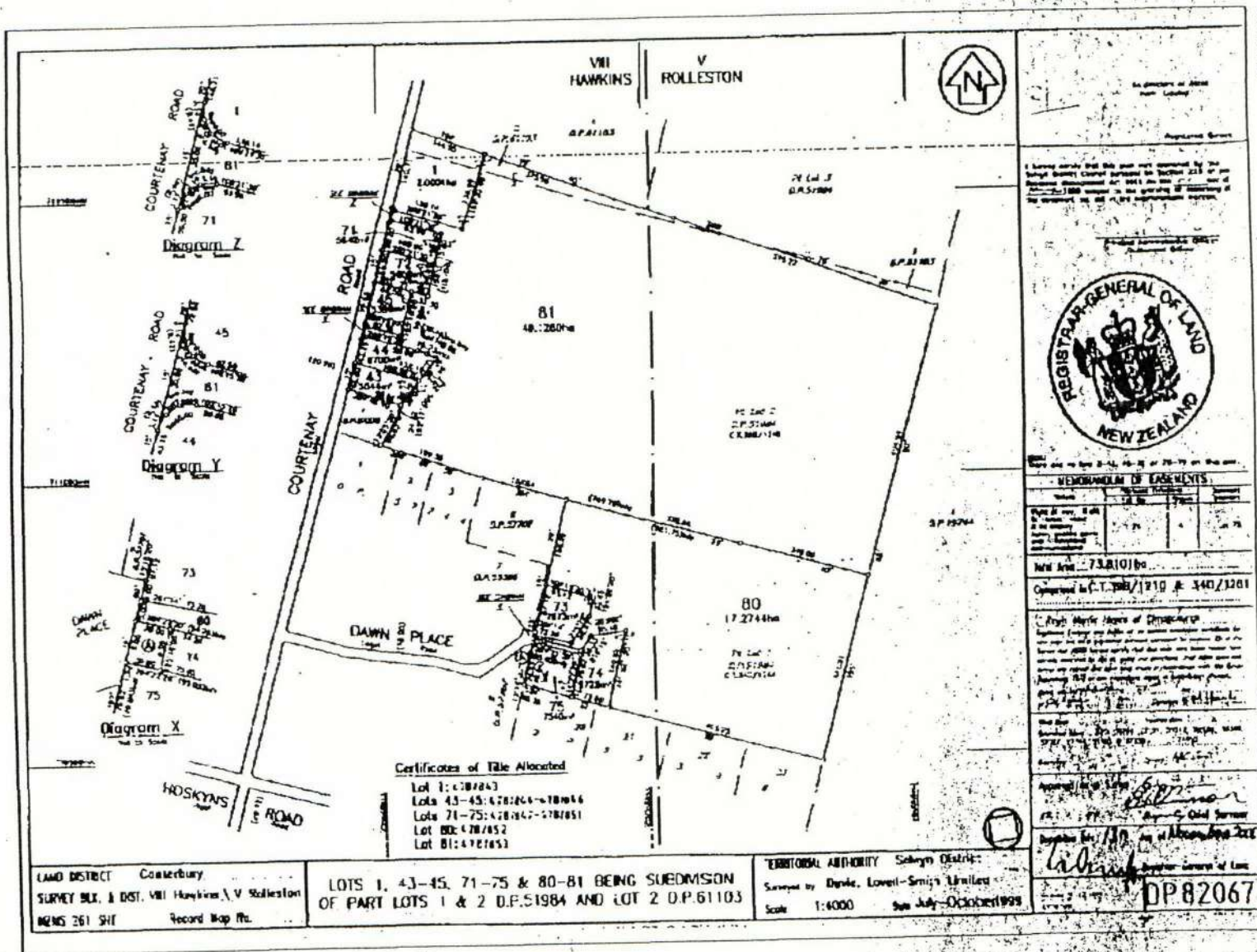
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Client Reference 2608.16

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Current Certificate of Title Version No. 1



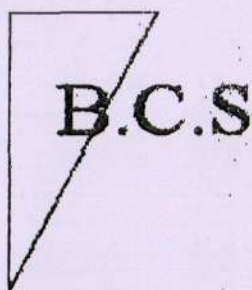
Identifier

CB47B/847



Transaction Id  
Client Reference 260816

Search Copy Dated 26/02/02 12:16 pm, Page 2 of 2  
Current Certificate of Title Version No. 1

**Building Consent Services**66 Beckford Road  
Christchurch 8002

ph-03 / 3373522 fax-03 / 3373538 email-roger@certifier.co.nz

**Fax**

|                                   |                               |
|-----------------------------------|-------------------------------|
| <b>To:</b> SDC                    | <b>From:</b> Roger Bleyendaal |
| <b>Fax:</b> AUTO                  | <b>Pages:</b> 3               |
| <b>Re:</b> Hayman / Courtney Road | <b>Date:</b> 14/10/2002       |
| <b>Att:</b> Sharon Wilson         | <b>File:</b> 02/1192          |

**• Comments:**

Please find a copy of the title to this property. For your files.

Regards Roger

FILE COPY

BC021305

**CERTIFICATE OF TITLE  
UNDER LAND TRANSFER ACT 1952**

*A.W. Muir*  
Registrar-General  
of Land

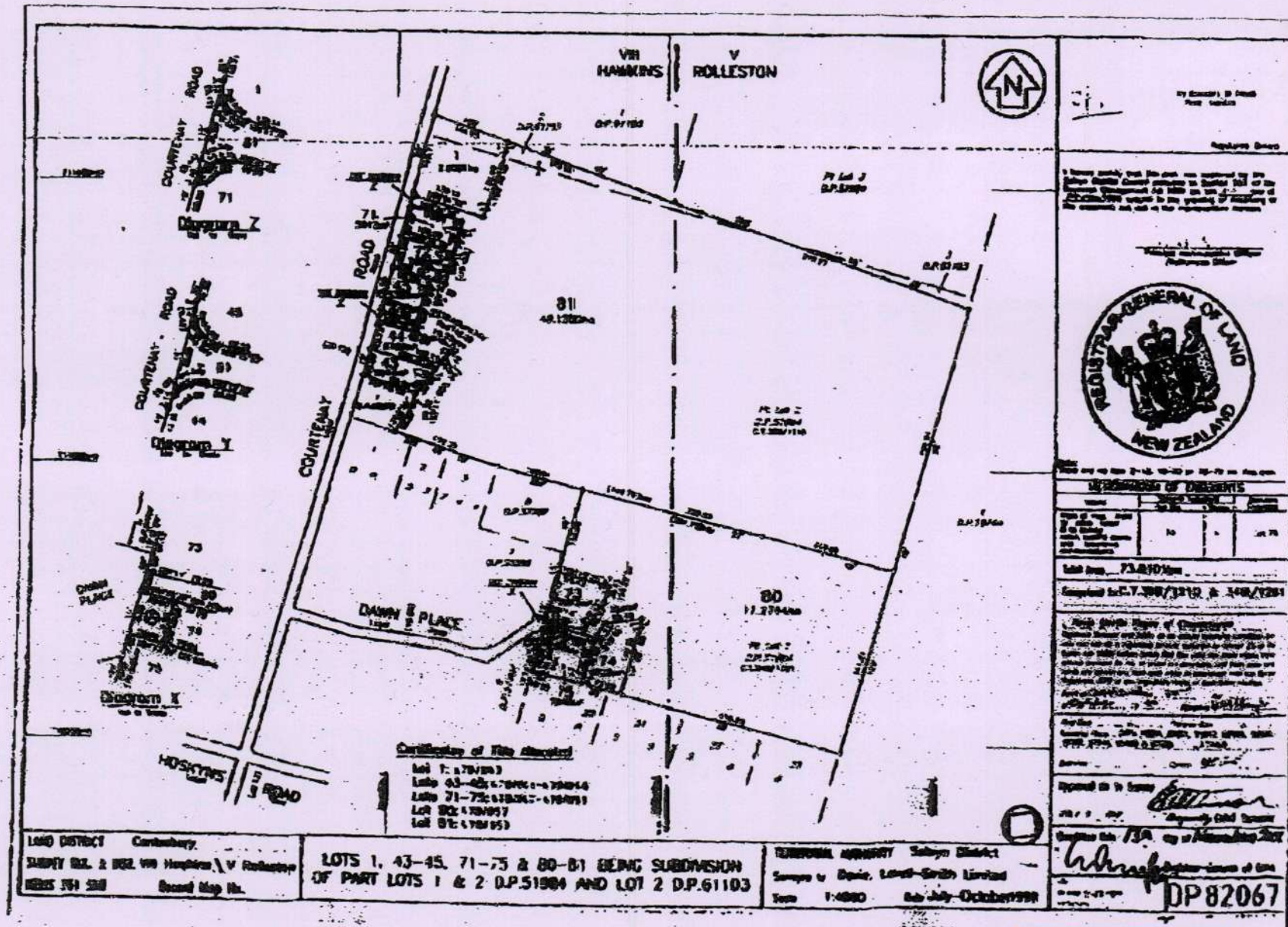
**Identifier****Land Registration District****Date Issued****CB47B/847****Canterbury****13 November 2000****Prior References****CB39B/1210****Estate****Fee Simple****Area****3642 square metres more or less****Legal Description****Lot 71 Deposited Plan 82067****Proprietors****Brian Robert Hayman, Judie Lorraine Hayman and Philip David Sewell****Interests****Land Covenant in Transfer A361531.6 - 23.7.1998 at 9.05 am****FILE COPY****BC021305**

0533416462

LUXURY HOMES LTD

100

**Duplicate Copy Dated 2/10/02 2:14 PM, Page**



FILE COPY

# BUILDING CONSENT SERVICES.

M. G. Davis Registered Building Certifier

## Drawing and Document Transfer Register.

Date

9-10-02

Attention

Sharon Wilson



Company

S.D.C.

Project

Hayman

// Courtney Road.

Kirwee

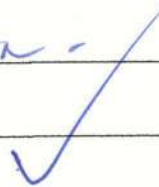
Address & Consent No.

| Drawing No | Amendment No | Date      | Comments          | Other |
|------------|--------------|-----------|-------------------|-------|
| 1 x        | cheque       | to cover  | Pim Deposit       |       |
|            | to this      | project - | (amount \$100.00) |       |
|            |              |           |                   |       |
|            |              |           |                   |       |
|            |              |           |                   |       |
|            |              |           |                   |       |
|            |              |           |                   |       |

Comments.

Thanks

Sharon



Malcolm Davis.

Civil Engineer NZCE REA.

Building Certifier.

DocTransLables

Roger

B.C.D.

FILE COPY

Phone 03 337 3522. Facsimile 03 337 3538 Mobile Phone 025 386 148.

E Mail [malcolm.davis@xtra.co.nz](mailto:malcolm.davis@xtra.co.nz)

Office 66 Beckford Road Christchurch.

A Division of M.G.Davis Engineering Services Ltd.

Building Consent Processing, Registered Independent Qualified Person, Building Control Services, Project Management, Property Development, Building Act Advice, Building Compliance Auditor.

# Drainage Consultancy and Design Ltd

**Malcolm Linton.** Wastewater / Drainage Engineer.  
AMBOINZ, Reg. Certifier (deferred), Reg. Drainlayer, Profic. Soil Mgt.  
13 Old North Rd  
RD1 Kaiapoi

**Mobile 025-2990092**  
Ph / (a/h) 03-3277483 Fax 03-3277418  
Email: dc&d@netaccess.co.nz

10<sup>th</sup> October 2002

**Amendment to application for Septic Tank / Disposal system for:**

Brian & Judie Hayman  
Lot 1 Dp 82067  
Courtney Rd  
Kirwee



The amendment is in the layout of the disposal trench. The area of land available on site has meant that the disposal field needed amending, on Owner's request, as per site plans A & B dated 9<sup>th</sup> October 2002.

This will allow disposal field to comply with separation distances from planted trees on the property as required in Notes in Drawing No: B3364 and condition 5 of CRC consent.

Please replace on your file the attached amended information.

Yours faithfully

Malcolm linton



# Drainage Consultancy and Design Ltd

**Malcolm Linton.** Wastewater / Drainage Engineer.  
AMBOINZ, Reg. Certifier (deferred), Reg. Drainlayer, Profic. Soil Mgt.  
13 Old North Rd  
RD1 Kaiapoi

**Mobile 025-2990092**  
Ph / (a/h) 03-3277483 Fax 03-3277418  
Email: dc&d@netaccess.co.nz

## **Amended Specifications:**

*Septic Tank and Land Application.*

**Applicant:** Brian & Judie Hayman

**Date:** 9<sup>th</sup> October 2002

**Location:** Lot 71 DP 82067 – Courtney Rd – Kirwee

**B.C. No:**

## **Discharge On-Site and Assessment of effects on the Environment:**

Proposed Septic Tank

Disposal for this site to comply with Resource Consent from Canterbury Regional Council  
CRC020857.

- Dwelling will be only one on-site. (as per condition 1 of consent)
- Dwelling is a 4-bedroom home which has the potential to produce a maximum wastewater flow of 1400L/day. (as per condition 2 of consent)
- Loading rate of effluent discharge to be 50mm/day for 1400L/day flow, which requires a soakage trench to be 28sq/m in size. (as per condition 3 of consent)
- Domestic water supplied by water scheme, no Wells within effected area.(as per condition 4 of consent)
- Disposal trench to be 2.8m wide x 10m long (28sq/m) and constructed as per Amended working drawing A plan attached. Being design concept as supplied by "Davie, Lovell-Smith Ltd". (as per condition 5 of consent)
- A Maintenance Service Contract to be arranged by Owner. (as per condition 6 of consent)

## **Type of System:**

### **1. Septic Tank / Pump Chamber:**

Septic Tank and Disposal Trench to comply with the concept presented by "Davie, Lovell-Smith Ltd." (refer attached sheets – Drawing No B3364 and following Notes).

#### **NOTES:**

- Septic Tank to be a dual multi-chamber Z5000 of Hynds Ph 03-3443500 or Z54 Oasis Deluxe Ph 03-344262
- A Zabel Filter to be fitted to outlet of secondary chamber.
- Lids to service tank and pump chamber to be at or above ground level. Lids and rises (if needed) to achieve this are to be watertight.
- An alarm float switch shall be installed, set at 100mm above the high water operating level, which ensures at least 400L emergency storage. The alarm should be located within the dwelling.

FILE COPY

### **2. Effluent – Land Application Disposal,**

- Disposal trench 2.8m wide x 10m long to comply with concept as per drawing No B3364
- Terminate ends of disposal pipe through a 90° bend and cap at ground level under mushroom.
- Disposal location as per Amended site plan A & B.

# Drainage Consultancy and Design Ltd

13 Old North Rd. R.D.1 – KAIAPOI

Mobile 025-2990092; Ph 03-3277483; Fax 03-3277418

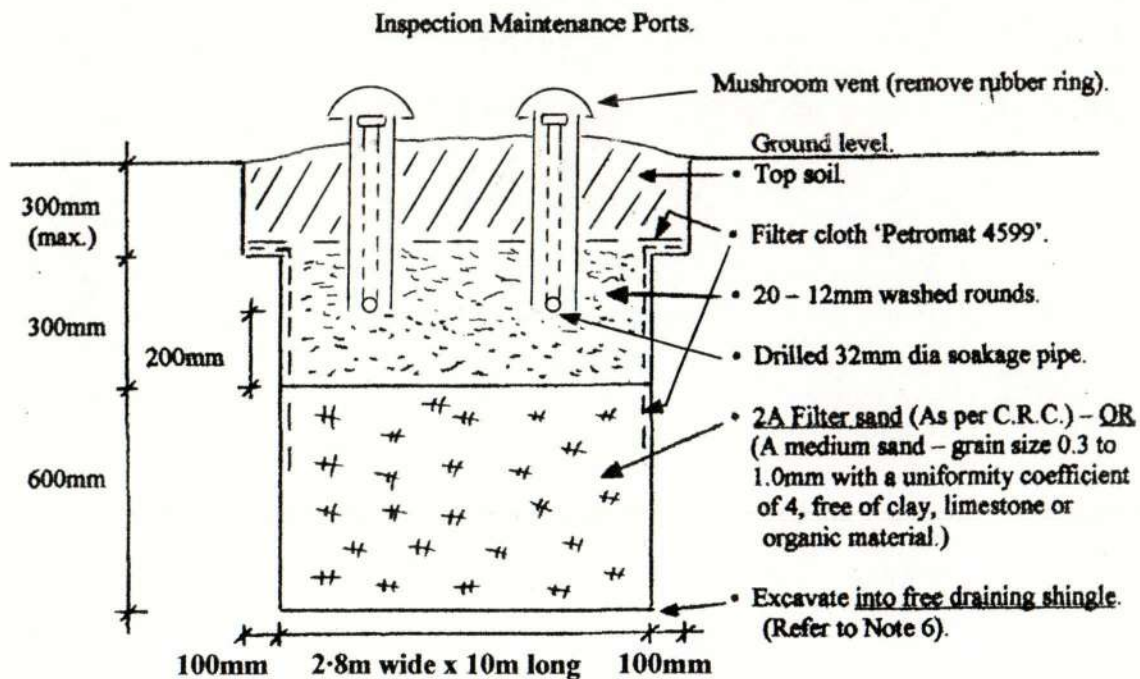
## Amended Working Drawing A

**Applicant:** Brian & Judie Hayman

**Date:** 9<sup>th</sup> October 2002

**Location:** Lot 1 DP 82067 – Courtney Rd – Kirwee

**B.C. No:**



### Notes:

1. Minimum soakage trench area  $28\text{sq/m} = \text{Trench length} \times \text{width}$ . (Size given above is to fit into area owner wanted it placed and to be clear of planted trees to comply with CRC consent.)
2. Dimensions are minimum.
3. Material and pipe to be laid level.
4. Pump line to connect to centre of joining pipe between two soakage lines.
5. Slightly mound topsoil over trench when finished.
6. Trench excavated to depth as per plan. If while excavating trench good draining material changes, where trench needs to be deeper, fill the extra depth with free draining river run. Otherwise contact **D. C. & D. Ltd** for further instructions. (Test excavated depth with 10 litres of water to confirm good soakage).

FILE COPY

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This drawing shall not be used, reproduced or copied  
in whole or in part, without the written consent of  
Drainage Consultancy & Design Ltd.

# Drainage Consultancy and Design Ltd

13 Old North Rd. RD 1 – KAIAPOI

Mobile 025-2990092; Ph 03-3277483; Fax 03-3277418

## Working Drawing B

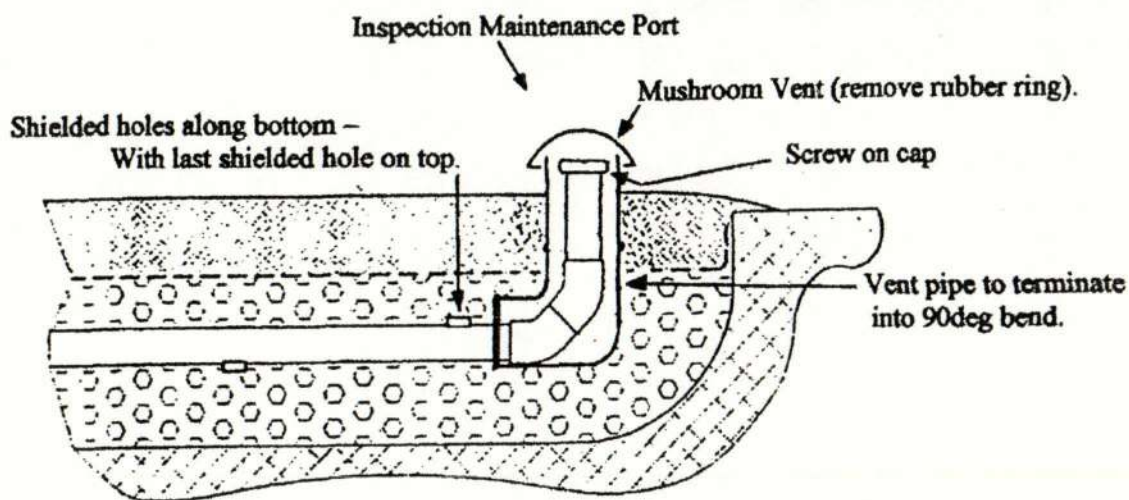
**Applicant:** Brian & Judie Hayman

**Date:** 9<sup>th</sup> October 2002

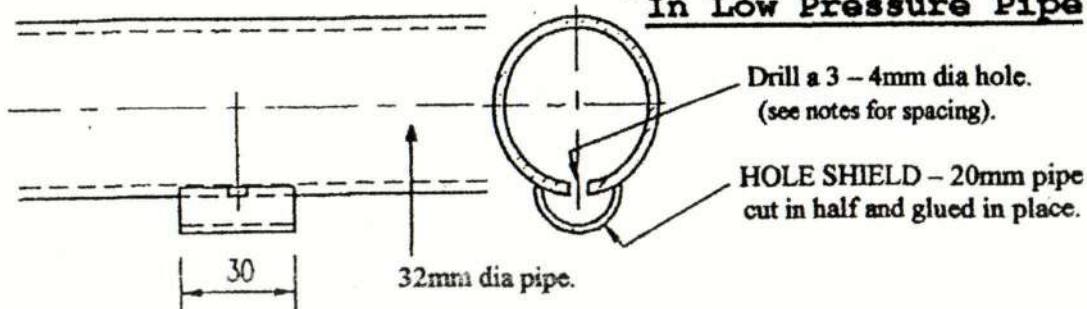
**Location:** Lot 1 DP 82067 – Courtney Rd – Kirwee

**B.C. No:**

### Detail of Distal End and Low Pressure Pipe:



### Details of Shielded Holes In Low Pressure Pipe:



### Notes:

1. When drilling the holes in soakage pipe, use a suitable drill to provide a clean neat hole. Remove all swarf from pipe. Drill holes along bottom with one hole on top at pipe ends. Hole spacings – 15 holes evenly spaced along bottom per line. Stagger the holes between the two parallel lines. The hole on top to be 300mm from pipe ends.
2. Note pump line connects midway point along joining pipe to soakage lines.
3. Hole shields to be glued in place minimum of 2 hours before placing in trench. Make sure glue doesn't block drilled holes when gluing shields on.

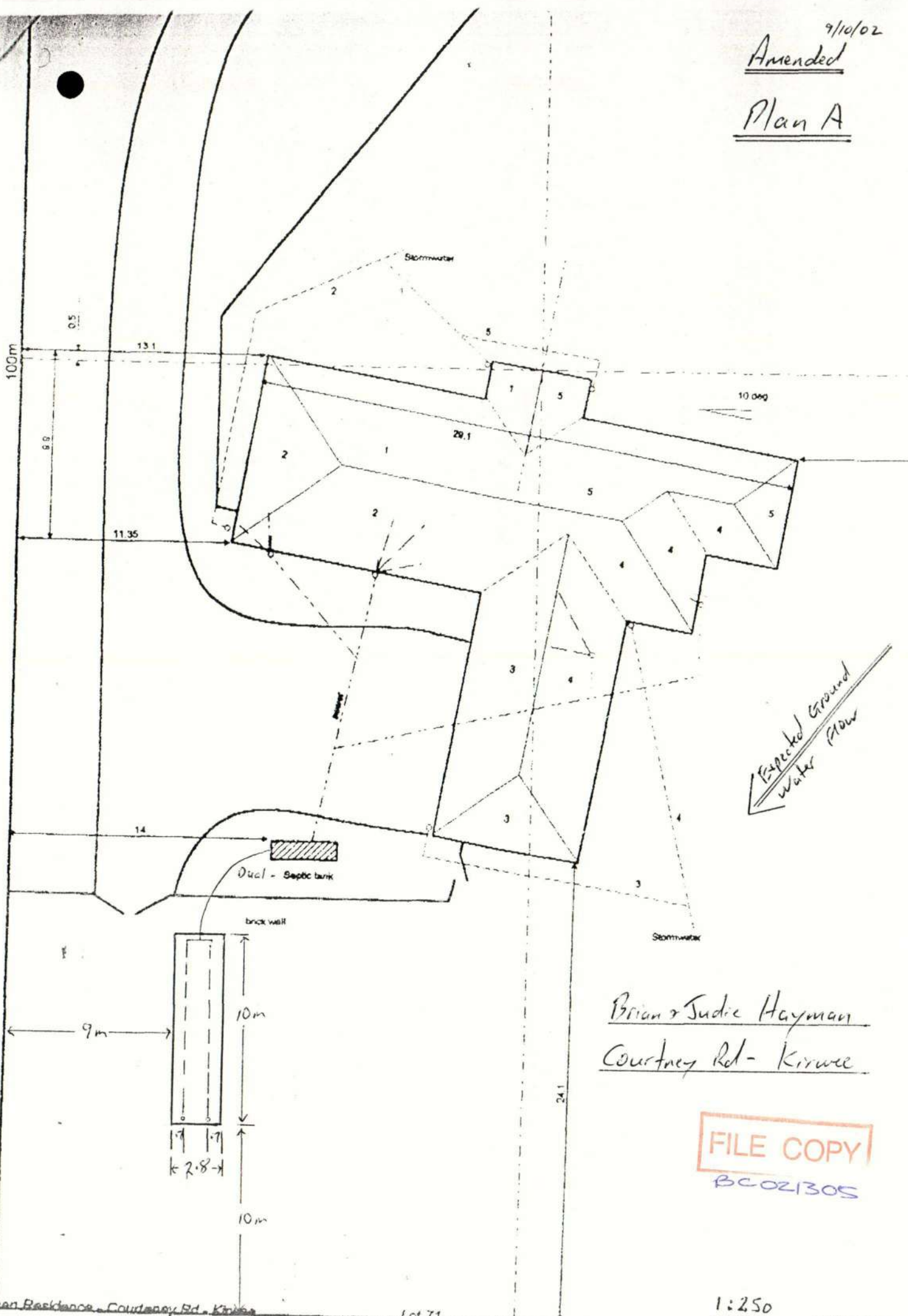
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9/10/02  
Amended

Plan A



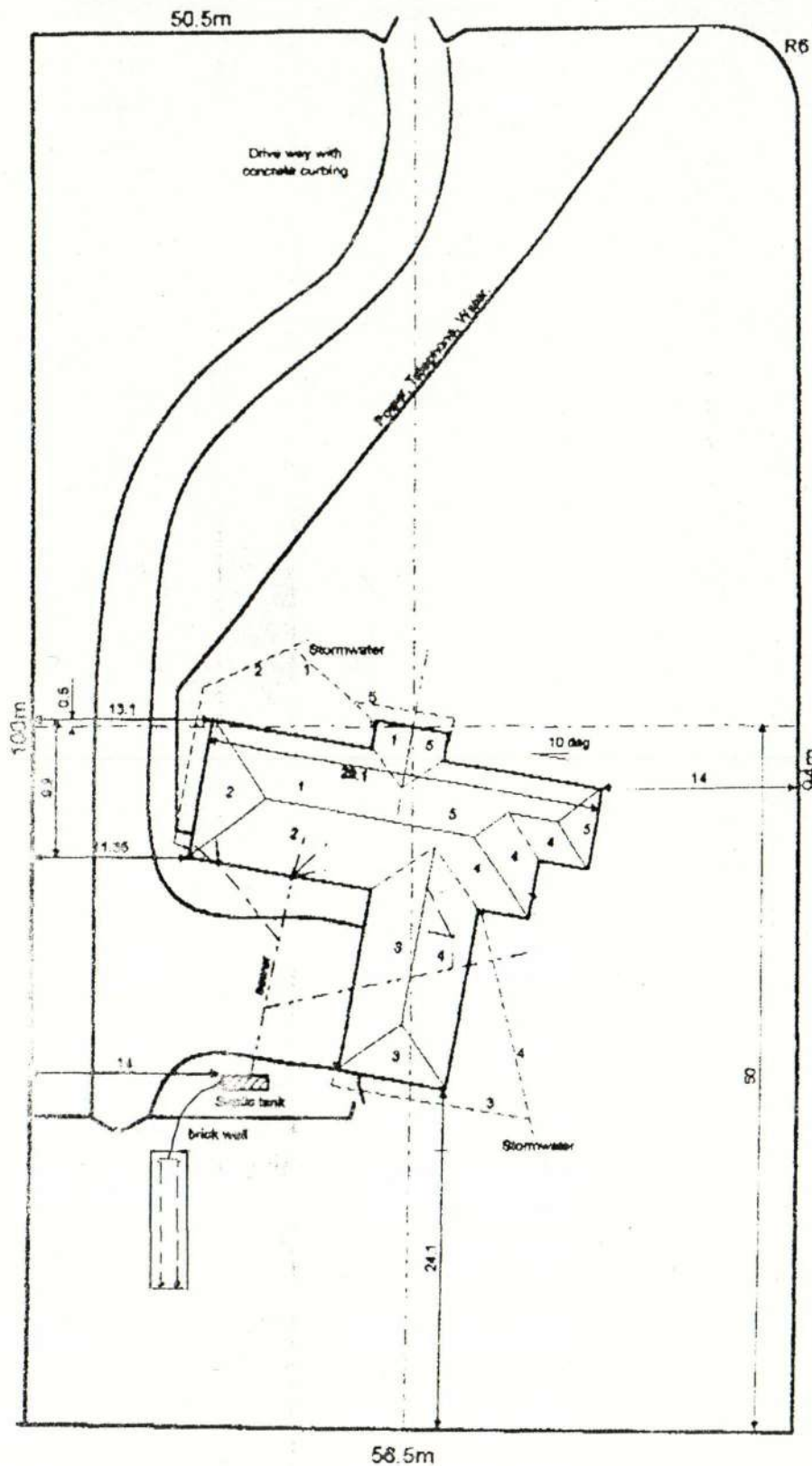
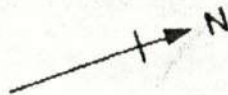
Brian & Julie Hayman  
Courtney Rd - Kirrawee

FILE COPY  
BC021305

9/10/02

Courtenay Road

Amended  
Plan B



FILE COPY

B & S Hayman  
Courtenay Rd - Kirwee

# Drainage Consultancy and Design Ltd

**Malcolm Linton.** Wastewater / Drainage Engineer.  
AMBOINZ, Reg. Certifier (deferred), Reg. Drainlayer, Profic. Soil Mgt.  
13 Old North Rd  
RD1 Kaiapoi

**Mobile 025-2990092**  
Ph / (a/h) 03-3277483 Fax 03-3277418  
Email: dc&d@netaccess.co.nz

## Specifications:

*Septic Tank and Land Application.*

**Applicant:** Brian & Judie Hayman

**Date:** 7<sup>th</sup> October 2002

**Location:** Lot 71 DP 82067 – Courtney Rd – Kirwee

**B.C. No:**

24190-147-30



## Discharge On-Site and Assessment of effects on the Environment:

Proposed Septic Tank

Disposal for this site to comply with Resource Consent from Canterbury Regional Council CRC020857.

- Dwelling will be only one on-site. (as per condition 1 of consent)
- Dwelling is a 4-bedroom home which has the potential to produce a maximum wastewater flow of 1400L/day. (as per condition 2 of consent)
- Loading rate of effluent discharge to be 50mm/day for 1400L/day flow, which requires a soakage trench to be 28sq/m in size. (as per condition 3 of consent)
- Domestic water supplied by water scheme, no Wells within effected area.(as per condition 4 of consent)
- Disposal trench to be 1m wide x 28m long (28sq/m) and constructed as per attached design plan concept supplied by "Davie, Lovell-Smith Ltd". (as per condition 5 of consent)
- A Maintenance Service Contract to be arranged by Owner. (as per condition 6 of consent)

## Type of System:

### **1. Septic Tank / Pump Chamber:**

Septic Tank and Disposal Trench to comply with the concept presented by "Davie, Lovell-Smith Ltd." (refer attached sheets – Drawing No B3364 and following Notes).

#### NOTES:

- Septic Tank to be a dual multi-chamber Z5000 of Hynds Ph 03-3443500 or Z54 Oasis Deluxe Ph 03-344262
- A Zabel Filter to be fitted to outlet of secondary chamber.
- Lids to service tank and pump chamber to be at or above ground level. Lids and rises (if needed) to achieve this are to be watertight.
- An alarm float switch shall be installed, set at 100mm above the high water operating level, which ensures at least 400L emergency storage. The alarm should be located within the dwelling.

### **2. Effluent – Land Application Disposal,**

- Disposal trench 1m wide x 28m long to comply with concept as per drawing No B3364
- Terminate ends of disposal pipe through a 90°bend and cap at ground level under mushroom.
- Disposal location as per site plan A & B.

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3. **Water Entry,**

No other surface or stormwater to enter system either before or after the septic tank stage.

4. **Maintenance,**

Refer to Owners Manual supplied by Drainage Consultancy and Design.

**Commissioning and Testing:**

1. Cut a 4m long 32mm dia pressure pipe and glue a female adapter to end, that will screw onto end of soakage pipe. (At Inspection Maintenance Port).

Drill 2mm dia holes every 200mm along pipe. Use a suitable drill to provide a clean neat hole. Remove all swarf from pipe. (This pipe is called a 'Standpipe').

2. When job is completed unscrew cap off soakage pipe and screw on the 4m 'Standpipe'. Put water into pump chamber. When pump is activated record the level water rises up 'Standpipe'. This measurement with the 'Standpipe' be given to new Owner.

**Installation:**

Septic tank and effluent system to be installed by a Registered Drainlayer.

**Producer Statement:**

Upon completion of installation as per Specifications and Working Drawings, Contractor to complete the 'Producer Statement – Construction' and send to Drainage Consultancy & Design Ltd, within 7 days of completion. (Via post or fax).

**Site Clearance:**

Upon completion of all drainage work, the site is to be left neat and tidy. (There will be a large volume of excavated material left over. Check with owner if it needs to be removed or stock piled.)

FILE COPY

# Drainage Consultancy and Design Ltd

13 Old North Rd. R.D.1 – KAIAPOI

Mobile 025-2990092; Ph 03-3277483; Fax 03-3277418

Building Consent No: \_\_\_\_\_ (Territorial Authority)

Resource Consent No: \_\_\_\_\_ (W.D.C. / Ecan)

## PRODUCER STATEMENT – CONSTRUCTION

Issued By: \_\_\_\_\_  
(Contractor)

To: \_\_\_\_\_  
(Owner / Designer)

In Respect Of: On-Site Sewerage Disposal System

At: \_\_\_\_\_  
\_\_\_\_\_  
(Address)

Lot: \_\_\_\_\_ DP: \_\_\_\_\_

I: \_\_\_\_\_, being contracted to: \_\_\_\_\_  
(Contractor) (Owner / Developer)

To construct the on-site sewerage disposal system described by the *Working Drawings and Specifications* prepared by;

Davie, Lovell – Smith Ltd and Drainage Consultancy & Design Ltd  
(Design Firm) (Additional Specification to Design Firm)

Dated: \_\_\_\_\_, Plus authorized variations dated: \_\_\_\_\_, (copies attached) issued by;

Drainage Consultancy & Design Ltd and other documents to which the on-site sewerage disposal system is proposed to be constructed.

I: \_\_\_\_\_, a duly authorized agent of \_\_\_\_\_  
(Duly authorized agent) (Contractor)

have sighted Building Consent No. \_\_\_\_\_ and the attached conditions of building consent with Working Drawings and Specifications prepared for construction and **Believe on reasonable grounds that** \_\_\_\_ All, \_\_\_\_ Part only, as specified in the attached particulars of the building work under the building consent has been completed to the extent required by that building consent.

Signed: \_\_\_\_\_ Date: \_\_\_\_\_  
(Signature of duly authorized agent)

On behalf of:

\_\_\_\_\_  
(Contractor)

\_\_\_\_\_  
\_\_\_\_\_  
(Address)

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# RESOURCE CONSENT

Pursuant to Section 105 of the Resource Management Act 1991  
The Canterbury Regional Council (known as Environment Canterbury)

**GRANTS TO:** ASCOT PARK LIMITED

**A DISCHARGE PERMIT:** to discharge sewage effluent to Lot 71 of a subdivision located at Courtenay Road and Dawn Place, Kirwee, at or about map reference NZMS 260 L35:471-462.

**DATE GRANTED:** 24-NOV-1998 **EXPIRY DATE:** 27-MAY-2024

**IN CONNECTION WITH THE FOLLOWING PROPERTY:**

**LOCATION:** COURTENAY ROAD-DAWN PLACE,

**LEGAL DESCRIPTION:** LOT 71 BEING SUBDIVISION OF PT LOTS 1 AND 2 DP 51984 AND LOT 2 DP 61103

**SUBJECT TO THE FOLLOWING CONDITIONS:**

- 1) The discharge shall be only domestic sewage effluent from a single dwellinghouse.
- 2) The volume of effluent discharged shall not exceed 1.5 cubic metres per day.
- 3) The faecal coliform bacteria concentration of a representative sample of the discharge, measured at a point no further than three metres from the point of discharge from the distribution pipe shown on the attached Diagram ST1, shall be less than 1,000 per 100 millilitre sample.
- 4) There shall be no discharge of effluent within:
  - a) 1,000 metres up-gradient (in relation to the direction of groundwater flow) and 200 metres in any direction of any bore from which more than 20 cubic metres per day of water is taken for community supply purposes; and
  - b) 200 metres up-gradient (in relation to the direction of groundwater flow) and 50 metres in any other direction of any bore from which less than 20 cubic metres per day of water is taken for community supply purposes; and
  - c) 50 metres up-gradient (in relation to the direction of groundwater flow) and 30 metres in any other direction of any bore not used for community supply purposes; and
  - d) within 20 metres of any surface water body.
- 5) The sewage treatment and disposal system shall be constructed and installed in accordance with the design plans B3364, Sheets (1) and (2), (Revision 1). Notwithstanding this requirement, the treatment and disposal system shall ensure compliance with conditions (1), (2), (3), (4) and (7) of this consent. A certificate signed by the person responsible for designing the system or a competent person, shall be submitted to the Canterbury Regional Council, within one month of construction, to certify that the system is constructed and installed in accordance with the design plans.

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- 6) A maintenance service contract which provides for servicing of the installed treatment and disposal systems at least once every two years shall be maintained by a person competent in the maintenance of such systems. The contract shall include a requirement to take action to ensure that the effluent treatment and disposal system is operated and maintained to ensure compliance with the conditions of this discharge permit. Following every service a written report shall be prepared and a copy provided to the Canterbury Regional Council on request.
- 7) There shall be no ponding of effluent on the ground.
- 8) The Canterbury Regional Council may, on the last working day of November each year, serve notice of its intention to review the conditions of this consent for the purposes of:
  - (a) dealing with any adverse effect on the environment which may arise from the exercise of the consent and which it is appropriate to deal with at a later stage; or
  - (b) dealing with any cumulative adverse effects on the environment which may arise from the exercise of this consent in conjunction with activities similar to those permitted by this consent and which are appropriate to deal with at a later stage; or
  - (c) requiring the adoption of the best practicable option to remove or reduce any adverse effect on the environment; or
  - (d) complying with the requirements of a relevant rule in an operative regional plan.
- 9) Charges, set in accordance with section 36 of the Resource Management Act 1991, shall be paid to the Regional Council for the carrying out of its functions in relation to the administration, monitoring and supervision of resource consents and for the carrying out of its functions under section 35 of the Act.
- 10) The lapsing provisions of section 125 of the Resource Management Act 1991 shall apply on the expiry of five years from the date of commencement of this consent.

ISSUED AT CHRISTCHURCH ON 2 NOVEMBER 2001

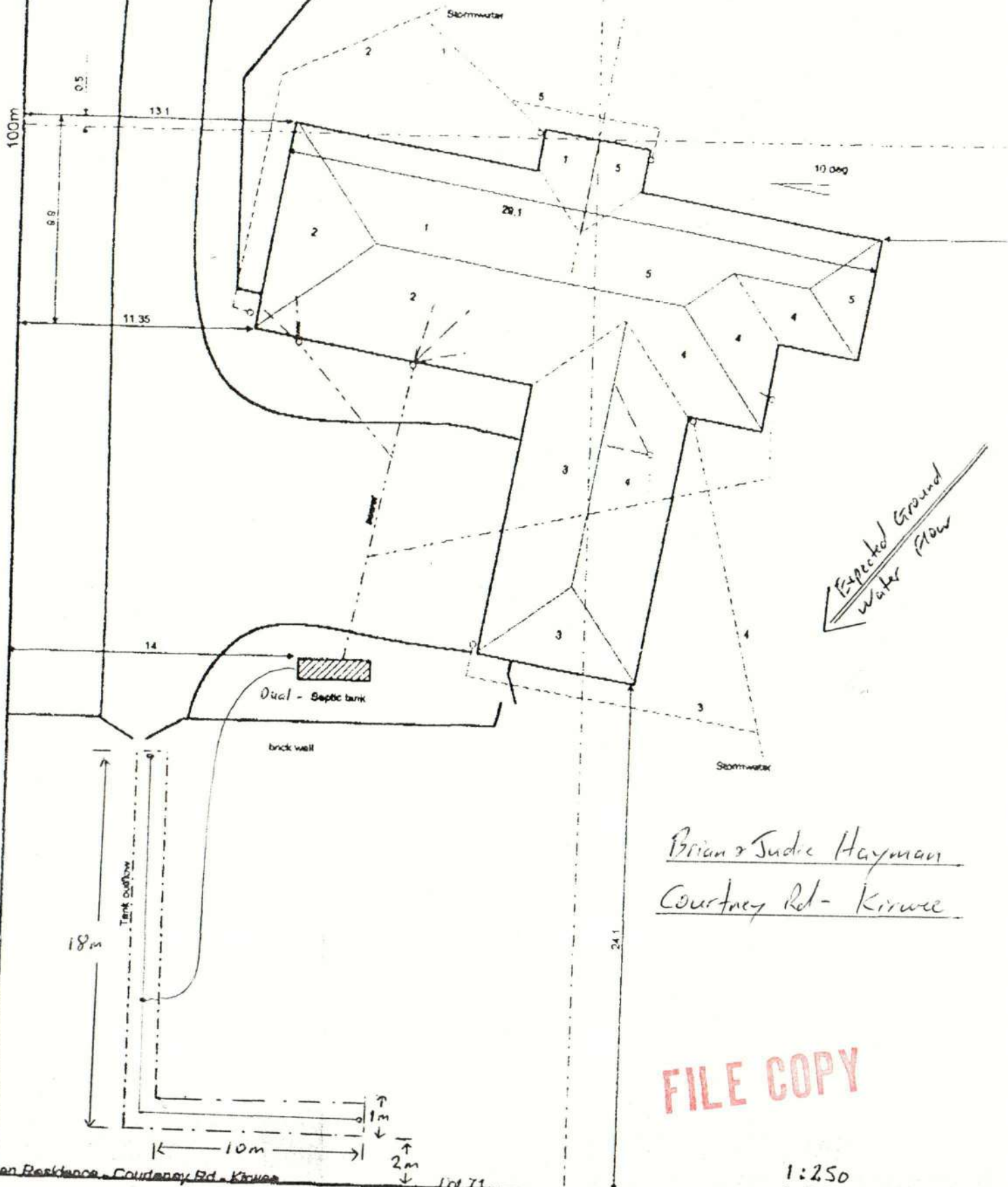


Tania Harris  
**TEAM LEADER CONSENTS ADMINISTRATION**  
on behalf of the Canterbury Regional Council

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Plan A



Brian & Julie Hayman  
Courtney Rd - Kirwee

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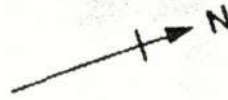
Hayman Residence, Courtney Rd - Kirwee

Lot 71

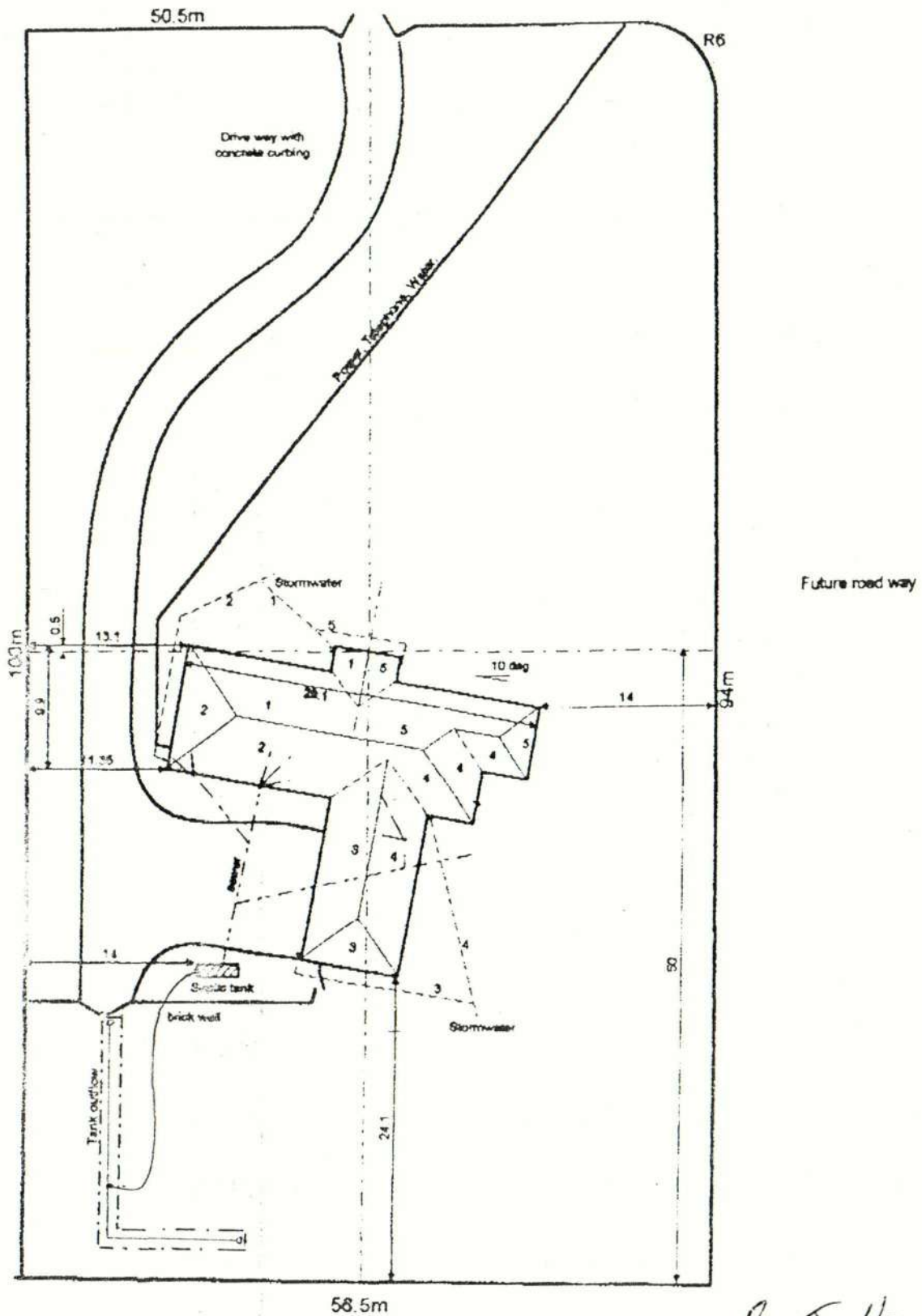
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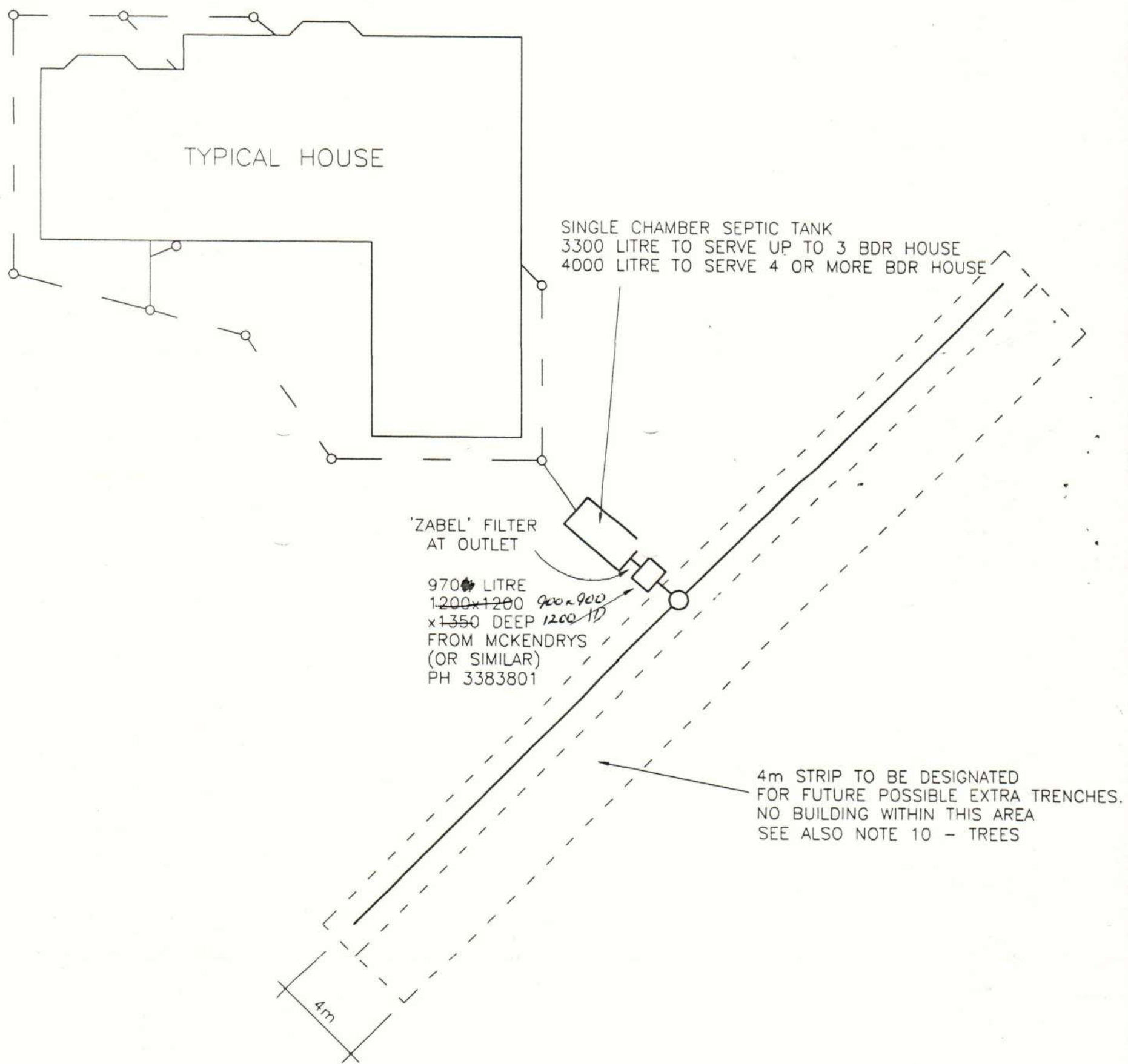
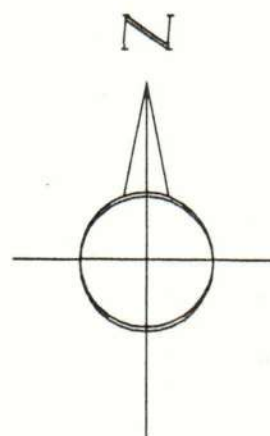
Courtenay Road



Plan B



B & S Hayman  
Courtenay Rd - Kirwee



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To be Used  
for Monitoring  
Purposes

# NOTES

FILE: Final Design

1. WASTEWATER SHALL BE PRE-TREATED BY A SEPTIC TANK AS SHOWN
2. WASTEWATER FROM THE SEPTIC TANK SHALL DISCHARGE TO A PUMP CHAMBER (970 LITRE TANK FROM MCKENDRYS OR SIMILAR) FOR DOSE PUMPING TO THE DISPOSAL FIELD. THE PUMP CHAMBER SHALL BE FITTED WITH A SUITABLE PUMP, CONTROLLED BY FLOAT SWITCHES, WITH A PUMPING CAPACITY OF 50 TO 150 LITRES/MINUTE. STATIC AND DYNAMIC HEAD REQUIREMENTS SHALL BE DETERMINED BY SITE SURVEY PRIOR TO INSTALLATION OF THE SEWERAGE SYSTEM.  
AN ALARM FLOAT SWITCH SHALL BE INSTALLED, SET AT 100mm ABOVE THE HIGH WATER OPERATING LEVEL, WHICH ENSURES AT LEAST 400 LITRES EMERGENCY STORAGE. THE ALARM SHOULD BE LOCATED WITHIN THE DWELLING.
3. EXCAVATION FOR THE BEDS SHOULD ONLY BE CARRIED OUT IF THE GROUND IS DRY. AVOID MOVING HEAVY MACHINERY OVER THE DISPOSAL BEDS. BACKFILLING WITH SAND AND MEDIA SHOULD BE CARRIED OUT WITH CARE TO RETAIN THE INTEGRITY OF INFILTRATIVE SURFACES. TOPSOIL OVER THE DISPOSAL BEDS SHOULD BE SPREAD UNIFORMLY, THEN COMPACTED CAREFULLY BY HAND AND SEWN IMMEDIATELY WITH GRASS.
4. PRIOR TO COVERING THE SAND BED WITH GEOTEXTILE FABRIC AND TOPSOIL THE PRESSURE DISTRIBUTION SYSTEM SHALL BE TESTED TO ENSURE A UNIFORM SPREAD OF EFFLUENT WILL BE ACHIEVED THROUGH THE DISTRIBUTION CHAMBER AND ALONG THE BEDS.
5. THE SOAKAGE BEDS SHALL BE POSITIONED IN THE DIRECTION AS SHOWN ON THIS SHEET. IF THE FIELD IS SITED WHERE GROUND SLOPE IS GREATER THAN 1:20 A STORMWATER INTERCEPTION DRAIN MAY NEED TO BE CUT UPSTREAM OF THE BED. THE COMPLETED DISPOSAL FIELD SHOULD NOT BE SUBJECT TO VEHICLE TRAFFIC.
6. ALL DRAINLAYING SHALL BE CARRIED OUT UNDER THE SUPERVISION OF THE LOCAL DRAINAGE INSPECTOR. THE INSTALLATION OF TANKS SHALL BE TO THE MANUFACTURERS SPECIFICATION.
7. THE PLANT SHALL BE CLEANED OUT AS NECESSARY BUT IN ANY CASE AT INTERVALS OF NOT LONGER THAN 3 YEARS.
8. THE INSTALLATION HAS BEEN DESIGNED FOR MAXIMUM FLOWS OF 1000 LITRES PER DAY FOR A THREE BEDROOM HOUSE AND 1500 LITRES PER DAY FOR FOUR OR MORE BEDROOMS.
9. THE EFFLUENT BED SHOULD BE WITHIN 20m OF ANY SURFACE WATERBODIES.
10. THE TRENCHES SHALL BE GRASSED OVER AND NOT SUBJECT TO VEHICLE TRAFFIC. SHRUBS SHOULD NOT BE PLANTED WITHIN 2m OF THE TRENCHES OR DESIGNATED TRENCH AREA (4m STRIP SHOWN ON THE PLAN). SMALL TREES AND SHRUBS SHALL NOT BE CLOSER THAN 5m AND LARGER TREES (GREATER THAN 1.5m HIGH) SHALL NOT BE WITHIN 8m.
11. THE SOAKAGE BED SHALL BE POSITIONED A MINIMUM OF 1.5 METERS FROM THE LOT BOUNDARIES AND NO CLOSER THAN 5.0 METERS FROM THE PROPOSED DWELLINGS. THE SEPTIC TANK SHALL BE AT LEAST 3.0 METERS FROM THE WALL OF THE PROPOSED DWELLINGS.
12. GARBAGE GRINDERS ARE NOT RECOMMENDED. THEIR USE CAN CAUSE THE FOLLOWING PROBLEMS AND SO ARE USED AT THE OWNERS RISK:
  - THE SEPTIC TANK WILL REQUIRE DESLUDGING MORE OFTEN
  - THE ZABEL FILTER WILL REQUIRE CLEANING MORE OFTEN (WHICH IN TURN WILL LESSEN ITS PERFORMANCE)
  - THE LIFE OF THE DISPOSAL FIELD MAY BE LESSENED
13. ONLY CLEANING PRODUCTS APPROVED BY THE SEPTIC TANK SUPPLIER SHALL BE DISCHARGED TO THE SEPTIC TANK. ALL WORK IS TO COMPLY WITH THE NZ BUILDING CODE.
14. THE ZABEL FILTER CAN BE SUPPLIED BY OASIS CLEARWATER LTD PH 3648080 PO BOX 8268 CHCH
15. PUMP DOSE VOLUMES WILL BE DETERMINED AT THE TIME OF TRENCH LENGTH SIZING (AT SUBDIVISION CONSENT STAGE)

R1

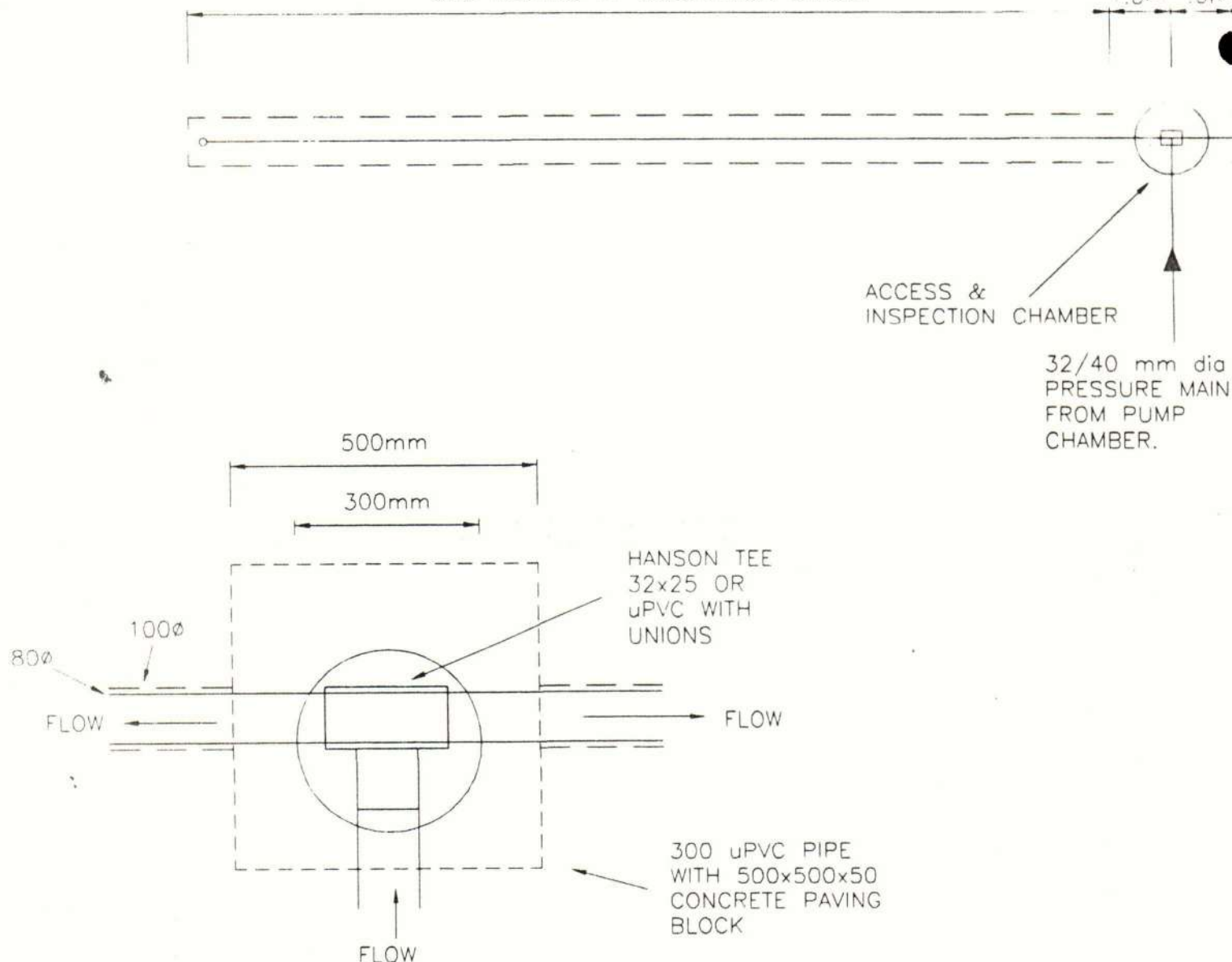
RESOURCE CONSENTS  
- DAWN PLACE KIRWEE

| No | Date     | By  | Amendments             |
|----|----------|-----|------------------------|
| R1 | 19.11.98 | ADF | Notes 12 & 15 changed. |
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| Drawn<br>ADF    |
| Checked<br>AJT  |

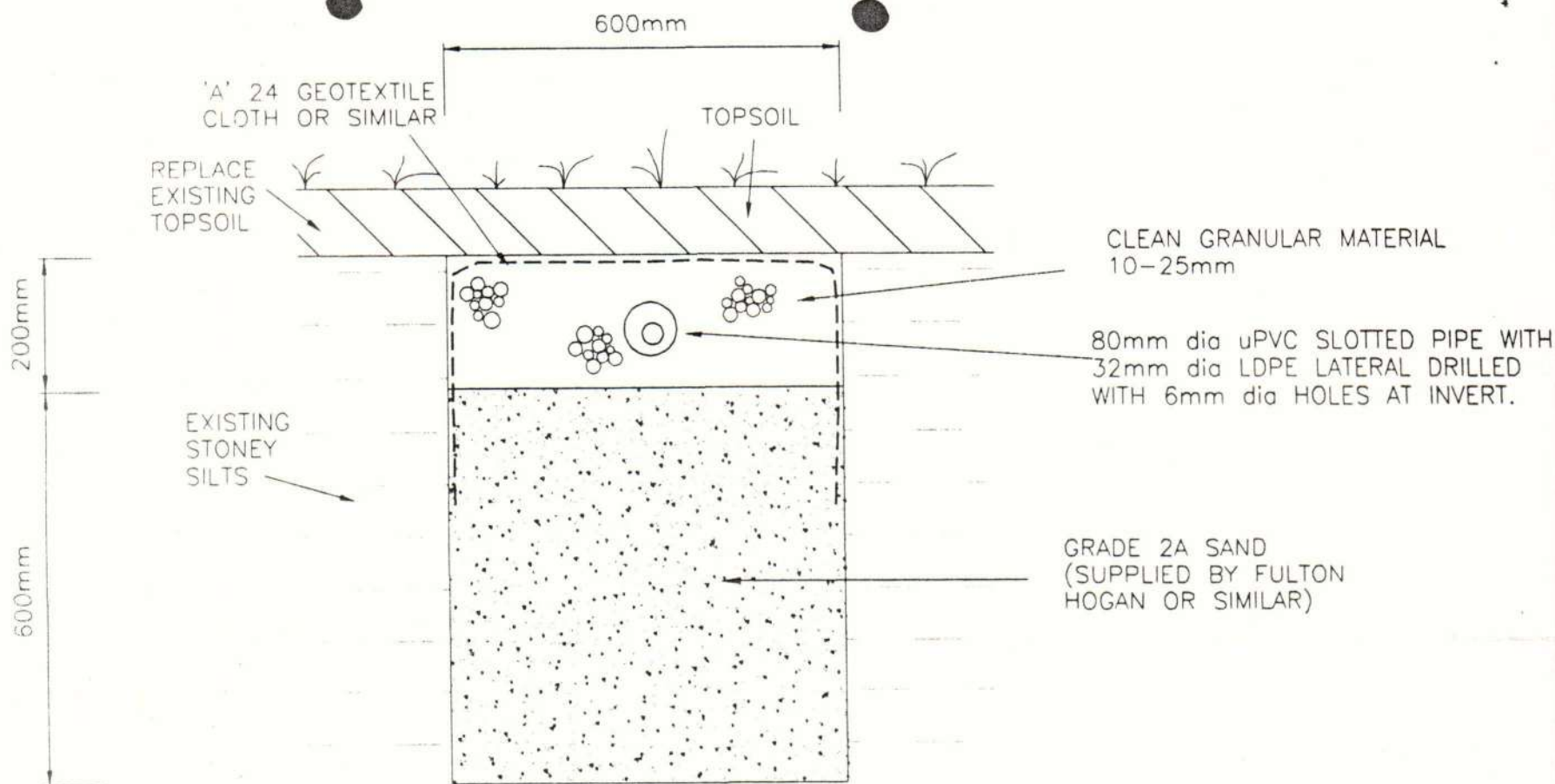
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| Scale: 1:200            |
| Date : Nov 1998         |
| Drawing No.: B3364      |
| Sheet No. 1 of 2 Sheets |

TRENCH LENGTH TO BE SIZED FOLLOWING REPRESENTATIVE  
SITE TESTING AT SUBDIVISION STAGE.



DETAIL 1 INSPECTION BOX

SCALE 1:10



SECTION A-A  
TYPICAL TRENCH CONSTRUCTION

SCALE 1:10

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**Davie, Lovell-Smith Ltd**  
PLANNERS ■ SURVEYORS ■ ENGINEERS

Cowles Notley House, 79 Cambridge Tce, Christchurch 1, New Zealand  
P.O. Box 679 Fax (03) 379 5664 E-mail office@davies.co.nz Ph (03) 379 0793

EFFLUENT DISPOSAL  
ASCOT PARK PARTNERSHIP

LENGTH TO BE SIZED FOLLOWING REPRESENTATIVE  
SITE TESTING AT SUBDIVISION STAGE.

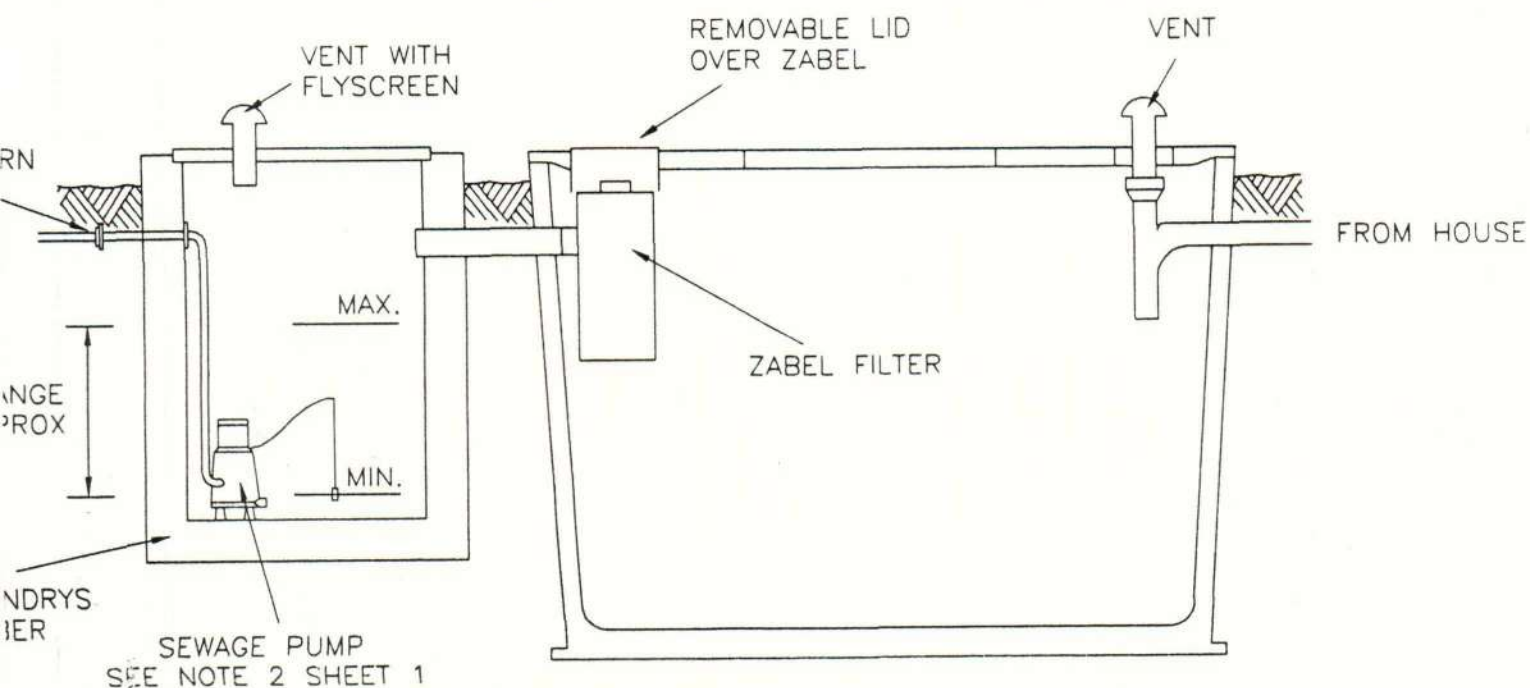
PERFORATED 32mm dia L.D.P.E LATERALS  
WITHIN SLOTTED 80 dia OR 100 dia P.V.C

SPACES @ 1200 CRS

CING OF 6mm dia HOLES IN INVERT OF 32mm dia  
P.E PIPE. LAST HOLE FACES UPWARD.

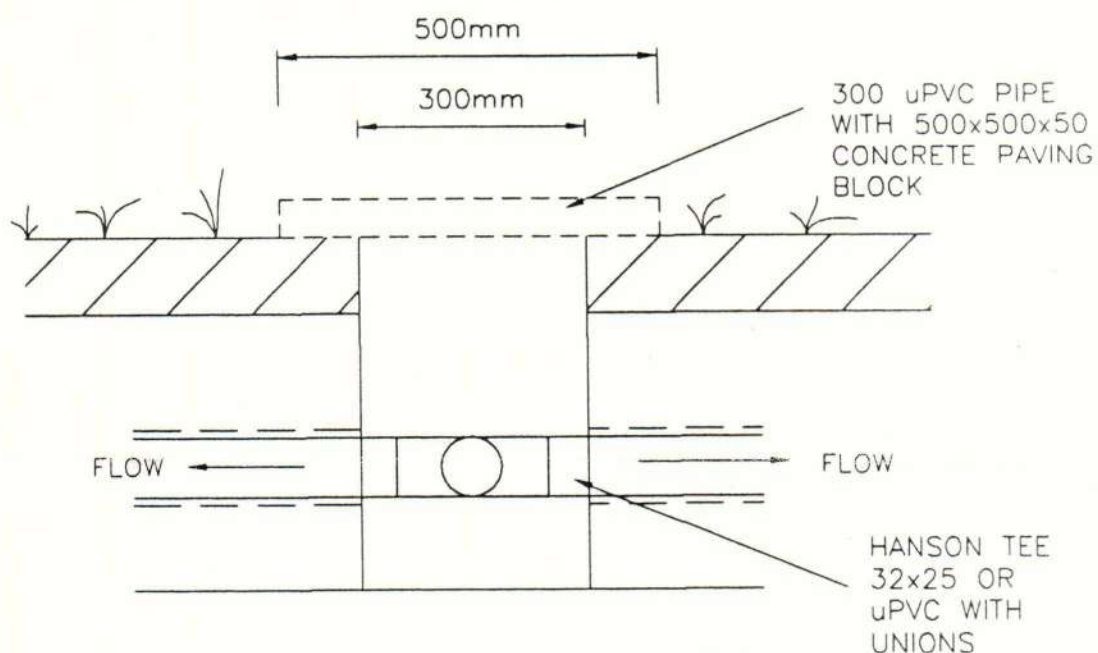
## TRENCH PLAN

SCALE 1:100



## PUMPING CHAMBER DETAILS

NOT TO SCALE



## DETAIL 1A INSPECTION BOX

SCALE 1:10

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R1

RESOURCE CONSENTS  
— DAWN PLACE KIRWEE

| No | Date     | By  | Amendments            |
|----|----------|-----|-----------------------|
| R1 | 19.11.98 | ADF | No change this sheet. |
|    |          |     |                       |
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|    |          |     |                       |

Designed  
AJT  
Drawn  
ADF  
Checked

Scale: As Shown  
Date : Nov 1998

Drawing No.: B3364  
Sheet No. 2 of 2 Sheets

# Drainage Consultancy and Design Ltd

**Malcolm Linton.** Wastewater / Drainage Engineer.  
AMBOINZ, Reg. Certifier (deferred), Reg. Drainlayer, Profic. Soil Mgt.  
13 Old North Rd  
RD1 Kaiapoi

**Mobile 025-2990092**  
Ph / (a/h) 03-3277483 Fax 03-3277418  
Email: dc&d@netaccess.co.nz

## OWNERS MANUAL:

**Applicant:** Brian & Judie Hayman

**Date:** 7<sup>th</sup> October 2002

**Location:** Lot 71 DP 82067 – Courtney Rd – Kirwee

**B.C. No:**

**AS THE OWNER OF THIS SEPTIC TANK AND  
EFFLUENT SYSTEM, YOU ARE RESPONSIBLE  
FOR THE OPERATION AND MAINTENANCE;**

### LIFE OF SYSTEM:

**A. Drains,**

If drains are PVC, (normal product) which are of durable material and excepting accidents should last at least 80 years.

**B. Septic Tank / Pump Chambers,**

Concrete septic tanks are of durable material and should last at least 50 years.

**C. Pump,**

The pump being a mechanical item, therefore the pumps life is dependent on maintenance and use. Any misuse will invalidate the guarantee. With normal use and yearly maintenance the pump should last at least 5 years. (The more you pay in pump purchase, usually means longer life in pump).

**D. Effluent Soakage Bed,**

The life of soakage bed is dependent on a large number of factors, some of which are listed below;

1. The types of detergents used.
2. The types of other products flushed into the system. (What kills bugs in the house will kill bacterial bugs in your septic tank, Therefore due-care is needed).
3. Volume of effluent discharged per day.
4. Volume of solid particles discharged per day. (Performance of septic tank - is tank alive or dead)?
5. The Maintenance of the system.
6. Variation of algae and bacterial growth in the bed.
7. Variation in rain fall.
8. Variation in the ground water height.
9. Normal long term clogging of the pores in the ground.

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## Owners Manual (page 2)

1. Use biodegradable household cleaners and synthetic laundry powders or liquids. (i.e. Petroleum based).
2. Recommend you use body washes, shower gels etc, as these produces are synthetic based. Instead of soap.
3. Recommend you use "Septi-Zyme" Bacteria Stimulator additive, (Refer to Maintenance).
4. Ensure you use water saver, sud saver cycles on your dishwasher and washing machine if fitted.
5. Recommend water saver devices to be fitted on all showers.
6. Clean Septic Tank and Filter when required, (Refer to Maintenance).
7. Follow Maintenance instructions for your system.

### Don't:

1. Recommend you avoid using soap based washing powders.
2. Recommend you don't install a waste master disposal, (Garbage grinder).
3. Don't dispose Napisan product or similar into drains.
4. Don't dispose of disposable nappies, sanitary napkins / panty shields or condoms into drains.
5. Don't use powerful bleaches, chlorine compounds, antiseptics or disinfectants into drains.
6. Don't dispose of medicine pills etc into drains.
7. Don't allow fat to be poured down the sink/s, except if there is the correct size grease trap for the complex installed, within the drainage system.
8. Don't put petrol, oil, flammable / explosive substances or chemicals from garage e.g. pesticide, paint, cleaners, photographic chemicals or trade waste down drains.
9. Don't empty a spa or swimming pool into system.

### Helpful Hints:

To help reduce sludge building up in the septic tank;

1. Scrape all dishes to remove food material etc before washing.
2. Keep all possible solids out of the system.

To help reduce the volume of effluent liquid required to soak away in the land application area;

1. As previous stated, install water saving devices.
2. Take showers (moderate length of time) instead of baths.
3. Only wash cloths when there is a full load / use dishwasher when there is a full load.
4. Try and avoid using the washing machine and dishwasher at the same time.
5. Endeavor to space out water use evenly as possible, so that the system is not over loaded with large volume of water at the one time.

### Maintenance:

1. Recommend you administer into drainage system "Septi - Zyme" Bacteria Stimulator by placing every week into toilet or a sink 100ml of "Septi - Zyme".  
(Information: "Septi-Zyme" is not adding Bacteria to system, but is helping along existing bacteria, and eliminates tank smells. It is a balance to the harsh cleaning compounds that cause bacteria die off in your septic tank. This product can also be used as a cleaner, instead of bleach type compounds. When this product is used weekly, the time between septic tank pump outs is greatly increased, even to a point of no pump out. Yearly checks of septic tank must still be done, see below (2). Septi-Zyme is also a simple maintenance procedure on your soakage trench that is buried from sight).

2. **Clean Septic Tank** at about the 3-5 year period. This however is dependant on the number of people your system caters for and the build up of sludge and crust layers.

(Required cleaning times become longer apart or even needed when "Septi-Zyme" is used as stated above).

Tanks need to be pumped out when the **scum** layer, (*Layer of crust on top*) comes down to within 100mm of the bottom of the tee junction or filter at outlet, **or** when the **sludge**, (*Build up of material on bottom of tank*) and **scum** have accumulated to the extent that the **scum and sludge** has taken up 2/3rds of the volume of the tanks first chamber. (Check build up yearly). The filter will need to be checked for blockage. Note the bio-mass build up on cartridge will aid filtration performance and is not required to be totally removed. Generally clean filter when tank gets emptied. (Hose down with water back into the 1<sup>st</sup> chamber of septic tank).

3. **MUST-YEARLY:** Remove cap off one end of soakage pipeline, (Under mushroom). Run fresh water into pump chamber so pump is activated to flush soakage pipeline out. When line runs clear, turn water off and screw on the 4m long 'Standpipe' given to you by installer of your system, with measurement the water rose up pipe when they commissioned it. Run water into Septic Tank until the pump is activated. Check level water rises up 'Standpipe' and if it is more than 1.5m higher than the level reached when commissioned, then clogging of soakage system is occurring. Contact Consultant / Designer Immediately.  
(Repeat process at other end of pipeline in the soakage trench).  
Remove pump yearly, clean and check intake.  
Check buildup of material in septic tank chambers as in step (2) above.

*If you find it difficult in carrying out the above requirements, contact Consultant / Designer who will arrange for it to be done. (03-3277483)*

### **Owner Change:**

This Manual, measurements, working drawings and site plan must be kept in a handy and safe place. These are to be given to New Owner if and when property changes ownership. (New occupiers of dwelling).

### **"Septi - Zyme"**

Septic Tank Control Biological

activator, stimulating bacterial action.

Obtained from – Counties Cleaning Supplies on 0800737849. (Produce gets delivered to your door).

**Drainage Consultancy and Design Ltd**

**Malcolm Linton** Wastewater / Drainage Engineer.  
AMBOINZ, Reg. Certifier (Deferred), Reg. Drainlayer, Profic. Soil Mgt.  
13 Old North Rd  
RD1 Kaiapoi

**Mobile 025-2990092**  
Ph / (a/h) 03-3277483 Fax 03-3277418  
Email: dc&dd@netaccess.co.nz

**FACSIMILE TRANSMITTAL SHEET****TO: SELWYN DISTRICT COUNCIL****FROM: MALCOLM LINTON****ATTENTION: TEAM LEADER  
CONSENTS****DATE: 26/09/2002****FAX NUMBER: 3243531****TOTAL NO. OF PAGES INCLUDING COVER: 1****PHONE NUMBER: 3248080****SENDER'S REFERENCE NUMBER: CD16802,****RE: SEPTIC TANK & DISPOSAL****YOUR REFERENCE NUMBER:**

☐ URGENT   ☐ FOR REVIEW   ☒ YOUR INFORMATION   ☐ PLEASE REPLY   ☐ PLEASE RECYCLE

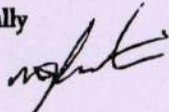
**Message: Dear Team Leader**

I have been contracted by the following person to design their septic tank / disposal system.

1. Brian & Judie Hayman - Lot 71 DP 82067 - Courtney Rd - Kirwee 24/90/147/30

Please continue in processing this building Consent application, as I will get the design to you as soon as possible.

Yours Faithfully



Malcolm Linton

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BC021305

**NOTE: THIS MESSAGE IS CONFIDENTIAL. IF YOU HAVE RECEIVED  
THIS MESSAGE IN ERROR. PLEASE NOTIFY US IMMEDIATELY.**

# GENERAL SPECIFICATIONS FOR TODAY HOMES LTD

Owner: Brian and Judie Hayman

Date: 01.10.02

Site Address: Lot 71 Courtney Road, Kirwee

Job No:

All work to comply with NZ Building Code 1999 and Approved Document

## SITE SCRAPE

The area of the site to be covered by the building shall be stripped of all top growth and vegetable matter. Should soft clay, peat or filled ground be encountered on the site, an engineer shall be consulted for additional foundation details.

## CONCRETE FOUNDATION AND FLOOR

Concrete shall be 20 M.P.A. at 28 days and comply with NZS 3109. Reinforcing to foundation beam 2 D 16mm bars with R10 starters at 600 CRS 600 into floor slab. A 17.5 MPA Concrete floor 100mm thick to be poured over .250 micron polythene on 150mm min (20mm - 40mm) round tailings. The slab shall be finished while still green. A high standard of finish is expected. NZS 3114 1987. Floor level height 250mm max (being standard material allowances) above ground level. B2 durability. 2 D 12mm reinforcing bars 1500mm long to be placed across internal corners of concrete slab.

## FLOOR CUTTING

Floor to be cut in 3.0m x 3.0m square sections to comply with NZS 3604.

## WALL FRAMING

All work to comply to NZS 3604 framing generally to be Lazer frame Dry frame or NZ Oregon 100 x 50 studs at 600 CRS and dwangs at 800 centres. Bracing to be as per schedule and will be steel angle brace or ply sheet bracing. Use malthoid D.P.C between concrete and timber. Lintels - size from NZS 3604 Table 6.7. All timber treated to NZ Timber Preservation Council 3650 1992. B2 durability. B1 stability.

## ROOF FRAMING

Gang-nail or pryda trusses at 900 CRS fixed with z nails designed and manufactured by a licensed manufacturer. For long run iron type roofs purlins to be 75 x 50 at 900 CRS. Ceiling battens to be H1 treated ex 75 x 40 x 400 CRS. B2 durability. B1 stability.

## SOFFITS

Fit 4.5mm Hardiflex sheets generally 600mm wide to 75 x 40 H1 treated Ribbon Plates and Sprockets. B2 durability.

## ROOFING

### Long Run

Fit .40 ....corrugated..... G2 Long Run Colour Steel to manufacturers specifications on self supporting roofing underlay on 75 x 50 Hi treated purlins 900 CRS. B2 durability 15 years.

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B402305

## GENERAL SPECIFICATIONS FOR TODAY HOMES LTD

Owner: Brian and Judie Hayman

Date: 01.10.02

Site Address: Lot 71 Courtney Road, Kirwee

Job No:

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### Fascia and Gutter

Stratco or similar coloursteel, fascia and gutter system fixed to rafters. Fix fascia and gutter system to manufacturers' specification and NZS 3617 1979. B2 durability.

### MASONRY VENEER

Run breather type building paper to NZS/BS 1521: 1972 NZS 2295 1988 horizontally and well secure to outside face of framing. Repair tears and holes before constructing veneer. Construct brick veneer with approved face fixed ties at correct spacing in accordance with appendix F of NZS 3604 and materials and workmanship to NZS 4203, 4229.

### PLUMBING AND DRAINAGE

#### Cold Water Reticulation

20mm PVC main through house to supply tank with 15mm tees to kitchen, laundry, bathrooms and two outside hose taps. 20mm control valve at point of entry to house and 15mm central valve at supply tank. Low pressure cold from supply tank run in 20mm PVC bushed to 15mm PVC at ceiling height. B2 durability. NZBC specification -B2, E1 to AS1, -G13 to AS2.

#### Hot Water Reticulation

Low pressure hot fed by 135 ltr Nuva Tank positioned as high as possible in roof space. 20mm copper feed from hot water cylinder through tempering valve with 15mm branches to feed all fittings. All pipework in ceiling to be lagged with aeroflex or similar material to comply with NZ building code. 270 ltr hot water cylinder to be installed. Fit 65mm PVC downpipes from gutter outlets to stormwater rises. All plumbing to comply with NZ Building Code 1991 G12 and G13. B2 durability. NZBC Specification B2 G12 to AS1, G13 to AS2.

### DRAINAGE

Drainage and stormwater to site plan to comply with G13, G14 and E1, B2 of NZ Building Code 1991.

### ELECTRICAL WORK

All electrical work to be carried out in a tradesman like manner and comply with the relevant codes of practice to G8, NZBC. Lighting to NZS 6703 1984. Private heating to give an adequate controlled interior temperature to NZBC G5.2.1(a), G5/AS1.

### JOINERY

Kitchen units are made from white Melamine with vinyl backs. All doors, draw fronts and seen ends are made from woodgrain or colour Melamine. Bench top is Formica with a deluxe 180 degree rolled edge with cover upstand. Appliance cabinetry to manufacturers specifications.

# GENERAL SPECIFICATIONS FOR TODAY HOMES LTD

Owner: Brian and Judie Hayman

Date: 01.10.02

Site Address: Lot 71 Courtney Road, Kirwee

Job No:

## EXTERNAL JOINERY

Aluminium windows with pine or rimu reveals, glazed with float glass, thickness as required to NZS 4223, 4211, 1985. B2 durability 5 years.

## INTERNAL DOORS

Fit paint grade or rimu flush panel prehung doors in 30mm Gib grooved jambs. B2 durability 15 years.

## LININGS

Wall and ceiling linings to be 9.5mm gib board fixed to manufacturers' specifications and stopped to a level 4 finish. B2 durability 5 years.

## INSULATION

All ceilings to be insulated with R2.5 fibreglass batts. All external walls to be insulated with 1.8 fibreglass batts. No insulation is required to the garage. Insulation to NZS 4214 1977. B2 durability.

## PAINTER

All painting work to be carried out in a tradesman like manner. Internal surfaces shall have 3 coats of acrylic paint and/or polyurethane (owners' choice), sanding out blemishes between each coat. All walls to be sized before wallpapering.

## EXCLUSION TO THE WORKS: (all work below responsibility of the owner)

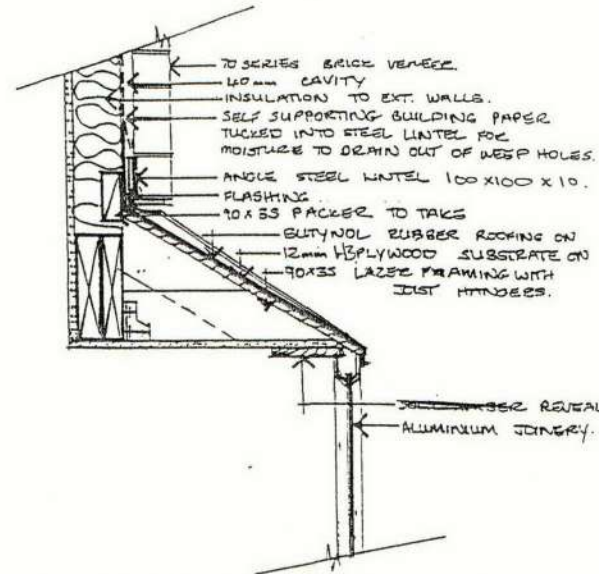
- 1) \_\_\_\_\_
- 2) \_\_\_\_\_
- 3) \_\_\_\_\_
- 4) \_\_\_\_\_

\*\*\*\*\*

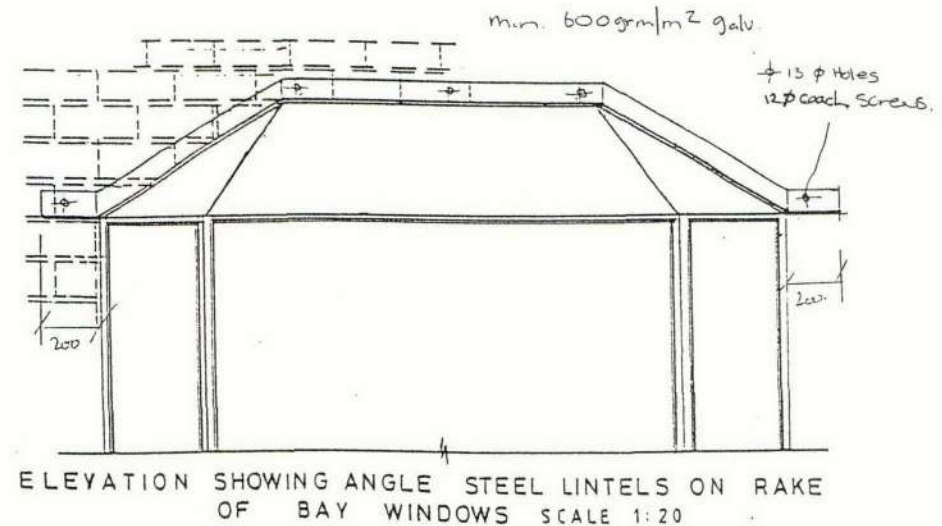
## Registration Numbers for Sub-Contractors:

|             |                                    |         |
|-------------|------------------------------------|---------|
| Electrical: | Nigel Boyes –Mobile Electrical Ltd | E110473 |
| Plumbing:   | Mark Nellis                        | 12562   |
|             | Kevin Tetley                       | 10169   |
| Drainage:   | Hansen Contractors Ltd             |         |

006325 **CERTIFIED**  
by  
**M. C. DAVIS**  
Registered Building Contractor



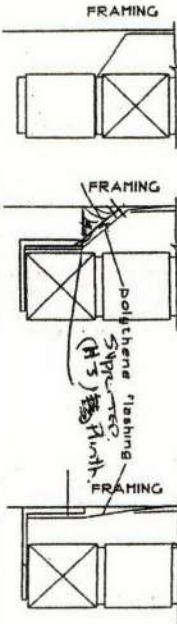
DETAIL THRU BAY WINDOW  
SCALE 1:10



ELEVATION SHOWING ANGLE STEEL LINTELS ON RAKE  
OF BAY WINDOWS SCALE 1:20

Standard Detail

# GALVANISED STEEL LINTELS



100 x 15 x 4 angle may be bent to a radius of 500mm using a Comac Section Bending machine. Fix angle using 15 x 10mm galv. coach screws at 450mm c/c. Stop steel at edge of opening.

## FLAT BAR ANGLE

## HEAD OF ARCH

1. Refer Table 4.4, NZS3604 1999, for lintel protection in seaproy.
2. For openings greater than 2.0m provide a landing of 200mm each side of opening.
3. For openings less than 2.0m allow 100mm. Prop flat bars until bricks have set.
4. Provide brick ties within the bottom two courses.
5. Install polythene flashings and weepholes.

## LINTEL SPAN TABLE (Engineered by BRANZ)

| Max. Span (mm) | 70 SERIES<br>Height of veneer above lintel |                    |                     | 90 SERIES<br>Height of veneer above lintel |               |               |
|----------------|--------------------------------------------|--------------------|---------------------|--------------------------------------------|---------------|---------------|
|                | 350<br>(4 courses)                         | 100<br>(8 courses) | 2000<br>(unlimited) | 350 high                                   | 100 high      | 2000          |
| 1500           | 40 x 10                                    | 40 x 10            | 40 x 10             | 80 x 10                                    | 80 x 10       | 80 x 10       |
| 2000           | 80 x 80 x 4                                | 80 x 80 x 4        | 80 x 80 x 4         | 80 x 80 x 4                                | 80 x 80 x 4   | 80 x 80 x 4   |
| 2500           | 80 x 80 x 4                                | 80 x 80 x 4        | 80 x 80 x 4         | 80 x 80 x 4                                | 80 x 80 x 4   | 80 x 80 x 8   |
| 3000           | 80 x 80 x 4                                | 80 x 80 x 4        | 125 x 75 x 4        | 80 x 80 x 4                                | 80 x 80 x 8   | 90 x 90 x 10  |
| 3500           | 80 x 80 x 4                                | 80 x 80 x 4        | 125 x 75 x 4        | 80 x 80 x 8                                | 90 x 90 x 10  | 125 x 75 x 10 |
| 4000           | 80 x 80 x 8                                | 125 x 75 x 4       | 125 x 75 x 10       | 80 x 80 x 10                               | 125 x 75 x 4  | 150 x 90 x 10 |
| 4500           | 125 x 75 x 4                               | 125 x 75 x 4       | —                   | 125 x 75 x 4                               | 125 x 75 x 10 | —             |
| 4800           | 125 x 75 x 4                               | 125 x 75 x 10      | —                   | 125 x 75 x 4                               | 150 x 90 x 10 | —             |

STEEL WEIGHT  
40 x 10 = 4.8 kg/m  
80 x 80 x 4 = 7.5 kg/m  
100 x 75 x 4 = 8.0 kg/m

125 x 75 x 4 = 12.5 kg/m  
125 x 75 x 10 = 17.3 kg/m  
150 x 90 x 10 = 17.3 kg/m

Brick mild steel.  
lintels, check. Steel tube  
12201

# MASPORT WOODFIRE INSTALLATION SHEET

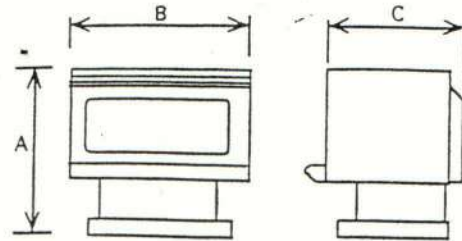
N.Z. MODELS:

LE 3000 Series 2 – LE 5000 Series 2 –

## MASPORT WOODFIRE DIMENSION SHEET

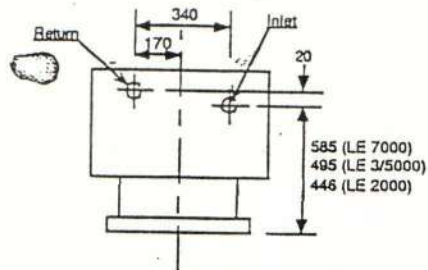
N.Z. MODELS: LE 2000 – LE 3000 Series 2 – LE 5000 Series 2 – LE 7000  
(See Installing Instructions for further detail)

### WOODFIRE DIMENSIONS

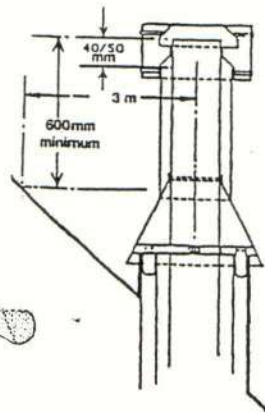


DIMENSIONS – MILLIMETRES

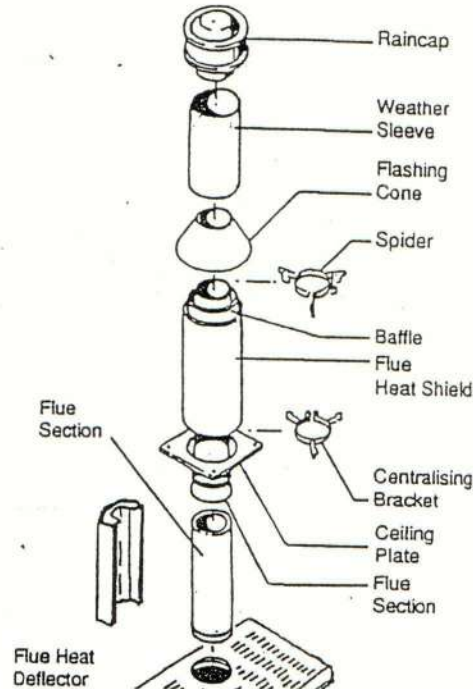
| MODEL            | A   | B   | C   |
|------------------|-----|-----|-----|
| LE 2000          | 620 | 555 | 435 |
| LE 3000 Series 2 | 680 | 660 | 490 |
| LE 5000 Series 2 | 680 | 660 | 490 |
| LE 7000          | 780 | 660 | 540 |



WATER PIPE CONNECTION POSITIONS

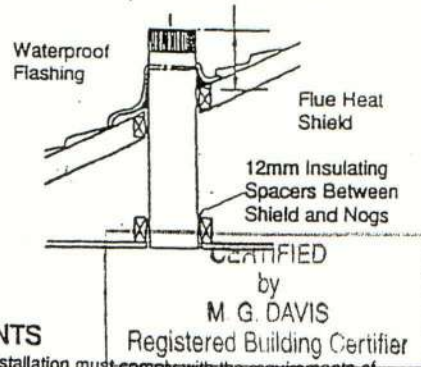


### TYPICAL FLUE INSTALLATION



Flue Heat Deflector

400 Above Roof Line

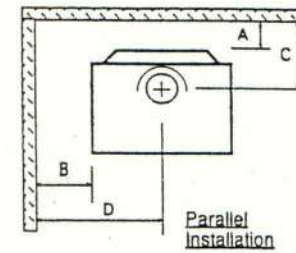


### FLUE REQUIREMENTS

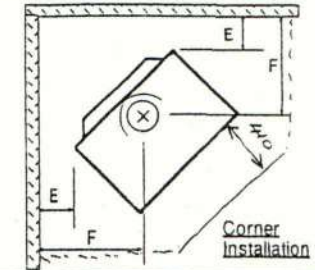
The Flue componentry and installation must comply with the requirements of NZS 7421:1990. Full instructions to ensure compliance are supplied with every Masport Flue Kit. The reduced clearances shown overleaf for cases where a flue heat deflector is installed apply to the 1200mm polished stainless steel Masport flue heat deflector, Part No 551337.

**Masport**

(See Installing Instructions for further details)



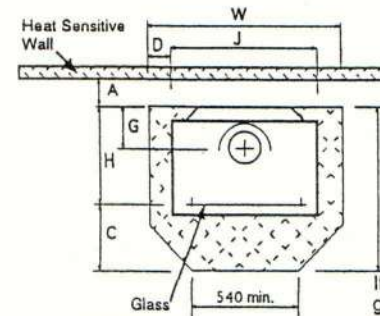
Parallel Installation



Corner Installation

### MINIMUM WOODFIRE TO WALL DISTANCES – MILLIMETRES

|                  | WITH FLUE HEAT DEFLECTOR |     |     |     |    |     | WITHOUT FLUE HEAT DEFLECTOR |     |     |     |     |     |
|------------------|--------------------------|-----|-----|-----|----|-----|-----------------------------|-----|-----|-----|-----|-----|
|                  | A                        | B   | C   | D   | E  | F   | A                           | B   | C   | D   | E   | F   |
| LE 2000          | 50                       | 200 | 230 | 570 | 25 | 380 | 300                         | 270 | 525 | 600 | 225 | 580 |
| LE 3000 Series 2 | 50                       | 245 | 275 | 575 | 25 | 380 | 300                         | 270 | 525 | 600 | 225 | 580 |
| LE 5000 Series 2 | 50                       | 245 | 275 | 575 | 25 | 380 | 300                         | 270 | 525 | 600 | 225 | 580 |
| LE 7000          | 100                      | 245 | 275 | 575 | 25 | 380 | 300                         | 270 | 525 | 600 | 225 | 580 |
| LE 7000          | 100                      | 245 | 275 | 575 | 25 | 380 | 300                         | 270 | 525 | 600 | 225 | 580 |
| LE 7000          | 100                      | 245 | 275 | 575 | 25 | 380 | 300                         | 270 | 525 | 600 | 225 | 580 |



### MINIMUM HEARTH REQUIREMENTS HEARTH CONSTRUCTION

Heat sensitive floors must be protected by a hearth. All hearths must have a continuous fireproof top surface. The insulation in an insulating hearth can be provided by two layers of Micore 160 (each 16mm thick), or one layer of Woodtex (35mm thick). An ash hearth must have one layer of 6mm fibre cement board e.g. Hardies Tile & Slate Underlay.

If the hearth is to extend to the wall, add 'A' to 'B' to get the overall depth. See above for min. values of 'A'.

|                                                      | W   | B    | C    | D   | G   | H   | J   | Ash<br>Hearth | Insulating<br>Hearth |
|------------------------------------------------------|-----|------|------|-----|-----|-----|-----|---------------|----------------------|
| LE 2000                                              | 935 | 690  | 200  | 138 | 225 | 490 | 660 | ✓             | ✓                    |
| LE 3000 Series 2                                     | 935 | 910* | 420* | 138 | 225 | 490 | 660 | ✗             | ✓                    |
| LE 3000 Series 2<br>(with Ash Hearth Conversion Kit) | 935 | 690  | 200  | 138 | 225 | 490 | 660 | ✓             | ✓                    |
| LE 5000 Series 2                                     | 935 | 690  | 200  | 138 | 225 | 490 | 660 | ✓             | ✓                    |
| LE 7000                                              | 935 | 910* | 420* | 138 | 225 | 490 | 660 | ✓             | ✓                    |
| LE 7000                                              | 935 | 910* | 420* | 138 | 225 | 490 | 660 | ✓             | ✓                    |
| LE 7000                                              | 935 | 910* | 420* | 138 | 225 | 490 | 660 | ✓             | ✓                    |

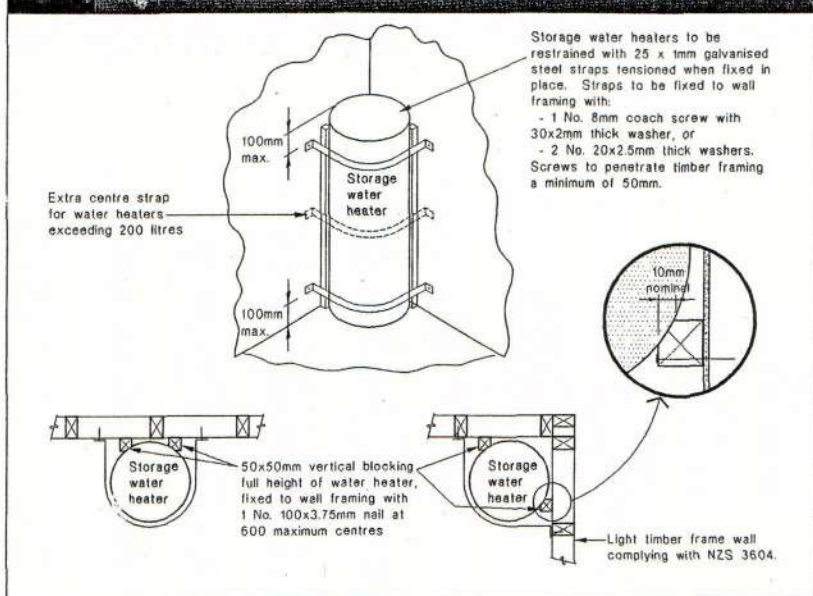
\* INCREASE BY 80mm IF HEARTH TOP IS NOT AT LEAST 50mm ABOVE FLOOR

✗ SEE ABOVE FOR MINIMUM CONSTRUCTIONAL REQUIREMENTS

✓ FOR PRACTICAL PURPOSES, WE RECOMMEND INCREASING THESE SIZES BY 100mm

Figure 14: Seismic Restraint of Storage Water Heaters 90 – 360 litres

Paragraph 6.10.4



## 6.12 Wet-back water heaters

6.12.1 Wet-back water heaters shall be:

- Connected only to open vented storage water heaters, or a water storage vessel (see Figure 15), and
- Made of copper.

6.12.2 Copper pipework shall be used between the wet-back and the water tank.

## 6.13 Safe water temperatures

## 6.13.1 Maximum temperatures

The delivered hot water temperature at any sanitary fixture used for personal hygiene shall not exceed:

- 45°C for early childhood centres, schools, old people's homes, institutions for people with psychiatric or physical disabilities, hospitals, and
- 55°C for all other buildings.

## COMMENT:

- At greatest risk from scalding are children, the elderly, and people with physical or intellectual disabilities, particularly those in institutional care.
- Sanitary fixtures used for personal hygiene include showers, baths, hand basins and bidets.

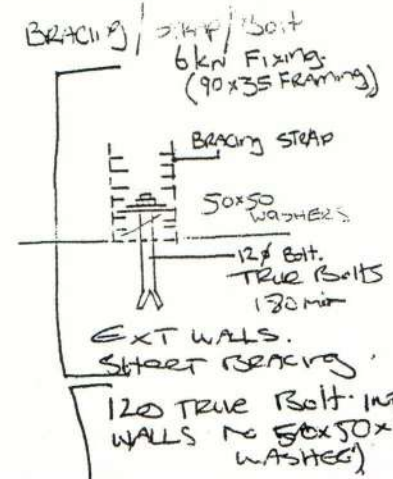
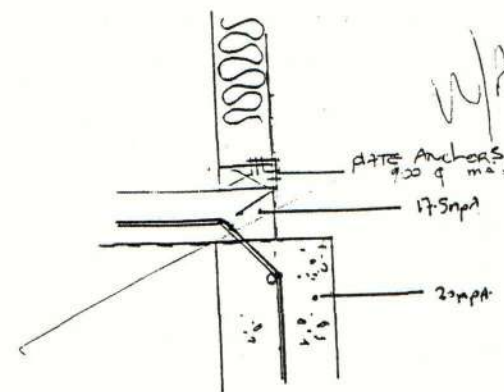
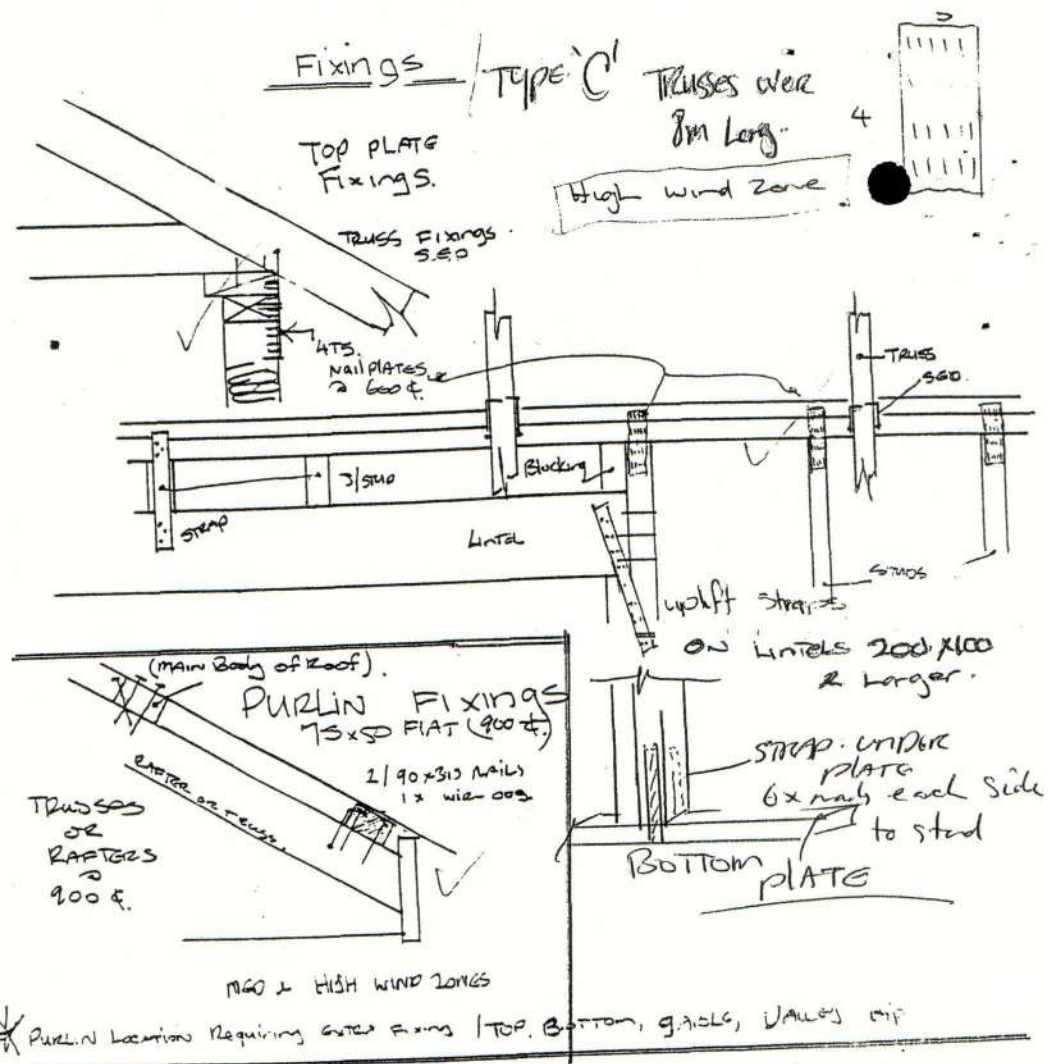
## 6.13.2 Hot water delivered from storage water heaters

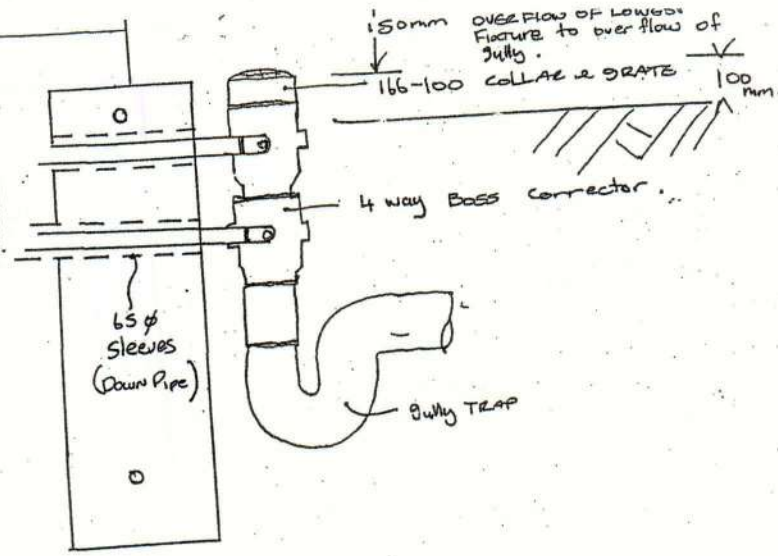
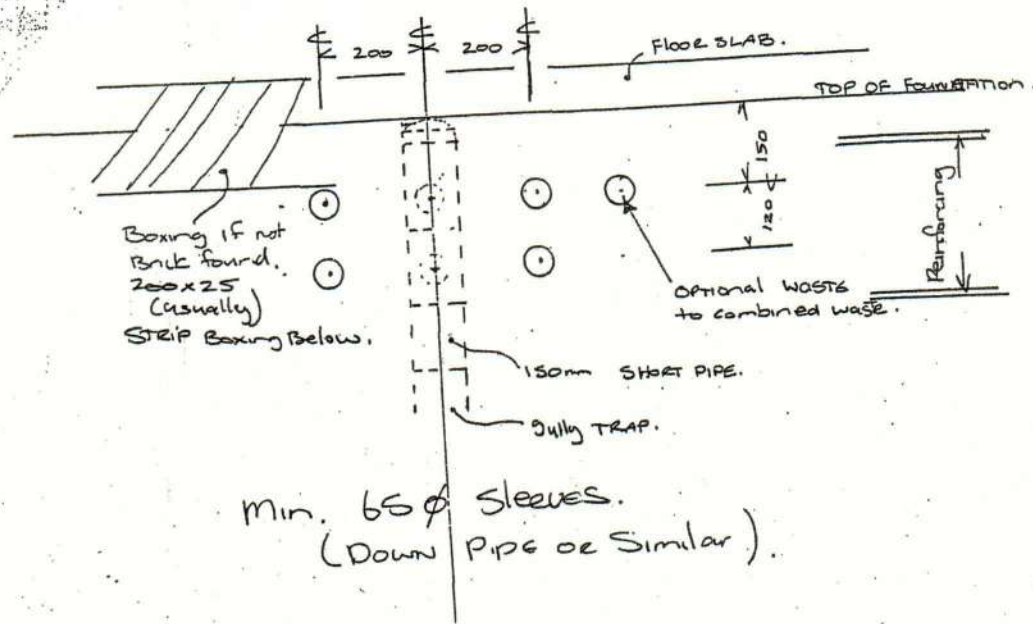
- An acceptable method of limiting hot water temperature delivered from storage water heaters is to install a mixing device between the outlet of the water heater and the sanitary fixture (see Figure 16).

- Tempering valves shall comply with NZS 4617 or AS 1357.2.

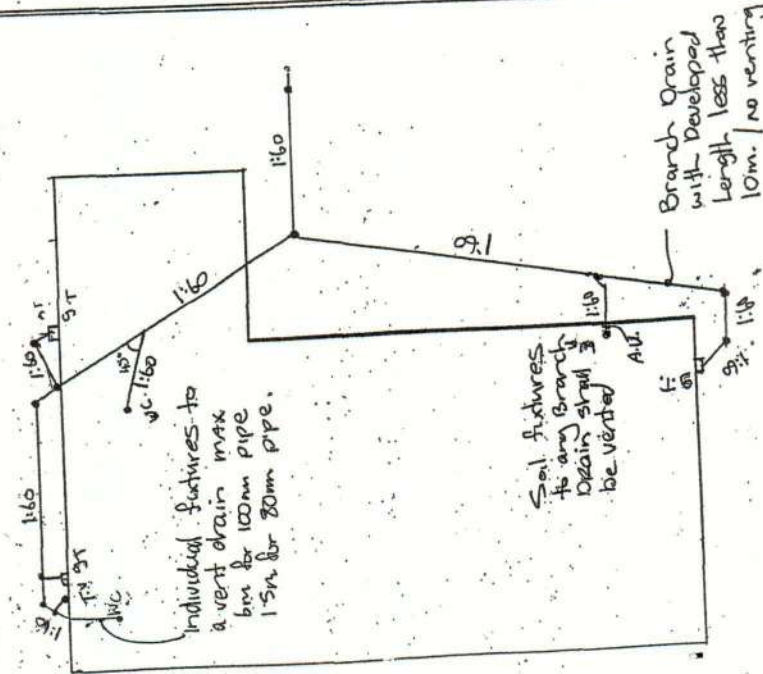
## 6.13.3 Legionella bacteria

Irrespective of whether a mixing device is installed, the storage water heater control thermostat shall be capable of being set at a temperature of not less than 60°C to prevent the growth of Legionella bacteria.

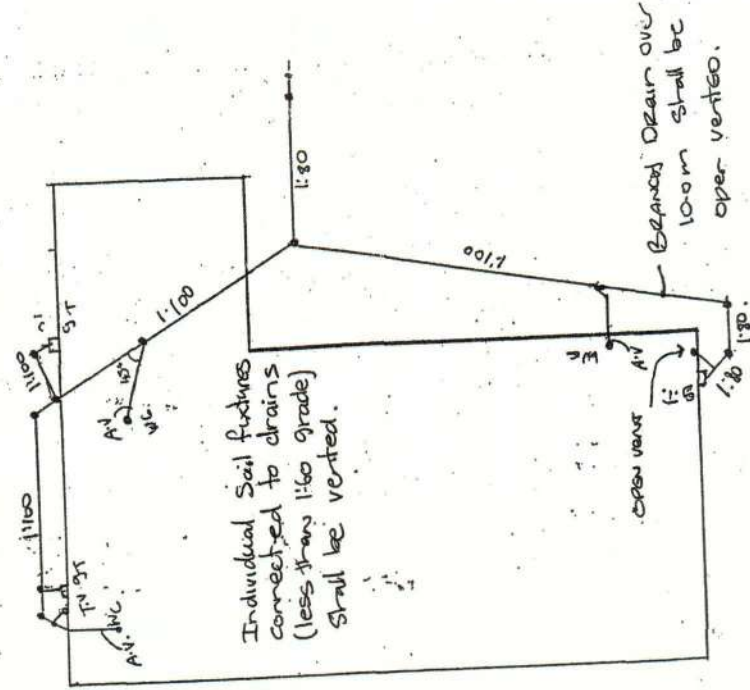




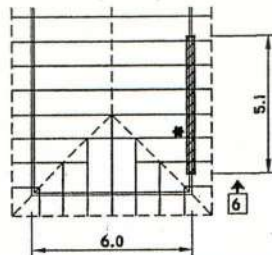
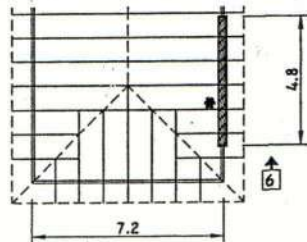
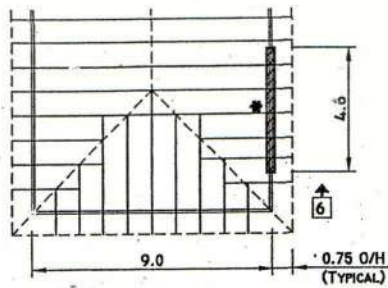
Waste pipes 150



Waste pipes 150



A.V. AIR ADMITTANCE VALVE



#### LEGEND:

\* LOCATION OF GIRDER TRUSSES ON THE GANG-NAIL FLITCH CAN BE ANYWHERE ALONG ITS LENGTH. THE WORST CASE LOAD SITUATION HAS BEEN ALLOWED FOR IN THE DESIGN.

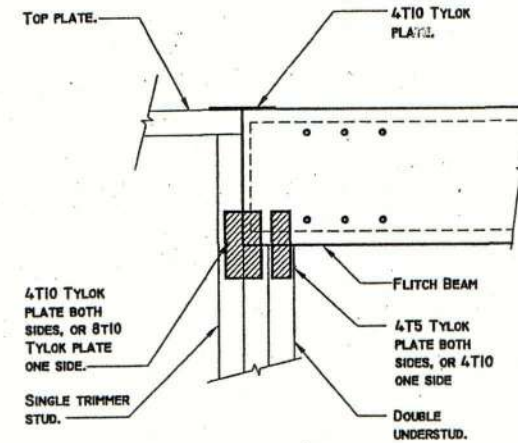
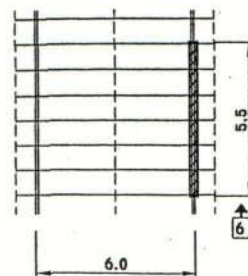
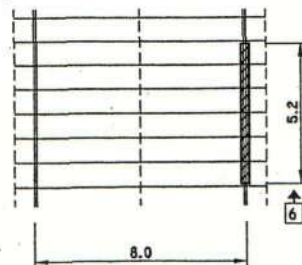
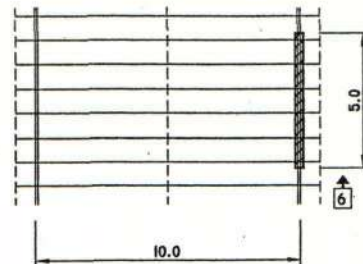
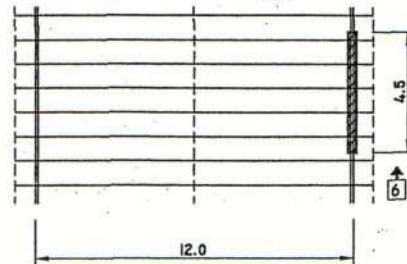
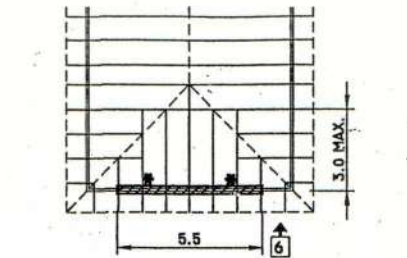
↑ INDICATES MIDSPAN CAMBER

#### LOAD CONDITIONS:

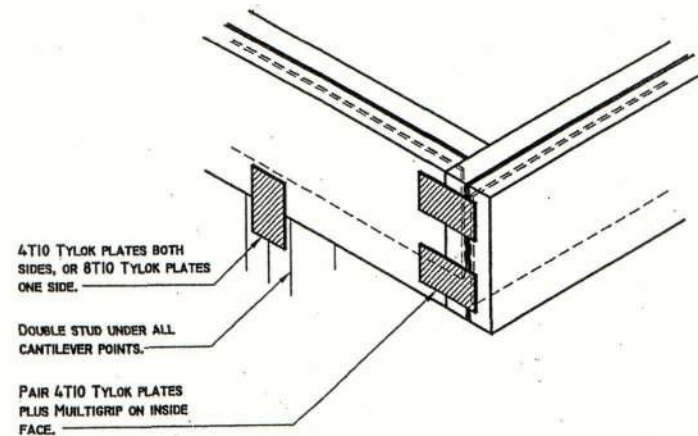
ROOF WEIGHT = LIGHT (0.25 KPA)  
CEILING = GIB BOARD OR SIMILAR (0.20 KPA)  
LIVE LOAD =  $L_u = 0.25 \text{ KPA}$   $L_c = 1.0 \text{ KN}$   
WIND LOAD = HIGH  
SNOW LOAD = 0.5 KPA

ALL OTHER DETAILS AS PER SPECIFICATION AT FRONT OF GANG-NAIL FLITCH BEAM MANUAL.

**LIGHT ROOF - FB25H**

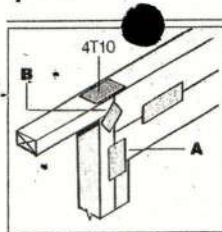


#### SIMPLY SUPPORTED BEAM



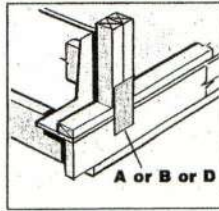
#### CANTILEVER BEAM

**FIXING AND SUPPORT DETAILS**



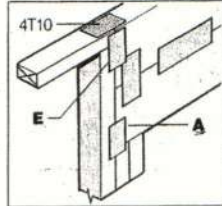
### BEAM END — TYLOK

- A** 4T10 both sides
- B** As **A** plus Strap Nail both sides



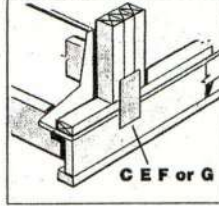
### SUPPORT BASE — TWO STUDS ONTO TIMBER

- A** 8T10 one side only
- B** 10T15 one side only
- D** 200 x 110 x 1mm Nail on one side only



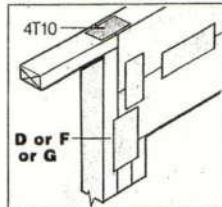
### BEAM END — DOUBLE TYLOK

- E** As **A** plus 4T10 both sides



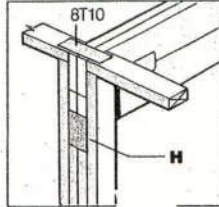
### SUPPORT BASE — 3 STUDS ONTO TIMBER

- C** 10T15 one side only
- E** 200 x 110 x 1mm Nail on one side only
- F** 280 x 110 x 1mm Nail on one side only
- G** 360 x 110 x 1mm Nail on one side only



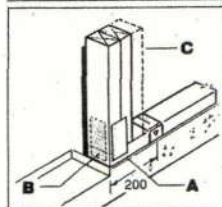
### BEAM END — NAILON

- D** or **C** 200 x 110 x 1mm Nail outside plus 4T10 inside
- F** 200 x 110 x 1mm Nail both sides
- G** 280 x 110 x 1mm Nail both sides



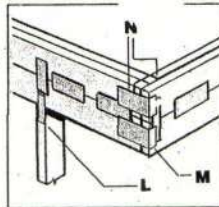
### B 1 POCKET

- H** TYLOK plate (Typical)



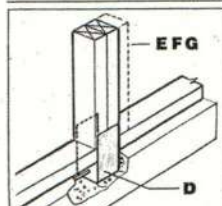
### SUPPORT BASE — TYLOK ONTO CONCRETE

- A** 4T10 both sides 1 BOTTOM PLATE FIXING ANCHOR
- B** as **A** plus 4T10 to end stud plus BOTTOM PLATE ANCHOR
- C** as **B** but with double understud to beam



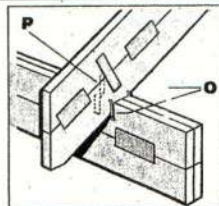
### CANTILEVERED BEAM & SUSPENDED LINTEL

- L** 200mm Strapfixing both sides at each support (All cases)
- M** 1/200 x 50 x 110 x 1mm Nail cleat & Multi-grip inside (Typical)
- N** 2 x **M** on Heavy roof over 200 x 100 suspended Lintel size (Typical)



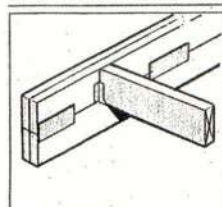
### SUPPORT BASE — NAILON U BRACKET ONTO CONCRETE

- D** 210 x 100 x 210 x 1mm Nailon U Bracket under reinforcing steel in concrete
- E** **F** **G** as **D** but with double understud to beam



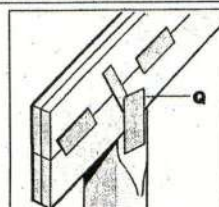
### RAFTER TO BEAM

- O** 2 wire dogs with blocking for **A** to **D** index CT200 with 4 nails each end both sides for **E** to **G** (birdsmouth rafter only)



### JOIST OR PURLIN TO GANGLAM

Joist or Purlin fixings may be selected by referring to the Maxspan brochure



### POLE TO GANGLAM

- Q** 200 x 110 x 1mm Nail on both sides onto pole cut for bearing and face cut for Nailon

### PRODUCER STATEMENT - DESIGN GANG-NAIL GROUP LIMITED

### GANG-NAIL FLITCH BEAM DESIGN

The GANG-NAIL FLITCH BEAM designs have been compiled using sound and widely accepted engineering principles and in accordance with NZS4203:1992 and NZS3603:1993 as verification methods and acceptable solutions of the approved documents issued by the Building Industry Authority to satisfy the requirements of Clause B1:Structure of the Building Regulations 1992.

As independent design professionals covered by a current policy of Professional Indemnity Insurance to a minimum value of \$200,000 I BELIEVE ON REASONABLE GROUNDS that subject to:

1. The verification of all design assumptions detailed in the drawings and
2. All proprietary products meeting the performance specification requirements,

the drawings, specifications and other documents according to which the building is proposed to be constructed, comply with the relevant provisions of the Building Code.

Stephen Anthony COLL

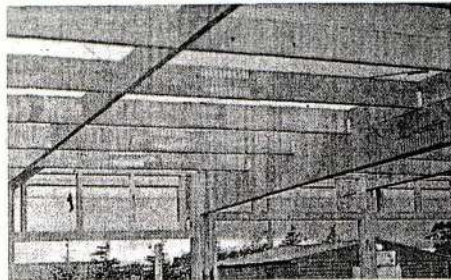
T.M. IPENZ, MNZIOB

for GANG-NAIL GROUP LIMITED  
20 KOTZIKAS PLACE  
CHRISTCHURCH  
NEW ZEALAND

*Stephen bow*

Date: November, 1998

GANGLAM Rafters Supporting Maxspan Purlins



### Design Data

The tables herein have been designed according to the following loads:

|      |           |           |         |
|------|-----------|-----------|---------|
| Roof | Live Load | 0.25 kPa, | 1.0 kN  |
|      | Dead Load | 0.65 kPa, | Heavy   |
|      |           | 0.25 kPa, | Light   |
|      |           | 0.20 kPa  | Ceiling |

Note: a) 750mm overhang has been included in the derivation of the tables.  
b) Spans are horizontal measurements  
c) For heavy roofs over 30 degrees pitch, nominally multiply the roof span by 1.17 before using the tables:

Nominal Roof Span = 1.17 x Actual Roof Span

|       |                           |                  |
|-------|---------------------------|------------------|
| Floor | Live Load                 | 1.50 kPa, 1.8 kN |
|       | Dead Load                 | 0.40 kPa         |
|       | Permanent Load (D + 0.4L) | 1.0 kPa          |

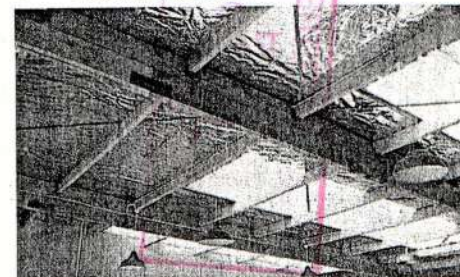
Wall Dead Load 0.6 kN/m line load

Snow 0.5 kPa snow load has been allowed in the tables. For higher snow loads up to 1.0 kPa, nominally multiply the actual roof span by 1.37 before using the tables:

Nominal Roof Span = 1.37 x Actual Roof Span

Wind/ Design covers all wind and seismic zones as Seismic in NZS3604 unless stated otherwise.

Multi- Beam spans selected from the tables may be increased by 10% in multispan situations. The Beams length of the shorter span must not be less than half the longer span.



GANGLAM Rafters



GANGLAM Commercial Lintel

### DESIGN CERTIFICATE GANGLAM Selection Manual

The selection charts and manufacturing details contained in this Manual have been designed to comply with the relevant requirements of NZS4203 and NZS3603 of the approved documents issued by the Building Industry Authority and in accordance with sound and widely accepted engineering principles.

For and on behalf of Gang-Nail Group Ltd,

*David Reid*

David Reid  
BE(Civil), MIPENZ, Registered Engineer  
01/11/97



GANGLAM®

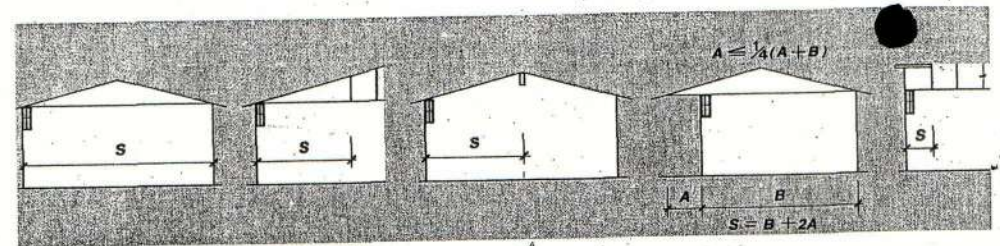


TABLE 1:  
LINTELS SUPPORTING ROOF AND CEILING ONLY

| LINTEL SIZE | MAXIMUM LINTEL SPAN (m)<br>SUPPORTED ROOF SPAN 'S' (m) |      |      |      |      |      |      |      |      |      |      |
|-------------|--------------------------------------------------------|------|------|------|------|------|------|------|------|------|------|
|             | 5.0                                                    | 6.0  | 7.0  | 8.0  | 9.0  | 10.0 | 11.0 | 12.0 | 13.0 | 14.0 | 15.0 |
| LIGHT ROOF  | 100 x 100                                              | 1.56 | 1.49 | 1.43 | 1.36 | 1.30 | 1.24 | 1.19 | 1.14 | 1.07 | 1.04 |
|             | 125 x 100                                              | 2.08 | 1.98 | 1.90 | 1.82 | 1.73 | 1.65 | 1.59 | 1.53 | 1.47 | 1.38 |
|             | 150 x 100                                              | 2.43 | 2.31 | 2.22 | 2.12 | 2.02 | 1.93 | 1.85 | 1.78 | 1.72 | 1.61 |
|             | 200 x 100                                              | 3.29 | 3.14 | 3.01 | 2.88 | 2.74 | 2.62 | 2.51 | 2.42 | 2.33 | 2.25 |
|             | 250 x 100                                              | 4.16 | 3.96 | 3.80 | 3.64 | 3.46 | 3.31 | 3.17 | 3.05 | 2.94 | 2.85 |
|             | 300 x 100                                              | 4.62 | 4.40 | 4.22 | 4.07 | 3.94 | 3.82 | 3.71 | 3.62 | 3.53 | 3.42 |
|             | 350 x 100                                              | 5.44 | 5.19 | 4.98 | 4.80 | 4.64 | 4.50 | 4.38 | 4.23 | 4.14 | 4.02 |
|             | 400 x 100                                              | 6.27 | 5.98 | 5.73 | 5.52 | 5.34 | 5.15 | 4.94 | 4.84 | 4.74 | 4.62 |
|             | 450 x 100                                              | 7.09 | 6.76 | 6.49 | 6.22 | 5.92 | 5.66 | 5.44 | 5.24 | 5.04 | 4.84 |
|             | 500 x 100                                              | 7.92 | 7.55 | 7.16 | 6.77 | 6.44 | 6.13 | 5.85 | 5.58 | 5.32 | 5.04 |
| HEAVY ROOF  | 100 x 100                                              | 1.26 | 1.20 | 1.15 | 1.11 | 1.07 | 1.04 | 1.00 | 0.96 | 0.93 | 0.87 |
|             | 125 x 100                                              | 1.68 | 1.60 | 1.54 | 1.48 | 1.43 | 1.39 | 1.33 | 1.28 | 1.24 | 1.16 |
|             | 150 x 100                                              | 1.96 | 1.87 | 1.79 | 1.73 | 1.67 | 1.62 | 1.55 | 1.49 | 1.44 | 1.35 |
|             | 200 x 100                                              | 2.68 | 2.54 | 2.43 | 2.35 | 2.27 | 2.20 | 2.11 | 2.03 | 1.98 | 1.83 |
|             | 250 x 100                                              | 3.36 | 3.21 | 3.08 | 2.96 | 2.87 | 2.77 | 2.66 | 2.56 | 2.47 | 2.32 |
|             | 300 x 100                                              | 3.74 | 3.56 | 3.42 | 3.28 | 3.18 | 3.09 | 2.98 | 2.88 | 2.80 | 2.74 |
|             | 350 x 100                                              | 4.40 | 4.20 | 4.03 | 3.88 | 3.75 | 3.64 | 3.51 | 3.41 | 3.32 | 3.24 |
|             | 400 x 100                                              | 5.07 | 4.84 | 4.64 | 4.47 | 4.32 | 4.19 | 4.08 | 3.97 | 3.88 | 3.72 |
|             | 450 x 100                                              | 5.74 | 5.47 | 5.25 | 5.06 | 4.89 | 4.74 | 4.61 | 4.50 | 4.39 | 4.21 |
|             | 500 x 100                                              | 6.41 | 6.11 | 5.86 | 5.64 | 5.46 | 5.30 | 5.16 | 5.02 | 4.90 | 4.66 |
|             | 550 x 100                                              | 7.07 | 6.74 | 6.47 | 6.23 | 6.03 | 5.85 | 5.69 | 5.54 | 5.36 | 5.03 |
|             | 600 x 100                                              | 7.62 | 7.35 | 7.08 | 6.82 | 6.60 | 6.40 | 6.20 | 6.00 | 5.74 | 5.40 |

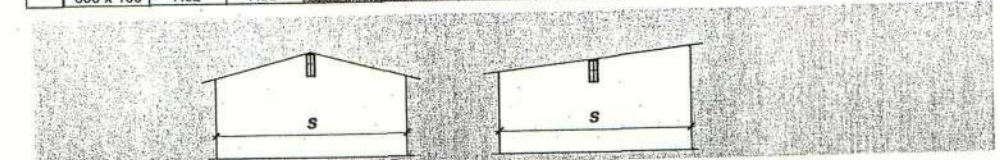


TABLE 1:  
GANGLAM RIDGE BEAM SUPPORTING ROOF AND SARKING  
(RAFTERS @ 1200MM CRS MAX)

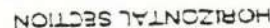
| LINTEL SIZE | MAXIMUM LINTEL SPAN (m)<br>SUPPORTED ROOF SPAN 'S' (m) |      |      |      |      |      |      |      |      |      |      |
|-------------|--------------------------------------------------------|------|------|------|------|------|------|------|------|------|------|
|             | 5.0                                                    | 6.0  | 7.0  | 8.0  | 9.0  | 10.0 | 11.0 | 12.0 | 13.0 | 14.0 | 15.0 |
| LIGHT ROOF  | 300 x 100                                              | 5.04 | 4.74 | 4.51 | 4.31 | 4.14 | 4.00 | 3.88 | 3.77 | 3.67 | 3.58 |
|             | 350 x 100                                              | 5.94 | 5.59 | 5.31 | 5.08 | 4.88 | 4.72 | 4.57 | 4.44 | 4.32 | 4.22 |
|             | 400 x 100                                              | 6.84 | 6.44 | 6.12 | 5.85 | 5.62 | 5.43 | 5.26 | 5.11 | 4.98 | 4.85 |
|             | 450 x 100                                              | 7.62 | 7.28 | 6.92 | 6.62 | 6.36 | 6.14 | 5.95 | 5.78 | 5.63 | 5.49 |
|             | 500 x 100                                              | 8.28 | 7.91 | 7.61 | 7.36 | 7.10 | 6.86 | 6.64 | 6.45 | 6.29 | 6.13 |
|             | 550 x 100                                              | 8.92 | 8.52 | 8.20 | 7.93 | 7.70 | 7.50 | 7.32 | 7.13 | 6.94 | 6.77 |
| HEAVY ROOF  | 300 x 100                                              | 4.08 | 3.84 | 3.65 | 3.49 | 3.34 | 3.21 | 3.09 | 2.97 | 2.86 | 2.74 |
|             | 350 x 100                                              | 4.81 | 4.52 | 4.30 | 4.11 | 3.95 | 3.79 | 3.65 | 3.50 | 3.41 | 3.28 |
|             | 400 x 100                                              | 5.53 | 5.21 | 4.95 | 4.73 | 4.55 | 4.39 | 4.25 | 4.09 | 3.98 | 3.84 |
|             | 450 x 100                                              | 6.26 | 5.89 | 5.60 | 5.35 | 5.15 | 4.97 | 4.82 | 4.66 | 4.55 | 4.41 |
|             | 500 x 100                                              | 6.99 | 6.58 | 6.25 | 5.98 | 5.75 | 5.53 | 5.34 | 5.22 | 5.08 | 4.95 |
|             | 550 x 100                                              | 7.61 | 7.26 | 6.90 | 6.60 | 6.34 | 6.10 | 5.94 | 5.77 | 5.61 | 5.48 |
|             | 600 x 100                                              | 8.14 | 7.77 | 7.48 | 7.22 | 6.94 | 6.72 | 6.50 | 6.34 | 6.14 | 5.99 |

Regular duty plating

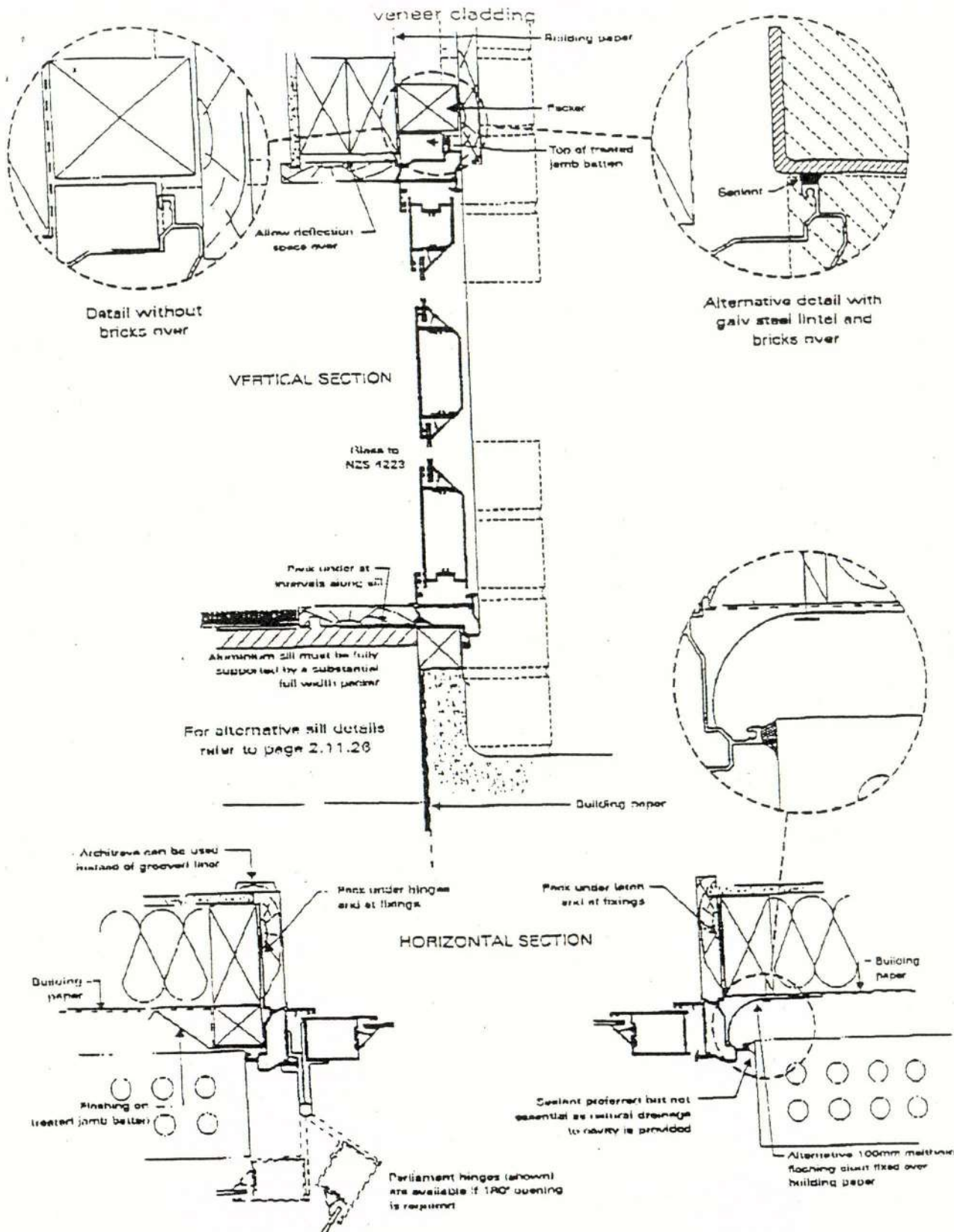
Heavy duty plating

Super heavy duty plating

(025) 321 147



VERTICAL SECTION AT AWINING SASH



**TODAY HOMES LTD**  
P.O. BOX 8043  
RICCARTON, CH-CH  
PH: 341 6460 FAX: 341 6462  
(025) 321 147

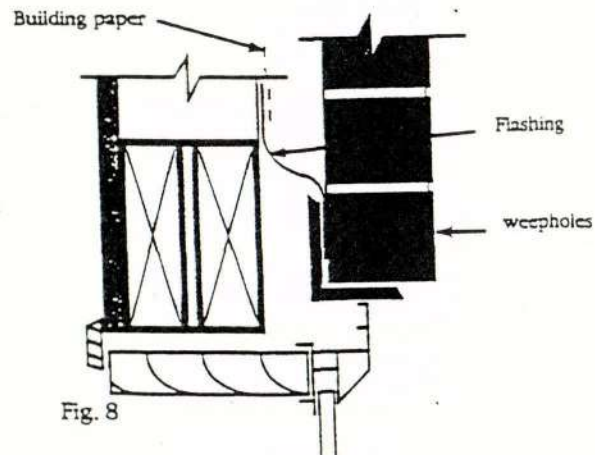


Fig. 8

Window Detail Flashing

## South

0.2      24.95  
0.09      4  
Conservator

|       |  |
|-------|--|
| Total |  |
| 29.04 |  |

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## West

9.74

9.74

9.74

9.74

11.74

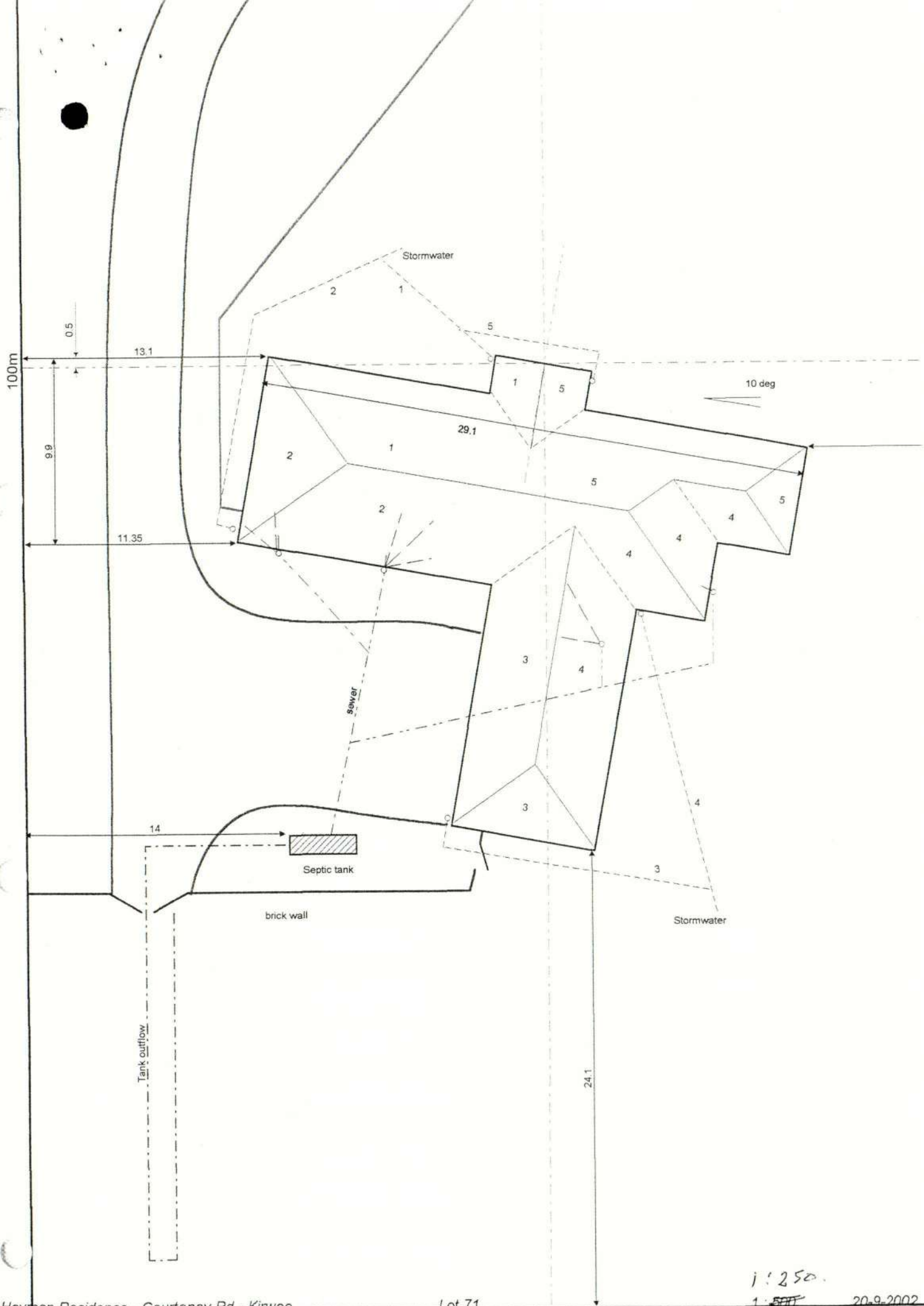
24.71

22.71

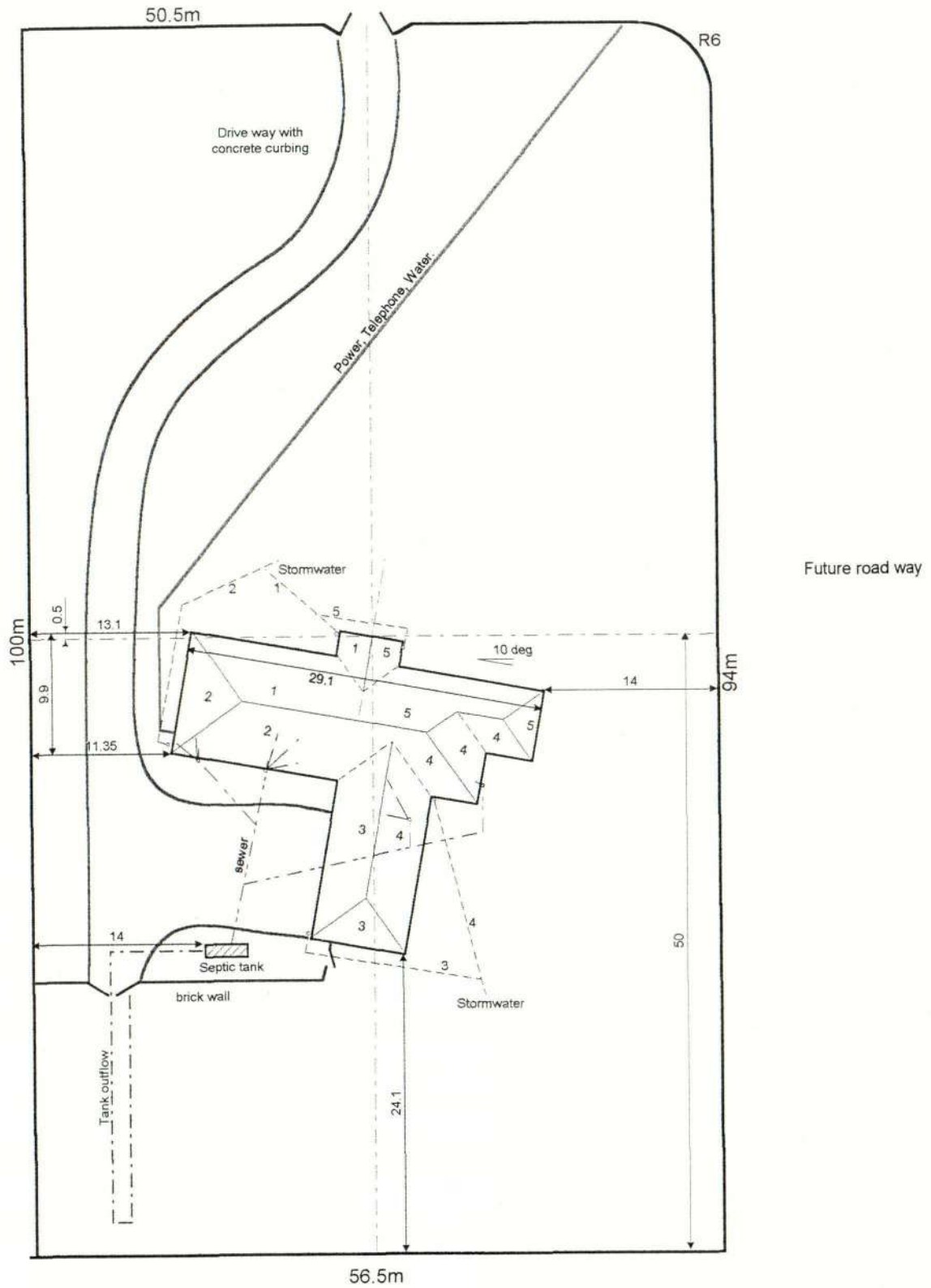
9.74

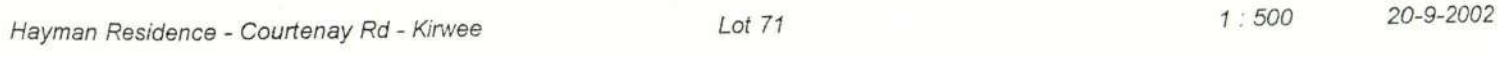
5.95

**East**



Courtenay Road





**Job Details**

Name : HAYMAN  
 Street and Number : COURTENAY ROAD  
 Lot and DP Number :  
 City/Town/District : KIRWEE  
 Designer and date : LD 25-Sep-02  
 Company Name : DIXON DESIGN LTD.

**Building Specification**

|                                 |        |   |                                         |
|---------------------------------|--------|---|-----------------------------------------|
| Location of Storey              | single | ▼ |                                         |
| Floor Loading                   | 2 kPa  | ▼ |                                         |
| Foundation Type                 | slab   | ▼ |                                         |
| Building Height to Apex (m)     | 7      | ▼ |                                         |
| Roof Height above Eaves (m)     | 4      | ▼ |                                         |
| Stud Height (m)                 | 2.4    | ▼ |                                         |
| Cladding Weight (top or single) | light  | ▼ |                                         |
| Cladding Weight (lower)         | heavy  | ▼ | not applicable (single storey building) |
| Cladding Weight (subfloor)      | light  | ▼ | not applicable (slab)                   |
| Roof Weight                     | light  | ▼ |                                         |
| Roof Pitch (degrees)            | 25-45  | ▼ |                                         |
| Room in Roof Space              | no     | ▼ |                                         |
| Building Length (m)             | 28.83  |   | Use roof length including eaves         |
| Building Width (m)              | 25.47  |   | Use roof length including eaves         |
| Gross Building Plan Area (m2)   | 340.6  |   |                                         |

**Building Location**

|                  |             |   |                        |   |
|------------------|-------------|---|------------------------|---|
| <b>Wind Zone</b> | <b>High</b> |   | <b>Earthquake Zone</b> |   |
| Region           | R1          | ▼ | B                      | ▼ |
| Terrain          | Inland      | ▼ |                        |   |
| Exposure         | Exposed     | ▼ |                        |   |
| Topography       | Moderate    | ▼ |                        |   |

**Bracing Units required for Wind**

| per m         | subfloor        | walls        |
|---------------|-----------------|--------------|
| W along       | n/a             | 93 BUs/m     |
| W across      | n/a             | 117 BUs/m    |
| <b>Totals</b> | <b>subfloor</b> | <b>walls</b> |
| W along       | n/a             | 2369 BUs     |
| W across      | n/a             | 3373 BUs     |

**Bracing Units required for Earthquake**

| per m2        | subfloor        | walls        |
|---------------|-----------------|--------------|
| E             | n/a             | 3.0 BUs/m2   |
| <b>Totals</b> | <b>subfloor</b> | <b>walls</b> |
| E along       | n/a             | 1022 BUs     |
| E across      | n/a             | 1022 BUs     |

CERTIFIED  
 by  
 M. G. DAVIS  
 Registered Building Engineer

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 BC021305

| Along                |                           |                           |          |                 |                            |                            |                 |                 |
|----------------------|---------------------------|---------------------------|----------|-----------------|----------------------------|----------------------------|-----------------|-----------------|
| Wall or Bracing Line | Bracing Elements provided |                           |          |                 |                            |                            | Wind            | Earthq.         |
| 1                    | 2                         | 3                         | 4        | 5               | 6                          | 7                          | 8W              | 9EQ             |
| Line Label           | Minimum<br>BUs<br>Req/Ach | Bracing<br>Element<br>No. | Supplier | Bracing<br>Type | Element<br>Length<br>(m) L | Element<br>Height H<br>(m) | BUs<br>Achieved | BUs<br>Achieved |
| <b>A</b>             | enter                     | 1                         | ecoply   | SP2             | 0.6                        | 2.4                        | 51              | 51              |
| line totals          |                           | 2                         | ecoply   | SP2             | 0.6                        | 2.4                        | 51              | 51              |
| W                    | 332                       | 3                         | ecoply   | SP1             | 1.1                        | 2.4                        | 110             | 121             |
| EQ                   | 355                       | 4                         | ecoply   | SP1             | 1.2                        | 2.4                        | 120             | 132             |
| <b>B</b>             | enter                     | 1                         | ecoply   | SP2             | 0.9                        | 2.4                        | 77              | 77              |
| line totals          |                           | 2                         | ecoply   | SP1             | 1.2                        | 2.4                        | 120             | 132             |
| W                    | 397                       | 3                         | Gib®     | Gib1a           | 2                          | 2.4                        | 110             | 100             |
| EQ                   | 408                       | 4                         | ecoply   | SP1             | 0.9                        | 2.4                        | 90              | 99              |
| <b>C</b>             | enter                     | 1                         | Gib®     | Gib2b           | 2.8                        | 2.4                        | 224             | 196             |
| line totals          |                           | 2                         | Gib®     | Gib2b           | 3                          | 2.4                        | 240             | 210             |
| W                    | 794                       | 3                         | Gib®     | Gib2b           | 3                          | 2.4                        | 240             | 210             |
| EQ                   | 715                       | 4                         | ecoply   | SP1             | 0.9                        | 2.4                        | 90              | 99              |
| <b>D</b>             | enter                     | 1                         | Gib®     | Gib1b           | 2.7                        | 2.4                        | 203             | 135             |
| line totals          |                           | 2                         | Gib®     | Gib1a           | 2.1                        | 2.4                        | 116             | 105             |
| W                    | 648                       | 3                         | Gib®     | Gib1a           | 1.9                        | 2.4                        | 105             | 95              |
| EQ                   | 485                       | 4                         | Gib®     | Gib1b           | 3                          | 2.4                        | 225             | 150             |
| <b>E</b>             | enter                     | 1                         | Gib®     | Gib2b           | 2.9                        | 2.4                        | 232             | 203             |
| line totals          |                           | 2                         | Gib®     | Gib2b           | 3                          | 2.4                        | 240             | 210             |
| W                    | 472                       | 3                         |          |                 |                            |                            |                 |                 |
| EQ                   | 413                       | 4                         |          |                 |                            |                            |                 |                 |
| <b>F</b>             | enter                     | 1                         | Gib®     | Gib2b           | 3                          | 2.4                        | 240             | 210             |
| line totals          |                           | 2                         |          |                 |                            |                            |                 |                 |
| W                    | 240                       | 3                         |          |                 |                            |                            |                 |                 |
| EQ                   | 210                       | 4                         |          |                 |                            |                            |                 |                 |
| <b>G</b>             | enter                     | 1                         | Gib®     | Gib1b           | 3                          | 2.4                        | 225             | 150             |
| line totals          |                           | 2                         |          |                 |                            |                            |                 |                 |
| W                    | 225                       | 3                         |          |                 |                            |                            |                 |                 |
| EQ                   | 150                       | 4                         |          |                 |                            |                            |                 |                 |
| <b>H</b>             | enter                     | 1                         |          |                 |                            |                            |                 |                 |
| line totals          |                           | 2                         |          |                 |                            |                            |                 |                 |
| W                    |                           | 3                         |          |                 |                            |                            |                 |                 |
| EQ                   |                           | 4                         |          |                 |                            |                            |                 |                 |
| <b>I</b>             | enter                     | 1                         |          |                 |                            |                            |                 |                 |
| line totals          |                           | 2                         |          |                 |                            |                            |                 |                 |
| W                    |                           | 3                         |          |                 |                            |                            |                 |                 |
| EQ                   |                           | 4                         |          |                 |                            |                            |                 |                 |
| <b>J</b>             | enter                     | 1                         |          |                 |                            |                            |                 |                 |
| line totals          |                           | 2                         |          |                 |                            |                            |                 |                 |
| W                    |                           | 3                         |          |                 |                            |                            |                 |                 |
| EQ                   |                           | 4                         |          |                 |                            |                            |                 |                 |

Wind Earthq.

|                 |  |  |  |  |  |  |      |      |
|-----------------|--|--|--|--|--|--|------|------|
| Totals Achieved |  |  |  |  |  |  | 3107 | 2736 |
|-----------------|--|--|--|--|--|--|------|------|

OK OK

|                                |  |  |  |  |  |  |      |      |
|--------------------------------|--|--|--|--|--|--|------|------|
| Totals Required (from Sheet A) |  |  |  |  |  |  | 2369 | 1022 |
|--------------------------------|--|--|--|--|--|--|------|------|

## Gib® Bracing Systems (1999)

For details see Gib® Bracing Systems, 1999  
and appropriate manufacturer's literature

| Supplier | System | Minimum Length (m) | BU's W/m | BU's EQ/m |
|----------|--------|--------------------|----------|-----------|
|          | none   |                    |          |           |
| Gib®     | Gib1a  | 1.8                | 55       | 50        |
| Gib®     | Gib1b  | 2.4                | 75       | 50        |
| Gib®     | Gib2a  | 1.8                | 75       | 60        |
| Gib®     | Gib2b  | 2.4                | 80       | 70        |
| Gib®     | Gib3   | 1.2                | 65       | 60        |
| Gib®     | Gib10  | 1.8                | 65       | 60        |
| Gib®     | Gib11  | 1.2                | 65       | 65        |
| Gib®     | UL1    | 1.2                | 70       | 60        |
| Gib®     | UL2    | 1.2                | 100      | 85        |
| Gib®     | BR1a   | 1.8                | 70       | 60        |
| Gib®     | BR1b   | 2.4                | 90       | 75        |
| Gib®     | BR2a   | 1.8                | 75       | 60        |
| Gib®     | BR2b   | 2.4                | 85       | 60        |
| Gib®     | BR3a   | 1.8                | 60       | 45        |
| Gib®     | BR3b   | 2.4                | 95       | 65        |
| Gib®     | BR4    | 0.9                | 100      | 85        |
| Gib®     | BR5    | 1.2                | 115      | 85        |
| Gib®     | BR6    | 1.2                | 150      | 110       |
| Gib®     | BR7    | 0.9                | 145      | 145       |
| Gib®     | BR8    | 0.9                | 120      | 95        |
| Gib®     | BR9    | 0.6                | 110      | 95        |
| ecoply   | SP4    | 0.45               | 70       | 85        |
| ecoply   | SP2    | 0.6                | 85       | 85        |
| ecoply   | SP1    | 0.9                | 100      | 110       |
| concrete | RC1    | 0.75               | 42       | 42        |
| concrete | RC2    | 1.5                | 100      | 100       |
| concrete | RC3    | 3                  | 200      | 200       |
| concrete | RC4    | 4.5                | 300      | 300       |
| Custom   | Custom |                    |          |           |
| Custom   | Custom |                    |          |           |
| Custom   | Custom |                    |          |           |
| Custom   | Custom |                    |          |           |
| Custom   | Custom |                    |          |           |
| Custom   | Custom |                    |          |           |
| Custom   | Custom |                    |          |           |
| Custom   | Custom |                    |          |           |
| Custom   | Custom |                    |          |           |
| Custom   | Custom |                    |          |           |
| Custom   | Custom |                    |          |           |
| Custom   | Custom |                    |          |           |
| Custom   | Custom |                    |          |           |
| Custom   | Custom |                    |          |           |
| Custom   | Custom |                    |          |           |
| Custom   | Custom |                    |          |           |
| Custom   | Custom |                    |          |           |

## V104A

| Wind | Earthq. |
|------|---------|
| 1    | 1       |
| 2    | 2       |
| 3    | 3       |
| 4    | 4       |
| 5    | 5       |
| 6    | 6       |
| 7    | 7       |
| 8    | 8       |
| 9    | 9       |
| 10   | 10      |
| 11   | 11      |
| 12   | 12      |
| 13   | 13      |
| 14   | 14      |
| 15   | 15      |
| 16   | 16      |
| 17   | 17      |
| 18   | 18      |
| 19   | 19      |
| 20   | 20      |
| 21   | 21      |
| 22   | 22      |
| 23   | 23      |
| 24   | 24      |
| 25   | 25      |
| 26   | 26      |
| 27   | 27      |
| 28   | 28      |
| 29   | 29      |
| 30   | 30      |
| 31   | 31      |
| 32   | 32      |
| 33   | 33      |
| 34   | 34      |
| 35   | 35      |
| 36   | 36      |
| 37   | 37      |
| 38   | 38      |
| 39   | 39      |
| 40   | 40      |
| 41   | 41      |
| 42   | 42      |
| 43   | 43      |
| 44   | 44      |
| 45   | 45      |
| 46   | 46      |
| 47   | 47      |
| 48   | 48      |
| 49   | 49      |
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| 58   | 58      |
| 59   | 59      |
| 60   | 60      |
| 61   | 61      |
| 62   | 62      |
| 63   | 63      |
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| 66   | 66      |
| 67   | 67      |
| 68   | 68      |
| 69   | 69      |
| 70   | 70      |
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| 89   | 89      |
| 90   | 90      |
| 91   | 91      |
| 92   | 92      |
| 93   | 93      |
| 94   | 94      |
| 95   | 95      |
| 96   | 96      |
| 97   | 97      |
| 98   | 98      |
| 99   | 99      |
| 100  | 100     |

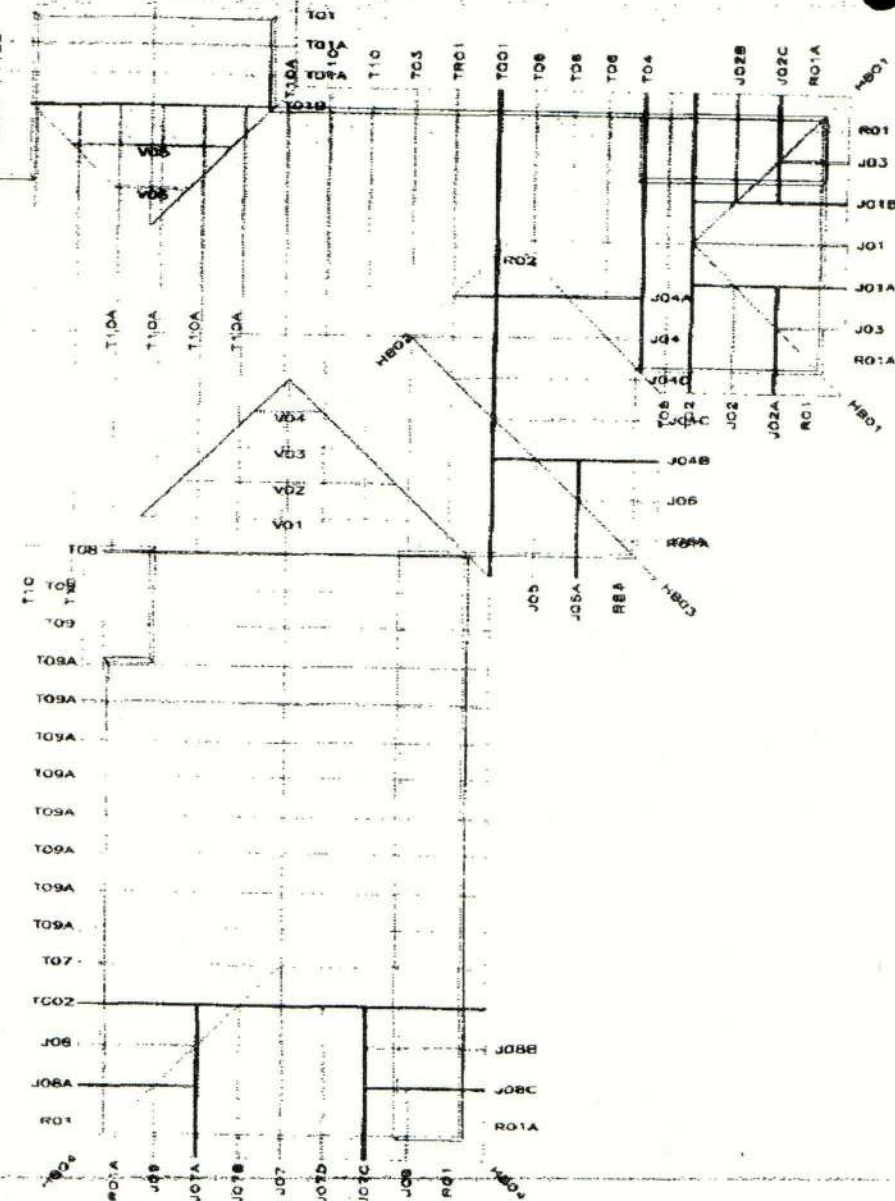
OK OK

|                                |  |  |  |  |         |        |
|--------------------------------|--|--|--|--|---------|--------|
| Totals Required (from Sheet A) |  |  |  |  | 3373.11 | 1021.8 |
|--------------------------------|--|--|--|--|---------|--------|

**Gib® Bracing Systems (1999)**

For details see Gib® Bracing Systems, 1999  
and appropriate manufacturer's literature

[illegible]



LINTELS: all Lintels as per GANGNAIL: Ganglion Tables (Nov 97) or GANGNAIL: Flitch Beam Tables (Oct 00), unless otherwise noted.

FILE COPY

## Carters Christchurch

Page: ProdSt - 1

Job: 0209064

Client: TODAY HOMES

Site: B AND J HAYMAN

Phone:

KIRWEE

Description: TRUSSES

Phone:

MITek 2000 2.100.g6f

Gang Nail Group Ltd.

Tue Oct 01 16:29:49 2002

**PRODUCER STATEMENT**  
**MITek 2000(tm) ROOF TRUSS DESIGN**

**FAXED****Certification of MITek 2000(tm) Design Program**

The MITek 2000(tm) roof truss design program has been developed by Gang-Nail Group Ltd for the design of Gang-Nail timber roof trusses in New Zealand. The truss designs computed by this program are prepared using sound and widely accepted engineering principles, and in accordance with NZS 4203, NZS 3603 and NZS 3604 as verification methods and acceptable solutions of the approved documents issued by the Building Industry Authority to satisfy the requirements of Clause B1:Structure of the Building Regulations 1992. This computer design for the proposed building complies with the relevant provisions of the NZ Building Code. This is subject to all proprietary products meeting their performance specification requirements, the provision of adequate bracing, fixings and the correct input of design data carried out by suitably trained personnel.

**Summary of MITek 2000(tm) Design Data and Output**

The MITek 2000(tm) computer design output for this job titled and located at the site identified on the top of this page is based on the following parameters entered into the program. The owner must ensure that the following job details below are current and relevant to the project before fabrication and erection of the Gang-Nail trusses.

**Job Details**

|                 |                |                    |                |                       |                        |
|-----------------|----------------|--------------------|----------------|-----------------------|------------------------|
| Roof Pitch:     | 35.00 deg      | Timber Inventory:  | MGP10_90x35    | Building Wind Zone:   | High                   |
| Roof Material:  | Light          | Ceiling Material:  | Standard       | Design Wind Speed:    | 44.0 m/s               |
| TC Dead Load:   | 0.250 kPa      | BC Dead Load:      | 0.200 kPa      | Pressure Coefficient: | C <sub>pe</sub> = -0.9 |
| TC Restraints:  | 900 mm centres | BC Restraints:     | 400 mm centres |                       | C <sub>pi</sub> = 0.3  |
| Roof Live Load: | Lu = 0.250 kPa | Truss Spacing:     | 900 mm         | Snow Load Zone:       | Zone 4                 |
|                 | Lc = 1.0 kN    | Standard Overhang: | 450 mm         | Altitude:             | 160 m                  |
|                 |                |                    |                | Snow Load@35deg:      | 0.490 kPa              |

These trusses must be fabricated and erected in accordance with the Gang-Nail manual. Proper erection bracing must be installed to hold the components true and plumb and in a safe condition until permanent bracing is fixed. All permanent bracing and fixing must be installed before any loads are applied. The specifications for timber shall be as shown on the output. The timber shall be standard gauged and treated to the requirements of NZMP 3640.

**Truss List**

Legend: \* : detail only, ? : input only, Fxx: failed design, Unmarked trusses: designed successfully

| Truss | Span<br>(mm) | Pitch<br>(deg) | Spacing<br>(mm) | Truss | Span<br>(mm) | Pitch<br>(deg) | Spacing<br>(mm) | Truss | Span<br>(mm) | Pitch<br>(deg) | Spacing<br>(mm) |
|-------|--------------|----------------|-----------------|-------|--------------|----------------|-----------------|-------|--------------|----------------|-----------------|
| J01   | 2782         | 35.00          | 900             | J05   | 2172         | 35.00          | 900             | J09   | 1182         | 35.00          | 900             |
| J01A  | 2782         | 35.00          | 900             | J05A  | 2172         | 35.00          | 900             | T01   | 5200         | 35.00          | 668             |
| J01B  | 2782         | 35.00          | 900             | J05B  | 2172         | 35.00          | 900             | T01A  | 5200         | 35.00          | 668             |
| J02   | 1882         | 35.00          | 900             | J05C  | 2172         | 35.00          | 900             | T01B  | 5200         | 35.00          | 668             |
| J02A  | 1882         | 35.00          | 900             | J05D  | 2172         | 35.00          | 900             | T02   | 5600         | 35.00          | 900             |
| J02B  | 1882         | 35.00          | 900             | J05E  | 2172         | 35.00          | 900             | T03   | 9780         | 35.00          | 900             |
| J02C  | 1882         | 35.00          | 900             | J06   | 1272         | 35.00          | 900             | T03A  | 9780         | 35.00          | 900             |
| J03   | 982          | 35.00          | 900             | J06A  | 1272         | 35.00          | 900             | T04   | 5600         | 35.00          | 536             |
| J04   | 3072         | 35.00          | 900             | J06B  | 1272         | 35.00          | 900             | T05   | 5600         | 35.00          | 536             |
| J04A  | 3072         | 35.00          | 900             | J06C  | 1272         | 35.00          | 900             | T06   | 5600         | 35.00          | 777             |
| J04B  | 3072         | 35.00          | 900             | J07   | 2982         | 35.00          | 900             | T07   | 7800         | 35.00          | 900             |
| J04C  | 3072         | 35.00          | 900             | J07A  | 2982         | 35.00          | 900             | T08   | 7800         | 35.00          | 826             |
| J04D  | 3072         | 35.00          | 900             | J07B  | 2982         | 35.00          | 900             | T09   | 7800         | 35.00          | 826             |
| J04E  | 3072         | 35.00          | 900             | J07C  | 2982         | 35.00          | 900             | T09A  | 7800         | 35.00          | 826             |
| J04F  | 3072         | 35.00          | 900             | J07D  | 2982         | 35.00          | 900             | T10   | 9780         | 35.00          | 899             |
| J04G  | 3072         | 35.00          | 900             | J08   | 2082         | 35.00          | 900             | T10A  | 9780         | 35.00          | 899             |
| J04H  | 3072         | 35.00          | 900             | J08A  | 2082         | 35.00          | 900             | T10B  | 9780         | 35.00          | 899             |
| J04I  | 3072         | 35.00          | 900             | J08B  | 2082         | 35.00          | 900             | TG01  | 9780         | 35.00          | 900             |
| J04J  | 3072         | 35.00          | 900             | J08C  | 2082         | 35.00          | 900             | TG01A | 9780         | 35.00          | 900             |

**FILE COPY**

## Carters Christchurch

Page: ProdSt - 2

Job: 0209064

Client: TODAY HOMES

Site: B AND J HAYMAN

Phone:

KIRWEE

Description: TRUSSES

Phone:

MITek 2000 2.100 g6f

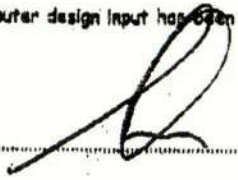
Gong Nail Group Ltd.

Tue Oct 01 16:29:49 2002

Truss ListLegend: \*: detail only, ? : input only, ~~xxx~~: failed design, Unmarked trusses: designed successfully

| Truss | Span<br>(mm) | Pitch<br>(deg) | Spacing<br>(mm) | Truss | Span<br>(mm) | Pitch<br>(deg) | Spacing<br>(mm) |
|-------|--------------|----------------|-----------------|-------|--------------|----------------|-----------------|
| T502  | 7800         | 35.00          | 900             | V03   | 3000         | 35.00          | 900             |
| TRO1  | 9780         | 35.00          | 900             | V04   | 1400         | 35.00          | 900             |
| TRO1A | 9780         | 35.00          | 900             | V05   | 3400         | 35.00          | 900             |
| V01   | 6200         | 35.00          | 900             | V06   | 1600         | 35.00          | 900             |
| V02   | 4600         | 35.00          | 900             |       |              |                |                 |

The computer design input has been carried out by:

Signed: 

Date: 01/10/02

Name of Computer Operator: M. GRIFFITHS

Qualifications and Title: QUOTBS

Company:

Carters Christchurch

Verification / Acceptance of Input Data:

I have checked the input data against the construction drawings and specifications and verify that they are correct and suitable for this job.

Signed:

Date:

Name:

Company:

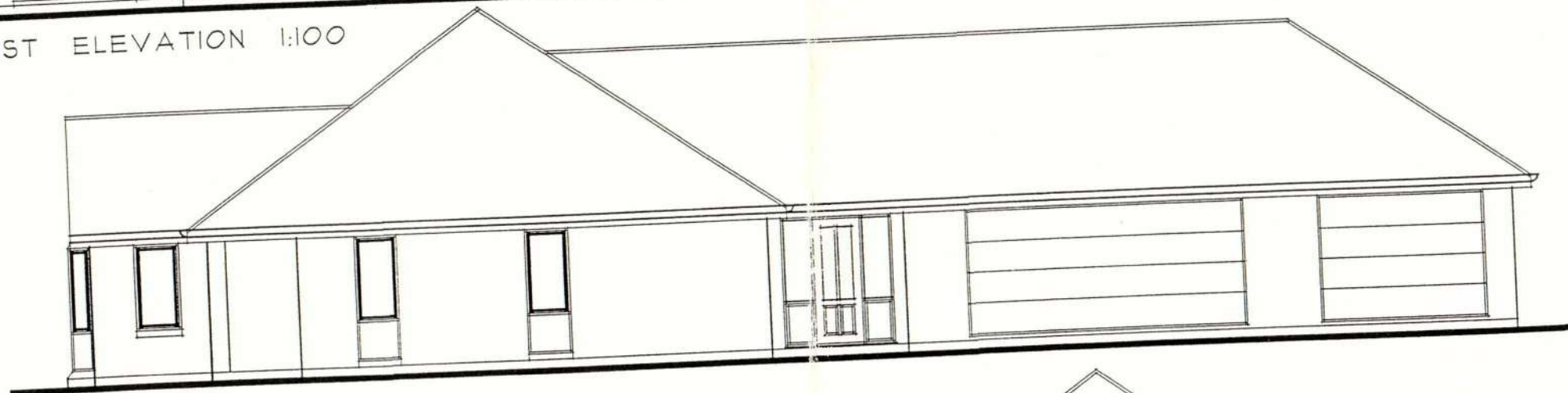
*SIX*



EAST ELEVATION 1:100



WEST ELEVATION 1:100



SOUTH ELEVATION 1:100



NORTH ELEVATION 1:100

SELWYN DISTRICT COUNCIL  
SITING APPROVED  
PROPOSAL *New Dwelling*  
DATE *18/10/02* PLANNER *JMA*  
*BC021305*

FILE COPY

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by  
M. G. DAVIS  
Registered Building Controller

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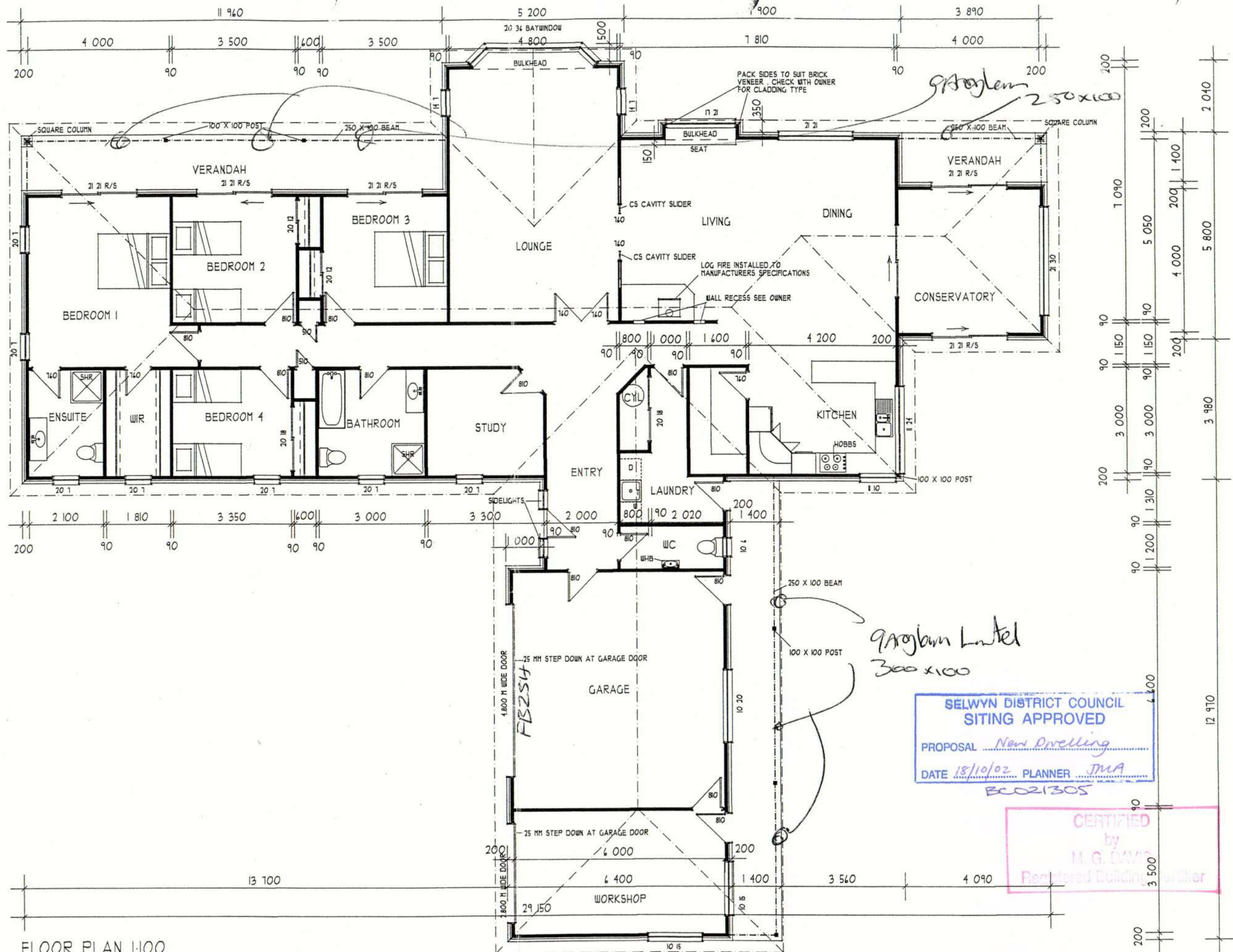
**HAYMAN RESIDENCE**  
COURTENAY ROAD KIRWEE

|               |             |
|---------------|-------------|
| DATE:         | AMENDMENTS: |
|               |             |
| SALES PERSON: | AC          |

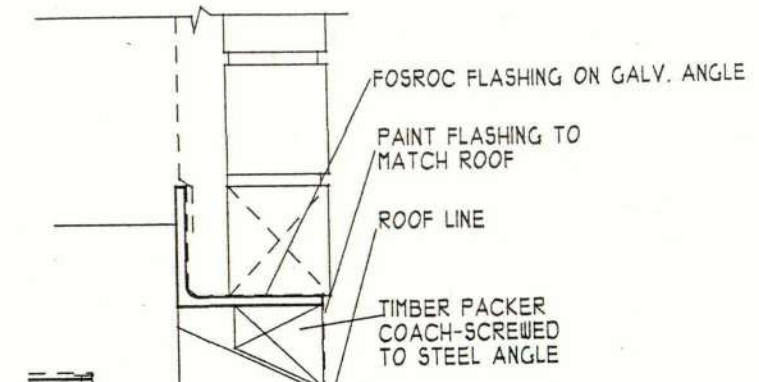
SHEET:  
1 of 5

|           |            |
|-----------|------------|
| DRAWN:    | L.D.       |
| DATE:     | 30/09/2002 |
| REF. NO.: | 2002229    |

**DataCAD**  
Software for AEC Professionals

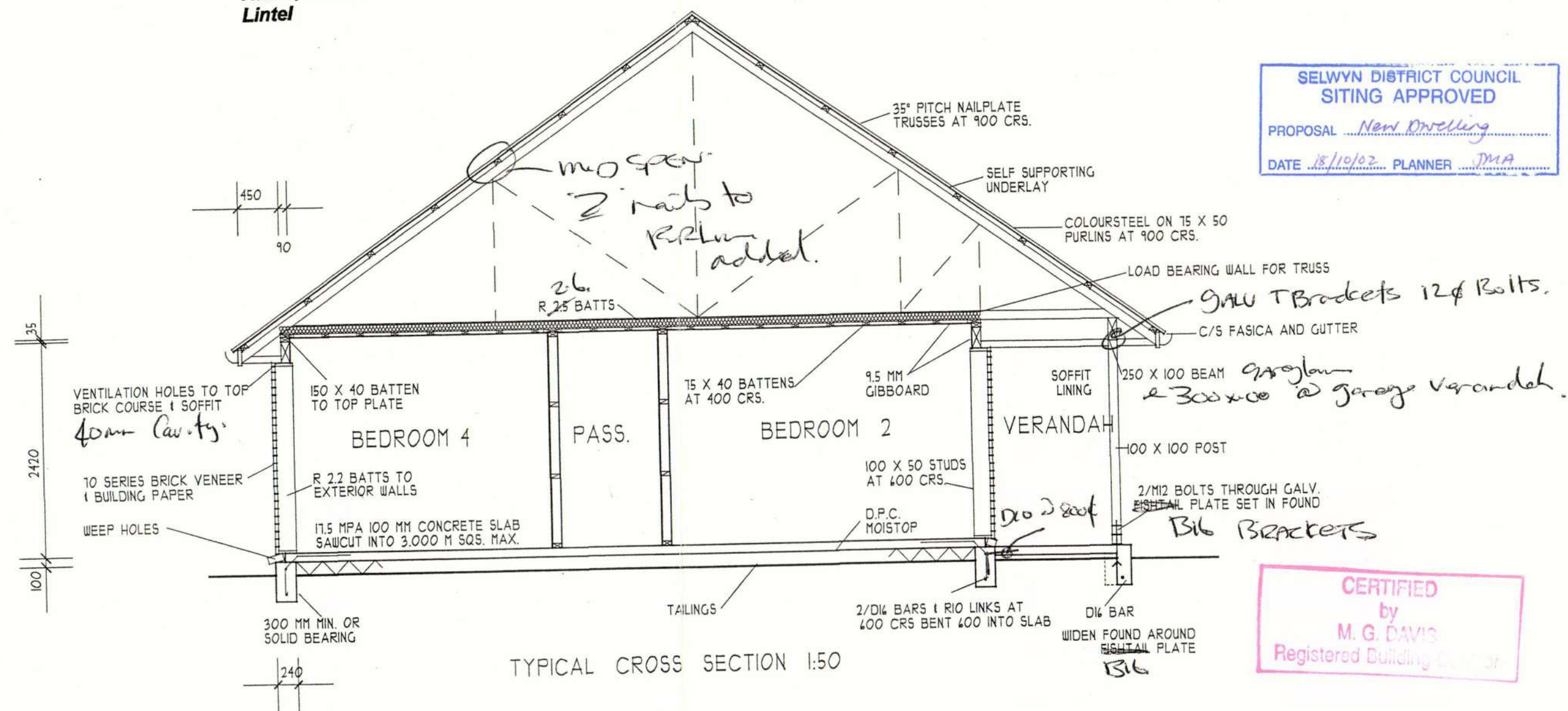


**Note :**  
**All Up Lift Fixings to**  
**comply with NZS 3604,1999.**  
**Top Plate to Stud,**  
**Rafter, Purlin,**  
**Lintel**



ALTERNATIVE  
 COLORSTEEL/COPPER  
 OR SIMILAR TUCKED  
 UNDER BUTYNOL  
 BAY WINDOW HEAD 1:5

SELWYN DISTRICT COUNCIL  
 SITING APPROVED  
 PROPOSAL *New Dwelling*  
 DATE *18/10/02* PLANNER *JMA*



TYPICAL CROSS SECTION 1:50

CERTIFIED  
 by  
 M. G. DAVIS  
 Registered Building Practitioner

| DATE          | AMENDMENTS |
|---------------|------------|
|               |            |
|               |            |
| SALES PERSON: | AC         |

|        |
|--------|
| SHEET: |
| 3 of 5 |

|           |            |
|-----------|------------|
| DRAWN:    | L.D.       |
| DATE:     | 30/09/2002 |
| REF. NO.: | 2002229    |

A

B

C

D

E

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G

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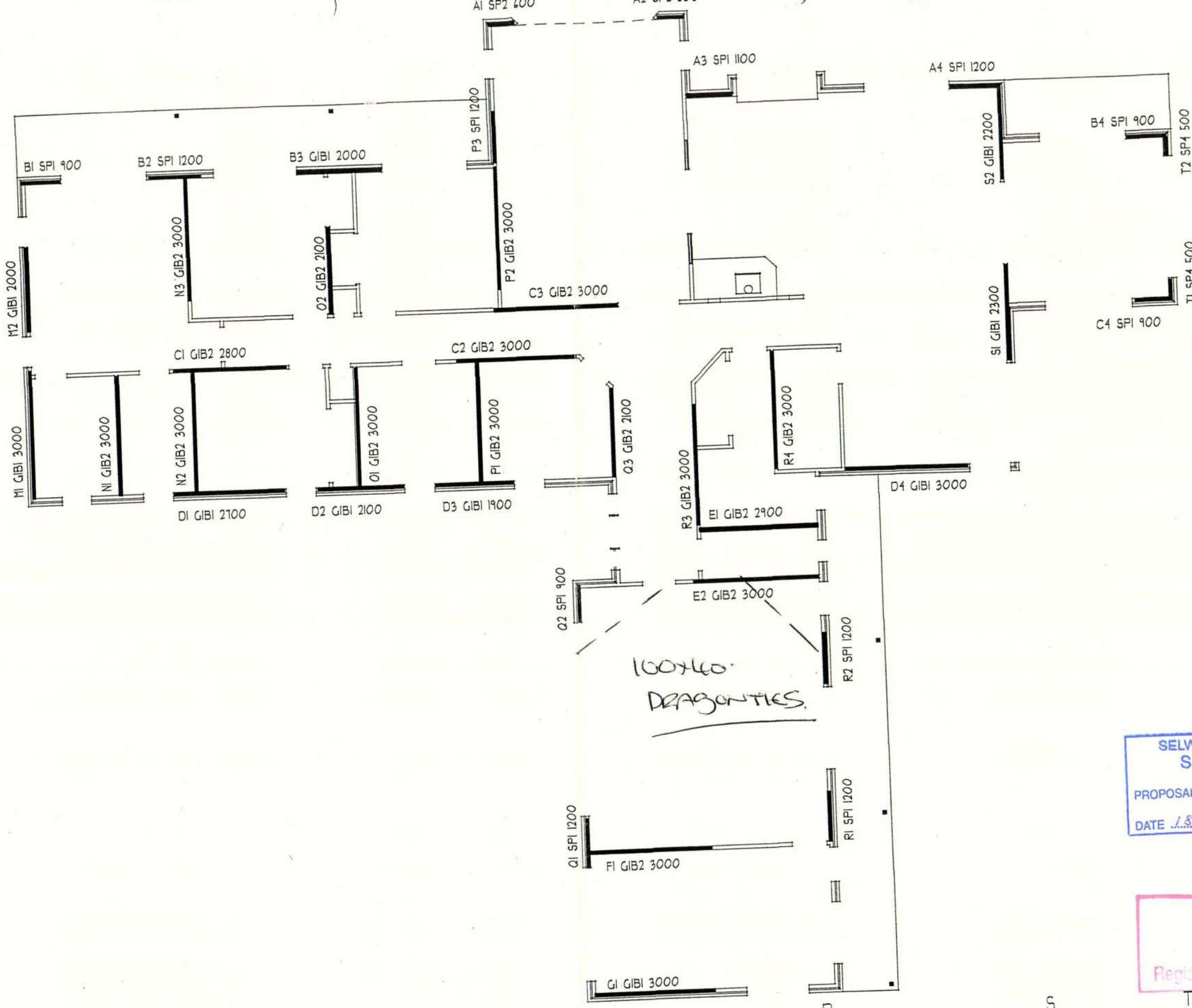
P

Q

R

S

T



SELWYN DISTRICT COUNCIL  
SITING APPROVED  
PROPOSAL *New Dwelling*  
DATE *18/10/02* PLANNER *JMA*  
*BC021305*

CERTIFIED  
by  
M. G. GARDNER  
Registered Draughtsman

BRACING PLAN 1:100

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HAYMAN RESIDENCE  
COURTENAY ROAD KIRWEE

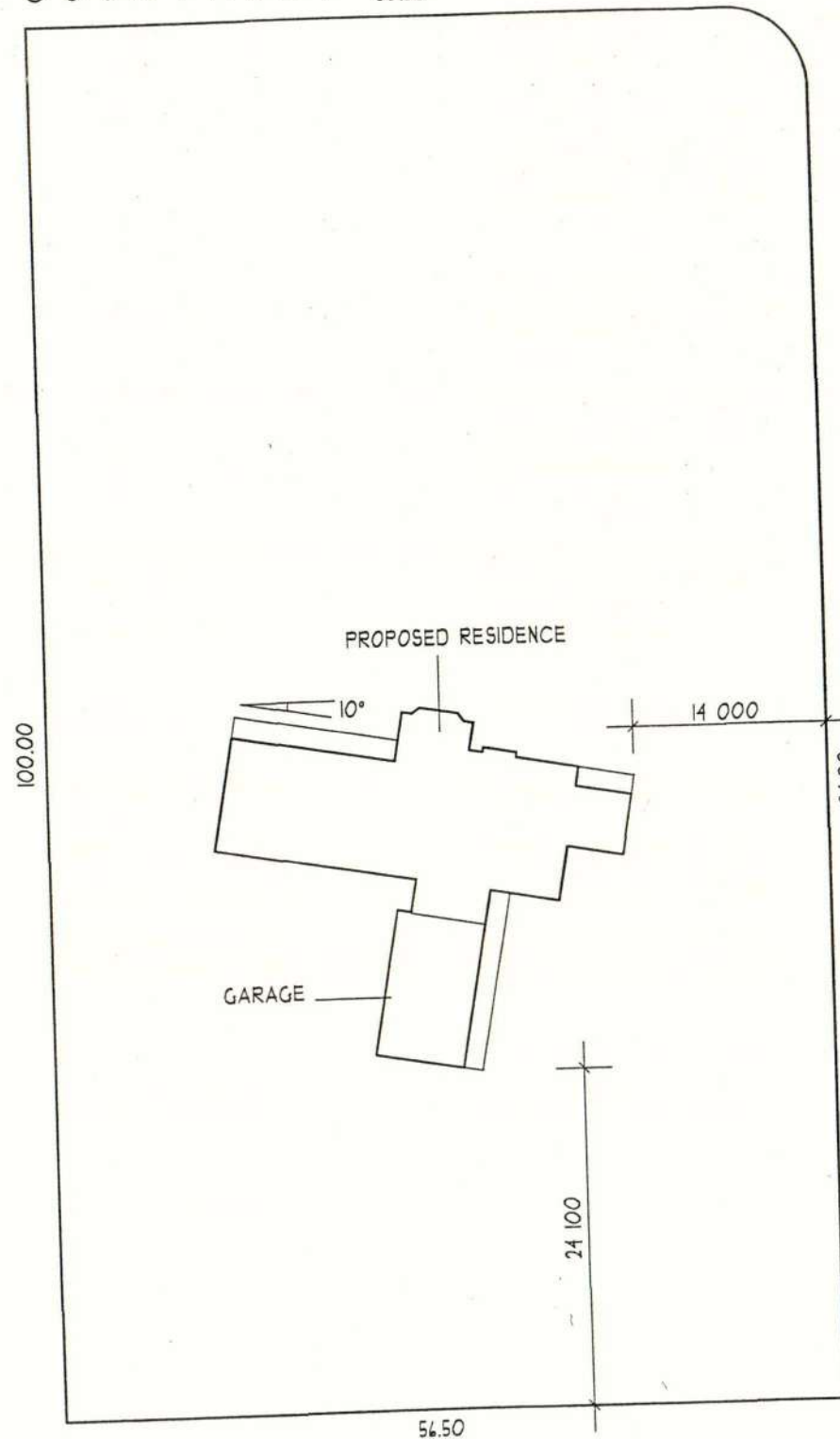
|               |             |
|---------------|-------------|
| DATE:         | AMENDMENTS: |
|               |             |
| SALES PERSON: | AC          |

SHEET:  
4 of 5

|           |            |
|-----------|------------|
| DRAWN:    | L.D.       |
| DATE:     | 30/09/2002 |
| REF. NO.: | 2002229    |

**DataCAD**  
Software for AEC Professionals

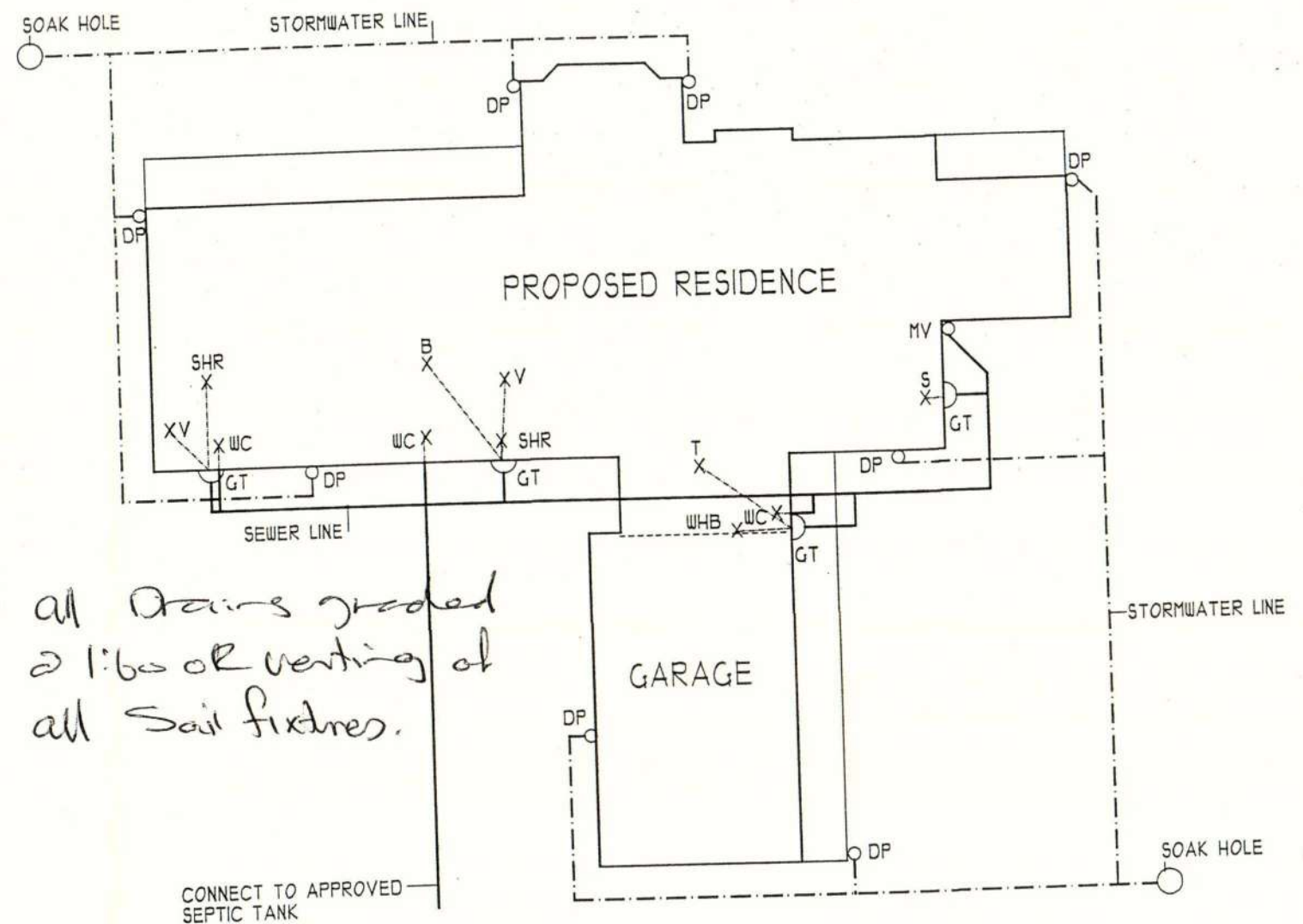
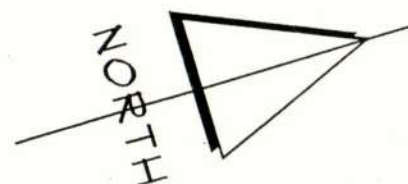
COURTENAY ROAD 50.50



SITE PLAN 1:500

LOT 71

DP 82061



\* all drains graded @ 1:60 or better of all soil fixtures.

DRAINAGE PLAN 1:200

NOTE:  
FINAL LAYOUT FOR DRAINS  
TO BE DETERMINED BY DRAINLAYER

Disposal Field  
Location note spec.

|                    |                       |
|--------------------|-----------------------|
| AREAS:             |                       |
| PROPOSED RESIDENCE | 273.42 M <sup>2</sup> |
| PROPOSED GARAGE    | 67.18 M <sup>2</sup>  |
| TOTAL              | 340.60 M <sup>2</sup> |

SELWYN DISTRICT COUNCIL  
SITING APPROVED  
PROPOSAL *New Dwelling*  
DATE *18/10/02* PLANNER *MA*

BC 021305

CERTIFIED  
by  
M. G. DAVIS  
Registered Building Surveyor

| DATE:         | AMENDMENTS: |
|---------------|-------------|
|               |             |
|               |             |
| SALES PERSON: | AC          |

SHEET:  
5 OF 5

|           |            |
|-----------|------------|
| DRAWN:    | L.D.       |
| DATE:     | 30/09/2002 |
| REF. NO.: | 2002229    |

**DataCAD**  
Software for AEC Professionals

## DWELLING

- ☒ Site Plan
- ☒ Floor plans
- ☒ Details of any demolition work
- ☒ Elevations
- ☒ Cross sections
- ☒ On site sewage treatment and disposal
- ☒ Potable water details
- ☒ Provisions for disposing of stormwater
- ☒ Wall bracing layout and calculations
- ☒ Truss design
- ☒ Producer Statement for specific design.
- ☒ Written specifications

## SOLID FUEL HEATER

- ☒ Floor plan indicating position of heater
- ☒ Fire installation instructions
- ☒ The fire is free standing
- ☒ The fire is built into an existing fireplace
- ☒ If second hand – include approved heating engineer's report
- ☒ A wetback is to be installed
- ☒ Include Craftsman Plumber's name if fire to be connected to a wetback.

## SWIMMING POOLS

- ☒ Site plan indicating position of pool.
- ☒ Pool specifications, paving and fencing details
- ☒ Backflow prevention, filter backwash and pool water disposal
- ☒ Hydrostatic valve if in high water table area.

## GARAGE

- ☐ Site Plan
- ☐ Floor plans
- ☐ Details of any demolition work
- ☐ Elevations
- ☐ Cross sections
- ☐ Provisions for disposing of stormwater
- ☐ Wall bracing layout and calculations
- ☐ Truss design
- ☐ Producer Statement for specific design.

## FARM BUILDINGS

- ☐ Site Plan
- ☐ Floor plans
- ☐ Details of any demolition work
- ☐ Elevations
- ☐ Cross sections
- ☐ Producer Statements for specific design
- ☐ Producer Statements for buildings sited in an area exceeding 0.7kPa snow loading.

## COMMERCIAL BUILDINGS

- ☐ as for dwelling plus:
- ☐ Producer Statement design to cover specifically designed engineering work (often the entire building project)
- ☐ Fire report
- ☐ Disabled Facilities and Access
- ☐ Compliance Schedule details

Where producer statements have been referred to in the checklists, it is not compulsory to have a Producer Statement Design but it will reduce the cost of your consent and facilitate a quicker release. Alternatively Council can have your proposed design peer reviewed by an Engineer and the cost added to your consent.

## BUILDING INFORMATION

### Timing:

A building consent will be issued within a maximum allowable time of ten working days provided all the information required has been supplied. Where all information is provided a faster issue time may be achieved. Processing time for issue is stopped whenever further information is required and starts again when the information is received.

### Fees:

A deposit payable of \$100.00 is required to begin processing your application. A quote for consent issue and inspection cost is provided with the Project Information Memorandum (PIM). Once the building consent has been approved, you will receive by mail notification of the balance of the fees payable.

## INSPECTIONS

During the process of construction, inspections will be necessary to confirm all work complies with your Building Consent and the Building Code. The Council requires 24 hours notice prior to the Council's Building Official visit.

Inspections are generally required prior to covering up or closing in of any of the following:-

- Plumbing and drainage work
- Excavations for foundations
- Reinforcing steel for foundations
- Timber framing
- Insulation material
- Bracing elements
- Other building work noted as requiring inspection as a condition of a consent.
- Other inspections required by an engineer relating to a producer statement.

## RESOURCE CONSENTS

When you apply for a Project Information Memorandum your application will be assessed by the Planning Department of Council to determine whether your application complies with the District Plans requirements.

Only if your application does not comply will a resource consent be required. You will be notified that a resource consent is required and it is recommended that you contact the Planning Department to determine the process from there. Telephone 324 8080.

## CODE COMPLIANCE

A building consent is not completed until it has been issued with a full Code Compliance Certificate following the final satisfactory inspection.

### Reasons and benefits of achieving Code Compliance Status

- Verify that the building and subcontractors have completed their work in accordance with the consent.
- Certify that the work complies with the NZ Building Code.
- Insurance—assists with claims, etc.
- Sale of property—a Land Information Memorandum (LIM) is normally requested prior to sale and the Solicitor acting for the purchaser will in the majority of cases require confirmation that Building Consents are issued with Code Compliance Certificates.