



# PROPERTY INFORMATION PACK

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WAITATI

**800 Mount Cargill Road**



## WAITATI

# 800 Mount Cargill



### FOR SALE BY TENDER

Tender Closing 6pm, Wed 18th March 2020.

### LAND AREA

2.5635 ha more or less

### BUILDING AREA

Approximately 171 m<sup>2</sup>

### OUTGOINGS

Council Rates \$1,796.23 pa

### C.V.

\$600,000

### LEGAL DESCRIPTION

567373 - Lot 1 Deposited Plan 448497



## Kirsty Coulter

Property Consultant

MOBILE 027 311 4445

DIRECT 425 9943

EMAIL [kirsty.coulter@nidd.co.nz](mailto:kirsty.coulter@nidd.co.nz)

WEB [nidd.co.nz](http://nidd.co.nz)

Gold Achiever

This Property Information has been supplied by the DCC. Nidd Realty cannot warrant the content or completeness of this document. We have used our best endeavours to provide complete documentation and correct information.

Potential purchasers should not be confined to the material herein and should always undertake their own due diligence on all aspects of the property.



**RECORD OF TITLE  
UNDER LAND TRANSFER ACT 2017  
FREEHOLD  
Search Copy**



  
R. W. Muir  
Registrar-General  
of Land

**Identifier** **567373**  
**Land Registration District** **Otago**  
**Date Issued** 19 December 2011

**Prior References**

OT16B/429

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**Estate** Fee Simple  
**Area** 2.5635 hectares more or less  
**Legal Description** Lot 1 Deposited Plan 448497

**Registered Owners**

Craig Wilson, Julian Temple Wilson and GCA Legal Trustee 2015 Limited

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**Interests**

Subject to a right to convey electricity easement (in gross) over part marked B on DP 448497 in favour of OtagoNet Limited created by Easement Instrument 7477495.1 - 26.7.2007 at 9:00 am

Subject to a right of way over part marked A on DP 448497 created by Easement Instrument 8914614.2 - 19.12.2011 at 9:02 am

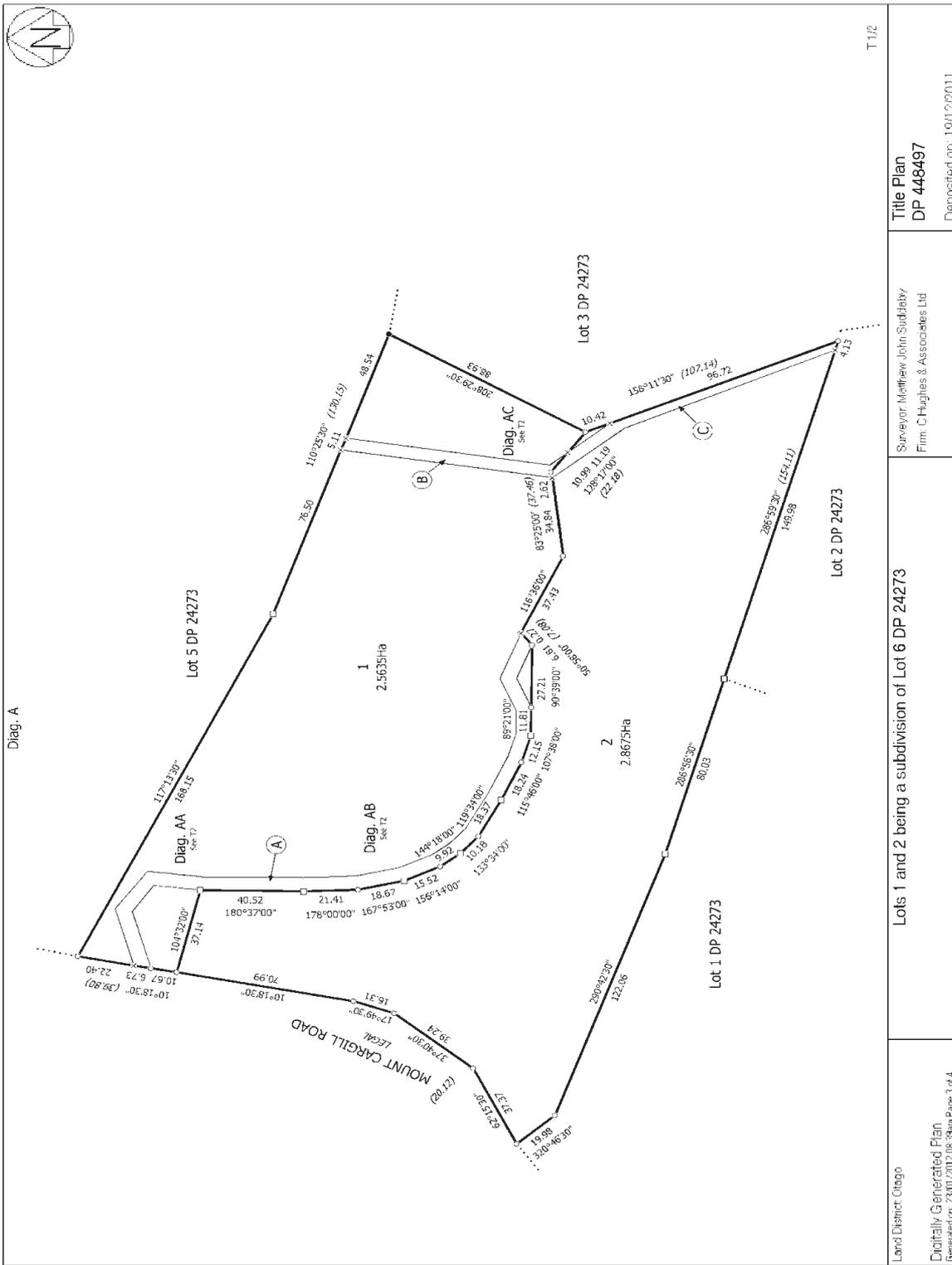
Appurtenant hereto is a right to convey telecommunications and computer media created by Easement Instrument 8914614.2 - 19.12.2011 at 9:02 am

The easements created by Easement Instrument 8914614.2 are subject to Section 243 (a) Resource Management Act 1991

Fencing Covenant in Transfer 8955578.2 - 24.1.2012 at 11:00 am

8955578.3 Mortgage to ASB Bank Limited - 24.1.2012 at 11:00 am

11108907.3 Surrender of the right of way created by Easement Instrument 8914614.2 as appurtenant to part Lot 2 DP 502402 formerly Lot 2 DP 448497 - 10.5.2018 at 12:33 pm

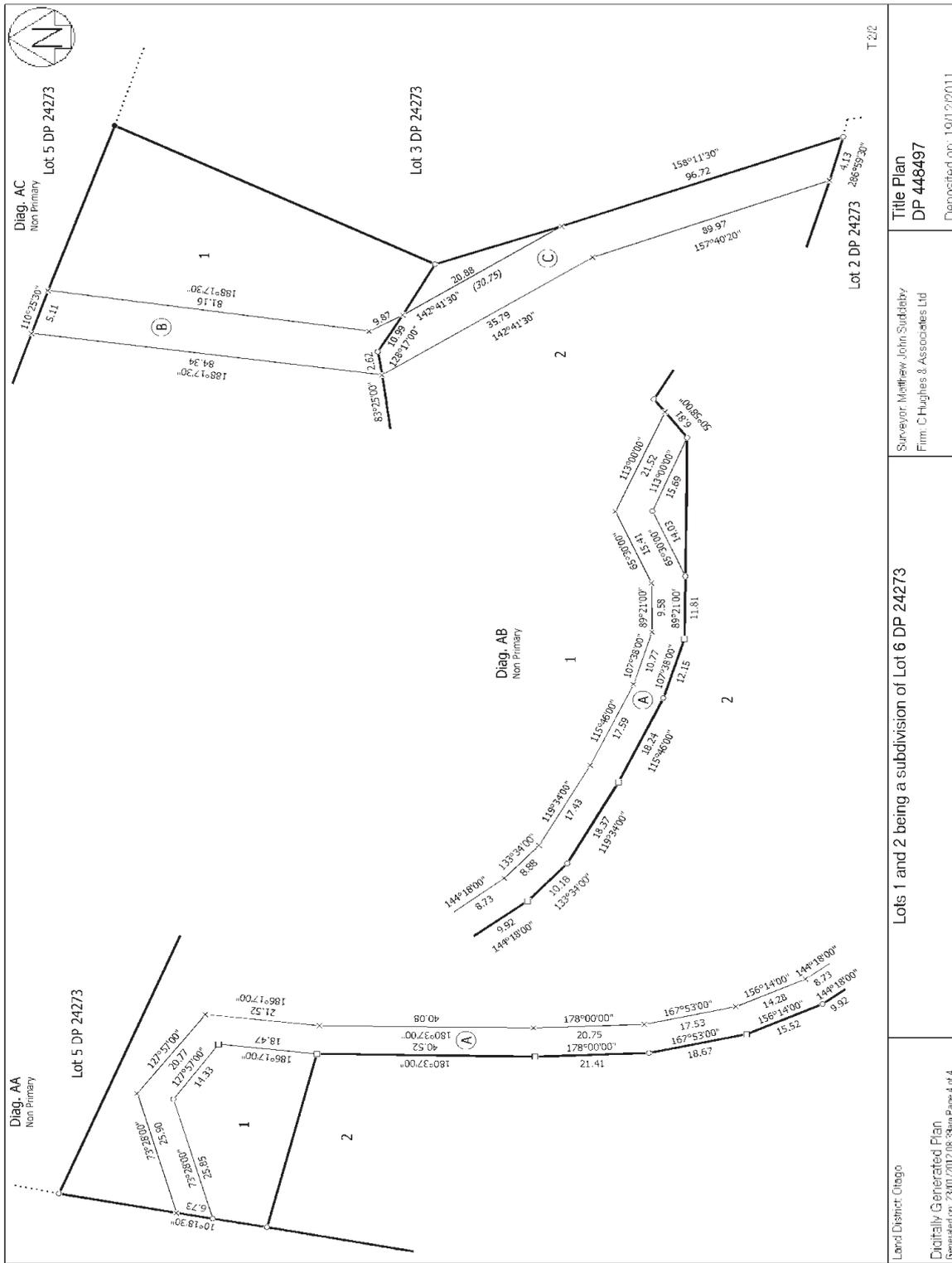


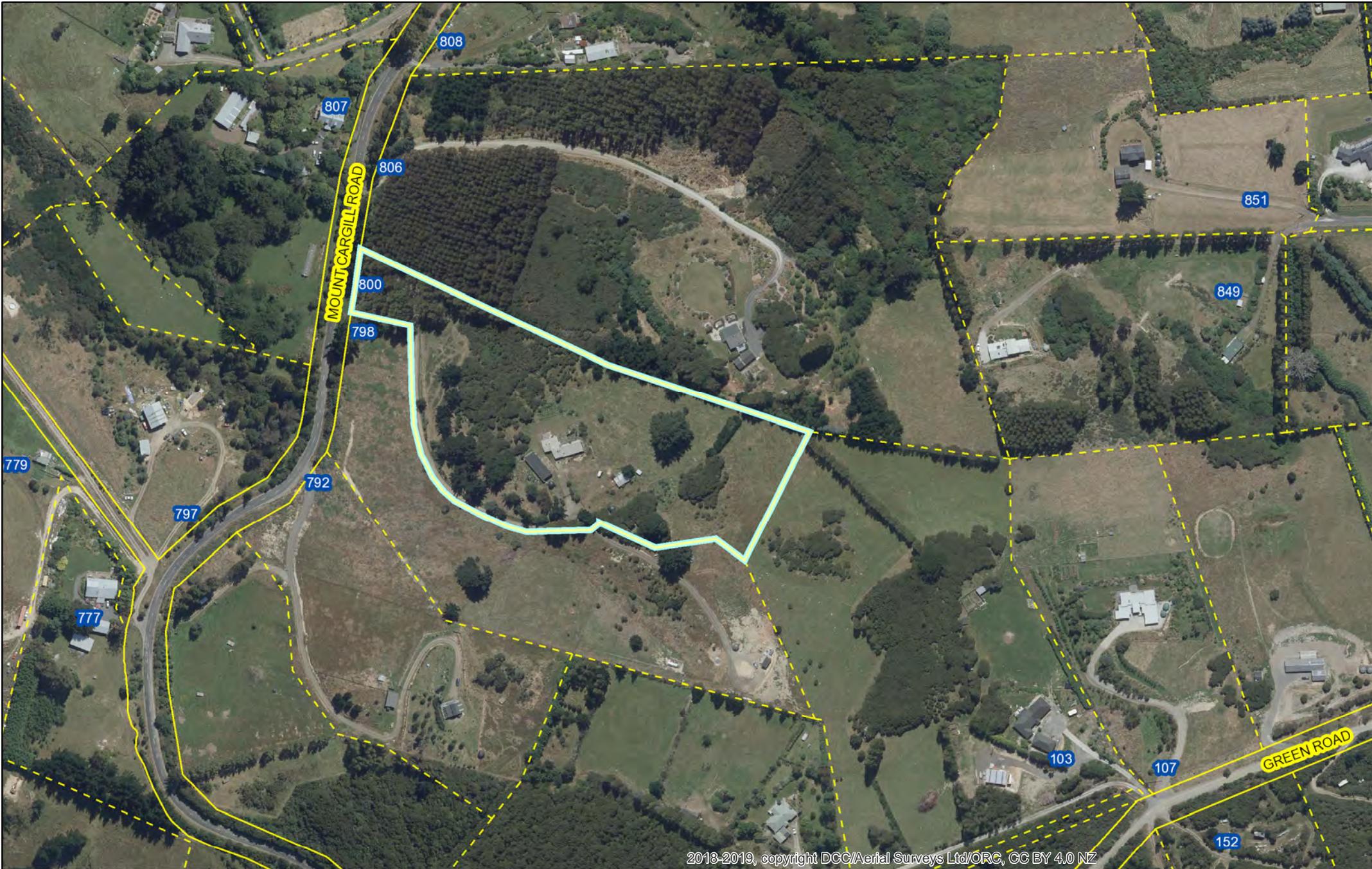
T:1/2  
 Title Plan  
 DP 448497  
 Deposited on: 19/12/2011

Surveyor: Matthew John Studdeby  
 Firm: C.Hughes & Associates Ltd

Lots 1 and 2 being a subdivision of Lot 6 DP 24273

Land District: Otago  
 Digitally Generated Plan  
 Generated on: 23/01/2012 08:38am Page 3 of 4





2018-2019, copyright DCC/Aerial Surveys Ltd/ORC, CC BY 4.0 NZ



# Photographic Map

Scale at A4:  
**1:3,000**  
 27/02/2020  
 4:22:13 PM

N  


PARCEL LINES CAN VARY FROM LEGAL PARCEL BOUNDARIES  
 This map is for illustration purposes only and is not accurate to surveying, engineering or orthographic standards. Every effort has been made to ensure correctness and timeliness of the information presented.

2018-2019 Urban, Copyright DCC/Aerial Surveys Ltd. Rural, ORC/Aerial Surveys Ltd. CC BY 4.0 NZ  
 2013 Urban and rural photography Jan/Feb 2013. Copyright DCC. CC BY 3.0 NZ.  
 2006/2007 Urban photography March 2007, copyright NZAM. Rural photography March 2006, copyright Terralink International Ltd.

**PROPERTY DETAILS**

<b>Property Key</b>	5117783
<b>Print Date</b>	27/02/2020 04:20 PM
<b>Address</b>	800 Mount Cargill Road Waitati
<b>Property Type</b>	Rapid
<b>Property Name</b>	
<b>Legal Description</b>	LOT 1 DP 448497

**BUILDING PERMITS/CONSENTS**

**Building Consent**

**Details**

Erect Lean-To Barn on Property

<b>Number</b>		<b>Status</b>	<b>Started</b>
ABA-2012-217		CCC Issued	20/02/2012
<b>PIM</b>	<b>BC</b>	<b>ICC</b>	<b>CCC</b>
	14/03/2012		24/06/2014

**Details**

Erect Farm Implement Shed

<b>Number</b>		<b>Status</b>	<b>Started</b>
ABA-1999-348219 (ABA992906)		Archived	22/10/1999
<b>PIM</b>	<b>BC</b>	<b>ICC</b>	<b>CCC</b>
05/11/1999	05/11/1999		

**Details**

Erect Dwelling

<b>Number</b>		<b>Status</b>	<b>Started</b>
ABA-2002-296962 (ABA21476)		CCC Issued	10/06/2002
<b>PIM</b>	<b>BC</b>	<b>ICC</b>	<b>CCC</b>
27/06/2002	27/06/2002		16/01/2012

**BUILDING ACT - OTHER**

**PIM**

**Details**

Erect Lean-To Barn on Property

<b>Number</b>	<b>Status</b>	<b>Started</b>
PIM-2012-107	PIM Issued	20/02/2012
<b>PIM</b>		
14/03/2012		

**PROPERTY ANALYSIS**

**NOTE: The Property Analysis section is additional information recorded in the computer system for your property. Full details of items can be obtained by requesting a Land Information Memorandum or Land Information Report from the Council Information Management Unit.**

**DISCLAIMER**

The information in this report is provided in accordance with Sections 216 and 217 of the Building Act 2004.

No person should rely on this information without seeking appropriate, independent and professional advice.

Every care has been taken to ensure that the information supplied is accurate however Council does not give any guarantees, undertakings or warranties concerning the accuracy, completeness or up-to-date nature of the information provided and disclaims all liability whatsoever for any error, inaccuracy, irrelevance or incompleteness of the information.

The information provided does not constitute a Land Information Memorandum (LIM).

**DEFINITION OF "STATUS" OF BUILDING CONSENTS**

**CCC REFUSED/ARCHIVED CONSENTS:** In accordance with section 93(2)(b) of the Building Act, the consent was reviewed for code compliance after two years. Compliance with the Building Code could not be established and therefore the Code Compliance Certificate has been refused.

**LAPSED CONSENTS:** Section 52 of the Building Act 2004 requires that a building consent shall lapse and be of no further effect if work has not commenced within 12 months after the date of issue, or any further period allowed by the Building Consent Authority.

The application will be given a status of LAPSED if no extension of time to this period is applied for. This means that a new consent will be required if the work were to take place in the future.

NOTE: This is NOT a comprehensive list of all building consent statuses.

## **DEFINITION OF "ABBREVIATIONS"**

Pim = Project Information Memorandum  
BC = Building Consent  
ICC = Interim Code Compliance Certificate  
CCC = Code Compliance Certificate  
CER = Certifier  
COA = Certificate of Acceptance  
NTF = Notice to Fix  
AMD = Amendment to a Building Consent

S45°46'26.4"

800 Mt Cargill Rd, Mt Cargill, New Zealand

10 M house

lean-to shed

12 M boundary

existing garage

water tank

DUNEDIN CITY COUNCIL  
APPROVED BUILDING CONSENT  
DOCUMENTS  
ABA: 2011-217

Image © 2012 GeoEye  
© 2012 Whereis® Sensis Pty Ltd

Google earth

63 m

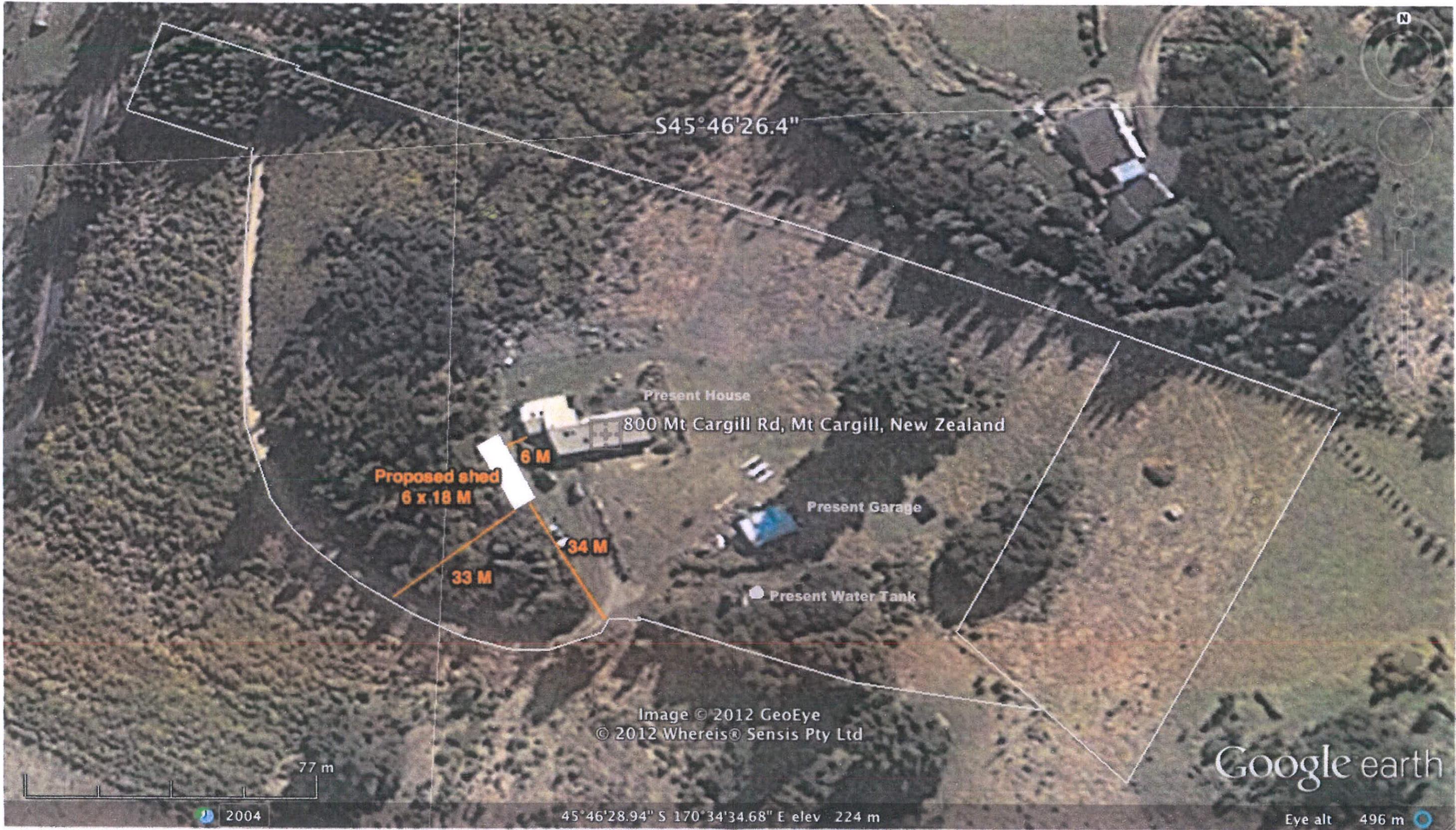
Imagery Date: 9/6/2011 2004

45°46'28.97" S 170°34'34.02" E elev 220 m

Eye alt 447 m

DCC COPY

As Built Plan  
Received by: HL  
Date: 29/1/2014  
ABA No: 2012-217



S45°46'26.4"

Present House  
800 Mt Cargill Rd, Mt Cargill, New Zealand

Proposed shed  
6 x 18 M

6 M

33 M

34 M

Present Garage

Present Water Tank

Image © 2012 GeoEye  
© 2012 Whereis® Sensis Pty Ltd

Google earth

77 m

2004

45°46'28.94" S 170°34'34.68" E elev 224 m

Eye alt 496 m

# Schematic of Hot Water System (AS BUILT)



800 MT CARRILL Rd

Drawn : HNC

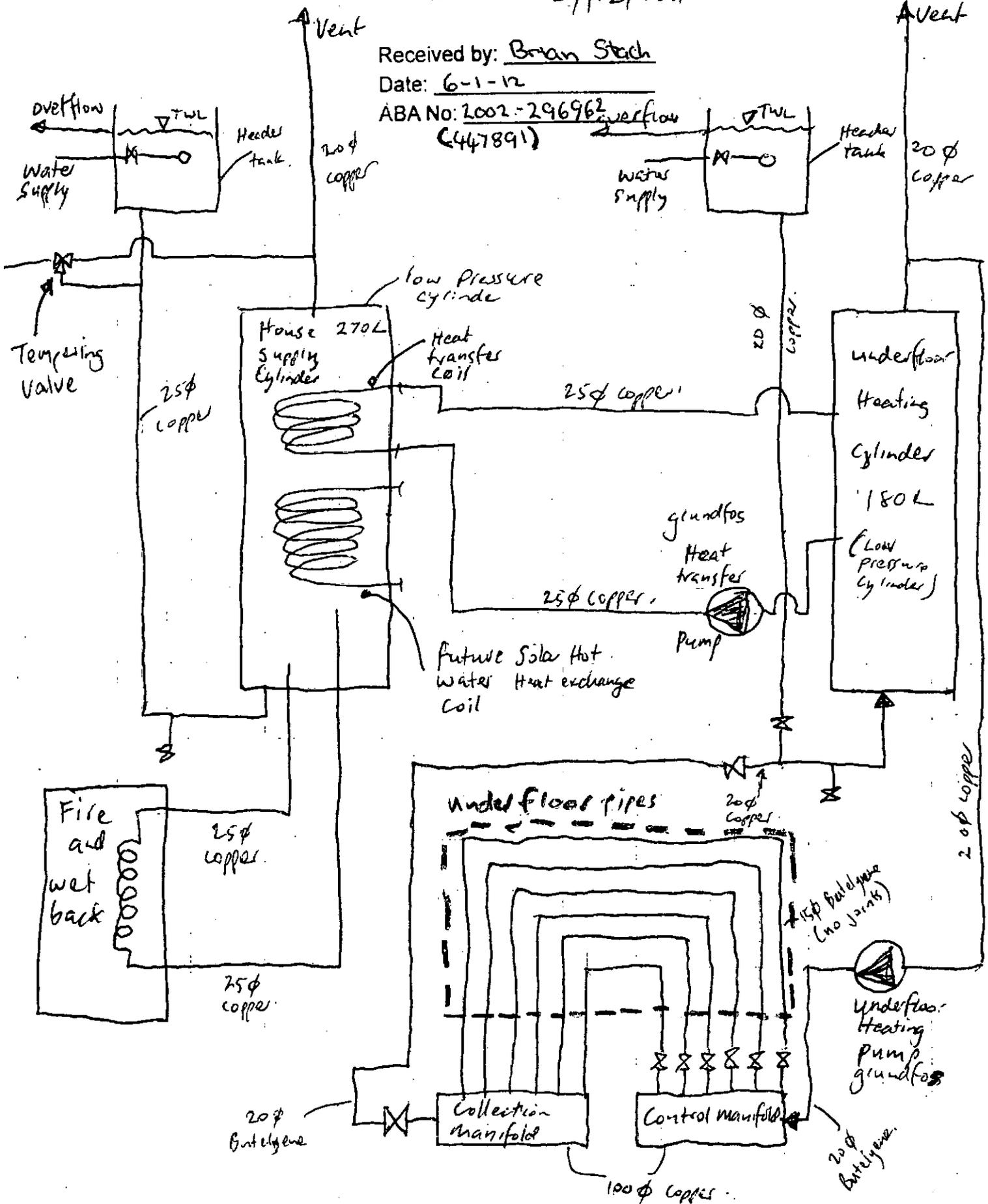
Not to Scale.

Date 29/12/2011

Received by: Brian Stach

Date: 6-1-12

ABA No: 2002-296962  
(447891)



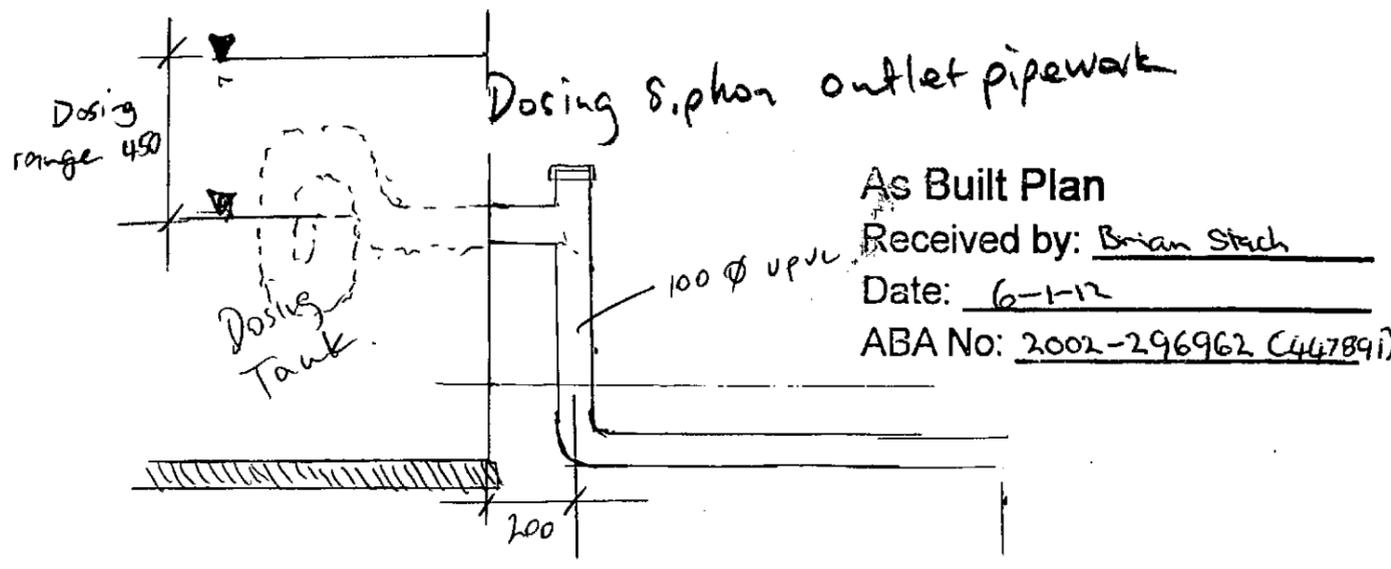
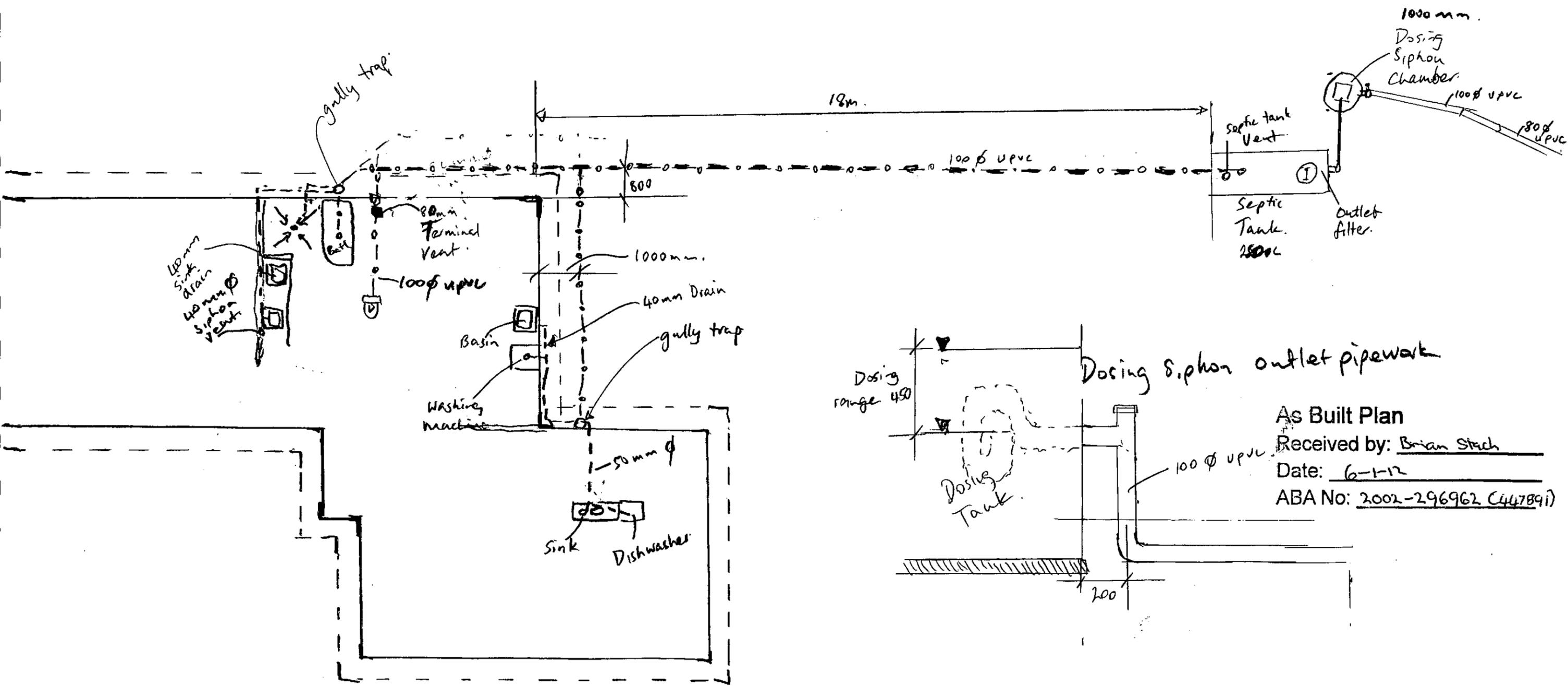
# Sewerage As Built Plan.

Scale 1:100

Drawn: HNC

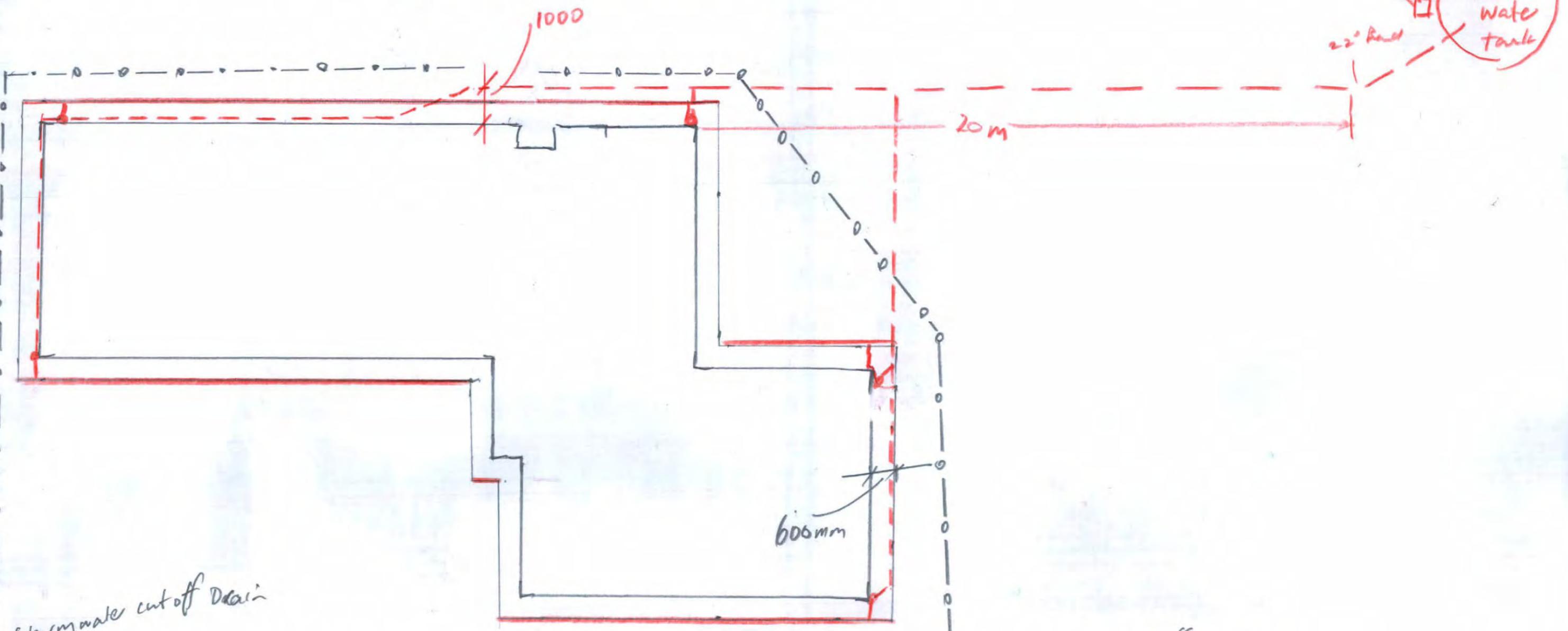
Date Jan 2012.

ABA - 2002-296962 (447891)



As Built Plan  
 Received by: Brian Stach  
 Date: 6-1-12  
 ABA No: 2002-296962 (447891)

Drainage Plan - As Built  
 Stormwater  
 - Drawn by HNC  
 - Date 2012 - Jan  
 - Scale 1:100  
 ABA-2002-296962 (447891)



Stormwater cutoff Drain  
 To Watercourse  
 (100φ NovaCoil)

As Built Plan  
 Received by: Brian Stach  
 Date: 6-1-12  
 ABA No: 2002-296962 (447891)

Stormwater cutoff  
 Drain (100mm φ NovaCoil)  
 To Discharge



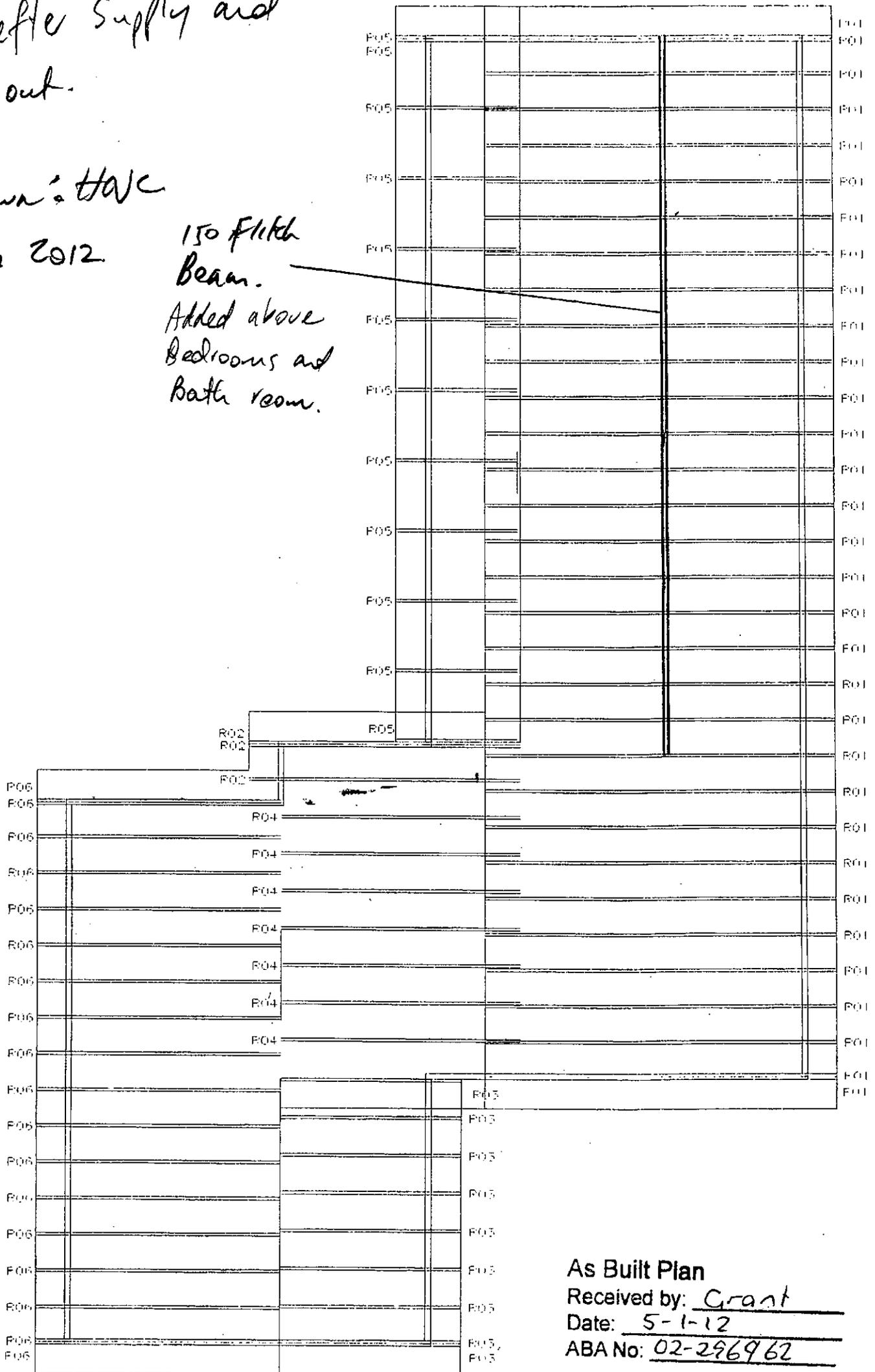
# Reflex Supply and layout.

Drawn: HWC

Jan 2012

NTS

150 Fitch  
Beam.  
Added above  
Bedrooms and  
Bath room.



As Built Plan

Received by: Grant

Date: 5-1-12

ABA No: 02-296962

**TECHNICAL DATA SHEET  
HB FULLER AUSTRALIA  
18/3/2010**



**WPM 300 WATERPROOF MEMBRANE**

**Description**

WPM 300 Waterproof membrane™ is a water clean up, synthetic rubber based water proofing membrane designed principally for wet areas. WPM 300 Waterproof membrane contains reinforcing micro fibers to provide greater resistance to cracking or tearing under the stress of normal structural movement.

**Pack Sizes**

- 20 liter pail, product code 6004951500
- 4 liter tin, product code 6004 954 020
- 1 liter tin, product code 6004 954 106

**Benefits**

- Single-pack product – no mixing required
- Waterproof – withstands constantly wet conditions
- Low odor – desirable in confined spaces or low airflow situations
- Permanently flexible – resists cracking
- Non-staining – suitable for use under grout, tiles, paint or cement render
- Micro fiber reinforced – extra strong
- Non-hazardous – does not contain isocyanates, coal tar, or toxic solvents
- Easy to apply
- UV resistant – will resist deterioration if exposed to external conditions

**Uses**

- Shower recesses
- Laundries
- Decks
- Balconies
- Planter boxes
- Podium slabs
- Plant room floors

**Compatible substrates**

Concrete	Fiber cement
Cement Render	Plasterboard
Aluminum	Wood
Brick	Galvanized iron

Received by: G-rant  
Date: 5-1-12  
ABA No: 02-296962

**Performance summary**

Storage Life	12 months in original sealed package when stored between 5°C and 30°C.
Colors	Grey
Solvent	Water
Drying Time	6 hours between coats and 48 hours full cure, 25°C/50% RH
Specific Gravity	1.25 g/ml
Solids	65%
Hardness	Shore D 45 - 50 before heating, Shore D 50 - 55 after heating
Tensile Strength	2.55 MPa AS 1145
Tensile Elongation	400% AS 1145
Service Temperature	-10°C to 80°C
Water Immersion	Suitable

**Limitations:**

- WPM 300 Waterproof membrane is waterproof only when cured. Do not allow water contact until fully cured
- Do not use single-pack acrylic tile adhesives on WPM 300 Waterproof membrane. Only use cement or cement plus polymer based systems.
- Only after full cure has been achieved should tiling, laying of mortar bed or flood testing be attempted.

**Standard Compliance:**

WPM 300 meets the requirements of AS 3740 - 1994 (Amdt 1 - Sept 1995) "Waterproofing of wet areas within residential buildings". WPM has been appraised by ABSAC and was found suitable for use as a waterproofing system of shower recess bases and associated floors which are to be tiled when conditions listed in Technical Opinion No 162 (amended) are fulfilled.

**Surface Preparation:**

Ensure that surface to be coated is clean, sound and free from grease, oil, dust etc. Cracks, depressions, joints, holes etc. must be filled prior to application of membrane. Cement sheet or wallboard should be rated for wet areas and securely fastened to framing

**TECHNICAL DATA SHEET  
HB FULLER AUSTRALIA  
18/3/2010**



**WPM 300 WATERPROOF MEMBRANE**

members. All joints should be taped using Boral Wet Area taping cement.

In all cases consideration should be given to the detailed preparation outlined in section headed "Shower Recesses" with respect to floor joints, flooring, wastes, hobs etc.

**Priming**

Prime, using WPM 300 Waterproof membrane diluted 1:1 with water. Work the primer into the surface to ensure that pores, hairline cracks or pinholes are filled. The primer will be touch dry in about 20 minutes (25°C, 50% RH, though may be longer in cooler or more humid conditions).

**Application**

WPM 300 Waterproof membrane is waterproof once fully dried. If the membrane is not fully dry, it can be dissolved by contact with water.

WPM 300 Waterproof membrane can be applied using brush, broom, roller or flood coated. A minimum of two coats should be applied in all circumstances.

Allow each coat to fully dry before applying the next coat, (about 6 hours depending on conditions. Allow a longer period in damp or cold conditions).

**Shower Recesses**

In addition to the surface preparation and application provisions, special attention shall be made in the matter of:

1. All work shall take full account of the requirements of AS 3740 - 1994.
2. Particleboard (Timber) Flooring: Holes for penetrations shall only be made by use of a hole saw or similar approved cutting device. The diameter should be oversize to pipe penetration. Installation of an approved particle board floor shall be made in accordance with AS 1859/1860. Flanged type wastes shall only be used.
3. Joints in Sheet Flooring: After application of primer coat, 40 mm wide masking tape shall be applied, centered to equally span all floor joints, as a bond-breaker. The WPM 300 Waterproof membrane system is then installed as per Application instructions.
4. Floor Wastes:
  - (a) Flanged Type - Generally approved flanged type wastes shall be used for suspended thin

section flooring. WPM 300 Waterproof membrane shall be detailed as previously discussed.

(b) Non-Flanged Type - These shall be used in concrete slab construction. The pipe should be flush with the surface and the WPM 300 Waterproof membrane turned carefully into the pipe. The floor waste shall be inserted into the sealed pipe.

**5. Hobs:**

(a) Showers with hobs shall have the WPM 300 Waterproof membrane applied over the hob and extended to a minimum of 20 mm onto the adjacent floor and returned up the wall within the shower compartment to a height 25 mm above the maximum height of the water retention by the hob, (the height of the hob plus the height of the shower screen door track).

(b) Showers without hobs shall as a minimum have WPM 300 Waterproof membrane applied to the floor area within the horizontal plane of 1.5 m of the shower rose and, within this area, up the walls a minimum of 75 mm.

**6. Vertical Corners (Walls):** Vertical corners or walls are to be flashed to 1.8 m high and 75 mm wide.

**7. Butt Wall Joints:** Joints in wall sheeting shall be filled flush with a suitable water resistant patching compound or joint sealant (such as Fuller's Joint Seal Polyurethane Sealant), in accordance with the manufacturer's instructions.

**8. Curing:** The completed WPM 300 Waterproof membrane must be allowed to fully cure before flood testing and prior to the application of concrete, mortar topping and ceramic tile finishes. Generally, curing time is 48 hours.

**NOTE:** Cure time will be longer in cooler weather conditions, or in confined areas where limited airflow will retard the effective drying of WPM 300 Waterproof membrane

**Flood Testing:**

Wet areas, such as shower recesses, should be flood tested for 12 hours before laying mortar bed or tiles.

**Tiling:**

Most two pack and cement based tile adhesives can be used with WPM 300 Waterproof membrane. Single pack, acrylic based tile adhesives should not be used over WPM 300.

Customer Service HB Fuller Australia 1800 423 855

Holdfast No. 2011/0000 70 10 00

- 2 -

Received by: \_\_\_\_\_

Date: \_\_\_\_\_

ABA No: \_\_\_\_\_

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Date: 5-1-12  
ABA No: 02-296962

**TECHNICAL DATA SHEET**  
**HB FULLER AUSTRALIA**  
**18/3/2010**



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**WPM 300 WATERPROOF MEMBRANE**

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**Coverage**

One liter will cover approximately 0.8 m<sup>2</sup> including 2 coats of product and priming

**Clean Up**

Wipe splashes off immediately with water and a little detergent. Brushes, brooms etc. should be cleaned in a solution of detergent in water as soon as application of each coat is finished. Rinse thoroughly with a strong jet of water. The WPM 300 Waterproof membrane, which has been allowed to dry, can be cleaned off tools using mineral turpentine or white spirits.

**Safety Information**

The WPM 300 Waterproof membrane is not classified as hazardous according to criteria of Worksafe Australia.

A Material Safety Data Sheet is available from the H.B. Fuller representative your state, HB Fuller Australia customer service, or downloadable from the HB Fuller web site, [www.hbfuller.com.au](http://www.hbfuller.com.au).

**Disclaimer**

This technical data sheet summarises at the date of issue to the best technical knowledge of HB Fuller Australia. Since HB Fuller Australia cannot anticipate or control the conditions under which the product may be used, each user must, prior to usage, review this technical data sheet in the context of how the user intends to handle and use the product in the workplace. If clarification or further information is needed to ensure that an appropriate assessment can be made, the user should contact this company. Our responsibility for the products sold is subject to our standard terms and conditions, a copy of which is sent to our customers and is also available on request

Received by: Grant  
Date: 5-1-12  
ABA No: 02-296962



**Duffill Watts**  
Consulting Group

Private

29/12/2011

Drawn: HNC

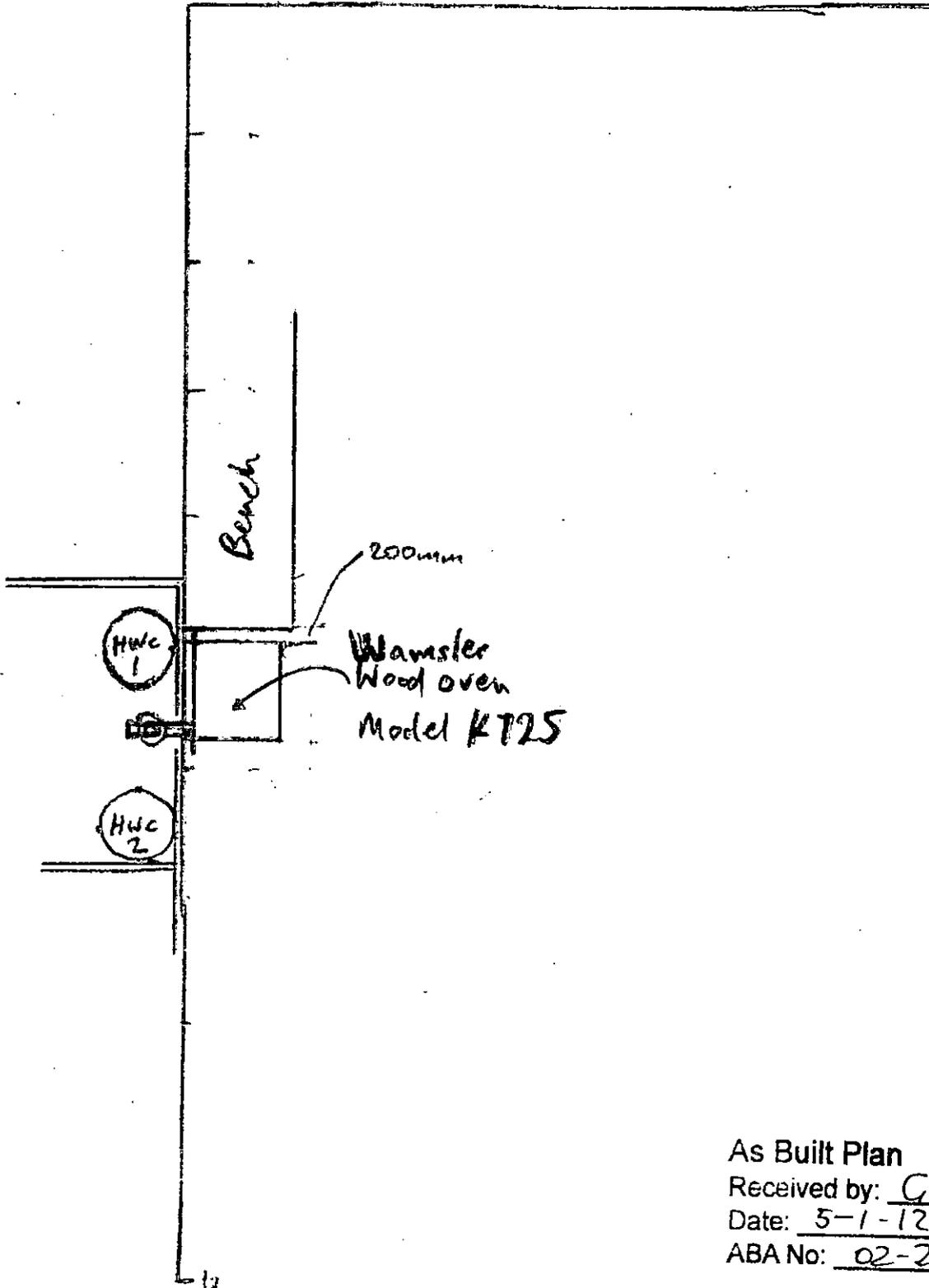
800 MT CARGILL Rd

1/3

SCALE 1:50

Fire place Asbuilt Details

Room Floor plan

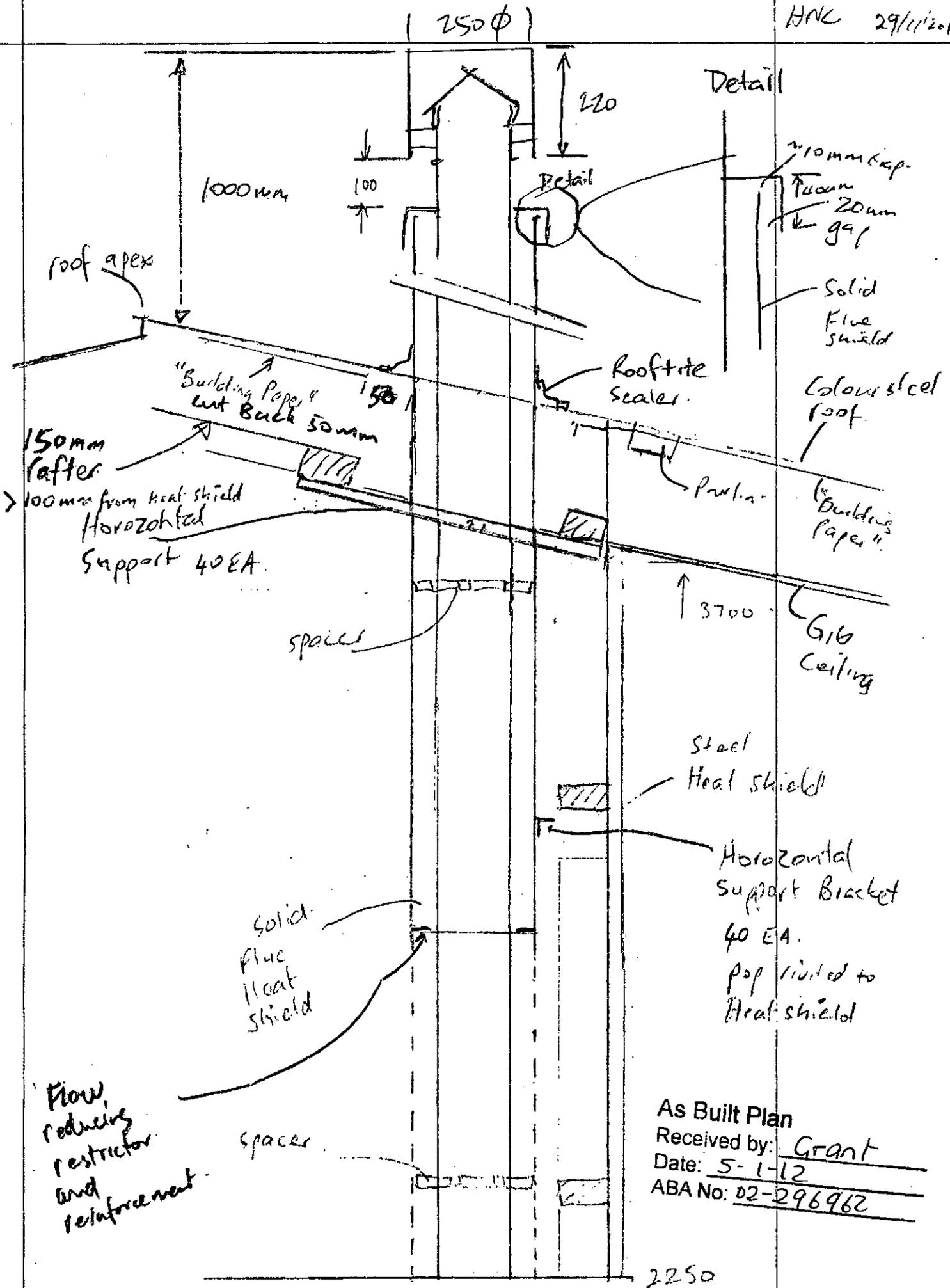


As Built Plan

Received by: Grant

Date: 5-1-12

ABA No: 02-296962



As Built Plan  
Received by: Grant  
Date: 5-1-12  
ABA No: 02-296962

2250

**FORM OF PRODUCER STATEMENT PS3 – CONSTRUCTION**

At project completion, this form shall be completed by the building contractor and supplied to the Engineer.

ISSUED BY: Nathan Clarke  
(Building Contractor)

TO: Nathan Clarke  
(Owner/Principal)

IN RESPECT OF: E3 Water Proof membrane installation  
(Description of Contract Works)

AT: 800 MT CARGILL Rd, WAITATI  
(Address)

T/A: Dunedin City Council BUILDING CONSENT No: 21476  
(Territorial Authority / Building Consent Authority)

The above Building Contractor has contracted to the above Owner/Principal to carry out and complete certain building works in accordance with the contract, titled

..... ("the contract")  
(Title of building contract)

I, Nathan Clarke, a duly authorised representative of the  
(Builder's Authorised Agent)

above building contractor, believe on reasonable grounds that the above building contractor has carried out and completed the installation to the Manufacturers instructions.

All  Part only as specified in the attached particulars above.

of the building works in accordance with the contract.

[Signature]  
(Signature of Authorised Agent on behalf of the Building Contractor)

5 Jan 2012  
(Date)

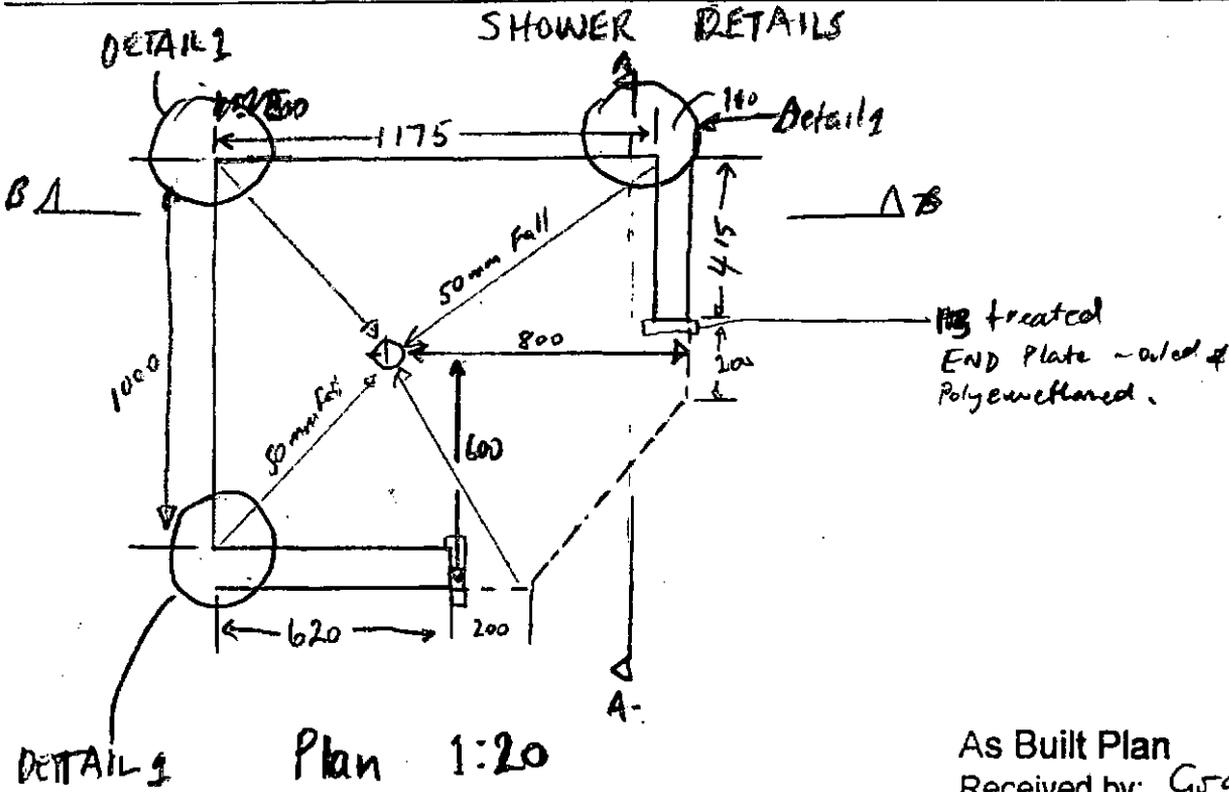
800 MT CARGILL Rd  
RD2 WAITATI  
(Address)

This producer statement is confirmation by the builder(s) that they have carried out the building work in accordance with the drawings, specifications (and site amendments) that are part of the contract / building consent documents.

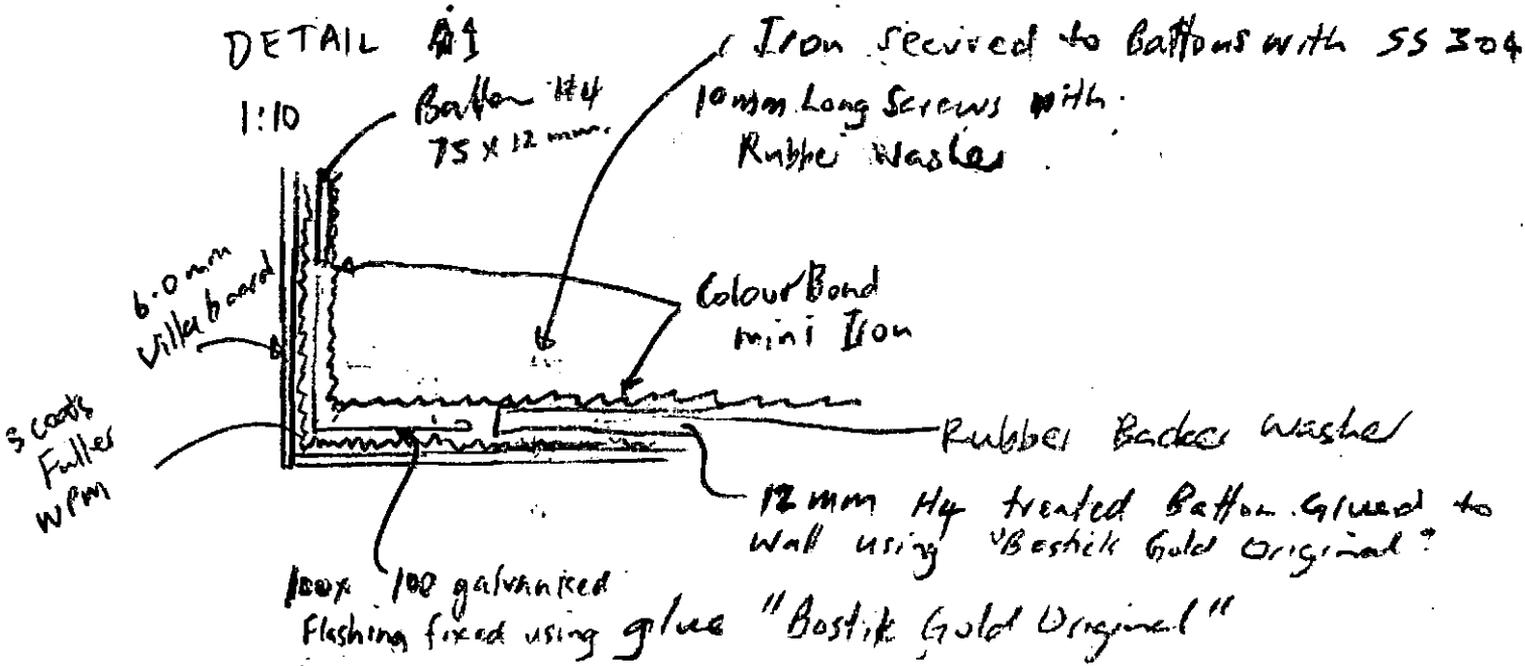
Work covered by this statement should have been supervised and checked by suitably qualified tradespersons.

The Engineer requires this producer statement and a copy of the T/A's building consent conditions, to confirm that items of the contract that he has not personally examined, have in fact been built according to the documents, so that the Engineer may issue appropriate documents to the T/A for it to release the Code Compliance Certificate.

Received by: Grant  
Date: 5-1-12  
ABA No: 02-296962



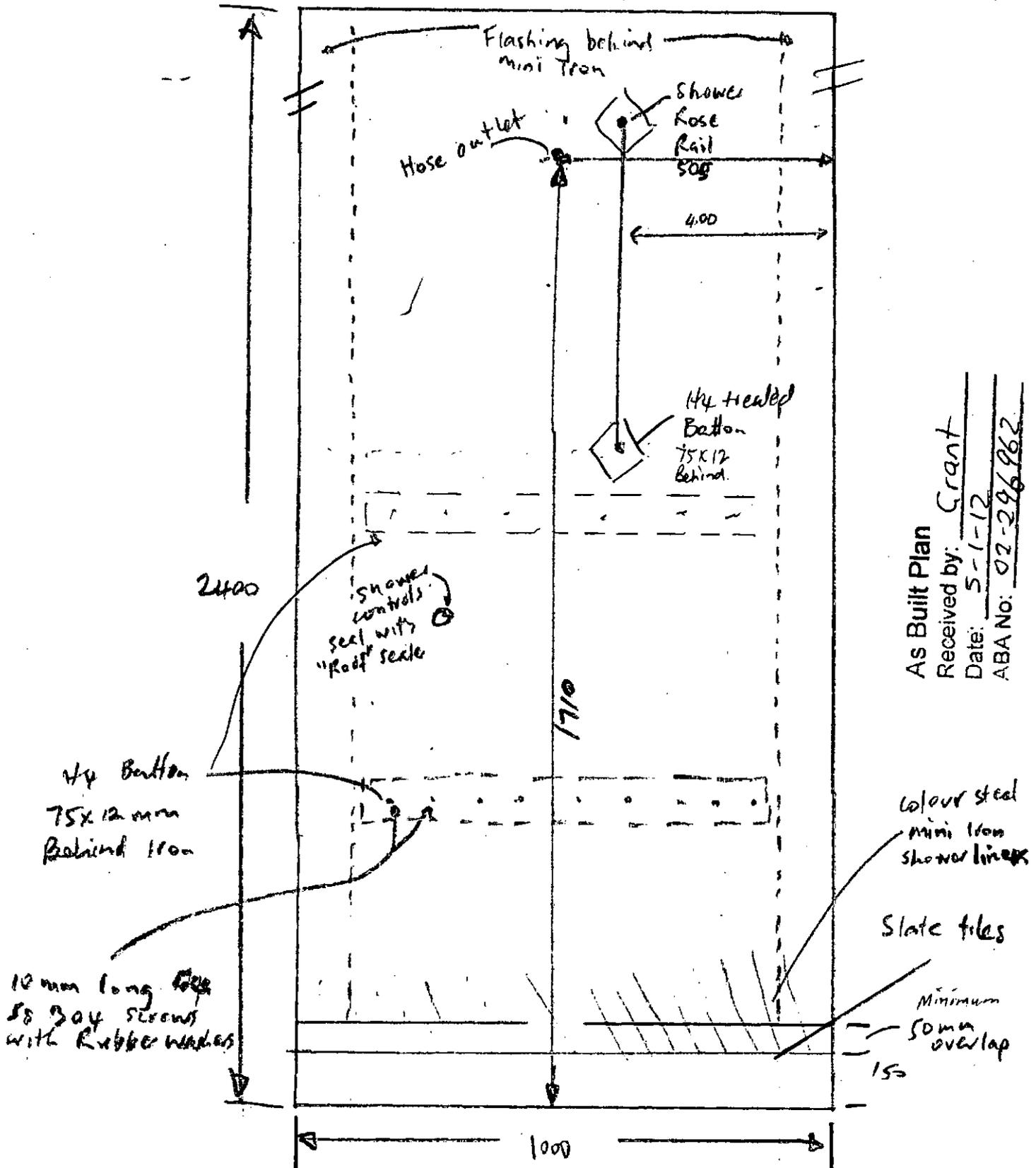
As Built Plan  
Received by: Grant  
Date: 5-1-12  
ABA No: 02-296962



- Notes 1
- ① Villa board Attached with 316 SS self tapping screws.
  - ② Attach Flashing with 316 SS self tapping screws (coat with roof sealant) at top and Bottom
  - ③ Attach Mini Iron using Galvanised Neoprene
- duffillwatts.com

Elevation A-A

Scale 1:10



As Built Plan  
Received by: Grant  
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ABA No: 02-296962





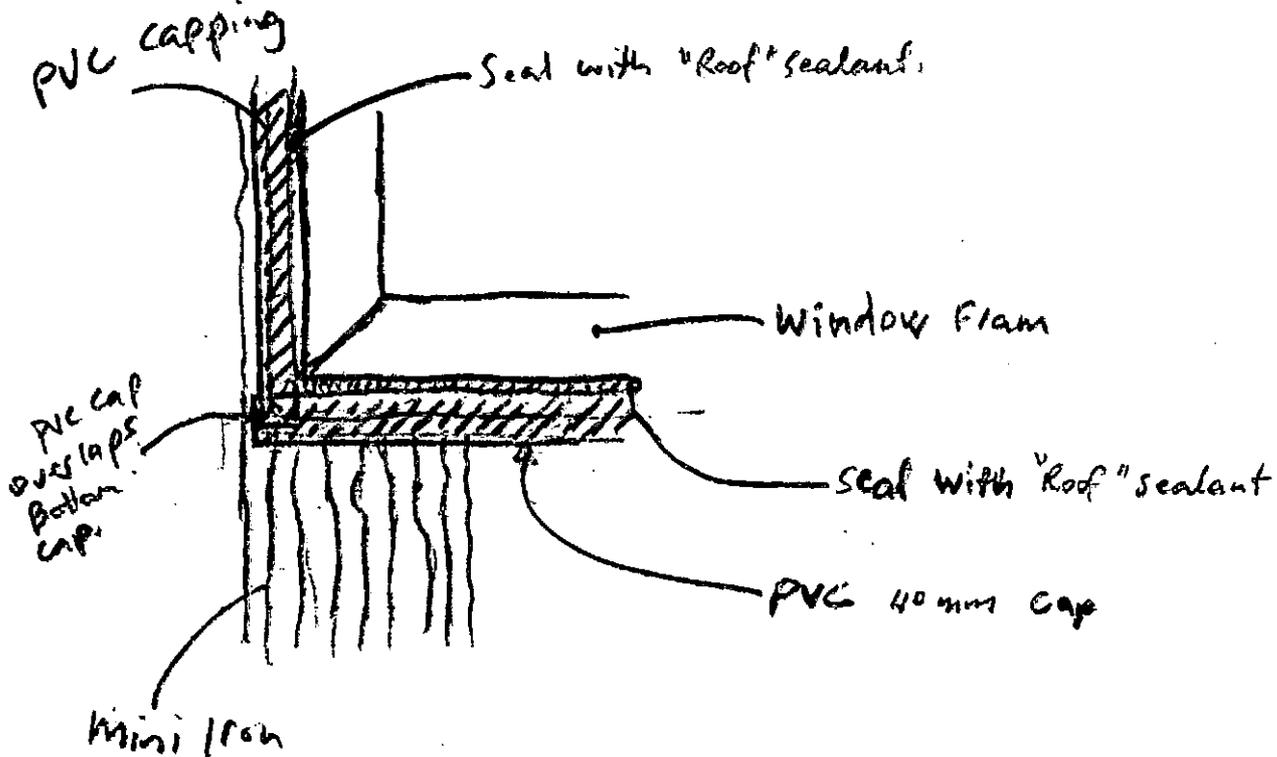
Private

29/12/2011

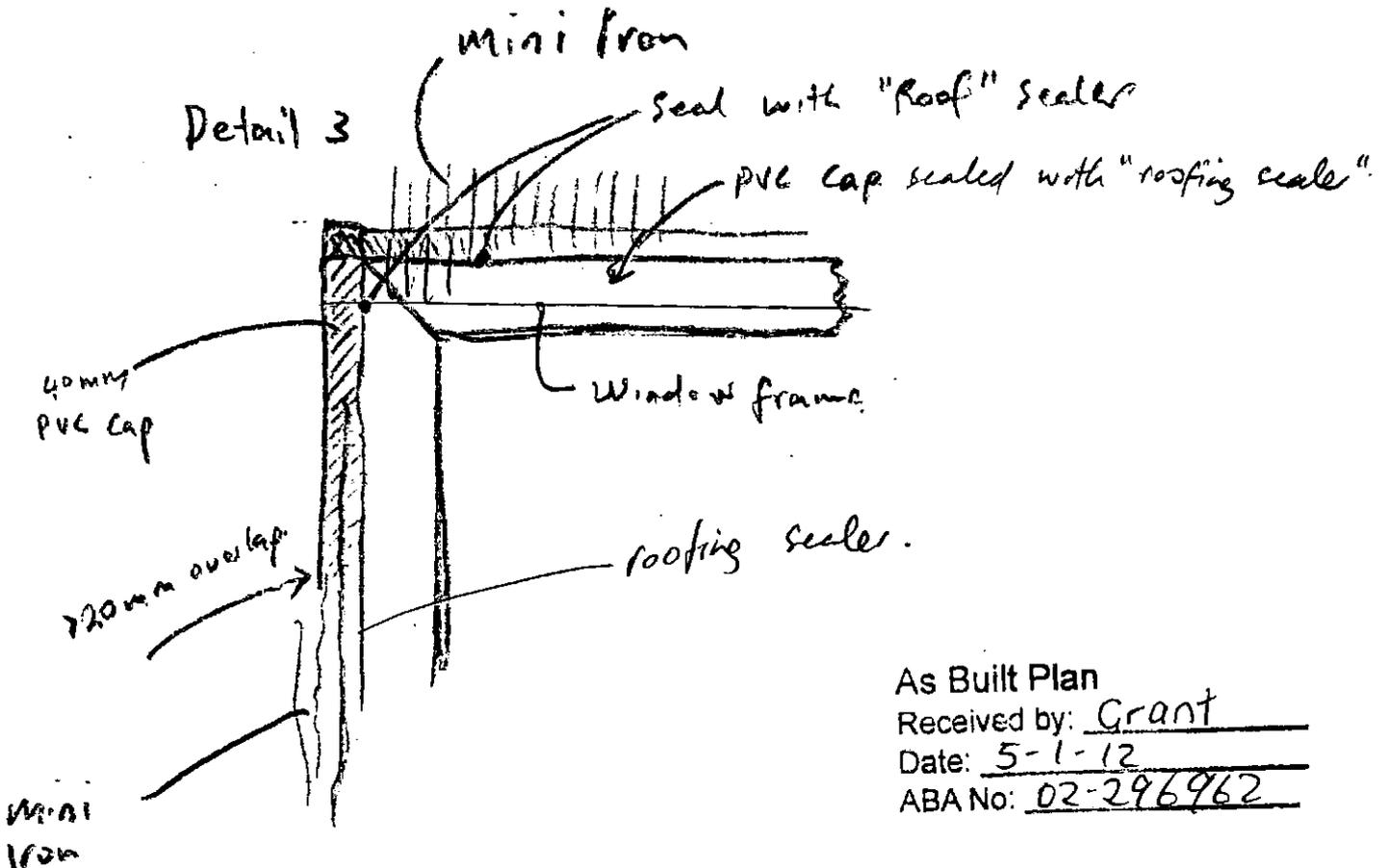
Drawn: HNC

4/6

DETAIL 2



Detail 3



As Built Plan

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ABA No: 02-296962

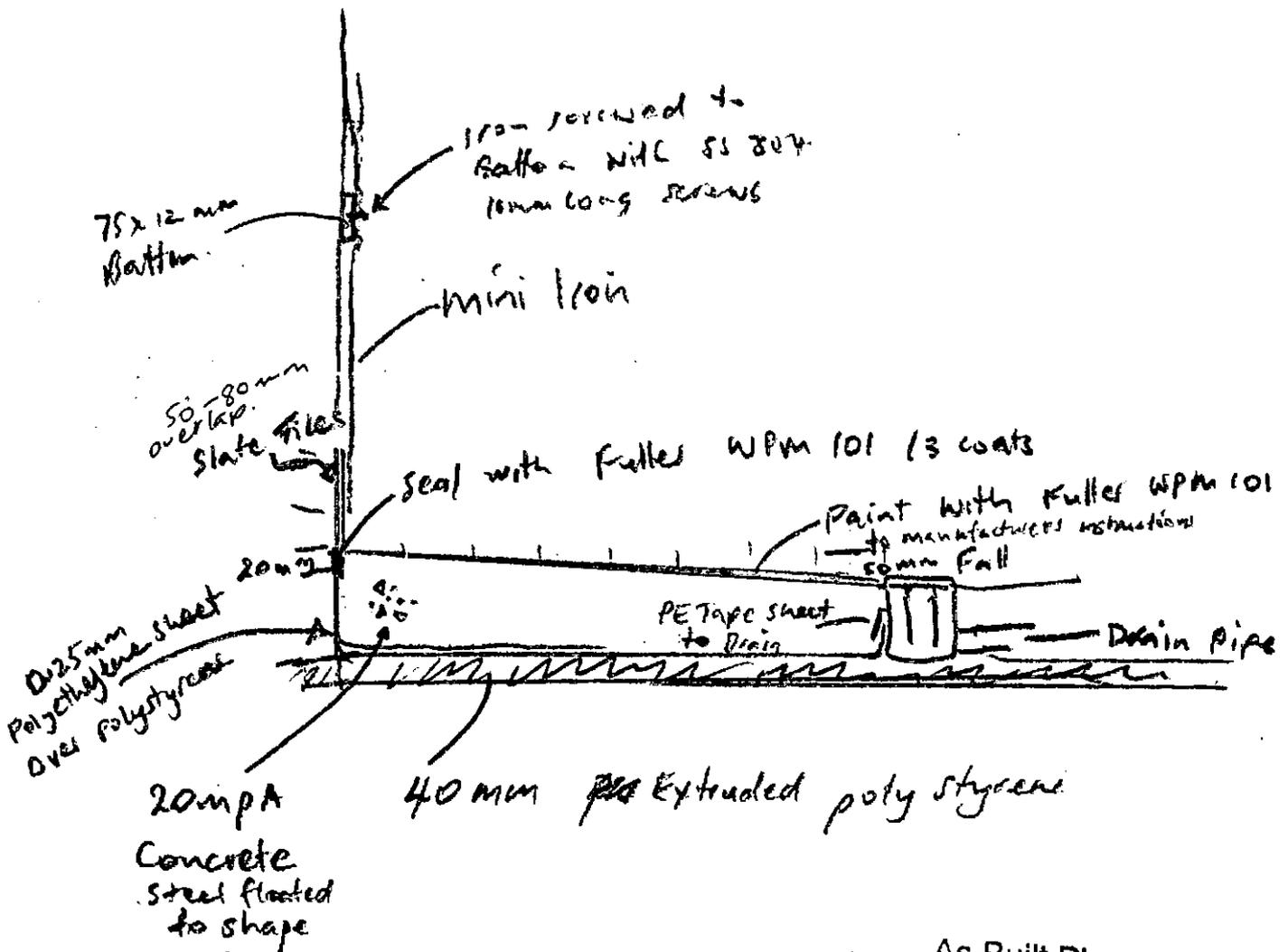
Private

29/12/2011

Drawn: HASE

5/6

# Shower floor Detail



## Notes / Description

- ① 50mm Fall to Drain
- ② Polystyrene with polyethylene moisture barrier above
- ③ 20 mpa concrete over steel floated to shape
- ④ Fuller WPM 101 over concrete to manufacturer's instructions
- ⑤ slate tiles installed with water resistant grout
- ⑥ Seal with Slate tile Sealer.

As Built Plan

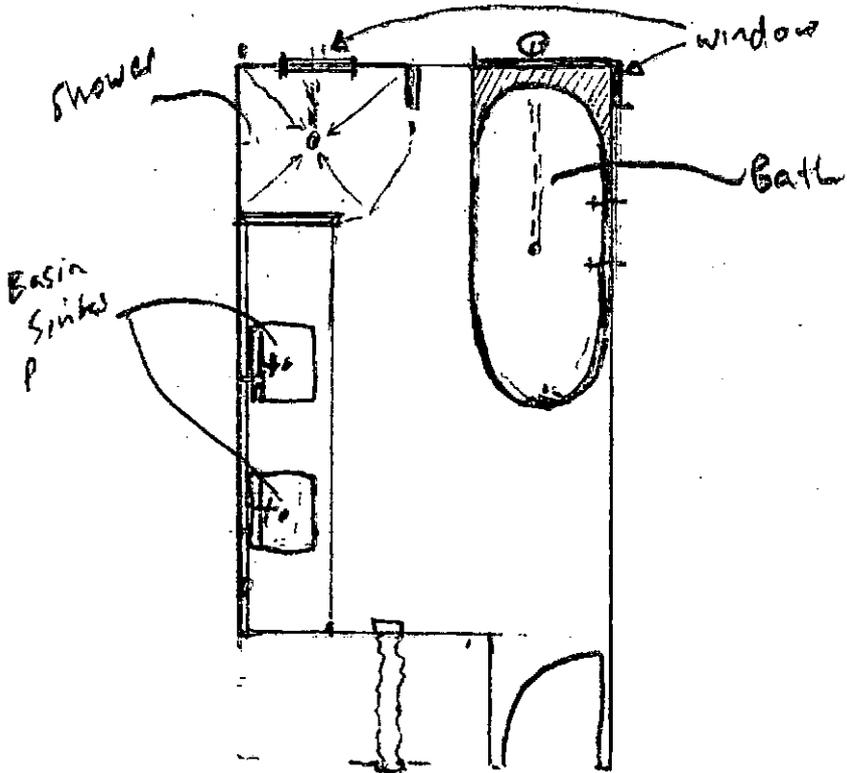
Received by: Grant

Date: 5-1-12

ABA No: 02-296962



### Step Bathroom Plan



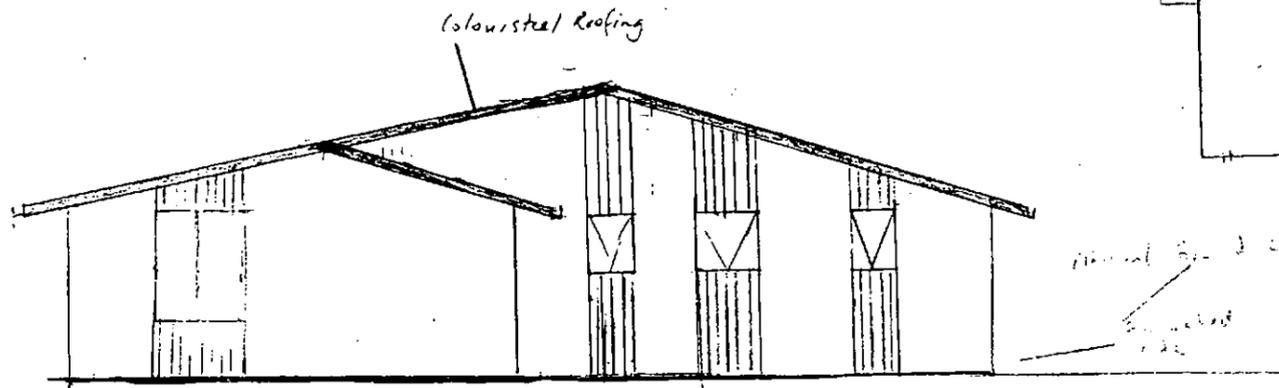
As Built Plan

Received by: Grant

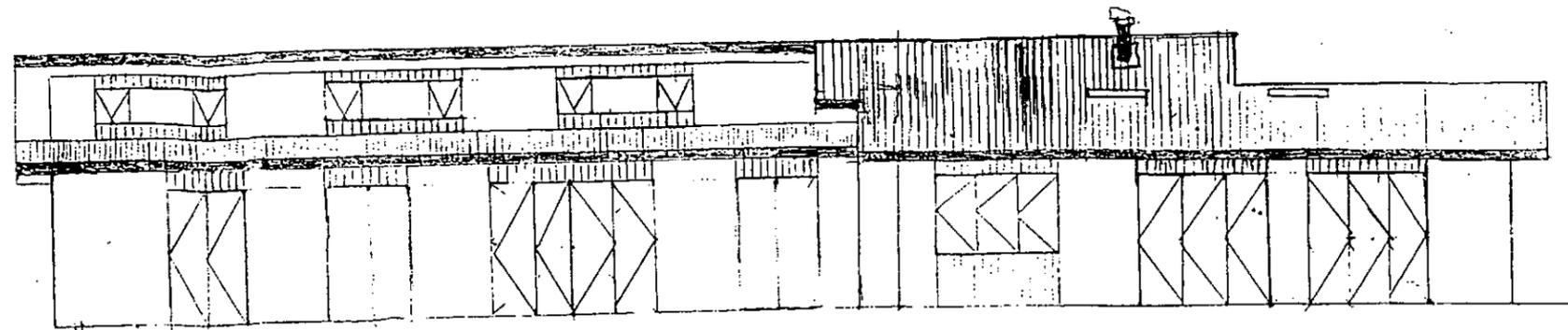
Date: 5-1-12

ABA No: 02-296962

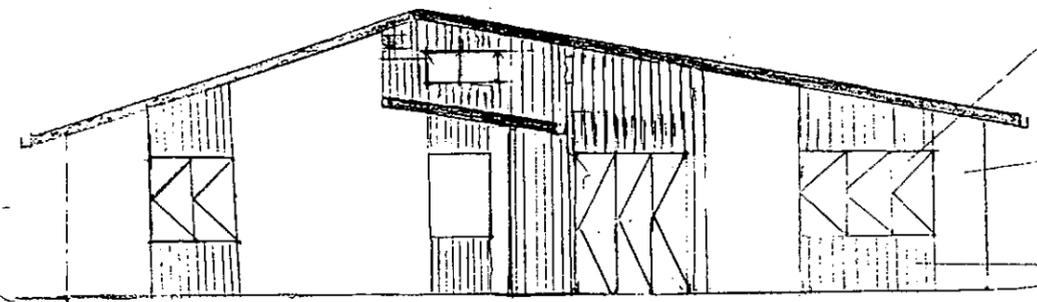




WESTERN ELEVATION - 1:100



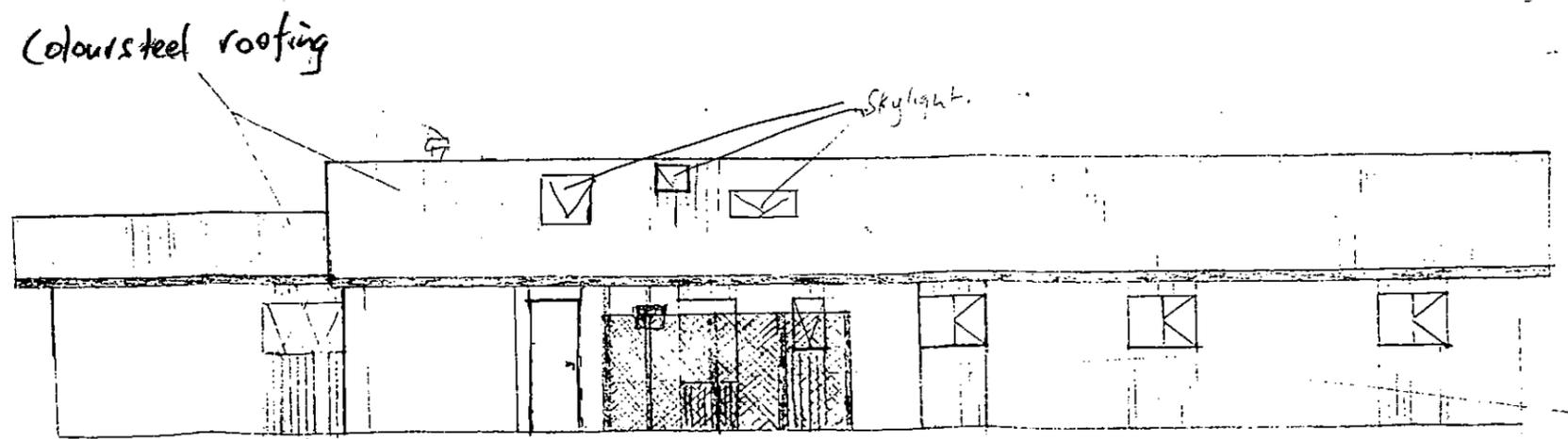
NORTHERN ELEVATION - 1:100



EASTERN ELEVATION - 1:100

Divide framed aluminium windows.  
 Coloursteel cladding  
 Continuous finish of  
 12mm H3 plywood covered with  
 Stucco / or Board and Batten

SITE: 200 MT CARGILL ROAD
DATE 5 Jan 2012 SHEET NO 2
SCALE 1:100 (A3)
DRAWN BY: H/M/C
TITLE: ELEVATION OF PROPOSED HOUSE
REVISION: AS BUILT



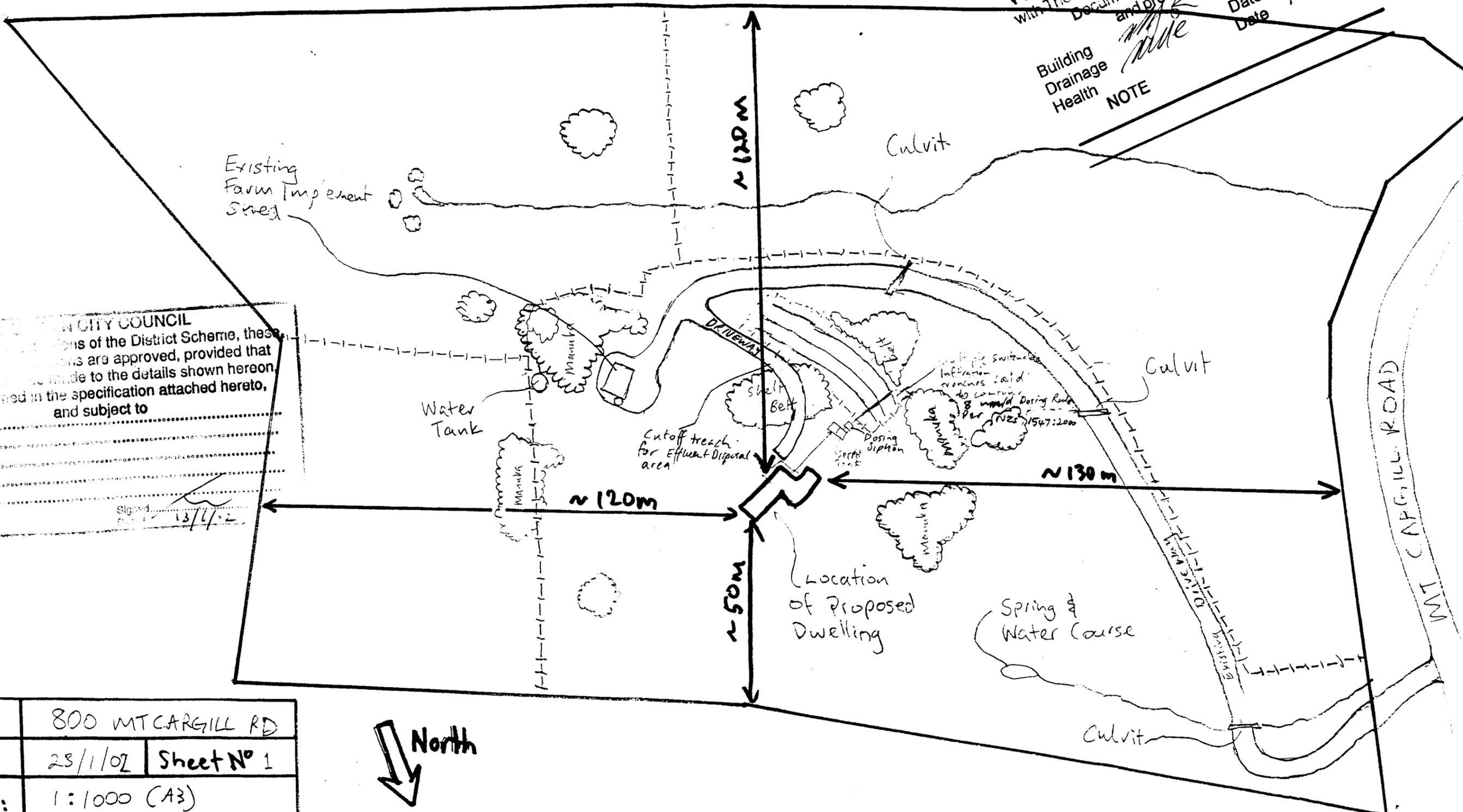
SOUTHERN ELEVATION - 1:100

**FLOOR LEVEL**  
 The height of the finished floor level above adjacent ground shall be no less than:-  
 For masonry veneer wall claddings - 100mm if ground permanently paved or 150mm if ground unpaved.  
 For cladding other than masonry - 150mm if ground permanently paved or 225mm if unpaved.

As Built Plan  
 Received by: Grant  
 Date: 5-1-12  
 ABA No: 02-296962

**DUNEDIN CITY COUNCIL**  
 Plans and Specifications Approved in accordance  
 with The New Zealand Building Code and Approved  
 Documents. To be retained on request  
 Date 19/6/02  
 Date 26/6/02

Building  
 Drainage  
 Health  
 NOTE



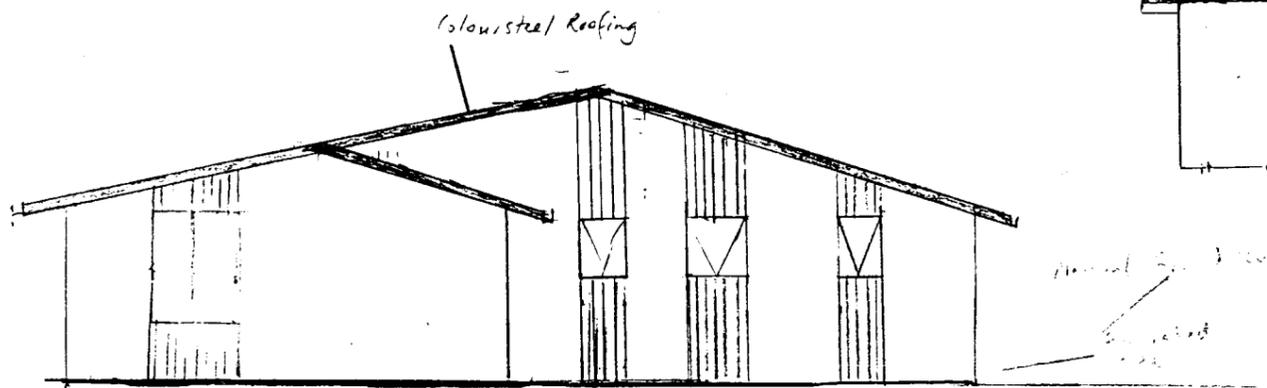
**DUNEDIN CITY COUNCIL**  
 In accordance with the provisions of the District Scheme, these  
 plans are approved, provided that  
 the conditions set out in the specification attached hereto,  
 and subject to

Signed  
 Date 13/6/02

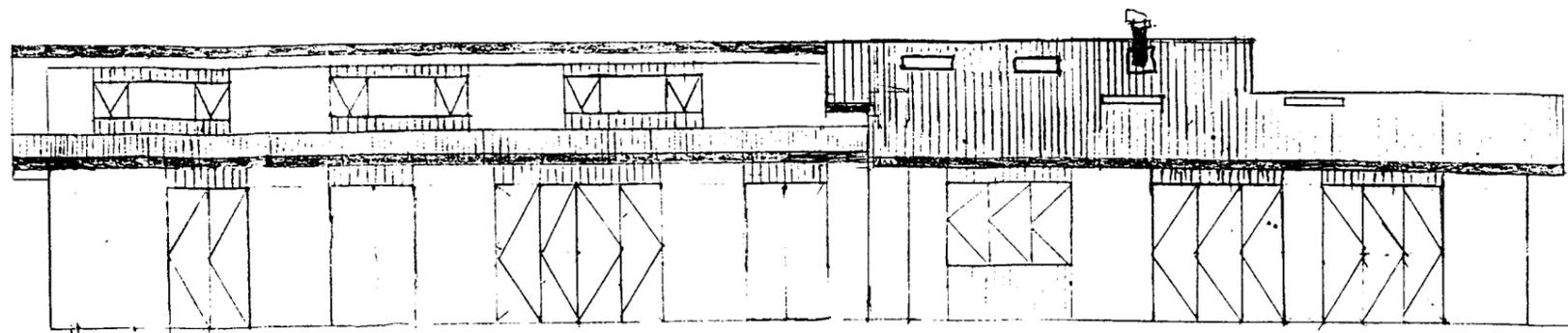
Site:	800 MTCARGILL RD	
Date:	23/1/02	Sheet No 1
SCALE:	1:1000 (A3)	
Drawn by:	HNC	
TITLE:	SITE PLAN.	



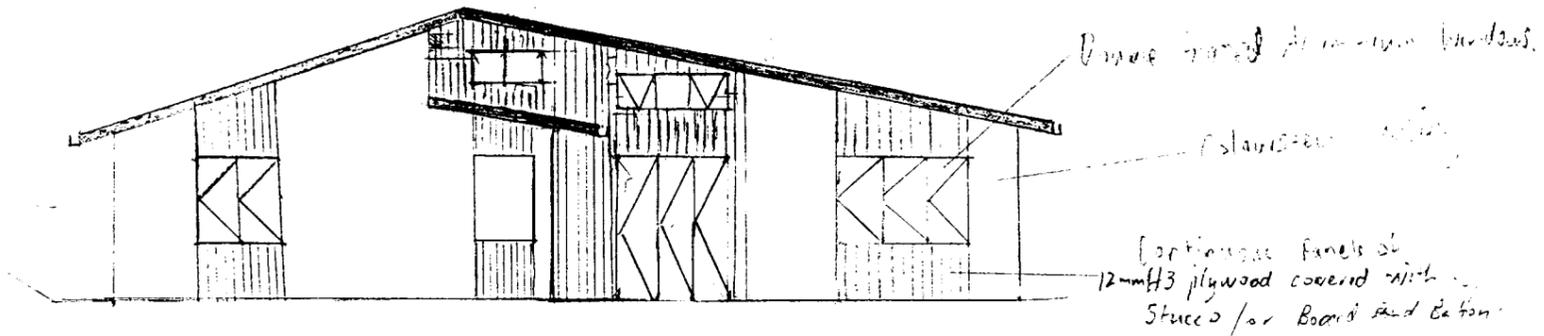
21476



WESTERN ELEVATION - 1:100



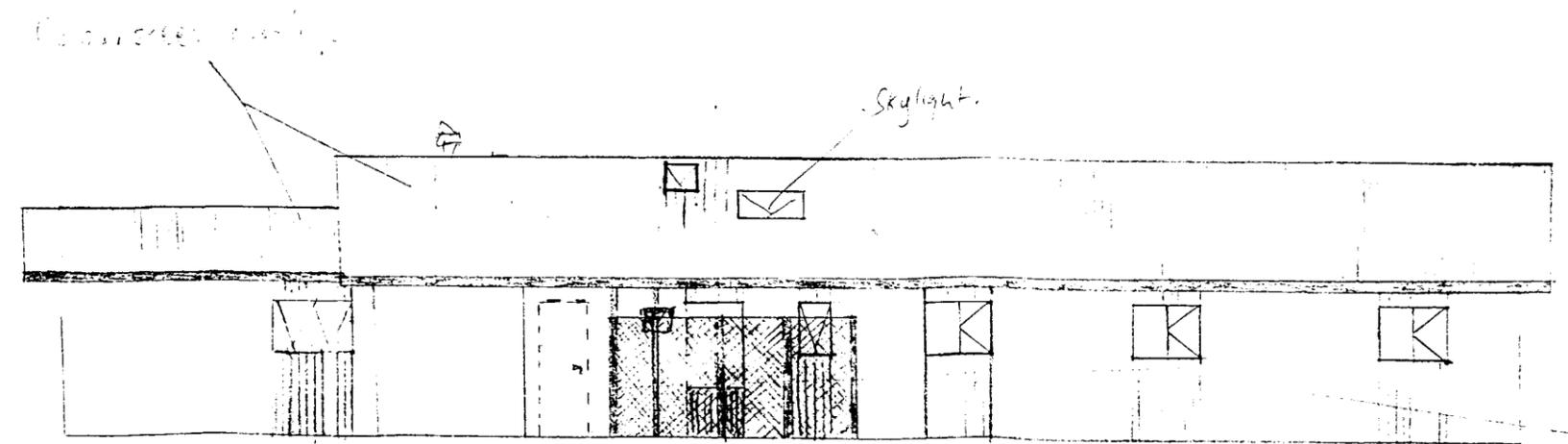
NORTHERN ELEVATION - 1:100



EASTERN ELEVATION - 1:100

SITE: 200 MT CARGILL ROAD	
DATE JAN 2002	SHEET NO 2
SCALE 1:100 (A3)	
DRAWN BY S H A C	
TITLE: ELEVATION OF PROPOSED HOUSE	
REVISION: FOR PERMIT	

**FLOOR LEVEL**  
 The height of the finished floor level above adjacent ground shall be no less than:-  
 For masonry veneer wall claddings - 100mm if ground permanently paved or 150mm if ground unpaved.  
 For cladding other than masonry - 150mm if ground permanently paved or 225 if unpaved.



SOUTHERN ELEVATION - 1:100





Wind Cone Determination on attached Calculation Sheet.

Calculation sheet give High wind zone, (Design based on Very high wind zone).

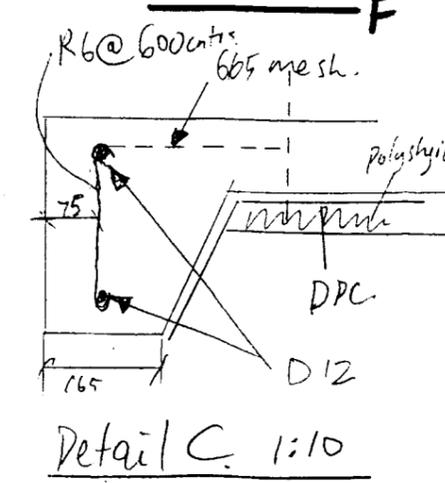
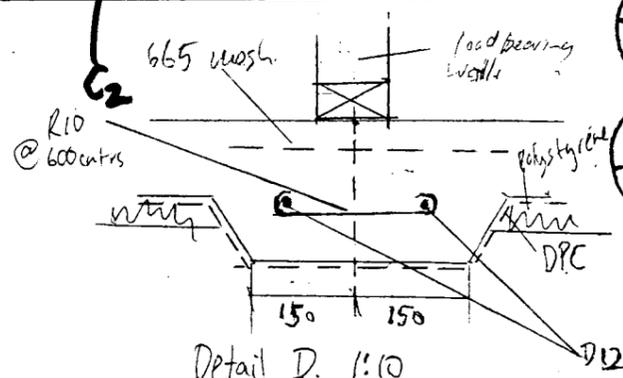
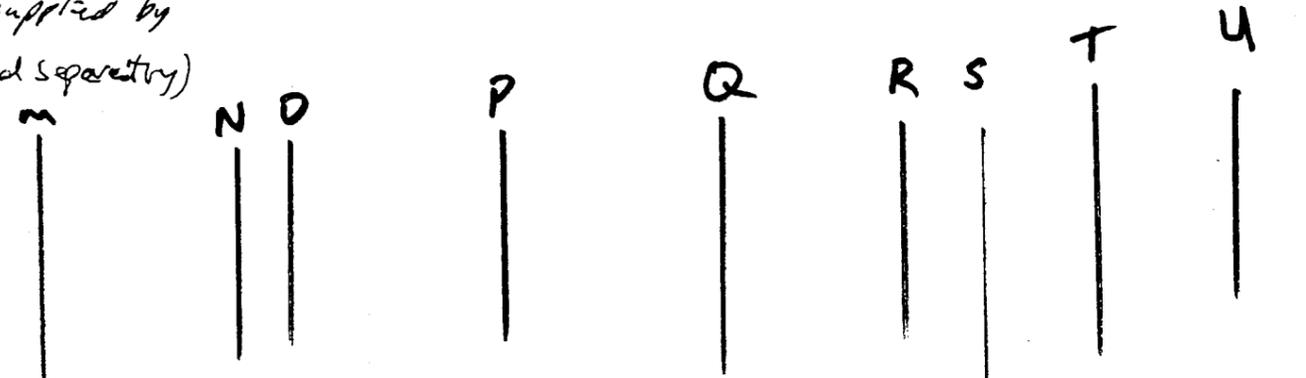
Bracing shown does not include Bracing supplied by Corrugated Iron cladding (on exterior of building).

BRACING LAYOUT DETAILS (Wing treated separately)

M	$M_1 = G1B1 - 2.2 \times 75 \times \frac{2.4}{3.4} = 116.5$	
N	$N_1 = G1B1 - 2.0 \times 75 \times \frac{2.4}{3.4} = 138$	
O	$O_1 = G1B1 - 2.5 \times 75 \times \frac{2.4}{3.4} = 145$	
P	$P_1 = G1B2 - 4.5 \times 80 \times \frac{2.4}{3.0} = 145$	
Q	$Q_1 = G1B1 - 2.0 \times 75 \times \frac{2.4}{3.4} = 128$ $Q_2 = G1B1 - 2.0 \times 75 \times \frac{2.4}{3.4} = 105$	
R	$R_1 = G1B1 - 2.0 \times 75 \times \frac{2.4}{3.4} = 105$	
S	$S_1 = G1B1 - 2.0 \times 75 \times \frac{2.4}{3.4} = 105$	
T	$T_1 = G1B1 - 2.8 \times 75 \times \frac{2.4}{2.8} = 180$	
U	$U_1 = BR4 - 1.2 \times 100 = 120$	
TOTAL BRACING ALONG (Wing 1)		1297.5
A	$A_1 = G1B2 - 2.0 \times 75 \times \frac{2.4}{3.4} = 150$ $A_2 = BR4 - 1.0 \times 100 = 100$	250
B	$B_1 = G1B1 - 2.5 \times 75 = 187.5$	200 187.5
C	$C_1 = BR4 - 1.0 = 100$ BU.	100
D	$D_1 = G1B1 - 1.2 \times 75 = 90$	90 Needed (50L)
TOTAL BRACING ALONG (Wing 2)		550
U <sub>1</sub>	$U_1 = BR4 - 1.2 = 120$ BU	120
V	$V_2 = G1B1 - 1.8 \times 75 \times \frac{2.4}{2.4} = 195$	195
W	$W_1 = G1B1 - 1.8 \times 75 \times \frac{2.4}{2.4} = 135$	135

Needed = 1180 BU.

X	$X_1 = BR4 - 1.2 \times 100 = 120$ $X_2 = BR4 - 1.2 \times 100 = 120$	120 120
TOTAL BRACING ACROSS (Wing 2)		597
E	$E_1 = BR7 - 0.6 \times 110 = 66$ $E_2 = BR4 - 0.9 = 100 \times 0.9 = 90$	66 90
F	$F_1 = BR4 - 1.2 = 120$ $F_2 = BR4 - 1.2 = 120$	120 120
G	$G_1 = BR4 - 1.0 = 100$ BU $G_2 = BR4 - 1.0 \times 100 = 100$	100 100
TOTAL BRACING ALONG (Wing 2)		596
		390.6 Needed

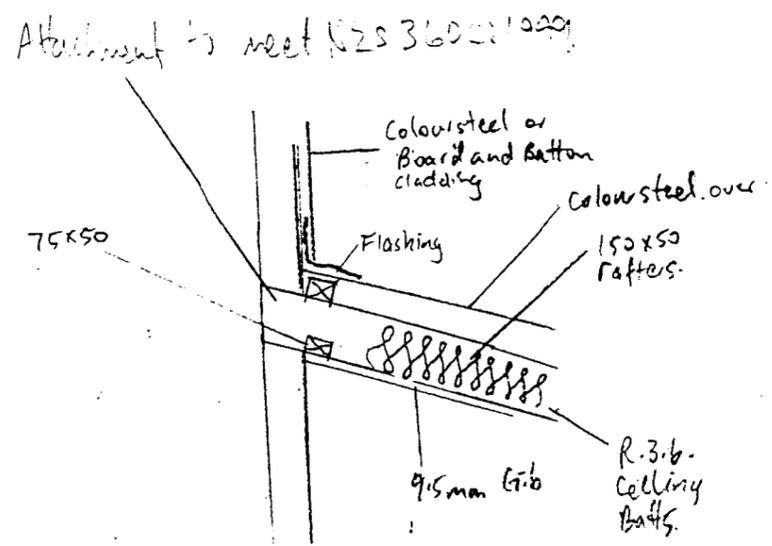


SITE: 800 MT CARGILL ROAD
DATE: Jan 2002 // SHEET NO: 5
SCALE: 1:100 (A3) or as specified
DRAWN BY: HNC
TITLE: FOUNDATION & BRACING PLAN.
REVISION: FOR APPROVAL.

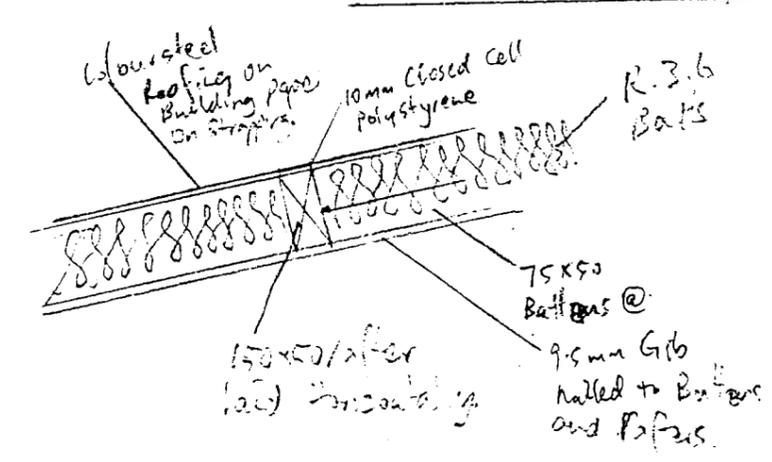
All Exterior Foundation Per Detail C.

300 x 300 x 300 FOOTINGS FOR INTERNAL POSTS. UPUNT TO BE SECURED BY ≥ 19.5 KN ATTACHMENT BRACKETS.

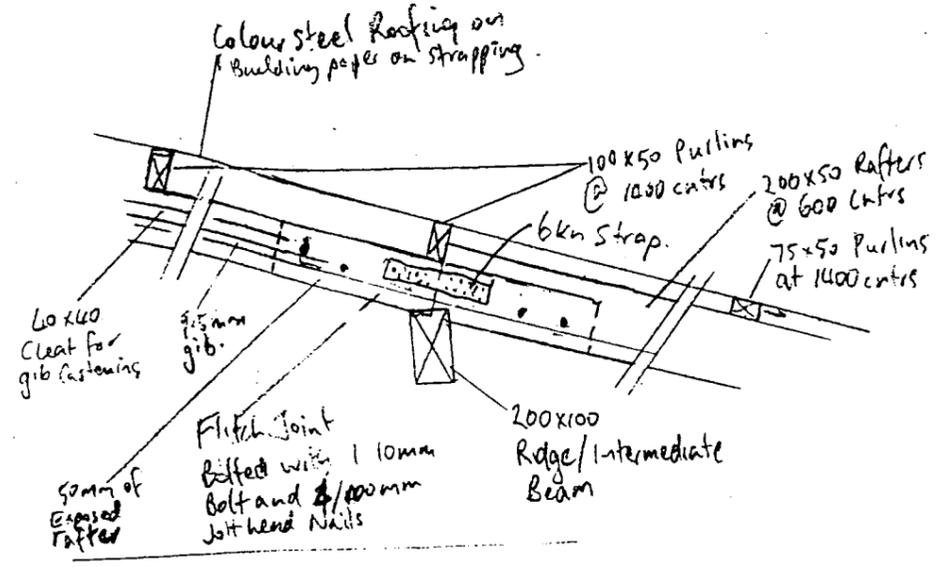
SITE:- 800 MT CARRILL RD  
 DATE: FEB 2002 / Sheet N°: 6  
 SCALE:- 1:20 <sup>(A3)</sup> or as specified  
 Drawn By: Nathan Clarke.  
 TITLE: CONSTRUCTION DETAILS  
 REVISION: FOR APPROVAL



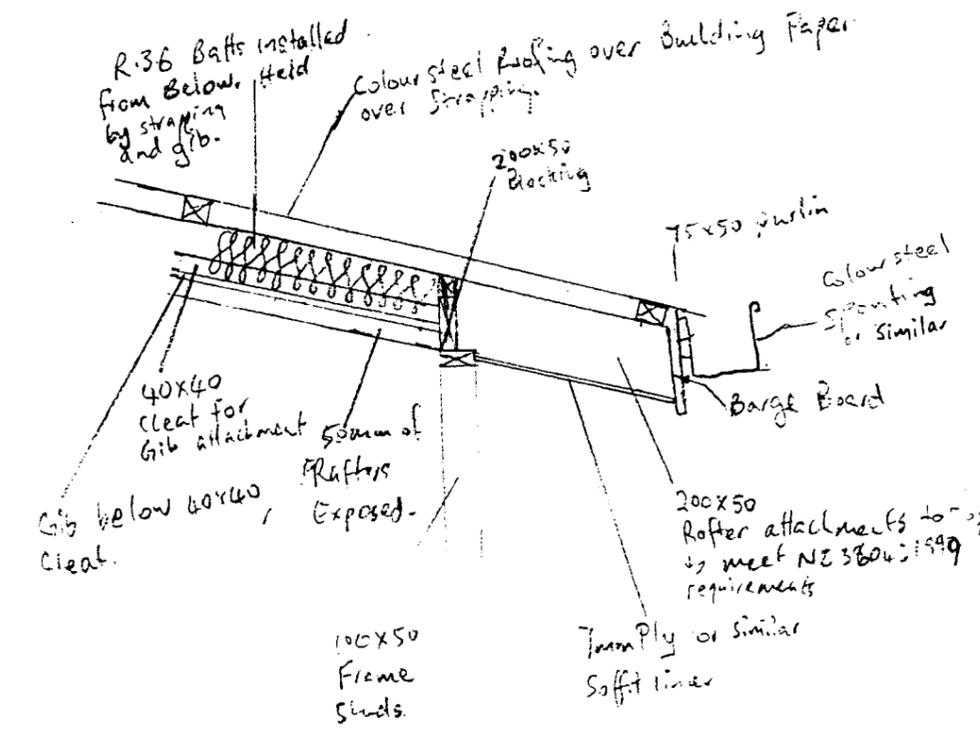
DETAIL 4 : 1:20



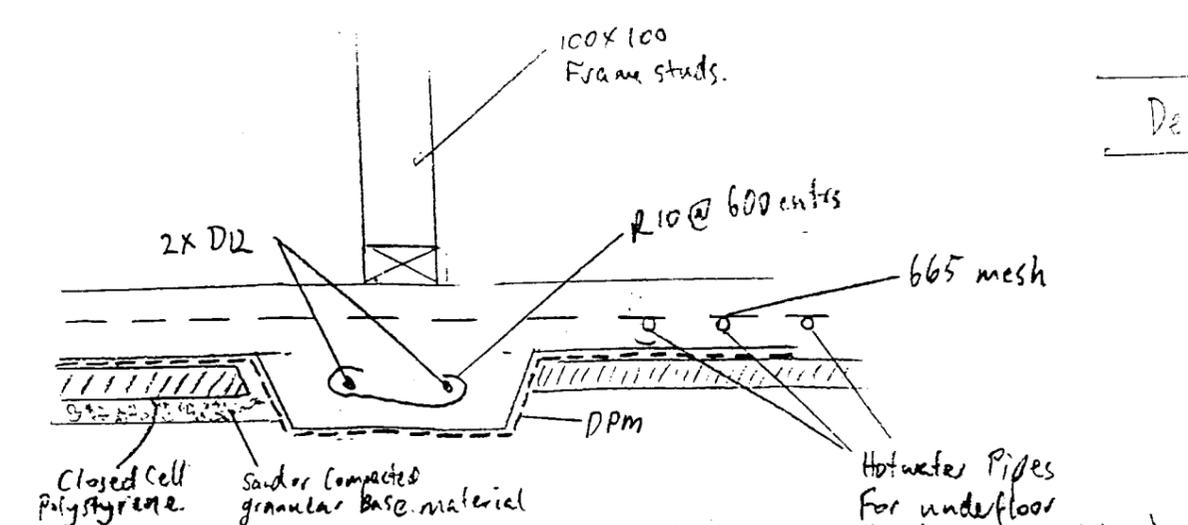
Detail 5 1:10



Detail 2. 1:20  
 Rafter "Joint Detail"

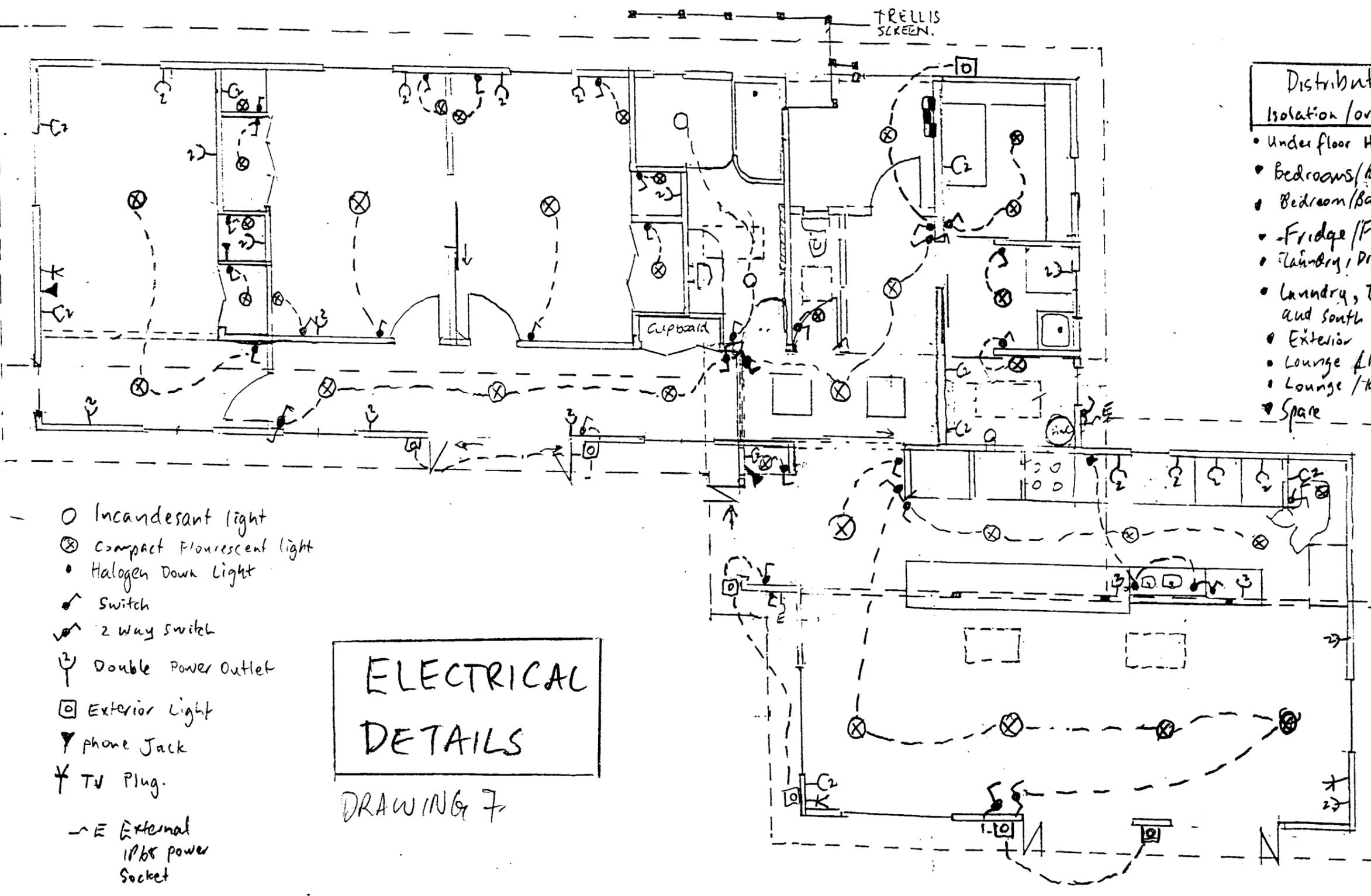


Detail 1. 1:20



Detail 3. 1:10

21476



**Distribution Box**  
Isolation / overload switches

- Under floor Heating Sockets
- Bedrooms / Bathroom / Toilet lights
- Bedroom / Bathroom / Toilet plugs
- Fridge / Freezer Plugs
- Laundry, Drying Room, Store Room, Hallway plugs
- Laundry, Drying Room, Store Room, Hallway, and South Exterior Lights.
- Exterior Plug Sockets
- Lounge / Kitchen / North Exterior lights
- Lounge / Kitchen plugs
- Spare

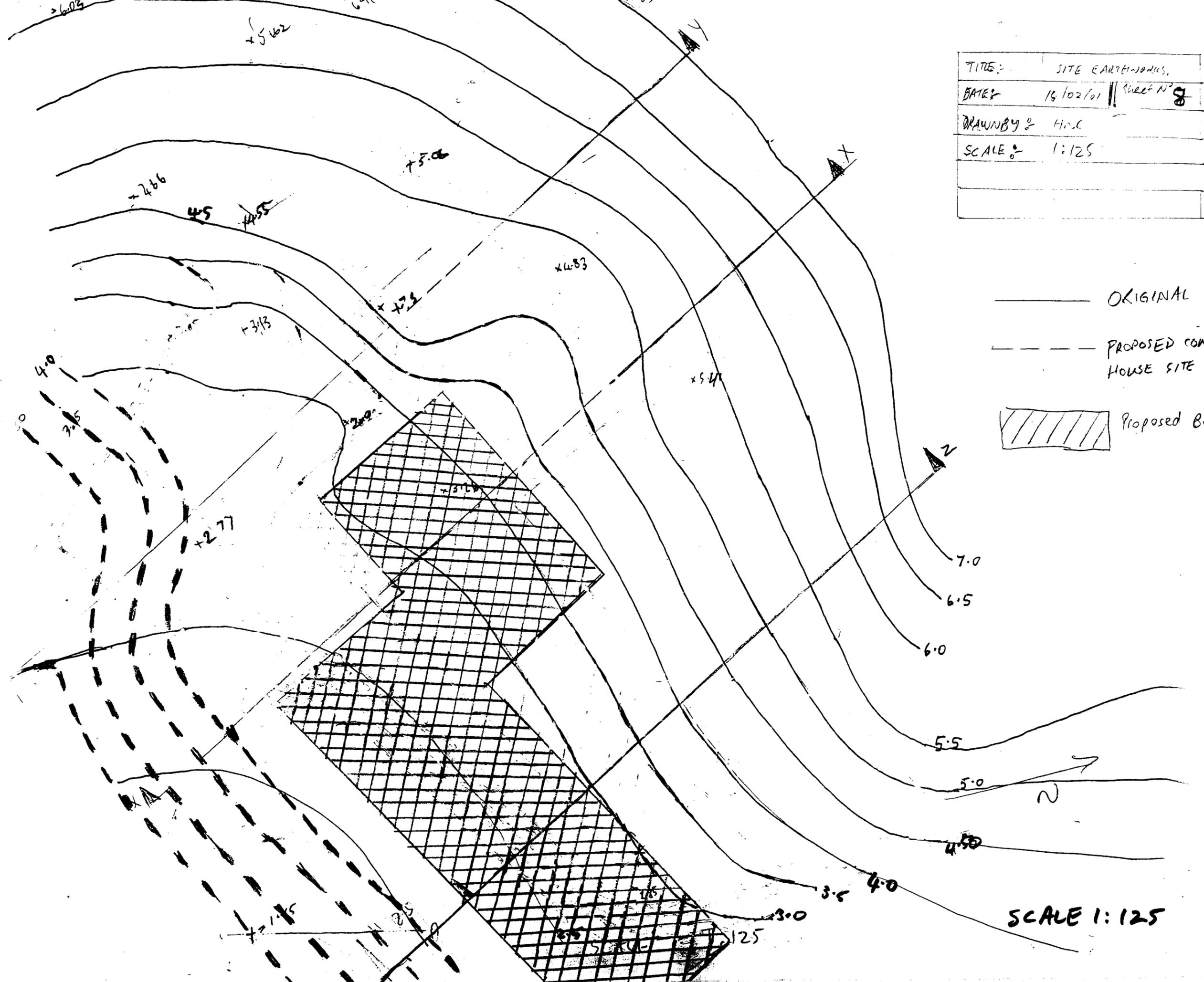
- Incandesant light
- ⊗ Compact Fluorescent light
- Halogen Down Light
- ⤴ Switch
- ↔ 2 Way Switch
- ⌚ Double Power Outlet
- ⊠ Exterior Light
- ▽ Phone Jack
- ⋈ TV Plug.
- ⌚ External IPbx power Socket

**ELECTRICAL  
DETAILS**

DRAWING 7

Not to SCALE

TITLE:	SITE EARTHWORKS
DATE:	15/02/01 Sheet N° 8
DRAWN BY:	H.M.C.
SCALE:	1:125



- ORIGINAL CONTOUR LINES
- - - PROPOSED CONTOURS AFTER HOUSE SITE EXCAVATED
-  Proposed Building

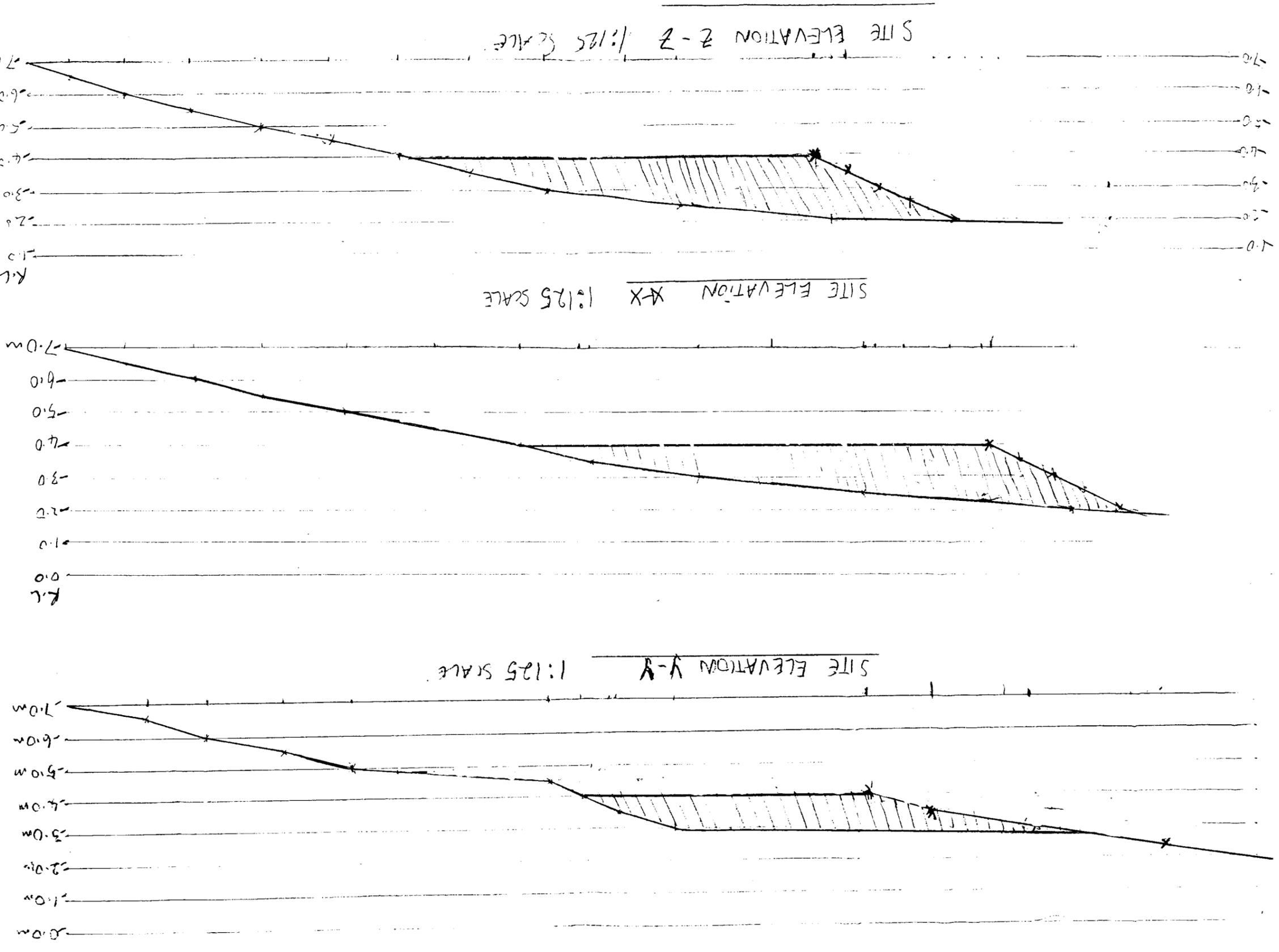
SCALE 1:125

524  
26

Excavation Requirements for Site (Elevations)

DRAWING 9

Note (Datum is Existing 7.0m contour)  
 (From Right to Left)  
 Existing ground level  
 Proposed house site ground levels.





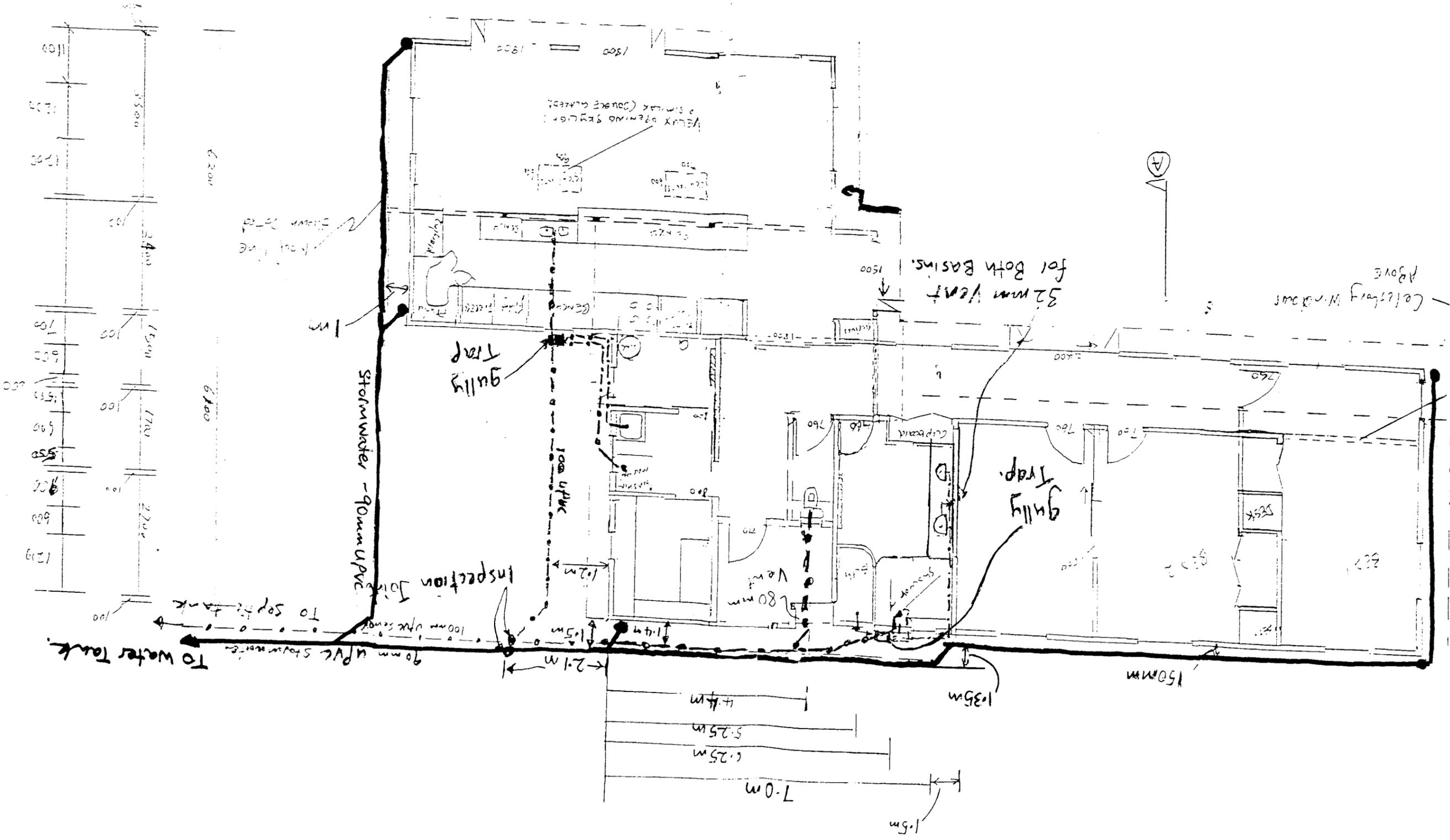
# DRAINAGE PLAN

ATTN: Mike Larsen  
Building Consent No ABA 21476

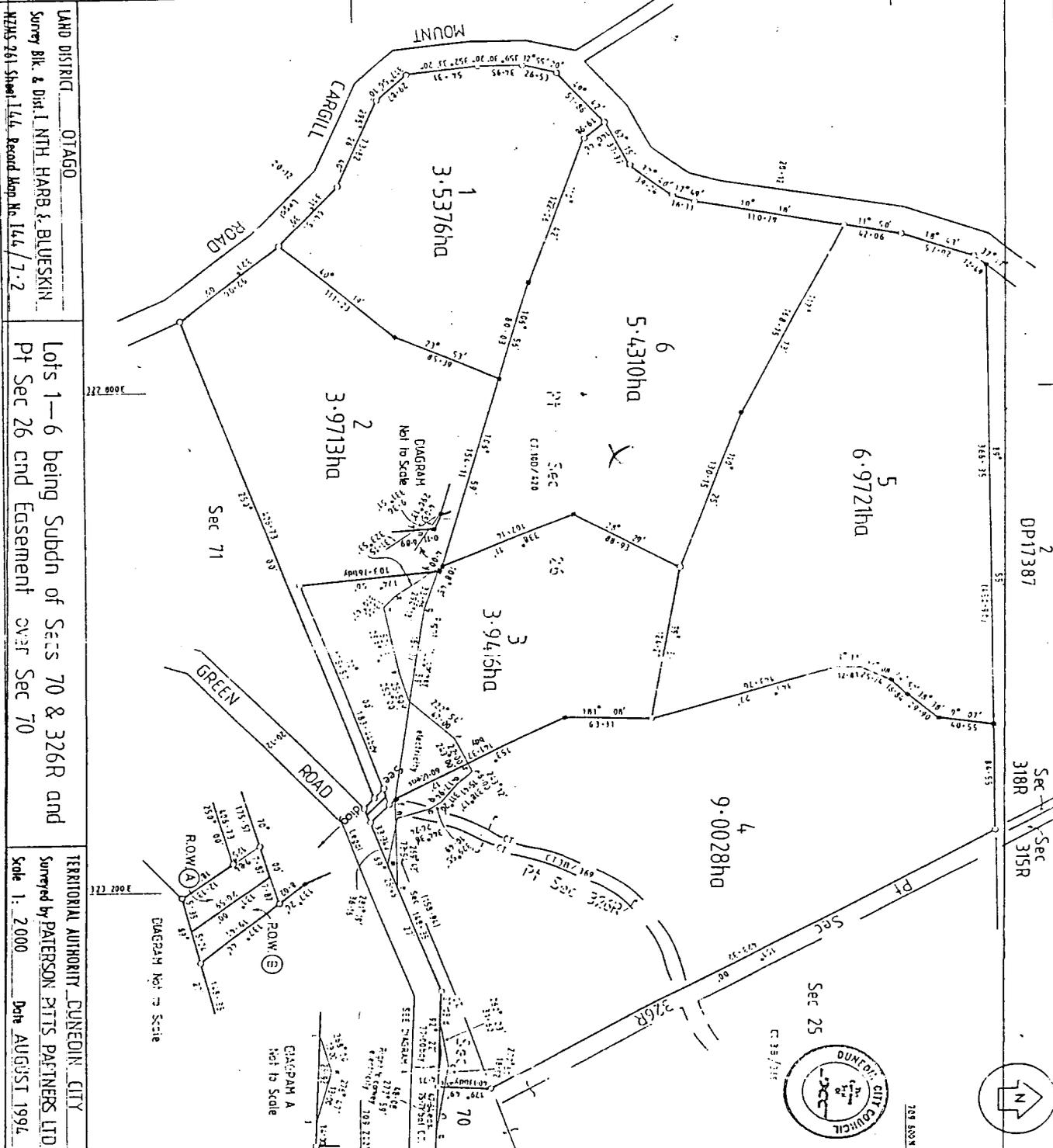
AS BUILT

11-10-02  
Specification Received

Guttering & Water  
Collection System  
SEWERAGE SYSTEM  
— Downpipe connections.



CERTIFICATE OF TITLE No.



LAND DISTRICT OTAGO  
 Survey Blk. & Dist. 1 NTH HARB. & BLUESKIN  
 NZMS 261 Sheet 144, Record Map No. 144/7-2

Lots 1-6 being Subdn of Secs 70 & 326R and  
 Pt Sec 26 and Easement over Sec 70

TERRITORIAL AUTHORITY DUNEDIN CITY  
 Surveyed by PATERSON PITS PARTNERS LTD  
 Scale 1: 2000 Date AUGUST 1994

Registered Owners

Registered Owner

The Common Seal of the Dunedin City Council is affixed hereto in the presence of:

*[Signature]*  
 Authorised Officer

Pursuant to Section 219(4) of the Resource Management Act 1991 I hereby certify that some of the conditions of the resource consent plan shown on this certificate are not being complied with by the Dunedin City Council and that a resource notice has been issued in respect of those conditions that have not been complied with.

Dated this 2nd day of September 1994

*[Signature]*  
 Authorised Officer

**MEMORANDUM OF EASEMENTS**

PARCELS	SECT. 100	SECT. 101	SECT. 102	SECT. 103	SECT. 104	SECT. 105	SECT. 106	SECT. 107	SECT. 108	SECT. 109	SECT. 110
RIGHT TO WAY	LOT 1	LOT 2	LOT 3	LOT 4	LOT 5	LOT 6	LOT 7	LOT 8	LOT 9	LOT 10	LOT 11
OPTIONAL EASEMENTS IN REVERSE											
RIGHT TO	PT SEC 70	PT SEC 71	PT SEC 26								
CONVEY TO	BLUESKIN SD										
ELECTRICITY	LOT 1	LOT 2	LOT 3	LOT 4	LOT 5	LOT 6	LOT 7	LOT 8	LOT 9	LOT 10	LOT 11
TELECOM	LOT 1	LOT 2	LOT 3	LOT 4	LOT 5	LOT 6	LOT 7	LOT 8	LOT 9	LOT 10	LOT 11
TELECOM	LOT 1	LOT 2	LOT 3	LOT 4	LOT 5	LOT 6	LOT 7	LOT 8	LOT 9	LOT 10	LOT 11
TELECOM	LOT 1	LOT 2	LOT 3	LOT 4	LOT 5	LOT 6	LOT 7	LOT 8	LOT 9	LOT 10	LOT 11
TELECOM	LOT 1	LOT 2	LOT 3	LOT 4	LOT 5	LOT 6	LOT 7	LOT 8	LOT 9	LOT 10	LOT 11

Total Area 32,8564ha

Completed in All CI 100/422  
 CI 38/755

1. NIGEL BURKLAND PITS

Authorising Surveyor and holder of a resource consent under the Resource Management Act 1991 to carry out a registered survey pursuant to section 22 of the Survey Act 1986 hereby certifies that this plan has been made and carried out in accordance with the provisions of that Act and that the survey is correct and that the survey has been made in accordance with the Survey Regulations 1977 as applied and made in accordance therewith.

Dated this 1st day of August 1994

*[Signature]*  
 1st Deputy Surveyor

Field Book: 1  
 Reference Plan: 1  
 Easement: 1  
 Approved by to Survey: 1  
 Deposited this 17th day of August 1994

DP 24273

992906

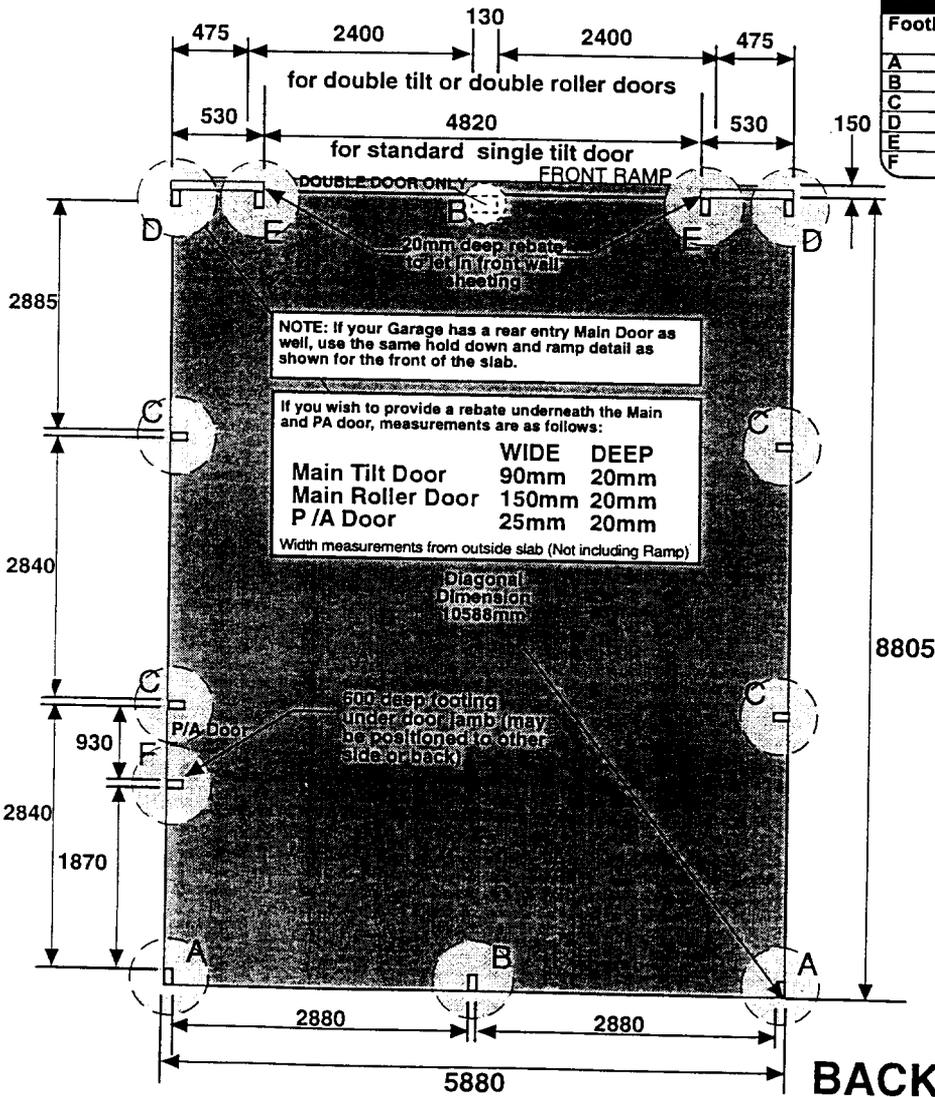
Pour a perfectly level concrete slab to the dimensions shown in Figure 1A. This is to be 100mm thick, reinforced with F72 Mesh, laid 30mm from the top with edge thickening shown in Figure 1B and a ramp at the front (Figure 1C). Concrete strength is to be 20MPA at 28 days.

If you would rather erect your Garage on footings, the locations are shown as dotted lines (Ⓜ) in Figure 1A, a side view of the footing and a size schedule are shown in Figure 1D.

The Garage has been designed so the slab size and the external frame size are the same. The wall sheeting then overlaps the top of the slab by 20mm to form a waterproof joint. If you plan to erect your Garage on a slab larger than the one specified, it will be necessary to trim 20mm off each wall sheet, then seal the joint between the slab and wall sheet with Silicone.

Fig. 1 A:

FRONT

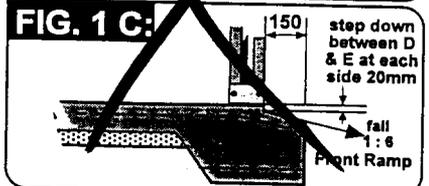
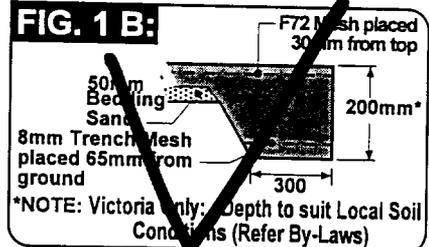


No. of anchors to be used for each Leg:  
- Screwbolts: M10x75mm all cases x qty shown below.  
- Chemsets: as shown below.

Footing	2.4Wall H.	2.7Wall H.	3.0Wall H.
A	1 X M10	1 X M10	1 X M10
B	2 X M8	2 X M8	2 X M8
C	2 X M8	2 X M8	2 X M8
D	2 X M10	2 X M12	2 X M12
E	2 X M10	2 X M12	2 X M12
F	1 X M8	1 X M8	1 X M8

NEW ZEALAND ONLY

Fig 1b, c & d are NOT to be used in New Zealand conditions refer to SLAB AND FOUNDATION SCHEDULE attached to plans, for detailed drawings.



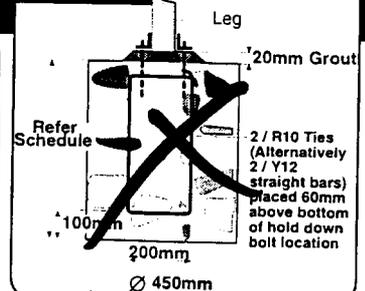
Refer to this Section ONLY if FOOTINGS are being used instead of concrete slab!

FOOTING DEPTH SCHEDULE (mm)

Wall Height	A		B		C		D		E		F	
	20 kpa	10kpa										
2.4H.	900	1150	950	1150	650	1050	1000	1700	900	1300	600	600
2.7H.	950	1150	1050	1250	850	1050	1450	2550	1300	2200	600	600
3.0H.	950	1150	1050	1250	850	1050	1450	2550	1300	2200	600	600

NOTE: Most soils meet 20kpa requirements. For soft soil use 10kpa value. For shaft adhesion value in your area consult your local soils engineer.

FIG. 1 D:



992906

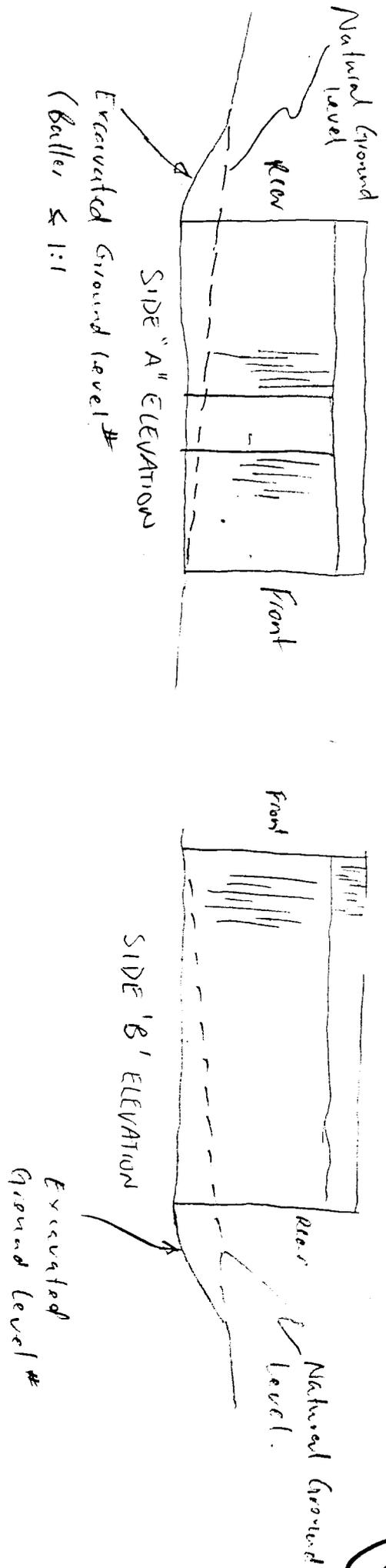
GROUND LEVELS AROUND PROPOSED IMPLEMENT SITE

DRAWN BY: NATHAN CLARK

SCALE: NTS

DATE: 13/10/99

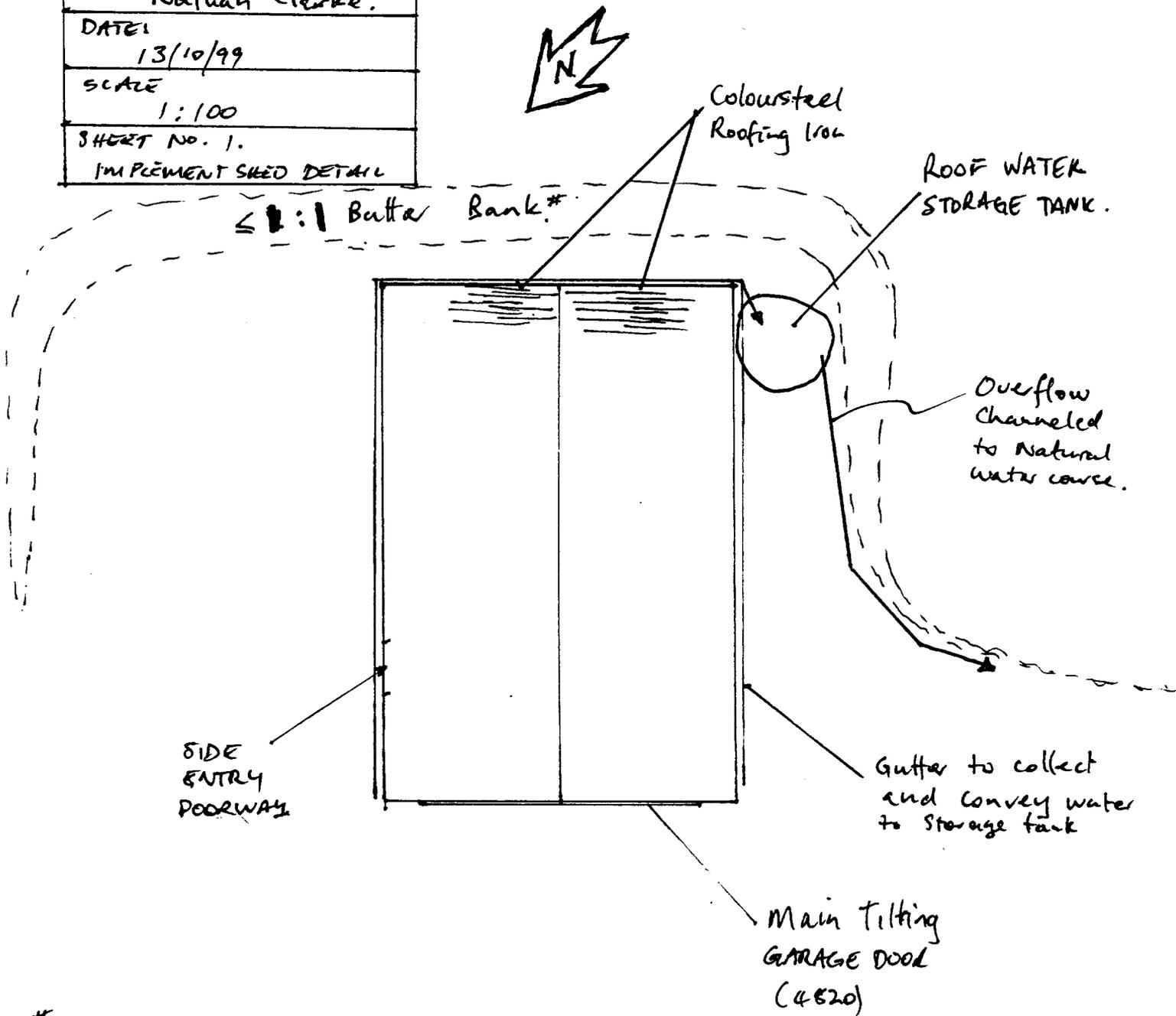
SHEET NO. 2.



#Note: Excavation to be less than 1.5m depth and Batter <math>\le 1:1</math>.

992906

DETAIL PLAN (SITE). OF PROPOSED IMPLEMENT SHED 800 MT CARGILL ROAD.
DRAWN BY: Nathan Clarke.
DATE: 13/10/99
SCALE 1:100
SHEET NO. 1. IMPLEMENT SHED DETAIL



# Note:- Bank on Bank to be  $\leq 1:1$   
and depth of Excavation Less than  
1.5m. Site is classified Rural and  
~~Prop~~ District plan allows excavation  
to 1.5m Depth without Excavation/Earthworks consent.

992906

**SITE PLAN OF PROPOSED  
RESIDENCE, 800 MT CARGILL  
ROAD, DUNEDIN.**

CLARKE RESIDENCE SITE PLAN PROPOSED FOR 800 MT CARGILL ROAD.
DRAWN BY: NATHAN CLARKE
DATE: 13/10/99
SCALE: 1:1000
SHEET NO: 0 SITE PLAN.

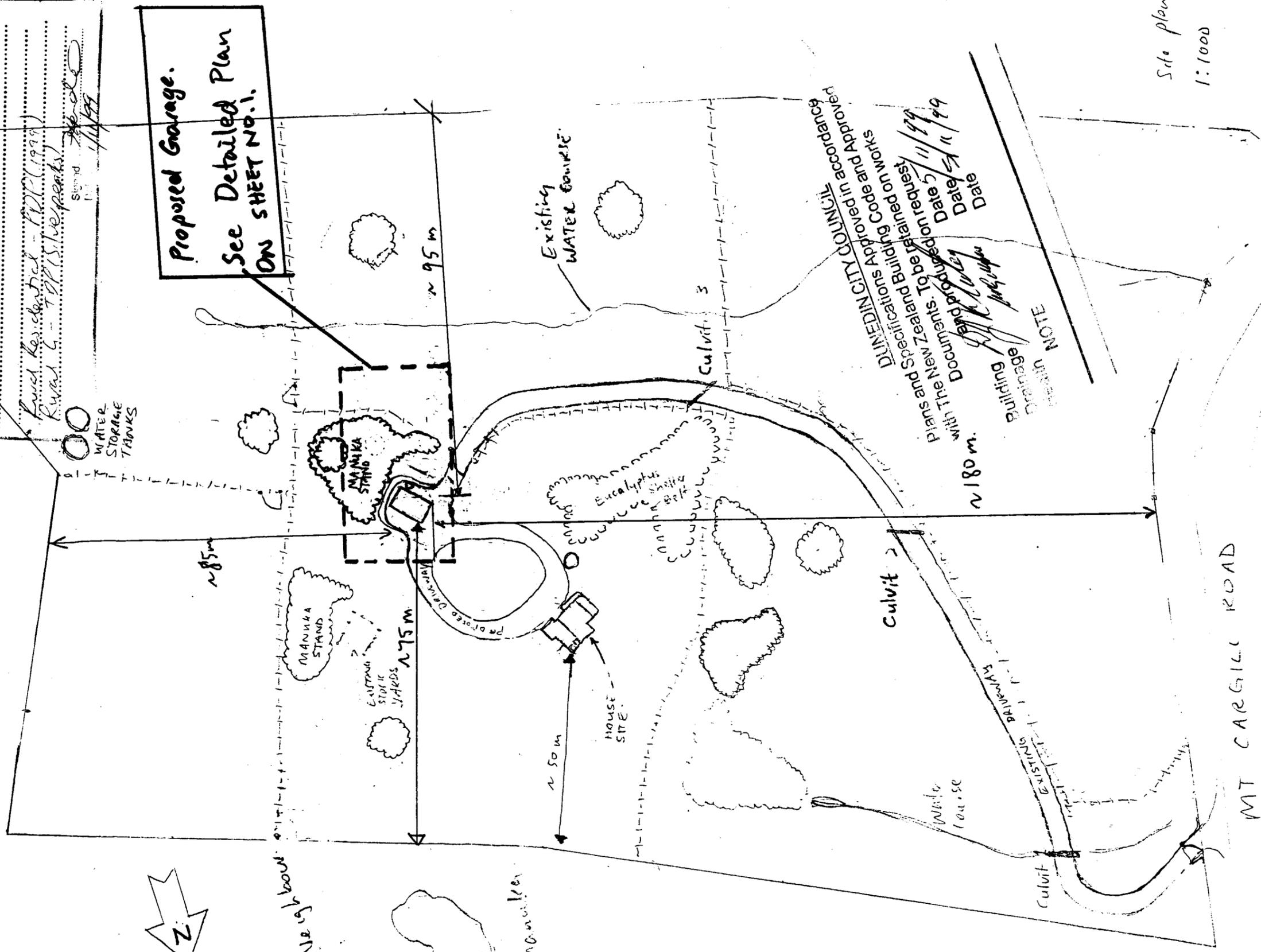
Scale 1:1000

DUNEDIN CITY COUNCIL  
Pursuant to the provisions of the District Scheme, the plans and specifications are approved, provided that no change shall be made to the details shown hereon, and contained in the specification attached hereto, and subject to

Final Residential - DP (1999)  
Rural 6 - TPP (5.6 weeks)  
Signed: *[Signature]*  
Date: 11/11/99



**Proposed Garage.**  
See Detailed Plan  
ON SHEET NO.1.



DUNEDIN CITY COUNCIL  
Plans and Specifications Approved in accordance with The New Zealand Building Code and Approved Documents. To be retained on request and produced on request.  
Date: 11/11/99  
Date: 11/11/99  
Date: 11/11/99  
Date: 11/11/99  
NOTE  
Building  
Garage  
Retain

992906

Site plan  
1:1000

**FREDERICK R SMITH** B E (civil), MIPENZ, MACENZ

Registered Consulting Structural and Civil Engineer

23 Glamorgan Drive, Torbay, Auckland Telephone/Facsimile 64 9 473 1262  
P O Box 35 422, Browns Bay, Auckland Mobile Telephone 025 997 139

## STEEL FRAMED BUDGET GARAGES DWELLINGS FARMSHEDS & CARPORTS

### STATEMENT OF DURABILITY

#### NEW ZEALAND BUILDING CODE

The DURABILITY requirement, of the Building Regulations 1992, requires the structure of the building, without reconstruction or major renovation, to have a life of at least 50 years (clause B2.3 (a)) whereas building elements which do have a moderate ease of access (clause B2.3 (c)) shall have a life of at least 15 years and components such as linings, doors and windows shall have a life of at least 5 years (clause B2.3 (d)), with only normal maintenance, unless the building is given a *specified intended life*.

#### NORMAL CONDITIONS

In areas of normal conditions (500m from breaking surf, in the immediate vicinity of calm salt water such as estuaries and harbour foreshores, more than 500 metres from industrial emissions and subject to little or no fallout from them and away from geothermal areas) provided the building is located, where possible, with the openings away from prevailing inclement weather and the building is given 'normal maintenance', as specified below, then the life of the building will be 50 years.

#### CORROSIVE CONDITIONS

In areas of corrosive conditions (within 500m of breaking surf, heavy salt deposits, constant smell of salt spray, the continuous presence of a smell of industrial chemicals, such as sulphur or acids, close to industrial emissions and/or geothermal areas and subject to light fallout from them) because all of the components of the building can be replaced 'with moderate ease' without 'reconstruction or major renovation' the specified intended life of the building is nominated as 20 years. After this period the local authority may request an inspection and assessment of the future life of the building.

For the life of the building to be at least 20 years - framing that is to be boxed or lapped with other framing members shall prior to assembly be degreased, etched with a primer suitable for galvanised iron and zincalume and given a heavy coat of anti-corrosive zinc-rich paint, or equivalent protective paint system, as supplied by a reputable paint supplier and the zinc plated Rawlplug screwbolts, securing the building to the foundations, shall be liberally coated with Selleys Roof and Gutter Sealant, as shall the angle fixing brackets.

#### NORMAL MAINTENANCE

'Normal maintenance', as required by the Building Code, shall consist of annual washing of areas, unwashed by rain, for buildings in moderate corrosion environments, twice annually washing down, in areas of severe corrosion and a complete protective painting system, for buildings in very severe atmospheres.

(amended : 02.07.97)

#### BUDGET GARAGES

5A Ryan Place, PO Box 76-318, Manukau City, Auckland  
Free Phone 0800 103 545 Facsimile 09 262 2798

**FREDERICK R SMITH** (Civil), MIPENZ, MACENZ

Registered Consulting Structural and Civil Engineer

23 Glamorgan Drive, Torbay, Auckland Telephone/Facsimile 64 9 473 1262  
P O Box 35 422, Browns Bay, Auckland Mobile Telephone 025 997 139

1614  
2 July 1997

The Manager  
Local Territorial Authority

Attention: Senior Building Controller

Dear Sir

### STEEL FRAMED BUDGET BUILDINGS DWELLINGS - GARAGES - FARMSHEDS - HAYBARNES - CARPORTS

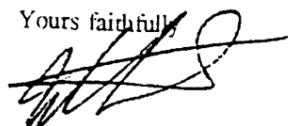
As the New Zealand representative, of the Australian designer of the above range of Spic-N-Span cold formed steel framed buildings, I have been requested, by some Local Authorities, to issue a blanket Producer Statement for these specific designed structures.

I consider the Producer Statement to be a legal document, that is unique to a particular building on one site, but I can issue the following statement:

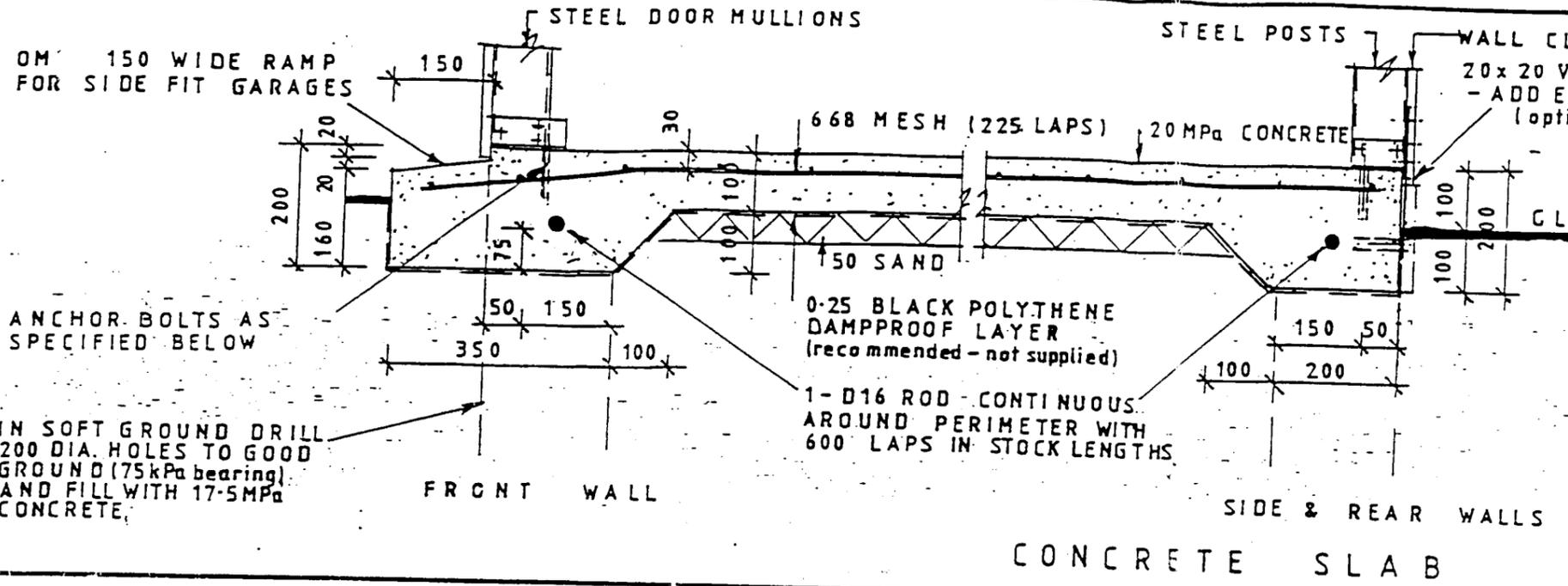
1. The buildings are constructed from high tensile steel with high tensile steel cladding in which no timber is used except for dwellings when timber studding may be used to support interior wall linings.
2. The buildings are fabricated from zincalume protected steelwork, all members are fixed with zinc plated Tek screws and any member, 'with moderate ease' can be removed and treated for corrosion at any time, 'without reconstruction or major renovation'.
3. The buildings are light and, even including the concrete floor slab, the required ground bearing pressure is less than 75kPa.
4. The maximum uplift, in any post, is 12.5 KN and the building will be stable provided the support system will resist these forces. Zinc plated Rawlplug Excalibur screwbolts are used to fix the structure to the concrete floor slab or concrete footings and these fasteners can be removed for inspection and treatment or replacement, at any time.
5. The W37 and W42 buildings will withstand basic non-directional wind speeds (NZS 4203:1992 clause 5.4.2) of 45 and 50 metres per second respectively.
6. The buildings will withstand snow loads of 0.7Kpa and loadings of up to 1.2kPa can be resisted by strengthening the roof trusses and adding extra purlins.

Please contact me for further information.

Yours faithfully,

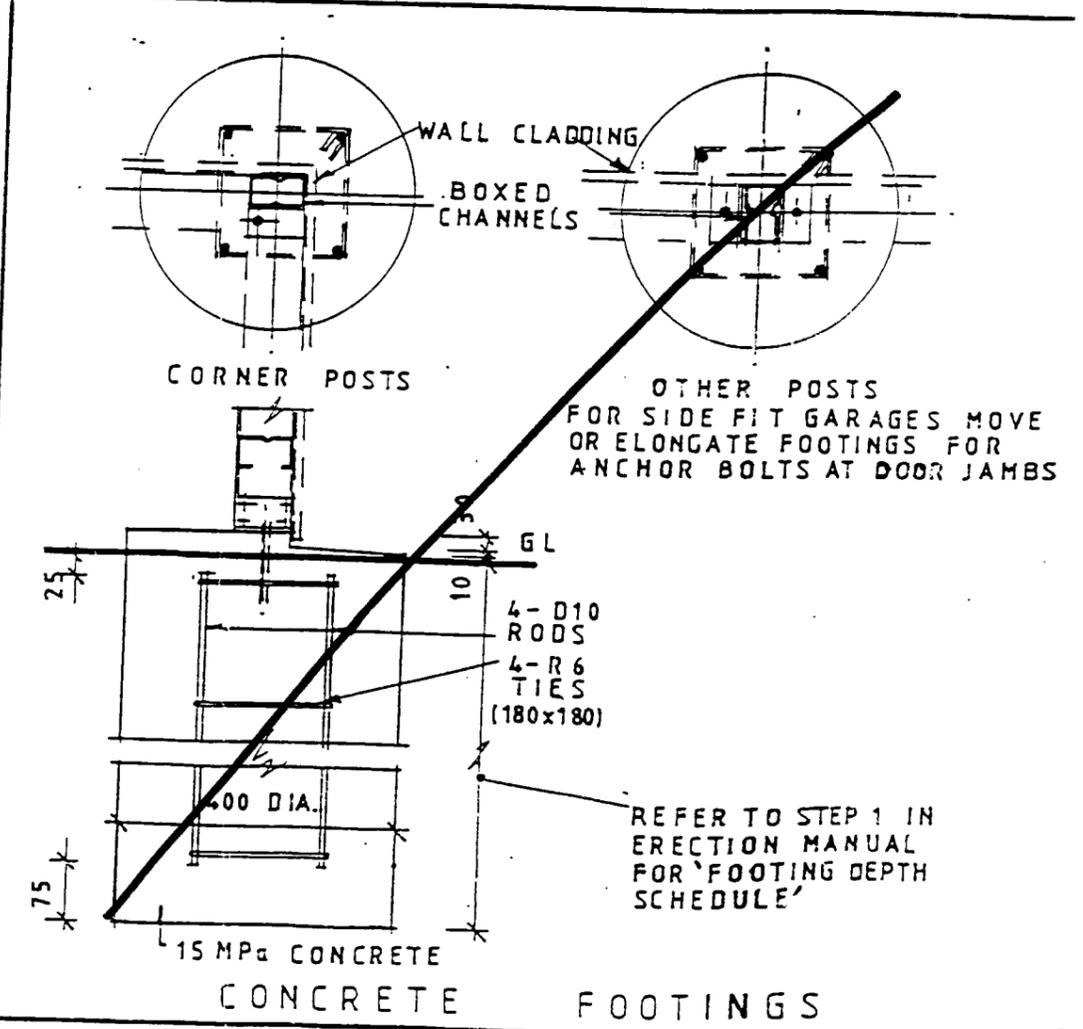
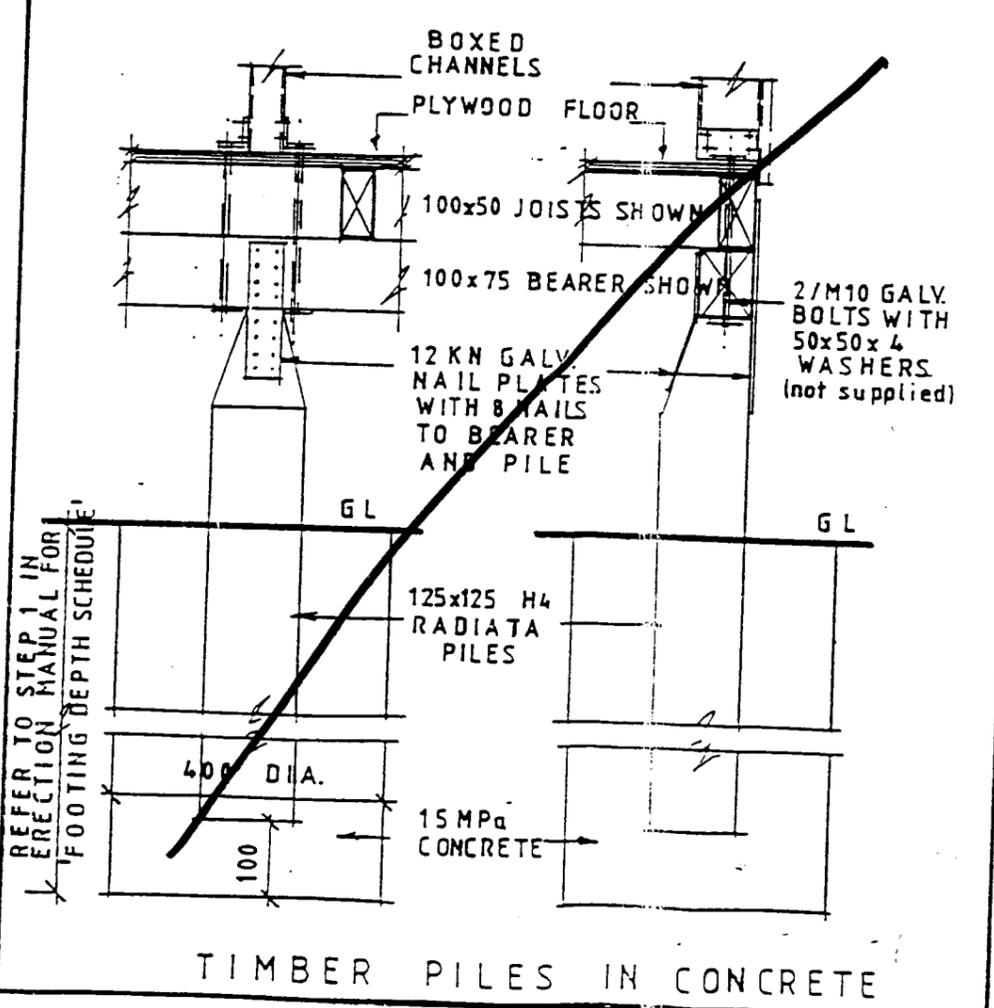
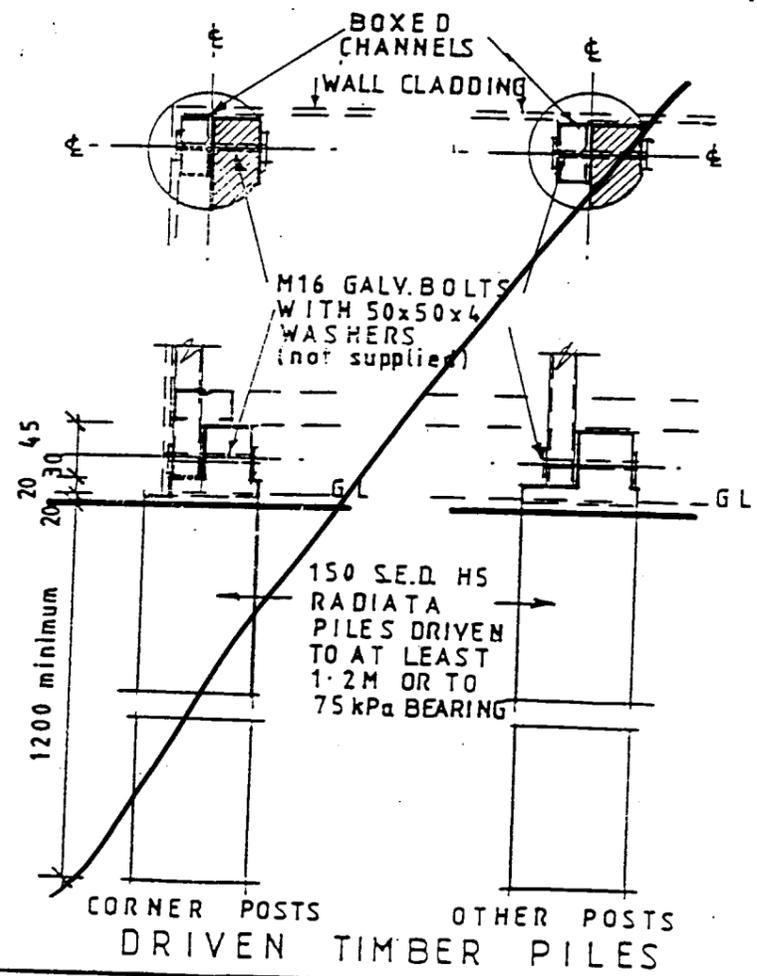
  
F.R. Smith

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**PROPOSED ✓**  
**SLAB AND FOUNDATION SCHEDULE**

☛DELETE OPTIONS NOT APPLICABLE☛



ANCHOR BOLTS TO CONCRETE SHALL BE RAWLPLUG M10x75 ZINC PLATED HEX HEADED EXCALIBUR SCREW BOLTS

ALL WORK SHALL CONFORM TO THE REQUIREMENTS OF THE NEW ZEALAND BUILDING CODE

Designer: Des Newport, Consulting Engineer  
 Brisbane, Australia

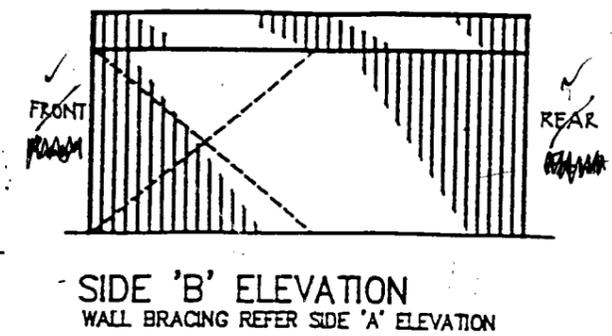
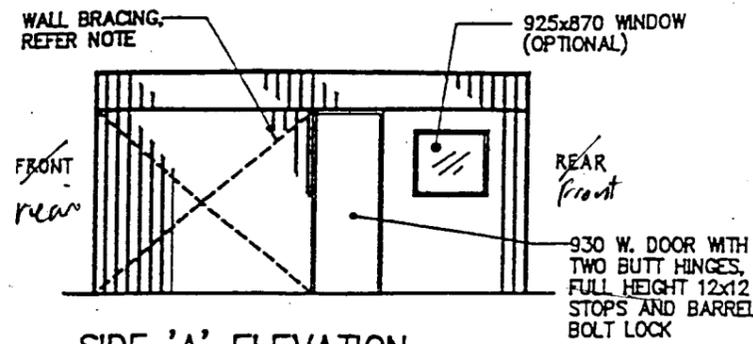
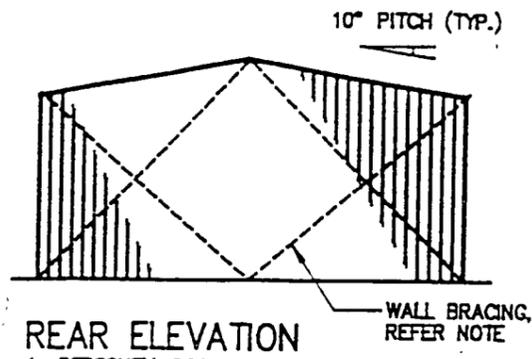
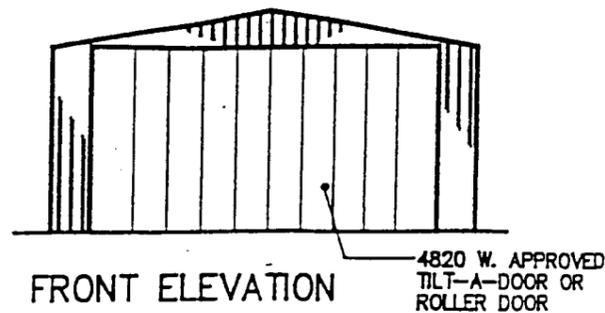
Regd. Eng: FREDERICK R SMITH  
 CONSULTING ENGINEER  
 23 Glamorgan Drive, Torbay  
 Auckland Ph/Fx 09 473 1262

Manuf. Agent: Spic - N. Span, Brisbane, Australia

25.7.96 amended  
 28.8.96

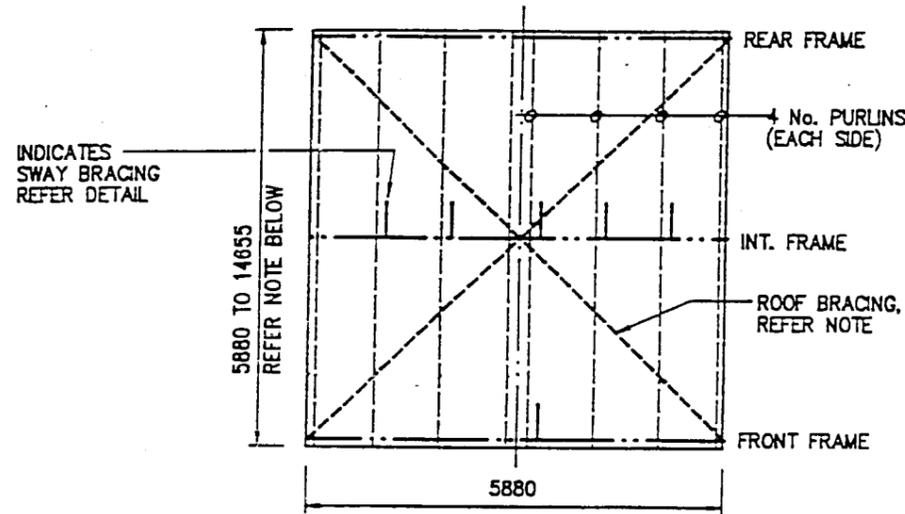
BUDGET GARAGES LTD  
 STEEL FRAMED GARAGES  
 CONCRETE FLOOR SLAB - FOOTINGS OR TIMBER PILES

**SHEET 4**  
 992906



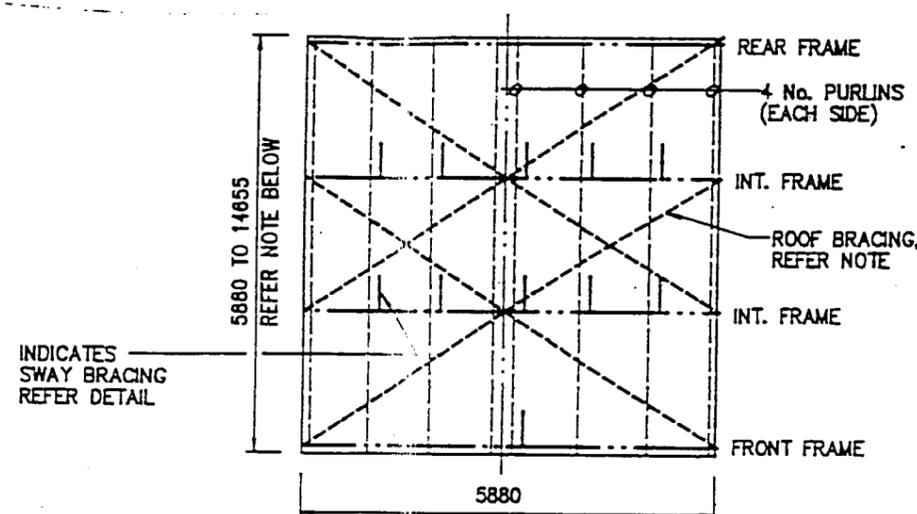
- PERSONNEL DOOR MAY BE INSTALLED IN THIS WALL PROVIDED THE NUMBER OF BRACING SETS IS MAINTAINED AS SCHEDULED
- WALL BRACING (2 BAYS) EX. G550 STRAPS:-
  - S42 - 6-12m L. GARAGE - 21x0.8 STRAPS 3 SCREWS/CONN.
  - 15m L. GARAGE - 50x0.8 STRAPS 4 SCREWS/CONN.
  - S50 - 6-9m L. GARAGE - 50x0.8 STRAPS 3 SCREWS/CONN.
  - 12-15m L. GARAGE - 50x0.8 STRAPS 4 SCREWS/CONN.

- WALL BRACING EX. G550 STRAPS:-
- S42 - 6-9m L. GARAGE - 1 BAY OF 21x0.8 STRAPS 3 SCREWS/CONN.
  - 12-15m L. GARAGE - 2 BAYS OF 21x0.8 STRAPS 2 SCREWS/CONN.
  - S50 - 6m L. GARAGE - 1 BAY OF 50x0.8 STRAPS 5 SCREWS/CONN.
  - 9-12m L. GARAGE - 2 BAYS OF 21x0.8 STRAPS 3 SCREWS/CONN.
  - 15m L. GARAGE - 3 BAYS OF 21x0.8 STRAPS 3 SCREWS/CONN.



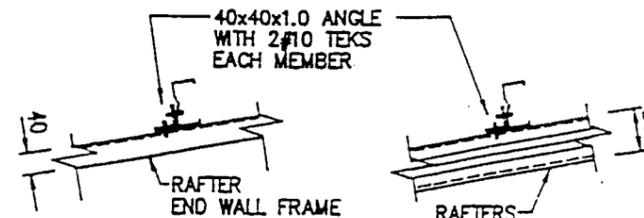
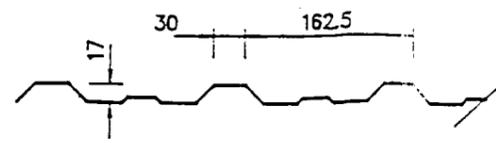
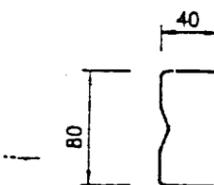
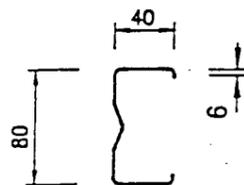
FRAMING PLAN - S42

- S42, 6m WIDE GARAGES MAY BE EXTENDED TO MAXIMUM 15m LONG BY INSERTING INTERNAL FRAMES AT 3000 CTS. MAXIMUM. BRACING LAYOUT SIMILAR.
- ROOF BRACING EX. G550 STRAPS:-
  - 6-12m L. GARAGE - 21x0.8 STRAPS (3 SCREWS/CONN.)
  - 15m L. GARAGE - 50x0.8 STRAPS (3 SCREWS/CONN.)

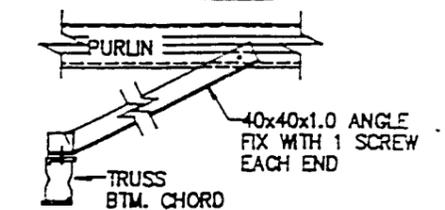


FRAMING PLAN - S50

- S50, 6m WIDE GARAGE MAY BE EXTENDED TO MAXIMUM 15m LONG BY INSERTING INTERNAL FRAMES AT 2000 CTS. MAXIMUM. BRACING LAYOUT SIMILAR.
- ROOF BRACING EX. G550 STRAPS:-
  - 6-9m L. GARAGE - 50x0.8 STRAPS 4 SCREWS/CONN.
  - 12-15m L. GARAGE - 50x0.8 STRAPS 5 SCREWS/CONN.



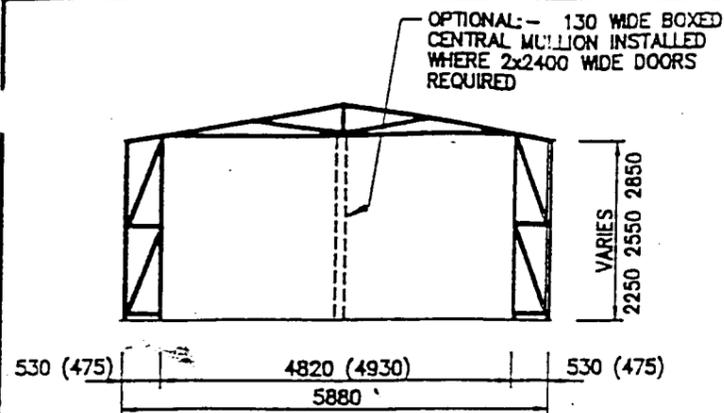
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TYPICAL SWAY BRACING DETAIL

© spic-n-span 1995

DES NEWPORT CONSULTING ENGINEERS Pty. Ltd. PO Box 76318, MANUKAU CITY, AUCKLAND 208 CONSTANCE STREET, FORTITUDE VALLEY BRISBANE QLD, 4006 AUSTRALIA Phone +61 7 3252 9822 Fax +61 7 3252 9844		CLIENT <b>BUDGET GARAGES Ltd.</b> 5a RYAN PLACE, MANUKAU CITY, AUCKLAND Phone (09) 262 2803 Fax (09) 262 2798 Freephone 0800 10 35 45	PROJECT 2.4m, 3m Height RANGE OF GARAGES 6m WIDE FRONT ENTRY SITE WIND SPEED 42m/s AND 50m/s	SUBJECT ELEVATIONS, FRAMING PLANS, CONNECTION DETAILS	JOB No. 91099NZ DWG No. 1 REVISION SUFFIX A
A	RELEASED FOR BUILDING APPROVAL	JULY 1998			
SUFF	REVISION	DATE			



**FRONT FRAME**

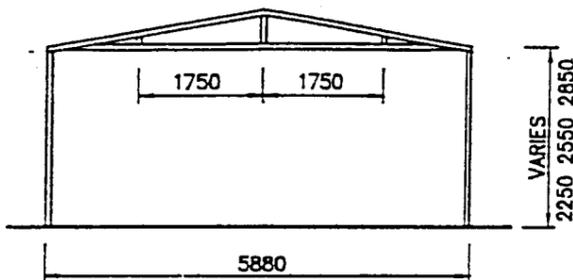
- 1 ALL MEMBERS TO BE EX. 80x40 CHANNELS, 0.8 B.M.T.
- 2 DOOR HEAD AND DOOR MULLIONS TO BE BOXED CHANNELS

**FRONT FRAME - HOLD DOWN SCHEDULE**

FIX EACH COLUMN OF FRONT FRAME WITH HOLD DOWN CLEAT/S FIXED TO CONCRETE WITH CHEMSETS AND TO COLUMN WITH SCREWS:-

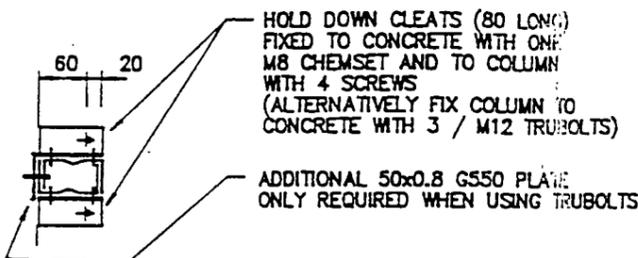
<b>2.4m HIGH GARAGE</b>	<b>2.7m AND 3.0m HIGH GARAGE</b>
6m LONG: S42 - 2/CH8 (4 SCREWS) S50 - 2/CH10 (5 SCREWS)	6m LONG: S42 - 2/CH10 (6 SCREWS) S50 - 2/CH12 (8 SCREWS)
9m LONG: S42 - 2/CH10 (5 SCREWS) S50 - 2/CH12 (7 SCREWS)	9m LONG: S42 - 2/CH12 (8 SCREWS) S50 - 4/CH10 (10 SCREWS)
12m LONG: S42 - 2/CH10 (6 SCREWS) S50C - 2/CH12 (9 SCREWS)	12m LONG: S42 - 4/CH10 (10 SCREWS) S50 - 4/CH12 (14 SCREWS)
15m LONG: S42 - 2/CH12 (6 SCREWS) S50 - 4/CH10 (12 SCREWS)	15m LONG: S42 - 4/CH12 (14 SCREWS) S50 - 4/CH12 (16 SCREWS)

NOTE:- NUMBER OF SCREWS INDICATED IS THE TOTAL NUMBER PER COLUMN (DIVIDE EQUALLY BETWEEN THE NUMBER OF CLEATS REQUIRED)



**INTERNAL FRAME**

- 1 ALL MEMBERS TO BE BOXED 80x40 CHANNELS (RAFTERS TO BE 2 / 80x40 CHANNELS)



**INTERNAL FRAME - HOLD DOWN**

- 1 HOLD DOWN CLEATS TO BE EX. 40x40x2.0 ANGLE
- 2 BOLTS DESIGNATED CH8 TO CH12 REFERS TO M8 TO M12 CHEMSETS INSTALLED STRICTLY IN ACCORDANCE WITH THE MANUFACTURERS INSTRUCTIONS.
- 3 M8 TO M12 CAST-IN BOLTS MAY BE USED IN LIEU OF CHEMSETS
- 4 M10 "AVDEL TEXTRON SCREWBOLTS", 75mm EMBEDMENT INTO CONCRETE, MAY BE USED IN LIEU OF CHEMSETS

**REAR FRAME NOTES**

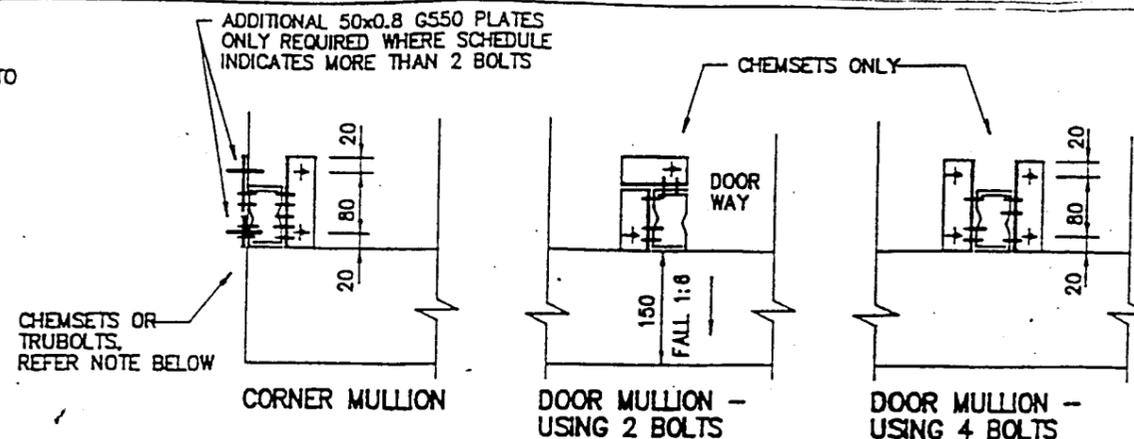
- 1 ALL MEMBERS EX. 80x40 CHANNELS, 0.8 B.M.T. (BOXED MULLIONS TO BE FLANGE CONNECTED WITH SCREWS AT 600 CTS.)
- 2 GIRT LAYOUT TO BE AS SHOWN. ALL GIRTS IN END WALL EX. SINGLE CHANNELS. (SIDE WALL GIRT LAYOUT SIMILAR).
- 3 CORNER MULLIONS TO BE TYPE A, ALL D.W.V., ALL HEIGHTS
- 4 NUMBER OF "INTERNAL" MULLIONS AS PER FOLLOWING:-

2400 H. GARAGE	1 TYPE B - S42 1 TYPE B - S50	
2700 H. GARAGE	1 TYPE B - S42 3 TYPE B - S50	
3000 H. GARAGE	1 TYPE B - S42 3 TYPE B - S50	

**SIDE WALL GIRT NOTE**

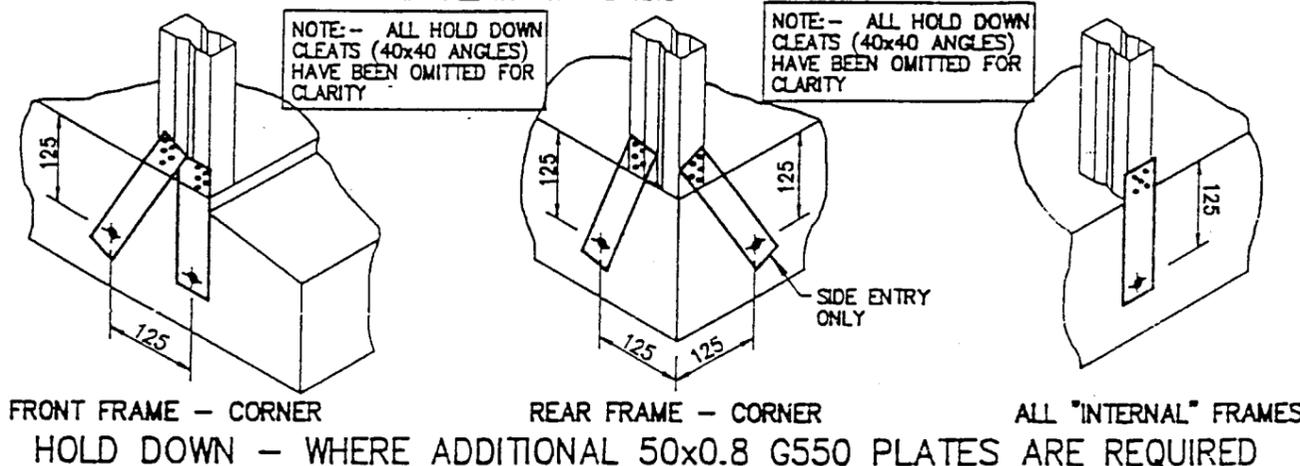
- 1 ALL SIDE WALL GIRTS TO BE SINGLE 80x40 CHANNELS, 0.8 B.M.T.
- 2 SPACING OF SIDE WALL GIRTS AS PER REAR WALL ELEVATION.

NOTE:- M10 "AVDEL TEXTRON SCREWBOLTS" MAY BE USED IN LIEU OF CHEMSETS FOR HOLD DOWN OF ALL FRAMES (SEE NOTES)



**FRONT FRAME - HOLD DOWN**

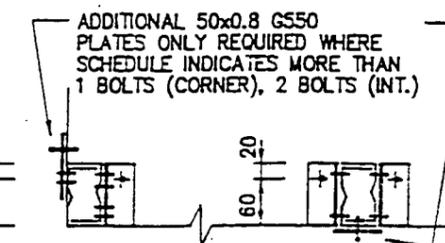
- 1 M12 TRIBOLTS MAY BE USED IN LIEU OF CHEMSETS FOR HOLD DOWN OF FRONT FRAME CORNER MULLION IN FOLLOWING CASES ONLY:-  
 - 2.4m HIGH GARAGE; S42, 6-15m L GARAGE; USE 3 TRIBOLTS  
 S50, 6-9m L GARAGE; USE 3 TRIBOLTS  
 12-15m L GARAGE; USE 4 TRIBOLTS  
 - 2.7-3.0m H. GARAGE; S42, 6m L GARAGE; USE 3 TRIBOLTS  
 9-12m L GARAGE; USE 4 TRIBOLTS  
 S50, 6-9m L GARAGE; USE 4 TRIBOLTS
- 2 REFER "INTERNAL FRAME - HOLD DOWN" FOR NOTES REGARDING:-  
 - SCREWBOLTS AND CAST-IN BOLTS USED IN LIEU OF CHEMSETS  
 - INSTALLATION OF CHEMSETS



**REAR FRAME CORNER - HOLD DOWN SCHEDULE**

HOLD DOWN CLEAT/PLATE FIXED TO CONCRETE WITH CHEMSET/S AND TO COLUMN WITH SCREWS:-

<b>6m LONG GARAGE:</b> S42 - 1/CH10 (2 SCREWS) S50 - 1/CH10 (2 SCREWS)
<b>9m LONG GARAGE:</b> S42 - 1/CH10 (3 SCREWS) S50 - 2/CH8 (3 SCREWS)
<b>12m LONG GARAGE:</b> S42 - 2/CH8 (3 SCREWS) S50 - 2/CH10 (3 SCREWS)
<b>15m LONG GARAGE:</b> S42 - 2/CH10 (4 SCREWS) S50 - 2/CH10 (4 SCREWS)



**REAR FRAME - HOLD DOWN**

- 1 M12 TRIBOLTS MAY BE USED IN LIEU OF CHEMSETS FOR HOLD DOWN REFER FOLLOWING:-  
 - CORNER MULLIONS; USE 2 TRIBOLTS  
 - "INTERNAL" MULLIONS; USE 3 TRIBOLTS
- 2 REFER "INTERNAL FRAME - HOLD DOWN" FOR NOTES REGARDING:-  
 - SCREWBOLTS AND CAST-IN BOLTS USED IN LIEU OF CHEMSETS  
 - INSTALLATION OF CHEMSETS

**REAR FRAME "INTERNAL" - HOLD DOWN SCHEDULE**

TWO HOLD DOWN CLEATS, EACH FIXED TO CONCRETE WITH ONE CHEMSETS AND TO COLUMN WITH SCREWS:-

<b>6-12m LONG GARAGE:</b> S42 - CH8 BOLT, 3 SCREWS S50 - CH8 BOLT, 3 SCREWS
<b>15m LONG GARAGE:</b> S42 - CH10 BOLT, 3 SCREWS S50 - CH10 BOLT, 3 SCREWS

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<p>DES NEWPORT CONSULTING ENGINEERS Pty. Ltd.          PO Box 76318, MANUKAU CITY, AUCKLAND          208 CONSTANCE STREET, FORTITUDE VALLEY          BRISBANE QLD. 4006 AUSTRALIA          Phone +61 7 3252 9822 Fax +61 7 3252 9844</p>		<p>CLIENT  <b>BUDGET GARAGES Ltd.</b>          5a RYAN PLACE, MANUKAU CITY, AUCKLAND          Phone (09) 262 2803 Fax (09) 262 2798          Freephone 0800 10 35 45</p>	<p>PROJECT          2.4m, <del>5m</del> Height          RANGE OF GARAGES          6m WIDE FRONT ENTRY          SITE WIND SPEED          42m/s AND <del>50m/s</del></p>	<p>SUBJECT          DETAILS OF FRAMES,          HOLD DOWN DETAILS</p>	<p>JOB No.          91099NZ          DWG No.          2          REVISION SUFFIX          A</p>
<p>A RELEASED FOR BUILDING APPROVAL JULY 199C</p>	<p>SUFF REVISION DATE</p>	<p>© spic-n-span 1995</p>			

- GENERAL NOTES**
- 1 ALL WORK SHALL CONFORM TO THE NEW ZEALAND BUILDING CODE.
  - 2 DRAWINGS SHALL NOT BE SCALED FOR ANY FABRICATION OR ERECTION DETAILS.
  - 3 AT SET OUT, DIAGONALS MUST BE CAREFULLY CHECKED TO ENSURE BUILDING IS SQUARE.

- LOADINGS**
- 1 STRUCTURE HAS NOT BEEN DESIGNED TO CARRY OCCASIONAL LOADING AS STIPULATED IN 3.8.3 OF AS 1170.1.
  - 2 WIND LOAD IN ACCORDANCE WITH NZS 4203-1992 D.W.V. REFERRED TO ON DRAWINGS ARE:  
-S42. ULTIMATE SITE WIND SPEED OF 42.5m/s  
-S50. ULTIMATE SITE WIND SPEED OF 50.4m/s
  - 3 ROOF LIVE LOAD:- 0.25 kPa
  - 4 MAXIMUM SNOW LOAD SHALL BE 0.7 kPa.  
HEAVIER SNOW LOAD WILL NEED EXTRA PURLINS.
  - 5 BUILDING SITES ABOVE 1000m ABOVE SEA LEVEL WILL NEED SPECIFIC DESIGN.

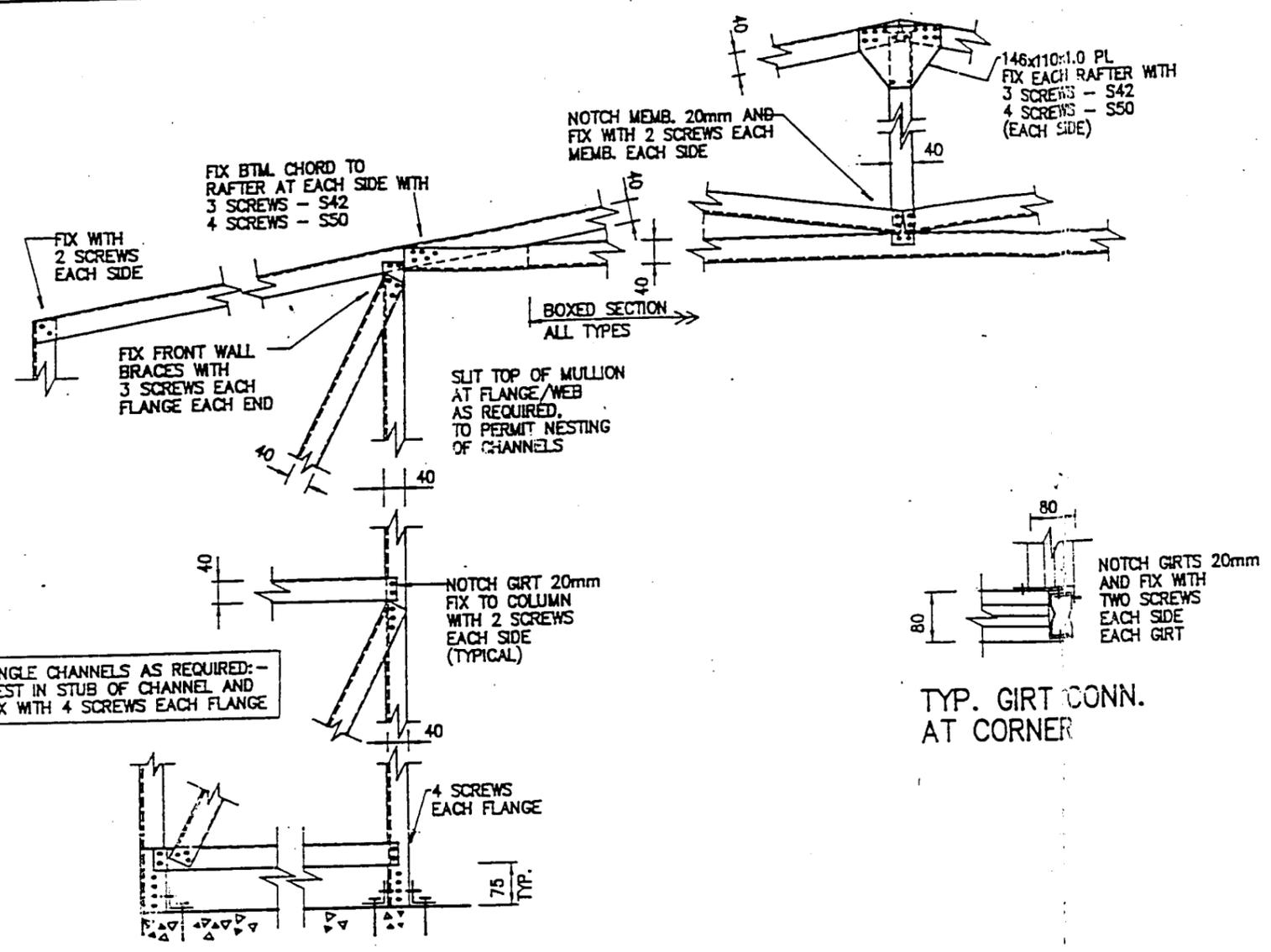
- CONCRETE**
- 1 SERVICES OF AN EXPERIENCED CONSULTING ENGINEER SHOULD BE ENGAGED TO ADVISE ON SUITABILITY OF SOIL CONDITIONS.
  - 2 CONCRETE SHALL HAVE MAXIMUM AGGREGATE SIZE OF 20 mm. SLUMP OF 80±20 AND ULTIMATE COMPRESSION STRENGTH AT 28 DAYS OF 20 MPa.
  - 3 CONCRETE SHALL BE PLACED IN ONE CONTINUOUS OPERATION AND BE COMPACTED BY EXTERNAL VIBRATION OR HAND TAMPING.
  - 4 FOOTING EXCAVATIONS SHALL BE THOROUGHLY CLEANED OF ALL LOOSE MATERIAL BEFORE PLACING CONCRETE.
  - 5 FOUNDING MATERIAL SHALL HAVE SAFE BEARING CAPACITY OF 75 kPa.
  - 6 POUR SLAB ON 50 mm COMPACTED SAND AND 25mm POLYTHENE WATERPROOF MEMBRANE (LAPPED 200 AND SEALED WITH APPROPRIATE TAPE).

- STEELWORK**
- 1 ALL STRUCTURAL FRAMING MEMBERS SHALL BE G550 GRADE STEEL AND ALL CLEATS SHALL BE G450 GRADE STEEL GALVANIZED TO MIN Z200.
  - 2 ROOF AND WALL SHEETING SHALL BE G550 GRADE STEEL PROTECTED WITH ZINCALUME AZ150.
  - 3 EVERY CLADDING SHEET IS TO BE FIXED AT RIDGE PURLINS AND EAVES WITH ONE SCREW AT EVERY PAN. AT OTHER PURLINS, GIRTS ETC. FIX WITH ONE SCREW AT EVERY SECOND PAN. ALL SCREWS INTO ROOF SHEETING TO HAVE NEOPRENE WASHERS.
  - 4 PURLINS AND GIRTS EX. 80x40 LIPPED, CRIMPED CHANNELS
  - 5 AT FRONT, INTERNAL AND REAR FRAMES CONNECT GIRTS WITH 2#10 SCREWS PER FLANGE PER MEMBER U.N.O. SCREWS TO HAVE MINIMUM EDGE DISTANCE OF 6mm AND A MINIMUM PITCH OF 12mm.
  - 6 SCREWS TO BE WAFERTEKS No. 10 U.N.O. MANUFACTURED BY DEUTSCHER (OR EQUIVALENT).
  - 7 FRAME AROUND PERSONNEL DOOR EX. 80x40x0.8 UNLIPPED CHANNELS. FIX MULLIONS TO FLOOR WITH 40x40x0.8 CLEAT AND 1/1010 DYNABOLT. -FLANGE CONNECT MEMBERS WITH 2 SCREWS EACH FLANGE. (FRAME AROUND WINDOW OPENING SIMILARLY)
  - 8 PERSONNEL DOOR FRAMED EX. 40x40 CHANNEL AND CLAD WITH STANDARD SHEETING PROFILE.
  - 9 RIDGES, BARGES AND ALL PENETRATIONS TO BE FLASHED WITH 0.4mm ZINCALUME FINISHED STEEL.
  - 10 GUTTER AND DOWNPIPES TO BE FITTED AND DISCHARGED TO EXISTING STORMWATER SYSTEM. SPLICE GUTTER AT CENTRE OF BUILDING. PROVIDE TWO SCREWS INTO EACH WEB AND SEAL WITH SILICONE.
  - 11 BOXED MEMBERS TO BE FLANGE CONNECTED WITH #10 TENSCREWS AT 600 CTS.
  - 12 STEELWORK SHALL ALL COMPLY WITH THE REQUIREMENTS OF:-  
NZS 4203 WIND LOADING CODE  
AS 1170 PARTS 1 & 2 LOADING CODES  
NZS 3404 STEEL STRUCTURE STANDARD  
AS 1538 COLD FORMED STEEL STRUCTURE CODE  
AS 1562 DESIGN AND INSTALLATION OF METAL ROOFING  
AS 1111/1112 METRIC HEXAGON COMMERCIAL BOLTS AND SCREWS  
AS 2313 GUIDE TO THE PROTECTION OF IRON AND STEEL  
AS 3568 SELF DRILLING SCREWS FOR BUILDING & CONSTRUCTION INDS

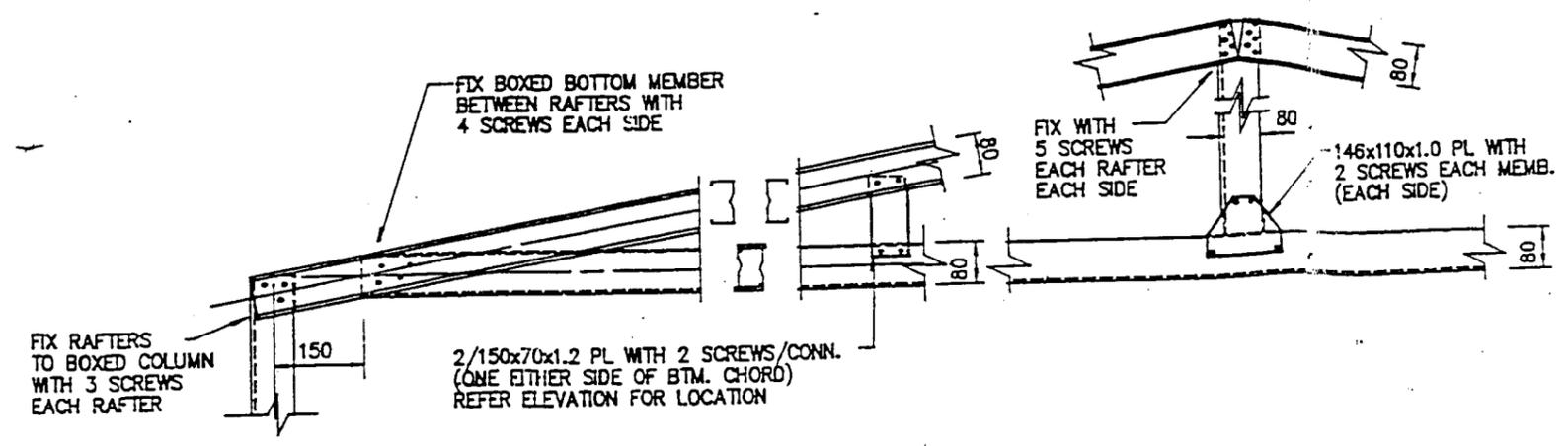
I certify that if constructed in accordance with these drawings the project will be structurally adequate complying with all relevant Australian and New Zealand Standards and Codes of Practice.



D.B. NEWPORT  
M.I.E. (Aust.)  
R.P.E. (1155)  
N.E.E.P. 3080 (N.T.)  
ED-1779 (VIC.)



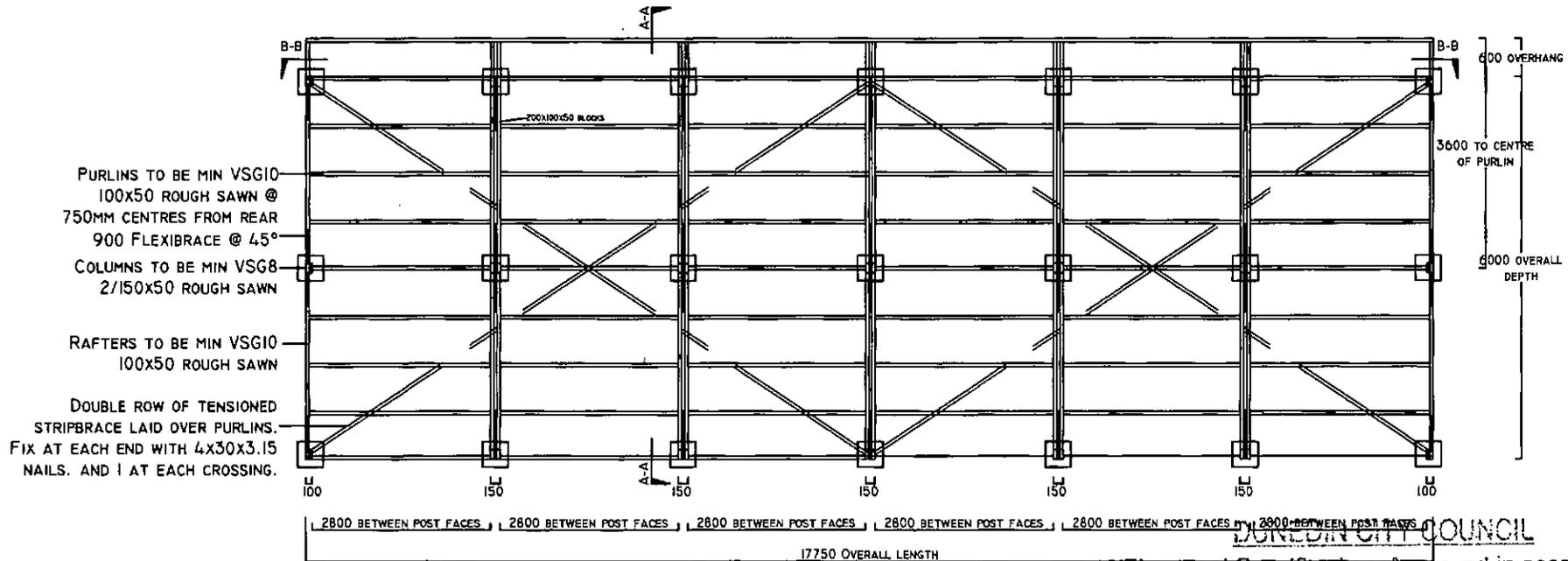
FRONT FRAME - CONNECTION DETAILS



INTERNAL FRAME - CONNECTION DETAILS

<p>DES NEWPORT CONSULTING ENGINEERS Pty. Ltd. PO Box 76318, MANUKAU CITY, AUCKLAND 208 CONSTANCE STREET, FORTITUDE VALLEY BRISBANE QLD. 4006 AUSTRALIA Phone +61 7 3252 9822 Fax +61 7 3252 9844</p>		<p>CLIENT <b>BUDGET GARAGES Ltd.</b> 5a RYAN PLACE, MANUKAU CITY, AUCKLAND Phone (09) 262 2803 Fax (09) 262 2798 Freephone 0800 10 35 45</p>		<p>PROJECT 2.4m, <del>5m</del> Height RANGE OF GARAGES 6m WIDE SITE WIND SPEED 42m/s AND <del>50m/s</del></p>		<p>SUBJECT CONNECTION DETAILS AND NOTES</p>		<p>JOB No. 91099NZ DWG No. 3 REVISION SUFFIX A</p>	
<p>REVISION</p>		<p>DATE</p>		<p>RELEASED FOR BUILDING APPROVAL</p>		<p>JULY 1996</p>		<p>© spic-n-span 1995</p>	

992906



DUNEDIN CITY COUNCIL  
 APPROVED BUILDING CONSENT DOCUMENTS  
 2012-217

Plans and Specifications Approved in accordance with The New Zealand Building Code and Approved Documents. To be retained on works and produced on request.

Building *Clarke J* Date 13-3-2012  
 Plumbing *M. Clark* Date 13-3-2012  
 Health Date

NOTE

**LOAD CONDITIONS:**

- WIND: V/HIGH
- SNOW: 0.9KPA



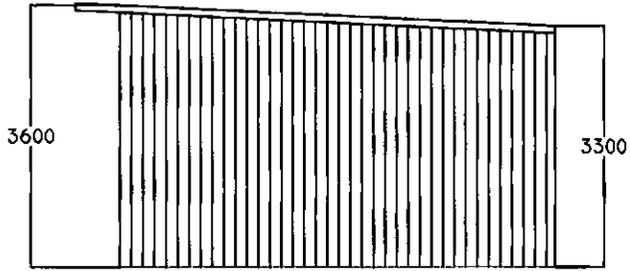
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**Stand-Fast Farm Building**

DRAWING TITLE  
**6m Deep - 3 Bay - 3.6m High  
 Below Ground Model**

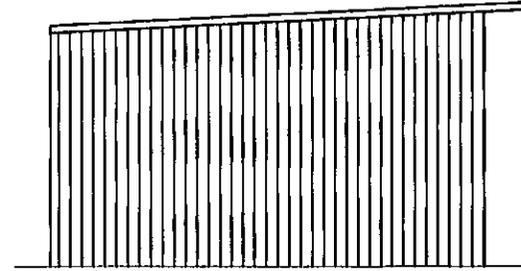
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 Ver 1.0

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 OF: 5

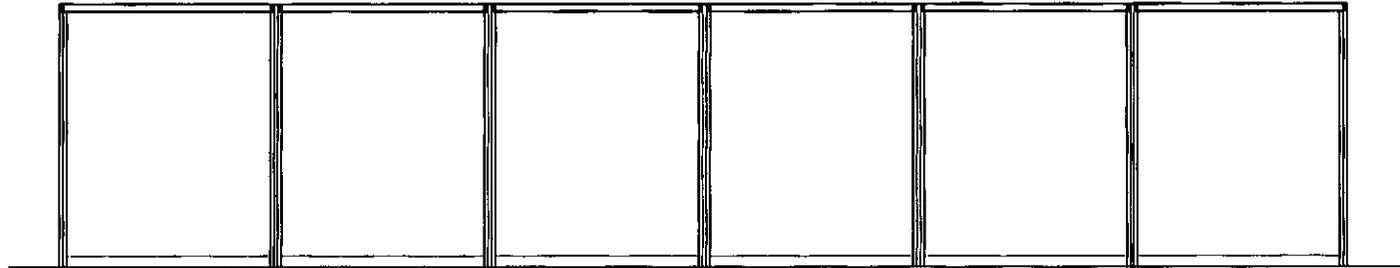
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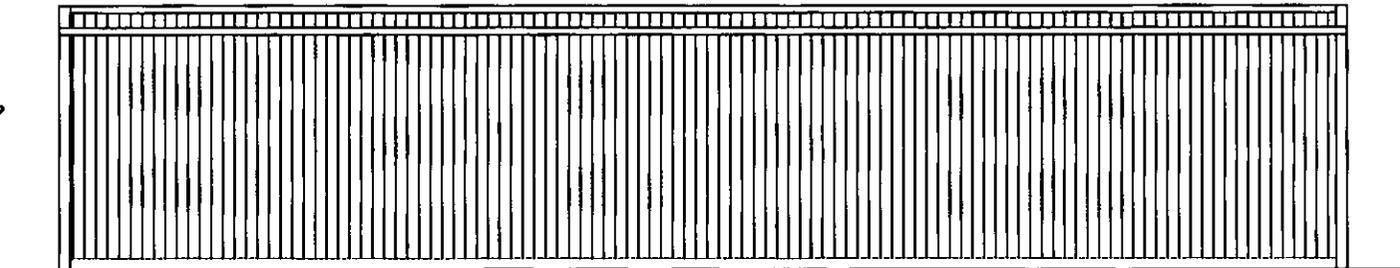
RIGHT ELEVATION



LEFT ELEVATION



FRONT ELEVATION



REAR ELEVATION

SPOUTING AND  
DOWN PIPE  
DISCHARGE  
CLEAR OF  
BUILDING.

**DCC COPY**  
DUNEDIN CITY COUNCIL  
APPROVED BUILDING CONSENT DOCUMENTS  
2012 - 217



PROJECT TITLE  
**Stand-Fast Farm Building**

DRAWING TITLE  
**6m Deep - 3 Bay - 3.6m High  
Below Ground Model**

SCALE: As Shown  
REVISION: Ver 1.0  
DATE: Feb 12  
FILE: SFB - 8000

SHEET:  
**2**  
OF: 5

CONTRACTOR TO VERIFY ALL DIMENSIONS PRIOR TO STARTING • ALL DIMENSIONS IN MM UNLESS STATED

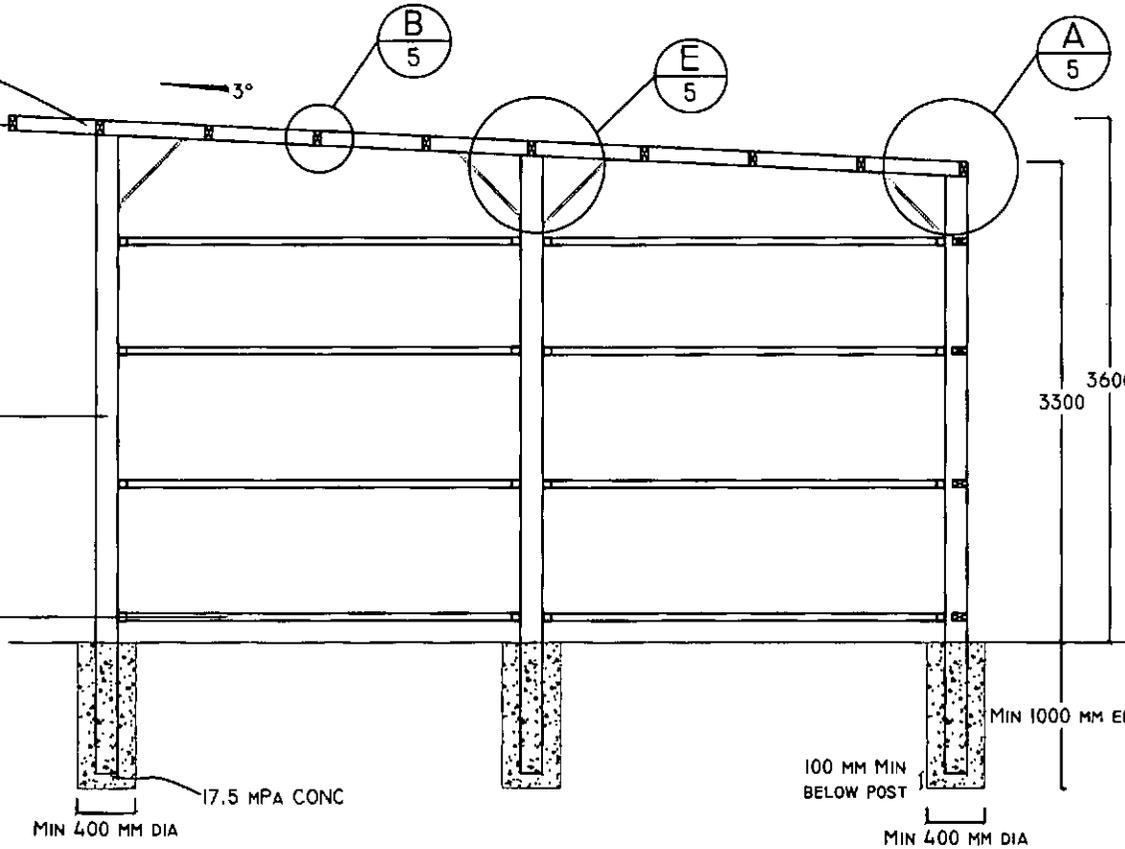
BUILDING CLAD WITH VERSATILE 6 RIB ROOF AND WALL CLADDING.

100x50 HI.2 RAFTERS

100x50 HI.2 PURLINS FIXED BETWEEN RAFTERS WITH 52x90 JH.

3/150x50 H5 POSTS

100x50 HI.2 GIRTS SECURED USING 52 x 90 JOIST HANGER



SECTION A-A

DUNEDIN CITY COUNCIL  
APPROVED BUILDING CONSENT DOCUMENTS

2012-217

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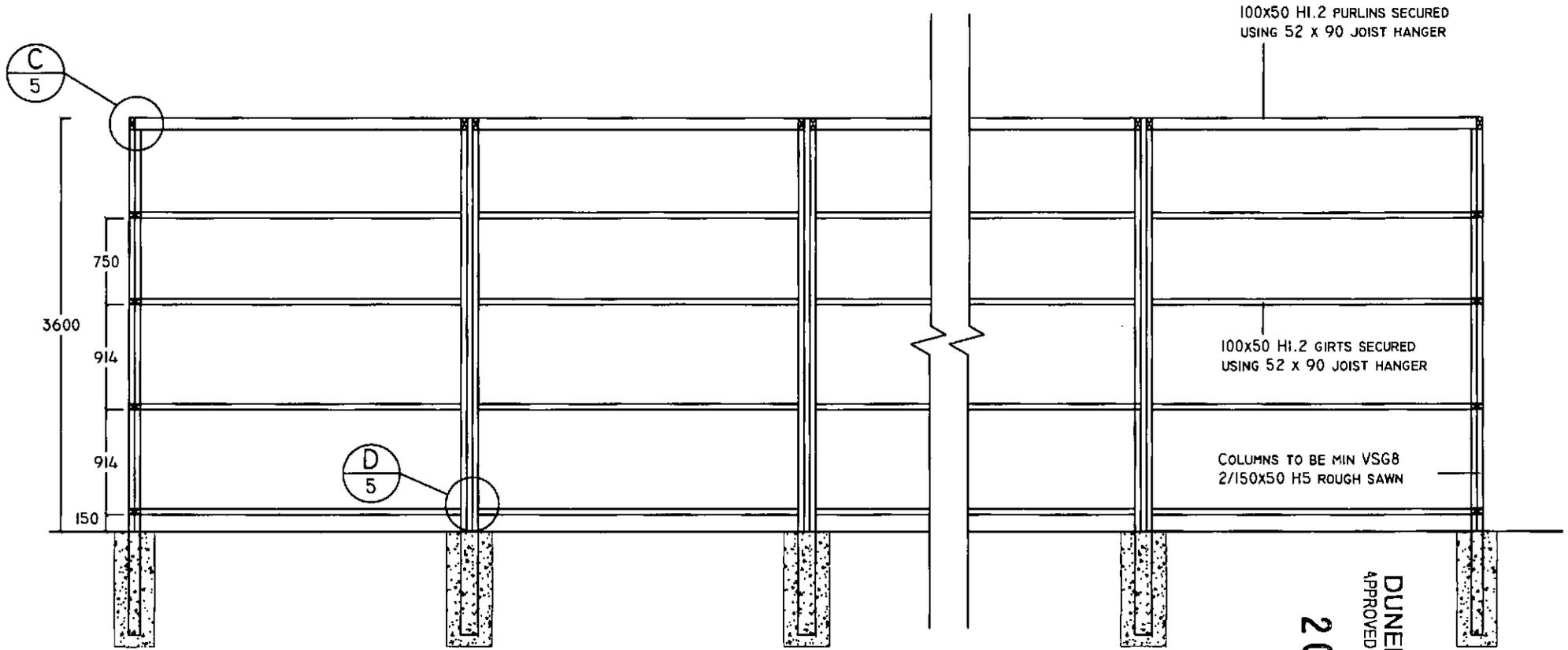
PROJECT TITLE  
**Stand-Fast Farm Building**

DRAWING TITLE  
**6m Deep - 3 Bay - 3.6m High  
Below Ground Model**

SCALE: 1:50    DATE: Feb 12  
REVISION:    FILE:  
Ver 1.0    SFB - 8000

SHEET:  
**3**  
OF: 5

CONTRACTOR TO VERIFY ALL DIMENSIONS PRIOR TO STARTING • ALL DIMENSIONS IN MM UNLESS STATED



SECTION B-B

2012 - 217

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APPROVED BUILDING CONSENT DOCUMENTS

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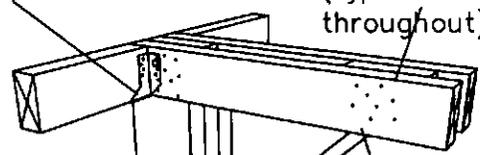
PROJECT TITLE	Stand-Fast Farm Building
---------------	--------------------------

DRAWING TITLE	6m Deep - 3 Bay - 3.6m High Below Ground Model
---------------	---

SCALE:	1:50	DATE:	Feb 12
REVISION:	Ver 1.0	FILE:	SFB - 8000

SHEET:	4
OF:	5

JH52x90 Joist Hanger. Fix with 4x 12g type 17 screws (1 per flange). Fold 100x50 Block, outside tab against rafter.

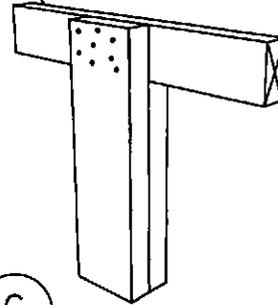


8/90x3.15dia nails to each face  
8/90x3.15dia nails to each face

**DETAIL A**  
SCALE NTS  
**RAFTER FIXING DETAIL**

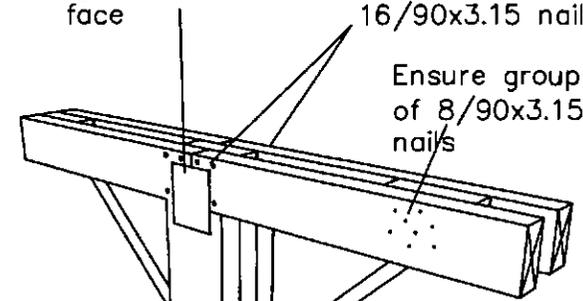
900 Flexibrace fixed at 45° with type 17 14g x 35 mm screw.

Rafter secured to post using 8/100 x 3.15mm nails



**DETAIL C**  
SCALE NTS  
**RAFTER FIXING DETAIL 2**

Tylok 4T10 each face  
16/90x3.15 nails

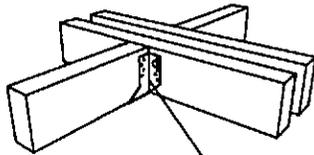


Ensure grouping of 8/90x3.15 dia nails

900 Flexibrace fixed at 45° with type 17 14g x 35 mm screw.

**DETAIL E**  
SCALE NTS  
**FLEXIBRACE FIXING DETAIL**

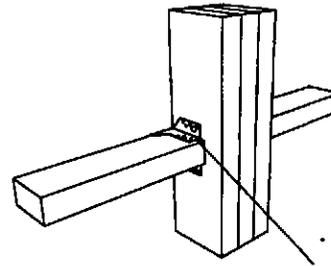
**DETAIL B**  
SCALE NTS



Purlins secured using JH52 x 90 joist hanger with 4x 12g type 17 screws (1 per flange).

**PURLIN FIXING DETAIL**

**DETAIL D**  
SCALE NTS



Girts secured to posts using JH52 x 90 joist hanger with 4x 12g type 17 screws (1 per flange).

**GIRT FIXING DETAIL**

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PROJECT TITLE  
**Stand-Fast Farm Building**

DRAWING TITLE  
**Farm Building Details  
Below Ground Model**

SCALE: As Shown  
DATE: Feb 12  
REVISION: Ver 1.0  
FILE: SFB-8000

SHEET: 5  
OF: 5



HOME OF GANG-NAIL® BUILDING

**MiTek New Zealand Ltd.**

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**Producer Statement - Design**

DUNEDIN CITY COUNCIL  
APPROVED BUILDING CONSENT DOCUMENTS

ISSUED BY: Claude Antony Carter Cook (MiTek NZ Ltd)TO: VERSATILE BUILDINGS

2012-217

IN RESPECT OF: STAND-FAST LEAN-TO BUILDING

MiTek New Zealand Ltd has been engaged by VERSATILE BUILDINGS to provide engineering design services in respect of the requirements of Clause(s) B1 of the Building Regulations 1992 for

Part only as specified – PURLINS, GIRTS, SAWN COLUMNS (including footing), and RAFTERS .

of the building work. The design has been prepared in accordance with AS/NZS 1170, NZS 3603, NZS 3604, approved documents of the NZ Building Code and the work is described on Versatile Buildings drawings titled STAND-FAST LEAN-TO and the specification and other documents according to which the building is proposed to be constructed.

As an independent design professional covered by a current policy of Professional Indemnity Insurance to a minimum value of \$500,000, I BELIEVE ON REASONABLE GROUNDS that subject to:

1. the verification of the following design assumptions:
  - i) Importance Level 1, Design working Life 50 years-refer to AS/NZS 1170.0:2002
  - ii) Light Roof
  - iii) Modified VERY HIGH Wind Zone
  - iv)  $S_g=1.35$  kPa Snow Load
  - v) The structure is supporting on good ground– NZS 3604 Section 3, with a soil ultimate bearing capacity 300 kPa,  $\phi_b = 0.5$
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.

Signature

Date: 1 February 2012

Claude Antony Carter Cook  
BE (Hons), MIPENZ (ID: 240891)  
CPEng, IntPE

GANG-NAIL®

LUMBERLOK®  
STANDFAST LEAN-TO.docx

BOWMAC®



# MiTek New Zealand Ltd.

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HOME OF **GANG-NAIL®** BUILDING SYSTEMS

www.mitek.nz.co.nz

## FARM BUILDING DESIGN INFORMATION – STAND-FAST LEAN-TO

### LOADS and TIMBER

- Radiata Pine or Douglas Fir VSG8  $f_b = 14$  MPa,  $E = 8$  GPa, VSG10  $f_b = 20$  MPa,  $E = 10$  GPa
- The determination of characteristic stresses, joint design, and dimensions has been based on the dry in service conditions

### DESIGN LOADS

- Dead loads for Light Roof – 0.25kPa (includes weight of purlins, associated framing and galvanized iron roof).
- Live loads – 1.1kN concentrated load, 0.25kPa uniform load.
- The enclosed charts have been designed for a Building Importance level 1, with 50 years working life. Refer to AS/NZS 1170.0:2002.
- Wind loads – building designed for a modified VERY HIGH
- Snow Loads - building designed for  $s_g = 1.35$ kPa
- Soil conditions – ALL foundations to be into natural ground with a minimum bearing capacity of 300 kPa,  $\phi_c=0.5$

### DESIGN LOAD REFERENCES

Compliance Document for the New Zealand Building Code Clause B1 Structure Amendment 4  
NZS3603:1993 Amendment 4  
NZS 3604 Amendment 2  
AS/NZS 1170 Part 0: 2002  
AS/NZS 1170 Part 1: 2002  
AS/NZS 1170 Part 2: 2002  
AS/NZS 1170 Part 3: 2003  
ANSI/TPI1 – 2002

Cited Verification Method  
Cited Acceptable Solution  
Cited Verification Method  
Cited Verification Method  
Cited Verification Method  
Cited Verification Method  
Alternative Solution

**DUNEDIN CITY COUNCIL**  
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### BUILDING ERECTION

Proper 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 fixings must be installed before applying any loads.

### LOAD DETAILS

These drawings have been prepared using the above design loads.

It is the responsibility of the user to ensure that the design data and loads are still correct at the time of construction.

## PRODUCT SPECIFICATION

These details have been designed using specific **GANG-NAIL®**, **LUMBERLOK®** AND **BOWMAC®** products and the performance of the building and validity of the Producer Statement is reliant on the correct choice of product.

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**TIMBER TREATMENT SCHEDULE (To be completed by Building Consent Applicant):**

The timber treatment specification is to be in accordance with NZS 3602:2003 and NZS 3640:2003.

Wood-based building component	Tick if Applicable	Species or Type	Level of Treatment to NZS 3640 or AS/NZS 1604 <sup>(3)</sup>
Poles (rounded –typically embedded into ground)		Radiata Pine	H5
Posts (rectangular –embedded into ground)		Radiata Pine	H5
Posts (rectangular –fixed to surface)		Radiata Pine	H5
Rafters (component supporting the purlins)		Douglas Fir	H1.2
Purlins (components supporting roofing material)		Douglas Fir	H1.2
Girts (structure supporting wall cladding)		Douglas Fir	H1.2
Props (component supporting the rafter)		Douglas Fir	H1.2
Blocking (component separating the rafter)		Douglas Fir	H1.2



**VERSATILE®**  
BUILDINGS

DUNEDIN CITY COUNCIL  
APPROVED BUILDING CONSENT DOCUMENTS

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## VERSATILE BUILDINGS

### MANUFACTURER'S STATEMENT – DURABILITY

Versatile farm buildings have been designed using the external metal cladding on the walls and roof.

To satisfy the requirements of Clause B2: "Durability" of the New Zealand Building Code and to ensure the cladding material meets a 15-year durability life the following provisions must apply:

#### Range of Product and Use

- Specification: AS1397: 2001
- Coating Type: Zinc/Aluminium & painted
- Steel thickness range: 0.35mm – 0.95mm BMT
- Steel grade range: G300 – G550
- Application: Standard Versatile cladding on Importance Level 1 as per AS/NZS1170.0:2002
- Fasteners: Heavy Zinc or Zinc-tin coated clouts to comply with AS3566.2-2002 Classes 3 & 4.  
Aluminium rivets for all steel components. IFI 114:1986

#### Requirements, Limitations and Exclusions

- Applicable to buildings in Sea-Spray zone and exposure zones 1,2,3 & 4 in accordance with Clause 4, Durability, NZS 3604:1999 which is an acceptable solution under clause B2 of the NZBC.
- Fixing and installation of the cladding must be done exactly in accordance with Versatile Buildings Fixing Guide CH8000
- Normal and regular maintenance must be carried out on the exterior surface of the cladding and the following guide must be followed to ensure the durability requirements are met.

#### Regular Maintenance

- **Exposure zones 1, 2, 3 & 4. (All areas other than sea spray zones – see below)**  
Rain washing only required on exposed sections, sheltered or protected areas such as under spouting, top cladding boards and tops of doors require washing every 3 months.
- **Sea Spray Zones (Within 500m from the sea or 100m from sheltered harbours or inlets) and areas of Geothermal Activity**  
Rain-washing only required on exposed areas. Sheltered and protected areas such as under spouting, top cladding boards and tops of doors require washing down every month and whenever corrosive salts are present.

#### Extended Maintenance, Painting or Repainting

- **Extended Durability**  
Once the metallic coating or the paint system has weathered away, signs of red rust for bare material or signs of the metallic coating for painted material, painting of the entire surface is required to extend the life of the cladding product. Paint manufacturers recommendations are to be followed for surface preparation and paint type to be used.
- **Evident Corrosion**  
Areas that show signs of white or red rust/corrosion (typically in unwashed areas) require cleaning back with a stiff brush and cleaner to remove all dust, surface contaminants and corrosion products and present a sound substrate for painting. Priming of the surface and application of two coats of paint as per the Paint Manufacturer's recommendations is then required. Particular attention needs to be paid to laps (side, end, flashing etc) where earlier corrosion may start due to moisture and dirt entrapment.  
If evident corrosion is not treated quickly rapid deterioration of the sheet may occur which could result in perforation. At this stage replacement of the affected sheet is the best option.

#### References

1. NZS 3604:1999, clause 4, Durability.
2. Versatile Buildings Assembly Instructions
3. New Zealand Building Code 2004

**Versatile Buildings**  
112 Waterloo Road  
Christchurch  
NEW ZEALAND

**Dated: 1<sup>st</sup> February 2012**

S45°46'26.4"

29.11 m

293.60 m

139 m

46.72 m

800 Mt Cargill Rd, Mt Cargill, New Zealand

Lot 6 DP 24273

62.92 m

91.11 m

340.34 m

28.07

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Image © 2012 GeoEye

Google earth

66 m

Imagery Date: 9/6/2011 © 2004

45°46'29.09" S 170°34'34.13" E elev. 721 m

Eye alt 458 m