File No. 5949 Permit No. J66465

BC

MARLBOROUGH DISTRICT COUNCIL

APPLICATION FOR BUILDING PERMIT

RECEIVED 29 AUG 1991 MARLBOROUGH DISTRICT COUNCIL

WARNING — The issue of this Permit is an approval to do the work described herein. *IT DOES NOT IMPLY OR MEAN:* That the method of construction is adequate or appropriate or, that the foundations are appropriate or adequate or, that Council accepts any obligations of supervision or, that Council accepts any liability whatever.

To THE ENGINEER, Please indicate Work ✓

Sir,

I/We hereby apply for permission to erect, ~~add, demolish, resite~~ a (state type of work) dwelling House INCLUDING GARAGE.

at No. 39 Waikawa Rd. Road/Street

For (owner-occupier) John Dunn.

of (full postal address) 455 Memorial Ave CH CH. Phone 03 3583614. 4/31 Waikawa Rd. Picton. 5737301

Name and address of owner (of the land if not that stated above)

according to locality plan and detailed plans, elevations, cross-sections, and specification of building deposited herewith in **DUPLICATE**

Previous owner —

PARTICULARS OF LAND

P.T. D.P. 1137 Pt Lot 1 D.P. 2967 Sec 1241 T.

Val. Roll No. 20210 - 46000 LOT 3 DP Pt 1137 Being Pt. section

Property No. 511361 Rural Gate No.

PARTICULARS OF BUILDING

Total floor area: 295.66 m²

John Dunn Construction Builder (Name of)

K.J. Morgan Plumber (Name of)

Drainlayer (Name of)

Area of Accessory Building — m²

455 Memorial Ave CH CH Address

Available Phone 03 3583614. CH CH. 5737301 picton. Address

~~Phone~~ Fax No 03 3583614. CH CH. Address

Phone

ESTIMATED VALUE

Building	~~200,000~~ —	$ 200.000 :
Plumbing		$ 16,000 :
Drainage		$ 4,000 :
Total		$ 220 000 : 00

Signature of Owner } John Dunn

Signature of Applicant }

Address of Applicant 455 Memorial Ave.

Date of Application 29.8.91 Phone 03 3583614 5737301

OFFICE USE ONLY

FEES PAYABLE -		Receipt Numbers
Buildings 612 - 70%	$ 183 : 60	
Footpath Services Damage Deposit	$ 225 : 00	
Building Research Levy ✓	$ 247 : 50	
Plumbing 2000 LAB.	$ 141 : 00	
Drainage 800 LAB.	$ 116 00	
Sewer Connection	$ — : —	By Subdivider
Water Connection	$ — : —	By Subdivider
Stormwater Connection	$ — : —	By Subdivider
Vehicle Crossing	$ —	
Reserves Cont. Fee	$ —	
Travel Fee	$ 6 : 00	
CONTROLLED USE APPLICATION FOR FILL.	$ 57 : 00	
	$:	
	$:	
TOTAL	$ 976 : 10	12651 29/01

Apporoved [signature]

DISTRICT COUNCIL BUILDING INSPECTOR

Date 20/12/91

Footpath Damage Deposit Refunded Retained

ALL WORK DESIGNED BY THE ENGINEER IS TO BE SUPERVISED BY THE ENGINEER AND ON COMPLETION OF THE WORK THE ENGINEER IS TO SUPPLY COUNCIL WITH A COMPLETION CERTIFICATE.

DESIGN CERTIFICATE

ENGINEER - PH 384 4086.

HARDING CONSULTING ENGINEERS LTD

123 MOUNT PLEASANT ROAD

BOS PRINT LTD

BUILDING INSPECTOR'S FIELD SHEET

AUTHORITY MARLBOROUGH DISTRICT COUNCIL

Stats. No. J 66465

No. 5949

Inspector: M

File No.

Receipt No. 12651 29/01

Date Permit Issued 31/01/92

OWNER

Name JOHN DUNN CONSTRUCTION

Mailing Address 455 MEMORIAL AVENUE CHRISTCHURCH.

PH. 03 358 3614

BUILDER

Name AS OWNER.

Mailing Address

PICTON PHONE 5737301.

PROPERTY ON WHICH BUILDING IS TO BE ERECTED/DEMOLISHED

SITE

Street No. 39

Street Name WAIKAWA ROAD

Town/District PICTON.

Riding

LEGAL DESCRIPTION

Valuation Roll No. 20210/460/00/00

Lot 3 D.P. 1137.

Section Block

Survey District PROPERTY No 511361.

DESCRIPTION OF PROPOSED WORK AND MAIN PURPOSE OF USE

ERECT NEW DWELLING INCLUDING GARAGE

DN.

FLOOR AREA

Whole Sq. Metres 296.

DWELLING UNITS

Number Erected

ESTIMATED VALUES $		
Building	200·000	—
Plumbing	16 000	—
Drainage	4 000	—
G.S.T.		
TOTAL	220 000	—

NATURE OF PERMIT (TICK BOX)

- [x] NEW BUILDING – exclude domestic garages and domestic outbuildings
- [ ] FOUNDATIONS ONLY
- [ ] ALTERED, REPAIRED, EXTENDED, CONVERTED, RESITED – include installation of heating appliances
- [ ] NEW CONSTRUCTION OTHER THAN BUILDINGS – include demolitions
- [ ] DOMESTIC GARAGES AND DOMESTIC OUTBUILDINGS

FEES APPLICABLE

Building Permit	$ 183 60	Water Connection	$
Street Damage Deposit	$ 225 00	TRAVEL FEE	$ 6 00
Building Research Levy	$ 247 50	DISPENSATION LEVY	$ 57 00
Plumbing	$ 141 00		$
Drainage	$ 116 00		$
Sewer Connection	$		$
Vehicle Crossing Levy	$	G.S.T.	$
M.S. Plumbing	$	TOTAL:	$ 976 10

Receipt No. 12651

Date of Payment 29/01/92

Authorised Officer

BP

Special Conditions: P&D – K.J. MORGAN.

DESIGN CERTIFICATE PH 03 384 4086

ENGINEER · HARDING CONSULTING ENGINEERS LTD

123 MOUNT PLEASANT ROAD, CHRISTCHURCH.

(DAVID HARDING)

ALL WORK DESIGNED BY THE ENGINEER IS TO BE SUPERVISED BY THE ENGINEER AND ON COMPLETION OF THE WORK THE ENGINEER IS TO SUPPLY COUNCIL WITH A COMPLETION CERTIFICATE.

2.14 Deviation from permit

2.14.1 After a permit has been issued no departure shall be made from any of the particulars supplied upon any plan, drawing, specification or document deposited with the application upon which the permit was issued, unless amended particulars clearly describing the intended deviation are supplied to the Engineer in his office and the Engineer shall have given his written approval of the deviation.

Section boundaries must be identified by the owner and the issue of this permit does not involve approval of the site as being within the boundaries of the owner's Land.

Particularly in those cases fronting foreshore reserves but in cases of any doubt the owner must if necessary identify his boundaries by a survey and ensure the building site is within those boundaries. The Council specifically excludes itself from any liability arising from the inspection of the site or approval conveyed by this permit in terms of the exact location of the building.

Notification needed when foundations ready for inspection.

Date Inspected	REMARKS (e.g. stage reached with work)
	Site inspection Foundation all appear OK
	Advise engineer to inspect

(CONTINUED OVER)

Date Inspected	
	Inspection on site with Kurt Trixell
	regarding over Height Complaint
28/4/92	General inspection all appear OK

COMPLETED (Signature) _____ Date ___/___/___

BC/MP/01A

File 465
26 August 1991

The District Engineer
Marlborough District Council
Picton

Dear Sir,

DESIGN CERTIFICATE -House for Mr & Mrs Dunn

I, David Harding, being a Registered Engineer and holding a current Annual Practising Certificate, hereby certify that I have been engaged to design and execute the appropriate engineering calculations for a timber and steel framed house proposed to be constructed for Mr and Mrs Dunn,at Waikawa Road, Picton.

The accompanying three sheets of Drawings,titled "Mr and Mrs Dunn- Waikawa Road Picton ", and numbered 465/S1 to S3, dated August 1991, adequately illustrate the design of the structure.

I have exercised reasonable control over the design processes for the works defined above which have been designed in accordance with sound and widely accepted engineering principles to support the loads specified in N.Z.S.4203:1984.This office has not been asked to carry but a soils investigation, and the foundations have been designed for an allowable bearing pressure of 70kPa as set out in NZS 3604. This should be confirmed on site by others.

Various aspects of the design are in accordance with the following authorities:
N.Z.S.3603:1981
N.Z.S.3101:1982
N.Z.S.3604:1981

I believe that the stresses in the various materials of construction and force resisting elements of the structure are such as to ensure the safety and stability of the structure,if the works are constructed in accordance with the above described drawings.

Yours Faithfully,

D Harding

Harding Consulting Engineers Ltd

HARDING
CONSULTING
ENGINEERS LTD
CIVIL & STRUCTURAL ENGINEERS PROJECT MANAGERS

123 Mt Pleasant Rd
Christchurch 8
New Zealand
Telephone (03) 384-4086
Fax (03) 384-4086

File 465
24 July 1992

RECEIVED
28 JUL 1992
MARLBOROUGH
DISTRICT COUNCIL

The District Engineer
Marlborough District Council
67 High Street
Picton

Attn Mr B A Palmer

Dear Sir,

J Dunn 39 Waikawa Road Permit No J66465

I have received your letter of 9 July 1992 regarding the new building for J Dunn at 39 Waikawa Road,Picton.

I would advise that I have not been engaged by Mr Dunn to observe the building works. Until I received your letter I was not aware that work on the site had started.

Accordingly I am unable to provide the Completion Certificate which you request.

I suggest that you contact Mr Dunn directly regarding this matter.

Yours Faithfully

D Harding

Harding Consulting Engineers Ltd

92071021

FILE No.: 525210
OFFICER: B Palmer
COPIES TO:
COMMENTS:

Picton
For
filing.

MARLBOROUGH DISTRICT COUNCIL
P.O. Box 443 Blenheim, N.Z. Tel. (057) 85 249 Fax. (057) 86-866

IN REPLY QUOTE REFERENCE JG:CAM PLN/2/3/90288

FOR ENQUIRIES ASK FOR Mr Good

23.11.90

Building Inspector - Brian Palmer

Dear Sir/Madam,

SCHEME PLAN NO. PLN/2/3/90288 (39) Marineside Apartments Ltd, Waikawa Road, Picton

Attached hereto for your comments please find a copy of the above scheme plan of subdivision.

Your comments are requested.

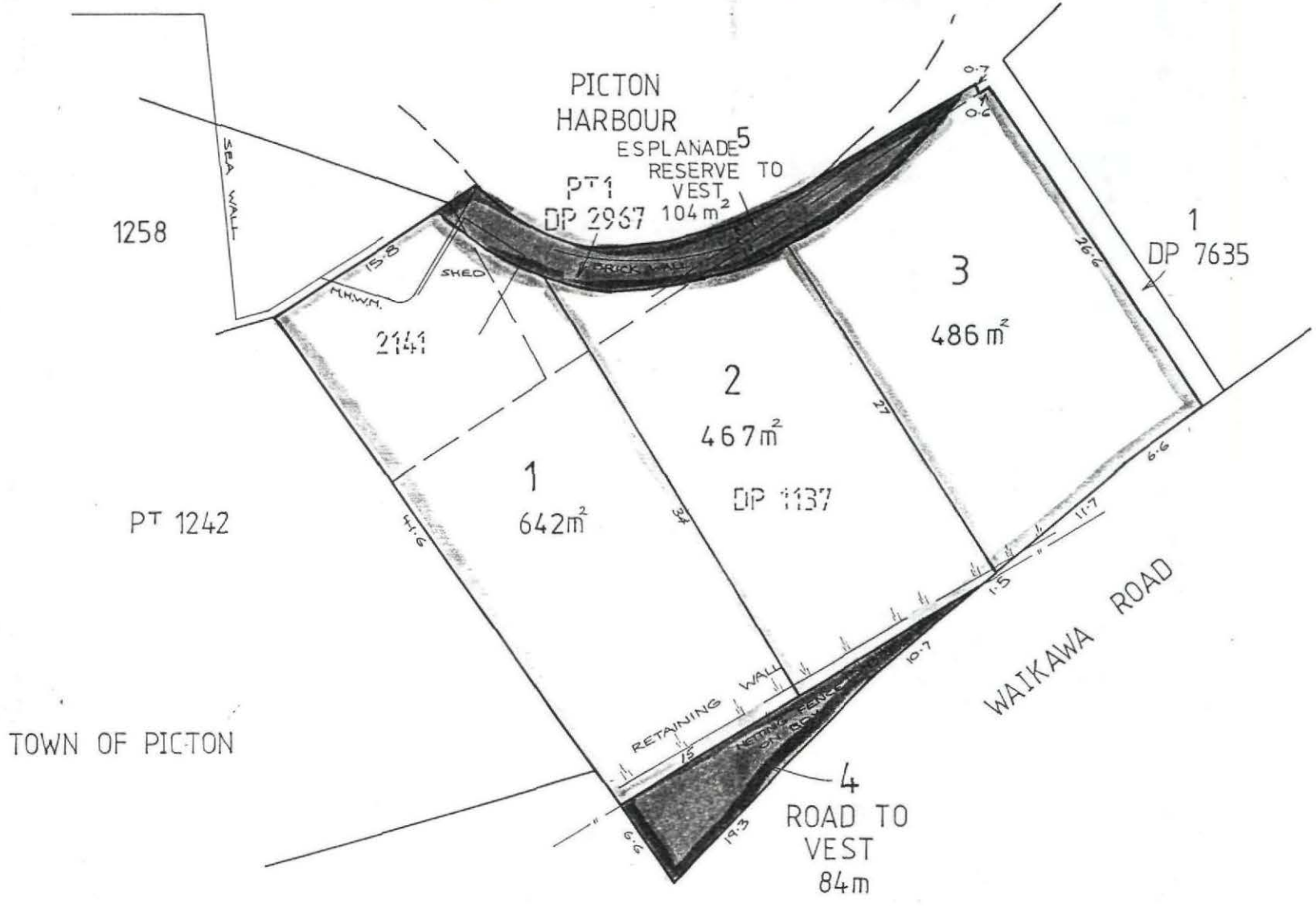
Yours faithfully,
W.J.D. Olliver,
POLICY AND REGULATORY MANAGER.

Per : Jennifer L Falstein

Encl.

20210 - 46000 62

D.P 1137 Pt Lot 1 D.P. 2967
39 Waikawa Rd.



SCHEME PLAN ONLY
Areas and Dimensions are subject to Final Survey

PROPOSED SBDN OF DP 1137, PT LOT 1 DP 2967 & SEC 1241 TOWN OF PICTON
COMPRISED IN: CT 1C/247
APPLICANT: MARINESIDE APARTMENTS LTD

SCALES 1:300
MAY 1990
LB

Davidson Partners Ltd - Consulting Engineers/ Ayson & Associates - Consulting Surveyors. (Practising in Association.)

DAVIDSON AYSON
CONSULTING ENGINEERS
CONSULTING SURVEYORS

Telephone (057) 87-029, Fax (057) 87-028, P.O. Box 256, 35 Grove Road, Blenheim, NEW ZEALAND

JOB NUMBER 1982
ISSUE | SHEET

MARLBOROUGH DISTRICT COUNCIL

P.O. Box 443, Blenheim

№ 149

To Mr. J. Dunn
455 Memorial Ave
CH·CH 5.

11-9-91

Application No. 5949

Reference No. 511361

Dear Sir/~~Madam,~~

Your application to Erect a dwelling

for Self

at 39 Waikawa Rd Picton

has been ~~Approved~~, Deferred, ~~Declined~~ for the following reasons.

Please have the enclosed plumbing and drainage forms completly filled out ~~and~~ and signed by the tradesmen whom will be completing the work

Your building permit will be held in abayance until they are recieved

No active work shall be commenced on any building until all necessary permits have been issued.

Yours faithfully,

[signature]

Engineer, Building Health Inspector
Clerk

MARLBOROUGH DISTRICT COUNCIL
PLUMBING & DRAINAGE
INSPECTOR

BOS PRINT LTD

MARLBOROUGH DISTRICT COUNCIL

Planning Officer - Ian Shapcott -

File Ref: PLN/2/3/ 90288

Ask for: Mrs. Foister

Date: 12-04-91

20210 - 460 - 02

To: Building Inspector
Brian Palmer

Amended Plan

Dear Sir/Madam,

SCHEME PLAN OF SUBDIVISION: Manneside Apartments Ltd

LOCATION: 39 Waitawa Rd, Picton

Attached hereto for your comments please find a copy of the above scheme plan of subdivision. This application has been distributed in accordance with Section 279(8) of the Local Government Act 1977.

Your comments are requested.

Yours faithfully,

W.J.D. OLLIVER
MANAGER - POLICY & REGULATORY.

Per Jennifer L Foster

DAVIDSON AYSON

CONSULTING ENGINEERS
CONSULTING SURVEYORS

Davidson Partners Ltd -
Consulting Engineers/
Ayson & Associates -
Consulting Surveyors.
(Practising in Association.)

Telephone (057) 87-029,
Fax (057) 87-028,
P.O. Box 256, 35 Grove Road,
Blenheim,
NEW ZEALAND.
REF: 1982

8 APR 1991
MARLBOROUGH DISTRICT COUNCIL

FILE No.: PW/2/3/90288
OFFICER: N. MORRIS
COPIES TO:
COMMENTS:

5 April 1991

The Manager
Marlborough District Council
P O Box 443
BLENHEIM

ATTENTION: Mr Pennington

Dear Sir

Re: Marineside Apartments Ltd - Waikawa Road

Recently Lot 3 has been negotiated for sale and it has become apparent that the esplanade reserve should be extended to give access onto the Fishermans Reserve.

This is the most direct route for the owner of Lot 3 to walk to the town shopping centre. By the vesting of the reserve will give public through access that otherwise would not have been available.

On behalf of Marineside Apartments Ltd I seek your Council approval to the variation of layout.

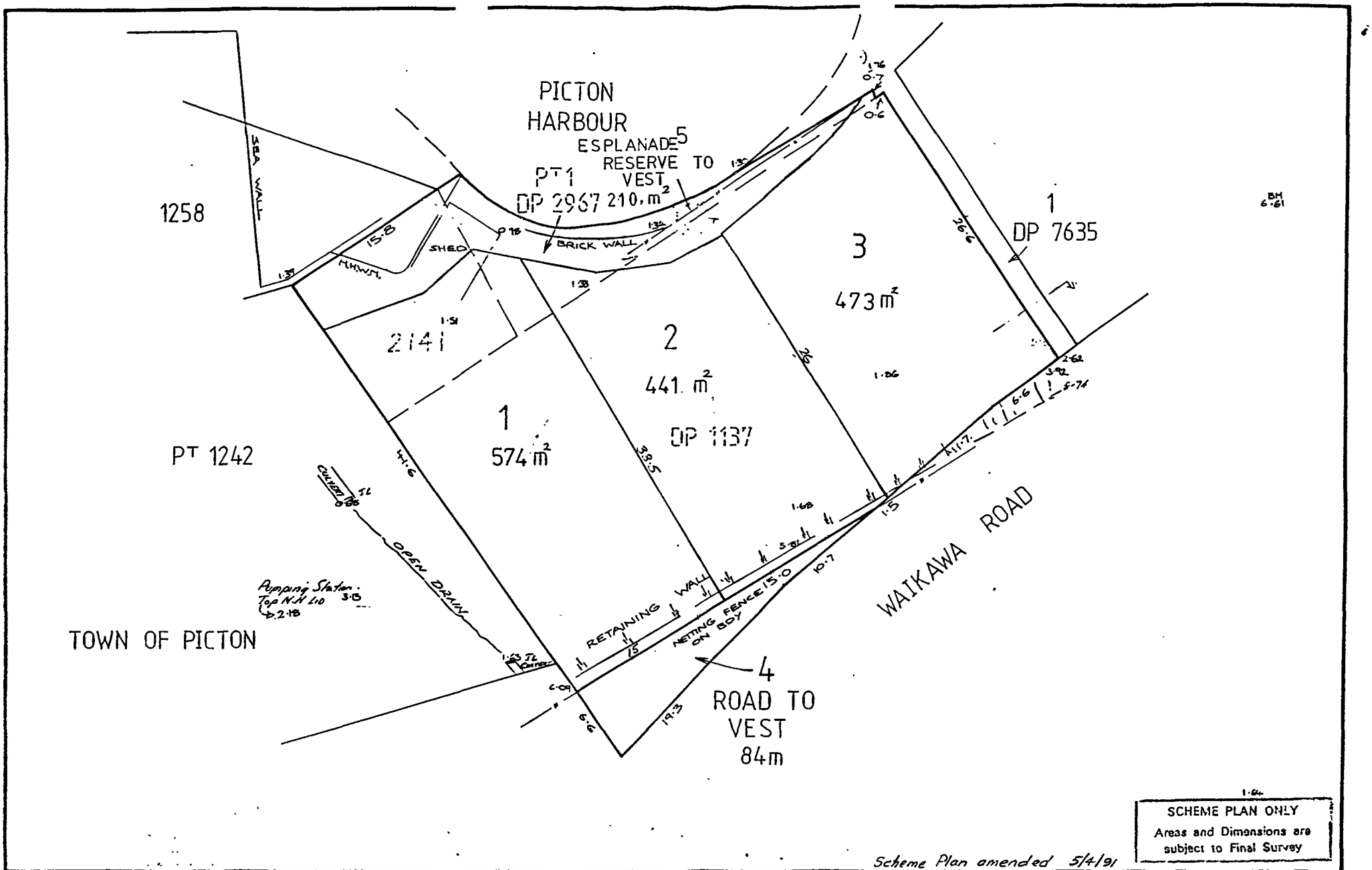
Enclosed are five copies of the amended scheme plan and as this amendment is in the public interest I would ask for a waiver of any fees.

Yours faithfully

VTF AYSON

VA:DB

Encls



SCHEME PLAN ONLY
Areas and Dimensions are subject to Final Survey

Scheme Plan amended 5/4/91

PROPOSED SBDN OF DP 1137, PT LOT 1 DP 2967 & SEC 1241 TOWN OF PICTON
COMPRISED IN: CT 1C/247
APPLICANT: MARINESIDE APARTMENTS LTD

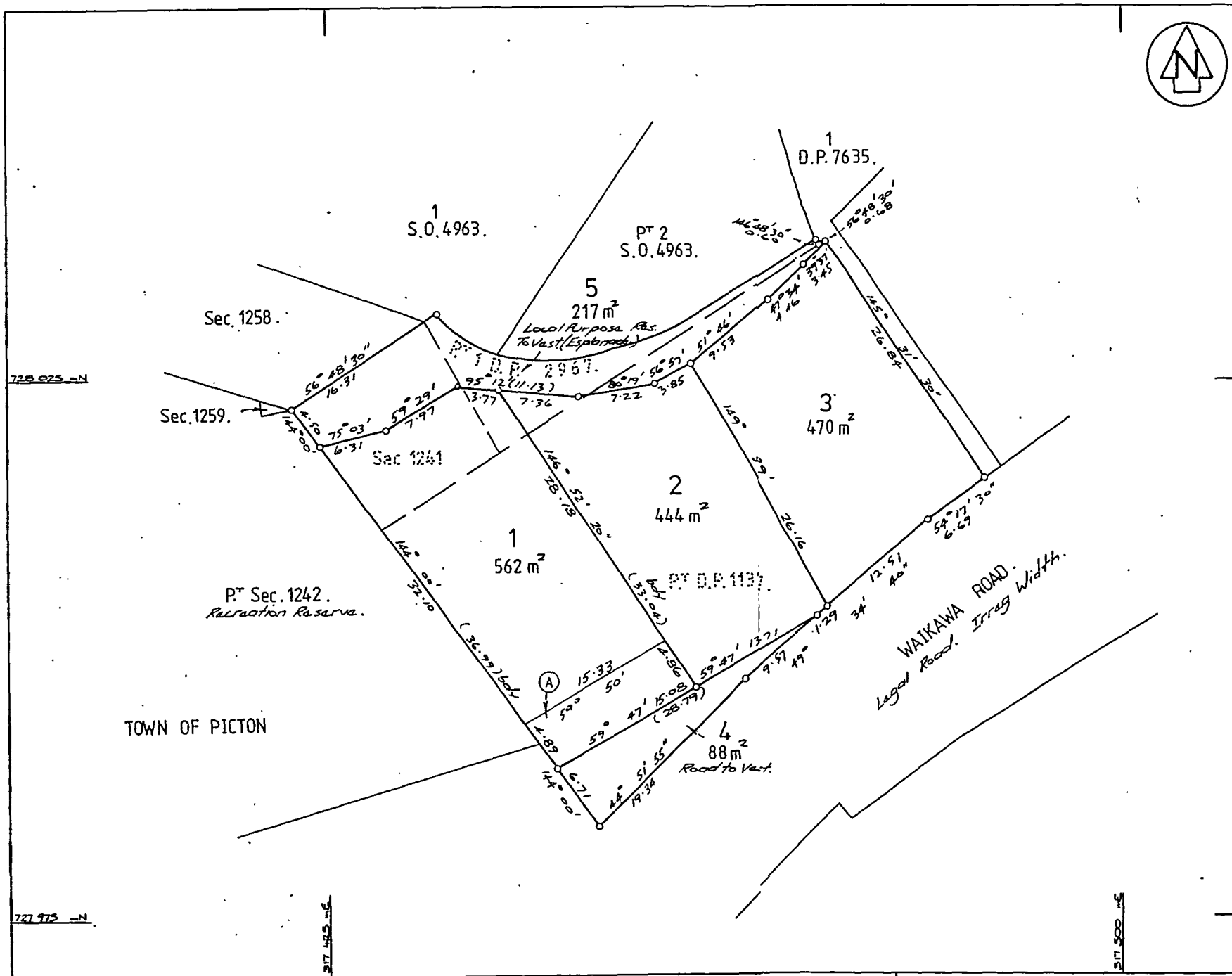
SCALES 1:300
MAY 1990
LB

Davidson Partners Ltd - Consulting Engineers/ Ayson & Associates - Consulting Surveyors. (Practising in Association.)

DAVIDSON AYSON
CONSULTING ENGINEERS
CONSULTING SURVEYORS

Telephone (057) 87-029.
Fax (057) 87-028,
P.O. Box 256, 35 Grove Road.
Blenheim,
NEW ZEALAND

JOB NUMBER 1982
ISSUE | SHEET



Approvals

REGISTERED OWNERS

FOR LOCAL AUTHORITY CONSENT SEE DOC

MEMORANDUM OF EASEMENTS

PURPOSE	SHOWN	SERV TEN	DOM TEN
Right to drain sewage	A	Lot 1	Lot 2.

Total Area 1781 m²

Comprised in CT 1C/247 Marineside Apartments Ltd.

I, Terence Patrick McGrail

Registered Surveyor and holder of an annual practising certificate (or who may act as a registered surveyor pursuant to section 25 of the Survey Act 1986) hereby certify that this plan has been made from surveys executed by me or under my directions, that both plan and survey are correct and have been made in accordance with the Survey Regulations 1972 or any regulations made in substitution thereof.

Dated at Blenheim this 12th day of July 1991 Signature [signature]

Field Book 1386 p. 9 Traverse Book ..... p. .....

Reference Plans 1382 26

Examined ..... Correct .....

Approved as to Survey

...../...../..... Chief Surveyor

Deposited this ..... day of ..... 19 ....

1982 District Land Registrar

File

Received

Instructions

LAND DISTRICT MARLBOROUGH

SURVEY BLK. & DIST. XII LINKWATER

NZMS 261 SHT P.27 RECORD MAP No 50:27

LOTS 1-5 BEING A SBDN OF
Pt DP 1137 Pt LOT 1 DP 2967 & SEC 241
TOWN OF PICTON

TERRITORIAL AUTHORITY MARLBOROUGH DISTRICT.

Surveyed by DAVIDSON AYSON

Scale 1:250 Date JULY 1991

W.A. ROBERTSON SURVEYOR GENERAL DEPARTMENT OF SURVEY AND LAND INFORMATION NEW ZEALAND

MARLBOROUGH DISTRICT COUNCIL

67 High Street, Picton
Fax (03) 573-7331

Date: 9-3-95

To: Mr E. Robinson
Highlands
R.D. 3
Blenheim

Application No. 95-0294
Reference No. 2026-46001

Dear Sir / Madam

I have to advise that your application for a Building Consent dated 8-3-95 to erect Dwelling
at 37A Waikawa Road Picton
for Self
does not meet our requirements, and before the application will be approved, it will be necessary for you to amend your application with respect to:-

(A) Engineers Producer Statement is required for the following
(A) Foundations
(B) Insulform concrete filled blocks
(C) Unislab floor slab (special note is to be taken in the sealing of the existing floor from the garage floor)
(D) Roof Truss Reference Numbers from an approved truss manufacture

If you have any queries, please do not hesitate to contact me.

No active work shall be commenced on any building until all necessary consents have been issued.

Yours faithfully

B A Palmer
BUILDING INSPECTOR
PICTON OFFICE

BUILDING INSPECTORS
FIELD SHEET

AUTHORITY MARLBOROUGH DISTRICT COUNCIL

Stats. No. J 66465
No. 5947

Inspector: M
File No.
Receipt No. 12651 29/01
Date Permit Issued 31/01/92

OWNER

Name JOHN DUNN CONSTRUCTION
Mailing Address 455 MEMORIAL AVENUE
CHRISTCHURCH.
PH. 03 358 3614

BUILDER

Name AS OWNER.
Mailing Address
PICTON PHONE 5737301.

PROPERTY ON WHICH BUILDING IS TO BE ERECTED/DEMOLISHED

SITE

Street No. 39
Street Name NAIKAWA ROAD
Town/District PICTON.
Riding

LEGAL DESCRIPTION

Valuation Roll No. 20210/460/00/00
Lot 3 D.P. 1137.
Section Block
Survey District PROPERTY No 511361.

DESCRIPTION OF PROPOSED WORK AND MAIN PURPOSE OF USE

ERECT NEW DWELLING INCLUDING GARAGE
DN.

FLOOR AREA

Whole Sq. Metres 296.

DWELLING UNITS

Number Erected

ESTIMATED VALUES $			
	Building	200 000	—
	Plumbing	16 000	—
	Drainage	4 000	—
	G.S.T.		
	TOTAL	220 000	—

NATURE OF PERMIT (TICK BOX)

- [x] NEW BUILDING – exclude domestic garages and domestic outbuildings
- [ ] FOUNDATIONS ONLY
- [ ] ALTERED, REPAIRED, EXTENDED, CONVERTED, RESITED – include installation of heating appliances
- [ ] NEW CONSTRUCTION OTHER THAN BUILDINGS – include demolitions
- [ ] DOMESTIC GARAGES AND DOMESTIC OUTBUILDINGS

FEES APPLICABLE

Building Permit	$ 183 60	Water Connection	$
Street Damage Deposit	$ 225 00	TRAVEL FEE	$ 6 00
Building Research Levy	$ 247 50	DISPENSATION LEVY	$ 57 00
Plumbing	$ 141 00		$
Drainage	$ 116 00		$
Sewer Connection	$		$
Vehicle Crossing Levy	$	G.S.T.	$
M.S. Plumbing	$	TOTAL:	$ 776 10.

Receipt No. 12651
Date of Payment 29/01/92
Authorised Officer
BP.

Special Conditions: P&D – K.J. MORGAN.
DESIGN CERTIFICATE PH 03 384 4086
ENGINEER. HARDING CONSULTING ENGINEERS LTD
123 MOUNT PLEASANT ROAD, CHRISTCHURCH.
(DAVID HARDING)

ALL WORK DESIGNED BY THE ENGINEER IS TO BE SUPERVISED BY THE ENGINEER AND ON COMPLETION OF THE WORK THE ENGINEER IS TO SUPPLY COUNCIL WITH A COMPLETION CERTIFICATE.

2.14 Deviation from permit

2.14.1 After a permit has been issued no departure shall be made from any of the particulars supplied upon any plan, drawing, specification or document deposited with the application upon which the permit was issued, unless amended particulars clearly describing the intended deviation are supplied to the Engineer in his office and the Engineer shall have given his written approval of the deviation.

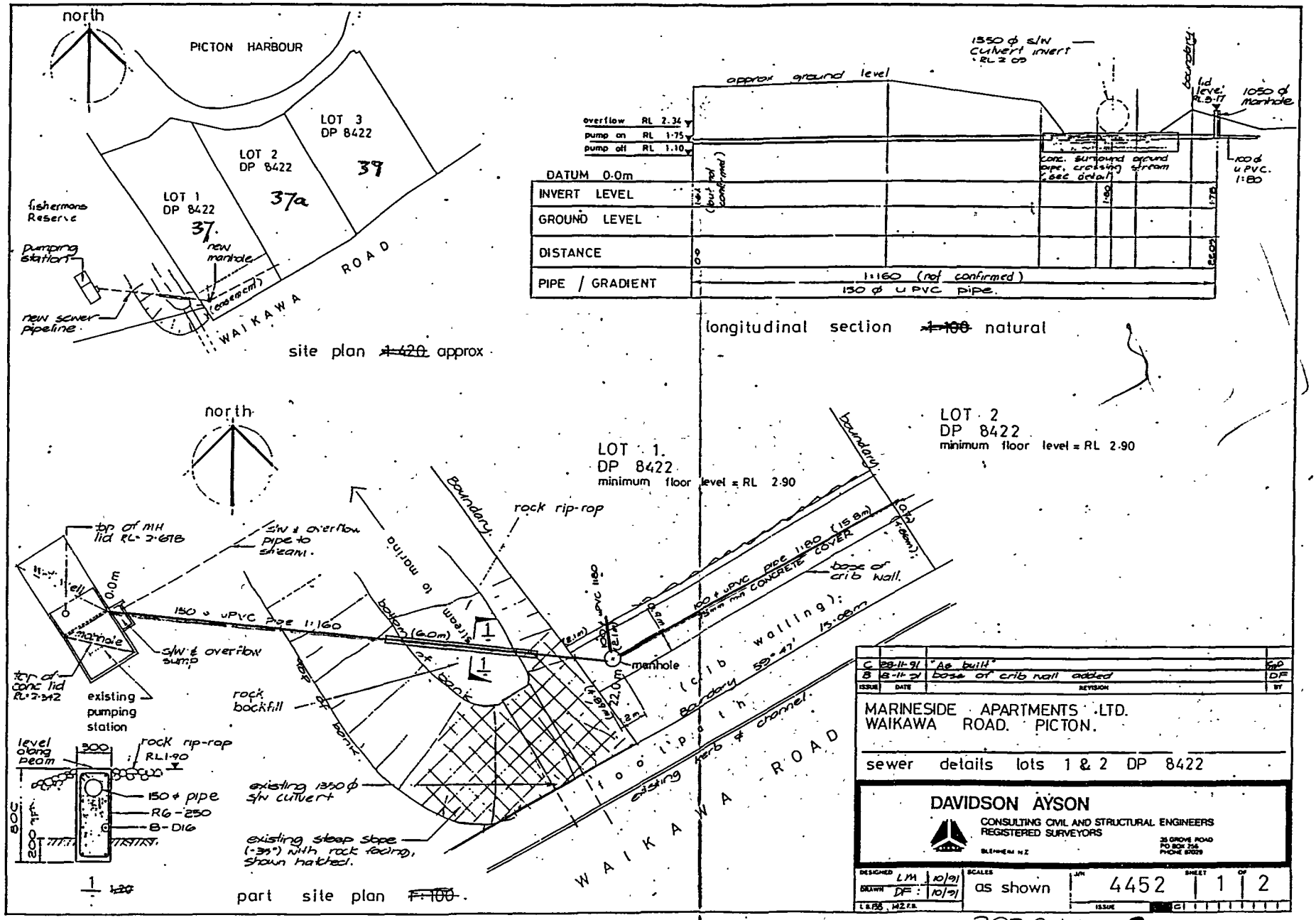
Section boundaries must be identified by the owner and the issue of this permit does not involve approval of the site as being within the boundaries of the owner's Land.

Particularly in those cases fronting foreshore reserves but in cases of any doubt the owner must if necessary identify his boundaries by a survey and ensure the building site is within those boundaries. The Council specifically excludes itself from any liability arising from the inspection of the site or approval conveyed by this permit in terms of the exact location of the building.

Notification needed when foundations ready for inspection.

Date Inspected	REMARKS (e.g. stage reached with work)
17-3-92	Plumbing inspection (only partly done)
30-4-92	Drain Test all OK. (Told drainlayer to compact around as backfilling.

20-7-92 All completed.


north
PICTON HARBOUR
LOT 3
DP 8422
39
LOT 2
DP 8422
37a
LOT 1
DP 8422
37.
fishermans Reserve
pumping station
new manhole
new sewer pipeline
WAIKAWA ROAD
site plan ~~1:420~~ approx
overflow RL 2.34
pump on RL 1.75
pump off RL 1.10
DATUM 0.0m
INVERT LEVEL
GROUND LEVEL
DISTANCE
PIPE / GRADIENT
approx ground level
1:160 (not confirmed)
150 ϕ u PVC pipe.
1350 ϕ s/w Culvert invert RL 2.09
lid level RL 2.17
1050 ϕ manhole
conc. surround around pipe, crossing stream (see detail)
100 ϕ u PVC. 1:80
longitudinal section ~~1:100~~ natural
LOT 1.
DP 8422
minimum floor level = RL 2.90
LOT 2
DP 8422
minimum floor level = RL 2.90
top of MH lid RL 2.678
s/w & overflow pipe to stream.
150 ϕ uPVC Pipe 1:160
s/w & overflow sump
top of conc lid RL 2.342
existing pumping station
rock backfill
rock rip-rap
Boundary
to moring
stream
base of bank
100 ϕ uPVC pipe 1:80 (15.8m)
base of crib wall.
manhole
existing 1350 ϕ s/w culvert
existing steep slope (-39°) with rock facing, shown hatched.
existing kerb & channel
footpath (crib walling)
WAIKAWA ROAD
level along beam
rock rip-rap RL1.90
150 ϕ pipe
R6-250
B-D16
part site plan ~~1:100~~.
C 28-11-91 "As built" DP
B 8-11-91 base of crib wall added DF
ISSUE DATE REVISION BY
MARINESIDE APARTMENTS LTD.
WAIKAWA ROAD. PICTON.
sewer details lots 1 & 2 DP 8422
DAVIDSON AYSON
CONSULTING CIVIL AND STRUCTURAL ENGINEERS
REGISTERED SURVEYORS
BLENHEIM N.Z.
DESIGNED LM 10/91
DRAWN DF 10/91
SCALES as shown
J/N 4452
SHEET 1 OF 2
ISSUE C

20210-460-00

Prop No. 525210

Val 20210/460/02/00

MARLBOROUGH DISTRICT COUNCIL

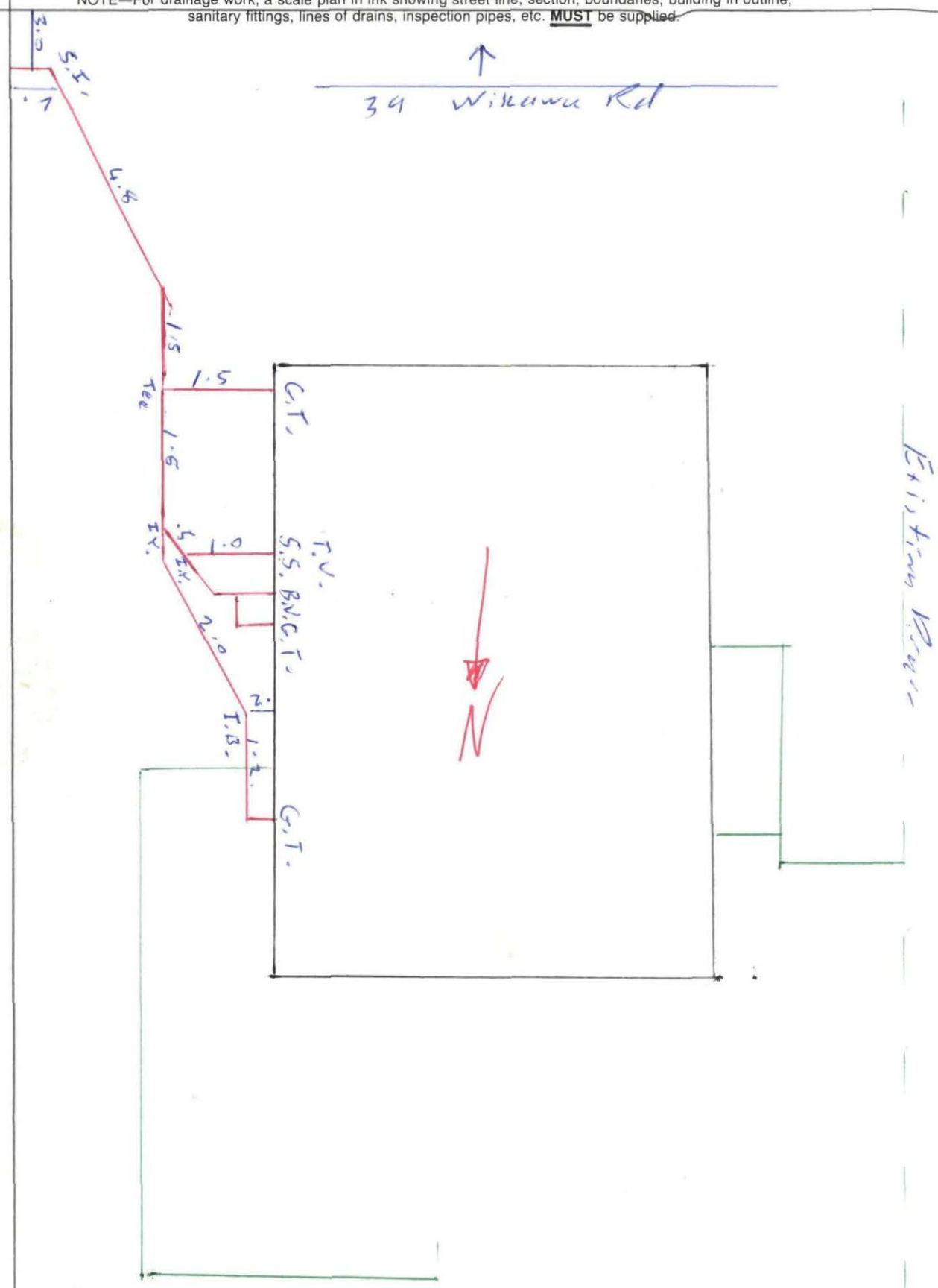
DRAINAGE PLAN

Drainlayer K. Morgan Plumber K. Morgan Date of Inspection 30-4-91

Name Mr J. Dunn Street 39 Wikuwu Rd.

Lot 3 D.P. 1137 Section

NOTE—For drainage work, a scale plan in ink showing street line, section, boundaries, building in outline, sanitary fittings, lines of drains, inspection pipes, etc. **MUST** be supplied.



Water Front

Scale: 1 to 100

BOS PRINT LTD

*NOTE: PERMIT NOT TO ISSUE UNTIL TITLE AVAILABLE. [signature]

PERMIT NO.	5949	PROP NO.	511361

PLANNING ASSESSMENT CHECK LIST - PICTON SCHEME

APPLICANT JOHN DUNN

SITE ADDRESS 39 WAIKAWA RD PICTON

ZONE = RES B. - PICTON

PROPOSED LOT 3 OF CURRENT S/DIV.

	ASSESSMENT REQUIRED	REMARKS	TAG PERMIT
RES. B Zoning/Use/Site	OKAY		
Yards/Height	X	HEIGHT IS WITHIN DISPENSATION ENVELOPE WEST YARD DOES NOT COMPLY - NOW 3m. [signature]	
Service/Living Courts	OKAY		
473 Site Cover/Density	X	SITE PLAN REQUIRES EXACT COVER DOWN DETAILS - PROVIDE MAX HT ORIGIN POINT [signature]	
Length on Boundary (Accessory Buildings) 6m	OKAY		
Parking Requirements	✓		
Vehicle Access (on site turning requirements)	X	REQUIRE CONFIRMATION THAT ON-SITE TURNING CAN TAKE PLACE ON MODIFIED PLATFORM PRIOR TO PERMIT ISSUE, TO SAT. DIS. ENG. [illegible] PLAN MEETS MAX HT.,	✓
Planning Approval Conditions	OKAY		
Subdivision Approval Conditions	X	TITLE TO COME see notes top of page.	
Earthquake Controls	OKAY		
Change Where Existing Use Rights Apply	✓		
Non-Notified Application Requirements		-- --	--
- Town Centre			
- Foreshore Amenities	X	NOTE: THIS REQUIREMENT FORMALLY WAIVED BY M.D.C. ON 5/7/91	✓
- Earthworks in excess of 20m3	X	*APPLIC. REQUIRED FOR FILL ON SITE (ONLY MATTER OUTSTANDING FOR PLANNING - 5/9/91) [signature]	
- Sign(s) P128)	OKAY		
- Industrial Building - Landscape Plan	✓	APPLIC. LODGED P.M. 5/9/91 BEING PROCESSED [signature]	
- Rural Zone - Specified Development (P62)	✓		
- Development Waikawa Marae (P65)	✓		
- Places of Special Interest (P131)	✓		
- Unsuitable Site (P94)	✓		
- Slope Exceeding 15° (P95)	✓		
- Temporary Uses & Developments (P99)	✓		
Development Levy	✓		
Regional Council Requirements	✓	NOTE: NO REQUIREMENTS ON SUBDIVISION, } letter on MARINESIDE S.D. FILE.	
Building Line Restriction	✓		
Flood Hazard Requirements	✓		
N.Z. Historic Places Registration	✓		
Other	✓		

SIGNED [signature] DATE 4/9/91

"Building"

PL. J. DUNN.

SITE	PLAN	SHOW	COVER / YARDS
✓	✓	✓	ACCURATELY MANOEUVRE TO ATTACHE OFF PLATFORM
✓	✓	✓	MARK HT. DATUM + THIS ON SECTIONS

YARDS INTRUSION TO WEST

N.N.P.A. FOR FILL / RLO UP — HARD FILL

13.5 X 11-5

36

155
49

200

J. DUNN
39 WAIKAWA Rd
HOUSE

CONFIRMATION THAT SUFFICIENT PROVISION HAS BEEN MADE FOR ON SITE VEHICLE TURNING.

3 m. 6.5

PARKING DIMENSIONS

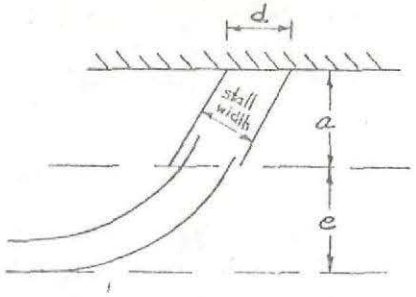
TYPE OF PARKING	STALL DEPTH FROM WALL (a)	STALL DEPTH FROM KERB (b)	STALL DEPTH KERB TO WALL (c)	STALL WIDTH 2.15 (d)	2.15 (e)	2.30 (d)	2.30 (e)	2.45 (d)	2.45 (e)	2.60 (d)	2.60 (e)	2.75 (d)	2.75 (e)
90° Nose in with left turn	4.9	4.25	0.6	2.15	9.8	2.3	8.5	2.45	7.3	2.6	6.4	2.75	5.5
90° Nose in with right turn or into blind bay +	4.9	4.25	0.6	2.15	10.4	2.3	9.1	2.45	8.2	2.6	7.3	2.75	6.4
90° Back in	4.9	3.65	1.2	2.15	6.4	2.3	5.8	2.45	5.5	2.6	5.2	2.75	4.9
75° Nose in	5.2	4.6	0.6	2.2	7.9	2.35	6.1	2.5	5.5	2.7	4.9	2.85	4.3
75° Back in	5.2	4.0	1.2	2.2	6.1	2.35	5.2	2.5	4.9	2.7	4.6	2.85	4.3
60° Nose in	5.2	4.6	0.6	2.45	5.8	2.65	4.6	2.8	4.0	3.0	3.4	3.2	2.7
60° Back in	5.2	4.15	1.1	2.45	5.2	2.65	4.6	2.8	4.3	3.0	4.0	3.2	3.7
45° Nose in	4.9	4.4	0.5	3.0	3.7	3.25	3.0	3.45	3.0	3.65	2.7	3.9	2.7
45° Back in	4.9	4.0	0.9	3.0	4.0	3.25	3.7	3.45	3.4	3.65	3.4	3.9	3.4
30° Nose in	4.0	3.65	0.3	4.3	3.4	4.6	3.0	4.9	2.7	5.2	2.4	5.5	2.1
30° Back in	4.0	3.35	0.6	4.3	3.7	4.6	3.4	4.9	3.4	5.2	3.0	5.5	3.0
0° Parallel parking	2.45	2.15	0.3	(d) = 6.1 (e) = 2.75 for manoeuvre space									

AISLE WIDTH FOR MANOUVERING

\+ A blind bay is one with only one point for both entrance and exit so that the parking manoeuvre forms part of a "U" turn.

(e) Is manoeuvre space. May be used for aisle width provided it is greater than 3.7. Otherwise use 3.7.

(d) Is length of stall along kerb line.



ac

IAN SHARCOTT / STEVE MURRIN

P.M. 4/9/91

BRIAN,

CAN YOU CONFIRM

THAT THIS VEHICLE

TURNING ARRANGEMENT

IS BEING COMPLIED

WITH? J—

BUILDING PERMIT FEES

03 5737301.

MARLBOROUGH
DISTRICT COUNCIL
P.O. BOX 443
BLENHEIM

DATE 07-01-92

M/S JOHN DUNN CONSTRUCTION,
455 MEMORIAL AVENUE,
CHRISTCHURCH.

003270

TELEPHONE (03) 578 5249

FILE No. 5949.

RE ERECT DWELLING AT 39 WAIKAWA ROAD, PICTON

Your application for a building permit has been approved and the permit will be issued on receipt of the following payments:

Building Permit Fee	$ 183:60
Plumbing Permit Fee	$ 141:00
Drainage Permit Fee	$ 116:00
Building Research Levy	$ 247:50
Travel	$ 6:00
Sewer Connection	$:
Water Connection	$:
Stormwater Connection	$:
Reserves Cont. Fee	$:
Vehicle Crossing	$:
DISPENSATION LEVY	$ 57:00
(G.S.T. INCLUDED) SUB TOTAL	$:
Footpath & Services Damage Deposit	$ 225:00
	$:
TOTAL	$ 976:10

Work is not to commence on the structure until the building permit has been uplifted.

SENIOR ADMINISTRATION OFFICER

BOS PRINT LTD

BUILDING PERMIT

AUTHORITY MARLBOROUGH DISTRICT COUNCIL

Stats. No. J 66465

No. 5949

Receipt No. 12651 29/01

Date Permit Issued 31 01 92

OWNER

Name JOHN DUNN CONSTRUCTION

Mailing Address 455 MEMORIAL AVENUE CHRISTCHURCH.

BUILDER

Name AS OWNER.

Mailing Address

PROPERTY ON WHICH BUILDING IS TO BE ERECTED/~~DEMOLISHED~~

SITE

Street No. 39

Street Name WAIKAWA ROAD

Town/District PICTON.

Riding

LEGAL DESCRIPTION

Valuation Roll No. 20210/460/00/00

Lot 3 D.P. 1137.

Section Block

~~Survey District~~ PROPERTY No 511361.

DESCRIPTION OF PROPOSED WORK AND MAIN PURPOSE OF USE

ERECT NEW DWELLING INCLUDING GARAGE

D.N.

FLOOR AREA

Whole Sq. Metres 296.

DWELLING UNITS

Number Erected

ESTIMATED VALUES $			
	Building	200·000	—
	Plumbing	16 000	—
	Drainage	4 000	—
	G.S.T.		
	TOTAL	220 000	—

NATURE OF PERMIT (TICK BOX)

- [x] NEW BUILDING — exclude domestic garages and domestic outbuildings
- [ ] FOUNDATIONS ONLY
- [ ] ALTERED, REPAIRED, EXTENDED, CONVERTED, RESITED — include installation of heating appliances
- [ ] NEW CONSTRUCTION OTHER THAN BUILDINGS — include demolitions
- [ ] DOMESTIC GARAGES AND DOMESTIC OUTBUILDINGS

FEES APPLICABLE

Building Permit	$ 183 60	Water Connection	$ 6 00
Street Damage Deposit	$ 225 00	TRAVEL FEE	$
Building Research Levy	$ 247 50	DISPENSATION LEVY	$ 57 00
Plumbing	$ 141 00		$
Drainage	$ 116 00		$
Sewer Connection	$		$
Vehicle Crossing Levy	$	G.S.T.	$
M.S. Plumbing	$	TOTAL:	$ 976 10.

Receipt No. 12651

Date of Payment 29/01/92

Authorised Officer SRush

BP.

Special Conditions: (In addition to those noted on reverse):

~~ALL WORK DESIGNED BY THE ENGINEER TO BE SUPERVISED BY THE ENGINEER AND ON COMPLETION OF THE WORK THE ENGINEER IS TO SUPPLY COUNCIL WITH A COMPLETION CERTIFICATE.~~

DESIGN CERTIFICATE PH 03 384 4086

ENGINEER - HARDING CONSULTING ENGINEERS LTD

123 MOUNT PLEASANT ROAD, CHRISTCHURCH.

(DAVID HARDING)

2.14 Deviation from permit

2.14.1 After a permit has been issued no departure shall be made from any of the particulars supplied upon any plan, drawing, specification or document deposited with the application upon which the permit was issued, unless amended particulars clearly describing the intended deviation are supplied to the Engineer in his office and the Engineer shall have given his written approval of the deviation.

Section boundaries must be identified by the owner and the issue of this permit does not involve approval of the site as being within the boundaries of the owner's Land.

Particularly in those cases fronting foreshore reserves but in cases of any doubt the owner must if necessary identify his boundaries by a survey and ensure the building site is within those boundaries. The Council specifically excludes itself from any liability arising from the inspection of the site or approval conveyed by this permit in terms of the exact location of the building.

NOTICE TO APPLICANT

PERMISSION IS HEREBY GRANTED YOU to carry out the works as proposed in accordance with the drawings and other documents submitted, and with any conditions defined; such work to be subject to inspection at any time during progress and to be carried out in strict conformity with the requirements of the Council By-Laws.

IMPORTANT — YOU ARE FULLY RESPONSIBLE for any damage done to any works such as telephone cables, power cables, water mains, gas mains, sewers, pipes, footpaths, roads or other services.

MARLBOROUGH DISTRICT COUNCIL
Planning Dept.

FAX

DATE: 28-01-92	BUSINESS SENDING TO: JOHN DUNN	
FAX NO. CALLED: 03 5737301	ATTENTION: JOHN DUNN	
NO.OF PAGES (Incl this page) 2	File Ref 5949	FROM: STAN RUSH.

MESSAGE:

Building Permit Fees.

Fee account as requested

Stan Rush.

TRANSMISSION CONFIRMATION REPORT No.=007164

DATE/TIME	JAN 28. 1992 12:05PM
DURATION	58s
TRANSMITTER	MARLBOROUGH DIST COUNCIL 035786866
RECEIVER	---------- 64 03 5737 301
PAGES XMITTED	00
PAGES ERRORED	P.01
RESULT	T225
COMM. MODE	G3
RESOLUTION	NORMAL

7033907121

PLEASE CONTACT US AS SOON AS POSSIBLE IF ALL PAGES ARE NOT RECEIVED

Marlborough District Council, Seymour Square, P.O. Box 443, Blenheim, New Zealand.
TELEPHONE: (03) 578-5249, FACSIMILE: (03) 578-6866

BUILDING PERMIT FEES

03 5737301.

MARLBOROUGH
DISTRICT COUNCIL
P.O. BOX 443
BLENHEIM

DATE 07-01-92

M/S JOHN DUNN CONSTRUCTION,
455 MEMORIAL AVENUE,
CHRISTCHURCH.

003270

TELEPHONE (03) 578 5249

FILE No. 5949.

RE ERECT DWELLING AT 39 WAIKAWA ROAD, PICTON

Your application for a building permit has been approved and the permit will be issued on receipt of the following payments:

Building Permit Fee	$ 183:60
Plumbing Permit Fee	$ 141:00
Drainage Permit Fee	$ 116:00
Building Research Levy	$ 247:50
Travel	$ 6:00
Sewer Connection	$:
Water Connection	$:
Stormwater Connection	$:
Reserves Cont. Fee	$:
Vehicle Crossing	$:
DISPENSATION LEVY	$ 57:00
(G.S.T. INCLUDED) SUB TOTAL	$:
Footpath & Services Damage Deposit	$ 225:00
	$:
TOTAL	$ 976:10

Work is not to commence on the structure until the building permit has been uplifted.

SENIOR ADMINISTRATION OFFICER

BOS PRINT LTD

RECEIVED
18 DEC 1991
MARLBOROUGH DISTRICT COUNCIL

RECEIVED
29 AUG 1991
MARLBOROUGH DISTRICT COUNCIL

DRAINAGE
MARLBOROUGH DISTRICT COUNCIL
DRAINAGE AND PLUMBING REGULATIONS 1978
APPLICATION FOR PERMIT TO CARRY OUT DRAINAGE ~~WORK~~

APPLICATION NO 5949.. PROPERTY NO 511361.. PERMIT NO 2985

TO THE Marlborough District Council,
I, the undersigned, hereby apply for permission to have the work described herein, and set out in the plan attached hereto, carried out in the premises situated in Marlborough -

at No 39 Waikawa Rd Picton

being Lot 3 DP 1137 Sec

Name & Address of Owner 455 Memorial Ave CHCH. 5.

Description of Work Drainage work on Dwelling House as per plans.

SCHEDULE OF FEES
PLUMBING AND DRAINAGE PERMITS

Value of Labour Only		Fee
Up to $ 200	...	$45.00
From $ 201 to $1,000	...	$ 9.62 per $ 100 plus $ 25.75
Over $1,001	...	$ 3.30 per $1,000 plus $118.70

Drainage Fee	$.....	OFFICE
GST	$.....	USE
Total Incl GST	$.....	ONLY
Travel Cost	$ ~~$116~~	
Total Fee	$ ~~72~~	

VALUE OF PROPOSED WORK:

Labour Content $800-00 Receipt No 12651 29/01

Total of Materials and Labour $4000-00 Date Issued 31-01-92

To be completed by Registered Drainlayer
Name and Address of Registered Tradesman:

Mr K. J. Morgan Licence/Reg No 9979

Address 19 Budge ST

Signature of Tradesman Date of Application

(FOR OFFICE USE ONLY)

Application Approved G. Watt Inspector.

Dated 20-12-91

Conditions

THE DECISION OF THE INSPECTOR SHALL BE FINAL AS TO ESTIMATED COST

RECEIVED
18 DEC 1991
MARLBOROUGH DISTRICT COUNCIL

RECEIVED
~~28 AUG 1991~~
MARLBOROUGH DISTRICT COUNCIL

PLUMBING
MARLBOROUGH DISTRICT COUNCIL
DRAINAGE AND PLUMBING REGULATIONS 1978
APPLICATION FOR PERMIT TO CARRY OUT SANITARY PLUMBING WORK

APPLICATION NO 5949 PROPERTY NO 51361 PERMIT NO 2985

TO THE Marlborough District Council,
I, the undersigned, hereby apply for permission to have the work described herein, and set out in the plan attached hereto, carried out in the premises situated in Marlborough, -

at No 39 Waikawa Rd

being Lot 39 DP 1137 Sec

Name & Address of Owner John Dunn
455 Memorial Ave CHCH 5

Description of Work plumbing work as per plans & specification

SCHEDULE OF FEES
PLUMBING AND DRAINAGE PERMITS

Value of Labour Only		Fee
Up to $ 200	...	$45.00
From $ 201 to $1,000	...	$ 9.62 per $ 100 plus $ 25.75
Over $1,001	...	$ 3.30 per $1,000 plus $118.70

		OFFICE USE ONLY
Plumbing Fee	$.....	
GST	$.....	
Total Incl GST	$.....	
Travel Cost	$.....	
Total Fee	$141	

VALUE OF PROPOSED WORK:

Labour Content X $2000-00 Receipt No 12651 29/01

Total of Materials and Labour X $6500-00 Date Issued 31-01-92

To be completed by Craftsman Plumber
Name and Address of Craftsman Plumber:

Mr X K.J. Mayo Licence/Reg No X 9979

Address X 14 Bridge ST

Signature of Tradesman X [signature] Date of Application 20-12-91

(FOR OFFICE USE ONLY)

Application Approved [signature] Inspector

Dated 20-12-91

Conditions

MARLBOROUGH DISTRICT COUNCIL
ALL HOT & COLD WATER RETICULATION MUST BE PRESSURE TESTED TO 150 p.s.i. FOR A MINIMUM OF 15 MINUTES.
PLUMBING AND DRAINAGE INSPECTOR

THE DECISION OF THE INSPECTOR SHALL BE FINAL AS TO ESTIMATED COST

MARLBOROUGH DISTRICT COUNCIL

FILE NO. _____ DATE 29-8-91

LEGAL DESCRIPTION VAL. ROLL NO. 20210 - 46000 LOT ____ DP ____

PROPOSED BUILDING Dwelling ADDRESS 39 Waikawa Rd

OWNER John Dunn. (Marnoside Apartments Ltd) BUILDER Owner

TOWN PLANNING CHECK LIST

ZONING _____ USE AND SITE _____

YARDS _____ HEIGHT _____

SITE COVERAGE _____ OFF STREET PARKING _____

STREET SET BACK/BUILDING LINE RESTRICTION _____

LENGTH IN RELATION TO YARD _____

OTHER BUILDINGS ON SITE _____

WIDTH OF EAVES _____

CRITERAL FLOOR LEVEL _____

REGIONAL COUNCIL APPROVAL REQUIRED _____

COUNCIL DISPENSATION APPROVAL REQUIRED _____

APPROVAL YES / NO

SIGNED ..... DATE .....

Refer to Ian Shapcott

PLUMBING AND DRAINAGE CHECK LIST

GENERAL PLUMBING New dwelling

NUMBER OF SANITARY FITTINGS 11

SEWER OK

SEWER INVERT (RELATIVE TO FLOOR LEVELS) OK

STORMWATER TO STREET yes

STORMWATER DRAINS OK

WATER SUPPLY OK

ISOLATION OF W.C. COMPARTMENT OK 2

SIGNED ..... DATE 20-12-91

WORKS

FOOTPATH CROSSING REQUIRED _____

FOOTPATH LEVEL _____

SEWER INVERT LEVEL _____

FINISHED FLOOR LEVEL _____

SEWER CONNECTION EXISTING

WATER CONNECTION EXISTING

STORMWATER CONNECTION EXISTING

PRG. 13/9/91

In 11/9/91 2:20pm
out 13/9/91 1:50pm
Delay Notified

SIGNED ..... DATE .....

File No. _____ Name: John Dunn Address: 39 Wenkanua Rd

Val. Roll No. 20210-46000 Lot _____ D.P. _____ Date: 29-8-91

SECTION 1

Exclusions N.Z.S. 3604 Clause 1.1.2

Yes (circled) No

Height 0/A

Pitch <45° (circled) >45°

Locality (Check zoning maps Records O.K) Res B.

Wind Low Med High (circled)

Snow Yes No (circled)

Stud Ht. 3.0 (circled)

Exclusions N.Z.S. 3604 Clause C.1.1.2

	Yes	No	
Floor Loading: 1.5kpa.	✓		
A-Frame Compliance	N/A		If yes, over rules its "Pitch" above
Foundation Walls 2.0m	✓		
Studs 3.0m	✓		
Check S per Fig. 36	✓		
Check Lintels 3.6m	✓		
Retaining Walls			
Pole Platform Compliance	N/A		Non-driven piles
Driven Piles			

1. Note certain proprietory structures of A-frame type will be registered as complying by Council and dated copies kept on Compliance File.
2. Note pole platforms constructed in accordance with a form of specification by the Marlborough District Council will be deemed to satisfy, otherwise written data is required to be lodged.
3. Pole frames specifically designed.

SECTION 2

	Yes	No	Comments
Floor Plan each level	✓		
Elevation of each wall	✓		
All foundation elements detailed	✓		
All member sizes material and spacing detailed	✓		
All bracing lines shown	✓		
Bracing units allocated to each line & schedule	✓		
Inter element connections specified	✓		
Type & location of cladding indicated	✓		
Engineers Certificate Covers	✓	(Complete construction of Dwelling to be Supervised)	
Engineers Certificate supplied	✓		
Supervision required	✓		

NOTE: If a negative is recorded for Section 1 and Section 2 - application to be deferred until information lodged.

SECTION 3

Site Requirements

	Yes	No	Comments
Slope Indicated	✓		
Known to checker	✓		
Excavation	✓		
Requirements 3.1.1c met		N/A	
" 3.1.1d known			
Site Report supplied			
Engineer Opinion report			
Engineer Known			

	Yes	No	Comments
Slab on ground - Reg. Application E met.	✓		
Ventilation area sufficient	N/A		
Identify & check subfloor elements against Section 4 systems - OK	N/A		
Note: Check 4th Schedule for variations or amendments to Section 4 - OK	N/A		

SECTION 5

Floors			Comments
Bearers	✓		
Floor joists size/span/spacing -	✓		
Joists under load bearing walls -	✓		
Subfloor brace conns.	N/A		
Cantilevers	✓		
Sheet floor	✓		
Diaphragms comply 5.3			

SECTION 6

Walls			Comments
Vertical system	✓		
Horizontal system	✓		
Bracing unit check list completed	✓		
Lintels and head including uplift	✓		
Plates	✓		
Stud size& spacing	✓		

SECTION 7

			Comments
Posts	✓		
Terrace Beams	✓		

SECTION 8

Exterior wall coverings			Comments
Type_____	✓		

SECTION 9

Wall Linings			Comments
Type _____			
Insulation Walls & Ceilings	✓		
Fire Rating to Walls etc.			

SECTION 10

Roofs			Comments
Trusses	N/A		
Design Ref.			
Framed systems	✓		
Bracing Systems			

SECTION 11

Roof Coverings			Comments
Type _____	✓		

SECTION 12

Ceilings			Comments Fully Engineered Design
Type_____	✓		

BUILDING INSPECTOR ..... DATE

MARLOROUGH DISTRICT COUNCIL

RECEIVED
29 AUG 1001
MARLBOROUGH
DISTRICT COUNCIL

BUILDING PERMIT APPLICATION

APPLICANTS CHECK LIST

DOCUMENTS	NUMBER	
Building Permit Application	1	✓
Site Plan	2	✓
Plan , Elevations and Construction Details	2	✓
Specifications	2	✓
Site Report	1	
Bracing Schedules	2	✓
Engineer's Certificates	As necessary	✓
Truss Design References	As necessary	
Truss Layout Plan	2	
Plumbing Application (signed by Tradesperson)	1	
Drainage Application (signed by Tradesperson)	1	
Water Supply Applcation (In serviced areas)	1	
Stormwater Application	1	✓
Sewer Application	1	
Vehicle Crossing Application	1	✓

NOTE : The Bylaws provide that the Permit processing time will not exceed 15 working days

THE APPLICANT IS REQUESTED TO CHECK THE ABOVE ITEMS AND OBTAIN THE NECESSARY DOCUMENTATION BEFORE PRESENTING THE APPLICATION. THIS WILL IN MOST INSTANCES AVOID THE NEED FOR REQUESTS FOR INFORMATION WHICH WILL DELAY THE RELEASE OF A BUILDING PERMIT.

RECEIVED

29 AUG 1991

MARLBOROUGH
DISTRICT COUNCIL

PERMIT APPROVED

Date: 20/12/91

Building Inspector

BEAM CALCULATIONS: Project No 3321....

Name JOHN RUFF

Address LOT 3 WAIKAWA RD PICTON

(refer B.R.A.N.Z. Technical Recommendation No.2 (1983)).

Beam Number ( )
Beam Location GARAGE DOOR
Roof (light/heavy) Span 2.7 Beam Span 4.25
Joist Span 3.8 (600 cantilever)

LOADS	DL	LL	TL	kN/M
Roof (table 1.1)	.71			
Floor (table 1.2)	.71	3.48		
Walls				
Misc.				
	1.42	3.48	4.90	kN/M

Minimum Beam Size from table 5.1 = 152 x 76 x 18 PFC use 203 x 76 x 24 [

Beam Number ( )
Beam Location GARAGE
Roof (light/heavy) Span 6.0 Beam Span 6.0
Joist Span 5.8

LOADS	DL	LL	TL	kN/M
Roof (table 1.1)	1.26			
Floor (table 1.2)	.95	4.73		
Walls				
Misc.				
	2.21	4.73	6.94	kN/M

Minimum Beam Size from table 5.1 = 250 UB 31

Beam Number ( )
Beam Location DECK
Roof (light/heavy) Span — Beam Span 2.7
Joist Span 2.3 (900 cant)

LOADS	DL	LL	TL	kN/M
Roof (table 1.1)				
Floor (table 1.2)	.58	3.78	4.36	
Walls				
Misc.				
				kN/M

Minimum Beam Size from table 4.9 = 200 x 100

Beam Number ( )

Beam Location BEDROOM 1 Beam Span 3.3
Roof (light/heavy) Span 4.2 Factored Span (table 1.5.) 2.4

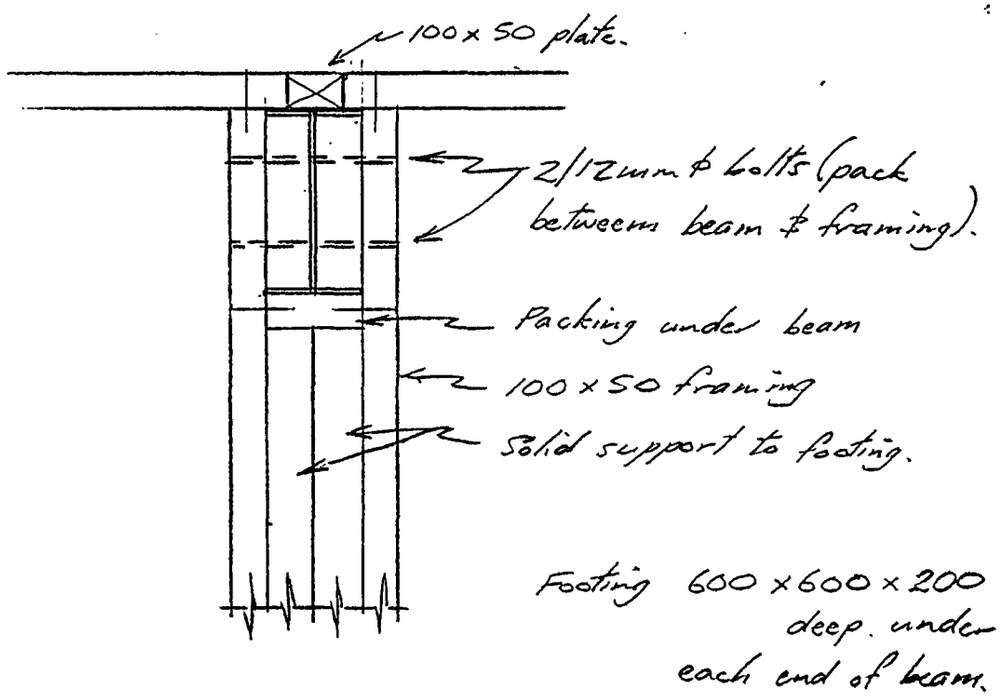
Minimum Beam Size from table 2.4 = 200 x 100

Beam Number ( )

Beam Location Beam Span
Roof (light/heavy) Span Factored Span (table 1.5.)

Minimum Beam Size from table =

RECEIVED
28 JAN 1992
MARLBOROUGH
DISTRICT COUNCIL



GARAGE BEAM DETAIL

Scale 1 : 100

bracing calculations

name JOHN RUFF
address LOT 3 WAIKAWA RD PICTON
project no. 3321

STOREY: Single or Uppermost / Lower of two or middle of three / Lower of three

ROOF TYPE: Light / Heavy

ROOF PITCH: 20° roof height: 1-75

WIND AREA: High / Medium / Low

W = along wall 18 + roof 26 = 44 B.U.'s/m
across wall 18 + roof 26 = 44 B.U.'s/m

EARTHQUAKE ZONE: A / B / C

E = .2 B.U.'s/m²

ROOF OR BUILDING LENGTH BL = 17.0 m

ROOF OR BUILDING WIDTH BW = 9.2 m

GROSS ROOF OR BUILDING PLAN AREA GPA = 115 m²

EARTHQUAKE: B.U.'s ALONG AND ACROSS E x GPA 115 x 2 = 230 B.U.'s

WIND: B.U.'s ALONG W x BW 9.2 x 44 = 405 B.U.'s

WIND: B.U.'s ACROSS W x BL 17.0 x 44 = 748 B.U.'s

1 Total B.U.'s Required	2 Wall Line	3	4	5	6	7	8
			Wall Bracing Elements Provided				
	Label	Minimum B.U.'s Required	Label No.	Type	Rating B.U.'s/m	Length (m)	B.U.'s Provided
ALONG	A		A1	1	42	2.4	109
			A2	1	42	2.4	100
		170				Sub-total	209
	B		B1	1	42	2.2	92
			B2	8	67	1.0	67
		70				Sub-total	159
	C		C1	1	42	2.2	92
			C2	8	67	1.1	73
		115				Sub-total	165
	D						
						Sub-total	
405	TOTAL					TOTAL	533
ACROSS	L		L1	1	42	1.7	71
			L2	1	42	1.8	75
		89				Sub-total	146
	M		M1	1	42	2.3	96
		70				Sub-total	96
	N		N1	2	62	3.2	198
			N2	2	62	2.7	167
		70				Sub-total	365
	O		O1	8	67	1.2	80
		70				Sub-total	80
	P		P1	1	42	1.7	71
		50				Sub-total	71
748	TOTAL					TOTAL	758

2.2

3321

bracing calculations

name JOHN DUFF
address LOT 3 WAIKAWA RD PICTON
project no. 3321

STOREY: Single or Uppermost / Lower of two or middle of three / Lower of three

ROOF TYPE: Light / Heavy

ROOF PITCH: 20° (15°) roof height: single 1 / lower of 2 1.75

WIND AREA: High / Medium / Low

W – along wall 22 (67) + roof 14 (26) – 36 (93) B.U.'s/m
across wall 22 (67) + roof 20 (26) – 42 (93) B.U.'s/m

EARTHQUAKE ZONE: A / B / C — E – 5 B.U.'s/m²

ROOF OR BUILDING LENGTH — BL – 7.1 m — single 2.6 — lower of 2 4.5

ROOF OR BUILDING WIDTH — BW – 6.9 m — 6.9

GROSS ROOF OR BUILDING PLAN AREA — GPA – 39 m²

EARTHQUAKE: B.U.'s ALONG AND ACROSS — E x GPA 39 x 5 = 195 B.U.'s

WIND: B.U.'s ALONG — W x BW = 642 B.U.'s

WIND: B.U.'s ACROSS — W x BL 109.2 + 418.5 = 528 B.U.'s

1 Total B.U.'s Required	2 Wall Line	3	4	5	6	7	8
			Wall Bracing Elements Provided				
	Label	Minimum B.U.'s Required	Label No.	Type	Rating B.U.'s/m	Length (m)	B.U.'s Provided
ALONG	A		A11	8	67	.9	60
			A12	8	67	.9	60
		62				Sub-total	120
	B		B11	9	83	5.2	431
			B12	9	83	1.9	157
		71				Sub-total	588
	C						
						Sub-total	
	D						
						Sub-total	
642	TOTAL					TOTAL	708
ACROSS	L		L11	1	50	2.4	100
			L12	1	50	2.4	100
			L13	8	67	.9	60
		69				Sub-total	260
	M		M11	9	83	3.6	298
		60				Sub-total	298
	N						
						Sub-total	
	O						
						Sub-total	
	P						
						Sub-total	
528	TOTAL					TOTAL	558

3321

RECEIVED
- 8 MAR 1995
MARLBOROUGH
DISTRICT COUNCIL

SPECIFICATION OF WORK AND MATERIALS REQUIRED IN THE ERECTION OF A NEW DWELLING AND GARAGE FOR MR E & MRS N ROBINSON WAIKAWA ROAD PICTON

PERMIT APPROVED
Date: .....
.....
Building Inspector

A. GENERAL

1. The Work

The building is constructed of;
- concrete foundations and flooring
- Insulform polystyrene block ground floor
- timber framing first floor
- aluminium windows
- Texture coating
- Colorsteel roofing
- metal fascia / gutters
- Gib-board interior linings

Also the construction of all cabinets, interior and exterior joinery, the fixing of all linings, and the installation of all services. The Contractor shall provide all labour, materials, tools, plant etc, pay all dues, obtain all permits, and generally complete the building in the best trade manner, in accordance with the accompanying drawings and this specification, taken collectively or separately. The Contractor shall ensure that materials and workmanship shall comply to the latest relevant NZ Standard Specification.

2. Bylaws

The Contractor shall conform in all respects to the Bylaws of all or any Local Authority having jurisdiction over the work, and be responsible for all damage to private or public property occasioned by the work.

3. Sub-Contractors

This specification is divided into trade sections for the convenience of reference only, and every trade jointly and severally shall assist and render all necessary assistance to complimentary trade.

4. Site

The Contactor shall visit the site before tendering to satisfy himself regarding access, levels, and the conditions generally, as no extra will be allowed under this heading for insufficient or wrong description.

5. Setting Out
The Contractor shall be held responsible for the setting out of the work and he shall be required to make good at his own expense, any error which may occur. Figure dimensions are to be taken in preference to scaled ones, and all measurements shall be verified on site before work commences.

6. Availability of Materials
Should any of the materials specified for this contract be unprocurable, negotiations shall be made for the provision of substitutes to the approval of the owner. Any price difference due to this must be agreed upon by the owner before the respective work is commenced.

7. Prime Cost Sum
The owner reserves the right to purchase any items under the PC Sum, and the accounts will be adjusted on completion of the Contract.

8. Completion
At regular periods during the building and on completion of this Contract, the Contractor shall remove debris which may accumulate, and leave the site and the building clean and ready for use. All floors shall be left broom clean, and all glass work sound and clean inside and out, all painted or stained work shall be left free from spoil or dirt. All plaster stopping shall be left sanded to a smooth finish on completion of all wall and ceiling linings.

B. EXCAVATIONS

1. Excavate
Excavate as required for foundation walls, footings, drainage pipes, etc where shown and as required to give a solid bearing to the various depths. Surplus spoil shall be placed where directed by the owner.

2. Back-fill and Ram
Back-fill and Ram carefully around footings, consolidating as the work proceeds, and make up to existing ground level.

3. Hardcore Filling
Hardcore filling shall be placed under all floor slabs as shown. Filling shall consist of clean river metal, consolidated and levelled off before blinding with clean sand, rolling, and pouring of concrete.

4. Over Excavations
In the event of the Contractor excavating below the proper level, the Contractor shall fill the parts over-excavated, at his own expense with concrete.

C. CONCRETE

1. Materials and Mix
The materials and workmanship shall be in accordance with NZS 3101. The concrete shall be ordinary grade, 17.24 mpa, in all foundations, walls, piles, etc as described in the above specification.

2. Foundations and Footings
All foundations shall rest on solid footings at least 300mm below adjacent ground level, and shall be constructed as shown on the plans.

3. Reinforcement
All reinforcement shall comply with NZS 3402 or as shown on the plans. Floor starters of 10 mm at 600 mm cts shall be tied to foundation steel and the reinforcing mesh.

4. Beams and Columns
Beams and columns to balcony and vehicle parking platform shall be as shown on Engineer's Data sheets, and shall be placed in conjunction with Insulform blockwork.

5. Insulform Blockwork
All ground floor walls where shown shall be Insulform polystyrene blocks, reinforced as shown or specified, and constructed to manufacturers specifications.

6. Steelwork
Allow to build in all holding down bolts, brackets, column bases etc as required for future fittings. Holding down bolts for bottom plates to building perimeter shall be 12 mm dia at 1.4 m cts max and not more than 300 mm from corners.

7. Damp Proof Course
All concrete faces in contact with timber shall be covered with one layer of 3 ply malthoid or other approved damp proof course, with minimum side laps of 75 mm.

8. Concrete Flooring
Ground floor shall be minimum of 100 mm thick, reinforced with 668 steel mesh and laid on AHI Moistop, or polythene sheeting properly sealed at all joints and exterior edges. Where water or drainage pipes cut through polythene, ensure that all holes and chases are properly sealed to the pipes, with sealing tape. Hardcore filling shall be properly consolidated and blinded with sand before laying DPC sheeting.

First floor shall be 75mm Stresscrete Unispan slabs, including vehicle platform, with a 75mm concrete topping, reinforced with #668 mesh and R10 starters bent over from the walls at 600 mm cts.

D. CARPENTER AND JOINER

1. Timber Generally
All timber shall be to the best of its class, free from large loose or dead knots or wavey edges, thicknessed if possible, and well seasoned and dry. All joinery timber shall be heart Rimu, Matai, or Mahogany, and machined timber shall be run dry. Any timber not dry shall be fillet stacked on the site until required.

Framing timbers shall be Douglas Fir or H1 treated Pinus Radiata.

2. Standard Specifications
All timber construction shall be in accordance with NZS 3604.

3. Builders' Ironmongery
The Contractor shall provide all nails, brads, screws, bolts, and other ironmongery required. Nails for flooring shall be 62 mm galv. brads. All interior and exterior finishing work shall be punch nailed.

4. Framing - General
The whole of the framework shall be securely braced as per bracing schedule, 150 x 25 mm on exterior walls, 100 x 50 mm solid bracing throughout, or steel angle bracing. All bracing shall be as near as possible to 45 degrees. Construction ply sheet bracing may be used as directed.

5. Top Wall Plates
Shall be 100 x 50 mm in long lengths for stud spacing of 450 max cts halved together at all joints and angles, or joined with a nail plate on top face. 100 x 75 mm, or 100 x 50 mm + 150 x 40 mm shall be used for stud spacing of 600 mm max.

6. Studs
Studs shall be 100 x 50 mm and cut to make 2450 mm between floor and ceiling battens. Opening studs to be 100 x 75 mm. Studs to be spaced at not more than 600 mm cts, and double studs to receive trimmers. Take all wall framing to an even width. Trim for all openings.

7. Ceiling Battens
Shall be 75 x 40 Douglas Fir and to be fixed at centres to suit linings, to underside of trusses or joists, and fixed also to 150 x 40 top plate packer.

8. Lintel Beams
Shall be to the following sizes :

Opening Width	Lintel Size Roof Load Only
Up to 1.5 m	125 x 100 mm
1.6 to 1.8 m	150 x 100 mm
1.9 to 2.4 m	200 x 100 mm
2.5 to 3.0 m	250 x 100 mm
3.1 to 3.6 m	300 x 100 mm

Lintels to be supported on a 100 x 50 mm stud, with an additional stud full height of wall framing fixed to end of lintels.

9. Roof Framing
(a) Trusses
Shall be ex 100 x 50 mm timber members, fixed together to design supplied by Nail Plate Manufacturer.
Trusses shall be positioned at 900 mm cts.

(b) Purlins
Shall be as detailed, fixed to the top side of rafters at centres to accommodate the specified roofing material.

10. Roof Bracing
All lap ends, or gable ends to roof shall be braced to top plate plateline to resist horizontal loads in roof plane. See clause 10.4 in NZS 3604.

11. Dwangs
All walls shall be dwanged with 100 x 50 solid dwangs at not more than 800 cts, or to suit linings.
All first floor joists shall be solid block dwanged at centre span, to all rooms where span exceeds 2.4 metres.

12. Flooring
Concrete floors shall be as specified under Section C6.

13. Insulation
Shall be to standards laid down by the Local Authority.
Generally it shall be R 2.4 batts to all ceilings.
R 1.8 batts to all exterior walls, and between all ground floor Bedrooms and Bathrooms, place one layer of sound control batts as shown.

14. Fire Proofing
Boundary Walls for Garages
Walls of garages on property boundary shall be clad with 1 layer of 12.5mm Fyreline gibboard both sides of wall framing, for 1 hour f.r.r.
Fire Rating material shall extend around corner minimum of 500 mm form the Boundary.
Exterior face of boundary walls shall be over clad with 6 mm flat Hardiflex and PVC jointers.

15. Joinery
All joinery must be constructed according to the best joinery practice, by mortice and tenon, tongue and groove, mitres, screwed corners, etc.
All exposed nailing shall be well punched.

(a) Windows
Aluminium windows shall be constructed by an approved manufacturer, to the sizes and styles shown, with wooden Rimu, or Aluminium Reveals - colour to be selected.

Glass blocks in frame to the Spa Room, fitted into the corner if possible. Also two windows to the stairwell, and sidelights to both sides of the front entrance.

Arched top windows as shown shall be constructed to allow pivot opening, and windows of this nature are available from G M P Joinery ex Hamilton.

(b) Doors and Frames
Aluminium sliders and or side lights as shown.
Eurogliders to Ground floor Living.
Entry doors to front shall be a selected panel Cedar with wooden frame and reveal. Glass blocks to sidelights.
Arched top door to wine cellar.
Cavity wall sliders to Wardrobe and Ensuite to Bed 1.
Laundry external door to be aluminium glass top panel.

(c) Joinery Fixtures
Kitchen cupboard and bench units shall be as selected in prefinished satin or woodgrain Melamine material, with formica bench tops of approved manufacture. Units may be as detailed or specified during the construction of the dwelling.
Allow P.C Sum of $9500 for main Kitchen and $1000 for ground floor bench unit.

Bathroom vanity cabinets as selected, including tops.
Allow P.C Sum of:- $1000 for Bed 1 Ensuite
$800 " Bed 2 "
$800 " U/s Toilet
$750 " D/s "
$750 " Spa Room
Laundry cupboard units as selected, allow P.C.Sum $600
Allow for Laundry shute from top floor Toilet room.

16. Staircase
Internal Staircase.
To be constructed with 250 x 50 stringers, 250 x 30 treads and risers as specified. Treads and risers shall be housed 15 mm; glued , wedged and glue blocked to the stringers.
Allow for future handrail mechanism to support disabled persons chairlift.
Supply selected handrail and balusters to one side of each flight of stairs.

External Staircase.
Shall be fixed alongside and onto the exterior wall of the dwelling and shall be constructed in concrete. Use a Unispan slab on the slope, and construct the treads onto the slab.

E. ROOFER

Supply and fix selected roofing to dwelling with all required underlays, flashings, hip covers, barge capping, ridging, and valleys, to complete the building fully waterproof.
Materials shall be of approved manufacture and installation shall be carried out by certified tradesmen.

All battens or purlins shall be of sizes stated by the roofing manufacturer or Local Authority Building Standards.

Aluminium and glass portico roof over front deck as shown to be designed and supplied by Aluminium manufacturer.

F. DRAINAGE

1. Materials
   Provide and fix materials which must be in accordance with the best trade practice and with the specification of the Local Authority and Health Department.

2. Excavate
   Excavate all trenches required for drains and fittings to the depth required, and the laying of sanitation and stormwater drains shall conform with Sanitary and Drainage Bylaws.

3. Stormwater Connection
   From each downpipe gully, collect all stormwater into 100mm PVC pipe and discharge at property boundary into sea.

4. Sewer Connection
   Connect up all foul sewerage drains in 110mm PVC to the main sewer via easement along foreshore boundary.

5. Completion and Testing
   On completion of the whole of the drainage, to be handed over in thorough working order, according to the Health Department's requirements and the local bylaws, to the satisfaction of Inspectors.

G. PLUMBER

1. Materials
   All materials used by the plumber shall be to the best of their several kinds and must be fully conform to all or any governing regulations or bylaws.

2. Flashings
   All flashings shall be made in as long lengths as possible from any of the following materials :
   - Colorsteel,
   - Butynol Rubber.

3. Downpipes
   Shall be 100 x 50 rectangular PVC throughout.

4. Showers
   All showers shall be tiled wet floor units with sloping floors.

4. Spouting
Shall be :
- Taylor Fascia external gutter,
- Dimond Straightline gutter,
- Dimond 125 x 125 x 75 Fascia gutter.

5. Waste Pipes
Carry waste pipes in PVC from all fittings with proper "S" waste traps, fittings, etc as required. Conceal wastes and traps wherever possible and all pipes shall have correct fall to discharge waste fluids to gully traps. Wastes to be 38mm dia except for wash hand basins which shall be 32mm dia.

6. Vents
Terminal vent shall be 75 mm dia PVC pipe with PVC cowl at top flashed at roof with lead, or Butynol rubber.

7. Cold Water Supply
Shall be run in 12 mm or 19 mm dia piping as required, to all services shown.

8. Hot Water Supply
Shall be run in 12 mm or 19 mm dia piping as required, to all services shown. 135 litre HW Cylfitted in roof above Study/ Entrance wall to service the upper floor, and 180 litre cylinder fitted in the Linen room to service the ground floor.

9. Supply and Fit Up ready for Use.
All fittings as shown shall be installed to correct procedures by a certified tradesman and to Local Authority Standards. Items may be purchased by the owner and installed by the Contractor, to the owner's satisfaction.

H. INTERIOR LININGS

1. Ceilings
Ceilings shall be lined with Gibralter board, for either plain or textured surface, and either glued directly onto the underside of the Unispans or battened.

2. Walls
Walls shall be lined with either :
- Standard Gibralter Board,
- Wet Wall Gibralter Board,
- Hardiglaze or other prefinished material,

3. Stopping
Where walls are lined in Gibralter Board, all stopping shall be carried out by the fixer and walls and ceilings shall be left in a fully sanded condition ready for painting or paper-hanging.

4. Mouldings
(a) Scotia
- Standard 40 x 20 Flat Bevelled timber,
- Deluxe Fibrous Plaster as selected,
- Other selected timber moulding.

(b) Architraves
- Standard 60 x 20 Flat Bevelled timber,
- Rebated Jambs throughout.

(c) Skirtings
- Standard 60 x 20 Flat Bevelled timber,
- Coved Floor Covering with 20 x 12 finishing bead placed 75 mm from floor level.

I. EXTERNAL FINISHING

1. Barge and Fascia Boards.
Barge and Fascia boards shall be Colorsteel pressed metal Fascia, as per section I-4 and fitted by a certified tradesman. All joints , mitres, angles, etc shall be neatly executed.

2. Soffit Lining
Soffits shall be lined with 4.5 mm flat Hardiflex sheets nailed to dwangs and framing with 38 mm galvanised flat head nails. All butt joints shall be finished with PVC jointers. Soffits may be lined with selected T & G timber.

3. Linings
Exterior linings shall be Nuplex coating over the Polystyrene blocks and also over the first floor walls of Harditex sheets, which shall be fixed to the manufacturers specs. Where required a skim coat of solic plaster may be applied to the blockwork before the Nuplex coating is applied.

4. Ballusrades
All deck ballustrades shall be selected powder coated aluminium handrails and supports, with infill panels of clear safety glass. Details to be supplied by manufacturer.

J. ELECTRICIAN

1. Materials
Materials used by the electrician shall conform to the regulations of the Electric Power Supply Authority. The electrician shall provide all materials necessary for the completion of the work, which shall be carried out in compliance with the appropriate regulations.

Wiring shall be done with tough plastic sheathed and insulated cable, and shall be concealed from view or run in PVC conduit.

2. Lighting
Wire up and provide the fittings as detailed on the plan.

___ Interior ceiling lights. ___ Exterior ceiling lights.

___ Interior wall lights. ___ Exterior wall lights.

All ceiling roses be centrally situated generally, unless shown otherwise, and switches where indicated, 1350 mm above floor level. Owner to choose light fittings.

3. Switched Socket Outlets
Outlets shall be provided as shown on the plan and shall all be double units, generally fitted 300 mm from the floor level, except for washing machine, fridge, and kitchen benches.

Number of outlets shall be ___

Allow shaving outlets in bathrooms as shown adjacent to vanities.

4. Telephones
Install telephone outlets where directed using flush mounted units to Telecom Standards.

5. Air Conditioning
Shall be provided in all rooms as directed with independent thermostat controls as required.
Use approved systems only and install to Manufacturer's specification.
Ensure no damage takes place during the pouring of the concrete floor.

6. Range / Oven
Install the selected Wall Oven, Range, Microwave Oven, Cook Tops, and Expellair Units, to the appropriate Manufacturer's specification as directed by the owner.

7. Point of Entry
Provide a switchboard where shown built into the wall, and run a mains cable from the road to the house.
A separate fuseboard may be installed elsewhere in the house if desired.

8. Hot Water Cylinder
Shall be wired into night rate control. Cylinder to have thermostat of :
- 2,500 watt element for 180 litres
- 3,000 watt element for 270 litres

9. Test and Completion
The electrician shall provide for all tests prescribed by the Power Authority and hand over the whole work completed, past and sealed by them.

K. PLASTERER

1. Materials
Cement and water shall be as specified under Concrete. Sand shall be hard and sharp and free from salt, soil or other deleterious materials.

2. Porches, Steps and Terraces
All porches, steps, and terraces, shall be thoroughly cleaned, hacked, washed with water, and rendered and straightened with 1:3 Portland Cement sand compo not less than 19 mm thick and finished with a steel float to a perfect smooth, straight, and even surface.
Floors may be finished with a steel float during the main concrete pour.

3. Exterior Finish
Plaster and splatter-coat finish to the external faces of all concrete foundations exposed above ground level, unless directed otherwise.

L. PAINTER AND PAPERHANGER

1. Materials
   Shall be to the best of their respective kind, and shall be delivered to the job in unopened containers.
   All surfaces to be painted shall be protected from the weather, cleaned and free from dust and dirt.
   All surfaces to be wall papered shall be properly sanded, cleaned and treated with Size to allow 100% bonding of paper to walls.

2. Exterior Work
   (a) Woodwork
   Prime all exterior woodwork with an approved general purpose primer, including all laps or joints.
   Apply two coats of approved undercoat, and finish with one coat of approved exterior Enamel.

   (b) Steelwork
   All flashings, downpipes, and spoutings that are not supplied in Colorsteel or Butynol, shall be primed with galvanised iron primer.
   Apply two coats of undercoat and one finishing coat.

   (c) Hardiflex
   Seal with approved cement sealer, then apply one undercoat and one finishing coat of Acrylic or apply two coats of Acrylic paint immediately after the sealer.

   (d) Stained Woodwork
   Apply liberally one coat of stain and brush well into the timber. After stopping with coloured putty, apply a second coat of stain.
   This treatment will need to be carried out on a regular basis.

   (e) Exterior Walls
   All exterior walls both Insulform and Harditex sheets shall be coated with Nuplex Flexicoat precoloured texture coating, applied by an approved applicator.

   (f) Foundations
   Shall be painted with two coats of suitable cement or Acrylic paint, if a painted surface is required.

3. Interior Work

(a) Wallpaper

Walls shall be papered after treating with Size, and all butt joints and patterns shall be neatly matching, free from wrinkles, blisters, lumps of paste, dirt, & stains. Allow PC Sum of $30 per roll for wallpaper.

(b) Painting

Walls and ceilings shall be painted with two coats of suitable Acrylic paint, or Alkyd flat for ceilings only, after sealing with an approved undercoat / sealer.

(c) Varnishing

All timber requiring varnishing shall be given one coat of Satin clear sealer, and finish with two coats of clear, or Satin Enamel.
Work shall be well sanded between all coats to give a perfectly smooth surface.

SPECIFICATION.

For DUNN RESIDENCE.
At 39 WAIKAWA ROAD. PICTON.
LOT 3 P.T. D.P. 1137
470 m2

BUILDING CONTRACTORS

JOHN DUNN CONSTRUCTION

455 Memorial Ave.
Christchurch 5.
Phone & Fax (03) 358-3614

4/31 Waikawa Road.
Picton.
Phone (03) 573-7301

SPECIFICATION.

Work to be done and materials to be used in the erection of single unit dwelling house.

For **DUNN RESIDENCE.**
At **39 WAIKAWA ROAD. PICTON.**
LOT 3 P.T. D.P. 1137
470 m2

Carry out work in accordance with the contract documents prepared by ;

Harding consulting engineers Ltd.
123 Mt Pleasant road.
Christchurch.
Phone & Fax 384.4086.

John Dunn construction.
455 Memorial Ave
Christchurch 8005.
Phone & Fax 358.3614.

HARDING
CONSULTING
ENGINEERS LTD
CIVIL & STRUCTURAL ENGINEERS PROJECT MANAGERS

123 Mt Pleasant Rd
Christchurch 8
New Zealand
Telephone (03) 3844-086
Fax (03) 3844-086

File 465
26 August 1991

The District Engineer
Marlborough District Co[illegible]cil
Picton

Dear Sir,

DESIGN CERTIFI[illegible] -House for Mr & Mrs Dunn

I, David Hard[illegible] being a Registered Engineer and holding a current [illegible]al Practising Certificate, hereby certify that I ha[illegible]een engaged to design and execute the appropriate engin[illegible]ng calculations for a timber and steel framed house pro[illegible]d to be constructed for Mr and Mrs Dunn,at Waikawa [illegible], Picton.

The accompa[illegible]g three sheets of Drawings,titled "Mr and Mrs Dunn- Waik[illegible] Road Picton ", and numbered 465/S1 to S3, dated August [illegible] adequately illustrate the design of the structure.

I have ex[illegible]d reasonable control over the design processes f[illegible] works defined above which have been designed i[illegible]rdance with sound and widely accepted engineerin[illegible]nciples to support the loads specified in N.Z.S.420[illegible]4.This office has not been asked to carry out a soils i[illegible]igation, and the foundations have been designed [illegible] an allowable bearing pressure of 70kPa as set out in N[illegible]604. This should be confirmed on site by others.

Var[illegible] aspects of the design are in accordance with the follow[illegible] authorities:

N.Z.S.3603:1981
N.Z.S.3101:1982
N.Z.S.3604:1981

I be[illegible]ve that the stresses in the various materials of cons[illegible]ction and force resisting elements of the structure are[illegible]h as to ensure the safety and stability of the str[illegible]ure,if the works are constructed in accordance with the [illegible]ove described drawings.

Y[illegible]s Faithfully,

D Harding

Harding Consulting Engineers Ltd

Director: D. Harding B.E. (Hons), Dip. Bus. Admin., Registered Engineer M.I.P.E.N.Z.

1-1 READING OF PLANS AND SPECIFICATIONS:
The Plans and Specifications will be read as one document. The contractor should ask all sub-tradesmen to read the particular section of the specification to see what specific requirements apply, apart from general trade practices.

1-2 SITE:
Visit the site so as to be fully acquainted with the facilities or difficulties of access thereto and the nature and extent of the proposed work.

1-3 PERMITS AND FEES:
Allow for giving all notice to local and other authorities, obtaining all necessary permits and paying all fees and charges.

1-4 INSURANCE:
The contractor shall insure the works in an approved Fire Office and such insurance shall cover the full value of the premises when completed. The contractor shall be held responsible for any damage or loss by fire to the works and such things as are covered by the "Policy" until the completion of the contract.

1-5 VARIATIONS:
No variations of any kind shall be made to the contract without direct instruction in writing from the employer. The price of any variations must be agreed to in writing before being proceeded with.

1-6-SAFETY PRECAUTIONS:
Allow for complying with all requirements of the Construction Act and Regulations.

1-7 POWER SUPPLY:
The contractor will arrange for the Contractors Power Supply connection on site and arrange all necessary fees to be paid.

1-8 ATTENDANCE OF TRADES:
Make good after all trades. The contractor shall leave all necessary holes, chases, sleeves, ducts etc.as required by subsequent trades.

1-9 SETTING OUT:
Any discrepancy between work as set out and the drawings must be reported to the designer before any work is carried out.
The contractor is responsible for the accuracy of the setting out and shall provide all labour, instruments, steel tapes, lines, pegs, etc.as necessary.

1-10 DIMENSIONS:
Figured dimension drawings shall take preference to scaled dimensions and large scale drawings given preference to smaller. Unless expressly stated otherwise, dimensions shall be taken to define bare surface of concrete, timber frames and the like. All dimensions shall be verified on site before commencing any work.

© Copyright.

1-11 MATERIALS AND WORKMANSHIP:
All materials shall be best of their respective kinds, qualities, classes, and grades as hereinafter specified and shall comply with the requirements of relevant New Zealand Standard Specifications.

1-12 REGULATIONS AND STANDARDS:
The whole of the work in all trades shall comply with in every respect the requirements of the local authorities and New Zealand Standards, Codes and Recommendations.

1-13 SCAFFOLDING:
Allow for the provision and erection of all external and internal scaffolding required, allowing free use of the same to all tradesmen engaged in the works, maintaining to the satisfaction of the authorities and removing at completion.

1-14 FINISHED WORK:
It should be clearly understood that a high standard of workmanship and finish is required throughout this contract. Should any trade consider that any surface finish or fitting be not in a satisfactory condition to ensure a proper fitting for his own thereon, it shall be his responsibility to notify the contractor before anything further is done, and under no circumstances whatever shall such finishing work be proceeded with until the necessary improvements have been made. Failing such notification and correction, the finishing trade concerned will be held responsible for a poor finish due to such unsatisfactory conditions.

1-15 CLEARING SITE:
The contractor shall allow in his tender for the completion of the building in all respects.
At completion, the site and the whole of the building shall be left completely free from rubbish and residue and ready for occupation.

EXCAVATOR

2-1 GENERAL:
Refer to the General and Special Conditions of Contract and Preliminary Clauses which shall apply to all work in this section.

2-2 EXCAVATION:
The area of the site to be covered by the building shall be stripped of all top growth and vegetable matter.
Excavate for all foundation pads, piles, slabs etc. as shown on the drawings.
Should soft clay, peat or filled ground be encountered on the site, an engineer shall be consulted for additional foundation details.
Before placing steel or pouring concrete, the excavations shall be cleaned and the bottoms dry and firm.

2-3 BACKFILLING:
Backfill around foundations with approved material and thoroughly consolidate. Remove all timber and other rubbish and loose material before backfilling.

2-4 REMOVAL OF SPOIL:
The excavator shall remove all surplus material away from the area of the building. Stockpile on the site where directed by the owner.

© Copyright.

3-1 GENERAL:
Refer to the General and Special Conditions of Contract and Preliminary Clauses which apply to all work in this section.

3-2 MATERIALS AND WORKMANSHIP:
The whole of the concrete work shall comply with the appropriate sections of N.Z.S.1900, Chapter9.3a, unless otherwise instructed.

3-3 CONCRETE STRENGTH:
The following strength shall be used unless specified otherwise on plans:

<A>	Foundations,pads,piles,and stops	17.5 Mpa
<B>	Floor Slab	17.5 Mpa
<C>	Filling of reinforced blockwork	17.5 Mpa

3-4 MIXING OF CONCRETE:
Mixing of concrete shall comlpy with N.Z.S.1900,Chapter 9.3a.

3-5 FORMWORK:
The formwork and falsework shall be constructed as specified in N.Z.S.9.3a. The formwork is to be constructed to provide a high standard of "fairface"finish.

3-6 REINFORCING:
The reinforcing steel shall comply with the following requirements:
<a> Mildsteel reinforcing <plain> shall be grade 275.N.Z.S.430ZP.
<b> Mildsteel reinforcing <deformed> shall be grade 275.N.Z.S.340ZP.

3-7 FLOOR SLAB:
<a>Dampproofing:
Lay "moistop" DPC over hardfill.
<b>Floorslab:
The concrete floor slab laid over the moistop and hardfill shall be 100mm thick unless otherwise specified on the plans.
<c>Floor Finish:
The slab shall be finished while still green. Any resulting ridges shall be trowelled off with a steel float. A high standard finish is expected. Allow to fill and finish with a steel float all pockets, recesses, chases, etc. left for pipework and other trades.
<d>Construction Joints:
Form construction joints using boxed construction joints in one direction and sawn 30mm depth in the other direction made not more than three days after concrete has been placed.
Saw cuts shall be filled with grout to prevent edges fretting.
Reinforcing shall be continuous across all construction joints.
Saw cuts and construction joints shall be at 4.000 crs. max.

3-8 CHASES ETC.:
Form all chases, pockets, flashing grooves etc. as are necessary for the complete and proper execution of the work.

3-9 EMBEDDED ITEMS:
Provide and build in all bolts, fixings, etc. necessary for the proper execution of the works. Co-operate with all other tradesmen and trades and build in all items required by them.

3-10 CONCRETE PILES:
Ordinary concrete piles to N.Z.S.3604 shall for this project be precast concrete piles embedded into insitu footings. All other concrete piles ie. anchor piles, braced piles and cantilever piles shall be formed insitu where indicated on drawings, reinforced and to depths in accordance with N.Z.S.3604.

© Copyright.

4-1 GENERAL:
Refer to the General and special Conditions of Contract and Preliminary clauses which apply to all work in this section.

4-2 SCOPE:
The concrete Blockwork includes the supply and laying of all blockwork shown on the drawings. The blocklayer shall provide all materials, equipment, plant and labour necessary to carry out the whole of the concrete blockwork.

4-3 BLOCKS:
Blocks shall comply with the requirements of N.Z.S.3102P. All exposed surfaces of blocks will be true and square. Damaged blocks will not be accepted.

4-4 MORTAR:
Mortar shall comply with the requirements of N.Z.S.1900 Ch.9.2.mortar to No.1 mix shall be used for all blockwork.

4-5 MATERIALS AND WORKMANSHIP:
All materials and workmanship shall comply with the relevant portion of N.Z.S.1900 Ch.9.2. Only first class workmanship will be accepted.

4-6 BOND:
Blocks shall be laid in stretcher or stack bond as shown on the drawings. All joints shall be full and struck to provide a fairfaced finish to both faces. Complete bond shall be secured between the blocks and the mortar. Ensure that the bond is not broken by making adjustments to blocks after mortar has taken a set.

4-7 BUILDING IN:
Build in bolts, fixings, pipes, joinery, fittings etc. as are required to be built in by other trades. The blocklayer shall cut all openings and chases to neat size required.

4-8 WEEP HOLES:
Provide weep holes in blockwork at least 50mm below all bottom plates and below finished ground floor level, and below intermediate floor level, at approximately 800mm intervals. Drill or rake out weep holes to base of mortar bedding so as not to entrap any rain that might enter the walls.

4-9 CLEANING:
On completion of laying clean down blockwork, remove mortar from adjoining surfaces and floors and leave work completely clean. Remove all scaffolding, mortar, debris, etc. from the site.

BRICKLAYER

5-1 PRELIMINARY AND GENERAL:
Read and note all clauses under Preliminary and General of this Specification where they apply to this trade.

5-2 RELEVANT SPECIFICATIONS:
All work shall be in accordance with the requirements of N.Z.S. 1900 Ch.6.2 as appropriate.

continued.....

© Copyright.

5-3 MATERIALS:

<a> Bricks for external veneers and foundation walls shall be of the colour and type selected by the owner and shall comply with N.Z.S.366 Clay Building Bricks grade A or B All fairface brickwork shall be laid with their best face outwards.

<b> Cement shall be ordinary Portland Cement and at the time of use shall comply with N.Z.S.S.3122 Portland Cement.

<c> Plasticisers shall be used in accordance with the manufacturers instructions and no other additives are to be used in conjunction with these materials. On no account will further additions be made at the time of re-tempering mortars.

<d> Water shall be drinking quality.

<e> Sand for mortars shall be mercer No.1 sand and/or shall comply with the relevant clauses of N.Z.S.S. 3013, sands for Mortar, Plasters and External Renderings.

5-4 PREPARATION OF MORTAR:

Mortar shall be prepared by mixing in an approved mixer. Measurement of materials shall be by volume using suitable containers. Mortar shall be mixed untill a homogenous mass is obtained but not for less than five minutes. All mortar whether on the boards or left in the mixer shall be used within 90 minutes. Mortar not used in this time shall be discarded.

5-5 BRICKLAYING:

Bricks shall be laid in stretcher bond true to line level and plumb and in accordance with the best trade practice. All work shall be laid from the lowest corner and no corner shall be raised more than 900mm above wall line. Corners shall be racked back. On no account will toothing be permitted. All joints will be completely filled with mortar and the bricks shall be disturbed as little as possible after initial positioning. Joints shall, unless otherwise specified,be not more than 9.5mm thick and shall be tooled as directed as work proceeds. Where tapestry bricks are used care shall be taken to use a tool slightly smaller than joint width to prevent pushing mortar into the brick striations.

5-6 MASONRY VENEERS:

<a> Building Paper: run ordinary black bituminous breather type building paper to N.Z.S.2295 <or fire resisting breather type> horizontally and well secure to outside face of framing from bearer to top plate.

<b> Clay Brick Veneer: construct brick veneer with approved face fixed tiles at correct spacings in accordance with Appendix F of N.Z.S.3604 and with material and workmanship to N.Z.S.1900 Ch.6.2.

A cavity of not less than 40mm and not more than 75mm shall be maintained between building paper and veneer.Where necessary weep holes shall be left every third joint for the discharge of water, as under concrete blocklayer. Keep the cavity and upstand clean, free from mortar protrusions and droppings. Keep pipes or electrical wire, junction boxes etc. out of the cavity. Build in the required number of subfloor vents to provide not less than 3500mm2 of ventilation per 1.0m2 of floor area. Keep tops of vents below bottom of bearers. Thoroughly clean down the face of work on completion and leave free of mortar stains and efflorescence.

<c> Sills: Sills to be brick on edge or brick sill tiles, brought to underside of wooded sills or aluminium joinery. Junction to be filled with a suitable sealant as recommended by the Joinery Manufacturer and overpointed with cement mortar.

© Copyright.

6-1 PRELIMINARY AND GENERAL:
Read and note all clauses under Preliminary and General of this Specification where they apply to this trade.

6-2 WORK INCLUDED:
The solid plastering of all interior floors, if on plan, and the front and back porches, slabs and steps, also terrace if shown.

6-3 MATERIALS:
Cement: shall be medium setting Portland Cement of approved manufacture.
Sand: shall be to N.Z.S.3013 Sands for mortars, plasters and External renderings.
Hydrated Lime: shall be mill hydrated of an approved brand.
Bonding Agents: if used shall be in accordance with makers instructions.

6-4 WORKMANSHIP:
All work to be best trade practice and generally where plastering is required by drawing it shall mean finishing to 12mm thickness with a mix of one part cement to three parts sand with 10% of hydrated lime added and finished to a straight and even surface with a wood float.

6-5 FOUNDATIONS:
Concrete foundation walls shall be prepared by removing projections making good any defects and finishing with a dash coat of 1 to 3 cement and sand applied to give a regular and satisfactory coverage.

6-6 PORCH, STEPS AND TERRACE:
Plaster up in one operation. One coat 12mm thick to terraces and porch slabs, 12mm thick to verticals and sides etc. Wood float up then given light sweeps with steel float to remove blemishes.

6-7 COMPLETION AND CURING:
Leave all work complete and clear away all plaster droppings. Keep work damp and maintain all finishes to completion.

6-8 EXTERIOR PLASTER ON METAL LATH OR WIRE MESH:
Such back grounds and plaster shall be erected according to Appendix G of N.Z.S.3604, either rigid or non-rigid backings, and plastered according to N.Z.S.4521.

FIBROUS OR GIB. PLASTERER

6-9 PRELIMINARY AND GENERAL:
Read and note all clauses under Preliminary and General of this Specification where they apply to this trade.

6-10 WORK INCLUDED:
The manufacture and application of fibrous plaster or Gibraltar board sheet to wall or ceiling surfaces as specified. The manufacture and application of cornices or other decaoative items as specified.

6-11 MATERIALS AND WORKMANSHIP:
All fibrous plaster or Gibraltar sheets and other products shall be manufactured and fixed, strictly in accordance to N.Z.S. 4221 or with the Code of Practise of the N.Z. Fibrous plaster manufacturers Assn. The whole of the labour required for the erection, fixing, wadding and stopping shall be that of competant fibrous plaster tradesmen. Admixtures, release agents and stopping materials shall not be of a deleterious nature nor used in Quantities sufficient to impair the properties of the sheet when used with or without decoration.

continued..... © Copyright.

6-12 FRAMING: PLASTERER

All noggings, trimmings, straightening and packing of studs or joists, necessary for the fixing of Fibrous or Gibraltar board products shall be provided and completed by the builder before the commencment of such work. Timber framing shall comply with N.Z.S.S.3631 (framing grades) and shall be pre-dried to an equilibrium moisture content not exceeding 15-16%. The surface to which Fibrous or Gibraltar board is fixed must be clean, straight and dry.

6-13 CEILING DIAPHRAGMS:

Fix all ceilings serving as structural ceiling diaphragms under terms of N.S.Z.3604 (obtain methods of fixing and size limitations from manufacturer) Check that each wall under or connected to has bracing for a diaphragm.

6-14 PAINTING:

All fibrous plaster or Gibraltar board sheets and other products shall be painted strictly in accordance with the specifications outlined below:

SYSTEM	FIRST COAT	SECOND COAT	THIRD COAT
No.1	Varnish based pigmented sealer.	Primer undercoat	Full Gloss
No.2	" " " " "	Semi Gloss	Semi Gloss
No.3	" " " " "	Alkyd Flat	Alklyd Flat
No.4	" " " " "	P.V.A. Plastic	P.V.A. Plastic

Allow overnight drying between coats except for system No.4 where one or two hours drying time, according to the manufacturers instructions may be allowed between second and third coats.
N.B. The plasterer will not accept responsibility for the effect of glancing light on fibrous or Gibraltar board with a gloss paint finish.

METALWORKER

7-1 GENERAL:

Refer to the General and Special Conditions of Contract and Preliminary clauses which shall apply to the work in this section.

7-2 SCOPE:

Fabrication and supply of all steelwork as shown on the drawings. All steelwork shall be complete with necessary bolts, washers etc.

7-3 GALVANISED M.S.ANGLE LINTELS:

Masonry veneer above windows and door openings shall be supported by galvanised M.S.lintels. Angle lintel dimensions shall be calculated as set out in the following schedule:

<u>Schedule of M.S.Angle Lintels:</u>

Maximum width of opening	Lintel Size
1.500m	70x 70x 6 mm
2.000m	100x 75x 8 mm
2.400m	125x 75x 8 mm
3.000m	150x 75x10 mm
3.600m	150x 90x10 mm
4.200m	200x100x10 mm

M.S. Lintels shall have a minimum landing of 200mm on their supporting masonry unless stated otherwise on the drawings, and to be provided with weep holes and be galvanised.

© Copyright.

CARPENTER

8-1 GENERAL:

This specification is to be read in conjunction with the General Clauses, the Plans and General Conditions of Contract.

(a) All timber construction shall conform with the principles laid down in N.Z.S.3604.

(b) All timber used shall conform to N.Z.S.3602 requirements "Code of Practise for Specifying Timber and Woodbased Products for use in building."and free from large loose or dead knots,waney edges and other defects and must be fillet stacked on site under weatherproof covers untill used.

(c) All framing timbers are to be air seasoned to not more than 18% moisture content.

(d) All dressing timbers are to be airseasoned or kiln dried to not more than 12% moisture content.

(e) The sizes of all timbers are the nominal size sawn unless stated to be the finished size by the abbreviation EX'.

(f) All framing timbers to be gauged or thicknessed where required to produce regular plane surfaces.

(g) All timbers described as Dressing grade are to be dressed and sanded smooth on all exposed faces.

(h) All external finishing timbers are to be primed or stained before fixing. (all surfaces).

(i) The Contractor shall supply all material plant and labour to complete the framing and finished carpentry.

8-2 TIMBERS:

In general the following timbers shall be used:

Treated Pinus Radiata	No.1 framing grade. Use for framing generally.
Ground Contact Pinus Radiata	No.1 framing grade. Use for sub-floor framing.
Treated Kahikaetea Clear	Fascia and Barge boards, Rusticated boarding.
Dressing A Heart Rimu	Exterior Finishing Timbers.
Dressing A Rimu	Miscellaneous Interior Finishing.

Refer to the drawings for roughsawn,bandsawn or dressed finishes to timber.

8-3 LINTELS:

Calculate lintel sizes as set out in schedule included in this specification.

8-4 DAMP PROOF PAPER:

Damp proof paper fabric shall consist of bitumised felt fabric weighing not less than 2.7Kg/m2 under all timber plates, etc. where they abut with concrete.

8-5 THICKNESSING:

All framing timbers shall be machined thicknessed to a uniform thickness.

8-6 FRAMING:

All framing shall be generally 100x50mm as shown on the drawings.

Rafters, purlins, beams, joists etc. shall be as shown on the drawings.

continued..... © Copyright.

Roof to be framed up to pitch indicated on plan and to detail properly checked, birds mouthed, and well fixed in accordance with N.Z.S.3604. Ceiling joists, ceiling runners, valley rafters, strutting beams and underpurlins to be sizes specified on the appropriate schedules included in N.Z.S. 3604.

Allow to frame up and finish whole of work as detailed. Allow to do all bracing, dwanging, packing etc. for linings, finishings and fittings as drawn or specified.

8-7 FASTENINGS AND FABRICATION:

(a) The Contractor should especially note that all aspects of fastening and fabrication of timber framing members and wood based products on this contract shall accord with the following clauses of N.Z.S.3604:-

Clause 2.5.1. - General
Clause 2.5.2. - Adhesives for timber & woodbased products
Clause 2.5.3. - AND APPENDIX A - for nailing & use of wire dogs.
Clause 2.5.4. - for bolting and screwing.

(b) Reference shall also be made to appendix A of N.Z.S.3604 for the proper fixing of sheet lining and cladding materials for walls and ceilings that are not woodbased eg. asbestos cement sheeting; especially where such materials are used as diaphragms and for wall bracing.

(c) Mild steel structural components used in sub-floor spaces, exposed to the weather or in position where condensation or dampness will occur shall be hot dipped galvanised after forming and shall provide the necessary"capacities" called for by N.Z.S. 3604 dependant on function & location.

(d) In all other cases, select and use connectors according to manufacturers literature conforming to N.Z.S.3604 requirements.

8-8 INSULATION:

All roofs and floors are to be insulated in accordance with N.Z.S.1900 Ch.4, N.Z.S.4212, and N.Z.S.4128P.

Walls - Insulate perifery walls with 75mm thick fibreglass insulating batts.

Ceiling - Insulate ceiling of dwelling with 100mm thick fibreglass batts or insulfluff as determined by the contractor. (insulfluff to be 75mm thick).

8-9 BUILDING PAPER:

Breather type building paper to be fixed to the outside faces of the exterior timber wall framing and fix horizontally with 150mm laps.

8-10 EXTERIOR SHEATHINGS,LININGS AND FINISHES:

Line soffits with 4.5mm asbestos cement sheets, fix with galv. brads, and jointed with a small neat vee butt joint.

Fascia boards shall be grooved to take soffit lining and fixed with galv. nails ex. 200x40mm.

8-11 METER RECESS:

Provide recess for electrical Meter Board where directed to the satisfaction of the local Electric Supply Authority.

continued..... © Copyright.

8-12 ACCESS HATCH:
Provide access manhole to ceiling 500x500mm where directed.

8-13 INTERIOR FINISHES:
Provide and fix finishing timbers as required to complete all the work necessary.
Skirting Board - 100x10mm finished.
Profile of skirting board shall be square.

8-14 PARTICLE BOARD FLOORING:
Shall be 20mm High Density to N.Z.S. 3608. All aspects of handling, storage, sheet layout and fixing shall be to manufacturers recommendation.

8-15 LINING SCHEDULE:
Walls - 9.5mm Gibraltar Board.
Ceiling - 9.5mm Gibraltar Board.
Unless otherwise specified on the drawings.

8-16 FITTING JOINERY:
The Carpenter shall take delivery of all timber joinery fittings and frames and build in carefully, fitted up with necessary hardware.

8-17 HINGES.ETC.:
Exterior doors shall be hung on 1 1/2 pairs of 100mm galvanised hinges.
Interior doors shall be hung on 1 1/2 pairs of 87.5mm bronze finished butt hinges having loose pins.

8-18 ALUMINIUM JOINERY:
Allow to take delivery and install all aluminium joinery with rebated reveals as work proceeds. Allow to co-operate with the manufacturer to ensure correct opening sizes.

8-19 HARDWARE:
Allow to supply and fit all hardware to include locks, door furniture, cupboard doors and drawer handles.

© Copyright.

LINTEL SCHEDULE FOR 1.5Kpa & 2.0Kpa FLOOR LOADS

STRUCTURAL ENGINEER: Lewis and Barrow (MIPENZ)
183 Hereford St.
CHRISTCHURCH.

		LIGHT ROOF			HEAVY ROOF		
Span of lintel	Max. span of member supp-orted.	Support-ing roof only.	Support-ing roof & walls	Support-ing roof walls & floor joists	Support-ing roof only	Support-ing roof & walls	Support-ing roof walls & floor joists.
0.900	8.000	100x100	100x100	100x100	100x100	100x100	100x100
	12.00	100x100	100x100	100x100	125x100	125x100	125x100
1.200	8.000	100x100	100x100	125x100	100x100	125x100	150x100
	12.00	125x100	125x100	150x100	125x100	150x100	200x100
1.500	8.000	100x100	100x100	150x100	125x100	125x100	200x100
	12.00	125x100	125x100	200x100	150x100	150x100	200x100
1.800	8.000	125x100	125x100	200x100	125x100	150x100	200x100
	12.00	150x100	150x100	250x100	200x100	200x100	250x100
2.100	8.000	150x100	150x100	250x100	200x100	200x100	250x100
	12.00	200x100	200x100	300x100	200x100	200x100	300x100
2.400	8.000	150x100	200x100	250x100	200x100	200x100	300x100
	12.00	200x100	200x100	300x100	250x100	250x100	350x100
2.700	8.000	200x100	200x100	300x100	250x100	250x100	300x100
	12.00	250x100	250x100	300x100	300x100	300x100	400x100
3.000	8.000	200x100	200x100	350x100	250x100	250x100	350x100
	12.00	250x100	250x100	350x100	300x100	300x100	400x100
3.300	8.000	250x100	250x100	350x100	250x100	300x100	350x100
	12.00	300x100	300x100	400x100	350x100	350x100	
3.600	8.00	250x100	250x100	400x100	300x100	300x100	400x100
	12.00	300x100	300x100	400x100	350x100	350x100	
3.800	8.000	250x100	300x100	400x100	350x100	350x100	
	12.00	300x100	350x100		400x100	400x100	
4.000	8.000	300x100	300x100		350x100	350x100	
	12.00	350x100	350x100		400x100	400x100	
4.200	8.000	300x100	300x100		350x100	350x100	
	12.00	350x100	350x100		400x100	400x100	
4.500	8.000	300x100	350x100		400x100	400x100	
	12.00	350x100	400x100				
4.800	8.00	350x100	350x100				
	12.00	400x100	400x100				
5.200	8.000	350x100	400x100				
	12.00	400x100					
5.600	8.000	350x100	400x100				
	12.00						
6.400	8.000	400x100					
	12.00						

© Copyright.

ROOFER:

9-1 GENERAL:
Refer to the General and Special Conditions of Contract and Preliminary Clauses which apply to this section of the Contract. (see also plumber)

9-2 SCOPE OF WORK:
Supply and fix roofing materials necessary to complete the work as shown on the drawings.

9-3 WORKMANSHIP:
The tiling or roofing contract will be carried out by competant approved contractors and all work shall be done in strict accordance with the manufacturers specification for each phase of the work.

9-4 PREPARATORY WORK:
Provide all gutters, valleys and underflashings before cladding commences. Except where stated, valleys shall be of 0.6 mm galv.steel at least 400mm wide with folded edges and with lower end finishing well into spouting. Use 0.7 mm aluminium roofing. For profiled metal roofing set out purlins to give reduced span at eaves and between top purlin and ridge as recommended.For tiled roofs provide anti-ponding boards at eaves as shown to support building paper. Allow tiles to adequatly project into spouting and set out so that when laid there is a full height course of tiles both at eaves and ridge. Ensure all edges of roof cladding are adequately supported around projections such as pipes, ducting and roof lights.

JOINER

10-1 GENERAL:
(a) Refer to the General Conditions of Contract and the Preliminary Section of this Specification, and the drawings, for the scope and quality of this work.
(b) All timbers are to be the best of their classes, free from large loose or dead knots, waney edges and other defects.
(c) All interior finishing timbers are to be dried to not more than 12% moisture content.
(d) All timbers described as Dressing Grade are to be dressed and sanded smooth on all faces.
(e) All joinery is to be accurately set out, properly machined and framed together, and finished to a clean, even and smooth surface, and free from cutter marks or other imperfections.
(f) The prices shall include for all work in providing and fixing joinery work complete.
(g) All joints in external joinery to be oil stained.(see painter)
(h) Before commencing any fabrication work the joiner shall verify all sizes on the job, as measurements shown take no account for wall linings and other variations beyond the designers control.
(i) All timbers used in joinery shall be treated against borer attack.

10-2 EXTERIOR TIMBER JOINERY:
Fabricate exterior timber windows and door joinery as shown on the drawings, unless specified as aluminium.
Door and window frames to be grooved and timbers run to standard profiles.
Check jambs and mullions into head and sills. Generally house members to the depth of the rebate.
Oil joints before assembly.

continued.....
© Copyright.

10-3 INTERIOR DOOR FRAMES:
Fabricate grooved interior door frames glued and nailed.

10-4 WARDROBE AND STORAGE CUPBOARDS:
Construct wardrobe and storage cupboards as shown on drawings complete with customwood cupboard doors, shelves, cleats, etc. for building in.

10-5 KITCHEN JOINERY UNITS:
Construct kitchen joinery units complete with doors ,drawers, shelves, and bench tops as shown on the drawings, to be standard where possible.
Fit drawers with laminated plastic guides and runners.

Bench tops shall be laminated plastic veneer on particle board complete with upstand. (tile insert optional refer to drawing)

10-6 BATHROOM UNITS:
Construct vanity unit generally using Customwood or similar particle board.
Vanity top shall be laminated plastic veneer on particle board.

10-7 LAUNDRY UNITS:
Construct laundry joinery units as shown on the drawings.
Laundry tub cabinet and storage cupboard unit shall be constructed generally using Customwood.

PLUMBER

11-1 PRELIMINARY AND GENERAL:
Refer to the General and Special Conditions of Contract and Preliminary Clauses which apply to this section of the contract.

11-2 GENERAL:
All work and materials used to this part of the contract shall be in accordance with the Drainage and Plumbing Regulations 1978, and Ammendments and Local Drainage Authoritys Rules and Regulations. All work will be performed by Registered Tradesmen.

11-3 SCOPE:
The work shall consist of the supply of all plant, materials and labour for the completion of the installation of a rainwater catchment system, water reticulation and sanitary services, all flashings and cappings, valley gutters, vents, flues, ducts, etc.

11-4 SPOUTING:
The rainwater catchment system shall be"standard" galvanised steel spouting unless otherwise specified on the drawings.
Supply all overflows, 62mm dia. downpipes, associated brackets, snow-straps and fastenings.
Use brass screws to fix downpipe brackets to walls.
Downpipes shall connect directly into sumps without any cranks, offsets etc.

11-5 FLASHINGS:
All penetrations through the roof shall be flashed with 2.27 Kg/m2 milled lead.
All sundry flashings shall be 0.6mm galv. steel.

11-6 CYLINDER:
Allow to supply, install and connect to all services one 182Li capacity copper lagged and steel cased cylinder unless otherwise specified on the drawings.
Cylinder to have pipe connections for wetback couplings if required.
Form box for element and thermostat.

continued.....
© Copyright.

11-7 WASTES:

PLUMBER

Where waste and vent pipes are reasonably accessible they will be run in P.V.C. with all work carried out in strict accordance with the manufacturers instructions for working and using the material. Great care will be taken to ensure that they are adequately supported where they run horizontally.

11-8 PIPES AND PIPEWORK:

Supply and run 25mm alkathene pipe supply line from street mains.

Cold water reticular within dwelling to be run in P.V.C. installed in strict accordance with the manufacturers instructions for working and using the materials.

Hot water reticulation within the dwelling to be run in 12.5mm drawn copper conforming to B.S.1735. All bends to be swept in direction of flow and all joints to be welded.

All pipes to be concealed in the walls or under the floor.

11-9 SUPPLY TANK:

Allow to supply and install 1/136. 5Li capacity NURA P.V.C. supply tank complete with ball cock, float and overflow in the roof space. The contractor at his election can substitute the supply tank with an approved pressure reduction control valve. Provide a stop cock on the supply line to the supply tank.

11-10 TAPS FAUCETS AND VALVES:

Consult with owner on choice of brands and fixing of all taps, faucets, and mixing valves. Provide and install cleaning eyes to all waste pipes at junctions and all necessary overflow pipes.

DRAINLAYER

12-1 PRELIMINARY AND GENERAL:

Read and note all clauses under Preliminary and General of this Contract where they apply to this trade.

12-2 EXTENT OF WORK:

Work in this section of the contract comprises all surface and foul water drainage up to above ground level to connect to plumbers work. Include all pipes and specials, fittings, construction of manholes, all gully traps and connections for terminal vents, soil and waste pipes. The Drainlayer shall confer with the Contractor before the foundations are laid to fix the exact position of all connections of wastes and drains.

12-3 STANDARD OF WORK:

The whole of the work shall be carried out by experienced Tradesmen to the satisfaction of the owner and the local councils Drainage Inspector. It shall conform to the requirements of the Plumbing and Drainage Regulations of 1978 and the Local Councils Specifications, the Contractor shall allow accordingly should conflict exist. Obtain all permits,service all notices and pay all fees required and arrange for all tests.

12-4 MATERIALS:

All materials shall be the best of their respective kinds

12-5 CONNECTION TO EXISTING DRAINAGE:

The Drainlayer is responsible for verifying the position and depth of the connection and commence laying his drains from this point.

12-6 DRAIN TRENCHES:

The excavation of trenches for drains shall be accurately made with base clean and true so that no unnecessary filling is required.

continued.....© Copyright.

12-7 LAYING OF DRAINS:

All drains are to be laid on and surrounded to midpoint with 100mm concrete composed of 6 parts shingle to 1 part cement. Any cast iron drains that have been laid on any type of filling are to be set on a continuous bed of concrete 225mm wide x 150mm deep reinforced with three continuous 10mm rods. The pipes are to be laid to straight lines and even grades with socket against fall in all cases.

12-8 FITTINGS:

The plan shows the layout of the system. Additional fittings that are normally required such as inspection points and inspection bends, etc. that may be required but are not specifically shown must be allowed for by the drainlayer to comply with normal practice under the regulations or special requirements of Local Council.

12-9 JOINTING AND BEDDING OF MATERIALS:

The pipes are to be jointed with lead in a proper manner and each and every junction or change of direction is to have removable cover plates for inspection.

12-10 FALL IN DRAINS:

The whole of the soil and stormwater drains are to be laid to a regular and even fall.

12-11 GULLY TRAPS:

Supply all gully traps and securely bed and build up with 5:1 concrete surround, 150mm above finished ground levels. Form large and deep dishings and finish the surface with blue metal, dust and cement, one to one and steel trowel smooth. All gully traps are to be fitted with large cast iron gratings and also a grating or perforated plate above the wastes discharging into it.

12-12 SEWER AND STORMWATER CONNECTIONS:

Arrange for the Council to connect drain to sewer and stormwater where provided and pay all charges in connection therewith.

12-13 COMPLETION:

Properly backfill all trenches, consolidate as filling proceeds and leave area in a tidy state.

ELECTRICIAN

13-1 GENERAL:

Refer to the General and Special Conditions of Contract and Preliminary Clauses which shall apply to all work in this section.

13-2 PREAMBLE:

(a) All electrical work to be carried out in accordance with the New Zealand Wiring Regulations 1961 and Ammendments, and to the requirements of the Local Supply Authority.

(b) All cables to be C.M.A 250 volts grade to N.Z.S. as applicable and colour selected for identification purposes.

13-3 SCOPE OF WORK:

The electrical contract consists of the supply of all materials, plant and labour for the complete light and power system.

13-4 TRENCHES:

600mm minimum depth trench to be dug for mains. After mains have been laid, backfill and consolidate trenches.

13-5 MAIN SUPPLY:

Arrange with the power board, allow for and pay all fees for the connection of all underground or overhead supply to the residence.

continued.....

© Copyright.

13-6 METER BOX:

600mm x 400mm for single phase or 600mm x 600mm for three phase supply, galv.steel meter box with hinged door.

13-7 SWITCHBOARD:

Electrician shall fabricate a switchboard panel complete with the following components clearly labelled.

(a) 60amp main switch (single pole)

(b)	5 amp	Lights	m.c.b.
	15amp	Socket Outlets	m.c.b.
	15amp	Water Heating Element	m.c.b
	30amp	Electric Range	m.c.b.

13-8 CIRCUITS:

In general all circuits will be run in T.P.S. cable, phase, neutral and earth.

Allow the following cable sizes:

Light	5 amp	1.0mm2
Socket Outlets	15 amp	2.5mm2
Water Heating Element	15 amp	2.5mm2
Electric Range	30 amp	6.0mm2

13-9 SWITCHES:

P.D.L. Series 200 - Colour by Owner.

13-10 SOCKET OUTLETS:

P.D.L. Series 200 - Colour by Owner.

13-11 LIGHT FITTINGS:

Wire for, supply, install and connect to services 60 watt light bulbs and batten holders to light points shown on drawings.

13-12 WATER HEATING ELEMENTS:

Allow to supply, wire for and install the water heating element and thermostat in hot water cylinder complete with remote control switch. Water heating cylinder supplied and installed by plumber.

GLAZIER

14-1 GENERAL:

Refer to the General and Special Conditions of Contract and Preliminary Clauses which shall apply to work in this section.

14-2 SCOPE:

The glazing Contractor shall supply all labour, plant and materials necessary to complete glazing work as required by drawings and as set out below.

14-3 WORKMANSHIP:

All work shall be in accordance with Code of Practice for Glazing and fixing of Glass in Buildings, N.Z.S. 973.

14-4 MATERIALS AND FINISHES:

Glaze all sashes,frames and glass doors, as specified hereinafter with due allowance for expansion and properly beaded.

All glass to conform to B.S. 1953.

14-5 MIRRORS IF SPECIFIED ON DRAWINGS:

Mirrors shall be of silvering quality 6mm polished plate glass with polished edges, silvered two coats nitrate of silver and then coated with copper and final coat of approved waterproof paint.

© Copyright.

15-1 PRELIMINARY AND GENERAL:

Refer to the General and Special Conditions of Contract and Preliminary Clauses which apply to work in this section.

15-2 GENERAL:

(a) The prices for all painting are to include for preliminary labours - dusting, scraping, brushing, cleaning off, rubbing down, washing - preparatory to each coat, leaving the paintwork etc. clean and perfect at completion.

(b) All hardware furniture, bolts, fittings, etc. shall be removed prior to painting and refitting on completion.

(c) Adequate precautions must be taken during and after painting operations to protect all work from dust, dirt, or any other disfigurement and provision must also be made against paints or stains marking floors or other work. Any such marks or splashes must be removed or masked out to the satisfaction of the owner.

(d) The prices are to allow for colour variations from room to room and within each room.

15-3 MATERIALS AND WORKMANSHIP:

(a) All painting materials described in this specification to be approved paints.

(b) All paints shall be thoroughly mixed or stirred before use. They shall also be stored as to minimise exposure to extremes of temperature.

(c) Thinning of paint materials, when necessary, shall be carried out with the type of thinner and proportions recommended by the Manufacturer of the paint.

(d) All primers shall be applied by brush, subsequent coats may be applied by brush, spray or roller.

(e) Each coat of paint shall be allowed to dry before the next is applied.

(f) No paint shall be applied to surfaces structurally or superficially damp and all surfaces must be free from condensation dirt, etc. before the application of each coat.

(g) Primed or undercoated woodwork and metalwork shall not be left for an undue period before completing the painting process.

(h) No exterior or exposed painting shall be carried out in adverse weather conditions, such as extremes of temperature or during rain, fog, etc.

(i) No consecutive coats of paint are to be of the same shade except in the case of white. The manufacturer of the paint will give on request, information on alternative shades.

(j) All colours and finishes are to be those selected by the owner in consultation with the painter unless otherwise specified.

continued.....
© Copyright.

15-3 MATERIALS AND WORKMANSHIP:

(k) All work shall be carried out in accordance with good trade practice and all work shall comply with the Code of Practice N.Z.S. 2239 "Painting of Buildings". Before commencing to paint any surface, the painter will draw the Owner's or Agents' attention to any marked defects which will prevent him from producing a satisfactory finish. It is to be clearly understood by the painter that it is his responsibility to see that all surfaces to be painted are thoroughly cleaned down. All timber surfaces should be lightly sanded. After completion of each undercoat, necessary sanding of the surfaces will be done before applying succeeding coats of paint. Stop all nail holes and cracks after the first coat.

15-4 EXTERIOR:

Soffits	Semi Gloss Latex	2 Coats
Rusticated Boarding	Exterior Stain	2 Coats
Spouting and downpipes	Etch	1 Coat
Galv.steel flashings	Primer	1 Coat
and cappings	High Gloss Enamel	2 Coats
Timber Door and Window	Primer	1 Coat
frames,doors,windows,	Undercoat	1 Coat
and Fascia Boards	High Gloss Enamel	2 Coats

15-5 INTERIOR:

High Gloss	Primer	1 Coat
	Undercoat	1 Coat
	High Gloss Enamel	1 Coat
Semi Gloss	Primer	1 Coat
	Undercoat	1 Coat
	Semi Gloss Enamel	1 Coat
Flat	Sealer	1 Coat
	Flat Latex	2 Coats

15-6 PAPERING:

Before hanging any paper apply one good coat of size.

15-7 STAINING:

Painter shall provide owner with a standard sample prior to commencing any staining to ensure the desired colour is achieved.

15-8 VARNISHING:

Where varnishing is required such as doors, architraves and skirtings give one coat of approved P.V.A. sealer followed by two coats of clear varnish finishing egg-shell gloss and lightly sanding between coats.

© Copyright.

SHEET A

(CIRCLE whichever is applicable)

NAME: DUNN

ADDRESS: WAIKAWA ROAD.

STOREY: Single or Uppermost

Lower of two or middle of three

Lower of three

ROOF TYPE: Light/Heavy

ROOF HEIGHT: 1.000

ROOF PITCH: 0° - 25°/26°-60°

EARTHQUAKE ZONE: A/B/C

WIND AREA: High/ Medium/ Low

EARTHQUAKE:			E 5	B.U.'s/m
WIND: ALONG	(W1)	W1 wall	55	
		W1 roof	20	
		W1 total	W 75	B.U.'s/m
WIND: ACROSS	(W2)	W2 wall	55	
		W2 roof	20	
		W2 total	W 75	B.U.'s/m
ROOF OR BUILDING LENGTH			BL 17.800	M
ROOF OR BUILDING WIDTH			BW 10.000	M
GROSS ROOF OR BUILDING PLAN AREA			GPA 133.36	M^2

EARTHQUAKE: B.U.'s ALONG AND ACROSS	E x GPA = 5 x 133.36 = 666.8	B.U.'s
WIND: B.U.'s ALONG	W x BW = 75 x 10 = 750	B.U.'s
WIND: B.U.'s ACROSS	W x BL = 75 x 17.8 132.5	B.U.'s

SHEET A

(CIRCLE whichever is applicable)

NAME: DUNN

ADDRESS: WAIKAWA ROAD

STOREY: Single or Uppermost

Lower of two or middle of three

Lower of three

ROOF TYPE: Light/Heavy

ROOF HEIGHT: 1.000

ROOF PITCH: 0° - 25°/26°-60°

EARTHQUAKE ZONE: A/B/C

WIND AREA: High/ Medium/ Low

EARTHQUAKE:			E 2	B.U.'s/m
WIND: ALONG	(W1)	W1 wall	18	
		W1 roof	20	
		W1 total	W 38	B.U.'s/m
WIND: ACROSS	(W2)	W2 wall	18	
		W2 roof	20	
		W2 total	W 38	B.U.'s/m
ROOF OR BUILDING LENGTH			BL 17.500	M
ROOF OR BUILDING WIDTH			BW 11.000	M
GROSS ROOF OR BUILDING PLAN AREA			GPA 162.30	M^2

EARTHQUAKE: B.U.'s ALONG AND ACROSS	E x GPA = 2 x 162.3 = 324.60	B.U.'s
WIND: B.U.'s ALONG	W x BW = 38 x 11 = 418	B.U.'s
WIND: B.U.'s ACROSS	W x BL = 38 x 17.5 = 665	B.U.'s

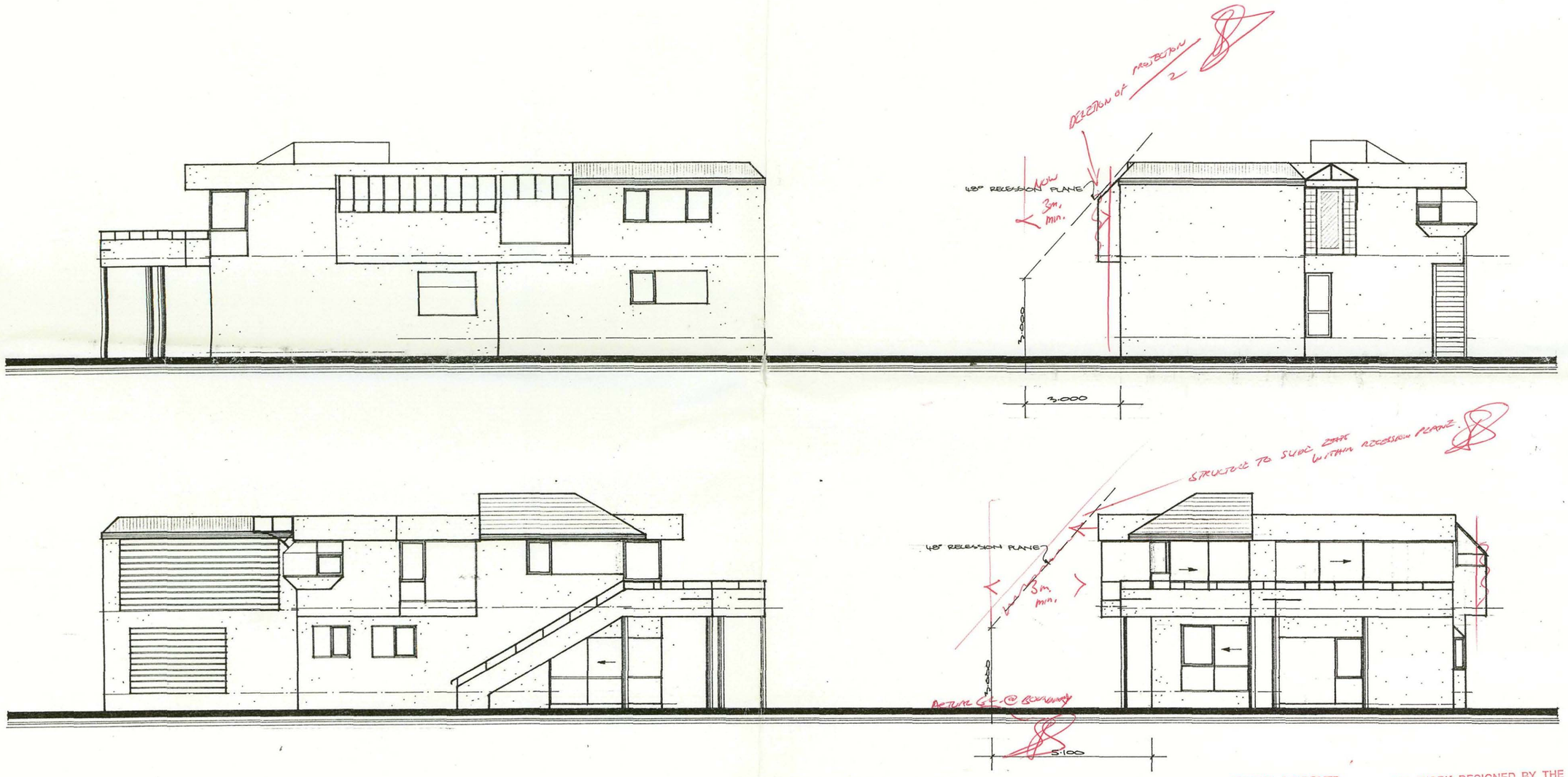
BC 5949

MARLBOROUGH DISTRICT COUNCIL
ALL HOT & COLD WATER RETICULATION MUST BE PRESSURE TESTED TO 150 p.s.i. FOR A MINIMUM OF 15 MINUTES.
PLUMBING AND DRAINAGE INSPECTOR

MARLBOROUGH DISTRICT COUNCIL
1. 48 HOURS NOTICE MUST BE GIVEN.
.. PRIOR TO FIXING ANY WALL OR CEILING LININGS
2. FOR SEWER OR STORMWATER INSPECTIONS.
3. ON FINAL COMPLETION OF BUILDING.
20-12-91
PLUMBING AND DRAINAGE INSPECTOR

MARLBOROUGH DISTRICT COUNCIL PLUMBING & DRAINAGE
All work to comply with 1978 regulations
Date 20-12-91

MARLBOROUGH DISTRICT COUNCIL PLUMBING & DRAINAGE
APPROVED
SIG.
P. & D. INSPECTOR
DATE 20-12-91



ELEVATIONS 1:100

PERMIT APPROVED
Date: 20/12/91
Building Inspector

ALL WORK DESIGNED BY THE ENGINEER IS TO BE SUPERVISED BY THE ENGINEER AND ON COMPLETION OF THE WORK THE ENGINEER IS TO SUPPLY COUNCIL WITH A COMPLETION CERTIFICATE.

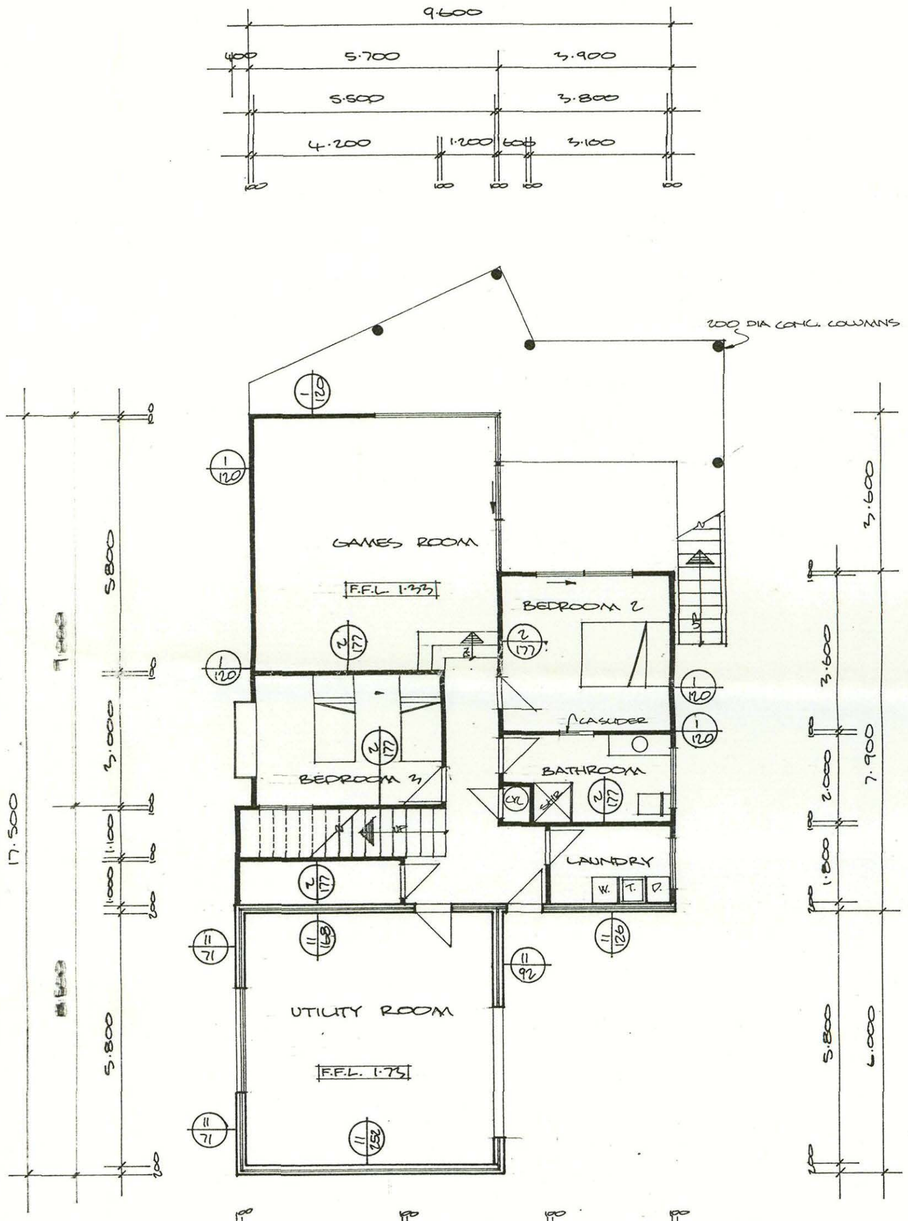
NOTE: ALL DIMENSIONS TO BE VERIFIED ON SITE BY BUILDER BEFORE CONSTRUCTION BEGINS.

DUNN RESIDENCE

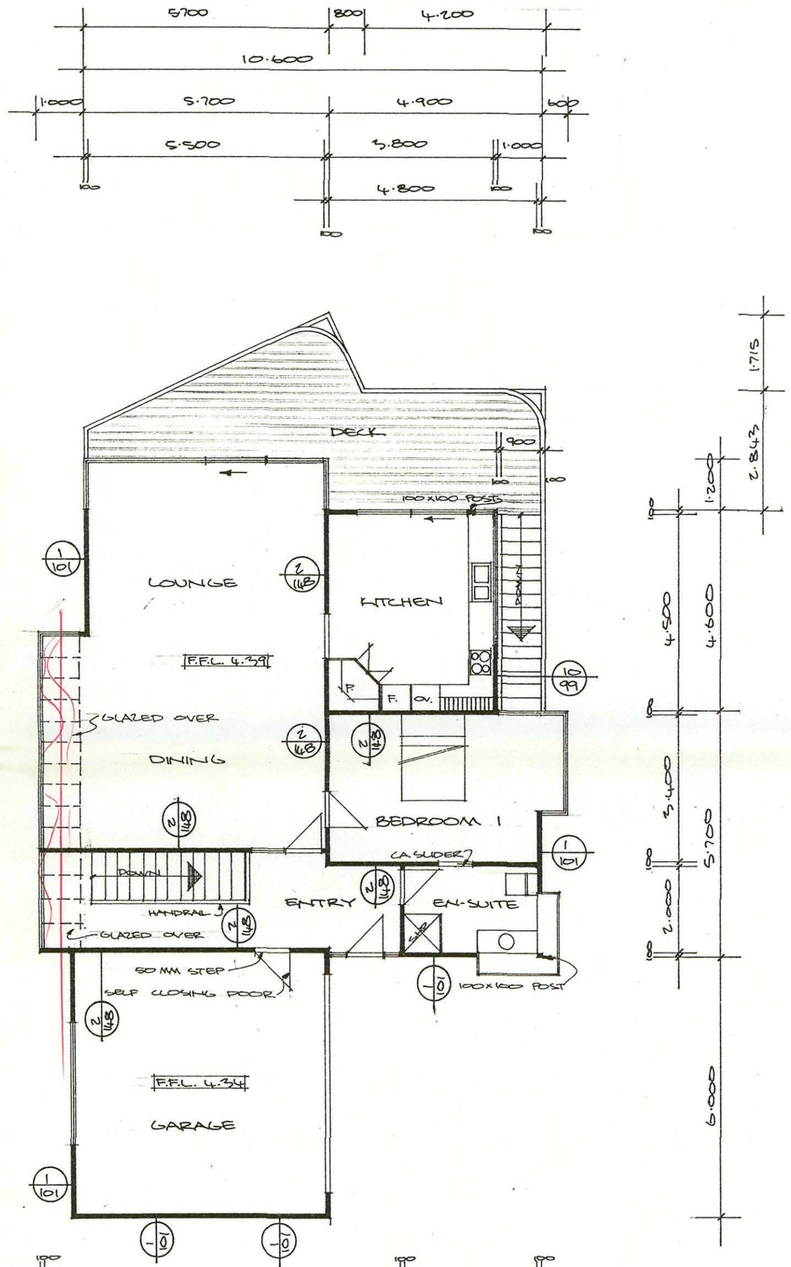
AT: WAIKAWA ROAD

DATE: AUGUST 1991

SHEET: 1 of 4



GROUND FLOOR PLAN 1:100



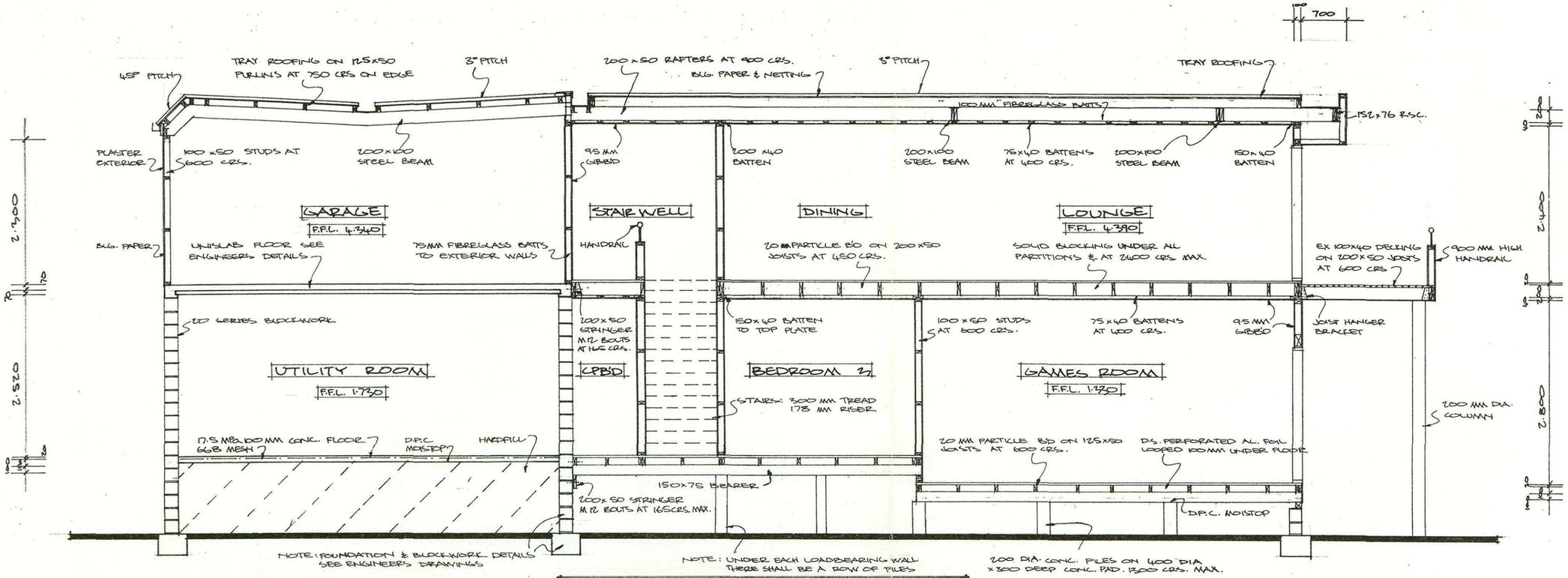
FIRST FLOOR PLAN 1:100

DUNN RESIDENCE

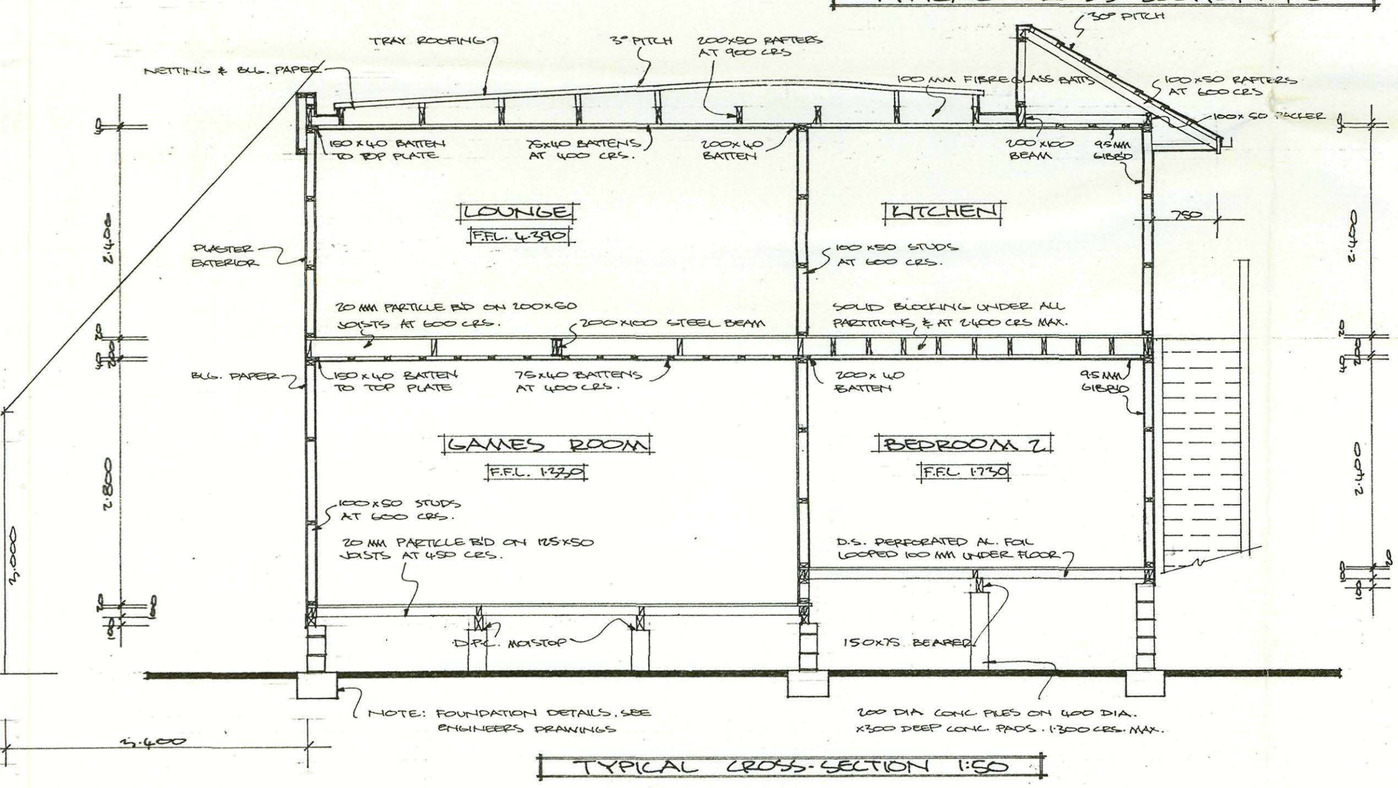
AT: WAIKAWA ROAD

DATE: AUGUST 1991

SHEET: 2 of 4



TYPICAL CROSS-SECTION 1:50



TYPICAL CROSS-SECTION 1:50

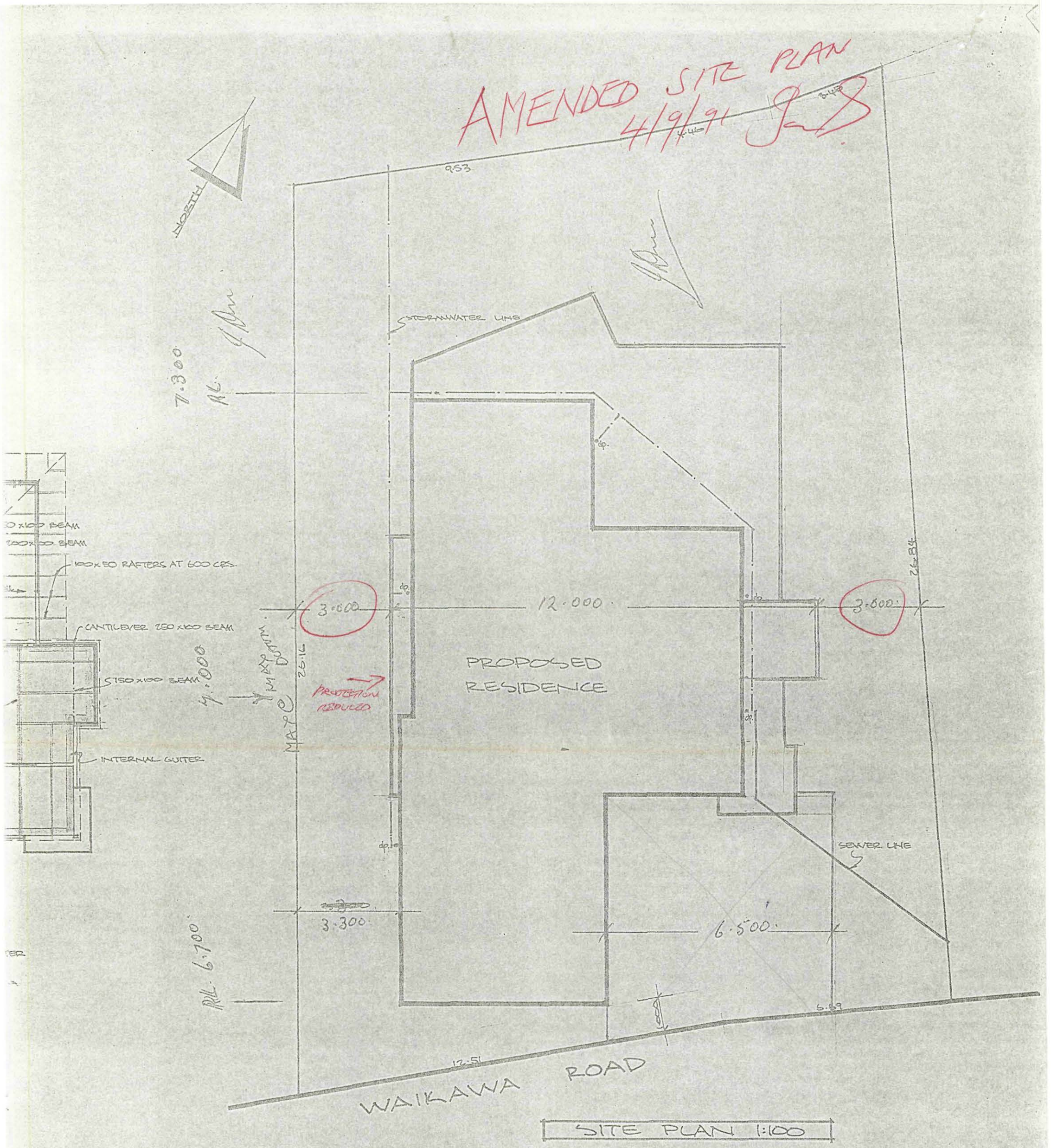
DUNN RESIDENCE

AT: WAIKAWA ROAD

DATE: AUGUST 1991

SHEET: 3 OF 4

AMENDED SITE PLAN
4/9/91



SITE PLAN 1:100

LOT. 3

P.T. D.P. 1137

AREAS:

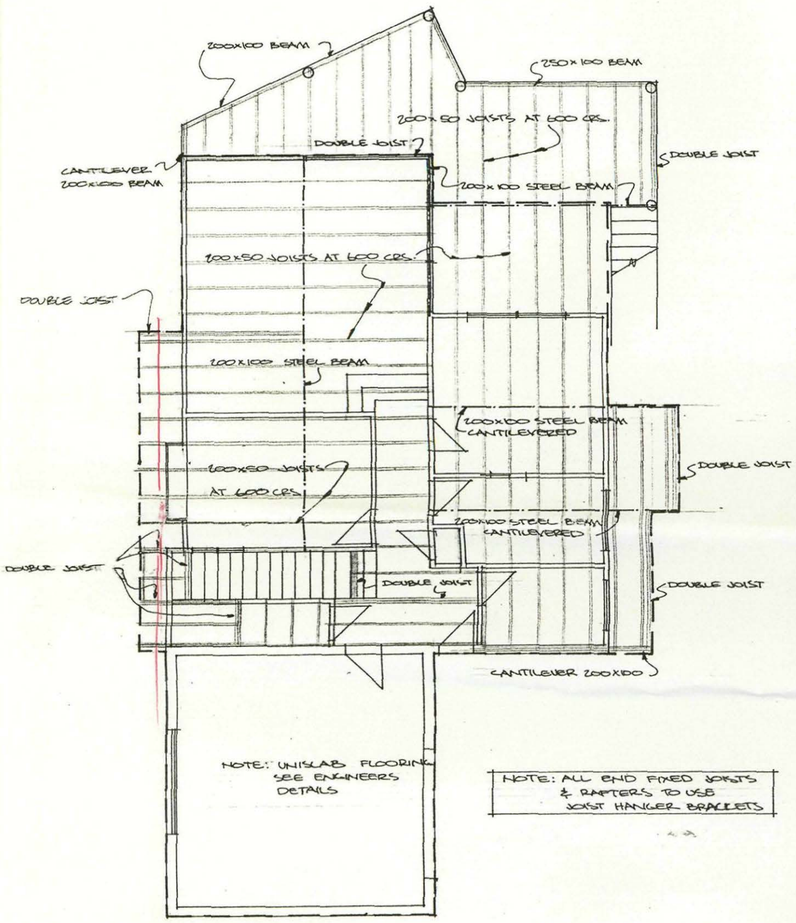
PROPOSED G.F.	133.36 m²	
PROPOSED F.F.	125.10 m²	
PROPOSED GARAGE	37.20 m²	
TOTAL	295.66 m²	
LAND	470 m²	
SITE COVERAGE	133.36 m²	IE: 28.37%

AT: WAIKAWA ROAD

DATE: AUGUST 1991

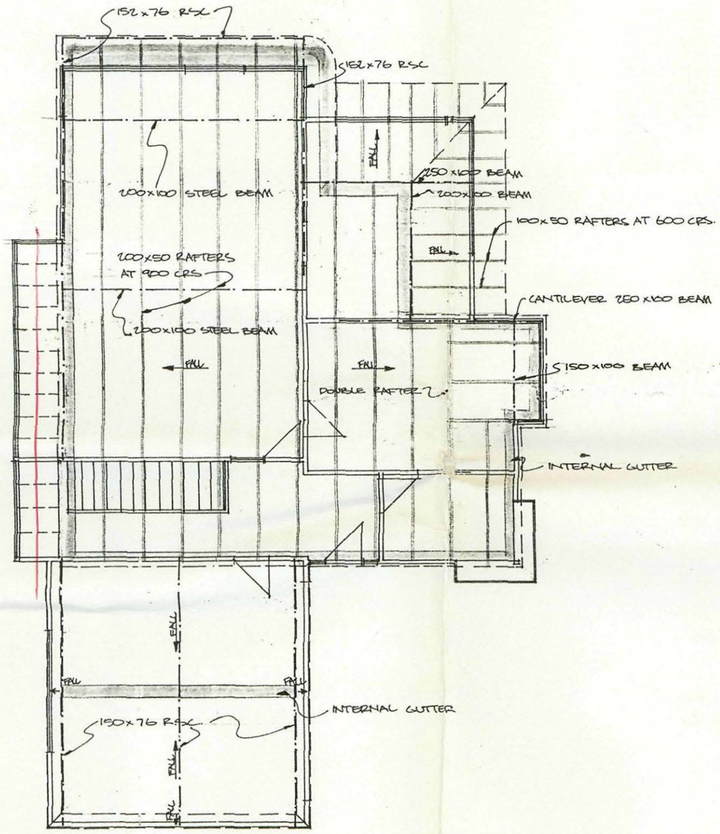
SHEET: 4 of 4

NOTE: ALL STEEL WORK DESIGNED BY ENGINEER. SEE ENGINEERS DRAWINGS & DETAILS

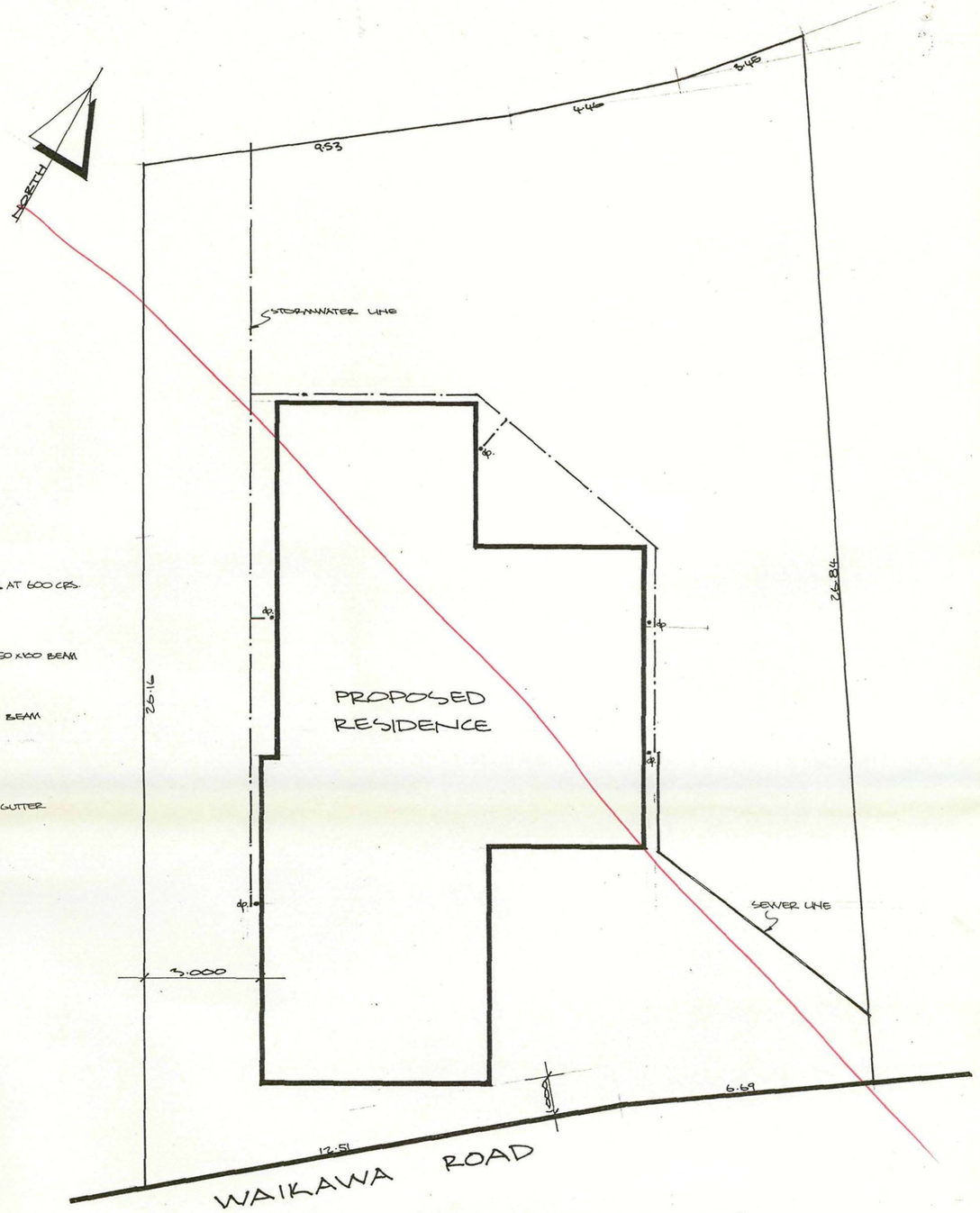


NOTE: ALL END FIXED JOISTS & RAFTERS TO USE JOIST HANGER BRACKETS

FIRST FLOOR JOIST LAYOUT 1:100



RAFTER LAYOUT 1:100



SITE PLAN 1:100

LOT. 3

P.T. DP. 1137

AREAS:

PROPOSED G.F.	133.36 m²	
PROPOSED F.F.	125.10 m²	
PROPOSED GARAGE	37.20 m²	
TOTAL	295.66 m²	
LAND	470 m²	
SITE COVERAGE	133.36 m²	IE: 28.37%

DUNN RESIDENCE

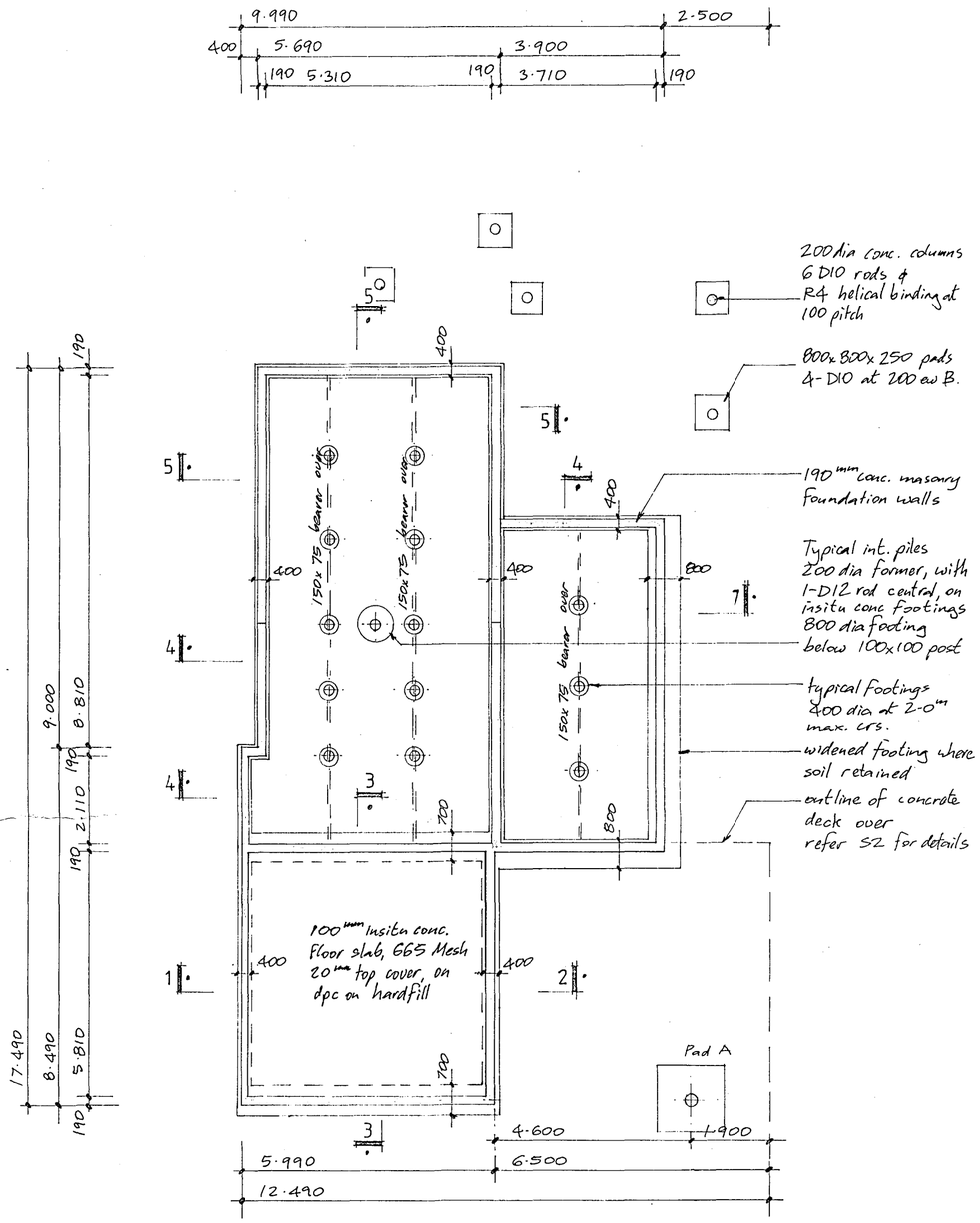
AT: WAIKAWA ROAD

DATE: AUGUST 1991

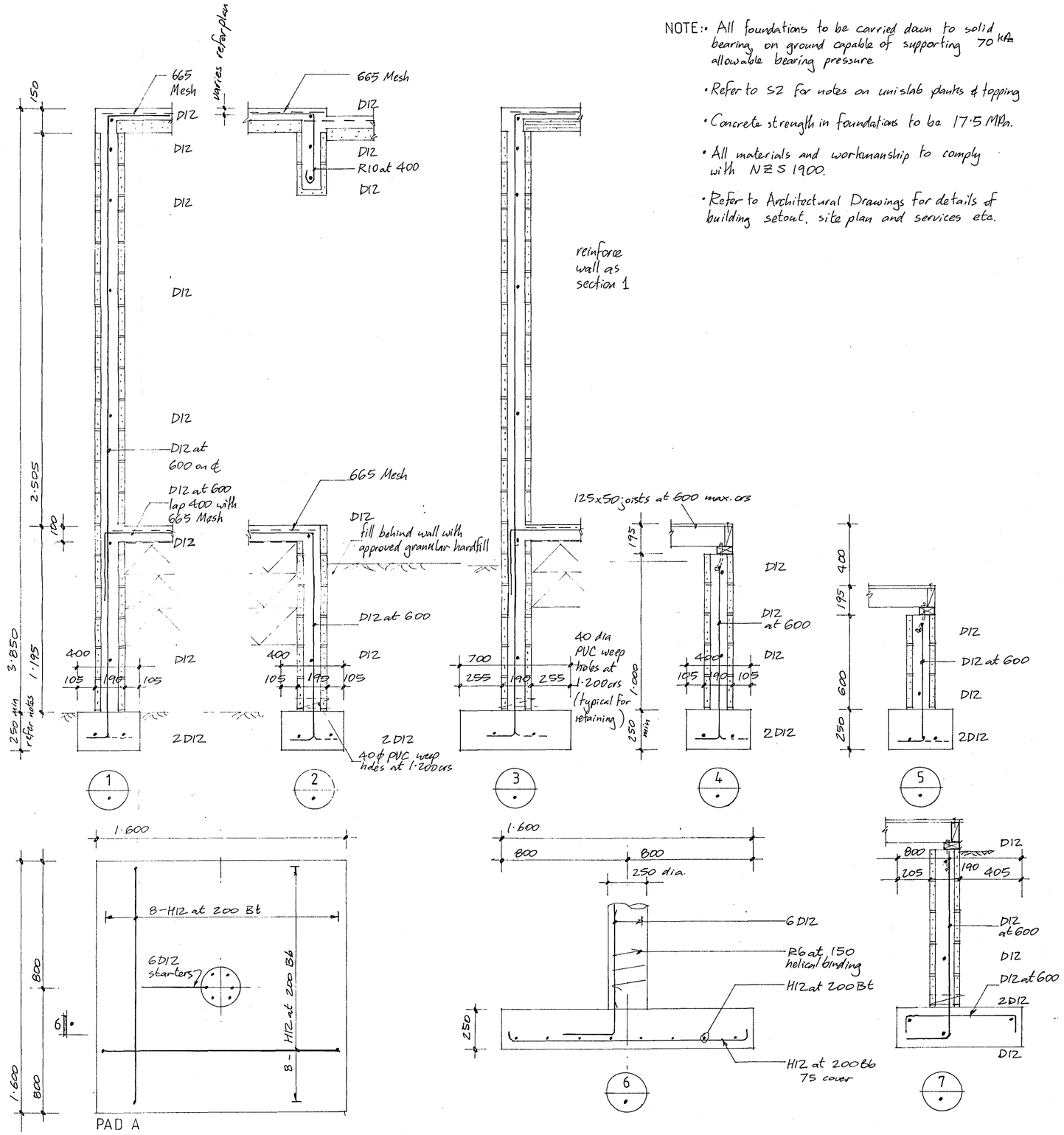
SHEET: 4 of 4

NOTE:- All foundations to be carried down to solid bearing on ground capable of supporting 70 kPa allowable bearing pressure

- Refer to S2 for notes on unislab plants & topping
- Concrete strength in foundations to be 17·5 MPa.
- All materials and workmanship to comply with NZS 1900.
- Refer to Architectural Drawings for details of building setout, site plan and services etc.



FOUNDATION PLAN



HARDING CONSULTING ENGINEERS LTD
123 Mt Pleasant Rd. Christchurch
Ph 384·4086

MR & MRS DUNN - WAIKAWA ROAD PICTON

FOUNDATIONS

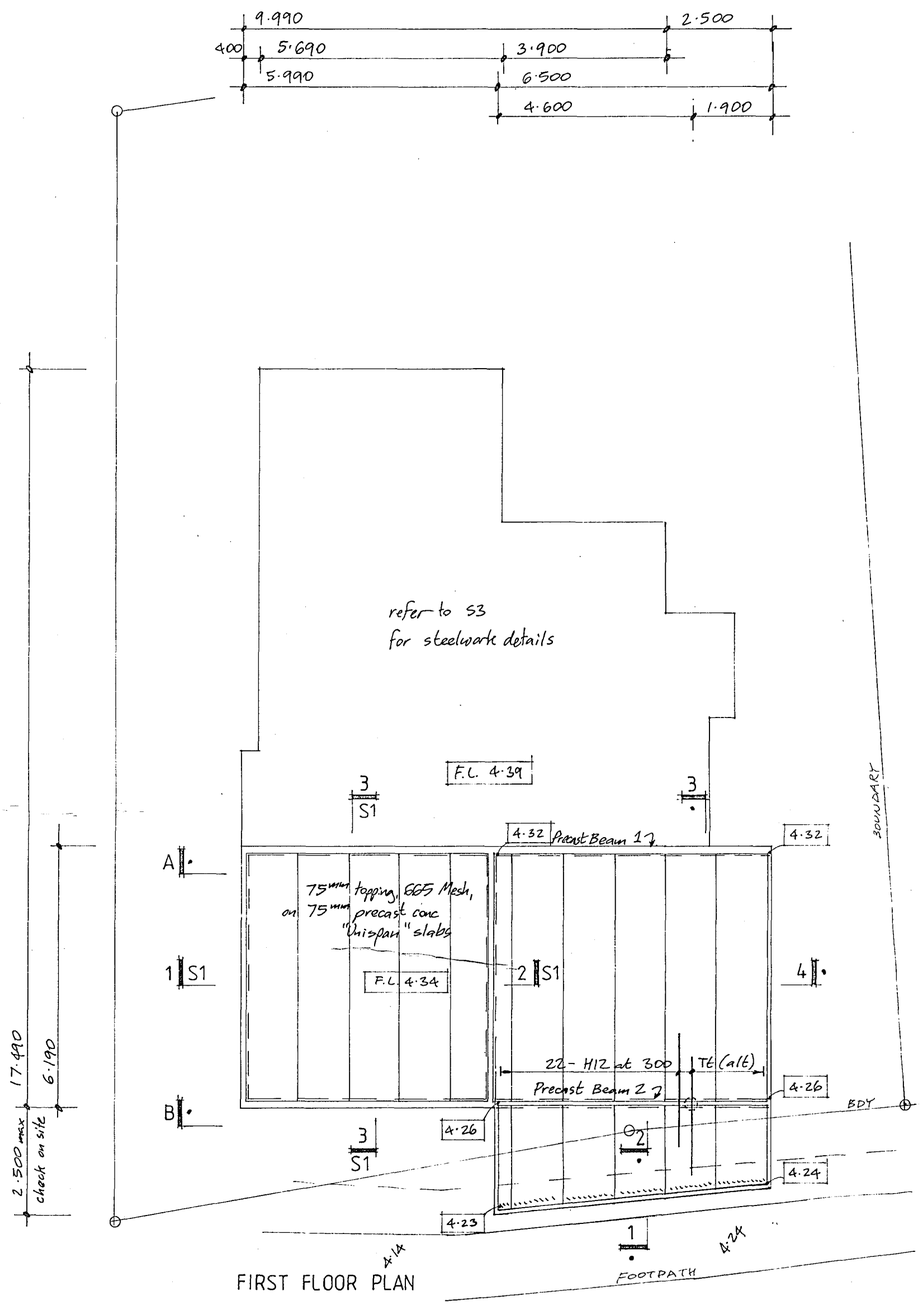
AUG '91

1:20
1:100

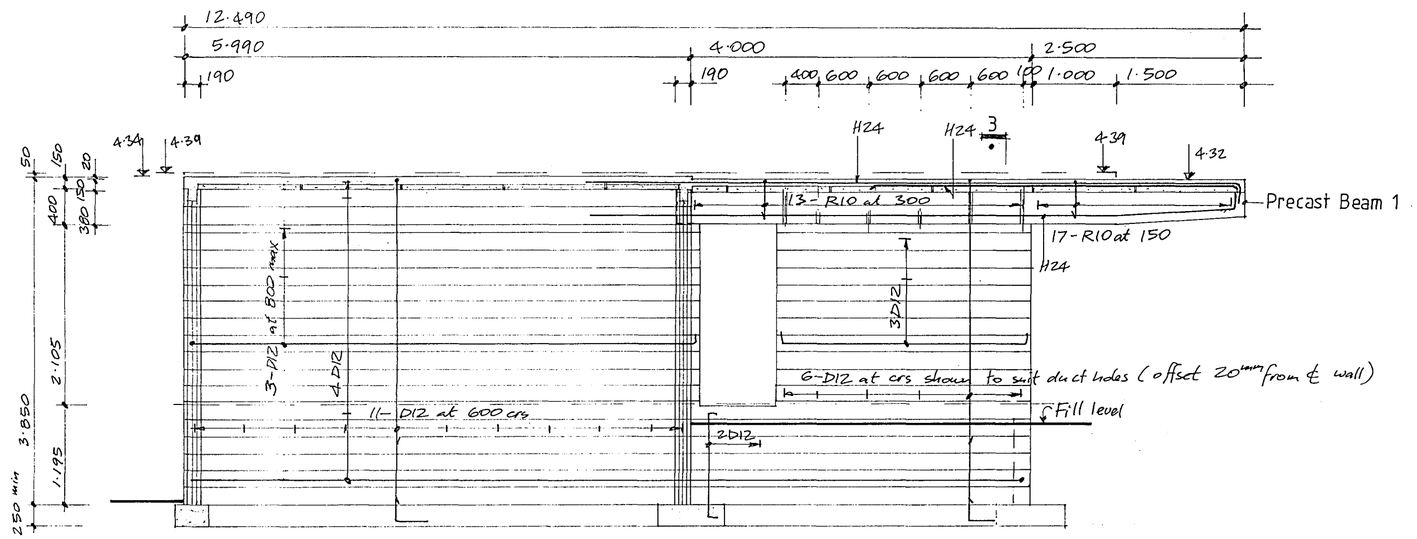
465

S 1 A

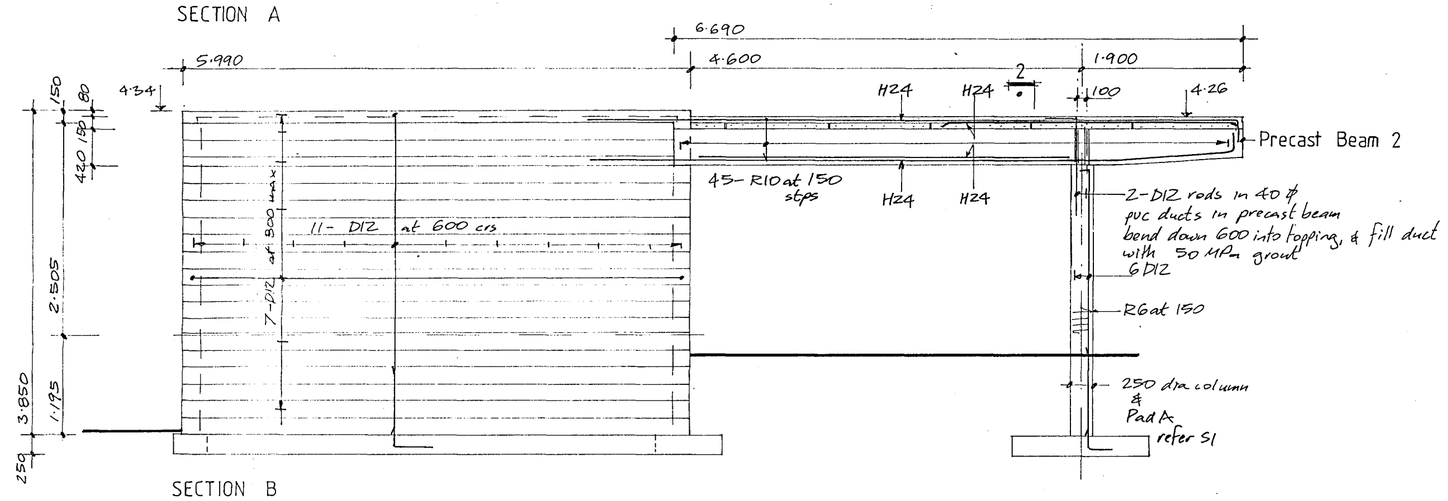
A Aug '91 conc. floor to Utility



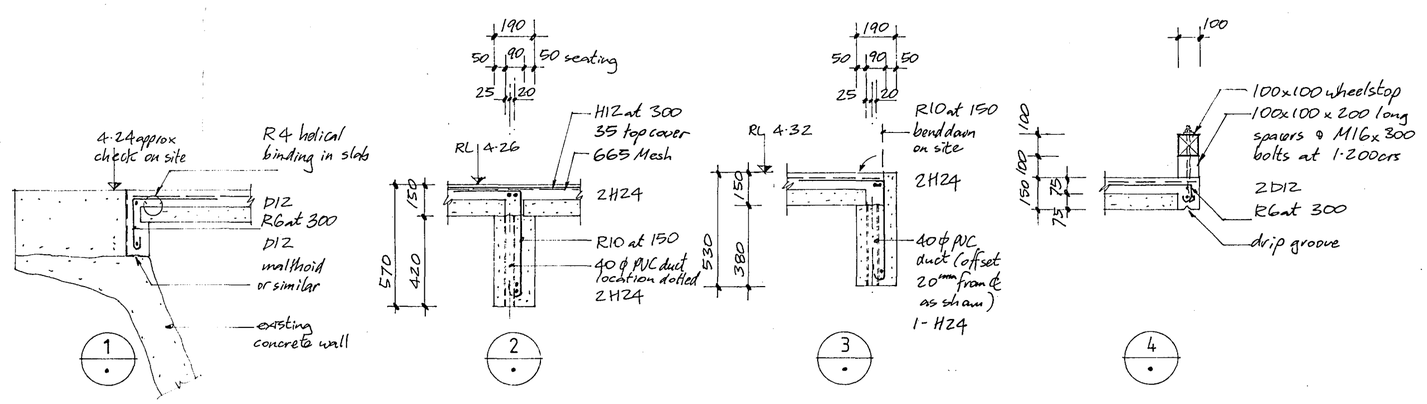
FIRST FLOOR PLAN



SECTION A



SECTION B



NOTE : First floor slab and deck are to be constructed using Stresscrete "Unispan" precast prestressed concrete planks, to be designed by the manufacturer for a superimposed dead load of 0.5 kPa, and a live load of 2.5 kPa minimum.
: Refer to manufacturer for details of temporary propping
: Concrete strength to be 25.0 MPa in slab topping, and precast beams 1 & 2.
: Block walls to be 190mm thick, grouted in all cells.

HARDING
CONSULTING
ENGINEERS LTD
123 Mt Pleasant Rd. Christchurch
Ph 384 4086

MR & MRS DUNN - WAIKAWA ROAD PICTON

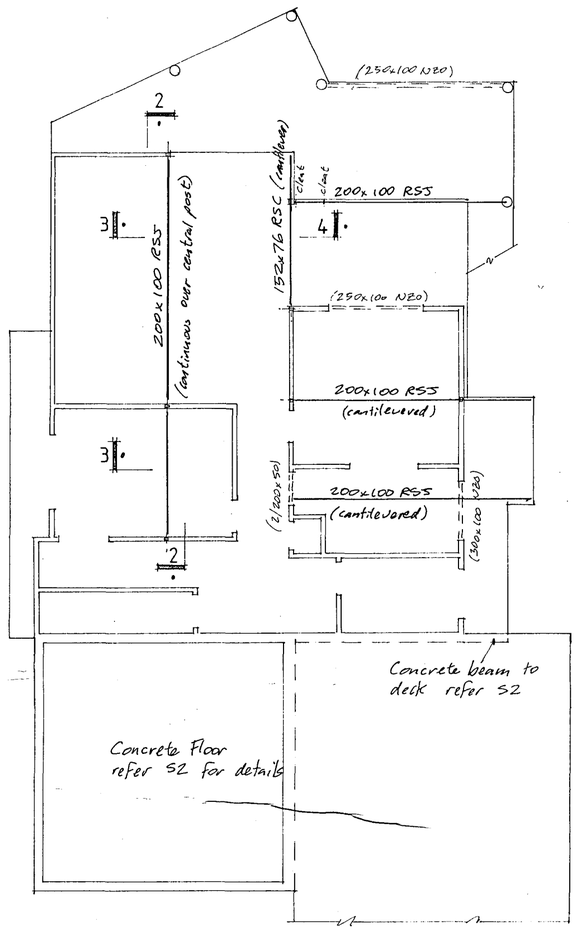
FIRST FLOOR SLAB

AUG '91

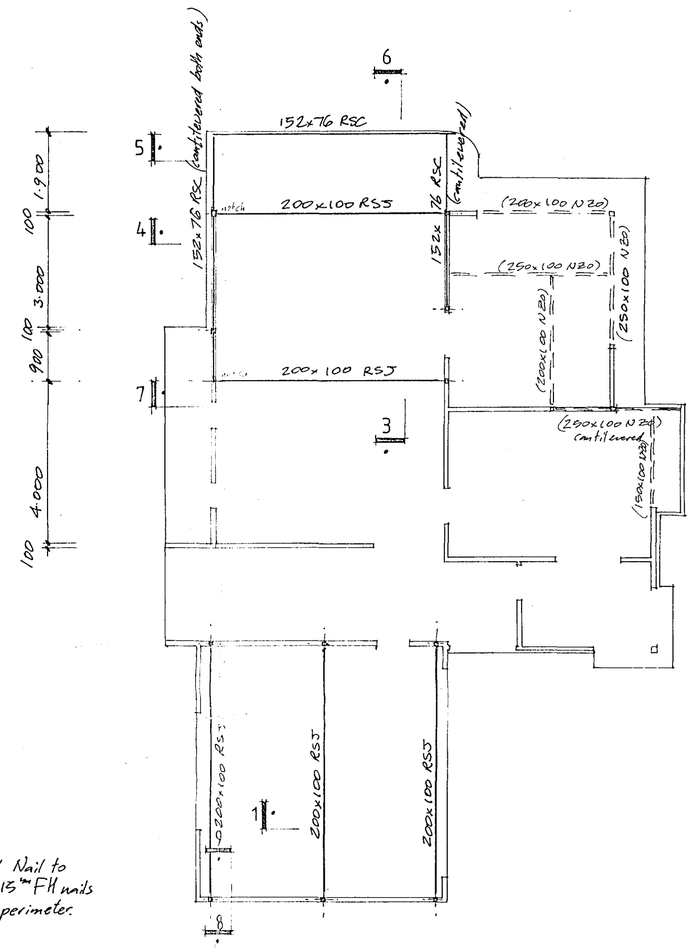
1: 20
1: 50
1: 100

465

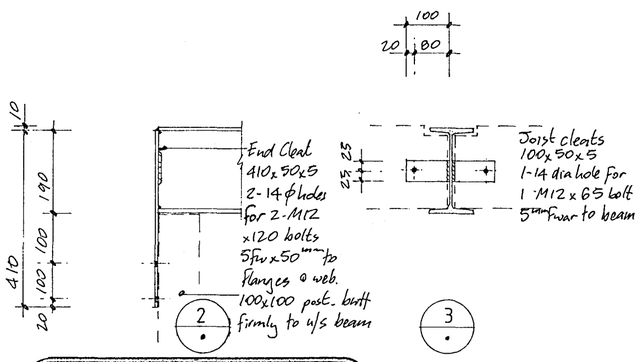
S 2

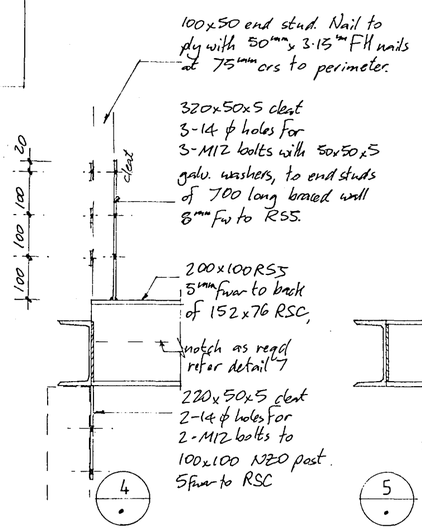


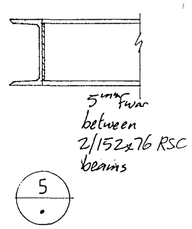
FIRST FLOOR FRAMING PLAN

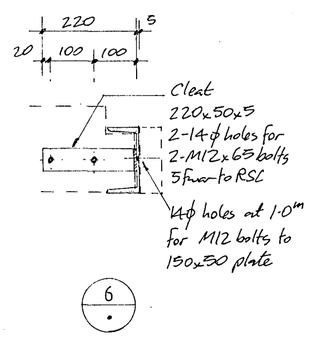


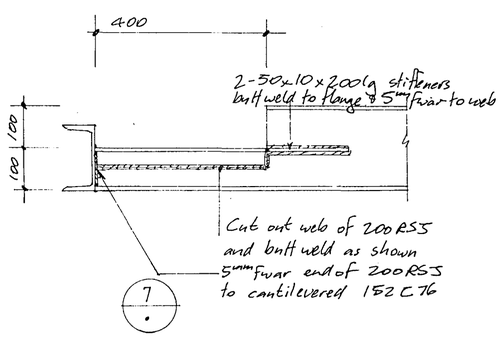
ROOF FRAMING PLAN

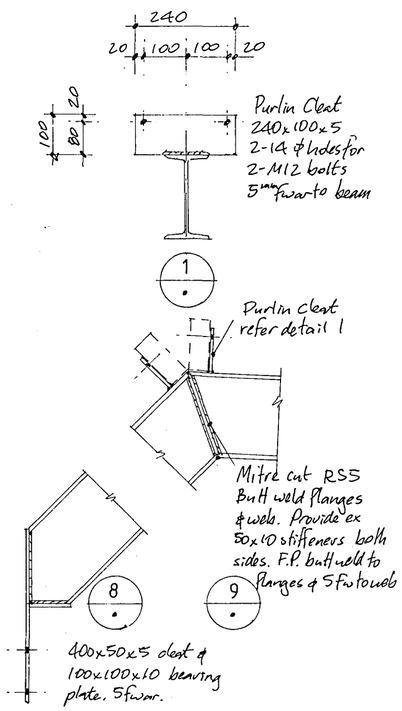












HARDING
CONSULTING
ENGINEERS LTD
123 Mt Pleasant Rd. Christchurch
Ph. 384 4086

MR & MRS DUNN - WAIKAWA ROAD PICTON

STEELWORK

AUG '91
A 23.8.91 Beams amended

1:10
1:100

465

S 3 A

RECEIVED
29 AUG 1001
MARLBOROUGH
DISTRICT COUNCIL