

RECEIVED
- 9 SEP 2002
MARLBOROUGH
DISTRICT COUNCIL



SPECIFICATION



Graeme J. Savage
M.D.A.N.Z.

Architectural & Structural Designer 61 Seymour St.
Telephone (03) 578 2769, Fax (03) 578 9361 BLENHEIM, Mobile (025) 353 466

**SPECIFICATIONS FOR WORK AND MATERIALS
REQUIRED IN THE ALTERATIONS TO AN
EXISTING BUILDING FOR
ALDAN LODGE MOTELS
WELLINGTON STREET PICTON**

A. GENERAL

1. **The Work**

The building is constructed of:-
Concrete foundations and flooring
Timber framing
Aluminium windows and exterior doors
Colortile roofing
Block wall exterior cladding
Metal fascia and gutter
Gib board interior linings

Also the fabrication 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 and plant, pay all dues, and obtain all consents, unless detailed otherwise within this specification.

The Contractor shall complete this building in the best trade practice, according to the plans and documents, and this specification, taken separately or collectively, and shall ensure that all materials shall comply to the latest relevant NZ Standard Specification.

All work shall adhere to NZS 3604 1999, and the NZ Building Code.

2. **Bylaws**

The Contractor shall conform in all respects to the Bylaws of the Local Authority having jurisdiction over the works, 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 trades, for the total completion of this project.

4. **Site and Setting Out**

The Contractor shall visit the site before tendering, to satisfy himself regarding access, levels, and the conditions generally, as no extra will be allowed for wrong description.

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 that may occur. Figure dimensions are to be taken in preference to scaled ones, and all measurements are to be verified on site before work commences. Should any discrepancy arise, the Designer must be contacted immediately.

5. **Availability of Materials**

Should any of the materials specified for this contract not be procurable, negotiations shall be made for the provision of substitutes to the approval of the Owners.

Any price difference due to this, must be agreed upon in writing by the Owners, before the respective work shall commence.

6. **Prime Cost Sum**

The Prime Cost Sum where shown in this specification reserves the Owners the right to purchase items themselves, and the accounts will be adjusted on completion of the Contract.

The Contractor shall allow for the installation of the PC Sum goods.

7. **Completion**

At regular intervals during the building, and on completion of the Contract, the Contractor shall remove debris which may accumulate, and leave the site and building clean and ready for use.

All floors shall be left broom clean, and all glass work sound and clean inside and out.

All plaster stopping shall be left sanded to a smooth surface, on completion of all wall and ceiling linings

B. DEMOLITION

1. **Removal**
Demolish and remove all existing partitions and temporary walls, roof structure, and fittings not required in the new room.
2. **Backfilling**
The existing pool shall be filled with compacted hardfill after sealing off the hydrostatic valve with concrete.
3. **Hardcore Filling**
Hardcore filling shall be placed under all floor slabs, as detailed in 2 above, and shall consist of clean river gravels max size 100mm.
All floor slabs shall be compacted with a plate compactor, and blinded with 25mm of clean sand before pouring.
3. **Over Excavations**
In the event of the Contractor excavating below the proper level, he shall fill the parts over excavated with concrete at his own expense.

C. CONCRETE

1. Materials

The materials and workmanship shall be in accordance with NZS 3101. Concrete shall be ordinary grade 17 mpa, in all new foundations and floors as described in the above specification.

2. Foundations and Footings

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

3. Reinforcement

All reinforcing shall comply with NZS 3402, or as shown on the plans. Horizontal bars ex D12, shall be held together with D10 stirrups or ties, wired and supported from the ground by plastic chairs or similar to give the required clearance to the concrete outside face, ie. 80mm to the bottom, and 50mm to all sides of the foundations. Floor starters of D10 at 600mm cts shall be tied to the reinforcing bars, and the #668 mesh.

4. Damp Proof Course

All concrete faces in contact with timber, shall be covered with one layer of 3 ply malthoid or other approved dampproof course, with minimum side laps of 75mm.

5. Concrete Flooring

Shall be a minimum of 100mm, reinforced with #668 Mesh placed 38mm from top of slab, and resting on plastic chairs. Concrete shall be laid on .025mm AHI Moistop, or Gib polythene sheeting, properly sealed at all joints and exterior edges.

Where water or drainage pipes cut through the polythene membrane, ensure that all holes and chases are properly sealed to the pipes with PVC sealing tape. Hardcore filling shall be consolidated and blinded with sand before laying polythene sheeting.

D. CARPENTER & JOINER

1. **Timber Generally**
All timber shall be to the best of its class, free from large loose or dead knots or wavy edges, thickened, well seasoned and dry.

Framing timbers shall be H1 treated Pinus Radiata, or Douglas Fir, of sizes ex 100 x 50mm or 90 x 45mm minimum.
2. **Standard Specifications**
All timber construction shall be in accordance with NZS 3604, 1999, and the NZ Building Code.
3. **Framing General**
The whole of the framework shall be cut on site etc, and assembled according to the plans and specifications, with all required bracing, as detailed in the schedule attached.
4. **Studs**
All internal studs shall be ex 100 x 50mm and cut to make 2430mm between floor and ceiling battens.
Opening studs to be double 100 x 50mm, one under lintel, and the other full height of frame between top and bottom plates.
5. **Exterior Walls**
Existing block walls shall be raised with two additional rows along back wall to match the front wall, and all existing block external walls shall be strapped and lined on interior with 10mm Gib Bd and 75 x 35mm battens. Fill cavities with R 1.8 Batts, prior to lining.
6. **Dwangs**
All walls shall be dwanged with ex 100 x 50mm or 90 x 45mm, solid dwangs at 800mm cts or to suit linings.
7. **Top Wall Plates.**
Top plates shall be ex 100 x 50mm, with ceiling plates of 150 x 35mm for external walls, and 200 x 35mm for internal walls.
8. **Ceiling Battens**
All battens shall be ex 70 x 35mm at 400mm cts, or to suit linings, and shall be fixed to underside of trusses or joists, and to ceiling plates on top of wall framing.
Steel Rhondo ceiling battens may be used, and fixed according to Gib bd specifications.
9. **Lintels**
Shall be block to match the existing building.

10. Roof Framing

a) Trusses

Shall be ex 100 x 50mm Douglas Fir or Dryframe, manufactured to design supplied by Gang nail or Pryda, supported by a Producer Statement.

Trusses shall be positioned at 900mm cts max, and fixed to top plates by 'Z' nails or multigrip plates.

b) Exposed beams

Shall span across porch opening as detailed, and shall be ex 200 x 100 and be supported on 125 x 125mm laminated timber post.

c) Purlins

Shall be as detailed, generally ex 75 x 50mm fixed at 760mm cts to top of rafters with double nailing, except as per NZS 3604 where the perimeter and ridge etc shall be 'Z' nails.

11. Flooring

Concrete floors shall be as specified under section C5.

12. Insulation

Generally all exterior walls shall be fitted with R 1.8 Fiberglass batts, and all ceilings shall be R 2.6 batts. 1.8-0

The Building Code H5 heating design will determine the final requirements.

13. Joinery

All joinery shall be fabricated according to the best trade practice whether it be Aluminium or wooden joinery.

Care shall be taken in the assembly to avoid scratching the powder coating, or in the case of wooden joinery, no damage by glue, water or scratching.

All mitres, butt joints, dowelling or biscuit joints, mortice and tenon joints, shall be neatly executed.

a) Windows

Aluminium windows shall be constructed by an approved fabricator, to sizes and styles shown, with all opening windows as required.

Windows shall be double glazed in Grey tint glass.

Reveals shall be ex 25mm Rimu and rebated for linings.

Powdercote colour shall be selected by Owners, and all window and door hardware shall be colorcoded.

Windows shall be fitted with double tongue handles, and all casement sashes over 1.2m deep, shall have 2 handles and 1 centre D handle.

All existing windows shall be reused or altered to suit style.

b) External Doors

Doors to Lounge exterior shall be Double Aluminium as shown, with colorcoded hardware, and hinges.

c) Internal doors

Shall be flush panel coloured Rimu throughout, fitted into Rimu jambs.

d) Joinery Fixtures

Kitchen cupboard and bench units shall be as selected in prefinished melamine or similar, with Formica tops and stainless steel sink insert. Units may be as detailed or specified during the construction of the dwelling.

14. Hardware

Door and cupboard hardware shall be selected by Owners, but generally all internal doors shall be fitted with two handles and one latchset.

Toilets, Bathrooms etc shall be fitted with privacy locksets.

Front Entry door(s) shall be fitted with selected locksets, together with a deadbolt of approved manufacture.

Allow P C Sum \$1200 for door hardware.

Aluminium doors etc shall be supplied as a package with the exterior joinery.

Kitchen joinery hardware shall be supplied with the units from the Joiner.

E. ROOFER1. Materials

Roofing shall be selected Colorsteel corrugated, with all required flashings, ridging, hip covers, and valleys in matching colour.

Barge capping, fascias, and spouting shall be colour matched to the roof, or other selected colour.

Spouting shall be colour matched external fitted, in selected profile, with all mounting brackets, mitred corners, and downpipe outlets as required.

2. Workmanship

All work shall be carried out by approved tradesmen, who shall complete the roof and accessories, for a completely waterproof dwelling.

Care shall be taken by the roofing Contractor to avoid any damage to the roof, fascia or spouting with ladders leaning against them.

F. EXTERNAL FINISHING

1. **Barge and Fascia**
Barge and fascia as detailed in Section E 2 above.
2. **Soffit Lining**
Soffits shall be framed with ex 75 x 50mm sprockets, and ribbon plate fixed to wall framing. Fascia shall be fitted at correct level to allow soffit linings to be fixed.
Soffit materials shall be 4.75 flat Hardiflex sheets with PVC jointers to all butt joints, and nailing shall be galv 30mm Hardinails.
3. **Linings**
Walls shall be 200 x 200 x 400mm concrete blocks to match existing.

G. DRAINLAYER

1. **Materials**
All materials used shall be in accordance with NZS / AS 3500, and the N Z Building Code.
2. **Excavate**
Excavate all trenches required for drains and fittings, to the depths specified, and the laying of sanitation and stormwater pipes shall conform to the N Z Building Code.
3. **Stormwater Drains**
From each downpipe, collect all stormwater into 100mm PVC piping, and discharge into existing stormwater pipe.
4. **Sewer Drains**
Connect up foul water from all gully traps, in 110 PVC high pressure piping, and discharge into the existing sewer pipe as shown.
5. **Terminal Vent**
Terminal vent shall be positioned at or near the end of the sewer line and shall be 75mm dia PVC, extend thru soffit and roof and flash at roof with butynol or similar.
6. **Completion and Testing**
On completion of the whole drainage system, Council tests shall be carried out before any backfilling takes place.

H. PLUMBER

1. **Materials**
All materials used by the Plumber shall be to the best of their several kinds, and must fully conform to all or any governing regulations or bylaws.
2. **Flashings**
All flashings shall be made in as long lengths as possible, from Butynol or Colorsteel, to suit the purpose intended.
3. **Downpipes**
All downpipes shall be PVC either 75 x 50mm or 62mm dia as selected, and fixed to the walls by purpose made brackets, two per downpipe.
4. **Spouting**
Shall be colorsteel external fascia gutter, fixed to fascia by purpose made brackets. All corners and joints shall be neatly executed.
5. **Waste Pipes**
Reuse all existing wastes and traps where possible, which run under the building, and any new connections shall be made as necessary.
6. **Cold Water Supply**
Shall be run from existing service line.
7. **Hot Water Supply**
Shall be run from new HW Cylinder, to all fittings as shown or required, in 12mm or 15mm dia polybutylene, with all correct fittings, junctions, etc. HW cylinder shall be positioned in Bathroom, fitted with an overflow tray underneath, and connected to a 32mm dia overflow pipe to the outside.
8. **Supply and Fit Up**
All fittings shown or required shall be installed to correct procedures by a certified tradesman.
Items may be purchased by the Owners, and installed by the Contractor, provided the Contractor is in agreement.
All tests shall be provided by the Contractor before handing over to the Owners, in operating condition.

I. INTERIOR LININGS

1. **Ceilings**
Ceilings shall be 10mm standard Gibralter Board throughout except Bathrooms, which shall be 10mm Aqualine Gib.
2. **Walls**
Walls shall be lined throughout with 10mm standard Gibralter Board, laid horizontally, and fixed with Gibgrabber screws and gibfix adhesive. Bathrooms and Ensuites etc which are to be tiled, shall be lined with Hardies Villa board 6mm, or 10mm Aqualine Gib.
3. **Stopping**
Where walls are lined with Gibralter board, all stopping shall be carried out by the fixer according to Winstone Wallboards specifications, and all Villa board lined walls are to be stopped according to Hardies specifications.

Gib walls and ceilings shall be sanded to a level 4 preparation, unless stipulated otherwise.
4. **Mouldings**
 - a) **Scotia**
Shall be 55mm Gib cove fixed to manufacturers specifications.
 - b) **Architraves**
All windows, doors, and other openings, shall have rebated jambs to conceal the edges of all Gibralter Board.
 - c) **Skirtings**
All flooring shall be coved, and finished with a timber finishing bead, placed 75mm above floor level.
Tiled floors shall be finished with 75mm of floor tiles placed on walls at floor junction.

J. ELECTRICIAN

1. Materials

Materials used by the Electrician shall conform to the Electric Power supply Authority regulations, and all wiring necessary for the completion of this contract, shall be of approved manufacture in compliance with the appropriate specifications.

All wiring shall be concealed from view, run within the framing, and the Electrician shall be careful how and where he drills the holes, as no drillings shall be through structural timber members, without the consent of the main Contractor.

All face plates, switches, plug outlets etc shall be HPM Excell series, colour as selected by the Owner.

2. Lighting

Wire up the fittings as shown on the plans.

Ceiling lights shall be 100mm dia recessed downlights throughout except for above Bathroom vanities, Kitchen benches etc, which shall be 50mm dia recessed low voltage Halogen downlights.

Wall lights shall be selected wall wash type fittings, fitted at approx 2.0mtrs from floor.

Exterior lights shall be selected wall mounted fittings at approx 2.0mtrs from floor level.

All switching shall be positioned adjacent to doors, and where two-way or multi operational switching, they shall be linked appropriately for the room.

Wall switched shall be positioned at 1.3mtrs from floor unless directed otherwise.

3. Switched Socket Outlets

Outlets shall be provided as shown on the plans, and shall all be double HPM horizontal units, generally fitted 300mm from floor level, except for Fridges, Washing Machine, Kitchen benches and Pantry, which shall be 1.3mtrs, or as directed.

Shaving outlets in Bathrooms shall be RCD protected double horizontal units. TV, Telephone and Radio outlets shall be supplied and fitted as required.

4. Point of Entry

Provide a switchboard where shown built into the wall, and run a mains cable from board to the Road. A separate sub board may be installed elsewhere in the Dwelling as required.

5. Test and Completion

The Electrician shall provide for all tests required, and hand over the completed works passed and sealed by the Local Power Authority.

K. PAINTER AND DECORATOR**1. Materials**

All 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.

Likewise 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) Soffits**

Shall be sealed with approved cement sealer, then apply two coats of Acrylic low sheen paint as finishing coats.

b) Walls

Where walls are to be painted over solid plaster or cement based weatherboards (Hardiplanks etc), they shall be painted with two coats minimum, of Acrylic or cement based paint.

3. Interior Work**a) Wallpaper**

Walls where specified after treating with size, shall be papered with all butt joints and patterns neatly matching and properly registered, free from lumps of paste or dirt, wrinkles, blisters, and smoothed off. Allow P C Sum of \$35 per roll of paper.

b) Painting

Ceilings shall be sealed with an approved wallboard sealer, before being painted with two coats minimum of approved low sheen Acrylic. All ceilings should have been stopped and finished to a level 5 Gib finish with smooth coat prior to final sanding and sealing. Wet area rooms, ie Bathrooms and Ensuites may be painted with a semi gloss Enamacryl or similar.

c) Varnishing

Where Doors, Jambs, window reveals etc require a varnished or polyurethane finish, all woodwork shall be finely sanded before sealing with an approved sanding sealer or thinned polyurethane, and then given three coats of approved polyurethane matt or semigloss finish, to manufacturers specifications.



Wall Bracing Calculation Sheet A

Job Details

box 1

Name <u>Aldan Lodge Motels.</u>	
Street and Number <u>86 Wellington St.</u>	
Lot and DP Number _____	
City/Town/District <u>Pictou</u>	
Location of Storey: _____	Floor load: 2kPa/3kPa
Building height to apex <u>4.2</u> m	Roof weight <u>light</u> /heavy
Roof height above eaves <u>1.5</u> m	Cladding weights: Subfloor <u>light</u> /medium/heavy
Stud height <u>2.4</u> m	Lower Storey <u>light</u> /medium/heavy
Average roof pitch <u>20°</u>	Upper Storey <u>light</u> /medium/heavy
Building length BL = <u>12.8</u> m	Room in Roof Space <u>Yes</u> / No
Building width BW = <u>6.4</u> m	Gross Building _____
	Plan Area, GPA = <u>77</u> m ²
Note: When the average roof pitch is over 25 degrees, use the eaves length and width to determine BL and BW.	
Note: For heavy roofs use the roof plan at eaves level to determine GPA.	

Wind Zone

box 2

Region: R1	0 <input checked="" type="checkbox"/>	Terrain: Inland	0 <input checked="" type="checkbox"/>	Exposure: Sheltered	0 <input checked="" type="checkbox"/>	Topography: Gentle	0 <input checked="" type="checkbox"/>
R2	1 _____	Coastal	1 _____	Exposed	1 _____	Moderate	1 _____
						Extreme	3 _____
Total points	<u>0</u>						
Wind Zone:	<input checked="" type="checkbox"/> Low (0)	_____ Very high	(3)				
	_____ Medium (1)	_____ Specific Design	(4)				
	_____ High (2)						

Earthquake Zone

box 3

From figure EQ1 select Earthquake Zone: A B C

BU's required Wind

box 4

From Table W1A/W1B

W along = 34 BU's/m

W across = 24 BU's/m

Total wind load,

W ALONG:

W along x BW = 218 BU's

W ACROSS

W across x BL = 307 BU's

BU's required Earthquake

box 5

From Table EQ1/EQ2/EQ3/EQ4/EQ5/EQ6

E = 5.2 BU's/m²

Note: For a room in the roof space use E + 3

Total earthquake load,

EQ ALONG and EQ ACROSS

E x GPA BU's = 400 BU's

Wall Bracing Calculation Sheet B

Along

Wall or Bracing Line		Bracing Elements Provided			Wind		Earthquake	
1	2	3	4	5	6 W	7 W	6 E	7 E
Line Label	Minimum BUs Required	Bracing Element No.	Bracing Type	Length Element (m) L	Rating BU/m W	BUs Achieved (BU/m x L) W	Rating BU/m E	BUs Achieved (BU/m x L) E
A		A1	Block	2.4	42	100	42	100
		A2	Block	2.4	42	100	42	100
B		B3	GIB2	2.4	80	192	70	168
C		C4	Block	2.0	42	84	42	84
		C5	Block	2.0	42	84	42	84
D								
E								

Totals Achieved				W		E	536
From Sheet A		Totals Required		W	218	E	400
Wreq/Ereq =				*			

*If Wreq/Ereq is 1 or less complete E column only
 If Wreq/Ereq is 1.5 or more complete W column only
 Otherwise complete both W and E

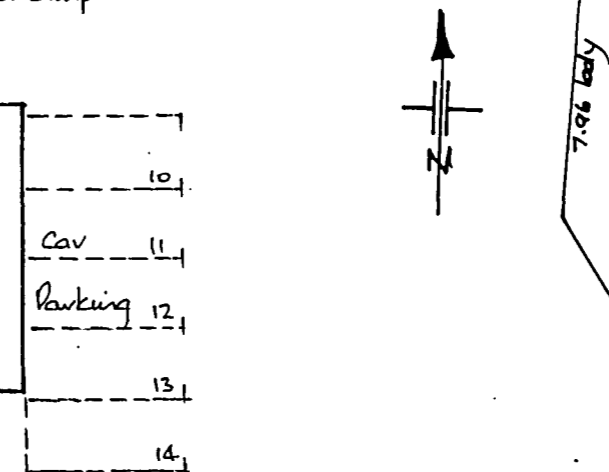
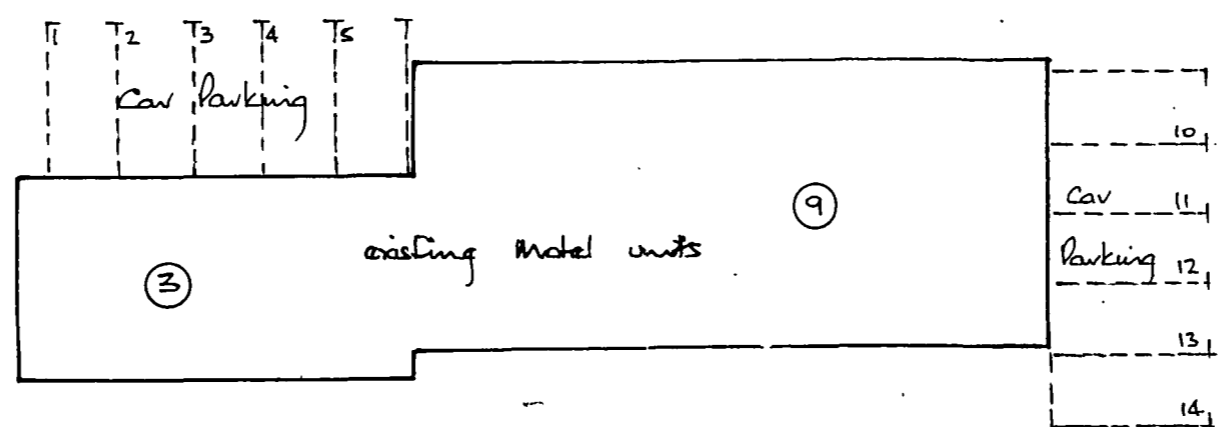
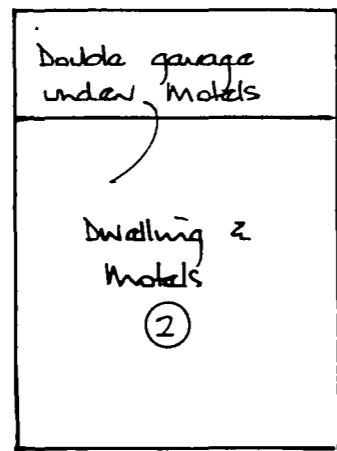
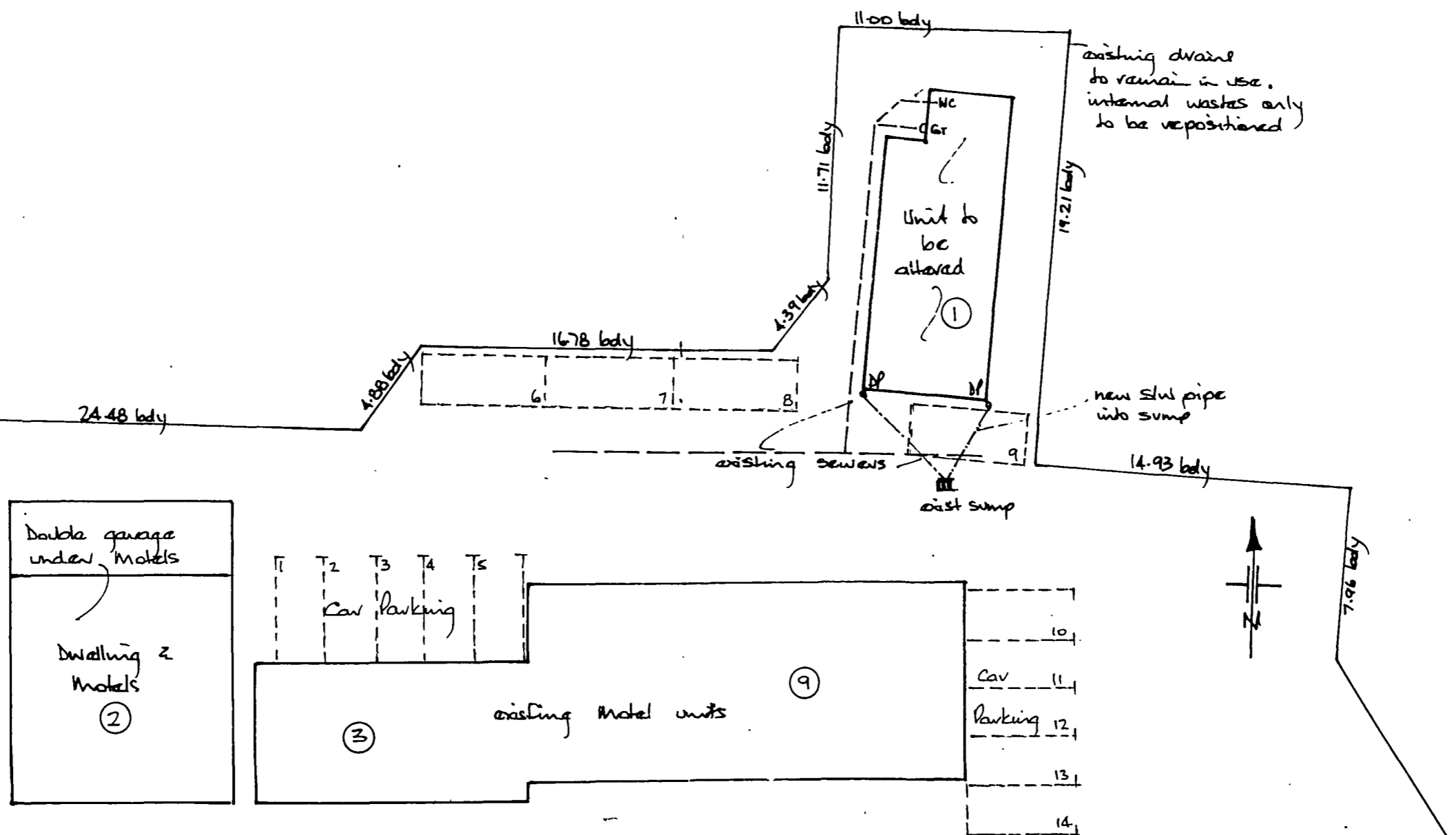
Across

Wall or Bracing Line		Bracing Elements Provided			Wind		Earthquake	
1	2	3	4	5	6 W	7 W	6 E	7 E
Line Label	Minimum BUs Required	Bracing Element No.	Bracing Type	Length Element (m) L	Rating BU/m W	BUs Achieved (BU/m x L) W	Rating BU/m E	BUs Achieved (BU/m x L) E
M		M6	Block	2.0	42	84	42	84
		N7	GIB2	2.4	80	192	70	168
N		O8	GIB2	2.0	75	150	60	120
O		P9	Block	1.2	42	50	42	50
		P10	Block	1.2	42	50	42	50
P								
Q								

Totals Achieved				W		E	472
From Sheet A		Totals Required		W	307	E	400
Wreq/Ereq =				*			

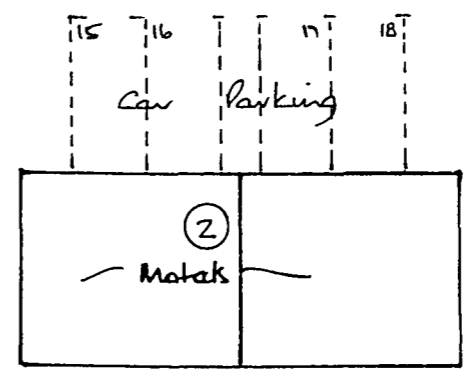
WELLINGTON STREET

20.68 bdy



Car parking requirements
 17 Motels = 17 carparks
 2 Staff = 1 carpark

SITE PLAN.
 Scale 1:250.



86 WELLINGTON ST. PICTON.
 ALDAN LODGE MOTELS.

PARKING PLAN

RECEIVED
 24 OCT 2002
 MARLBOROUGH DISTRICT COUNCIL

Consent # 021575

CARTERS Blenheim

Page: ProdSt - 1

Job: QC201028

Client: G Taylor

Site: Aldan Lodge Motel

Phone:

Picton

Description:

Phone:

MiTek 2000 2.100.g6f

Gang Nail Group Ltd.

Thu Oct 24 12:16:55 2002

PRODUCER STATEMENT
MITek 2000(tm) ROOF TRUSS DESIGN

Certification of MiTek 2000(tm) Design Program

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

Summary of MiTek 2000(tm) Design Data and Output

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

Job Details

Roof Pitch:	20.00 deg	Timber Inventory:	Default	Building Wind Zone:	High
Roof Material:	Light	Ceiling Material:	Standard	Design Wind Speed:	44.0 m/s
TC Dead Load:	0.250 kPa	BC Dead Load:	0.200 kPa	Pressure Coefficient:	Cpe = -0.9
TC Restraints:	900 mm centres	BC Restraints:	400 mm centres		Cpi = 0.3
Roof Live Load:	Lu = 0.250 kPa	Truss Spacing:	900 mm		
	Lc = 1.0 kN	Standard Overhang:	600 mm		

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

Truss List

Legend: *: detail only, ?: input only, -x: failed design, Unmarked trusses: designed successfully

Truss	Span (mm)	Pitch (deg)	Spacing (mm)
EN01	6700	20.00	850
EN01A	6700	20.00	850
T01	6700	20.00	850
T01A	6700	20.00	850
T01B	6700	20.00	850



The computer design input has been carried out by:

Signed: _____

Date: 24/10/02

Name of Computer Operator: R. May

Qualifications and Title: _____

Company: CARTERS Blenheim

Verification / Acceptance of Input Data:

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

Signed: _____

Date: _____

Name: _____

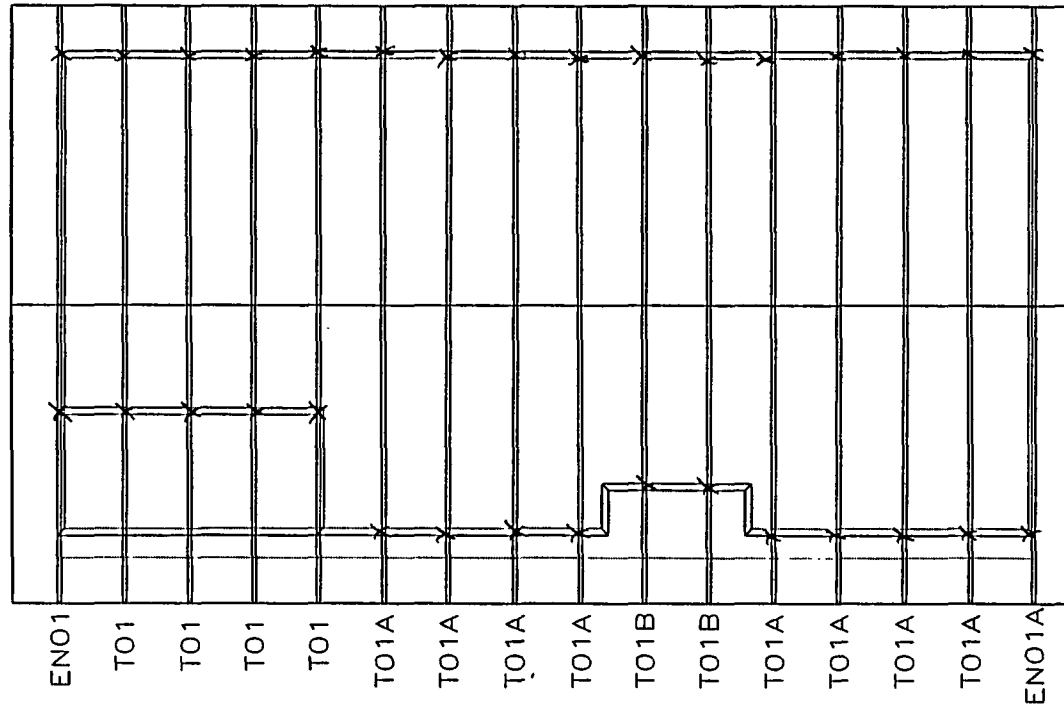
Company: _____

CARTERS Blenheim

Burleigh Industrial Estate BLENHEIM Telephone: (03) 5775344 Fax: (03) 5775322	Name: G Taylor Address: Aldan Lodge Motel Picton	Description: Job: <div style="text-align: center; font-size: 1.2em;">QC201028</div>
	Telephone:	Scale: 1 : 100 Date: 24/10/2004 Drawn By: RP

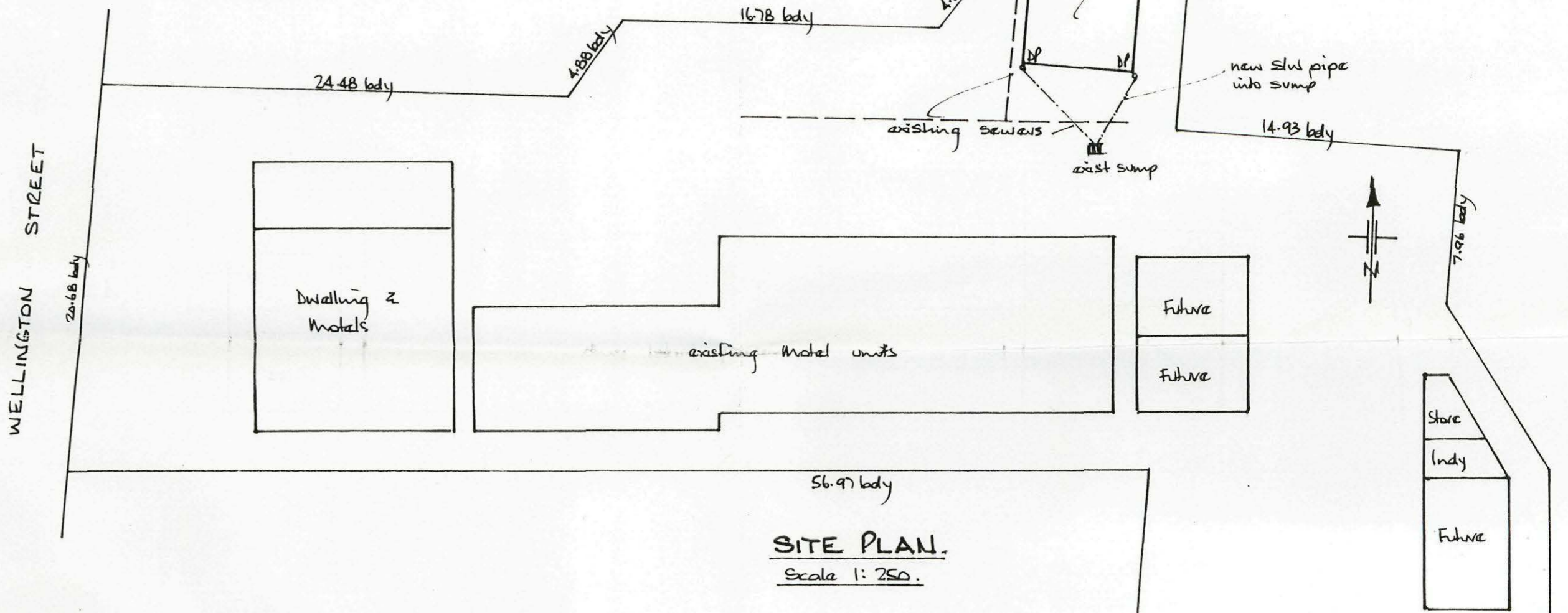
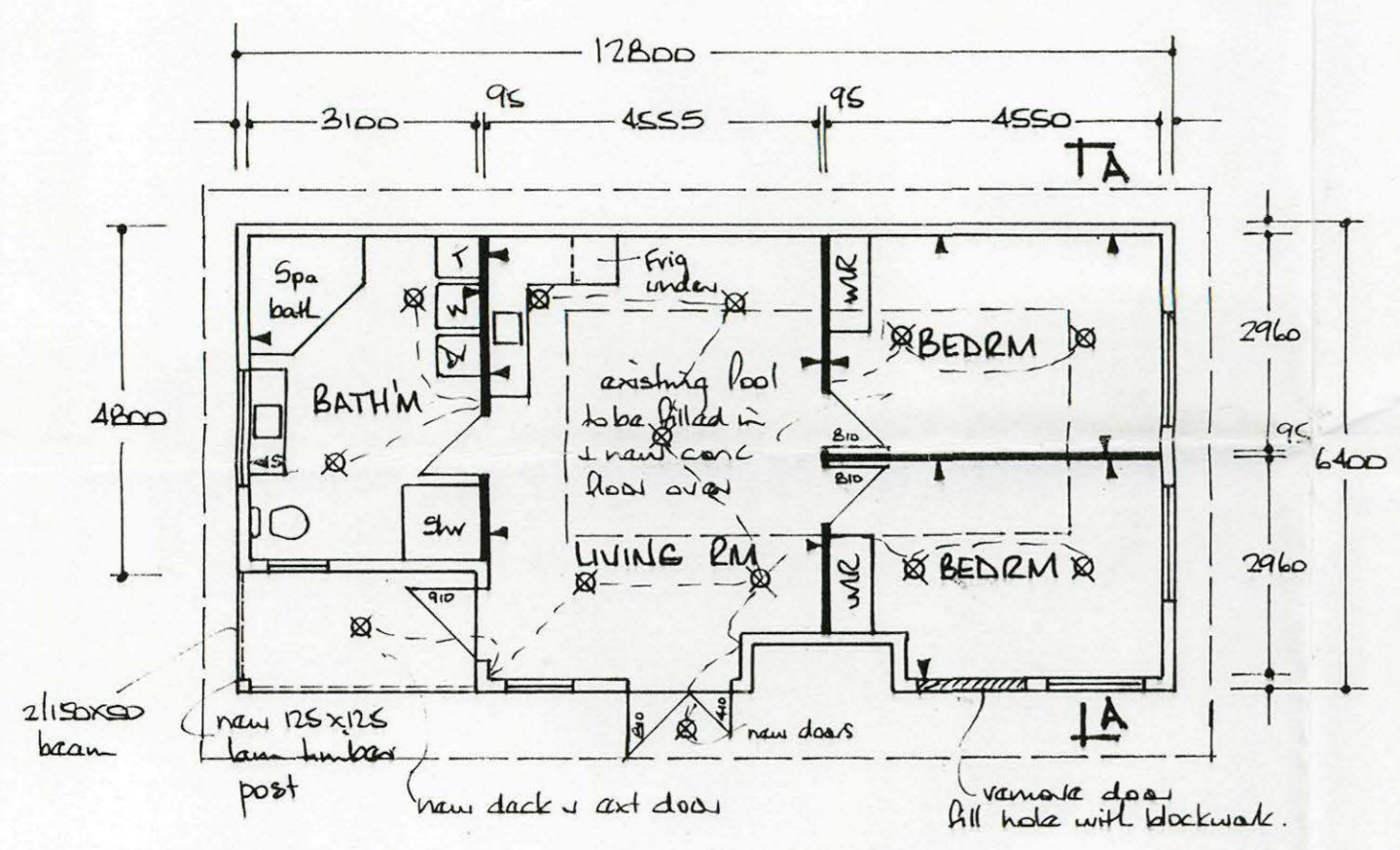
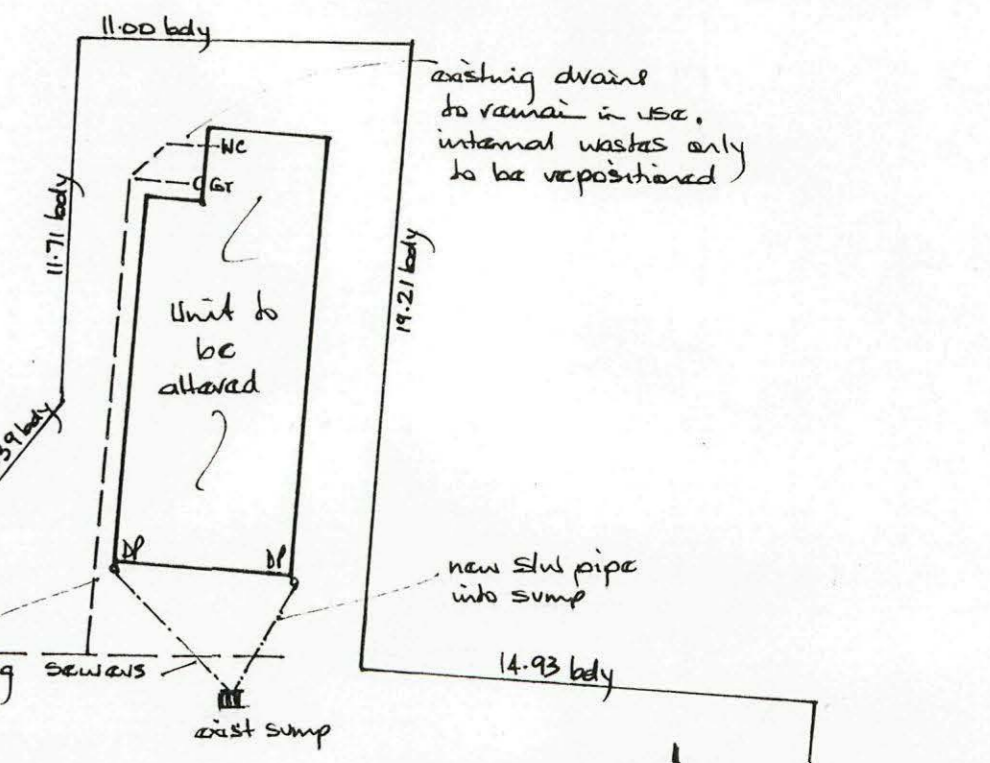
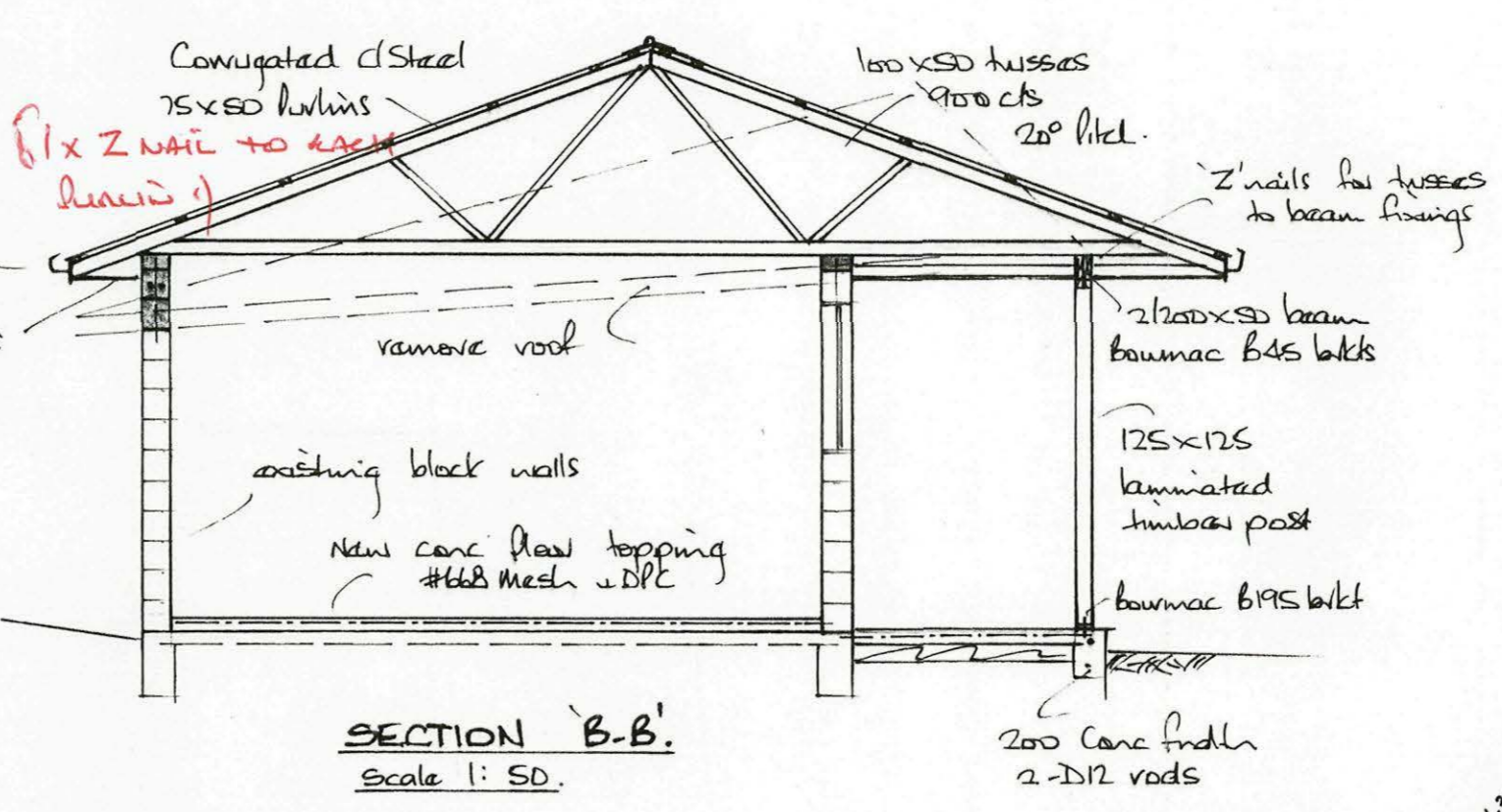
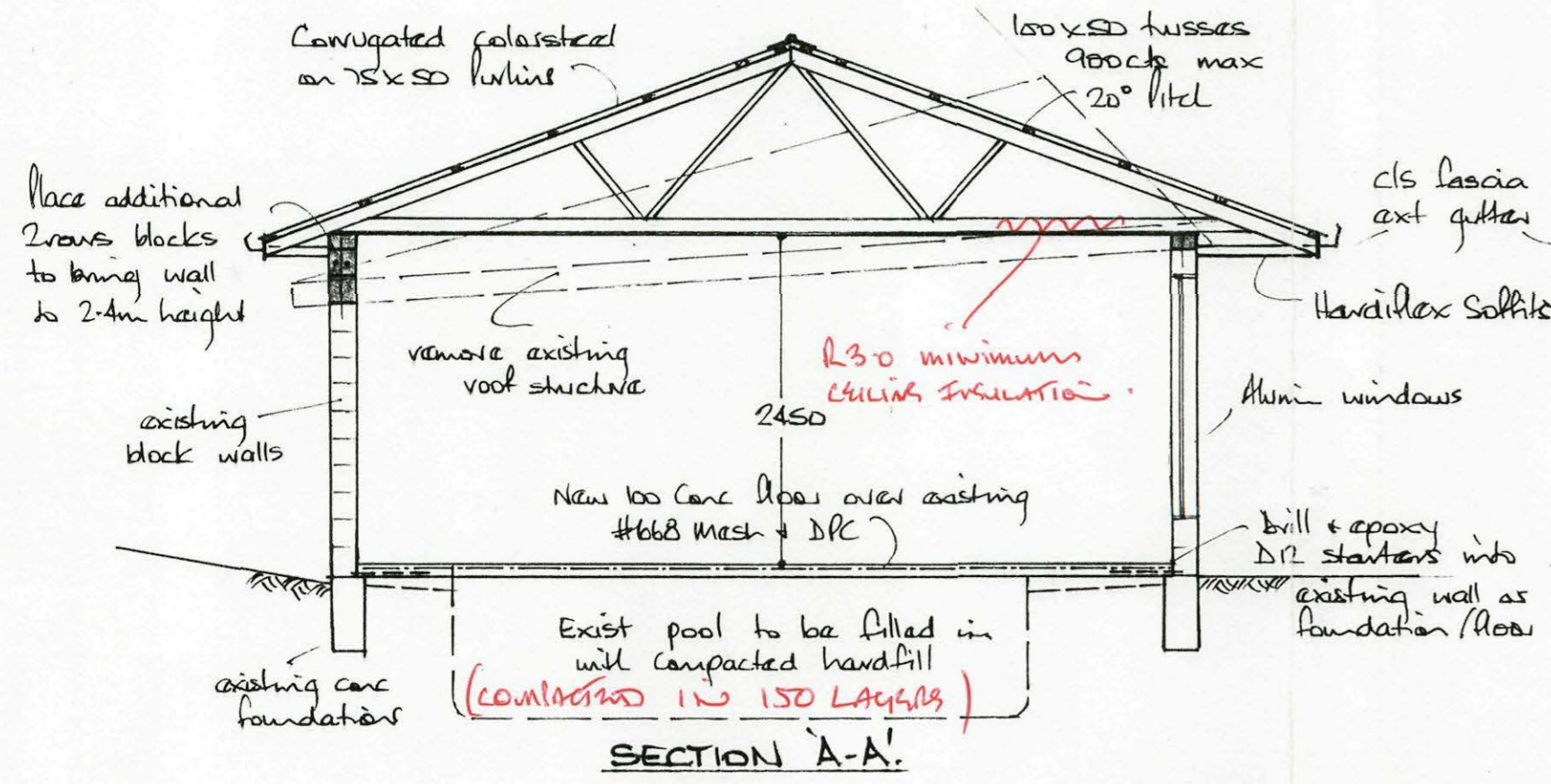
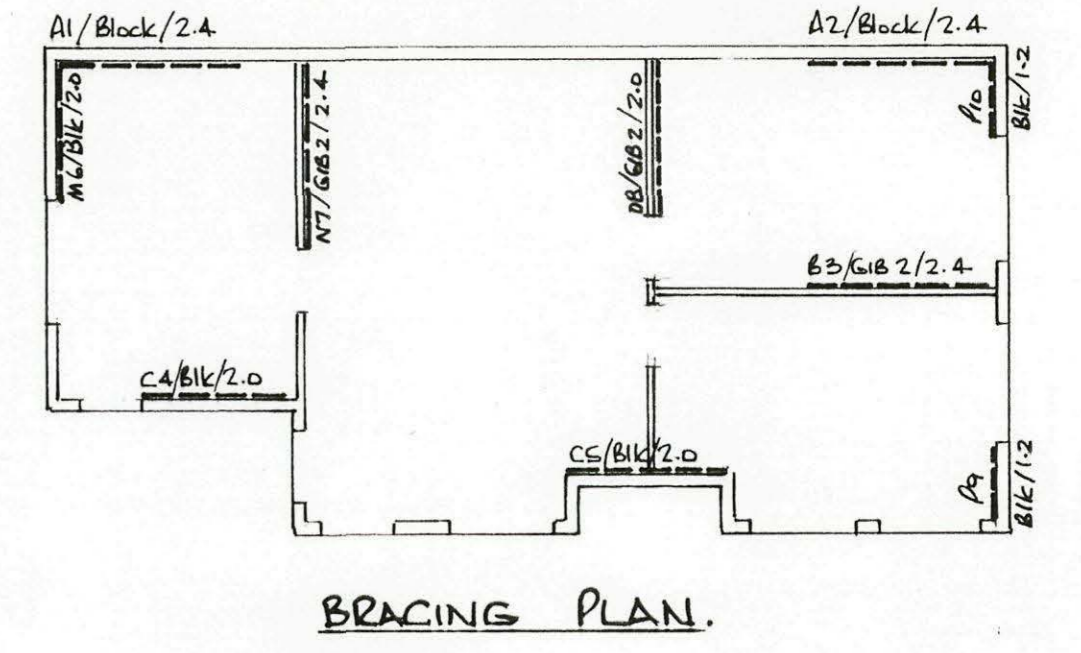
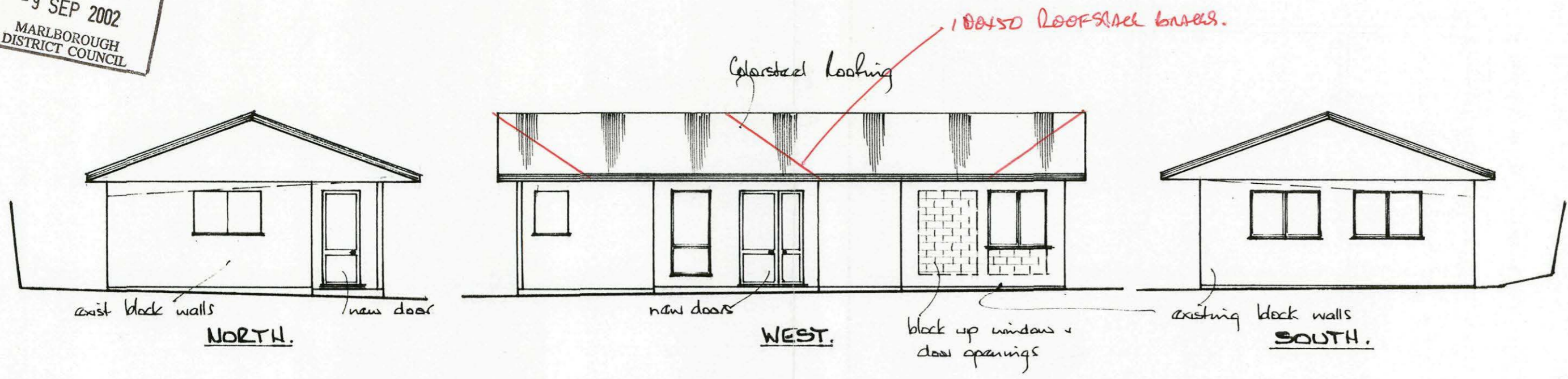
Job Details:

Ext. Pressure Coeff.:	-0.9	Int. Pressure Coeff.:	0.3
Wind Area:	High	Design Wind Speed:	44.0m/s
TC Restraints:	900mm	BC Restraints:	400mm
Roof Material:	Light	Ceiling Material:	Standard
Roof Live Load:	0.250kPa		
Roof Pitch:	20.00deg	Truss Centres:	900mm



x = 2# CT200 cyclone ties

RECEIVED
- 9 SEP 2002
MARLBOROUGH
DISTRICT COUNCIL



MARLBOROUGH DISTRICT COUNCIL
Approved subject to all work complying with
the N.Z. Building Code

[Signature]
Date 25/10/02

RECEIVED
 -9 SEP 2002
 MARLBOROUGH
 DISTRICT COUNCIL

