PLEASE ENSURE YOU MAKE AN APPOINTMENT

| OFFICE USE ONLY | IC-₩ |
|-----------------------------------|---|
| Application Number: | Hamilton City Council Application for: |
| 2337/2002 | Project information memorandum and building consent together |
| Valuation Number: | Project information memorandum only |
| 0418U-13U-10-B | Building consent only (in accordance with project information memorandum) Number |
| Project location: | New InBuilt S/F Heater |
| 100 | |
| Street Number 18 H | Street Name SRECKONS HUE |
| | Flat B 0/589572 |
| LOT(S) | SITE AREA ha / m² |
| DPS 9804 - F | 10 Careers |
| PROJECT: | Specified as years |
| ☐ New building ·—— | Description of work: Replacement |
| ☐ Alteration/addition ———— | of Solich Ruel Rive |
| Relocation | Intended uses: (testing |
| Demolition Gifter Heart-in | |
| Other Heavition | Estimated value (incl GST): \$ 2,800 |
| OWNER | CONTACT (if not owner): |
| Name <u>8/8/4</u> | 1701110 4 |
| Postal Address 19 Hou | there Place Postal Address BOX 5652 |
| HAMICT | on HHMICTON |
| Phone (daytime) | Phone (daytime) 847-1179 |
| Cellphone | - 一 ・ ・ ・ ・ ・ ・ ・ ・ ・ ・ ・ ・ ・ ・ ・ ・ ・ ・ |
| Fax | Fax 846-1159 |
| Email | Email Saleya heating toutions conte |
| | |
| DECLARATION: Signed for or on beh | |
| Print name Graham | Signature Date |
| <u>@@b/</u> | Y |
| | THAME TON OFFY COUNCIL RECEIVED |
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| Hamilton City | Council BY: Kay 6 odd o 44 |
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Building Unit, Ground Floor, Hamilton City,Country Orines, Gradien 2.565 Private Bag 3010, Hamilton Telephone 07-838-6685 Fax 07-838-6684 Email Building unit admin@hcc.govt.nz

| OR OFFICE USE ONLY EES PAYABLE: Building Consent Project Information Memorandum | . , | | |
|---|-----------------|---------------------------------------|-------|
| EES PAYABLE: Building Consent Project Information Memorandur | | BUILDER: | 11.00 |
| Building Consent Project Information Memorandur | s 🚸 | 7.74 | |
| roject Information Memorandur | 70.00 | | ' |
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| | 1500 | 7.007000. | |
| Code Compliance Certificate | 1900 | | |
| BRANZ Levy | | Fax: | ĺ |
| IIA Levy | | Phone - day: |] |
| hotocopying | | Cellphone: | |
| fircofilming | 25.00 | PLUMBER: | |
| tructural Check | | | |
| ixternal Consultants Check | | | |
| | | | İ |
| crossing Administration | | Address: | |
| lanning Bond | | | |
| eserves Contribution (Residential) | | Fax: | Ì |
| eserves Contribution (Commercial) | | Phone - day: | |
| Vater Main Connection | | Cellphone: | |
| /ater Connection (Nearside) | | Reg # | |
| /ater Connection (Farside) | | • | |
| /ater Connection (Rural) | | DRAINLAYER: | |
| | | | |
| /ater Disconnection | | | |
| ackflow Device | | Address: | |
| ackflow Inspect/Permit Fee | } | | |
| anitary Connection | | Fax: | |
| tormwater Connection | i i | Phone - day: | |
| anitary Disconnection | | · · · · · · · · · · · · · · · · · · · | |
| tormwater Disconnection | | Cellphone: | |
| CTV Survey Sanitary | | Reg # | |
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| CTV Survey Stormwater | - | ACTION HOP ALLEY | 1. 1 |
| erb & Channel Connection | | OFFICE USE ONLY Receipt # 411575 | 170 |
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| ompliance Schedule | | $11/\sqrt{2cr}$ | |
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| etal Fees (including GST). \$ | | | |
| Г | 125- | Date authorised 11/2002 REFERRALS: | |

C

Consent Reference: **Project Address:** Issue Date: 2337/2002 **18A Breckons Avenue** 11 November 2002 Owner: Bish Limited Builder: Heating & Controls Ltd wk 07 847 1179 Description of Work: New Inbuilt Solid Fuel Heater Property Reference: Flat B & Shed B DP S89572 TR **BUILDING INSPECTIONS** PLUMBING & DRAINAGE INSPECTIONS APPROVED DATE SIGN SIGN APPROVED DATE Yes No Yes No Siting Concrete Floor Foundation Prelining Bond Beam Waste & Soil Concrete Floor Foulwater Tiit Slab Stormwater Prelining Chimney/Heate Fire protection Crossing Crossing Final Other Producer Statement Requested Producer Statement Received Requested Received Driven Piles Pressure Test Engineers As Laid Drainage Plan Automatic Sprinkfers Back Flow Prevention Device Fire Alarm DRAINLAYER: Emergency Lighting Lifts, Escalators PLUMBER: Mechanical Ventilation 5<u>canj</u> INTERIM CODE COMPLIANCE CERT. ISSUED COMPLETION YES NO SIGN COMPLETION SIGN COMMENTS: COMMENTS:

3.89% (1.0000%) (4.

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Hamilton City Council Te kaunihera o Kirikiriroa

Private Bag 3010 Hamilton New Zealand

Phone 07 838 6699 Fax 07 838 6599

info@hcc.govt.nz www.hcc.govt.nz

Code Compliance Certificate No 2002/2337

Section 35, Building Act 1991

Issued by Hamilton City Council

Date:

28 November 2002

Applicant: Mailing Address: Bish Limited 19 Houhere Pl **HAMILTON**

Application Lodged:

11/11/2002

Project:

Application Description:

Intended Use:

New Inbuilt Solid Fuel Heater

Detached Dwelling - Live As A Family

Work Type:

New Construction

Intended Life: Value of Work: 5 years \$2800

Property:

Address:

18A Breckons Avenue HAMILTON 2001

Property Reference:

FLT: B DP: \$89572

This is:

- (X A final code compliance certificate issued in respect of the building work under the above building consent.
- () An interim code compliance certificate in respect of part only, as specified in the attached particulars, of the building work under the above building consent.
- () This Certificate is issued subject to the conditions specified in the attached page(s) headed "Conditions of Code Compliance Certificate No. 2002/2337" (being this certificate)

Signed for and on behalf of the Hamilton City Council:

PETER MARTENS

Name:

Position: Authorised Officer

Building Control Unit

| Hamilton City Council | HEATERS |
|---|---|
| Te kaunihera o Kirikiriroa PH: (07) 838 6444 | BUILDING CHECKLIST |
| PROPERTY ADDRESS: 18 A | Brekons Av Ham |
| Flatis | ů, |
| LOT: 5 DP/S: 980 | 4 CONSENT NO: 2337.7007 |
| Approved Building Consent documents on site | Liner spacing |
| Check conditions | Flue copped |
| Check street number on letter box | HEATER INBUILT |
| HEATER FREESTANDING | Check existing chimney condition |
| Hearth size / thickness | Fire place condition |
| Clearances from wells and drapes | Hearth size / thickness |
| Healer fixed down | Maniel clearances |
| Clearances in roof space | Timber in fireplace |
| Flue support | Full length liner |
| COMMENTS: | ind 2 Jones |
| Designo | er fines. |
| | |
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| HWC | |
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| | Fine Serround |
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| (3) E.F de [1 | ector shield |
| (timber man) | -1 11/0 |
| Tiving alex | 51 5517 11 A GO 7416 |
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| 100 | asove complete. |
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| | |
| | |
| Further Inspection Regulated / | Approved |
| Inspector Hill vold | Date 8-11-22 |
| | |
| HEATERS Builders Copy | - White Owners Copy - Pink File Copy - Blue BC-HO1 06/12/01 |

Building

Hamilton City Council
Te kaunihera o Kirikiriroa

Private Bag 3010 Hamilton New Zealand

Phone 07 838 6699 Fax 07 838 6599

> info@hcc.govt.nz www.hcc.govt.nz

11 November, 2002

Heating & Controls Ltd P O Box 5632 HAMILTON 2001

Dear Sir/Madam

Consent Number: 2337/2002

Project: New Inbuilt Solid Fuel Heater Project Address: 18A Breckons Avenue

Thank you for the application for building consent. We are pleased to advise that this consent has been processed and is now ready for collection.

Your next steps are:

- 1. Please arrange for the payment and collection of the consent documents (If this has been pre-paid, then these will be sent to you). Please bring your invoice in with you when you pay. Your approved documentation must be kept on site for the building inspector to view.
- Read carefully the Project Information Memorandum comments on page 2 of this letter. This information may be important to you during the construction process.
- This Building Consent is issued subject to the conditions outlined on page 4. In particular please note the
 requirements for inspections. The phone number to arrange inspections is 838 6677 available from 8:00 am
 to 11:00 pm.
- 4. Your final step after the completion of the project, is to apply for the issue of a Code Compliance Certificate. Please fill out the "Advise of Completion of Building Work" form attached (page 5) and we will contact you to arrange a suitable time. We have found that many people do not complete this last task with the result that legal difficulties can arise at the time of sale or with insurance companies.

It is also a legal requirement of the Building Act, therefore the keeping and processing of the Advise of Completion is very important to both yourself and Council.

Good luck with your building project and we look forward to our staff assisting you with this and any future building work.

Yours faithfully

Mr KH Hjelmstrom Private Bag 3010 HAMILTON

Work: 07 838 6685

BC1/1f Version 3 Date: 7-Dec-00



Building Consent:

Project Information Memorandum Comments

This is your Project Information Memorandum

This describes (if relevant) any special features of the land, Information of other Acts relating to the land or buildings, Details of waste and storm water systems and confirmation that the works will comply with the Building Act subject to the requirements of the building consent.

Private Bag 3010 Hamilton New Zealand

Phone 07 838 6699 Fax 07 838 6599

> info@hcc.govt.nz www.hcc.govt.nz

* Planning

*

- * Solid Fuel Heaters
- * Heater to be installed in compliance with Manufacturers Installation instructions, which must be on site at the time of inspection.
- * Curtains to be 1 metre away from the firebox/flue.
- * Health
- * Please see attached information sheet "Correct Operation of Solid Fuel Space Heaters" (EC 1/3d) as a guide to efficient burning. This will assist you in minimising any adverse environmental effect as required by the Resource Management Act 1991.

BC1/1f Version 3 Date: 7-Dec-00

Project Information Memorandum No: 2337/2002

Hamilton City Council
Te kaunihera o Kirikiriroa

Private Bag 3010 Hamilton New Zealand

Phone 07 838 6699 Fax 07 838 6599

info@hcc.govt.nz www.hcc.govt.nz

Section 43(3), Building Act 1991 Issued by the Hamilton City Council

Date:

11 November 2002

Applicant:

Mailing Address:

Bish Limited 19 Houhere Pi HAMILTON

2001

Application Lodged:

Project

Application Description:

11 November 2002

New Inbuilt Solid Fuel Heater

Stage:

Intended Use:

Residential

Work Type:

New Construction

Intended Life: Value of Work:

5 years \$ 2,800.00

Property

Address:

18A Breckons Avenue

Property Reference

Flat B & Shed B DP S89572

LOT 5 DP 9804

This is:

Confirmation that the proposed building work may be undertaken, subject to the provisions of the Building Act 1991 and any requirements of the building consent.

[]_Not yet applied for. No.: 2337/2002 attached.

] Not yet issued.

[] Notification that other authorisations must be obtained before a building consent will be issued.

Or

[] Notification that the proposed building work may not be undertaken because a necessary authorisation has been refused.

This project information memorandum includes (cross each applicable box, attach relevant documents, and send a copy to any relevant network utility operators and organisations having the power to classify land and buildings);

[] Information identifying relevant special features of the land concerned.

[] Information about the land or buildings concerned notified to the Council by any statutory org misation having the power to classify land or buildings.

[] Details of rele. . nt utility systems.

[] Details of authorisations which have been granted.

Details of authorisations which must be obtained before a building consent will be issued.

[] Details of authorisations which have been refused.

Signed for and on behalf of the Hamilton City Council:

Name:

Position: Authorised Officer

Building Control Unit

BC1/1f Version 3 Date: 7-Dec-00



Private Bag 3010 Hamilton New Zealand

Phone 07 838 6699 Fax 07 838 6599

> info@hcc.govt.nz www.hcc.govt.nz

These are your Building Consent Conditions.

Please read these carefully

- * Building
- * Please quote building consent number when requesting an inspection.
- * Completion inspection required prior to issue of interim or final code compliance certificate. Please make application on the appropriate form, that is included in Building Consent.
- * Solid Fuel Heaters
- * Call for a completion inspection before you light the appliance. (Manufacturers installation instructions to be on site). Please provide 24 hours notice.
- * Inspection of prepared fireplace and chimney is required prior to heater installation. Please provide 24 hours notice.
- * Freestanding and inbuilt heaters to be bolted to the floor.

Important Notes:

- If the work has not commenced within 6 months or if there is a lack of reasonable progress within 12 months then your building consent may lapse. Please contact the processing officer if you feel you may exceed these times and we can discuss extending the time frames.
- 2. The Project Information Memorandum lapses if a building Consent for the work concerned has not been issued within 24 months after the date of the issue of the Project information Memorandum.
- 3. Please check with your local Network Utilities Operator as to where your services are located, i.e. Telecom, Wel Enorgy and Gas.

| Yes | BUILDING CONSEN No | T / PIM ACTION SHEET / CONSENT No. 233 1 | /2002 w/held | issue |
|------|---|--|-----------------|-----------------------------------|
| Hea | | 61 | Mylieta | Issue |
| Roa | ds & Traffic | | | |
| Wa | tor | | | |
| | □ water connection □ water disconnection □ backflow device □ green sheet sent | | | 150 30 ₀ 4 22-31 |
| | | Yes No | ļweņ. | |
| | Inage □ TV required □ drainage contacted | Disconnections □ □ waste water □ □ storm water | | |
| J | Connections waste water storm water | ☐ ☐ green sheet sent ☐ ☐ K & C connections | | |
| 3 | ☐ green sheet sent | ☐ ☐ green sheet sent | : | { |
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BC1/2 Version 8 06/09/01

18/1/B/188 - 3895TD ATTHEW RICHARDS AND THE MEMBERS OF THE SECTION OF THE PROPERTY OF THE SECTION OF THE SECTION OF THE SECTION OF 67007 PLANNING GUIDANCE 2 4 JAN 2002 AM/PM ---Total Ann....2028.cm2 Approved as to Survey Chief Serveyor AND DISTRICT SOUTH AUCKLAND TERRITORIAL AUTHORITY Hamilton City بنفوسته ست JURYEY BLIC & DIST. XIII Komokonec DP 9804 Surveyed by ... Market across accounts are HZMS 261 SHT RECORD MAP-No. Midugust 2000



Bc1/2n version 2 25 September 2001

QUALITY ASSURANCE CHECKLIST

Solid Fuel Heater

| Certifi | cate | of | Title |
|---------|------|----|-------|
| | | | |

This is an important document that identifies which piece of land the project is to be built on and must be supplied with all applications. This can be obtained from Land Information New Zealand.

<u>Fees</u>

A full fee will be required as part of the application for consent. Please check our fees and charges booklet to see what your fee is. Payment options are cash, cheque or Efpos.

| Floor Plan (two copies) | [7] | □ | Office Ose |
|---|------------------|----------|------------|
| A single line drawing of the room showing the position | | ليسا | |
| of the proposed heater. Please include distances from | | | |
| windows and doors. | , | , | |
| Specifications | | | |
| Manufacturers heater specifications included | | | |
| Usually found in the heater brochure. | | | |
| Heating Engineers Report | 107 | /Δ_ | |
| To be provided if the heater is a second hand one. | □ ¹ Y | 台 | |
| · | | | T = T |
| This application is accompanied by (cross each applicab | le box | , attac | h relevant |
| documents in duplicate) | | | |
| ➤ Building certificates | | | ф., " |
| > Producer statements | | | # ₹% |
| > Reference to accreditation certificates | | | Þ |
| issued by the Building Industry Authority | _ | _ | <u> </u> |
| ➤ References to determinations issued by | | Ш | - P |
| the Building Industry Authority | | | |
| | | | |
| Signed St. Applicant (1/1/1/1) | О- | . 11. | -11-02 |
| Signed By Applicant | Da | te. /./. | (/У ↑ |
| | ~ | | -1/ |
| Authorised by Review Officer | | | 11/11/01 |
| Additionsed by Nevicw Officer | | | |

18A BRECKONS AUS Flat 2 Lot 5 DPS 9804 Proposed new Inbuilt five location

| | Divin | 2 | Kitchen |
|-----|---------------|-----|--|
| | . :. | | HAMILTON CITY COUNCIL |
| | | | APPROVED |
| Low | ge | | SUBJECT TO CONDITIONS TO BE KEPT ON SITE |
| | Existing inbu | alt | 32 |
| ę | | | |
| | Hallway | | |
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HAMILTON CITY COUNCIL

APPROVED

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Metro inserts are designed to be installed direct onto a concrete base. A hearth is required to project in front of the Metro and must extend a minimum of support to each sup schedule of hearth projections is measured from behind the Metro fascia, being the total hearth depth as shown in diagram 4 below. Note: the heights specified above the combustible floor can be achieved by:-

455mm insulated

445mm insulated

436mm insulated

424mm insulated

408mm insufated

396mm insulated

366mm insulated

Adjusting the thickness of the hearth

Insert Raised Minimum Hearth projection and Type

Metro Compact

439mm insulated

425mm insulated

417mm insulated

403mm insulated

392mm insulated

381mm insulated

367mm insulated

356mm insulated

260mm insulated

N/A

HEARTH REQUIREMENTS

Raising the insert

10mm

15mm

20mm

25nm 30mm

35mm

40mm

45mm 50mm & above

A combination of the two

| DIAGRAM 4 | |
|----------------------|---|
| Firebox Insart 560mm | ¥ |

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7.

Metro High Output 260mm ash hearth

41mm & above

WETBACKS - Both Metro inserts can be fitted with either of Pioneer's 3kW or 4kW wetback option. Only Picneer's cast jacket wetback system as illustrated on page 2 (reverse side of this manual) should be fitted to a Metro; alternative wetbacks will void the Metro's emission approvals and may seriously affect the performance of the appliance and void the owner's warranty

Both 3kW and 4kW wetback options can be fitted to either side of the firebox with the connection pipe heights illustrated in diagram 4 above. Please note:-

- It is recommended the return pipe has a minimum rise of 1 in 12; performance will reduce as the distance to the storage cylinder increases.
- The welback must be conflected to a vented system. To fit the wetback proceed as follows:
- Remove the brick from the inside of the firebox (from the side to which the wetback is to be fitted).
- Expose the holes in the firebox through which the connection pipes will pass.
 - The high output model has 3mm pressed washers covering these two openings and two 6mm bolts which are fitted inside the tire to ear the connection holes; remove these also.
 - The compact has a 6mm cover plate secured by four 6mm bolts on the outside of the firebox.
- 3. Using a hole saw or snips, prepare the cabinet for the connection pipes. Note: these holes should be a neat fit or have any excess gap covered or filled with high temperature insulation.
- Using the tube of sealant supplied with the wetback, apply a liberal bead of sealant around both connection holes on the inside of the firebox. On the rear face of the wetback casting apply the remaining contents of the tube equally around both connection pipes.
- 5. Fit the wetback into the firebox and position the connection pipes through the connection holes in the firebox. For the "Compact" model only: lift the end of the wetback at the rear of the firebox over and behind the supporting lug which was previously locating the side brick.
- Fit two bolts through the slots provided in the wetback. Align the wetback so its front edge is parallel to the door opening and secure the bolts. The wetback is ready for connection to the storage cylinder by a registered plumber.

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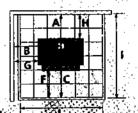
Wet

All Metro woodfires are tested to NZS-7421 and AS-2918. Specifications and clearances detailed below apply to both standard and Ef Series Metros. Specifications may alter and HAMILTON CITY COUNCIL

Technical RepritoVED

those detailed belows health be used on the installation and operation the installation and operation the subdict with every Metro, or if in doubt, consult your Metro retailer.

| Contractor Land | e di ai | | | | i tar va. | |
|--------------------------|---------|-------|--------|--------------|------------|--|
| SPECIFICATIONS | Width | Depth | Height | , kW-(1) | kW-(2) | |
| TINY-TRAD | 490 | 530 | 665 | N.A | 11.0 | |
| PIONEER & PIONEER TRAD | 590 | 530 | 665 | 14.6 | 14.4 | |
| PIONEER REAR OUTLET | 590 | 530 | 660 | N.A | N.A | |
| X-TREME & X-TREME TRAD | 670 | 575 | 715 | 17.7 | 14.2 | |
| ASPIRE & ASPIRE TRAD | 670 | 575 | 715 | 19.8* | 15.6 | |
| WEE-RAD | 607 | 530 | 665 | 14.6 | 14.4 | |
| BAD | 750 | 575 | 745 | 17.7 | 14.6 | |
| HI-OUTPUT INSERT FIREBOX | 560 | 500 | 550 | 16kW (| estimated | |
| COMPACT INSERT FIREBOX | 560 | 410 | 550 | 13kW (| estimated_ | |
| TRADITIONAL FASCIA | 900 | 195 | 685 | Denotes (| | |
| V.E. & H.T. FASCIA | 810 | 170 | 650 | h with Jan o | ption | |



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|----------------|-----------------------|-------|--------|-------|-----|------------|----------|-----|-----|-------|--------|-------|------|----------|
| • | With Flueshield | 225 | 445 | | 305 | 25 | 100* | 200 | 75 | 705* | 650 | 920* | | 660 |
| TINY-TRAD | Without Flueshield | 605 | 545 | 480* | 595 | 315 | 100 | 350 | 455 | 1085* | 030 | 1320* | 940 | |
| PIONEER & | With Flueshield | 200 | 595 | 400+ | 400 | 85 | 100* | 300 | 50 | 680* | 825 | 1045* | 950 | 660 |
| PIONEER TRAD | Without Flueshield | 530 | 595 | 480* | 595 | 280 | 100 | 300 | 430 | 1060* | 023 | 1320* | 1145 | |
| PIONEER REAR C | OUTLET | N/A | 565 | N/A | N/A | 100 | 100* | 270 | 60 | 690* | 825 | 1070* | 965 | 660 |
| X-TREME & | With Flueshield | 230 | 575 | | 455 | 110 | 100* | 240 | 80 | 755* | 905 | 1165* | 1065 | 740 |
| X-TREME TRAD | Without Flueshield | 800 | 575 | 525* | 595 | 250 | 100" | 240 | 650 | 1325* | 1 30.7 | 1365* | 1205 | , , , |
| ASPIRE & | With Flueshield | 230 | 575 | COE+ | 455 | 110 | 100* | 240 | 80 | 755* | 905 | 1165* | 1065 | 740 |
| ASPIRE TRAD | Without Flueshield | 800 | 575 | 525* | 595 | 250 | 100 | 240 | 650 | 1325* | 505 | 1365* | 1205 | |
| | With Flueshield | 200 | 555 | | 400 | 80 | 100* | 250 | 50 | 680* | 825 | 1045* | 950 | 660 |
| WEE-RAD | W.thout Flueshield | 580 | 555 | 480* | 600 | 280 | 100* | 250 | 430 | 1060* | 023 | 1320* | 1145 | 400 |
| - | With Flueshield | 230 | 575 | cara | 455 | 80 | 100+ | 200 | 80 | 755* | 905 | 1165* | 1065 | -1 74¢ |
| RAD | Without Flueshield | 800 | 575 | 525* | 625 | 250 | 100 | 200 | 650 | 1325* | | 1365* | 1205 | |

Tio comply with Assesses 1990 lieds 100mm to troaten projection measurements C. F. Lend K. Note | With Flueshield tiserences are tested with Planetrs double flueshield.

Pioneer Manufacturing Limited

Mamaku Street, PO Box 11, Inglewood, New Zealand Phone 06 756 6520 Fax 06 756 6540 www.woodfire.co.nz email info@woodfire.co.nz



Heating & Controls Limited 12 Hall Lane (off Norton Rd) Frankton, HAMILTON Ph 847-1179 fax 846-1159

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| FFICE USE ONLY PPLICE ONNUMBER: | <u> Hamilto</u> | n City Council |
|---------------------------------------|---|--|
| ALUATION No: | or a building or Project program or building so | tion memorandum of W CITY nsententy OF |
| oto | (in ac projed | ct information memorandum # HAMILTON |
| Project location: Street Number/88 | Street Name | Breckous avenue |
| LOT(S) 5 | | TE AREA 40-0 m² |
| DP\$ 9804 80 | 1572. | Intended life: Indefinite but not less that, 50 years |
| PROJECT: floor | area (m²) | Specified as years |
| New building Alteration/addition | 23:30 | Description of work: New Buelling |
| Relocation | Nate | Description of work: New Buelling 4 Betwoons Intended uses: Residential. |
| Demolition Other | NOTA | Estimated value (incl GST): \$ 6 5,800 |
| OWNER: | | CONTACT (if not owner): |
| Name Habitat for 1 | | Name Westlyn Pemberton Postal address P. O. Bon 8075 |
| Postal address _ P. O _ E | DEA 0073 | Howel Your |
| Phone day: 843-4999 nig | | Phone day: 843-4949 night |
| Celiphone QS 20 1% Far | See Note | Celiphone 025 200 1840 Fax 843-4999 |
| Signed for or on behalf of the o | wner | ignature Millings Date \$ 13 12000 |

Tel 07-838-6444. Fax 07-838-6684

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| building security and copyright. | dence is to be directed to: |
| Picase ask the Building Review | my/our agent whose responsibility it is to |
| Officer you are dealing with for | forward all council documentation as received as |
| further information. | appropriate. |

appropriate.

BUILDING CONSENT 2000/425 EXTERNAL REF: 425/2000

18**9** Breckons Avenue 188 - Fict C.

A CD ACCOMPANIED THIS APPLICATION FOR

CCTV INSPECTION OF SEWER AND STORMWATER 18C & D BRECKON

AVE

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Hamilton City Council
Te kaunihera o Kirikiriroa

Private Bag 3010 Hamilton New Zealand

Phone 07 838 6699 Fax 07 838 6599

> info@hcc.govt.nz www.hcc.govt.nz

Code Compliance Certificate No 2000/425

Section 43(3), Building Act 1991

Issued by Hamilton City Council Building Consent ref: 2000/425 Historic ref: 425/2000

Date:

04 January 2006

Applicant:

Habitat for Humanity Waikato Ltd

Mailing Address:

P O Box 5775 HAMILTON 2031

Application Lodged:

01/03/2000

Project:

Application Description:

New 4 bedroom Dwelling

Intended Use:

Detached Dwelling - Live As A Family

Work Type:

New Construction

Intended Life:

>50 years

Value of Work:

\$65000

Property:

Address:

18 Breckons Avenue HAMILTON 2001

Property Reference:

LOT: 5 DP: 9804

This is:

- (X) A final code compliance certificate issued in respect of the building work under the above building consent.
- () An interim code compliance certificate in respect of part only, as specified in the attached particulars, of the building work under the above building consent.
- () This Certificate is issued subject to the conditions specified in the attached page(s) headed "Conditions of Code Compliance Certificate No. 2000/425" (being this certificate)

Signed for and on behalf of the Hamilton City Council: McL.

Name: 5/1/2006

Position: Authorised Officer

Building Control Unit

| Te kaunihera o Kirikiriroa | DUB DING GUEDVUCT |
|--|--|
| PH: (07) 838 6444 | BUILDING CHECKLIST |
| PROPERTY ADDRESS: | weckons Ave |
| LOT: 5 DP/S: 9804 | CONSENT NO: |
| Approved Building Consent documents on site Check sheet number on letter box EXTERIOR External envelope complete and weatherproof Flashings/sealants complete Wet area/kitchen vents Safety glass Grossing and toutpath for demage Brick veneer weep and ventilation hales Extenior decorated Weathering of penetrations Construction of decks/steps/handraits etc Barger heights and construction Sult floor access/ponding/ventilation/insulation Roof cladding/flashing fixings/roof penetrations Landscaping complete Roof pitch for cladding used Wall cladding fixings/sookers/scribers etc Fine totings Iteriors Ceiting insulation dear of light fittings Fine ratings stapped Correct installation at shower/both linings, spash boards etc Safety glass Shower curtain/screen Wet areas completed, walls, ceitings, timber floors sealed Bathroom, ensuite, wc, loundry, kitchen vents ducted to extenior Heights of berriers and brandrails/details All inspections have been completed All producer statements have been received | COMMERCIAL Surface linishes, smake development and spread of flame for ceilings, walls, floor coverings Stopping of hire walls and penetrations Penetrations/light fittings/fire collars etc Means of escope, door hardware, signage Fire ratings Fire and smake doors: hardware, lags, self closers/magnetic hold open device and signage Signage: fire alarm Check off Comphance Schedule checklist in consent jobcard and request Producer Statements for all features ACCESSIBLEY ACCESSIBLE CARPARK easy to see, marked out, close to entrance, surfaces non slip FOOTPATH RAMPS non slip, width, lengtin, upstands, handrails, kerb ramps 1000-wide ENTRANCE signage, threshold, width, floor surfaces PUBLIC RECEPTION counters or desks LIFT sizes, controls, condesis, lobby width STAIRS width, handrails, landings, rivers, freads, nosings DOORWAYS/COREIDONS Clear width, glazing, colour contrasted, projections into veridor! ALERTING DEVICES and kike and visual signal TOILET size, controls, doors, worsh hand basin, tops SHOWERS size, controls, door/s LAUNDERINS size, controls, door/s LAUNDERINS size, controls, door/s LAUNDERINS size food truning circle SIGNAGE entrance cloors, information board and facilities signage SUFFACE FINISHES stable firm and non slip PLACE OF ASSEMELY spaces, sound system, stage podium access, listening system (more than 250 persons) SIGNAGE for listening system ACCESSIBLE ROUTE car parks, Identifiable route from street to and through building, surface finishes stable firm and non slip |
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| nspector Abordan | Date 19:11:02 |

bnes Prior

CODE COMPLIANCE CERTIFICATE - BUILDING

Builders Copy - White Owners Copy - Pink File Copy - Blue

8C-CCCG1 06/12/01

Building



Private Bag 3010 Hamilton New Zealand

Phone 07 838 6699 www.hcc.govt.nz

20 March, 2000

Merifyn Pemberton PO Box 8075 Hamilton

Dear Sir/Madam

PROJECT INFORMATION MEMORANDUM (PIM) AND CONDITIONS OF BUILDING CONSENT APPLICATION 425/2000, FOR THE PROPOSED CONSTRUCTION OF A NEW DWELLING, AT 18C BREKONS AVE, HAMILTON.

Please note that because you have applied for a Project Information Memorandum (see Part A) and a Building Consent (see Part B) together, all the information will appear in this letter.

I wish to advise that the above project information memorandum/building consent has been approved and upon receipt of fees and charges itemised on the attached tax invoice, a building consent will be issued. If you have any queries or problems please contact Bryce Keogh on 838 6509.

<u>Please Note:</u> Approved plans must be uplifted from Council WITHIN 1 MONTH FROM THE DATE OF THIS NOTICE. If you do not uplift your plans within 1 month your application will be cancelled and the plans returned to you.

FOR ALL INSPECTIONS PHONE 838 6677, 8.00AM - 5.00PM
APPROVED CONSENT DOCUMENTS ARE TO BE ON SITE AT ALL TIMES DURING
CONSTRUCTION

Yours faithfully

Bryce Keogh

Building Review Officer

Municipal Offices Garden Place, Hamilton Phone (07) 838 6444 Fax (07) 838 6684

BC 1/2 Version 2 27 July 1999



PROJECT INFORMATION MEMORANDUM COMMENTS

PLANNING

LEGAL DESCRIPTION:

Lot: 5 DPS: 9804

ZONE:

Residential Low

UNDERLYING ZONE:

ACTIVITY TYPE:

PLANNING APPLICATION:

Not required

FILE NO:

COMMENTS: Condition of resource consent 1999/75 apply on a continual basis.

HEALTH

No known information on record that will affect this building project.

ROADS & TRAFFIC

 Any damage to the Council grassed verge outside your property resulting from construction works, that is a repair cost to Council, will be charged to the person responsible or the property owner.

WATER SUPPLY

- Please find attached logs showing the size and position of watermain

DRAINAGE

Please find attached logs showing the size and position of drains.

PLUMBING & DRAINAGE

- All foulwater and stormwater drains to be laid in accordance with the New Zealand Building Code Documents E1 and/or G13 and/or AS/NZS 3500.
- Please ensure compliance with G12 and H1 of the Building Code Hot Water Supplies.

BUILDING

- Please ensure boundary pegs and boundary lines are clearly defined to check siting of building.
- All work to comply with the New Zealand Building Code.
- Wind Zone is rated as Low
- The Earthquake Zone for your area is designated as B.

STRUCTURAL

No known information on record that will affect this building project,

PROJECT INFORMATION MEMORANDUM NO: 425/2000 Section 31, Building Act 1991

ISSUED BY HAMILTON CITY COUNCIL

(Insert a cross in each applicable box. Attach relevant documents.)

| OWNER | PROJECT | | | |
|--|---|--|--|--|
| Habitat for Humanity | New | | | |
| PO Box 8075 | Intended Use(s) (in detail): | | | |
| Hamilton | Residential\ | | | |
| PROJECT LOCATION | This is: | | | |
| 18C Breckons Ave | Confirmation that the proposed building | | | |
| HAMILTON | work may be undertaken, subject to the | | | |
| 1 | provisions of the Building Act 1991 and | | | |
| | any requirements of the building consent. | | | |
| | | | | |
| | Not yet applied for | | | |
| | No: 425/2000 attached | | | |
| LEGAL DESCRIPTION | Not yet issued | | | |
| Lot: 5 DPS: 9804 | | | | |
| 1 | Or: | | | |
| Branch ID Musham | Notification that other authorisations must be obtained before a building | | | |
| Property ID Number: Valuation Number: | consent will be issued. | | | |
| Valuation (Multiper. | On | | | |
| | — Notification that the proposed building | | | |
| Intended Life: | work may not be undertaken because a | | | |
| Indefinite, but not less than 50 years | necessary authorisation has been refused. | | | |
| This project information memorandum includes (cross ea | | | | |
| send a copy to any relevant network utility operators as | | | | |
| and buildings): | | | | |
| | | | | |
| Information identifying relevant special features of the | | | | |
| ☐ Information about the land or buildings concerned no | tified to the Council by any statutory organisation | | | |
| having the power to classify land or buildings. | | | | |
| ☐ Details of relevant utility systems.☐ Details of authorisations which have been granted. | | | | |
| Details of authorisations which must be obtained before | ra a building consent will be insued | | | |
| Details of authorisations which have been refused | e a building consent will be issued. | | | |
| Details of autiforisations which have been refused | | | | |
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| Signed for and on behalf of the Council: | | | | |
| Name | Date: 20 March, 2000 | | | |
| | material to it initially pane | | | |

Please note that the Project Information Memorandum lapses if a Building Consent for the work concerned has not been issued within 24 months after the date of the issue of the Project Information Memorandum.

Please check with your Local Network Utilities Operator as to where your services are located, i.e. Telecom, WEL Energy and the Gas Centre.

PART B

BUILDING CONSENT CONDITIONS

ROADS & TRAFFIC

- Crossing to be constructed to a minimum residential crossing specification.
- Please call for inspection of prepared base for crossing. Please give 24 hours notice.
- Please note that the final inspection for crossing will be carried out at code compliance certificate time.

PLUMBING & DRAINAGE

- Inspection of foulwater drains required. Please provide 24 hours notice.
- Inspection of stormwater drains required. Please provide 24 hours notice.
- Pre line inspection of plumbing installation required. Please give 24 hours notice.

BUILDING

- Please quote Building Consent number when requesting an inspection.
- A foundation/siting inspection required. Please provide 48 hours notice.
- All driving of piles to be overseen by a registered engineer.
- A pre-lining inspection required. Please provide 24 hours notice.
- From boundary to building, on site plan, are to be taken from the edge of the guttering system, for internal gutters and the fascia board for external guttering systems.
- Ground levels to comply with NZS 3604 appendix E 2.1.
- Completion inspection required prior to issue of interim or final code compliance certificate. Please make application of inspection on the appropriate form, included in your Building Consent.

Please note that if the work has not commenced within 6 months or if there is a lack of reasonable progress within 12 months then your building consent will lapse.



12th December 2005

Mr P Martens Co-ordinator Building Inspector Hamilton City Council Private Bag 3010 Hamilton REC. ...

HAMILTON OFFI COUNCIL

Dear Peter

Re: Building Consent 425/2000

On 23rd August 2005 you sent a letter to our office requesting that the following items were outstanding on this building consent for 18C Breckons Avenue, Hamilton

- 1. Require bearer joist connections
- 2. Seal pipe work penetrations to gas hot water unit
- 3. Raise gully traps

I wish to advise that the work has now been completed and request that a final inspection is done by your staff so that the Certificate of Compliance can be issued.

I apologise for the time that this has taken us to complete the required tasks and thank you for your patience.

Yours faithfully

DE Corredo.

Shirley Bennett Family Support

Habitat for Humanity Waikato
9 Devon Road, PO Box 5775, Hamilton, New Zealand, Ph: (07) 346 2226, Fax: (07) 846 2229
Email: info@hfh-waikato.org.nz Website: www.hfh-waikato.org.nz



Private Bag 3010 Hamilton New Zealand

Phone 07 838 6699 Fax 07 838 6599

> info@hcc.govt.nz www.hcc.govt.nz

23 August 2005

Habitat for Humanity Waikato C/- Wayne Cunningham P O Box 5775 Hamilton

Dear Wayne

18 A, 18 C, 18 D BRECKONS AVENUE HAMILTON

Thank you for the additional information you have provided on the above dwellings. We can advise that our records show that the following items still need to be addressed before we can issue the Code Compliance Certificate on each dwelling:

18 A Breckons Avenue - Building Consent 1697/2000

1. Raise two gully traps.

18 C Breckons Avenue - Building Consent 425/2000

- 1. Require bearer joist connections.
- 2. Seal pipe work penetrations to gas hot water unit.
- 3. Raise guily traps.

18 D Breckons Avenue - Building Consent 424/2000

- 1. Confirm safety glass to bathroom.
- 2. No pre-line building inspection called for.

Once you have completed or addressed the above issues, please phone our call centre on: 838 6677 and arrange a recall final inspection. Should you have any queries in regard to the above, please feel free to contact the writer.

Yours faithfully

,

Peter Martens Co-ordinator Building Inspector

Municipal Offices Garden Place, Hamilton Phone 07 838 6687 / Mobile: 021 751 505 Fax 07 838 6684 Email martenp@hcc.govt.nz

Building



9 March, 2000

Private Bag 3010 Hamilton New Zealand

Phone 07 838 6699 www.hcc.govt.nz

Habitat For Humanity (Ham) Ltd P O Box 8075 HAMILTON 2015

Dear Sir/Madam

Building Consent / Project Information Memorandum (PIM) Application Number 425/2000, For The Proposed Construction Of A New 5 Bedroom Dwelling, At 18 Breckons Avenue Hamilton.

Request For Further Information

In reference to the above application, further processing can only be carried out when the following information is supplied in duplicate or amended on the plans held at Council. If you have any problems or queries please contact the under signed.

PLEASE NOTE: If you do respond as requested within 1 month from the date of this notice your application will be cancelled and your application returned to you.

Building

Please confirm the invert levels for the proposed sewer drain and provide a longitudinal drainage plan.

Please provide a registered engineers producer statement and letter of observation for the sub-floor foundations.

Yours faithfully

Mr BJ Keogh Private Bag 3010 HAMILTON 2001

07 838 6509

| BUILDING CONSENT / PIM SHEET / CONSENT NO | | | |
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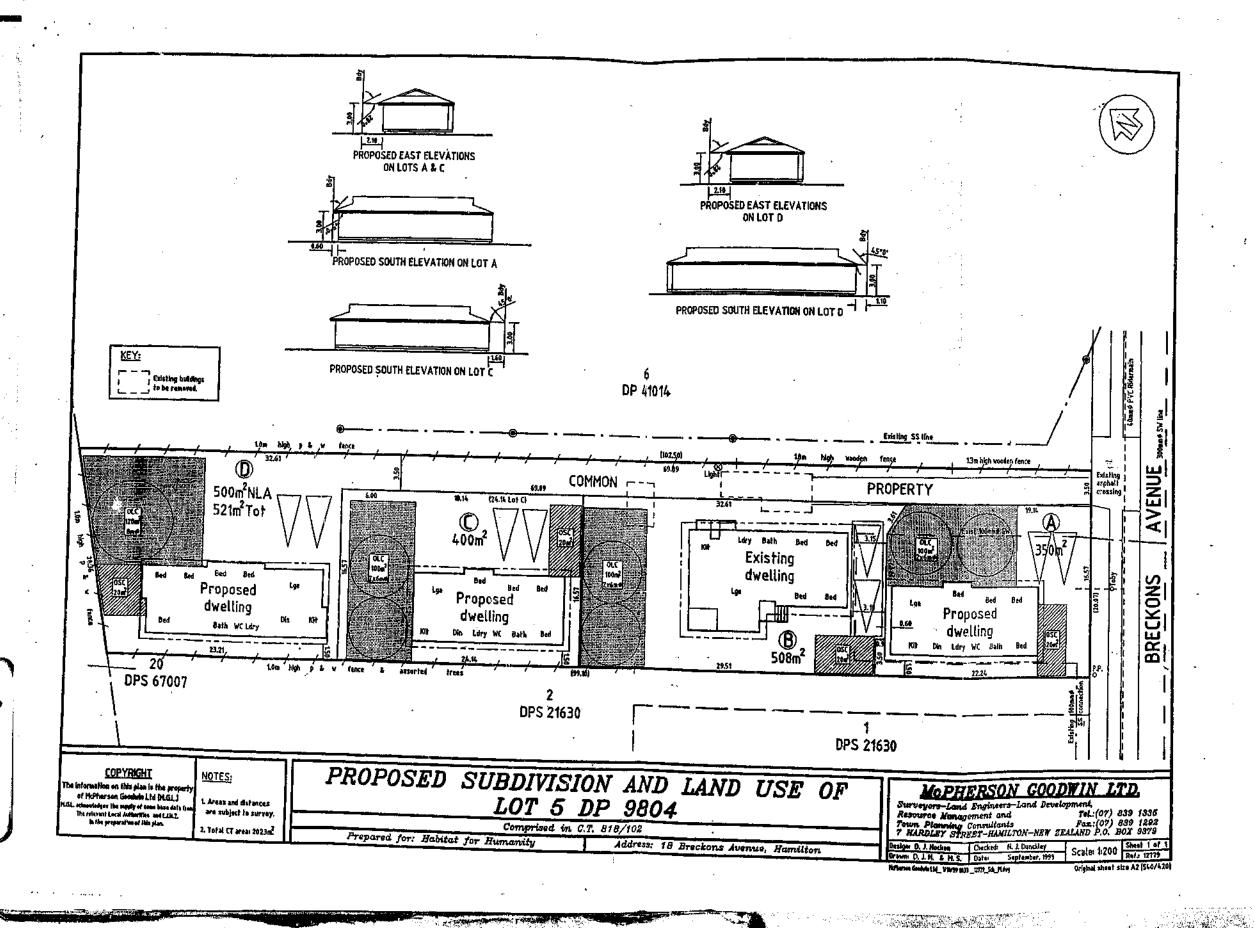
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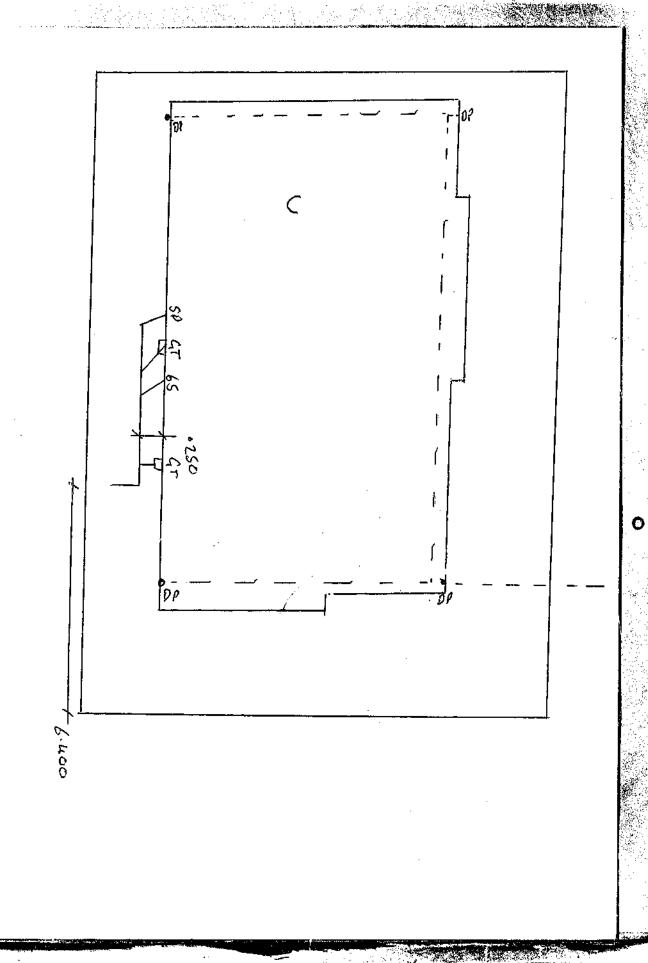
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G.S.T. Inclusive. Reg. No. 11-174-531

HABITAT FOR BUMANITY - 20/3/00

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|-------------|-------------------|-----------|
| PROJ INFO | 425/2096 | \$55.00 |
| CONSENT | 425/2000 | \$819.00 |
| Branz | 425/2000 | \$65.00 |
| MICRO | 42592000 | \$99.43 |
| STRUCT | 425/2 000 | \$40.00 |
| CODE COMPL | 425/2000 | \$55.00 |
| BLD AUTH | 4 25 /2550 | 93.25 |
| Post att | | 1111.71 |
| Receipt 03 | 334007 Total | 91175, 19 |
| Paid by Cha | 1175.70 | 20/03/06 |
| BIBITAL FOR | ht/MARITY | 90: 49 |

With the Compliments of the Department of Finance
CASH RECEIPTING SECTION

Garden Place, Hamilton. Private Bag 3010 Telephone 838-6699

Quality Assurance Checklist For Checking Application (Major Buildings)

(Commercial / Industrial / New dwellings)

Please place a tick in the appropriate box

| App | lication Form | | |
|-----|---|------------|------------|
| 1. | Please complete all sections: - accurate valuations of works required - correct legal description. (refer to your rates demand and/or certificate of title) - owners name, address, telephone number, fax etc. - contacts name address, telephone, fax (if not the owner.) - project location (street address) - declaration signed and dated | Yes DDDDDD | Office Use |
| Not | e: A deposit will be required when you make your ap | plication, | |
| 2. | A copy of a Certificate of title (this is available at the Land Information New Zealand cnr Victoria & Rostrevor St's, or a Copy or the 224(c) certificate for the subdivision. | Ø | d |
| P) | Two copies of each (for commercial and industrial a third copy included for consultants referral). Note: If the value of the work exceeds \$100,000, or it involves a first/second floor addition, then an extra copy of the floor plans is required | d | ø |
| 4. | Drawings of good quality, to an appropriate scale of 1:100 (detail 1:50) (site plan 1:200) with metric dimensions. | Ø | ď |

BC 1/2k version 4 29/09/98

| | | Yes | N/A | Office | Use |
|-----------------|---|---------|-----|----------------------------------|-----|
| | Site Plan | | | | |
| 5. | Show the total lot boundaries. If this is a large site, cross-lease or a unit title, use a locality plan to indicate the position within the site. Show the location of <u>all</u> existing and proposed building including accessory buildings and garages to an appropriate | s / | i | | |
| | metric scale 1:200 or 1:100 etc and include a north point. | Ø | | | |
| 6. | All measurements from the boundaries to "nearest parts" of proposed and existing buildings (where applicable) e.g. measurements from roof overhang (from the fasica board | , | / | | |
| | or edge of inbuilt guttering system). | 口 | | | ٠, |
| 7. | Layout of existing and proposed internal sanitary and stormwater drains. Please include location of each drains connection to | , | | | |
| | public mains. | Ø | | | |
| 8. | Invert levels of stormwater and sanitary sewers at connection point of private to public drains and distance from this connection point to the head of the drain. i.e. longitudinal drawing showing the level of the drain in relation to ground | , | | | |
| | levels. This is to determine the gradient of the drain. Example | Ø | | 4 | |
| invert levei | Depth Length of drain | Depth : | | | |
| | Council connection | | | ÷ | |
| 9. | Top of any bank shown and slope in relation to building. Distance from top of the bank to the building. Also height of | | | | |
| | bank. A soils report from a registered engineer may be required. | | | P | |
| 10. | Position, along boundary and width of proposed vehicle crossing. | | 1 | • | |
| | Also position and width of existing vehicle crossing/s. | | | ď | |
| 11. | Car parking and vehicle circulation provisions (where required) drawn to scale. Mark street names on the plan, and indicate onsite | | | / | |
| | manoeuvering. | | 디 | 4 | |
| | | | | BC 1/2k version 4 29/09/98 | 2 |

| | • • | Yes | N/A | Office Use |
|-----|--|------|-----|------------|
| Flo | or Plan | | | |
| 12. | A floor plan of each floor level, including complete floor layout and use of each area. Floor areas in square metres should be shown on plans. Floor area, overall floor areas and overall roof areas should be dimensioned to an appropriate scale, e.g. 1:10 or 1:50 | Ø | | 4 |
| Ele | vations | | | |
| 13. | An elevation of each external wall showing relevant heights from eaves to finished ground level at each external corner and land contours, existing and proposed. | _/ | _ | |
| | Also, overall height of building (ground level to apex of roof). | | | |
| 14. | Location of wall and roof bracing shown on elevations. | | | |
| 15. | Opening window sashes shown on elevation. | Ø | | |
| Fo | undation Plans | | | |
| 16. | For timber floors; location of piles, pile type, sub floor bracing, foundation walls and internal piling system where applic | able | | , |
| | For concrete floors refer to "Cross Section Details" below. | | | Ø |
| 17. | For engineers specifically designed timber floor systems, | | | |
| | please refer to "Specific Design" sections 34 & 35 | | | ď |
| Cro | ss Section Details | | | |
| | ob Section Decails | | 1 | |
| 18. | Scaled cross section drawings (1:50 or better) through the building to show foundation details, floor system, wall, ceiling and roof construction. Where roof construction | , | | |
| | is not clear a roof truss/framing plan is also required. | Ø | | I |
| 19. | Where position of beams, support and connections are not clear then this should be shown on the floor plans with | | | , |
| | a scale of 1:50 or 1:20 detail of connections. | Ø | | A · |
| | | | | |

BC 1/2k version 4 29/09/98

| | | Yes | N/A | Office Use |
|-----|--|--------|-----|------------|
| 20. | Location and type of wall cladding and roof sheathing, For composite systems such as "Insulclad" this should be designated on cross-section and referenced in | | / | |
| | specification. | \Box | | Ø |
| 21. | Construction details of terraces, steps, stairs | • | | |
| | (including internal/external) and barriers/balustrades. | Ø | | ☑ |
| 22. | Thermal insulation details including type and R. Value. | Ø | | Z |
| | Foundation Bracing Calculations | | | |
| 23. | Bracing calculations in an approved form such as "BRANZ" sheet and location of bracing elements shown on foundation plan. Note For one/two room additions the location, type and value of | / | · | |
| | the bracing element will be sufficient. | 点 | | d |
| Fir | e Wall and Fire Rating Requirements | | | |
| 24. | If using Hamilton City Council Standard Design detail, then | | | r |
| | please sign the detail and include with application. | | ┛ | Þ |
| 25. | Approved fire rating system details included. e.g. Winstone Standard fire rating system. If specifically designed by an | | | |
| | engineer then refer to "Specific Design" section 33 and 34. | | 四 | p |
| 26. | For commercial and industrial (including retail outlets, offices, etc) a philosophy of design detailing fire safety features and means of egress is to be supplied, including all compliance schedul features together with maintenance and reporting procedures | e | | · |
| | (e.g. fire alarms, detection systems, HVAC etc.) | | 中 | ф |
| | | | ı | 1 |

Accessibility for Disabled Persons

| 27. | Details of accessible route from the building fringe to and within the building. This will include: - | | 1 | |
|-----|--|--------|-----------|----------|
| | - Parking and Signage | | ㅁ | |
| | - Main Entry | | | |
| | - Passageways/Doorways | | | |
| | - Stairs and Ramps | | | |
| | - Ablution facilities | | | |
| | Lifts and moving walkways | | | ф |
| | - Internal Signage | | | ф |
| 28. | For multi level building or residential housing using AS /NZS 35 isometric drawings of soil and waste system showing positions of | | | |
| | all fittings and pipe sizing. | | | |
| 29. | Multi level structures may be outside the scope of NZS 3604 design. Refer to the Specific Design Sections 32 and 33 | | | d |
| Com | pliance Schedule Items | | -11 | |
| 30. | Complete if your building is a new commercial, a commercial ch or any building intending to have the following systems installed, each applicable box and attach proposed inspection, maintenance reporting procedures for each of the following: | Please | use | |
| | -Automatic sprinkler systems or other systems of automatic | | $ \cdot $ | |
| | fire protection | | | ф |
| | -Automatic doors which form part of any fire wall and which are | | 11 | - |
| | designed to close shut and remain shut on an alarm of fire | | | 中 |
| | -Emergency warning systems for fire or other dangers. | | | ф |
| | -Emergency lighting systems | | | ф |
| | -Escape route pressurisation systems | | | ф |
| | -Riser mains for fire service use | | 中 | ₽ |
| | | | 1 | |

BC 1/2k version 4 29/09/98

| | | Yes | N/Ą | Office use | * | ĺ |
|-----|---|-----------------|------|------------|---|---|
| | -Any automatic back-flow preventer connected to a potable water supply. | | | | | |
| | -Lifts, escalators, travelators or other similar systems. | | 中 | - | | |
| | -Mechanical ventilation or air conditioning system serving all or a major part of the building. | | | | | İ |
| | -Any other mechanical, electrical, hydraulic, or electronic system whose proper operation is necessary for compliance with the building code. | | | | | |
| | -Building maintenance units for providing access to the exterior and interior walls of buildings. | | | | | |
| | -Such signs as are required by the building code in respect of the above mentioned systems | | | | | |
| 31. | Other systems and features to be included in the Compliance Sche attached proposed inspection, maintenance and reporting procedur | dule wit es: | h | | | |
| | -Means of escape from fireSafety barriers | | | + | | |
| | -Means of access and facilities for use by persons with disabilities which meet the requirements of Section 25 of the Disabled | | | | | |
| | Persons Community Welfare Act 1975. | | ┛ | ф | | |
| | -Hand held hoses for fire fighting. | | □ | • | | |
| | -Such signs as are required by the New Zealand Building Code for the above mentioned systems. | | | 4 | | |
| | | | | | | |

BC 1/2k version 4 29/09/98

| | Construction | Yes | No | Office use |
|---------------------------------|--|--|----------------|---|
| 35. | Do you wish to construct a new crossing? Residential: minimum 3.0m, maximum 5.5m Commercial / Industrial: minimum 5.0m, maximum 7.5m | | 4 | |
| 36. | Discourse Countries 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | | | |
| 37. | Have you shown the position and dimension of the new crossing on the site plan? | | 中 | þ |
| 38. | Have you provided the crossing contractors name, phone number and evidence of Public Liability Insurance? | | | |
| | Contractor: Address: Ph/Fax: | | | |
| 39. | Is there a footpath outside the site? | | | þ |
| 40. | Is the footpath damaged? Record the area damaged:metres square | | | |
| 41. | Is this project on an arterial route? | | h | |
| <u>Pleas</u> | e note: | | | |
| i. ii. iii. iv. iv. | The owner is responsible for the damage to the footpath and v building activities and the construction of the street crossing. Crossing shall be constructed as per the standards in the Ham Practice for Urban Land Development. (A plan for construction The Code Compliance Certificate will not be issued until both free of defects and complete. 24 hours notice at the completion of excavation, but before the shall be given to the Inspectors (ph. 838 6677) Contractor required to be on site at the time of first inspection | ilton Cit on detail footpath paveme | y Cours is ava | ncil Code of nilable) rossing are struction, |
| v. | It lootpath damage (6) is marked 'ves' then a council officer wi | ill incos | t and | confirm |
| Review Conser Street | | Date | | roco |
| | | | | 8 |

BC 1/2k version 4 29/09/98 0

Consulting Geotechnical Engineer

1202/1 Victoria Street
P.O. Box 9123
Hamilton New Zealand
Facsimile 07 839 3125
Telephone 07 838 3119

-mail: geocon@voyager.co.nz

PRODUCER STATEMENT - PS1 - DESIGN (HCC MODIFICATION)

Issued by: Mark T Mitchell, Consulting Geotechnical Engineer

Issued to: (Owner): Habitat for Humanity

To be supplied to: (TA): Hamilton City Council

In respect of: (Building Work): Construction of Foundations only

Located at: . . No. 18C Breckons Avenue, Hamilton

Mark T Mitchell, Consulting Geotechnical Engineer has been engaged by

- The Builder, Wayne Cunningham

to provide Design and Construction Inspection Services in respect of relevant clauses of the Building Regulations 1992 for the part only as specified below for the building work:

The following specific design elements have been considered:

- Building Subfloor and Driven Timber Piles: Mark T Mitchell Ltd Drawing No. 5106-10 dated March, 2000

The following specific design elements have not been reviewed:

- Wall, Roof and above- floor components

Structure Class
Verification Level

Verification to be parried out by: (not i

(not required)

The design has been prepared in accordance with acceptable solutions of the approved documents issued by the Building Industry Authority and the Design Code(s) as listed below and the work is as outlined on attached specifications (where appropriate), and described on the Drawings which are listed above

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

- (i) the site verification of the following design assumptions: .

 NZS 3603:1999 Code of Practice for Timber Design

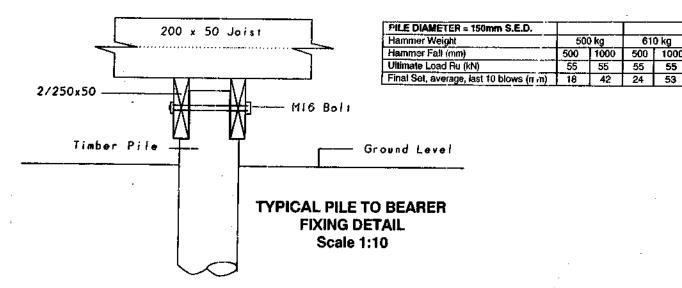
 Soil Conditions as reported in Geocon Soil Testing Ltd Soils Report dated 25 November, 1999 and Mark T Mitchell Ltd report dated 23 February, 2000
- (ii) all proprietary products meeting the performance specification requirements, the drawings, specifications and other documents according to which the building is proposed to be constructed comply with the relevant provisions of the building code.

Signed: Vram > hull

Mark T Mitchell, BE(Civil), MS, MIPENZ (Member ACENZ, IPENZ; ERB Reg. No 4874) Date: 15 mark 2000

505 6620 5850 5790 3270 2/250 x 50 Bearers 2/200 x 50 Bearers 1000 150 dia SED piles @ 2,233 typical #rs 3330 2/250 x 50 Bearers 505 18260

FOUNDATION PLAN Scale 1:100



NOTE:

Reduction of pile spacing to 1.98m allows for reduction in Ru to 50kN but bearer size remains at $2/250 \times 50$

Mark T Mitchell Ltd

Consulting Geotechnical Engineer

1202 Victoria Street, PO Box 9123, Hamilton

HABITAT FOR HUMANITY

Proposed New Residential Dwelling @ No. 18c Breckons Avenue, Hamilton

as the "final set".

610 kg

500 1000

55

55

500 kg

500 1000

55 55

shall be ordered and delivered to the site. The Contractor shall mark on each pile the total length so it may be seen after the completion of driving operations. The tops of piles shall not be cut off until after the final inspection has been made by the Engineer or his representative. The final series of at least 20 blow counts shall be clearly marked on each pile, with the distance over the final 10 being recorded

SUBFLOOR AND FOUNDATION **DESIGN DETAILS**

DRAWING No. 5106-10 DATE March 2000 ISSUE One

PILE DRIVING SPECIFICATION - DRIVEN TIMBER PILES

1. MATERIALS

All limber poles and piles shall be Corsican or Radiato Pine or other species. provided they are permitted by the appropriate standard. They shall be milled and treated in accordance with NZS 3605:1977 "Load Bearing Round Timber Piles and Poles". The minimum small end diameter (SED) shall be as shown on the

2. TIMBER PRESERVATIVE

The piles shall be treated in accordance with the N7. Timber Preservation Authority Specification C2B. Where Housing Corporation or other NZ Ods, minent related financing is involved, preservative testing shall be carried out to their requirements. All can faces and notches, including the top of the piles, shall be coated with two liberal coatings of 'Ensele' (Pentachlorophenol) or "Metalex" (Copper Naphenate). The faces of the other timbers in contact with the poles shall be treated in a similar fastion.

3. TEST BORES AND PROBES

Test borings have been taken at the site, and a soils in restigation report, which includes the results of the test borings and their respective locations, is available for inspection at the Engineers Office and at that of the principal Contractor/Owner of the project. Contractor, must make their over appreciation of driving conditions and quote accordingly

4 SETTING OUT

The Contractor shall be responsible for all setting out. The piles shall be set out and placed to a tolerance of 20m in at the top of the pile and shall be true to line over the remainder of their lear h.

5. PILE DRIVING EQUIPMENT

The plant to be used for pile driving $i\nu$ to be approved of by the Engineer. The monkey shall be designed so that it falls freely under its own weight from the height as specified and is positioned centrally over the pile. The height of drop shall be clearly marked and readily identified during driving.

6. PILE DRIVING

The piles shall be driven to the Hiley Formula; where alternative methods or formula are to be used, they are to be approved of by the Engineer prior to the commencement of driving. Refer to the attached table for pile driving

7. LOAD TESTING

No allowance is made for test loading of piles. Should there be any evidence of faulty workmanship, the affected pile shall be load tested by the Contractor at his OWn extrense.

B. COMMENCEMENT OF WORK

The Contractor shall notify the Engineer of proposed commencement of work at ienst two working days prior to the pile driving. The initial piles driven at the project are termed "test piles" and they shall be located at opposite ends and sides of the project in order to assess the likely driving conditions and depths over the full extent of the project. The test piles shall also be used as production piles. The Engineer of his representative shall be present during this operation and a ntimious driving record shall be taken.

For this project, the number of 'test piles' required = 2 piles.

9. PRODUCTION DRIVING OF PILES

Following the driving of the 'test piles', the remainder of the production piles

10. PILE RECORDS

The Contractor shall supply to the Engineer within 7 days of completion of the pile driving, a summary of the final depths and average final sets.

Consulting Geotechnical Engineer

RECEIVED 1 a AUG 2000 BUILDING 1202/1 Victoria Street P.O. Box 9123 Hamilton New Zealand Facsimile 07 839 3125 Telephone 07 838 3119 e-mail: geocon@voyager.co.nz

Ref: W = 5106.3 4 August, 2000

The Chief Building Inspector Hamilton City Council Private Bag Hamilton

Dear Sirs

Re: Residential Dwelling Under Construction

Owner: Habitat for Humanity Builder: Wayne Cunningham

Location: 18(c) Breckons Avenue, Hamilton

We wish to advise that we were retained by the Owner/Builder to carry out the pile inspection of the proposed dwelling.

We have made periodic visits to the site in order to assess that the foundations were being prepared in accordance with sound engineering practice and to the design requirements, as specified under NZS 3604.

Records taken on the site at the time of our inspections and also by the contractor at other times are indicative of a satisfactory foundation having been constructed. It is therefore considered that the substructure is adequate to support the structural load from the building as designed.

A copy of the site inspection report for the foundation installation is attached.

Yours faithfully

Mark T Mitchell Ltd

Consulting Geotechnical Engineer

c.c. Habitat for Humanity PO Box 8075 Hamilton

Consulting Geotechnical Engineer

PO Box 9123 Hamilton Telephone 07 838 3119 Facsimite 07 839 3125

INSPECTION REPORT

Job Location: 18c Breckens Avenue, Hamilton Job Ref. W. 5106 3

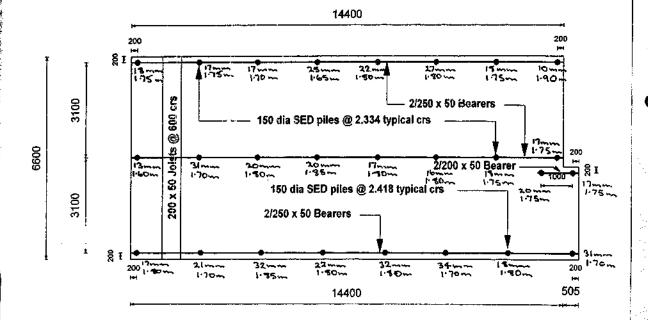
Initial Report Date:

ا المسم ا Inspection No.

Owner: Habitat for Humanity

Contractor: Waikako Post Ramming

Date of Inspection: 10/7/00 By: Rob Butick



Notes: 1. Sets shown are the average for the final 10 blows of penetration, e.g. 1% mm

2. Pile founding depths shown are from below ground level.

e.g. 1-%0 metres

3. Weight of driving monkey = 375 kg.

4. Fall of driving monkey = 1500 mm

Consulting Geotechnical Engineer

1202/1 Victoria Street P.O. Box 9123 Hamilton New Zealand Facsimils 07 839 3125 Telephone 07 838 3119 e-mail: geocon@voyager.co.nz Ref: W - 5106/2

9 March, 2000

The Chief Building Inspector Hamilton City Council Private Bag Hamilton

Attn: Mr Bryce Keogh

Dear Sir,

Re: Building Consent Application

Project: New Dwelling at No. 18C Breckons Avenue for Habitat for Humanity

Builder: Wayne Cunningham

We advise that we have been retained by the Owner/Builder of the above referenced property to inspect soil conditions and foundation construction at the above referenced site. The results of our assessment of foundation conditions at the site are contained in Geocon Soil Testing Ltd report dated 13 September 1999 and subsequent Mark T Mitchell Ltd report dated 23 February 2000, copies of which are attached.

The soil test results indicate that organic SILT and PEAT is present over the site and this will necessitate that driven piled foundations are used. Our staff will carry out inspections of the pile installation to ensure the piles are driven into dense, original ground and to a final set that is appropriate for the loads that the foundations are required to support.

The purpose of our inspections will be to ensure that foundations for the proposed building are installed in accordance with sound engineering practice and to the design requirements of the project. At the conclusion of our work, a foundation completion report will be forwarded to Hamilton City Councit.

Yours faithfully

Mark T Mitchell Ltd

Registered Engineer

c.c. Habitat for Humanity PO Box 8075 Hamilton



Consulting Geotechnical Engineer

1202/1 Victoria Street P.O. Box 9123 Hamilton New Zealand Facsimile 07 839 3125 Telephone 07 838 3119 e-mail: geocon@voyager.co.nz

Ref: W - 5106/1 23 February, 2000

Habitat for Humanity PO Box 8075 Hamilton

Attention: Tig Martin

Dear Sir

Re: Soils Investigation and Foundation Recommendations Proposed Subdivision of 18 Breckons Avenue, Hamilton

You will be aware that our associate company, Geocon Soil Testing Ltd carried out a soils investigation at the above referenced site last year and prepared a report dated 13 September, 1999. At that time the site was occupied by a building which prevented access to our drilling rig and only hand auger test holes to 2 metres deep could be carried out.

We were recently contacted by Mr Phil Taylor of King Drilling Co Ltd who is pricing the pile drilling for the residential dwellings which are to be located at the above referenced site. Mr Taylor has indicated that his company has driven piles for the house over the rear (northern) boundary fence which were 4.8 metres below existing ground level.

Within the general Breckons Avenue area, there are two available founding layers. Where the upper founding layer is thin, or where piles are required to support relatively heavy loads, the piles tend to punch through this upper layer and found into the lower layer.

Because of Phil Taylor's concern, we have carried out further test drilling at the site and have deepened three of the original 2.0 metre deep Bore Hotes.

The results of the recent Soils Investigation and our recommendations for foundation construction work are as follows:

1. Field Investigation and Soil Conditions

The site was investigated by drilling three truck-auger borings in the centre of each of the proposed house locations. Bore hole locations are shown on the attached Site Plan, Drawing No. 5106-01. Scala Penetrometer probes were also carried out in conjunction with the borings. The Bore Holes are designated Nos. 1 to 3 and the boring logs and associated test results are present on Figs. B-1 to B-3.

The purpose of the borings and associated testing was to provide guidance as to the general subsurface soil profile, the variability and relative density of soils within the site area. Actual conditions may vary across the site however, and may differ slightly from those as described below.

The near-surface soil conditions at the site, as revealed by the borings and associated field tests generally consist of 50 to 100mm of peaty TOPSOIL overlying very soft, organic SILT and amorphous PEAT to a depth of between 0.8 and 1.2 metres below ground level. These organic soils are underlain by a layer of loose, silty, fine-medium SAND.

The deeper soils consist of firm to stiff, clayey SILT which overfies dense, silty, fine and fine-medium SANDS from about 1.6 metres depth. Two organic SILT ienses, 400 to 600mm and 300mm thick were found at about 2.9 and 4.5 metres respectively. The upper layer is typically very soft, while the lower material is more consolidated and firm.

Groundwater was encountered at the time of test drilling at depths between 1.4 and 1.6 metres below ground level.

2. Foundation Recommendations

The near-surface, very soft layers of PEAT and organic SILT soils that underlie the proposed houses are considered to be too soft and variable to provide suitable foundation support for conventional bore piles. Therefore, as mentioned in the earlier Geocon Soil Testing Ltd soils report, the most economical option for support the proposed structures would be to use driven timber piles.

The upper founding layer occurs at about 1.7 metres below ground level and the lower founding layer at about 5 metres below ground level. Therefore there are some cost savings if the piles are able to found within the upper layer. In order to do so, the required load-carrying capacity of each of the piles should be kept to a minimum, with pile spacings not exceeding about 2 metres.

However, the thickness of the upper founding layer is likely to vary and thus even although the loading on the piles is kept to a low level, there is some risk that at some locations, deeper piles will be required.

On the basis of the three test hole results, at Bore Hole Nos. 1 and 2 location, the pile founding depths should be about 2.0 metres below ground level and slightly less at Bore Hole No. 3 location.

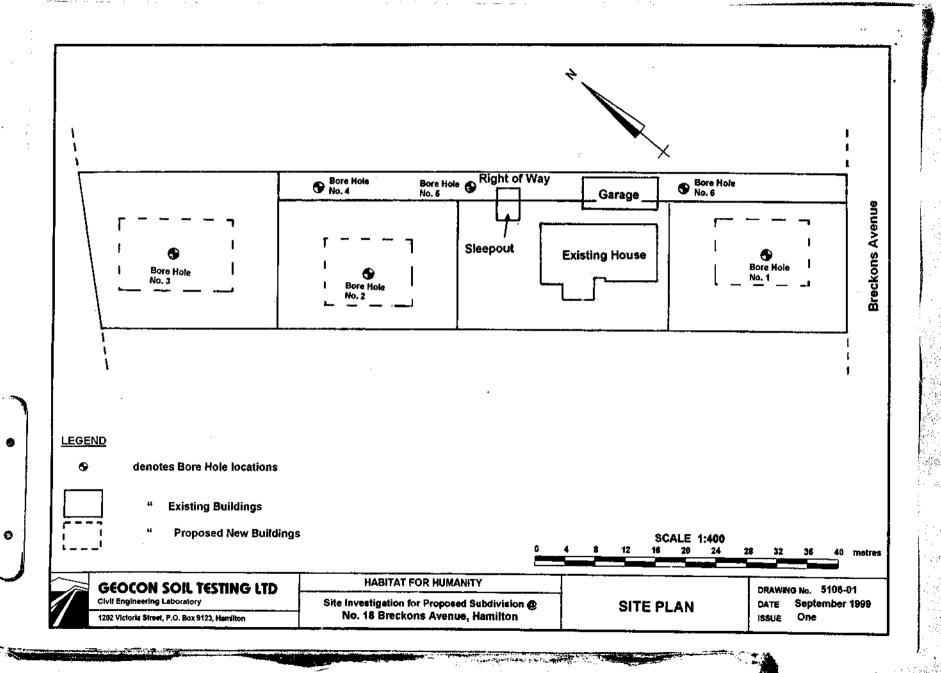
It is recommended that a member of our staff be present during driving a reasonable portion of the piles to ensure that the piles are not over-driven and the penetration into the sand bearing layer does not exceed about 400mm.

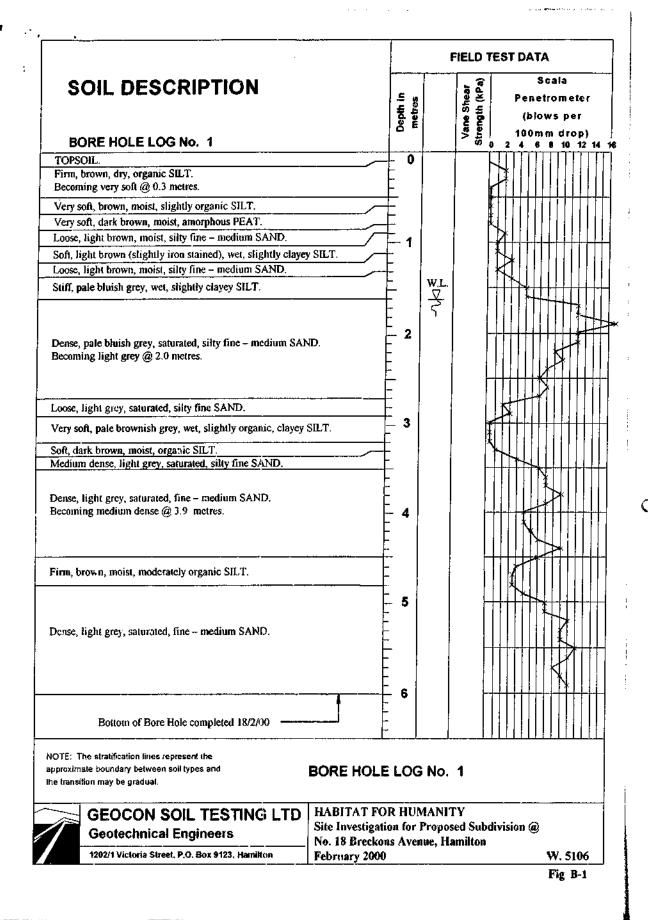
Please note that for this project, the Hamilton City Council will require the subfloor to be designed and the foundations inspected and certified by a Registered Engineer. This documentation will be required prior to the issue of a Building Consent.

Yours faithfully

Mark T Mitchell Ltd

Mark T Mitchell Registered Engineer





FIELD TEST DATA Vane Shear Strength (kPa) Scala SOIL DESCRIPTION Depth in Penetrom eter metres (blows per 106mm drop) **BORE HOLE LOG No. 2** 6 8 10 12 14 TOPSOIL. 0 Very soft, brown, dry, organic SILT. Becoming moist @ 0.5 metres. Very soft, dark brown, wet, amorphous PEAT. 1 Loose, light brown, wet, silty fine - medium SAND. Stiff, light bluish grey, moist, clayey SILT. 2 Dense, light bluish grey, saturated, silty fine SAND. Becoming light grey @ 1.9 metres. 3 Firm, light grey, wet, fine sandy SILT. Soft, dark brown, moist, organic SILT. Firm, light grey, wet, fine sandy SILT. 4 Medium dense, light grey, saturated, fine - medium SAND. Becoming dense @ 4.1 metres. Soft, pale brown, moist, slightly organic SILT. Dense, light grey, saturated, fine -- medium SAND. 6 Bottom of Bore Hole completed 18/2/00 -NOTE: The stratification lines represent the approximate boundary between soil types and **BORE HOLE LOG No. 2** the transition may be gradual. **GEOCON SOIL TESTING LTD** HABITAT FOR HUMANITY Site Investigation for Proposed Subdivision @ **Geotechnical Engineers** No. 18 Breckons Avenue, Hamilton 1202/1 Victoria Street, P.O. Box 9123, Hamilton February 2000 W. 5106 Fig B-2

Although the state of the state

FIELD TEST DATA Scala Vane Shear Strength (kPa) SOIL DESCRIPTION Depth in metres Penetrometer (blows per 100mm drop) **BORE HOLE LOG No. 3** TOPSOIL Very soft, brown, dry, organic SILT. Becoming moist @ 0.6 metres. Soft, light brown, wet, slightly clayey, SILT. Loose, light brown, wet, silty fine - medium SAND. Soft to firm, pale bluish grey, moist, clayey SILT. 2 Dense, pale bluish grey, saturated, silty time SAND. Becoming light grey and fine - medium SAND @ 2.1 metres. Loose, light grey, saturated, silty fine SAND. Very soft, light brownish grey, wet, slightly organic clayer SILT. 3 Very soft, dark brown, moist, organic SILT. Soft, light grey, wet, slightly clayey SILT. Medium dense, light grey, saturated, silty fine SAND. 4 Firm, pale brown, wet, slightly organic, SILT. Loose, light grey, saturated, silty fine SAND. 5 Dense, light grey, saturated, fine - medium SAND. Bottom of Bore Hole completed 18/2/00 NOTE: The stratification lines represent the approximate boundary between soil types and **BORE HOLE LOG No. 3** the transition may be gradual. HABITAT FOR HUMANITY GEOCON SOIL TESTING LTD Site Investigation for Proposed Subdivision @ Geotechnical Engineers No. 18 Breckons Avenue, Hamilton 1202/1 Victoria Street, P.O. Box 9123, Hamilton February 2000 W. 5106 Fig B-3

GEOCON SOIL TESTING LTD

Geotechnical Engineers

1202/1 Victoria Street P.O. Box 9123 Hamilton New Zealand Facsimile 07 839 3125 Telephone 07 838 3119 email geocon@voyager.co.nz

Ref: W - 5106 13 September, 1999

Habitat for Humanity PO Box 8075 Hamilton

Attention: Merilyn Pemberton

Dear Madam

Re: Soils Investigation and Foundation Recommendations Proposed Subdivision of 18 Breckons Avenue, Hamilton

In accordance with your request we have carried out a Soils Investigation at the above referenced site and reviewed the requirements for foundation work.

The proposed development of the property will involve subdividing No 18 Breckons Ave into 4 individual fots served by a Right-of-Way (R.O.W.) along the northeastern boundary. The existing house is to remain in its present location and will occupy Lot 2, but with the garage and sleepout to be removed. The new houses to occupy the remaining lots will be of lightweight construction, with timber floors supported off driven or bored timber piles.

The results of the Soils Investigation and our recommendations for foundation construction work are as follows:

1. Field Investigation and Soil Conditions

The site was investigated by drilling six hand-auger borings, three in the centre of each of the proposed house locations and three along the R.O.W. Bore hole locations are shown on the attached Site Plan, Drawing No. 5106-01. Scala Penetrometer probes were also carried out, but at the house site locations only. The Bore Holes are designated Nos. 1 to 6 and the boring logs and associated test results are present on Figs. A-1 and A-3.

The purpose of the borings and associated testing was to provide guidance as to the general subsurface soil profile, the variability and relative density of soils within the site area. Actual conditions may vary across the site however, and may differ slightly from those as described below.

The near-surface soil conditions at the site, as revealed by the borings and associated field tests generally consist of 50 to100mm of peaty TOPSOIL overlying very soft, organic SILT and amorphous PEAT to a depth of between 0.8 and 1.2 metres below ground level. These organic soils are underlain by a layer of loose, silty, fine-medium SAND.

13 September, 1999 Ref: W - 5106

The deeper soils consist of firm to stiff, clayey SILT which overlies dense, sitty, fine and fine-medium SANDS from about 1.6 metres depth.

Groundwater was encountered at the time of test drilling at depths between 0.8 and 1.0 metres below ground level.

2. Foundation Recommendations

The very soft layers of PEAT and organic SILT soils that underlie the proposed houses are considered to be too soft and variable to provide suitable foundation support for conventional bored piles.

Therefore the most economical option would be to support the proposed structure using driven timber piles.

This pile foundation should consist of 150mm SED (small end diameter) timber piles, driven to found at a depth of <u>about</u> 2 metres below existing ground level. The total length of pile required would depend upon the height of the floor level above ground level. During the foundation construction work, it is recommended that initially, test piles be driven at either end of the structures, so as to determine more precisely the lengths of the remaining piles.

Following the driving of these test piles, the remainder of the piles can be ordered and delivered to the site. The test piles may be used as production piles in the support of the structure.

It should be noted that the Hamilton City Council may also require a Registered Engineer to inspect and certify the pile driving installation. We would be pleased to carry out this function.

3. Right of Way Construction

For the construction of the Right-of-way, all PEAT and organic SILT soils will need to be removed and replaced with pit sand filling. The typical depth of this excavation will be about 1 metre and should extend at least 0.5 metres beyond the carriageway width on both sides.

The following procedure should then be adopted.

- a. Compact the exposed soil surface with a self-propelled vibratory compactor of minimum 2 tonne static weight. The surface should be compacted with at least six passes with this roller. Any soft areas that show up during this proof-rolling/base compaction process should be excavated and removed from the building site area.
- b. Imported pit sand filling should then be used to bring the building area up to the desired grade. The fill should be placed in layers not exceeding 250mm thick and compacted with the vibratory roller referred to above.
- c. Satisfactory compaction of the imported sand filling, would be achieved when testing with a Scala Penetrometer indicates a blow count of 4 blows per 100mm penetration.

This work should be carried out under the direction of a Registered Engineer. Mark Mitchell, Consulting Geotechnical Engineer who is associated with our office would be able to undertake this work.

4. Sleepout

The sleepout currently located behind the existing house will require moving to enable the right-of-way to be built.

This building has been measured up and the subfloor details noted. This information appears on Drawing No. 5106-02 and comprises of the following:

- The building measures 4.2 metres by 3.0 metres and is of timber floor construction.
 There are 3 rows of bearers made up of varying timber thickness equating to 100 by 100mm.
- The bearers are supported by 150 by 200mm shallow purice piles, four down each side and three along the middle row chocked up to level by timber blocks.
- The pile in the western corner is missing and the bearer sits directly on a stack of timber chocks only.
- The floor-joists are ex 150 by 50mm at 450mm centres with a double joist at either end and a boundary joist down either side.

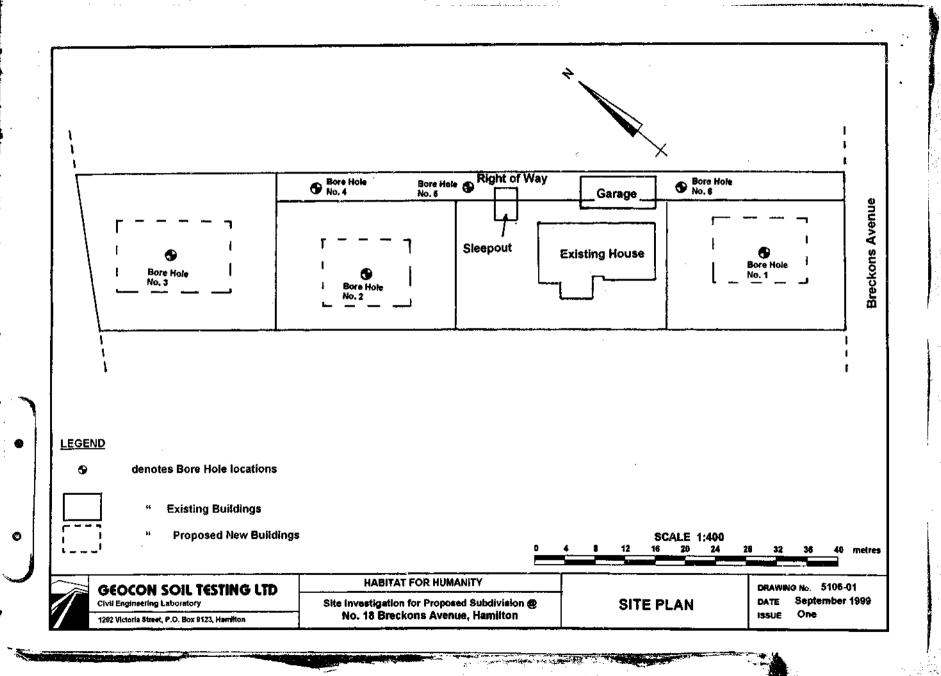
If this building is relocated, it should be supported off driven timber piles, as for the new buildings. It will be necessary to support the structure off 3 rows of 4 piles each. That is, the central row should also consist of four piles.

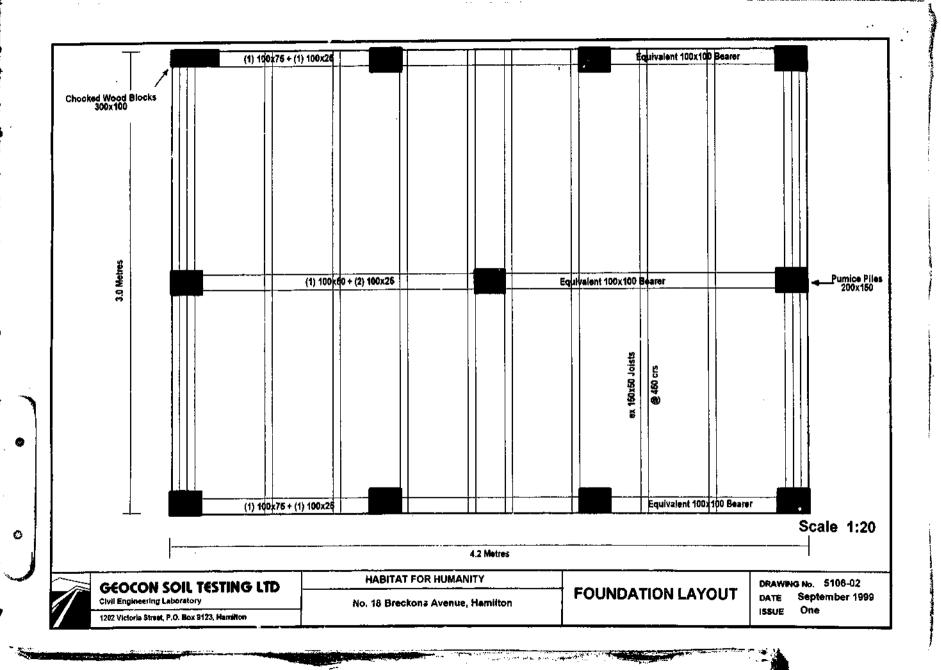
Yours faithfully

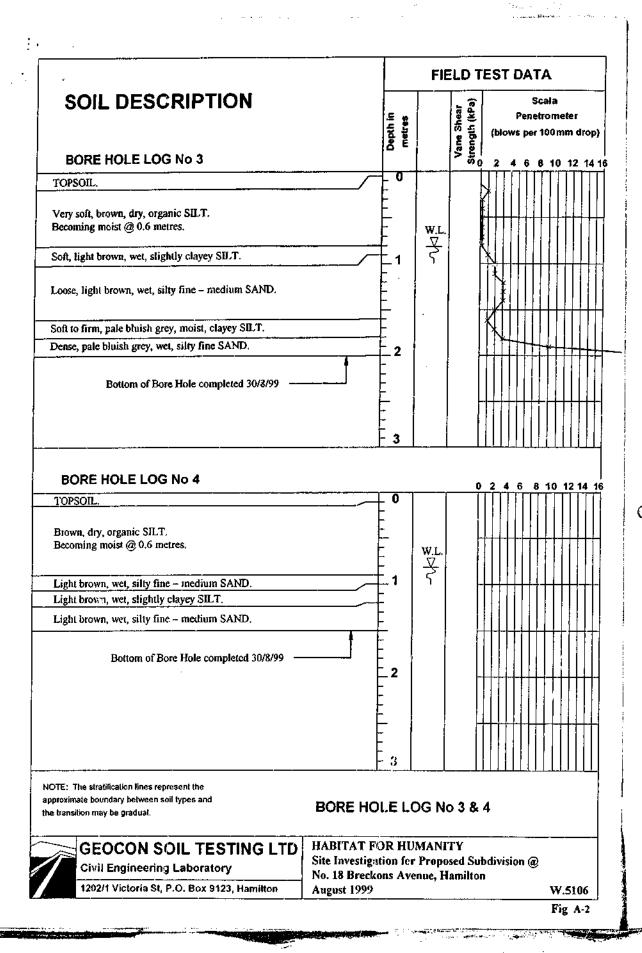
Geocon Soil Testing Ltd

Kevin M Hyde Manager

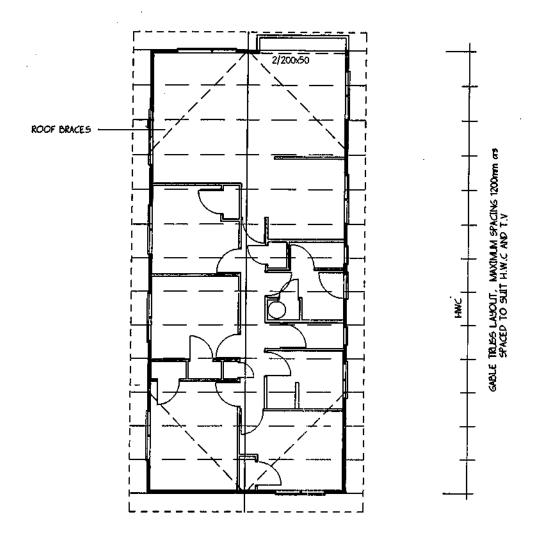
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FIELD TEST DATA SOIL DESCRIPTION Vane Shear Strength (kPa) Scala Penetrometer (blows per 100mm drop) **BORE HOLE LOG No 5** 8 10 12 14 16 TOPSOIL. Brown, dry, organic SILT. Becoming moist @ 0.6 metres. _1 Light brown, wet, silty fine SAND. Bottom of Bore Hole completed 30/8/99 2 3 **BORE HOLE LOG No 6** 8 10 12 14 16 TOPSOIL. FILLING. Mixture of PEAT and organic SILT. Brown, dry, organic SILT. W.L. Dark reddish brown, wet, amorphous PEAT. . 1 Light brown, wet, silty fine SAND. Bottom of Bore Hole completed 30/8/99 3 NOTE: The stratification lines represent the approximate boundary between soft types and **BORE HOLE LOG No 5 & 6** the transition may be gradual. **GEOCON SOIL TESTING LTD** HABITAT FOR HUMANITY Site Investigation for Proposed Subdivision @ Civil Engineering Laboratory No. 18 Breckons Avenue, Hamilton 1202/1 Victoria St, P.O. Box 9123, Hamilton Asigust 1999



600mm SOFFIT 20° ROOF PITCH ALL OTHER LINTELS 1/200x50

FOUNDATION (SINGLE STOREY)

SHEET A

Light roof, light walls only, 20° pitch

LOCATION OF STOREY

foundation

SITE WIND ZONE (Table 2.4)

low / medium high / vary high

EARTHQUAKE ZONE

(Fig 2.2, Table 2.3)

AB C

SITE ADDRESS

City / Town

or District

HAMILTON

Street & No

NORTON

LOT:

D.P.

| FOR EARTHQUAKE | | | E |
|---|---|---------|---------|
| ROOF WEIGHT: light | | 1.5 Kpa | 3.0 Kpa |
| AVERAGE ROOF PITCH: 20° TYPE OF CLADDING: light | A | 6.5 | 11,0 |
| EARTHQUAKE ZONE : B | В | 5.0 | 8.0 |
| STOREY IN ROOF SPACE : yes (no) | ٥ | 3.0 | 5.5 |

| FOR WIND | Building Height | | < 5m | · | < 6m | | | | |
|-------------------|-----------------|-----|-----------|----------|------|-----------|----------|--|--|
| BUILDING HEIGHT | :4.39m | | Across WI | Along W2 | | Across WI | Along W2 | | |
| ROOF HEIGHT | : 1.6 m | L | 51 | 57 | L | 65 | 71 | | |
| STOREY HEIGHT | : 2.4 m | M | 67 | 77 | М | 86 | 95 | | |
| DESIGN WIND SPEED | ; H m | Н | 98 | 108 | Н | 125 | 134 | | |
| | (| H.V | 125 | 140 | V.H | 159 | 173 | | |

BUILDING LENGTH

BL = 14.905 m

BUILDING WIDTH

6.6 __ m

BUILDING PLAN AREA

 $GPA = 96.55 m^2$

EARTHQUAKE LOAD(ACROSS & ALONG)

 $E \times GPA = 5 \times 96.55 = 483 \text{ B.U.s}$

WIND LOAD: ACROSS W1 : BL= 98 x 14.095 = 1461 B.U.s

WIND LOAD: ALONG $W2 \times BW = 108 \times 6.6$ **₌**713 B.U.5

Standard Floor To Apex = 3.790m

| DA DA | Keith Hay | CUSTOMER | CONTRA | ctor | |
|---------|-----------------|----------|------------|---------------------|---|
| 24/2/00 | HOMES | HABITA | T FOR HUMA | NITY | |
| CHECKED | ©COPYRIGHT 1998 | AREA | SCALES | PLAN REF. 25/025 | 9 |

| MARK T MITC | HELL L | TD | | | Project: | Habitat fo | or Human | ify | Location | : No 180 | Breckon | s Ave, I | tamilton | | | | | | | ;— - | \rightarrow | |
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| nternal Bearer | 240 | 95 | | 109.4 | 2.233 | | <u> </u> | | 7.2 | 3.5 | | | 1.7 | 7,944 | 5.0 | | _ | 50.0 | 42.9 | | kΝ | _ |
| nternal Bearer | 240 | 95 | | 109.4 | 1,986 | 17.874 | 0 | 6.2 | | 3.5 | | (High) | | | 5.0 | 14.3 | | | | | kΝ | |
| nlernal Bearer | 190 | . 95 | | 54.3 | | 17,874 | 0 | 6.2 | 7,2 | | | | | | 5.0 | | 52.4 | | **** | _ | kΝ | $\overline{}$ |
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Consulting Geotechnical Engineer

1202/1 Victoria Street
P.O. Box 9123
Hamilton New Zealand
Facsimile 07 839 3125
Telephone 07 838 3119
e-mail: geocon@voyager.co.nz
Ref: W - 5106/2
9 March, 2000

The Chief Building Inspector Hamilton City Council Private Bag Hamilton

Attn: Mr Bryce Keogh

Dear Sir,

Re: Building Consent Application

Project: New Dwelling at No. 18C Breckons Avenue for Habitat for Humanity

Builder: Wayne Cunningham

We advise that we have been retained by the Owner/Builder of the above referenced property to inspect soil conditions and foundation construction at the above referenced site. The results of our assessment of foundation conditions at the site are contained in Geocon Soil Testing Ltd report dated 13 September 1999 and subsequent Mark T Mitchell Ltd report dated 23 February 2000, copies of which are attached.

The soil test results indicate that organic SILT and PEAT is present over the site and this will necessitate that driven piled foundations are used. Our staff will carry out inspections of the pile installation to ensure the piles are driven into dense, original ground and to a final set that is appropriate for the loads that the foundations are required to support.

The purpose of our inspections will be to ensure that foundations for the proposed building are installed in accordance with sound engineering practice and to the design requirements of the project. At the conclusion of our work, a foundation completion report will be forwarded to Hamilton City Council.

Yours faithfully

Mark T Mitchell Ltd

Registered Engineer

c.c. Habitat for Humanity PO Box 8075 Hamilton

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