

EARTHQUAKE RECOVERY (EQR) DOCUMENTATION

The documents within the Earthquake Recovery Documentation section, encompass all works completed under the Canterbury Home Repair Programme (CHRP). These contain assessments, contractor quotes, work orders and sign offs.

EQR Property Overview Report

Released Under the Official Information Act 1982

Company Fletcher EQR (division of FCC) as agent for EQC

Printed Date: 26-04-2018

EQC Property ID	Property Address	Vulnerable?	Property F Status	Property Finalisation Indicator		
2010013897	1/126 HALSWELL JUNCTION ROAD, HALSWELL		F3 - Complete & Finalised	Some Finalisation has taken place		
Main Contractor:	CLOSED OUT-Interproducts Limited t/a Frame Contracting ***** (S049)		Property F2'd By:	Blair Jones	F2 Completed Date:	29-03-2016
Cont Managing Hub:	<MULTIPLE>	Not Vulnerable	Property F3'd By:	Blair Jones	F3 Completed Date:	29-03-2016

Adjustments

				Original Budget			Budget Variation			Gross Claimed	Gross Certified
EQC Claim Number + Address	Project	Status	Unmapped Adjmt Lines	Total OB	Allocated	Unallocated	Total BV	Allocated	Unallocated		
CLM/2011/123837 1/126 HALSWELL JUNCTION ROAD	E025	F3	0	0.00	0.00	0.00	3,100.00	3,100.00	0.00	0.00	0.00
CLM/2011/123837 1/126 HALSWELL JUNCTION ROAD	E031	F3	0	0.00	0.00	0.00	1,735.00	1,735.00	0.00	1,735.00	1,735.00
Property Total			0	0.00	0.00	0.00	4,835.00	4,835.00	0.00	1,735.00	1,735.00

Assignments

EQC Claim Number + Address	Subcontractor	Workflow Status	Contractor Quote	Adjustment Line Count	Gross Claimed	Gross Certified
CC + Hub Status	Assignment	Hub Comments				
CLM/2011/123837 1/126 HALSWELL JUNCTION ROAD	Substantive Works - Primary	CLOSED OUT-Interproducts Limited t/a Frame Contracting ***** (S049)	NOT REQUIRED	0.00	9	0.00
	Transmitted To Hub -> Not Required - Over Cap Confirmed	CONFIRMED OVER CAP ADVISED VIA EQC-CLIENTCOM-012096				
CLM/2011/123837 1/126 HALSWELL JUNCTION ROAD	Substantive Works - Specialist Contractor	CLOSED OUT-ICP Asbestos Consultants Limited ***** (SF78)	COMPLETIONS	1,780.00	3	1,735.00
	Transmitted To Hub -> Claim File Review Complete	ASBESTOS TEST - Negative				
Property Total				1,780.00	12	1,735.00

Works Orders

EQC Claim Number	WO Number	Assignment	Subcontractor	Workflow Status	Issuing QS	WO Status	Issued Date	Works Order Value
CLM/2011/123837	E031-03697	Substantive Works - Specialist Contractor - 22-Aug-2014	CLOSED OUT-ICP Asbestos Consultants Limited ***** (SF78)	COMPLETIONS	Michael McDaid	Issued	22/08/2014	1,780.00
Property Total								1,780.00

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Claims / Certs / Payables

SF78	CLOSED OUT-ICP Asbestos Consultants Limited *****									
EQC Claim Num	Line Type	Approval Type	Claim No	Claimed By	Remaining	Claim Date	This Claim			
CLM/2011/123837	Asbest Test BV	Scope Addition	45	EQR\YasirM	\$0.00	04-Sep-2014	\$1,780.00			
CLM/2011/123837	Asbest Test BV	Scope Addition	45	EQR\YasirM	\$0.00	04-Sep-2014	-\$45.00			
EQC Claim Num	Line Type	Approval Type	Cert No	Certified By	Remaining	Certified Date	This Cert	Cert Line Notes		
CLM/2011/123837	Asbest Test BV	Scope Addition	40	EQR\YasirM	\$0.00	04-Sep-2014	\$1,780.00	7557		
CLM/2011/123837	Asbest Test BV	Scope Addition	40	EQR\YasirM	\$0.00	04-Sep-2014	-\$45.00	7557		
SF78	CLOSED OUT-ICP Asbestos Consultants Limited ***** Total					Claims	\$1,735.00	Certs	\$1,735.00 Payables	\$0.00

CONS		Consultants									
EQC Claim Num	Line Type	Approval Type	Transaction Type	Internal Ref	CAS Batch	CAS Date	Line Value	Invoice No			
CLM/2011/123837			GL Journal Entry	EQR TSR 106	7864	08-Aug-2014	\$600.00				
CLM/2011/123837			GL Journal Entry	EQR TSR 106	7864	08-Aug-2014	\$1,000.00				
CLM/2011/123837			GL Journal Entry	EQR TSR 106	7864	08-Aug-2014	\$500.00				
CLM/2011/123837			GL Journal Entry	EQR TSR 106	7864	08-Aug-2014	\$400.00				
CLM/2011/123837			GL Journal Entry	EQR TSR 131	8889	27-Feb-2015	\$200.00				
CLM/2011/123837			GL Journal Entry	EQR TSR 133	8891	27-Feb-2015	\$200.00				
CLM/2011/123837			GL Journal Entry	EQR TSR 134	8892	27-Feb-2015	\$100.00				
CLM/2011/123837			GL Journal Entry	EQR TSR 135	8893	27-Feb-2015	\$100.00				
CONS	Consultants Total					Claims	\$0.00	Certs	\$0.00	Payables	\$3,100.00
Property Total						Claims	\$1,735.00	Certs	\$1,735.00	Payables	\$3,100.00

No Open Complaints / Remedial Issues on this Property

No Finalisation Documents on this Property

EQR Property Overview Report

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Cont Managing Hub:	<MULTIPLE>	Not Vulnerable	Property F3'd By:	Blair Jones	F3 Completed Date:	29-03-2016

Technical Services Referrals

EQC Claim Number	Referral Type	Assignment Consent Information	Technical Status Comment / Instruction for Hub	Workflow Status	Engineer	Engineer Visit	Gross Recharges
CLM/2011/123837	EQR Claim	Substantive Works - Primary - 09-Feb-2012	Complete - Level 2	COMPLETE - ACTION REQUIRED	Stephanie Regan	16/07/2014	3,100.00

Property Total **3,100.00**

Asbestos Test Information

EQC Claim Number	Claim Address	Asbestos Test Required?	Asbestos Test Result
CLM/2011/123837	1/126 HALSWELL JUNCTION ROAD	Yes	Negative

Property Total **Number of Claims: 1**

Contractors

Contractor	Accreditation Status	Accreditation Number	Classification	Type of Work on the Property
SF78 CLOSED OUT-ICP Asbestos Consultants Limited *****	Accredited	SPLA6870	Specialist Subcontractor	Substantive Works
S049 CLOSED OUT-Interproducts Limited t/a Frame Contracting *****	Accredited	EQRC0316	Main Contractor	Substantive Works

Property Total **Number of Contractors: 2**



Works Order

Fletcher EQR acting as agent for EQC
(divn of FletcherConstruction)
P O Box 80105
CHRISTCHURCH 8440

Telephone 03 341 9900
Facsimile 03 343 4167

To:

International Construction Partners NZ Limited
40 Huxley St
Beckenham
Christchurch, 8023
Phone 022 427-6987
Email mark@icp-usa.com

Order No E031-03697

Please quote Works Order Number on
all invoices, correspondences etc

Accreditation Number **SPLA6870**
Contractor Code **SF78**

From:

Hub Colombo
Works Order Date 22-Aug-2014

Project Number **E031**

Please proceed with the works outlined in the attached approved Scope of Works for:

EQC Claim Number	Address	Start Date	\$ Ex. GST
CLM/2011/123837	1/126 HALSWELL JUNCTION ROAD, HALSWELL	22-Aug-2014	1,780.00
NZ Govt Goods and Services Tax Is Not Included In This Total			Total Cost 1,780.00

The above stated contract price is deemed to be a complete price to undertake and complete the works as detailed within the attached Scope of Works. The Scope of Works shall not be varied without Fletcher EQR's prior written consent. No additional costs will be accepted unless approved by a written Variation Order issued and signed by Fletcher EQR. Any request for payment based on an invalid variation instruction will be refused.
All Works shall be completed in accordance with the approved Scope of Works unless varied as above.

Authorised By **Michael McDaid**
On behalf of Fletcher Construction
as agent for Earthquake Commission Signature

IMPORTANT

This Works Order is only valid when authorized and signed by a Fletcher EQR Quantity Surveyor.
This Works Order is conditional upon evaluation and acceptance by the Fletcher EQR Contract Supervisor of the SSSP (and Task Analysis where applicable). You may not proceed with any work without this signed acceptance.
This Works Order is to be read in conjunction with the attached approved Scope of Works referencing this Works Order.
If no Scope of Works is attached please contact the issuing Quantity Surveyor for a copy of the Scope of Works.
This Works Order is subject to the terms and conditions contained in the Short Form Agreement for engagement of contractors between the parties.
Please send all invoices and correspondence to the Fletcher EQR Hub responsible for issuing this Works Order.
The Contractor is responsible for all Warranties to be passed onto the homeowner.
No additional private work is to be undertaken. Fletcher EQR reserves the right to terminate the contract and de-accredit any contractor working on site without approval.
EQC and Fletcher EQR employ zero tolerance in relation to fraud and will prosecute offenders.



INTERNATIONAL CONSTRUCTION PARTNERS



29/08/2014

Fletchers EQR - Colombo Hub
66 Colombo Street, Beckenham
CHRISTCHURCH 8022

Re: Asbestos Identification Analysis – 1/126 Halswell Junction Road

Collected by: International Construction Partners NZ Limited, for the above-referenced address
EQR Order Number: E031-03697
EQC Claim Number: 2011/123837
Analysis by: IANZ accredited laboratory. Reference Number: 2011/123837

Please see Laboratory Results on next page.

This report has been prepared by International Construction Partners NZ Ltd on the specific instructions of our Client. It is solely for our Client's use for the purpose for which it is intended with the agreed scope of work. Any use or reliance by any person contrary to the accompanying Laboratory Results is at that person's own risk. If required, an additional copy of the Laboratory Results are available upon request.

When dealing with asbestos it is recommended to use a qualified DOL Certificate of Competence for Restricted Work Involving Asbestos holder.

Asbestos consultancy work is not covered by indemnity insurance in New Zealand, and therefore International Construction Partners NZ Ltd's liability for asbestos related work shall be limited to the amount of the related invoice.

If you have any questions about of these sample results, please do not hesitate to contact me.
Thank you.

Yours sincerely

A handwritten signature in black ink, appearing to read 'Mark Quigley'.

Mark Quigley
Director

International Construction Partners NZ Limited

Mark Quigley



PRECISE

CONSULTING & LABORATORY

Sample Analysis Results

Reference No: ID004420

Thursday, 28th August 2014

Site Address: 1/126 Halswell Junction Road			
Sample ID	Client Sample Number	Sample Location/Description/Dimensions	Analysis Results
ID004420.1	01	Kitchen/Lounge – Ceiling (c) L1 – Paint L2 – Plaster L3 – Paper Backing 39 x 18 x 5mm	No Asbestos Detected Organic Fibres
ID004420.2	02	Hallway – Ceiling (c) L1 – Paint L2 – Plaster L3 – Paper Backing 47 x 20 x 7mm	No Asbestos Detected Organic Fibres
ID004420.3	03	Bedroom 2 – Ceiling (c) L1 – Paint L2 – Plaster L3 – Paper Backing 43 x 24 x 7mm	No Asbestos Detected Organic Fibres
ID004420.4	04	Main Bedroom – Ceiling (c) L1 – Paint L2 – Plaster 51 x 21 x 8mm	No Asbestos Detected Organic Fibres
ID004420.5	05	Bathroom – Ceiling (c) L1 – Paint L2 – Plaster 32 x 21 x 2mm	No Asbestos Detected Organic Fibres
ID004420.6	06	Bathroom – Vinyl L1 – Vinyl Sheeting L2 – Vinyl Sheeting Inner Layer L3 – Glue 53 x 8 x 1mm	No Asbestos Detected Synthetic Mineral Fibres
ID004420.7	07	Toilet – Ceiling (c) L1 – Paint L2 – Plaster 33 x 20 x 4mm	No Asbestos Detected Organic Fibres

ID004420.8	08	Toilet – Vinyl L1 – Vinyl Sheeting L2 – Vinyl Sheeting Inner Layer 67 x 13 x 1mm	No Asbestos Detected Synthetic Mineral Fibres
ID004420.9	09	Laundry – Ceiling (c) L1 – Paint L2 – Plaster 32 x 26 x 5mm	No Asbestos Detected Organic Fibres
ID004420.10	10	Laundry – Vinyl L1 – Vinyl Sheeting L2 – Vinyl Sheeting Inner Layer L3 – Glue 65 x 21 x 4mm	No Asbestos Detected Synthetic Mineral Fibres
ID004420.11	11	Office/Study – Ceiling (c) L1 – Paint L2 – Plaster 47 x 18 x 6mm	No Asbestos Detected Organic Fibres
ID004420.12	12	Garage – Ceiling (c) L1 – Paint L2 – Plaster L3 – Paper Backing 60 x 15 x 5mm	No Asbestos Detected Organic Fibres

Note 1: The reporting limit for this analysis is 0.1g/kg (0.01%) by application of polarised light microscopy, dispersion staining and trace analysis techniques.

Note 2: Mineral fibres of unknown type detected by PLM and dispersion staining may or may not be asbestos fibres. To confirm the identity of this fibre, another independent analytical technique such as XRD analysis is advised.

Note 3: The samples in this report as reported "As Received" Precise Consulting does not take responsibility for the sampling procedure or accuracy of sample location description as these have been provided by the client.

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Identified by:



Tim Trembath (BSc (Hons))

Approved Identifier

Reviewed by:



Joseph Feltham (B.E. (Env))

Key Technical Person



MS-SF2016

CLAIM TRANSFER ADVICE

TECHNICAL CORRESPONDENCE

This memorandum is notification that the required technical components of the above claim have been complete as identified below.

Date	18 th July 2014	Claim Number	CLM/2011/123837
Address	1/126 Halswell Junction Road	Author	Stephanie Regan
Hub	Colombo	CC	

Complete Status of the Engineering work:

- | | |
|--|---|
| <input type="checkbox"/> Engineering Not Required | <input type="checkbox"/> Partial CTA |
| <input type="checkbox"/> Not Required - EQC Deferral | <input type="checkbox"/> Exemption Granted |
| <input type="checkbox"/> Level 1 | <input type="checkbox"/> Consent Granted |
| <input type="checkbox"/> Overcap | <input checked="" type="checkbox"/> Level 2 |

Engineering Claim File Documents Transmitted

- ☐ Level 1 Design
- ☐ Level 2 Simple Report
- ☒ Level 2 Moderate Report
- ☐ Level 2 Complex Report
- ☐ Technical Correspondence
- ☒ Exempt Building Works Record File Note
- ☐ Approved Building Consent
- ☐ Approved Building Exemption (Sched1 Sec2)
- ☐ Review File Note Simple
- ☐ Review File Note Moderate
- ☐ Review File Note Complex
- ☒ Schedule of Inspections

Rechargeable Items

- ☒ Structural Assessment
- ☒ Zip Level Survey
- ☒ Damage Report
- ☒ Shallow Geotech Investigations
- ☐ Deep Geotech Investigations
- ☐ Level 2 Concept Design
- ☐ Application for Consent/Exemption
- ☐ Construction Observations
- ☐ Other

Comments/ Instructions:

Engineer to be contacted to attend site commencement meeting
 Repalce 45m2 of concrete slab
 Remove and replace internal walls as necessary to provide access for repalcing floor slab
 Crack repair to construction joint in lounge
 crack repair to perimeter foundation on Northwest corner

Author Stephanie Regan Stephanie Regan

Reviewed by [Signature] Senior Engineer



MS-SF2021

ENGINEERING INSPECTIONS

TECHNICAL TEAM

Date	18 th July 2014	Claim Number	CLM/2011/123837
Address	1/126 Halswell Junction Road	Author	S Regan
Hub	Colombo	Revision	

ENGINEERING WORKS NOTICE

Purpose

All work must be undertaken in accordance with the Building Act 2004, the New Zealand Building Code and all plans and specifications issued by the Engineer. To ensure this is the case the following Engineer's inspections **must** be undertaken prior to any sign off of contract works by either the Engineer or the Fletcher EQR Contract Supervisor.

Final sign-off and final payment for the work will depend upon all inspections being signed off on the attached schedule of inspections.

The Schedule of Inspections is to be maintained on site at all times. If the schedule is found to be not present when the Engineer visits, he will close the site down at the Contractor's cost.

Engineers require a minimum of 48 hours' notice to carry out any inspections. The following inspections are required:

Engineers Inspections Schedule

1. Site Commencement Meeting – engineer to attend (Stephanie Regan)
2. Pre pour inspection of reinforcement
3. Final inspection

Contact:

Please contact the Fletchers EQR Technical Team on **03 741 8494 (Vivienne)** to arrange for an inspection by a Technical Supervisor or Engineer

Issued By Stephanie Regan
Stephanie Regan



MS-SF2021

ENGINEERING INSPECTIONS

TECHNICAL TEAM

Date	18 th July 2014	Claim Number	CLM/2011/123837
Address	1/126 Halswell Junction Road	Author	S Regan
Hub	Colombo	Revision	

RECORD OF INSPECTIONS

Purpose

This is a working document to be **kept on site** and is the responsibility of the Contractor. If this schedule, along with all engineering documentation are not on site **the site will be closed down at the Contractor's cost**. The Contractor is to arrange for the engineering inspections, as detailed below, as and when required.

Please allow a minimum of **48 hours** for the completion of any inspection

Engineer's Inspections

Please contact the Fletcher EQR Technical Hub on **03 741 8494 (Vivienne)** to arrange for an inspection by a Technical Supervisor or Engineer.

Inspection Description	Signed	Date
1. Site Commencement Meeting		
2. Pre pour inspection of reinforcement		
3. Final Inspection		

MS-SF2009

Technical Report

Date 18/07/2014

Claim Number CLM/2011/123837

Hub Colombo

Author S Regan

Revision

1/126 Halswell Junction Road



Dwelling Description

Year of Construction (approx)	Post 1980s
Number of Storeys	1
Foundation Type(s)	Type C
Wall Cladding	Heavy Weight
Roof Cladding	Light Weight
Floor Area (approx)	130m ² including internal garage

Site Description

Topography	Flat
Technical Category	TC3
Likely Soil Types	Silt
Shallow Geotech Report	Yes
Deep Geotech Analysis	No

MS-SF2009

This report has been prepared solely for the Earthquake Commission and is to be used only for work undertaken under the management of Fletcher EQR within the Canterbury Homes Repair Programme. No use by any other party is permitted without the prior consent of both Fletcher EQR and the Earthquake Commission.

Observed Damage

A structural assessment and level survey of the dwelling outlined above has been carried out. The levels recorded on site are shown on sketch SK01.

Cracking in the floor slab along the construction joints has been observed where the joints have opened by a maximum of 20mm in some areas. Refer to sketch SK02 for locations of separation in floor slab along construction joints and widths of joint openings. The concrete slab does not appear to have settled differentially across the cracks. A 2mm crack in the concrete floor slab has also been observed and indicated on sketch SK02. There is one crack in the perimeter foundation on the North-western corner.



Figure 1: Construction Joint Separated 18mm



Figure 2: Construction Joints have opened



Figure 3: Crack in perimeter foundation

Some of the walls are out of plumb as a result of the movement in the concrete floor slab and the doors to the bathroom and North-western bedroom are jamming at the top. The bathroom door frame is out of level as it is likely that the bottom plate fixing has pulled away from the concrete slab. The wardrobe door in the North-eastern bedroom is jamming and the dining area slider is sticking. Refer to sketch SK02 for doors that are jamming.

MS-SF2009

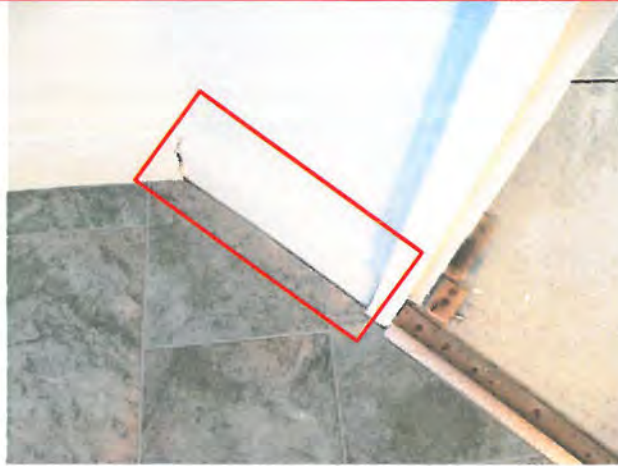


Figure 4: Wall framing has moved

Internally there is little damage to the wall linings. Externally the mortar joints of the brick cladding is cracked on the Southern elevation.



Figure 5: Minor damage to wall linings



Figure 6: Crack in mortar joints of brick

Externally there is evidence of land movement confirming the earthquake related movement in the dwelling. The concrete paving has pulled away from the neighbour's garage and also cracked in a number of areas on the Northern and Western elevations. On the Southern elevation there is cracking in the tarmac driveway and settlement in the area at the front of the garage.



Figure 6: 65mm gap between paving and garage



Figure 7: Movement by front entrance door

Appended to this report are the following drawings that show the extent of damage:

- SK01 Levels Plan
- SK02 Damage Locations

MS-SF2009**Repair Solution**

It is proposed to remove and replace two sections of the slab foundation in the areas indicated on sketch SK03 as the construction joints have opened in these areas and there are doors jamming indicating earthquake related movement. Refer to sketch SK03 for proposed target level.

In the Northern end of the house the ceiling members are to be propped using Acrow props or a similar system and walls removed as necessary to provide access for replacing the floor slab. When replacing the section of floor slab it is to be cut out 200mm from all external walls. The replacement section of slab is to be connected back into the existing slab using D10 starter bars epoxy grouted 150mm into the existing section at 600mm centres. New construction joints in the locations indicated on sketch SK03 are to be built into the new section of slab using MiTek Krack Mates. Refer to sketch SK04 for details for undertaking this work. The bottom plate of the internal stud walls are to be connected to the foundation using GIB HandiBracs as per the attached product specification.

An 800mm wide section of slab in the hallway and kitchen/dining area is to be removed and reconstructed as per the attached details in sketches SK05 and SK06. A new construction joint is to be built into the slab in the same location as the original as indicated in sketch SK03 using a MiTek Krack Mate. D10 starter bars at 600mm centres are to be epoxy grouted 150mm in to the existing foundation as per the attached details in sketches SK05 and SK06. The starter bars are to be installed into every second side of the new section of concrete slab.

The 6mm crack across the lounge floor as indicated in sketch SK02 is to have a new MiTek Krack Mate installed and filled using Ardex Crackbond JF-311 as per the attached product specifications.

The crack in the perimeter foundation on the North-western corner is to be remediated as per the attached crack repair in walls and foundations specification.

Other Repairs:

The cracks in the mortar joints of the brick cladding by the Southern entrance door are to be ground out and repointed.

Approximate Extent of Repairs

- | | |
|---|------------------|
| 1. Area of slab to be replaced | 45m ² |
| 2. Length of crack to be repaired | 3.8lin.M |
| 3. Remove and replace internal walls to allow for replacement of floor slab | |
| 4. Mortar crack repair | |

Note that the remaining repair work identified in the EQC Scope of Damage, except as modified by this report, are still required to be completed.

MS-SF2009

Drawings and Specifications

The following drawings are appended to this report along with a technical specification

- SK03 Area of slab to be replaced and proposed levels
- SK04 Internal Slab Replacement Details
- SK05 Plan Detail: Replacement slab in Kitchen/Dining Area
- SK06 Section A-A: Replacement Slab in Kitchen/Dining Area
- SK07 Concrete Notes
- Spec 1 MiTek Krack Mate
- Spec 2 GIB HandiBrac
- Spec 3 Ardex Crackbond JF-311
- Spec 4 Crack Repair in Foundation and Walls
- Inspection Schedule
- Fletcher Building Exempt Building Work File Record
- Geotechnical Report

Required Inspections

Inspections from the Technical Hub will be required during construction. This is in addition to the inspections required from the BAU Hub supervisor. Attached to this report is a schedule of required inspections.

The claim may now proceed to final scoping and programming for construction.

Author Stephanie Regan
Stephanie Regan

Reviewed [Signature]
Senior Engineer

THE PURPOSE OF RE-LEVELLING THE FOUNDATION OF THIS DWELLING IS TO RETURN THE FLOOR TO ITS LIKELY PRE-EARTHQUAKE LEVELS. TARGET LEVELS PROVIDED ARE A GUIDE ONLY. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO MONITOR DOORS AND WINDOWS, ANY HORIZONTAL SURFACES AND ALL LININGS. IF DAMAGE IS RESULTING DUE TO FLOOR RE-LEVELLING, WORK SHOULD BE STOPPED IMMEDIATELY. RE-LEVELLING IS TO BE PERFORMANCE BASED AND FINAL LEVELS A RESULT OF RETURNING FUNCTIONALITY TO THE DWELLING.

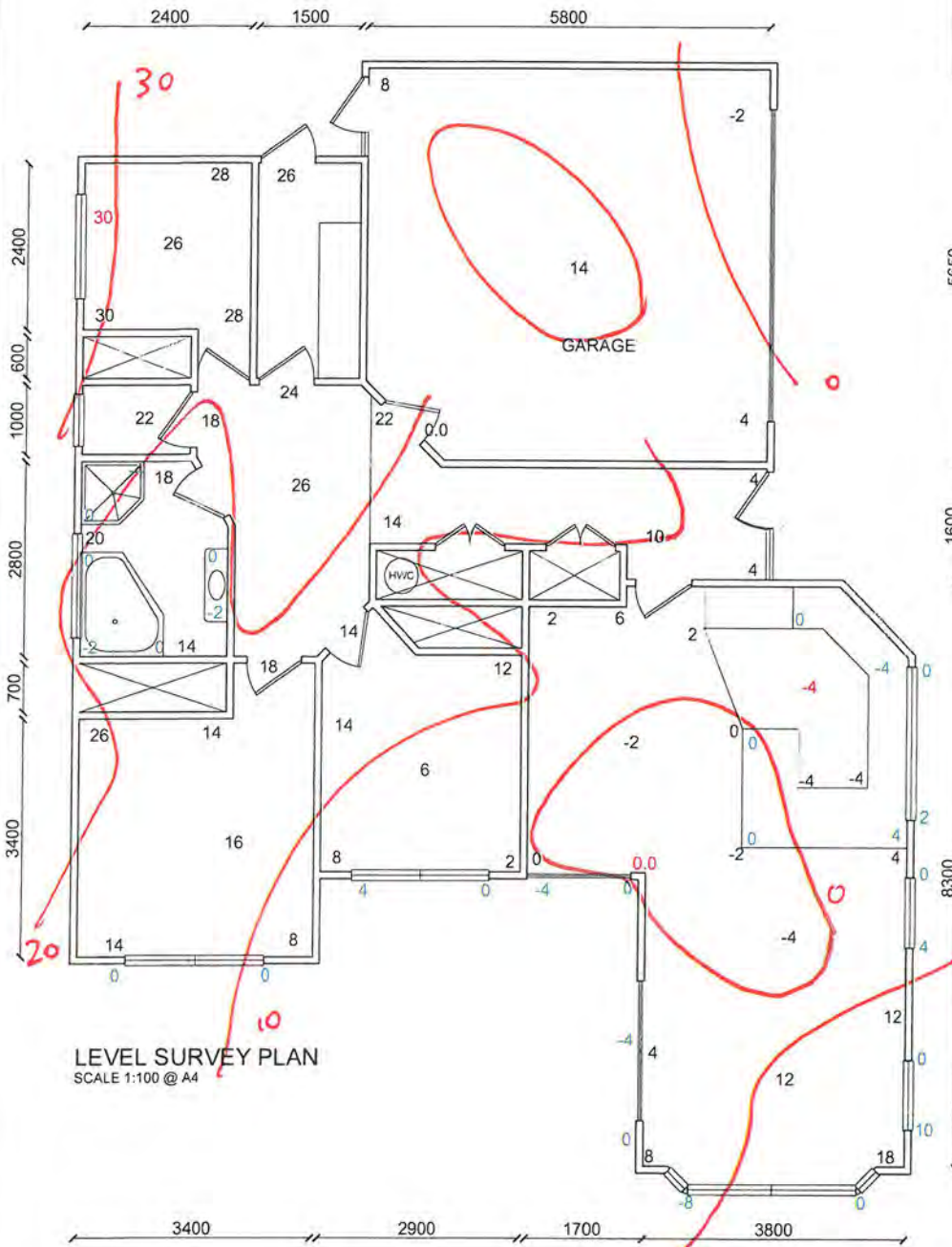
NOTES

ADJUSTMENTS FOR FLOOR COVERINGS HAVE BEEN MADE

MAX LEVEL DIFFERENCE;
-4mm TO 30mm = 34mm

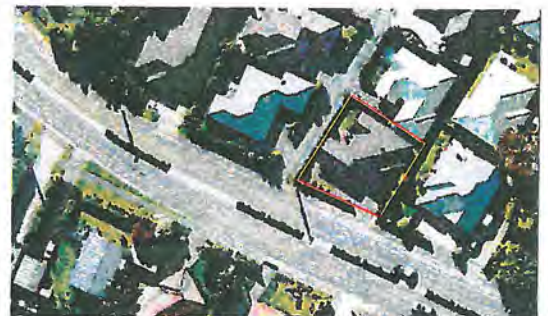
LEGAL DESC; FLAT 1 DP 75904
ON LOT 5 DP 68654 HAVING,
SHARE IN 651 M2

CONSTRUCTION TYPE;C



KEY

Levels recorded on site.



SITE LOCATION
NTS

	Technical Office, 11 Deans Avenue, Riccarton PO Box 80 105, Riccarton Christchurch 8440, New Zealand	TITLE LEVELS ASSESSMENT ADDRESS 1/126 HALSWELL JUNCTION ROAD, OAKLANDS, CHRISTCHURCH	DRAWING2	DESIGNED BR
			DATE ---- SCALE 1:100 @ A4	DRAWN TL SHEET NO. 301

THE PURPOSE OF RE-LEVELLING THE FOUNDATION OF THIS DWELLING IS TO RETURN THE FLOOR TO ITS LIKELY PRE-EARTHQUAKE LEVELS. TARGET LEVELS PROVIDED ARE A GUIDE ONLY. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO MONITOR DOORS AND WINDOWS, ANY HORIZONTAL SURFACES AND ALL LININGS. IF DAMAGE IS RESULTING DUE TO FLOOR RE-LEVELLING, WORK SHOULD BE STOPPED IMMEDIATELY. RE-LEVELLING IS TO BE PERFORMANCE BASED AND FINAL LEVELS A RESULT OF RETURNING FUNCTIONALITY TO THE DWELLING.

NOTES

ADJUSTMENTS FOR FLOOR COVERINGS HAVE BEEN MADE

MAX LEVEL DIFFERENCE;
-4mm TO 30mm = 34mm

LEGAL DESC; FLAT 1 DP 75904
ON LOT 5 DP 68654 HAVING,
SHARE IN 651 M2

CONSTRUCTION TYPE;C

KEY

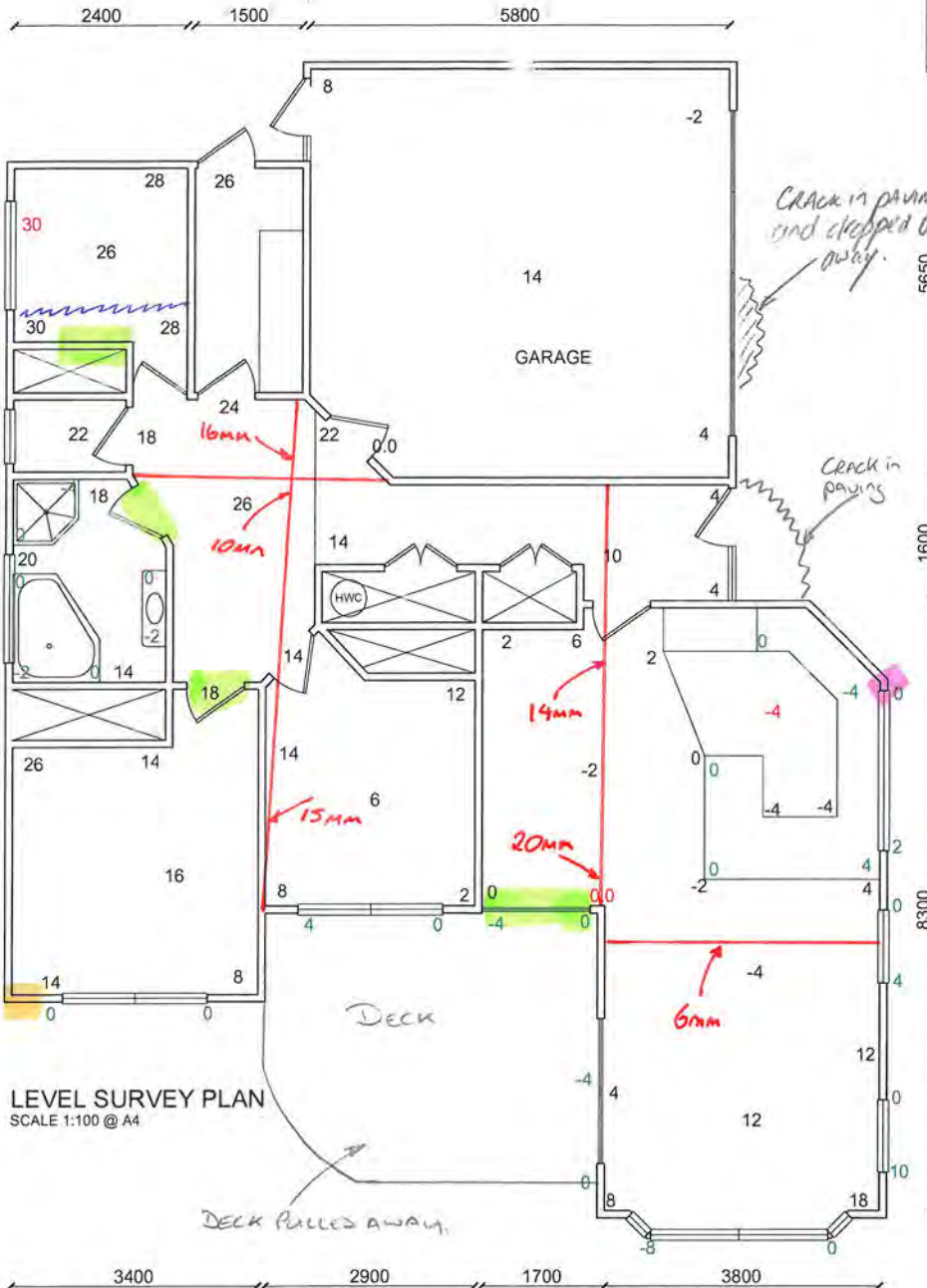
— Construction joints
opened up to 20mm

Doors jamming

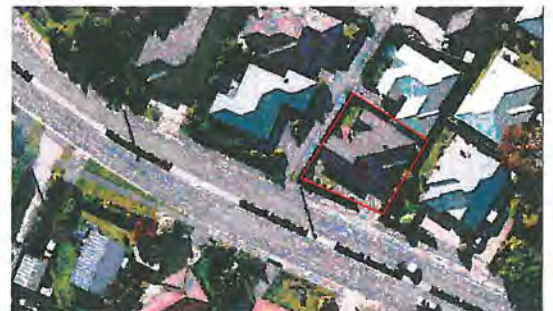
mm Crack in SLAB.

Crack in MASONRY.

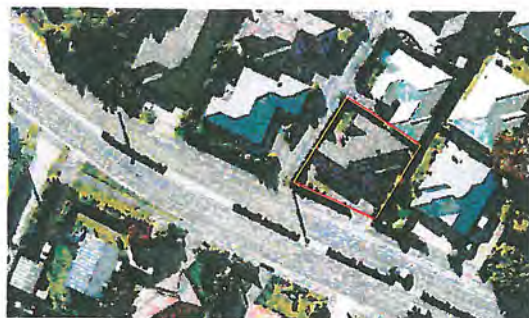
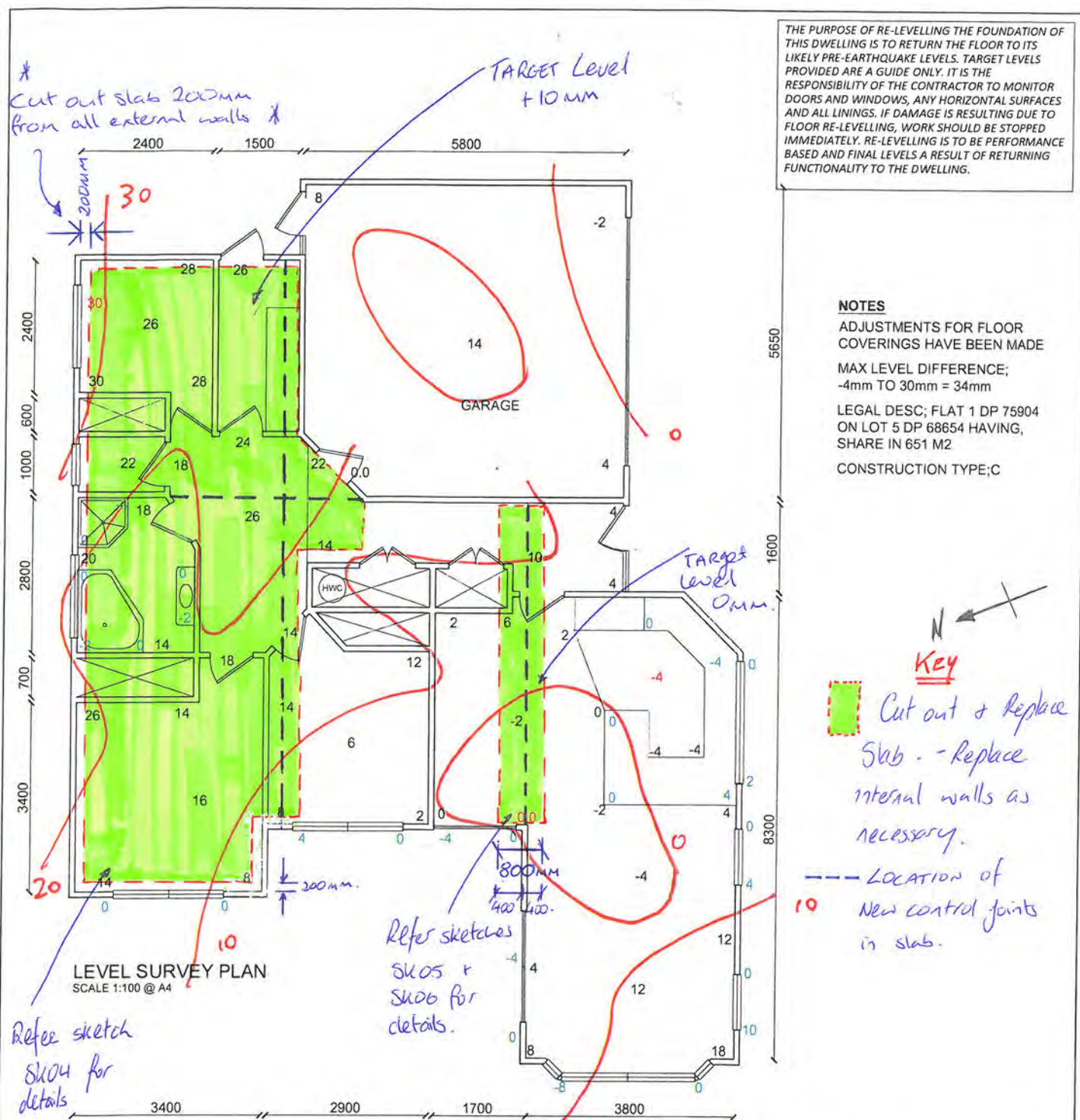
Crack in PERIMETER
FOUNDATION.



LEVEL SURVEY PLAN
SCALE 1:100 @ A4



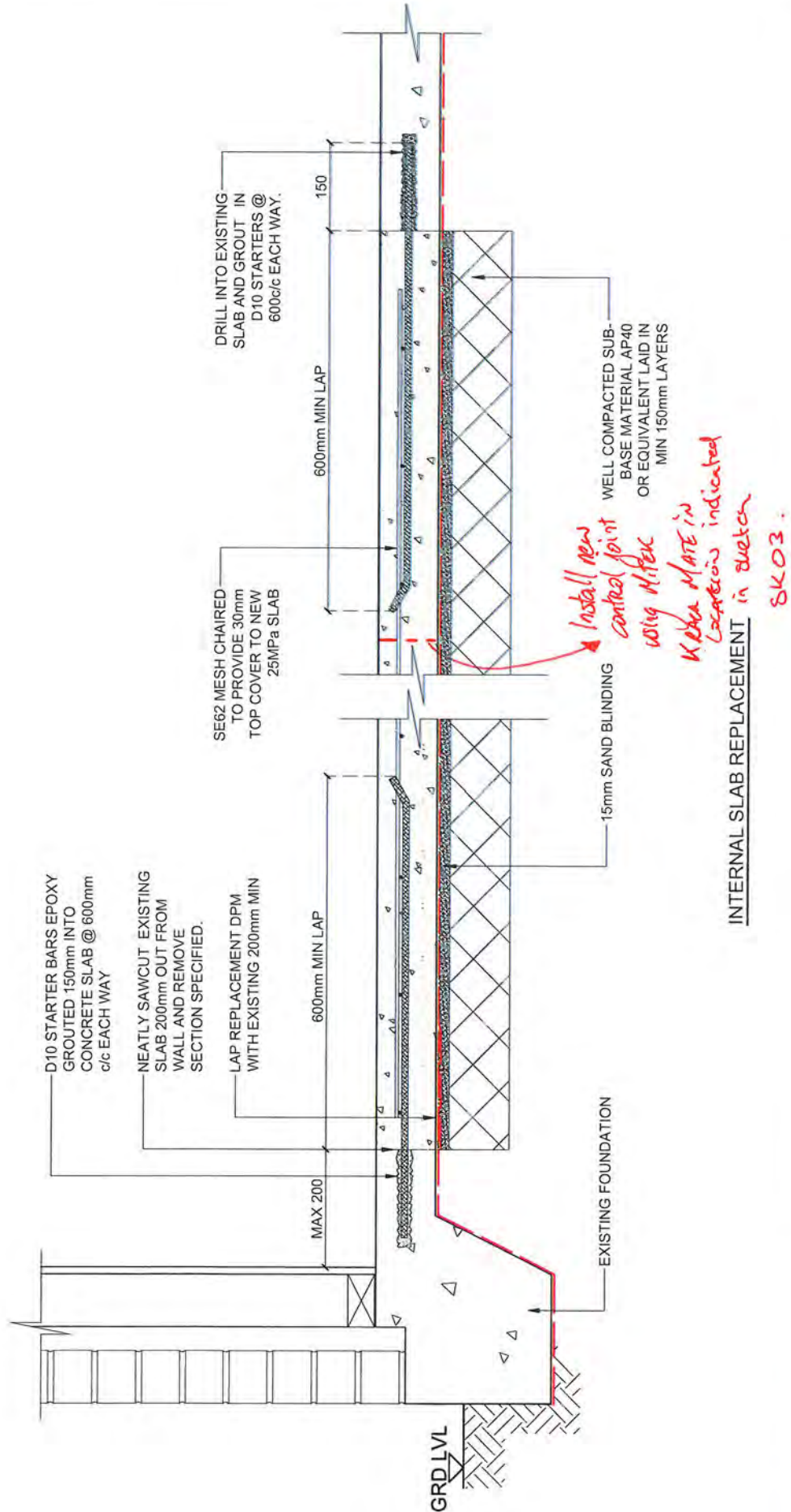
SITE LOCATION
NTS



SITE LOCATION
NTS

NOTES

1. TO BE READ IN CONJUNCTION WITH ENGINEER'S TECHNICAL REPORT AND SPECIFICATION.

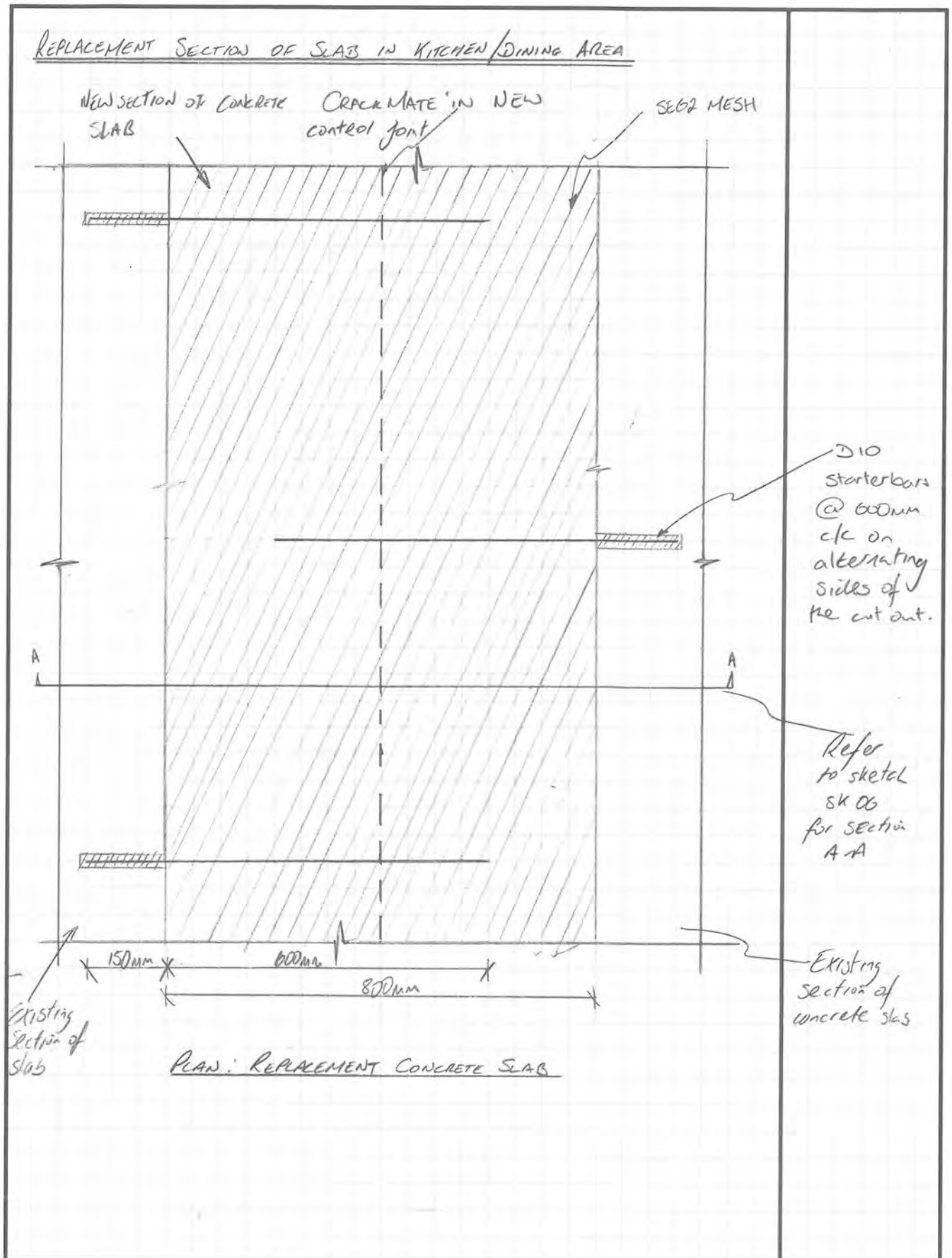


Fletcher Earthquake Recovery	Technical Office, 11 Deans Avenue, Riccarton PO Box 80 105, Riccarton Christchurch 8440, New Zealand	ADDRESS: 1126 Halswell Junction Road, Oaklands Christchurch	REV NO.	REVISION	DATE	APP.	DESIGNED
							DRAWN
							REF
							SHEET NO.
							1:10 @ A4
							DATE
							SCALE
							MS-SD20021
							EQR
							2011/123887
							5/10/04

Project Name 1/126 Halswell Jct Rd
 Section Slab Replacement - Kitchen
Dining Area.

Project Number 2011/123837
 Date 10/7/14

Page Number SK05.
 Designed SR.
 Checked _____



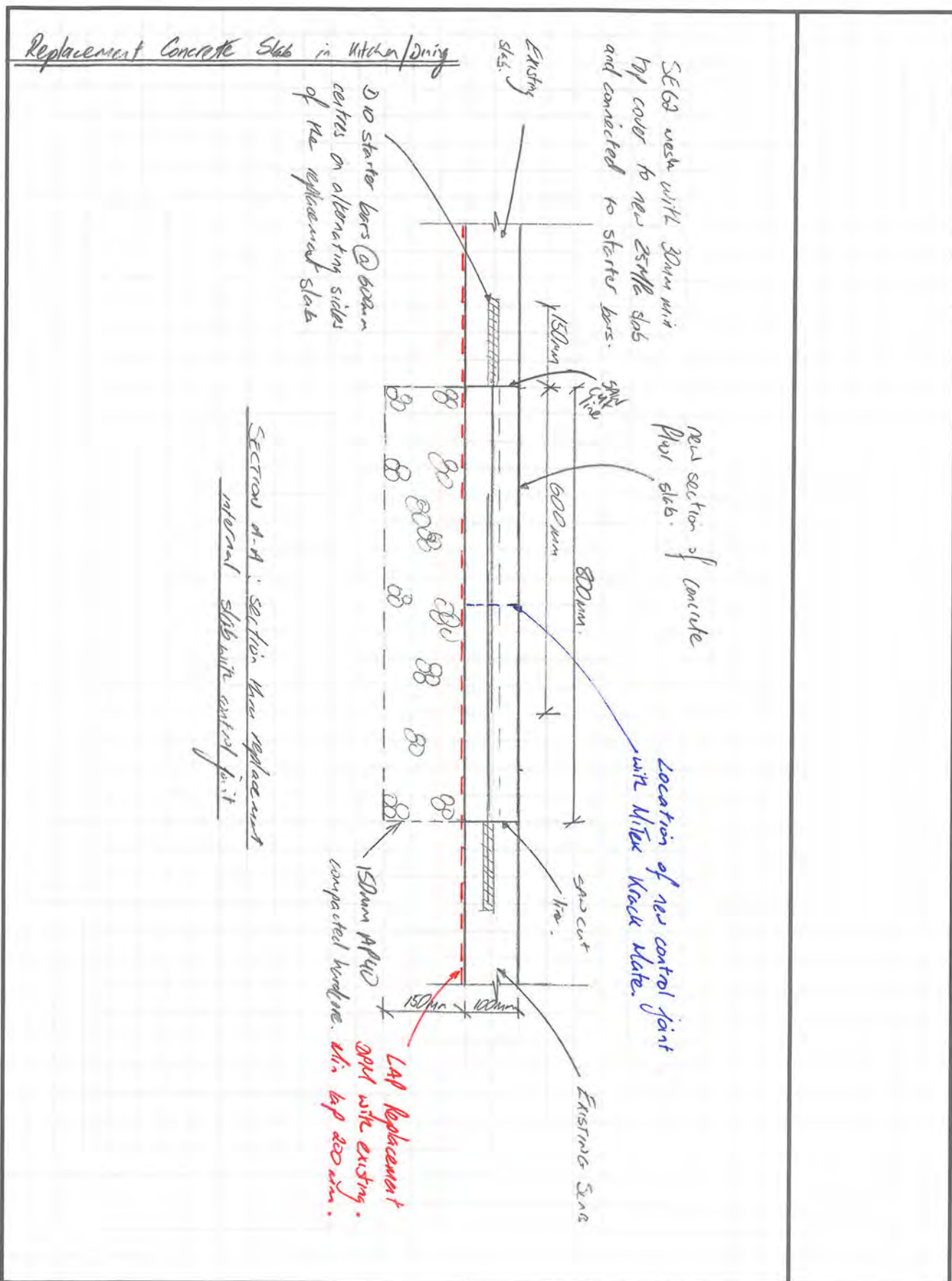
Calculation Sheet



Project Name 1/126 Halswell Junction Rd Project Number 2011/127837
 Section Slab Replacement Detail - Date 17/7/14
Kitchen/Dining Area.

Page Number SK06Designed SR

Checked _____



MINIMUM COVER TO REINFORCEMENT

Unless shown otherwise on the drawings, minimum cover for cast in-situ concrete shall be as follows:

Specified Compressive Strength (MPa)	Cast against natural ground	General areas External	General Areas Internal	In Contact with fresh water
25	75 (50)	40	25	50
30	75 (50)	35	20	45
40	75 (50)	30	20	40

Based on external exposure classification B1 of NZS3101:1995

Note: Minimum cover for concrete in contact with ground can be 50mm, shown in brackets, instead of 75mm if using a damp-proof membrane

SPLICE LAP LENGTH FOR DEFORMED STEEL IN CONCRETE

Unless specified otherwise on the drawing, minimum splice lap lengths for deformed bars shall be as follows:

Diameter	Grade 300E steel	Grade 500E steel
10	400mm	650mm
12	500	750
16	650	1000
20	800	1250
25	1000	1600
32	1200	2000

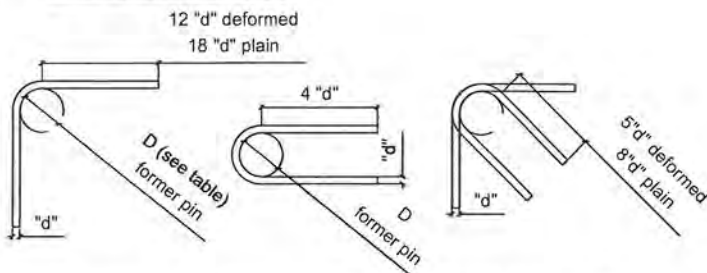
Note 1: Splice lap length shall be increased by 100% for plain round steel

Note 2: If more than 50% of beam bars are lapped at any one location, required lap lengths shall be increased by 30%

SPLICE LAP LENGTH FOR DEFORMED STEEL IN BLOCKWORK

Unless specified otherwise on the drawing, minimum splice lap lengths for deformed bars shall be: 40 bar diameters for grade 300 steel
60 bar diameters for grade 500 steel

Splice lap lengths shall be increased by 100% for plain steel

STANDARD HOOKS AND BENDS

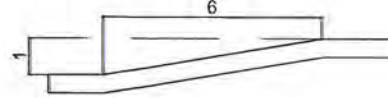
All dimensions are from outside to outside of bars except radii which are to inside of bar
"d" denotes diameter

MINIMUM DIAMETERS OF REINFORCEMENT BENDS

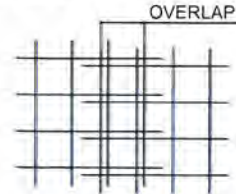
fy (MPa)	Bar Type	Bar Diameter d (mm)	Minimum diameter of bend (mm)	
			Plain bars	Deformed bars
300 or 500	Stirrups and ties	6-20	2d	4d
		25	3d	6d
	All other bars	6-20	5d	5d
		24-40	6d	6d

STANDARD BAR CRANKS

Where main bars are offset, ie for cranked laps, the slope of the inclined portion of the bar shall not exceed 1 in 6, thus:

LAPS TO REINFORCING STEEL MESH

Overlap measured between outermost cross wires of each fabric sheet is not less than the spacing of cross wires, plus 50mm, nor less than 150mm, except where shown otherwise on the drawing

REINFORCEMENT NOTATION

R = Grade 300E, plain
D = Grade 300E, deformed
HR = Grade 500E, plain
H = Grade 500E, deformed

e.g. D16-300
Denotes bar type Denotes bar diameter Denotes bar spacing

PROJECT CONTROL TESTING

Refer specifications

CHEMICAL ANCHORS

All chemical anchors are to be installed following manufacturers instructions and recommendations

CONCRETECOMPRESSIVE STRENGTH AND EXPOSURE

Element (in-situ)	Exposure Classification	28 day comp. strength MPa
Site Concrete	A2	10
Foundations	A2	20
Internal slab on grade	A1	20
External slab on grade	A2	20

MASONRY

All masonry blocks to be constructed in accordance with NZS4210

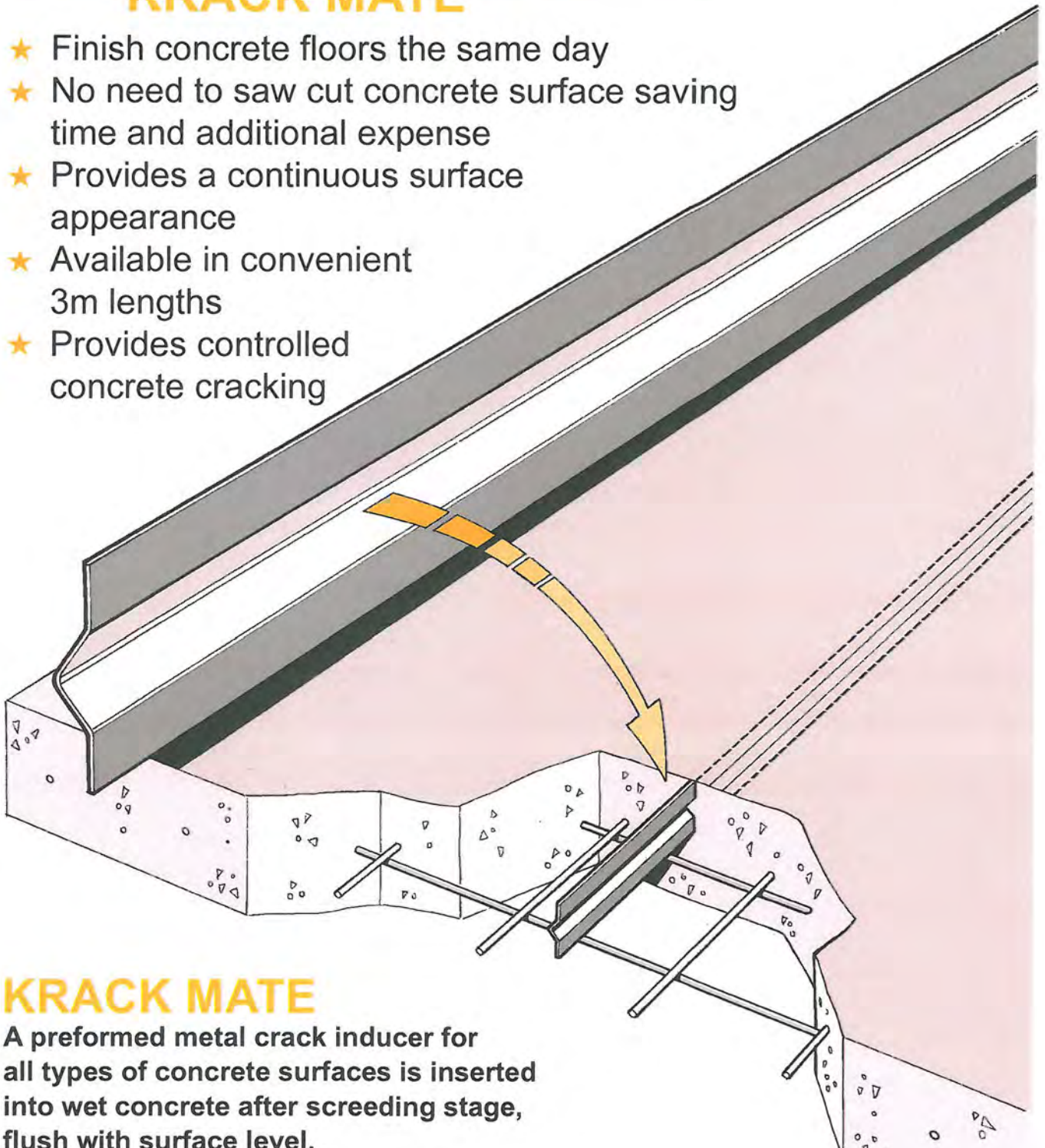
GOOD GROUND

All foundations are to be put on ground with an ultimate bearing capacity of 300 KPa unless otherwise specified

LUMBERLOK®

KRACK MATE

- ★ Finish concrete floors the same day
- ★ No need to saw cut concrete surface saving time and additional expense
- ★ Provides a continuous surface appearance
- ★ Available in convenient 3m lengths
- ★ Provides controlled concrete cracking



KRACK MATE

A preformed metal crack inducer for all types of concrete surfaces is inserted into wet concrete after screeding stage, flush with surface level.

**Available from leading Builders Supply Merchants
throughout New Zealand**

Krack Mate

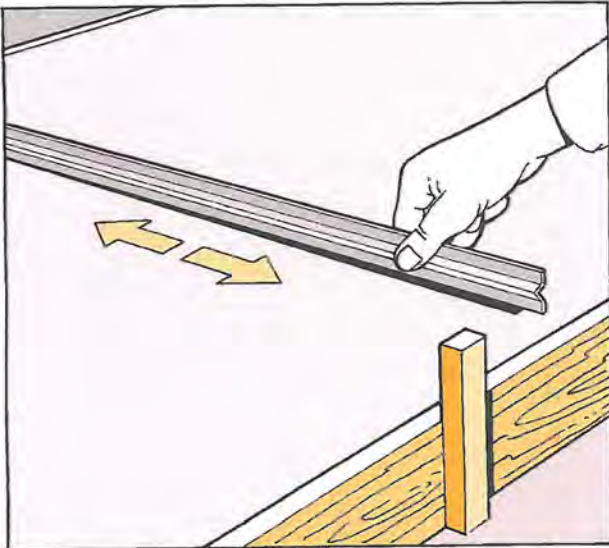
Available in 3.0m lengths which can be bent and snapped to the required length on site, to suit the width of concrete being laid.

Alternatively KRACK MATE lengths can be lapped against each other for continuous crack induced locations over greater areas.

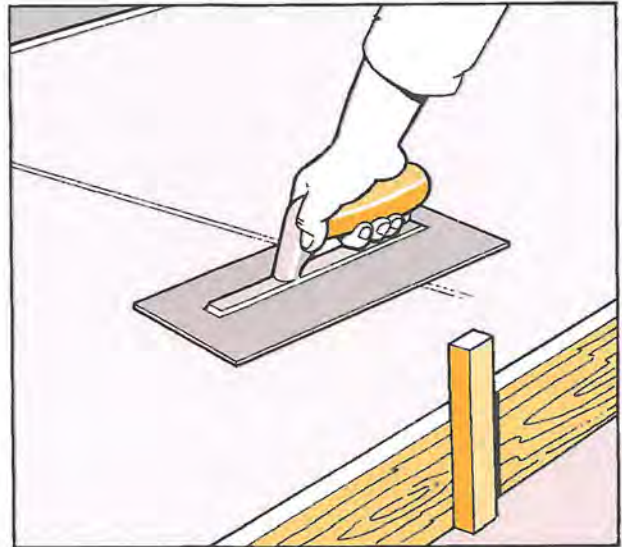
Installation

Once the concrete has been screeded and is still relatively wet, KRACK MATE can be installed at predetermined locations by placing the product vertically into the concrete surface.

With a series of gentle push/pull movements, the product will slowly immerse itself into the concrete just below, or at surface level.



Immersing KRACK MATE into screeded surface



Floating off for continuous surface finish

Advantages

- Designed for on-ground slabs and can be butted up to any given edge ie. columns, pilasters and kerbing.
- Allows the concrete to crack along the KRACK MATE whilst it cures.
- Profile makes KRACK MATE almost impossible to dislodge therefore surface can be floated as normal to obtain a flat continuous surface.
- KRACK MATE provides a positive alternative to existing methods and saw cut options.
- KRACK MATE insures no cutting of mesh enabling the continuity of mesh and and rebar to be utilised to their maximum strength.

Material

0.85mm G250 Z275 Galvanised Steel
36mm o/a width
Supplied in 3.0m lengths

GIB HandiBrac[®]

Panel Hold-Down Bracket

- For use in specified GIB Ezy Brace[®] systems
- Quick and easy to fit
- May be fitted at any stage before lining
- Framing face is clear to allow flush lining
- Easily inspected



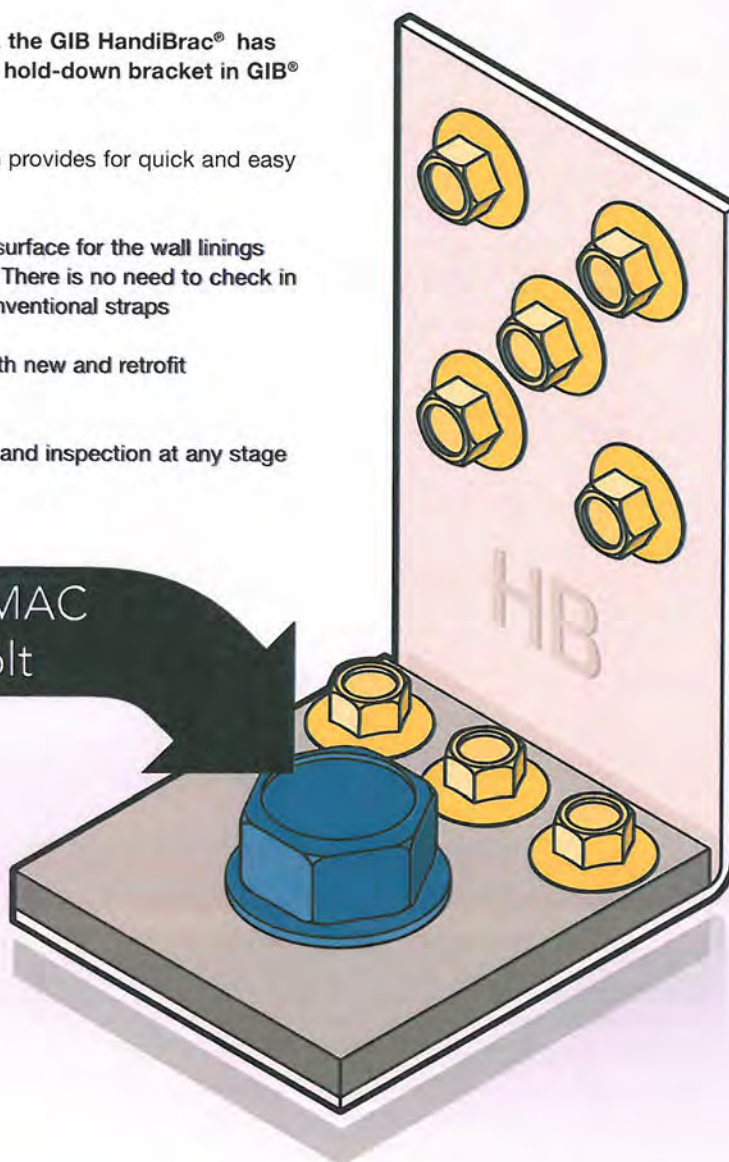
GIB HandiBrac®

Panel Hold-Down Bracket

Developed in conjunction with MiTek™, the GIB HandiBrac® has been designed and tested for use as a hold-down bracket in GIB® BL and UP bracing elements.

- The GIB HandiBrac® registered design provides for quick and easy installation
- The GIB HandiBrac® provides a flush surface for the wall linings because it is fitted inside the framing. There is no need to check in the framing as recommended with conventional straps
- The GIB HandiBrac® is suitable for both new and retrofit construction
- The design also allows for installation and inspection at any stage prior to fitting internal linings

Look for the BOWMAC
unique blue top bolt



Components

GIB HandiBrac® is available in boxes of 10, each containing 5 pairs.

Components per paired pack include:

- 2 x GIB HandiBrac® Brackets
- 2 x Washers
- 16 x Tek Screws
- 2 x BOWMAC screw bolts included within specific GIB HandiBrac® pack

Fixing to Timber Framed Floors

BOWMAC screw bolt or a 150mm by 12mm diameter galvanised coach screw (with a minimum characteristic uplift strength of 12kN).

Fixing to Concrete Slabs

BOWMAC screw bolt or an alternative proprietary fixing with a characteristic uplift strength of 15kN

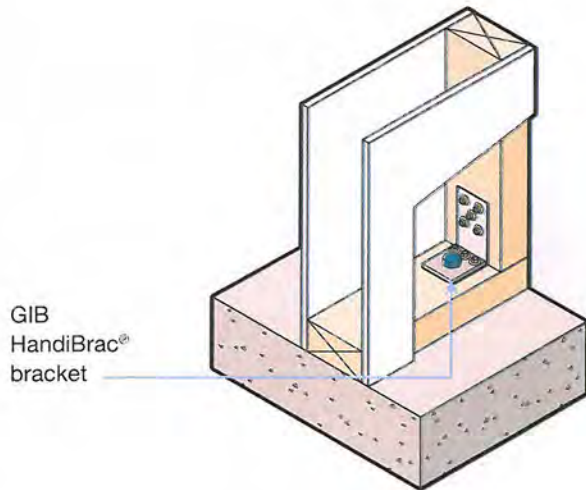
GIB® Bracing Elements

The GIB HandiBrac® is a proprietary product that has been tested and is suitable for use with specified GIB Ezy Brace® systems.

Panel Hold-down Details

Concrete Floor - Internal Wall

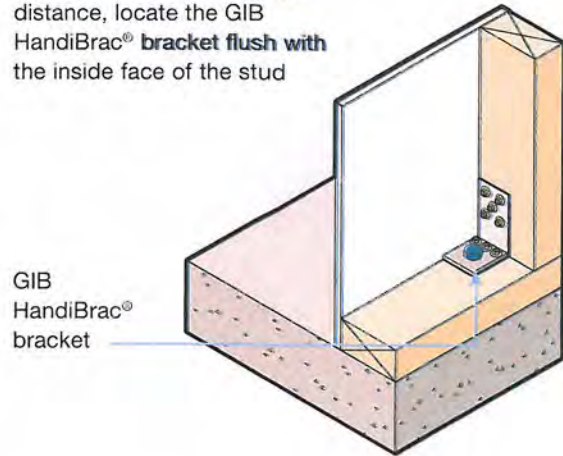
The bottom plate at both ends of the bracing element is fixed using a fastener with a proprietary fixing with a minimum characteristic uplift strength of 15 kN. If included in pack see overleaf instruction to install BOWMAC screw bolt.



Concrete Floor - External Wall

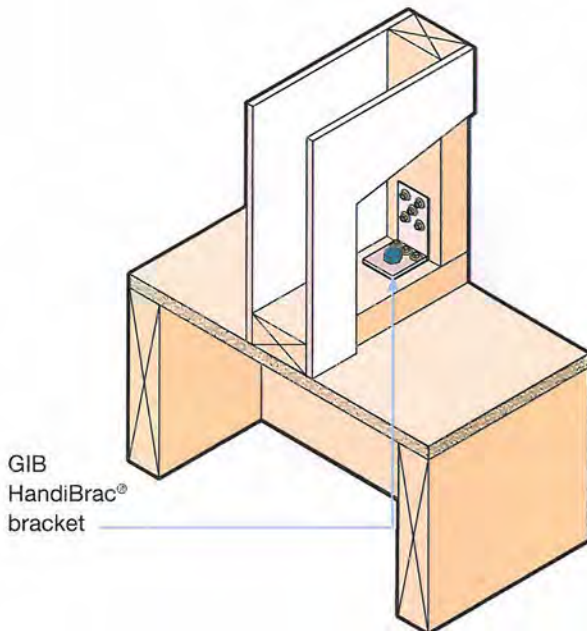
The bottom plate at both ends of the bracing element is fixed using a fastener with a proprietary fixing with a minimum characteristic uplift strength of 15 kN. If included in pack see overleaf instruction to install BOWMAC screw bolt.

To maximise concrete edge distance, locate the GIB HandiBrac® bracket flush with the inside face of the stud



Timber Floor - Internal Wall

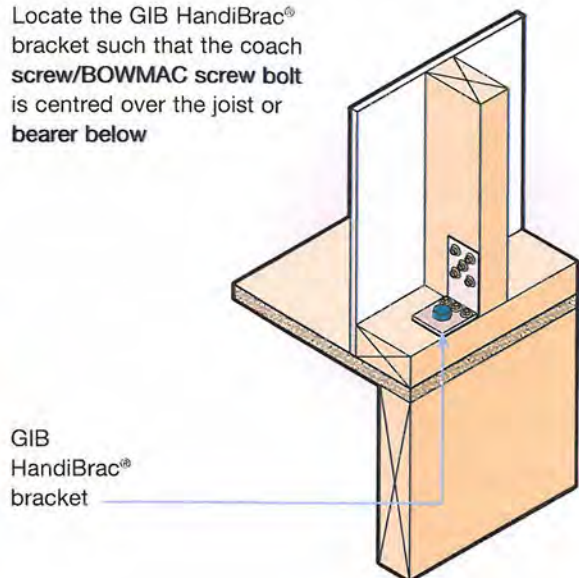
Bottom Plate is fixed using a BOWMAC screw bolt (if supplied) or a 150mm by 12mm diameter galvanised coach screw (with a minimum characteristic uplift strength of 12kN). For BOWMAC screw bolt installations see overleaf.



Timber Floor - External Wall

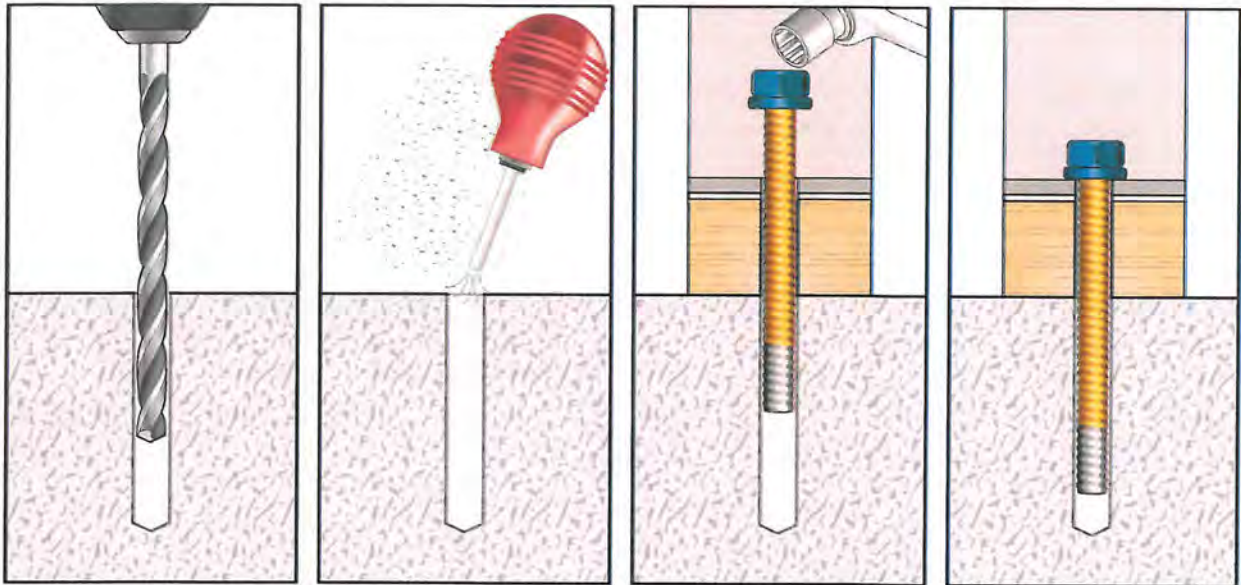
Bottom Plate is fixed using a BOWMAC screw bolt (if supplied) or a 150mm by 12mm diameter galvanised coach screw (with a characteristic uplift strength of 12kN). For BOWMAC screw bolt installations see overleaf.

Locate the GIB HandiBrac® bracket such that the coach screw/BOWMAC screw bolt is centred over the joist or bearer below



Installation of BOWMAC screw bolt

Suitable for use in timber or masonry base material



- Use a 10 mm diameter masonry bit for a solid concrete substrate and an 8 mm diameter bit for fixing to a timber sub-floor.
- Drill a hole into the base material to depth 8 mm deeper than the required embedment and clean out the hole of dust and debris prior to installation of BOWMAC screw bolt.
- Insert the bolt through the GIB HandiBrac® plate and bracket and into the hole.
- **Begin tightening the bolt by applying forward pressure when engaging the first thread.**
- Additional forward pressure may be required for installation in high strength, dense base materials.
- Continue tightening the anchor until the head is firmly seated against the GIB HandiBrac® plate.
- In extremely dense material, use of an impact wrench is recommended.
- Be sure the bolt is at the required embedment depth.
- The installation is now complete.

Installation Tips:

- Use quality hexagonal socket with a ratchet spanner
- During installation debris or dust created by the thread cutting action may cause some resistance to be experienced. This is easily overcome by unscrewing the BOWMAC screw bolt for one turn, or more and then continue to fix to the full embedment.

GIB HandiBrac® is manufactured and distributed by:

MiTek New Zealand Ltd

Auckland Office:

40 Neales Rd, East Tamaki, Manukau 2013, New Zealand
P O Box 58-014, Botany, Auckland 2163, New Zealand
Ph: 64-9-274 7109, Fax: 64-9-274 7100

Christchurch Office:

14 Pilkington Way, Wigram, Christchurch 8042, New Zealand
P O Box 8387, Riccarton, New Zealand
Ph: 64-3-348 8691, Fax: 64-3-348 0314
Internet Site: www.mitek.nz

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Distributor:

Winstone Wallboards Ltd

National Support:

37 Felix Street, Penrose, Auckland 1061, New Zealand
P O Box 12 256, Penrose 1642, Auckland, New Zealand
Ph: 64-9-633 0100, GIB® Helpline: 0800 100 442
Fax: 64-9-633 0101, Free Fax: 0800 229 222
Email: info@gib.co.nz, Site: www.gib.co.nz

The name GIB®, GIB HandiBrac® and the shield device are registered trademarks of Fletcher Building Holdings Limited.

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CRACKBOND JF311 POLYUREA JOINT FILLER

A two component, rapid curing Polyurea Joint Filler designed for heavy duty traffic and freezer applications. Use it to fill and repair joints, cracks and saw cuts. It is self levelling, with 100% solids and low viscosity. The cure is flexible and provides 10-15% movement of the installed joint width. Shavable in 45 minutes. For horizontal use only.



PROFESSIONAL REPAIRS FOR ANY BUILDING

- | | | | |
|--------------------------|------------------------|------------------------|---------------|
| ■ Apartments | ■ Commercial Buildings | ■ Prisons | ■ Hotels |
| ■ Housing Complexes | ■ Conference Centres | ■ Warehouses | ■ Raceways |
| ■ Hospitals | ■ Parking Garages | ■ Manufacturing Plants | ■ Stadiums |
| ■ Schools & Universities | ■ Retail Centres | ■ Precast Plants | ■ Theme Parks |

CRACKBOND JF311 REPAIR APPLICATIONS



Pool Deck/Patios Warehouse Floors Sidewalks/Driveways Freezer Floors

FILLING A THIN CRACK BETWEEN BRICK AND DECK

Problem: A thin crack had formed between pool tile and deck surface.

Solution: The crack was first filled with a fine grade dry sand. Crackbond JF311 was gravity fed into the crack using a needle nozzle system with a 9 oz. cartridge. More sand was added and then topped off with more Crackbond JF311 until the crack was filled and the desired appearance was obtained. Excess sand was removed after curing.



FILLING A CONTROL JOINT

Problem: An unfilled control joint accumulated debris and mold.

Solution: The unfilled joint was ground further using an angle grinder to help remove paint and accumulated debris. It was cleaned with a wire brush and blown out with compressed air (not shown). It was then filled with Crackbond JF311 and topped off with dry sand to give a textured look. After curing, the sand was removed.



Products Exclusively Distributed in New Zealand by:



ARDEX New Zealand Ltd Ph 0800 2 ARDEX www.ardex.co.nz

AUCKLAND Ph (09) 580 0005 Fax (09) 579 9963

WELLINGTON Ph (04) 568 5949 Fax (04) 568 6376

CHRISTCHURCH Ph (03) 373 6000 Fax (03) 384 0370



Crackbond JF311 Polyurea Joint Filler



1. Product Name

Crackbond JF311 Polyurea Heavy Duty Joint Filler

2. Manufacturer

Adhesives Technology Corp.
450 East Copans Road
Pompano Beach, FL 33064
(800) 892-1880
(954) 782-2221
Fax: (800) 362-3320
E-mail: info@atc.ws
Web Address: www.atc.ws

3. Product Description

GENERAL DESCRIPTION

Crackbond JF311 is a two component, rapid curing 1:1 ratio, Polyurea Joint Filler designed for heavy duty traffic and freezer applications. It is a self leveling, 100% solids, low viscosity, flexible system that provides 10-15% movement of installed joint width. **Crackbond JF311** can be used at temperatures between -40°F - 120°F.

Quick Selection Guide

Coverage (22 oz cart)	1/4" joint x 2" depth 6.7 feet
Gel-Time (72°)	3 min.
Cure Time (72°)	90 min.
Application Temperature Range	-40°F. - 120°F.

BASIC USE

Crackbond JF311 is used to fill interior control joints or new construction saw joints on horizontal concrete surfaces. **Crackbond JF311** is designed for industrial floor applications receiving heavy duty vehicle traffic. **Crackbond JF311** can be used in exterior applications, when minimal joint movement from thermal cycling will occur. With a very rapid cure time, repaired joints can be opened to traffic in 90 minutes (at 72°F).

LIMITATIONS: **Crackbond JF311** is not intended for joints that are subject to high movement. **Crackbond JF311** is a moisture sensitive product prior to full cure. Joints must be clean and dry to facilitate a strong bond.

COLOR

"A" Component (ISO): Amber

MIXED: Concrete Gray

"B" Component (Poly): Gray

SOLIDS: Weight: 100%

Volume: 100%

SHELF LIFE: 18 Months

STORAGE STABILITY: Product must be stored in unopened containers at 60°F - 90°F.

SIZE/PACKAGING

Cartridge Sizes: **Crackbond JF311** is available in:

- 9 oz. cartridges; part number: A9-JF311HN
- 22 oz. cartridges; part number: A22-JF311

The resin and hardener are uniformly dispensed from a dual cartridge system and mixed simultaneously through a mixing nozzle, providing installers with a self mix delivery system.

SYSTEM REQUIREMENTS:

System Size	9 oz.	22 oz.
Product:	A9-JF311HN	A22-JF311HN
Dispensers (air):	N/A	TA22HD
(manual):	TM9HD	TM22HD
Nozzle:	T12HGR	T12

Bulk Sizes: **Crackbond JF311** is also available in:

- 10 gallon kit; part number; B10GM-JF311

Due to rapid gel-time, bulk sizes only recommended for pump applications.

4. Technical Data

Technical Data		
Properties	ASTM	Results
Tensile Strength (psi)	D412	1,200 psi
Elongation	D412	82 %
Bond Strength (psi)	C882	400 psi
Shore A Hardness	D2240	75 - 80A
Adhesion to Concrete (psi)	D4541	275 psi
Abrasion Resistance		Excellent
Viscosity of Resin (ISO component)		600 cps at 77°F.
Viscosity of Hardener (POLY Component)		460 cps at 77°F.
Gel-Time / Cure Time		3 minutes (100 gram mass / 90 minutes)
Note: Higher temperatures and larger quantities will shorten the gel-time. Lower temperatures and smaller quantities will lengthen the gel-time.		





Crackbond JF311 Polyurea Joint Filler



Sample Specification – Joint filler material shall be a two component, 1:1 ratio, 100% solids polyurea system supplied in a two component side by side cartridge and dispensed through a static mixing nozzle supplied by the manufacturer. The polyurea material must have a tensile strength of 1,200 psi and an elongation of 82%, per ASTM D412. Cured adhesive shall have a Shore A hardness of 75 – 80A as per ASTM D2240. Adhesive shall be **Crackbond JF311** manufactured by Adhesives Technology Corp., Pompano Beach, Florida.

5. Installation

Job site preparation and work flow – to achieve the desired results, carefully follow these procedures!

- Make sure the joints are prepared in advance before starting a new cartridge. If at all possible, schedule dispensing to consume an entire cartridge at one time with no interruption of material flow.

SYSTEM REQUIREMENTS		
System Size	9 oz.	22 oz.
Product:	A9-JF311HN	A22-JF311N
Dispensers (air):	N/A	TA22HD
(manual):	TM9HD	TM22HD
Nozzle:	T12HGR	T12

Note, the T12 mixer nozzle is the correct mixer for this product.

The 9 oz cartridge is packaged with the T12 Mixer nozzle.

The 22 oz cartridge is packaged with the T12 Mixer nozzle.

Dual Cartridge Joint Filler Application Instructions – Joint Preparation and Cartridge Set up

JOINT PREPARATION:

Remove all dust, debris, oil and any other contamination from the construction and/or saw cut joints. For best results re-cut joints with a dry diamond blade. Joints must be clean and dry. Install material into joint so that material is slightly higher than the face of the concrete. Allow Crackbond JF311 to set for approximately 45 minutes (at 75° F.) then use a sharp 8" wall scraper to shave excess material from top of slab.

CARTRIDGE SET-UP:

While preparing cartridge for dispensing, keep cartridge in upright position to prevent material from leaking out of cartridge. Do not tilt cartridge until material is to be applied to the repair area.

IMPORTANT: During set-up of cartridge (purging air and equalizing) and initial dispensing of material, keep cartridge and nozzle assembly pointed straight up. **AFTER** purging/equalizing and initial shot of material, always keep cartridge and nozzle pointed downward to prevent material in nozzle from flowing back into cartridge.

I. Shake cartridge vigorously for 60 seconds, then stand cartridge upright for 5 minutes.

II. Insert cartridge into dispenser. Make sure it is properly positioned with shoulder of cartridge flush with front/top bracket of the dispenser. Remove plastic cap from the top of the cartridge. **IMPORTANT!** Before attaching nozzle, dispense a small amount of material into a disposable container until both materials flow evenly from cartridge. Place nozzle onto cartridge and secure by threading in a clock-wise direction. Make sure that the nozzle and cartridge assembly is secure.



III. Point nozzle straight up and slowly apply pressure to dispenser, moving product up through the nozzle until it reaches the tip, then dispense 1 stroke of material into a rag (1-2 quick bursts if using an air tool). After purging and balancing always point cartridge downward when not dispensing to prevent mixed material in the nozzle from flowing back into the cartridge.



Repairing Small Joints and/or Cracks in Concrete

IV. Place the mixing nozzle directly over the crack, joint or repair area. Dispense material using full smooth trigger pulls (no short choppy strokes) and allow material to gravity feed into the crack/joint. Over-fill the crack/joint so that material is slightly higher than the face of the concrete slab you are repairing.

V. Allow the Crackbond JF311 to set for approximately 45 minutes (at 75° F.) then use a sharp 8" wall scraper to shave excess material from top of slab.

VI. Allow material to fully cure before subjecting repaired area to any type of traffic.



Distributed by ARDEX New Zealand Ltd



Crackbond JF311 Polyurea Joint Filler



CRACKBOND JF311 CHEMICAL RESISTANCE CHART

Chemical (Reagent)	Recommended For Continuous Service	Limited Recommendation (Occasional Spills)
Acetic Acid (10%)	X	
Acetone		X
Bleach		X
Bleach (10%)	X	
Citric Acid (5%)	X	
Crude Oil	X	
Motor Oil		X
Gasoline		X
Diesel Fuel	X	
Skydrol		X
Hydraulic Oil	X	
Ethylene Glycol		X
Fatty Acids	X	
Water (Room Temperature)	X	
NaCl (10%)	X	
Hydrochloric Acid (10%)	X	
Lactic Acid (5%)	X	
Methyl Ethyl Ketone		X
Nitric Acid (1%)	X	
Phosphoric Acid (10%)	X	
Sodium Hydroxide (20%)	X	
Sulfuric Acid (20%)	X	
Toluene		X
Urea (50%)	X	
Vinegar	X	
Xylene		X

This chart is intended as an aid in evaluating the performance of the JF311 in various chemical exposures at 75°F. The data is intended as a guide only. In severe or combination exposures, a sample should be tested under actual or simulated use conditions to determine suitability.



Distributed by ARDEX New Zealand Ltd



Crackbond JF311 Polyurea Joint Filler



COVERAGE CHART 9 oz. – 22 oz. – 128 oz (Gallon)

**Bulk packaging should be
mixed/dispensed from a metering
pump**

Joint Size	Lineal Feet/Gallon	Lineal Feet per 9 oz Cartridge	Lineal Feet per 22 oz cartridge
1/8" x 1"	154.0	10.3	26.7
1/8" x 1-1/4"	123.2	8.3	21.3
1/8" x 1-1/2"	102.7	6.9	17.8
1/8" x 1-3/4"	88.0	5.9	15.2
1/8" x 2"	77.0	5.2	13.3
3/16" x 3/4"	136.9	9.2	23.7
3/16" x 1"	102.7	6.9	17.8
3/16" x 1-1/4"	82.1	5.5	14.2
3/16" x 1-1/2"	68.4	4.6	11.9
3/16" x 1-3/4"	58.7	3.9	10.2
3/16" x 2"	51.3	3.4	8.9
1/4" x 1"	77.0	5.2	13.3
1/4" x 1-1/4"	61.6	4.1	10.7
1/4" x 1-1/2"	51.3	3.4	8.9
1/4" x 1-3/4"	44.0	3.0	7.6
1/4" x 2"	38.5	2.6	6.7
1/2" x 1"	38.5	2.6	6.7
1/2" x 1-1/4"	30.8	2.1	5.3
1/2" x 1-1/2"	25.7	1.7	4.4
1/2" x 1-3/4"	22.0	1.5	3.8
1/2" x 2"	19.3	1.3	3.3

BUILDING CODES

Installation of Crackbond products must comply with applicable local, state and national code requirements.

SITE CONDITIONS

Material shall be delivered in original unopened containers and stored in a dry environment at a temperature between 60° and 90°F.

PRECAUTIONS

- Wear safety glasses
- Avoid prolonged contact with skin.
- Keep out of reach of children
- Do not take internally
- If Ingested seek medical attention immediately.
- Eye contact. Flush with water for at least 15 minutes. Call a physician immediately.

6. Availability and Cost

AVAILABILITY

Crackbond products are available through select distributors who can provide you with all of your construction needs. Please contact Adhesives Technology Corp. at (800) 892-1880 for a distributor near you.

COST

Cost information is available from your local distributor.

7. Warranty

All warranties of the product listed herein, in the corresponding ATC catalog, and in any other current literature, expressed or implied, including warranties of merchantability and fitness for a particular purpose are specifically and expressly excluded, with the following exception: At its sole discretion, ATC will repair or replace any product which it considers to be defective in material or workmanship, excepting normal wear and tear within sixty (60) days from the date of purchase from ATC. ATC shall not be liable for any injury, loss or damage, direct, indirect, incidental or consequential or arising out of use of, misuse of, negligence, accident or inability to use any ATC product.

8. Technical Services

For technical support contact Adhesives Technology Corp. at (800) 892-1880.

9. Maintenance

None required.

10. Filing System

Additional product information and specifications are available either on line at www.atc.ws or contact Adhesives Technology at (800) 892-1880 to get copies mailed to you.

Actual user performance and data may differ due to variations of base material, installation procedures and personnel, weather conditions and other factors. Adhesives Technology Corp. reserves the right to change specifications or information printed in this Tech Data Sheet without notice or liability for these changes. Adhesives Technology Corp. will not be liable for any claim based on the use of data or other information printed in this Tech Data Sheet.



Distributed by ARDEX New Zealand Ltd

Specification



Date 18th July 2014

Claim Number CLM/2011/123837

Address 1/126 Halswell Junction Road

Engineer Stephanie Regan

Hub Colombo

Crack Repair in Foundations and Walls

Definitions

Surface penetration: Where cosmetic repair is required. Some hairline cracking may occur in future.

Partial penetration: Where it is not necessary to reinstate the full structural strength of the concrete but more than a surface repair is required to either protect the durability of reinforcement or where there is some strength requirement for the connection.

Full Penetration: Where it is desirable to reinstate the full strength of the concrete at the location of the crack.

Summary of Required Repairs Based on Crack Width

Category	Vertical faces i.e. -perimeter foundation walls			
	Crack width			
	<0.3mm	0.3-3.5mm	3.5-5mm	5-10mm
Surface Penetration	No repair required	Type VA	Type VA	N/A
Partial Penetration	No Repair required	Type VB	Type VC	N/A
Full Penetration	Type VD	Type VD	Specific design	Specific Repair Required or Partial Foundation Replacement

Specification



Procedure

For all repair types it is first recommended that a small trial section is conducted using the suggested technique. The most common problem likely to be encountered is unreasonable volumes of the repair product being used due to the porous nature of the element being repaired. Clearly a very strong crack repair in poor concrete is often unnecessary. In this case a revised repair technique will need to be developed.

Type VA

Product: **Sika Anchorfix 3, MCDur Kleber EP34**

- Used for – surface penetration repairs of vertical surfaces for cracks 0.3mm to 5mm
- This repair assumes that access to the crack is from one side only.
- Minimum penetration of the repair product shall be 15% of the depth of the structural member or 30mm whichever is greater.
- Grind out crack to a depth of approximately 30mm to allow penetration of repair product.
- Clean crack by vigorous brushing or with high pressure water. If water used allow to dry.
- Fill crack with a 2 part epoxy anchoring adhesive and finish surface to match existing.
- All products shall be used in accordance with the manufacturer specification.
- Where specified, paint over crack repair to match existing.

Type VB

Product: **Sika Injectokit-TH**

- Used for – partial penetration repairs of vertical surfaces for cracks 0.3mm to 3.5mm
- This repair assumes that access to the crack is one side only.
- Minimum penetration of the repair product shall be at least 50% of the depth of the structural member.
- Drill 6mm holes along the length of the crack at 100mm centres. Holes to be 30% of the depth of the structural member.
- Clean holes and crack with high pressure water. Allow to dry.
- Surface fix injection ports at each 6mm hole position using manufactures recommended product. Surface seal crack between injection ports.
- Inject thixotropic epoxy into lowest injection port until epoxy is seen coming out of adjacent port. Cap port and move to next injection point. Continue until all ports have been used.
- All epoxy and port injection adhesive must be from the same manufacturer. All products shall be used in accordance with the manufacturer specification.
- When products have cured, remove injection ports and surface sealer and make good surface.
- Where specified paint over crack to match existing.

Specification



Type VC

- Used for – partial penetration repairs of vertical surfaces for cracks 3.5mm to 5mm
- Minimum penetration of the repair product shall be at least 50% of the depth of the structural member.

Access from one side

Product: **Sika AchorFix 3+, MCDur Kleber EP34**

- Grind out crack to a depth of 30% of the member to allow access for nozzle of product application gun.
- Clean crack.
- Apply epoxy anchoring adhesive worked into crack.
- All products shall be used in accordance with the manufacturer instructions.
- Finish surface to match existing.
- Paint over if required.

Access from both sides of the crack.

Epoxy Resin: **Sika Injectokit-LV, MCDur 1264FF, Ramset Chemset crack repair epoxy, BASF Concresive 2530, Fosroc Nitrofill LV**

Repair Mortar: **Sikadur UA, MCDur Kleber EP34**

- On one face drill 6mm holes along the length of the crack at 100mm centres. Holes to be 30% of the depth of the structural member.
- Clean holes and crack with high pressure water. Allow to dry.
- Surface fix injection ports at each 6mm hole position using manufactures recommended product. Surface seal crack between injection ports.
- Seal far side of crack with non-slump epoxy resin repair mortar listed above.
- Inject low viscosity epoxy resin into lowest injection port until epoxy is seen coming out of adjacent port. Cap port and move to next injection point. Continue until all ports have been used.
- All epoxy and port injection adhesive must be from the same manufacturer. All products shall be used in accordance with the manufacturer specifications.
- When products have cured, remove injection ports and surface sealer and make good surface.
- Where specified paint over crack to match existing.

Specification



Type VD

Epoxy Resin: Sika Injectokit-LV, MCDur 1264FF, Ramset Chemset crack repair epoxy, BASF Concreseive 2530, Fosroc Nitrofill LV

Repair Mortar: Sikadur UA, MCDur Kleber EP34

- Used for full penetration repairs of vertical surfaces for cracks up to 3.5mm width
- Access from both sides is required.
- Minimum penetration of the repair product shall be at least 90% of the depth of the structural member.
- On one face drill 6mm holes along the length of the crack at 100mm centres. Holes to be 30% of the depth of the structural member.
- Clean holes and crack with high pressure water. Allow to dry.
- Surface fix injection ports at each 6mm hole position using manufactures recommended product. Surface seal crack between injection ports.
- Seal far side of crack with non-slump epoxy resin repair mortar listed above.
- Inject low viscosity epoxy resin into lowest injection port until epoxy is seen coming out of adjacent port. Cap port and move to next injection point. Continue until all ports have been used.
- All epoxy and port injection adhesive must be from the same manufacturer. All products shall be used in accordance with the manufacturer specification.
- When products have cured, remove injection ports and surface sealer and make good surface.
- Where specified paint over crack to match existing.

Data

Property name	1-126 Halswell Junction Road, Addington
Claim number	2011/123837
Date	09 Jul 2014
Investigated by	J. O'Brien & H. Luke



Input borehole >>

1

(Reference level top of hole 0 m, water table at 2 m)

Input scale >>

1

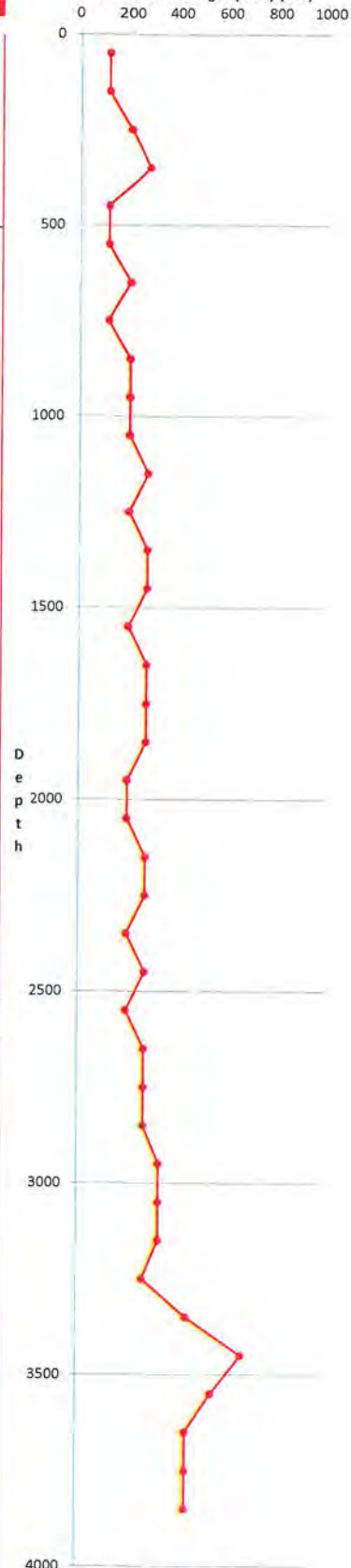
Input boreholes

Borehole 1

Depth	Description	Graphic log
0		
50	TOPSOIL, minor sand, trace gravel, dark brown, soft, moist. Sand is fine, gravels are fine and subrounded	
100		
150		
200		
250		
300		
350		
400		
450	SILT, minor sand, dark brown, soft, moist, non plastic, quick dilatancy. Sand is fine	XXXXXXXXXX
500		
550	Fine SAND, minor silt, light brown, loose, wet, poorly graded
600	
650	
700	
750	
800		
850	Sandy SILT, greyish brown mottled orange, soft, wet, non plastic, quick dilatancy. Sand is fine	XXXXXX
900		XXXXXX
950		XXXXXX
1000		XXXXXX
1050		XXXXXX
1100		XXXXXX
1150		XXXXXX
1200		
1250	Sandy SILT, greyish brown mottled orange, soft, wet, low plasticity, quick dilatancy. Sand is fine	XXXXXX
1300		XXXXXX
1350		XXXXXX
1400		XXXXXX
1450		XXXXXX
1500		
1550	Sandy SILT, greyish brown mottled orange, soft, wet, non plastic, quick dilatancy. Sand is fine	XXXXXX
1600		XXXXXX
1650		XXXXXX
1700		XXXXXX
1750		XXXXXX
1800		XXXXXX
1850		XXXXXX
1900		XXXXXX
1950		XXXXXX
2000		
2050	Sandy SILT, greyish brown mottled orange, soft, saturated, non plastic, quick dilatancy. Sand is fine	XXXXXX
2100		XXXXXX
2150		XXXXXX
2200		XXXXXX
2250		XXXXXX
2300		XXXXXX
2350		XXXXXX
2400		
2450	SILT, minor sand, grey mottled orange, soft, saturated, low plasticity, quick dilatancy. Sand is fine	XXXXXXXXXX
2500		XXXXXXXXXX
2550	SILT, some sand, grey mottled orange, soft, saturated, low plasticity, quick dilatancy. Sand is fine	XXXXXXXXXX
2600		
2650	Auger discontinued, collapse	
2700		
2750		
2800		
2850		
2900		
2950		
3000		
3050		
3100		
3150		
3200		
3250		
3300		
3350		
3400		
3450		
3500		
3550		
3600		
3650		
3700		
3750		
3800		
3850		
3900		
4000		

UBC for Scale 1

Ultimate Bearing Capacity (kPa)



Data

Property name	1-126 Halswell Junction Road, Addington
Claim number	2011/123837
Date	09 Jul 2014
Investigated by	J. O'Brien & H. Luke



Input borehole >>

2

(Reference level top of hole 0 m, water table at 1.6 m)

Input scale >>

2

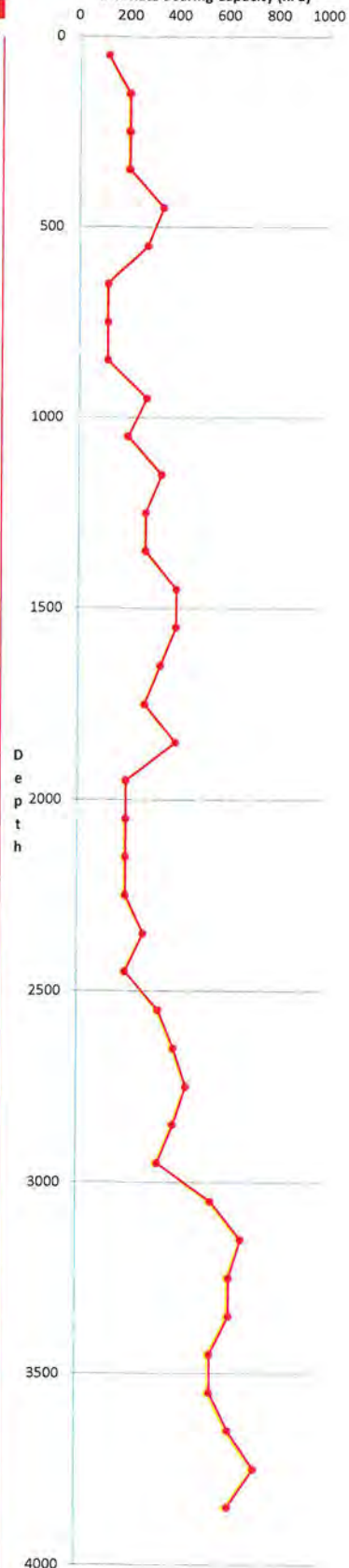
Input boreholes

Borehole 2

Depth	Description	Graphic log
0		
50	Silty TOPSOIL, trace sand and gravel, dark brown, soft, moist. Sand is fine to medium, gravels are fine to medium and angular	XXXXXX
100		XXXXXX
150		XXXXXX
200		XXXXXX
250		XXXXXX
300		XXXXXX
350	SILT, trace sand and gravel, brown, soft, moist, non plastic, quick dilatancy. Sand is fine to medium, gravels are fine to medium and subrounded	XXXXXXXXXX
400		XXXXXXXXXX
450		XXXXXXXXXX
500		XXXXXXXXXX
550	SILT, minor sand, brown, soft, moist, non plastic, quick dilatancy. Sand is fine to medium	XXXXXXXXXX
600		XXXXXXXXXX
650		XXXXXXXXXX
700		XXXXXXXXXX
750	SILT, minor sand, dark brown, soft, moist, non plastic, quick dilatancy. Sand is fine to medium	XXXXXXXXXX
800		XXXXXXXXXX
850		XXXXXXXXXX
900		XXXXXXXXXX
950	SILT, minor sand, greyish brown mottled orange, soft, moist, non plastic, quick dilatancy. Sand is fine to	XXXXXXXXXX
1000		XXXXXXXXXX
1050		XXXXXXXXXX
1100		XXXXXXXXXX
1150	Sandy SILT, greyish brown mottled orange, soft, wet, non plastic, quick dilatancy. Sand is fine to medium	XXXXXXXXXX
1200		XXXXXXXXXX
1250		XXXXXXXXXX
1300		XXXXXXXXXX
1350		XXXXXXXXXX
1400		XXXXXXXXXX
1450		XXXXXXXXXX
1500		XXXXXXXXXX
1550	Fine to medium SAND, trace silt, grey mottled orange, medium dense, saturated, poorly graded	XXXXXXXXXX
1600		XXXXXXXXXX
1650		XXXXXXXXXX
1700		XXXXXXXXXX
1750		XXXXXXXXXX
1800		XXXXXXXXXX
1850		XXXXXXXXXX
1900		XXXXXXXXXX
1950		XXXXXXXXXX
2000		XXXXXXXXXX
2050		XXXXXXXXXX
2100		XXXXXXXXXX
2150		XXXXXXXXXX
2200		XXXXXXXXXX
2250	Auger discontinued, collapse	
2300		
2350		
2400		
2450		
2500		
2550		
2600		
2650		
2700		
2750		
2800		
2850		
2900		
2950		
3000		
3050		
3100		
3150		
3200		
3250		
3300		
3350		
3400		
3450		
3500		
3550		
3600		
3650		
3700		
3750		
3800		
3850		
3900		
4000		

UBC for Scale 2

Ultimate Bearing Capacity (kPa)



File Note - Geotechnical



Date 10th July 2014

Claim Number

CLM/2011/123837

Address 1-126 Halswell Junction Road, Halswell

Geotechnical Technician J. O'Brien

Hub Colombo

Geotechnical Report

Purpose

At the request of the allocated Structural Engineer (S. Regan) a geotechnical investigation has been carried out to determine the surrounding soil bearing capacity and classification.

Site description

The dwelling is located in Technical Category 3 (blue) area on flat ground.

Investigation

The investigation consisted of two combined hand auger and Scala penetrometer tests. Borehole one reached a depth of 2.6m below ground level (BGL) and borehole two reached 2.2m BGL. Scala penetrometer one and two both reached target depth of 3.9m BGL.

Results

Borehole one is located near the south corner of the dwelling. The soil profile consists predominantly of inter bedded layers of silt and sand to a depth of 2.6m BGL. The hand auger was discontinued at 2.6m BGL due to collapse. The water table is located at 2.0m BGL. The ultimate bearing capacity inferred from the Scala penetrometer reaches 200kPa at 0.9m BGL, and then reaches 300kPa at 3.3m BGL where it remains consistently above 300kPa until target depth is reached.

Borehole two is located near the northern corner of the dwelling. The soil profile consists predominantly of silt to a depth of 1.5m BGL, sand is then present from 1.5m to 2.2m BGL. The hand auger was discontinued at 2.2m BGL due to collapse. The water table is located at 1.6m BGL. The ultimate bearing capacity inferred from the Scala penetrometer reaches 200kPa at 0.9m BGL, and then reaches 300kPa at 2.6m BGL where it remains consistently above 300kPa until target is reached.

Geotechnical investigation results in tandem with this report.

Notes:

No interpretation of the findings has been made other than to determine indicative bearing capacity based on the Scala penetrometer tests.

Field Descriptions of Soils and Rocks by NZ Geotechnical Society Dec 2005

NZS 4402 Test 6.5.2:1988 Determination of the Penetration Resistance of a Soil

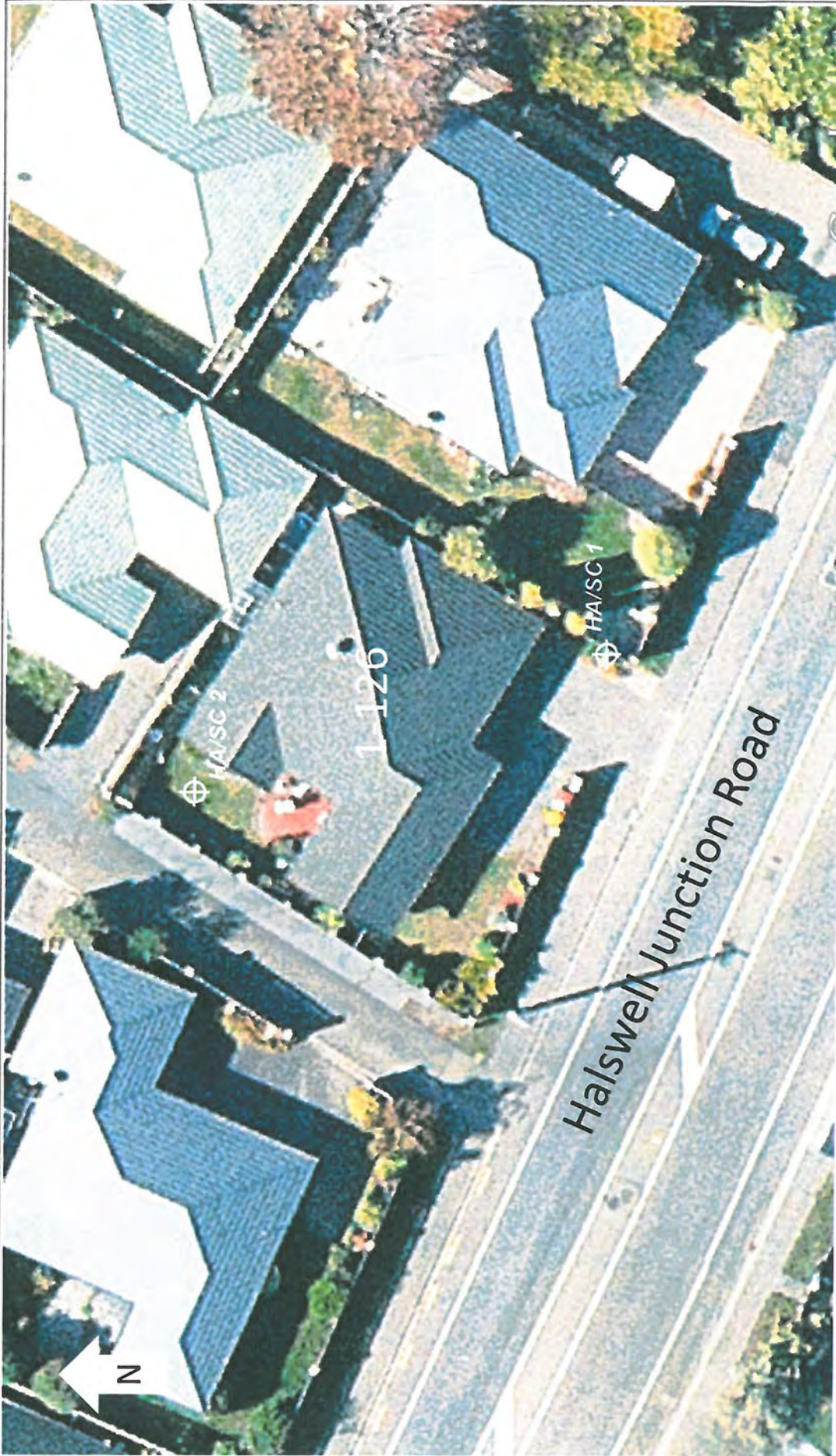
Indicative Bearing Capacity is based on MJ Stockwell's "Determination of Allowable Bearing Capacity Under Small Structures" and converting to Ultimate Bearing Capacity

Reviewed by

J. O'Brien

Geotechnical Technician

Senior EQR Engineer



Address: 1-126 Halswell Junction Road, Halswell
Undertaken by: J. O'Brien & H. Luke

Technical Office,
111 Deans Avenue, Riccarton
PO Box 80 105, Riccarton
Christchurch 8440, New Zealand

Fletcher.
Earthquake Recovery

EXEMPT BUILDING WORK FILE RECORD



THIS IS A RECORD OF THE DECISION TO COMPLETE EARTHQUAKE REPAIRS WITHOUT BUILDING CONSENT AS THE WORKS DESCRIBED HAVE BEEN DETERMINED AS EXEMPT FROM THE NEED FOR BUILDING CONSENT.

Claim Number 2011/123837

Street Address 1/126 Halswell Junction Road

Suburb Halswell

City/Town Christchurch

A brief description of the work is as follows (and as otherwise described within the body of the claim file)

Work to be carried out is demolishing and replacing two sections of the concrete floor slab totalling 45m² (approx. 33%). Minor crack repairs to the foundation are to be carried out in two other areas of the dwelling.

From the Building Act 2004 where any lawful repair and maintenance using comparable materials, or replacement with a comparable component or assembly in the same position, of any component or assembly incorporated or associated with a building is exempt building works under schedule 1 Part 1 (1) as the works described above to does not constitute the complete or substantial replacement of any component or assembly contributing to the buildings structural behaviour.

Accordingly I have determined that this work is exempted under Schedule 1 Part 1 (1) of the Building Act 2004

This assessment and record was completed by myself as an authorised agent of The Fletcher Construction Company Limited, acting under the delegated authority of the company to determine exempted work on behalf of the owner.

Name Stephanie Regan **Signature**.....*Stephanie Regan*.....

Position⁷ Intermediate Engineer **Hub** Colombo **Date** *18/7/14*

Provided to homeowner/agent Name)..... **Date**.....
(provided to the property owner or his/her authorised agent on request only).

Note¹ The homeowners/agents authority to apply Exemption status is given in the Building Act 2004, Schedule 1, this exemption information is augmented by supplementary guidance issued by The Department of Building & Housing and by the relevant Councils (i.e. - CCC Form B390).

Note² Only work prescribed within Schedule 1(a- j) and (m & n) of the Building Act 2004 is recorded on this form.

Note³ Work Exempted under Schedule 1(k) of the Building Act 2004 is not to be recorded on this form. Claimants should refer to the formal "Exemption from building consent" records of the relevant City or District Council. (viewing EQR Aconex File Recording System may assist).

Note⁴ For background information refer to 'Your guide to the repair process (with Fletcher EQR)' the home owners information bulletin provided by EQR staff, usually the Community Liaison Officer, just prior to or at the time of the scoping of the works.

Note⁵ This record applies to earthquake damaged residential buildings in the Canterbury Region following earthquake events of 2010/2011.

Note⁶ Building remediation work for the majority of Fletcher EQR projects is completed by Licensed Building Practitioners (LBP's)

Note⁷ This record will usually be completed by the Works Supervisor, but may be completed by his/her immediate (Hub) Works Manager.

Note⁸ This record is held in the Fletcher EQR Aconex File Recording System (an online information management system).

CASH SETTLED CLAIM(S)

The following information contains documents relating to claim(s) that were cash settled for the property.

If you require sign off or repair completion documents, they may be obtainable from the contractors who completed the substantive repairs at the property.

ENTERED

Statement of Claim Checklist

Date: 15-10-10

Author: GEOFF JENKINS

Claim No.: 2010/013897

Claimant: B. M'GLINCHAY

Situation of Loss: 1/126 Halswell Junction
RD HALSWELL

LA: GEOFF JENKINS

Estimator: MIKE WATY


Room	Damage	Walls	Ceiling	Floor	Description of Damage
	Y/N	✓	✓	✓	
Lounge	Y	✓	✓		GYPROCK CRACKING AT CORNERS OF ALL WINDOWS CRACK IN CEILING IN PLASTER AT DINING ROOM
Dining Room	Y	✓		✓	SLIDING DOOR OUT OF PLUMB & DOOR JAMB CRACKED AT WALL - FLOOR IS CRACKED - CRACKS
Kitchen	Y	✓			SPLASH BACK CRACK AT WALL - DOOR TO HALLWAY STICKS & GYPROCK CRACKS ABOVE DOOR
Family Room	N/A				
Bedroom 1	Y	✓			DOOR JAMBS - GYPROCK CRACKS AT WINDOW CORNERS -
En Suite	N/A				
Bedroom 2	Y	✓			GYPROCK CRACKS ABOVE WINDOWS/DOORS WIPER DOORS JAMMED - SQUARE STOP CRACK
Bedroom 3	N				
Bedroom 4	N/A				
Bathroom	Y	✓			TILES BATH CRACKED AWAY FROM TILES WALL & MORTAR CRACK - VANITY SAME-DOOR JAMB
Toilet 1	N				
Garage Toilet 2	Y	✓			DOOR STICKS - (DOUBLE GARAGE DOOR)
Office/Study	N/A				
Rumpus	N/A				
Entry/Hall(s)	Y	✓		✓	GYPROCK CRACKS ABOVE ALL DOORS - TILES CRACKED & WALL CRACKED - SLAB CRACKED + HILARIOUS CRACKING AND 10MM CRACK IN SLAB OUT OF LEVEL
Stairwell	N/A				
Laundry	Y	✓		✓	GYPROCK CRACK ABOVE DOOR (INT) CRACK THROUGH FLOOR SLAB
Other					

ENTERED

Item		Event Damage	Description of Damage	Appoint Engineer
		Y/N	Y/N	
Roof		N		
External Walls	North	N		
	South	Y	MORTAR CRACKING AT CORNER - GARAGE DOOR JAMB CRACKING AT WALL -	
	East	Y	CRACKED MORTAR AT N/E CORNER -	
	West	Y	MORTAR & BRICK CRACKING AT DOORWAY BOTTOM ROW OF BRICKS MOVING ON FOUNDATION	
Decks ^{CONCRETE}		Y	WEST SIDE CONCRETE PORCH CRACKED & CRACK ALONG WALL	
Chimney	Base	}		
	Ceiling Cavity			
	Above Roof			
	Fireplace			
Foundations		Y	PLASTER CRACKING OF FOUNDATION N/W CORNER	
Piling		N/A		
Services		N		
Other Dwelling Items		N		
Outbuildings		N		
Land & Retaining Walls		Y	NO OF SAND BOLS, LIQUIDIZATION & MOVEMENT HAD CAUSED DRIVEWAYS, PATHS & OUTSIDE CONCRETE AREAS TO LIFT/SINK & CRACK & SPLIT.	
(Discuss with Supervisor)				

I confirm the rooms and areas listed above have been inspected by an EQC representative.

Damage caused by the event has been noted and to my knowledge there are no other areas of damage resulting from the event.

Signature of Claimant: 

Dated: 15/10/10

Completed By: *Michael Way*

Date: *15-10-10*

Page 1 of 4

Claimant Name: Barry Mc Glinchey
1/126 Halswell Junction Rd
Halswell

Land	✓	Building	✓	Bridges/culverts	NA	Retaining walls	NA	Other	NA
Lounge	✓	Dining	✓	Kitchen	✓	Family Room	NA	Bedroom	3
Office/Study	NA	Rumpus	NA	Hallway	✓	Stairwell	NA	Toilet	✓
Laundry	✓	Bathroom	✓	Ensuite	NA	Chimney	NA	Foundations	
Piling	NA	Services		Kitchen Ovens		Hot Water Cylinders		Header Tanks	✓
Clazing/windows		Fireplace/woodburner	NA	Floor	✓	External Walls	✓	Roof	
Outbuildings	NA	Other							

REPAIR STRATEGY: Repair damaged areas.

DESCRIPTION:	Units	Length	Breadth	Depth	Qty.	Rate	Cost
* <u>Cracked Floor Slab</u> To- Entry- Hall- Laundry & Dining Room Approx 20m Lift floor Tiles - Lift Carpet, Laundry Tub - Fill Crack with Epoxy - Re lay Carpet - New Floor tiles to Entry/Hall	Approx	20m					
* <u>Lounge</u> Remove texture from ceiling Re Stop Crack to ceiling- Re texture and Repaint <u>WALLS</u> Re Stop Minor Cracking to Window heads - Repaint	m ²	5.00	3.80				
* <u>Dining</u> - Floor Crack as above. - Re stop minor Wall cracks, and Repaint - <u>Ceiling</u> - Part of Lounge- Remove texture - Retexture & Repaint - <u>Door</u> Ease and adjust door							

Each, Sheet, Kilogram, Linear metre, Square metre, Cubic metre, Per Hour, Per Day, Per Week. Cubic metre calculations must include length, breadth and depth figures. Square metre calculations must include length and breadth figures.

TOTAL

Scope of Works

Completed By: *Michael Way*Date: *15-10-10*Page *2* of *4*

CLM 2010 / 013 897

Claimant Name: *Barry Mc Glinchey*
1/126 Halswell Junction Rd
Halswell

Element Details:

Land	Building	Bridges/culverts	Retaining walls	Other
Lounge	Dining	Kitchen	Family Room	Bedroom <i>1, 2</i>
Office/Study	Rumpus	Hallway	Stairwell	Inlet
Laundry	Bathroom	Ensuite	Chimney	Foundations
Piling	Services	Kitchen Ovens	Hot Water Cylinders	Header Tanks
Glazing/windows	Fireplace/woodburner	Floor	External Walls	Roof
Outbuildings	Other			

DESCRIPTION:

REPAIR STRATEGY:

LINE ITEMS:

DESCRIPTION:	Units	Length	Breadth	Depth	Qty	Rate	Cost
<u>Kitchen</u> = Bench - <i>Dropped 4 mm -</i> <i>Unscrew Top - Pack up with Shimms.</i> <i>New Sealant to Top -</i> <u>Ceiling</u> - <i>One Ceiling with Lounge and</i> <i>dining - Re-Texture & Re paint</i>		<i>3.20</i>	<i>3.20</i>				
<u>Bed 1</u> = <i>Re Stop minor cracks to wall</i> <i>@ window - Sealant to left side of</i> <i>Window - Repaint wall -</i> <i>Door: Ease & adjust door</i>		<i>3.60</i>	<i>3.40</i>				
<u>Bed 2</u> - <i>Remove texture to ceiling</i> <i>Re stop Cracking to Square Stopping</i> <i>- Re texture ceiling & Repaint ceiling</i> <u>Wall</u> <i>Re stop Cracking to Window head</i> <i>& Re paint Wall</i>		<i>3.40</i>	<i>3.00</i>				
<u>Bathroom</u> - <i>Remove Grout/sealant</i> <i>to tile bath joint & tile Vanity joint</i> <i>Apply new Sealant around bath and</i> <i>Vanity</i>	<i>Lm</i>	<i>5</i>					

Subtotal

+ P&C, Margin & GST Figure

TOTAL

* Unit Categories to be used as follows:

Each, Sheet, Kilogram, Linear metre, Square metre, Cubic metre,
Per Hour, Per Day, Per Week. Cubic metre calculations must include
length, breadth and depth figures. Square metre calculations must
include length and breadth figures.

Scope of Works

EARTHQUAKE COMMISSION

Completed By: *Michael Way*Date: *15-10-10*Page 3 of 4CLM *2010 / 013 897*Claimant Name: *Barry Mc Glinchey*
1/126 Halswell Junction Rd
Halswell

Element Details:

Land	Building	Bridges/culverts	Retaining walls	Other
Lounge	Dining	Kitchen	Family Room	Bedroom
Office/Study	Rumpus	Hallway	Stairwell	Toilet
Laundry	Bathroom	Ensuite	Chimney	Foundations
Piling	Services	Kitchen Ovens	Hot Water Cylinders	Header Tanks
Clazing/windows	Fireplace/woodburner	Floor	External Walls	Roof
Outbuildings	Other <i>Garage</i>			

DESCRIPTION:

REPAIR STRATEGY:

LINE ITEMS:

DESCRIPTION:	Units	Length	Breadth	Depth	Qty	Rate	Cost
<u>Laundry</u> - Remove, Laundry tub and unit. Remove Vinyl flooring. (As above (Page 1) with floor cracking - This was included with "Cracked floor slab") Lay new Vinyl flooring - Refit Laundry tub - Re stop Crack to door head and repaint - Adjust Striking plate to Exterior Aluminium door		2.5	1.5				
<u>Garage</u> Re stop minor Crack to interior door head, and Repaint wall Ease door		6.0	6.0				
<u>Entry/Hall</u> Up lift tiles to floor approx 10m ² - (Repair Floor slab as on page ①) - Relay new tiles - Repair Cracks to Walls where floor has split - Re stop & Paint - New Skirting to Affected Wall, & Paint		8.00	2.00				
Subtotal							
+ P&G, Margin & GST figure							
TOTAL							

* Unit Categories to be used as follows:

Each, Sheet, Kilogram, Linear metre, Square metre, Cubic metre, Per Hour, Per Day, Per Week. Cubic metre calculations must include length, breadth and depth figures. Square metre calculations must include length and breadth figures.

Completed By: *Michael Way*

Page 4 of 4

CLM 2010 / 013 897

Claimant Name: Barry McGlinchey
1/126 Halswell Junction Rd
Halswell

Land	Building	Bridges/culverts	Retaining walls	Other	
Lounge	Dining	Kitchen	Family Room	Bedroom	
Office/Study	Rumpus	Hallway	Stairwell	Toilet	
Laundry	Bathroom	Ensuite	Chimney	Foundations	✓
Piling	Services	Kitchen Ovens	Hot Water Cylinders	Header Tanks	
Glazing/windows	Fireplace/woodburner	Floor	External Walls	✓ Roof	
Outbuildings	Other:				

REPAIR STRATEGY:

[illegible]

Each, Sheet, Kilogram, Linear metre, Square metre, Cubic metre, Per Hour, Per Day, Per Week. Cubic metre calculations must include length, breadth and depth figures. Square metre calculations must include length and breadth figures.

+ P&G, Margin & GST figure

TOTAL

OFFICE USE ONLY - LOSS ADJUSTER TO COMPLETE

Date: 15-10-10Claim Number: 2010/013897Loss Adjuster: GEORGE JENKINSCosting Estimate

\$ 2500 Lounge	\$ 1,000 Dining Room	\$ 1,000 Kitchen
\$ NA Family Room	\$ 500 Bed 1	\$ NA Ensuite
\$ 1500 Bed 2	\$ Nil Bed 3	\$ NA Bed 4
\$ 200 Bathroom	\$ Nil Toilet 1	\$ NA Toilet 2
\$ NA Office/Study	\$ 500 Rumpus Garage	\$ 3,000 Entry/Hall(s) Includes Tiles
\$ N/A Stairwell	\$ 1,000 laundry	\$ Outbuildings/Garage

OFFICE USE ONLY - LOSS ADJUSTER TO COMPLETE

Date: 15-10-10

Claim Number: 2010/013897

Loss Adjuster: GEORGE JENKINS

\$ 1,000

Exterior Bricks

\$ 2,000

Floor Slab Crack

\$.

\$

\$

\$

\$

\$

\$

Sub Totals:

\$5200

\$5000

\$4000

Total Estimate: \$14200 - 00

Date: 15-10-10

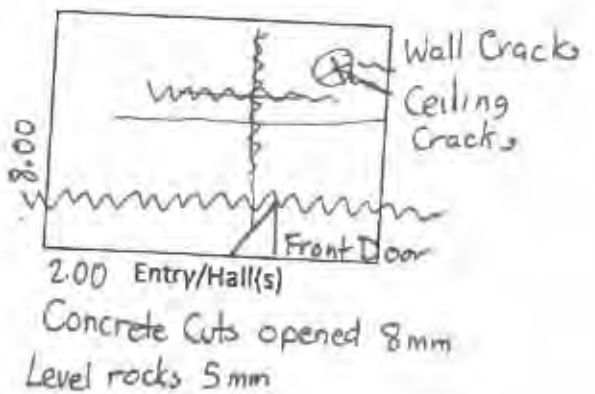
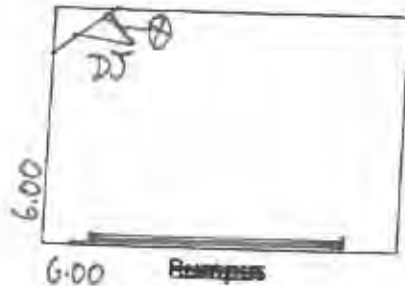
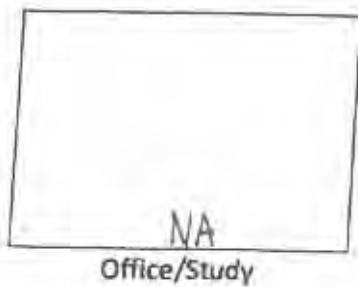
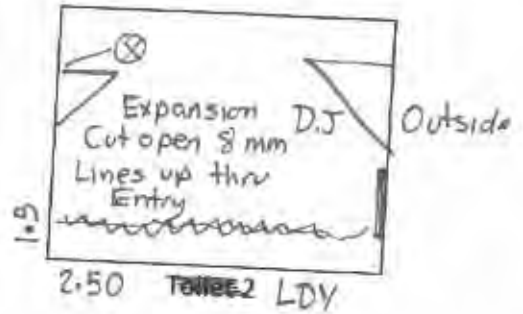
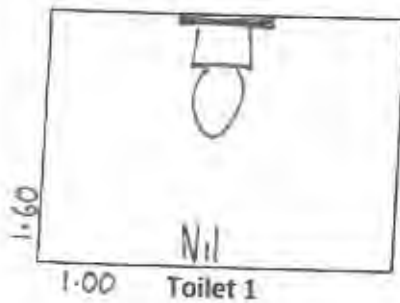
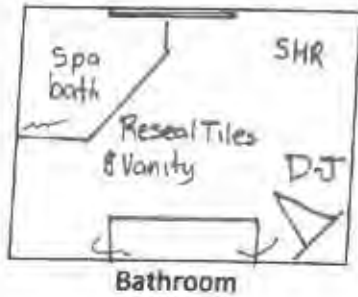
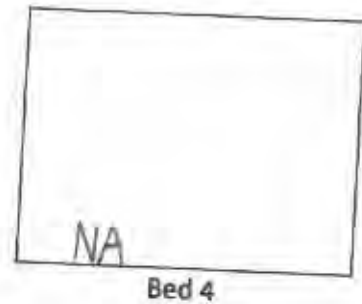
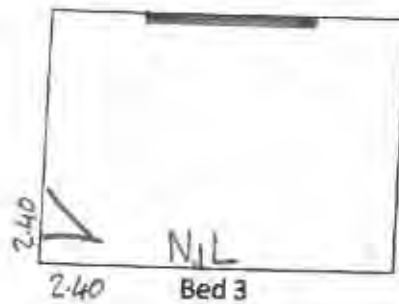
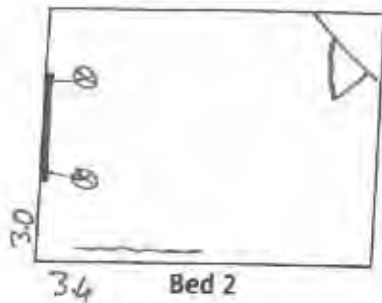
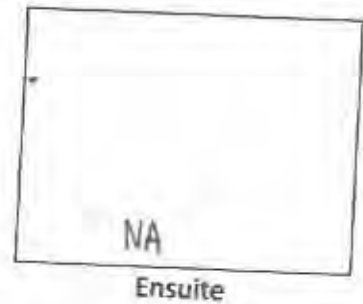
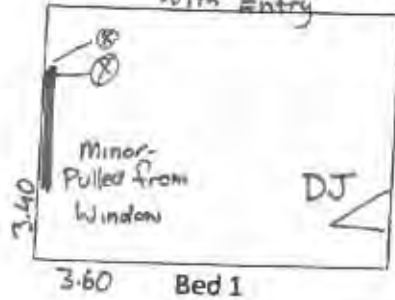
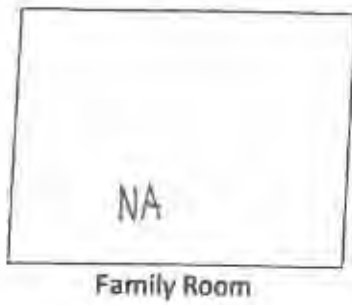
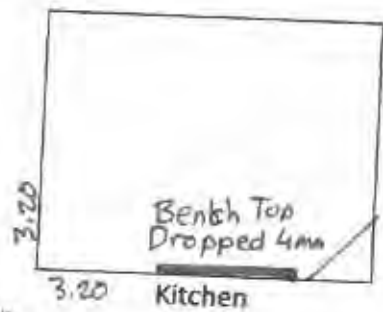
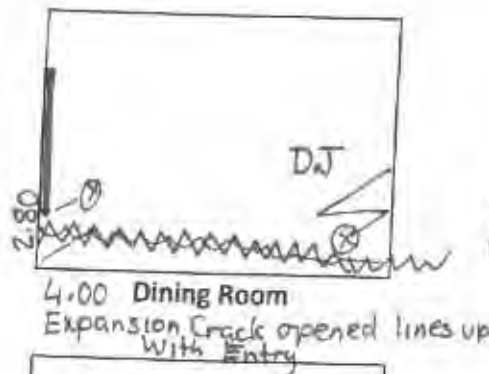
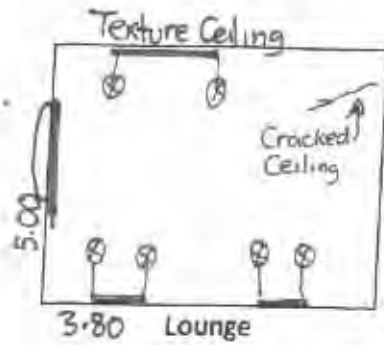
Claim Number: 2010/ 013 897

Estimators Name: Michael Way

Barry McGlinchey

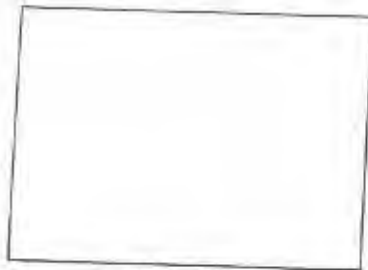
1/126 Halswell Junction Rd

Dwelling Inspection Checklist: Show measurements indicate damage



Date: 15-10-10Claim Number: 2010/ 013897Estimators Name: Michael Way

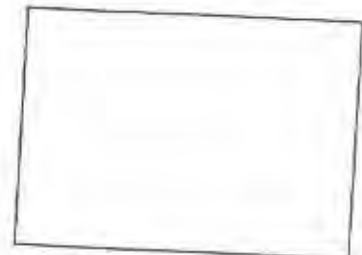
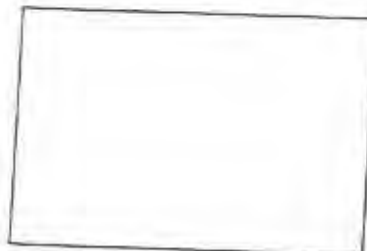
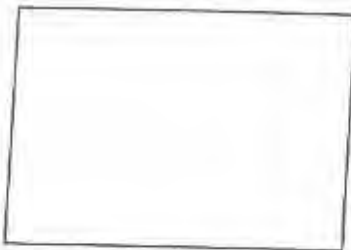
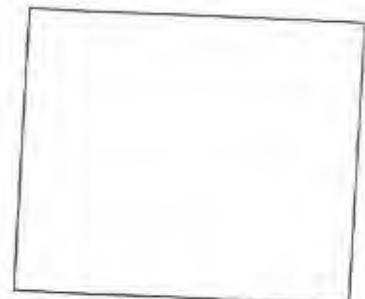
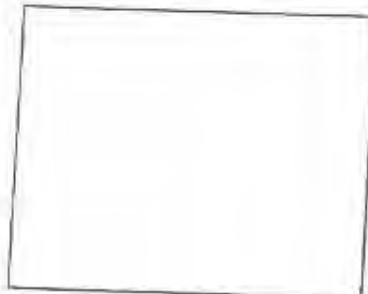
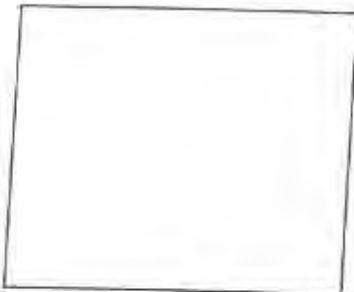
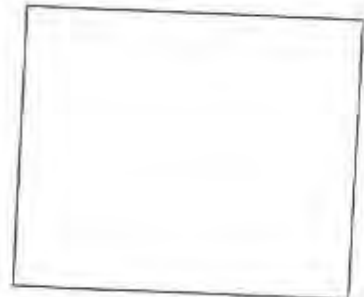
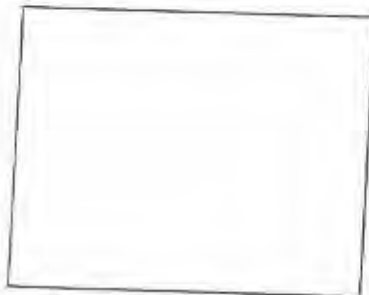
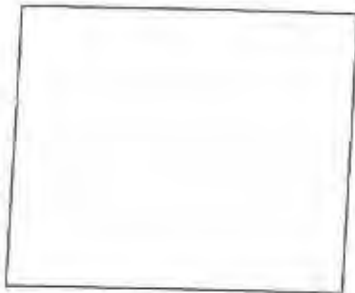
Stairwell



Laundry



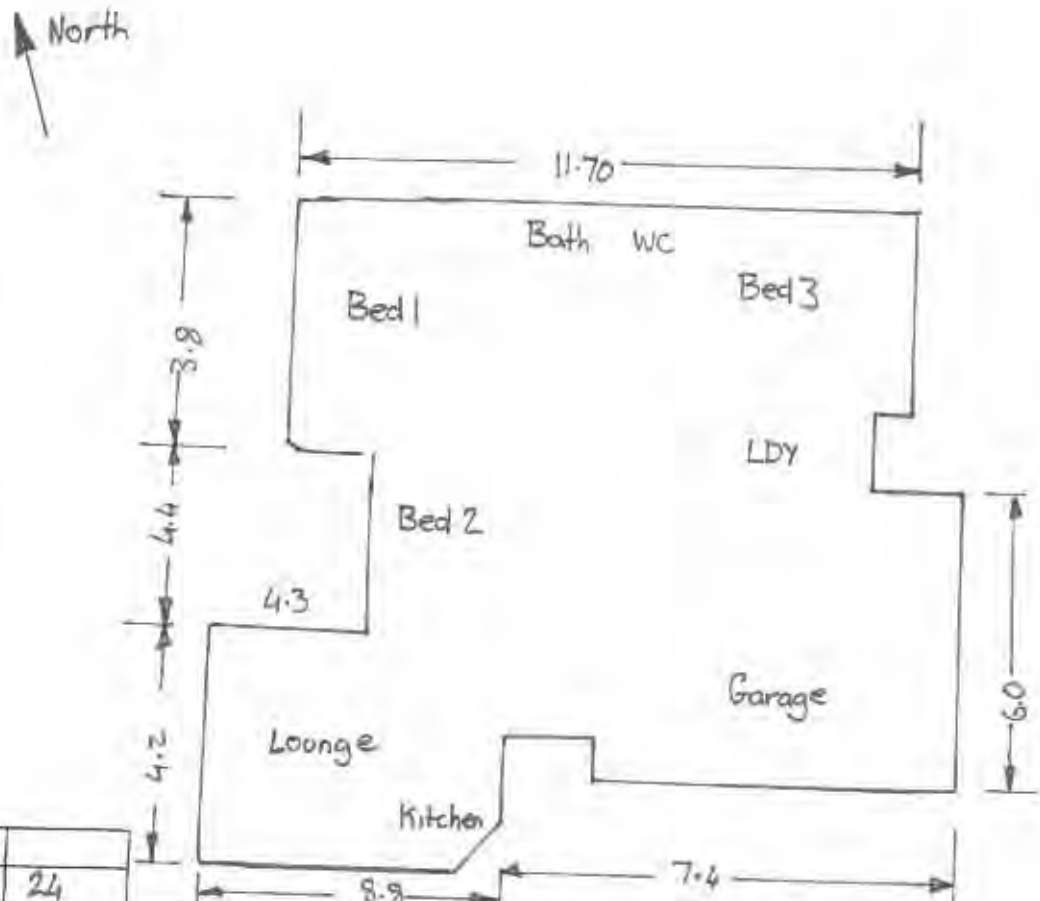
Outbuildings/Garage



Legend

⊗	Crack to Gable End Wall
mmv	Cracking to floor Slab
~~~~~	Ceiling Cracking
DJ	Door jammed or out of Alignment



Date: 15-10-10Claim Number: 2010/ 013 897Estimators Name: Michael Way

Area m2:	
Stud Heights:	24
Wall Finish:	Wallpaper Plastered Paint finish
Other	Textured ceilings
Services:	Specify damage:
Chimneys:	Construction type:
NA	Height:
	Damage description: Above Roof Below Roof Total Repair
Foundations Damage:	Timber Concrete Ring Concrete Slab Other (Specify):
	Minor Moderate Severe
	House moved off foundations?:
	Concrete slab cracked? Crack width: 6-8 mm... Crack length: Approx 20m
Roof:	Framed Trussed
	Type: Clay Tiles Concrete tiles Metal tiles Rolled Metal Other
	Damage:
Cladding Type:	Weatherboard Brick Veneer Hardi Plank Other

## Sketch Plan of Property

Completed By: *Michael Way*

Supvr ID

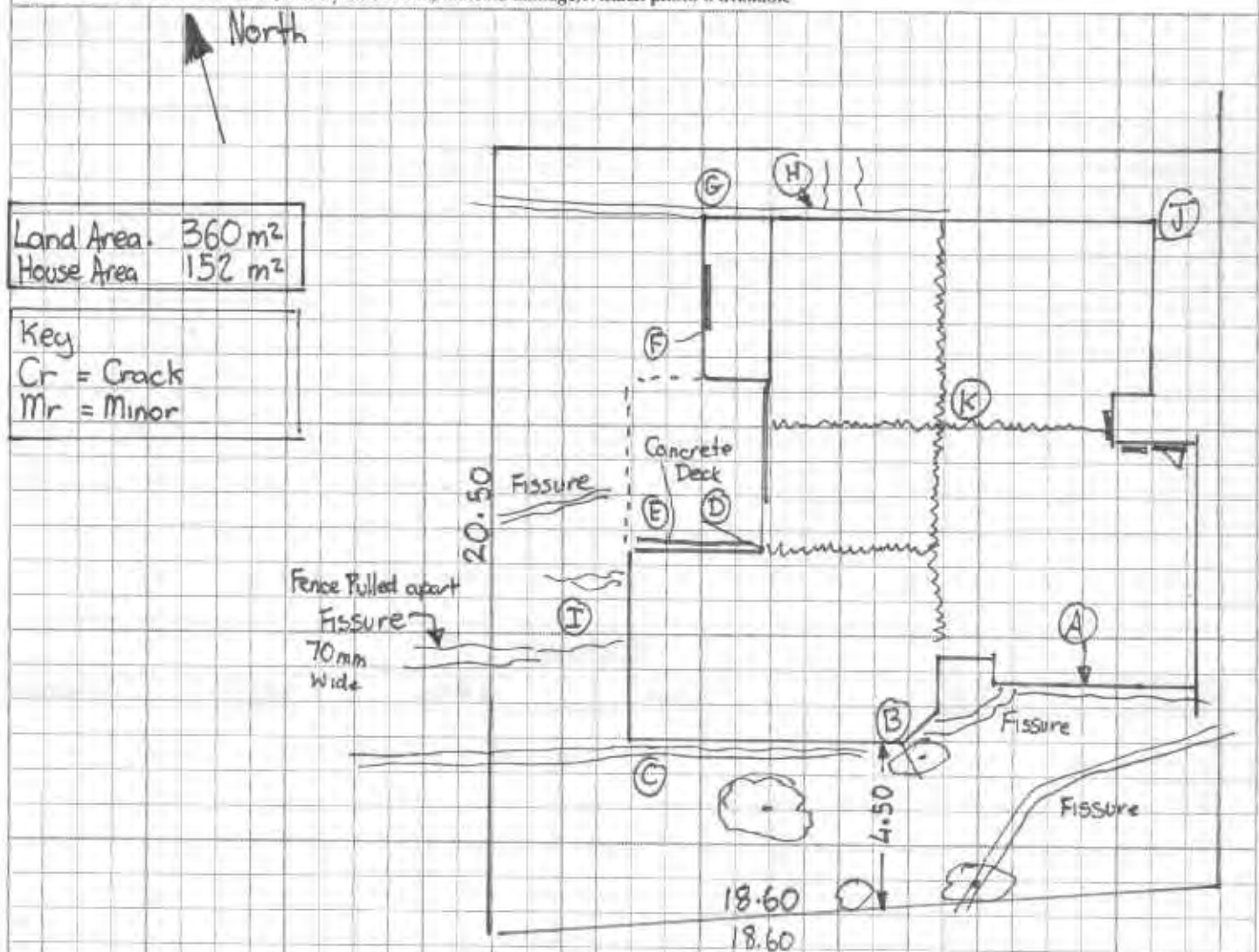
LA ID

Date: *15-10-10*

LA File Ref:

2010/013 897  
*Barry Mc Glinchey*Affix Label  
Here*1/126 Halswell Junction Rd  
Halswell*

PLAN SKETCH OF PROPERTY (identify each room, indicate damage). Attach photo if available



*Major Land &amp; Dwelling Damaged to Surrounding Properties

## Additional Information

- (A) Cracking to Garage Door head, Re Seal & Paint (B) Mortar/Cr (C) Fissure 30mm (D) Mortar, Bricks broken, lines up with Internal Slab Cracking (E) Concrete Deck pulled from house 10mm & Mr/Cr (F) Loose Brck top Corse  
 (G) Mr/Plaster Crack (H) Concrete path Pulled from house 30mm & Cracked (I) Paths Cracked (J) Cracked Mortar  
 (K) Floor Slab Cracking





# Scope of Works



Completed By:	Doug Edwards	Claim Number:	2011 123837
Date:	07.10.2014	Customer Name:	[REDACTED]
Page	1 OF 1	Address:	1/126 Halswell Junction Rd Halswell ChCh

## TOTALS PAGE :

### P & G's Page:

P & G's Page - Sub Total

### Building Damage Page:

Scope Of Works Page 1 \$1,524.05

Scope Of Works Pages - Sub Total \$1,524.05

* Unit categories to be used as follows:

Each, Sheet, Kilogram, Linear metre, Square metre, Cubic metre, Per hour, Per day, Per week. Cubic metre calculations must include length, breadth and depth figures. Square metre calculations must include length and breadth figures.

Sub Total \$1,524.05

GST \$228.61

**TOTAL** \$1,752.66





## EQR FIXED PRICE QUOTATION

Reference Number	CLM2011/123837
Address	1/120 Halswell Junction Road

The Fletcher Construction Co Ltd	Frame Contracting
P O Box 20105	4/19 Nga Muri Road
Christchurch 8140	Christchurch 8042

(For Contractor)

Date 28-Jan-16

Area	Item	Scope Change	Description	Unit	Quantity	Price	Summary Price	Scope Change
			Unit Price including GST					
North Elevation	Exterior	N	Wall cladding - supply and install solid plaster	M2	1	\$ 65.00	\$ 65.00	
North Elevation	Patio	N	Covacrete repair. As per attached quote	Quote	1	\$ 2,322.00	\$ 2,322.00	
North Elevation	Labour	N	8hs for carpentry - remove and reinstate bench	Hour	8	\$ 50.00	\$ 400.00	
South Elevation	Exterior	N	Wall cladding - grind out and repoint mortar joints	LM	2.5	\$ 45.00	\$ 112.50	
South Elevation	Door	N	External - gap fill, sand and paint jambs/sills.	LM	8	\$ 15.00	\$ 120.00	
West Elevation	Exterior	N	Wall cladding - relay and rebed loose bricks	M2	0.5	\$ 104.00	\$ 52.00	
West Elevation		N	Fees- small job fee.	Item	1	\$ 150.00	\$ 150.00	
Foundation	Ring foundation	N	Grind out and epoxy fill cracks 0-5mm wide.	LM	2	\$ 120.00	\$ 240.00	
Kitchen	Walls	N	Rake out and stop plasterboard joint cracks and paint.	M2	62.4	\$ 32.00	\$ 1,996.80	
Kitchen	Walls	Y	Remove, dispose, replace gib board to wall by door to hallway which will be affected by floor slab replacement.	M2	9.6	\$ 95.00		\$ 912.00
Kitchen	Heatpump	N	Remove and reinstall heat pump for other trades.	Item	1	\$ 591.25	\$ 591.25	
Kitchen	Ceiling	N	Scrape off stipple, pigment seal, skim and paint plasterboard (includes crack repair)	M2	39.01	\$ 75.00	\$ 2,925.75	
Kitchen	Work Top	N	Resilicone bench top	LM	6	\$ 25.00	\$ 150.00	
Kitchen	Door	N	Remove, reinstate door & frame. Note frame may have to be fully replaced.	Item	1	\$ 225.00	\$ 225.00	
Kitchen	Door	N	Gap fill and paint door and frame.	Item	1	\$ 220.00	\$ 220.00	
Office/Study	Walls	N	Rake out and stop plasterboard joint cracks and paint.	M2	28.4	\$ 32.00	\$ 844.80	
Office/Study	Ceiling	N	Remove, dispose, supply and install plasterboard, stop and paint.	M2	7.44	\$ 125.00	\$ 930.00	
Office/Study	Door	N	Remove, reinstate door & frame x3. Note frame may have to be fully replaced.	Item	3	\$ 225.00	\$ 675.00	
Office/Study	Door	N	Gap fill and paint door and frame x3.	Item	3	\$ 220.00	\$ 660.00	
Toilet	Floor	N	Remove, dispose, supply and install vinyl.	M2	1.6	\$ 125.00	\$ 200.00	
Toilet	Ceiling	N	Remove, dispose, supply and install plasterboard, stop and paint.	M2	1.6	\$ 125.00	\$ 200.00	
Toilet	Walls	Y	Remove, dispose, replace gib board to all walls, stop and paint.	M2	12.48	\$ 125.00		\$ 1,560.00
Toilet	Walls	Y	Remove, dispose, replace framing to the wall with the door in it. Two other walls have been allowed for in other rooms (To allow for floor slab replacement as per engineers report)	M2	2.4	\$ 120.00		\$ 288.00
Toilet	Skirting	Y	Remove, dispose, replace skirting to 1/2 the room including wardrobe.	LM	4.2	\$ 21.00		\$ 88.20
Toilet	Skirting	Y	Gap fill and paint all skirtings.	LM	4.2	\$ 15.00		\$ 63.00
Toilet	Door	N	Remove, reinstate door & frame. Note frame may have to be fully replaced.	Item	1	\$ 225.00	\$ 225.00	
Toilet	Door	N	Gap fill and paint door and frame.	Item	1	\$ 220.00	\$ 220.00	
Toilet	Toilet	N	Remove and reinstall toilet for other trades.	Item	1	\$ 500.00	\$ 500.00	
Toilet	Window	Y	Gap fill and paint.	LM	4	\$ 15.00		\$ 60.00
Bathroom	Floor	N	Remove, dispose, supply and install vinyl.	M2	8.72	\$ 125.00	\$ 840.00	
Bathroom	Ceiling	N	Remove, dispose, supply and install plasterboard, stop and paint.	M2	8.72	\$ 125.00	\$ 840.00	
Bathroom	Walls	N	Remove, dispose, supply and install tiles (PC Sum \$65m2) Note allowance for around spa bath. This is an estimate and a VO may be required.	M2	7.5	\$ 246.00	\$ 1,845.00	
Bathroom	Walls	Y	Remove, dispose and replace gib board to 3 walls, stop and paint.	M2	18.24	\$ 125.00		\$ 2,280.00
Bathroom	Walls	Y	Remove, dispose, replace framing to wall not previously allowed for in other rooms.(To allow for floor slab replacement as per engineers report)	M2	12.48	\$ 120.00		\$ 1,497.60

Bathroom	Walls	Y	Rake out and stop plasterboard joint cracks and paint back/external wall.	M2	6.72	\$ 32.00		\$ 216.04
Bathroom	Skirting	Y	Remove, dispose, replace skirting.	LM	4.5	\$ 21.00		\$ 94.50
Bathroom	Skirting	Y	Gap fill and paint all skirtings.	LM	4.5	\$ 15.00		\$ 67.50
Bathroom	Door	N	Remove, reinstate door & frame. Note frame may have to be fully replaced.	Item	1	\$ 225.00	\$ 225.00	
Bathroom	Door	N	Gap fill and paint door and frame.		1	\$ 220.00	\$ 220.00	
Bathroom	Bath	N	Remove and reinstate spa bath. (This was not included in the plumbers quote due to access issues) This is an estimate and a VO may be required.	Item	1	\$ 850.00	\$ 850.00	
Bathroom	Shower	N	Remove and reinstate shower (Removal allowed for in plumbers quote but not for reinstatement and tanking. A VO will be required for these).	Item	1	\$ -	\$ -	
Bathroom	Vanity	N	Remove and reinstate vanity. See Quote from The Plumber. (Access was limited, a \$500 allowance for underground pipework has been given, no allowance for a tanking so a VO will be required).	Quote	1	\$ 1,881.25	\$ 1,881.25	
Bathroom	Mirror	N	Remove and reinstate mirror	Item	1	\$ 150.00	\$ 150.00	
Bathroom	Sealer	N	Re-silicone bath, shower etc	LM	15	\$ 25.00	\$ 375.00	
Bathroom/Toilet	Fittings	Y	Remove and reinstate bathroom fittings, shelving, soap holder, towel rail and toilet roll holder in toilet.	Item	1	\$ 150.00		\$ 150.00
Laundry	Floor	N	Remove, dispose, supply and install vinyl.	M2	3.75	\$ 125.00	\$ 468.75	
Laundry	Ceiling	N	Remove, dispose, supply and install plasterboard, stop and paint.	M2	3.75	\$ 125.00	\$ 468.75	
Laundry	Walls	Y	Remove, dispose and replace gib board to 3 walls, stop and paint.	M2	15.6	\$ 125.00		\$ 1,950.00
Laundry	Walls	Y	Remove, dispose, replace framing to one wall, door entry to hall, other walls allowed for other rooms (To allow for floor slab replacement as per engineers report)	M2	3.6	\$ 120.00		\$ 432.00
Laundry	Skirting	Y	Remove, dispose, replace skirting.	LM	7	\$ 21.00		\$ 147.00
Laundry	Skirting	Y	Gap fill and paint all skirtings.	LM	7	\$ 15.00		\$ 105.00
Laundry	Door	N	Remove, reinstate door & frame. Note frame may have to be fully replaced.	Item	1	\$ 225.00	\$ 225.00	
Laundry	Door	Y	Gap fill and paint door and frame.	Item	1	\$ 220.00		\$ 220.00
Laundry	Wash Tub	N	Remove and reinstate. Included in quote from The Plumber.	Item	1	\$ -	\$ -	
Hallway	Floor	N	Remove, dispose, supply and install tiles (PC Sum \$65m2) Added 15% allowance for wastage.	M2	7	\$ 235.75	\$ 1,650.25	
Hallway	Floor	N	Build up floor screed	M2	7	\$ 65.00	\$ 455.00	
Hallway	Heating	N	Remove, dispose, supply and install underfloor heating - electric.	M2	7	\$ 633.00	\$ 4,431.00	
Hallway	Walls	Y	Remove, dispose and replace gib board to walls affected by removal, stop and paint.	M2	31.9	\$ 125.00		\$ 3,987.50
Hallway	Walls	Y	Remove, dispose, replace framing to cupboard wall kitchen entry (To allow for floor slab replacement as per engineers report)	M2	7	\$ 120.00		\$ 840.00
Hallway	Walls	N	Rake out and stop plasterboard joint cracks on remaining walls.	M2	24.72	\$ 32.00	\$ 791.04	
Hallway	Skirting	Y	Remove, dispose, replace skirting where walls have been affected. Including large wall on right of entry.	LM	14.3	\$ 21.00		\$ 300.30
Hallway	Skirting	Y	Gap fill and paint all skirtings.	LM	20.3	\$ 15.00		\$ 304.50
Hallway	Ceiling	N	Remove, dispose, supply and install plasterboard, stop and paint.	M2	17.16	\$ 125.00	\$ 2,145.00	
Hallway	Door	N	Remove, reinstate door & frame x2 (Cupboard doors closest to kitchen)	Item	2	\$ 225.00	\$ 450.00	
Hallway	Door	N	Gap fill and paint door and frame x2 (Cupboard doors closest to kitchen)	Item	2	\$ 220.00	\$ 440.00	
Bedroom 1 (Master)	Walls	N	Rake out and stop plasterboard joint cracks and paint.	M2	36.48	\$ 32.00	\$ 1,167.36	
Bedroom 1 (Master)	Walls	Y	Remove and replace gib board to internal walls including wardrobe. (excluding external walls).	M2	29.25	\$ 95.00		\$ 2,778.75
Bedroom 1 (Master)	Walls	Y	Remove, dispose, replace framing to above walls (To allow for floor slab replacement as per engineers report)	M2	29.25	\$ 120.00		\$ 3,510.00
Bedroom 1 (Master)	Ceiling	N	Remove, dispose, supply and install plasterboard, stop and paint.	M2	14.28	\$ 125.00	\$ 1,785.00	
Bedroom 1 (Master)	Door	N	Remove, reinstate door & frame x3 (includes wardrobe)	Item	3	\$ 225.00	\$ 675.00	
Bedroom 1 (Master)	Door	N	Gap fill and paint door and frame x3 (includes wardrobe)	Item	3	\$ 220.00	\$ 660.00	
Bedroom 1 (Master)	Skirting	Y	Remove, dispose, replace skirting to 1/2 the room including wardrobe.	LM	12.3	\$ 21.00		\$ 258.30



Bedroom 1 (Master)	Skirting	Y	Gap fill and paint all skirtings.	LM	19.9	\$ 15.00		\$ 298.60
Bedroom 2	Ceiling	N	Remove, dispose, supply and install plasterboard, stop and paint.	M2	10.73	\$ 125.00	\$ 1,341.25	
Bedroom 2	Walls	N	Rake out and stop plasterboard joint cracks and paint.	M2	31.68	\$ 32.00	\$ 1,013.76	
Bedroom 2	Walls	Y	Remove, dispose, replace gib board to one wall.	M2	8.88	\$ 95.00		\$ 843.60
Bedroom 2	Skirting	Y	Remove, dispose replace skirting to one wall.	LM	3.7	\$ 21.00		\$ 77.70
Bedroom 2	Skirting	Y	Gap fill and paint all skirtings including wardrobe.	LM	15.2	\$ 15.00		\$ 228.00
Bedroom 2	Door	N	Remove, reinstate door & frame. Note frame may have to be fully replaced.	Item	1	\$ 225.00	\$ 225.00	
Bedroom 2	Door	N	Gap fill and paint door and frame.	Item	1	\$ 220.00	\$ 220.00	
Bedroom 2	Wardrobe	N	Wardrobe door - ease/realign.	Item	2	\$ 100.00	\$ 200.00	
Office/Study	Ceiling	Y	Remove, dispose, supply and install plasterboard, stop and paint.	M2	7.44	\$ 125.00		\$ 930.00
Office/Study	Walls	Y	Rake out and stop plasterboard joint cracks and paint.	M2	26.4	\$ 32.00		\$ 844.80
Office/Study	Walls	Y	Remove, dispose, replace gib board to two walls including wardrobe.	M2	25.2	\$ 95.00		\$ 2,394.00
Office/Study	Skirting	Y	Remove, dispose replace skirting to two walls including wardrobe.	LM	10.5	\$ 21.00		\$ 220.50
Office/Study	Skirting	Y	Gap fill and paint all skirtings including wardrobe.	LM	30.7	\$ 15.00		\$ 460.50
Office/Study	Door	Y	Remove, reinstate door & frame. Note frame may have to be fully replaced.	Item	1	\$ 225.00		\$ 225.00
Office/Study	Door	Y	Gap fill and paint door and frame.	Item	1	\$ 220.00		\$ 220.00
Office/Study	Door	Y	Remove and replace reveal to sliding wardrobe doors.	LM	6	\$ 21.00		\$ 126.00
Office/Study	Door	Y	Gap fill and paint reveal to wardrobe.	LM	5	\$ 28.00		\$ 140.00
Office/Study	Door	Y	Remove and reinstate sliding door to wardrobe x2.	Item	1	\$ 50.00		\$ 50.00
Internal Garage	Walls	N	Rake out and stop plasterboard joint cracks and paint.	M2	54.72	\$ 32.00	\$ 1,751.04	
Internal Garage	Walls	Y	Remove, dispose replace gib board to wall backing on to laundry and small wall with access to laundry.	M2	10.8	\$ 95.00		\$ 1,026.00
Internal Garage	Skirting	Y	Remove, dispose replace skirting to above wall.	LM	4.5	\$ 21.00		\$ 94.50
Internal Garage	Skirting	Y	Gap fill and paint all skirtings.	LM	16.5	\$ 15.00		\$ 247.50
Internal Garage	Ceiling	N	Scrape off stipple, pigment seal, skim and paint plasterboard (includes crack repair)	M2	32.49	\$ 75.00	\$ 2,436.75	
Internal Garage	Door	N	Door (external) - ease or realign.	Item	1	\$ 161.25	\$ 161.25	
Internal Garage	Garage Door	N	Double - adjust door. This is an estimate based on Dominator Doors pricing.	Item	1	\$ 451.50	\$ 451.50	
Carpet	Floor	Y	Uplift and relay all carpet for engineers inspection 93.3m2. This was done in 2014.	M2	93.3	\$ 24.00		\$ 2,239.20
Carpet	Floor	Y	Remove, dispose and replace carpet. This was discussed by Tomas and the HO and approved by the Fletchers Supervisor.	M2	93.3	\$ 90.00		\$ 8,397.00
Floor Slab removal	Floor	Y	Remove concrete slab by hand to areas identified in engineers report. This is an estimate and a VO may be required.	M2	50	\$ 85.00		\$ 4,250.00
Floor Slab replacement	Floor	Y	Replacement of concrete slab including starters. It is likely this will need to be done by hand. This is an estimate and a VO may be required.	M2	50	\$ 185.00		\$ 9,250.00
Subtotal							\$ 14,651.05	\$ 32,611.50
P&G's			Scaffold, erect, dismantle, cartage and weekly hire as per engineers direction to prop ceilings while walls are being removed. This is an estimate due to the unpredictability of the work and a VO may be required.	Item	1	\$ 5,000.00	\$ 5,000.00	
			Project Management	hrs	120	\$ 50.00	\$ 6,000.00	
			Commercial Clean	hrs	12	\$ 50.00	\$ 600.00	
			Floor protection over a hard surface	m2	140	\$ 4.00	\$ 560.00	
			Electrician as per quote. Electrical work as per estimate from Inight Electrical Limited. A VO may be required.	Item	1	\$ 1,673.78	\$ 1,673.78	
			Rubbish removal - Estimate 3 skips	Item	1	\$ 3,870.00	\$ 3,870.00	
			Small job fee for solid plasterer	Item	1	\$ 150.00	\$ 150.00	
P&G's Subtotal							\$ 17,853.78	\$ 34,455.28
Subtotal							\$ 32,717.83	\$ 64,887.99
Total							\$117,405.82	

# LAND DOCUMENTS

The following information contains documents relating to the land assessments that were either cash settled or declined:

*The attached land document(s) help NHC Toka Tū Ake identify information that may be relevant to its assessment of your residential land claims. They are not intended to form a complete technical report on land damage to your land. The land information, including valuations, repair costs and estimates, do not necessarily reflect the final land settlement received*



# Scope of Works

# EQC

Completed by: *C. Oatwell*Date: *6/8/13*

dd / mm / yy

Page: 1 of 1

1/126 HALSWELL JUNCTION ROAD  
 HALSWELL  
 CHRISTCHURCH  
 H: & W:  
 M:

Description: **Damage to Land**

Repair Strategy: Removal and/or import materials and labour to repair land

*89.3* m²

Description – Removal of Debris/Minor Works	Units	Length	Breadth	Depth	Quantity	Rate	Cost
Transporter- machine	each					\$160	
Machine Hire	hrs					\$110	
Truck Hire	hrs					\$100	
Labour	hrs					\$45	
Contaminated Spoil Removal	m ³					\$100	
Spoil Removal/Tip Fees (clean)	m ³					\$20	
Skip (4m ³ )	each					\$190	
Materials	each						

NB A Small/Minor Works cost may only be applied when there is only land repair to the site/property; a total area of damage under 15m²; no further works required

Description - Supply and level hard fill	Units	Length	Breadth	Depth	Quantity	Rate	Cost
Land Under Residential Buildings (Type 'A') – Supply and level hard fill	m ²					\$12	
Land Under Access way <i>B1, B2 &amp; B3</i> (Type 'B') – Supply and level hard fill	m ²	<i>9.4</i>	<i>1.0</i>	<i>.1</i>	<i>9.4</i>	\$12	<i>\$112.80</i>
Land Under Pavers/Patio/Concrete <i>C2 &amp; C4</i> (Type 'C') – Supply and level hard fill	m ²	<i>11.68</i>	<i>1.0</i>	<i>.1</i>	<i>11.68</i>	\$12	<i>\$140.16</i>
Land Under Lawn Areas <i>C1, C3, C5 &amp; C6</i> (Type 'C') - Level and Seed	m ²	<i>68.22</i>	<i>1.0</i>	<i>.1</i>	<i>68.22</i>	\$10	<i>\$682.20</i>
Lateral Spread Cracks under 10mm but greater than 5mm	Lm					\$25	
Lateral Spread Cracks greater than 10mm	Lm					\$90	

* Unit categories to be used as follows:

Each, Sheet, Kilogram, Linear metre, Square metre, Cubic metre, Per hour, Per day, Per week.

Cubic metre calculations must include length, breadth and depth figures.

Square metre calculations must include length and breadth figures.

Sub-total

*\$935.16*

P&amp;G, Margin &amp; GST (Figure x 1.3662)

*\$342.45*

Total

*\$1,277.61*CHECKED *JH* 12/8



# Scope of Works

Released Under the Official Information Act 1982

Completed by: *C Oakell - 1160*



Date: *7/8/15*  
dd / mm / yy

Page: 1 of 1

1/126 HALSWELL JUNCTION ROAD  
HALSWELL  
CHRISTCHURCH  
H: & W:  
M:

Description: **Cosmetic Damage to Retaining Wall**

**RTW** 01

Insert 2 digit n° as recorded on Mud Map eg 01 →

Construction Type Concrete ☐ ☒ Gabion ☐ Crib ☐ Poled ☐ Diamond Pro Gravity ☐ Dry Stack or Mortared Stone ☐

Repointing	Units	Length	Breadth	Qty	Rate	Cost
	Lm		----		\$50	
Injection grouting						
0-4mm	Lm	<i>0.4</i>	----	<i>0.4</i>	\$120	<i>\$48.00</i>
4-8mm	Lm		----		\$176	
8-12mm	Lm		----		\$234	
Repainting						
	m ²				\$25	
Replastering						
	m ²	<i>0.4</i>	<i>1.0</i>	<i>0.4</i>	\$85	<i>\$34.00</i>
Labour	hr			<i>4</i>	\$45	<i>\$180.00</i>

Comments

* Unit categories to be used as follows:

Each, Sheet, Kilogram, Linear metre, Square metre, Cubic metre,  
Per hour, Per day, Per week.

Cubic metre calculations must include length, breadth and depth  
figures.

Square metre calculations must include length and breadth figures.

Sub-total

*\$262.00*

P&G, Margin & GST (Figure x 1.3662)

*\$95.94*

Total

*\$357.94*

CHECKED *JS 12/8*









## Land As:



## Complex Flat Land Claims



EARTHQUAKE COMMISSION

Kōmihana Rūwhenua

Claim N°: .....

Date: 6/8/13

Situation of Loss: .....

Author: C. Dehrell-1160

1/126 HALSWELL JUNCTION ROAD

HALSWELL

CHRISTCHURCH

H: &amp; W:

M:

Item N°	Description/Construction	Length	Height/Width	Depth	Damage	Damaged Area	Evacuated m²	Inundated m²	Debris m³	Access E D
B1	Asphalt 1/126	2.0	.4	.1	Undulations	.8m²	.8m²	-	-	E
C1	Lawn/Dirt 1/126	4.2	1.0	.1	Undulations	4.2m²	4.2m²	-	-	E
C2	Pavers 1/126	2.6	.8	.1	Undulations	2.08m²	2.08m²	-	-	E
C3	Lawn 1/126	4.0	3.0	.1	Undulations	12m²	12m²	-	-	E
B2	Asphalt 2/126	2.2	2.0	.1	Undulations	4.4m²	4.4m²	-	-	E
B3	Asphalt 2/126	4.2	1.0	.1	Undulations	4.2m²	4.2m²	-	-	E
C4	Concrete 2/126	3.2	3.0	.1	Undulations	9.6m²	9.6m²	-	-	E
C5	Lawn 2/126	16.2	2.1	.1	Undulations	34.02m²	34.02m²	-	-	E
C6	Lawn 2/126	10.0	1.8	.1	Undulations	18m²	18m²	-	-	E

89.3m² 89.3m²







M:

Date: 6/8/13

Author:

# EQC

Kōmihana Rūwhenua

Claim N^o: .....

Situation of Loss:

[illegible]



# Inspection Summary

# EQC

Completed by: BEN YONG

Date: 5/8/13 Page: 1 of 1  
dd / mm / yy

CLM 2010/013897

1/126 Halswell Junction Rd  
Halswell  
Christchurch

Time arrived at site: 12:30 Time left site: 14:00 Was an inspection carried out? Yes ☒ No ☐

Customer present: Yes ☒ No ☐ Customer Name: Barrie McGlinchey

Access denied ☐ Loose dogs ☐ Other ☐ If other, please provide reason

If No inspection carried out, why not? ☐ ☐ ☐

## Where an inspection has been conducted:

	Yes	No	Notes
- Any land damage under the main access way or other hard surfaces?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	B1, B2, B3. Undulating land under asphalt.
- Were any bridges or culverts damaged within EQC Cover?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
- Were any retaining walls damaged within EQC Cover?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	RTW 1. Cracks.
- Is an engineer required?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
- Is a valuation required?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Valuer instruction.
- Is a resource consent required for any remediation work? (proximity to protected trees and waterways)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
- Has anything in this pack been escalated?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
- Customer has advised of invoices for emergency work?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
- Customer advised of next action?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	claim process
- Was any silt found under the dwelling?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
- If there was nil damage, why was that?	Building removed <input type="checkbox"/> Building repairs have fixed <input type="checkbox"/> No visible damage <input type="checkbox"/>		
- If a potential or actual 8/9 property, was the dwelling present?	Building removed <input type="checkbox"/> Building present <input type="checkbox"/>		

## Land Damage to Area A? If Yes, add details

Yes ☐ No ☒

## Land Damage to Area B? If Yes, add details

Yes ☒ No ☐ Undulating land under asphalt

## Land Damage to Area C? If Yes, add details

Yes ☒ No ☐ Undulating land under pavers & lawn area.

Total m² of Damaged Land: 89.3 m²

Notional Land Damage Value @\$300/m² (Incl GST):

\$26,790.00

CHECKED

JS 12/8

## Next action

Refer for shared land/access way analysis and recosting.

