HARRISONS
QUANTITY SURVEYORS
Independent. Always.

100 Victoria Street,
Christchurch, New Zealand
Tel (03) 366-5881 or (03) 366-7375

P.O. Box 21-393,
Edgeware, Christchurch
www.harrison-qs.co.nz

INTRODUCTION

1 My full name is Stewart Menzies Harrison. I am a registered quantity surveyor practicing at Harrisons Quantity Surveyors (**Harrisons**). Harrisons is located at 100 Victoria Street, Christchurch. I am a director and shareholder of Stewart Harrison Limited, which trades as Harrisons. I am also a director and shareholder of Ian Harrison & Associates Limited. Harrisons took over Ian Harrison & Associates Limited's business in 2014.

QUALIFICATIONS AND EXPERIENCE

2 I hold a New Zealand Certificate of Quantity Surveying. In 2006, I became a Registered Quantity Surveyor.

3 I am a Fellow of The New Zealand Institute of Quantity Surveyors Inc. (**FNZIQS**).

4 I am a Member of The New Zealand Institute of Building Inc. (**MNZIOB**).

5 I am currently the Chairman of NZIQS Canterbury Branch Board, a Canterbury Branch Membership Interview Panel Member, and a member of the NZIQS National Insurance Working Group.

6 I am currently a Board Member of the Southern Chapter of the NZIOB.

7 I have practiced as a quantity surveyor and project manager in New Zealand since 1990.

8 I have previously given evidence in the High Court as an expert on rebuild and repair costings in Christchurch following the Canterbury earthquakes.

9 I have previously acted as an expert witness in the High Court.

ASSESSMENT

10 I have been asked to provide an assessment of the estimated cost to strengthen the building to 100% NBS based on documentation provided to me by Mr Tim Gwatkin of TM Consultants.

11 I have also been asked to give evidence on the estimated cost to refurbish the strengthened building to a tenantable standard for the reuse of it, based on documentation provided to me by Mr Bill Skews of Skews Architects Ltd. From this documentation, the refurbishment for reuse includes, but is not limited to, the partial replacement of exterior roofing & wall cladding materials & flashings; replacement skylights; replacement canopies to the street frontage; partial replacement of timber floor framing and floorboards; supply & installation of a new stairway to the exterior; supply & installation of fire rated ceilings; supply & installation of fire rated linings to existing columns; supply & installation of a fire alarm system; supply & installation of a mechanical ventilation system to the mezzanine area, lining & insulating the block boundary walls, and removal & replacement of partitions as necessary to effect the works.

12 To prepare my cost estimates I have:

12.1 Read documents about the building, including:

12.1.1 Plans, and associated notes contained on them, from TM Consultants dated 15 May 2015 – attached for reference as "AA"; and TM Consultants updated Seismic Assessment dated 13 August 2018.

12.1.2 The updated Condition Report from Skews Architects dated 8 April 2018;

12.1.3 Viewing photographs of the exterior and interior of the building.

13 There is a strengthening estimate and a refurbishment estimate. Both use my quantity surveying experience, market rates obtained from merchants, suppliers, builders and subcontractors I am regularly in contact with, and supplied by builders my office closes tenders for.

14 The materials allowed in both estimates are currently available.

COST TO STRENGTHEN THE BUILDING

15 The estimated cost to earthquake strengthen the building is $1,103,282.00. This is the figure shown in the Estimate Summary at page 1 ("A") and in more detail at pages 1 to 9 in the Trade x Trade breakup ("B").

16 The estimate is dated 19 January 2017.

17 The figure includes builder's preliminary & general and margin, building consent, professional fees, contract works insurance, and a 15% contingency allowance.

18 The estimate excludes GST, replacing borer damaged floor boards and future increased costs. These exclusions are detailed on page 1 of the estimate summary.

COST TO REFURBISH THE STRENGTHENED BUILDING

19 The estimated cost to refurbish <u>and</u> strengthen the building, is $2,630,381.00. This is the figure shown in the Estimate Summary at page 1 ("C") and in more detail at pages 1 to 11 in the Trade x Trade breakup ("D").

20 The cost of refurbishment alone is $1,527,099.

21 The $2,630,381 figure therefore <u>includes</u> the strengthening costs noted in paragraph 15 above.

22 The estimate is dated 2 September 2016.

23 The figure includes builder's preliminary & general and margin, building consent, professional fees, contract works insurance, and a 15% contingency allowance.

24 The estimate excludes GST and future increased costs. These exclusions are detailed on page 1 of the estimate summary.

25 Note the "refurbish and strengthen" estimate includes builder's preliminary & general at 6% and professional fees at 15% whereas the "strengthening" estimate includes builder's preliminary & general at 8% and professional fees at 5%. This is simply on the basis that the strengthening estimate, at the time, took no account of the subsequent refurbishment requirements. I would expect both the strengthening and refurbishment work to occur concurrently thus the adjustment in the percentages adopted.

THE GILKINSON PROPOSAL

26 The "Gilkinson proposal" refers to a proposal put forward by a submitter, Mr Nigel Gilkinson, at the Council hearing of the application for resource consent. It is described in Mr Skews' updated report at paragraphs 43 & 44 as follows: -

> *43. For this reason, I recommend to RRL's structural engineer, Mr Tim Gwatkin, that his assessment:*
>
> *a. Include the demolition of the rear building extension and making-good the rear wall;*
>
> *b. Include the removal of the 1950s changes to the street facade and return to the original construction methods by removing all the wall linings and windows and replacing them with timber framing lining the existing concrete frame and cladding it with 0.66 Corrugated vertical iron sheeting and new timber windows to replicate the upper story.*
>
> *c. Include the demolition of the 1950s side extensions and return the form of the building to its original curved corrugated iron structure by replacing the external wall with a 0.66 mm corrugated iron cladding in 200 x 72 mm H 3.1 framing clad with 12mm Ply bracing and removal of all internal partitions post c1950.*
>
> *d. Retain or restore the following heritage features of the original building:*
>
> *i. The original posts and beam structure including replacement of*

borer infested timber and metal brackets at each junction of post to beam and post to floor.

ii. Replacement of 'like with like' first floor joist and flooring (borer infested).

iii. New reinforced concrete foundations/ concrete pads (for structural frames).

iv. Replacement of the timber floor with concrete with a timber finish over the top to match the existing flooring.

E. Remediation of the first-floor curved laminated trusses and props.

F. Replace the curved roofing iron and provide new bracing.

G. Provide the addition of two enclosed egress stairs and fire doors

H. Complete the earthquake remediation of the complete structure

I. The refabricating of 200 x 75 stud walls to the entire ground floor to meet Code requirements including all windows and doors in timber to match the existing.

J. Create new male and female wc's. 2 wc's per male and female at each level and an accessible WC at GF level, complete with wash hand basins.

44. I recommend to RRL's quantity surveyor, Mr Harrison, that the refurbishment works will include the above but in more detail:

a) include the demolition of the building extension and making-good both walls including the rear wall with 200 x 75 h 3.2 timber framing at 400c/c, building wrap and vertical 0.66 mm corrugated iron cladding and the necessary flashings to ensure a water tight finish and cladding of the inside face with gbtl 90 , 16mm firestop cladding.

b) Include the removal of the 1950s changes to the street facade and return to the original construction methods plus replacing the demolished walls. Include the demolition of the 1950s side extensions and return the form of the building to its original curved corrugated iron structure by replacing the external walls as noted in paragraph 16(b) above, lining with 12mm H3.1 plywood bracing.

c) Removal of internal partitions post c1950.

d) Retain or restore the following heritage features of the original building:

I. The original posts and beam structure including replacement of borer infested'timber and metal brackets at each junction of post to beam and post to floor, to the ground floor. Clad all the columns and beams with 19 mm Firestop linings.

II. Install the 9 steel portal frames supported on reinforced concrete

pads: see engineer's drawing Attached Appendix 2.

III. *Replacement of like with like first floor joist and flooring (removing all borer infested timber) and replace it with rimu ex 150 x 35mm h 3.1 t&g flooring and gbtl 90 , 16mm firestop lining on the underside of the floor.*

IV. *Provide new 200 x 600 mm deep reinforced concrete foundations to the NW and SW walls, including total replacement of the ground floor timber floor with a 100mm reinforced concrete slab over a PVC DPC with a rimu Ex 150 x 35 mm t&g floor laid over it with 45 x 45mm pinus strips at 400 c/c ramset to concrete, as a timber finish over the top to match existing.*

V. *Remediation of the first-floor curved laminated trusses and props, with additional 100 x 100 mm H3.1 supports @ 2.000.m c/c.*

VI. *Replacement of the curved roofing iron over a polythene vapour barrier complete with "Reid brace" adjustable steel bracing complete over two full width roof bays.*

VII. *The fabrication, supply and installation of two 1200mm wide enclosed egress stairs complete with mid-landing, twin handrails and fireproof egress doors at the base. The whole stair enclosed with 140 x 45nmm Ha3.1 framing and GBTL 60/60/60 firestop lining. Fix and stop to Gib Standards UNDER THE CODE.*

VIII. *The earthquake remediation of the complete structure. See engineers report. (Tim Gwatkins).*

IX. *The re-fabrication of 200 x 75 stud walls to the entire ground floor to meet Code requirements including all windows and doors in timber to match the existing.*

27 The estimated cost of the "Gilkinson proposal" is $1,990,919.00. This is the figure shown in the Estimate Summary at page 1 ("E") and in more detail at pages 1 to 7 in the Trade x Trade breakup ("F"). The estimate is dated 28 May 2018.

28 The figure includes builder's preliminary & general and margin, building consent, professional fees, contract works insurance, and a 15% contingency allowance.

29 The estimate excludes GST and future increased costs. These exclusions are detailed on page 1 of the estimate summary.

Yours faithfully,

Stewart Harrison
Managing Director
FNZIQS | Reg QS | MNZIOB

'A'

Estimate Summary

Job Name :	229 WEST ST ASH TMA1	**Job Description**
Client's Name:	TM Consultants	Earthquake Strengthening Estimate 229 West Street Ashburton

Trd No.	Trade Description	Trade %	Cost/m2	Trade Total
1	Earthquake Strengthening Estimate			
2	229 West Street, Ashburton			
3				
4	Rear Building	38.55		425,270
5	Front Building	23.83		262,938
6	Scaffolding & Access	2.91		32,100
7	Subtotal			*720,308*
8	Builders Preliminary & General (8%)	5.22		57,625
9	Builders Margin (10%)	7.05		77,794
10	Subtotal			*855,727*
11	Contingency Sum (15%)	11.63		128,360
12	Professional Fees (5%)	4.46		49,205
13	Building Consent Fees	0.91		10,000
14	CW Insurance - Premium & Excess	5.44		59,990
15	Total Estimate excluding GST			*1,103,282*
16				
17	Notes: -			
18	Labour rate - $60.00 per hour			
19	Preliminary & General - 8%			
20	Builders Margin - 10%			
21	Assumed a clear building area to work within			
22				
23	Exclusions: -			
24	GST			
25	Replacing borer damaged floor joists			
26	Future increased costs			
27				
28	Thursday 19 January 2017			
		100.00		1,103,282

Final Total : $ **1,103,282**

'B'

Trade x Trade

Job Name : 229 WEST ST ASH TMA1

Client's Name : TM Consultants

Job Description

Earthquake Strengthening Estimate
229 West Street
Ashburton

Item Description	Quantity	Unit	Material Rate	Mark Up %	Labour Factor	Labour Qty	Labour Rate	Amount
Trade : ***Rear Building***								
Services								
Disconnect existing electrical , plumbing, fire protection, drainage services	1.00	sum	5,960.00					5,960.00
Stage 1								
200x200x9mm SHS portal beams :[8 No]	5,745.00	kg	8.60					49,407.00
[illegible]l timber bottom cord and fix portal beam	104.00	no	11.60					1,206.40
Prop existing trusses under new steel portal beam allowing sufficient space to excavate new pads	18.00	no	90.00					1,620.00
200x100 bearer under new steel portal beam supporting bottom cords for props to sit under	60.00	m	28.00					1,680.00
Stage 2								
Disconnect posts from truss bottom chord and concrete floor, and dump	17.00	no	60.00					1,020.00
Sawcut concrete floors, break up concrete and dump	17.00	no	182.40					3,100.80
Hand excavate 500mm deep for new SHS posts :[17 No]	13.00	m3	240.00					3,120.00
Concrete in 1200 x 1200 x 500mm deep pads	17.00	no	305.78					5,198.32
200x200x9mm SHS portal legs and braces :[17 No]	6,497.00	kg	8.60					55,874.20
[illegible]89x5mm SHS struts between truss top [illegible]ords	406.00	kg	17.60					7,145.60
89x89x5mm SHS struts between new portals at knee joint	738.00	kg	15.20					11,217.60
50x3mm flat steel cross bracing between truss top chords	154.00	kg	17.60					2,710.40
Ex 100x100 timber struts between truss bottom chords :[40 No]	124.00	m	22.00					2,728.00
100x100x6mm angle for fixing struts to bottom chords :[80 No]	74.00	kg	11.00					814.00
Coach bolts to last	160.00	no	9.20					1,472.00
Ex 75x75 timber struts fixed to existing diagonal truss struts	66.00	m	17.00					1,122.00
Stage 3 - Side walls								
Prop existing rafters on side walls prior to block walls being demolished (not the gable end wall)	18.00	no	60.00					1,080.00

Trade x Trade

Job Name : 229 WEST ST ASH TMA1

Client's Name : TM Consultants

Job Description

Earthquake Strengthening Estimate
229 West Street
Ashburton

Item Description	Quantity	Unit	Material Rate	Mark Up %	Labour Factor	Labour Qty	Labour Rate	Amount
Trade : ***Rear Building***								*(Continued)*
200x100 bearer under existing rafters ready for props to sit under	60.00	m	28.00					1,680.00
Disconnect existing downpipes and store for reuse	8.00	no	30.00					240.00
Carefully take down existing external guttering and store for re-use	60.00	m	18.00					1,080.00
Take down fascia board and dump	60.00	m	18.00					1,080.00
Disconnect top plate from rafters	1.00	sum	960.00					960.00
Sawcut concrete floor slab 600mm in from inside face of blockwork side walls, breakout slab and dump	36.00	m2	103.33					3,719.88
Sawcut asphalt carpark, lift asphalt and dump, allow 1.00m working space	60.00	m2	31.20					1,872.00
Carefully demolish existing blockwork walls and dump	252.00	m2	56.00					14,112.00
Breakout existing foundations and dump	60.00	m	95.00					5,700.00
Excavate 400mm dia postholes, 2500mm deep at 2500mm crs	18.00	no	120.00					2,160.00
Concrete in reinforced postholes :[36 No]	12.00	m3	1,031.15					12,373.76
Tidy up the trench left following demolition of existing foundations	12.00	m3	57.00					684.00
Concrete in 500mm wide x 400mm deep perimeter foundation	60.00	m	198.68					11,921.02
200 series blockwork to walls	252.00	m2	220.00					55,440.00
Drill existing floor slab 200mm deep at [illegible]mm crs and epoxy grout D12 rods 500mm long	60.00	m	110.76					6,645.60
Concrete infill between new foundation and existing floor slab, say 400mm wide	24.00	m2	101.60					2,438.40
150x50 ribbon plate on DPM bolted to top of concrete wall inserted under existing rafters	60.00	m	45.05					2,703.00
300x90 LVL11 rafters :[18 No]	117.00	m	131.00					15,327.00
Connect LVL rafters to ribbon plate using Z nails :[4 No]	36.00	no	9.20					331.20
Connect LVL rafters to plate welded to 200SHS portal frame :[2 No]	18.00	no	12.00					216.00
Bolts to last	36.00	no	11.20					403.20
Ex 200x50 blocking between LVL rafters	60.00	m	28.00					1,680.00
Z nails fixing LVL rafters to existing purlins	1.00	sum	1,060.00					1,060.00
Disconnect and remove existing rafters	1.00	sum	960.00					960.00
65x5mm flat steel cross bracing between rafters	266.00	kg	18.80					5,000.80

Trade x Trade

Job Name : 229 WEST ST ASH TMA1

Client's Name : TM Consultants

Job Description

Earthquake Strengthening Estimate
229 West Street
Ashburton

Item Description	Quantity	Unit	Material Rate	Mark Up %	Labour Factor	Labour Qty	Labour Rate	Amount
Trade : ***Rear Building***								*(Continued)*
Take down props and propping bearer	1.00	sum	720.00					720.00
Fascia board	60.00	m	29.20					1,752.00
Reinstall existing external guttering	60.00	m	22.00					1,320.00
Paint blockwork wall	252.00	m2	26.00					6,552.00
Paint fascia board	60.00	m	10.00					600.00
Reinstate downpipes	8.00	no	30.00					240.00
Reinstate stormwater pipe	60.00	m	85.00					5,100.00
Base up and new asphalt	60.00	m2	100.00					6,000.00
Stage 4 - Gable End Wall								
Take down existing barge flashings and dump	1.00	sum	600.00					600.00
Take down barge board and dump	27.00	m	18.00					486.00
Disconnect gable wall framing from roof framing	1.00	sum	960.00					960.00
Sawcut concrete floor 600mm in from inside face of blockwork wall, break up concrete and dump	15.00	m2	103.33					1,549.95
Carefully demolish existing timber gable wall framing and dump	38.00	m2	32.00					1,216.00
Carefully demolish existing blockwork and dump	105.00	m2	56.00					5,880.00
Breakout existing foundations and dump	25.00	m	95.00					2,375.00
Excavate 900mm dia postholes, 2500mm deep	4.00	no	225.00					900.00
Concrete in postholes :[4 No]	7.00	m3	606.29					4,244.04
Tidy up the trench left following demolition of existing foundations	5.00	m3	165.00					825.00
Concrete in 500mm wide x 400mm deep perimeter foundation	25.00	m	198.68					4,967.09
Concrete in 600mm x 400mm insitu columns	34.00	m	852.05					28,969.70
200 series blockwork including bond beams	143.00	m2	240.00					34,320.00
Drill existing floor slab 200mm deep at 200mm crs and epoxy grout D12 rods 500mm long	25.00	m	110.76					2,769.00
Concrete infill between new foundation and existing floor slab, say 400mm wide	10.00	m2	101.60					1,016.00
150x50 ribbon plate on DPM bolted to top of concrete wall ready for new barge flashing	27.00	m	45.05					1,216.35
100x100x10mm angle bolted to concrete block wall ready for struts :[5 No]	5.00	kg	23.00					115.00

Trade x Trade

Job Name : 229 WEST ST ASH TMA1

Client's Name : TM Consultants

Job Description

Earthquake Strengthening Estimate
229 West Street
Ashburton

Item Description	Quantity	Unit	Material Rate	Mark Up %	Labour Factor	Labour Qty	Labour Rate	Amount
Trade : ***Rear Building***								*(Continued)*
M12 expansion anchors connecting 89x89x5mm SHS struts to concrete block wall	10.00	no	9.70					97.00
M12 bolts connecting 89x89x5mm SHS struts to steel angle bracket	10.00	no	9.20					92.00
Barge board	27.00	m	29.20					788.40
Barge flashing	27.00	m	45.00					1,215.00
Misc								
Take down, store and reinstall external doors, windows, vents etc	1.00	sum	2,120.00					2,120.00
							Rear Building Total :	**425,269.71**
Trade : ***Front Building***								
Services								
Disconnect existing electrical , plumbing, fire protection, drainage services	1.00	sum	7,400.00					7,400.00
Stage 1								
Portal Frames Across								
Sawcut concrete floors, break up concrete and dump	18.00	no	96.00					1,728.00
Hand excavate 500mm deep for new SHS posts :[18 No]	6.00	m3	240.00					1,440.00
Concrete in 800 x 800 x 500mm deep pads	18.00	no	301.70					5,430.66
200x200x9mm SHS portals - across :[9 No]	6,059.00	kg	8.60					52,107.40
Portal Frames Along								
Sawcut concrete floors, break up concrete and dump	18.00	no	96.00					1,728.00
Hand excavate 500mm deep for new SHS posts :[18 No]	6.00	m3	240.00					1,440.00
Concrete in 800 x 800 x 500mm deep pads	18.00	no	301.70					5,430.66
200x200x9mm SHS portals - along :[9 No]	6,918.00	kg	8.60					59,494.80
Stage 2 - East Wall								
Prop existing rafters prior to block walls being demolished	20.00	m	60.00					1,200.00
200x100 bearer under existing rafters ready for props to sit under	20.00	m	28.00					560.00

Trade x Trade

Job Name : 229 WEST ST ASH TMA1

Client's Name : TM Consultants

Job Description

Earthquake Strengthening Estimate
229 West Street
Ashburton

Item Description	Quantity	Unit	Material Rate	Mark Up %	Labour Factor	Labour Qty	Labour Rate	Amount
Trade : ***Front Building***								*(Continued)*
Disconnect existing downpipes and store for reuse	1.00	no	30.00					30.00
Carefully take down existing external guttering and store for re-use - allow the full length of wall	30.00	m	18.00					540.00
Take down fascia board and dump - allow the full length of wall	30.00	m	18.00					540.00
Disconnect top plate from rafters	1.00	sum	480.00					480.00
Carefully remove existing windows and store for reuse	1.00	sum	600.00					600.00
Carefully remove existing lintel over windows and store for reuse	1.00	sum	240.00					240.00
Sawcut concrete floor slab 600mm in from inside face of blockwork side walls, breakout slab and dump	12.00	m2	103.33					1,239.96
Sawcut asphalt carpark, lift asphalt and dump, allow 1.00m working space	20.00	m2	31.20					624.00
Carefully demolish existing blockwork walls and dump	84.00	m2	56.00					4,704.00
Breakout existing foundations and dump	20.00	m	95.00					1,900.00
Excavate 400mm dia postholes, 2500mm deep at 2500mm crs to walls	9.00	no	120.00					1,080.00
Concrete in reinforced postholes to side walls :[9 No]	3.00	m3	1,031.15					3,093.44
Tidy up the trench left following demolition of existing foundations	4.00	m3	57.00					228.00
Concrete in 500mm wide x 400mm deep perimeter foundation to walls	20.00	m	198.68					3,973.67
200 series blockwork to walls	84.00	m2	220.00					18,480.00
Drill existing floor slab 200mm deep at 200mm crs and epoxy grout D12 rods 500mm long	20.00	m	110.76					2,215.20
Concrete infill between new foundation and existing floor slab, say 400mm wide	8.00	m2	101.60					812.80
Reinstall salvaged lintel	16.00	m	32.00					512.00
150x50 ribbon plate on DPM bolted to top of concrete wall inserted under existing rafters	20.00	m	45.05					901.00
Connect existing rafters to ribbon plate using Z nails	1.00	sum	530.00					530.00
Ex 200x50 blocking between rafters	20.00	m	28.00					560.00
Take down props and propping bearer	1.00	sum	720.00					720.00
Fascia board	30.00	m	29.20					876.00
Reinstall existing external guttering	30.00	m	22.00					660.00

Trade x Trade

Job Name : 229 WEST ST ASH TMA1

Client's Name : TM Consultants

Job Description

Earthquake Strengthening Estimate
229 West Street
Ashburton

Item Description	Quantity	Unit	Material Rate	Mark Up %	Labour Factor	Labour Qty	Labour Rate	Amount
Trade : ***Front Building***								*(Continued)*
Paint blockwork wall	126.00	m2	26.00					3,276.00
Paint fascia board	30.00	m	10.00					300.00
Reinstate downpipes	1.00	no	30.00					30.00
Reinstate stormwater pipe	25.00	m	85.00					2,125.00
Base up and new asphalt	25.00	m2	100.00					2,500.00
Stage 3 - West Wall								
Prop existing mezzanine floor, well clear of new postholes, prior to block wall being demolished	25.00	m	60.00					1,500.00
200x100 bearer under existing rafters ready for props to sit under	25.00	m	28.00					700.00
Disconnect timber posts/mezzanaine floor structure from external wall	25.00	m	24.00					600.00
Disconnect existing downpipes and store for reuse	1.00	no	30.00					30.00
Carefully take down existing external guttering and store for re-use	30.00	m	18.00					540.00
Take down fascia board and dump	30.00	m	18.00					540.00
Disconnect top plate from rafters	1.00	sum	480.00					480.00
Carefully remove existing windows and store for reuse	1.00	sum	600.00					600.00
Carefully remove existing lintel over windows store for reuse	1.00	sum	240.00					240.00
Sawcut concrete floor slab 600mm in from inside face of blockwork side walls, breakout slab and dump	12.00	m2	103.33					1,239.96
Sawcut asphalt carpark, lift asphalt and dump, allow 1.00m working space	20.00	m2	31.20					624.00
Sawcut blockwall	5.00	m	26.00					130.00
Carefully demolish existing blockwork walls and dump	84.00	m2	56.00					4,704.00
Breakout existing foundations and dump	20.00	m	95.00					1,900.00
Excavate 400mm dia postholes, 2500mm deep at 2500mm crs to walls	9.00	no	120.00					1,080.00
Concrete in reinforced postholes to side walls :[9 No]	3.00	m3	1,031.15					3,093.44
Tidy up the trench left following demolition of existing foundations	4.00	m3	57.00					228.00
Concrete in 500mm wide x 400mm deep perimeter foundation to walls	20.00	m	198.68					3,973.67

Trade x Trade

Job Name : 229 WEST ST ASH TMA1

Client's Name : TM Consultants

Job Description

Earthquake Strengthening Estimate
229 West Street
Ashburton

Item Description	Quantity	Unit	Material Rate	Mark Up %	Labour Factor	Labour Qty	Labour Rate	Amount
Trade : ***Front Building***								*(Continued)*
Drill existing concrete block wall 200mm deep and epoxy D12 starters every other course	6.00	no	21.61					129.63
200 series blockwork to walls	84.00	m2	220.00					18,480.00
Drill existing floor slab 200mm deep at 200mm crs and epoxy grout D12 rods 500mm long	20.00	m	110.76					2,215.20
crete infill between new foundation and existing floor slab, say 400mm wide	8.00	m2	101.60					812.80
Reinstall salvaged lintel	16.00	m	32.00					512.00
150x50 ribbon plate on DPM bolted to top of concrete wall inserted under existing rafters	20.00	m	45.05					901.00
Connect existing rafters to ribbon plate using Z nails	1.00	sum	530.00					530.00
Ex 200x50 blocking between rafters	20.00	m	28.00					560.00
Take down props and propping bearer	1.00	sum	720.00					720.00
Fascia board	30.00	m	29.20					876.00
Reinstall existing external guttering	30.00	m	22.00					660.00
Paint blockwork wall	126.00	m2	26.00					3,276.00
Paint fascia board	30.00	m	10.00					300.00
Reinstate downpipes	1.00	no	30.00					30.00
Reinstate stormwater pipe	25.00	m	85.00					2,125.00
e up and new asphalt	25.00	m2	100.00					2,500.00
Once new wall completed....								
Drill existing 200x200 timber post	11.00	no	6.00					66.00
100x100x10mm angle each side of timber post	21.00	kg	23.00					483.00
M12 bolt through timber	44.00	no	10.70					470.80
M12 chemset into concrete	44.00	no	18.00					792.00
Stage 4 - Frontage Wall								
150x150x16mm angle bolted to underside of mezzanine floor and chemset fixed to concrete beam (3m sections allowed for ease of access) :[8 No]	907.00	kg	9.20					8,344.40
M6 coach screw into timber	150.00	no	9.20					1,380.00
M12 chemset into concrete	40.00	no	18.00					720.00

Trade x Trade

Job Name : 229 WEST ST ASH TMA1

Client's Name : TM Consultants

Job Description

Earthquake Strengthening Estimate
229 West Street
Ashburton

Item Description	Quantity	Unit	Material Rate	Mark Up %	Labour Factor	Labour Qty	Labour Rate	Amount
Trade : ***Front Building***								*(Continued)*
Misc								
Take down, store and reinstall external doors, windows, vents etc	1.00	sum	2,120.00					2,120.00
							Front Building Total :	**262,937.49**
Trade : ***Scaffolding & Access***								
External Works								
Stage 1 - Replacement of West & East Blockwork Walls								
EDC	500.00	m2	20.00					10,000.00
Rental - 8 weeks	500.00	m2	16.00					8,000.00
Stage 2 - Painting West side only								
EDC	300.00	m2	20.00					6,000.00
Rental - 2 weeks	300.00	m2	4.00					1,200.00
Internal Works								
Stage 1 - Replacement of North Blockwork Wall (from the interior)								
EDC	150.00	m2	20.00					3,000.00
Rental - 4 weeks	150.00	m2	16.00					2,400.00
Mobiles and platforms	1.00	sum	1,500.00					1,500.00
							Scaffolding & Access Total :	**32,100.00**
Trade : ***Builders Preliminary & General (8%)***								
P&G 8%	0.08	sum	720,308.00					57,624.64
							Builders Preliminary & General (8%) Total :	**57,624.64**
Trade : ***Builders Margin (10%)***								
Margin 10%	0.10	sum	777,933.00					77,793.30
							Builders Margin (10%) Total :	**77,793.30**
Trade : ***Contingency Sum (15%)***								

Trade x Trade

Job Name : 229 WEST ST ASH TMA1

Client's Name : TM Consultants

Job Description

Earthquake Strengthening Estimate
229 West Street
Ashburton

Item Description	Quantity	Unit	Material Rate	Mark Up %	Labour Factor	Labour Qty	Labour Rate	Amount
Trade : ***Contingency Sum (15%)***								
Contingency Sum - 15%	0.15	sum	855,727.00					128,359.05
							Contingency Sum (15%) Total :	**128,359.05**
Trade : ***Professional Fees (5%)***								
Engineering fees including observation - 5%	0.05	sum	984,087.00					49,204.35
							Professional Fees (5%) Total :	**49,204.35**
Trade : ***Building Consent Fees***								
Consent	1.00	sum	10,000.00					10,000.00
							Building Consent Fees Total :	**10,000.00**
Trade : ***CW Insurance - Premium & Excess***								
CW Insurance 0.75%	0.01	sum	1,043,292.00					7,824.69
Excess 5%	0.05	sum	1,043,292.00					52,164.60
							CW Insurance - Premium & Excess Total :	**59,989.29**

'C'

Estimate Summary

Job Name :	229 WEST ST ASH A1	**Job Description**
Client's Name:	TM Consultants	Earthquake Strengthening Estimate 229 West Street Ashburton

Trd No.	Trade Description	Trade %	Cost/m2	Trade Total
1	Earthquake Strengthening Estimate			
2	229 West Street, Ashburton			
3				
4	Rear Building	16.17		425,270
5	Front Building	10.00		262,938
6	Scaffolding & Access	2.21		58,260
7	Skews Report - August 2016	26.81		705,187
8	Compliance Costs	5.52		145,166
9	Subtotal			*1,596,821*
10	Builders Preliminary & General (6%)	3.64		95,810
11	Builders Margin (10%)	6.43		169,264
12	Subtotal			*1,861,895*
13	Contingency Sum (15%)	10.62		279,285
14	Professional Fees (15%)	12.21		321,177
15	Building Consent Fees	0.95		25,000
16	CW Insurance - Premium & Excess	5.44		143,024
17	Total Estimate excluding GST			*2,630,381*
18				
19				
20	Notes: -			
21	Labour rate - $60.00 per hour			
22	Preliminary & General - 6%			
23	Builders Margin - 10%			
24	Assumed a clear building area to work within			
25				
26	Exclusions: -			
27	GST			
28	Future increased costs			
29				
30	Friday 2 September 2016			
		100.00		2,630,381

Final Total : $ **2,630,381**

'D'

Trade x Trade

Job Name : 229 WEST ST ASH A1

Client's Name : TM Consultants

Job Description

Earthquake Strengthening Estimate
229 West Street
Ashburton

Item Description	Quantity	Unit	Material Rate	Mark Up %	Labour Factor	Labour Qty	Labour Rate	Amount
Trade : ***Rear Building***								
Services								
Disconnect existing electrical , plumbing, fire protection, drainage services	1.00	sum	5,960.00					5,960.00
Stage 1								
200x200x9mm SHS portal beams :[8 No]	5,745.00	kg	8.60					49,407.00
[illegible] timber bottom cord and fix portal beam	104.00	no	11.60					1,206.40
Prop existing trusses under new steel portal beam allowing sufficient space to excavate new pads	18.00	no	90.00					1,620.00
200x100 bearer under new steel portal beam supporting bottom cords for props to sit under	60.00	m	28.00					1,680.00
Stage 2								
Disconnect posts from truss bottom chord and concrete floor, and dump	17.00	no	60.00					1,020.00
Sawcut concrete floors, break up concrete and dump	17.00	no	182.40					3,100.80
Hand excavate 500mm deep for new SHS posts :[17 No]	13.00	m3	240.00					3,120.00
Concrete in 1200 x 1200 x 500mm deep pads	17.00	no	305.78					5,198.32
200x200x9mm SHS portal legs and braces :[17 No]	6,497.00	kg	8.60					55,874.20
[illegible]89x5mm SHS struts between truss top chords	406.00	kg	17.60					7,145.60
89x89x5mm SHS struts between new portals at knee joint	738.00	kg	15.20					11,217.60
50x3mm flat steel cross bracing between truss top chords	154.00	kg	17.60					2,710.40
Ex 100x100 timber struts between truss bottom chords :[40 No]	124.00	m	22.00					2,728.00
100x100x6mm angle for fixing struts to bottom chords :[80 No]	74.00	kg	11.00					814.00
Coach bolts to last	160.00	no	9.20					1,472.00
Ex 75x75 timber struts fixed to existing diagonal truss struts	66.00	m	17.00					1,122.00
Stage 3 - Side walls								
Prop existing rafters on side walls prior to block walls being demolished (not the gable end wall)	18.00	no	60.00					1,080.00

Trade x Trade

Job Name : 229 WEST ST ASH A1

Client's Name : TM Consultants

Job Description

Earthquake Strengthening Estimate
229 West Street
Ashburton

Item Description	Quantity	Unit	Material Rate	Mark Up %	Labour Factor	Labour Qty	Labour Rate	Amount
Trade : ***Rear Building***								*(Continued)*
200x100 bearer under existing rafters ready for props to sit under	60.00	m	28.00					1,680.00
Disconnect existing downpipes and store for reuse	8.00	no	30.00					240.00
Carefully take down existing external guttering and store for re-use	60.00	m	18.00					1,080.00
Take down fascia board and dump	60.00	m	18.00					1,080.00
Disconnect top plate from rafters	1.00	sum	960.00					960.00
Sawcut concrete floor slab 600mm in from inside face of blockwork side walls, breakout slab and dump	36.00	m2	103.33					3,719.88
Sawcut asphalt carpark, lift asphalt and dump, allow 1.00m working space	60.00	m2	31.20					1,872.00
Carefully demolish existing blockwork walls and dump	252.00	m2	56.00					14,112.00
Breakout existing foundations and dump	60.00	m	95.00					5,700.00
Excavate 400mm dia postholes, 2500mm deep at 2500mm crs	18.00	no	120.00					2,160.00
Concrete in reinforced postholes :[36 No]	12.00	m3	1,031.15					12,373.76
Tidy up the trench left following demolition of existing foundations	12.00	m3	57.00					684.00
Concrete in 500mm wide x 400mm deep perimeter foundation	60.00	m	198.68					11,921.02
200 series blockwork to walls	252.00	m2	220.00					55,440.00
Drill existing floor slab 200mm deep at [illegible]mm crs and epoxy grout D12 rods 500mm long	60.00	m	110.76					6,645.60
Concrete infill between new foundation and existing floor slab, say 400mm wide	24.00	m2	101.60					2,438.40
150x50 ribbon plate on DPM bolted to top of concrete wall inserted under existing rafters	60.00	m	45.05					2,703.00
300x90 LVL11 rafters :[18 No]	117.00	m	131.00					15,327.00
Connect LVL rafters to ribbon plate using Z nails :[4 No]	36.00	no	9.20					331.20
Connect LVL rafters to plate welded to 200SHS portal frame :[2 No]	18.00	no	12.00					216.00
Bolts to last	36.00	no	11.20					403.20
Ex 200x50 blocking between LVL rafters	60.00	m	28.00					1,680.00
Z nails fixing LVL rafters to existing purlins	1.00	sum	1,060.00					1,060.00
Disconnect and remove existing rafters	1.00	sum	960.00					960.00
65x5mm flat steel cross bracing between rafters	266.00	kg	18.80					5,000.80

Trade x Trade

Job Name : 229 WEST ST ASH A1

Client's Name : TM Consultants

Job Description

Earthquake Strengthening Estimate
229 West Street
Ashburton

Item Description	Quantity	Unit	Material Rate	Mark Up %	Labour Factor	Labour Qty	Labour Rate	Amount
Trade : ***Rear Building***								*(Continued)*
Take down props and propping bearer	1.00	sum	720.00					720.00
Fascia board	60.00	m	29.20					1,752.00
Reinstall existing external guttering	60.00	m	22.00					1,320.00
Paint blockwork wall	252.00	m2	26.00					6,552.00
Paint fascia board	60.00	m	10.00					600.00
Reinstate downpipes	8.00	no	30.00					240.00
Reinstate stormwater pipe	60.00	m	85.00					5,100.00
Base up and new asphalt	60.00	m2	100.00					6,000.00
Stage 4 - Gable End Wall								
Take down existing barge flashings and dump	1.00	sum	600.00					600.00
Take down barge board and dump	27.00	m	18.00					486.00
Disconnect gable wall framing from roof framing	1.00	sum	960.00					960.00
Sawcut concrete floor 600mm in from inside face of blockwork wall, break up concrete and dump	15.00	m2	103.33					1,549.95
Carefully demolish existing timber gable wall framing and dump	38.00	m2	32.00					1,216.00
Carefully demolish existing blockwork and dump	105.00	m2	56.00					5,880.00
Breakout existing foundations and dump	25.00	m	95.00					2,375.00
Excavate 900mm dia postholes, 2500mm deep	4.00	no	225.00					900.00
Concrete in postholes :[4 No]	7.00	m3	606.29					4,244.04
Tidy up the trench left following demolition of existing foundations	5.00	m3	165.00					825.00
Concrete in 500mm wide x 400mm deep perimeter foundation	25.00	m	198.68					4,967.09
Concrete in 600mm x 400mm insitu columns	34.00	m	852.05					28,969.70
200 series blockwork including bond beams	143.00	m2	240.00					34,320.00
Drill existing floor slab 200mm deep at 200mm crs and epoxy grout D12 rods 500mm long	25.00	m	110.76					2,769.00
Concrete infill between new foundation and existing floor slab, say 400mm wide	10.00	m2	101.60					1,016.00
150x50 ribbon plate on DPM bolted to top of concrete wall ready for new barge flashing	27.00	m	45.05					1,216.35
100x100x10mm angle bolted to concrete block wall ready for struts :[5 No]	5.00	kg	23.00					115.00

Trade x Trade

Job Name : 229 WEST ST ASH A1

Client's Name : TM Consultants

Job Description

Earthquake Strengthening Estimate
229 West Street
Ashburton

Item Description	Quantity	Unit	Material Rate	Mark Up %	Labour Factor	Labour Qty	Labour Rate	Amount
Trade : ***Rear Building***								*(Continued)*
M12 expansion anchors connecting 89x89x5mm SHS struts to concrete block wall	10.00	no	9.70					97.00
M12 bolts connecting 89x89x5mm SHS struts to steel angle bracket	10.00	no	9.20					92.00
Barge board	27.00	m	29.20					788.40
Barge flashing	27.00	m	45.00					1,215.00
Misc								
Take down, store and reinstall external doors, windows, vents etc	1.00	sum	2,120.00					2,120.00
							Rear Building Total :	**425,269.71**
Trade : ***Front Building***								
Services								
Disconnect existing electrical , plumbing, fire protection, drainage services	1.00	sum	7,400.00					7,400.00
Stage 1								
Portal Frames Across								
Sawcut concrete floors, break up concrete and dump	18.00	no	96.00					1,728.00
Hand excavate 500mm deep for new SHS posts :[18 No]	6.00	m3	240.00					1,440.00
Concrete in 800 x 800 x 500mm deep pads	18.00	no	301.70					5,430.66
200x200x9mm SHS portals - across :[9 No]	6,059.00	kg	8.60					52,107.40
Portal Frames Along								
Sawcut concrete floors, break up concrete and dump	18.00	no	96.00					1,728.00
Hand excavate 500mm deep for new SHS posts :[18 No]	6.00	m3	240.00					1,440.00
Concrete in 800 x 800 x 500mm deep pads	18.00	no	301.70					5,430.66
200x200x9mm SHS portals - along :[9 No]	6,918.00	kg	8.60					59,494.80
Stage 2 - East Wall								
Prop existing rafters prior to block walls being demolished	20.00	m	60.00					1,200.00
200x100 bearer under existing rafters ready for props to sit under	20.00	m	28.00					560.00

Trade x Trade

Job Name : 229 WEST ST ASH A1

Client's Name : TM Consultants

Job Description

Earthquake Strengthening Estimate
229 West Street
Ashburton

Item Description	Quantity	Unit	Material Rate	Mark Up %	Labour Factor	Labour Qty	Labour Rate	Amount
Trade : ***Front Building***								*(Continued)*
Disconnect existing downpipes and store for reuse	1.00	no	30.00					30.00
Carefully take down existing external guttering and store for re-use - allow the full length of wall	30.00	m	18.00					540.00
Take down fascia board and dump - allow the full length of wall	30.00	m	18.00					540.00
Disconnect top plate from rafters	1.00	sum	480.00					480.00
Carefully remove existing windows and store for reuse	1.00	sum	600.00					600.00
Carefully remove existing lintel over windows and store for reuse	1.00	sum	240.00					240.00
Sawcut concrete floor slab 600mm in from inside face of blockwork side walls, breakout slab and dump	12.00	m2	103.33					1,239.96
Sawcut asphalt carpark, lift asphalt and dump, allow 1.00m working space	20.00	m2	31.20					624.00
Carefully demolish existing blockwork walls and dump	84.00	m2	56.00					4,704.00
Breakout existing foundations and dump	20.00	m	95.00					1,900.00
Excavate 400mm dia postholes, 2500mm deep at 2500mm crs to walls	9.00	no	120.00					1,080.00
Concrete in reinforced postholes to side walls :[9 No]	3.00	m3	1,031.15					3,093.44
Tidy up the trench left following demolition of existing foundations	4.00	m3	57.00					228.00
Concrete in 500mm wide x 400mm deep perimeter foundation to walls	20.00	m	198.68					3,973.67
200 series blockwork to walls	84.00	m2	220.00					18,480.00
Drill existing floor slab 200mm deep at 200mm crs and epoxy grout D12 rods 500mm long	20.00	m	110.76					2,215.20
Concrete infill between new foundation and existing floor slab, say 400mm wide	8.00	m2	101.60					812.80
Reinstall salvaged lintel	16.00	m	32.00					512.00
150x50 ribbon plate on DPM bolted to top of concrete wall inserted under existing rafters	20.00	m	45.05					901.00
Connect existing rafters to ribbon plate using Z nails	1.00	sum	530.00					530.00
Ex 200x50 blocking between rafters	20.00	m	28.00					560.00
Take down props and propping bearer	1.00	sum	720.00					720.00
Fascia board	30.00	m	29.20					876.00
Reinstall existing external guttering	30.00	m	22.00					660.00

Trade x Trade

Job Name : 229 WEST ST ASH A1

Client's Name : TM Consultants

Job Description

Earthquake Strengthening Estimate
229 West Street
Ashburton

Item Description	Quantity	Unit	Material Rate	Mark Up %	Labour Factor	Labour Qty	Labour Rate	Amount
Trade : ***Front Building***								*(Continued)*
Paint blockwork wall	126.00	m2	26.00					3,276.00
Paint fascia board	30.00	m	10.00					300.00
Reinstate downpipes	1.00	no	30.00					30.00
Reinstate stormwater pipe	25.00	m	85.00					2,125.00
Base up and new asphalt	25.00	m2	100.00					2,500.00
Stage 3 - West Wall								
Prop existing mezzanine floor, well clear of new postholes, prior to block wall being demolished	25.00	m	60.00					1,500.00
200x100 bearer under existing rafters ready for props to sit under	25.00	m	28.00					700.00
Disconnect timber posts/mezzanaine floor structure from external wall	25.00	m	24.00					600.00
Disconnect existing downpipes and store for reuse	1.00	no	30.00					30.00
Carefully take down existing external guttering and store for re-use	30.00	m	18.00					540.00
Take down fascia board and dump	30.00	m	18.00					540.00
Disconnect top plate from rafters	1.00	sum	480.00					480.00
Carefully remove existing windows and store for reuse	1.00	sum	600.00					600.00
Carefully remove existing lintel over windows and store for reuse	1.00	sum	240.00					240.00
Sawcut concrete floor slab 600mm in from inside face of blockwork side walls, breakout slab and dump	12.00	m2	103.33					1,239.96
Sawcut asphalt carpark, lift asphalt and dump, allow 1.00m working space	20.00	m2	31.20					624.00
Sawcut blockwall	5.00	m	26.00					130.00
Carefully demolish existing blockwork walls and dump	84.00	m2	56.00					4,704.00
Breakout existing foundations and dump	20.00	m	95.00					1,900.00
Excavate 400mm dia postholes, 2500mm deep at 2500mm crs to walls	9.00	no	120.00					1,080.00
Concrete in reinforced postholes to side walls :[9 No]	3.00	m3	1,031.15					3,093.44
Tidy up the trench left following demolition of existing foundations	4.00	m3	57.00					228.00
Concrete in 500mm wide x 400mm deep perimeter foundation to walls	20.00	m	198.68					3,973.67

Trade x Trade

Job Name : 229 WEST ST ASH A1

Client's Name : TM Consultants

Job Description

Earthquake Strengthening Estimate
229 West Street
Ashburton

Item Description	Quantity	Unit	Material Rate	Mark Up %	Labour Factor	Labour Qty	Labour Rate	Amount
Trade : ***Front Building***								*(Continued)*
Drill existing concrete block wall 200mm deep and epoxy D12 starters every other course	6.00	no	21.61					129.63
200 series blockwork to walls	84.00	m2	220.00					18,480.00
Drill existing floor slab 200mm deep at 200mm crs and epoxy grout D12 rods 500mm long	20.00	m	110.76					2,215.20
Concrete infill between new foundation and existing floor slab, say 400mm wide	8.00	m2	101.60					812.80
Reinstall salvaged lintel	16.00	m	32.00					512.00
150x50 ribbon plate on DPM bolted to top of concrete wall inserted under existing rafters	20.00	m	45.05					901.00
Connect existing rafters to ribbon plate using Z nails	1.00	sum	530.00					530.00
Ex 200x50 blocking between rafters	20.00	m	28.00					560.00
Take down props and propping bearer	1.00	sum	720.00					720.00
Fascia board	30.00	m	29.20					876.00
Reinstall existing external guttering	30.00	m	22.00					660.00
Paint blockwork wall	126.00	m2	26.00					3,276.00
Paint fascia board	30.00	m	10.00					300.00
Reinstate downpipes	1.00	no	30.00					30.00
Reinstate stormwater pipe	25.00	m	85.00					2,125.00
Make up and new asphalt	25.00	m2	100.00					2,500.00
Once new wall completed....								
Drill existing 200x200 timber post	11.00	no	6.00					66.00
100x100x10mm angle each side of timber post	21.00	kg	23.00					483.00
M12 bolt through timber	44.00	no	10.70					470.80
M12 chemset into concrete	44.00	no	18.00					792.00
Stage 4 - Frontage Wall								
150x150x16mm angle bolted to underside of mezzanine floor and chemset fixed to concrete beam (3m sections allowed for ease of access) :[8 No]	907.00	kg	9.20					8,344.40
M6 coach screw into timber	150.00	no	9.20					1,380.00
M12 chemset into concrete	40.00	no	18.00					720.00

Trade x Trade

Job Name : 229 WEST ST ASH A1

Client's Name : TM Consultants

Job Description

Earthquake Strengthening Estimate
229 West Street
Ashburton

Item Description	Quantity	Unit	Material Rate	Mark Up %	Labour Factor	Labour Qty	Labour Rate	Amount
Trade : ***Front Building***								*(Continued)*
Misc								
Take down, store and reinstall external doors, windows, vents etc	1.00	sum	2,120.00					2,120.00
							Front Building Total :	**262,937.49**
Trade : ***Scaffolding & Access***								
External Works								
EDC	656.00	m2	20.00					13,120.00
Rental - 20 weeks	656.00	m2	40.00					26,240.00
Nets	1,500.00	m2	8.00					12,000.00
Internal Works								
EDC	150.00	m2	20.00					3,000.00
Rental - 4 weeks	150.00	m2	16.00					2,400.00
Mobiles and platforms	1.00	sum	1,500.00					1,500.00
							Scaffolding & Access Total :	**58,260.00**
Trade : ***Skews Report - August 2016***								
r Building								
Roof								
Remove and dump roofing	301.00	m2	24.00					7,224.00
Replace roofing with new iron, insulation	301.00	m2	70.00					21,070.00
Flashings	42.00	m	50.00					2,100.00
New skylights	4.00	sum	3,740.00					14,960.00
Access equipment for removal and replacement	1.00	sum	10,000.00					10,000.00
Side Walls								
Batten block walls and line with polystyrene insulation and 10mm plywood sheets	362.00	m2	242.30					87,712.60
Front Building								

Trade x Trade

Job Name : 229 WEST ST ASH A1

Client's Name : TM Consultants

Job Description

Earthquake Strengthening Estimate
229 West Street
Ashburton

Item Description	Quantity	Unit	Material Rate	Mark Up %	Labour Factor	Labour Qty	Labour Rate	Amount
Trade : ***Skews Report - August 2016***								*(Continued)*
East Spandrel over Office Extension								
Remove and dump spandrel linings	18.00	m2	75.00					1,350.00
Check integrity of structure and replace timbers as required	1.00	sum	2,420.00					2,420.00
Hardies cladding	18.00	m2	80.00					1,440.00
Paint cladding	18.00	m2	26.00					468.00
Roof								
Remove and dump curved roofing - approx two thirds	520.00	m2	24.00					12,480.00
Replace roofing with new allowing natural drape	520.00	m2	120.00					62,400.00
Replacement internal gutter	30.00	m	200.00					6,000.00
New skylights	4.00	sum	3,740.00					14,960.00
Access equipment for removal and replacement	1.00	sum	10,000.00					10,000.00
Canopies								
Remove and dump two small canopies	2.00	sum	1,460.00					2,920.00
Remove and dump one large canopy	1.00	sum	2,920.00					2,920.00
Rebuild two small canopies	2.00	sum	4,800.00					9,600.00
Rebuild one large canopy	1.00	sum	7,600.00					7,600.00
Curved Gable Wall Cladding								
Remove and dump corrugated iron cladding	58.00	m2	33.00					1,914.00
New timbers ready for new cladding	174.00	m	17.70					3,079.80
Corrugated iron cladding	58.00	m2	70.00					4,060.00
Extra value for circular cutting	26.00	m	50.00					1,300.00
Curved barge flashings	26.00	m	100.00					2,600.00
Reflash existing window and paint on completion	1.00	sum	500.00					500.00
1980's Office								
Remove and dump upper & lower spandrel linings	37.00	m2	75.00					2,775.00
Check integrity of structure and replace timbers as required	1.00	sum	4,350.00					4,350.00
Hardies cladding	37.00	m2	80.00					2,960.00
Paint cladding	37.00	m2	26.00					962.00

Trade x Trade

Job Name : 229 WEST ST ASH A1

Client's Name : TM Consultants

Job Description

Earthquake Strengthening Estimate
229 West Street
Ashburton

Item Description	Quantity	Unit	Material Rate	Mark Up %	Labour Factor	Labour Qty	Labour Rate	Amount
Trade : ***Skews Report - August 2016***								*(Continued)*
Make good existing window joinery as required	1.00	sum	1,460.00					1,460.00
Replacement of Flooring & Floor Framing - 33% replaced								
Remove and dump floor board and floor framing	175.00	m2	80.00					14,000.00
Replace native timber floor boards and floor framing	175.00	m2	485.00					84,875.00
Egress								
Form opening in mezzanine floor, trim opening ready for installation of stairs	2.00	sum	2,020.00					4,040.00
Form door way in exterior wall, and trim for frame	2.00	sum	1,060.00					2,120.00
Timber stairs, 3 flights and landings, lined with fyreline gib	2.00	sum	23,340.00					46,680.00
Solid core & frame to exterior	2.00	sum	1,240.00					2,480.00
Fire Rated Suspended Ceiling								
Suspended grid with fyreline gib board	550.00	m2	70.00					38,500.00
Paint last	550.00	m2	22.00					12,100.00
Extra value cutting around columns	1.00	sum	4,800.00					4,800.00
Fire Rated Timber Columns								
Timber framing spaced off existing timber columns, fyreline gib board, painting	55.00	no	633.60					34,848.00
Fire Rated Curved Truss at Wall Junction								
Timber framing, fyreline gib board, painting	24.00	m2	132.00					3,168.00
Fire Protection								
Fire Alarm system to entire building - Provisional Sum	2,144.00	m2	30.00					64,320.00
Ventilation								
Mechanical ventilation to mezzanine floor area	1.00	sum	5,000.00					5,000.00
Boundary Walls								
Batten block walls and line with polystyrene insulation and 10mm plywood sheets	135.00	m2	242.30					32,710.50
General								
Remove and replace partitions as required	528.00	m2	70.00					36,960.00
Accessible toilet	1.00	sum	15,000.00					15,000.00

Trade x Trade

Job Name : 229 WEST ST ASH A1

Client's Name : TM Consultants

Job Description

Earthquake Strengthening Estimate
229 West Street
Ashburton

Item Description	Quantity	Unit	Material Rate	Mark Up %	Labour Factor	Labour Qty	Labour Rate	Amount
							Skews Report - August 2016 Total :	**705,186.90**
Trade : ***Compliance Costs***								
Compliance costs such as health & safety, traffic management, testing and checks, contractor management time, and the like	0.10	sum	1,451,655.00					145,165.50
Including archaeological and HPT inspections								
							Compliance Costs Total :	**145,165.50**
Trade : ***Builders Preliminary & General (6%)***								
P&G 6%	0.06	sum	1,596,821.00					95,809.26
							Builders Preliminary & General (6%) Total :	**95,809.26**
Trade : ***Builders Margin (10%)***								
Margin 10%	0.10	sum	1,692,631.00					169,263.10
							Builders Margin (10%) Total :	**169,263.10**
Trade : ***Contingency Sum (15%)***								
Contingency Sum - 15%	0.15	sum	1,861,895.00					279,284.25
							Contingency Sum (15%) Total :	**279,284.25**
de : ***Professional Fees (15%)***								
Professional Fees - 15%	0.15	sum	2,141,180.00					321,177.00
							Professional Fees (15%) Total :	**321,177.00**
Trade : ***Building Consent Fees***								
Consent	1.00	sum	25,000.00					25,000.00
							Building Consent Fees Total :	**25,000.00**
Trade : ***CW Insurance - Premium & Excess***								
CW Insurance 0.75%	0.01	sum	2,487,357.33					18,655.18
Excess 5%	0.05	sum	2,487,357.00					124,367.85
							CW Insurance - Premium & Excess Total :	**143,023.03**

'E'

Estimate Summary

Job Name : 229 WEST ST ASH C1
Client's Name: TM Consultants

Job Description
Earthquake Strengthening Estimate
229 West Street
Ashburton

Trd No.	Trade Description	Trade %	Cost/m2	Trade Total
1	Earthquake Strengthening Estimate			
2	229 West Street, Ashburton			
3				
4				
5	Demolition	6.63		132,030
6	Front Building	20.47		407,468
7	Scaffolding & Access	2.15		42,780
8	Skews Report - April 2018	29.83		593,875
9	Compliance Costs	5.91		117,616
10	Subtotal			*1,293,769*
11	Builders Preliminary & General (6%)	3.90		77,627
12	Builders Margin (10%)	6.89		137,140
13	Subtotal			*1,508,536*
14	Contingency Sum (15%)	11.37		226,281
15	Professional Fees (15%)	11.37		226,281
16	Building Consent Fees	0.75		15,000
17	CW Insurance	0.74		14,821
18	Total Estimate excluding GST			*1,990,919*
19				
20				
21	Notes: -			
22	Labour rate - $60.00 per hour			
23	Preliminary & General - 6%			
24	Builders Margin - 10%			
25	Assumed a clear building area to work within			
26				
27	Exclusions: -			
28	GST			
29	Future increased costs			
30				
31	Monday 28 May 2018			
		100.00		1,990,919

Final Total : $ 1,990,919

'F'

Trade x Trade

Job Name : 229 WEST ST ASH C1

Client's Name : TM Consultants

Job Description

Earthquake Strengthening Estimate
229 West Street
Ashburton

Item Description	Quantity	Unit	Material Rate	Mark Up %	Labour Factor	Labour Qty	Labour Rate	Amount
Trade : ***Demolition***								
Disconnect existing electrical , plumbing, fire protection, drainage services	1.00	sum	5,960.00					5,960.00
Demolish rear building c. 60's	832.00	m2	100.00					83,200.00
Demolish side building c. 80's	36.00	m2	120.00					4,320.00
Demolish side building c. 60's	64.00	m2	150.00					9,600.00
East Wall								
Demolish existing wall structure and foundations below mezzanine level	93.00	m2	100.00					9,300.00
South Wall								
Demolish existing wall structure and foundations	131.00	m2	150.00					19,650.00
Refer Skews Trade for other demolition								
							Demolition Total :	**132,030.00**
Trade : ***Front Building***								
Services								
Disconnect existing electrical , plumbing, fire protection, drainage services	1.00	sum	7,400.00					7,400.00
Stage 1 (SK 4)								
Portal Frames Across								
Sawcut concrete floors, break up concrete and dump	18.00	no	96.00					1,728.00
Hand excavate 500mm deep for new SHS posts :[18 No]	6.00	m3	240.00					1,440.00
Concrete in 800 x 800 x 500mm deep pads	18.00	no	301.70					5,430.66
200x200x9mm SHS portals - across :[9 No]	6,059.00	kg	8.60					52,107.40
Portal Frames Along								
Sawcut concrete floors, break up concrete and dump	18.00	no	96.00					1,728.00
Hand excavate 500mm deep for new SHS posts :[18 No]	6.00	m3	240.00					1,440.00
Concrete in 800 x 800 x 500mm deep pads	18.00	no	301.70					5,430.66
200x200x9mm SHS portals - along :[9 No]	6,918.00	kg	8.60					59,494.80

Trade x Trade

Job Name : 229 WEST ST ASH C1

Client's Name : TM Consultants

Job Description

Earthquake Strengthening Estimate
229 West Street
Ashburton

Item Description	Quantity	Unit	Material Rate	Mark Up %	Labour Factor	Labour Qty	Labour Rate	Amount
Trade : ***Front Building***								*(Continued)*
North Wall								
Prop existing rafters prior to block walls being demolished	30.00	m	60.00					1,800.00
200x100 bearer under existing rafters ready for props to sit under	30.00	m	28.00					840.00
Sawcut asphalt carpark, lift asphalt and dump, allow 1.00m working space	30.00	m2	31.20					936.00
Excavate for new foundations	6.00	m3	105.00					630.00
Concrete in perimeter foundation	30.00	m	186.81					5,604.15
Drill existing floor slab 200mm deep at 200mm crs and epoxy grout D12 rods 500mm long	30.00	m	110.76					3,322.80
Concrete infill between new foundation and existing floor slab, say 400mm wide	12.00	m2	101.60					1,219.20
Wall framing, corrugated cladding over building paper, insulation, 16mm fyreline gib board internally, painting	126.00	m2	312.00					39,312.60
Connect existing rafters to ribbon plate using Z nails	1.00	sum	530.00					530.00
Ex 200x50 blocking between rafters	30.00	m	28.00					840.00
Take down props and propping bearer	1.00	sum	720.00					720.00
Fascia board	30.00	m	29.20					876.00
External guttering	30.00	m	85.00					2,550.00
Paint fascia board	30.00	m	10.00					300.00
Downpipes	1.00	no	675.00					675.00
Reinstate stormwater pipe	30.00	m	85.00					2,550.00
Base up and new asphalt	30.00	m2	100.00					3,000.00
South Wall								
Prop existing mezzanine floor, well clear of new postholes, prior to block wall being demolished	30.00	m	60.00					1,800.00
200x100 bearer under existing rafters ready for props to sit under	30.00	m	28.00					840.00
Disconnect top plate from rafters	1.00	sum	480.00					480.00
Sawcut asphalt carpark, lift asphalt and dump, allow 1.00m working space	30.00	m2	31.20					936.00
Excavate for new foundations	6.00	m3	105.00					630.00

Trade x Trade

Job Name : 229 WEST ST ASH C1

Client's Name : TM Consultants

Job Description

Earthquake Strengthening Estimate
229 West Street
Ashburton

Item Description	Quantity	Unit	Material Rate	Mark Up %	Labour Factor	Labour Qty	Labour Rate	Amount
Trade : ***Front Building***								*(Continued)*
Concrete in perimeter foundation	30.00	m	186.81					5,604.15
Drill existing floor slab 200mm deep at 200mm crs and epoxy grout D12 rods 500mm long	30.00	m	110.76					3,322.80
Concrete infill between new foundation and existing floor slab, say 400mm wide	12.00	m2	101.60					1,219.20
Wall framing, corrugated cladding over building paper, insulation, 16mm fyreline gib board internally, painting	126.00	m2	312.00					39,312.60
Connect existing rafters to ribbon plate using Z nails	1.00	sum	530.00					530.00
Ex 200x50 blocking between rafters	30.00	m	28.00					840.00
Take down props and propping bearer	1.00	sum	720.00					720.00
Fascia board	30.00	m	29.20					876.00
External guttering	30.00	m	22.00					660.00
Paint fascia board	30.00	m	10.00					300.00
Downpipes	1.00	no	675.00					675.00
Reinstate stormwater pipe	30.00	m	85.00					2,550.00
Base up and new asphalt	30.00	m2	100.00					3,000.00
East Wall - facing the Road								
Prop existing mezzanine floor, well clear of postholes, prior to block wall being demolished	22.00	m	60.00					1,320.00
Sawcut asphalt carpark, lift asphalt and dump, allow 1.00m working space	22.00	m2	31.20					686.40
Excavate 600mm dia postholes, 1800mm deep at 6000mm crs to walls	4.00	no	120.00					480.00
Concrete in reinforced postholes to side walls :[4 No]	14.00	m3	1,031.15					14,436.06
Tidy up the trench left following demolition of existing foundations	5.00	m3	57.00					285.00
Excavate for new foundations	5.00	m3	105.00					525.00
Concrete in perimeter foundation	22.00	m	198.68					4,371.04
310UB40 portal	1,552.00	kg	11.00					17,072.00
Wall framing, corrugated cladding over building paper, insulation, 16mm fyreline gib board internally, painting	126.00	m2	312.00					39,312.60

Trade x Trade

Job Name : 229 WEST ST ASH C1

Client's Name : TM Consultants

Job Description

Earthquake Strengthening Estimate
229 West Street
Ashburton

Item Description	Quantity	Unit	Material Rate	Mark Up %	Labour Factor	Labour Qty	Labour Rate	Amount
Trade : ***Front Building***								*(Continued)*
Drill existing floor slab 200mm deep at 200mm crs and epoxy grout D12 rods 500mm long	22.00	m	110.76					2,436.72
Concrete infill between new foundation and existing floor slab, say 400mm wide	9.00	m2	101.60					914.40
Connect existing rafters to ribbon plate using Z nails	1.00	sum	530.00					530.00
Ex 200x50 blocking between rafters	30.00	m	28.00					840.00
[illegible] down props and propping bearer	1.00	sum	720.00					720.00
Base up and new asphalt	22.00	m2	100.00					2,200.00
West Wall								
Excavate for new foundations	5.00	m3	105.00					525.00
Concrete in perimeter foundation	22.00	m	198.68					4,371.04
Drill existing floor slab 200mm deep at 200mm crs and epoxy grout D12 rods 500mm long	22.00	m	110.76					2,436.72
Concrete infill between new foundation and existing floor slab, say 400mm wide	9.00	m2	101.60					914.40
Wall framing, corrugated cladding over building paper, insulation, 16mm fyreline gib board internally, painting	143.00	m2	312.00					44,616.68
Barge board	27.00	m	29.20					788.40
Paint barge	27.00	m	10.00					270.00
Barge flashing	27.00	m	45.00					1,215.00
							Front Building Total :	**407,467.48**
Trade : ***Scaffolding & Access***								
External Works								
EDC	580.00	m2	20.00					11,600.00
Rental - 20 weeks	580.00	m2	40.00					23,200.00
Internal Works								
EDC	180.00	m2	20.00					3,600.00
Rental - 4 weeks	180.00	m2	16.00					2,880.00
Mobiles and platforms	1.00	sum	1,500.00					1,500.00

Trade x Trade

Job Name : 229 WEST ST ASH C1

Client's Name : TM Consultants

Job Description

Earthquake Strengthening Estimate
229 West Street
Ashburton

Item Description	Quantity	Unit	Material Rate	Mark Up %	Labour Factor	Labour Qty	Labour Rate	Amount
				Scaffolding & Access			Total :	42,780.00
Trade : ***Skews Report - April 2018***								
Front Building								
East Spandrel over Office Extension								
Remove and dump spandrel linings	18.00	m2	75.00					1,350.00
Check integrity of structure and replace bers as required	1.00	sum	2,420.00					2,420.00
Roof								
Remove and dump curved roofing	780.00	m2	24.00					18,720.00
Replace roofing with new allowing natural drape	780.00	m2	120.00					93,600.00
New skylights	4.00	sum	3,740.00					14,960.00
Access equipment for removal and replacement	1.00	sum	10,000.00					10,000.00
Canopies								
Remove and dump two small canopies	2.00	sum	1,460.00					2,920.00
Remove and dump one large canopy	1.00	sum	2,920.00					2,920.00
Curved Gable Wall Cladding								
Remove and dump corrugated iron cladding	58.00	m2	33.00					1,914.00
New timbers ready for new cladding	174.00	m	17.70					3,079.80
Curved barge flashings	26.00	m	100.00					2,600.00
Reflash existing window and paint on completion	1.00	sum	500.00					500.00
Replacement of Flooring & Floor Framing - 33% replaced								
Remove and dump floor board and floor framing	175.00	m2	80.00					14,000.00
Replace native timber floor boards and floor framing	175.00	m2	485.00					84,875.00
Fire Egress								
Form opening in mezzanine floor, trim opening ready for installation of stairs	2.00	sum	2,020.00					4,040.00
Form door way in exterior wall, and trim for frame	2.00	sum	1,060.00					2,120.00
Timber stairs, 3 flights and landings, lined with fyreline gib	2.00	sum	23,340.00					46,680.00
Solid core & frame to exterior	2.00	sum	1,240.00					2,480.00
Fire Rated Suspended Ceiling								
Suspended grid with fyreline gib board	550.00	m2	70.00					38,500.00

Trade x Trade

Job Name : 229 WEST ST ASH C1

Client's Name : TM Consultants

Job Description

Earthquake Strengthening Estimate
229 West Street
Ashburton

Item Description	Quantity	Unit	Material Rate	Mark Up %	Labour Factor	Labour Qty	Labour Rate	Amount
Trade : ***Skews Report - April 2018***								*(Continued)*
Paint last	550.00	m2	22.00					12,100.00
Extra value cutting around columns	1.00	sum	4,800.00					4,800.00
Fire Rated Timber Columns								
Timber framing spaced off existing timber columns, fyreline gib board, painting	55.00	no	633.60					34,848.00
Fire Rated Curved Truss at Wall Junction								
Timber framing, fyreline gib board, painting	24.00	m2	132.00					3,168.00
Fire Protection								
Fire Alarm system to entire building - Provisional Sum	2,144.00	m2	30.00					64,320.00
Ventilation								
Mechanical ventilation to mezzanine floor area	1.00	sum	5,000.00					5,000.00
General								
Remove and replace partitions as required	528.00	m2	70.00					36,960.00
Accessible toilet	1.00	sum	15,000.00					15,000.00
Replacement windows & doors in keeping with existing building - Provisional Sum	1.00	sum	50,000.00					50,000.00
Misc historic replication - Provisional Sum	1.00	sum	20,000.00					20,000.00
							Skews Report - April 2018 Total :	**593,874.80**
Trade : ***Compliance Costs***								
Compliance costs such as health & safety, traffic management, testing and checks, contractor management time, and the like	0.10	sum	1,176,153.00					117,615.30
Including archaeological and HPT inspections								
							Compliance Costs Total :	**117,615.30**
Trade : ***Builders Preliminary & General (6%)***								
P&G 6%	0.06	sum	1,293,769.00					77,626.14
							Builders Preliminary & General (6%) Total :	**77,626.14**
Trade : ***Builders Margin (10%)***								
Margin 10%	0.10	sum	1,371,396.00					137,139.60

Trade x Trade

Job Name : 229 WEST ST ASH C1

Client's Name : TM Consultants

Job Description

Earthquake Strengthening Estimate
229 West Street
Ashburton

Item Description	Quantity	Unit	Material Rate	Mark Up %	Labour Factor	Labour Qty	Labour Rate	Amount
						Builders Margin (10%)	**Total :**	**137,139.60**
Trade : ***Contingency Sum (15%)***								
Contingency Sum - 15%	0.15	sum	1,508,536.00					226,280.40
						Contingency Sum (15%)	**Total :**	**226,280.40**
Trade : ***Professional Fees (15%)***								
Professional Fees - 15%	0.15	sum	1,508,536.00					226,280.40
						Professional Fees (15%)	**Total :**	**226,280.40**
Trade : ***Building Consent Fees***								
Consent	1.00	sum	15,000.00					15,000.00
						Building Consent Fees	**Total :**	**15,000.00**
Trade : ***CW Insurance***								
CW Insurance 0.75%	0.01	sum	1,976,097.33					14,820.73
						CW Insurance	**Total :**	**14,820.73**

Trade Summary

Job Name : 229 WEST ST ASH C1

Client's Name : TM Consultants

Job Description

Earthquake Strengthening Estimate
229 West Street
Ashburton

Item Description	Quantity	Unit	Material Rate	Mark Up %	Labour Factor	Labour Qty	Labour Rate	Amount
Trade : ***Demolition***								
Disconnect existing electrical , plumbing, fire protection, drainage services	1.00	sum	5,960.00					5,960.00
Demolish rear building c. 60's	832.00	m2	100.00					83,200.00
Demolish side building c. 80's	36.00	m2	120.00					4,320.00
Demolish side building c. 60's	64.00	m2	150.00					9,600.00
East Wall								
Demolish existing wall structure and foundations below mezzanine level	93.00	m2	100.00					9,300.00
South Wall								
Demolish existing wall structure and foundations	131.00	m2	150.00					19,650.00
Refer Skews Trade for other demolition								
							Demolition Total :	**132,030.00**
Trade : ***Front Building***								
Services								
Disconnect existing electrical , plumbing, fire protection, drainage services	1.00	sum	7,400.00					7,400.00
Stage 1 (SK 4)								
Portal Frames Across								
Sawcut concrete floors, break up concrete and dump	18.00	no	96.00					1,728.00
Hand excavate 500mm deep for new SHS posts :[18 No]	6.00	m3	240.00					1,440.00
Concrete in 800 x 800 x 500mm deep pads	18.00	no	301.70					5,430.66
200x200x9mm SHS portals - across :[9 No]	6,059.00	kg	8.60					52,107.40
Portal Frames Along								
Sawcut concrete floors, break up concrete and dump	18.00	no	96.00					1,728.00
Hand excavate 500mm deep for new SHS posts :[18 No]	6.00	m3	240.00					1,440.00
Concrete in 800 x 800 x 500mm deep pads	18.00	no	301.70					5,430.66
200x200x9mm SHS portals - along :[9 No]	6,918.00	kg	8.60					59,494.80

Trade Summary

Job Name : 229 WEST ST ASH C1

Client's Name : TM Consultants

Job Description

Earthquake Strengthening Estimate
229 West Street
Ashburton

Item Description	Quantity	Unit	Material Rate	Mark Up %	Labour Factor	Labour Qty	Labour Rate	Amount
Trade : ***Front Building***								*(Continued)*
North Wall								
Prop existing rafters prior to block walls being demolished	30.00	m	60.00					1,800.00
200x100 bearer under existing rafters ready for props to sit under	30.00	m	28.00					840.00
Sawcut asphalt carpark, lift asphalt and dump, allow 1.00m working space	30.00	m2	31.20					936.00
Excavate for new foundations	6.00	m3	105.00					630.00
Concrete in perimeter foundation	30.00	m	186.81					5,604.15
Drill existing floor slab 200mm deep at 200mm crs and epoxy grout D12 rods 500mm long	30.00	m	110.76					3,322.80
Concrete infill between new foundation and existing floor slab, say 400mm wide	12.00	m2	101.60					1,219.20
Wall framing, corrugated cladding over building paper, insulation, 16mm fyreline gib board internally, painting	126.00	m2	312.00					39,312.60
Connect existing rafters to ribbon plate using Z nails	1.00	sum	530.00					530.00
Ex 200x50 blocking between rafters	30.00	m	28.00					840.00
Take down props and propping bearer	1.00	sum	720.00					720.00
Fascia board	30.00	m	29.20					876.00
External guttering	30.00	m	85.00					2,550.00
Paint fascia board	30.00	m	10.00					300.00
Downpipes	1.00	no	675.00					675.00
Reinstate stormwater pipe	30.00	m	85.00					2,550.00
Base up and new asphalt	30.00	m2	100.00					3,000.00
South Wall								
Prop existing mezzanine floor, well clear of new postholes, prior to block wall being demolished	30.00	m	60.00					1,800.00
200x100 bearer under existing rafters ready for props to sit under	30.00	m	28.00					840.00
Disconnect top plate from rafters	1.00	sum	480.00					480.00
Sawcut asphalt carpark, lift asphalt and dump, allow 1.00m working space	30.00	m2	31.20					936.00
Excavate for new foundations	6.00	m3	105.00					630.00

Trade Summary

Job Name : 229 WEST ST ASH C1

Client's Name : TM Consultants

Job Description

Earthquake Strengthening Estimate
229 West Street
Ashburton

Item Description	Quantity	Unit	Material Rate	Mark Up %	Labour Factor	Labour Qty	Labour Rate	Amount
Trade : ***Front Building***								*(Continued)*
Concrete in perimeter foundation	30.00	m	186.81					5,604.15
Drill existing floor slab 200mm deep at 200mm crs and epoxy grout D12 rods 500mm long	30.00	m	110.76					3,322.80
Concrete infill between new foundation and existing floor slab, say 400mm wide	12.00	m2	101.60					1,219.20
Wall framing, corrugated cladding over building paper, insulation, 16mm fyreline gib board internally, painting	126.00	m2	312.00					39,312.60
Connect existing rafters to ribbon plate using Z nails	1.00	sum	530.00					530.00
Ex 200x50 blocking between rafters	30.00	m	28.00					840.00
Take down props and propping bearer	1.00	sum	720.00					720.00
Fascia board	30.00	m	29.20					876.00
External guttering	30.00	m	22.00					660.00
Paint fascia board	30.00	m	10.00					300.00
Downpipes	1.00	no	675.00					675.00
Reinstate stormwater pipe	30.00	m	85.00					2,550.00
Base up and new asphalt	30.00	m2	100.00					3,000.00
East Wall - facing the Road								
Prop existing mezzanine floor, well clear of new postholes, prior to block wall being demolished	22.00	m	60.00					1,320.00
Sawcut asphalt carpark, lift asphalt and dump, allow 1.00m working space	22.00	m2	31.20					686.40
Excavate 600mm dia postholes, 1800mm deep at 6000mm crs to walls	4.00	no	120.00					480.00
Concrete in reinforced postholes to side walls :[4 No]	14.00	m3	1,031.15					14,436.06
Tidy up the trench left following demolition of existing foundations	5.00	m3	57.00					285.00
Excavate for new foundations	5.00	m3	105.00					525.00
Concrete in perimeter foundation	22.00	m	198.68					4,371.04
310UB40 portal	1,552.00	kg	11.00					17,072.00
Wall framing, corrugated cladding over building paper, insulation, 16mm fyreline gib board internally, painting	126.00	m2	312.00					39,312.60

Trade Summary

Job Name : 229 WEST ST ASH C1

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Job Description

Earthquake Strengthening Estimate
229 West Street
Ashburton

Item Description	Quantity	Unit	Material Rate	Mark Up %	Labour Factor	Labour Qty	Labour Rate	Amount
Trade : ***Front Building***								*(Continued)*
Drill existing floor slab 200mm deep at 200mm crs and epoxy grout D12 rods 500mm long	22.00	m	110.76					2,436.72
Concrete infill between new foundation and existing floor slab, say 400mm wide	9.00	m2	101.60					914.40
Connect existing rafters to ribbon plate using Z nails	1.00	sum	530.00					530.00
200x50 blocking between rafters	30.00	m	28.00					840.00
Take down props and propping bearer	1.00	sum	720.00					720.00
Base up and new asphalt	22.00	m2	100.00					2,200.00
West Wall								
Excavate for new foundations	5.00	m3	105.00					525.00
Concrete in perimeter foundation	22.00	m	198.68					4,371.04
Drill existing floor slab 200mm deep at 200mm crs and epoxy grout D12 rods 500mm long	22.00	m	110.76					2,436.72
Concrete infill between new foundation and existing floor slab, say 400mm wide	9.00	m2	101.60					914.40
Wall framing, corrugated cladding over building paper, insulation, 16mm fyreline gib board internally, painting	143.00	m2	312.00					44,616.68
Barge board	27.00	m	29.20					788.40
nt barge	27.00	m	10.00					270.00
Barge flashing	27.00	m	45.00					1,215.00
						Front Building	**Total :**	**407,467.48**
Trade : ***Scaffolding & Access***								
External Works								
EDC	580.00	m2	20.00					11,600.00
Rental - 20 weeks	580.00	m2	40.00					23,200.00
Internal Works								
EDC	180.00	m2	20.00					3,600.00
Rental - 4 weeks	180.00	m2	16.00					2,880.00
Mobiles and platforms	1.00	sum	1,500.00					1,500.00

Trade Summary

Job Name : 229 WEST ST ASH C1

Client's Name : TM Consultants

Job Description

Earthquake Strengthening Estimate
229 West Street
Ashburton

Item Description	Quantity	Unit	Material Rate	Mark Up %	Labour Factor	Labour Qty	Labour Rate	Amount
					Scaffolding & Access	Total :		42,780.00
Trade : ***Skews Report - April 2018***								
Front Building								
East Spandrel over Office Extension								
Remove and dump spandrel linings	18.00	m2	75.00					1,350.00
Check integrity of structure and replace timbers as required	1.00	sum	2,420.00					2,420.00
Roof								
Remove and dump curved roofing	780.00	m2	24.00					18,720.00
Replace roofing with new allowing natural drape	780.00	m2	120.00					93,600.00
New skylights	4.00	sum	3,740.00					14,960.00
Access equipment for removal and replacement	1.00	sum	10,000.00					10,000.00
Canopies								
Remove and dump two small canopies	2.00	sum	1,460.00					2,920.00
Remove and dump one large canopy	1.00	sum	2,920.00					2,920.00
Curved Gable Wall Cladding								
Remove and dump corrugated iron cladding	58.00	m2	33.00					1,914.00
New timbers ready for new cladding	174.00	m	17.70					3,079.80
Curved barge flashings	26.00	m	100.00					2,600.00
Reflash existing window and paint on completion	1.00	sum	500.00					500.00
Replacement of Flooring & Floor Framing - 33% replaced								
Remove and dump floor board and floor framing	175.00	m2	80.00					14,000.00
Replace native timber floor boards and floor framing	175.00	m2	485.00					84,875.00
Fire Egress								
Form opening in mezzanine floor, trim opening ready for installation of stairs	2.00	sum	2,020.00					4,040.00
Form door way in exterior wall, and trim for frame	2.00	sum	1,060.00					2,120.00
Timber stairs, 3 flights and landings, lined with fyreline gib	2.00	sum	23,340.00					46,680.00
Solid core & frame to exterior	2.00	sum	1,240.00					2,480.00
Fire Rated Suspended Ceiling								
Suspended grid with fyreline gib board	550.00	m2	70.00					38,500.00

Trade Summary

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Job Description

Earthquake Strengthening Estimate
229 West Street
Ashburton

Item Description	Quantity	Unit	Material Rate	Mark Up %	Labour Factor	Labour Qty	Labour Rate	Amount
Trade : ***Skews Report - April 2018***								*(Continued)*
Paint last	550.00	m2	22.00					12,100.00
Extra value cutting around columns	1.00	sum	4,800.00					4,800.00
Fire Rated Timber Columns								
Timber framing spaced off existing timber columns, fyreline gib board, painting	55.00	no	633.60					34,848.00
Fire Rated Curved Truss at Wall Junction								
Timber framing, fyreline gib board, painting	24.00	m2	132.00					3,168.00
Fire Protection								
Fire Alarm system to entire building - Provisional Sum	2,144.00	m2	30.00					64,320.00
Ventilation								
Mechanical ventilation to mezzanine floor area	1.00	sum	5,000.00					5,000.00
General								
Remove and replace partitions as required	528.00	m2	70.00					36,960.00
Accessible toilet	1.00	sum	15,000.00					15,000.00
Replacement windows & doors in keeping with existing building - Provisional Sum	1.00	sum	50,000.00					50,000.00
Misc historic replication - Provisional Sum	1.00	sum	20,000.00					20,000.00
							Skews Report - April 2018 Total :	**593,874.80**
Trade : ***Compliance Costs***								
Compliance costs such as health & safety, traffic management, testing and checks, contractor management time, and the like	0.10	sum	1,176,153.00					117,615.30
Including archaeological and HPT inspections								
							Compliance Costs Total :	**117,615.30**
Trade : ***Builders Preliminary & General (6%)***								
P&G 6%	0.06	sum	1,293,769.00					77,626.14
							Builders Preliminary & General (6%) Total :	**77,626.14**
Trade : ***Builders Margin (10%)***								
Margin 10%	0.10	sum	1,371,396.00					137,139.60

Trade Summary

Job Name : 229 WEST ST ASH C1

Client's Name : TM Consultants

Job Description

Earthquake Strengthening Estimate
229 West Street
Ashburton

Item Description	Quantity	Unit	Material Rate	Mark Up %	Labour Factor	Labour Qty	Labour Rate	Amount
					Builders Margin (10%)		Total :	137,139.60
Trade : ***Contingency Sum (15%)***								
Contingency Sum - 15%	0.15	sum	1,508,536.00					226,280.40
					Contingency Sum (15%)		Total :	226,280.40
Trade : ***Professional Fees (15%)***								
Professional Fees - 15%	0.15	sum	1,508,536.00					226,280.40
					Professional Fees (15%)		Total :	226,280.40
Trade : ***Building Consent Fees***								
Consent	1.00	sum	15,000.00					15,000.00
					Building Consent Fees		Total :	15,000.00
Trade : ***CW Insurance***								
CW Insurance 0.75%	0.01	sum	1,976,097.33					14,820.73
					CW Insurance		Total :	14,820.73