

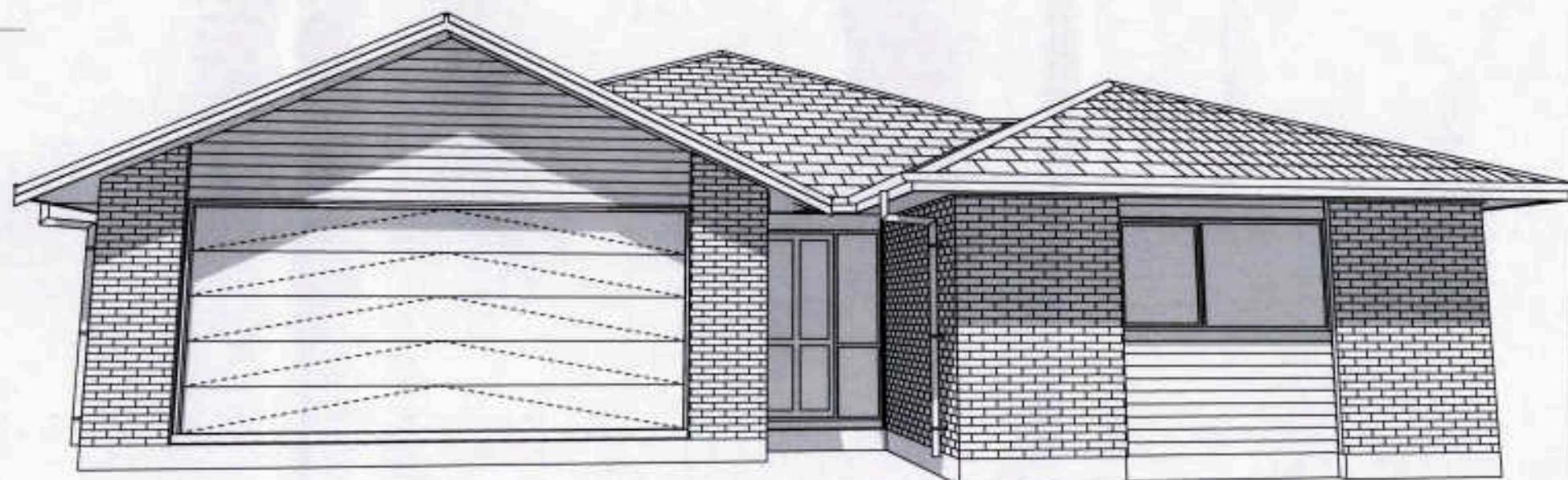
Refuse to Grant BC77977
Dated: 17 FEB 2020
kshan

Gourlay Home - Mark Lam

Mark Lam

16 Oakland Place, Ngongotaha, Rotorua,

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RRD002G105

Document Number: RDC-992863

Date Registered: 25/2/2020

GH84 CONSENT

F5 Construction and Demolition Hazards

Where work onsite is not completely enclosed and unauthorised entry by children is likely, it is acceptable for the specific hazards to be fenced when workers are absent from the immediate vicinity.
If the potential hazard requires a safety barrier, this barrier must comply with Table 1 of NZS8350:2011

BUILDING PLATFORM PREPARATION:

Site prepared to O'BRIEN GEOTECH - Geotechnical Assessment for Proposed New House
Project #: 583

Listed in part below (to be read in conjunction with the Geotechnical Assessment for Proposed New House)
Cleared platform shall be examined and certified by Geotechnical Engineer, any firm to soil
cohesive soils or very loose granular soils encountered shall be replaced with compacted fill
Light weight pumice fill approved by the Geotechnical Engineer shall be used to suit minimum
floor levels.

A perforated pipe connected to the stormwater system shall be installed around the perimeter of
the foundation in line with Geotech report.

A 100mm thick hardfill capillary break shall be provided to Geotech specifications.

A 2 layer enhanced damp proof membrane shall be provided to Geotech specifications.

WIND ZONE
REGION
GROUND ROUGHNESS
SITE EXPOSURE
TOPOGRAPHIC CLASS
WIND ZONE
HIGH

SOIL BEARING CAPACITY:

Site prepared to allow for min. 100kPa soil bearing capacity under foundations as per NZS 3604 Specific engineers design required for sites outside these soil conditions.

FINISHED GROUND LEVELS

Finished ground levels adjoining the concrete slab on ground shall be formed to carry surface water away from the residence.
Finished Ground Levels should be a minimum distance below Floor levels as detailed under the base details for the relevant cladding finishes.
In general allow 150mm to protected ground such as paving, allow 225mm for unprotected ground.

SLIP RESISTANCE:

Main route to the entrance to have a slip resistance coefficient of 0.4 as per NZS8350:2011

SOIL MOVEMENTS:

Soil movements have been determined using the contour data provided. Volumes are for the soil movements to 1.0m outside the building platform and excavation to 150mm below natural ground. For detailed excavation requirements refer to the Geotechnical report under excavation recommendations.

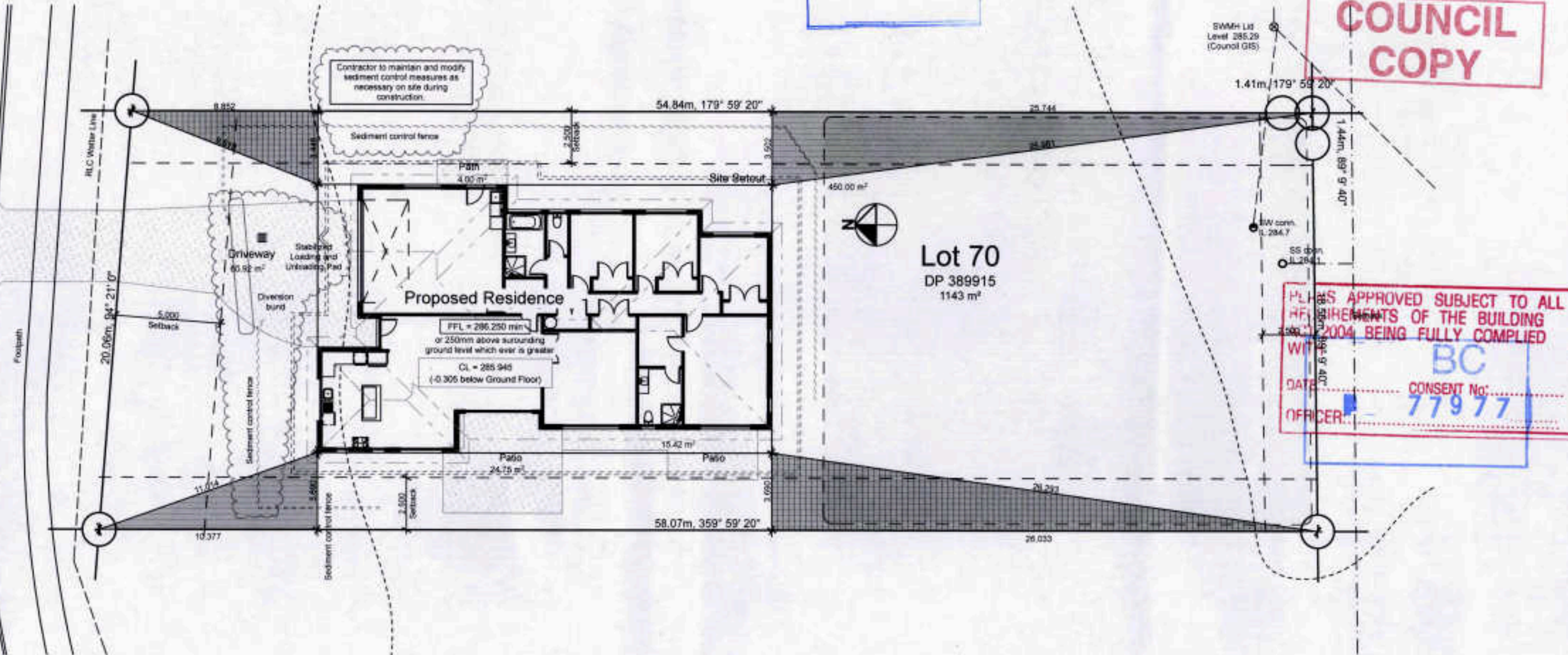
AREA	
SOIL MOVEMENT AREA	300 m²
SURFACE AREAS OF THE FOLLOWING:	
DRIVE AREA	60 m²
HARDSCAPE AREAS	45 m²
VOLUME	
SOIL MOVEMENT VOLUME	45 m³

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OAKLAND PLACE

SSMH Ltd
Level across
road 285.35
(Council GIS)



P O Box 808, ROTORUA
1109 Pukutahi Street, ROTORUA
(ph) 07 929 9807
pb@bishoparch.co.nz

TOTAL FLOOR AREA	222.72 m²
TOTAL ROOF AREA	259.78 m²
SITE AREA	1143 m²
ALLOWABLE SITE COVERAGE	40 %
SITE COVERAGE AREA	226.18 m²
SITE COVERAGE PERCENT	20.3 %

Our calculations exclude the Areas of the existing buildings on site

SITE COVERAGE:

The site coverage of the building is based on the area measured over the foundation line. For covered areas it is based on the area up to 600mm inside the eave line.

ZONES		ZONE		Residential 1	
WIND ZONE	High	LEE ZONE	N/A		
EARTHQUAKE ZONE	2	SOIL CLASS	DIE		
CORROSION ZONE	B	SNOW ZONE	NO		

CONSENT

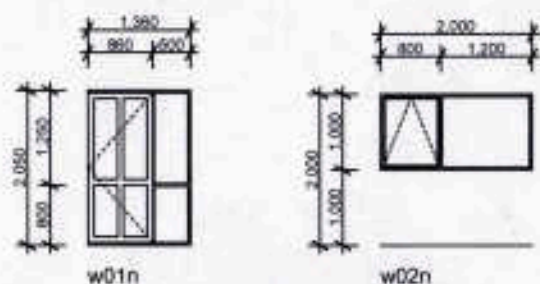
Client:
Mark Lam
Site Address:
15 Oakland Place, Ngongotaha, Rotorua,

LEGAL DESCRIPTION
Lot No. **70** **389915**
Job Title:
Gourlay Home - Mark Lam

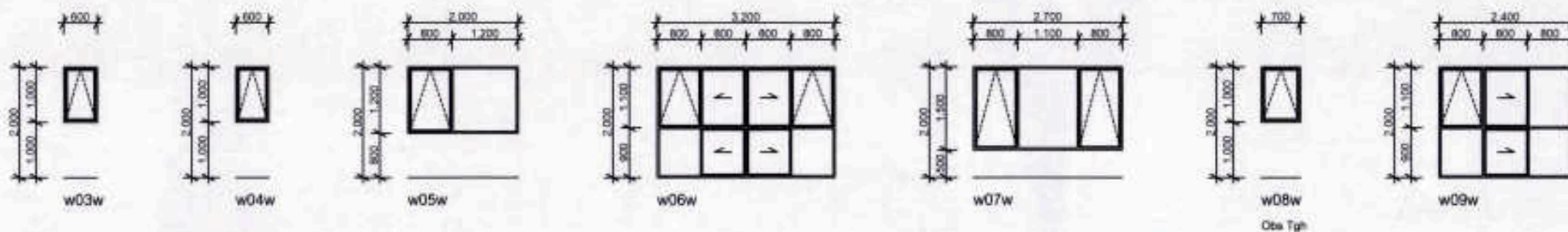
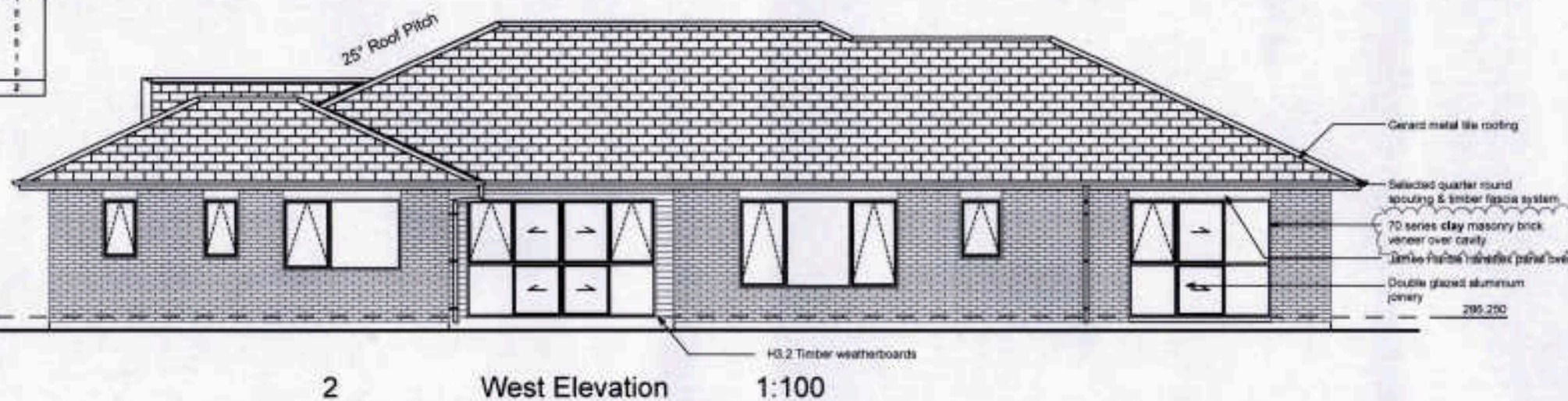
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Drawn	JWD		
Checked	MB		
Published	19-Jul-18	Job No.	GH84

ALL DIMENSIONS TO BE VERIFIED ON SITE

BUILDING ENVELOPE RISK MATRIX		
North Elevation		
Risk Factor	Risk Severity	Risk Score
Wind zone (per NZS 3604)	High risk	1
Number of storeys	Low risk	0
Roofwall intersection design	Low	0
Eaves width	Medium risk	1
Envelope complexity	Medium risk	1
Deck design	Low risk	0
Total Risk Score		3



BUILDING ENVELOPE RISK MATRIX		
West Elevation		
Risk Factor	Risk Severity	Risk Score
Wind zone (per NZS 3604)	High risk	1
Number of storeys	Low risk	0
Roofwall intersection design	Low	0
Eaves width	Low risk	0
Envelope complexity	Medium risk	1
Deck design	Low risk	0
Total Risk Score		2



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ROOFING
As detailed to comply with NZS3604.
NZS E2/AS1.
Pressed metal tiles - NZS 4217

BRICK VENEER CLADDING
As detailed on plans to comply with NZS3604 and NZS E2/AS1.
Brick Veneer Cladding
- built in components to AS/NZS 2699
- Masonry construction NZS 4210 and BRANZ bulletin 436.

WEATHERBOARD CLADDING
As detailed on plans to comply with E2/AS1.
Timber Weatherboards

JOINERY
All joinery as detailed to comply with NZBC E2/AS1, NZS 4211 & WANS Aluminium Joinery Handbook.
Double glazed units throughout

GLAZING
All glazing shall be selected by the supplier to comply with NZS4223 for Glazing in Buildings.

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Client:
Mark Lam
Site Address:
16 Oakland Place, Ngongotaha, Rotorua,

LEGAL DESCRIPTION
Lot No: **70** 389915

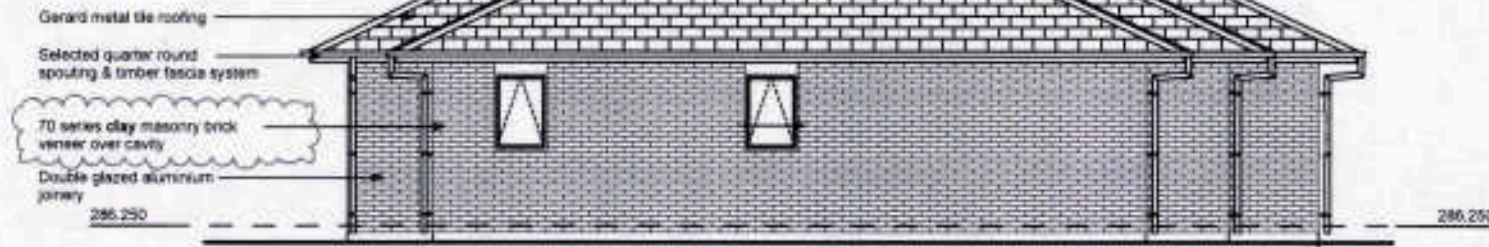
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Gourlay Home - Mark Lam

Drawing Title:
Elevations

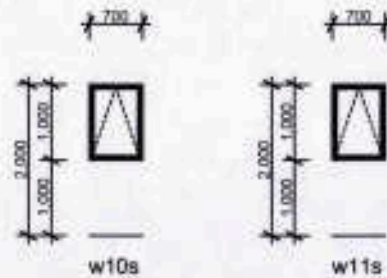
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Drawn: JWD
Checked: MB
Published: 19-Jul-18
Job No: GH84

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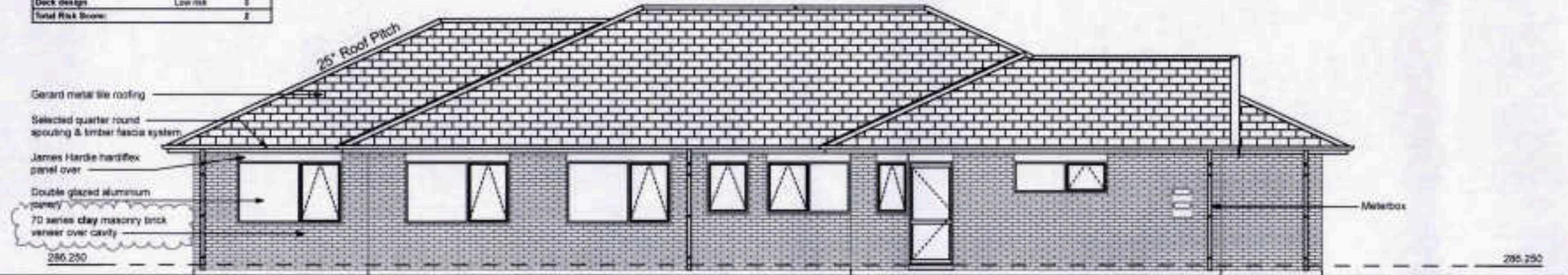
BUILDING ENVELOPE RISK MATRIX		
South Elevation		
Risk Factor	Risk Severity	Risk Score
Wind zone (per NZS 3604)	High risk	1
Number of storeys	Low risk	0
Roof/wall intersection design	Low	0
Eaves width	Low risk	0
Envelope complexity	Medium risk	1
Deck design	Low risk	0
Total Risk Score:		2



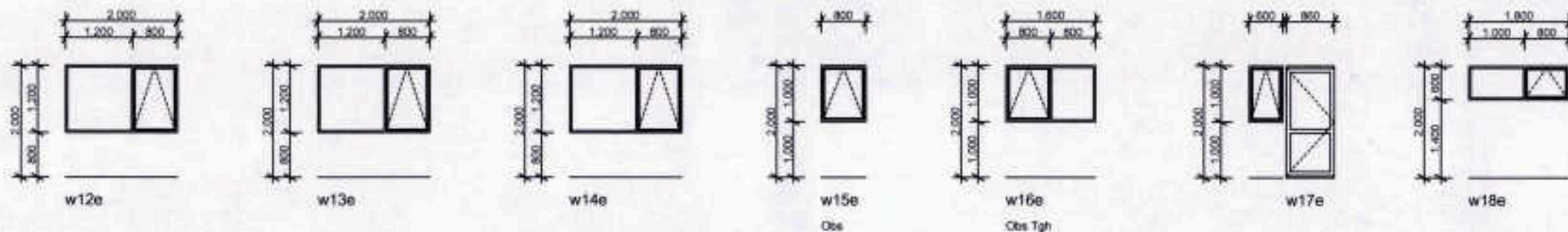
3 South Elevation 1:100



BUILDING ENVELOPE RISK MATRIX		
East Elevation		
Risk Factor	Risk Severity	Risk Score
Wind zone (per NZS 3604)	High risk	1
Number of storeys	Low risk	0
Roof/wall intersection design	Low	0
Eaves width	Low risk	0
Envelope complexity	Medium risk	1
Deck design	Low risk	0
Total Risk Score:		2



4 East Elevation 1:100



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ROOFING
As detailed to comply with NZS3604
NZS E2IAS1.
Pressed metal tiles - NZS 4217

BRICK VENEER CLADDING:
As detailed on plans to comply with NZS3604 and NZS
E2IAS1
Brick Veneer Cladding
- built in components to AS/NZS 2599
- Masonry construction NZS 4210 and BRANZ bulletin
430.

JOINERY:
All joinery as detailed to comply with NZBC E2IAS1,
NZS 4211 & WANS Aluminium Joinery Handbook
Double glazed units throughout

GLAZING:
All glazing shall be selected by the supplier to comply
with NZS4223 for Glazing in Buildings.

CONSENT

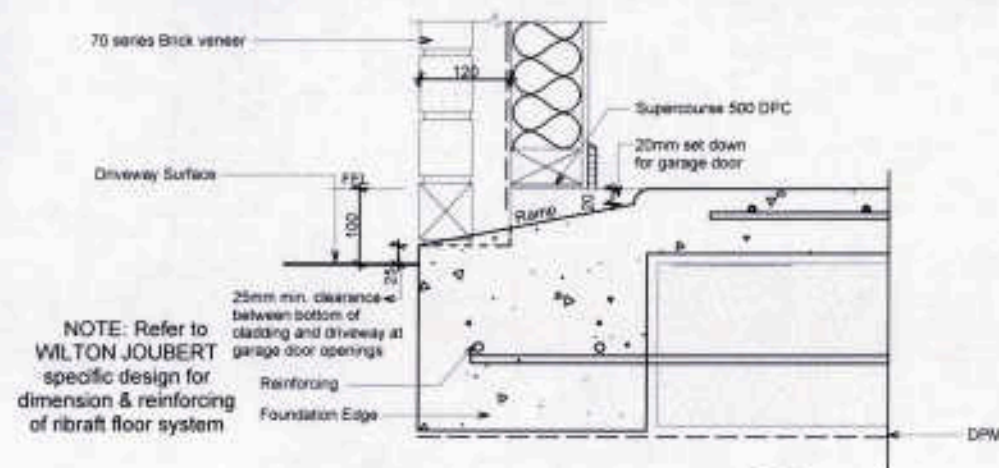
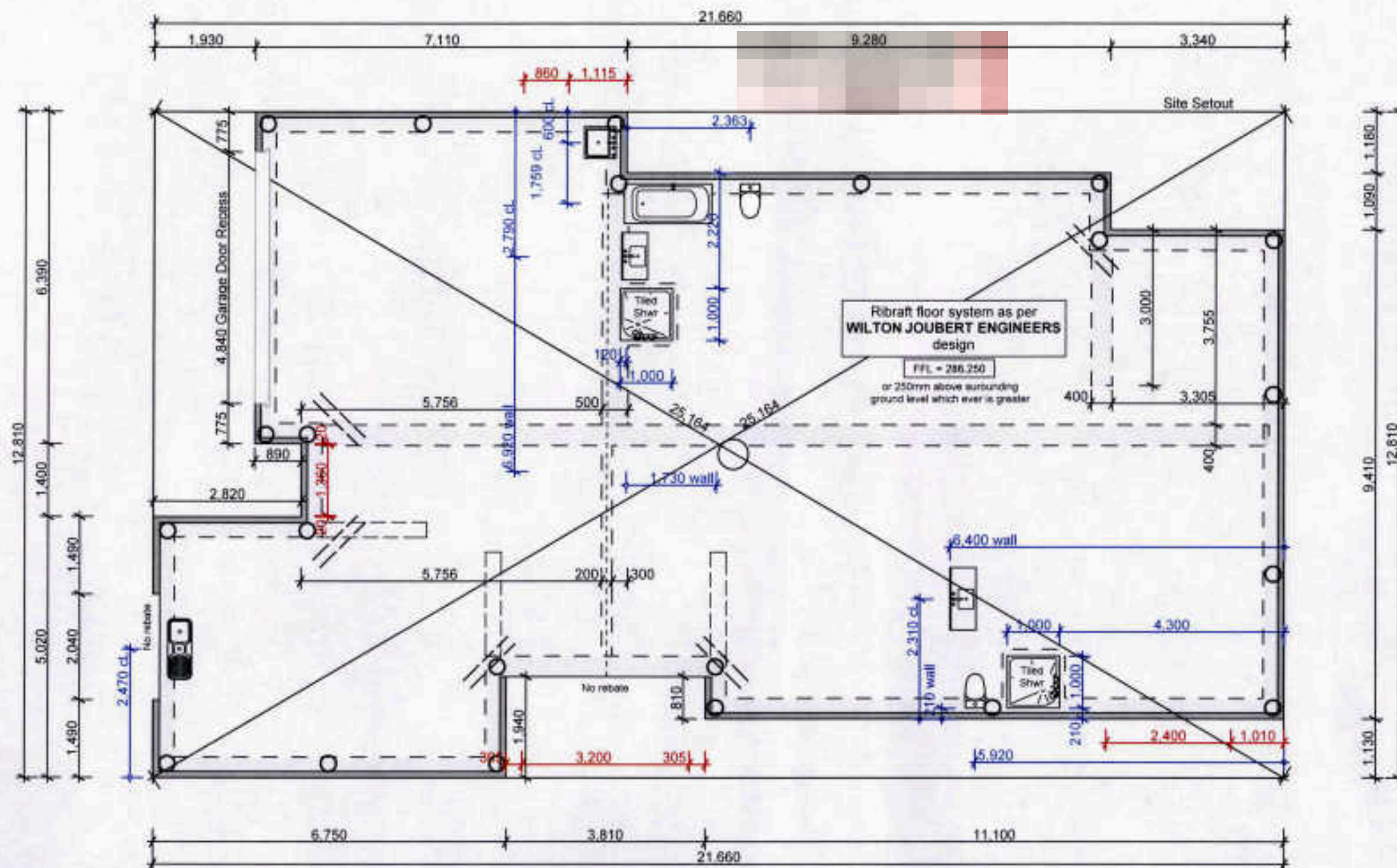
Client:
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Site Address:
16 Oakland Place, Ngongotaha, Rotorua,
LEGAL DESCRIPTION:
Lot No. **70** 389915

Job Title:
**Gourlay Home -
Mark Lam**

Drawing Title:
Elevations
Scale:
1:100
Drawing Number:
05
Drawn: JWD
Checked: MB
Published: 19-JUL-18
Job No.: GH84

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Garage Door Recess

Scale: 1:10

2

Site prepared to O'BRIEN GEOTECH - Geotechnical Assessment for Proposed New House
Project #: 583

Listed in part below (to be read in conjunction with the Geotech report):
Cleared platform shall be examined and certified by Geotechnical Engineer, any firm to soft cohesive soils or very loose granular soils encountered shall be removed.
Light weight pumice fill approved by the Geotechnical Engineer shall be used to suit minimum floor levels.

A perforated pipe connected to the stormwater system shall be installed around the perimeter of the foundation in line with Geotech report.

A 2 layer enhanced damp proof membrane shall be provided to Geotech specifications

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INTERIOR:
As detailed to comply with NZS3604 and NZS E3 Internal Moisture

PLASTERBOARD LININGS:
All linings to Gb living solutions Site Guide and all relevant suppliers documentation. Bracing elements as detailed on plans.
Wet areas to be lined with Gb Aqualine as outlined in Gb Aqualine Wet Area Systems

TILING:
Installed to Ceramic tiles AS 3958 and BRANZ Good practice guide Tiling

VINYL SURFACING:
Installed to NZSAS1864 Floor coverings and BRANZ Bulletin 530

INSULATION:
As detailed to comply with NZS R1/AS1 and NZS421 Insulation to comply with manufacturers specifications. Minimum insulation specified on plans.

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Garage Area	43.11	m ²	xxxx	m ²
House Area	179.17	m ²	xxxx	m ²
TOTAL FLOOR AREA	222.72			
TOTAL ROOF AREA	259.75	m ²		
SITE AREA	1143	m ²		

ZONES				
RDC		ZONE	Residential 1	
WIND ZONE	High	LEE ZONE	N/A	
EARTHQUAKE ZONE	2	SOIL CLASS	D/E	
CORROSION ZONE	B	SNOW ZONE	N0	

CONSENT

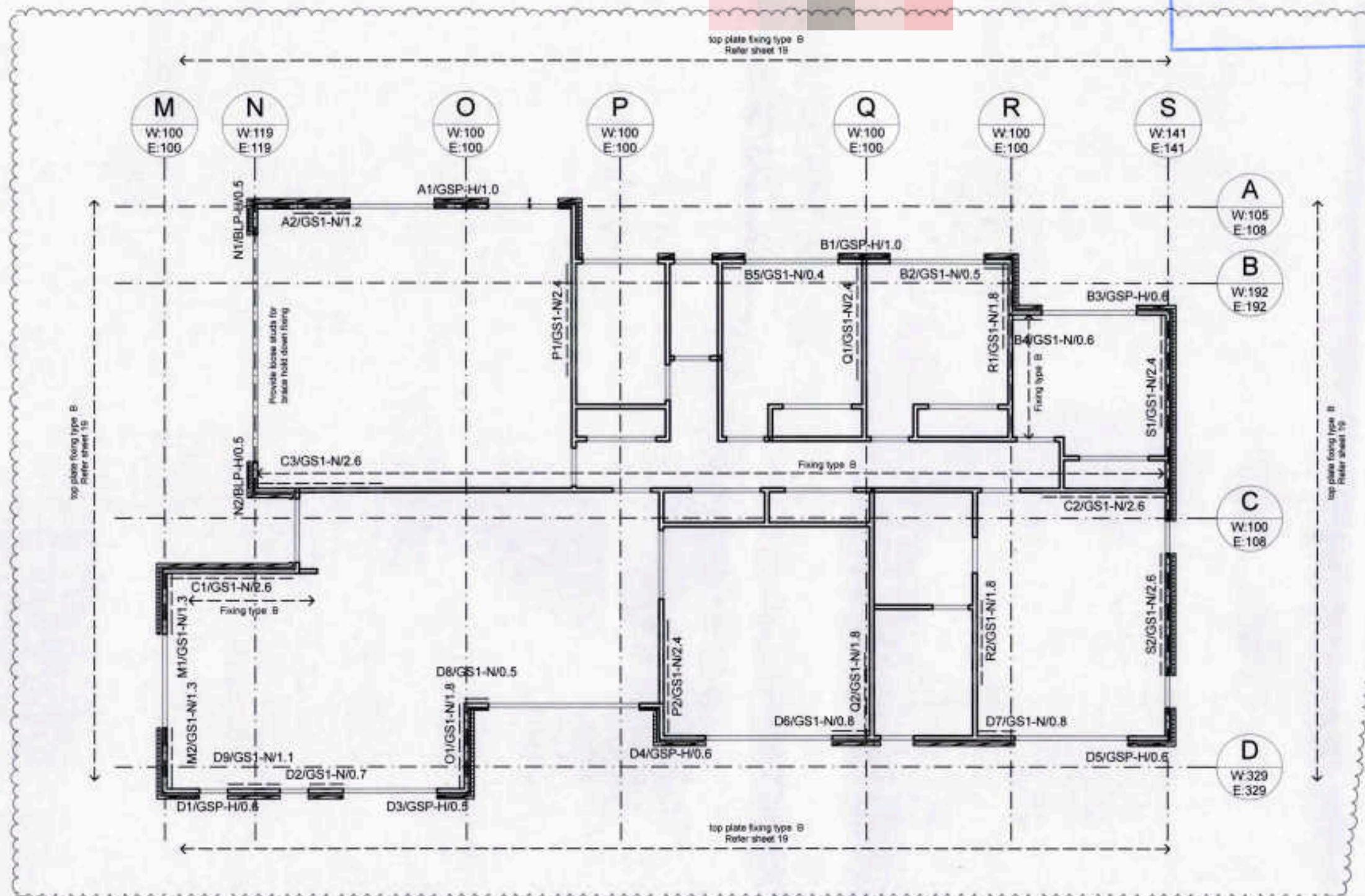
Client:	Mark Lam
Site Address:	16 Oakland Place, Ngongotaha, Rotorua,
LEGAL DESCRIPTION	
Lot No	70
	389915

Job Title	Gourlay Home - Mark Lam
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Drawing Title	Bracing Plan
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Drawn	JWD		
Checked	MB		
Published	19-Jul-18	Job No.	GH84

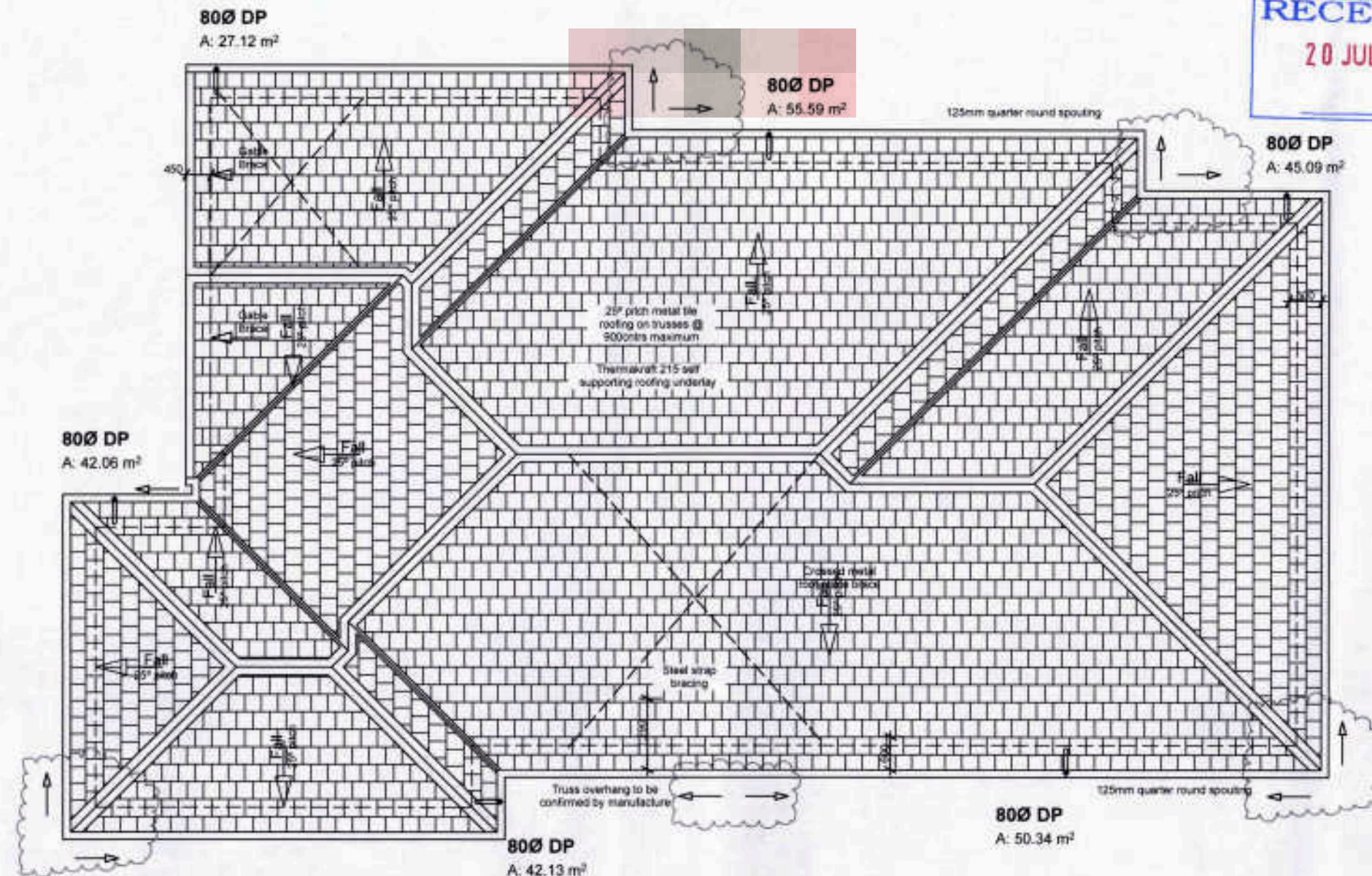
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Truss Fixings
LUMBERLOK JH47x80 Joist Hanger
LUMBERLOK JH47x120 Joist Hanger
LUMBERLOK JH47x190 Joist Hanger
LUMBERLOK JH47x165 Joist Hanger
Pair of LUMBERLOK CT200 Ceiling Tie
Pair of LUMBERLOK CT400 Cyclone Tie
Pair of LUMBERLOK CT600 Cyclone Tie
Pair of LUMBERLOK Multi Grip
LUMBERLOK Nailon Plate
LUMBERLOK N21 Diagonal Cleat
Pair of LUMBERLOK CPC40 Cleats
LUMBERLOK TTP 16kN Truss to Top Plate set
2 Wire Dogs

Rafter Fixings as per NZS 3604:2011 Table 15.6
Fixing Type E 2/90x3.15 Skew nails + 2 wire dogs
Fixing Type F 2/90x3.15 Skew nails + 2 wire dogs + strap fixing

METAL TILE ROOFING:
To comply with NZBC E2/A5.1 External moisture, NZS 3602, NZS 3604 and NZS 4217. Installed to NZ metal roof and wall cladding code of practice and to the Metrolife technical specification. For Roof truss layout design refer to ITM producer statement.

BOTTOM CHORD RESTRAINTS:
90x35mm bottom chord restraints (Refer roofing details) required when using clip on metal battens to ceilings.

CONSENT

Client:
Mark Lam
Site Address:
16 Oakland Place, Ngongotaha, Rotorua.

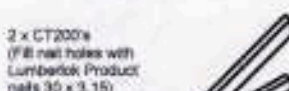
LEGAL DESCRIPTION
Lot No. **70** 389915

Job Title
Gourlay Home - Mark Lam

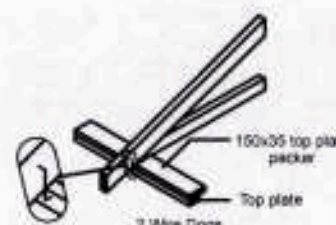
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Roof Plan

Scale 1:100, 1:10	Drawing Number 08
Drawn JWD	Job No. GH84
Checked MB	
Published 19-Jul-18	

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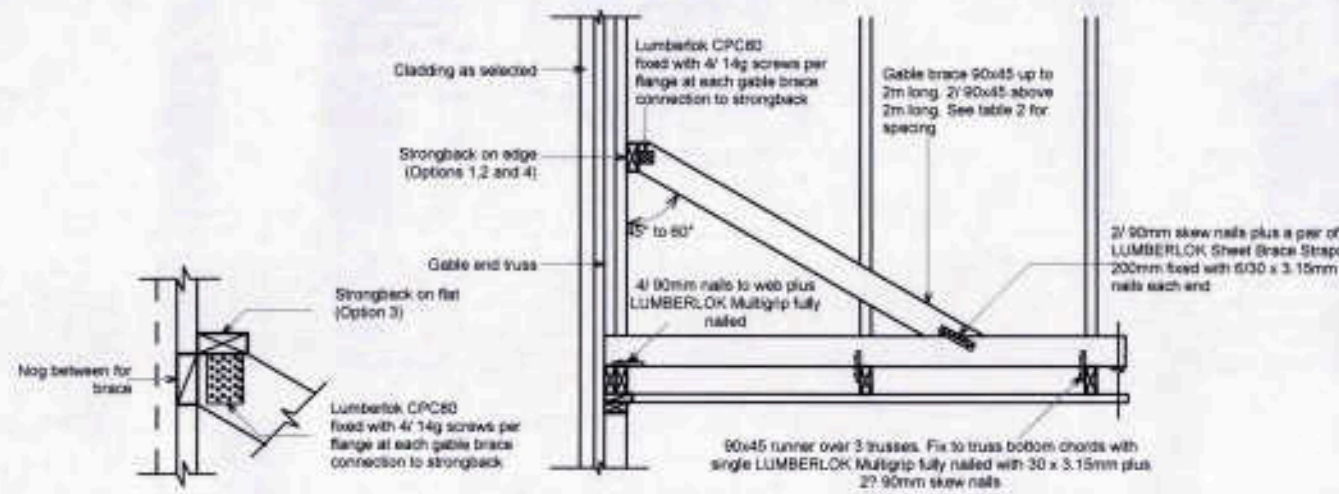
CT200 FIXING



WIRE DOG FIXING

Load Details
Truss Span: 3000-15000 High - Very High Wind zone
Roof Weight: Heavy or Light
Truss Centres: 900mm maximum

Load Details
Truss Span: 3000-10000 Low - Medium Wind zone
3000-6000 High - Very High Wind zone
Roof Weight: Heavy or Light
Truss Centres: 900mm maximum



Fixings Gable End Detail

Scale: 1:10

3

NOTE:
Electrical layout given as example. Use plan as minimum requirements for house. Consult client regarding full electrical layout prior to construction.

ELECTRICAL INSTALLATION

To comply with the Electrical Regulations 1997, AS/NZS 3000 and AS/NZS 3008.1.2 and the New Zealand electrical codes of practice (EOP) Letho 125mm Downlights used throughout - CA Rated

TELECOMMUNICATIONS INSTALLATION

To comply with AS/NZS 3098

SMOKE ALARMS:

Installed as required by NZBC F/WAS1 as where Detailed on plans.
Smoke Alarms to AS 3786

RECESSED DOWNLIGHTS:

recessed downlights used in residential housing in New Zealand must comply with 1 of the 4 Classifications listed below as per AS/NZS 60598.2.2

CA 80 Abutted only
CA 135 Abutted only
IC Abutted and covered
IC-F Abutted and covered

Bradford gold insulation is approved to be used with all of the above classifications. Both segment and blanket types have been through rigorous testing to warrant this. Bradford Gold passes Fire Hazard Test AS/NZS 6095.11.5.
Please refer manufacturers technical literature as to which Classification the downlight is complying with.

ELECTRICAL FIXTURES IN BRACES:

Openings under 90x90mm are required to be a minimum of 90mm from any edge of the brace panels. Blanking may be required for fixing of flushbooks.

CONSENT

Client:

Mark Lam

Site Address:

16 Oakland Place, Ngongotaha, Rotorua,

LEGAL DESCRIPTION

Lot No **70** 389915

Job Title

**Gourlay Home -
Mark Lam**

Drawing Title

Electrical Plan

Scale

1:100, 1:1

Drawn **JWD**

Checked **MB**

Published **08-Jun-18**

Drawing Number

09

Job No. **GH84**

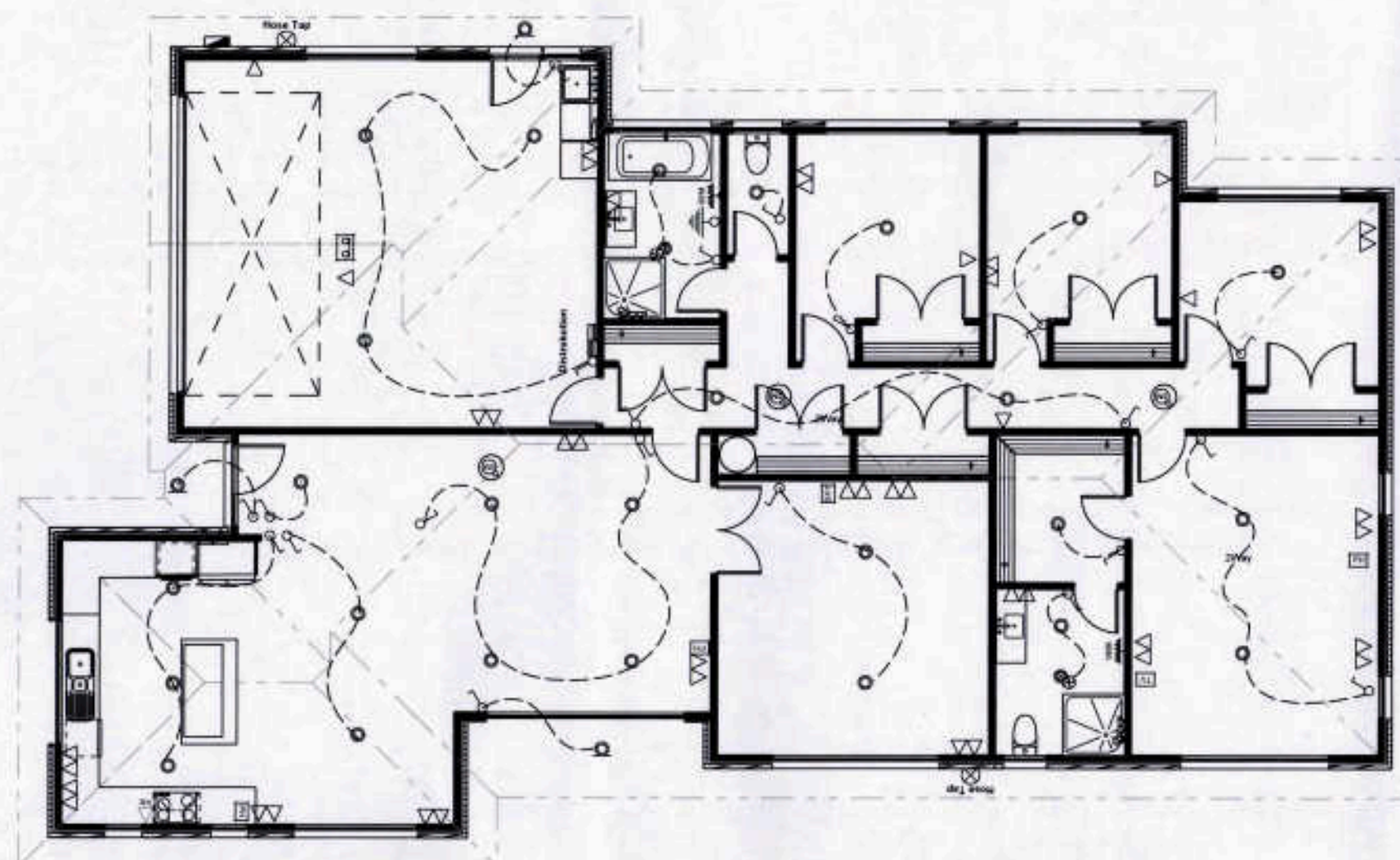
ALL DIMENSIONS TO BE VERIFIED ON SITE

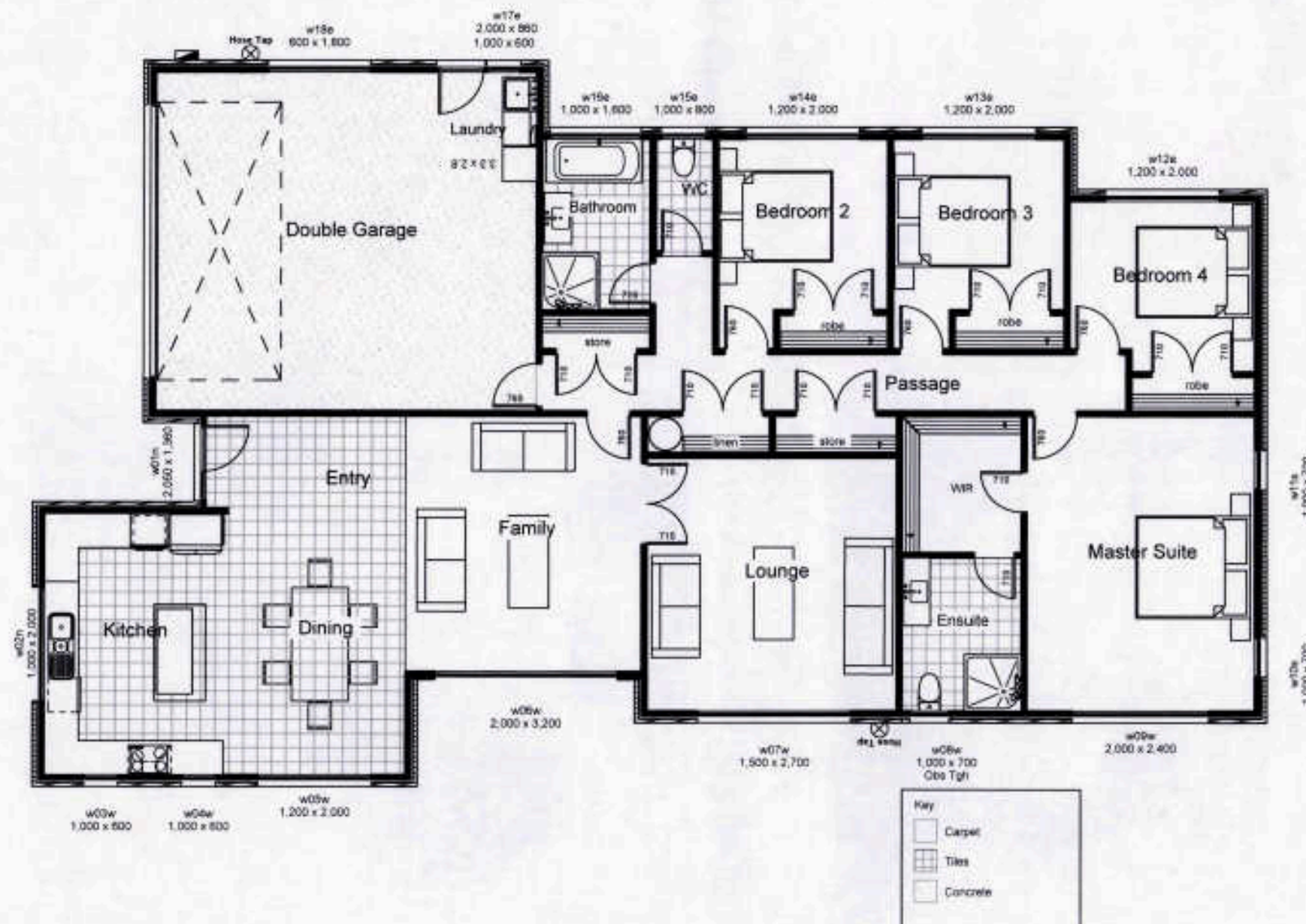
Switches		
21		Single Switch
2		2 Way Circuit

Lights		
26		Recessed Down Light
3		Recessed Light
2		Inline fan with light ducted outside

Plugs & Sockets		
21		Double Plug
6		Single Plug
3		PH Connection
1		Rangehood Plug
1		TV Connection
1		Sky Connection

Other		
3		Smoke Alarm Hardwired
2		Heated Towel Rail
2		Wall Mounted Heater
1		Garage Door
1		Distribution Board





WET AREA FINISHES:
Bench top:
Formica or Wilson Art rolled front edge bench tops
Splash back:
Stainless steel, glass or tile
Bathroom, Laundry and W.C.:
Waterborne Enamel Painted walls and ceiling

Wardrobe:
Custom designed wardrobe system. Heavy duty vinyl coated ventilated shelving painted. Walk-in wardrobe is wall papered

Wall Finishes:
Paint finish to: Bathroom, Ensuite, W.C., Garage and Laundry
Wall Paper finish to remaining areas
Flat Paint finish to ceilings with 55mm Gib Cove Scotia

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LEGAL DESCRIPTION
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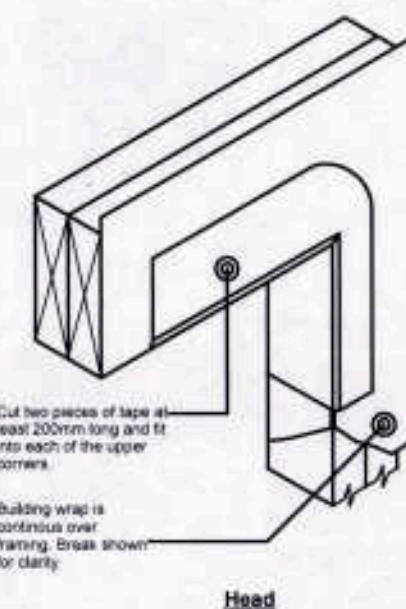
Job Title
Gourlay Home - Mark Lam

Drawing Title
Floor Finishes Plan

Scale 1:1, 1:100	Drawing Number 10
Drawn JWD	
Checked MB	
Published 08-Jun-18	Job No. GH84

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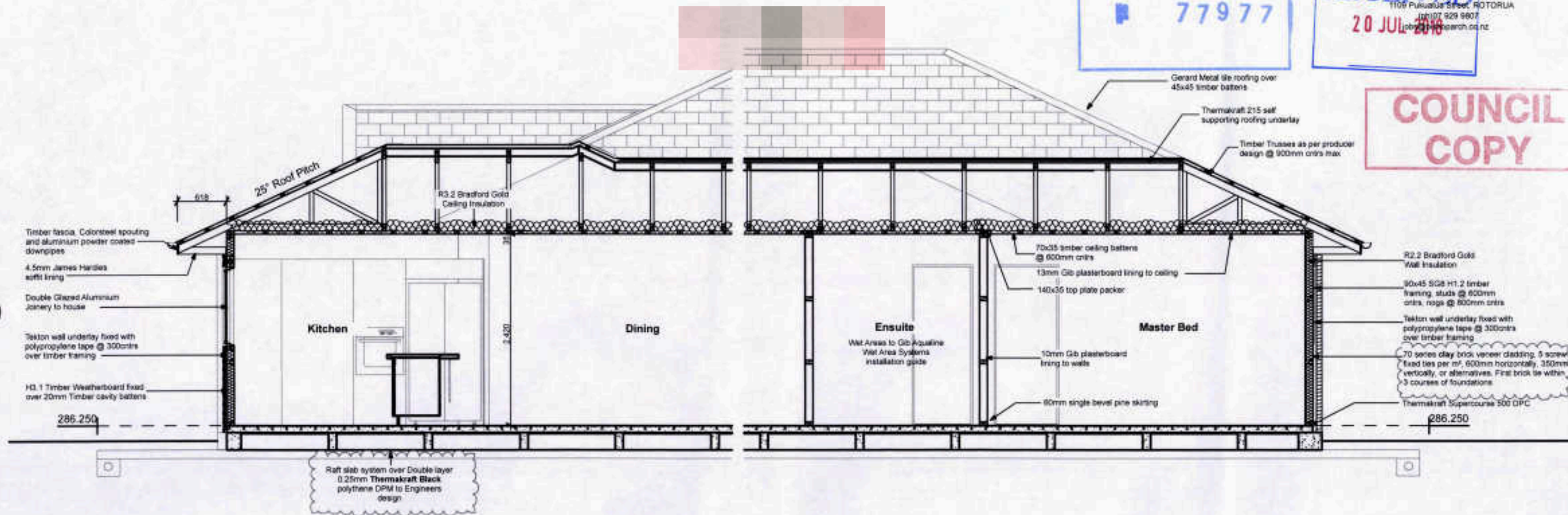


Client:	Mark Lam	
Site Address:	16 Oakland Place, Ngongotaha, Rotorua,	
<u>LEGAL DESCRIPTION</u>		
Lot No.	70	389915
Job Title	Gourlay Home - Mark Lam	

Drawing Title		Section AA	
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Drawn	JWD	Job No. GH84	
Checked	MB		
Published	19-Jul-18		

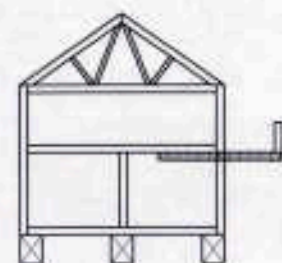
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Version: 2, Version Date: 25/02/2020

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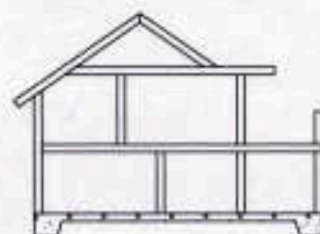
TIMBER TREATMENT

Cantilevered enclosed balcony and balustrade



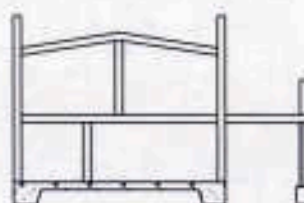
H1.2

Enclosed balcony and balustrade with living space below



H3.2

Enclosed balcony and balustrade open below



H5 post in contact with ground

H5

TIMBER TREATMENT as per NZS 3802			
HAZARD CLASS	EXPOSURE	SERVICE CONDITIONS	BUILDING ELEMENTS
H1.2	Protected from weather, above ground, but with a possibility of exposure to moisture	Protected from weather, but with a risk of moisture content conducive to decay	• Wall Framing • Low risk internal wall framing • Ceiling framing
H3.1	Exposed to weather above ground or protected from the weather but with a risk of moisture entrapment	Periodic wetting, not in contact with the ground	• Cavity framing • Window jamb liners
H3.2	Exposed to weather above ground	Periodic wetting, not in contact with the ground, more critical end uses	• Structural ply braces • Decks and Pergolas • External beams and posts above ground • Timber Fascia
H5	Exposed to the weather, in ground or in fresh water	Ground contact, or conditions of service or continuous wetting, where uses are critical and where a higher level of protection than H4 is required	House posts

CONSENT

Client:

Mark Lam

Site Address:

16 Oakland Place, Ngongotaha, Rotorua,

LEGAL DESCRIPTION

Lot No. 70 389915

Job Title

Gourlay Home -
Mark Lam

Drawing Title

Section BB

Scale

1:50

Drawn

JWD

Checked

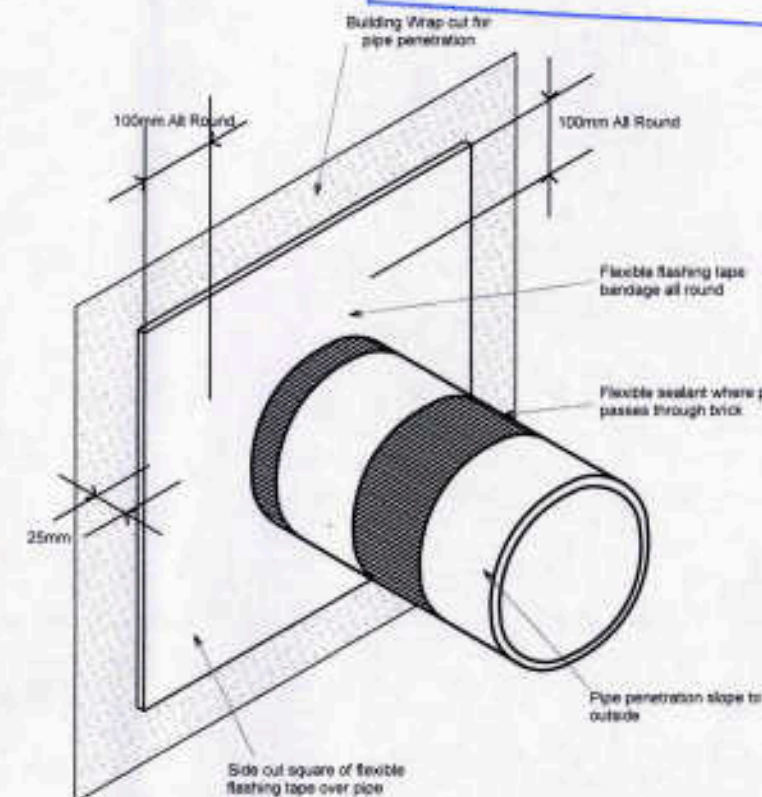
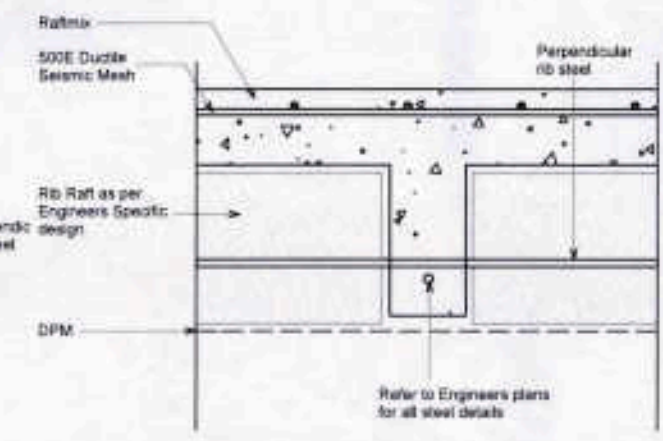
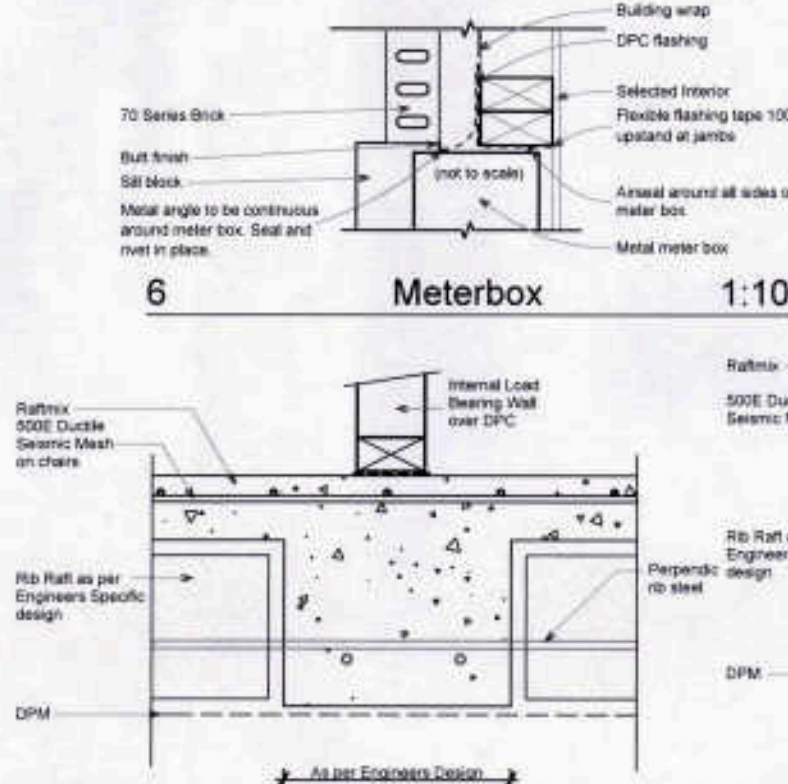
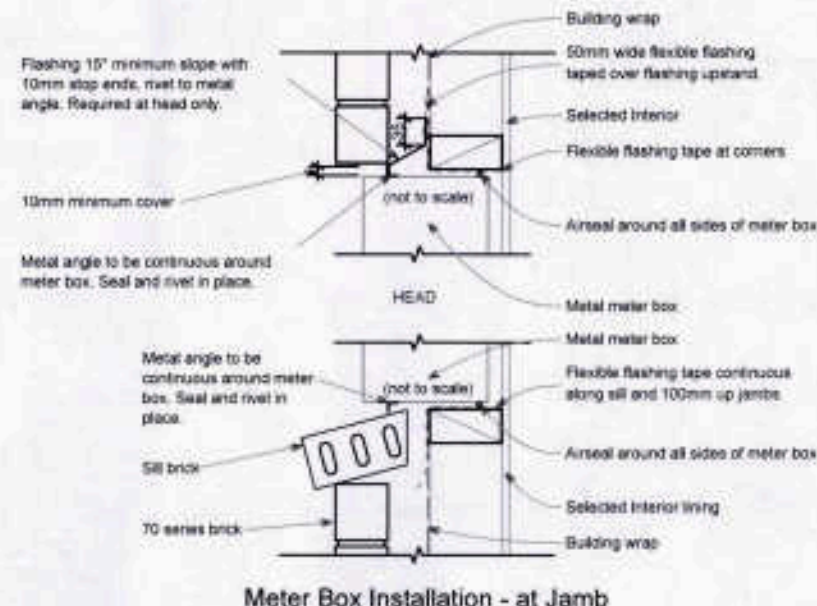
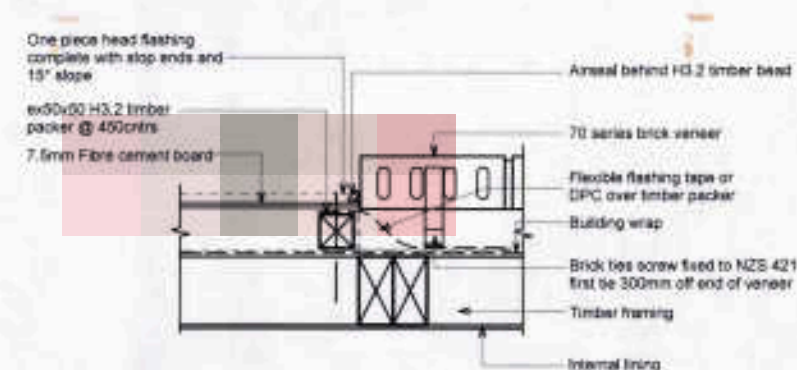
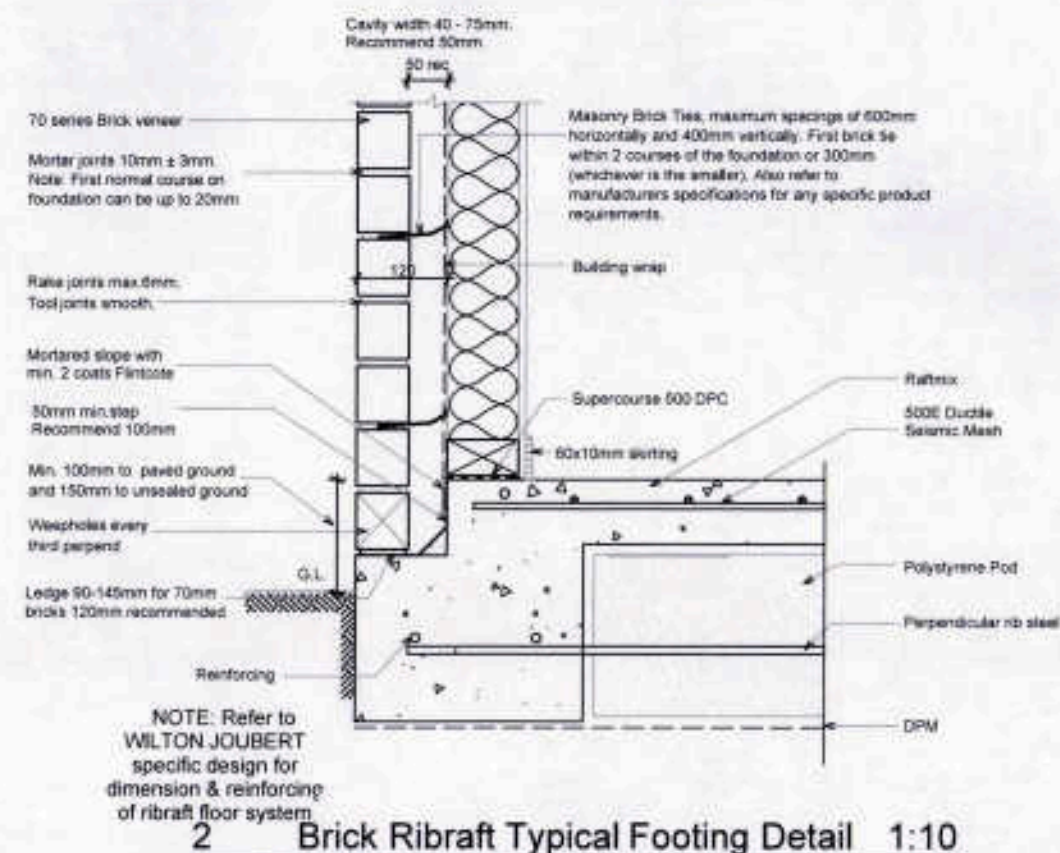
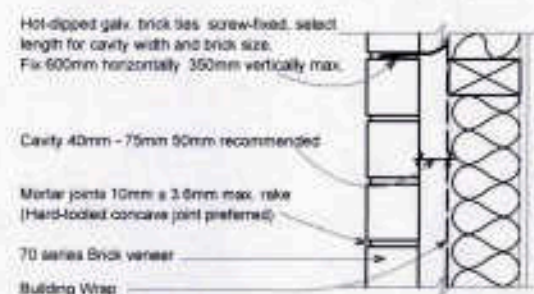
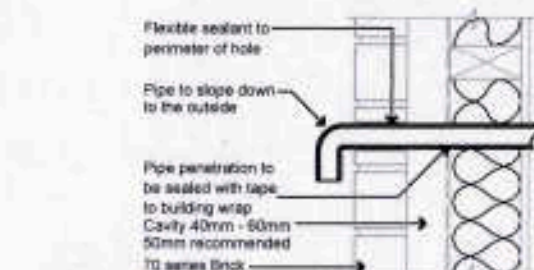
MB

Published 19-Jul-18

Job No.

GH84

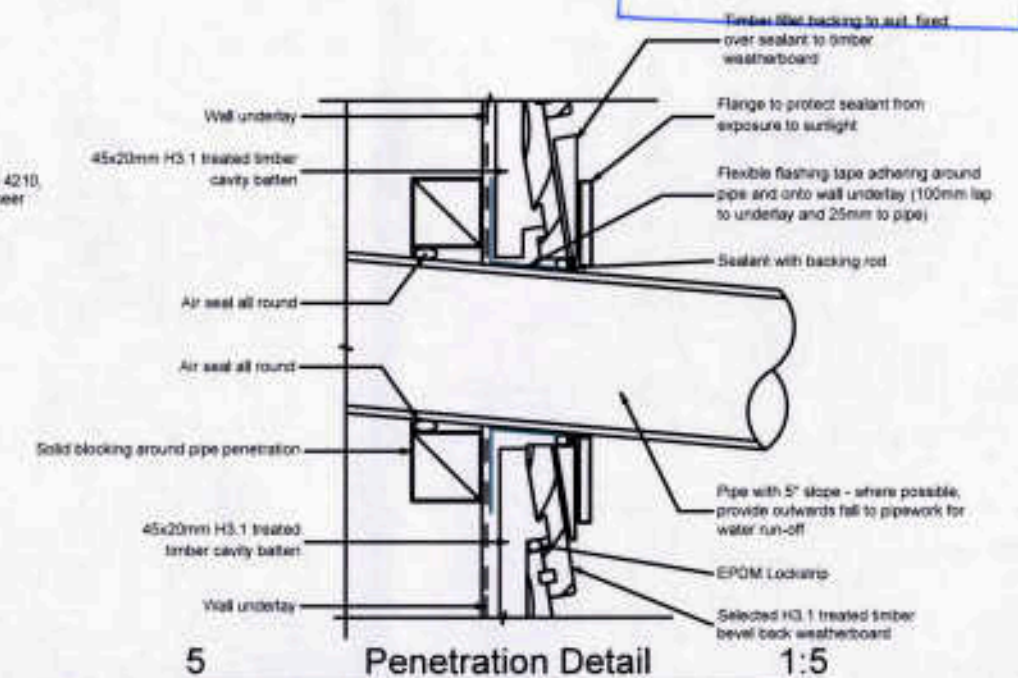
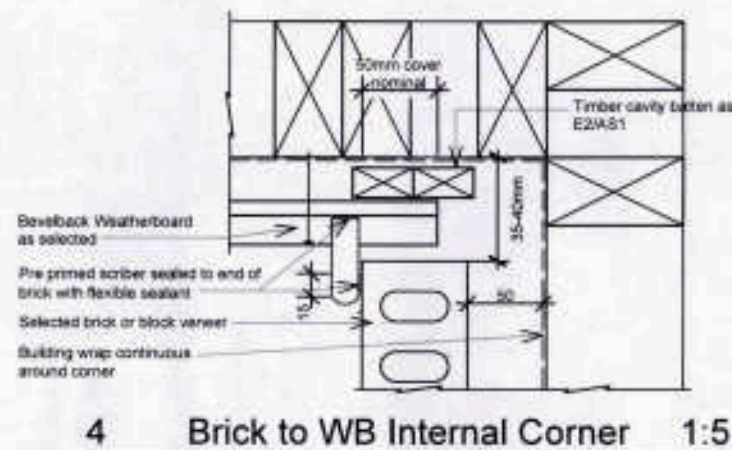
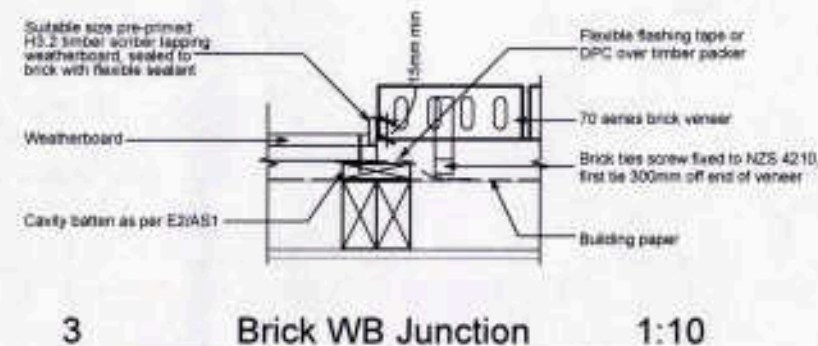
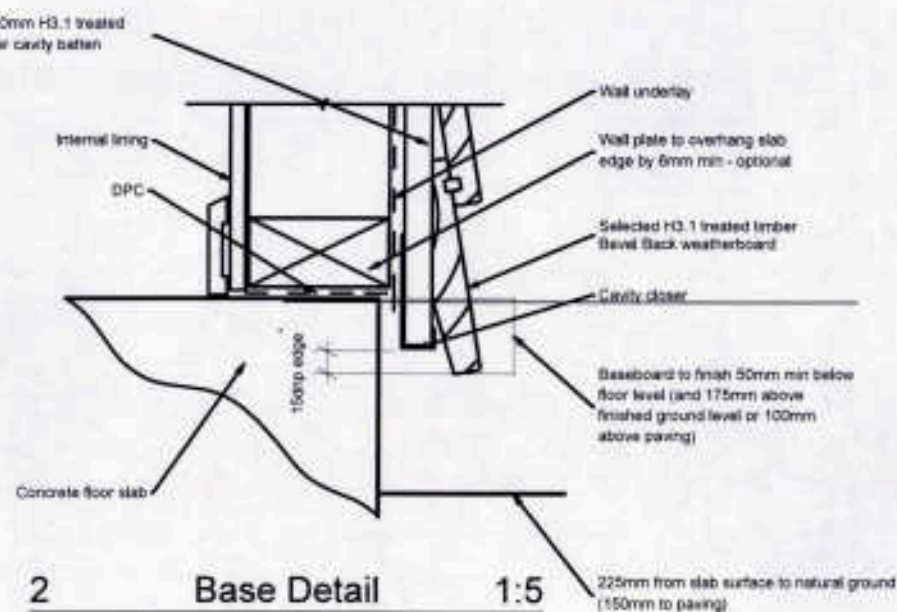
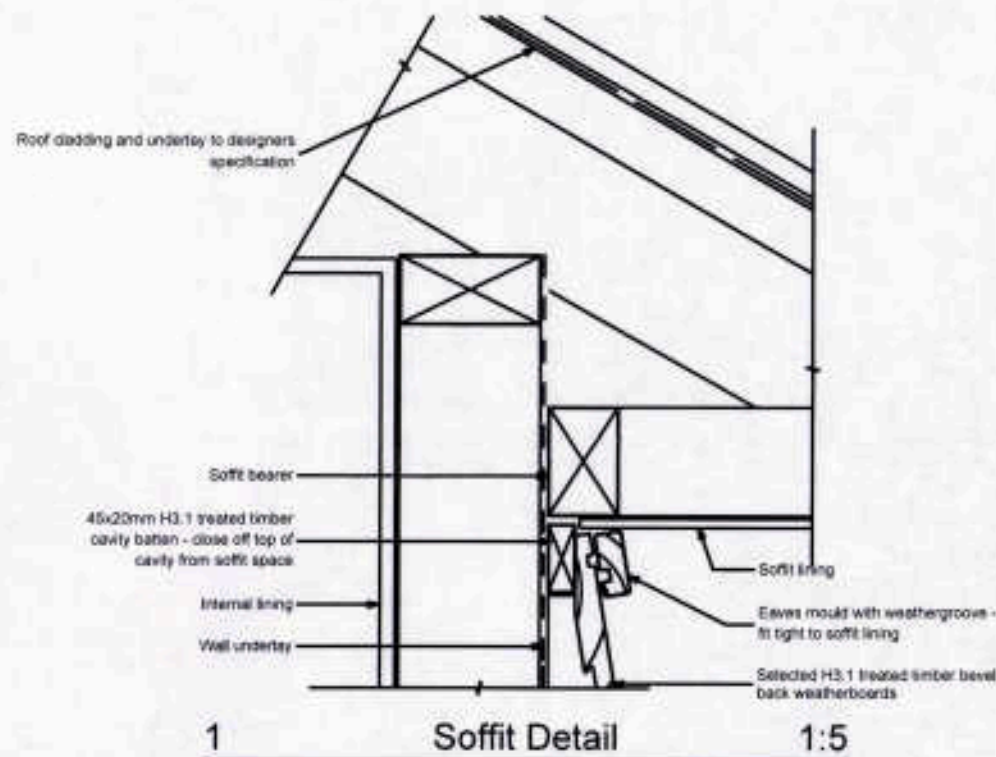
ALL DIMENSIONS TO BE VERIFIED ON SITE



CONSENT	
Client:	Mark Lam
Site Address:	16 Oakland Place, Ngongotaha, Rotorua,
LEGAL DESCRIPTION	
Lot No.	70 389915
Job Title	
Gourlay Home - Mark Lam	
Drawing Title	
Cladding Details	
Scale	1:10, 1:5
Drawn	JWD
Checked	MB
Published	08-Jun-18
Drawing Number	13
Job No.	GH84

IMPORTANT: DETAILS ARE DIAGRAMATIC ONLY - REFER WILTON JOUBERT PLANS FOR ENGINEER SPECIFIC DETAILING OF FOUNDATION

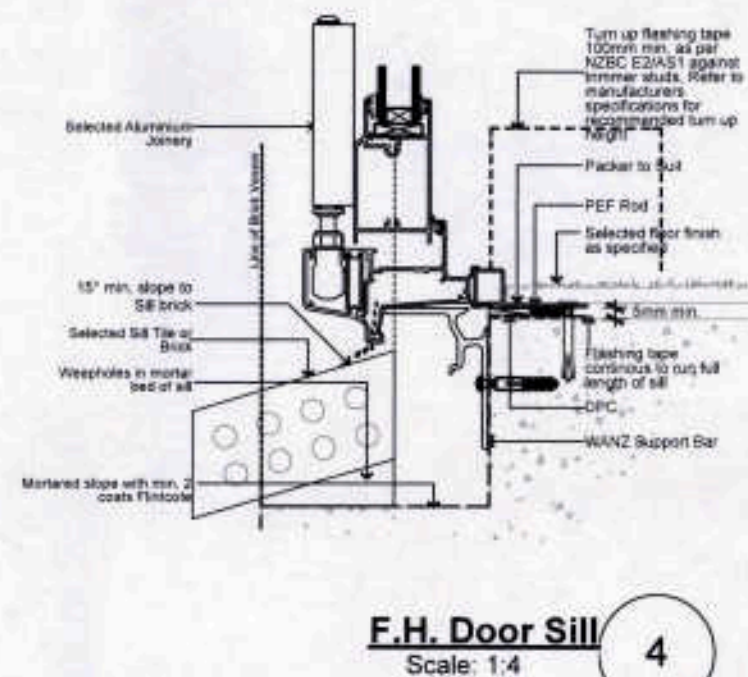
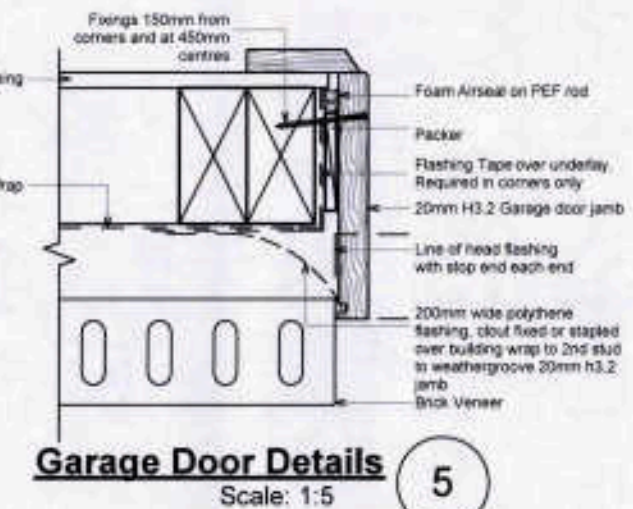
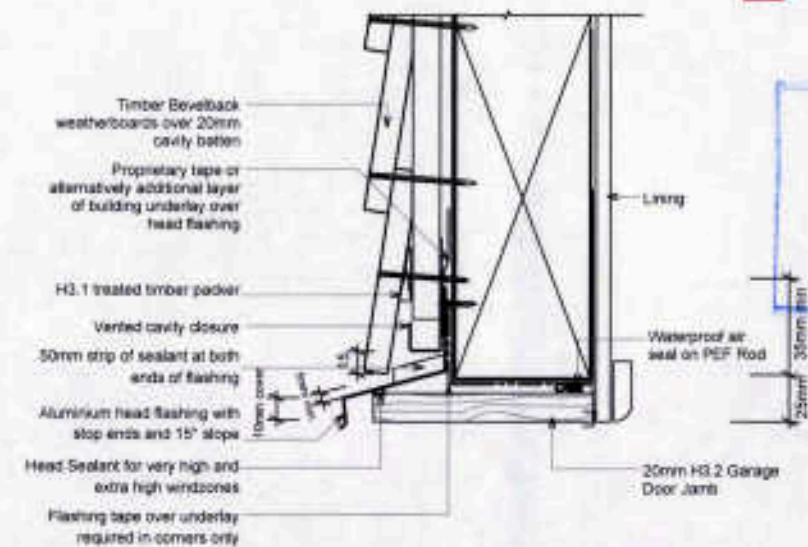
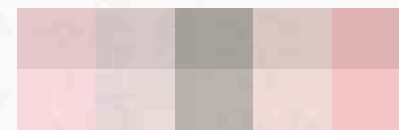
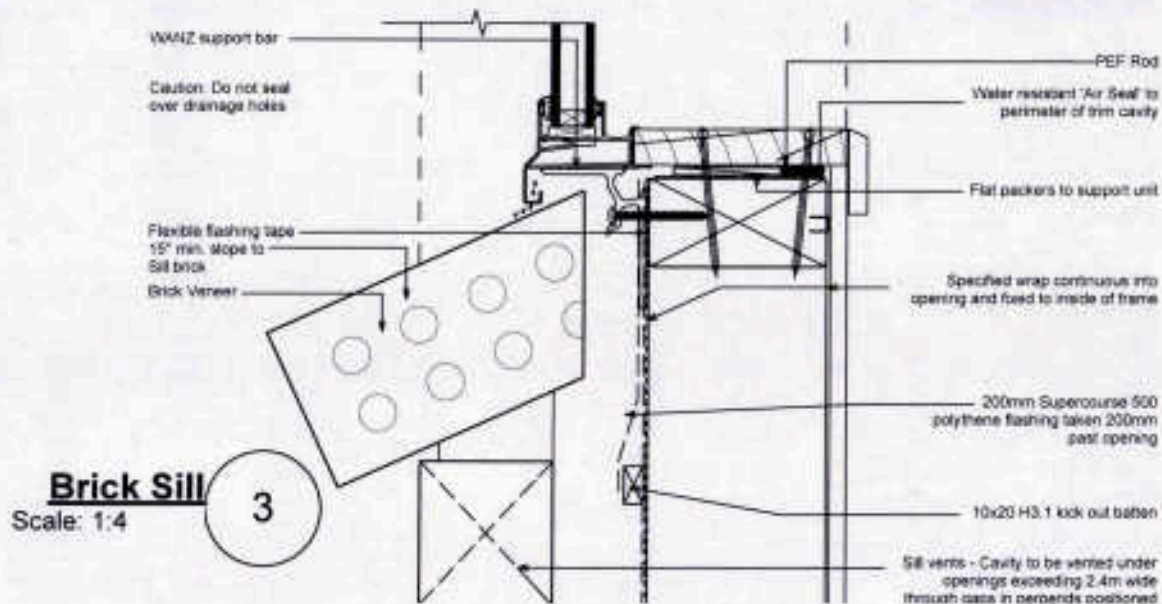
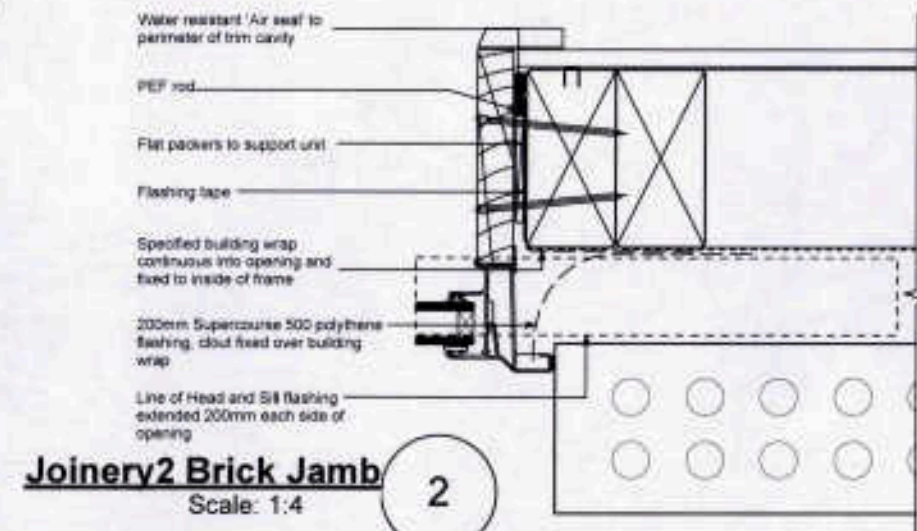
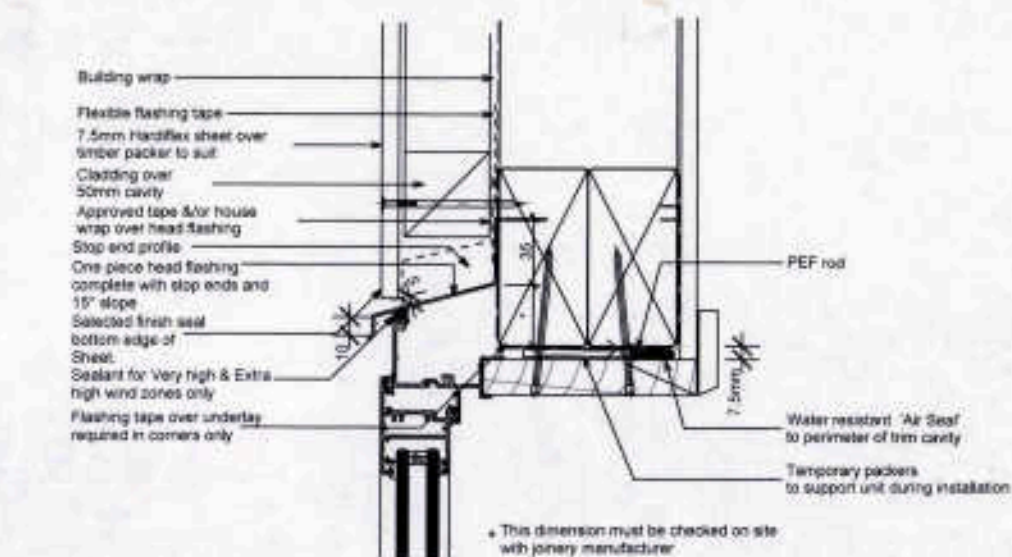
ALL DIMENSIONS TO BE VERIFIED ON SITE



IMPORTANT: DETAILS ARE DIAGRAMATIC ONLY - REFER WILTON JOUBERT PLANS FOR ENGINEER SPECIFIC DETAILING OF FOUNDATION

CONSENT	
Client: Mark Lam	
Site Address: 16 Oakland Place, Ngongotaha, Rotorua,	
<u>LEGAL DESCRIPTION</u>	
Lot No.	70 389915
Job Title Gourlay Home - Mark Lam	
Drawing Title Cladding Details	
Scale 1:5, 1:10	Drawing Number 14
Drawn JWD	
Checked MB	
Published 08-Jun-18	Job No. GH84

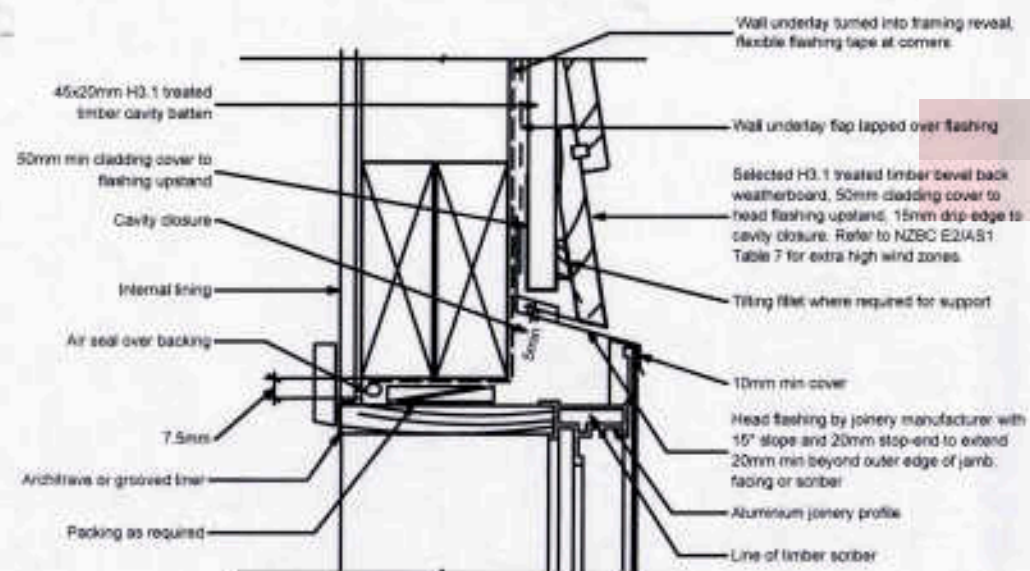
ALL DIMENSIONS TO BE VERIFIED ON SITE



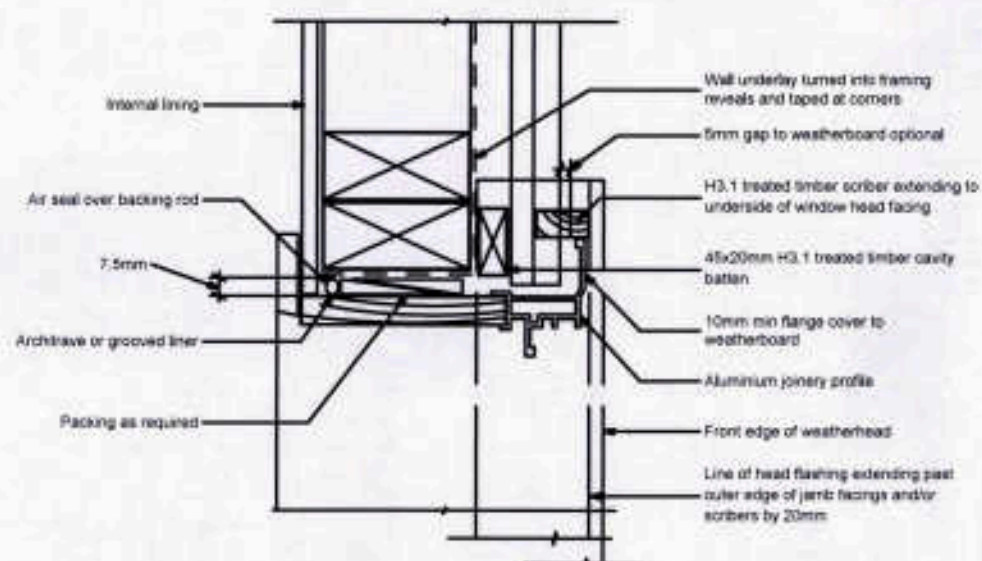
CONSENT

Client:	Mark Lam		
Site Address:	16 Oakland Place, Ngongotaha, Rotorua,		
<u>LEGAL DESCRIPTION</u>			
Lot No:	70	389915	
Job Title	Gourlay Home - Mark Lam		
Drawing Title	Joinery Details		
Scale	1:4, 1:5	Drawing Number	15
Drawn	JWD		
Checked	MB		
Published	08-Jun-18	Job No.	GH84

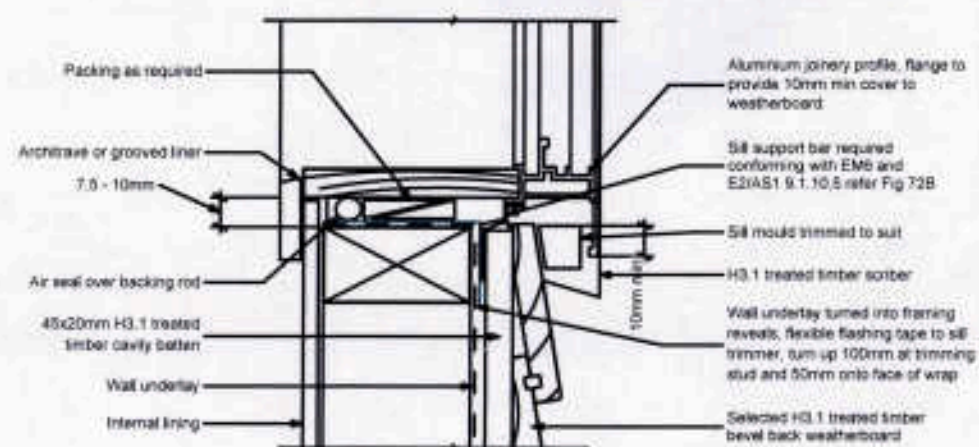
ALL DIMENSIONS TO BE VERIFIED ON SITE



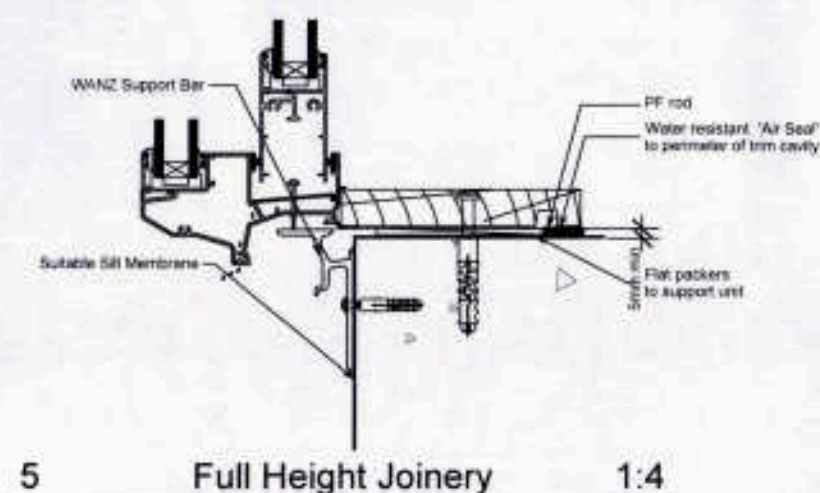
1 Joinery Head Detail 1:5



2 Joinery Jamb Detail 1:5



3 Joinery Sill Detail 1:5



5 Full Height Joinery 1:4

CONSENT

Client:

Mark Lam

Site Address:

16 Oakland Place, Ngongotaha, Rotorua,

LEGAL DESCRIPTION

Lot No. **70**

389915

Job Title

Gourlay Home - Mark Lam

Drawing Title

Joinery Details

Scale

1:5, 1:4

Drawn

JWD

Checked

MB

Published

08-Jun-18

Drawing Number

16

Job No.

GH84

ALL DIMENSIONS TO BE VERIFIED ON SITE