

Site Description

32 Nicholls Street Richmond
Parcel ID: 3529456
Appellation: Lot 56 DP 5913
Location: Richmond

Climate Zone: 3
Earthquake Zone: Zone 2
Exposure Zone: Zone C
Lee Zone:
Rainfall Range: 30 - 40
Wind Region: A
Wind Zone: Low

All Fixings to Comply with
Corrosion Zone C

GENERAL NOTES

The Construction documents created have been designed and prepared for the purpose of our client. All work shall comply with the N.Z.B.C and other relevant associated standards, codes and technical authorities by law. The Construction documents shall be read in conjunction with all relevant Engineers Documents. All dimensions shown in drawings to be verified by builder prior to commencement of work. Do not obtain dimensions by scaling from drawings. The builder is to refer any discrepancies to the MOA Design Ltd before proceeding with work. All proprietary items and materials will be applied and installed in accordance with the manufacturer's designs.

SITE SEDIMENT CONTROL PLAN:

Refer to Site Sediment Control Plan contained in supporting documents

SITE MANAGEMENT PLAN

1. Construction Signage to F5/AS1
2. 2m high safety fence around construction area.
3. Contractor to adhere to all H & S requirement relevant to site construction in accordance to department of Heath and Safety

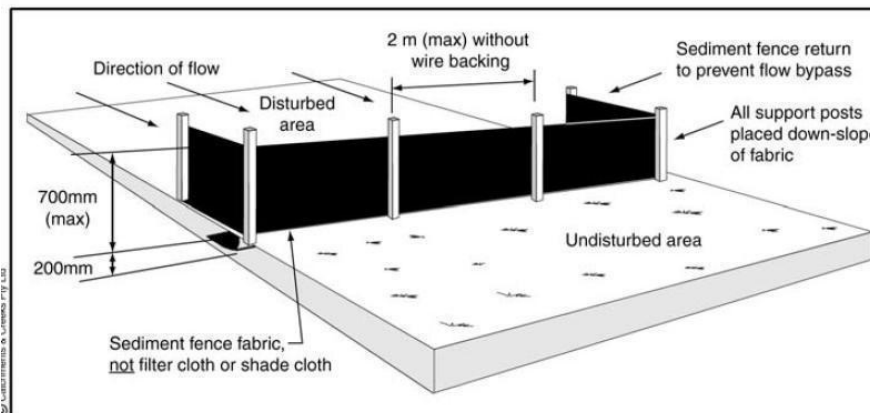
Re-clad Weatherboard as noted on plans under Maintenance (Not covered by Moa Design) not part of consent.

Foundation Re-levelled as Per Cook Costello Plans/ Details /Specifications.

Interior re-configuration wall removed in living area covered by Engco refers to Plans/ Details /Specifications.

New Fire Installed refer to Woodsman installation Docs/ Supporting/Spec

Sediment fence construction details



Site Location

SCALE: NTS (Dimensions to be confirmed on site)

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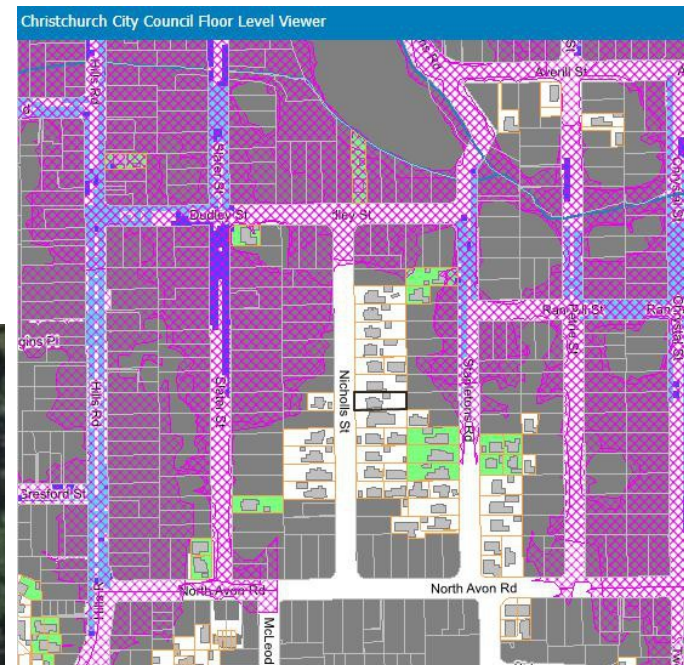
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Stuthridge, Evan



MOA DESIGN
MCNULTY/OSKAM ARCHITECTURE

P: 0226005008 E: mike@Moadesign.nz
P: 027 5565005 E: rob@Moadesign.nz



Floor Level Assessment

Street Address	32 Nicholls Street
Within District Plan Flood Management Area (FMA)	No
Building Code Floor Level	Not required.
District Plan Floor Level	Not required.
Recommended Floor Level (not mandatory)	No recommendation.
Predicted 1 in 50 Year Flood Level	No flooding predicted.
Predicted 1 in 200 Year Flood Level	No flooding predicted.
Minimum Ground Level	13.6 m Christchurch Drainage Datum
Average Ground Level	13.79 m Christchurch Drainage Datum
Maximum Ground Level	14.05 m Christchurch Drainage Datum

Sediment Control Measures

The Project Manager or Foreman is to oversee the sediment control.

All erosion and sediment structure to be inspected each working day to maintain good working order.

All groundcover vegetation outside the immediate building are to be preserved during the building phase.

All Erosion and sediment control measures to be installed prior to commencement of major earthworks.

Stockpiles of clayey Material to be covered with impervious sheets.

Assure to :
Create a Stabilized Entry Exit Pad
Create Sediment Control Fence

Refer to sediment control for small site contained in supporting docs.

Stabilised Entry/Exit Pad - Building Sites

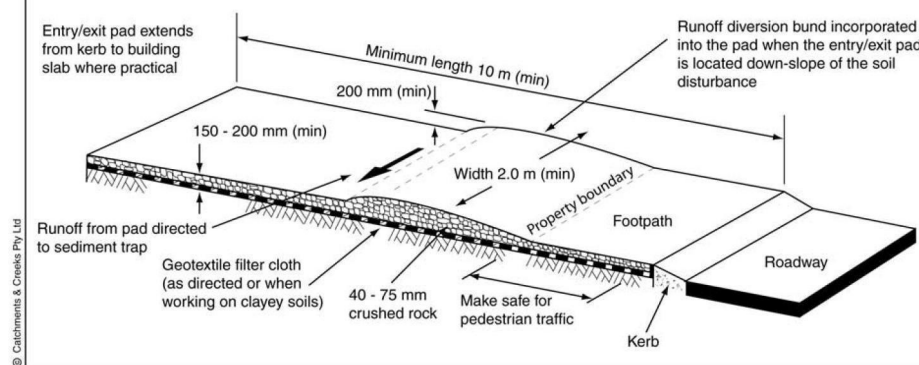
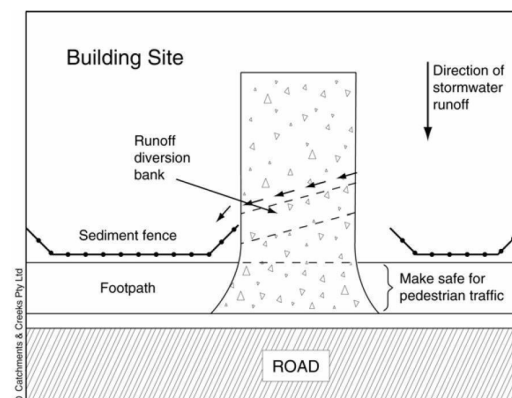


Figure 4 Typical stabilised all-weather site access – PLAN VIEW



NOTES:

The onus is on the contractor to check and verify all dimensions and levels on site and notify engineer of any discrepancies. All work to comply with Local Authority requirements the New Zealand Building Code and the relevant New Zealand standards. The designer is not liable for any construction work on site that does not comply with the approved building consent documents of NZBC & NZS. Comply with ALL OSH and onsite Health and Safety requirements at all times. Drawings must be read in conjunction with Engineering specification and Engineering details. Where there is a conflict between specification and a specify note, contact the engineer.

All timber construction shall be as per NZS 3604:2011 Timber Framed buildings. Any services that are within the rebuild area need to be temporarily disconnected, capped and prepared for new work. Later be reconnected to comply with NZBC - (Like grade and level, plumbing etc)

ISSUE :
32 Nicholls Street,
Richmond, Christchurch
8013

Guidance Documents

All Renders Indicative

DRAWN BY : MMN

REVISION : Rev B

SCALE : NTS @A3

PAGE TITLE : Site Location / Site Information

PAGE :

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A-01

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New: 2/190x45 SG8
H1.2, Mitek Lintel Fixing
Type F 2.80 m

New Woodsman Coleridge installed
as per manufactures specifications.
installation manual contained in
supporting documents. Installation
to be undertaken by registered
installer.

Chimney
Demolished

**ALL PLANS HAVE BEEN DRAWN FROM A SITE MEASURE.
WHILE ALL REASONABLE EFFORT HAS BEEN MADE TO
ACCURATELY REPRESENT THE EXISTING BUILDING,
THERE MAY BE DESCRENCIES. IT SHALL REMAIN THE
CONTRACTORS RESPONSIBILITY TO VERIFY ON SITE ALL
DIMENSIONS AND LEVELS PRIOR TO COMMENCING ANY
WORKS.**

 Wall Removed

NOTES:
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verify all dimensions and levels on site
and notify engineer of any discrepancies.
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Guidance Documents

All Renders Indicative

DRAWN BY : MMN
REVISION :
SCALE : 1:50 @A3
PAGE TITLE : Existing Plans

PAGE :
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Asbestos Notes

If any asbestos is discovered during the proposed building work, the following steps are
required to be taken:
i) Prior to removal, please contact the Department of Labour, telephone 0800 209020 for
information on
appropriate methods of handling asbestos.
ii) Before any disposal of asbestos, please contact the Council's Hazardous Waste Advisory
Service, Civic
Offices, telephone 941 8999. This will ensure correct disposal in the City Council area at the
land fill site

Demolition Notes

Before commencing work , carry out a
thorough survey and examination
building structure in order to ensure the
extent, sequence and technique and
method of demolition proposed can be
safely and efficiently carried out.

Builder to ensure all service water /
Electrical etc Utility operator to be
contacted to disconnect service and
remove fitting and equipment.

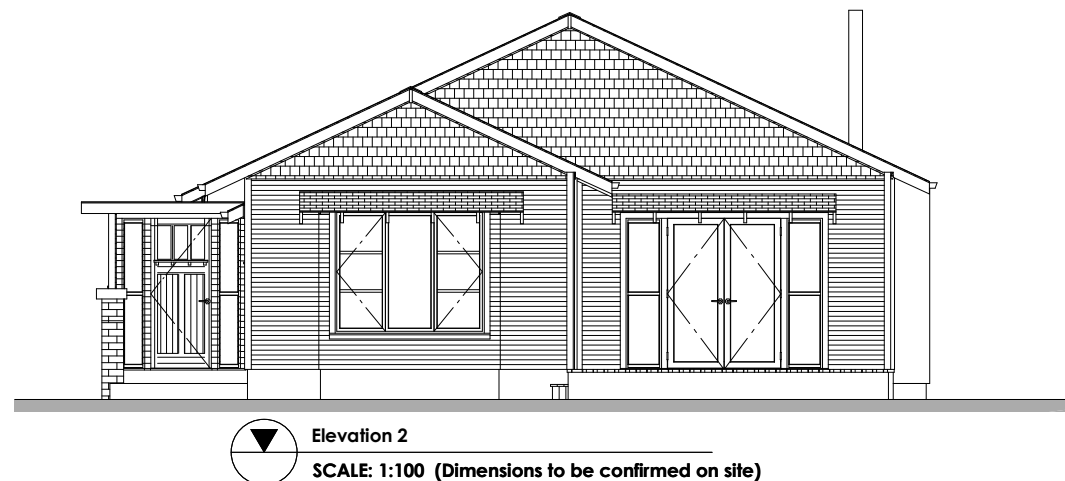
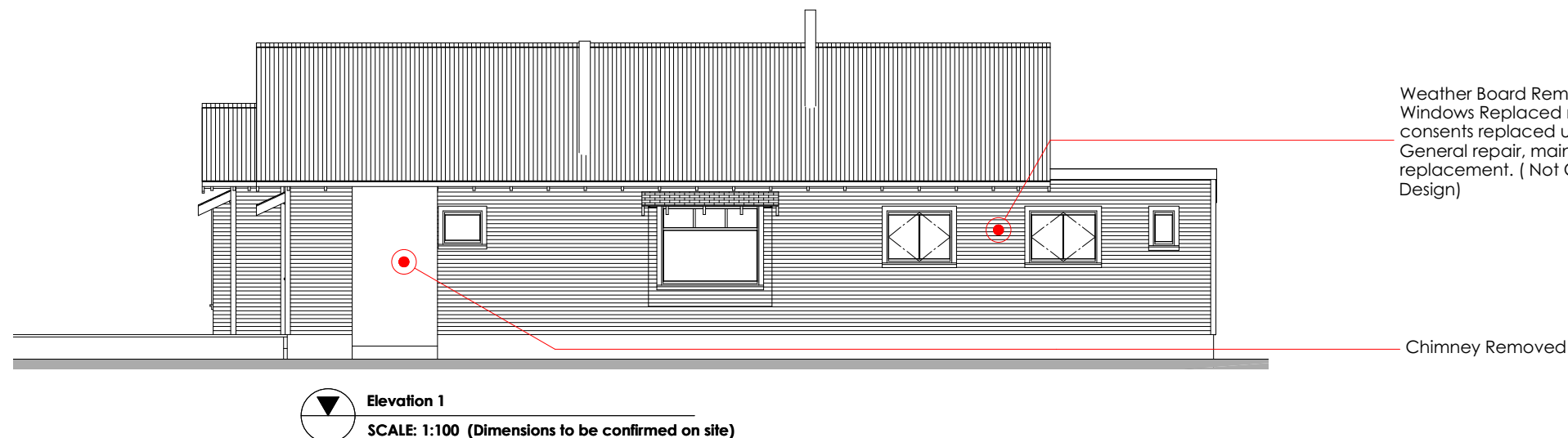
Material to be re-salvage to be
discussed with homeowner before
commencement of works.

Take all precaution necessary to
minimize nuisance caused by dirt ,
rubbish and water

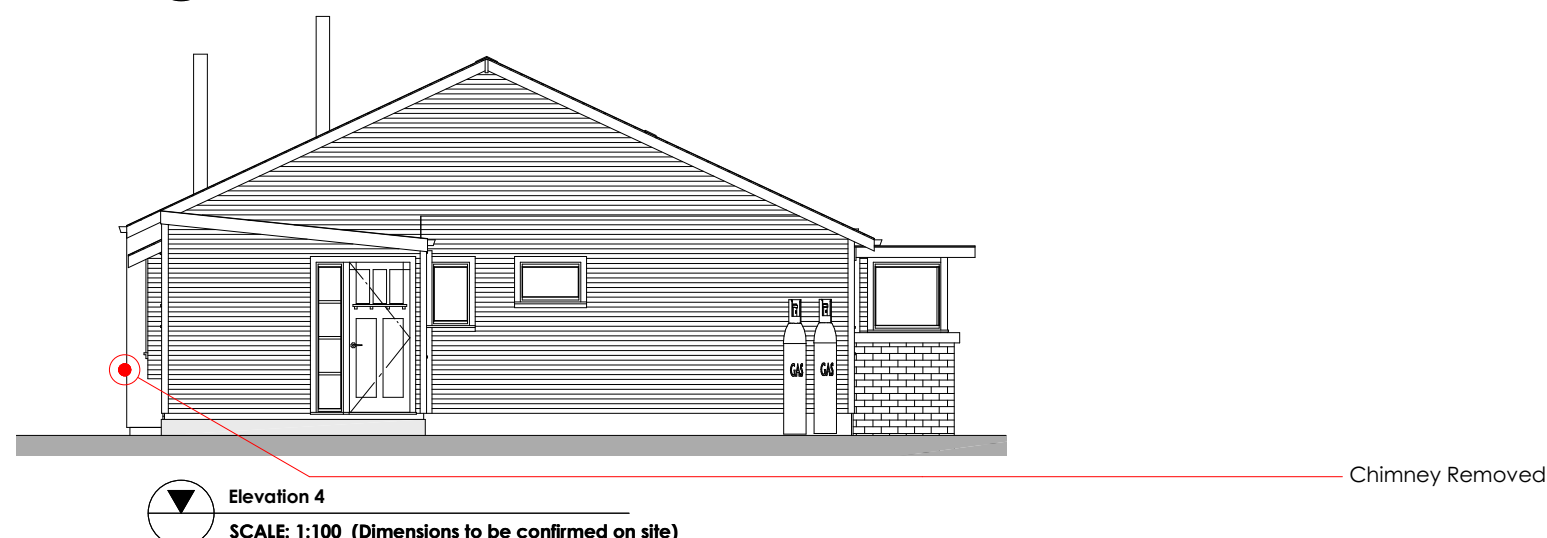
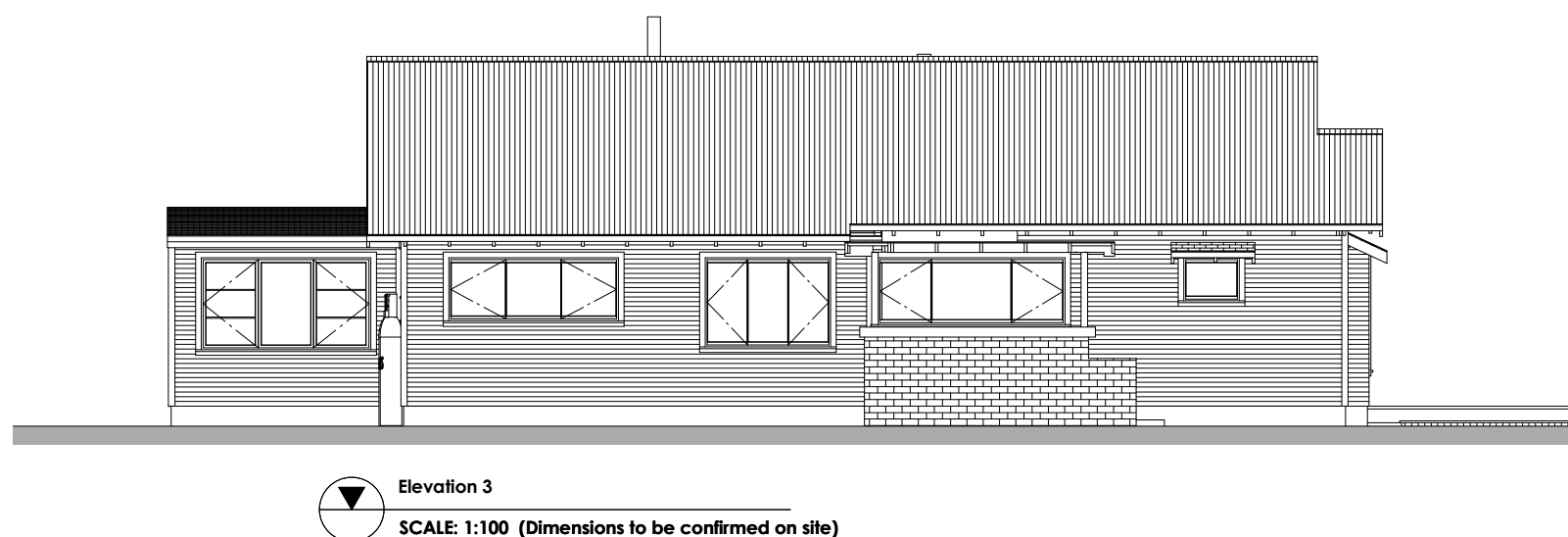
All Work to comply with the Health and
Safety Employment act 1992 in general
an the OSH document: "Approved code
of practice for demolition section 1.2"

 Existing Ground Floor Plan

SCALE: 1:50 (Dimensions to be confirmed on site)



Risk Matrix	Elevations				North	East	South	West
Risk Factor	Low	Medium	High	Very High	Sub-Totals	Sub-Totals	Sub-Totals	Sub-Totals
Wind Zone	0	0	1	2	0	0	0	0
No of Stories	0	1	2	4	0	0	0	0
Roof / Wall Intersections	0	1	3	5	0	0	0	0
Eaves Width	0	1	2	5	0	0	0	0
Envelope Complexity	0	1	3	6	3	3	3	3
Deck Balconies	0	2	4	6	0	0	0	0
Total risk score and rating: Low ,Medium,High or Very High					3	3	3	3



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Guidance Documents

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DRAWN BY : MMN
 REVISION :
 SCALE : 1:100 @A3
 PAGE TITLE : Existing Elevations

PAGE :
 DATE PRINTED : February 2021
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A-03

Weather Board Removed replaced / Windows Replaced not part of building consents replaced under schedule 1.1 General repair, maintenance, and replacement. (Not Covered by Moa Design)

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P: 027 5565005 E: rob@Moadesign.nz

SMOKE ALARM

Smoke Alarms must be fitted and working correctly. They must be located within 3m of sleeping areas and in all areas required to pass through to get to a safe place. They may be battery operated and are not required to be interconnected. In addition they shall be provided with a hush facility having a minimum duration of 60 seconds.

Smoke alarms shall have a test facility located on the smoke alarm (readily accessible to building occupants). Smoke alarms shall be listed or approved by a recognized authority as complying with at least one of: UL 217, ULC S531, AS 3786,BS 5446 Part 1 Existing lengths of dead-end paths are less than 24m long

Demolition Notes

Before commencing work , carry out a thorough survey and examination building structure in order to ensure the extent, sequence and technique and method of demolition proposed can be safely and efficiently carried out.

Builder to ensure all service water / Electrical etc Utility operator to be contacted to disconnect service and remove fitting and equipment.

Material to be re-salvage to be discussed with homeowner before commencement of works.

Take all precaution necessary to minimize nuisance caused by dirt , rubbish and water

All Work to comply with the Health and Safety Employment act 1992 in general an the OSH document: "Approved code of practice for demolition section 1.2"

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32 Nicholls Street,
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Guidance Documents

All Renders Indicative

DRAWN BY : **MMN**
REVISION :
SCALE : **1:50** @A3
PAGE TITLE : **Proposed Plans**

PAGE :
DATE PRINTED :
February 2021

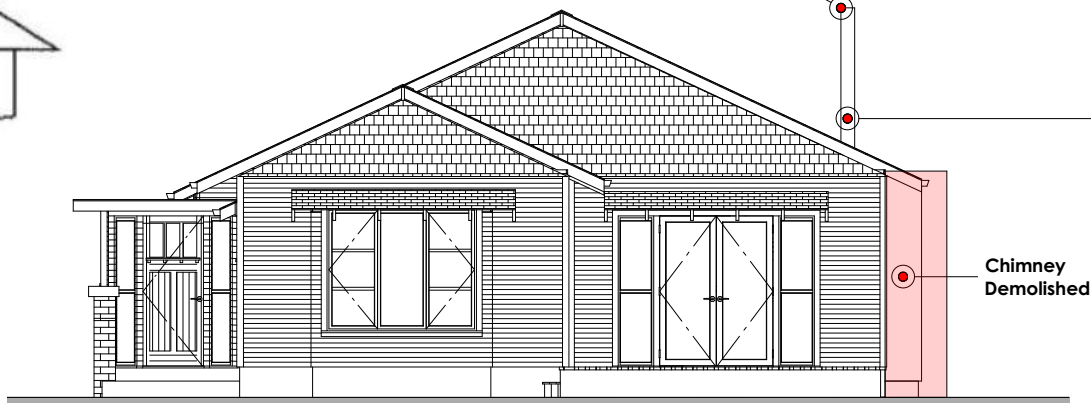
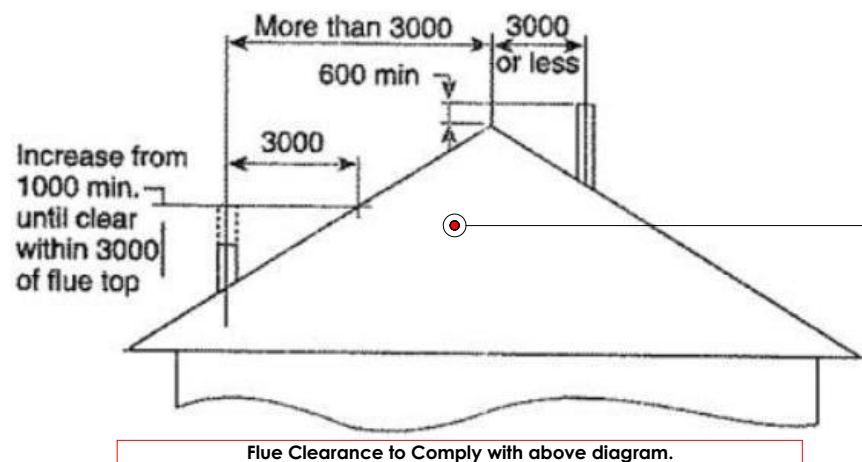
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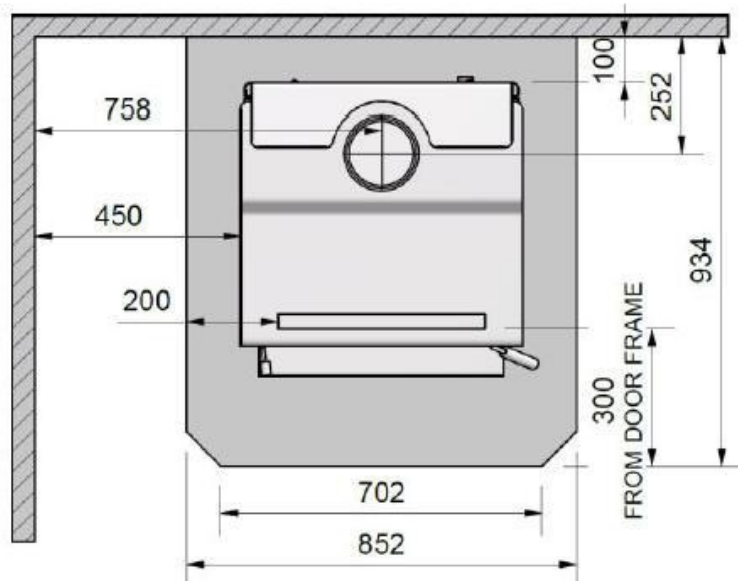
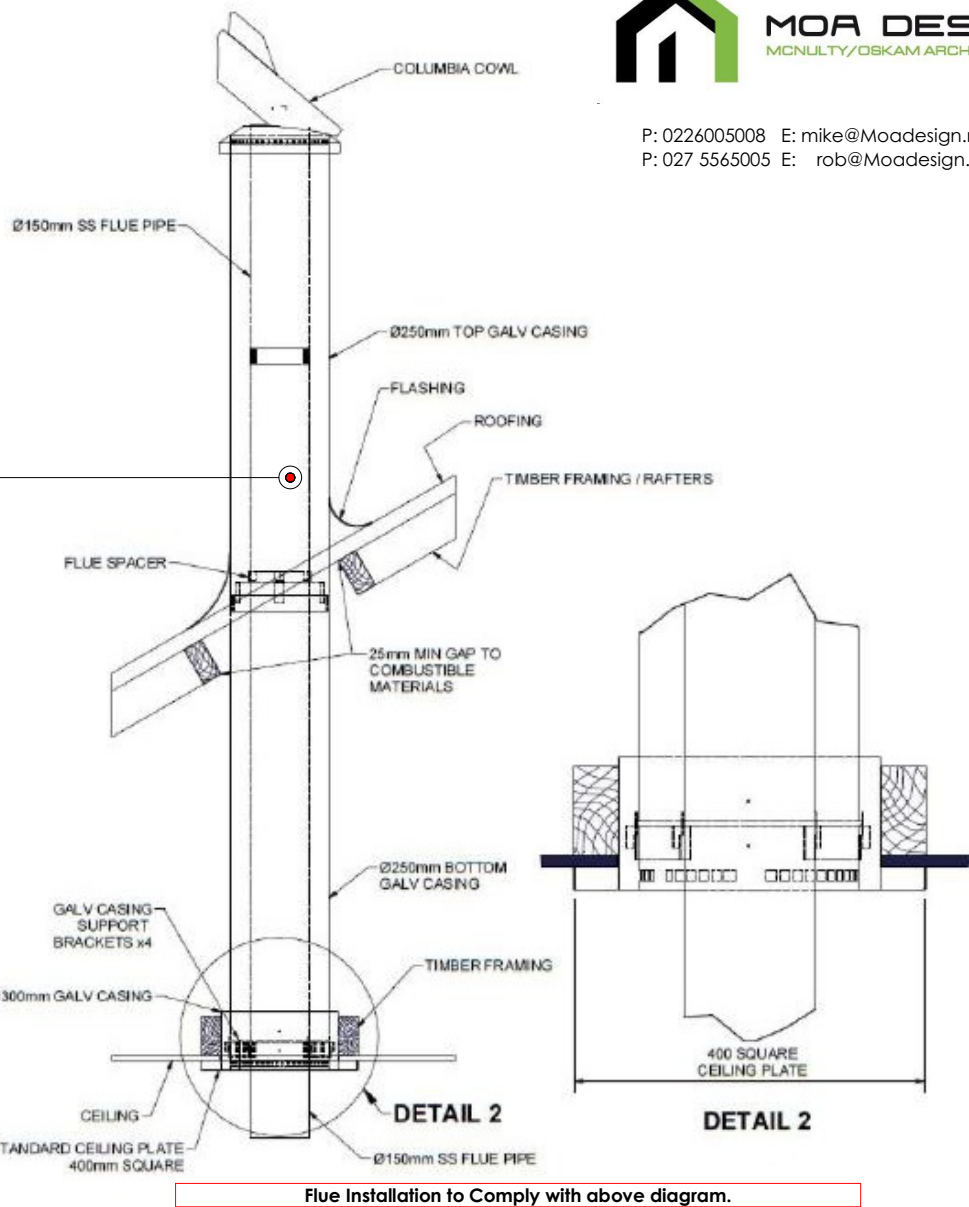
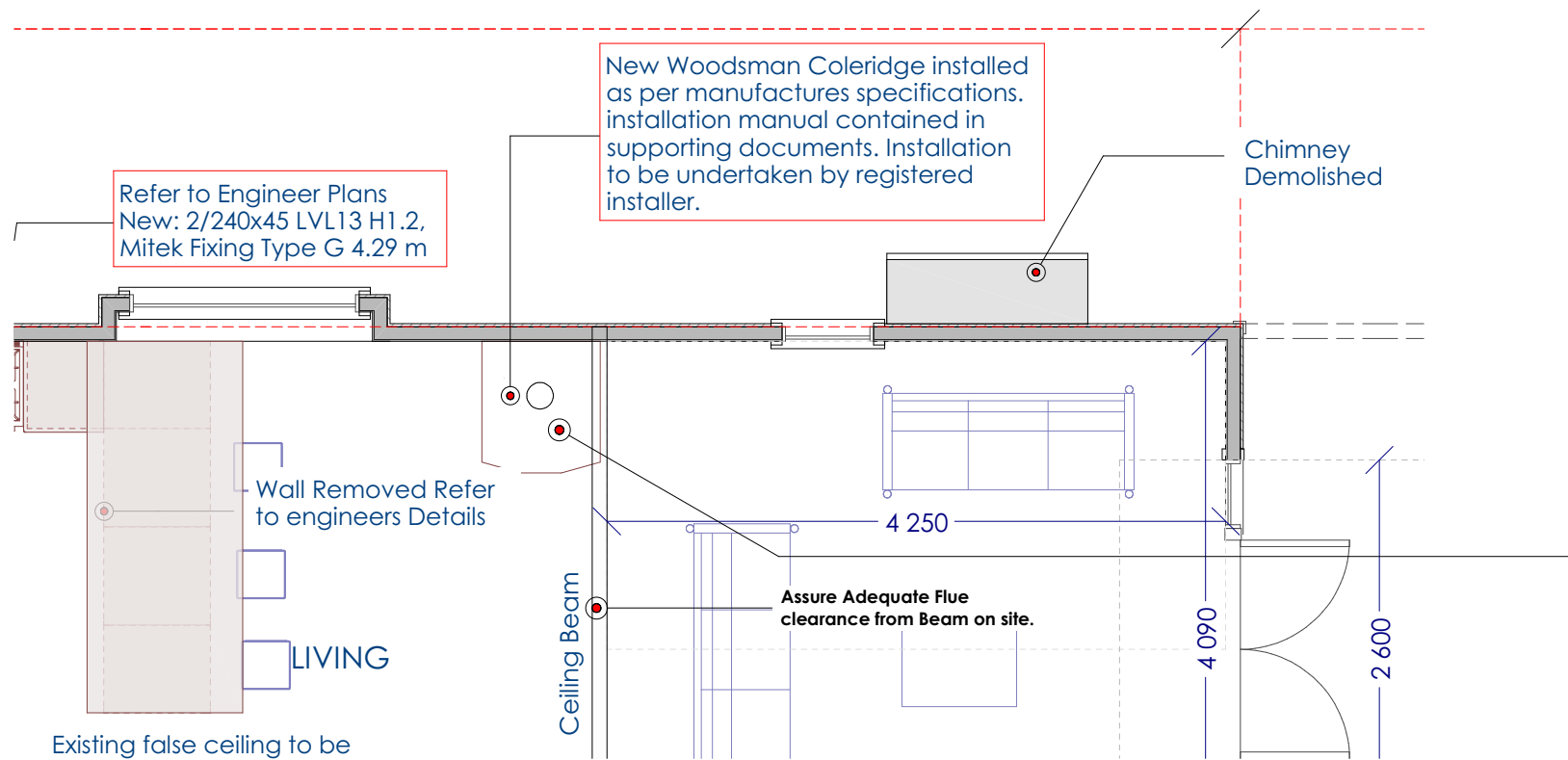
Please Note: Refer to Engineer Plans for Bracing & Beam Designs / Connection/ Studs and Foundation. Moa Design Drawings Indicative Only



Proposed Ground Floor Plan
SCALE: 1:50 (Dimensions to be confirmed on site)



Elevation 2
SCALE: 1:100 (Dimensions to be confirmed on site)



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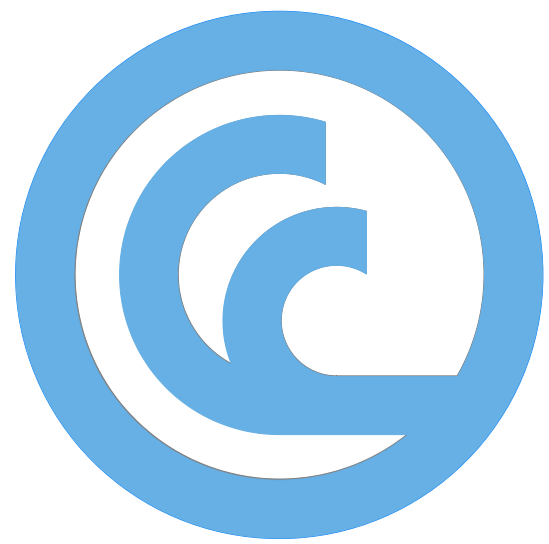
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REVISION :
SCALE : 1:50 @A3
PAGE TITLE : Fire Details

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DATE PRINTED :
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cook | costello

PROPOSED RELEVELLING PLAN
32 NICHOLLS STREET
RICHMOND, CHRISTCHURCH

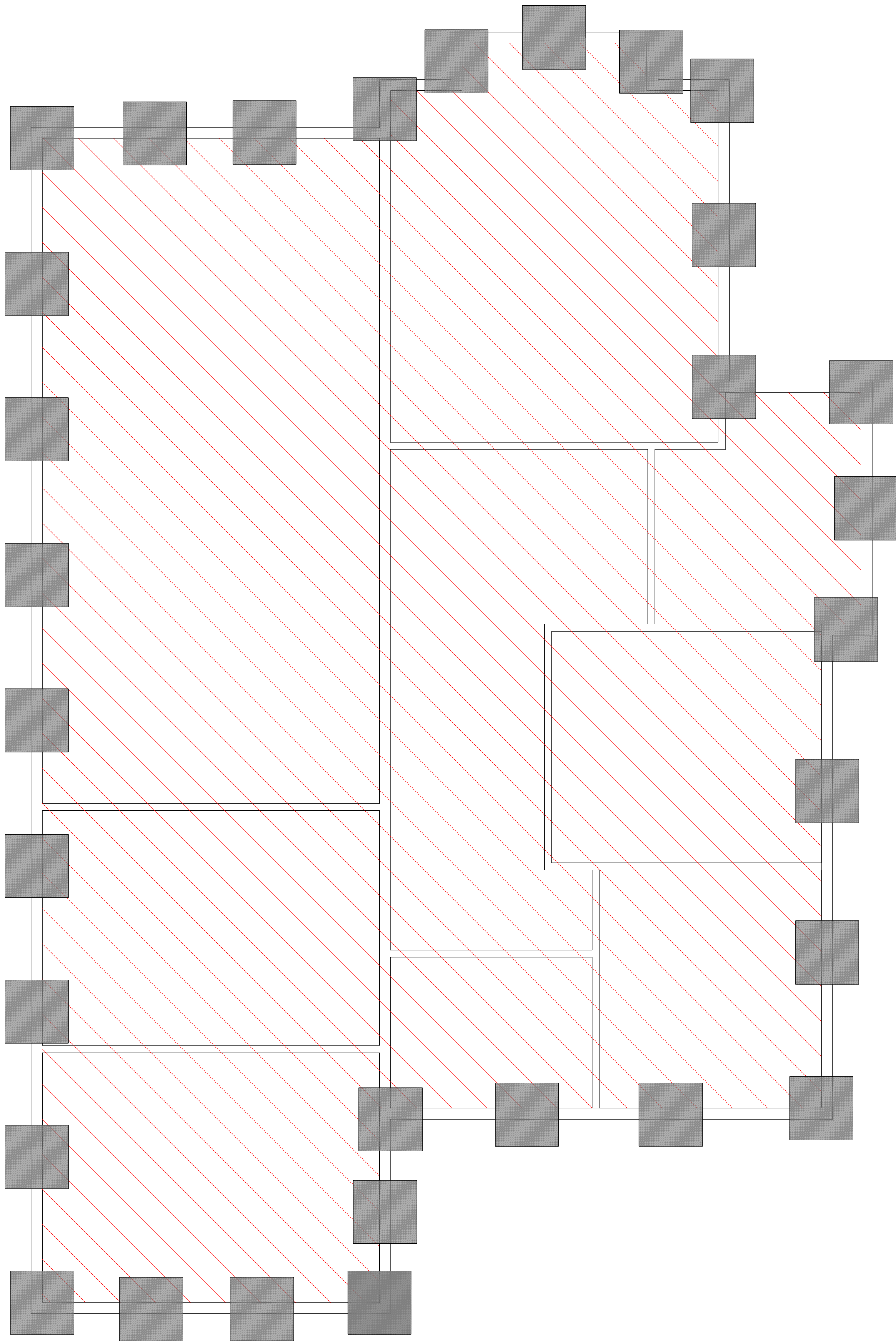
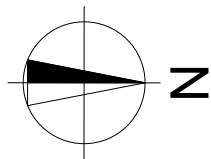
FOR CONSENT

JOB NO:12445-388

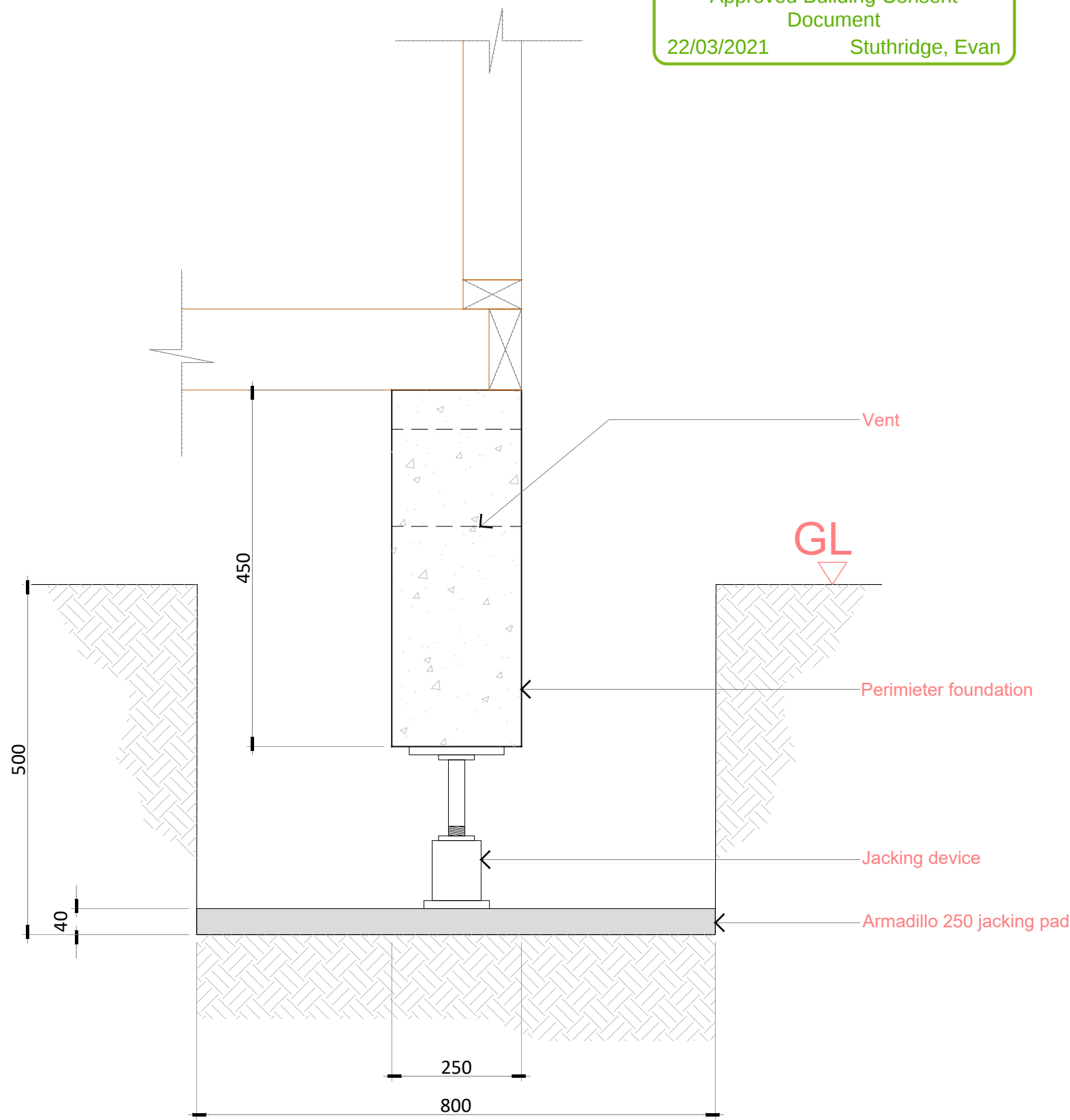
DATE: 12/10/2020

ISSUE: A

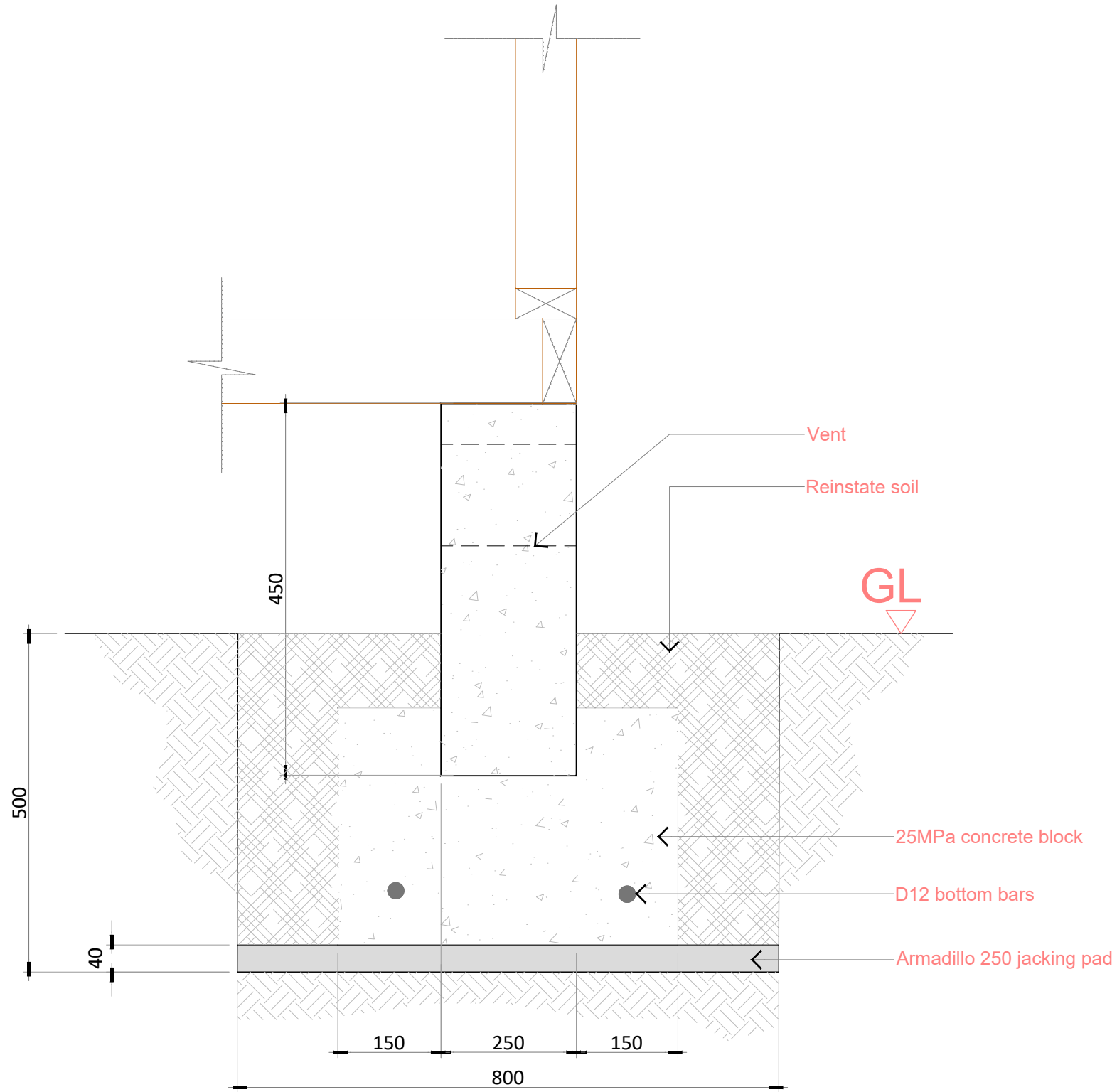
Sheet List		
Sheet Number	REV.	Sheet Name
S101		RELEVELLING PLAN & DETAILS



FOUNDATION RELEVELLING PLAN
SCALE 1:40 @ A1



1 FOUNDATION JACKING DETAIL
SCALE 1:40 @ A1



2 FOUNDATION RELEVELLING BLOCK DETAIL
SCALE 1:40 @ A1

- GENERAL**
- COOK COSTELLO STRUCTURAL DRAWINGS ARE NOT SHOP DRAWINGS. SHOP DRAWINGS ARE THE RESPONSIBILITY OF THE CONTRACTOR.
 - ALL DISCREPANCIES SHALL BE REFERRED TO THE ARCHITECT, CONSULTANT OR THE ENGINEER BEFORE PROCEEDING WITH WORK.
 - SETTING OUT, NIBS, REBATES, SET-DOWN & THE LIKES ARE AS PER ARCHITECTURAL DRAWINGS. COOK COSTELLO ACCEPTS NO RESPONSIBILITY WHEN NO DRAWINGS HAVE BEEN PROVIDED.
 - ALL DIMENSIONS RELEVANT TO SETTING OUT AND OFF-SITE WORK SHALL BE VERIFIED BY THE CONTRACTORS BEFORE WORK SHALL BE VERIFIED BY THE CONTRACTORS BEFORE CONSTRUCTION AND FABRICATION IS COMMENCED. THE ENGINEER'S DRAWINGS SHALL NOT BE SCALED.
 - DURING CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE STRUCTURE IN A STABLE CONDITION & ENSURE NOT PART SHALL BE OVERSTRESSED UNDER CONSTRUCTION ACTIVITIES. THIS INCLUDES ALL EXISTING STRUCTURES FORMING PART OF, OR AFFECTED BY, THE WORKS.
 - IF DURING CONSTRUCTION, ANY PART OF THE WORKS SHOW SIGNS OF DISTRESS, EXCESSIVE DEFLECTION, CONFLICT OF COMPONENTS OR OTHER PROBLEMS, THE CONTRACTORS SHALL IMMEDIATELY NOTIFY THE ENGINEER, WHO SHALL INVESTIGATE & ISSUE SUCH INSTRUCTION AS ARE CONSIDERED NECESSARY.
 - CONTRACTOR SHOULD VERIFY THAT ALL CONSTRUCTION DRAWINGS ARE THE LATEST VERSION.
 - ALL DIMENSIONS SHOULD BE VERIFIED ON SITE PRIOR TO COMMENCING ANY WORK.
 - COMPLY WITH ALL WORKSAFE NZ AND ONSITE HEALTH AND SAFETY REQUIREMENTS AT ALL TIMES.
 - COOK COSTELLO ACCEPT NO LIABILITY FOR UNAUTHORIZED CHANGES FROM THE DETAILS AND INFORMATION CONTAINED IN THESE DRAWINGS.
 - THESE DRAWINGS AND DESIGN ARE COPYRIGHT AND REMAIN THE PROPERTY OF COOK COSTELLO.
 - PAD LOCATIONS ARE INDICATIVE ONLY. PAD SIZE TO BE 800 x 800 x 40mm ARMADILLO 250 JACKING PAD @ 1.9m max crs.
 - PADS TO BE PLACED >=0.5mbgl, ON CONFIRMATION OF UBC 140kPa.

LEGEND	
	Indicative location of 800 x 800 x 40mm Armadillo jacking pads at 1.9m crs around perimeter foundation.
	Area to be relevelled via 'Jack and Pack' methodology. Internal jack spacing should not exceed the existing bearer span.

B		
A		
REV		DRAWN APP

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PROJECT DETAILS:

PROPOSED RELEVELLING PLAN
32 NICHOLLS STREET
RICHMOND, CHRISTCHURCH

TITLE: RELEVELLING PLAN & DETAILS		
DATE CREATED 12/10/2020	CCL REF. No. 12445-388	
DRAWN AB	DESIGNED AB	APPROVED PF
SCALE AS SHOWN @ A1	STATUS FOR EXEMPTION	
DWG NUMBER S101	REVISION	



ENGCO
Consulting Engineers

Title: Structural Renovation,
Address: 32 Nicholls Street, Richmond, Christchurch
Part: Structural Plans
Engco Reference: 20749
Date: 21.12.2020
Engineer: SP

Christchurch
City Council



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22/03/2021

Stuthridge, Evan

GENERAL

Contacts:

EngCo Consulting: ph. 03 366 7955

Project Engineer: Simon Parkes
simon@engco.co.nz
027 5310 755

These drawings shall be read in conjunction with the Architectural and other consultant's drawings/ specifications.

Refer to the Preliminary and General Clauses of these Specifications and to the General Conditions of Contract which shall be equally binding on all trades.

Do not scale from these drawings, refer any discrepancies to the architect/engineer.

INSPECTIONS

Please ensure that a minimum of 48hrs notice is given for all inspections required.

CONSTRUCTION MONITORING SCHEDULE

Inspection Stage	Purpose of inspection	Estimated number required
Bearing check	Confirm Soil Conditions	One
Post Hole Pre-pour	Confirm pile cover etc	One per pour
Pre-Line	Checking of all member sizes & fixings Checking of bracing hold downs (prior to any structure being concealed)	One

1.0 General

All materials and workmanship shall comply with the New Zealand Building Code.

The Contractor shall supply the Engineer with a copy of any Consent Conditions and amendments to the Consent Documents, prior to commencing construction.

Under no circumstances shall the Contractor substitute or delete structural elements or products without the written approval of the Engineer.

The Contractor shall check and verify all dimensions on site prior to commencing works.

The Contractor shall comply with the requirements of the Health and Safety at Work Act 2015, and shall be responsible for all personnel entering the site and adjoining the site, where their safety is affected by the construction.

All hand sketches produced by ENGCO are conditional; whereby the architect is to ensure that all details fit within the building envelope.

If in doubt ask, Engco ph 03 366 7955

2.0 Excavation

In accordance with the Geotechnical Investigation Report by KGA (Ref: K200202). All Piles to be founded on at ~0.5m below existing ground level, with an ultimate bearing capacity of no less than 150kPa. Sketched details may require amending once excavation is complete and the end bearing capacity is confirmed by the Engineer.

3.0 Concrete & Reinforcing

All reinforcing steel shall comply with AS/NZS4671 and be manufactured using the micro-alloy process.

Reinforcing bars have the following designation on the structural details:

- D = Grade 300E deformed bar
- R = Grade 300E Round bar
- H = Grade 500E deformed bar
- HR = Grade 500E Round bar

Reinforcement shall be placed and fastened in accordance with NZS 3109. Support for reinforcing shall allow for chairing at a maximum of 900mm centres each way.

Cut and bend bars using proper bending tools to avoid notching and to the requirements of NZS 3109. Do not re-bend bars.

Secure reinforcement adequately with tying wire and place accurately, supported adequately and secured against displacement when concreting. Bend tying wire back well clear of the formwork.

All concrete work is to be compacted as defined in Section 7.6 of NZS 3109:1997.

Compact by vibration of the concrete to expel entrapped air and until settlement of the concrete is visibly evident over all areas of the surface.

Maintain vibration until settlement ceases and coarse aggregate at the surface is embedded.

Reinforcing laps shall be 70 times the diameter of the bar unless noted otherwise on the structural details.

All concrete work shall comply with the provisions of NZS 3109 "Specification for Concrete Construction.

All concrete to be used shall have a 28 day compressive strength of 25 MPa.

Concrete production shall be in accordance with the requirements of NZS 3104:2003 "Concrete Production - High Grade and Special Grade", unless otherwise approved in writing by the Engineer. All concrete must be supplied by a high or special graded plant as defined in NZS 3104:2003. No additives are to be included in the mix design without the written approval of the Engineer.

4.0 Timber

All timber sizes are actual minimum dried sizes.

Timber Framing: Species, grade and in service moisture content to NZS 3602, NZBC B2/AS1 and treatment to NZS 3640, NZBC B2/AS1. Structural grade (SG) to NZS 3604, NZS 3622 with properties to NZS 3603.

Nails: Type to NZS 3604, section 4, Durability, and of the size and number for each particular types of joint as laid down in the nailing schedules of NZS 3604, sections 6-10.

Bolts and screws of engineering and/or coach type complete with washers, to the requirements of NZS 3604, section 4, Durability, and of the number and form required for each particular junction to NZS 3604, sections 6-10.

Timber Connectors and Fixings for each particular joint the connectors and fixings as noted on the drawings. Comply with the requirements of the manufacturer, NZS 3604, section 4, Durability, and of the number and form required for each particular junction to NZS 3604, sections 6-10.

For interior timber, treated with copper-based timber preservatives (H3.2 or higher), use a minimum of hot-dipped galvanized steel fixings and fasteners. For exterior timber, timber in damp areas and timber subject to occasional wetting, use only stainless-steel fixings and connectors.

Protect all timber against damage and from inclement weather. Ensure that any variation in moisture content is kept to a minimum, before and after erection and before enclosure.

Execution to comply with NZS 3604, except as varied in this specification. Execution to include those methods, practices and processes contained in the unit standards for the National Certificate in Carpentry and the National Certificate in Joinery (cabinetry, exterior joinery, stairs).

5.0 Structural Steel

All structural steel shall be in accordance with NZS 3404. All steel is to have the following minimum yield strengths:

- RHS = 350 MPa
- Angles = 300 MPa
- Plate = 300 MPa
- Flats = 300 MPa

Welding personnel shall be qualified in accordance with Clause 4.11 of AS / NZS 1554.1 2011 or AN/NZS 1554.5 2011, as appropriate.

All steelwork is to have 14dia. holes spaced at 900crs, for bolting to adjacent timber framing.

External steelwork is to have a 'PUR5" coating system complying with AS/NZS2312.2004, and requires maintenance after 25 years of exposure.

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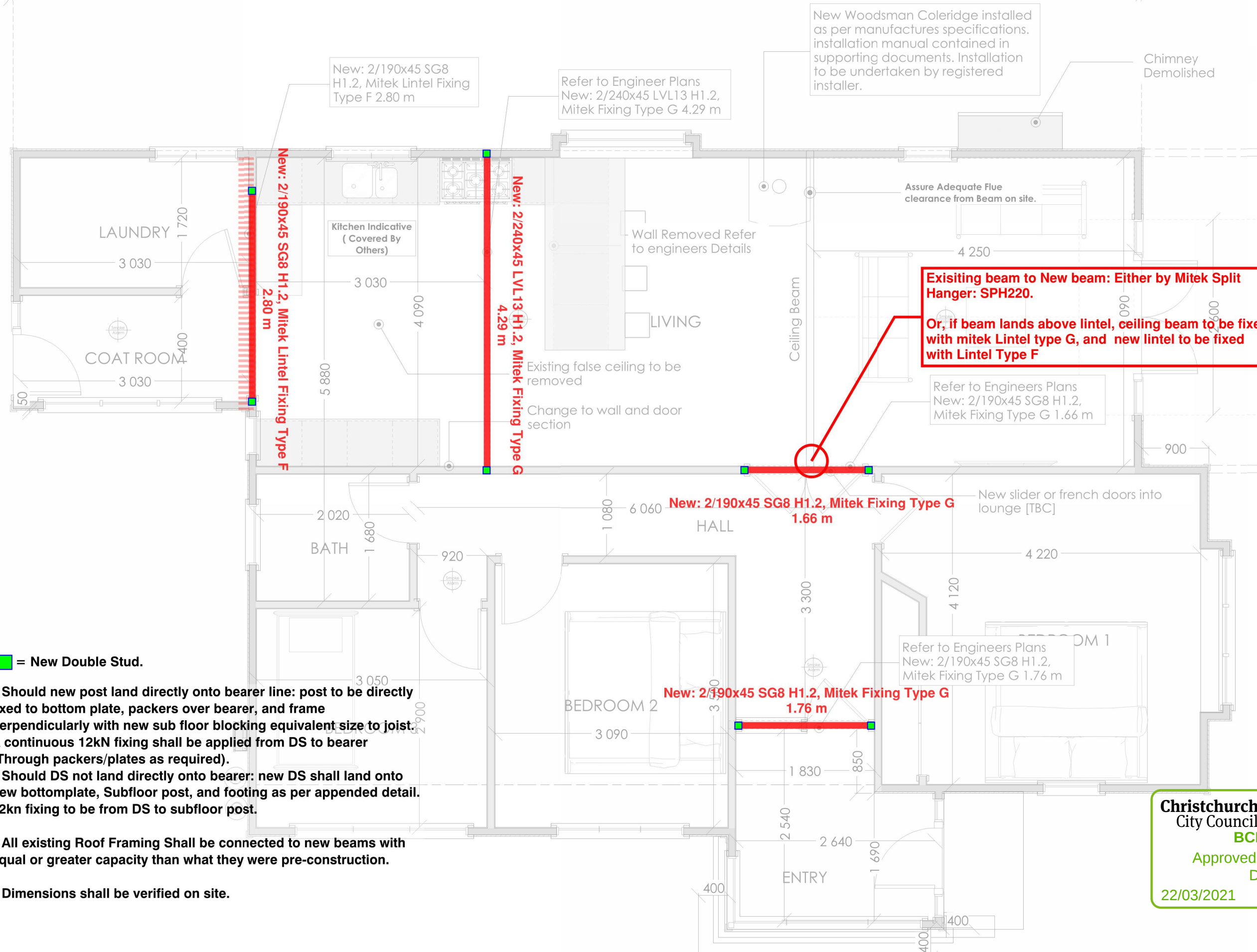
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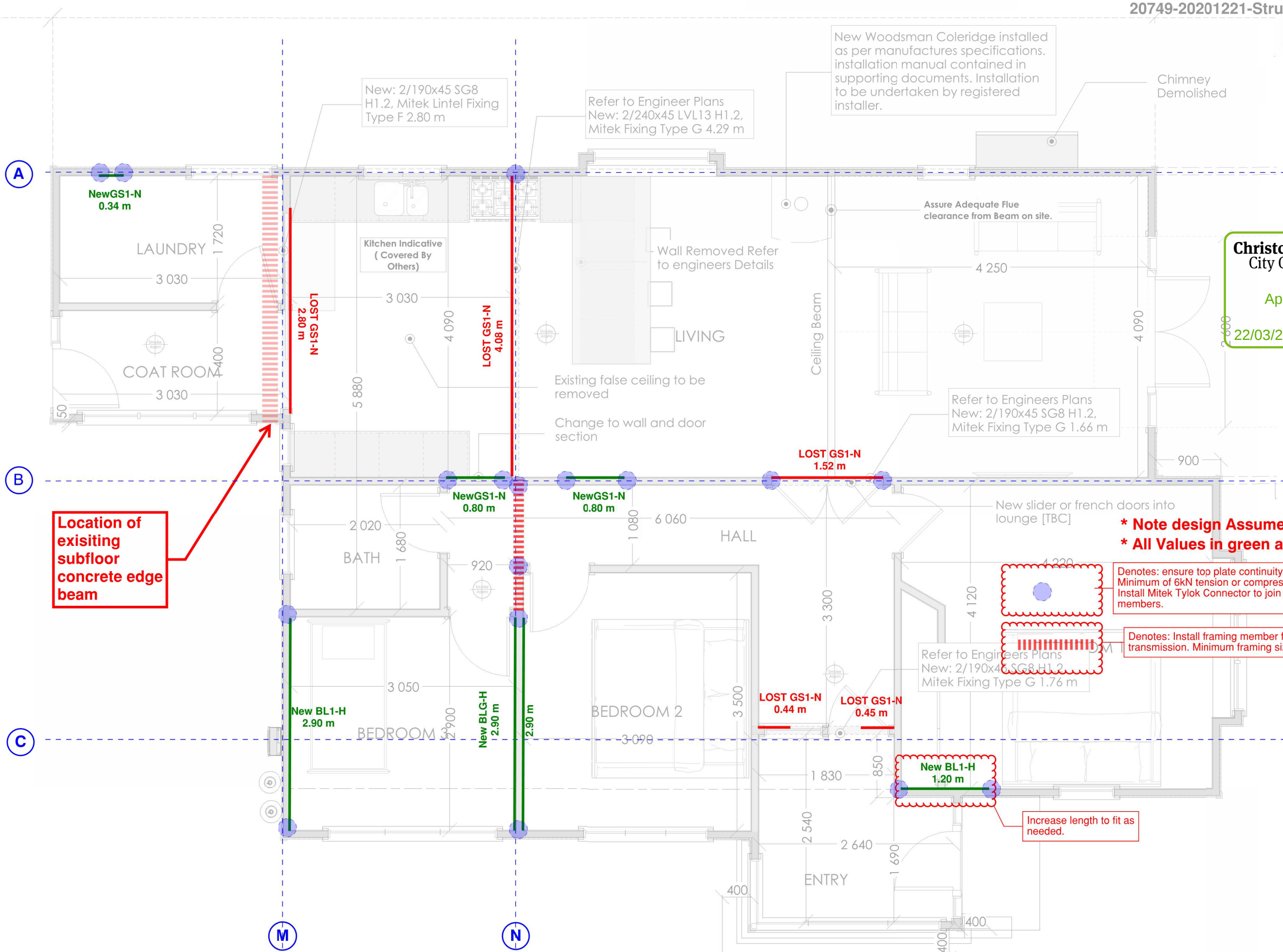


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SCALE : 1:50 @A3

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Location of existing subfloor concrete edge beam

* Note design Assumes 2.4m stud.
* All Values in green are minimums

Denotes: ensure top plate continuity through structural member. Minimum of 6kN tension or compression capacity at top plate. Install Mitek Tylok Connector to join top plates to framing members.

Denotes: Install framing member for tension / compression force transmission. Minimum framing size is a double topplate

Increase length to fit as needed.

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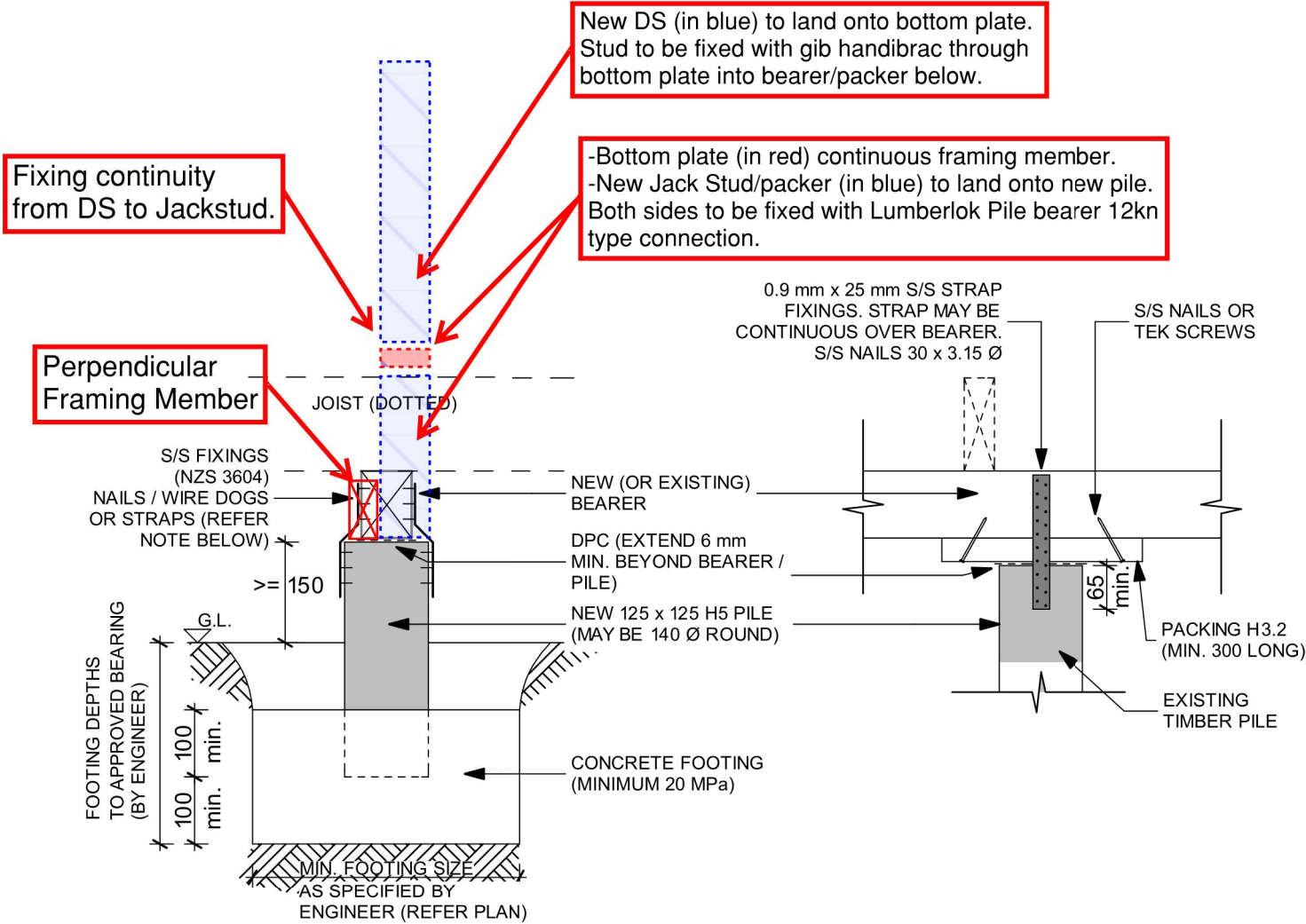
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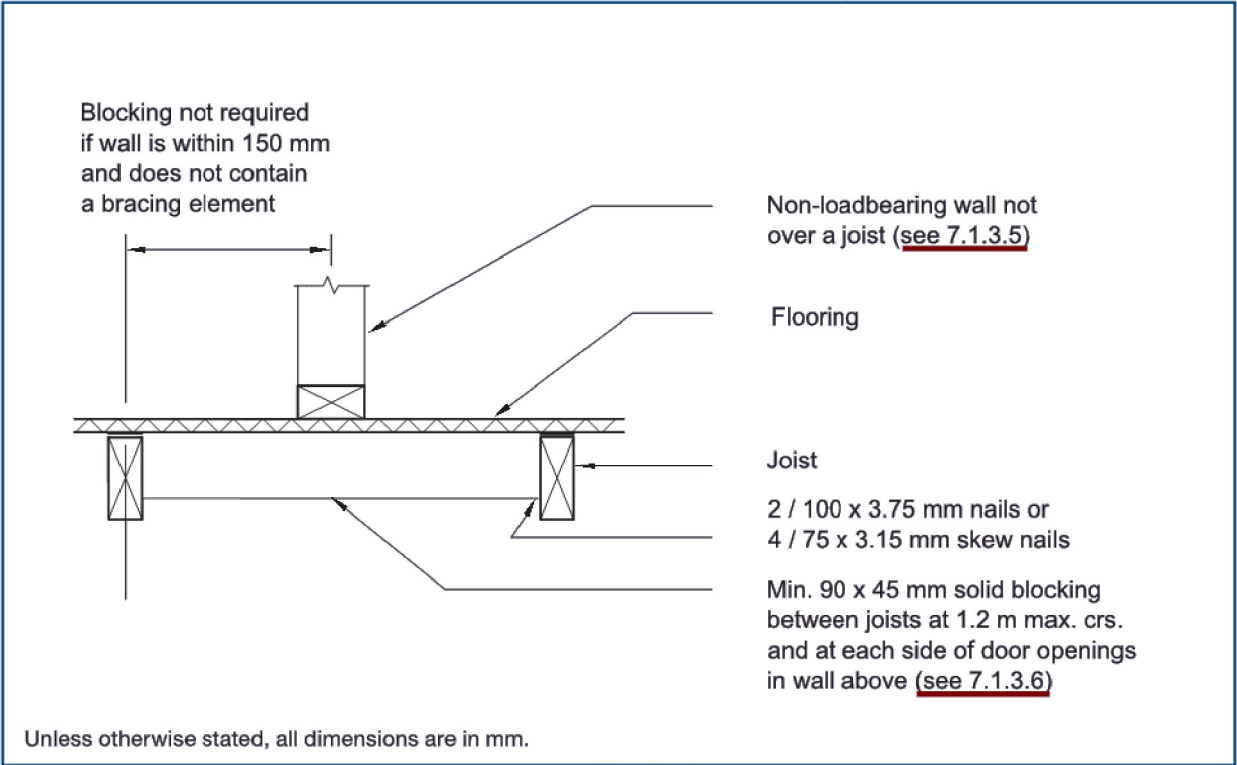
NEW TIMBER PILE & BEARER FIXINGS
MUST BE S/S FIXINGS TO COMPLY WITH NZS 3604

NOTE :
PILE / BEARER FIXING BY NZS 3604 : 2011

- 2 S/S WIRE DOGS AND 2 S/S 100 x 4 min Ø SKEWED NAILS (1 WIRE DOG & NAIL EACH FACE OF BEARER)
- 140 MIN. DIAMETER TIMBER PILE (H5) MAY BE USED IN LIEU OF 125 x 125.

NEW TIMBER PILE TO BEARER & PACKING TO EXISTING PILES
SCALE 1 : 10

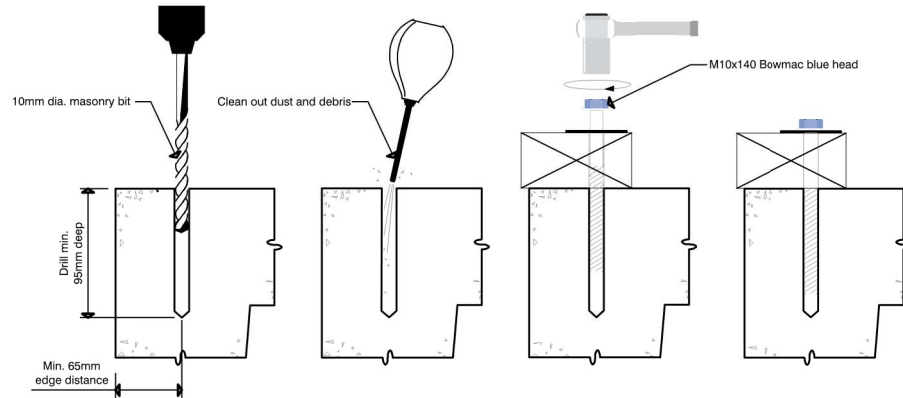
Provisional Load bearing pile/bearer Detail



Should a non-load bearing wall have bracing: ensure blocked beneath wall bottom plate between adjacent structure.

Typical Blocking below walls containing Bracing.

No substitution of Bowmac blue head bolt
without prior approval by the Engineer



Installation Procedure

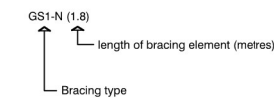
Use a 10mm diameter masonry bit for concrete fixing and an 8mm diameter bit for timber fixing

BRACING KEY

All bracing to comply with the requirements of :
- NZS 3604: 2011
- Winstone Wallboards "Gib Bracing Systems" Manual August 2016

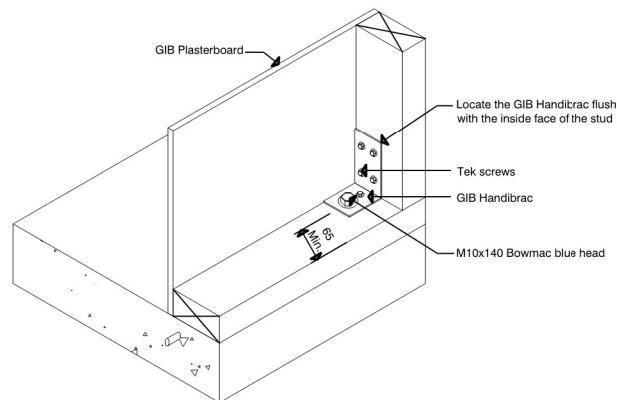
Bracing element lengths are minimum only.
Actual wall lengths may vary
(refer to Architect wall dimensions)

Ensure bracing elements are installed
to the side to which they are noted.

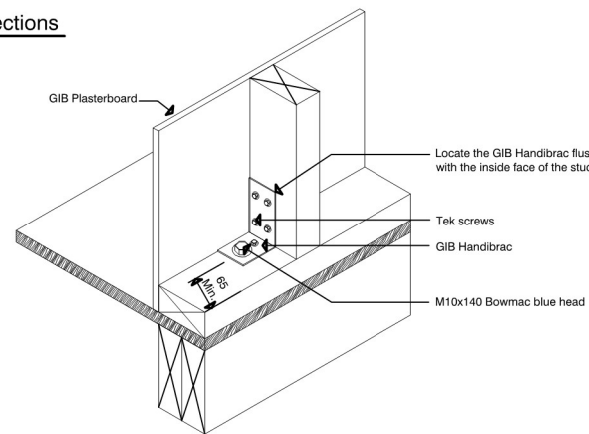


GIB Handibrac Connections

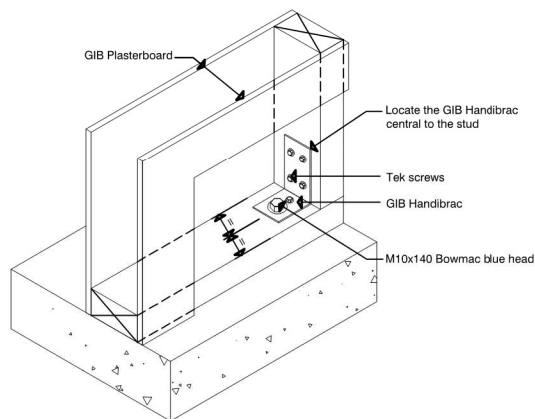
1:100



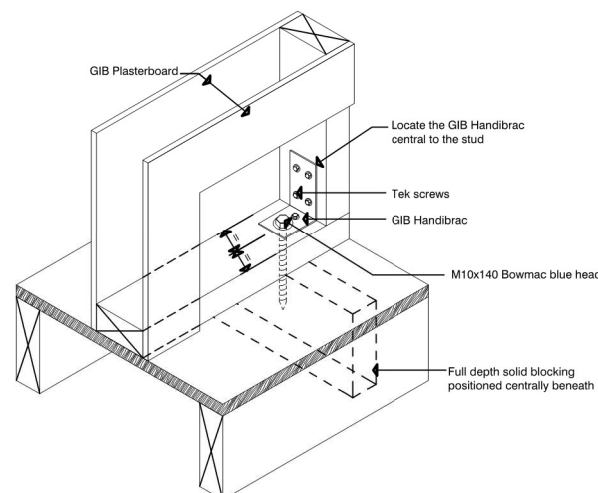
Concrete Floor for External Walls



Timber Floor for External Walls



Concrete Floor for Internal Walls



Timber Floor for Walls between Joists



GIB CEILING DIAPHRAM
Refer to Winstone Wallboards
"Gib EzyBrace Systems" Manual
August 2016 issue, (page 17)
for all fixing requirements.

WET AREAS ✱
Swap out GIB lining type for 10mm or 13mm GIB Aqualine.
(Refer Architectural requirements)
Fixing requirements as per Bracing Element Noted on Bracing Plans,
including hold-down.

GIB - STANDARD

- GS1-N Standard 10mm or 13mm GIB Plaster Board
(Refer Architectural requirements)
on one face fixed horizontal or vertical.
Refer to Gib. Systems Manual
or Gib. Site Guide,
for all fixing requirements.
- GS2-N Standard 10mm or 13mm GIB Plaster Board
(Refer Architectural requirements)
on both faces fixed horizontal or vertical
Refer to Gib. Systems Manual
or Gib. Site Guide,
for all fixing requirements.
- GSP-H Standard 10mm or 13mm GIB Plaster Board on internal face
fixed vertical or horizontal
7mm min. ECOPLY (H3 treated) on exterior face.
(fix ply below building wrap)
GIB. HANDIBRAC hold-down brackets
M12 bolt bottom plate to slab.
Refer to Gib. Systems Manual
or Gib. Site Guide,
for all fixing requirements.

PLYWOOD

- EP1 7mm min. ECOPLY (H3 treated)
on one face.
fixed below building wrap.
Gib HANDIBRAC hold down brackets
M12 bolt bottom plate to slab.
Refer to Carter Holt Harvey Manual
for all fixing requirements
- EP2 7mm min. ECOPLY (H3 treated)
on both face.
fixed below building wrap
Gib HANDIBRAC hold down brackets
M12 bolt bottom plate to slab.
Refer to Carter Holt Harvey Manual
for all fixing requirements
- EPG 7mm min. ECOPLY (H3 treated)
on one face.
fixed below building wrap
Refer to Carter Holt Harvey Manual
for all fixing requirements.
GIB. BRACELINE on internal face
fixed vertical or horizontal
GIB. HANDIBRAC hold-down brackets
M12 bolt bottom plate to slab.
Refer to Gib. Systems Manual
or Gib. Site Guide,
for all fixing requirements.

GIB - BRACELINE

- BL1-H GIB. BRACELINE on one face
fixed horizontal or vertical.
GIB. HANDIBRAC hold-down brackets
M12 bolt bottom plate to slab.
Refer to Gib. Systems Manual
or Gib. Site Guide,
for all fixing requirements.
- BLG-H GIB. BRACELINE on one face
Standard 10mm or 13mm GIB Plaster Board on the other face
GIB. HANDIBRAC hold-down brackets
M12 bolt bottom plate to slab.
Refer to Gib. Systems Manual
or Gib. Site Guide,
for all fixing requirements.
- BLP-H GIB. BRACELINE on internal face
fixed vertical or horizontal
7mm min. ECOPLY (H3 treated) on exterior face.
(fix ply below building wrap)
GIB. HANDIBRAC hold-down brackets
M12 bolt bottom plate to slab.
Refer to Gib. Systems Manual
or Gib. Site Guide,
for all fixing requirements.

PLYWOOD - Barrier

- EPB1 7mm min. ECOPLY BARRIER (factory coated)
on one face.
(Use S/S nails instead of galv. if within seaspray zone,
also additional nailing maybe required for high wind zones.)
Gib HANDIBRAC hold down brackets
M12 bolt bottom plate to slab.
Refer to Carter Holt Harvey Manual
for all fixing requirements
- EPBS 7mm min. ECOPLY BARRIER (factory coated)
on one face.
(Use S/S nails instead of galv. if within seaspray zone,
also additional nailing maybe required for high wind zones.)
Refer to Carter Holt Harvey Manual
for all fixing requirements
- EPBG 7mm min. ECOPLY BARRIER (factory coated)
on one face.
(Use S/S nails instead of galv. if within seaspray zone,
also additional nailing maybe required for high wind zones.)
Gib HANDIBRAC hold down brackets
M12 bolt bottom plate to slab.
Refer to Carter Holt Harvey Manual
for all fixing requirements
Standard 10mm or 13mm GIB Plaster Board on internal face
fixed vertical or horizontal
Refer to Gib. Systems Manual
or Gib. Site Guide,
for all fixing requirements.

OS' BRACE RAP WALL BRACING SYSTEM

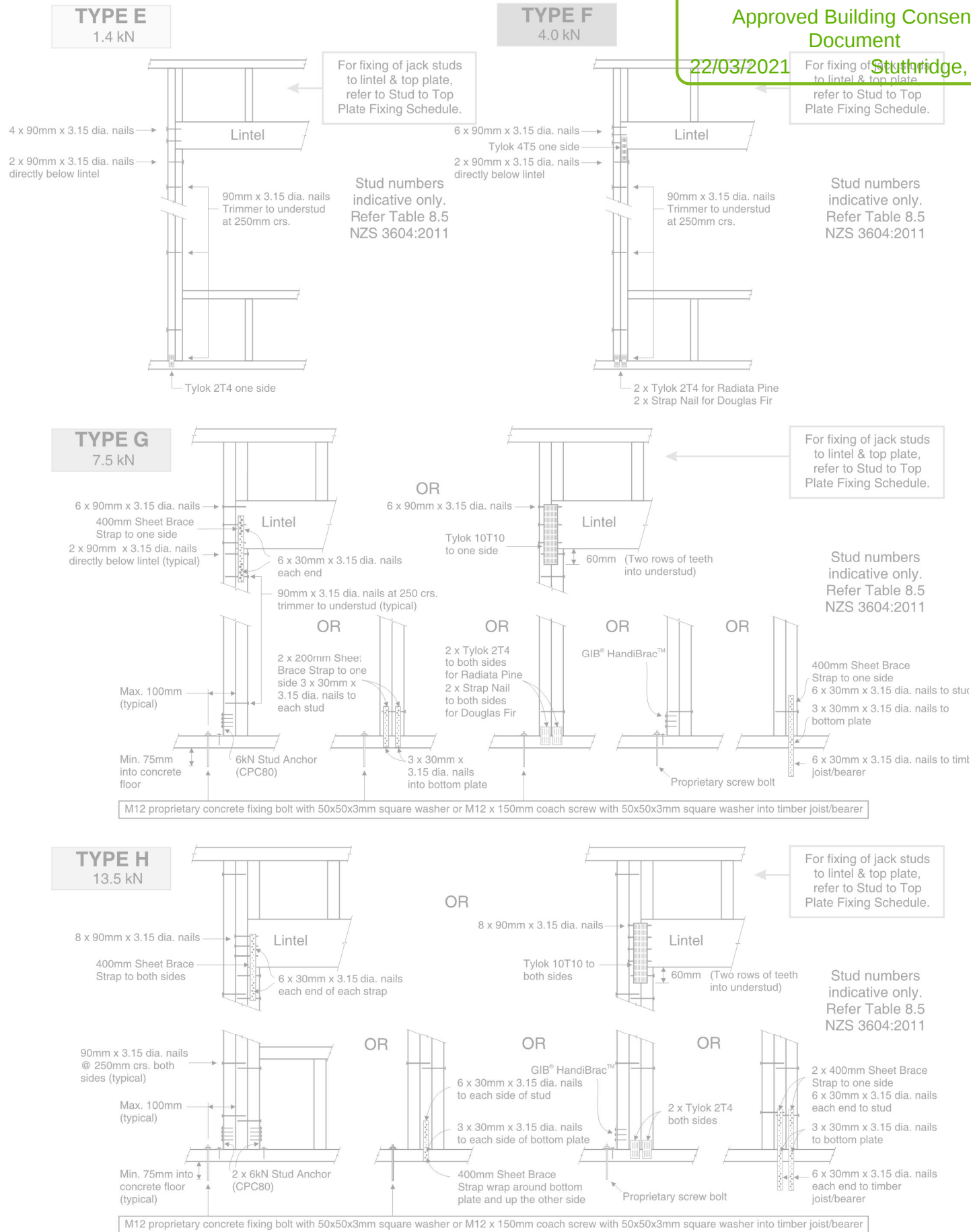
Refer to IBS Building Products Design and Installation
Manual for all Fixing Requirements.

- OSB/1 SYSTEM 1:
OSB - 300 m.m. x 2440 m.m. wall
GIB HandiBrac fixing 30x2.5 Galv. Clouts or
45x2.5 S/S Annular grooved nails.
- OSB/2 SYSTEM 2:
OSB - 1200 m.m. x 2440 m.m. wall
25 x1.0 m.m. Strap fixing 30x2.5 Galv. Clouts
or 45x2.5 S/S Annular grooved nails.
- OSB/3 SYSTEM 3:
OSB - 1200 m.m. x 2440 m.m. wall
GIB HandiBrac fixing 30x2.5 Galv. Clouts
or 45x2.5 S/S Annular grooved nails.
- OSB/4 SYSTEM 4:
OSB - 2400 m.m. x 2440 m.m. wall
GIB HandiBrac fixing 30x2.5 Galv. Clouts.

Christchurch City Council
BCN/2021/569
Approved Building Consent
Document
22/03/2021 Stuthridge, Evan

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LINTEL FIXING OPTIONS



20749-20201221-StructuralPlans-SP.pdf
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LINTEL FIXING SCHEDULE

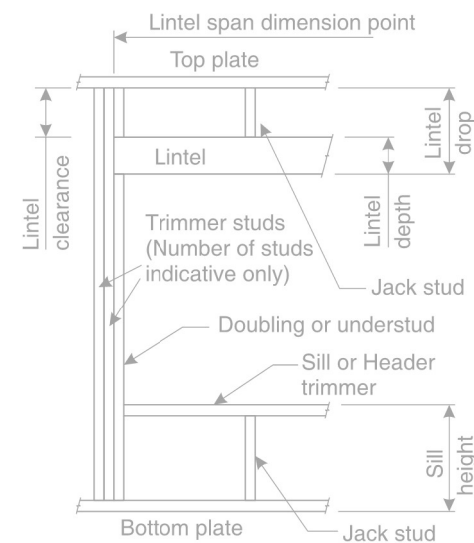
ALTERNATIVE TO TABLE 8.14 & FIGURE 8.12

NZS 3604:2011

NOTE:

- ★ All fixings are designed for vertical loads only. Dead loads include the roof weight and standard ceiling weight of 0.20 kPa.
- ★ Refer to Table 8.19 NZS 3604:2011 for nailing schedule to resist horizontal loads.
- ★ These fixings assume the correct choice of rafter/truss to top plate connections have been made.
- ★ All fixings assume bottom plate thickness of 45mm maximum. Note: TYLOK options on timber species.
- ★ Wall framing arrangements under girder trusses are not covered in this schedule.
- ★ All timber selections are as per NZS 3604:2011.

DEFINITIONS



Lintel Supporting Girder Trusses:

Roof Tributary Area	Light Roof					Heavy Roof				
	Wind Zone					Wind Zone				
	L	M	H	VH	EH	L	M	H	VH	EH
8.6 m ²	G	G	H	G	G	H	G	G	H	H
11.6 m ²	G	H	H	G	G	H	G	G	H	H
12.1 m ²	G	H	H	G	H	H	G	H	H	H
15.3 m ²	H	H	-	G	H	H	H	H	-	-
19.1 m ²	H	-	-	G	H	-	-	-	-	-
20.9 m ²	H	-	-	H	H	-	-	-	-	-
21.8 m ²	H	-	-	H	-	-	-	-	-	-
34.3 m ²	-	-	-	H	-	-	-	-	-	-

Notes:

- 1) Roof Tributary Area = approx. 1/2 x (Total roof area on girder and rafter trusses supported by lintel)
- 2) Assumed girder truss is at mid-span or middle third span of lintel
- 3) Use similar fixings for both ends of lintel
- 4) All other cases require specific engineering design

SELECTION CHART FOR LINTEL FIXING

Lintel Span	Loaded Dimension (See Fig. 1.3 NZS 3604:2011)	Light Roof					Heavy Roof				
		Wind Zone					Wind Zone				
		L	M	H	VH	EH	L	M	H	VH	EH
0.7	2.0	E	E	E	E	F	E	E	E	E	E
	3.0	E	E	E	F	F	E	E	E	E	F
	4.0	E	E	F	F	F	E	E	E	F	F
	5.0	E	F	F	F	G	E	E	F	F	F
	6.0	E	F	F	G	G	E	E	F	F	G
0.9	2.0	E	E	E	F	F	E	E	E	E	F
	3.0	E	E	F	F	F	E	E	E	F	F
	4.0	E	E	F	F	F	E	E	F	F	F
	5.0	E	F	F	F	G	E	E	F	F	F
	6.0	E	F	F	G	G	E	E	F	F	G
1.0	2.0	E	E	E	F	F	E	E	E	E	F
	3.0	E	E	F	F	F	E	E	E	F	F
	4.0	E	F	F	F	G	E	E	F	F	F
	5.0	E	F	F	G	G	E	E	F	F	G
	6.0	E	F	F	G	G	E	E	F	F	G
1.2	2.0	E	E	F	F	F	E	E	E	F	F
	3.0	E	E	F	F	F	E	E	F	F	F
	4.0	E	F	F	F	G	E	E	F	F	G
	5.0	E	F	F	G	G	E	E	F	F	G
	6.0	F	F	G	G	H	E	E	F	G	G
1.5	2.0	E	E	F	F	F	E	E	E	F	F
	3.0	E	F	F	F	G	E	E	F	F	F
	4.0	E	F	F	G	G	E	E	F	F	G
	5.0	F	F	G	G	H	E	E	F	G	G
	6.0	F	F	G	H	H	E	E	F	G	H
2.0	2.0	E	F	F	F	G	E	E	F	F	F
	3.0	E	F	F	G	G	E	E	F	F	G
	4.0	F	F	G	G	H	E	E	F	G	G
	5.0	F	F	G	H	H	E	E	F	G	H
	6.0	F	G	G	H	H	E	F	G	H	H
2.4	2.0	E	F	F	G	G	E	E	F	F	G
	3.0	F	F	G	G	H	E	E	F	G	G
	4.0	F	F	G	H	H	E	E	F	G	H
	5.0	F	G	G	H	H	E	F	G	H	H
	6.0	F	G	H	-	-	E	F	G	H	-
3.0	2.0	E	F	F	G	G	E	E	F	F	G
	3.0	F	F	G	H	H	E	E	F	G	H
	4.0	F	G	G	H	H	E	F	G	H	H
	5.0	F	G	H	H	-	E	F	G	H	H
	6.0	F	G	H	-	-	E	F	G	H	-
3.6	2.0	F	F	G	G	H	E	E	F	G	G
	3.0	F	F	G	H	H	E	F	G	G	H
	4.0	F	G	H	H	-	E	F	G	H	H
	5.0	F	G	H	-	-	E	F	G	H	-
	6.0	G	H	H	-	-	E	F	H	-	-
4.2	2.0	F	F	G	G	H	E	E	F	G	G
	3.0	F	G	H	H	-	E	F	G	H	H
	4.0	F	G	H	-	-	E	F	G	H	-
	5.0	G	H	H	-	-	E	F	H	-	-
	6.0	G	H	-	-	-	E	F	H	-	-
4.5	2.0	F	F	G	H	H	E	E	F	G	H
	3.0	F	G	H	H	-	E	F	G	H	H
	3.4	F	G	H	H	-	E	F	G	H	-
	4.0	F	G	H	-	-	E	F	G	H	-
	5.0	G	H	-	-	-	E	F	H	-	-
4.8	2.0	F	F	G	H	H	E	E	F	G	H
	3.0	F	G	H	H	-	E	F	G	H	H
	3.2	F	G	H	H	-	F	F	G	H	-
	4.0	F	G	H	-	-	E	F	H	H	-
	5.0	G	H	-	-	-	E	F	H	-	-
6.0	2.0	G	H	-	-	-	E	F	H	-	-
	3.0	G	H	-	-	-	E	F	H	-	-