

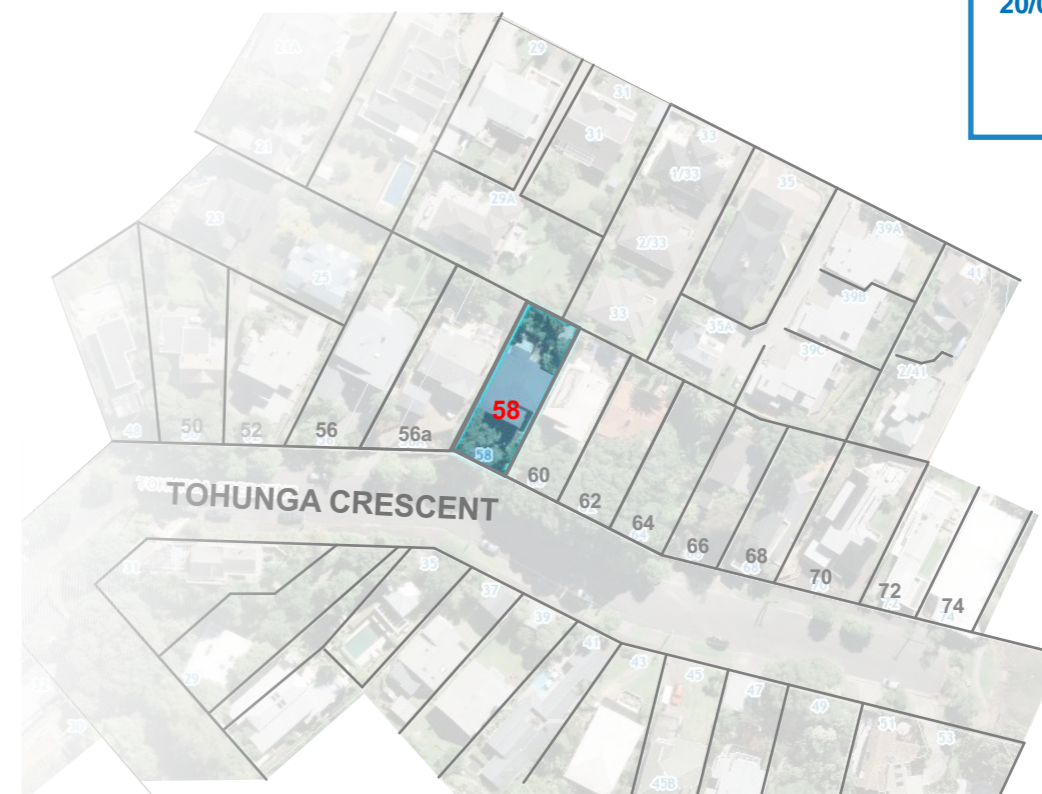


# INTERNAL RECONFIGURATION

58 TOHUNGA CRESCENT PARNELL AUCKLAND 1052

Lot 21 DP 9448

Sheet No.	Sheet Name
A00	COVER PAGE
A01	EXISTING SITE PLAN
A02	PROPOSED SITE PLAN
A03	EXISTING FOUNDATION PLAN
A04	PROPOSED FOUNDATION PLAN
A05	PROPOSED FOUNDATION (FRAMING LAYOUT)
A06	EXISTING LOWER AND UPPER FLOOR PLAN
A07	EXISTING ROOF AND ROOF FRAMING PLAN
A08	EAST ELEVATION
A09	WEST ELEVATION
A10	SOUTH ELEVATION
A11	NORTH ELEVATION
A12	SECTION A-A
A13	SECTION B-B
D01	DETAILS
D02	DETAILS
D03	DETAILS
D04	DETAILS
D05	DETAILS
T01	HOT WATER CYLINDER
T02	Gib HANDIBRAC
T03	NAILLING SCHEDULE
T04	LINTEL FIXING



LOCALITY MAP

nts

**General Notes:**  
 All works to comply with NZ 3604:2011 and all relevant codes of NZBC.  
 All ceiling heights, stud heights roof pitches and the like shall be checked and confirmed on site by the builder before engaging work with manufacturers of steel & timber components.  
 All existing timber structure to be checked by builder for durability. Any issues with existing structure to be rectified with consultation of engineer.  
 All foundation designs are based on assumed "Good Ground". If builder finds not "Good Ground", Engineered Design is required.  
 All timber must be SG8 min grade.  
 All covered timber to be H1.2 min grade.  
 All covered structural steel shall be galvanised or as per engineering requirements.  
 All exposed structural steel shall be hot dip galvanised, or as per structural engineering requirements.  
 All existing structure to be supported with temporary supports as necessary.  
 All external wall cladding and roof cladding shall be carried out as per manufacturers specification and recommendation.  
 All restricted building work must be carried out by a licensed building practitioner or specific trade.  
 All dimensions are to be checked before commencing work, including site works and construction.  
 All wet areas- glass to be safety glass as per manufacturer's specification, with Mapegum WPS waterproof membrane.  
 Internal moisture to comply with NZBC E3/AS1.  
 External moisture to comply with NZBC E2/AS1.  
 Provide smoke alarms to comply with NZBC F7/AS1.  
 No dimensions are to be scaled from this drawing set.  
 All discrepancies found in this drawing set, or other attached documents must reported to the architectural designer prior to construction. If in doubt ask the architectural designer.

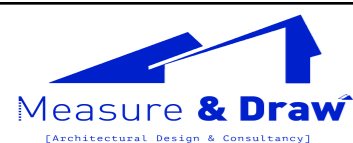
**SCOPE OF WORK:** The scope of work is for the subfloor alteration of the storage area and repiling of the foundation.

\*Exposure Zone: **D**

\*Unitary Plan Zone: **Residential - Single House Zone**

\*Wind Zone: **Medium**

\*Overlays : **Historic Heritage and Special Character Areas**



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Drawing Title:  
 COVER PAGE

Project address:  
**58 TOHUNGA CRESCENT PARNELL AUCKLAND 1052**

Job No.	927	Sheet No. <b>A00</b>
Date	3/20/2023	
Client	Kevin Muir	
Designer	Slaiman Math	
Scale	1:1.1765	
		Rev:

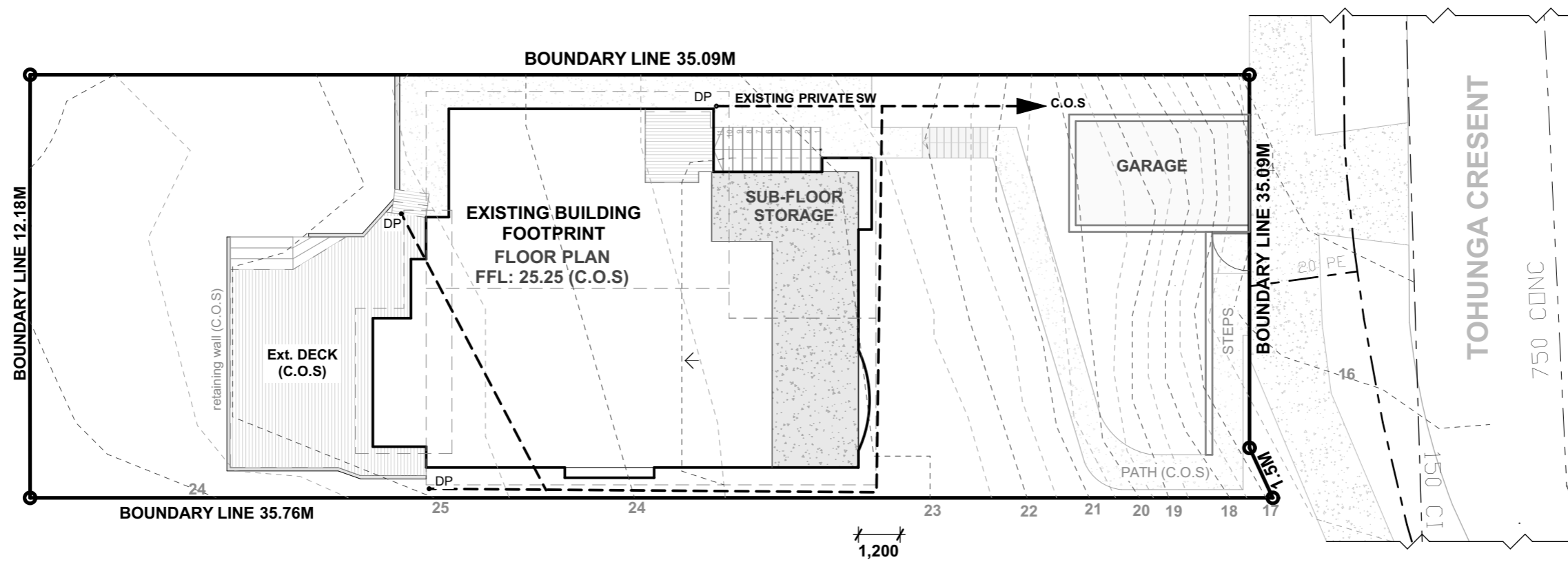


**SITE INFORMATION**

Physical Address: 58 TOHUNGA CRESCENT PARNELL AUCKLAND 1052  
 Legal description of land: Lot 21 DP 9448  
 Zone: Residential - Single House Zone  
 Site Area: 428m<sup>2</sup>  
 Wind Zone: Medium Wind Zone

Site plan was drawn according to Auckland Council GEOMAPS. The contractor shall check and verify all dimensions, level and angles on site prior to commencing any work.

- EXISTING BUILDING FOOTPRINT REMAIN THE SAME
- STORM WATER REMAIN THE SAME
- FFL SHALL BE CONFIRM ON SITE



**EXISTING SITE PLAN**

**1:150**



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Drawing Title:  
**EXISTING SITE PLAN**

Project address:  
**58 TOHUNGA CRESCENT PARNELL AUCKLAND 1052**

Job No.	927	Sheet No.
Date	3/20/2023	
Client	Kevin Muir	<b>A01</b>
Designer	Slaiman Math	Rev:
Scale	1:150	



**SITE INFORMATION**

Physical Address: 58 TOHUNGA CRESCENT PARNELL AUCKLAND 1052  
 Legal description of land: Lot 21 DP 9448  
 Zone: Residential - Single House Zone  
 Site Area: 428m<sup>2</sup>  
 Wind Zone: Medium Wind Zone

Site plan was drawn according to Auckland Council GEOMAPS. The contractor shall check and verify all dimensions, level and angles on site prior to commencing any work.

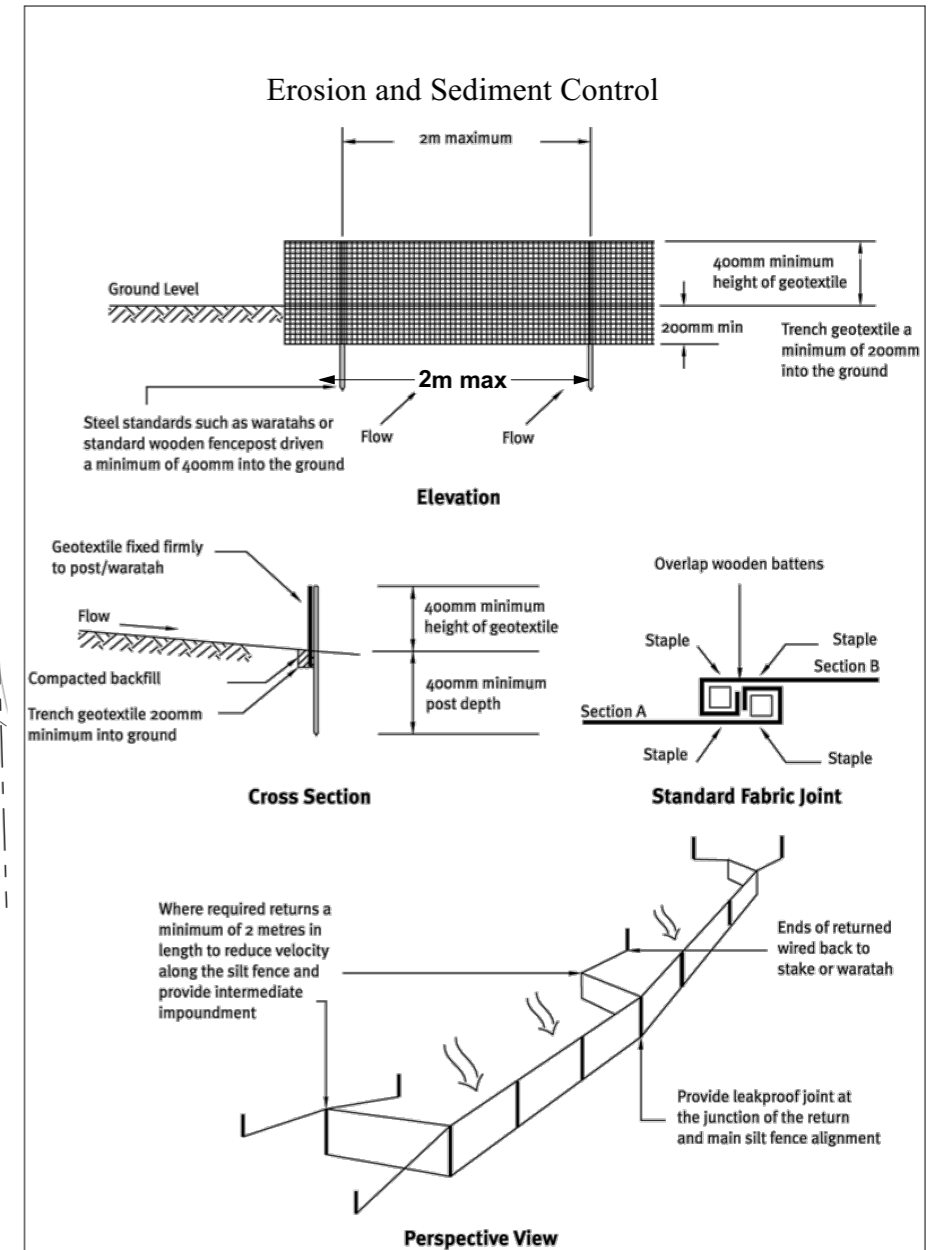
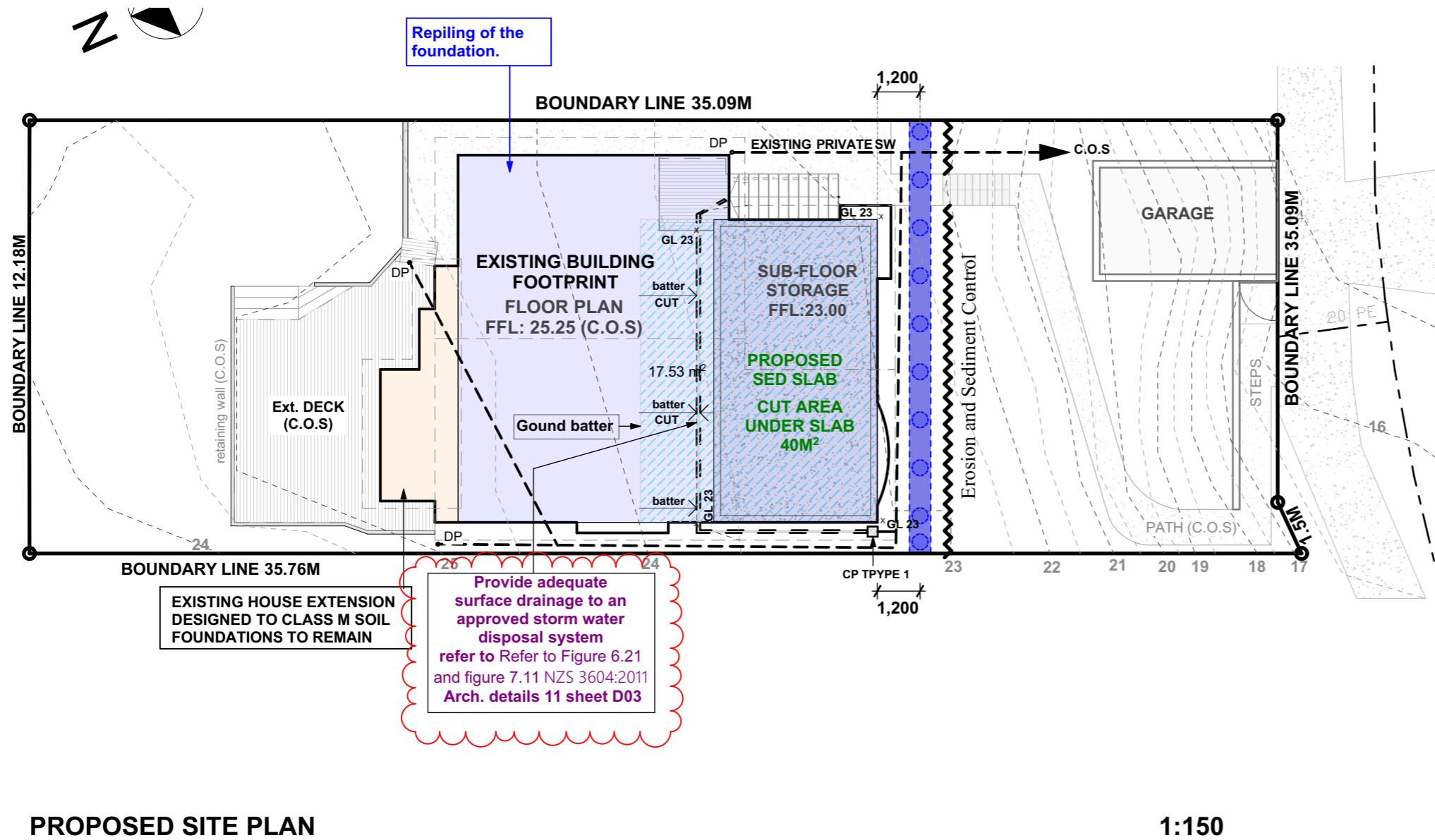
- EXISTING BUILDING FOOTPRINT REMAIN THE SAME
- STORM WATER AND WASTE WATER REMAIN THE SAME.
- FFL SHALL BE CONFIRM ON SITE



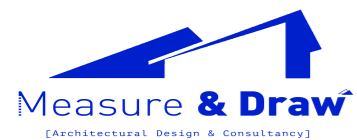
**EARTHWORK CALCULATION**

KEYS	CUT 1	CUT batter	TOTAL
Cut area	40m <sup>2</sup>	17m <sup>2</sup>	57m <sup>2</sup>
Average cut height	0.2m	0.3m	
Cut volume	8m <sup>3</sup>	5.1m <sup>3</sup>	14.8m <sup>3</sup>

Maximum cut heights 0.4m



~ Silt Fence Erosion and Sediment Control



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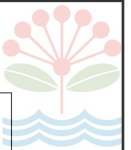
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Drawing Title:  
**PROPOSED SITE PLAN**

Project address:  
**58 TOHUNGA CRESCENT PARNELL AUCKLAND 1052**

Job No.	927	Sheet No.
Date	3/20/2023	
Client	Kevin Muir	<b>A02</b>
Designer	Slaiman Math	
Scale	1:150, 1:1.1714	Rev:

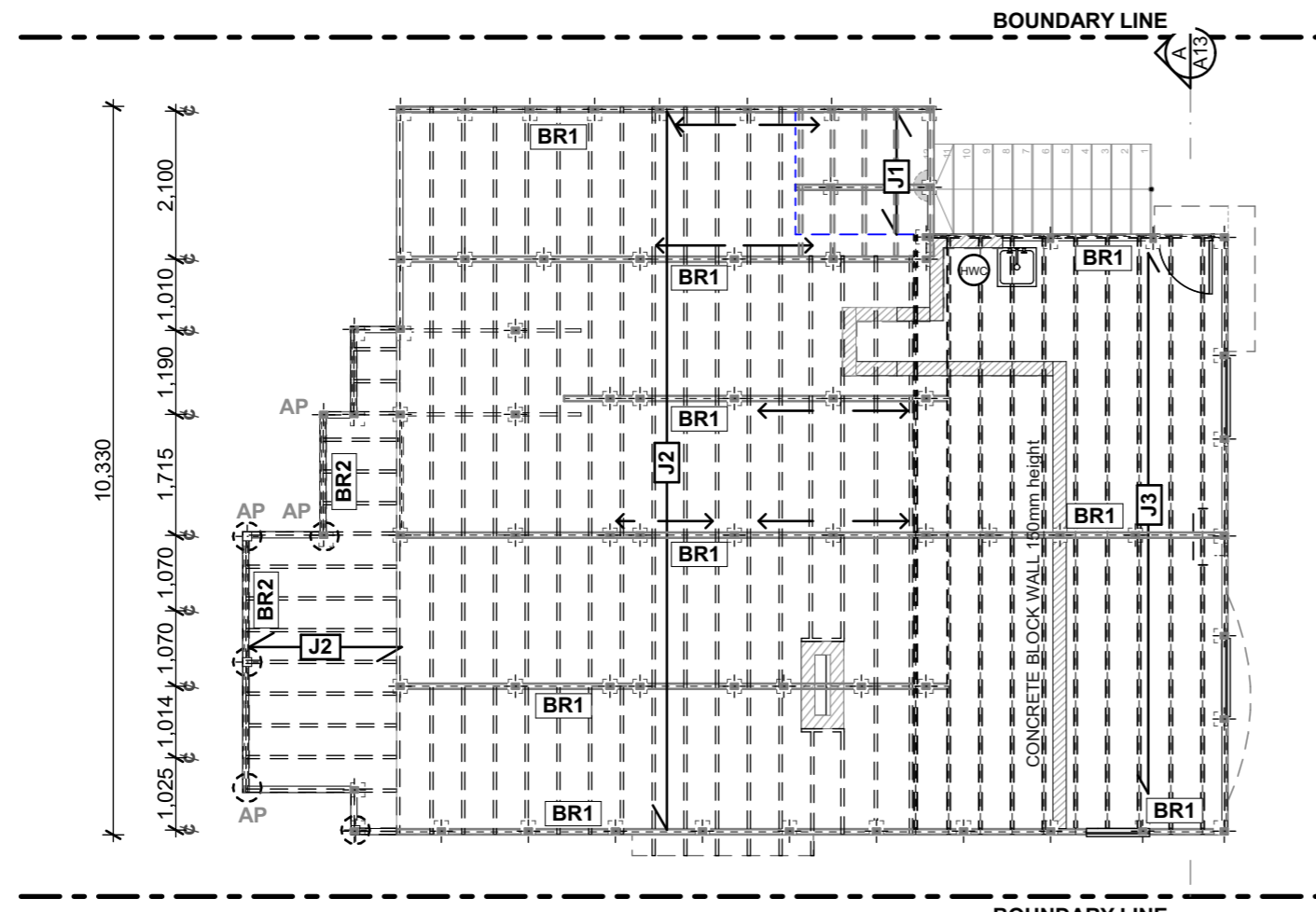




Wind Zone: Medium

**Notes:**

- ↙ J1 Existing 50x100mm floor joists @450mm crs.
- ↙ J2 Existing 145x45mm floor joists @450mm crs.
- ↙ J3 Existing 220x45mm floor joists @450mm crs.
- BR1 100x75 timber bearers
- BR2 2/140x75 timber bearers
- ⊕ 100x75 timber pile on 200x200 concrete pad



**EXISTING FOUNDATION PLAN**

**1:100**



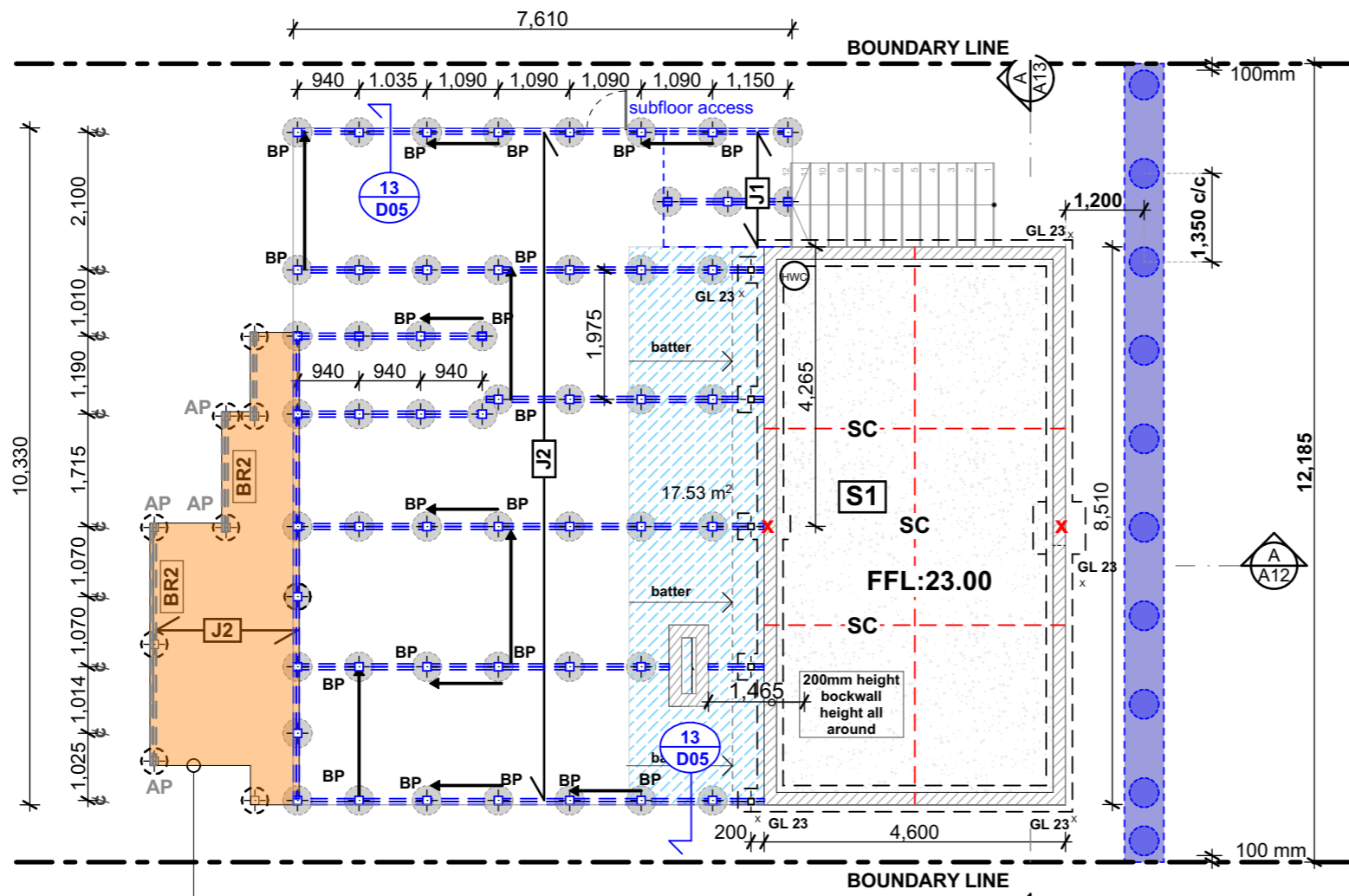
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Drawing Title:  
**EXISTING FOUNDATION PLAN**

Project address:  
**58 TOHUNGA CRESCENT PARNELL AUCKLAND 1052**

Job No.	927	Sheet No.
Date	3/20/2023	
Client	Kevin Muir	<b>A03</b>
Designer	Slaiman Math	
Scale	1:100	
		Rev:



EXISTING HOUSE EXTENSION DESIGNED TO CLASS M SOIL FOUNDATIONS TO REMAIN.  
 GEOTECH TO INSPECT FOR CONDITION AND RISK OF SETTLEMENT.

**PROPOSED FOUNDATION PLAN** **1:100**

**Wind Zone: Medium**

**Notes: EXISTING**

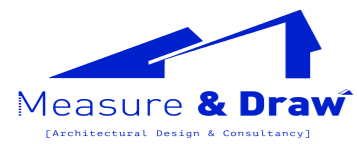
- J1 Existing 50x100mm floor joists @450mm crs.
- J2 Existing 145x45mm floor joists @450mm crs.
- J3 Existing 220x45mm floor joists @450mm crs.

**Notes: PROPOSED**

- 2/190x45 SG8 BEARER CONTINUOUS SPAN, MAX SPAN = 1.6m IF DIFFERENT, CONTACT STRUCTURAL ENGINEER
- POINT LOAD FROM ABOVE
- 450 CONCRETE PILE AT 350 c/c 3500mm MIN EMBREDDMENT. REFER TO 1/S201 FOR DETAILS
- 125 SED ON 450 CONCRETE PILE, 600mm MIN EMBEDMENT. SPACED AT 1200 C/C MAX REFER TO 1/S200
- 125 SED ON 450 CONCRETE PILE, 900mm MIN EMBEDMENT. REFER TO 1/S200
- BRACED PILE STRUT. ARROW HEAD INDICATES TOP END FIXING
- S1** 100 THICK, 25 Mpa SLAB ON GRADE, CW SE72 MESH ON DPM (THERMATHENE BLACK 250µM FLOOR DAMP PROOF MEMBRANE) ON 25 SAND BLINDING ON 150GAP40. GEOTECH TO CONFIRM SUBASE TO CBR 5%
- sc** 15mm Sawcut post concrete pour

**16.0 CONSTRUCTION METHODOLOGY**

- 1) INSPECTION AND ASSESSMENT:**  
 PRIOR TO ANY RE-PIILING WORK, A THOROUGH INSPECTION AND ASSESSMENT OF THE FOUNDATION MUST BE CARRIED OUT TO DETERMINE THE EXTENT OF THE SETTLEMENT AND IDENTIFY ANY UNDERLYING CAUSES.
- 2) PREPARATION:**  
 THE AREA AROUND THE FOUNDATION MUST BE PREPARED FOR RE-PIILING WORK, WHICH MAY INVOLVE CLEARING VEGETATION, REMOVING OBSTRUCTIONS, AND EXCAVATING THE SOIL AROUND THE FOUNDATION TO EXPOSE THE EXISTING PILES
- 3) INSTALLATION OF NEW PILES:**  
 PROP HOUSE USING TIMBER BLOCKS AND PROPS PROVIDED BY A QUALIFIED CONTRACTOR. PROPPING MUST PROVIDE ADEQUATE SUPPORT AND PREVENT ANY ADDITIONAL DEFLECTION OR DISTORTION TO HOUSE FLOOR PLATE STRUCTURE  
  
 ONCE COMPLETE, ASSESS HOUSE FLOOR PLATE AND REPAIR/RESTORE. ENSURE FLOOR LEVELS ARE RESTORED THROUGHOUT GROUND FLOOR PLATE USING JACKS OR SHIMS AS REQUIRED  
  
 WHEN COMPLETE, REMOVE SETTLED PILES AND INSTALL NEW PILES AS PER STRUCTURAL DRAWINGS AND PLANS
- 4) CONNECTION OF PILES:**  
 THE NEW PILES MUST BE CONNECTED TO THE EXISTING FOUNDATION BEAMS AS PER STRUCTURAL DRAWING PLANS AND DETAILS
- 5) TESTING AND CERTIFICATION:**  
 ONCE THE RE-PIILING WORK IS COMPLETE, SURVEY THE NEW FOUNDATION TO ENSURE THAT IT MEETS THE REQUIRED LEVELS. A BUILDING INSPECTOR OR STRUCTURAL ENGINEER MUST CERTIFY THAT THE WORK HAS BEEN CARRIED OUT TO A SATISFACTORY STANDARD AND MEETS ALL RELEVANT BUILDING CODES AND REGULATIONS
- 6) REPORTING:**  
 A REPORT MUST BE PROVIDED OUTLINING THE WORK THAT HAS BEEN COMPLETED, INCLUDING ANY MEASUREMENTS OR OBSERVATIONS MADE DURING THE PROCESS



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Drawing Title:  
**PROPOSED FOUNDATION PLAN**

Project address:  
**58 TOHUNGA CRESCENT PARNELL AUCKLAND 1052**

Job No.	927	Sheet No.
Date	3/20/2023	
Client	Kevin Muir	<b>A04</b>
Designer	Slaiman Math	
Scale	1:100, 1:1.2106	
Rev:		

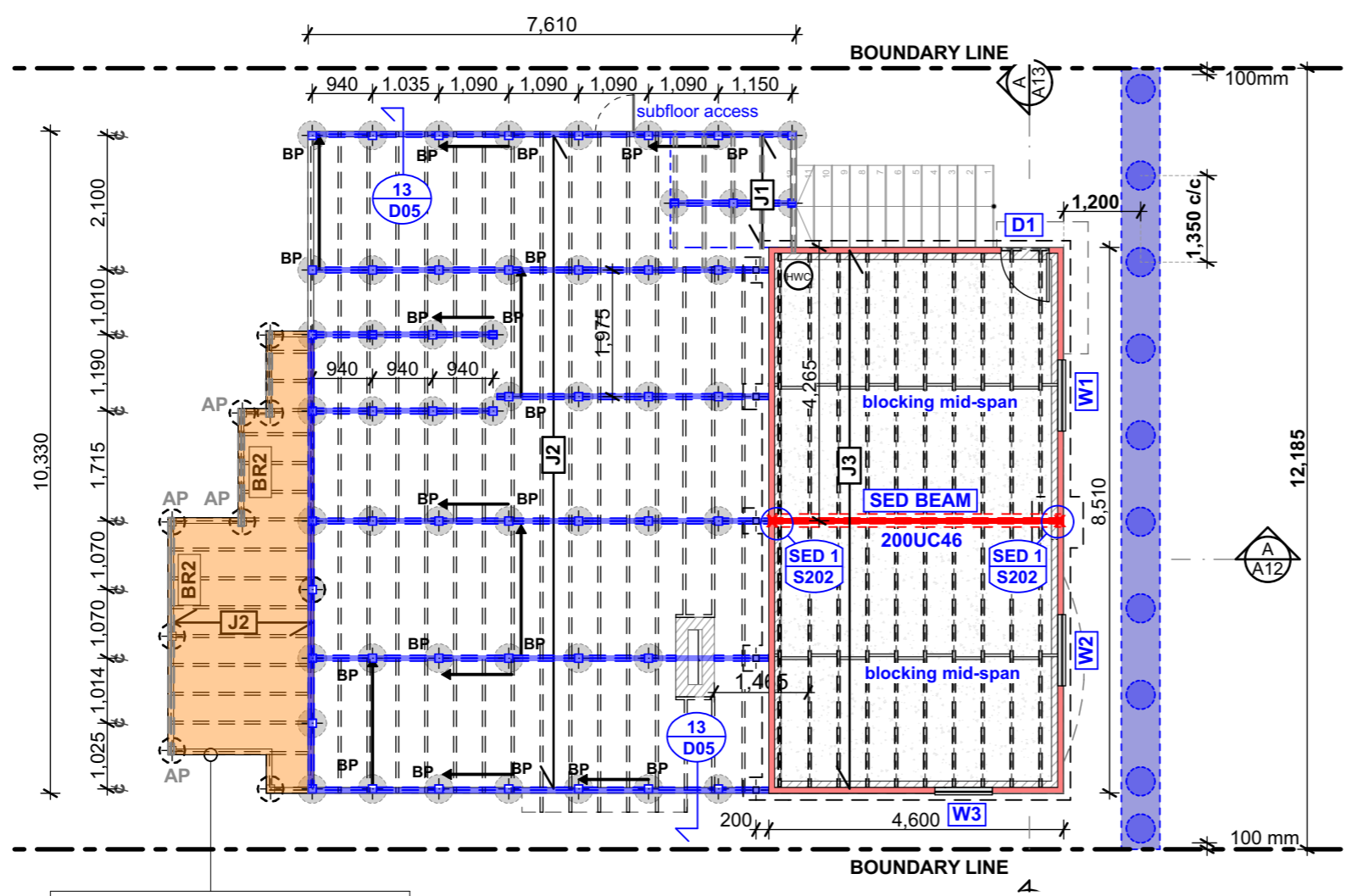


**RECEIVED**  
20/03/2023  
Auckland Council

**FOUNDATION DESIGN BY ENGINEER.  
PLAN TO READ IN CONJUNCTION WITH THE  
ENGINEERING DRAWING SET.  
FOUNDATION BRACING REFER TO  
ENGINEERING DRAWING.**

**WINDOWS, DOORS AND LINTELS LEGEND:**  
W1 W:1100 x H:570 reused timber joinery (Head height 1700)  
NZ3604-(Lintel = 2/90x45 SG8 (MiTek fixing type F))  
W2 W:1100 x H:570 reused timber joinery (Head height 1700)  
NZ3604-(Lintel = 2/90x45 SG8 (MiTek fixing type F))  
W3 W:900 x H:570 reused timber joinery (Head height 1700)  
NZ3604-(Lintel = 2/90x45 SG8 (MiTek fixing type F))  
D1 W:810 x H:1800 timber joinery (Head height to the suite)  
NZ3604-(Lintel = 2/90x45 SG8 (MiTek fixing type F))  
**Builder to confirm all existing windows and doors size.**

**Wind Zone: Medium**  
**Notes: EXISTING**  
J1 Existing 100x45mm floor joists @400mm crs.  
J2 Existing 145x45mm floor joists @450mm crs.  
J3 Existing 220x45mm floor joists @450mm crs.

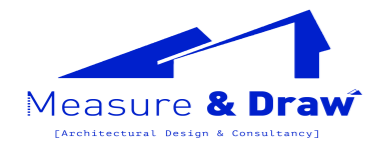


EXISTING HOUSE EXTENSION DESIGNED TO CLASS M SOIL FOUNDATIONS TO REMAIN.  
GEOTECH TO INSPECT FOR CONDITION AND RISK OF SETTLEMENT.

**NOTES: PROPOSED**  
LOAD BEARING WALL UNDER  
2/190x45 SG8 BEARER CONTINUOUS SPAN, MAX SPAN = 1.6m IF DIFFERENT, CONTACT STRUCTURAL ENGINEER  
SED BEAM (200UC46)  
450 CONCRETE PILE AT 350 c/c 3500mm MIN EMBEDMENT. REFER TO 1/S201 FOR DETAILS  
125 SED ON 450 CONCRETE PILE, 600mm MIN EMBEDMENT. SPACED AT 1200 C/C MAX REFER TO 1/S200  
125 SED ON 450 CONCRETE PILE, 900mm MIN EMBEDMENT. REFER TO 1/S200  
BRACED PILE STRUT. ARROW HEAD INDICATES TOP END FIXING  
STEEL BEAM POINT LOAD. REFER TO SUBFLOOR PLAN

**Wall construction:**  
**Proposed stud height refer cross section.**  
Loadbearing:  
- 90x45 H1.2 SG8 grade studs @ 400c/c  
- 90x45 H1.2 SG8 grade noggs @ 800c/c  
- 10mm plasterboard lining.  
**Top plate** - 90x45 + 140x35 H1.2 SG8 grade ribbon plate fixed with CT 200 to joists.  
**Bottom plate** - M12 anchor bolts set within 150mm of each end of the plate @ max 900crs with 50x50x3mm washers on slab.  
**Ceiling System:** 10mm plasterboard ceiling lining on 70x35mm SG8 H1.2 ceiling battens @450mm crs. max. fixed to underside of existing floor joists. Refer to nailing schedule for fixings.  
**Window and door:** (reusing old doors and windows)  
All door and windows to be Timber joinery  
**head height refer WINDOWS, DOORS, AND LINTELS LEGEND**  
**Glazing:**  
Glass to comply with nzs4223 part 2 & 3.  
Existing joinery windows that reuse joinery need to have all seals checked and replaced where necessary and all mitres will need to be resealed, rubbers and back flashed by the builder to perform for an additional 15-year durability period in accordance with Clause B2.  
**Hot water supply**  
install main pressure hot water cylinder in accordance to nzbc g12/as1, 6.11, water heater installation. provide seismic restrains as required, refer detail sheet T01  
**Insulation in habitable spaces as per nzbc h1:**  
Sub/mid floor: R1.6 Pink® Batts®

**PROPOSED FOUNDATION (FRAMING LAYOUT) 1:100**

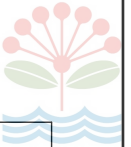


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Drawing Title:  
**PROPOSED FOUNDATION (FRAMING LAYOUT)**

Project address:  
**58 TOHUNGA CRESCENT PARNELL AUCKLAND 1052**

Job No.	927	Sheet No.
Date	3/20/2023	
Client	Kevin Muir	<b>A05</b>
Designer	Slaiman Math	
Scale	1:100	Rev:

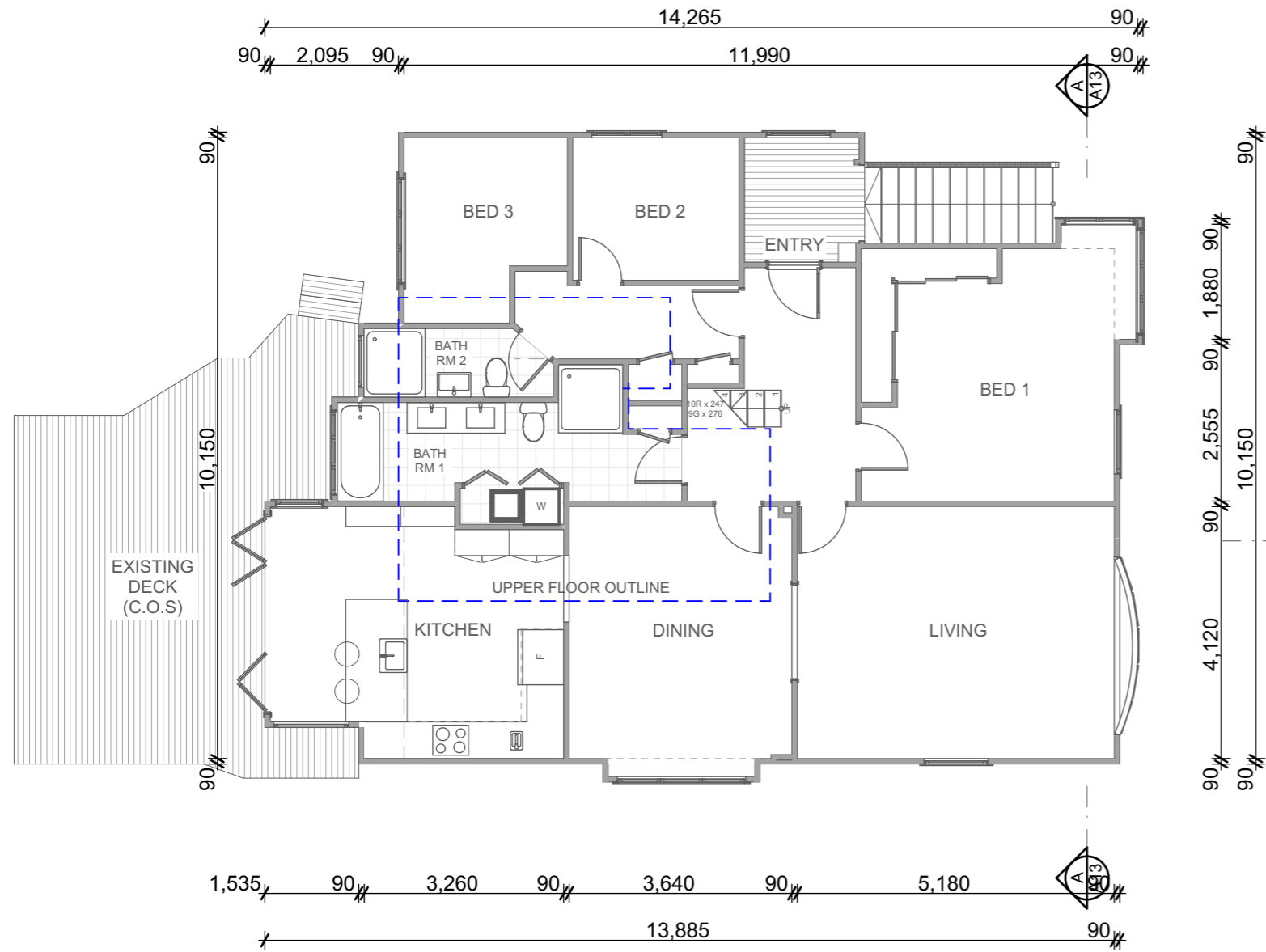


Wind Zone: Medium

**LEGEND:**

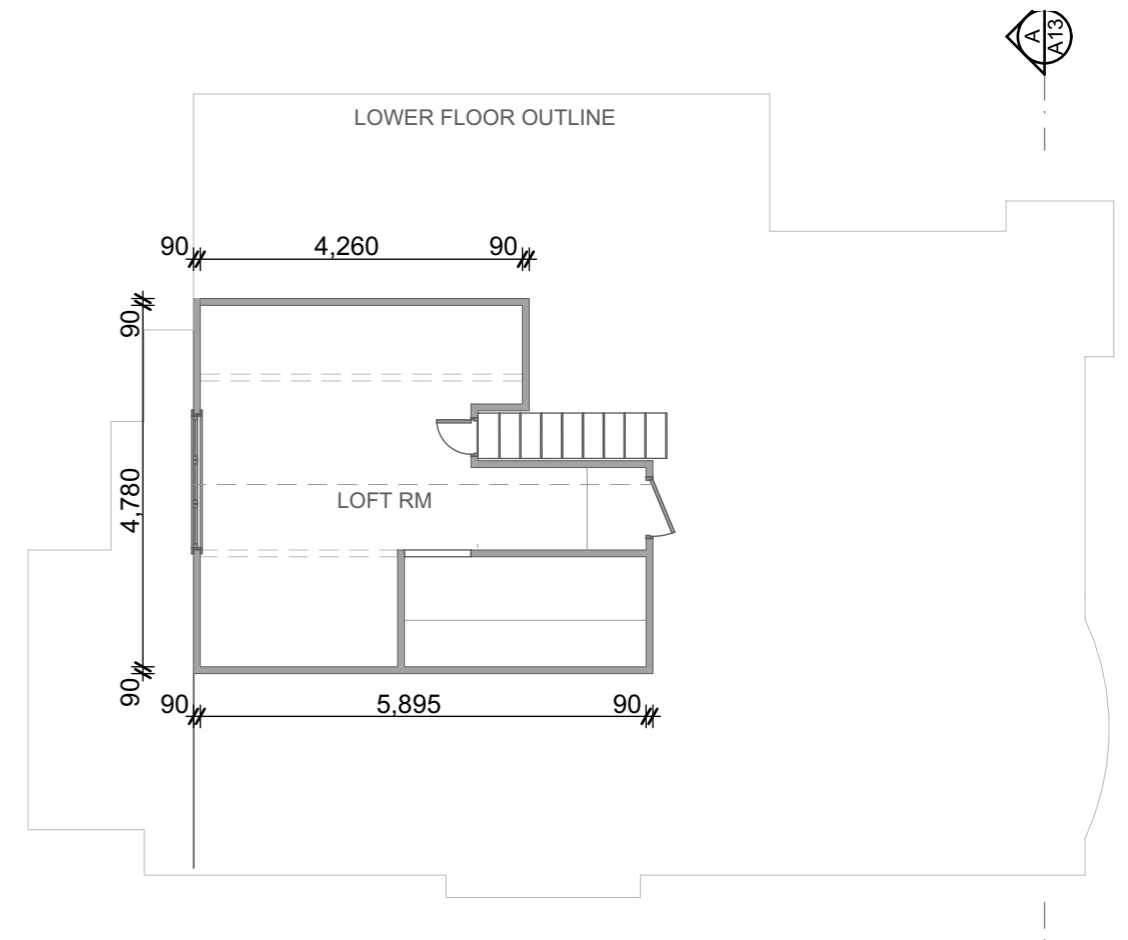
- Existing construction wall
- SD - Smoke Detector
- WR - Wardrobe
- W - Washing machine
- CB - Cupboard.
- FP - Fireplace
- HWC - Hot water cylinder
- ST - Storage

THE BUILDING FOOTPRINT AND FLOOR PLAN WILL REMAIN THE SAME AS THE EXISTING ONE. SUBFLOOR REPIILING ONLY.



**EXISTING LOWER FLOOR PLAN**

1:100



**EXISTING UPPER FLOOR PLAN**

1:100



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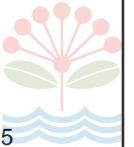
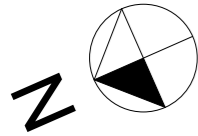
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Drawing Title:  
**EXISTING LOWER AND UPPER FLOOR PLAN**

Project address:  
**58 TOHUNGA CRESCENT PARNELL AUCKLAND 1052**

Job No.	927	Sheet No.
Date	3/20/2023	
Client	Kevin Muir	<b>A06</b>
Designer	Slaiman Math	
Scale	1:100	Rev:

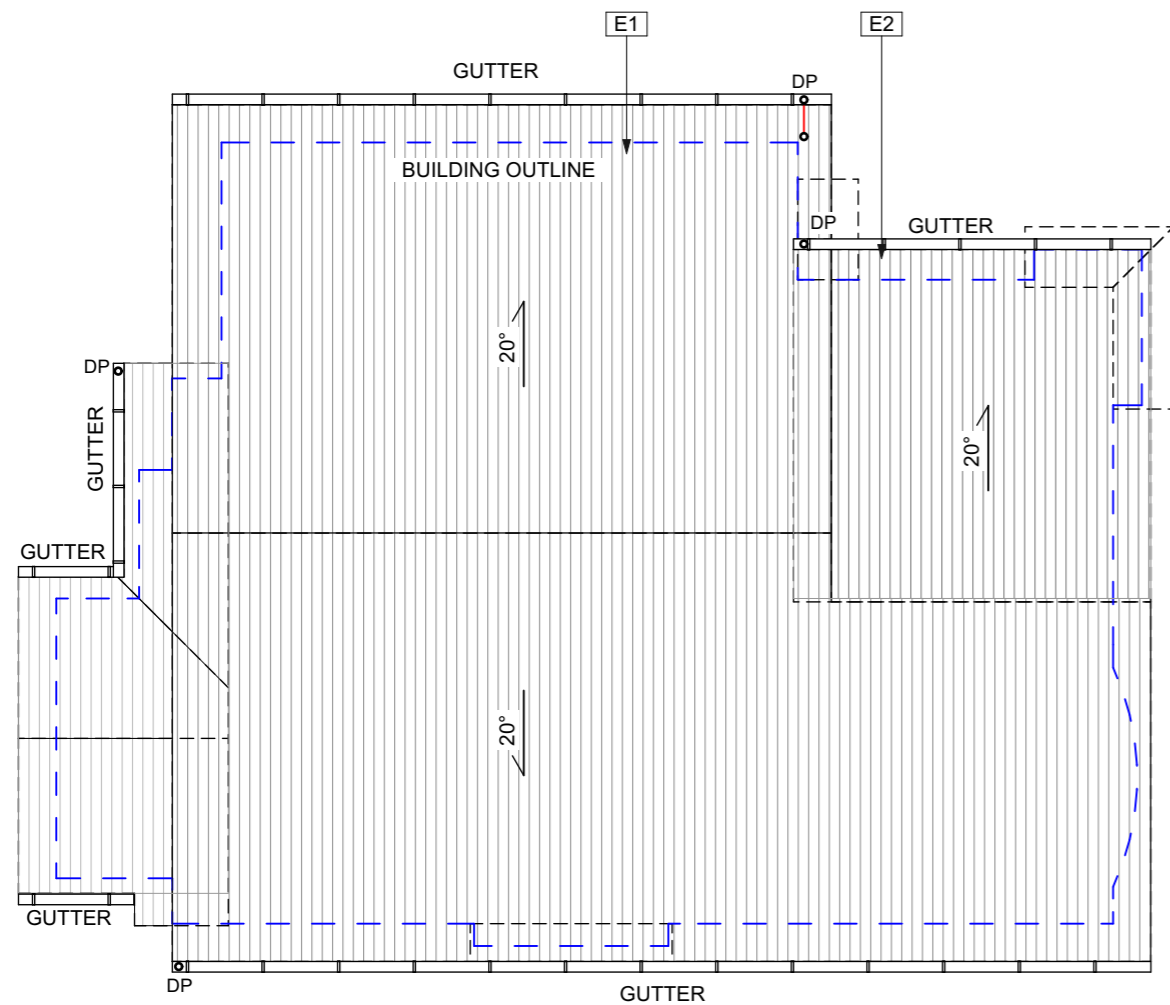




- The building footprint, floor plans, and roof plan will remain the same.
- The subfloor alteration of the storage area and Re-piling of the foundation.

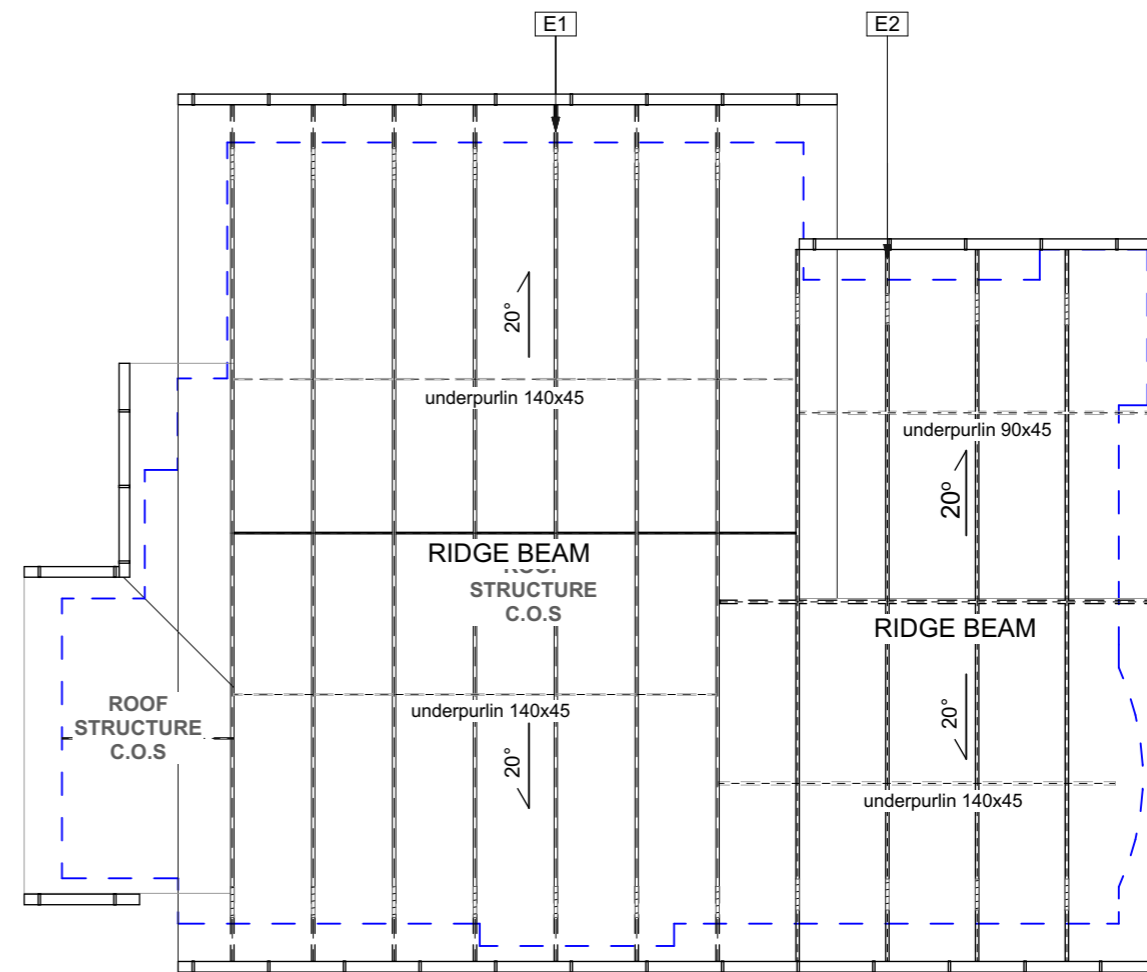
**Wind Zone: Medium**

- E1** Existing steel roofing on 140x45 rafter on 140x15 underpurlin  
-Roof slope 20°  
-Ridge beam 140x20
- E2** Existing steel roofing on 90x45 rafter  
-Roof slope 20°  
-Ridge beam 90x45
- DP** Downpipe



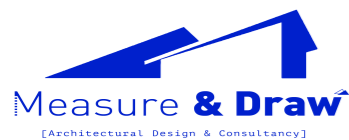
**EXISTING ROOF PLAN**

**1:100**



**EXISTING ROOF FRAMING PLAN**

**1:100**



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Drawing Title:  
**EXISTING ROOF AND ROOF FRAMING PLAN**

Project address:  
**58 TOHUNGA CRESCENT PARNELL AUCKLAND 1052**

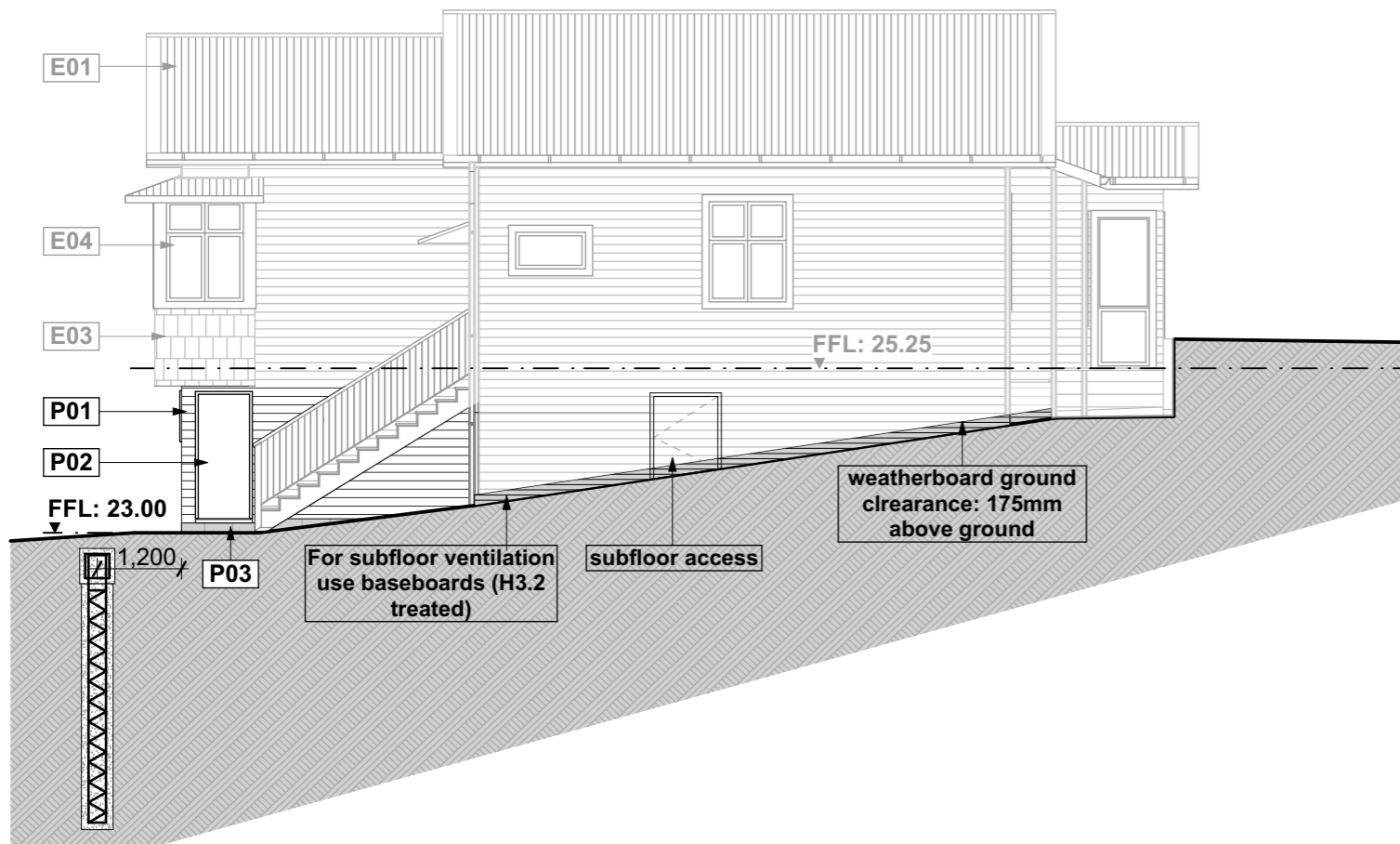
Job No.	927	Sheet No.
Date	3/20/2023	
Client	Kevin Muir	<b>A07</b>
Designer	Slaiman Math	Rev:
Scale	1:100	





**EXISTING EAST ELEVATION**

**1:100**



**PROPOSED EAST ELEVATION**

**1:100**



Risk Matrix					
Wall Type: Standard					
Risk Factor	Low	Med.	High	Very High	Score
Wind (NZS3604)	0	0	1	2	0
Storeys	0	1	2	4	1
R/W Intersection	0	1	3	5	1
Eaves Width	0	1	2	5	5
Complexity	0	1	3	6	0
Deck Design	0	2	4	6	0
Total Risk Score: <b>medium</b>					<b>7</b>

Risk Matrix created by Design Navigator

**Existing Notes**

- E01** Existing corrugated steel roofing
- E02** Existing bevelback weatherboard cladding (direct fixed)
- E03** Existing timber shingle cladding
- E04** Existing timber joinery

**P01** **Wall System:** bevelback weatherboard cladding (direct fixed) on Thermakaft Covertex 403 wall underlay and 10mm plasterboard wall lining

**P02** **Window and door:** (reusing old doors and windows) All door and windows to be Timber joinery *head height refer WINDOWS, DOORS, AND LINTELS LEGEND*  
**Glazing:** Glass to comply with nzs4223 part 2 & 3.

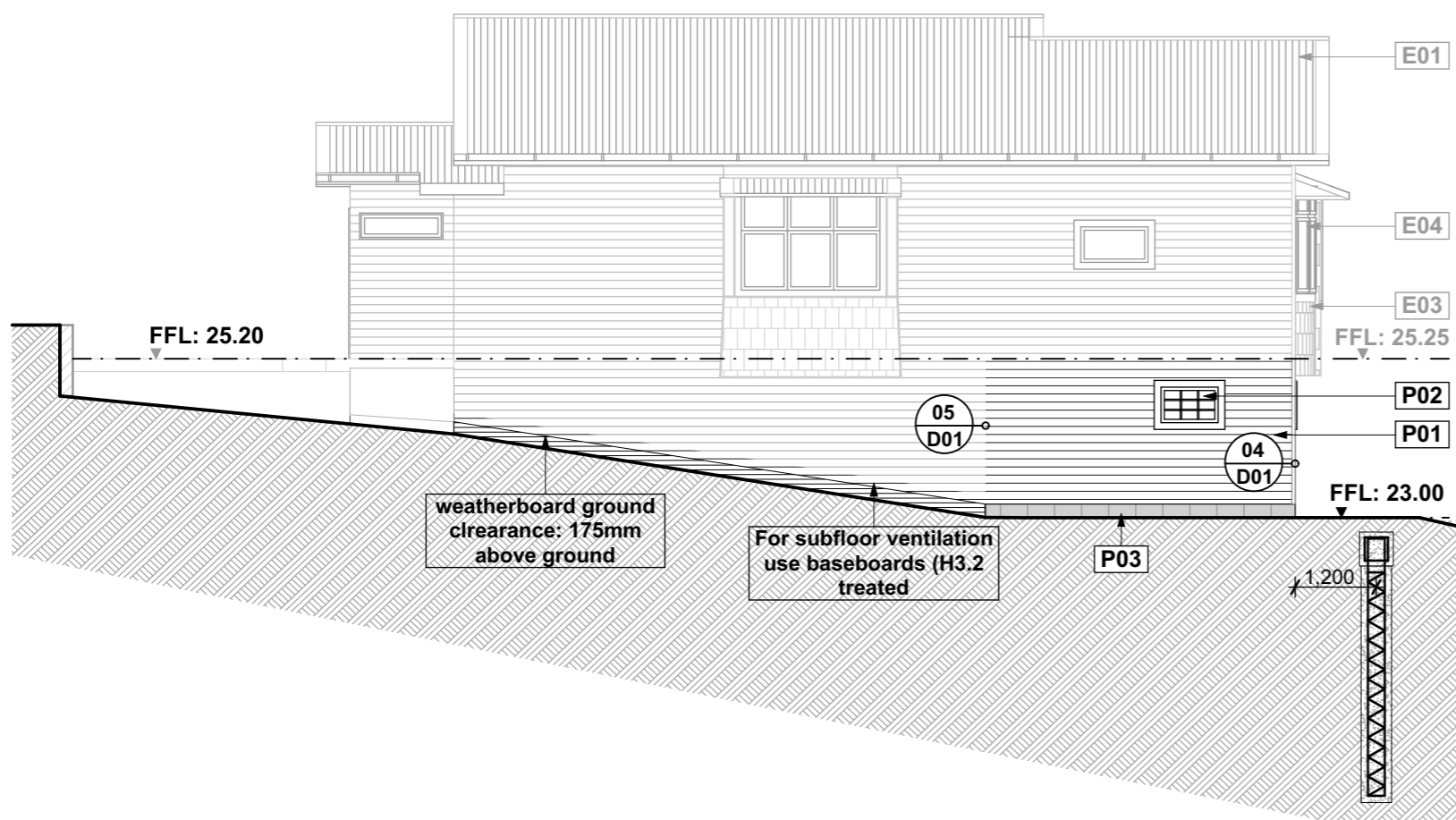
Existing joinery windows that reuse joinery need to have all seals checked and replaced where necessary and all mitres will need to be resealed, rubbers and back flashed by the builder to perform for an additional 15-year durability period in accordance with Clause B2.

**P03** Block wall above the ground shall be finished with STO clear coat system or Resene X-200 Paint system.



**EXISTING WEST ELEVATION**

**1:100**



**WEST ELEVATION**

**1:100**

Risk Matrix					
Wall Type: Standard					
Risk Factor	Low	Med.	High	Very High	Score
Wind (NZS3604)	0	0	1	2	0
Storeys	0	1	2	4	1
R/W Intersection	0	1	3	5	1
Eaves Width	0	1	2	5	5
Complexity	0	1	3	6	0
Deck Design	0	2	4	6	0
Total Risk Score: <b>medium</b>					<b>7</b>

Risk Matrix created by Design Navigator

**Existing Notes**

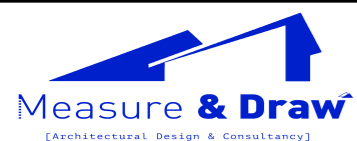
- E01** Existing corrugated steel roofing
- E02** Existing bevelback weatherboard cladding (direct fixed)
- E03** Existing timber shingle cladding
- E04** Existing timber joinery

**P01** **Wall System:** bevelback weatherboard cladding (direct fixed) on Thermakaft Covertex 403 wall underlay and 10mm plasterboard wall lining

**P02** **Window and door:** (reusing old doors and windows) All door and windows to be Timber joinery *head height refer WINDOWS, DOORS, AND LINTELS LEGEND*  
**Glazing:** Glass to comply with nzs4223 part 2 & 3.

Existing joinery windows that reuse joinery need to have all seals checked and replaced where necessary and all mitres will need to be resealed, rubbers and back flashed by the builder to perform for an additional 15-year durability period in accordance with Clause B2.

**P03** Block wall above the ground shall be finished with STO clear coat system or Resene X-200 Paint system.



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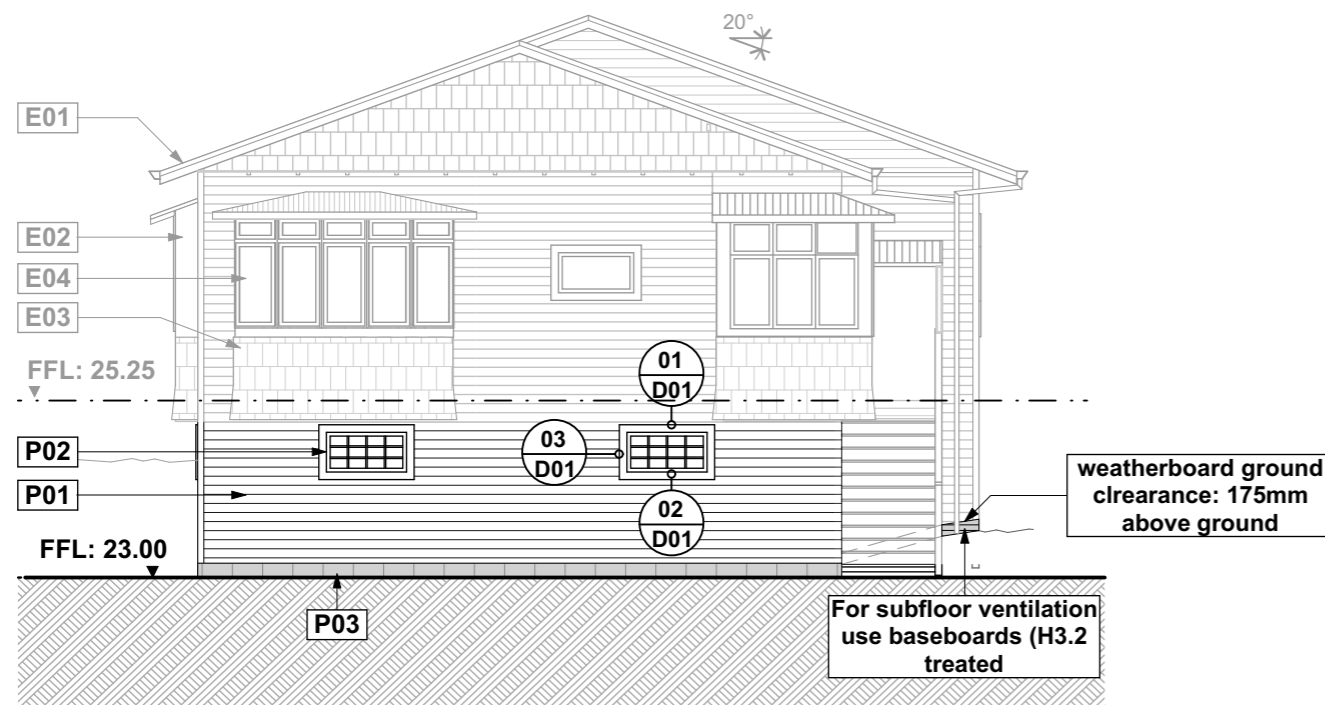
Drawing Title:  
**WEST ELEVATION**

Project address:  
**58 TOHUNGA CRESCENT PARNELL AUCKLAND 1052**

Job No.	927	Sheet No.
Date	3/20/2023	
Client	Kevin Muir	<b>A09</b>
Designer	Slaiman Math	
Scale	1:100	Rev:



**EXISTING SOUTH ELEVATION 1:100**



**PROPOSED SOUTH ELEVATION 1:100**

Risk Matrix					
Wall Type: Standard					
Risk Factor	Low	Med.	High	Very High	Score
Wind (NZS3604)	0	0	1	2	0
Storeys	0	1	2	4	1
R/W Intersection	0	1	3	5	1
Eaves Width	0	1	2	5	5
Complexity	0	1	3	6	0
Deck Design	0	2	4	6	0
Total Risk Score: <b>medium</b>					<b>7</b>

Risk Matrix created by Design Navigator

**Existing Notes**

- E01** Existing corrugated steel roofing
- E02** Existing bevelback weatherboard cladding (direct fixed)
- E03** Existing timber shingle cladding
- E04** Existing timber joinery

**P01** **Wall System:** bevelback weatherboard cladding (direct fixed) on Thermakaft Covertex 403 wall underlay and 10mm plasterboard wall lining

**P02** **Window and door:** (reusing old doors and windows) All door and windows to be Timber joinery *head height refer WINDOWS, DOORS, AND LINTELS LEGEND*  
**Glazing:** Glass to comply with nzs4223 part 2 & 3.

Existing joinery windows that reuse joinery need to have all seals checked and replaced where necessary and all mitres will need to be resealed, rubbers and back flashed by the builder to perform for an additional 15-year durability period in accordance with Clause B2.

**P03** Block wall above the ground shall be finished with STO clear coat system or Resene X-200 Paint system.





**EXISTING NORTH ELEVATION 1:100**

Risk Matrix					
Wall Type: Standard					
Risk Factor	Low	Med.	High	Very High	Score
Wind (NZS3604)	0	0	1	2	0
Storeys	0	1	2	4	1
R/W Intersection	0	1	3	5	1
Eaves Width	0	1	2	5	5
Complexity	0	1	3	6	0
Deck Design	0	2	4	6	0
Total Risk Score: <b>medium</b>					7

Risk Matrix created by Design Navigator

**Existing Notes**

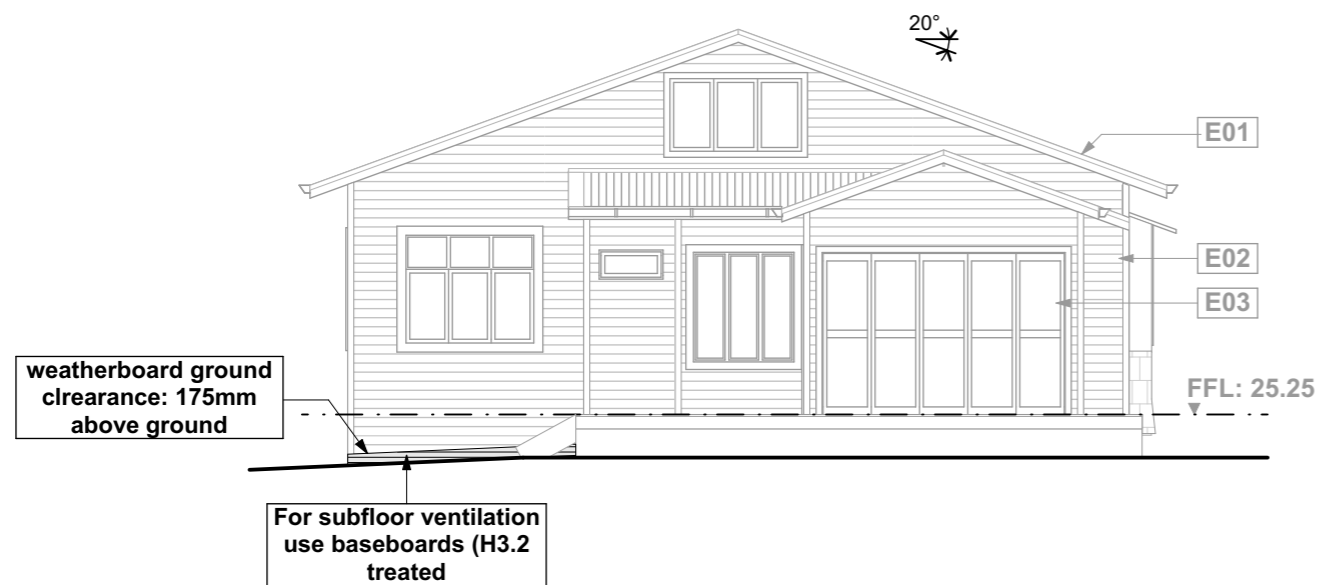
- E01** Existing corrugated steel roofing
- E02** Existing bevelback weatherboard cladding (direct fixed)
- E03** Existing timber shingle cladding
- E04** Existing timber joinery

**P01** **Wall System:** bevelback weatherboard cladding (direct fixed) on Thermakaft Covertex 403 wall underlay and 10mm plasterboard wall lining

**P02** **Window and door:** (reusing old doors and windows) All door and windows to be Timber joinery *head height refer WINDOWS, DOORS, AND LINTELS LEGEND*  
**Glazing:** Glass to comply with nzs4223 part 2 & 3.

Existing joinery windows that reuse joinery need to have all seals checked and replaced where necessary and all mitres will need to be resealed, rubbers and back flashed by the builder to perform for an additional 15-year durability period in accordance with Clause B2.

**P03** Block wall above the ground shall be finished with STO clear coat system or Resene X-200 Paint system.



**PROPOSED NORTH ELEVATION 1:100**



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Drawing Title:  
**NORTH ELEVATION**

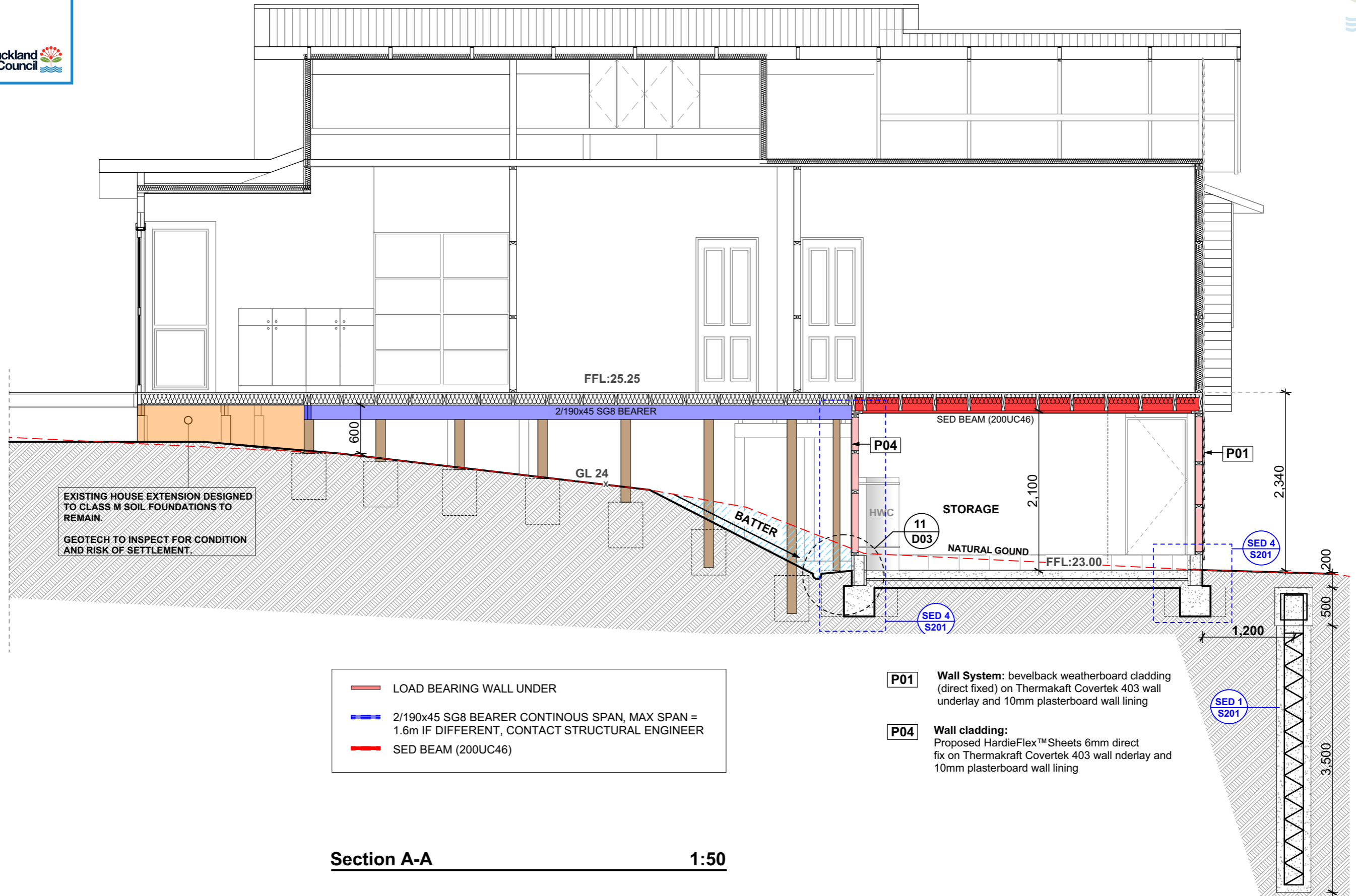
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**58 TOHUNGA CRESCENT PARNELL AUCKLAND 1052**

Job No.	927	Sheet No. <b>A11</b>
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Client	Kevin Muir	Rev:
Designer	Slaiman Math	
Scale	1:100	





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- LOAD BEARING WALL UNDER
- 2/190x45 SG8 BEARER CONTINOUS SPAN, MAX SPAN = 1.6m IF DIFFERENT, CONTACT STRUCTURAL ENGINEER
- SED BEAM (200UC46)

- P01** Wall System: bevelback weatherboard cladding (direct fixed) on Thermakraft Covertek 403 wall underlay and 10mm plasterboard wall lining
- P04** Wall cladding: Proposed HardieFlex™ Sheets 6mm direct fix on Thermakraft Covertek 403 wall nderlay and 10mm plasterboard wall lining

**Section A-A** 1:50



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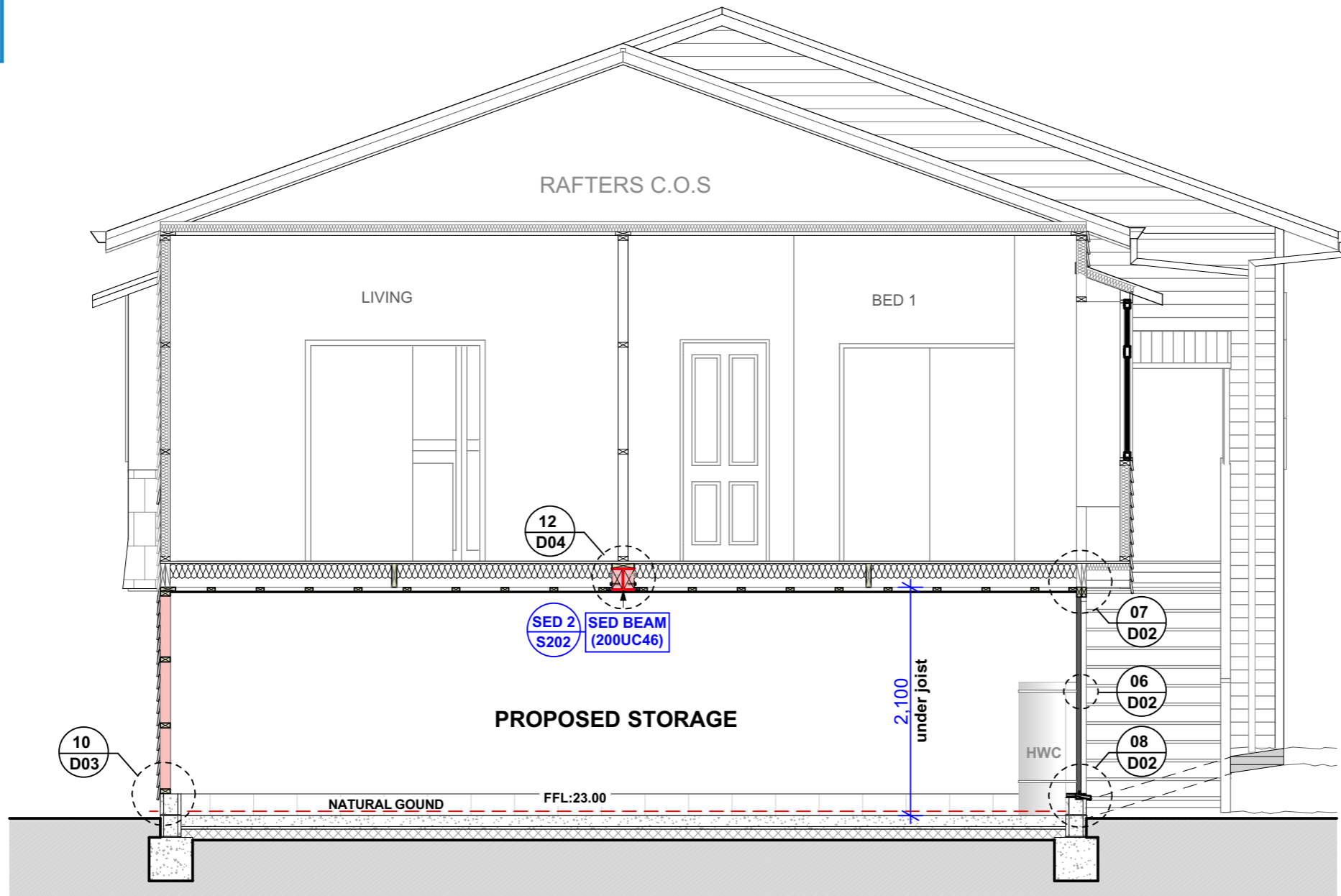
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**SECTION A-A**

Project address:  
**58 TOHUNGA CRESCENT PARNELL AUCKLAND 1052**

Job No.	927	Sheet No.
Date	3/20/2023	
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Designer	Slaiman Math	
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Section B-B

1:50



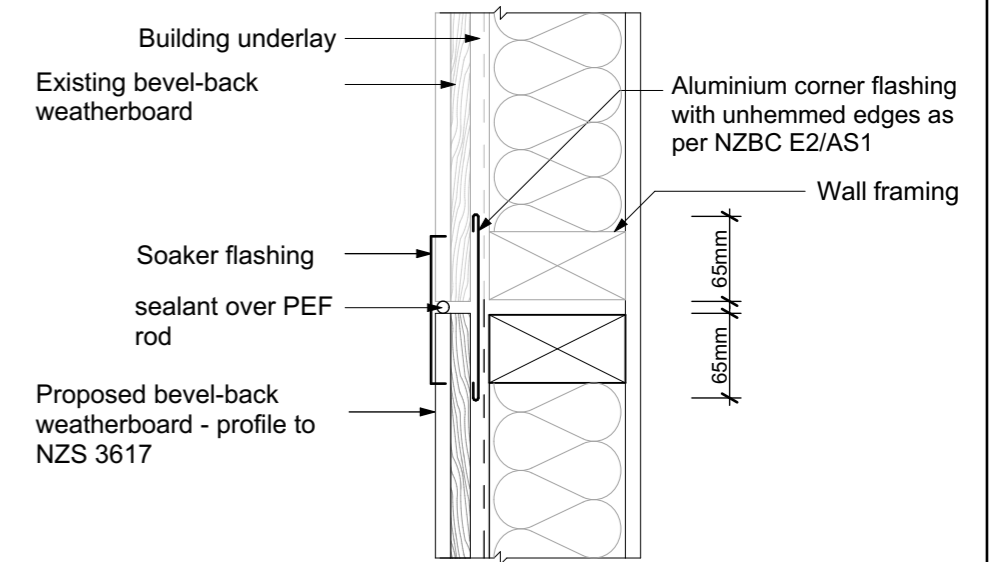
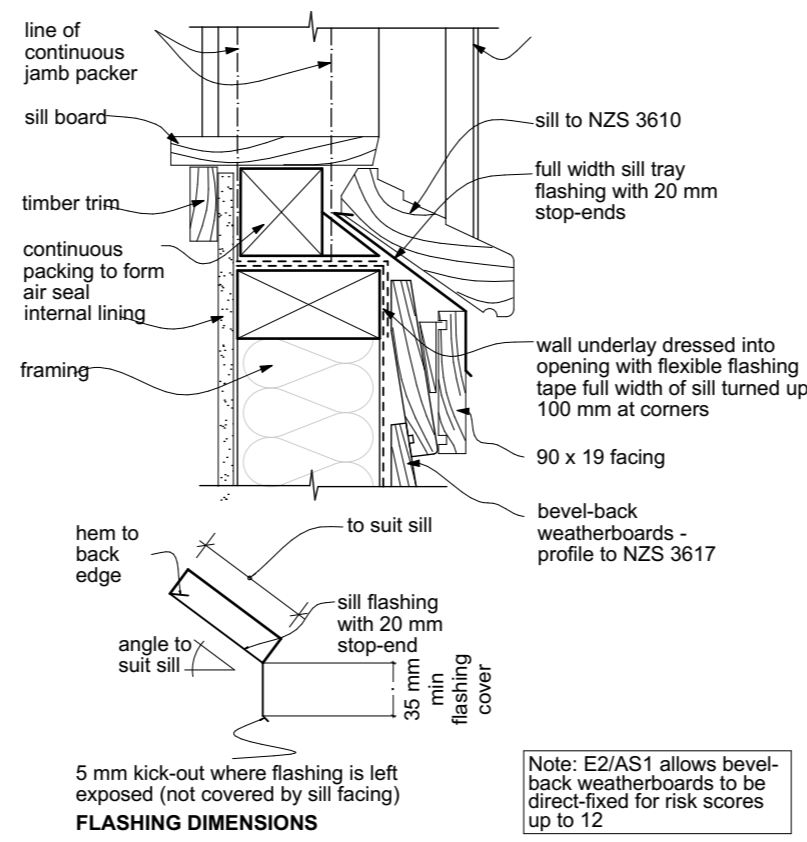
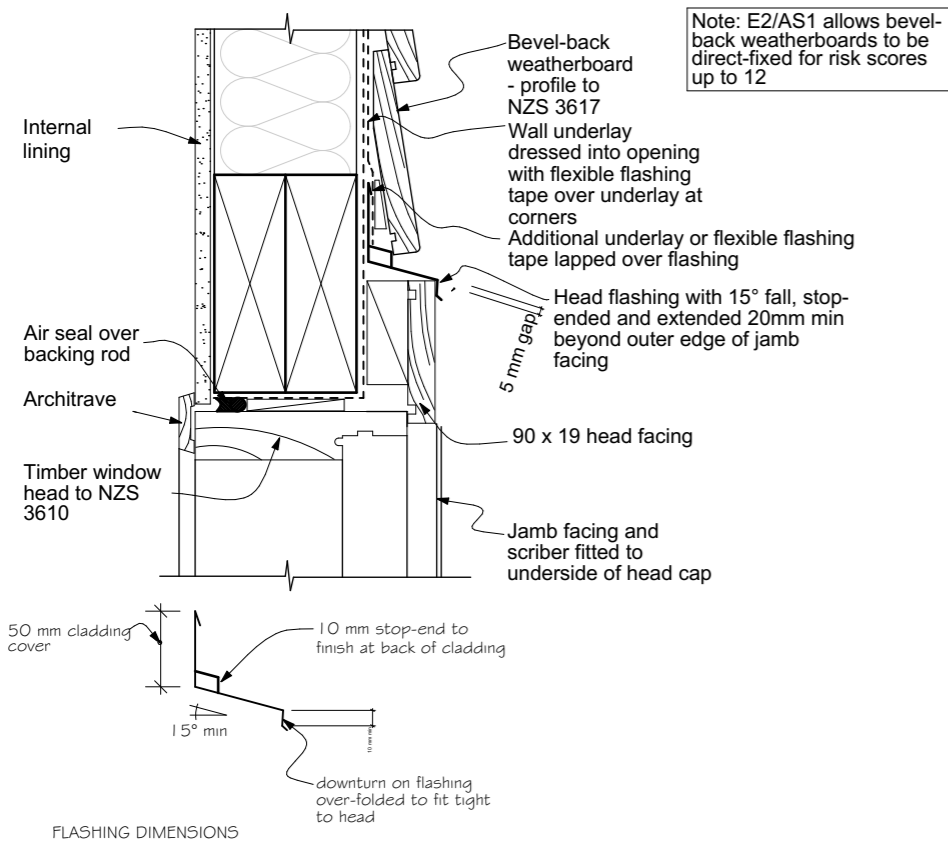
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Drawing Title:  
SECTION B-B

Project address:  
58 TOHUNGA CRESCENT PARNELL AUCKLAND 1052

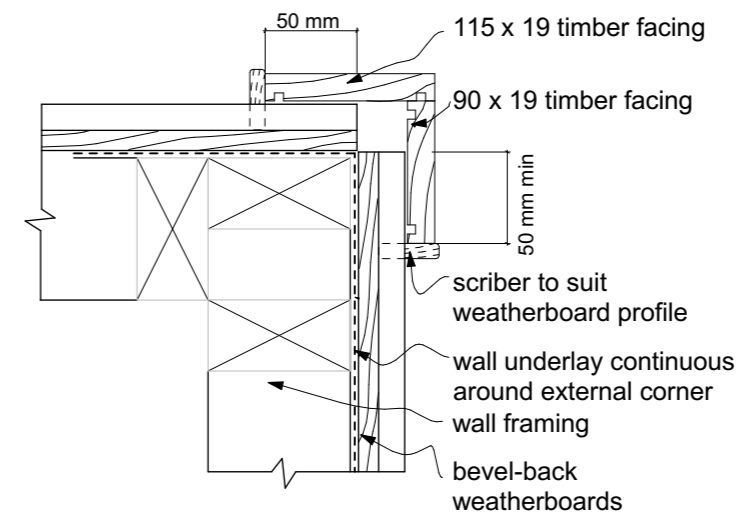
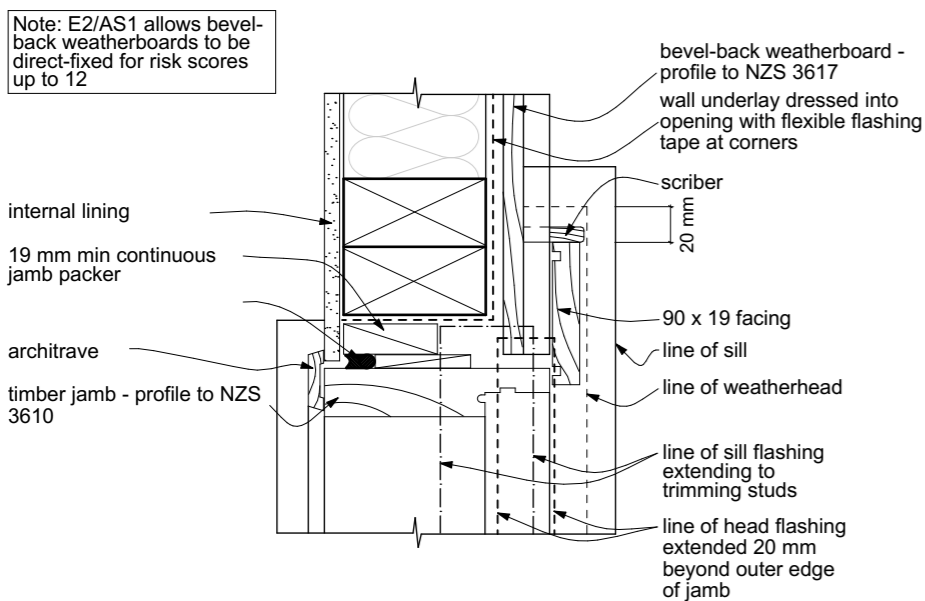
Job No.	927	Sheet No.
Date	3/20/2023	
Client	Kevin Muir	A13
Designer	Slaiman Math	
Scale	1:50	Rev:



01 **TIMBER WINDOW HEAD** 1:5  
A10 Bevelback weatherboard - direct fixed

02 **TIMBER WINDOW SILL** 1:5  
A10

05 **EXISTING AND PROPOSED DETAIL** 1:5  
A09 **BEVEL-BACK**



03 **TIMBER WINDOW JAMB** 1:5  
A10 Bevelback weatherboard - direct fixed

04 **EXTERNAL CORNER** 1:5  
A09 Bevelback weatherboard - direct fixed



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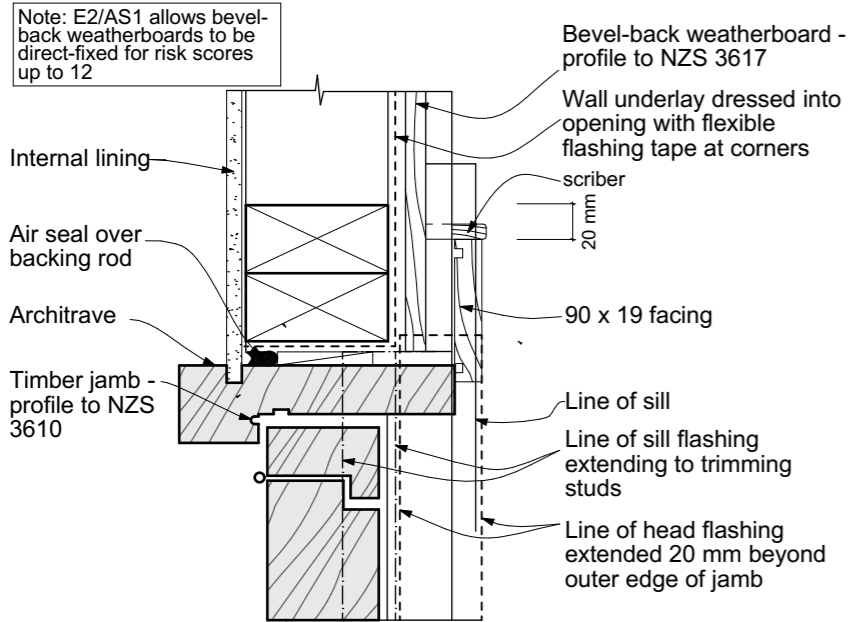
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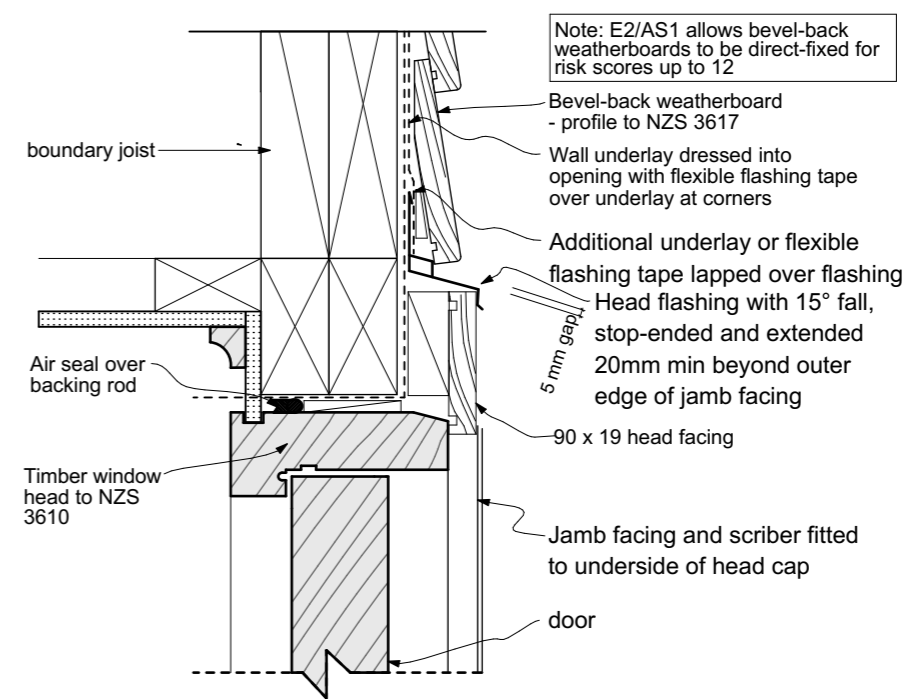
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**58 TOHUNGA CRESCENT PARNELL AUCKLAND 1052**

Job No.	927	Sheet No.
Date	3/20/2023	
Client	Kevin Muir	<b>D01</b>
Designer	Slaiman Math	
Scale	1:5	Rev:

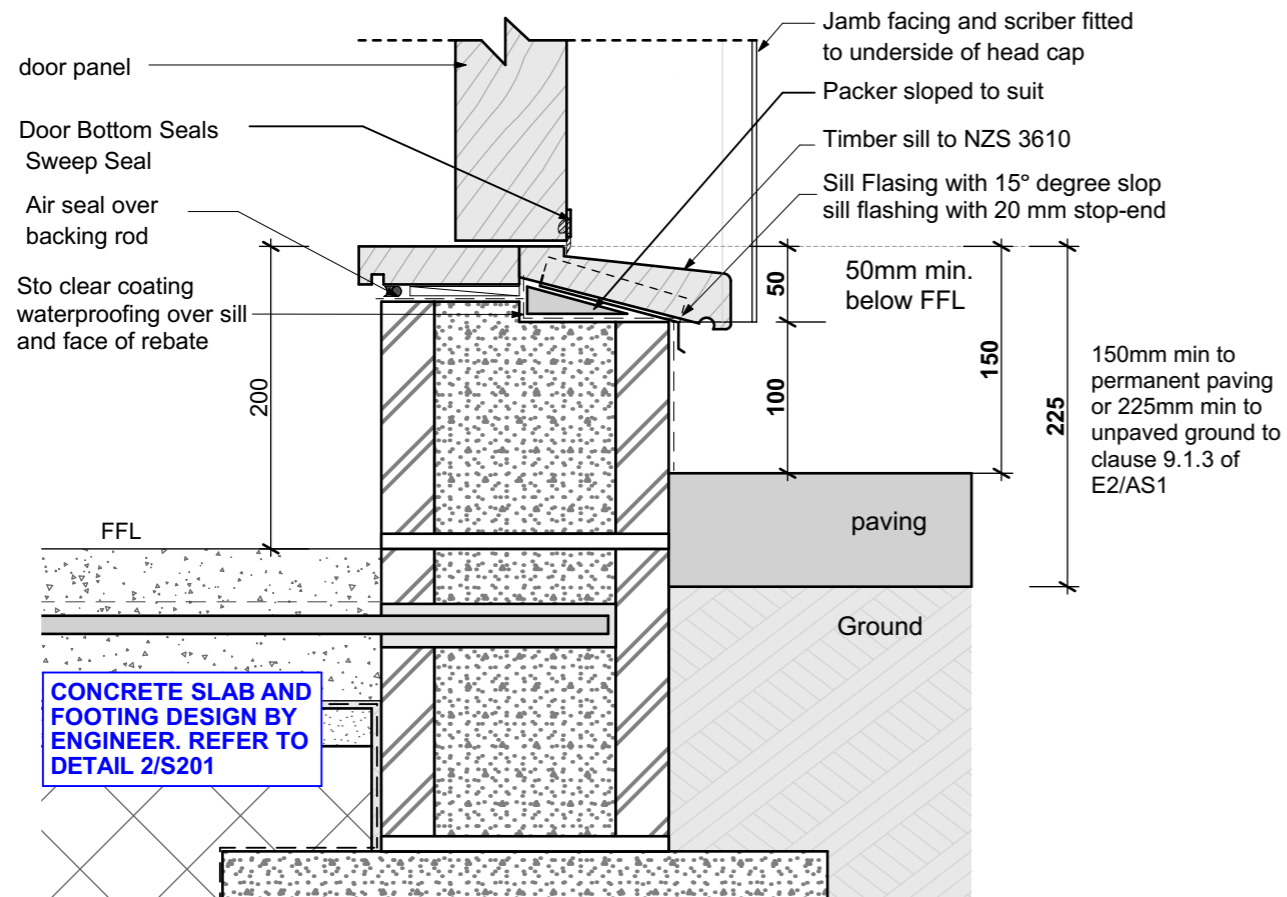




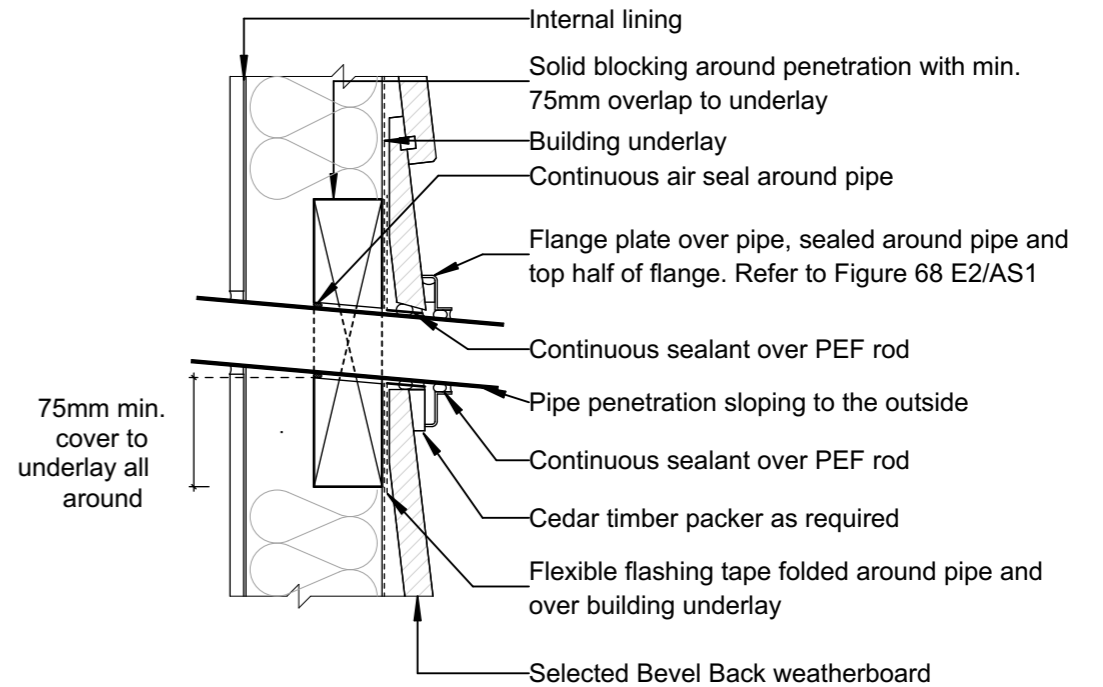
06 **TIMBER DOOR JAMB** 1:5  
A13 Bevelback weatherboard - direct fixed



07 **TIMBER DOOR HEAD** 1:5  
A13 Bevelback weatherboard - direct fixed



08 **BASE OF WALL, CONCRETE TIMBER DOOR** 1:5  
A13



09 **PIPE PENETRATION SECTION** 1:5  
A00



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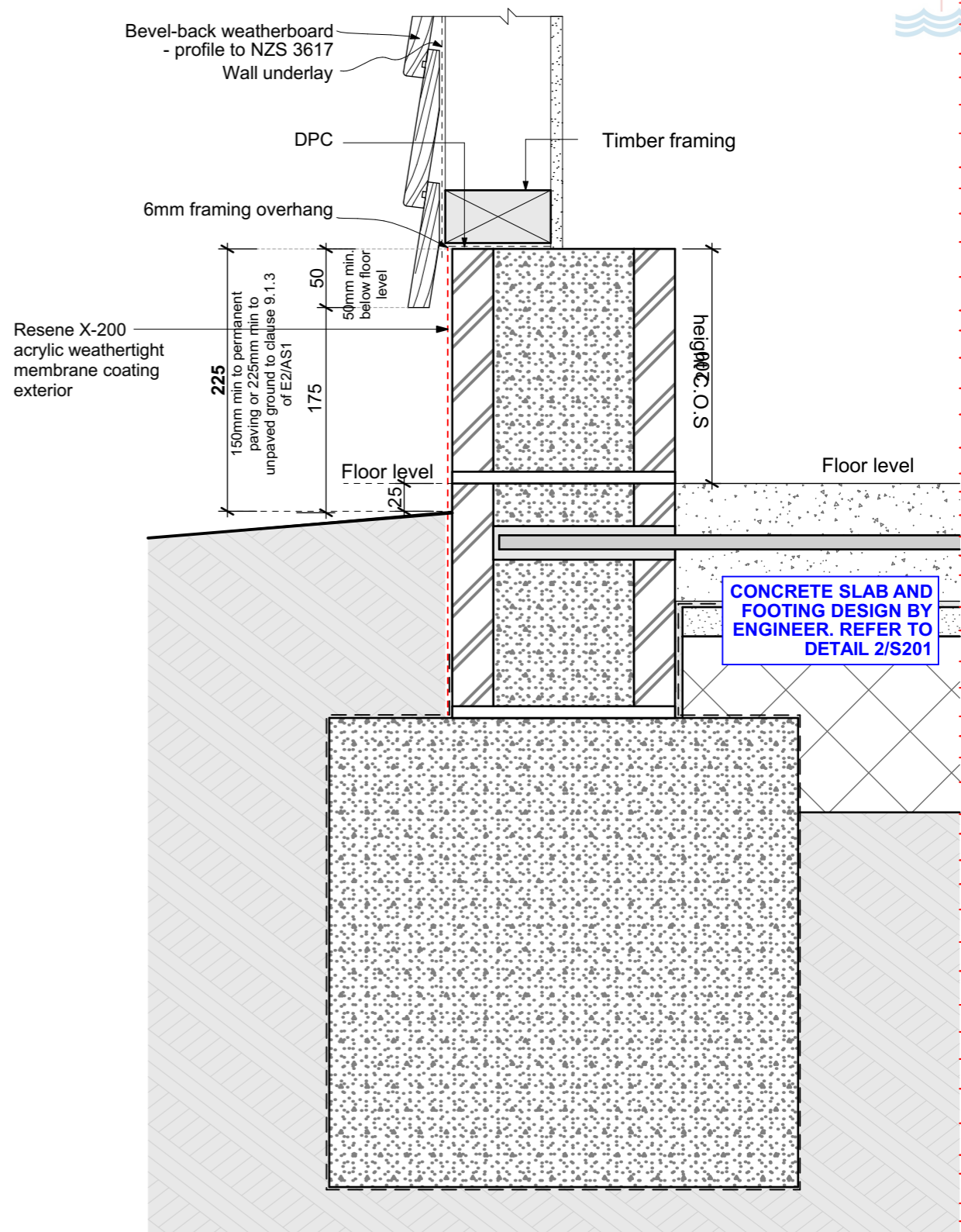
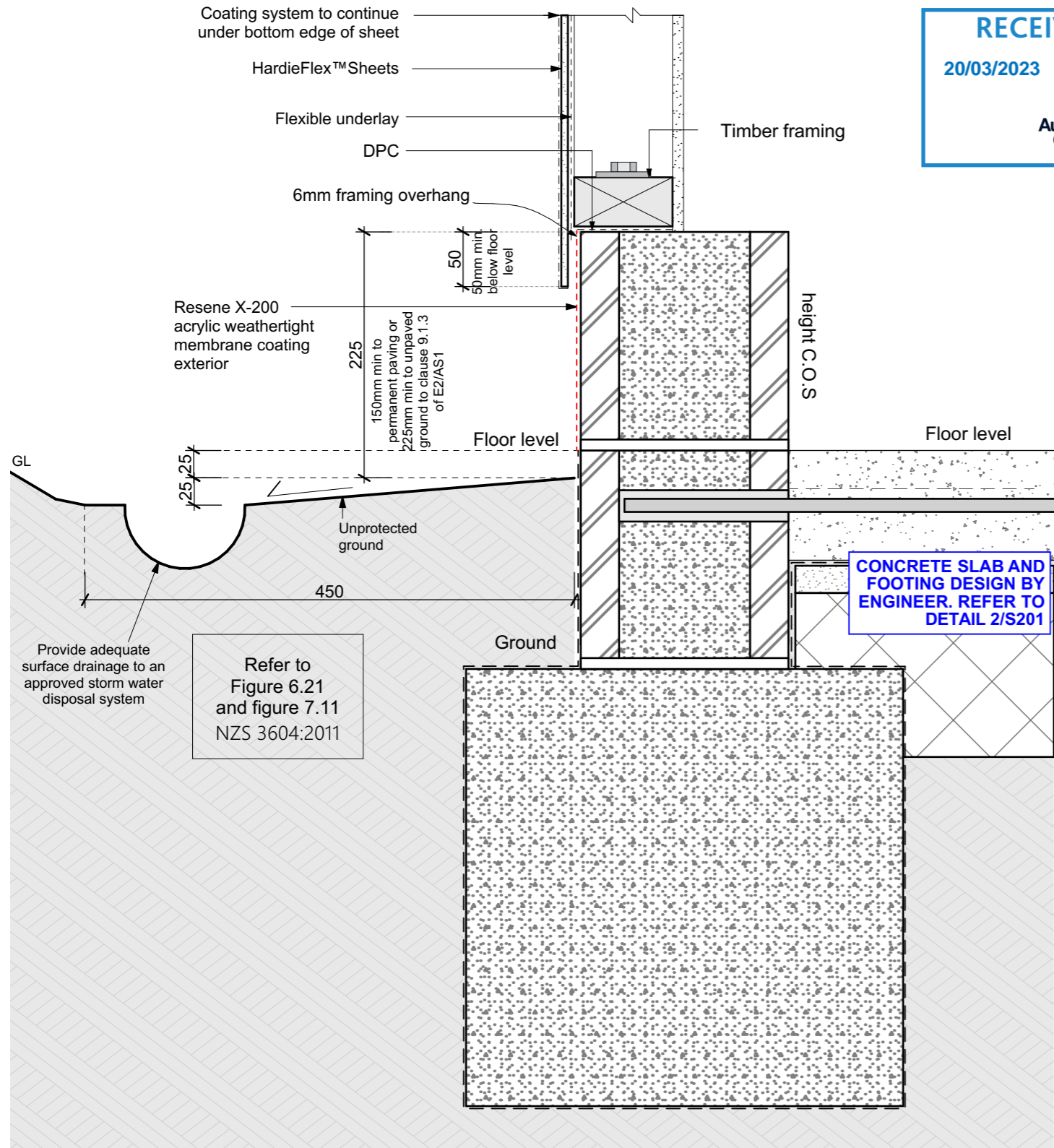
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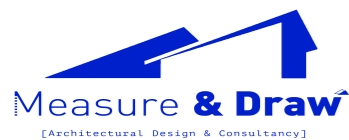
Job No.	927	Sheet No.
Date	3/20/2023	
Client	Kevin Muir	D02
Designer	Slaiman Math	
Scale	1:5	Rev:





11 **BASE OF WALL, CONCRETE BLOCK OR NIB-WALL**  
A12 Hardie Flex Sheet

10 **BASE OF WALL, CONCRETE BLOCK OR NIB-WALL**  
A12 / A13 Bevelback weatherboard - direct fixed



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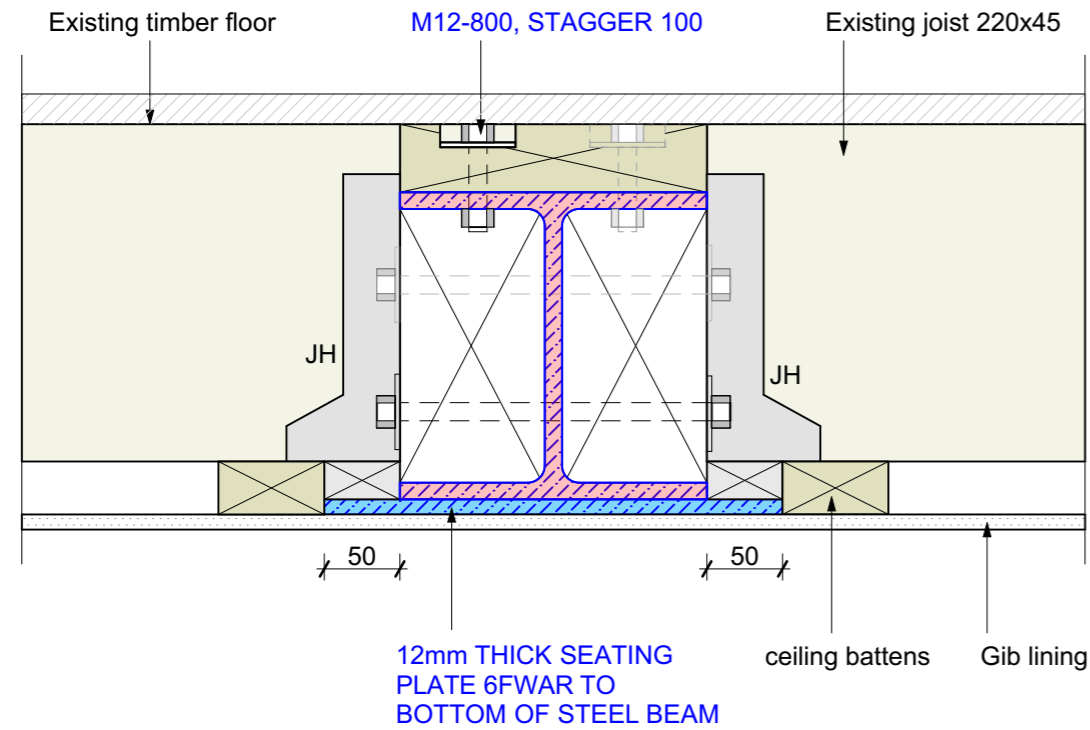
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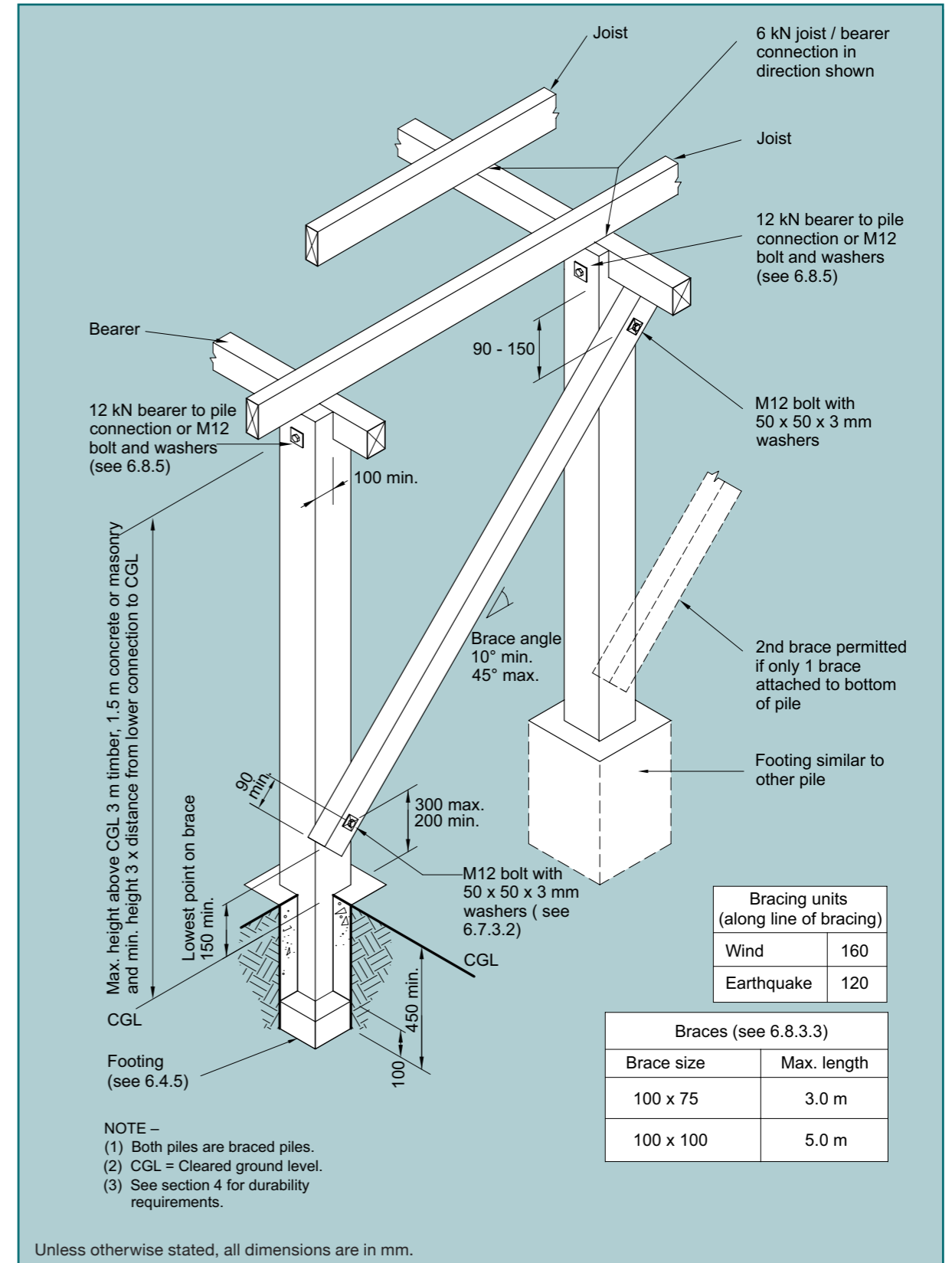


12  
A13 **SED BEAM CONNECTION**

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**SECTION 6 – FOUNDATION AND SUBFLOOR FRAMING**

NZS 3604:2011



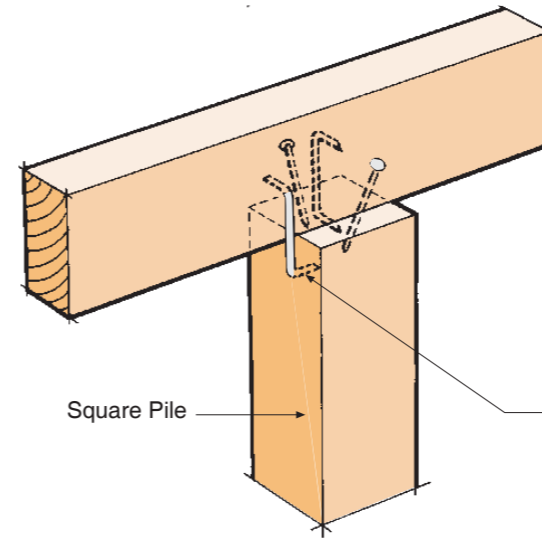
**Figure 6.6 – Braced pile system – Brace connected to pile (see 6.8)**



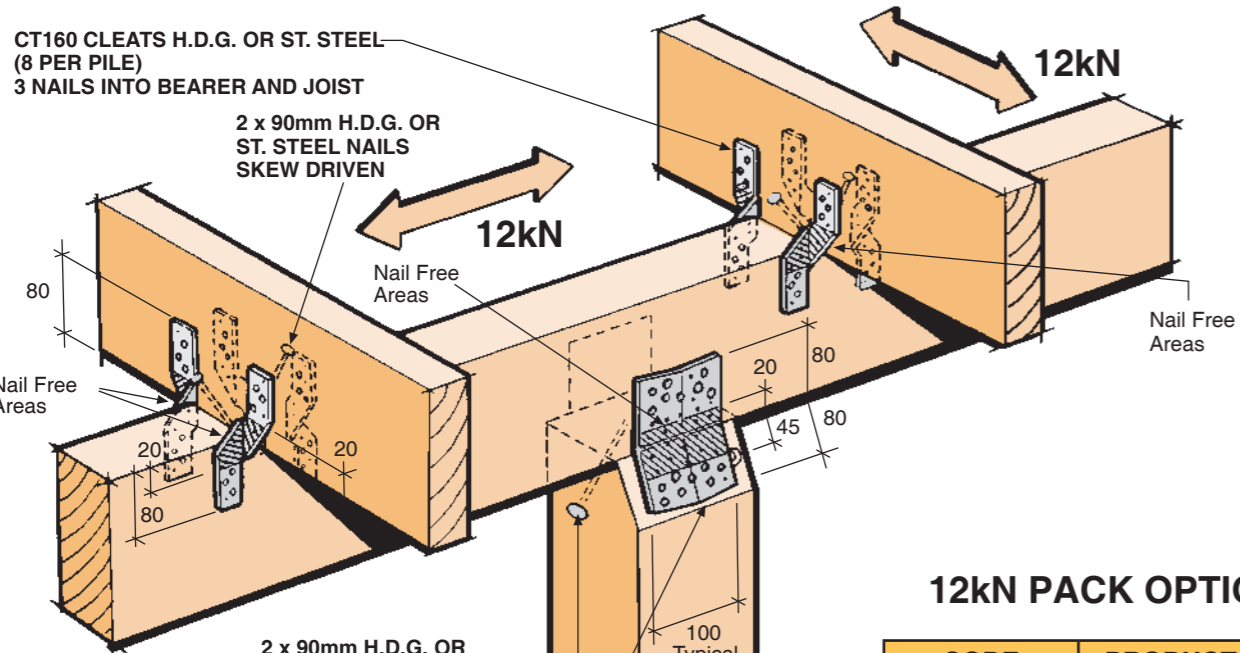
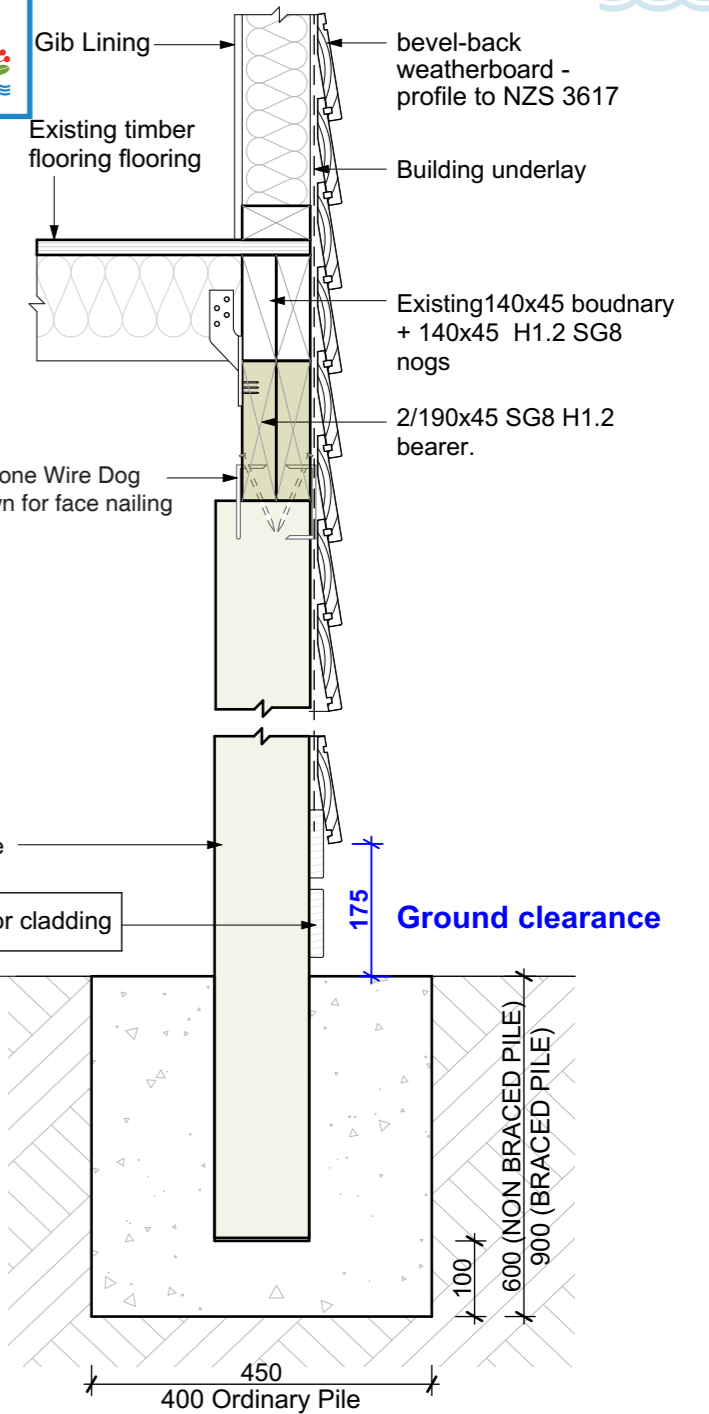
01/2017

# 12kN PILE FIXING FOR BRACED PILES OR ANCHOR PILES

- ★ The 12kN Pile Fixing must be installed in accordance with this brochure
- ★ Auckland University Tested. Test Ref. 4613
- ★ All subfloor construction must be in accordance with NZS 3604:2011
- ★ NZS 3604 requires lines of lateral support to floor joists within 300mm of bearer or bracing lines, refer to Clause 7.1.2
- ★ Joists deeper than 150mm require solid nogging over braced or anchor pile



If Square Piles are used, one Wire Dog needs to be bent as shown for face nailing into both Pile and Bearer



### 12kN PACK OPTIONS

CODE	PRODUCT FINISH OPTIONS
STANDARD PACK <b>12KN</b>	- All items HOT DIP GALVANISED
HIGH CORROSION PACK <b>12KNH</b>	- All items STAINLESS STEEL

Anchor/Brace Pile Shown (on internal bracing line)

★ See Over For Corrosion Table.



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Date	3/20/2023	
Client	Kevin Muir	
Designer	Slaiman Math	
Scale	1:10	
Rev:		

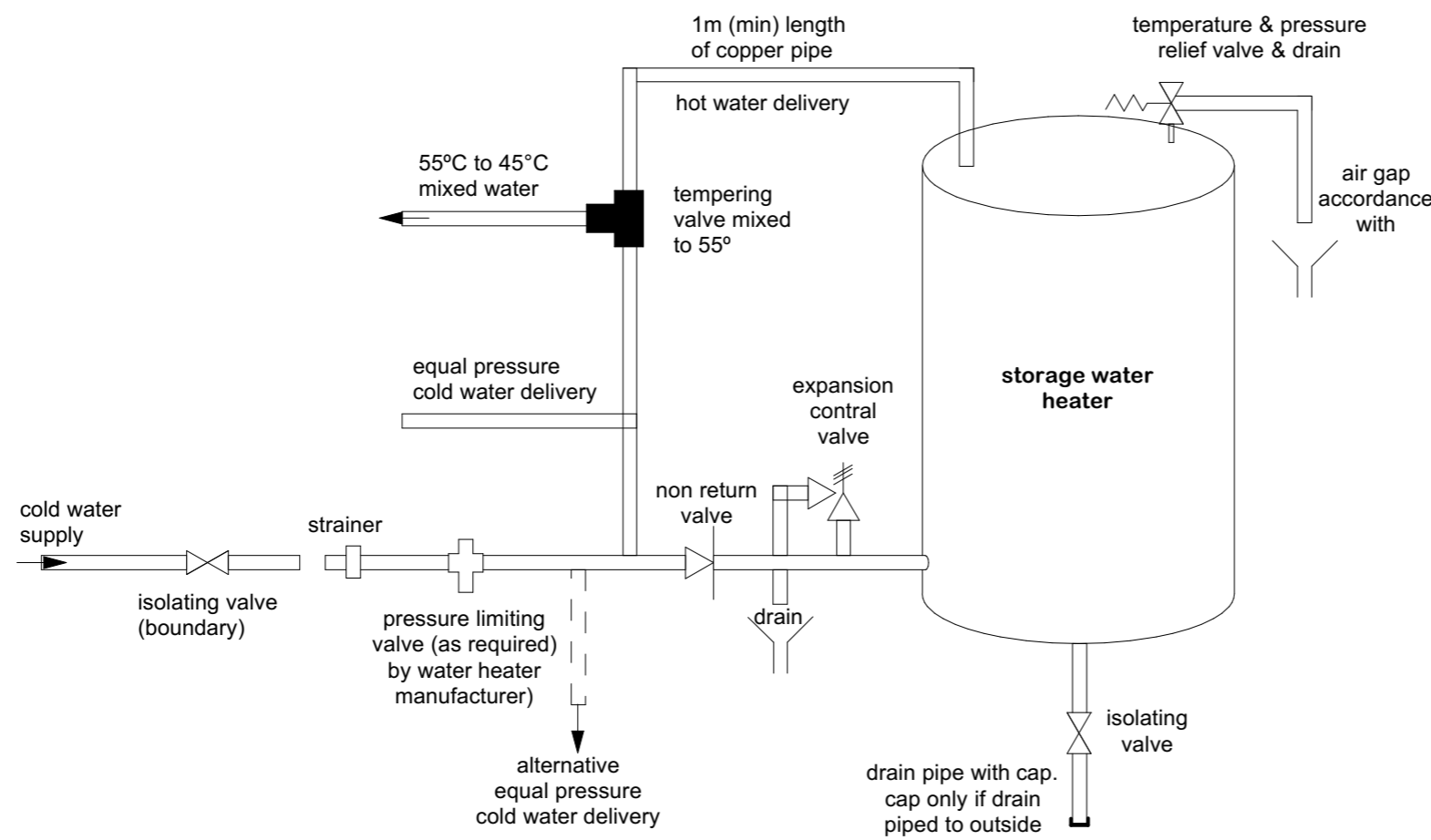




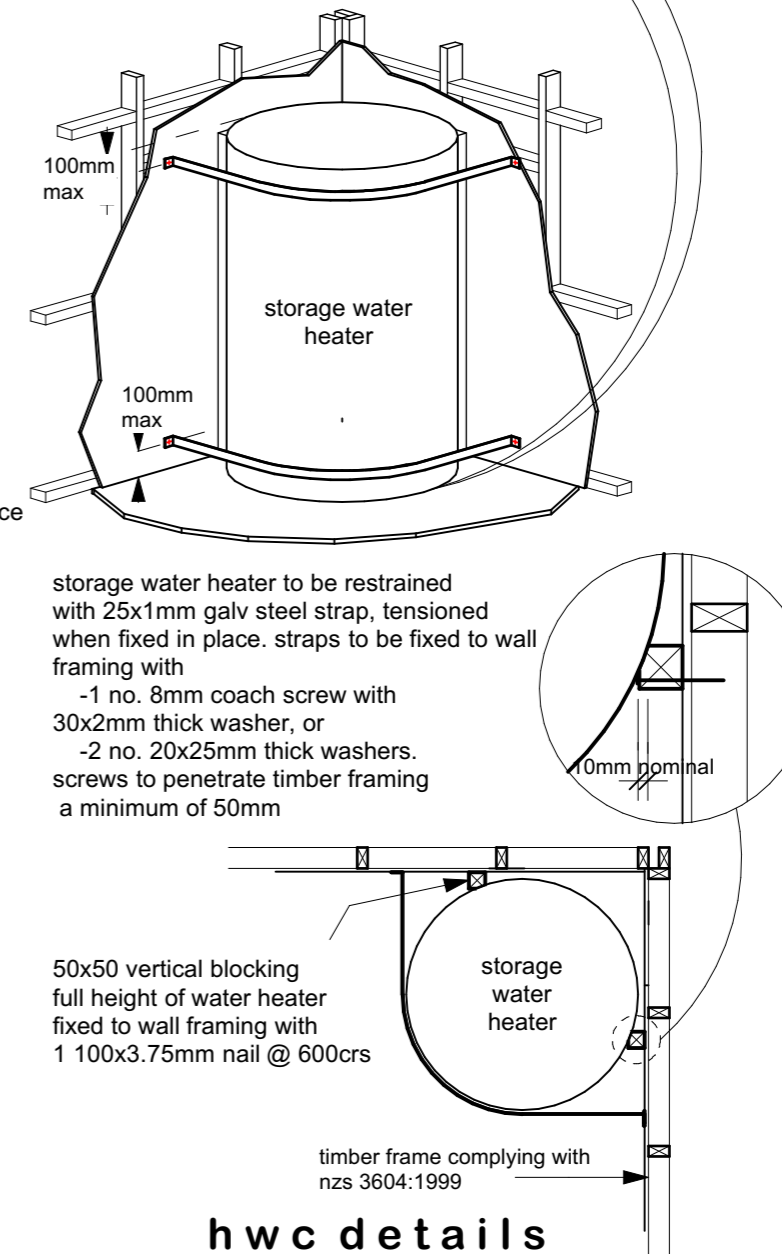
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**Important**  
All cylinders have the potential to leak water. To minimise damage to other areas of your home, for cylinders installed indoors, ensure that your cylinder has been installed with a drip tray—the person doing the installation is responsible for this.

\* Refer to the warranty terms and conditions in this guide for more information.



**mains pressure hwc system (unvented)**  
**G12/AS1 FIG.8**



**hwc details**





**GIB HANDIBRAC® OVERVIEW**

**COMPONENTS**

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

Components per paired pack include:

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

**GIB® BRACING ELEMENTS**

The GIB HandiBrac® is a proprietary product that has been tested and is suitable for use with specified GIB EzyBrace® Systems.

**FIXING TO TIMBER FRAMED FLOORS**

BOWMAC® screw bolt to achieve a characteristic uplift strength of 12kN.

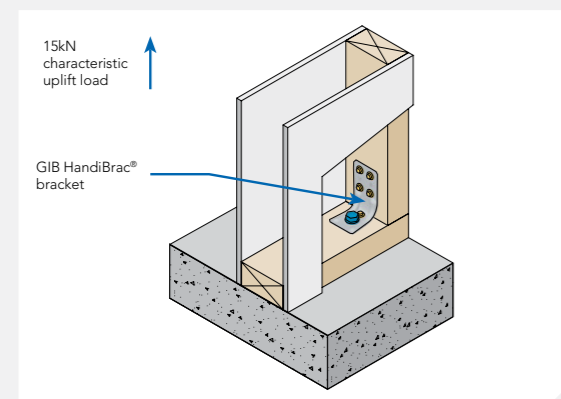
**FIXING TO CONCRETE SLABS**

BOWMAC® screw bolt to achieve a characteristic uplift strength of 15kN.

**PANEL HOLD-DOWN DETAILS**

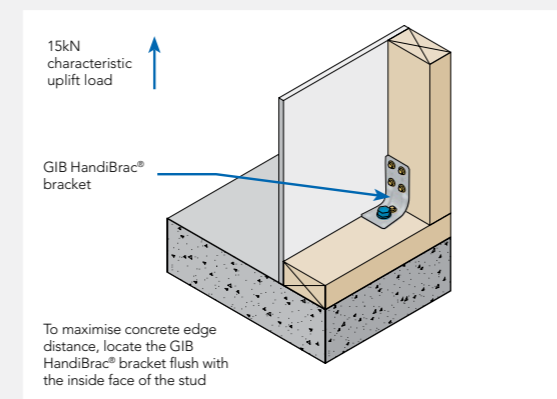
**CONCRETE FLOOR – INTERNAL WALL**

The bottom plate at both ends of the bracing element is fixed using a BOWMAC® screw bolt. For BOWMAC® screw bolt installation see instructions on next page



**CONCRETE FLOOR – EXTERNAL WALL**

The bottom plate at both ends of the bracing element is fixed using a BOWMAC® screw bolt. For BOWMAC® screw bolt installation see instructions on next page.



**GIB HANDIBRAC®**

**TRADEMARKS**

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NZ Registered Design Application #420161

**MANUFACTURER**

GIB HandiBrac® is manufactured and distributed by MiTek New Zealand Ltd.

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**Christchurch Office**

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P O Box 8387, Riccarton, New Zealand  
Ph: 64-3-348 8691, Fax: 64-3-348 0314

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ECOPLY® STRUCTURAL BRACING & CEILING DIAPHRAGMS

**3.3 ECOPLY® BRACING SPECIFICATION - EPI**

**Table 10: Singled Sided Structural Plywood Brace**

Specification No.	Minimum Wall Length	Lining Requirements	BU's/m Wind	BU's/m Earthquake
EPI_0.4	0.4 m	Ecoply one side	80	95
EPI_0.6	0.6 m	Ecoply one side	95	105
EPI_1.2	1.2 m	Ecoply one side	120	135

**Framing**

Wall framing must comply with:

- NZBC B1 - Structure: ASI Clause 3 Timber (NZS 3604)
- NZBC B2 - Durability: ASI Clause 3.2 Timber (NZS 3602)

Framing dimensions and height are as determined by the NZS 3604 stud and top plate tables for load bearing and non load bearing walls. Kiln dried verified structural grade timber must be used. Machine stress graded timber, such as Laserframe® of SGB stress grade minimum, is recommended.

**Bottom plate fixing**

Use GIB Handibrac® hold-down connections at each end of the bracing element. Refer to manufacturer installation instructions supplied with the connectors for correct installation instructions and bolt types to be used for either concrete or timber floors. Within the length of the bracing element, bottom plates are fixed in accordance with the requirements of NZS 3604.

**Lining**

One layer of 7 mm, 9 mm or 12 mm Ecoply plywood fixed directly to framing or over cavity battens. If part sheets are used, ensure nailing at required centres is carried out around the perimeter of each sheet or part sheet. A 2-3 mm expansion gap should be left between sheets.

**Fastening the Ecoply® panels**

Fasten with 50 x 2.8 mm hot dipped galvanised or stainless steel flat head nails for direct fix, or 60 x 2.8 mm over cavity battens. Place fasteners no less than 7 mm or 3 fastener diameters from sheet edges. Screws cannot be used. Power driven nails are suitable. Do not overdrive, nails must be full round head.

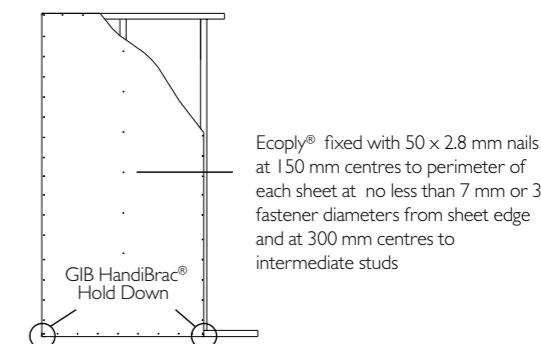
**Fasteners for H3.2 CCA treated Ecoply® panels**

Where fasteners are in contact with H3.2 CCA treated timber or plywood, fasteners shall be a minimum of hot dip galvanised.

In certain circumstances stainless steel fasteners may be required. Refer to Table 8 of the Ecoply Specification and Installation Guide for these circumstances and further fastener selection advice. Where stainless steel nails are required, annular grooved nails must be used.

**Fastening centres**

Fasteners are placed at 150 mm centres around the perimeter of each sheet and 300 mm centres to intermediate studs. Where more than one sheet forms the brace element each sheet must be nailed off independently.



Winstone Wallboards Limited - National Support

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P O Box 12 256, Penrose 1642, Auckland, New Zealand  
Ph: 64-9-633 0100, GIB® Helpline: 0800 100 442

Fax: 64-9-633 0101, Free Fax: 0800 229 222  
Email: info@gib.co.nz  
Web: www.gib.co.nz



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Drawing Title:  
Gib HANDIBRAC

Project address:  
**58 TOHUNGA CRESCENT PARNELL AUCKLAND 1052**

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Client	Kevin Muir	T02
Designer	Slaiman Math	
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SECTION 7 – FLOORS

NZS 3604:2011

7.6 NAILING SCHEDULE FOR TIMBER FLOOR FRAMING

Table 7.5 lists the size, number and location of nails to be used in floor framing. See 2.4.4 for other requirements for nails.

Table 7.5 – Nailing schedule for hand-driven and power-driven nails (see 7.6)

Joint	Hand-driven nails		Power-driven nails	
	Length (mm) x diameter (mm) and type	Number/ Location	Length (mm) x diameter (mm) and type	Number/ Location
<b>Floor framing</b>				
Boundary joist to end of each joist	100 x 3.75	2 (end nailed)	90 x 3.15	2 (end nailed)
Curtailed joist not exceeding 3 m long to trimmer	100 x 3.75	3 (end nailed)	90 x 3.15	5 (end nailed)
Curtailed joist to trimmer when half housed	100 x 3.75	2 (end nailed)	90 x 3.15	3 (end nailed)
Flitched joint in joist	100 x 3.75	4 (each end)	90 x 3.15	6 (each end)
Herringbone strutting to joist	60 x 2.8	2 (skewed)	60 x 2.8	2 (skewed)
Joist to plate on foundation walls	100 x 3.75	12 (skewed) per 1.5 m length	90 x 3.15	18 (skewed) per 1.5 m length
Joist to plate or bearer	100 x 3.75	2 (skewed)	90 x 3.15	3 (skewed)
Lapped joint in joist	100 x 3.75	2 (each side)	90 x 3.15	3 (each side)
Solid blocking between joists to plate bearer or stringer	100 x 3.75	4 (skewed)	90 x 3.15	6 (skewed)
Solid blocking to joist	100 x 3.75 or 75 x 3.15	2 (end nailed) 4 (skewed)	90 x 3.15	2 (end nailed)
<b>Flooring</b>				
Sheet decking (not exceeding 21 mm thick): (a) Supports at sheet edges (b) Intermediate supports	60 x 3.06 ring shanked galv. or 60 x 2.8	150 mm centres	60 x 2.8 ring shanked galv.	150 mm centres
		300 mm centres		300 mm centres
Strip flooring not exceeding 75 mm wide to floor joist	2½ x finished thickness	1	–	1
Strip flooring not exceeding 100 mm wide to floor joist	2½ x finished thickness	2	–	2

NOTE –  
(1) Nail lengths and diameters are the minimum required.  
(2) See 4.4 for required protective coatings for metal fasteners.

SECTION 8 – WALLS

NZS 3604:2011

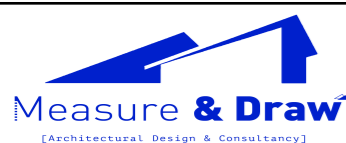
Table 8.19 – Nailing schedule for hand-driven and power-driven nails (see 8.8.6)

Joint	Hand-driven nails		Power-driven nails	
	Length (mm) x diameter (mm) and type	Number/ Location	Length (mm) x diameter (mm) and type	Number/ Location
Bottom plate to floor framing at: (a) External walls and internal wall bracing elements (b) Internal walls (may be nailed to floor decking) (c) Trimmer not exceeding 4.2 m long	100 x 3.75	2 at 600 mm centres	90 x 3.15	3 at 600 mm centres
	100 x 3.75	1 at 600 mm centres	90 x 3.15	1 at 600 mm centres
	100 x 3.75	4 (end nailed)	90 x 3.15	6 (end nailed)
Dwang to stud	75 x 3.15 or 100 x 3.75	2 (skewed) 2 (end nailed)	75 x 3.06 90 x 3.15	2 (skewed) 2 (end nailed)
Fishplate to straightened stud	60 x 2.8	4 each side of cut	60 x 2.8	4 (each side of cut)
Half joint in top plate	75 x 3.15	3	75 x 3.06	4
Lintel to trimming stud	75 x 3.15 or 100 x 3.75	4 (skewed) 2 (end nailed)	90 x 3.15	3 (end nailed)
Ribbon board to stud	100 x 3.75	2	90 x 3.15	3
Sill or header trimmer to trimming stud for: (a) Trimmer not exceeding 2.4 m long (b) Trimmer not exceeding 3.0 m long (c) Trimmers not exceeding 3.6 m long	100 x 3.75	2 (end nailed)	90 x 3.15	3 (end nailed)
	100 x 3.75	3 (end nailed)	90 x 3.15	5 (end nailed)
	100 x 3.75	4 (end nailed)	90 x 3.15	6 (end nailed)
Solid plaster batten to stud	60 x 2.8 (galv.)	500 mm centres	60 x 2.8 (galv.)	500 mm centres
Stud to plate	75 x 3.15 or 100 x 3.75	4 (skewed) 2 (end nailed)	75 x 3.06 90 x 3.15	4 (skewed) 3 (end nailed)
Top plate 140 mm x 35 mm to 90 mm x 45 mm and top plate to lintel	100 x 3.75	2 at 500 mm centres	90 x 3.15	3 at 500 mm centres
Trimming studs at openings, blocking and studs at wall intersections	100 x 3.75	600 mm centres	90 x 3.15	600 mm centres
Trimming stud to doubled stud immediately under lintel	100 x 3.75	2	90 x 3.15	2
Waling to stud	60 x 2.8	2	60 x 2.8	2

NOTE –  
(1) Nail lengths and diameters are the minimum required.  
(2) Refer to 4.4 for required protective coatings for metal fasteners.  
(3) For studs up to 2.7 in length, 2 / 90 x 3.15 power-driven nails (end nailed) are sufficient.

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Drawing Title:  
NAILLING SCHEDULE

Project address:  
58 TOHUNGA CRESCENT PARNELL AUCKLAND 1052

Job No.	927	Sheet No.
Date	3/20/2023	
Client	Kevin Muir	T03
Designer	Slaiman Math	
Scale	1:5	Rev:



10/20

# LINTEL FIXING SCHEDULE

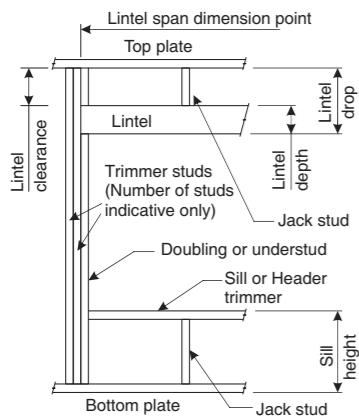
## ALTERNATIVE TO TABLE 8.14 & FIGURE 8.12

### 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 Wind Zone				Heavy Roof Wind Zone			
	L	M	H	VH	L	M	H	VH
8.6 m <sup>2</sup>	G	G	H	H	G	G	H	H
11.6 m <sup>2</sup>	G	H	H	H	G	G	H	H
12.1 m <sup>2</sup>	G	H	H	H	G	H	H	H
15.3 m <sup>2</sup>	H	H	-	-	G	H	H	-
19.1 m <sup>2</sup>	H	-	-	-	G	H	-	-
20.9 m <sup>2</sup>	H	-	-	-	H	H	-	-
21.8 m <sup>2</sup>	H	-	-	-	H	-	-	-
34.3 m <sup>2</sup>	-	-	-	-	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 Wind Zone				Heavy Roof Wind Zone			
		L	M	H	VH	L	M	H	VH
		0.7	2.0	E	E	E	F	E	E
	3.0	E	E	E	F	E	E	E	F
	4.0	E	E	F	F	E	E	F	F
	5.0	E	F	F	F	E	E	F	F
	6.0	E	F	F	G	E	E	F	G
0.9	2.0	E	E	E	F	E	E	E	F
	3.0	E	E	F	F	E	E	F	F
	4.0	E	F	F	F	E	E	F	F
	5.0	E	F	F	G	E	E	F	F
	6.0	E	F	F	G	E	E	F	G
1.0	2.0	E	E	E	F	E	E	E	F
	3.0	E	E	F	F	E	E	F	F
	4.0	E	F	F	F	E	E	F	F
	5.0	E	F	F	G	E	E	F	F
	6.0	E	F	F	G	E	E	F	G
1.2	2.0	E	E	F	F	E	E	F	F
	3.0	E	F	F	F	E	E	F	F
	4.0	E	F	F	G	E	E	F	F
	5.0	E	F	F	G	E	E	F	G
	6.0	E	F	F	G	E	E	F	G
1.5	2.0	E	F	F	F	E	E	F	F
	3.0	E	F	F	G	E	E	F	F
	4.0	F	F	G	H	E	E	F	G
	5.0	F	F	G	H	E	E	F	G
	6.0	F	F	G	H	E	E	F	G
2.0	2.0	E	F	F	F	E	E	F	F
	3.0	E	F	F	G	E	E	F	F
	4.0	F	F	G	H	E	E	F	G
	5.0	F	F	G	H	E	E	F	G
	6.0	F	F	G	H	E	E	F	G
2.4	2.0	E	F	F	G	E	E	F	G
	3.0	F	F	G	H	E	E	F	G
	4.0	F	F	G	H	E	E	F	G
	5.0	F	F	G	H	E	E	F	G
	6.0	F	F	G	H	E	E	F	G
3.0	2.0	E	F	F	G	E	E	F	G
	3.0	F	F	G	H	E	E	F	G
	4.0	F	F	G	H	E	E	F	G
	5.0	F	F	G	H	E	E	F	G
	6.0	F	F	G	H	E	E	F	G
3.6	2.0	F	F	G	H	E	E	F	G
	3.0	F	F	G	H	E	E	F	G
	4.0	F	F	G	H	E	E	F	G
	5.0	F	F	G	H	E	E	F	G
	6.0	F	F	G	H	E	E	F	G
4.2	2.0	F	F	G	H	E	E	F	G
	3.0	F	F	G	H	E	E	F	G
	4.0	F	F	G	H	E	E	F	G
	5.0	F	F	G	H	E	E	F	G
	6.0	F	F	G	H	E	E	F	G
4.5	2.0	F	F	G	H	E	E	F	G
	3.0	F	F	G	H	E	E	F	G
	3.4	F	F	G	H	E	E	F	G
	4.0	F	F	G	H	E	E	F	G
	5.0	F	F	G	H	E	E	F	G
	6.0	F	F	G	H	E	E	F	G
4.8	2.0	F	F	G	H	E	E	F	G
	3.0	F	F	G	H	E	E	F	G
	3.2	F	F	G	H	E	E	F	G
	4.0	F	F	G	H	E	E	F	G
	5.0	F	F	G	H	E	E	F	G
	6.0	F	F	G	H	E	E	F	G

**LINTEL FIXING OPTIONS**

**TYPE E**  
1.4 kN

For fixing of jack studs to lintel & top plate, refer to Stud to Top Plate Fixing Schedule.

**TYPE F**  
4.0 kN

For fixing of jack studs to lintel & top plate, refer to Stud to Top Plate Fixing Schedule.

**TYPE G**  
7.5 kN

For fixing of jack studs to lintel & top plate, refer to Stud to Top Plate Fixing Schedule.

**TYPE H**  
13.5 kN

For fixing of jack studs to lintel & top plate, refer to Stud to Top Plate Fixing Schedule.

**FIXING SELECTION CHART**

(Suitable for walls supporting roof members at 600, 900 or 1200mm crs.)

Wind Zones L, M, H, VH, EH, as per NZS 3604:2011

Loaded Dimension (m) Stud Centres	Light Roof Wind Zone					Heavy Roof Wind Zone				
	L	M	H	VH	EH	L	M	H	VH	EH
300mm	A	A	B	B	B	A	A	B	B	B
3.0	A	A	B	B	B	A	A	B	B	B
4.0	A	A	B	B	B	A	A	B	B	B
5.0	A	B	B	B	B	A	A	B	B	B
6.0	A	B	B	B	B	A	A	B	B	B
7.0	A	B	B	B	B	A	A	B	B	B
8.0	A	B	B	B	B	A	A	B	B	B
9.0	B	B	B	B	B	A	A	B	B	B
10.0	B	B	B	B	B	A	A	B	B	B
11.0	B	B	B	B	B	A	A	B	B	B
12.0	B	B	B	B	B	A	A	B	B	B

**FIXING OPTIONS**

**FIXING TYPE A**  
0.7 kN

**FIXING TYPE B**  
4.7 kN

CHOOSE ANY OF THE 3 OPTIONS BELOW

Recommended for internal wall options to avoid lining issues

**Note:**  
To calculate the number of B type fixings required, divide the wall length by the stud centres, add 1 to this figure and locate this number of fixings as evenly as possible along the wall length. This figure includes the start and end studs in each wall length.

8 WALLS



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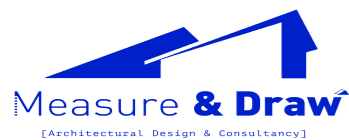
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Drawing Title:  
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Client	Kevin Muir	T04
Designer	Slaiman Math	
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