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All dimensions are to be checked and confirmed prior to any construction
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Sheryl Hockey
Lot 17
Belfast Development
Belfast, Christchurch

Job Number:
141537
Original Plan:
Silvereye 146
Sheet Name:
COVER PAGE
Sales: D Ryan Drawn: M Glynn QS: S Liu Print Date: 10/11/2021 Scale: @ A3

CONSENT PLANS

No.	Date:	Reason:
1	10-11-2021	Initial Consent Plans

Sheet No.:
1

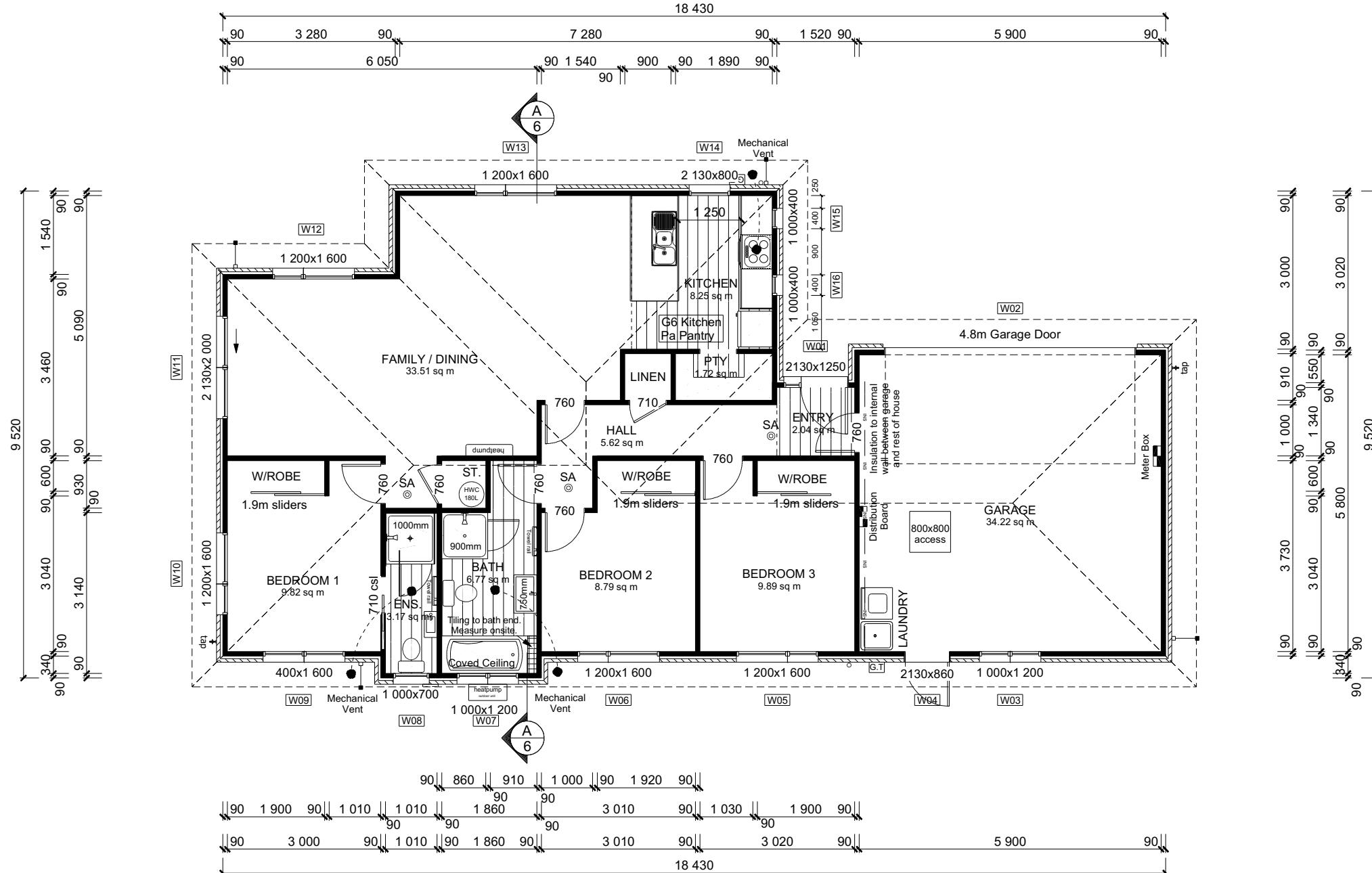
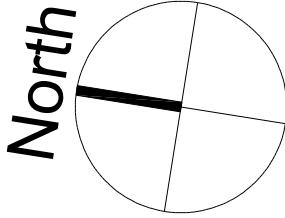
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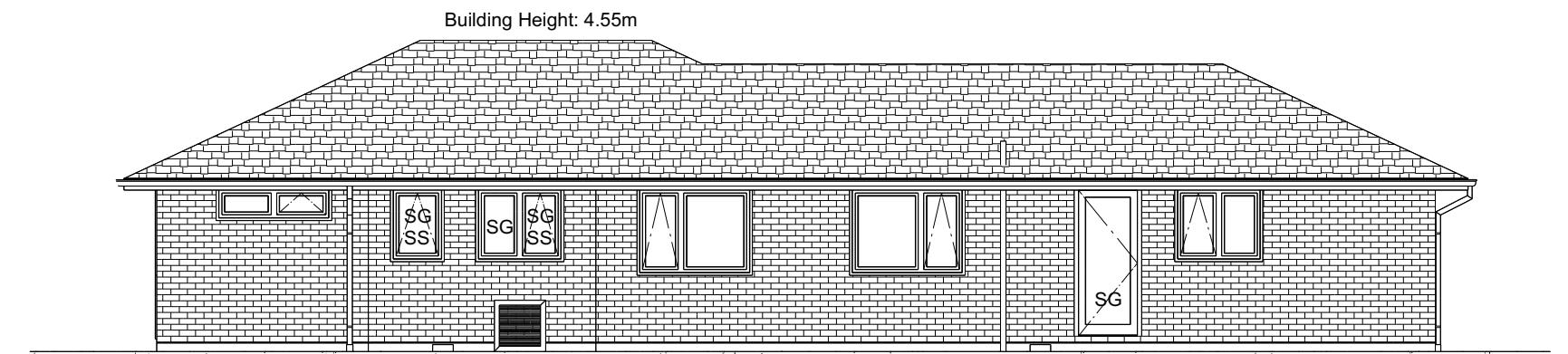
ROOF & WALL CLADDINGS
Roof: 25° Pressed Metal Tiles
Walls: 70 Series Brick Veneer
with a 50mm cavity

ELEVATION LEGEND
SS Safety Stays
SG Safety Glass
MB Meter Box
TV Terminal Vent

ELEVATION NOTES
Gutter: Coloured Steel Quad Gutter
Fascia: Coloured Steel 185 Fascia
Downpipes: Colorsteel Rectangular 75x55mm
Soffits: Hardiflex 4.5mm
Joinery: Double glazed aluminum

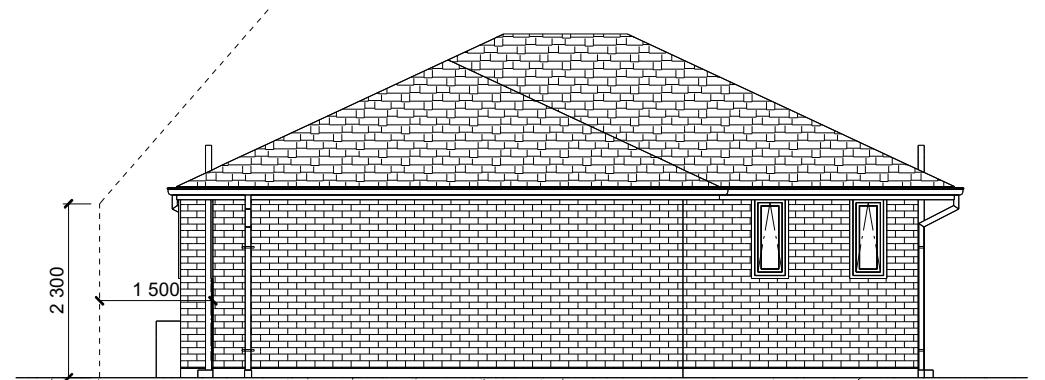
All egress points to have a maximum step down of 190mm.
Access routes to have slip resistance surface in compliance with NZBC D1/AS1 Table 2 and to have a 1:100 fall away from the building

BUILDING ENVELOPE RISK MATRIX		
ELEVATION A		
RISK CRITERIA	RISK	SCORE
Wind Zone	High	1
Number of Stories	Low	0
Roof Wall Junction	Low	0
Eaves Width	High	2
Building Envelope	Low	0
Decks & Balconies	Low	0
Total		3



ELEVATION A

BUILDING ENVELOPE RISK MATRIX		
ELEVATION B		
RISK CRITERIA	RISK	SCORE
Wind Zone	High	1
Number of Stories	Low	0
Roof Wall Junction	Low	0
Eaves Width	Medium	1
Building Envelope	Low	0
Decks & Balconies	Low	0
Total		2



ELEVATION B

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Belfast, Christchurch

Job Number:
141537

Original Plan:
Silvereye 146

Sheet Name:
ELEVATIONS

Sales: **D Ryan** Drawn: **M Glynn** QS: **S Liu** Print Date: **10/11/2021** Scale: **1:100 @ A3**

CONSENT PLANS

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4

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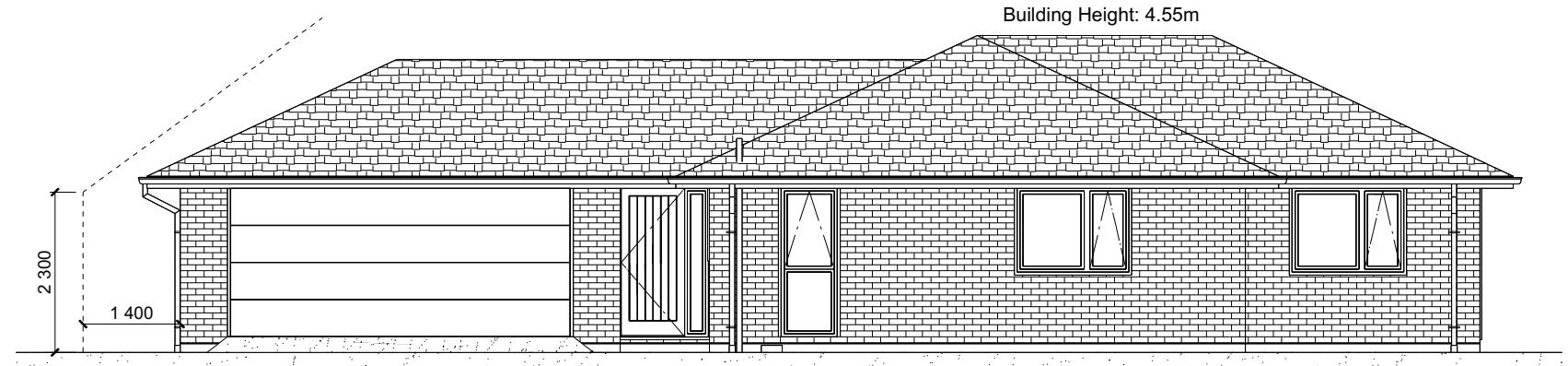
ROOF & WALL CLADDINGS
Roof : 25° Pressed Metal Tiles
Walls : 70 Series Brick Veneer
with a 50mm cavity

ELEVATION LEGEND
SS Safety Stays
SG Safety Glass
MB Meter Box
TV Terminal Vent

ELEVATION NOTES
Gutter : Coloured Steel Quad Gutter
Fascia : Coloured Steel 185 Fascia
Downpipes : Colorsteel Rectangular 75x55mm
Soffits : Hardiflex 4.5mm
Joinery : Double glazed aluminum

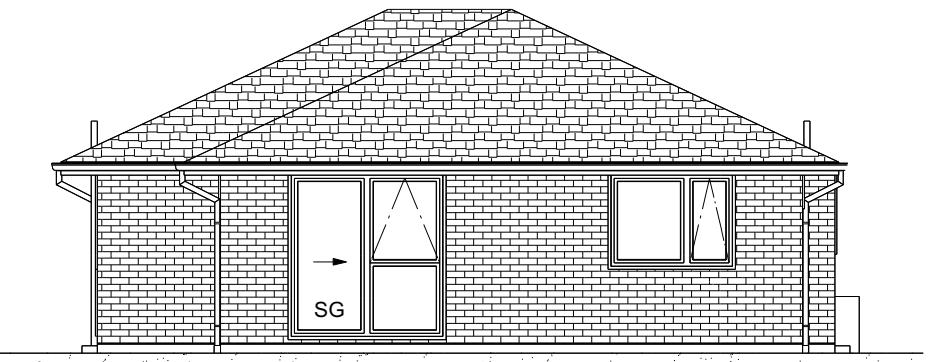
All egress points to have a maximum step down of 190mm.
Access routes to have slip resistance surface in compliance with NZBC D1/AS1 Table 2 and to have a 1:100 fall away from the building

BUILDING ENVELOPE RISK MATRIX		
ELEVATION C		
RISK CRITERIA	RISK	SCORE
Wind Zone	High	1
Number of Stories	Low	0
Roof Wall Junction	Low	0
Eaves Width	Medium	1
Building Envelope	Low	0
Decks & Balconies	Low	0
Total		2



ELEVATION C

BUILDING ENVELOPE RISK MATRIX		
ELEVATION D		
RISK CRITERIA	RISK	SCORE
Wind Zone	High	1
Number of Stories	Low	0
Roof Wall Junction	Low	0
Eaves Width	Medium	1
Building Envelope	Low	0
Decks & Balconies	Low	0
Total		2



ELEVATION D

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Belfast, Christchurch

Job Number:
141537

Original Plan:
Silvereye 146

Sheet Name:
ELEVATIONS

Sales: **D Ryan** Drawn: **M Glynn** QS: **S Liu** Print Date: **10/11/2021** Scale: **1:100 @ A3**

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ROOF & WALL CLADDINGS

Roof : 25° Pressed Metal Tiles
Walls : 70 Series Brick Veneer
with a 50mm cavity

CROSS SECTION NOTES

Building wrap is to comply with E2/AS1 & NZS 3604:2011.

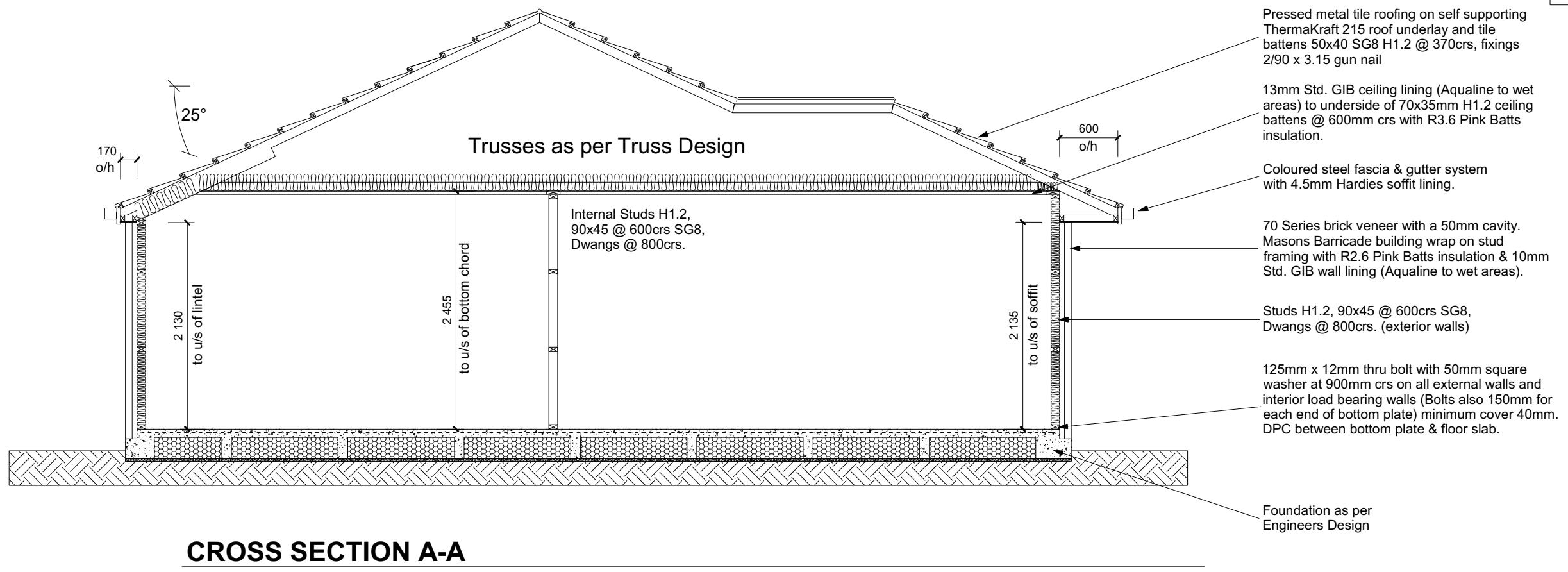
Flashing materials must be selected based on environmental exposure. Refer to NZS 3604:2011 & table 20 of E2/AS1.

Flashing tape must have proven compatibility with the selected wrap & other materials with which it comes into contact as per table 21 of E2/AS1.

Fixings shall comply with NZS 3604:2011 Section 4 Durability Tables 4.1-4.3

Unless stated otherwise, timber members on drawings are to be a minimum of SG8 strength graded as per NZS3604:2011.

INSULATION
Ceiling: Pink Batts R3.6 Ceiling Batts
Wall: Pink Batts R 2.6 Wall Batts



CROSS SECTION A-A

DRAWING NOTES

Verify all dimensions, sizes and levels on site prior to commencing any work. Any discrepancies are to be confirmed with Signature Homes Ltd.

Refer to attached Specifications for further information.

All work is to comply with the NZBC Acceptable Solutions, NZS 3604:2011 and Local Authority bylaws.

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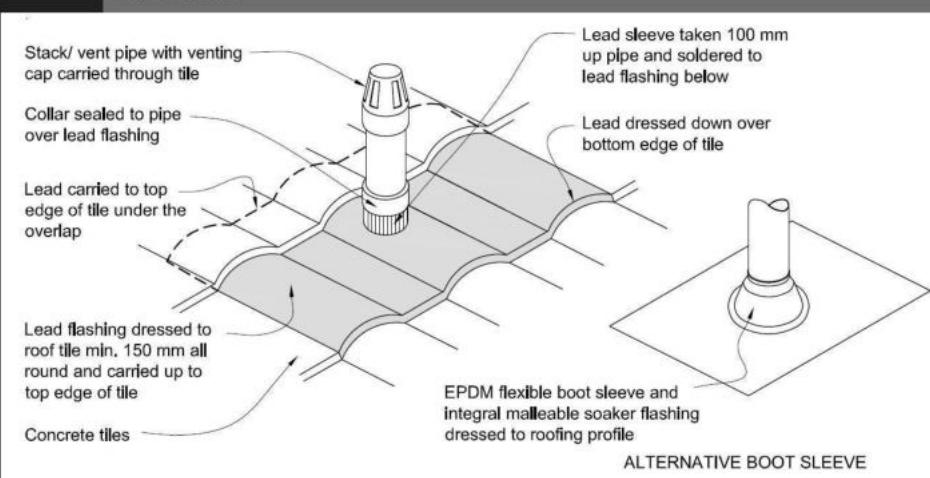
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Belfast Development
Belfast, Christchurch**

Job Number:	Original Plan:		Sheet Name:	
141537	<i>Silvereye 146</i>		CROSS SECTIONS	
Sales: D Ryan	Drawn: M Glunn	QS: S Liu	Print Date: 10/11/2021	Scale: 1-50

Figure 29: Pipe penetration for masonry tile
Paragraph 8.2.7

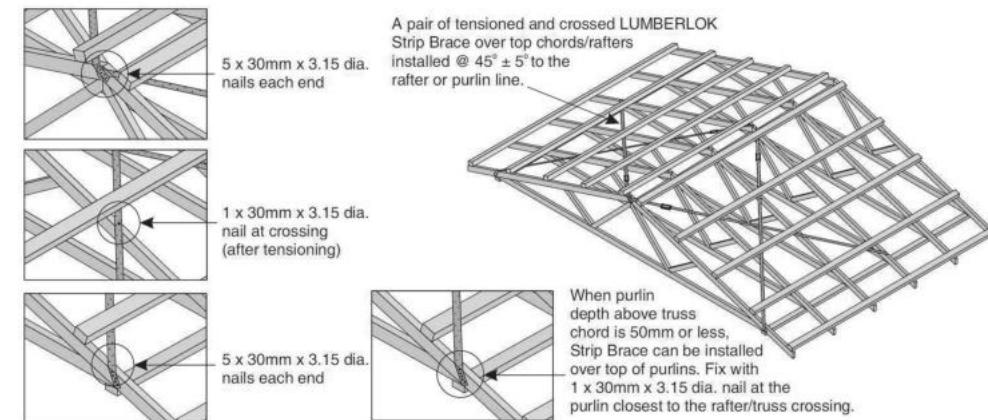


Metal Tile Penetration Detail
Scale NTS

8.3.10 Roof penetrations

Pipe penetrations shall be flashed using *EPDM flashings* similar to that shown for masonry tiles, Figure 29.

- A pair of tensioned and crossed LUMBERLOK Strip Brace running continuously from ridge to top plate installed as detailed below.



ROOF CLADDING
Roofing : 25° Pressed Metal Tiles
Tile Battens : 50x40 SG8 H1.2 @ 370crs, fixings 2/90 x 3.15 gun nail

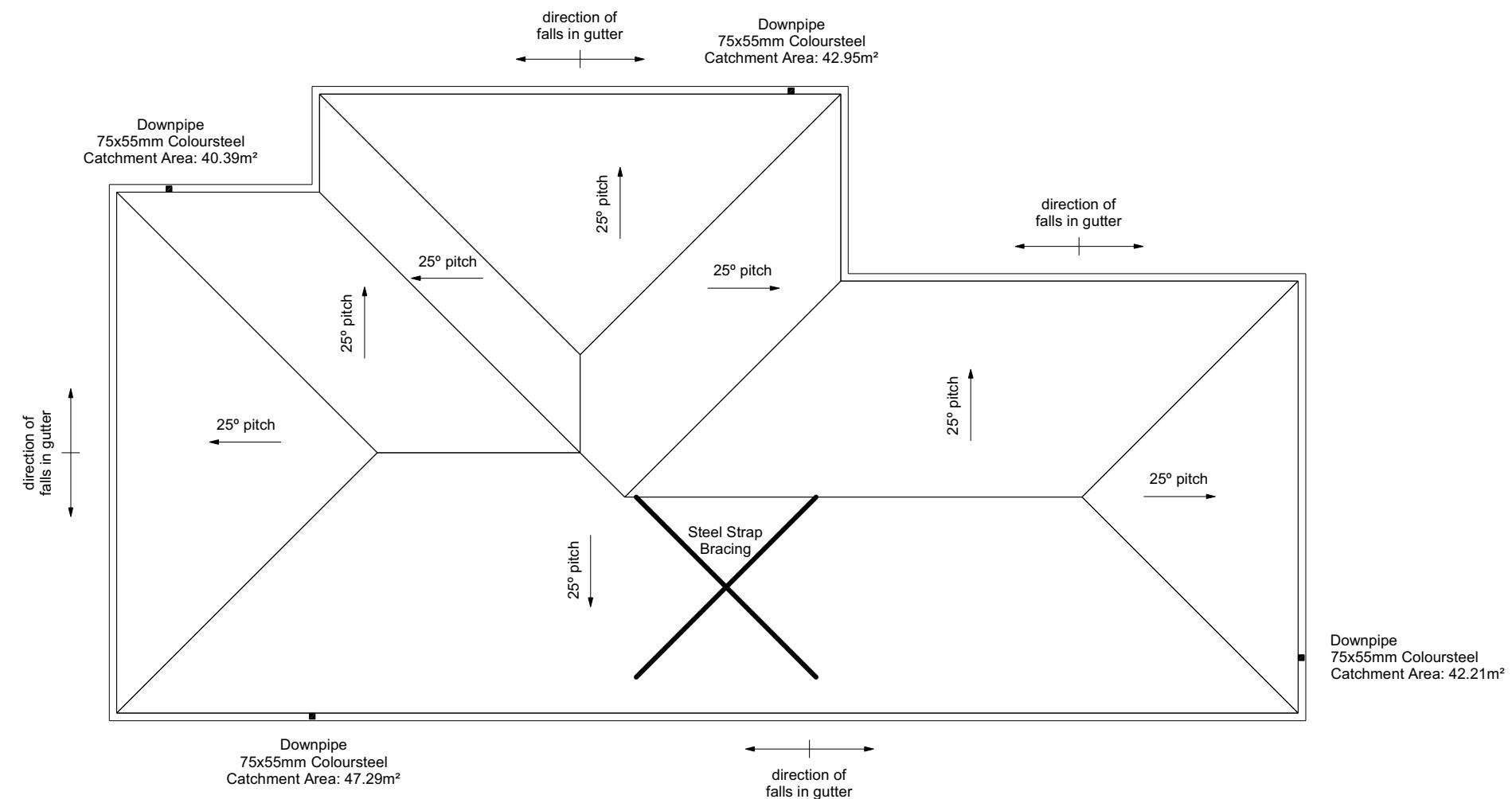
ROOF PLAN NOTES
Gutter: Coloured Steel Quad Gutter
Fascia: Coloured Steel 185 Fascia
Downpipes: Colorsteel Rectangular 75x55mm
Soffits: Hardiflex 4.5mm

Underlay: Thermakraft 215 roof underlay

Downpipes: 75x55 Rectangle Colorsteel
As per NZBC E1/AS1 Table 5 75x55 down pipes can collect up to 60m² of 0-25° roof plan area.

Use Coloured steel Quad Gutter
As per NZ Metal Roof and Wall Cladding Code of Practice Version 2 section 8 the above gutter with a cross sectional area of 5550mm² can collect up to 60m² of 0-25° roof plan area. Refer to the specifications for exact calculations.

Use Lumberlock top plate fixing chart attached to the main specifications to determine top plate fixings.



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Belfast, Christchurch

Job Number:
141537

Original Plan:
Silvereye 146

Sheet Name:
ROOF PLAN

Sales: D Ryan Drawn: M Glynn QS: S Liu Print Date: 10/11/2021 Scale: 1:100 @ A3

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1	10-11-2021	Initial Consent Plans

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MEADOW VIEW DRIVE

SET OUT PLAN NOTES
 All dimensions over foundation face. Allow (120mm rebate) 70mm veneer & 50mm cavity, Brick to overhang foundation face by 0-20mm max as per NZBC E2/AS1.
 All reinforcing is to be Ductility Class E, in accordance with NZS 4671.
 All concrete to comply with NZS3604:2011 Section 4 Durability Clause 4.5.2.

These foundations are design to the findings and recommendations in the site specific Geotech report.

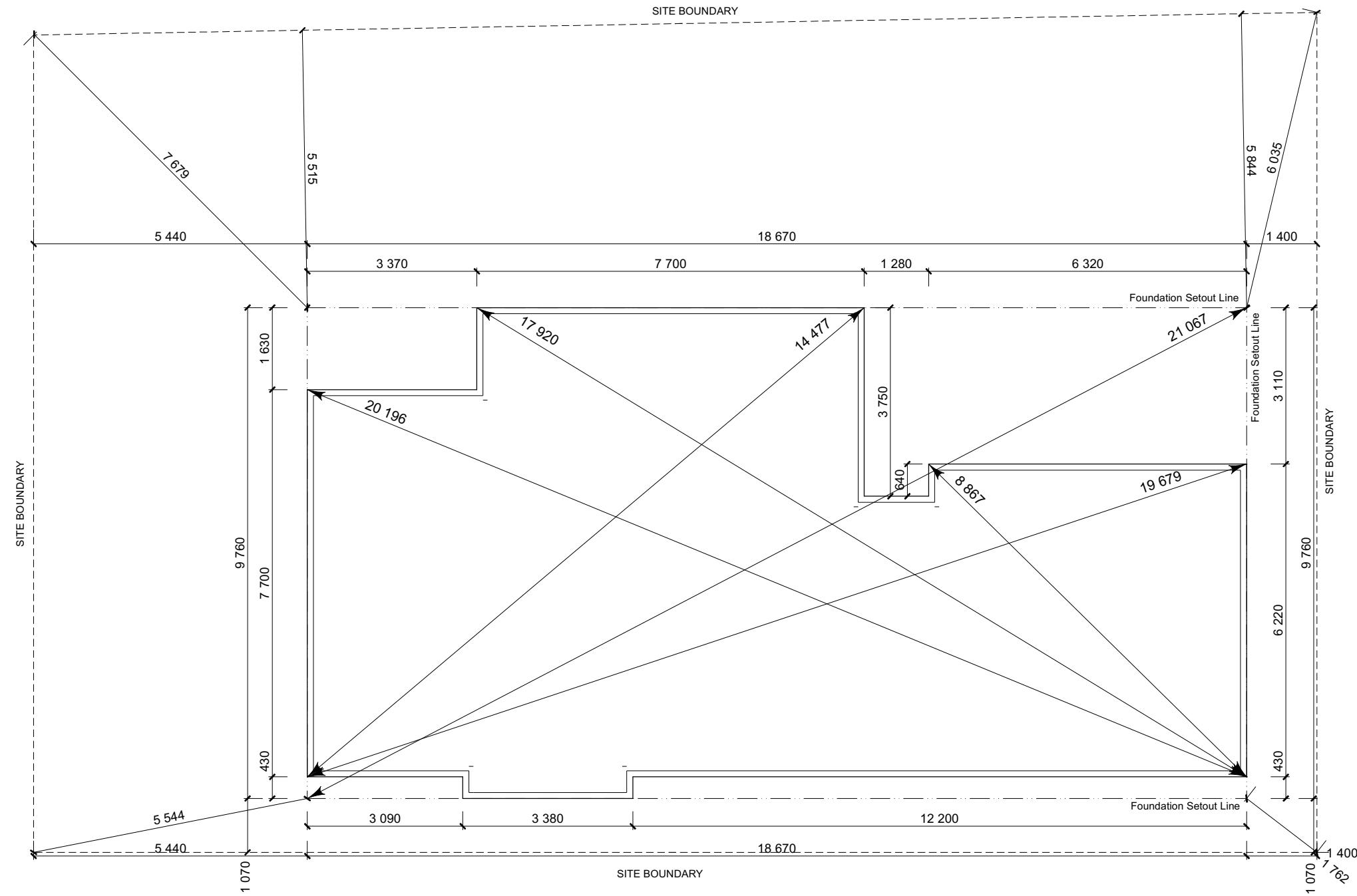


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R . O . W



RESERVE

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Sheryl Hockey
 Lot 17
 Belfast Development
 Belfast, Christchurch

Job Number:
141537
 Original Plan:
Silvereye 146
 Sheet Name:
SETOUT DIMENSIONS
 Sales: D Ryan Drawn: M Glynn QS: S Liu Print Date: 10/11/2021 Scale: 1:100 @ A3

CONSENT PLANS

Sheet No.:
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 of 21 sheets

FOUNDATION PLAN NOTES

All dimensions over foundation face. Allow (120mm rebate) 70mm veneer & 50mm cavity, Brick to overhang foundation face by 0-20mm max as per NZBC E2/AS1. W/C location indicated on plan has assumed a 140mm offset from internal frame line, please consult manufacturer's documentation to confirm offset.

Contractor to consult manufacturer's documentation to determine the correct location for all wastes positioned through floor slabs.

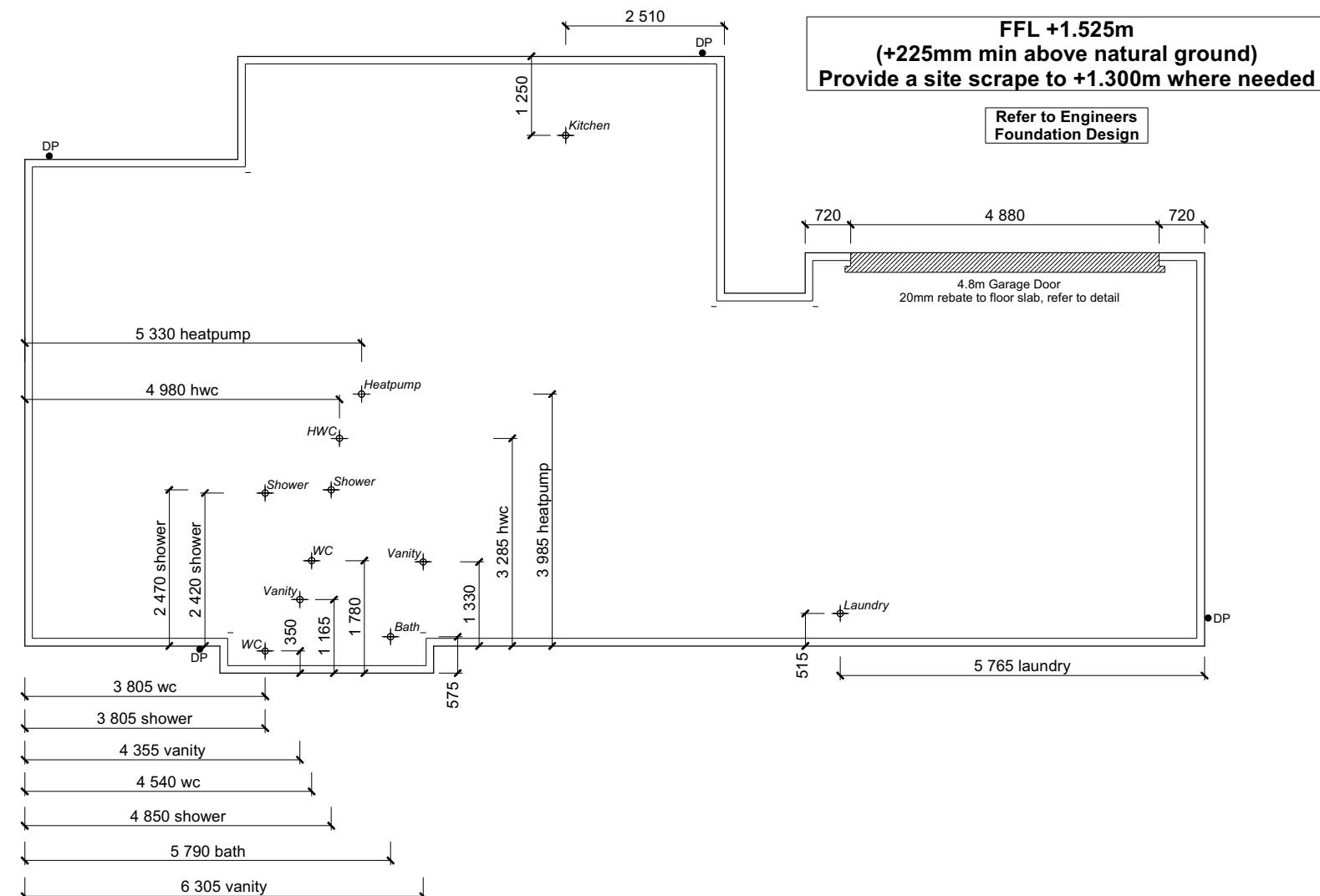
Earth bar to be bonded to the reinforcing mesh

Refer to Truss design for exact location of slab thickenings

All reinforcing is to be Ductility Class E, in accordance with NZS 4671.

All concrete to comply with NZS3604:2011 Section 4 Durability Clause 4.5.2.

These foundations are design to the findings and recommendations in the site specific Geotech report.



Christchurch City Council BCN/2022/2262
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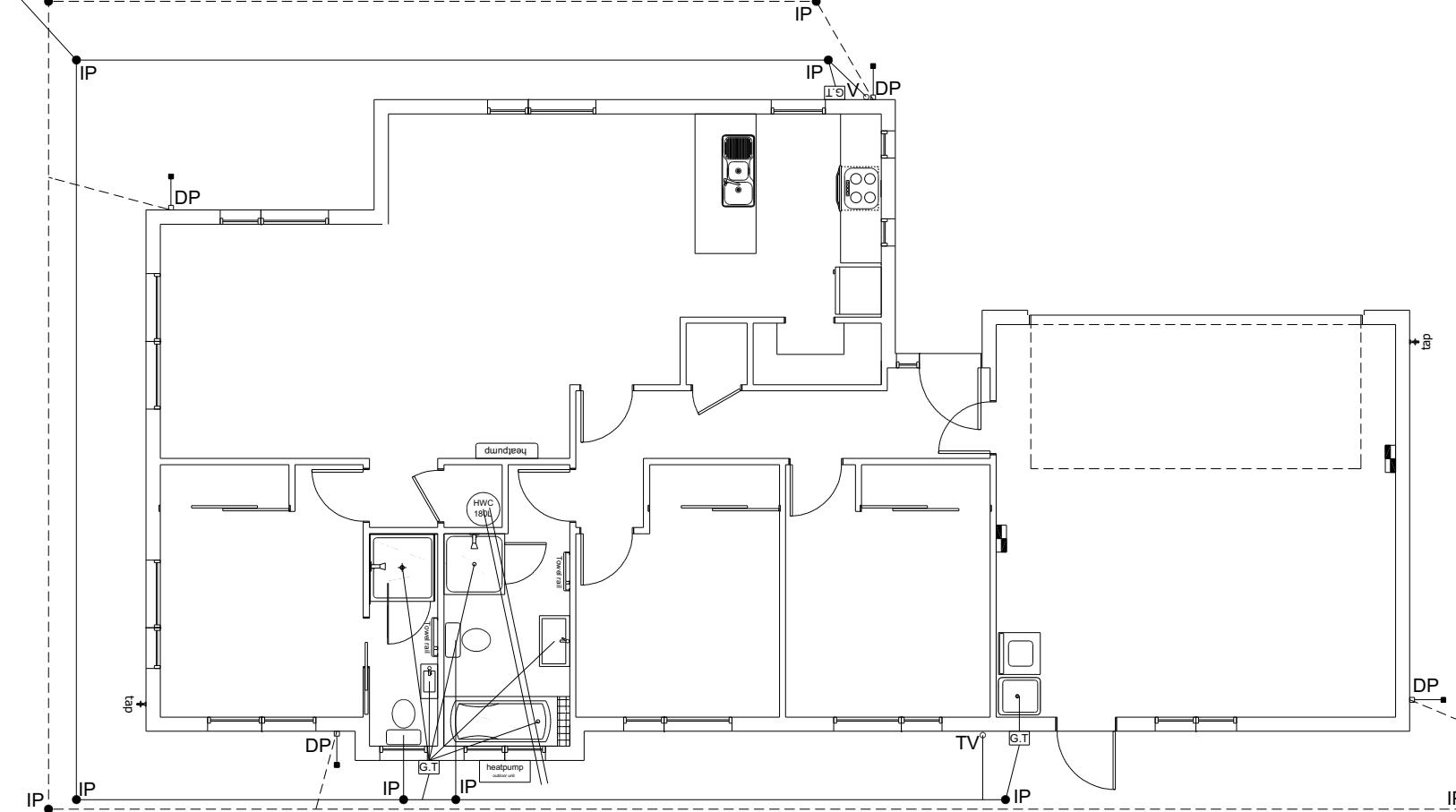
Sheryl Hockey
Lot 17
Belfast Development
Belfast, Christchurch

Job Number:
141537
Original Plan:
Silvereye 146
Sheet Name:
FOUNDATION PLAN
Sales: D Ryan Drawn: M Glynn QS: S Liu Print Date: 10/11/2021 Scale: 1:100 @ A3

CONSENT PLANS

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Connection locations for
Sewer & Stormwater drains
are to be confirmed onsite

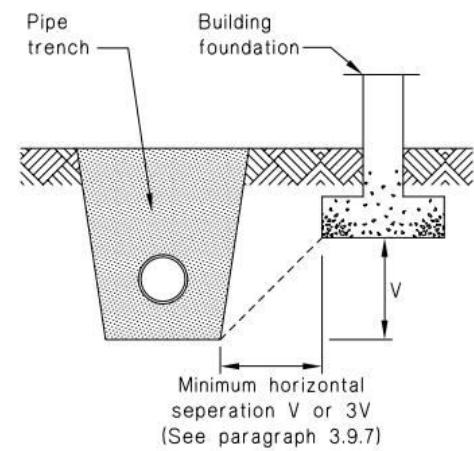


Plumbing Schedule	NZBC G13
Kitchen	
Sink:	Ø50mm @ 1:40 (3 discharge units)
Bathrooms	
Vanity:	Ø40mm @ 1:40 (1 discharge units per basin)
Shower:	Ø40mm @ 1:40 (2 discharge units)
Bath:	Ø40mm @ 1:40 (4 discharge units)
WC:	Ø100mm @ 1:40 (4 discharge units)
Laundry Sink:	Ø40mm @ 1:30 (5 discharge units)
Drainage Schedule	NZBC G13
Main Foulwater	
Vented Drain	Ø100mm @ 1:60
Stormwater Drain	Ø100mm @ 1:60 (1:120max)
Terminal Vent	Ø80mm
Vent	Ø50mm
Heatpump	Drain over GT
ORG	Overflow Relief Gully
Hot water Cylinder	min 20mm Drain over GT
Notes:	
	All plumbing and drainage to comply with NZBC G13.
	ORG to be positioned so the top of gully dish is no less than 150mm below overflow level of lowest fixture.
	Sewer & Stormwater to connect to existing connections.
	All drains passing through concrete, provide sleeve or wrap in durable and flexible to allow for expansion and contraction. (as per G13/AS2 5.8.1)
	HWC: Safe tray to HWC with 50mm overflow drain to exterior to comply with G12/AS1.

DRAINAGE LEGEND	
-----	Stormwater DN100mm uPVC
—	Sewer Drain DN100mm uPVC
DP	Downpipe
GT	Gully Trap
ORG	Overflow Relief Gully
TV	Terminal Vent
AAV	Air Admittance Valve
IP	Inspection Point

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Figure 14: Relationship of Pipe Trench to Building Foundation
Paragraph 3.9.7



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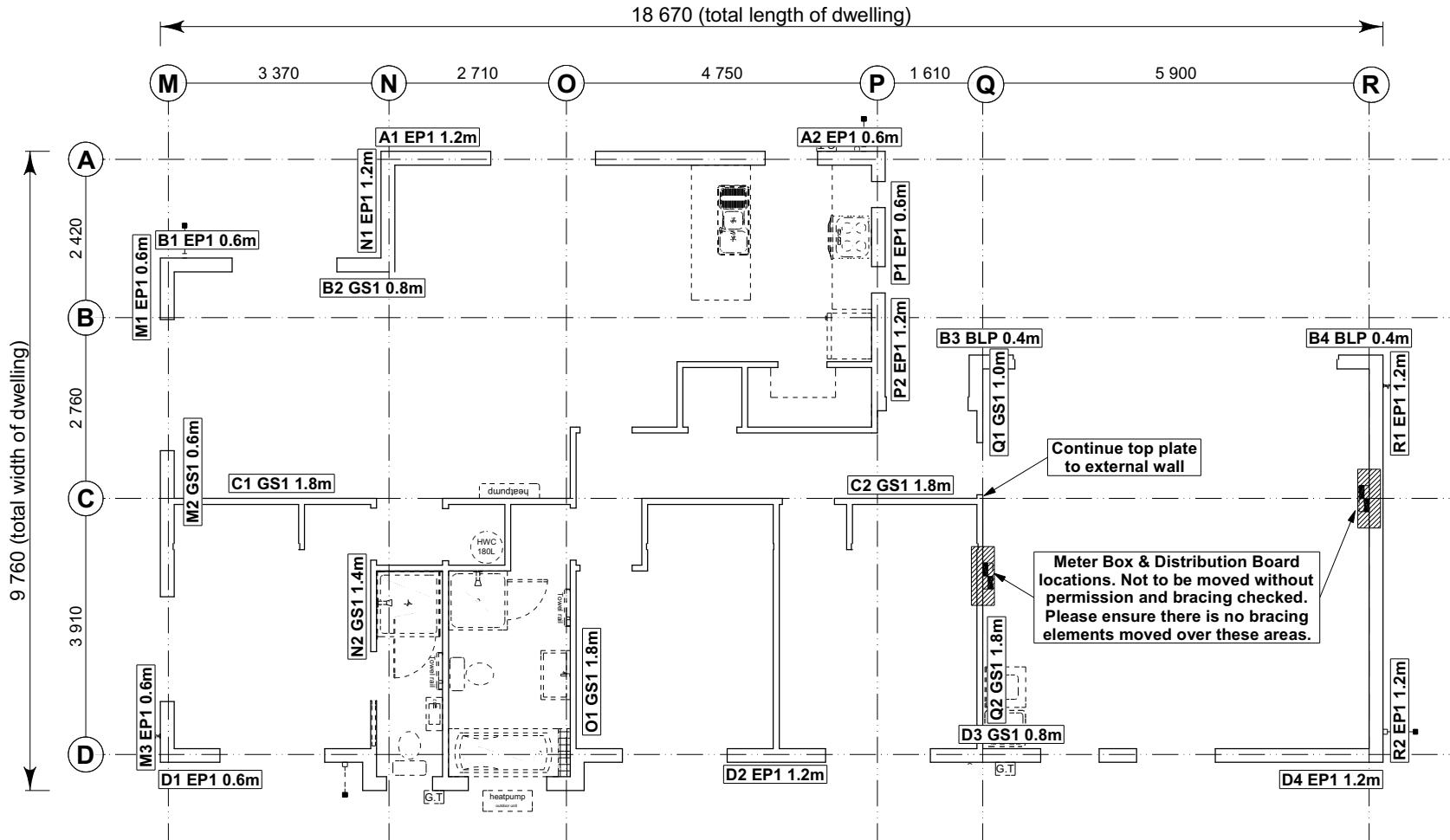
Sheet Name:
DRAINAGE PLAN

Sales: D Ryan	Drawn: M Glynn	QS: S Liu	Print Date: 10/11/2021	Scale: 1:100 @ A3
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1	10-11-2021	Initial Consent Plans

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BRACING PLAN NOTES
Wall bracing designed in accordance with NZS 3604:2011 & GIB Ezybrace system
Refer to attached calculations.

Bracing Designed to:
Wind: High
Earthquake: 2

8.7.3.4
Each wall that contains one or more wall bracing elements shall be connected at the top plate level, either directly, or through a framing member in the line of the wall, to external walls at right angles to it. Top plate fixings(s) of the capacity in tension or compression along the line of the wall bracing element are given as follows:

- For each wall containing wall bracing elements with a total bracing capacity of not more than 125 bracing units: to at least one such external wall by a fixing as shown in figure 8.16 of 6 kN capacity;
- For each wall containing wall bracing elements with a total bracing capacity of not more than 250 bracing units: to at least 2 external walls by fixings as shown in figure 8.16 each of 6 kN capacity;
- For each wall containing wall bracing elements with a total bracing capacity of more than 250 bracing units: to at least 2 external walls by fixings as shown in figure 8.16 each having a rating of not less than 2.4 kN per 100 bracing units.

BRACING LEGEND			
A	Brace Line Label	M	Brace Length
1.2m	Brace Type	EP1	Brace Number
B1	EP1 0.6m	C1	GS1 1.8m
C2	GS1 1.8m	D1	EP1 0.6m
D2	EP1 1.2m	D3	GS1 0.8m
D4	EP1 1.2m	R1	EP1 1.2m
R2	EP1 1.2m		

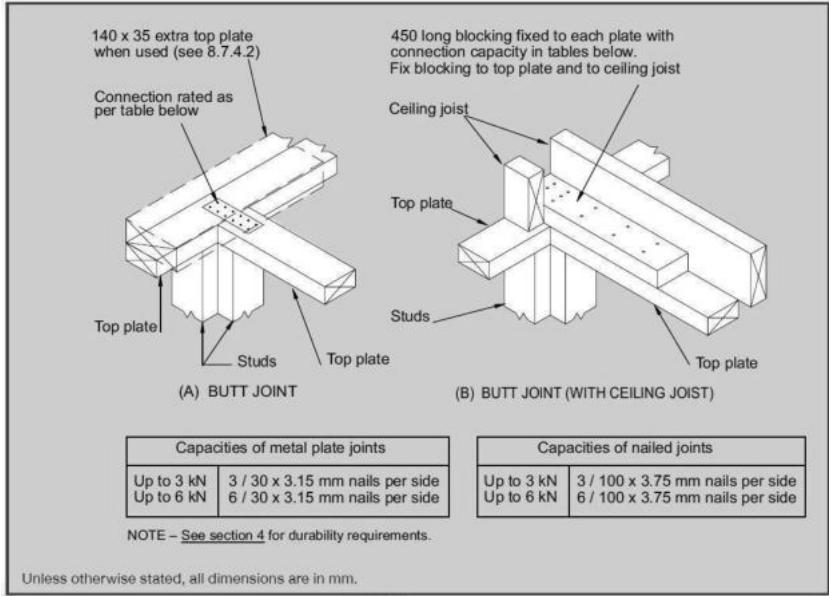


Figure 8.16 – Connecting top plates to external walls at right angles – Walls containing bracing (see 8.7.3.4)

Single Level Along Resistance Sheet

Job Name: Sheryl Hockey

Line	Element	Length (m)	Angle (degrees)	Stud Ht. (m)	Type	Supplier	Wind		EQ	
							Demand		Achieved	
							474	878	1046	1093
A	1	1.20		2.4	EP1 1.2	Ecopy®	144	162		
	2	0.60		2.4	EP1 0.6	Ecopy®	57	63		
							201 OK	225 OK		
B	1	0.60		2.4	EP1 0.6	Ecopy®	57	63		
	2	0.80		2.4	GS1-N	GIB®	49	47		
	3	0.40		2.4	BLP-H	GIB®	48	54		
	4	0.40		2.4	BLP-H	GIB®	48	54		
							203 OK	218 OK		
C	1	1.80		2.4	GS1-N	GIB®	124	108		
	2	1.80		2.4	GS1-N	GIB®	124	108		
							248 OK	216 OK		
D	1	0.60		2.4	EP1 0.6	Ecopy®	57	63		
	2	1.20		2.4	EP1 1.2	Ecopy®	144	162		
	3	0.80		2.4	GS1-N	GIB®	49	47		
	4	1.20		2.4	EP1 1.2	Ecopy®	144	162		
							394 OK	434 OK		

Single Level Across Resistance Sheet

Job Name: Sheryl Hockey

Line	Element	Length (m)	Angle (degrees)	Stud Ht. (m)	Type	Supplier	Wind		EQ	
							Demand		Achieved	
							850	878	1191	1232
M	1	0.60		2.4	EP1 0.6	Ecopy®	57	63		
	2	0.60		2.4	GS1-N	GIB®	34	35		
	3	0.60		2.4	EP1 0.6	Ecopy®	57	63		
N	1	1.20		2.4	EP1 1.2	Ecopy®	144	162		
	2	1.40		2.4	GS1-N	GIB®	97	84		
O	1	1.80		2.4	GS1-N	GIB®	124	108		
P	1	0.60		2.4	EP1 0.6	Ecopy®	57	63		
	2	1.20		2.4	EP1 1.2	Ecopy®	144	162		
Q	1	1.00		2.4	GS1-N	GIB®	65	60		
	2	1.80		2.4	GS1-N	GIB®	124	108		
R	1	1.20		2.4	EP1 1.2	Ecopy®	144	162		
	2	1.20		2.4	EP1 1.2	Ecopy®	144	162		

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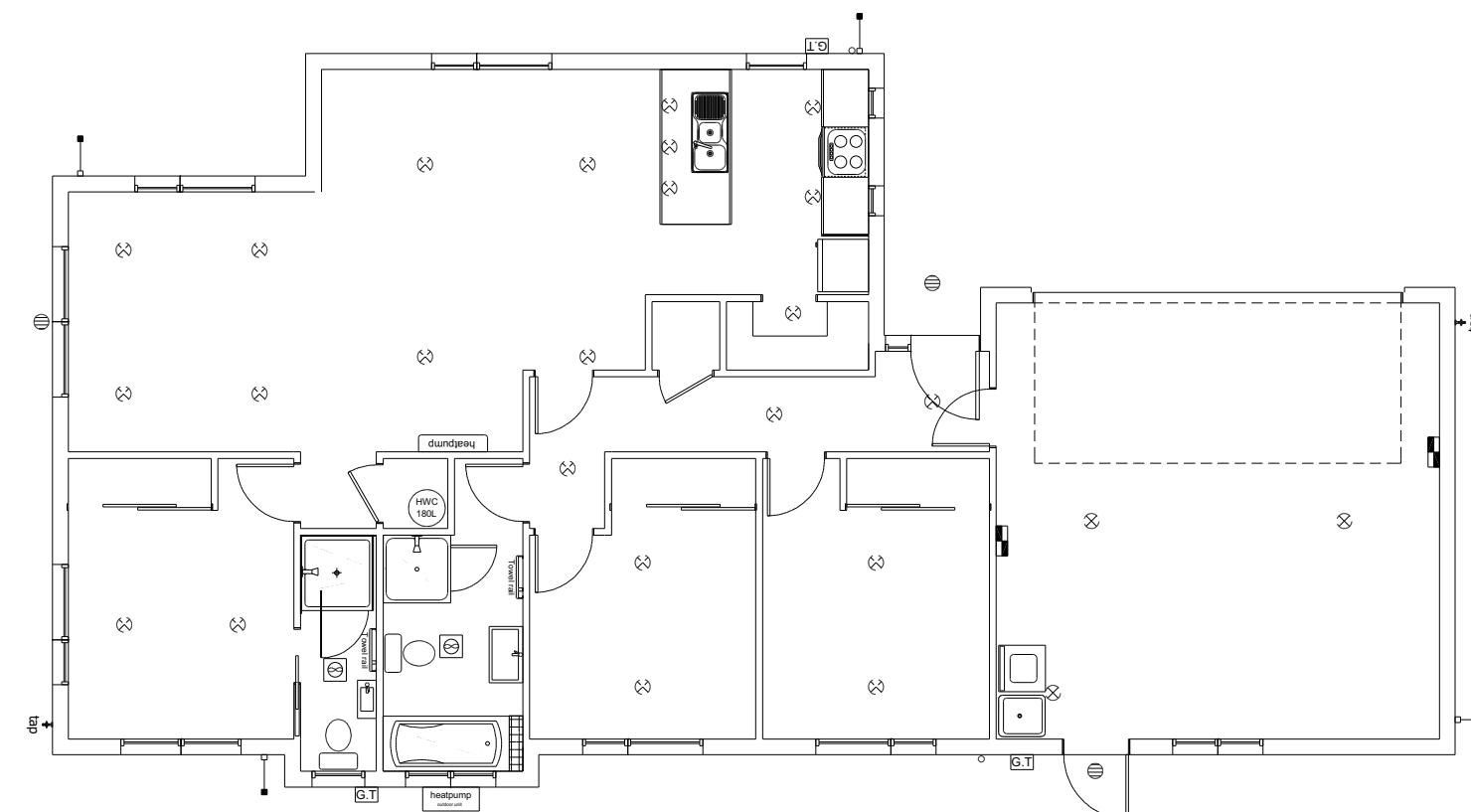
Job Number: 141537
Original Plan: Silvereye 146
Sheet Name: BRACING PLAN
Sales: D Ryan
Drawn: M Glynn
QS: S Liu
Print Date: 10/11/2021
Scale: 1:100 @ A3

CONSENT PLANS
No. Date Reason:
1 10-11-2021 Initial Consent Plans

Sheet No.: 11
of 21 sheets

20/04/2022

Maher, Kevin



LEGEND

Refer to Electrical Section in Specification
for further details

- Ceiling Pan
 - ⊗ CA Approved Down Light
 - ◐ Exterior Bulkhead Light
 - ◑ Exterior Wall Light
 - Fluorescent Double
 - ↶ Light Switch
 - ↷ Two Way Light Switch
 - ↶ Single Power Socket
 - ↷ Double Power Socket
 - ◐ Outside Waterproof Plug
 - ▼ Telephone/Data Outlet
 - [TV] TV Jack
 - [SKY]** Sky Connection
 - [■]** Bathroom Heater
 - [■]** Bathroom Extractor/Light

Electrical Plan is indicative only and is to be confirmed onsite with electrician and client

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**Sheryl Hockey
Lot 17
Belfast Development
Belfast, Christchurch**

Job Number:	Original Plan:	Sheet Name:
141537	Silvereye 146	LIGHTING PLAN
Sales:	Drawn:	QS:
D Ryan	M Glynn	S Liu

CONSENT PLANS

Sheet No.: 12

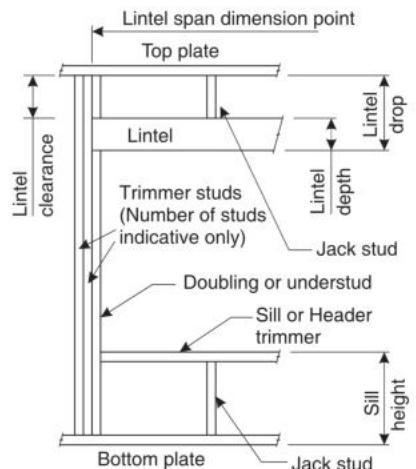
LINTEL FIXING SCHEDULE

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 0.20kPa.
- 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


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

NOTES:

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

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Sheryl Hockey
Lot 17
Belfast Development
Belfast, Christchurch

Job Number:	Original Plan:	Sheet Name:	CONSENT PLANS			
			FRAMING DETAILS			
141537	Silvereye 146		Sales: D Ryan	Drawn: M Glynn	QS: S Liu	Print Date: 10/11/2021 Scale: NTS @ A3

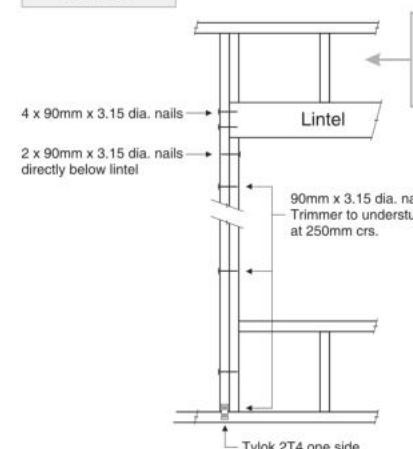
Christchurch City Council
BCN/2022/2262

Page 13 of 35

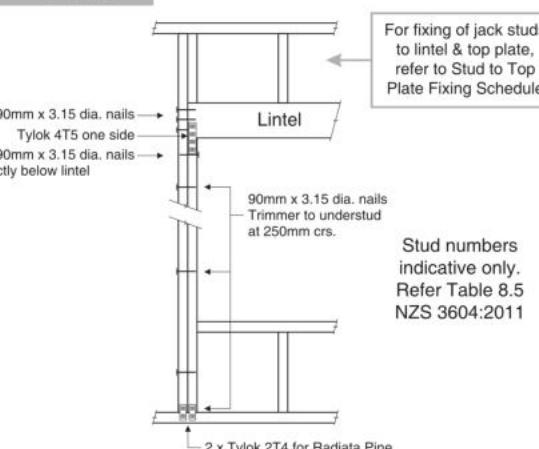
Approved Building Consent Document

20/04/2022

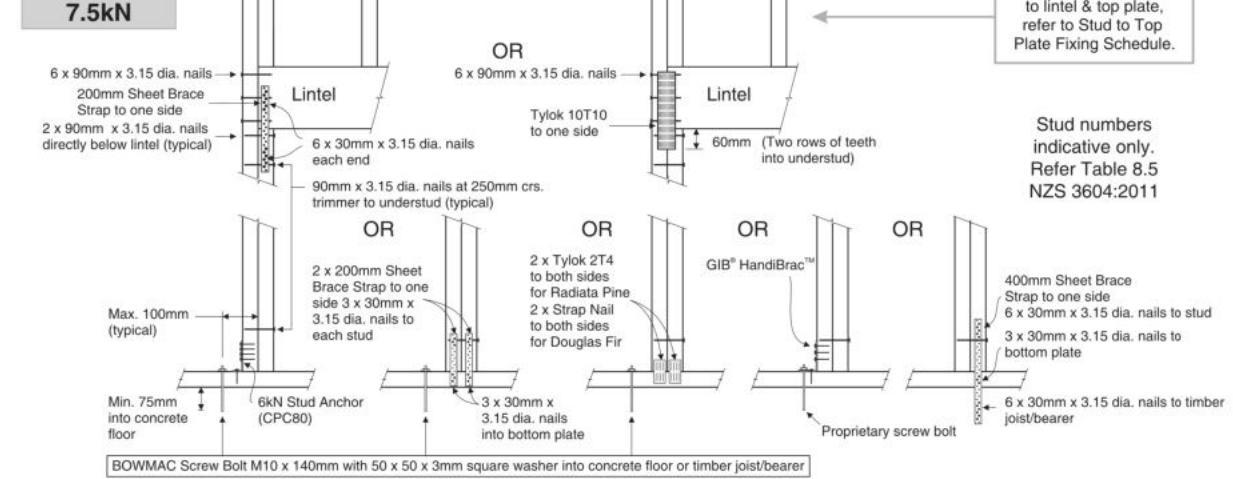
Maher, Kevin

LINTEL FIXING OPTIONS
TYPE E
1.4kN


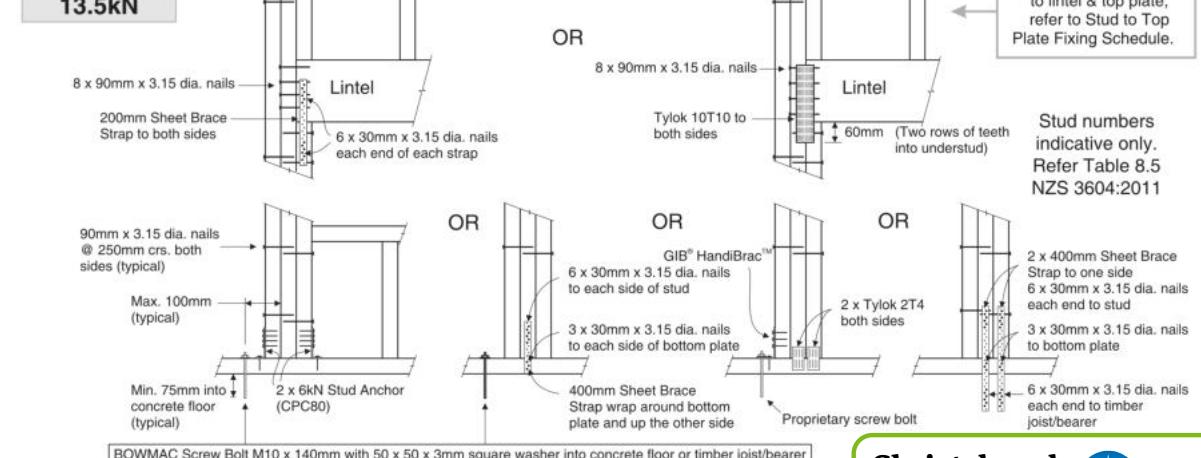
For fixing of jack studs to lintel & top plate, refer to Stud to Top Plate Fixing Schedule

TYPE F
4.0kN


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

TYPE G
7.5kN


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

TYPE H
13.5kN


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

Stud numbers indicative only. Refer Table 8.5 NZS 3604:2011

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08/2017

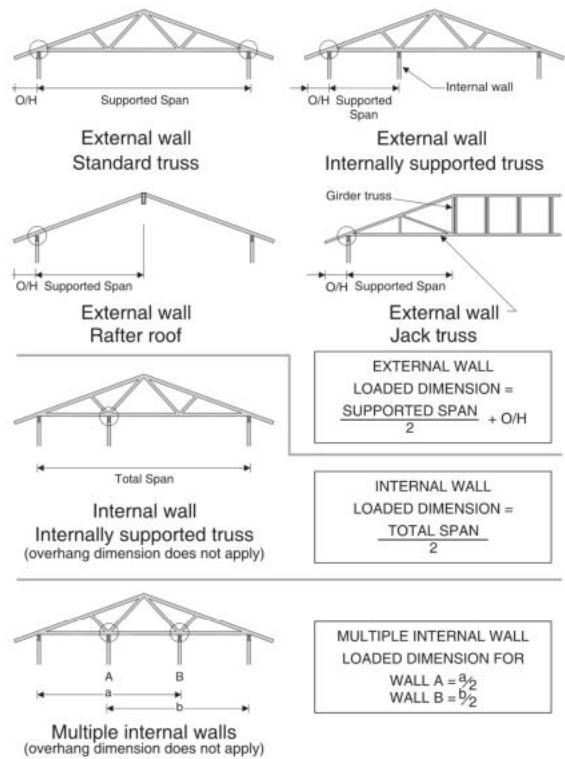
STUD TO TOP PLATE FIXING SCHEDULE

ALTERNATIVE TO TABLE 8.18 NZS 3604:2011

NOTE:

- All fixings are designed to resist vertical loads only. Dead loads include the roof weight and standard ceiling weight of 0.20kPa.
- Refer to Table 8.19 NZS 3604:2011 for nailing schedule to resist lateral loads.
- These fixings assume the correct choice of rafter/truss to top plate connections have been made.
- For gable end walls where the adjacent rafter/truss is located within 1200mm and with a maximum verge overhang of 750mm, select stud to top plate fixing using a loaded dimension of 1.5m.
- All fixings assume top plate thickness of 45mm maximum.
- Wall framing arrangements under girder trusses are not covered in this schedule.
- All timber selections are as per NZS 3604:2011.

LOADED DIMENSION DEFINITION



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						
300mm	400mm	600mm	L	M	H	VH	EH	L	M	H	VH	EH
3.0	2.3	1.5	A	A	B	B	B	A	A	B	B	B
4.0	3.0	2.0	A	A	B	B	B	A	A	B	B	B
5.0	3.8	2.5	A	B	B	B	B	A	A	B	B	B
6.0	4.5	3.0	A	B	B	B	B	A	A	B	B	B
7.0	5.3	3.5	A	B	B	B	B	A	A	B	B	B
8.0	6.0	4.0	A	B	B	B	B	A	A	B	B	B
9.0	6.8	4.5	B	B	B	B	B	A	A	B	B	B
10.0	7.5	5.0	B	B	B	B	B	A	A	B	B	B
11.0	8.3	5.5	B	B	B	B	B	A	A	B	B	B
12.0	9.0	6.0	B	B	B	B	B	A	A	B	B	B

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Sheryl Hockey
Lot 17
Belfast Development
Belfast, Christchurch

Job Number:
141537

Original Plan: Silvereye 146	Sheet Name: FRAMING DETAILS			
Sales: D Ryan	Drawn: M Glynn	QS: S Liu	Print Date: 10/11/2021	Scale: NTS @ A3

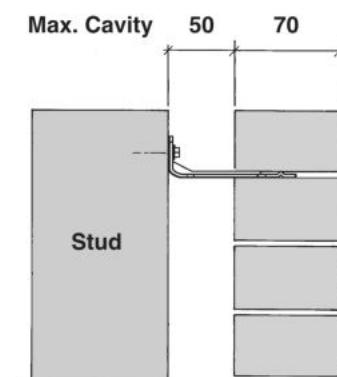
CONSENT PLANS

No.	Date:	Reason:
1	10-11-2021	Initial Consent Plans

Sheet No.:
14

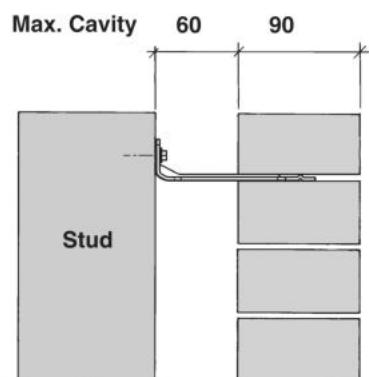
of 21 sheets

70 SERIES BRICK



Screw Tie Short (85mm)

90 SERIES BRICK



Screw Tie Long (105mm)

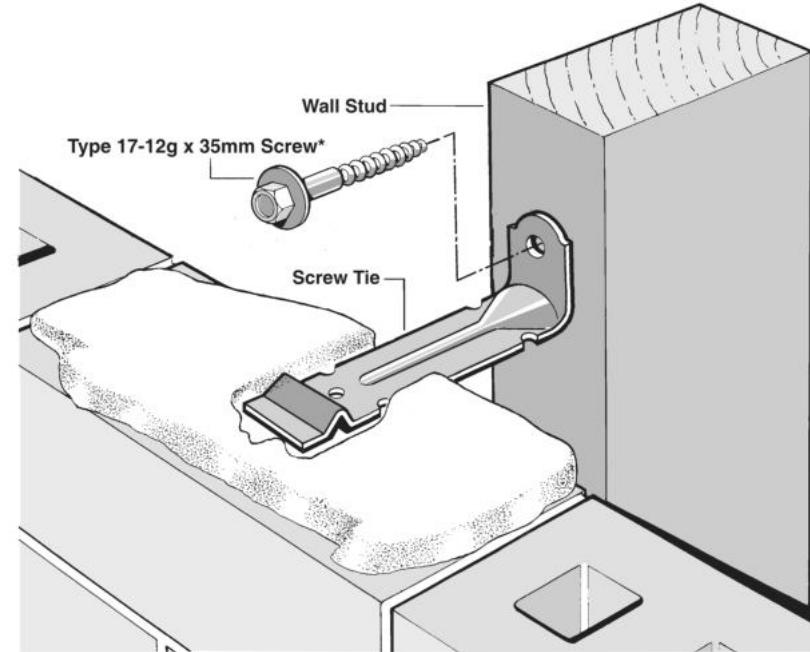
- All brick work must be constructed in accordance with NZS 4210:2001 Masonry Construction: Materials and Workmanship. Screw Ties must be applied accordingly and are not to be hammered into timber framing.
- Water shedding shoulder prevents transfer of the moisture from tie to building.
- Nail hole for Oamaru Stone.
- Angled neck encourages increased tie embedment in mortar.

Material: 1.2mm NZCC-SD Hot Dip Galvanised Steel
Screws: Type 17-12g x 35mm Hex Head Hot Dip Galvanised Screws
Packed: 250 ties per box including screws

Also available in Stainless Steel Grade 316 for Zone D.

SCREW TIES FOR BRICK VENEER FIXING

- Medium duty (EM) classification
- Tested by BRANZ in accordance with AS/NZS 2699.1:2000
- BRANZ test report No. ST0725 November 2007
- Suitable for both 'dry bedding' and encapsulated mortar
- Hot Dip Galvanised ties for Zones B & C, and Stainless Steel Grade 316 ties for Zone D meet NZS 3604:2011 Sect. 4 Durability
- Available in 85mm and 105mm sizes

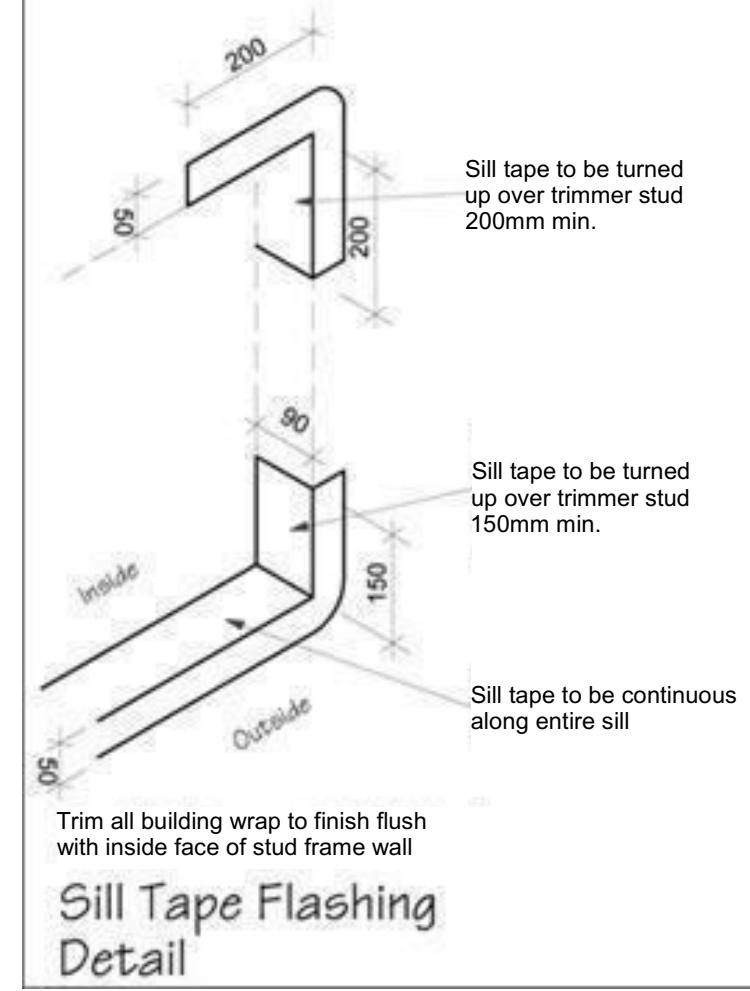
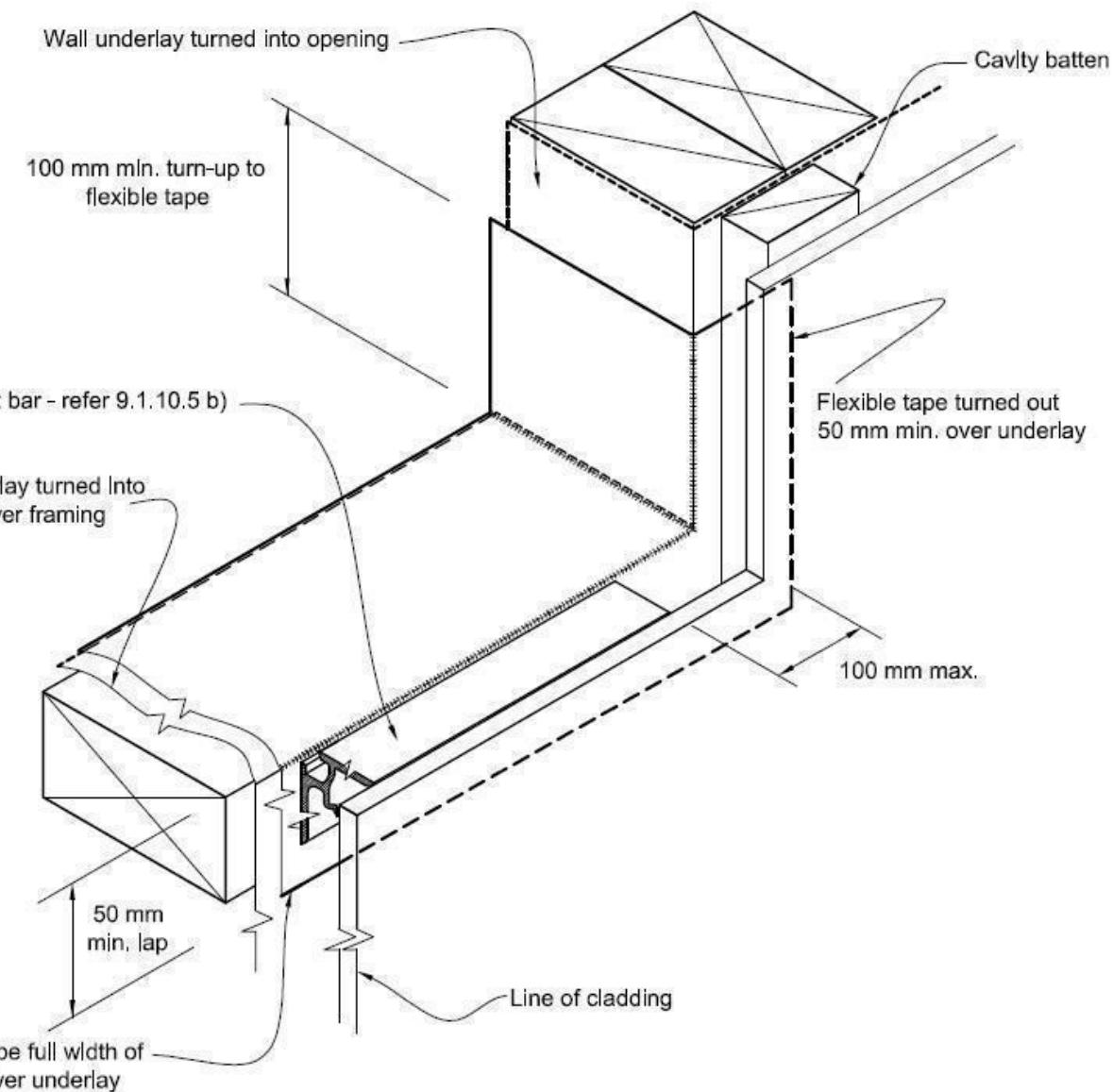


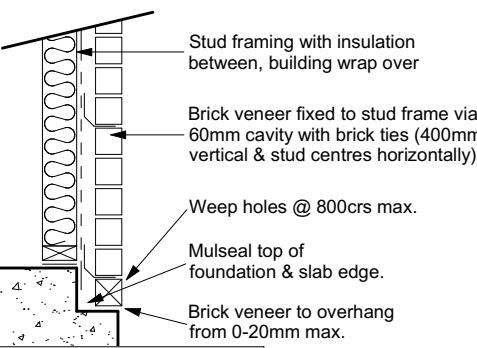
***NOTE:**
Use longer screws for fixing through Rigid Air Barrier (RAB). Maintain 35mm embedment in studs.

Figure 72B: General window and door opening with drainage cavity
Paragraphs 9.1.5, 9.1.9.3, 9.1.10.2, Figures 73C, 76, 85, 86, 91, 99, 116 and 128

NOTE:

- (1) Detailed cladding omitted for clarity, refer to specific claddings.
- (2) Head to be treated similarly with continuous wall underlay and flexible tape at corners.
- (3) Refer individual cladding details for jamb flashings.





Refer to Engineers Foundation Detail

Brick Veneer Foundation
Scale 1:20

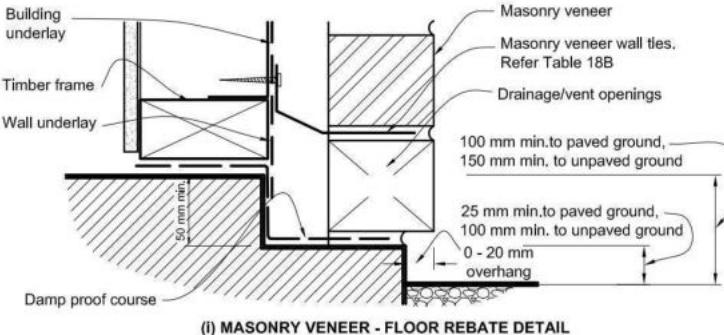


Figure 65: Levels and garage openings
Paragraphs 9.1.3, 9.1.3.4, 9.2.5,
Table 18

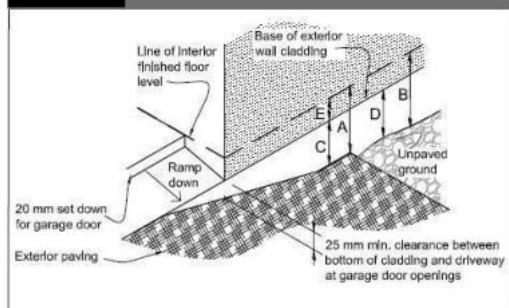
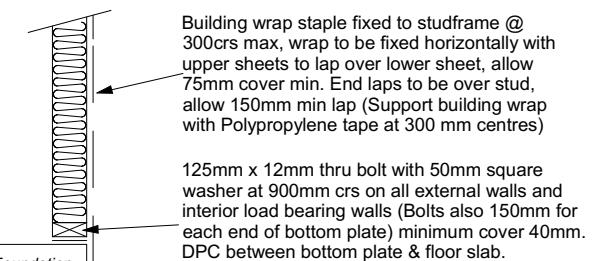


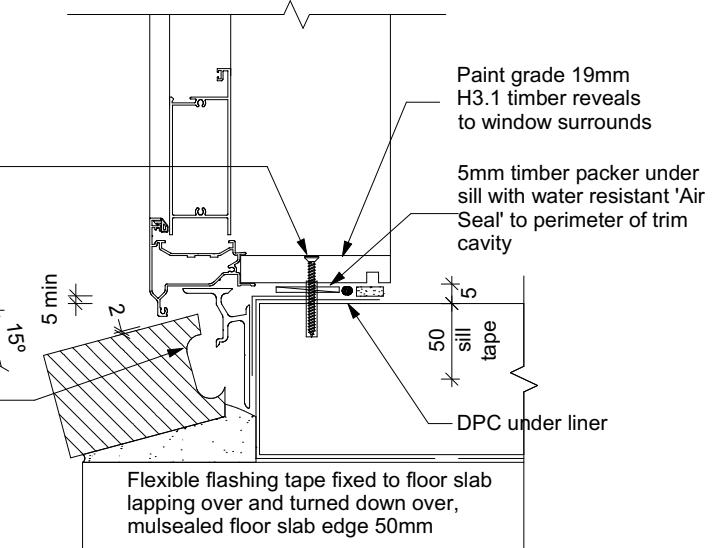
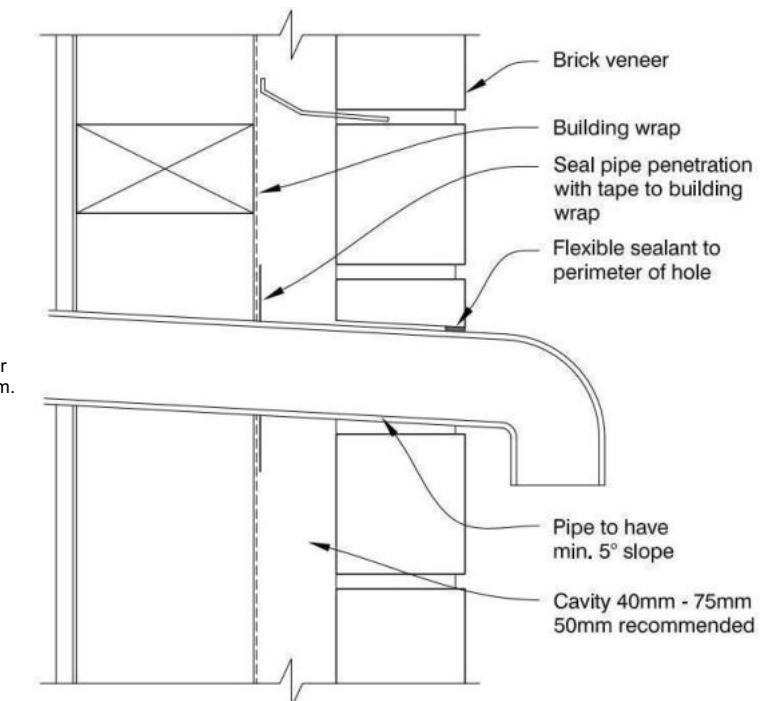
Table 18: Minimum clearances
Paragraphs 9.1.3, 9.1.3.1, 9.1.3.2,
9.1.3.3, 9.1.3.4, 9.1.3.5 and 9.2.7

Minimum clearances (mm)	Masonry veneer		Other claddings				
	A	B	A	B	C	D	E
Concrete slab	100	150	150	225	100	175	50
Timber floor Refer Note 1)			100	175	502		

NOTE: 1) Refer to NZS 3604 for requirements.
2) Cladding to extend minimum 50 mm below bearer or lowest part of timber floor framing.



Stud framing to slab
Scale 1:20



Door Sill to Slab Detail
Scale 1:20

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Sheryl Hockey
Lot 17
Belfast Development
Belfast, Christchurch

Job Number:
141537

Original Plan:
Silvereye 146

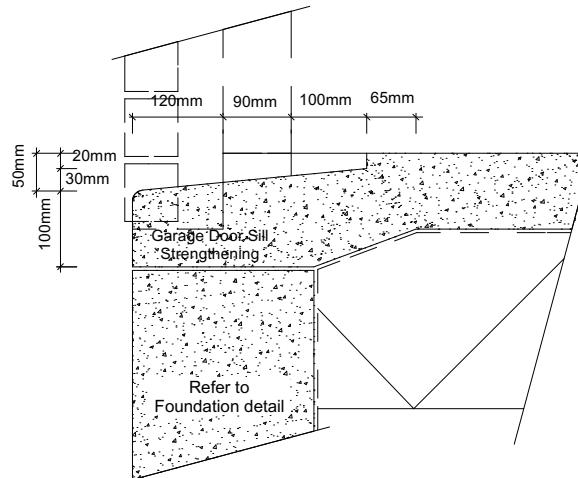
Sheet Name:
CONSTRUCTION DETAILS

Sales: **D Ryan** Drawn: **M Glynn** QS: **S Liu** Print Date: **10/11/2021** Scale: **As Shown @ A3**

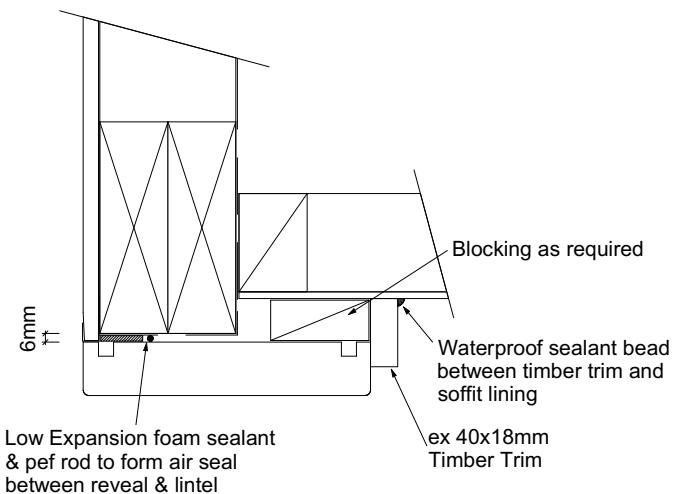
CONSENT PLANS

No.	Date:	Reason:
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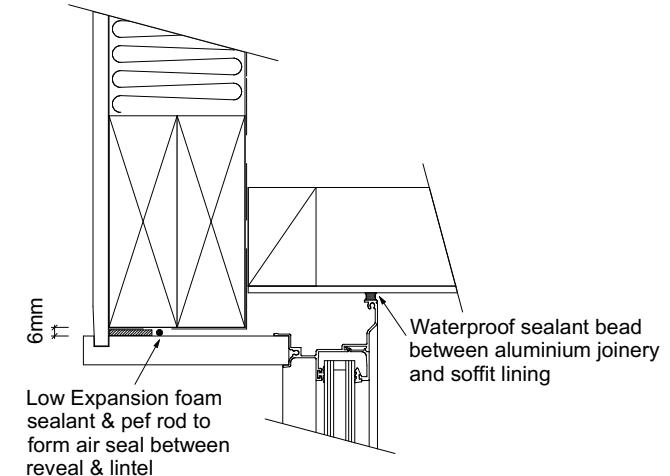
Sheet No.:
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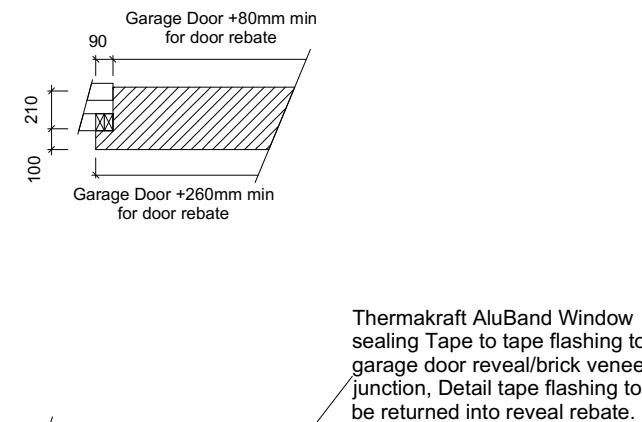
Garage Door Rebate Details



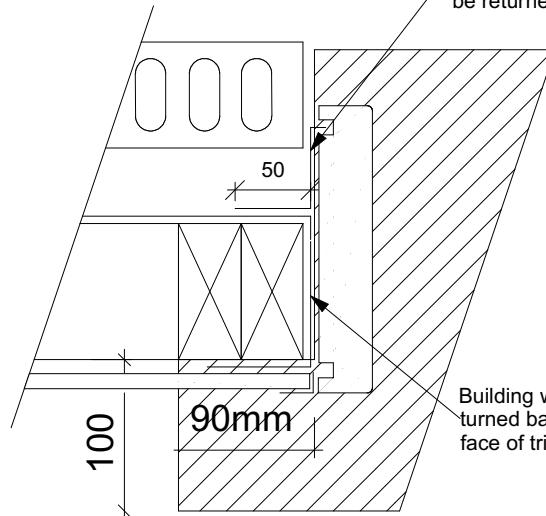
Garage Door Head to Soffit Scale 1:5



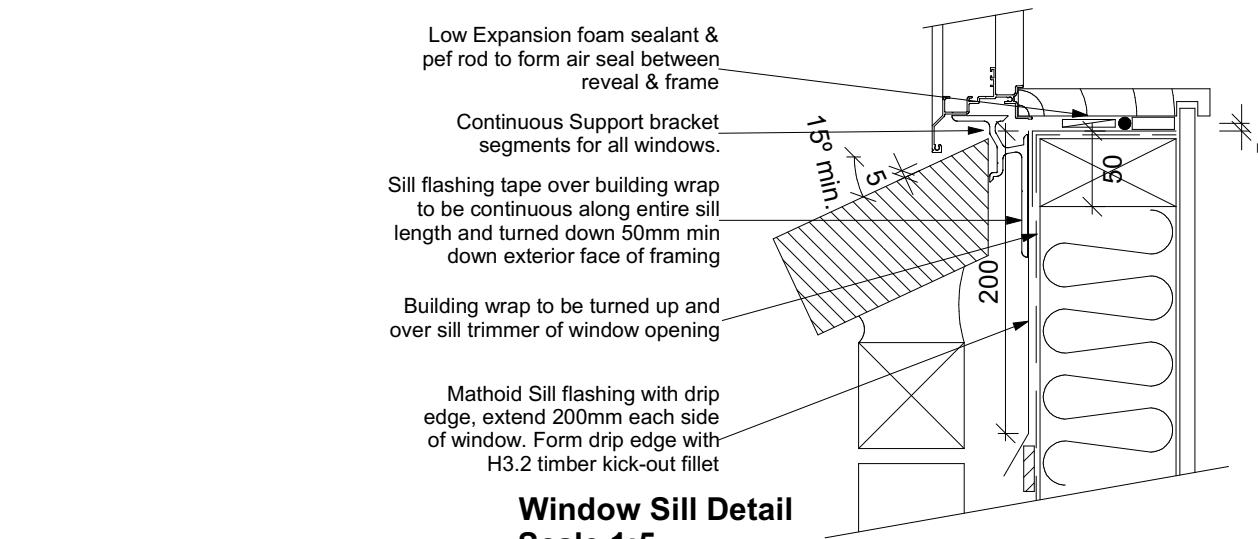
Window Head to Soffit Detail Scale 1:5



Thermakraft AluBand Window sealing Tape to tape flashing to garage door reveal/brick veneer junction, Detail tape flashing to be returned into reveal rebate.

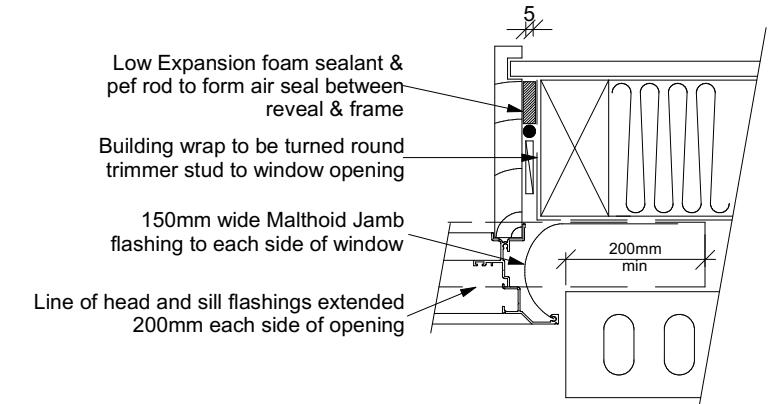


Garage Door Jamb Detail

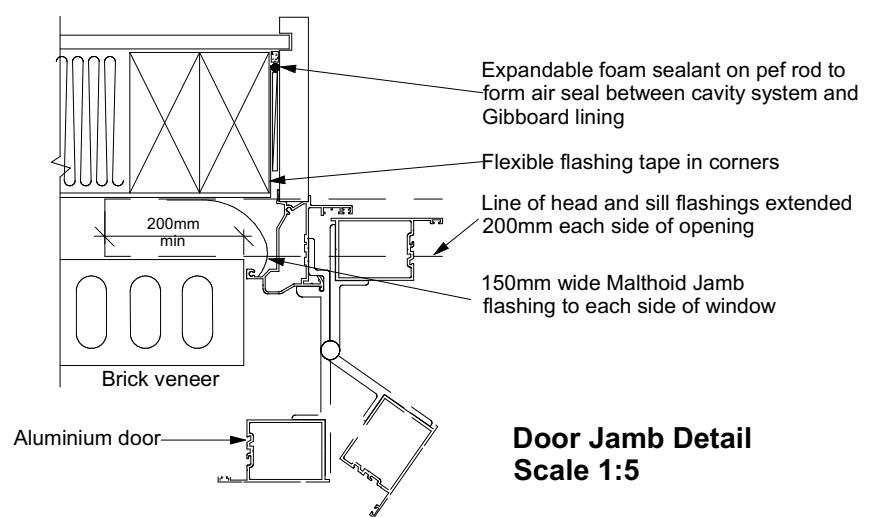


Window Sill Detail

Scale 1:5



Window Jamb Detail Scale 1:5



Door Jamb Detail

Scale 1:5

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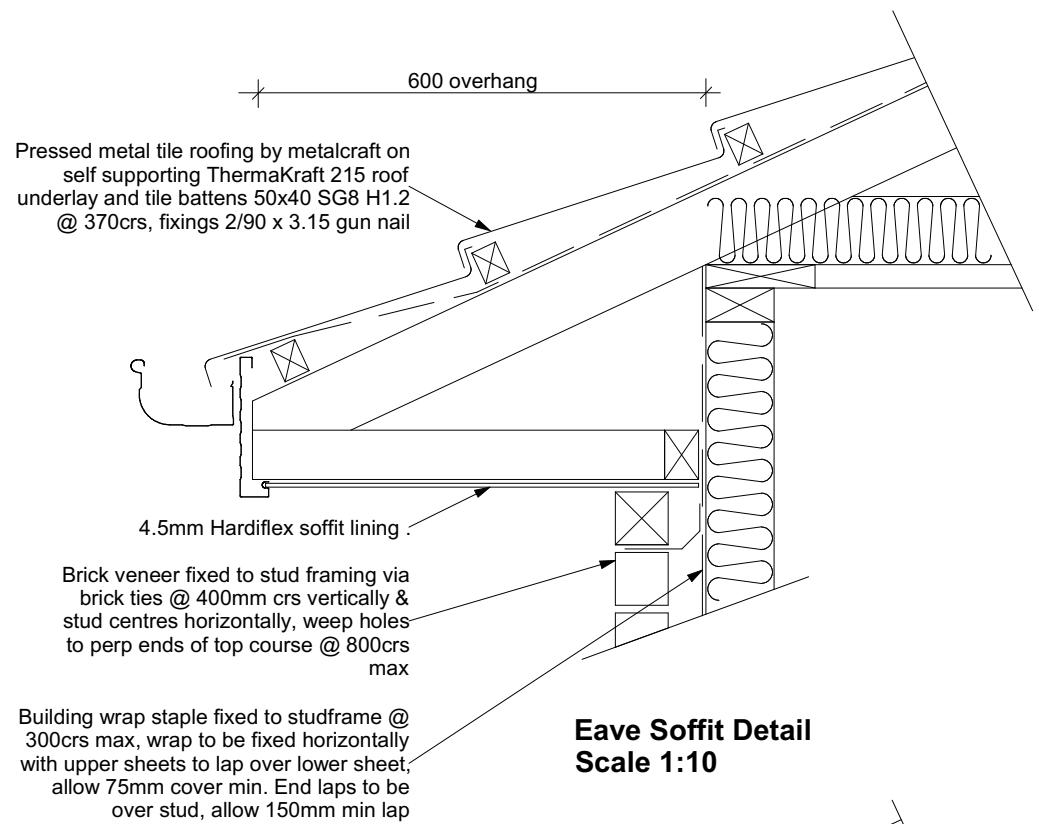


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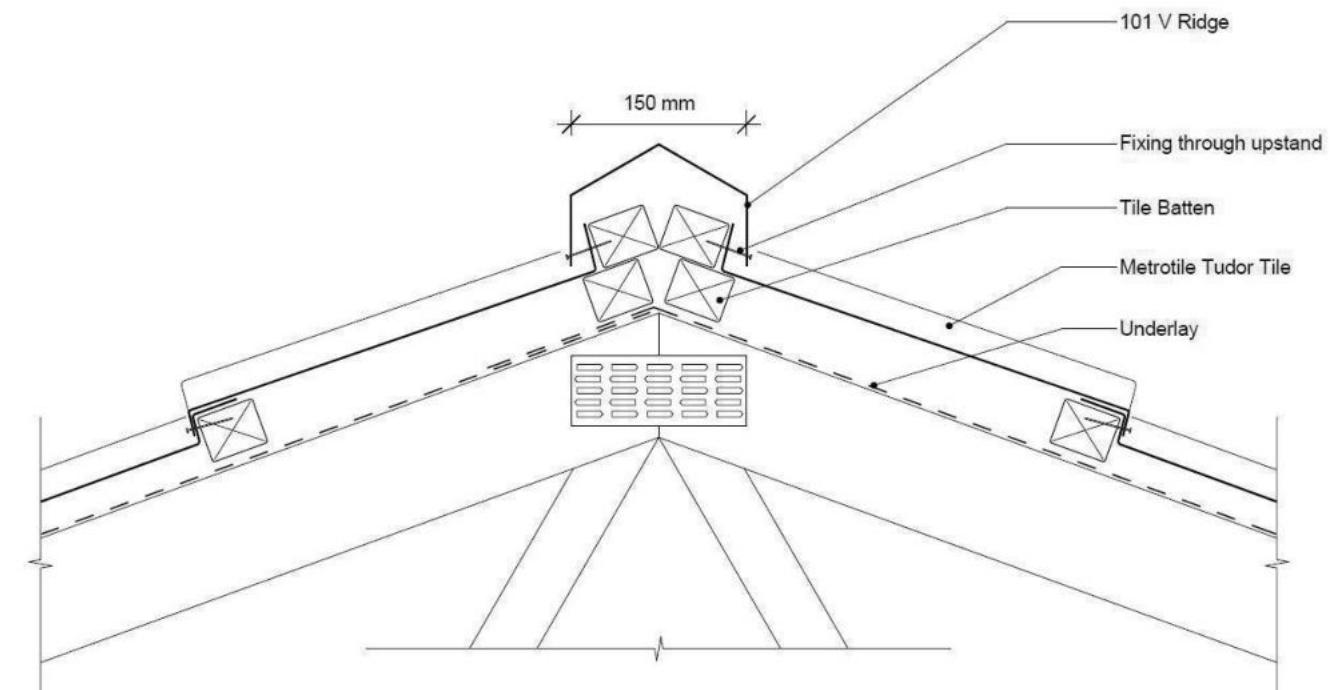
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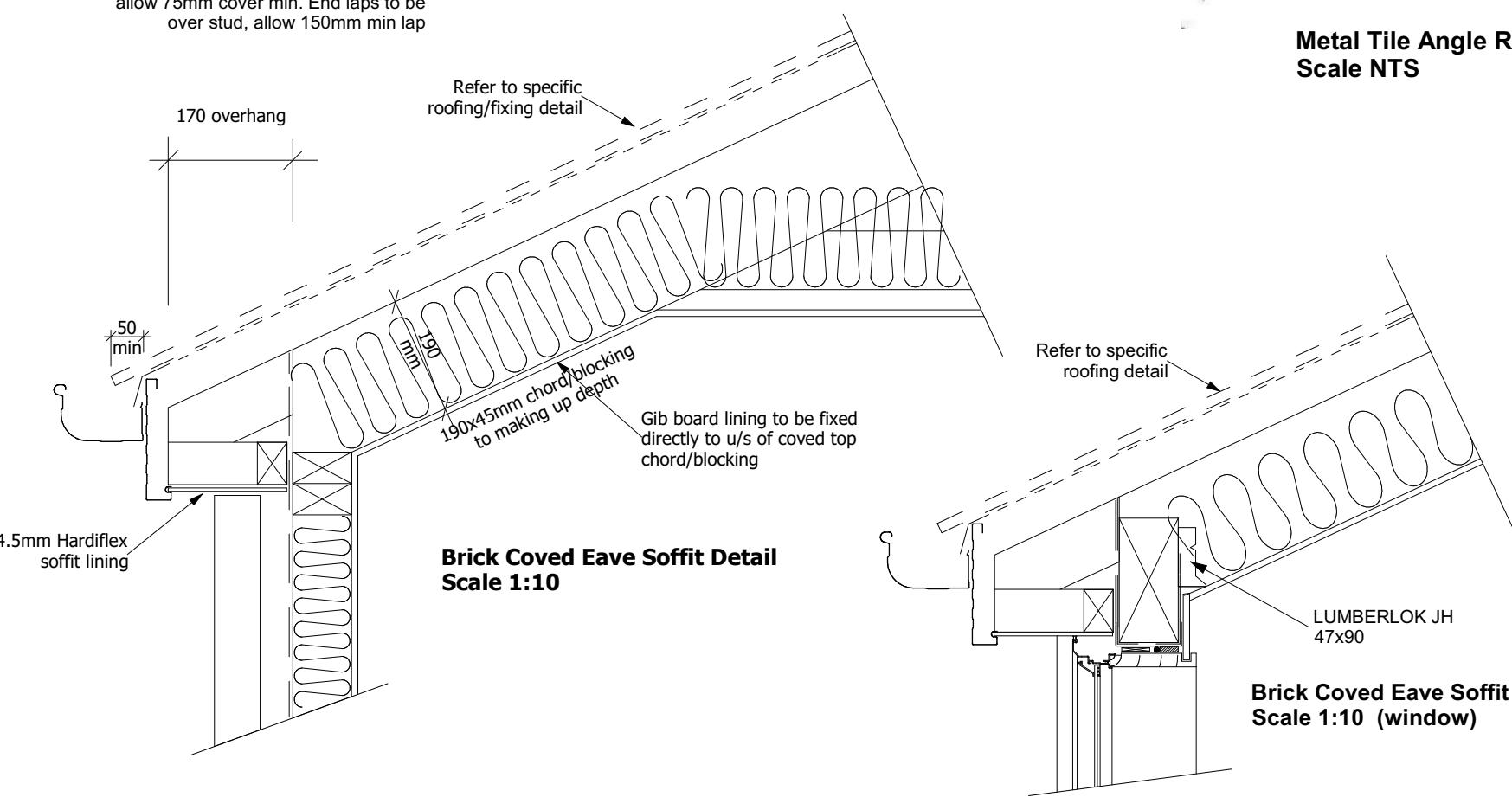
**Sheryl Hockey
Lot 17
Belfast Development
Belfast, Christchurch**



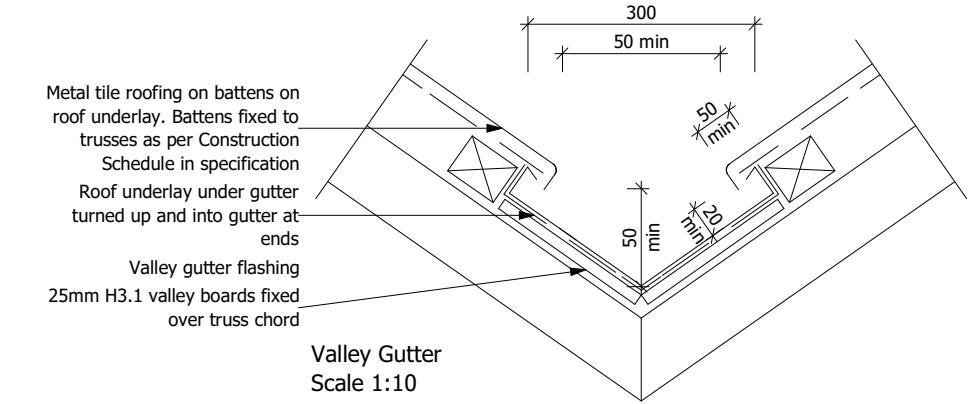
Eave Soffit Detail
Scale 1:10



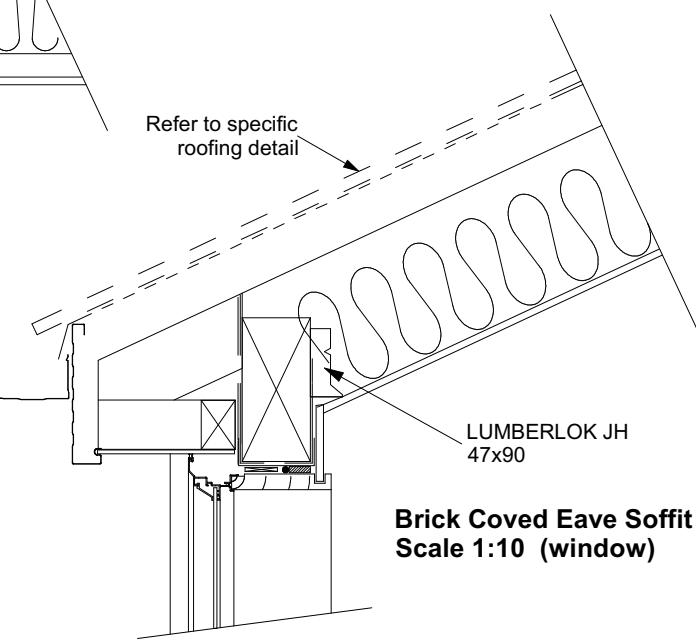
Metal Tile Angle Ridge Detail
Scale NTS



Brick Coved Eave Soffit Detail
Scale 1:10



Valley Gutter
Scale 1:10



Brick Coved Eave Soffit Detail
Scale 1:10 (window)

Christchurch City Council
BCN/2022/2262
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20/04/2022 Maher, Kevin

Page 18 of 35

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Job Number:
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Silvereye 146

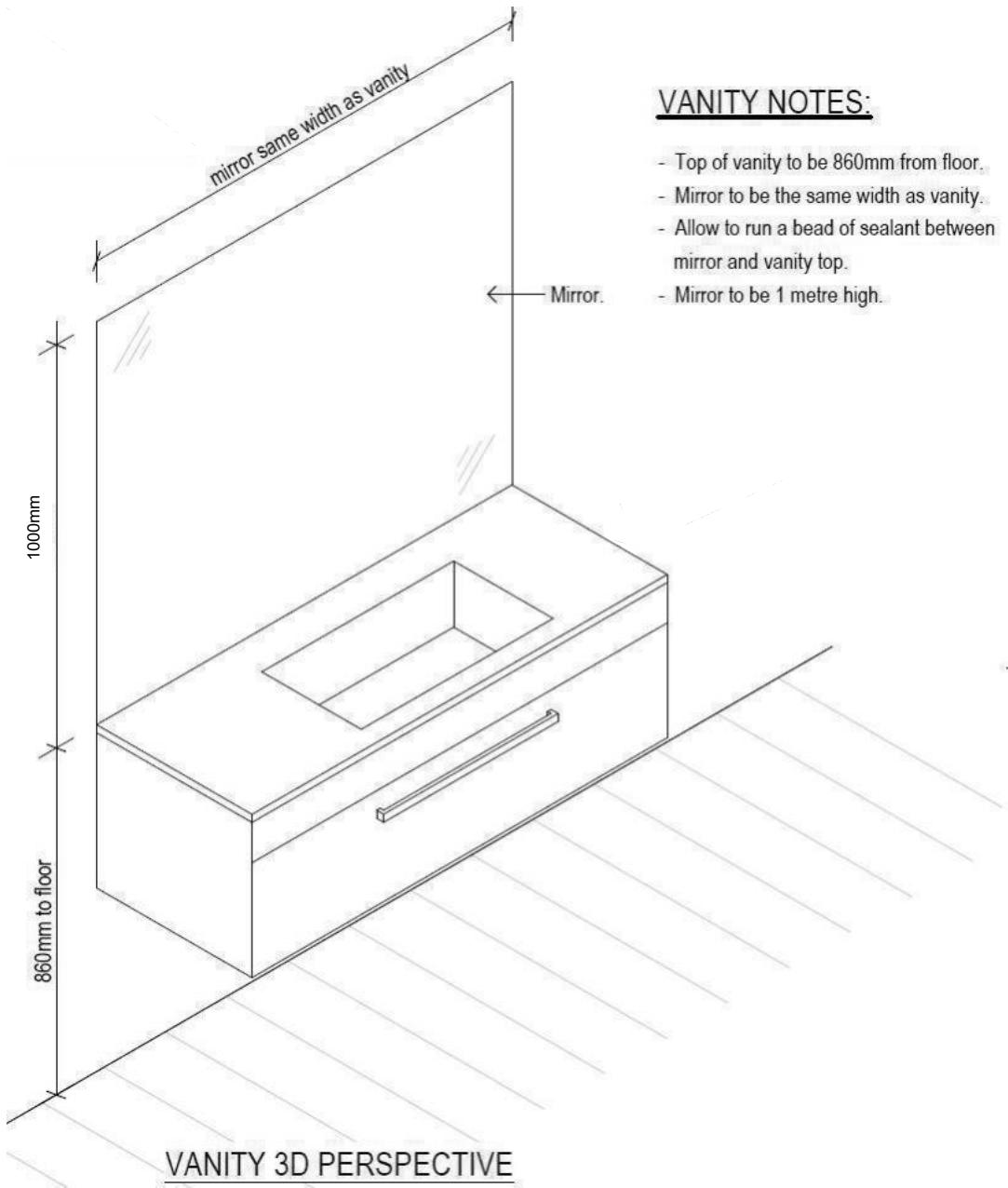
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CONSTRUCTION DETAILS

CONSENT PLANS

No.	Date:	Reason:
1	10-11-2021	Initial Consent Plans

Sheet No.:
18

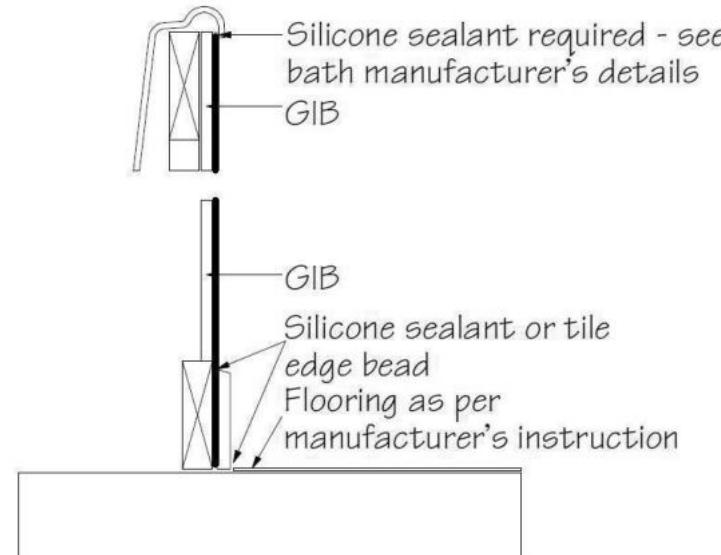
of 21 sheets



VANITY NOTES:

- Top of vanity to be 860mm from floor.
- Mirror to be the same width as vanity.
- Allow to run a bead of sealant between mirror and vanity top.
- Mirror to be 1 metre high.

VANITY 3D PERSPECTIVE



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Silvereye 146

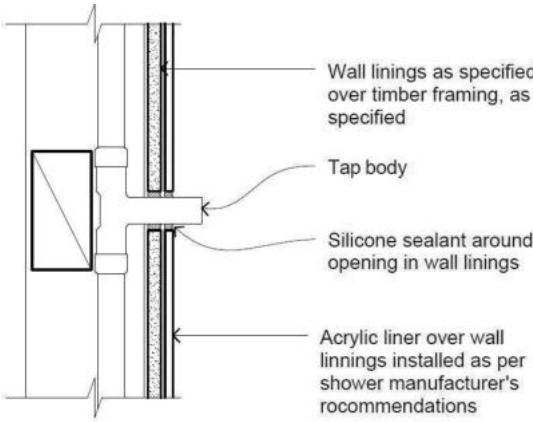
Sheet Name:
BATHROOM DETAILS

CONSENT PLANS

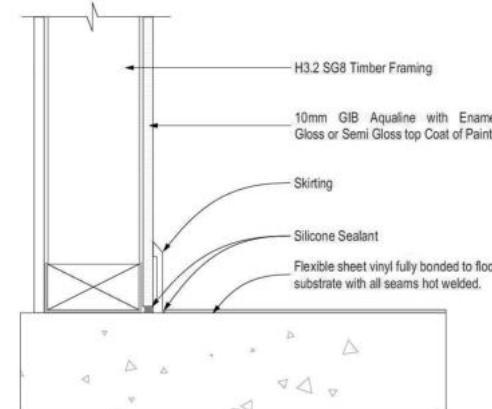
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1	10-11-2021	Initial Consent Plans

Sheet No.:
19

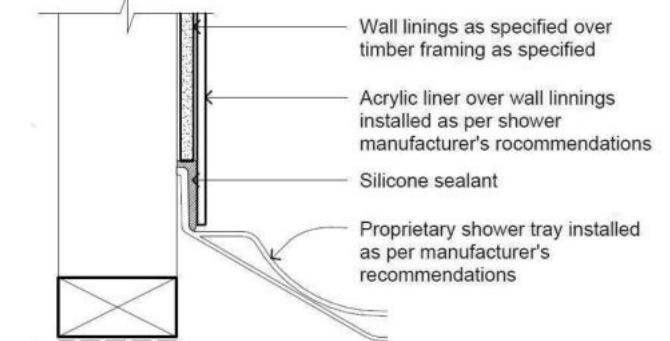
of 21 sheets



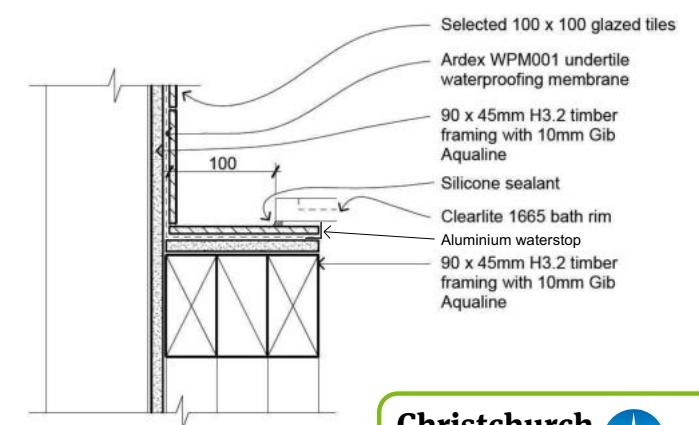
PENETRATION DETAIL



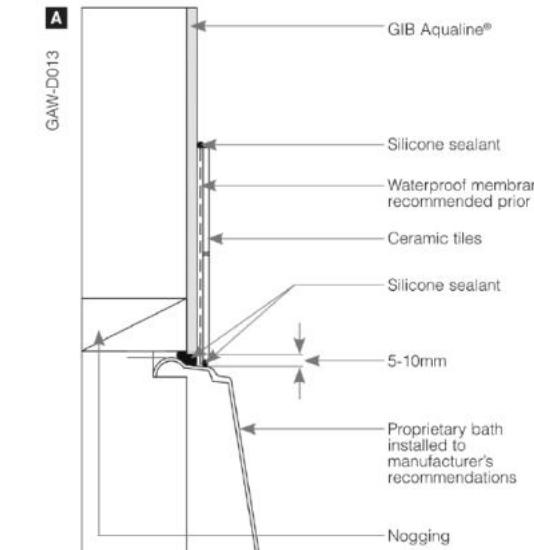
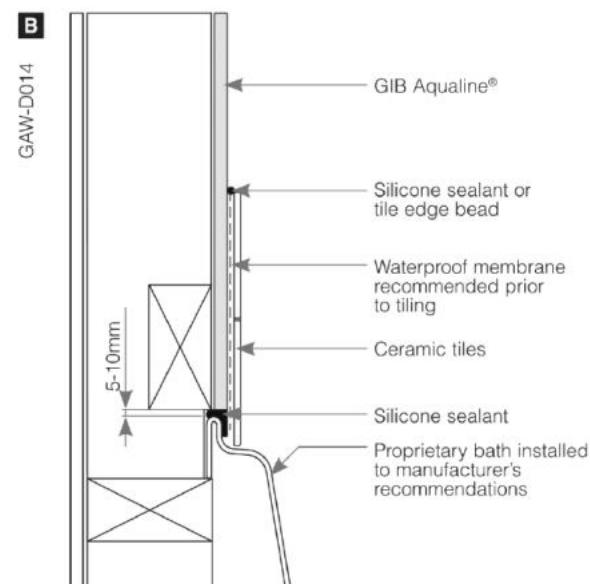
GENERAL FLOOR/WALL DETAIL



SHOWER TRAY DETAIL



BATH/WALL JUNCTION



Christchurch City Council BCN/2022/2262

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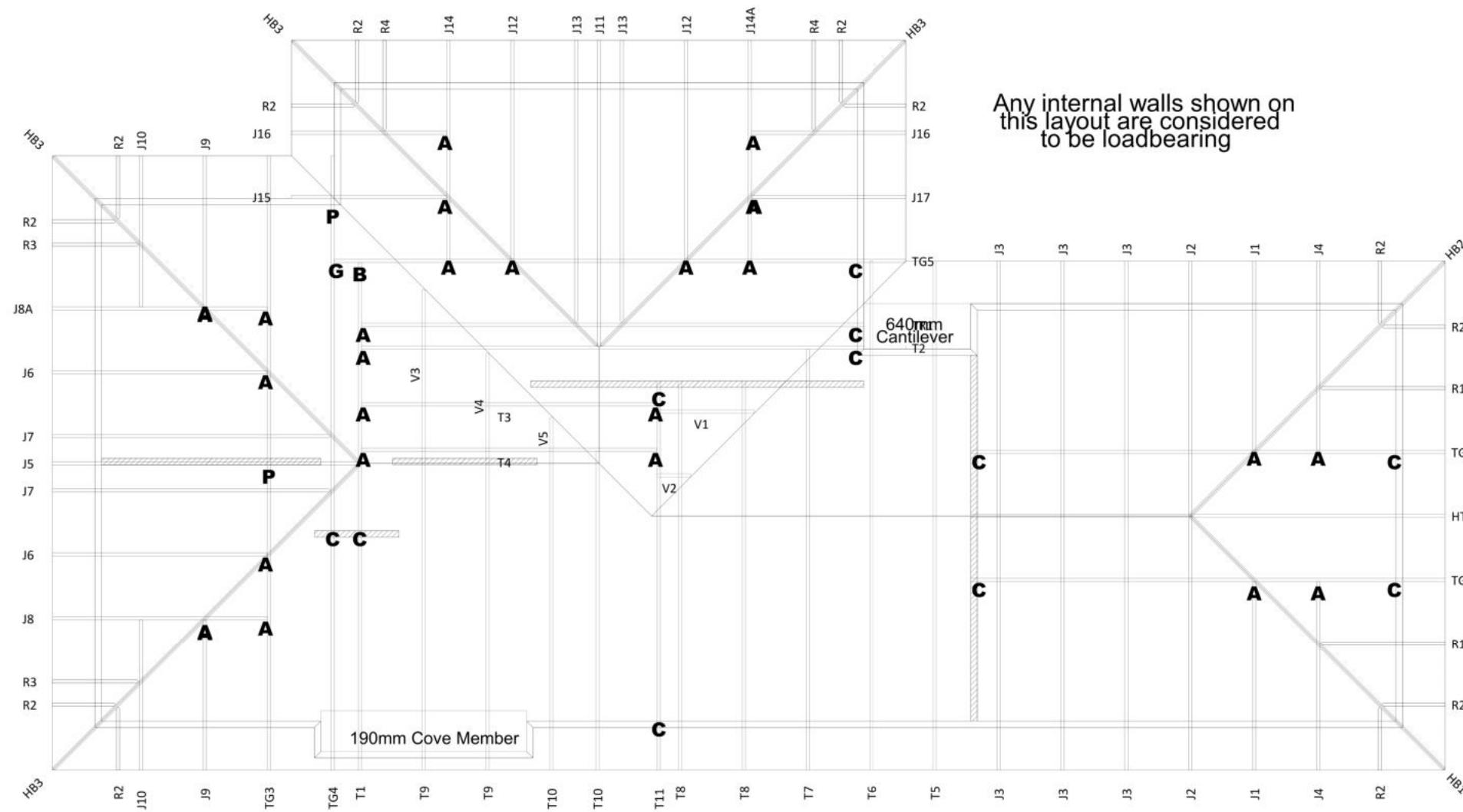
Maher, Kevin

Page 19 of 35

BUILDABLE CONSENT LAYOUT



For valley/saddle truss fixing unless stated otherwise use a pair of wire dogs at 900mm centres for up to and including a very high wind zone. Or a pair of CT200's at 900mm centres for extra high wind zone. This fixing is to meet the minimum requirements as per NZS3604.



PLEASE NOTE: All gable trusses are designed to suit cladding manufacturer's framing requirements. If a gable truss requires a windbeam brace, the type of MiTek brace will be noted as such on the layout.

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Plans are to be read in conjunction with Specifications and all supporting documentation



TKR Homes Ltd.
31 Watts Road, Sockburn
PO BOX 11 351
Christchurch 8443
P: +64 3 342 7788

These drawings are limited to and by the extent of the detail covered in the drawings to meet the current New Zealand Building Code (NZBC). Where detail is required for construction and to demonstrate compliance with the current NZBC, a specific request should be made for the required detail to be supplied. No liability will be accepted for any detail or construction not covered in these drawings and/or carried out by persons other than the designer producing these documents.

Sheryl Hockey
Lot 17
Belfast Development
Belfast, Christchurch

Job Number: **141537** Original Plan: **Silvereye 146** Sheet Name: **TRUSS DESIGN**
Sales: D Ryan Drawn: M Glynn QS: S Liu Print Date: 10/11/2021 Scale: NTS @ A3

CARTERS Your Building Partner

CARTERS
Carters National Support Office
0800 Carters

JOB No **352531C1**

Client: Signature Homes Canterbury
Job: Sheryl Hockey
Site: Lot 17 Belfast Development
Belfast
Christchurch

Pitch: 25.0deg
Roof Type: Metal Tiles
Overhang: 600mm
Wind Area: High
Roof Snow: 0.441kPa
Ceiling Restraint Centres: 600mm

Trusses and rafters at 900mm max centres unless stated otherwise. This layout is to be read in conjunction with the Architectural plans.

DRAWN Celica Maffey | 7 Sep, 2021

FIXINGS

- A** = 47x90 Joist Hanger
- B** = 47x120 Joist Hanger
- C** = CT200 (pair)
- D** = 47x190 Joist Hanger
- E** = 95x165 Joist Hanger
- F** = SH-140 Split Hanger
- G** = SH-180 Split Hanger
- H** = SH-220 Split Hanger
- J** = 2x6kN Strap (12kN Total)
- K** = 6kN Strap
- L** = Multigrip (single)
- M** = Multigrips (pair)
- N** = Nailon Plate (240x110x1)
- P** = 16kN Pack
- Q** = 9kN Pack
- S** = CPC 40 Single Cleat
- T** = CPC 40 Short (pair)
- U** = CPC 80 Single Cleat
- V** = 16kN Uplift
- W** = 24kN Uplift
- X** = 25kN Uplift
- Y** = 35kN Uplift
- Z** = 45kN Uplift

Unless otherwise indicated, all specified truss fixings are to use L/Lok product nail fasteners (as per the MiTek On-site Guide) when the choice of using screws or nails is optional.

All truss to frame fixings require 2 additional 2/90x3.15dia skew nails.

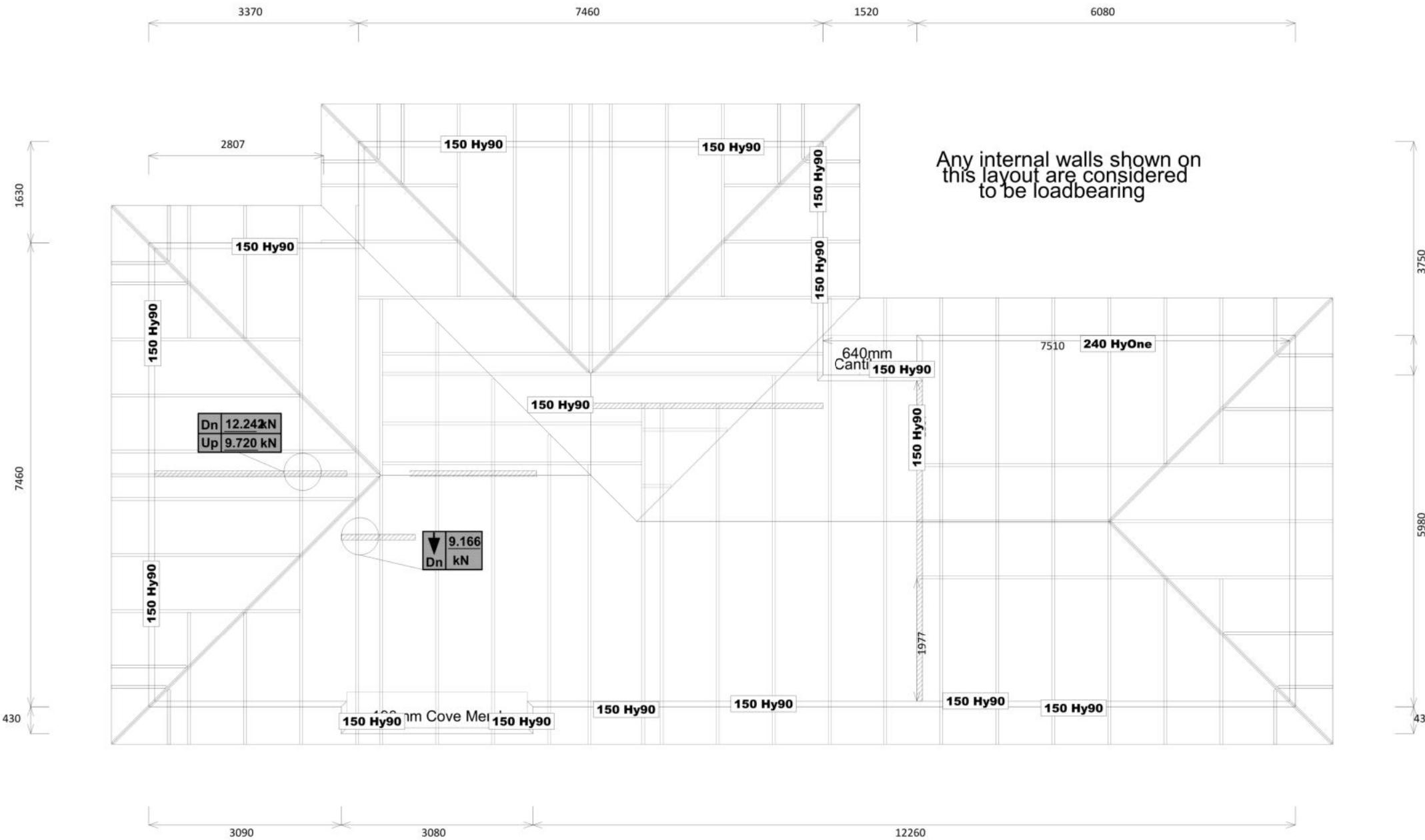
All truss fixings not indicated as above must have 2 wire dogs for cross joints and 2/90x3.15dia nails for butt joins.

Fixings shown are for fixing trusses to the top plate. Any other point load uplift fixings down through the framing stud to top plate, stud to bottom plate, bottom plate to floor remain the responsibility of the architect / draughtsman.

Truss Layout

Sheet No.:
20
of 21 sheets

BUILDABLE CONSENT LAYOUT



**All internal walls shown hatched on this layout are considered to be loadbearing
Lintel fixing specification remains the responsibility of the architect / draughtsperson**

**All dimensions are to be checked and confirmed prior to any construction
Plans are to be read in conjunction with Specifications and all supporting documentation**



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**Sheryl Hockey
Lot 17
Belfast Development
Belfast, Christchurch**

Job Number:
14153

Original Plan:
Silvereye 14

Sheet Name:

TRUSS DESIGN

CONSENT PLANS



HOCKEY RESIDENCE

Lot 17 Belfast development, Belfast

RIBRAFT DRAWINGS



ENGCO
Consulting Engineers

20/04/2022 Maher, Kevin

Christchurch City Council BCN/2022/2262
Approved Building Consent Document

Page 22 of 35

Sheet No.	Rev	Date Issued	Sheet Title	Date	Description
S1	-	23/09/2021	General Notes		
S2	-	23/09/2021	Rib Raft Layout Foundation Plan		
S3	-	23/09/2021	Typical Foundation Sections		
S4	-	23/09/2021	Typical Foundation Sections		
S5	-	23/09/2021	Typical Foundation Sections		
S6	-	23/09/2021	Typical Services Penetration Details	23/09/2021	For Consent

Disclaimer: All reports, advice, drawings and other deliverables of any kind provided by the consultant ("advice") are, unless agreed otherwise in writing by the consultant, prepared exclusively for the client's use for the purposes stated in the scope of services in relation to the project. Unless the consultant's prior written consent has been obtained, the client shall not use or rely on the advice (in whole or part) for any other purpose or disclose any of the advice to a third party. The consultant shall have no liability if any of the advice is used or relied on by the client for any unauthorised purpose or by any unauthorised third party.

A U C K L A N D - P H: (0 9) 3 7 7 7 9 5 5 ■ C H R I S T C H U R C H - P H: (0 3) 3 6 6 7 9 5 5 ■ N E L S O N - P H: (0 3) 3 6 6 7 9 5 5 ■ Q U E E N S T O W N - P H: (0 3) 3 6 6 7 9 5 5 ■ E - M A I L: O F F I C E @ E N G C O . N Z ■ W W W. E N G C O . N Z ■

GENERAL

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- These drawings are to be read in conjunction with the Architects & Engineers drawings.
- The builder shall be responsible for any damage to works during construction.
- The sand blinding layer shall be 20mm min. & 50mm max. to aid levelling & to prevent rocking of pods.
- Vapour barrier to be 0.25mm (250 micron) polythene complying with NZS 4229. / NZS 3604
- Finished ground level adjacent to slab to be protected from wind, water erosion and undermining.

FOUNDATIONS

- For assumed allowable bearing capacity refer to calculations/installer guide. Unless otherwise noted in documentation
- If there is any doubt about the integrity of the material on which the slab is to be founded - Supervising Engineer must be notified immediately.

CONCRETE

- All workmanship & materials to conform to NZS 3109, NZS 4210 & local authority regulations.
- Minimum covers to reinforcement:
 - Exposed to earth - 75mm.
 - Protected by vapour barrier - 50mm.
 - Not exposed to weather except for a brief period during construction - 25mm.
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- All concrete shall have 20mm nominal maximum aggregate size & 120mm slump & shall comply with NZS 3109.
- All concrete to be mechanically vibrated & carefully worked around the reinforcement & into the corners of the formwork.

6. Ribraft make-up to be

100 mm Floor Slab - 220 mm pods
(25MPa TC2 Dramix 4D 80/60 Fibre mix Concrete)
G500 E SE62 Ductile mesh on 65 mm chairs.

The design Fibre mix shall be supplied so that the residual flexural tensile stresses $f_{r,1}$ & $f_{r,4,k}$ shall be 1.5 MPa & 1.0 MPa respectively.

REINFORCEMENT

- All reinforcing shall be new Zealand sourced and conform to AS/NZS 4671 :2001 in grade 300 or grade 500E.
- All bends to be made cold without fracture.
- All reinforcing shall be deformed type unless otherwise stated.
- Grade 500E deformed bars shall be designated 'H', Grade 300 deformed bars shall be designated 'D' and Grade 300 round bars shall be designated 'R'
- Minimum bar splice 720mm. (or unless otherwise noted)
- All reinforcement to be fixed & tied where necessary in its specified position.
- Welding of steel is not permitted
- Spacers:
 - Edge at 1200mm ctrs (one on edge & two on corners, typically).
 - Internal one on each side of pod (typically).
- All mesh shall comply with AS/NZS 4671 & shall conform with elongation requirements exceeding 10%.
- All Mesh shall lap a minimum of 250mm (end extensions not included in lap length)

INSPECTIONS

Inform ENGCO consulting 48 hours in advance of any inspections required for code compliance certification.
Contact ENGCO - Ph. 03 366 7955 & quote ENGCO Ref. No.

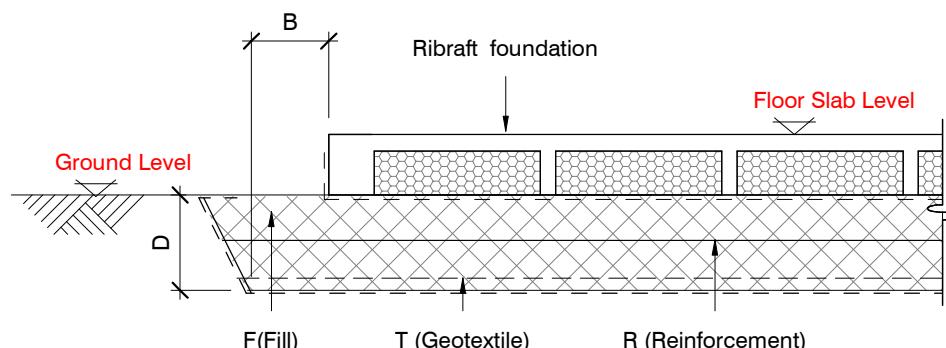
INSPECTIONS REQUIRED

- Confirm bearing at excavation. - By Engco
- Contractor to supply (4) N.D> Tests at mid-height and finished compacted surface - if depth of fill is greater than 400mm.
- Pre-pour of slab. - By Engco

BUILDING PLATFORM TABLE:	
B	500mm
D	300mm below ground level (approx) across building platform (remove topsoil only)
T	N/A
R	N/A
F	AP 40/AP65 fill. - 95% Dry Density. Compact in 200mm layers (max.)

Refer Architectural drawings for Finished Floor Level

GEOTECHNICAL REFERENCE:
Refer: ENGEO Lot Specific Geotechnical Report.
Ref. No: 19120.000.001_17
Dated: 16th September 2021

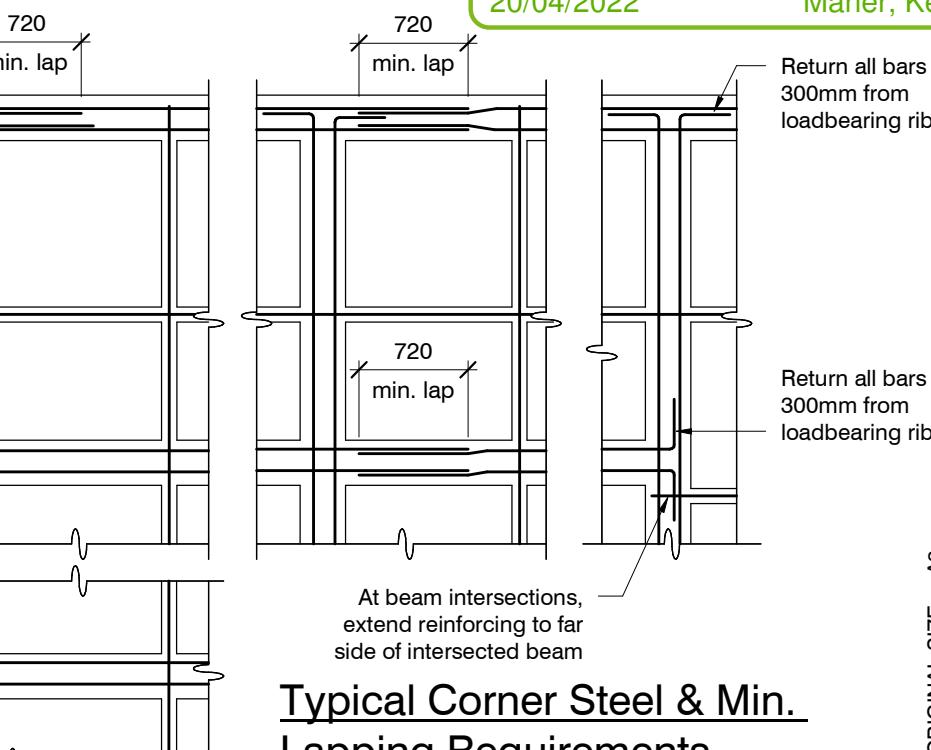
**BUILDING PLATFORM**

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HOCKEY RESIDENCE

Lot 17 Belfast development, Belfast



revisions	-	23/09/2021	For Consent

General Notes

design J. Farrés
drawn C. Andrews
appvd M. Cusiel
date 23/09/2021

file 21008.159
dwg S1
rev. -

Locations shown of internal floor beam thickenings are indicative only. It shall be the responsibility of the Contractor to ensure that they are located centrally under the load bearing walls to which they pertain.

Under no circumstance should pipework for services be run longitudinally in 100mm ribs. Similarly they should not be run along perimeter foundations nor internal floor beam thickening

Vertical or horizontal penetrations through the foundation edge beam or floor beam thickening must be made through the middle third of the member. Vertical penetrations should not be made through 100 mm ribs.

Refer to Architects drawings for floor slab, set downs, steps, rebates, holding down bolts, cast-in componentry and the like.

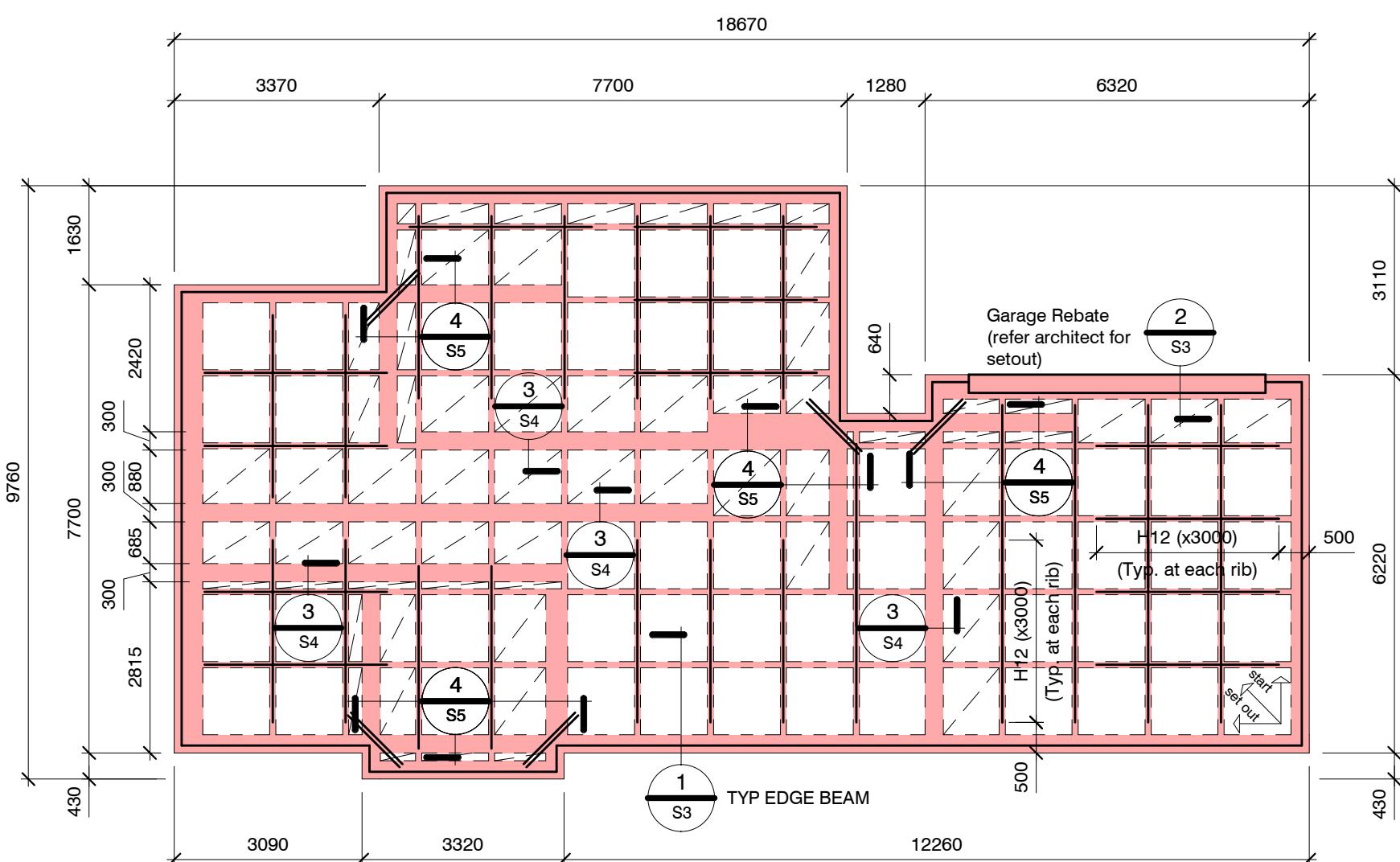
KEY:
(2) H12 (x1200) at 200 crs.
1100 x 1100 pod (typ.)
Cut pod (typ.)

100 mm Floor Slab - 220 mm pods
(25MPa TC2 Dramix 4D 80/60 Fibre mix Concrete)
G500 E SE62 Ductile mesh on 65 mm chairs.

The design Fibre mix shall be supplied so that the residual flexural tensile stresses $f_{R,1}$ & $f_{R,4,K}$ shall be 1.5 MPa & 1.0 MPa respectively.

All Mesh shall lap a minimum of 250mm (end of extensions not included).

ORIGINAL SIZE = A3



RIBRAFT FOUNDATION LAYOUT PLAN

1 : 100

Confirm all dimension with Architects drawings

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HOCKEY RESIDENCE
Lot 17 Belfast development, Belfast

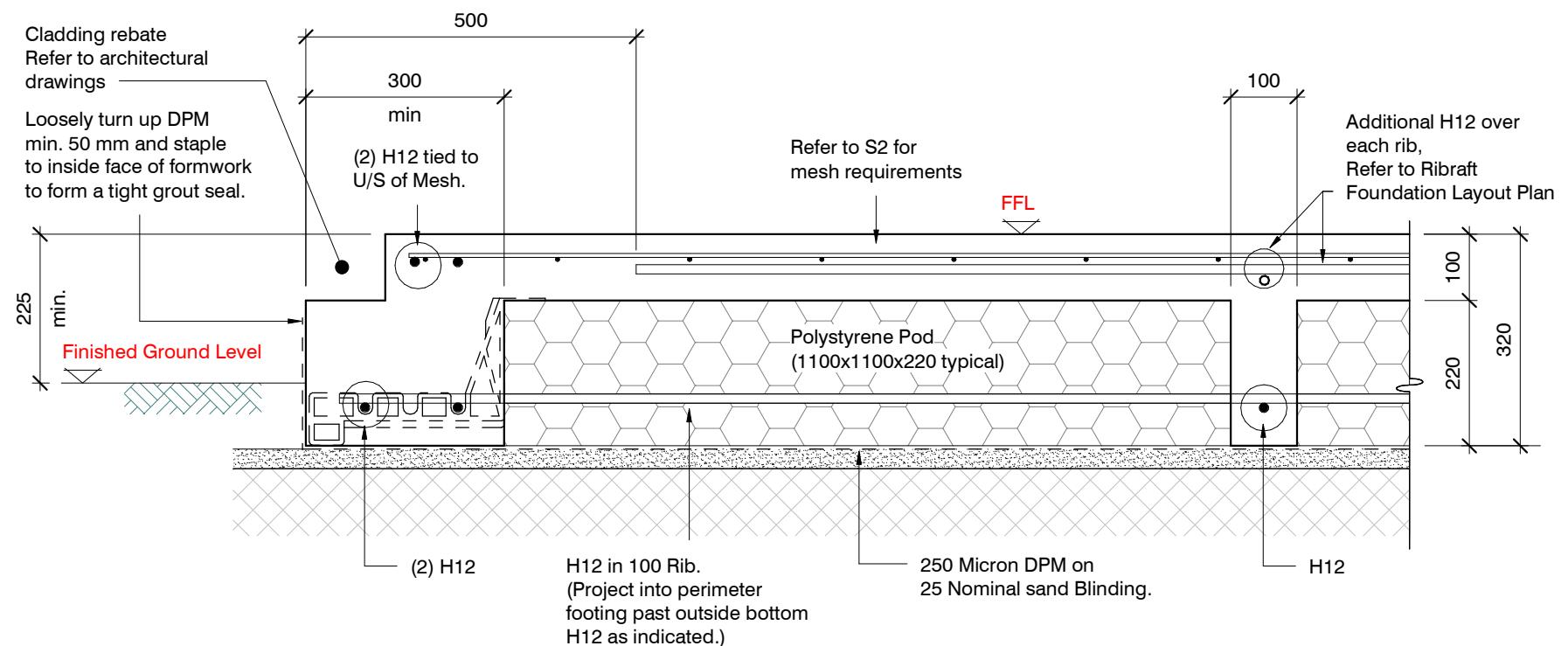
Rib Raft Layout
Foundation Plan

revisions

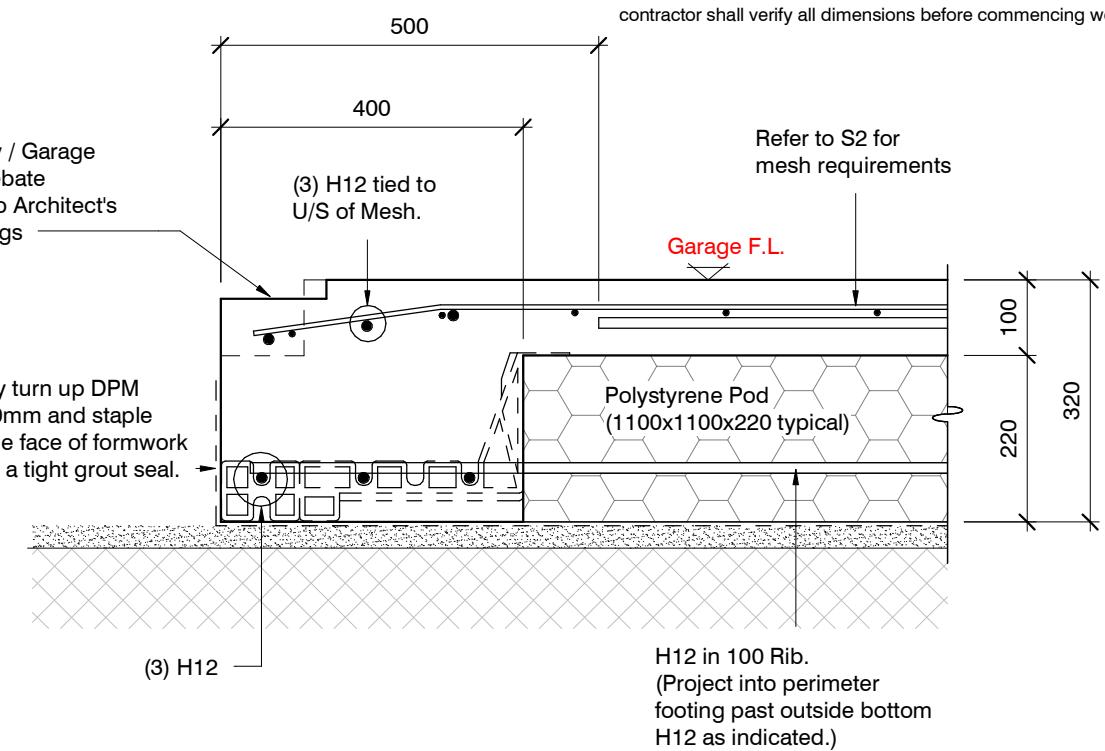
-	23/09/2021	For Consent

design J. Farrés
drawn C. Andrews
appvd M. Cusiel
date 23/09/2021

file 21008.159
dwg S2
rev. -

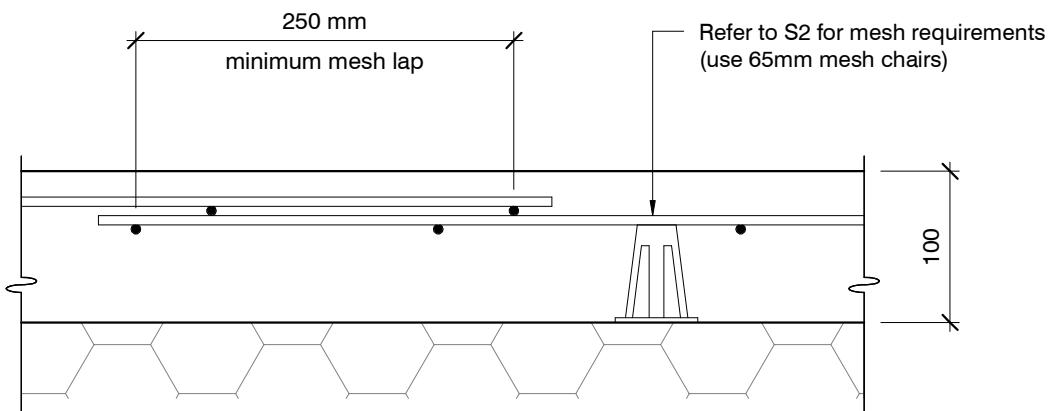


SECTION 1
1 : 10
S2



SECTION 2
1 : 10
S2

Christchurch City Council BCN/2022/2262
Approved Building Consent Document
20/04/2022 Maher, Kevin



TYPICAL MESH LAP & CHAIR REQUIREMENTS

1:10

ORIGINAL SIZE = A3

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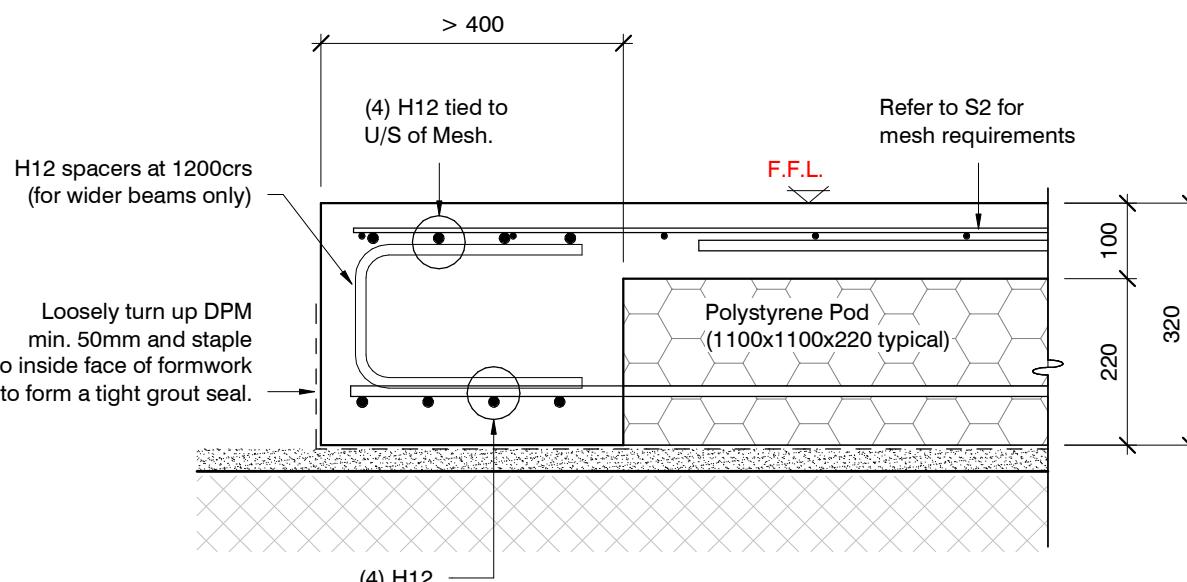
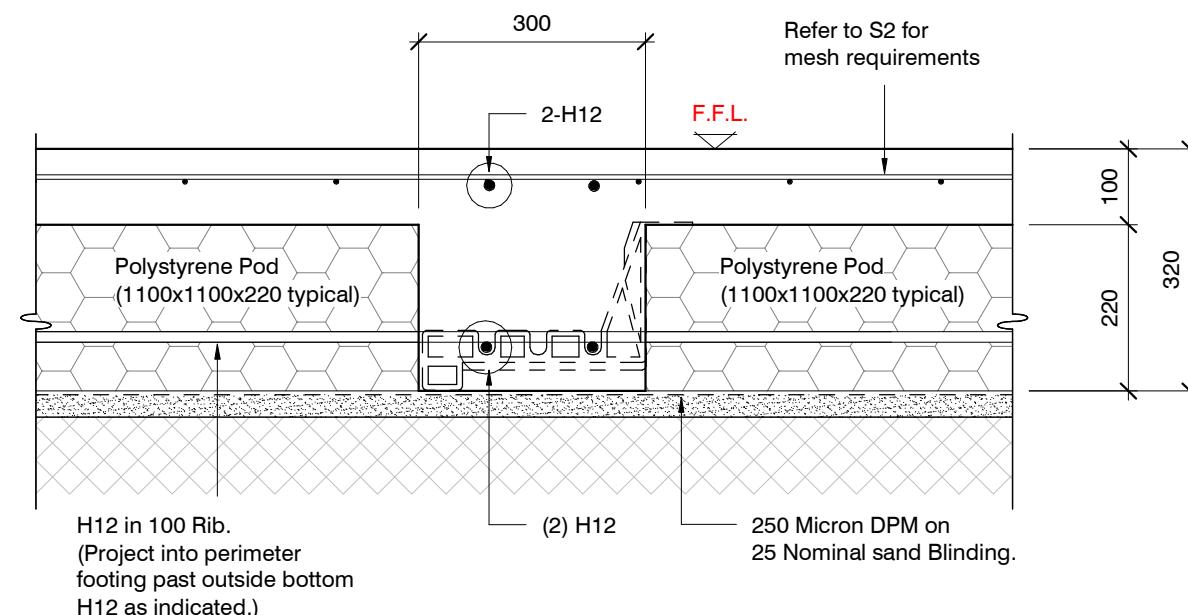


HOCKEY RESIDENCE
Lot 17 Belfast development, Belfast

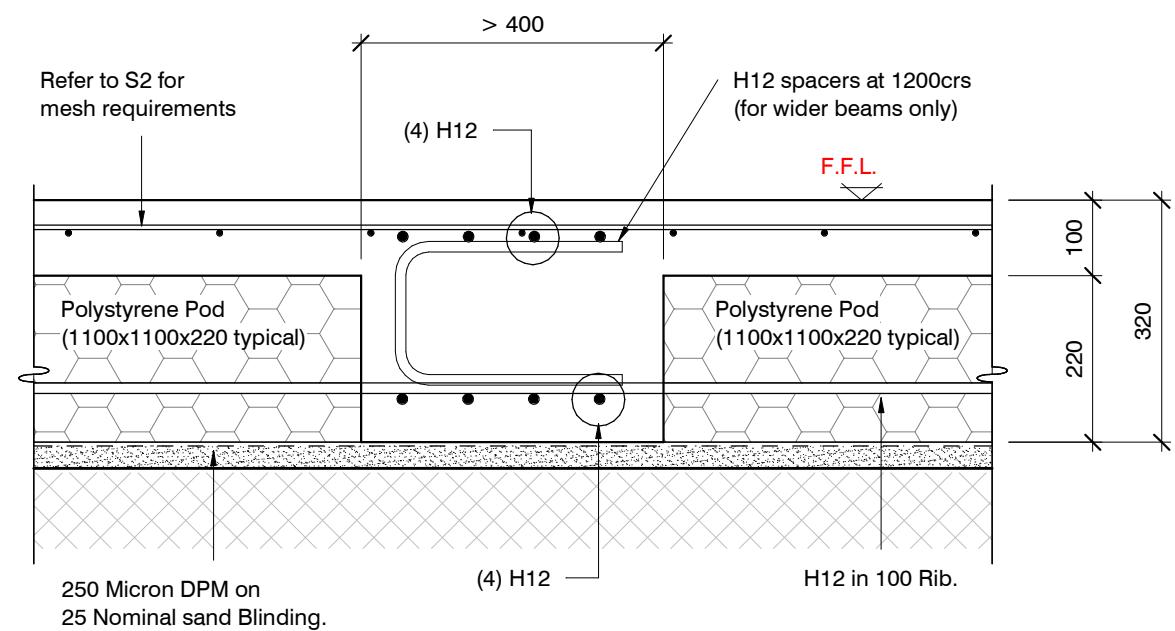
Typical Foundation Sections

revisions	-	23/09/2021	For Consent

design	J. Farrés
drawn	C. Andrews
appvd	M. Cusiel
date	23/09/2021
file	21008.159
dwg	S3
rev.	-



EDGE BEAM > 400mm IN WIDTH
if required
1:10



INTERNAL BEAM > 400mm IN WIDTH
if required
1:10

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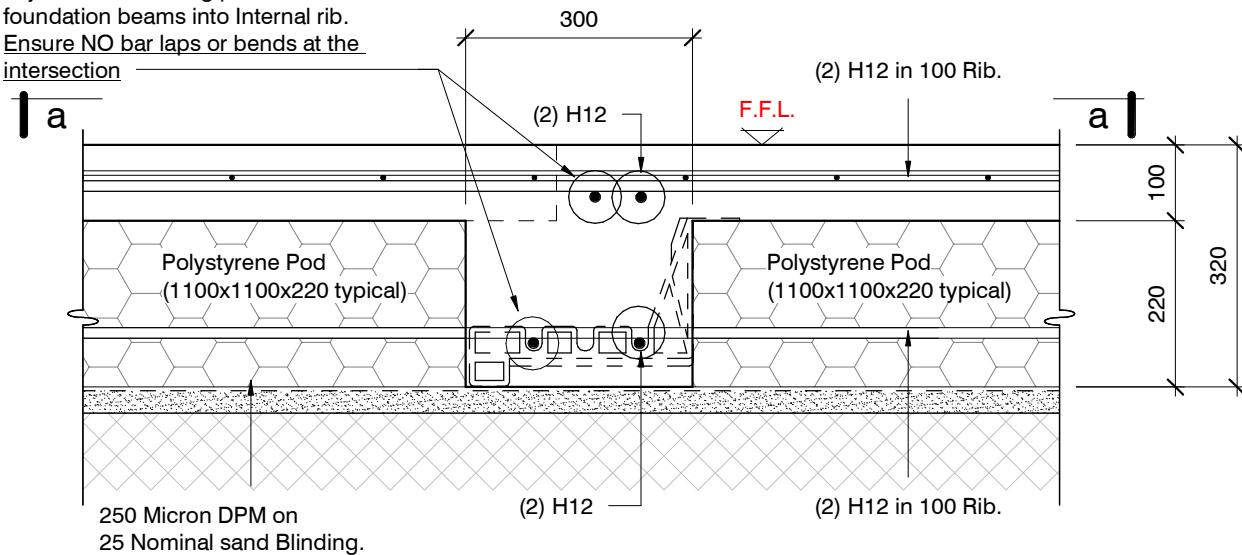
HOCKEY RESIDENCE
Lot 17 Belfast development, Belfast

**Typical Foundation
Sections**

revisions	-	23/09/2021	For Consent
design	J. Farrés	dwg	21008.159
drawn	C. Andrews	rev.	S4
appvd	M. Cusiel		
date	23/09/2021		

ORIGINAL SIZE = A3

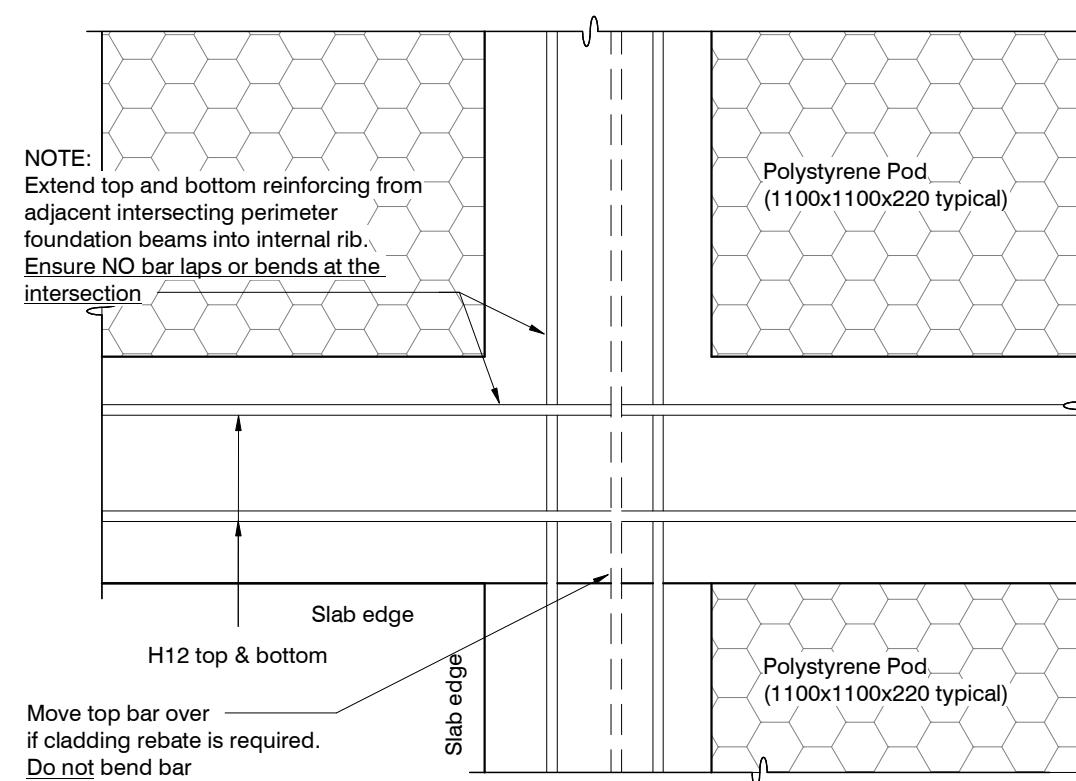
NOTE:
Extend top and bottom reinforcing from adjacent intersecting perimeter foundation beams into Internal rib.
Ensure NO bar laps or bends at the intersection



SECTION 4

1 : 10

S2



ORIGINAL SIZE = A3

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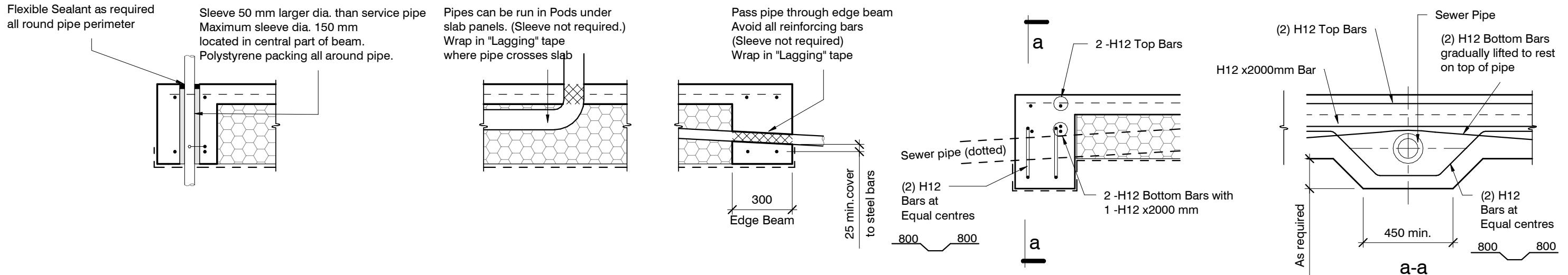
Typical Foundation
Sections

revisions

-	23/09/2021	For Consent

design J. Farrés
drawn C. Andrews
appvd M. Cusiel
date 23/09/2021

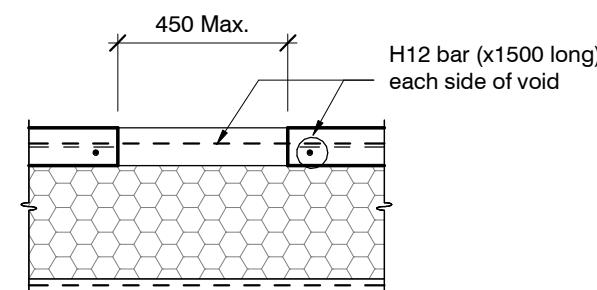
file 21008.159
dwg S5 rev. -



SLAB SERVICES PENETRATION DETAIL

PIPE NOTE:
No separation required where pipes are fully contained within slab.
Sleeve all drains that pass through the base of the slab.

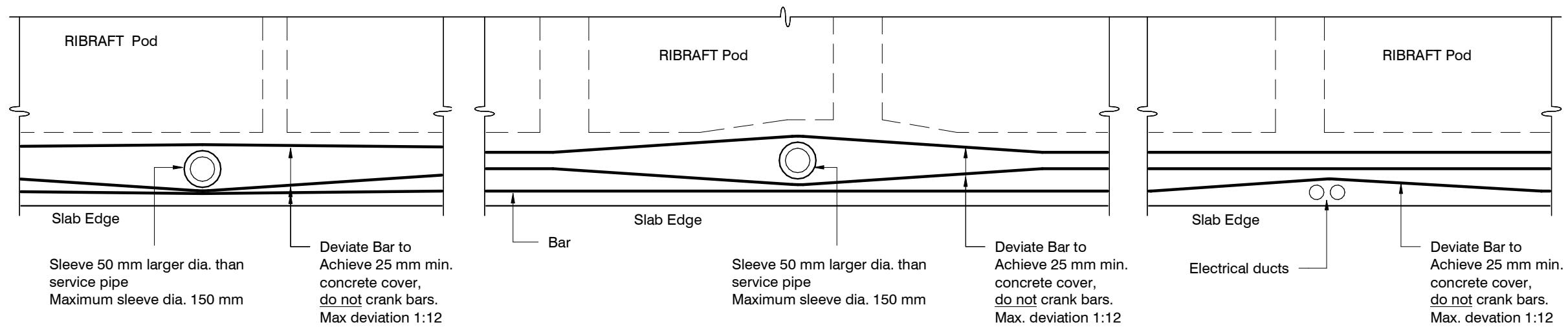
PENETRATIONS NOTE:
Where penetrations through Floor Slab exceed 450 mm Square, Crack Control Bars will be required.



LARGE SLAB PENETRATION DETAIL

TYPICAL SECTION LOCALISED DEEPENING OF FOUNDATION BEAM TO ACCOMMODATE TOILET WASTE PIPE

Christchurch City Council BCN/2022/2262
Approved Building Consent Document
20/04/2022 Maher, Kevin



ORIGINAL SIZE = A3

FOUNDATION SERVICES PENETRATION DETAILING.

Services shall not run along ribs or edge beams.

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HOCKEY RESIDENCE
Lot 17 Belfast development, Belfast

Typical Services
Penetration Details

-	23/09/2021	For Consent

design	J. Farrés
drawn	C. Andrews
appvd	M. Cusiel
date	23/09/2021
file	21008.159
dwg	S6
rev.	-



HOCKEY RESIDENCE

Lot 17 Belfast development, Belfast

RIBRAFT DRAWINGS



ENGCO
Consulting Engineers

20/04/2022

Christchurch City Council
BCN/2022/2262
Approved Building Consent Document
Maher, Kevin
Page 29 of 35

Sheet No.	Rev	Date Issued	Sheet Title	Issue Register
S1	-	23/09/2021	General Notes	
S2	-	23/09/2021	Rib Raft Layout Foundation Plan	
S3	-	23/09/2021	Typical Foundation Sections	
S4	-	23/09/2021	Typical Foundation Sections	
S5	-	23/09/2021	Typical Foundation Sections	
S6	-	23/09/2021	Typical Services Penetration Details	
				Date
				23/09/2021 For Consent
				Description

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A U C K L A N D - P H: (0 9) 3 7 7 7 9 5 5 ■ C H R I S T C H U R C H - P H: (0 3) 3 6 6 7 9 5 5 ■ N E L S O N - P H: (0 3) 3 6 6 7 9 5 5 ■ Q U E E N S T O W N - P H: (0 3) 3 6 6 7 9 5 5 ■ E - M A I L: O F F I C E @ E N G C O . N Z ■ W W W. E N G C O . N Z ■

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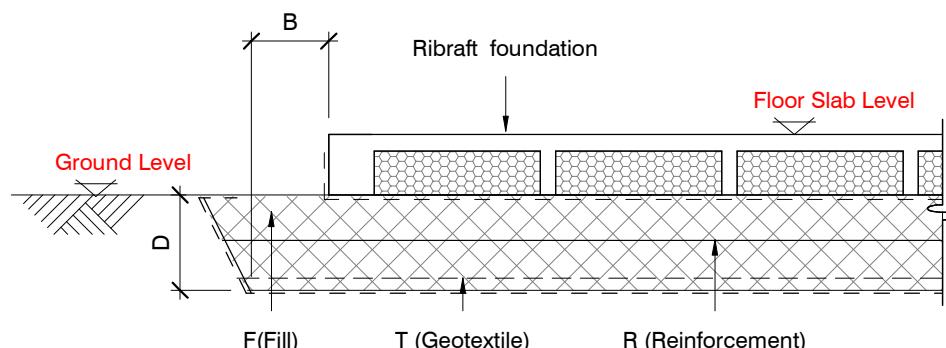
INSPECTIONS REQUIRED

- Confirm bearing at excavation. - By Engco
- Contractor to supply (4) N.D> Tests at mid-height and finished compacted surface - if depth of fill is greater than 400mm.
- Pre-pour of slab. - By Engco

BUILDING PLATFORM TABLE:	
B	500mm
D	300mm below ground level (approx) across building platform (remove topsoil only)
T	N/A
R	N/A
F	AP 40/AP65 fill. - 95% Dry Density. Compact in 200mm layers (max.)

Refer Architectural drawings for Finished Floor Level

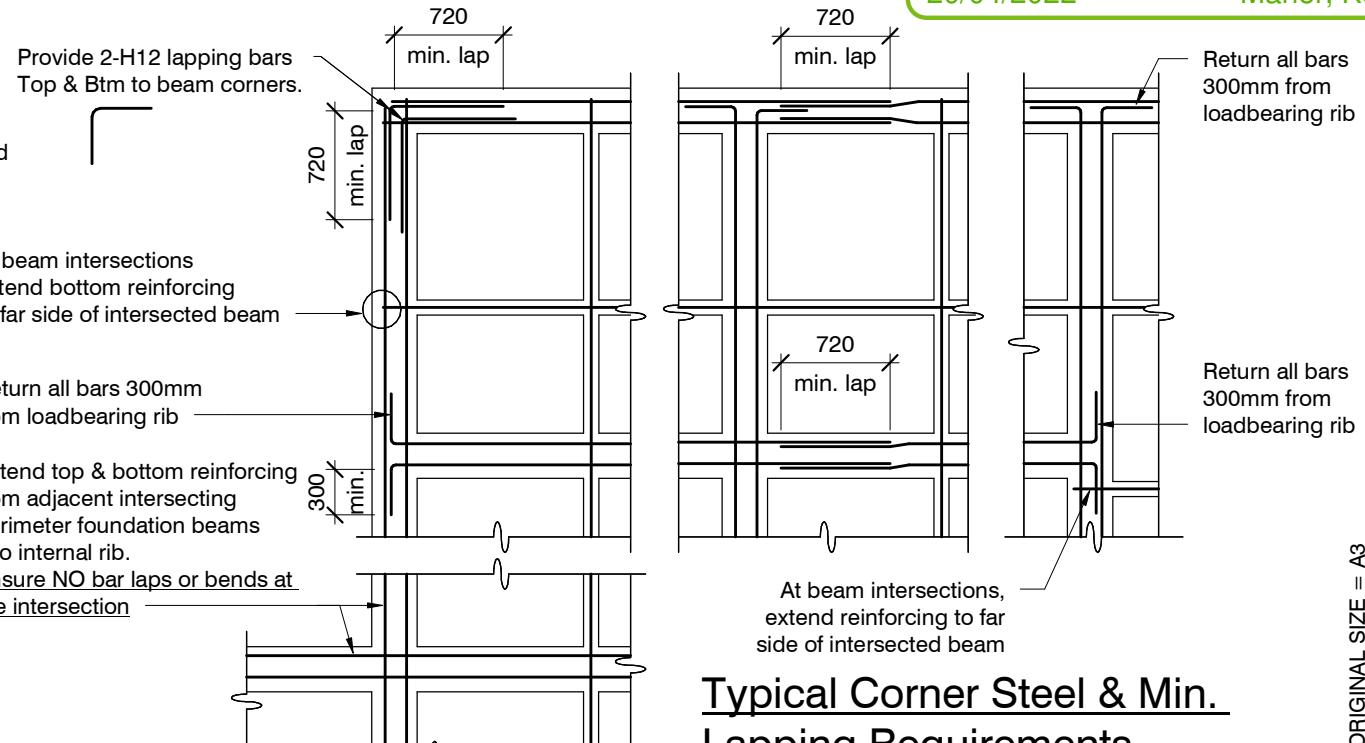
GEOTECHNICAL REFERENCE:
Refer: ENGEO Lot Specific Geotechnical Report.
Ref. No: 19120.000.001_17
Dated: 16th September 2021

**BUILDING PLATFORM**

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**HOCKEY RESIDENCE**
Lot 17 Belfast development, Belfast

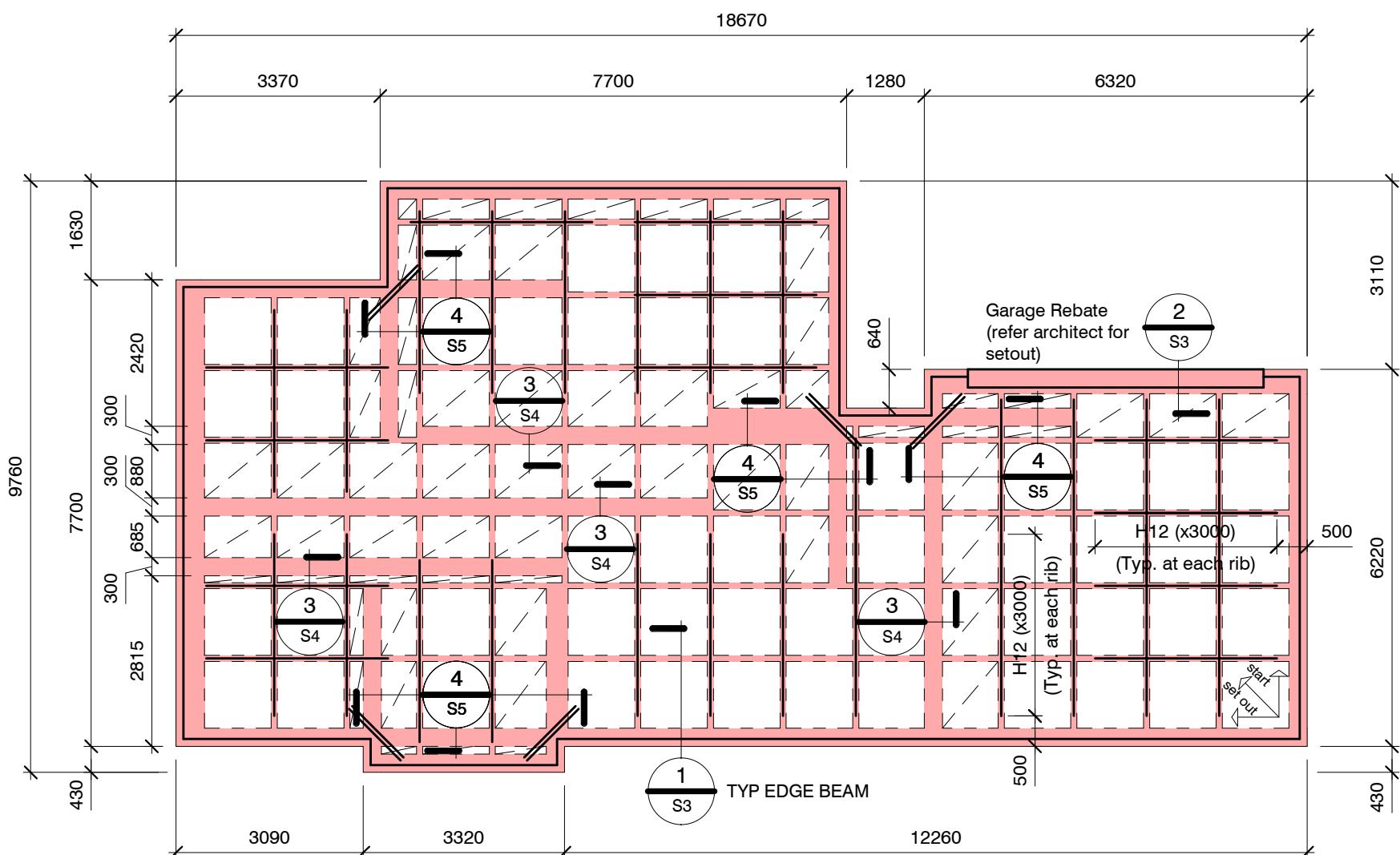
Christchurch City Council BCN/2022/2262
Approved Building Consent Document
20/04/2022 Maher, Kevin

**Typical Corner Steel & Min. Lapping Requirements**

N.T.S.

-	23/09/2021	For Consent

design	J. Farrés
drawn	C. Andrews
appvd	M. Cusiel
date	23/09/2021
file	21008.159
dwg	S1
rev.	-



RIBRAFT FOUNDATION LAYOUT PLAN

1 : 100

Confirm all dimension with Architects drawings

GENERAL NOTES:

Locations shown of internal floor beam thickenings are indicative only. It shall be the responsibility of the Contractor to ensure that they are located centrally under the load bearing walls to which they pertain.

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KEY:

(2) H12 (x1200)
at 200 crs.

1100 x 1100 pod
(typ.)

Cut pod
(typ.)

100 mm Floor Slab - 220 mm pods
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G500 E SE62 Ductile mesh on 65 mm chairs.

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All Mesh shall lap a minimum of 250mm
(end of extensions not included).

ORIGINAL SIZE = A3

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HOCKEY RESIDENCE
Lot 17 Belfast development, Belfast

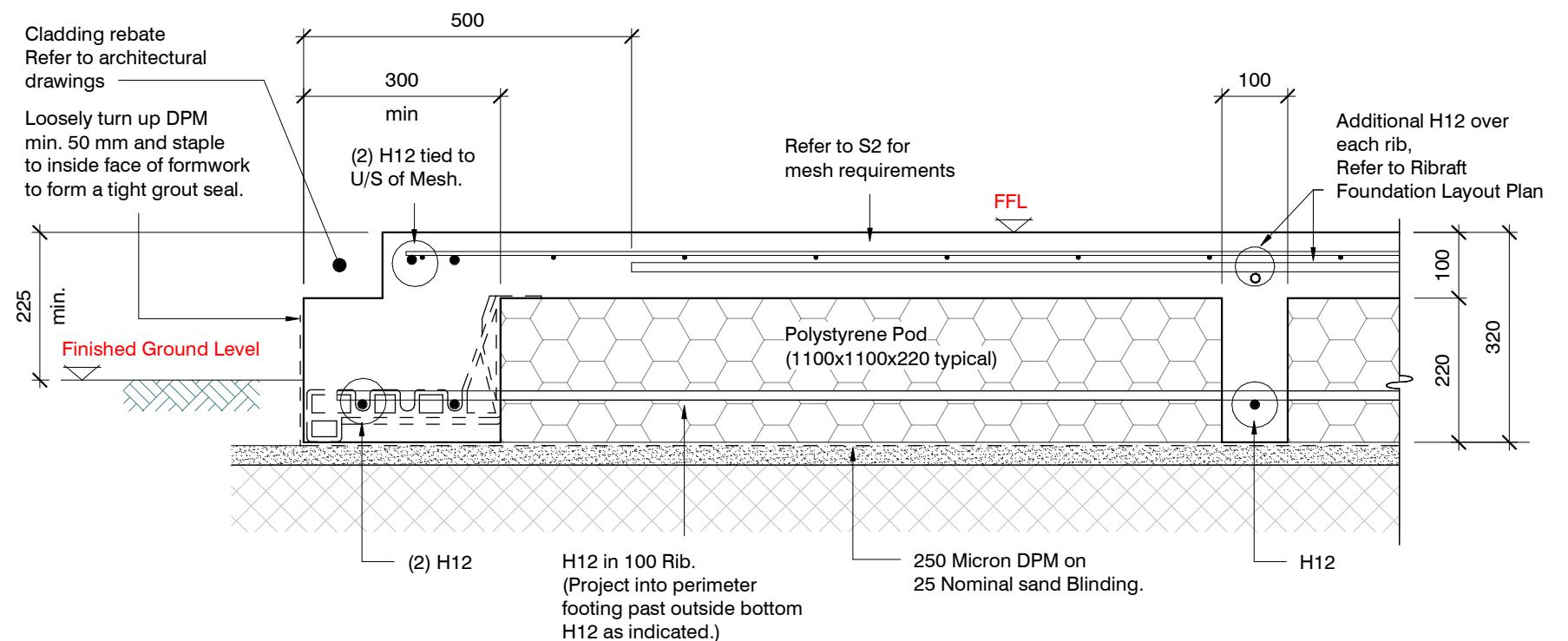
Rib Raft Layout
Foundation Plan

revisions

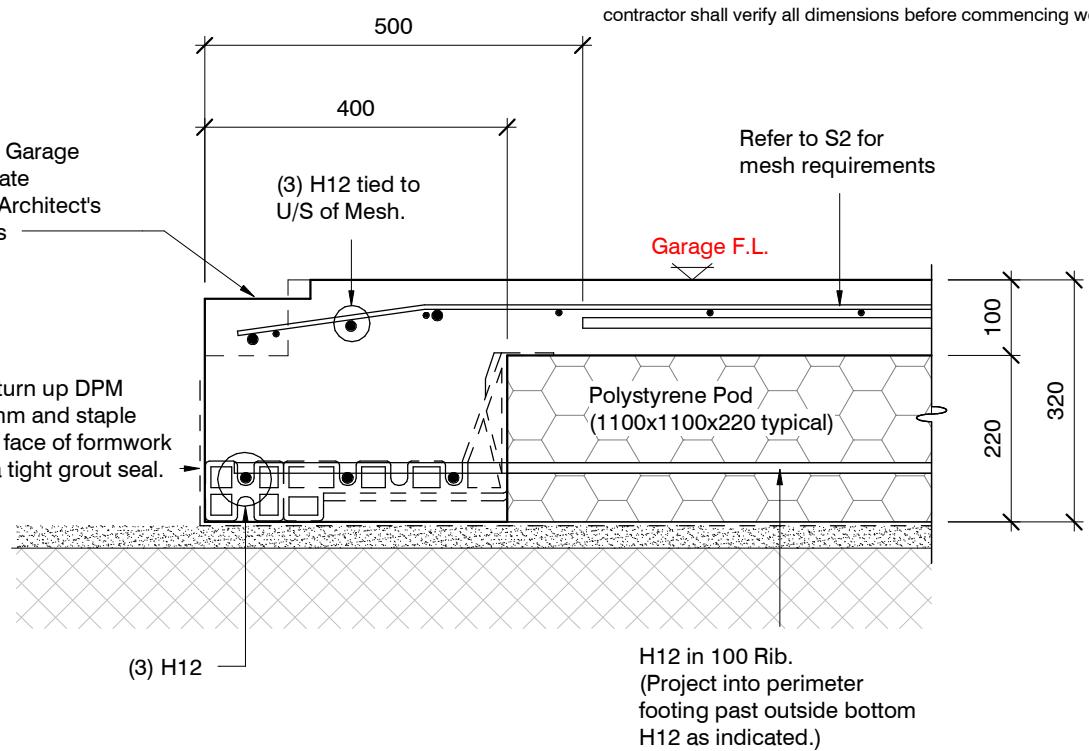
-	23/09/2021	For Consent

design J. Farrés
drawn C. Andrews
appvd M. Cusiel
date 23/09/2021

file 21008.159
dwg S2
rev. -

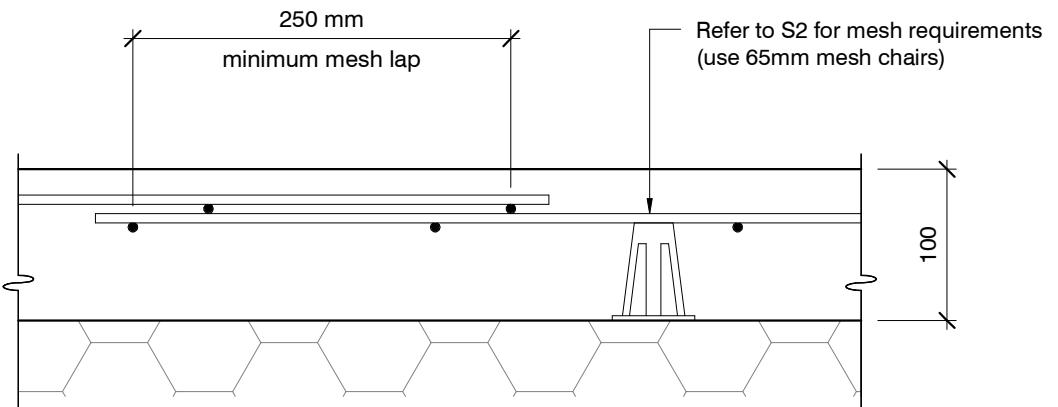


SECTION 1
1 : 10
S2



SECTION 2
1 : 10
S2

Christchurch City Council BCN/2022/2262
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20/04/2022 Maher, Kevin



TYPICAL MESH LAP & CHAIR REQUIREMENTS

1:10

ORIGINAL SIZE = A3

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HOCKEY RESIDENCE
Lot 17 Belfast development, Belfast

Typical Foundation Sections

revisions		-	23/09/2021	For Consent

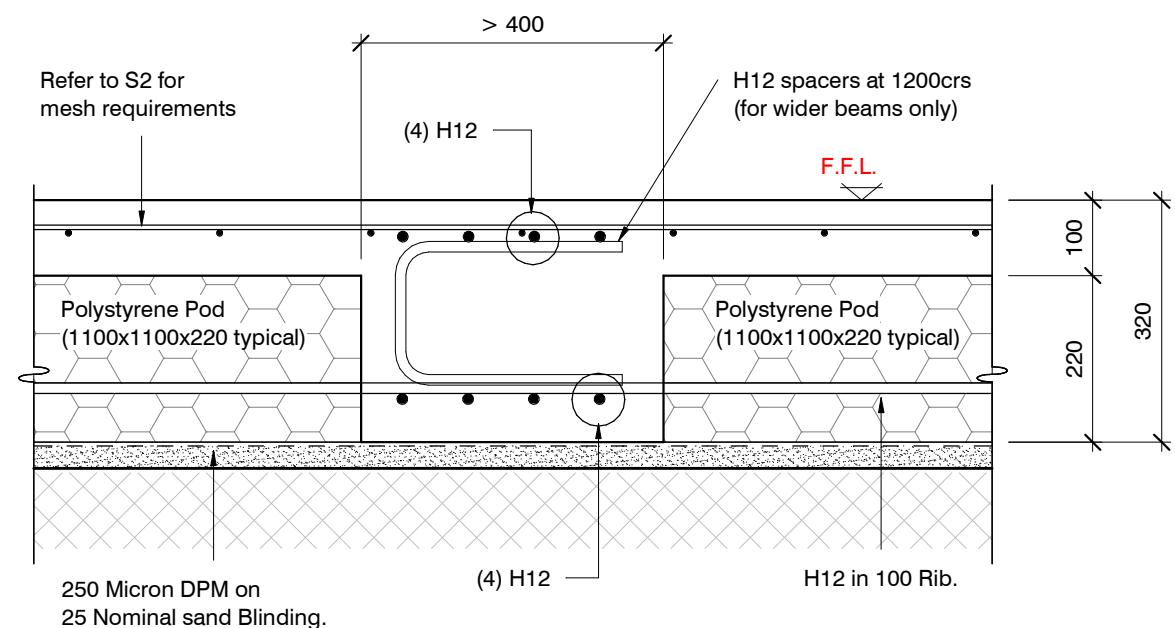
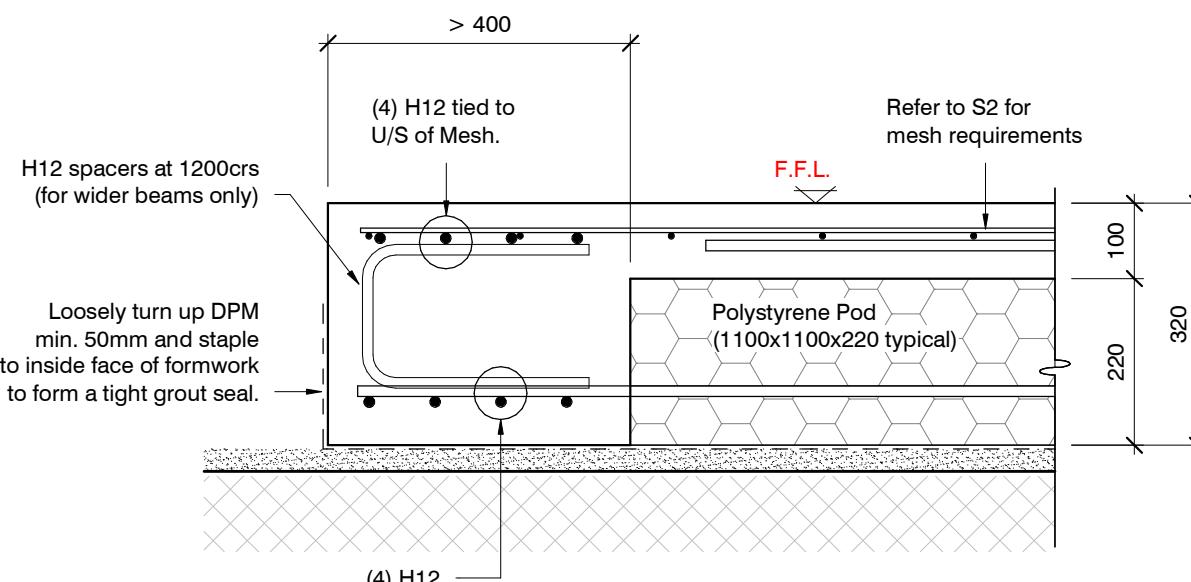
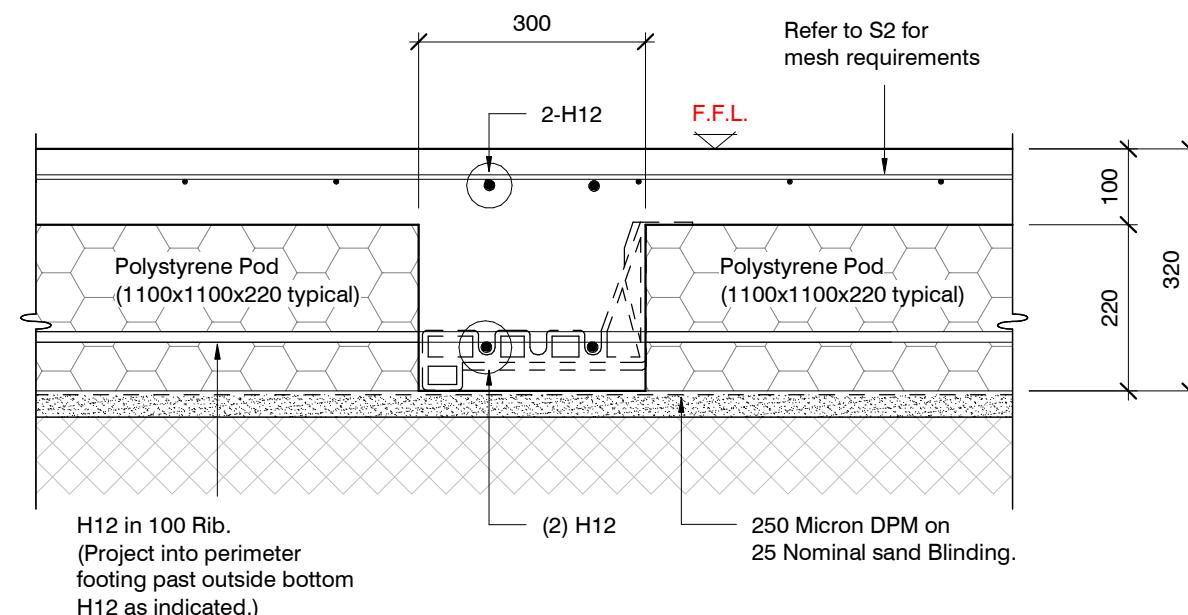
design	J. Farrés
drawn	C. Andrews
appvd	M. Cusiel
date	23/09/2021

file	21008.159
dwg	S3
rev.	-

BCN/2022/2262
Approved Building Consent
Document

20/04/2022

Maher, Kevin



ORIGINAL SIZE = A3

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HOCKEY RESIDENCE
Lot 17 Belfast development, Belfast

**Typical Foundation
Sections**

revisions

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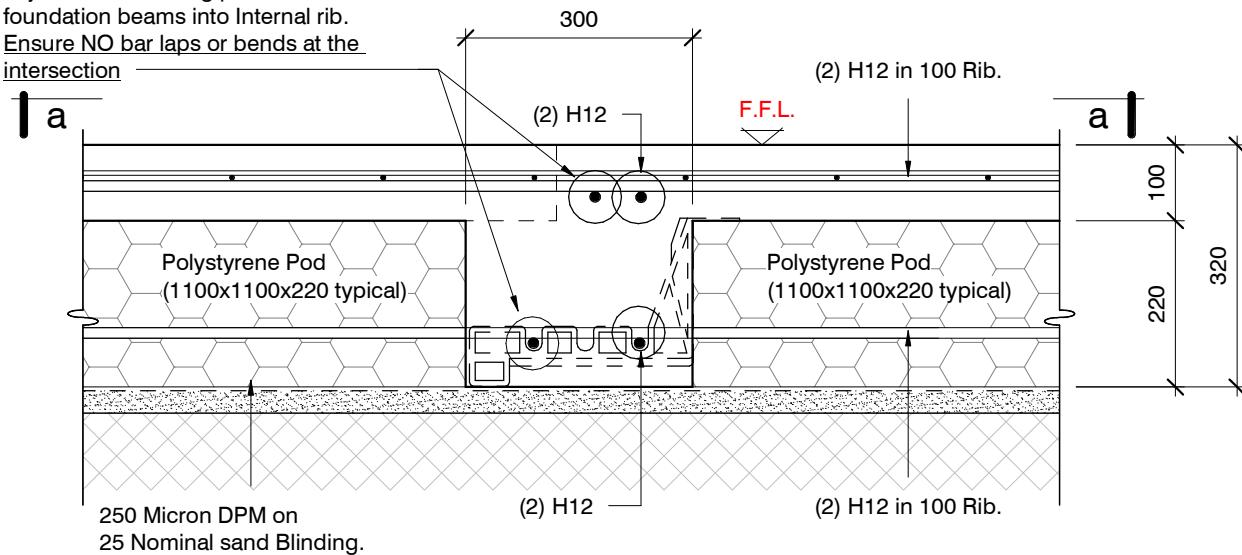
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drawn C. Andrews
appvd M. Cusiel
date 23/09/2021

file 21008.159
dwg S4 rev. -

20/04/2022

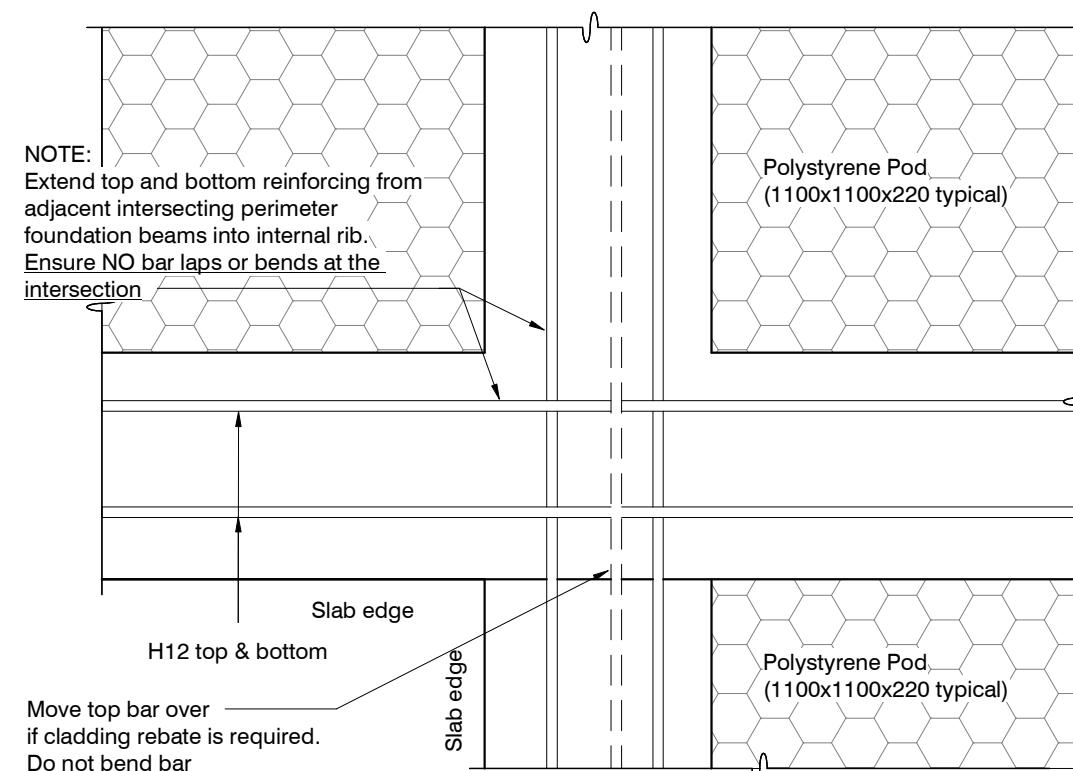
Maher, Kevin

NOTE:
 Extend top and bottom reinforcing from adjacent intersecting perimeter foundation beams into Internal rib.
 Ensure NO bar laps or bends at the intersection

**SECTION 4**

1 : 10

S2



a-a

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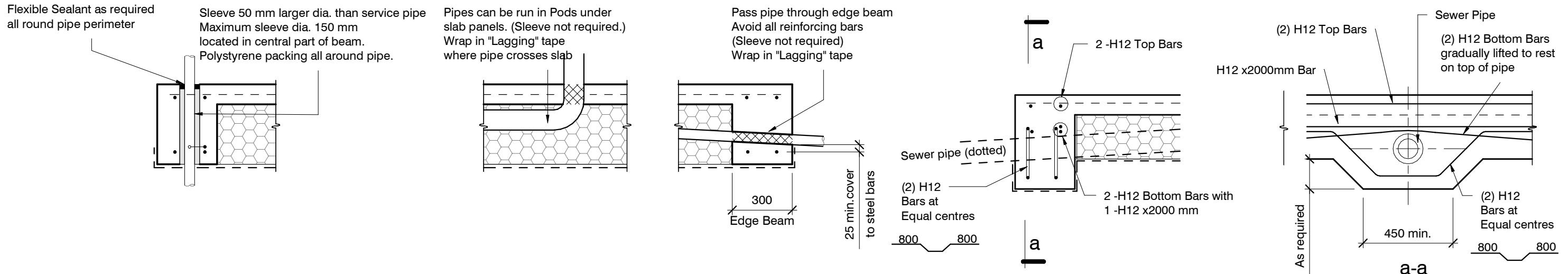
Typical Foundation Sections

revisions

-	23/09/2021	For Consent

 design J. Farrés
 drawn C. Andrews
 appvd M. Cusiel
 date 23/09/2021

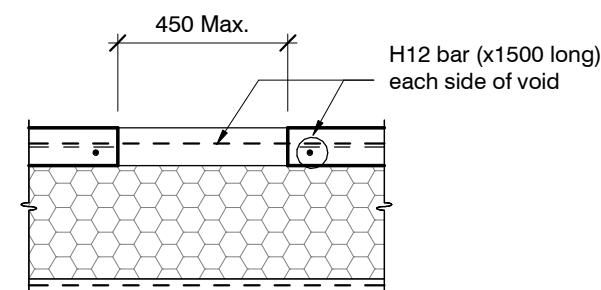
 file 21008.159
 dwg S5 rev. -



SLAB SERVICES PENETRATION DETAIL

PIPE NOTE:
No separation required where
pipes are fully contained within slab.
Sleeve all drains that pass through the
base of the slab.

PENETRATIONS NOTE:
Where penetrations through
Floor Slab exceed 450 mm Square,
Crack Control Bars will be required.

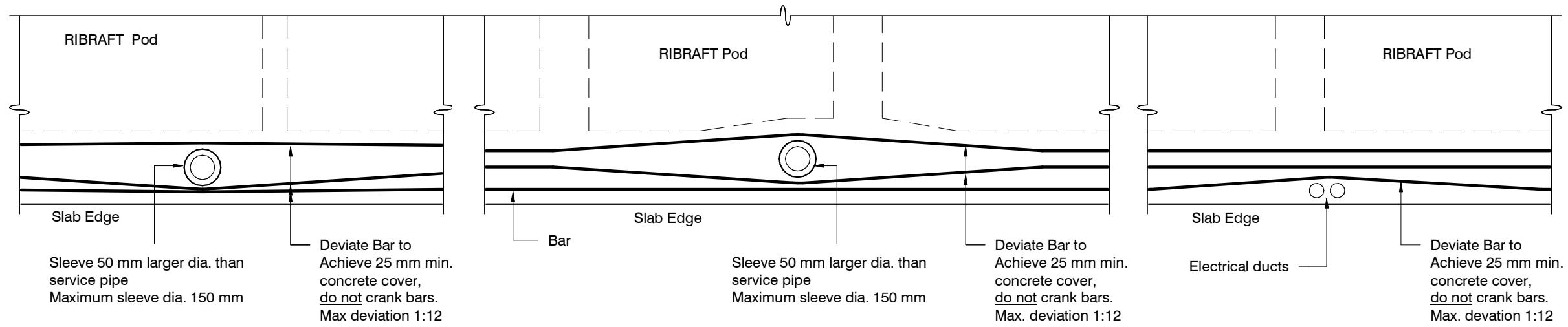


LARGE SLAB PENETRATION DETAIL

TYPICAL SECTION LOCALISED DEEPENING OF FOUNDATION BEAM TO ACCOMMODATE TOILET WASTE PIPE

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FOUNDATION SERVICES PENETRATION DETAILING.

Services shall not run along ribs or edge beams.

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HOCKEY RESIDENCE
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Typical Services
Penetration Details

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design	J. Farrés
drawn	C. Andrews
appvd	M. Cusiel
date	23/09/2021
dwg	S6
file	21008.159
rev.	-