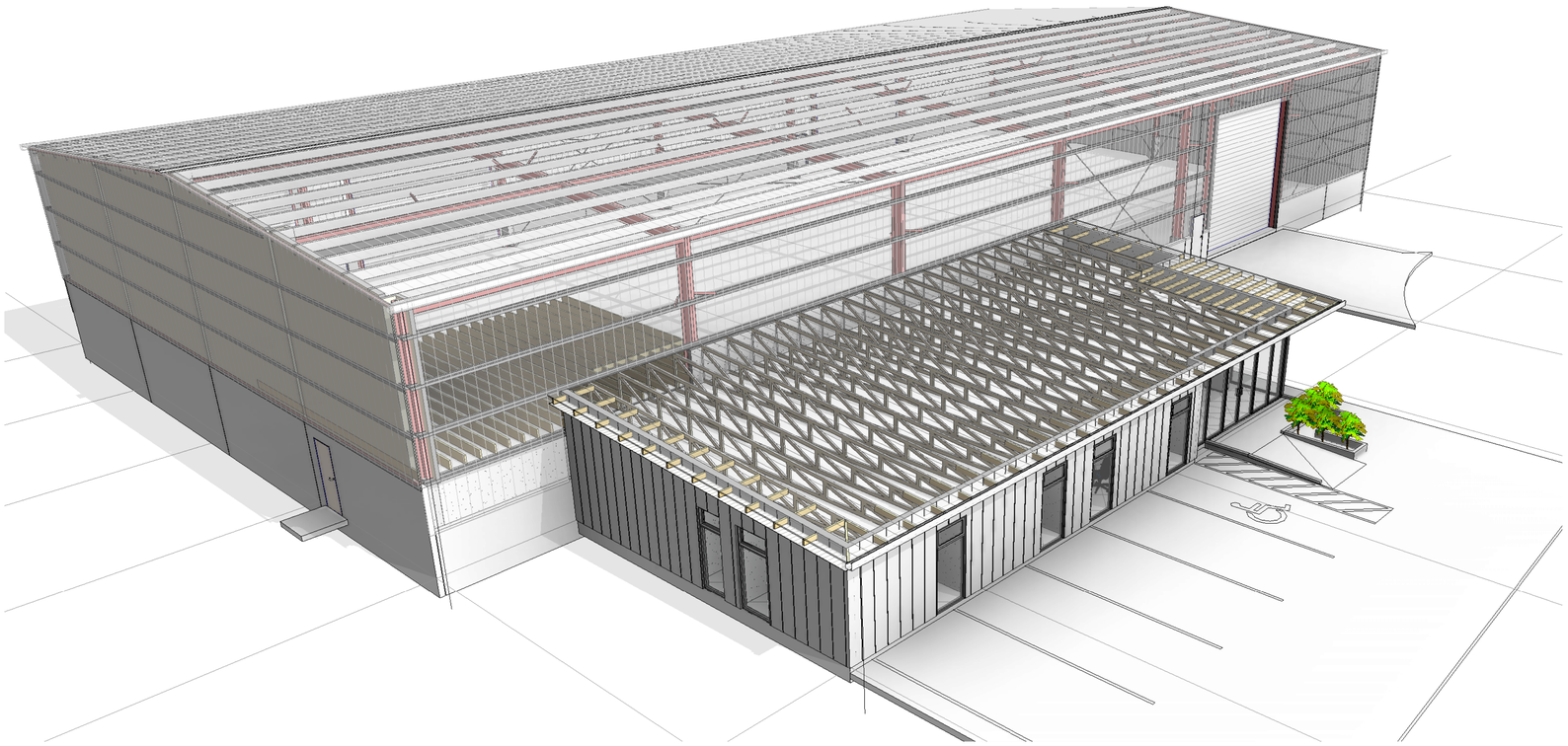
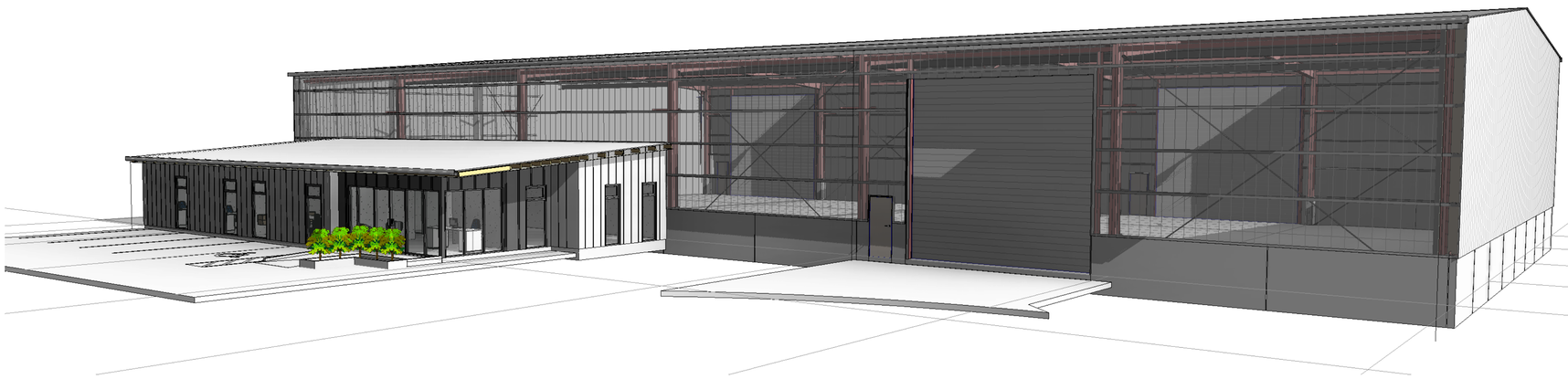
NEW COMMERCIAL BUILDING
LOT 3 328 NGAUMUTAWA ROAD MASTERTON
FOR
WESTWOOD PROPERTY GROUP LIMITED





ARCHITECTURAL

Sheet List		
Sheet Number	Revision	Sheet Name
000	0	Cover Sheet
001	0	Specs
003	0	Site Plan
010	0	Floor Plan
011	0	Walls Plan
012	0	Bracing Plan
014	0	Reflected Ceiling Plan
015	0	Roof Framing Plan (Offices)
016	0	Roof Plan
020	0	Stormwater Plan
021	0	Plumbing Plan
030	0	Architectural Elevations
031	0	Architectural Elevations (Fire Walls)
035	0	Architectural Sections
040	0	Window Schedule
041	0	Door Schedule
042	0	Door Schedule
043	0	Accessible Details
045	0	Standard Details
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047	0	Standard Details
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050	0	Arch Details
051	0	Arch Details
052	0	Arch Details
053	0	Arch Details
054	0	Arch Details, PFC Lintel
060	0	Stria Details
061	0	Stria Details
062	0	Stria Details
065	0	Board & Batten Details
066	0	Board & Batten Details
067	0	Board & Batten Details
068	0	Board & Batten Details
070	0	GIB Nailing
071	0	GIB Ceiling Diaphragm
072	0	GIB Fyreline

STRUCTURAL

Sheet List		
Sheet Number	Revision	Sheet Name
100	0	Foundation Plan
101	0	PC Panel Plan
110	0	PC Panel Elevations
120	0	Foundation Details
121	0	Foundation Details
122	0	Foundation Details
123	0	Foundation Details
200	0	Column Plan
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202	0	Walls Fly Brace Plan
205	0	Roof Framing Plan (WareHouse)
220	0	Sections
221	0	Sections
222	0	Sections
230	0	Details
231	0	Details
232	0	Details
233	0	Details
234	0	Details
236	0	Base Plates

REV	DATE	DESCRIPTION
0	240325	Issued for Consent

Structural Concepts
Consulting Engineers

Napier Office: 06 842 0111
Level 3 Dunvegan house,
215 Hastings Street, Napier
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New Commercial Building

Cover Sheet

CLIENT
Westwood Property Group Limited

PROJECT ADDRESS
Lot 3 328 Ngaumutawa Road Masterton

SCL NUMBER 4226-10302

A1	SHEET	REV
	000	*0*

DES: PR DRG: SP K:_CAD\4226-10302 Lot 6 328 Ngaumutawa Rd (Loaders)\4226-10302 DRG Lot 3 328 Ngaumutawa Rd (Loaders).rvt

DATE: 27/02/24

GENERAL ABBREVIATIONS

CL	Centreline	MAX	Maximum	EW	Each way
CJ	Construction Joint	MIN	Minimum	T	Top
C.O.S	Check on site	MS	Mild steel	B	Bottom
CONC	Concrete	SS	Stainless steel	H	Horizontal
CVR	Cover	NTS	Not to scale	V	Vertical
DPM	Damp proof membrane	O/A	Overall	STA	Starter
DPC	Damp proof course	PC	Precast concrete	STPS	Stirrups
D&E 'X'MM	Drill & Epoxy 'X'mm	REO	Reinforcing		
EMBED	Embedment	RL	Reduced level		
ES	Each side	TYP	Typical		
GALV	Galvanized	U/S	Underside		
GL	Ground level	UNO	Unless noted otherwise		
FFL	Finish floor level				

STEEL PLACEMENT

1.0 GENERAL UNO

1.1 This specification in material and with regards to workmanship, accuracy and quality, the requirements of NZBC and appropriate current NZ Standards apply.

1.2 Structural Drawings shall be read in conjunction with the specification, civil and engineering services and architectural documents.

1.3 All dimensions are in mm UNO

1.4 All dimensions shown are to be verified by the contractor from on-site measurements prior to any fabrication work. The contractor is to notify Structural Concepts Ltd. of all required changes to drawings prior to any fabrication.

1.5 Dimensions shall not be obtained by scaling from drawings.

1.6 The Contractor is responsible for familiarising themselves with the site, the conditions and the site survey information that's being made available. This information is rendered as "Information Only" and the Contractor is required to conduct their own survey's to justify setting out and geometric constraints. The Contractor is to check all dimensions on the drawings and on site before commencing any work.

1.7 The Contractor is responsible for all design necessary to ensure stability of the works and adjoining structures at all stages of construction, including the provision for temporary shores and bracing. Erection methodology to be submitted to Structural Concepts Ltd. for approval.

1.8 All materials and workmanship shall be in accordance with the current codes of practice except where varied by the specification and/or drawings.

1.9 Where proprietary products are specified in the documents the contractor must submit any alternative product for approval.

1.10 Contractor to check location of existing services prior to any excavation work. Notify the engineer of any conflicts and await approval before proceeding.

1.11 Only "Construction Issue" information is to be used for the proposed construction.

1.12 Structural Concepts Ltd. drawings provide overall dimensioning, member sizes and typical connections only. Shop drawings are to be the responsibility of the fabricator/contractor.

1.13 The accuracy & completeness of workshop drawings & specification remain the sole responsibility of the contractor. It is Structural Concepts Ltd. policy that we are happy to answer queries from those preparing workshop drawings regarding interpretation of our drawings and documentation.

1.14 All discrepancies shall be referred to Structural Concepts ltd. for resolution before proceeding with the work.

1.15 SCL Drawings ETC, refer notes
All drawings to be read inconjunction with Architectural drawings

2.0 CONCRETE

2.1 Minimum concrete strengths shall be as follows, unless noted otherwise on drawings:

CONCRETE TYPE	MIN. STRENGTH
Foundations	30 Mpa
Precast	30Mpa
Slabs on Grade	25Mpa
Block/ Masonry fill	17Mpa
Site Concrete	10 Mpa

2.2 Contractor shall submit shop drawings of all precast units for approval prior to commencement of work.

2.3 Tolerances and finishes to be as per project specification.

2.4 All concrete shall be cured for at least 14 days as follows. For the first 7 days, all concrete shall be kept continuously wet and thoroughly protected from direct rays of sun and from drying winds. For 7 days thereafter, concrete surfaces shall be kept damp and protected from direct rays of sun and drying winds. Membrane curing shall only be used with the express permission of the engineer.

3.0 REINFORCING

REINFORCING TYPES

3.1

TYPE	DETAILS
R	Plain bars Grade 300 to AS/NZS 4671 (300 MPa)
HR/XR	Plain bars Grade 500E to AS/NZS 4671 (500 MPa)
D	Deformed bars Grade 300 to AS/NZS 4671 (300 MPa)
HD/XD	Deformed bars Grade 500E to AS/NZS 4671 (500 MPa)
Mesh	Mesh to NZS 4671 (500MPa)
RB	Deformed Reidbar Grade 500E to AS/NZS 4671 (500 MPa)

3.2 Clear cover to all reinforcement, including stirrups, ties shall be as follows, unless noted otherwise on the drawings and project specification.

3.3 Casting against ground:
Where concrete is cast on or against ground in accordance with NZS 3109, the minimum cover for a surface in contact with the ground shall be 75mm, or 50mm if using a damp-proof membrane between the ground and the concrete to be cast - All UNO on drawings, 30mm UNO for internal surfaces
On External surfaces the cover will be specified depending on environmental exposure.

3.4 No reinforcing splices shall be made other than those shown on the structural drawings without the prior approval of the engineer.

3.5 Reinforcing laps in concrete to comply with the table below:
Splice lap lengths for deformed bars (in mm) NZS 3101 - 8.6.3 (Eqn 8.2)

Lap/ Development Length, f'c ≥ 25 MPa, 50mm Cover Top bar with 300mm concrete cast under						
Diameter of Bar (mm)						
Grade (MPa)	8	10	12	16	20	25
300	320	390	470	630	780	975
500	520	650	780	1040	1300	1625

3.6 When main bars are offset i.e. for cranked laps, the slope of the incline portion of the bar shall not exceed the ratio of 1:6.

3.7 Epoxy grouting of reinforcing bars into concrete:
Holes for vertical bars shall be vertical. Holes for horizontal starters shall slope down at 15 degrees. Starter bars through panels must be through Drossbach tubes of sufficient diameter to allow grouting. Fully fill the void with High-strength Non-shrink grout once starter bars are installed.

3.8 Welding of reinforcing in not permitted

3.9 Top and bottom reinforcement in slabs shall be adequately supported to ensure all reinforcement stays in place during concrete pouring

3.10 Standard hooks and bends: (To be in accordance with NZS:3101)

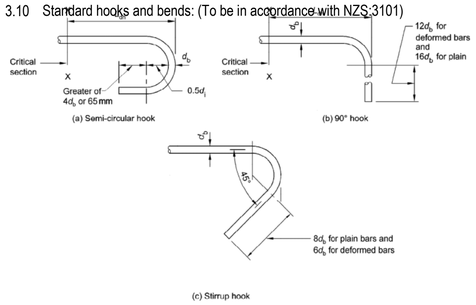

Figure 8.1 – Standard hooks

3.11 All dimensions are from outside to outside of bars except radii which are to inside of bar. 'D' denotes bar diameter.

3.12 The development of plain bars shall rely on hooks.

3.13 All plain (round) bars shall be grade 300. All deformed bars nominated as 'D' shall be grade 300E and all deformed bars nominated as 'H' shall be grade 500E, UNO

3.14 Mesh to conform to AS 4671. Mesh shall be lapped 225 min unless specified otherwise by manufacturer

3.15 Where floor slab has sawcuts, cut every second bar in mesh 25mm each side of saw cut

3.16 Spiral or hoops reinforcing to have standard 90Deg hooks at each end. Spirals to terminate with full hoop lap. Alternatively, with engineers approval, ternination can consist of a 6mm fillet lap weld x10Dp (bar diameters) long

Minimum bends for steel			
Grade	Bar Dia db (mm)	Min Dia of bend db (mm)	
300 or 500E	6-20	5 db	
	24-40	6 db	
Minimum bends for stirrups & ties			
Grade	Bar Dia db (mm)	Min Dia of bend db (mm)	
		Plain	Deformed
300 or 500E	6-20	2 db	4db
	24-40	3 db	6db

4.0 STRUCTURAL STEEL

4.1 All structural steel is to comply with AS/NZS 3679 Structural Steel.

4.2 Steel members shall be the following grades

UB UC PFC EA UA	300PLUS
RHS SHS	C350LO / C450LO
CHS	350

4.3 All cold formed sections including cold rolled purlins to conform to AS 1538 and shall have a minimum yield stress of 500 MPa

4.4 The ends of all hollow sections shall be sealed with 5mm min. steel plate, steel welded UNO

4.5 All plates and cleats shall be grade 300

4.6 All holding down bolts and other fixing devices shall have a minimum yield stress of 300MPa UNO

4.7 All dry pack mortar / grout shall have a compressive strength of at least 30 MPa.

4.8 Surface preparation is in accordance with NZS 2312 and relevant to the selected protective system Surface protection required. Refer to table 18 NZS 3404.1. 15 years to first maintenance. Any damage to the protective coating of steelwork shall be made good.

4.9 Tolerances for erection of steelwork shall comply with clause 15.3 of NZS 3404.

4.10 Bolts, nuts, pins and fasteners shall be hot dipped galv, grade 8.8 high strength bolts complying with AS 1252 UNO

4.11 All bolts to be grade 8.8 UNO

4.12 Each bolt and nut shall have at least one washer placed under the rotating component in accordance with AS 1511 section 4.2, and shall be not less than twice the nominal bolt size in diameter.

4.13 The bolts shall be selected so that the projection beyond the nut is not less than two threads and not more than 10mm.

4.14 Nuts shall be placed so that the mark specified in AS 1252 to identify a high-strength nut is visible after tightening in accordance with AS 1511 section 4.2

4.15 **COMMON DETAILING CRITERIA: (UNO)**

Bolt edge and end distance	2D
Bolt pitch distances	2.5D
Gauge distances	70, 90, 140 as per AISC
Bolt standard holes	D+2mm
Slotted holes	D+2mm wide x 2.5D long
HD bolts	1.22D (standard washer)
	1.33D (fabricated washing)

4.16 For Connections WM, BWBS, MEP, WP, Refer to SCNZ 14.2.2007 Catalog

4.17 Refer Architectural drawings for all steelwork to be drilled with 14Dia holes where required for timber fixing

5.0 WELDING

5.1 All welded connections to primary structure shall be of SP grade metal ARC as shown on the drawings.

5.2 All welding shall comply with AS 1554:PART 1 "Welding of steel structures"

5.3 Welds exposed in the completed building and in particular butt welds shall be neatly finished and ground smooth ie. flush finish.

5.4 All fillet welds to be 6mm fillet weld all round UNO

5.5 All butt welds shall be full penetration, using backing plates as required.

5.6 Welding of hollow sections shall incorporate internal sections or backing plates as necessary to complete the specified weld.

6.0 TIMBER

6.1 All timber is to be SG8 grade Radiata Pine complying with NZS 3602 and graded to NZS3631 UNO

6.2 LVL MANUFACTURE AND MARKING
To AS/NZS 4357.0 and the manufacturer's design properties. Treatment to H1/H1.2 to NZS 3640 and AS/NZS 1604.4. Equivalent solvent based preservative for treating cut ends on site. Veneers to be bonded with Type A marine bond (phenolic) to AS/NZS 2754.1.

6.3 GLULAM MANUFACTURE AND MARKING
To AS/NZS 1328.1 and AS/NZS 1328.2, except where modified by this specification.

6.4 LAMINATIONS
Laminations to AS/NZS 1328.1 and AS/NZS 1328.2. Pre-joint laminates to full length required. End joint laminations by the use of finger joints to AS/NZS 1491 for structural jointsand show by test they have a strength at least equivalent to the strength of the grade of lamination.

6.5 ADHESIVE USE
To AS/NZS 1328.1 with regard to adhesive use, and to the requirements of the adhesive manufacturer, to ensure full strength bonding.

6.6 SIZE OF FINISHED MEMBERS
Ensure size of finished members is within the tolerances set out in AS/NZS 1328.1, for the finish specified.

6.7 SURFACE FINISH
Smooth finish all exposed surfaces by sanding, to produce the standard of finish to AS/NZS 1328.1 and AS/NZS 1328.2. Fill knot holes and defects with neutral coloured filler or by the use of inserts. Do not use putty. Ease all corners. UNO

6.8 APPLY SEALER
Apply one coat of approved water repellent sealer. Use two coats of the approved sealer on end grain to ensure adequate sealing against water absorption. Check compatibility of sealer with proposed finishing coating before application.

6.9 Moisture content of timber framing timber shall not exceed 25% at the time of installation nor 18% at the time of enclosure.

6.10 General construction requirements shall comply with NZS 3604 UNO. Provide washers for bolted connections in locations and to sizes required by NZS 3603. Re-tighten nuts prior to enclosure of joints.

6.11 Plywood shall be CD grade construction plywood conforming to NZS 3614 UNO

6.12 Timber-to-timber and timber-to-steel/concrete, indicated on structural drawings, have been subject to specific structural design.

REV	DATE	DESCRIPTION
0	240325	Issued for Consent

Structural Concepts
Consulting Engineers

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New Commercial Building

Specs

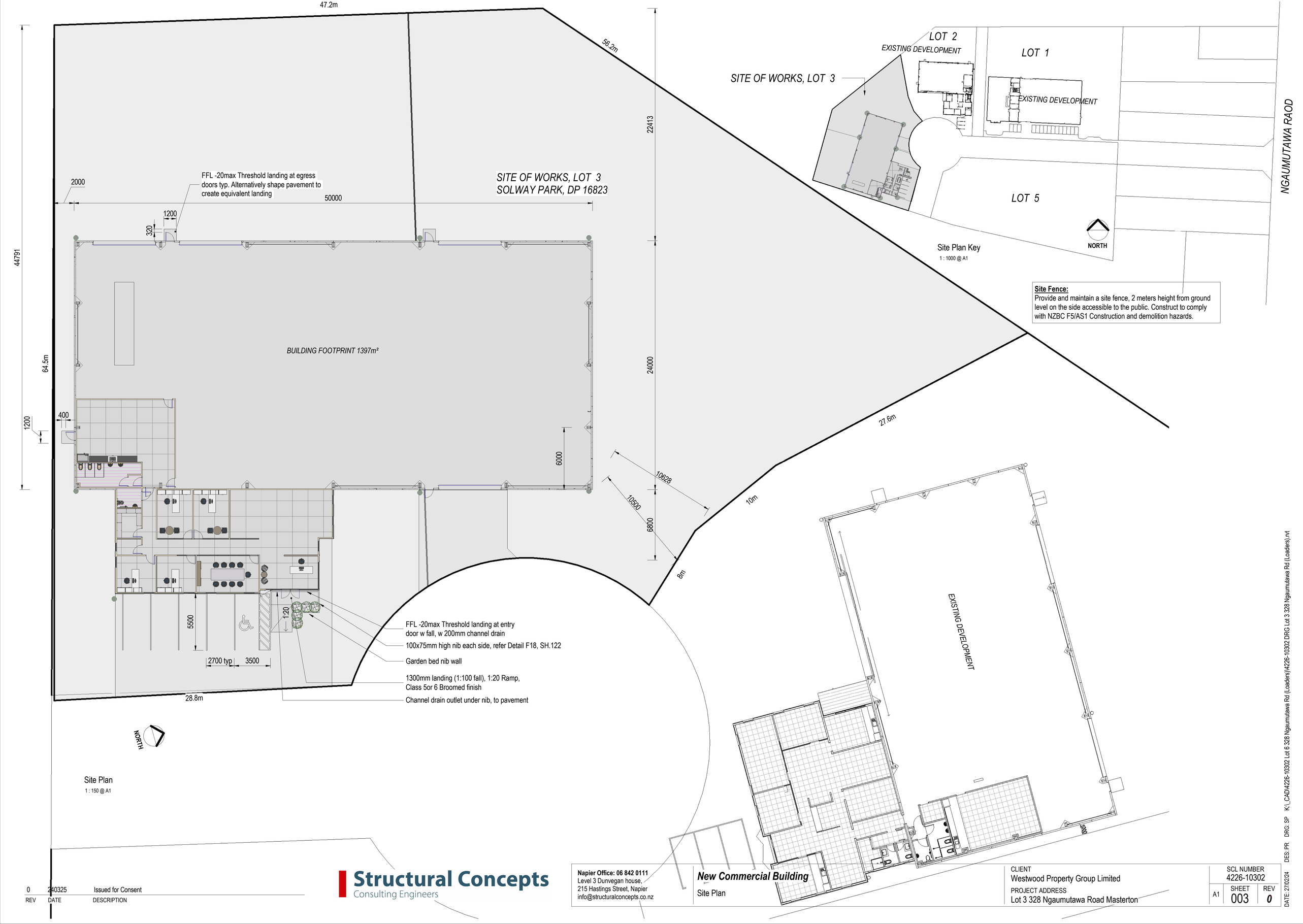
CLIENT
Westwood Property Group Limited

PROJECT ADDRESS
Lot 3 328 Ngaumutawa Road Masterton

SCL NUMBER
4226-10302

A1 | SHEET 001 | REV *0*

DATE: 27/02/24 DES: PR DRG: SP K:_CAD\4226-10302 Lot 6 328 Ngaumutawa Rd (Loaders)\4226-10302 DRG Lot 3 328 Ngaumutawa Rd (Loaders).rvt



Site Fence:
Provide and maintain a site fence, 2 meters height from ground level on the side accessible to the public. Construct to comply with NZBC F5/AS1 Construction and demolition hazards.

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New Commercial Building

Site Plan

CLIENT
Westwood Property Group Limited

PROJECT ADDRESS
Lot 3 328 Ngaumutawa Road Masterton

SCL NUMBER
4226-10302

A1	SHEET	REV
	003	*0*

DES: PR DRG: SP K:_CAD\4226-10302 Lot 6 328 Ngaumutawa Rd (Loaders)\4226-10302 DRG Lot 3 328 Ngaumutawa Rd (Loaders).rvt

DATE: 27/02/24

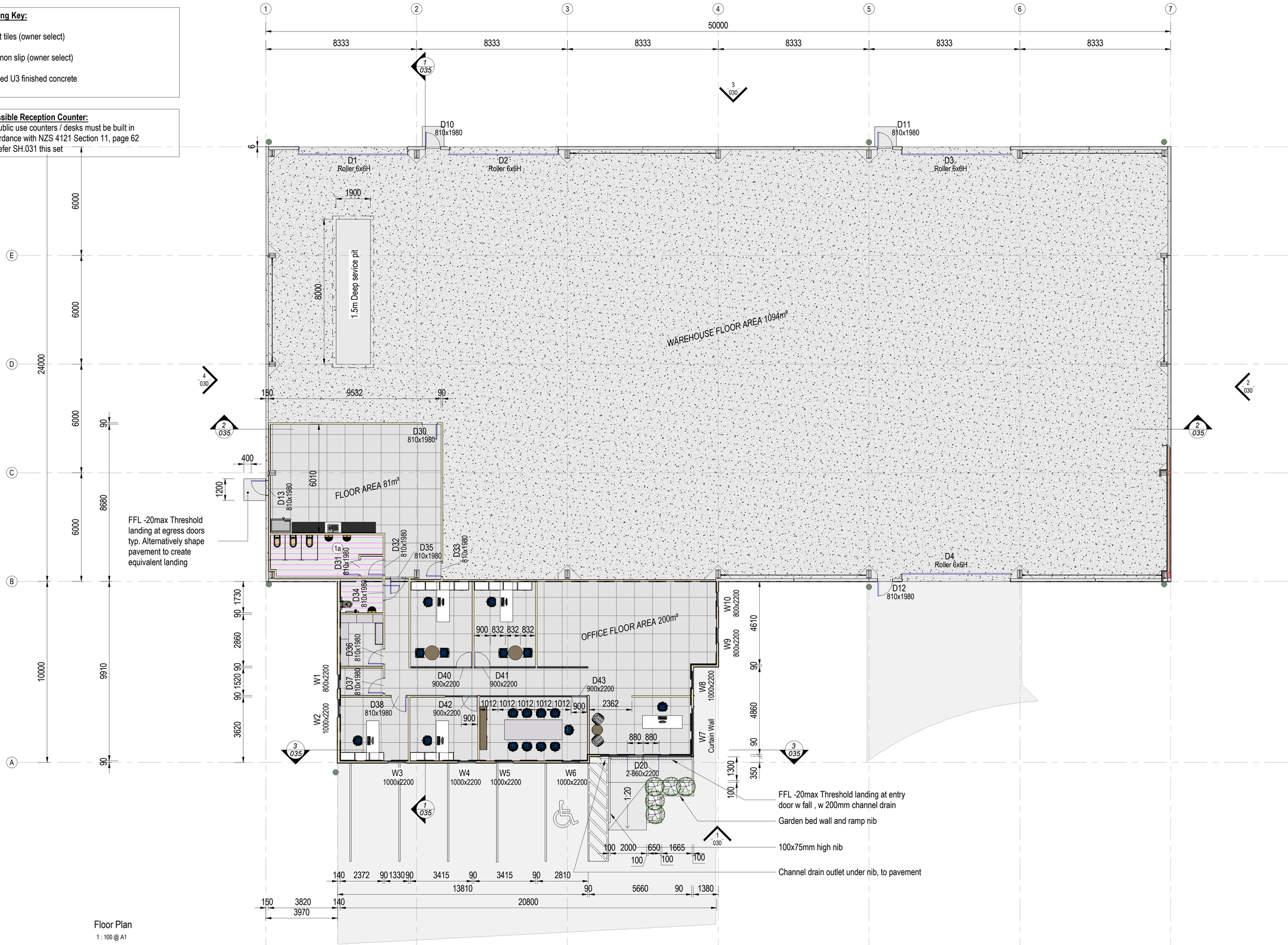
Flooring Key:

Carpet tiles (owner select)

Vinyl, non slip (owner select)

Exposed U3 finished concrete

Accessible Reception Counter:
Any public use counters / desks must be built in accoordance with NZS 4121 Section 11, page 62
Also refer SH.031 this set



Floor Plan
1 : 100 @ A1

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New Commercial Building

Floor Plan

CLIENT
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PROJECT ADDRESS
Lot 3 328 Ngaumutawa Road Masterton

SCL NUMBER 4226-10302
A1 | SHEET 010 | REV *0*

DES: PR DRG: SP K:_CAD\4226-10302 Lot 6 328 Ngaumutawa Rd (Loaders)\4226-10302 DRG Lot 3 328 Ngaumutawa Rd (Loaders).rvt
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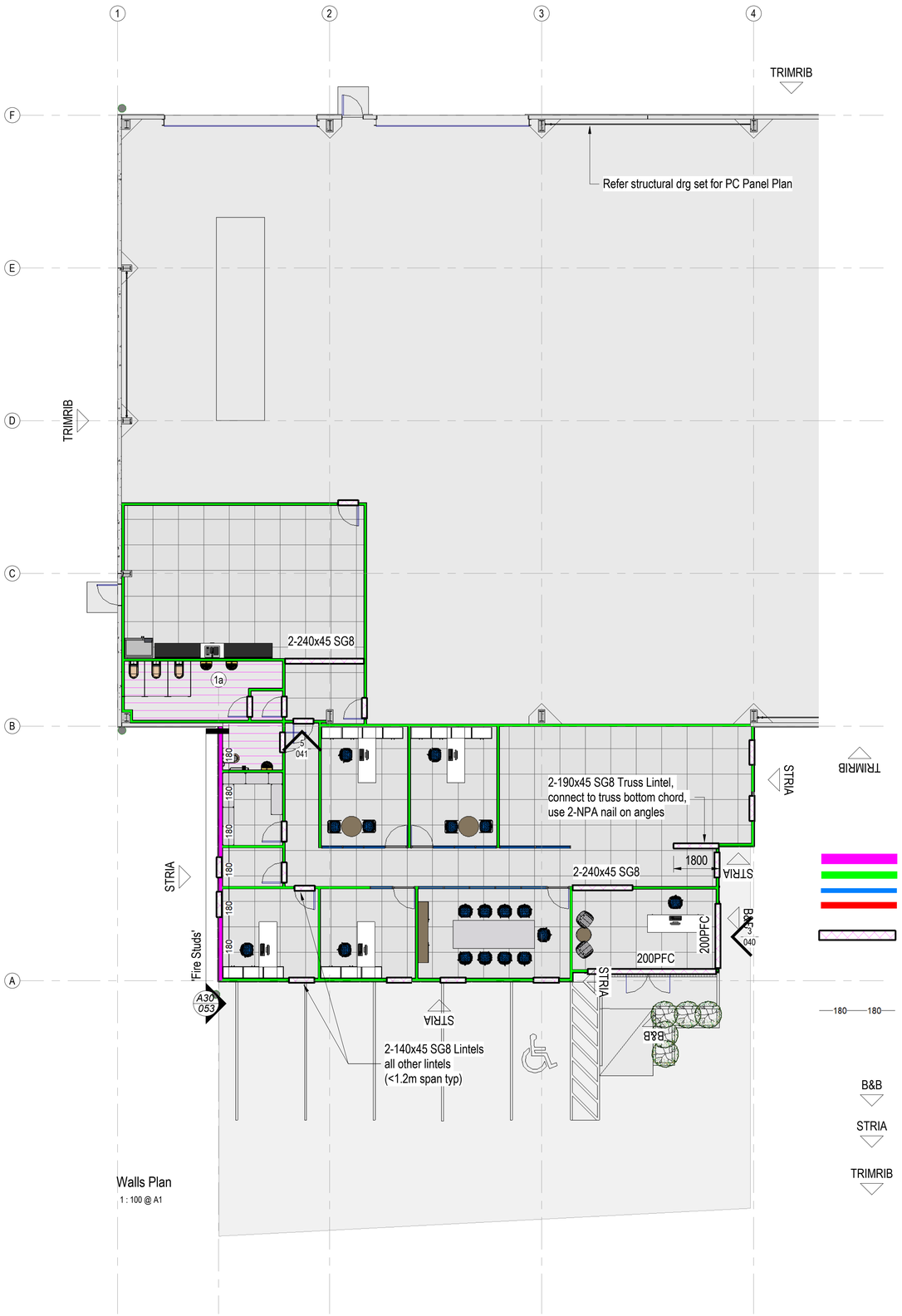

Walls Plan
1 : 100 @ A1

Walls Key:

140x45 SG8 H1.2 Fire Wall, Studs @400crs (<3m High)
90x45 SG8 H1.2 Framed Walls, Studs @600crs (<3m High)
Glazed Curtain Walls (Refer Door / Window Schedule)
90x45 H1.2 SG8 Fire Wall infill framing, (Between girths) Studs @600crs

Lintels

Wall Linings:
Timber= Standard 10mm GIB, (UNO, Refer Bracing)
10mm Gib Aqualine to wet areas
3 layers 19mm Fyreline to fire wall

PC Panel= No linings, UNO

Wall Claddings:
Hardies Board & Batten cladding system over battens & wall underlay

Hardies Stria cladding system over battens & wall underlay

0.55 BMT Trapazoidal (Owner select Trimrib or similar), over battens

Print this sheet in colour

B&B
STRIA
TRIMRIB

Walls Notes:
Refer Separate Bracing Plan for GIB Bracing
All dwangs 800crs UNO
Wall Batts: R2.8
Roof Batts: R4.5
Painted finishes to level 4
Allow DPC between timber and concrete members

Wall Plan (Fire Walls @ RL +2400)
1 : 100 @ A1

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New Commercial Building

Walls Plan

CLIENT
Westwood Property Group Limited

PROJECT ADDRESS
Lot 3 328 Ngaumutawa Road Masterton

SCL NUMBER
4226-10302

A1 | SHEET 011 | REV *0*

DES: PR DRG: SP K:_CAD\4226-10302 Lot 6 328 Ngaumutawa Rd (Loaders)\4226-10302 DRG Lot 3 328 Ngaumutawa Rd (Loaders).rvt
DATE: 27/02/24

Bracing Plan

1 : 50 @ A1

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New Commercial Building

Bracing Plan

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PROJECT ADDRESS
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SCL NUMBER
4226-10302

A1	SHEET	REV
	012	*0*

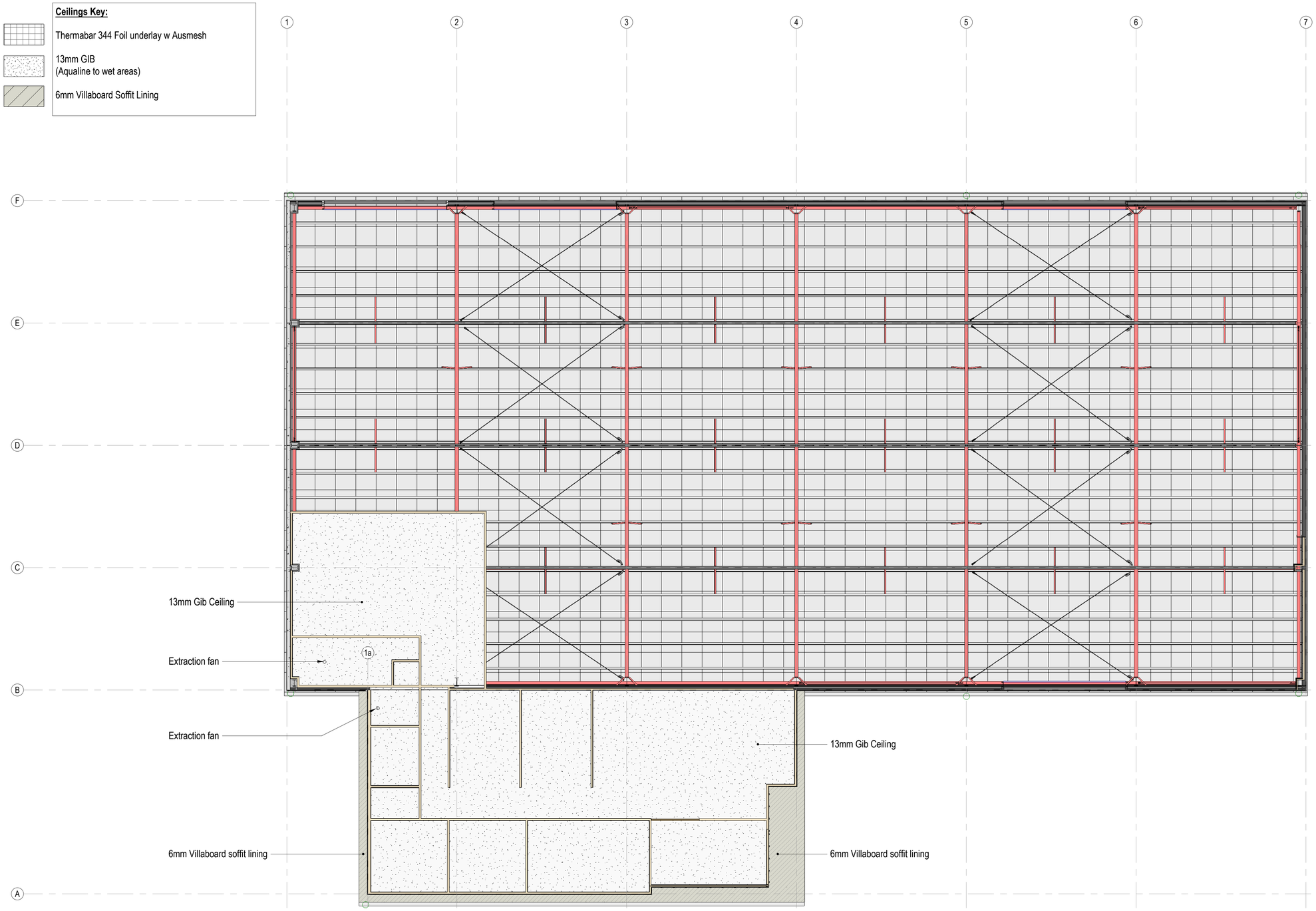
DATE: 27/02/24 DES: PR DRG: SP K:_CAD\4226-10302 Lot 6 328 Ngaumutawa Rd (Loaders)\4226-10302 DRG Lot 3 328 Ngaumutawa Rd (Loaders).rvt

Ceilings Key:

Thermabar 344 Foil underlay w Ausmesh

13mm GIB
(Aqualine to wet areas)

6mm Villaboard Soffit Lining



Ceiling
1 : 100 @ A1

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New Commercial Building

Reflected Ceiling Plan

CLIENT
Westwood Property Group Limited

PROJECT ADDRESS
Lot 3 328 Ngaumutawa Road Masterton

SCL NUMBER
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A1	SHEET	REV
	014	*0*

DES: PR DRG: SP K:_CAD\4226-10302 Lot 6 328 Ngaumutawa Rd (Loaders)\4226-10302 DRG Lot 3 328 Ngaumutawa Rd (Loaders).rvt
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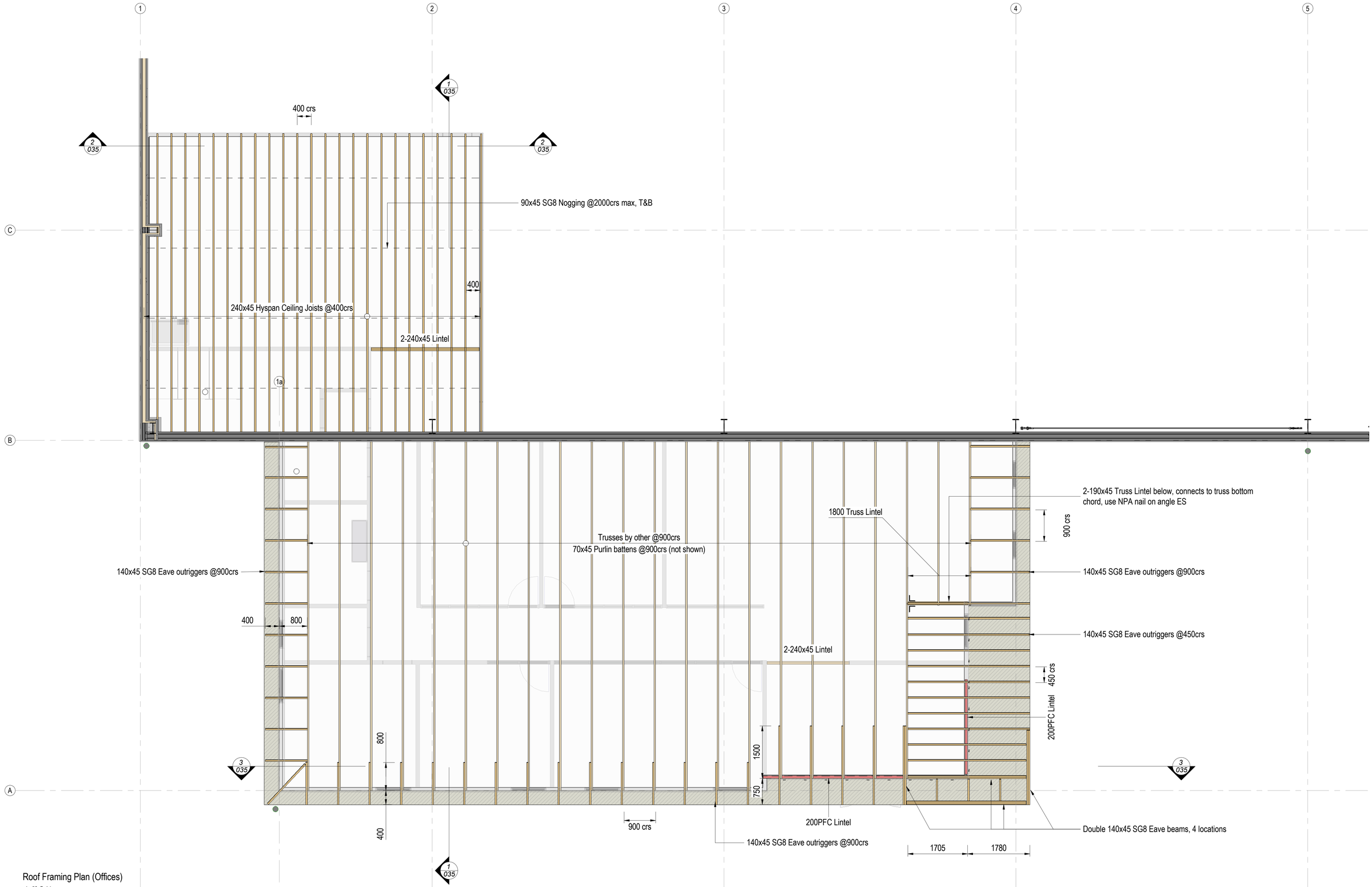

Roof Framing Plan (Offices)

1 : 50 @ A1

REV	DATE	DESCRIPTION
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New Commercial Building

Roof Framing Plan (Offices)

CLIENT
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PROJECT ADDRESS
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SCL NUMBER
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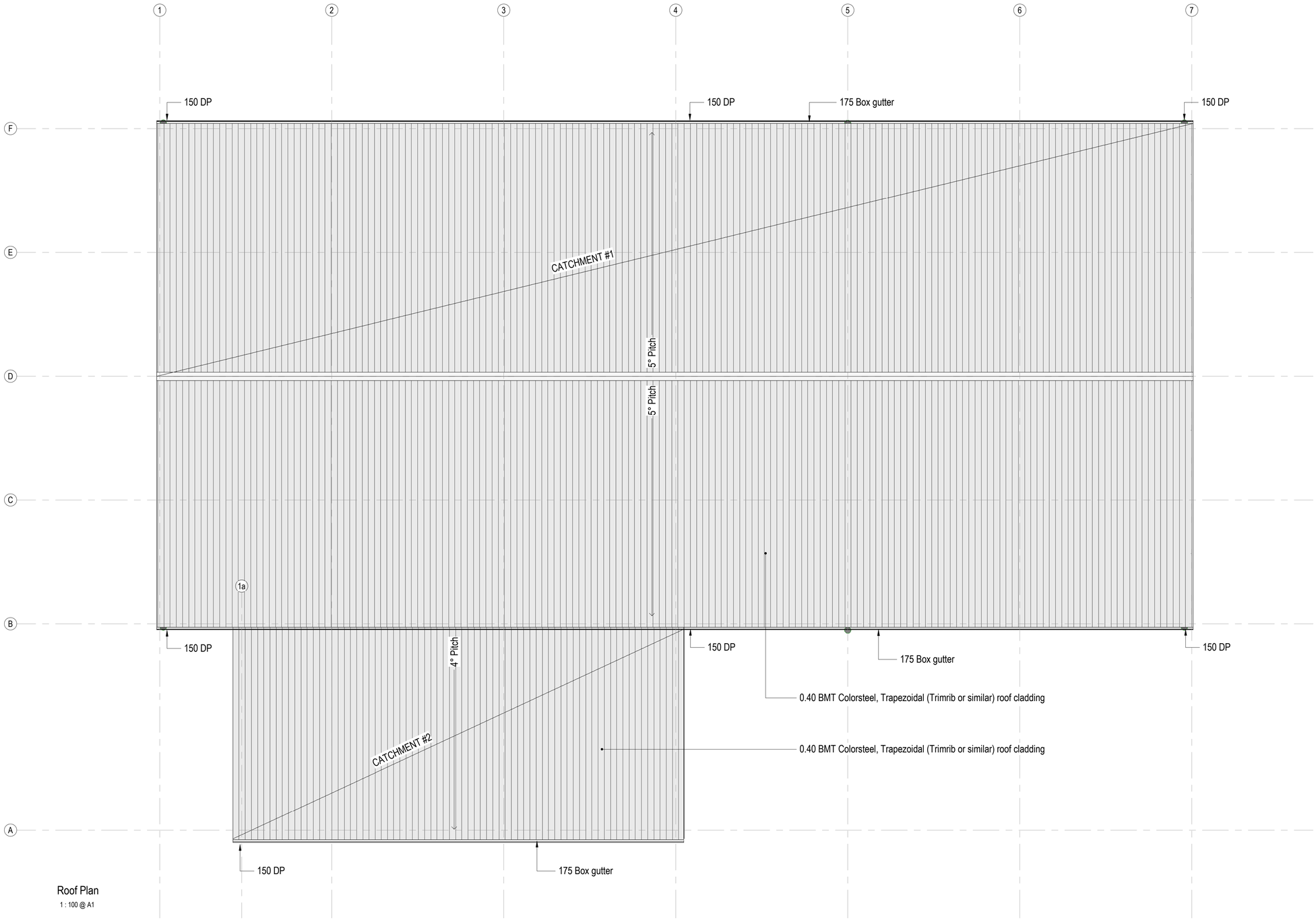
A1	SHEET	REV
	015	*0*

DES: PR DRG: SP K:_CAD\4226-10302 Lot 6 328 Ngaumutawa Rd (Loaders)\4226-10302 DRG Lot 3 328 Ngaumutawa Rd (Loaders).rvt

DATE: 27/02/24

CATCHMENT #1	
Spouting & downpipes for roof plan area = **615m²** (based on 100mm/hr rainfall) 175 Box effective C/S area = 19250mm²	
No. of downpipes	Cross sectional area of spouting required
3xØ150mm DP	(615) =E1x.85 =39100/3 = 13033

CATCHMENT #2	
Spouting & downpipes for roof plan area = **230m²** (based on 100mm/hr rainfall) 175 Box effective C/S area = 19250mm²	
No. of downpipes	Cross sectional area of spouting required
1xØ150mm DP	(230) =E1x.85 =17000



Roof Plan
1 : 100 @ A1

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New Commercial Building

Roof Plan

CLIENT
Westwood Property Group Limited

PROJECT ADDRESS
Lot 3 328 Ngaumutawa Road Masterton

SCL NUMBER 4226-10302

A1 | SHEET 016 | REV *0*

DES: PR DRG: SP K:_CAD\4226-10302 Lot 6 328 Ngaumutawa Rd (Loaders)\4226-10302 DRG Lot 3 328 Ngaumutawa Rd (Loaders).rvt

DATE: 27/02/24

NOTES
THIS PLAN TO BE READ IN CONJUNCTION WITH ALL OTHER RELEVANT PROJECT DRAWINGS AND SPECIFICATIONS.
2. WORK TO BE IN ACCORDANCE WITH NEW ZEALAND BUILDING CODE, NZS4404:2010, LAND DEVELOPMENT AND SUBDIVISION INFRASTRUCTURE, AND MASTERTON DISTRICT COUNCIL ENGINEERING REQUIREMENTS.
3. SERVICES SHOWN SHOULD BE CONSIDERED INDICAITVE ONLY AND ARE BASED ON RECORDS SUPPLIED BY UTILITY COMPANIES. PRIVATE SERVICES AND CONNECTIONS ARE NOT SHOWN.
4. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING ALL SERVICES ARE LOCATED PRIOR TO ANY SITE WORKS; AND FOR PROTECTING THESE SERVICES FOR THE DURATION OF THE SITE CONTRACT.
5. ALL STORMWATER MANHOLES AND SUMPS TO BE IN ACCORDANCE WITH NZS:4404:2010
6. ALL MANHOLES ARE STANDARD 1050 DIA. UNLESS NOTED OTHERWISE.
7. ALL SUMP LEADS TO BE DN225.
8. SUMP LEADS TO BE RCP CLASS 4 WHERE COVER IS LESS THAN 600mm COVER AND UPVC SN16 WHERE COVER IS GREATER THAN 600mm COVER.
9. Soak pit to extend minimum 300mm into gravels.
10. The site is divided into two catchments, with roof runoff and surface water in each. The larger catchment has been used to size the soakage systems.
11. The HIRDS RCP6.0 2051-2080 rainfall data has been used to calculate runoff.
12. Soakage testing indicates average rates of >10mhr

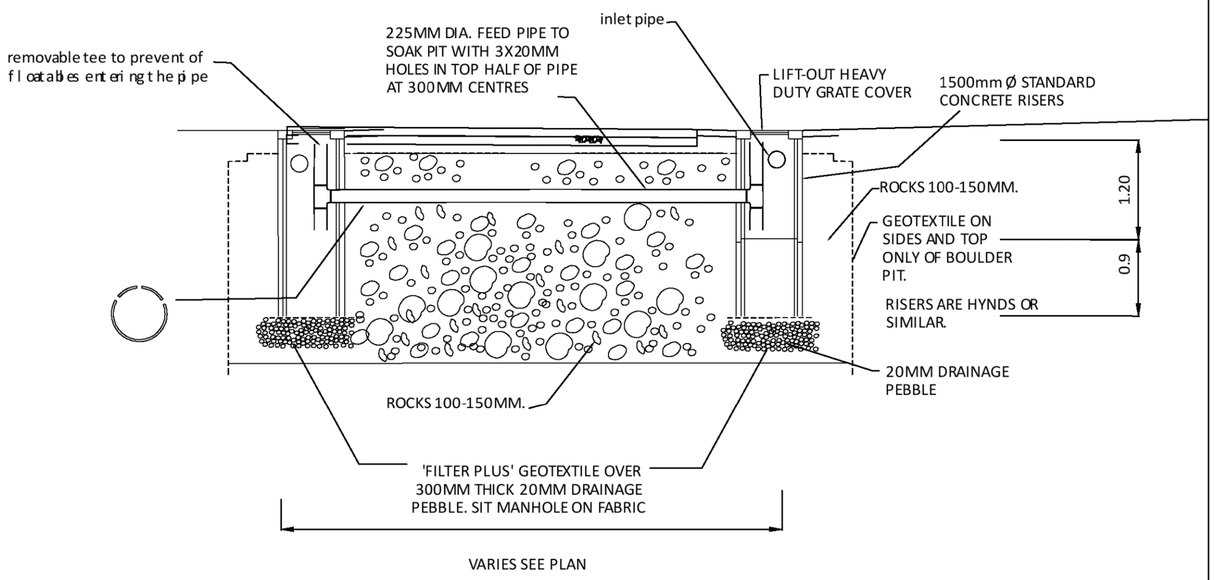
Stormwater layout

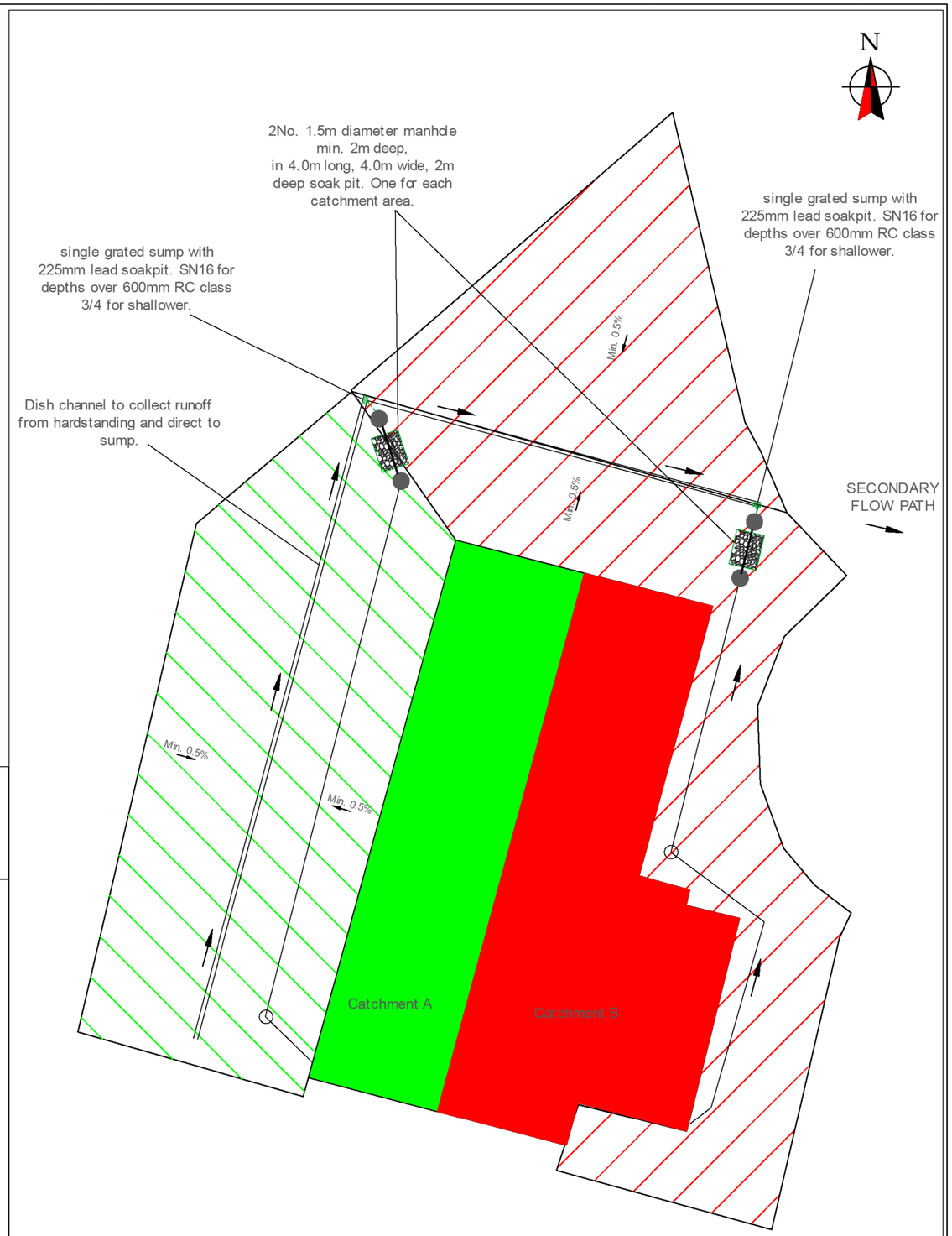
LEGEND

- NEW SINGLE BACK ENTRY SUMP
- NEW 225MM STORMWATER PIPE
- NEW STORMWATER MANHOLE
- SOAK PIT

Soakage factor of safety

	Risk			
	low	medium	high	Risk
sediment load	1	1.2	1.4	**1**
soil variation	1	1.2	1.4	**1**
ratio of test area to soak pit area	1	1.2	1.4	**1.2**
permeability rate	1.5	2	2.5	**2.5**
maintenance ability	1	1.1	1.2	**1.2**
groundwater depth	1	1.2	1.4	**1.4**
consequence of failure	1	1.2	1.4	**1**
Cumulative FOS				**5.0**
Soakage test rate m/hr				**10**
Max. Design soakage rate m/hr				**2.0**





eQO nz	MASTERTON DISTRICT COUNCIL	scale: 1:500	drawn: A. Duncan date: 14/2/2025 sheet 1 of : 3	client: Westwood Limited	project: Solway Trade Park, Masterton	Title: Stormwater layout Project no. 230515 Drawing no. Eng01 Status: Submission / Revision: V1

REV	DATE	DESCRIPTION
0	240325	Issued for Consent

Structural Concepts
Consulting Engineers
Napier Office: 06 842 0111
Level 3 Dunvegan house,
215 Hastings Street, Napier
info@structuralconcepts.co.nz

New Commercial Building
Stormwater Plan

CLIENT: Westwood Property Group Limited
PROJECT ADDRESS: Lot 3 328 Ngaumutawa Road Masterton

SCL NUMBER 4226-10302
A1 | SHEET 020 | REV 0

DES: PR DRG: SP K:_CAD\4226-10302 Lot 6 328 Ngaumutawa Rd (Loaders)\4226-10302 DRG Lot 3 328 Ngaumutawa Rd (Loaders).rvt
DATE: 27/02/24

Note:
Plumbing design in accordance with AS/3500.2

WATER SUPPLY:
- HOT AND COLD WATER RETICULATION TO COMPLY WITH NZBC G12/AS1
- HOT AND COLD SUPPLY TO TEMPERING VALVE AND SHOWERS ALL 20MM POLYBUTYLENE MIN.
- HOT WATER CYLINDER TO HAVE SAFE TRAY BENEATH AS PER G12/AS1 CLAUSE 6.113(A) WITH DRAINAGE AS PER CLAUSE 5.2.3.
- HOT & COLD SUPPLY TO SINK, LAUNDRY AND BATH 15MM POLYBUTYLENE MIN.
- HOT AND COLD SUPPLY TO ALL OTHER FIXTURES 10MM POLYBUTYLENE MIN.
- HOSE TAPS OVER ORGS AND FURTHER TO OWNER SPECIFICATIONS
- 25MM BLACK AND BLUE PIPE FOR THE OFF STREET FEED.
- WATER PIPES THROUGH SLAB TO BE SLEEVED
- HOSE TAP LOCATIONS CONFIRMED BY OWNER

C

B

A

Ø100 @1:60 for WC's

Ø65 @1:60 for basins

Allow for mechanical ventilation to comply with G4/ NZS4303, All Units typ
0.1m² max unprotected area permitted
Manrose timer fan 150mm duct, or similar

HWC

50mm stack vent

HWC with Ø40min safe tray drain, located above ceiling, connect to stack vent

ORG

IJ

Ø100 @1:60

Ø65 @1:60 for basins

Ø100 @1:60 **Main Drain**

IB

IB

Ø100 @1:60 **Main Drain**

Inspection trap, close to boundary

Locate and connect to Off Site Mains

Plumbing Plan
1 : 50 @ A1

min. 150 mm between overflow level of the gully and the lowest fixture measured to:
- top of grate in FWG or shower
- top of water seal in soil fixtures
- top of fixture outlet in waste fixtures

(if 150 mm cannot be achieved a reflux valve must be fitted to protect those fixtures within this distance)

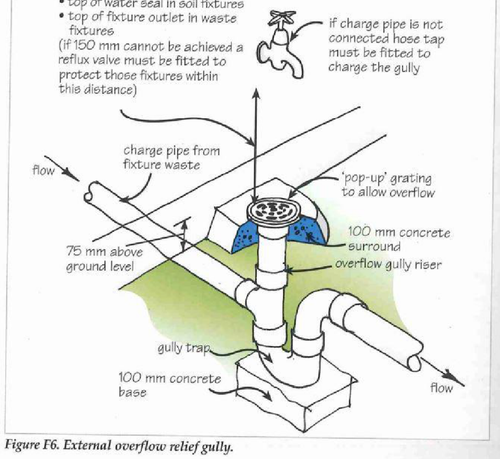
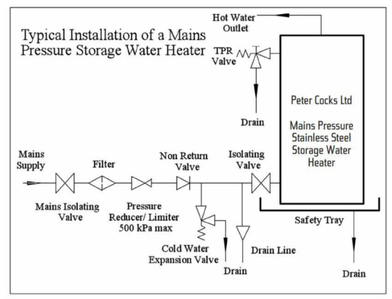


Figure F6. External overflow relief gully.



REV	DATE	DESCRIPTION
0	240325	Issued for Consent

Structural Concepts
Consulting Engineers

Napier Office: 06 842 0111
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215 Hastings Street, Napier
info@structuralconcepts.co.nz

New Commercial Building

Plumbing Plan

CLIENT
Westwood Property Group Limited

PROJECT ADDRESS
Lot 3 328 Ngaumutawa Road Masterton

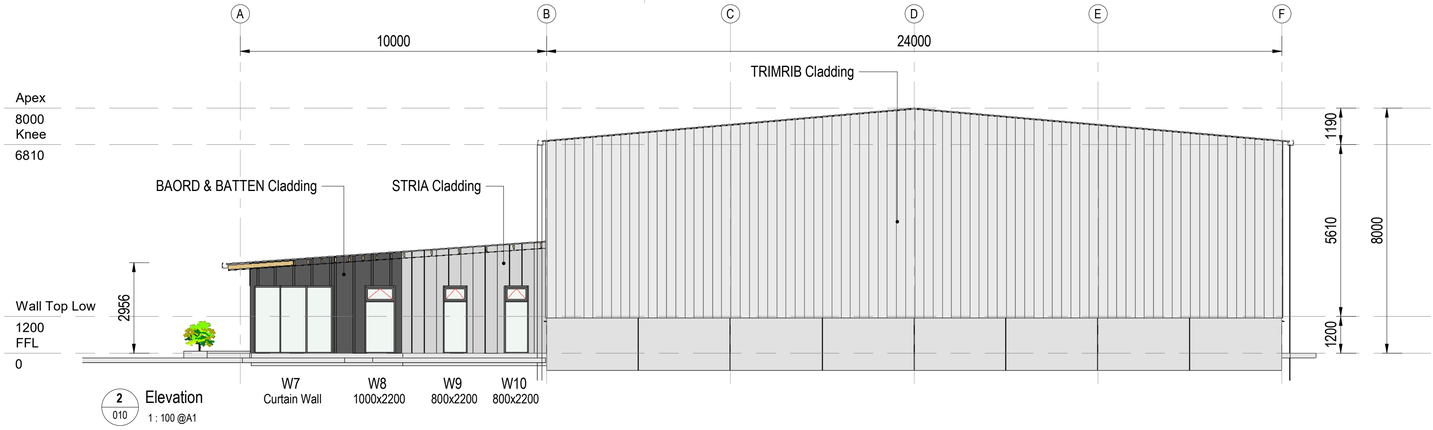
SCL NUMBER 4226-10302

A1 | SHEET 021 | REV *0*

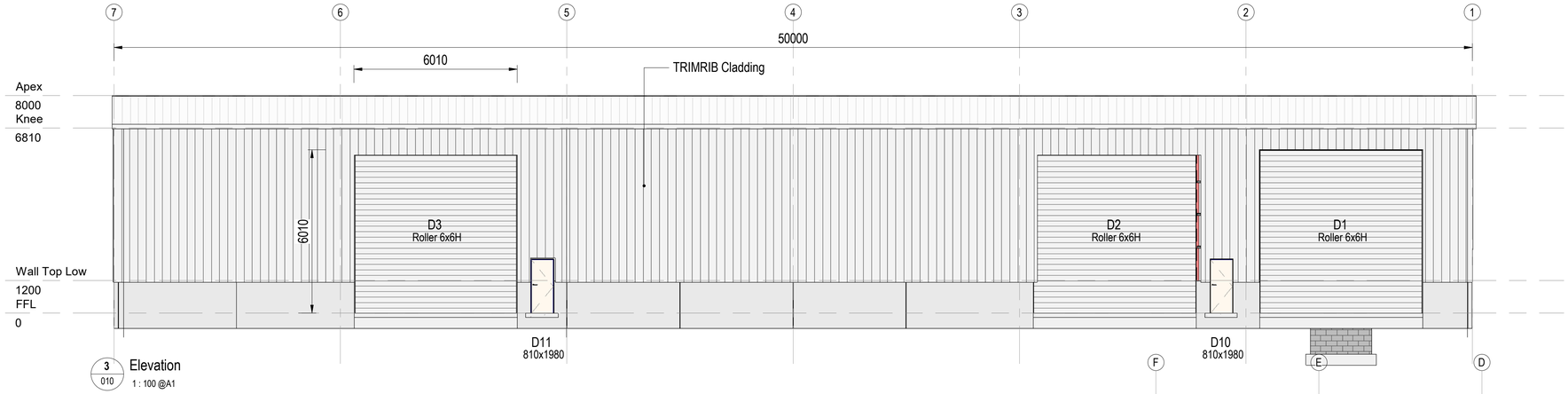
DES: PR DRG: SP K:_CAD\4226-10302 Lot 6 328 Ngaumutawa Rd (Loaders)\4226-10302 DRG Lot 3 328 Ngaumutawa Rd (Loaders).rvt

DATE: 27/02/24

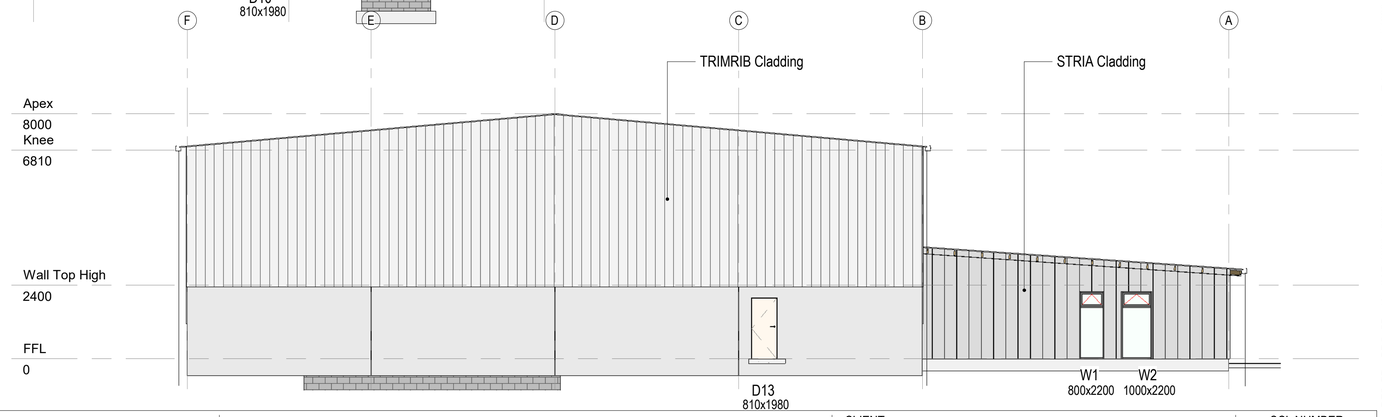
1 / 010 Elevation
1 : 100 @A1



2 / 010 Elevation
1 : 100 @A1



3 / 010 Elevation
1 : 100 @A1



4 / 010 Elevation
1 : 100 @A1

REV	DATE	DESCRIPTION
0	240325	Issued for Consent

Structural Concepts
Consulting Engineers

Napier Office: 06 842 0111
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215 Hastings Street, Napier
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New Commercial Building

Architectural Elevations

CLIENT
Westwood Property Group Limited

PROJECT ADDRESS
Lot 3 328 Ngaumutawa Road Masterton

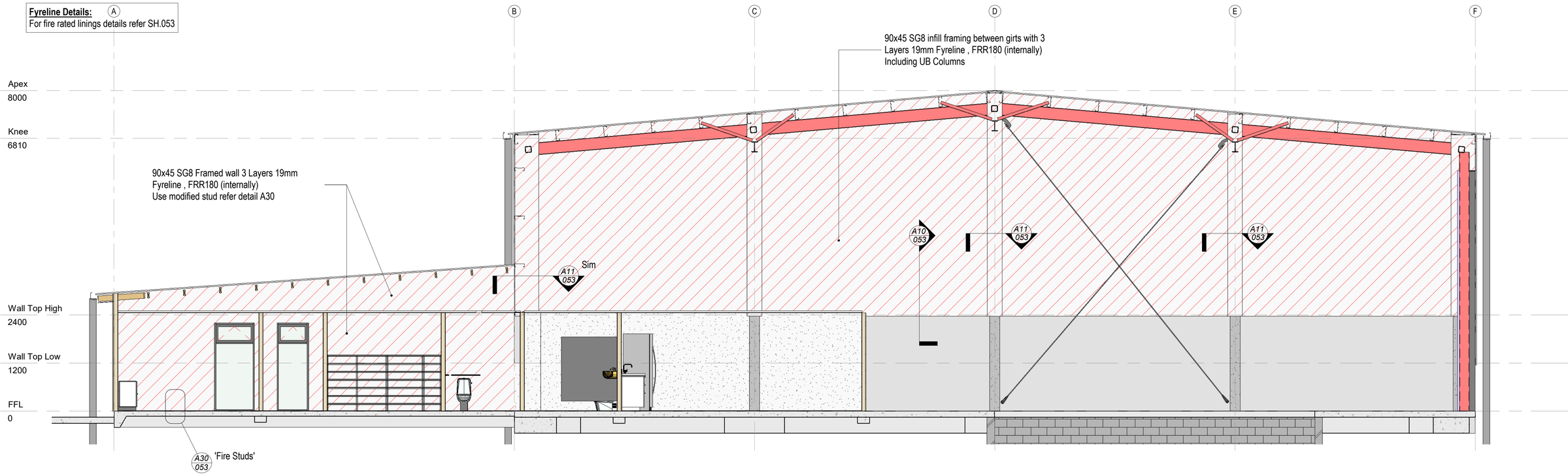
SCL NUMBER
4226-10302

A1 | SHEET 030 | REV *0*

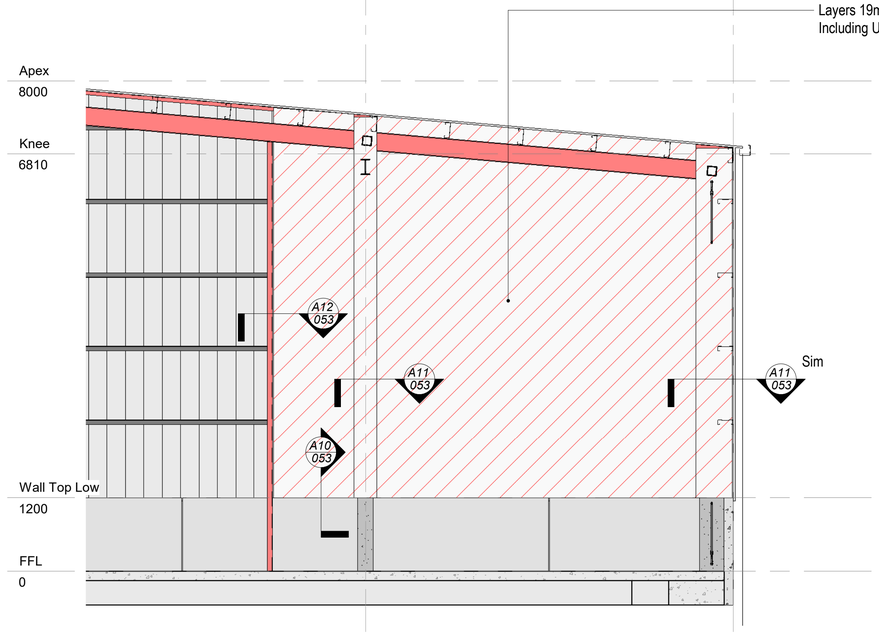
DES: PR DRG: SP K:_CAD\4226-10302 Lot 6 328 Ngaumutawa Rd (Loaders)\4226-10302 DRG Lot 3 328 Ngaumutawa Rd (Loaders).rvt

DATE: 27/02/24

Fyreline Details:
For fire rated linings details refer SH.053



1 011 Fire Walls
1 : 50 @A1



2 011 Fire Walls
1 : 50 @A1

REV	DATE	DESCRIPTION
0	240325	Issued for Consent

Structural Concepts
Consulting Engineers

Napier Office: 06 842 0111
Level 3 Dunvegan house,
215 Hastings Street, Napier
info@structuralconcepts.co.nz

New Commercial Building

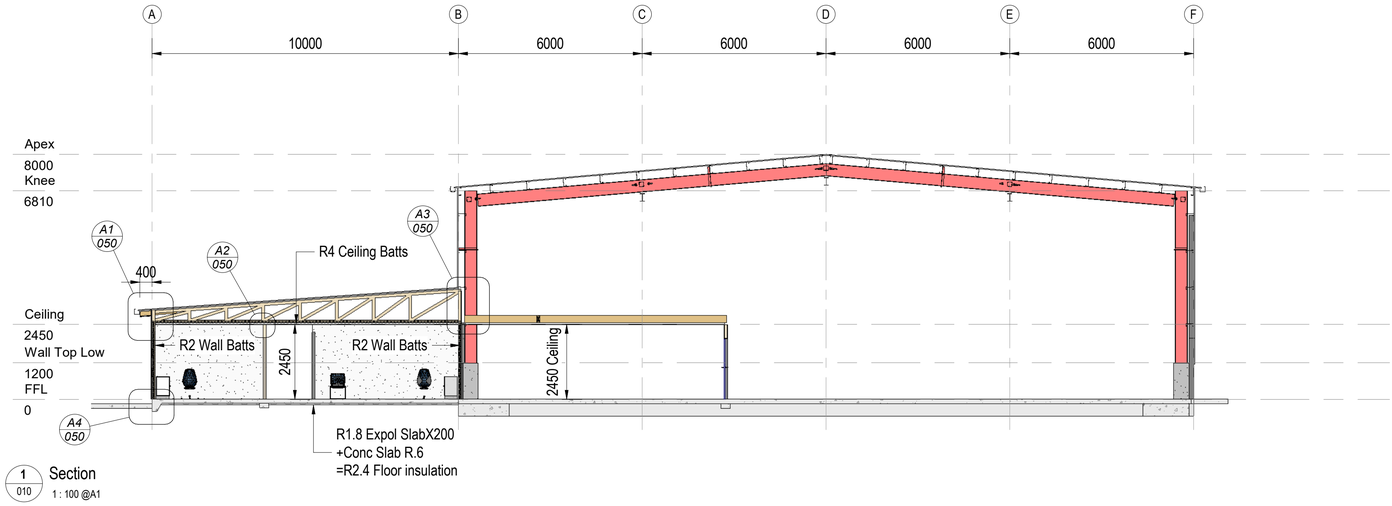
Architectural Elevations (Fire Walls)

CLIENT
Westwood Property Group Limited

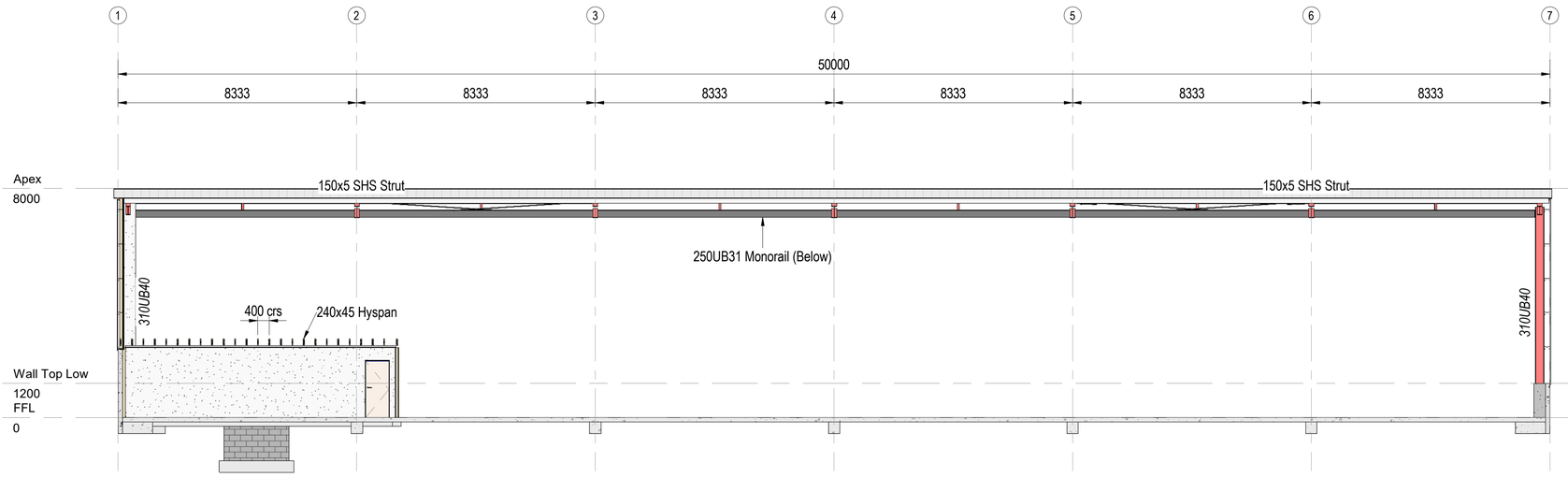
PROJECT ADDRESS
Lot 3 328 Ngaumutawa Road Masterton

SCL NUMBER 4226-10302
A1 | SHEET 031 | REV *0*

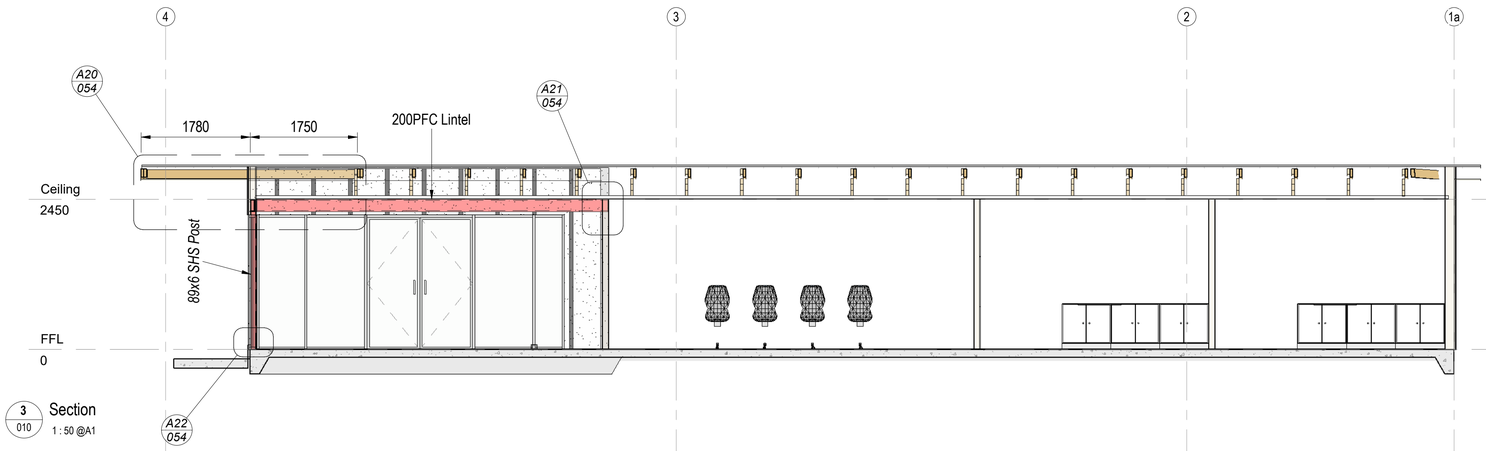
DES: PR DRG: SP K:_CAD\4226-10302 Lot 6 328 Ngaumutawa Rd (Loaders)\4226-10302 DRG Lot 3 328 Ngaumutawa Rd (Loaders).rvt
DATE: 27/02/24



1 / 010 Section
1 : 100 @A1



2 / 010 Section
1 : 100 @A1



3 / 010 Section
1 : 50 @A1

BRANZ H1/AS1 5th Edition Calculation Method Spreadsheet - Results

Version: 21-Oct-2022

Client	Westwood Property Group Ltd
Project name	New Commercial Building
Address	Pt Lot 6, 328 Ngaumutawa Rd, Masterton
Designer	Scott Patchett
Date	051224

Territorial Authority	Masterton District	**Climate Zone**	4
When submitted	After 2 November 2023	**Application**	Other buildings<300 m²

Proposed Building

Element	Area (m²)	Proposed Building Heat Loss (W/K)
Slab Floors	200.0	83.3
Other Floors	0.0	0.0
Roof	200.0	50.0
Skylights	0.0	0.0
Walls	100.0	50.0
Glazing (walls & door (25.6% of total wall area)	35.0	76.1
Doors (opaque)	1.6	4.2
	536.6	**Total** 263.6

Reference Building

Element	Area (m²)		Reference Building Heat Loss (W/K)
Slab Floors	200.0	1.5	133.3
Other Floors	0.0	2.8	0.0
Total Roof (includes skylight area)	200.0	6.6	30.3
Walls (70% of total wall area)	95.6	2.0	47.8
Glazing allowance (30% of total wall area)	41.0	0.46	89.1
	536.6	**Total**	300.5

Comparison of proposed building against the reference building — **PASS**

Element type	Description	Embed heating?	Area (m²)	Construction R-value (m².K/W)	Heat Loss (W/K)	Errors
Slab Floors	Office Area Slab	No	200.0	2.4	83.3	
Roof	Office Area Ceiling	No	200.0	4.0	50.0	
Walls	Offices area Perimeter	No	100.0	2.0	50.0	
Glazing (walls & door	Offices area glazing		35.0	0.46	76.1	
Doors (opaque)	Offices to smoko room		1.6	0.38	4.2	

REV	DATE	DESCRIPTION
0	240325	Issued for Consent

Structural Concepts
Consulting Engineers

Napier Office: 06 842 0111
Level 3 Dunvegan house,
215 Hastings Street, Napier
info@structuralconcepts.co.nz

New Commercial Building

Architectural Sections

CLIENT
Westwood Property Group Limited

PROJECT ADDRESS
Lot 3 328 Ngaumutawa Road Masterton

SCL NUMBER 4226-10302

A1	SHEET 035	REV *0*

DATE: 27/02/24 DES: PR DRG: SP K:_CAD\4226-10302 Lot 6 328 Ngaumutawa Rd (Loaders)\4226-10302 DRG Lot 3 328 Ngaumutawa Rd (Loaders).rvt

Windows:
Also Refer Architectual Elevations
All Exteranl windows & Doors to be double glazed UNO
All dimensions to be confirmed onsite, prior to manufacture

Safety Glass:
(SG) = Safety glass, in accordance with NZS 4223-3

Manifestation (making glass visible)
All windows and doors that are full height will have signage treatment to them (to stop people walking through them)
As per NZS4223-3

Powder Coat:
All aluminium joinery (doors & windows) to be powder coated UNO
owner to select colours

Contractor to confirm window openings with owner
Contractor to confirm window styles with owner

This sheet to be read inconjunction with Architectual Elevations & Sections

1.0 Glazing

1.1 Human impact safety

1.1.1 Glazing likely to be subject to human impact shall comply with NZS 4223: Part 3.

COMMENT:

1. NZS 4223: Part 3: 2016 now requires manifestation for shopfronts whereas previously they were exempt.

   Transoms or rails with a face width not less than 20 mm and with their centreline between 800 mm and 1200 mm from the finished floor level can provide manifestation.

2. F4/AS1 Paragraph 2.1 gives safety from falling requirements for opening windows where the possible fall through the opening is 1 m or more, measured from the adjacent floor level.

3. D1/AS1 in Figure 6 shows where open windows could be a dangerous projection..

302.2
For the purposes of this Standard the word "shall" refers to practices that are mandatory for compliance with this standard, while the word "should" refers to practices which are advised or recommended.

303 GENERAL

303.1 Manifestation (making glass visible)

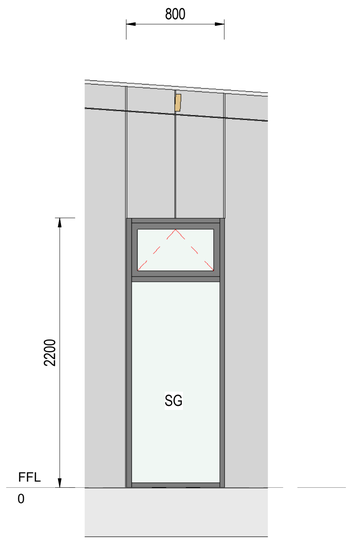
303.1.1
Where transparent glazing material may be mistaken for a doorway or an unimpeded path of travel (as defined in 306), the presence of glazing shall be made apparent either by the provision of an opaque band complying with 303.1.2 and 303.1.3 across the full width of the glazed opening or by a motif or other decorative treatment (e.g. colonial bars). Where motifs or other decorative treatments are proposed, they shall provide similar levels of manifestation (when viewed from both sides) to the opaque band. Such markings are not a substitute for the use of safety glazing where this is required by this Part.

303.1.2
Where an opaque band is provided for manifestation, it shall be not less than 20 mm in height and located so that the vertical distance from the floor level is:

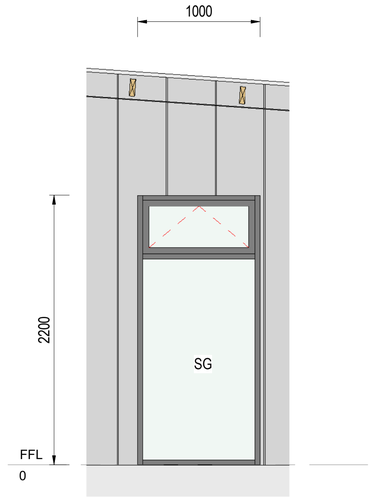
(a) Not less than 700 mm to the upper edge of the band;

(b) Not more than 1000 mm to the lower edge of the band.

Glazing notes
1 : 1 @ A1



W1,9,10
Aluminium Double Glazed, Awning
1 : 25 @ A1



W2,3,4,5,6,7,8
Aluminium Double Glazed, Awning
1 : 25 @ A1

W7
External Aluminium Double Glazed
1 : 25 @ A1

REV	DATE	DESCRIPTION
0	240325	Issued for Consent

Structural Concepts
Consulting Engineers

Napier Office: 06 842 0111
Level 3 Dunvegan house,
215 Hastings Street, Napier
info@structuralconcepts.co.nz

New Commercial Building

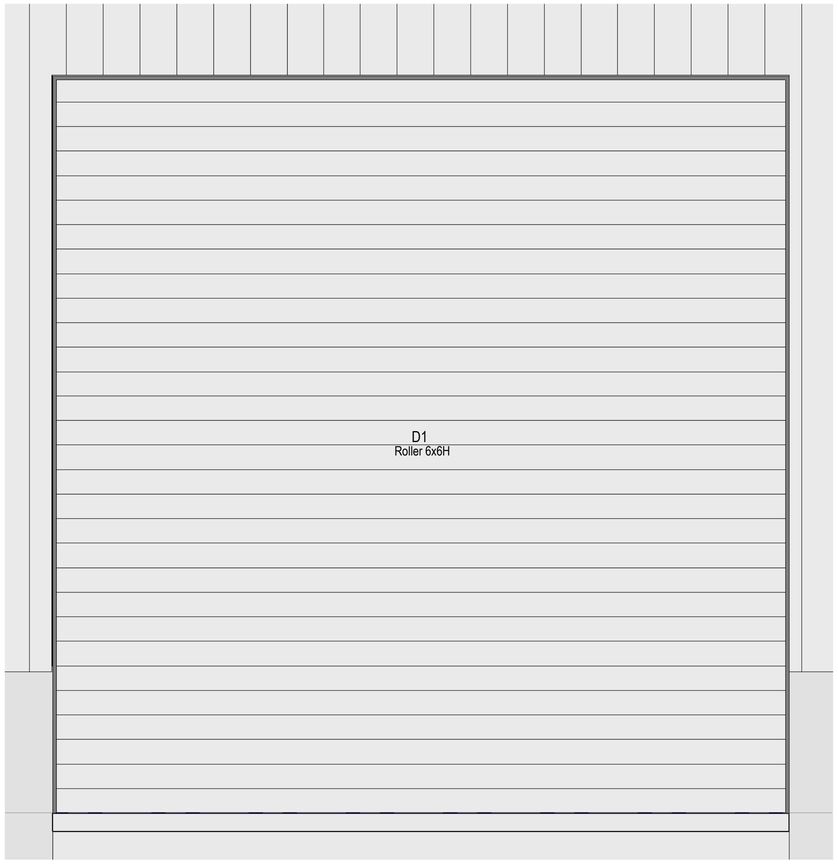
Window Schedule

CLIENT
Westwood Property Group Limited

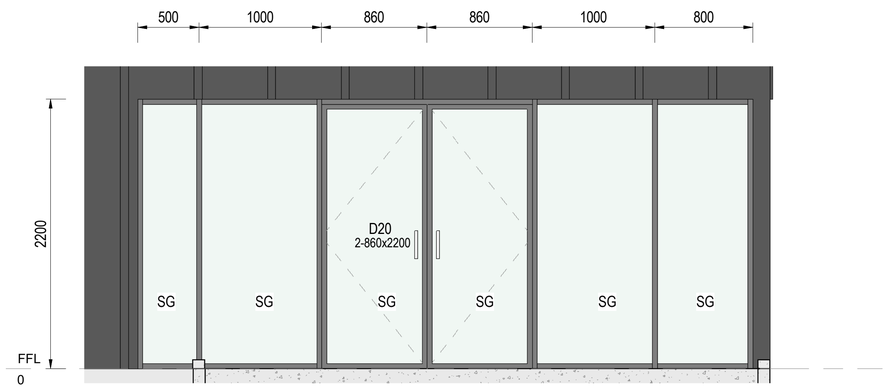
PROJECT ADDRESS
Lot 3 328 Ngaumutawa Road Masterton

SCL NUMBER 4226-10302
A1 | SHEET 040 | REV *0*

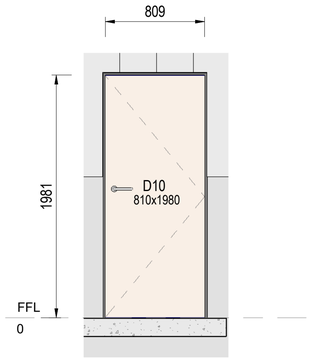
DATE: 27/02/24 DES: PR DRG: SP K:_CAD\4226-10302 Lot 6 328 Ngaumutawa Rd (Loaders)\4226-10302 DRG Lot 3 328 Ngaumutawa Rd (Loaders).rvt



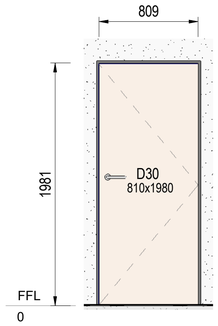
D1,2,3,4
External Profiled Roller Dr
1 : 25 @ A1



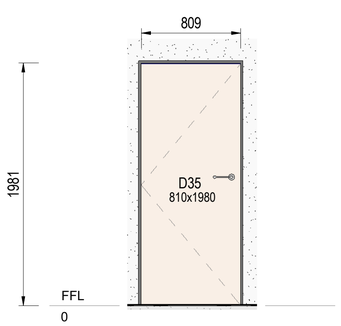
D20
External Double Glazed, Double Swing Dr
1 : 25 @ A1



D10,11,12,13
External Aluminium Swing Dr
1 : 25 @ A1



D30,31,32,33,34,36,37,38
Internal PA, Hollow Core Timber
1 : 25 @ A1



D35
Internal PA, Solid Core Timber
1 : 25 @ A1

Windows:
Also Refer Architectual Elevations
All Exteranl windows & Doors to be double glazed UNO
All dimensions to be confirmed onsite, prior to manufacture

Safety Glass:
(SG) = Safety glass, in accordance with NZS 4223-3

Manifestation (making glass visible)
All windows and doors that are full height will have signage treatment to them (to stop people walking through them)
As per NZS4223-3

Powder Coat:
All aluminium joinery (doors & windows) to be powder coated UNO
owner to select colours

Contractor to confirm window openings with owner
Contractor to confirm window styles with owner

This sheet to be read inconjunction with Architectual Elevations & Sections

PA Doors:
All Internal PA Doors to have 20mm undercut

Also refer glazing notes on Window Schedule

REV	DATE	DESCRIPTION
0	240325	Issued for Consent

Structural Concepts
Consulting Engineers

Napier Office: 06 842 0111
Level 3 Dunvegan house,
215 Hastings Street, Napier
info@structuralconcepts.co.nz

New Commercial Building

Door Schedule

CLIENT
Westwood Property Group Limited

PROJECT ADDRESS
Lot 3 328 Ngaumutawa Road Masterton

SCL NUMBER
4226-10302

A1	SHEET	REV
	041	*0*

DES: PR DRG: SP K:_CAD\4226-10302 Lot 6 328 Ngaumutawa Rd (Loaders)\4226-10302 DRG Lot 3 328 Ngaumutawa Rd (Loaders).rvt
DATE: 27/02/24

Windows:
Also Refer Architectual Elevations
All Exteranl windows & Doors to be double glazed UNO
All dimensions to be confirmed onsite, prior to manufacture

Safety Glass:
(SG) = Safety glass, in accordance with NZS 4223-3

Manifestation (making glass visible)
All windows and doors that are full height will have signage treatment to them (to stop people walking through them)
As per NZS4223-3

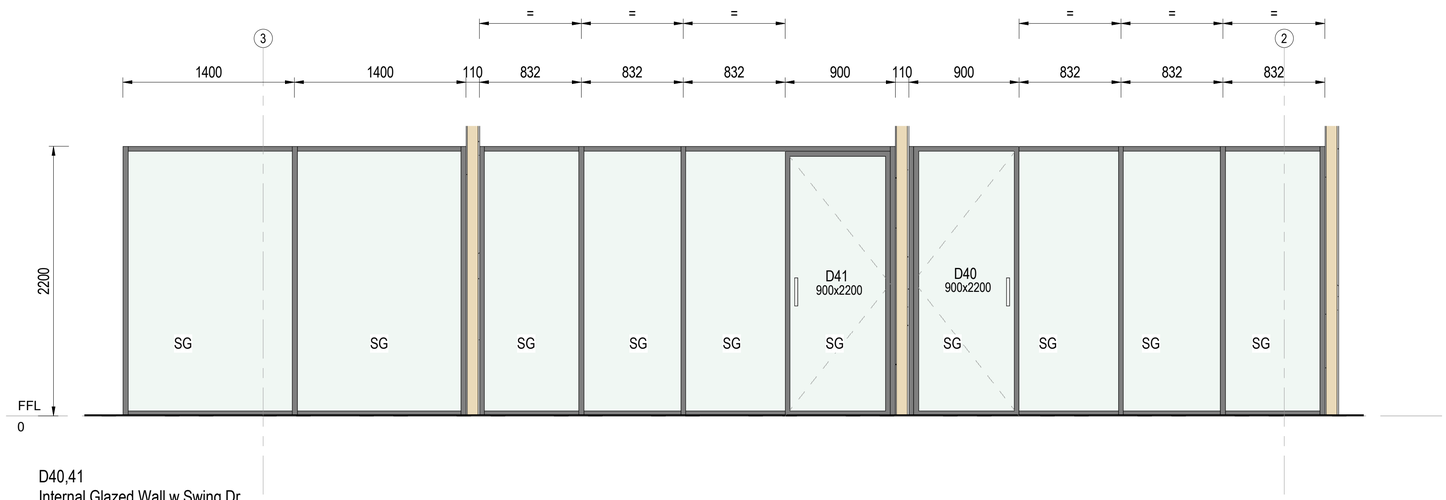
Powder Coat:
All aluminium joinery (doors & windows) to be powder coated UNO
owner to select colours

Contractor to confirm window openings with owner
Contractor to confirm window styles with owner

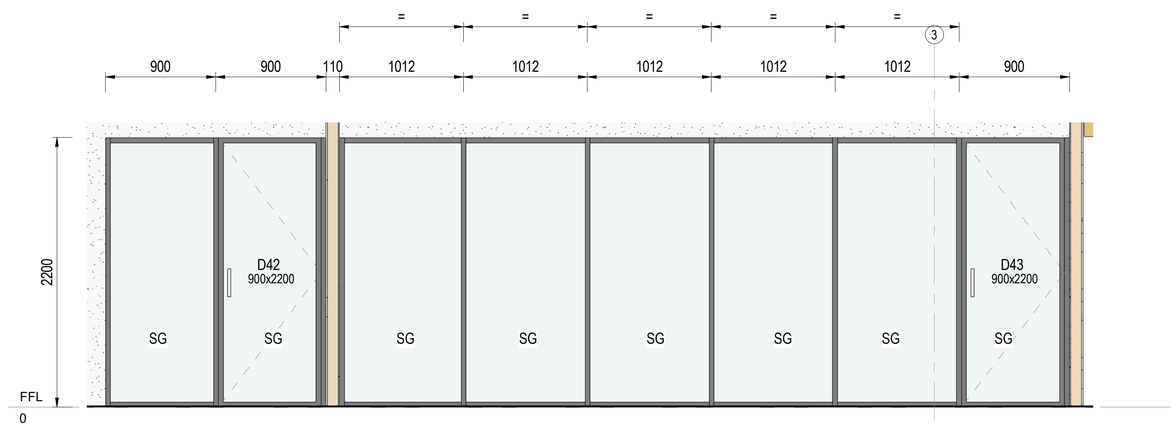
This sheet to be read inconjunction with Architectual Elevations & Sections

PA Doors:
All Internal PA Doors to have 20mm undercut

Also refer glazing notes on Window Schedule



D40,41
Internal Glazed Wall w Swing Dr
1 : 25 @ A1



D42,43
Internal Glazed Wall w Swing Dr
1 : 25 @ A1

REV	DATE	DESCRIPTION
0	240325	Issued for Consent

Structural Concepts
Consulting Engineers

Napier Office: 06 842 0111
Level 3 Dunvegan house,
215 Hastings Street, Napier
info@structuralconcepts.co.nz

New Commercial Building

Door Schedule

CLIENT
Westwood Property Group Limited

PROJECT ADDRESS
Lot 3 328 Ngaumutawa Road Masterton

SCL NUMBER 4226-10302
A1 | SHEET 042 | REV *0*

DES: FR DRG: SP K:_CAD\4226-10302 Lot 6 328 Ngaumutawa Rd (Loaders)\4226-10302 DRG Lot 3 328 Ngaumutawa Rd (Loaders).rvt
DATE: 27/02/24

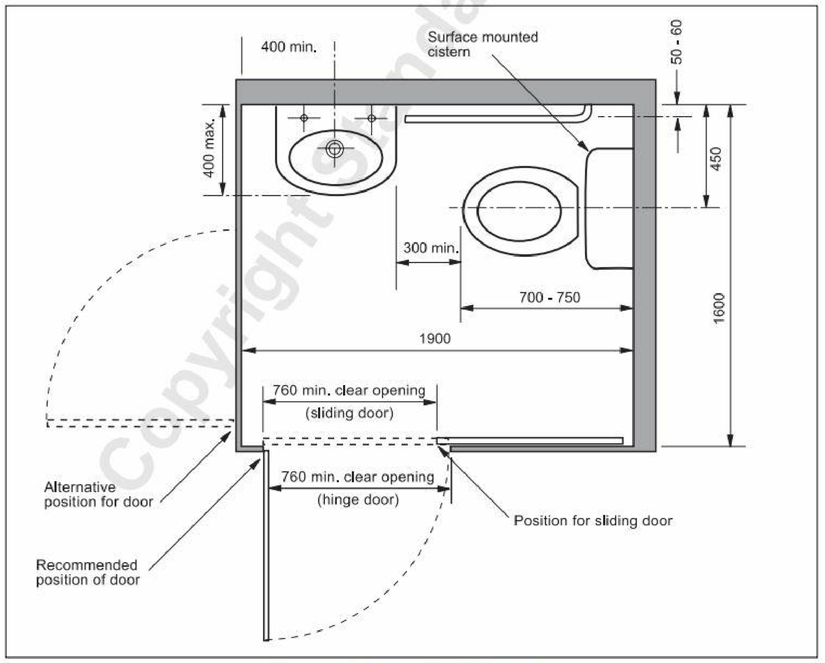


Figure 27 – Accessible toilet units

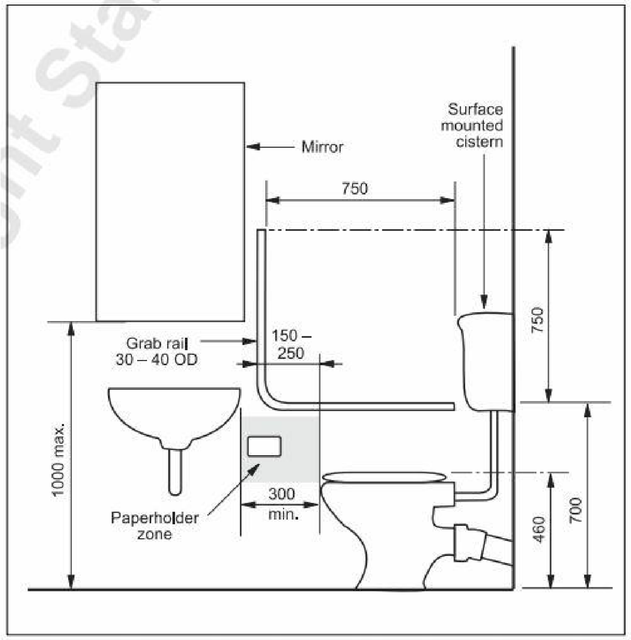


Figure 31 – Toilet unit fittings – positioning of grab rail and paper roll holder

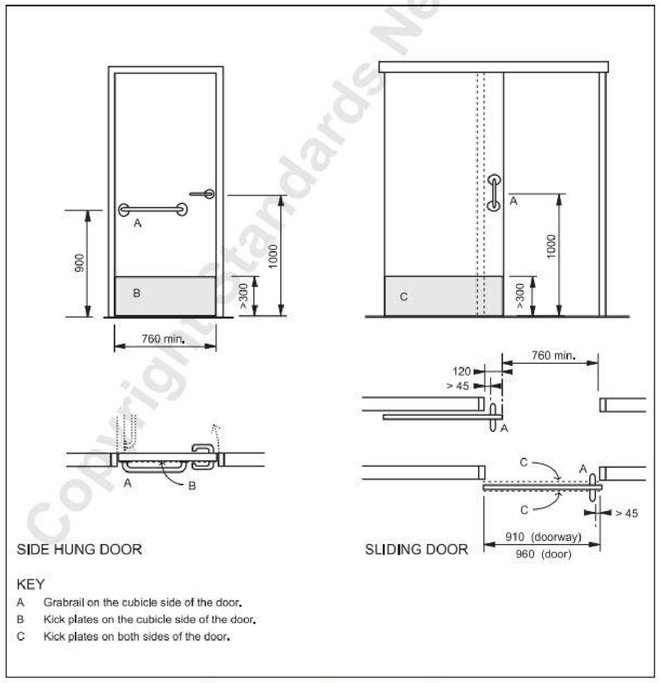


Figure 28 – Grab rails and kick plates on toilet doors

11 PUBLIC FACILITIES

11.1 Public counters and desks

11.1.1 General

Reception counters and desks for public use on an accessible route shall have at least one space for use by people in wheelchairs as visitors and staff working in the reception area (see figure 36). Such a space shall be at least 900 mm wide.

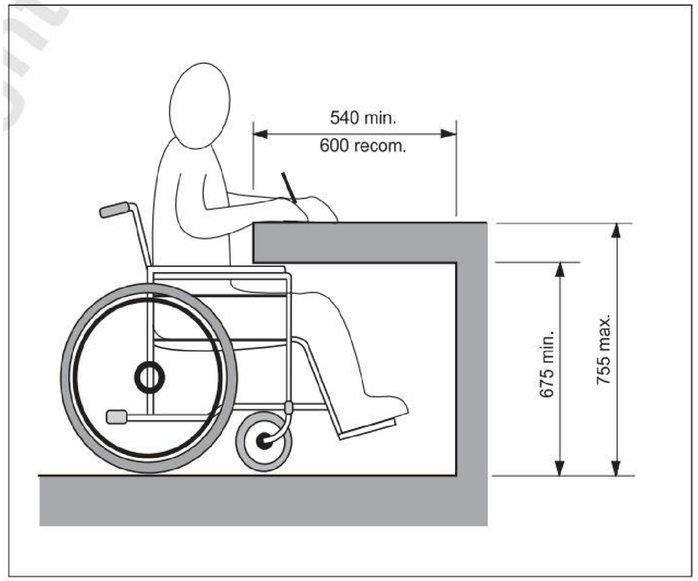


Figure 36 – Public counters and desks

LUMBERLOK®

01/2017

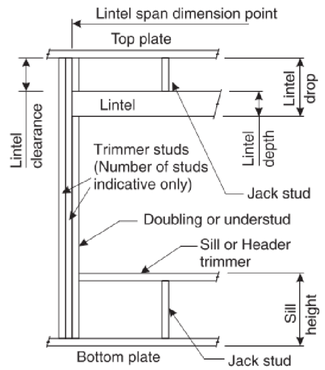
LINTEL FIXING SCHEDULE

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



Lintel Supporting Girder Trusses

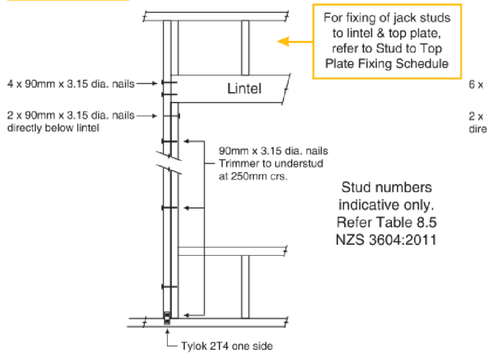
Roof Tributary Area	Light Roof Wind Zone			Heavy Roof Wind Zone		
	L, M, H	VH	EH	L, M, H	VH	EH
8.6m²	G	G	H	G	G	H
11.6m²	G	H	H	G	G	H
12.1m²	G	H	H	G	H	H
15.3m²	H	H	-	G	H	H
19.1m²	H	-	-	G	H	-
20.9m²	H	-	-	H	H	-
21.8m²	H	-	-	H	-	-
34.3m²	-	-	-	H	-	-

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

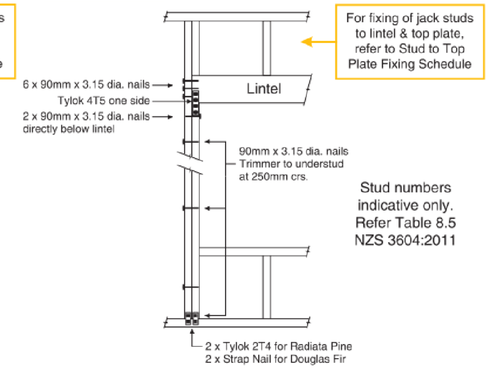
Lintel Span (m)	Loaded Dimension (m) (See Fig. 1.3 NZS 3604:2011)	Light Roof Wind Zone					Heavy Roof Wind Zone				
		L	M	H	VH	EH	L	M	H	VH	EH
1.0	2.0	E	E	E	F	F	E	E	E	E	F
	3.0	E	E	F	F	F	E	E	E	F	F
	4.0	E	F	F	F	G	E	E	F	F	F
	5.0	E	F	F	G	G	E	E	F	F	G
	6.0	E	F	F	G	G	E	E	F	F	G
1.2	2.0	E	E	F	F	F	E	E	E	F	F
	3.0	E	E	F	F	F	E	E	F	F	F
	4.0	E	F	F	G	G	E	E	F	F	G
	5.0	E	F	F	G	G	E	E	F	F	G
	6.0	F	F	G	G	H	E	E	F	G	G
1.5	2.0	E	E	F	F	F	E	E	E	F	F
	3.0	E	F	F	F	G	E	E	F	F	F
	4.0	E	F	F	G	G	E	E	F	F	G
	5.0	F	F	G	G	H	E	E	F	G	G
	6.0	F	F	G	H	H	E	E	F	G	H
2.0	2.0	E	F	F	F	G	E	E	F	F	F
	3.0	E	F	F	G	G	E	E	F	F	G
	4.0	F	F	G	G	H	E	E	F	G	G
	5.0	F	F	G	H	H	E	E	F	G	H
	6.0	F	G	G	H	H	E	F	G	H	H
2.4	2.0	E	F	F	G	G	E	E	F	F	G
	3.0	F	F	G	G	H	E	E	F	G	G
	4.0	F	F	G	H	H	E	E	F	G	H
	5.0	F	G	G	H	H	E	F	G	H	H
	6.0	F	G	H	H	-	E	F	G	H	H
3.0	2.0	E	F	F	G	G	E	E	F	F	G
	3.0	F	F	G	H	H	E	E	F	G	H
	4.0	F	G	G	H	H	E	F	G	H	H
	5.0	F	G	H	H	-	E	F	G	H	H
	6.0	F	G	H	-	-	E	F	G	H	-
3.6	2.0	F	F	G	G	H	E	E	F	G	G
	3.0	F	F	G	H	H	E	F	G	G	H
	4.0	F	G	H	H	-	E	F	G	H	H
	5.0	F	G	H	-	-	E	F	G	H	-
	6.0	G	H	H	-	-	E	F	H	-	-
4.2	2.0	F	F	G	G	H	E	E	F	G	G
	3.0	F	G	H	H	-	E	F	G	H	H
	4.0	F	G	H	-	-	E	F	G	H	-
	5.0	G	H	H	-	-	E	F	H	-	-
	6.0	G	H	-	-	-	E	F	H	-	-
4.5	2.0	F	F	G	H	H	E	E	F	G	H
	3.0	F	G	H	H	-	E	F	G	H	H
	3.4	F	G	H	H	-	E	F	G	H	H
	4.0	F	G	H	-	-	E	F	G	H	-
	5.0	G	H	-	-	-	E	F	H	-	-
	6.0	G	H	-	-	-	E	F	H	-	-
4.8	2.0	F	F	G	H	H	E	E	F	G	H
	3.0	F	G	H	H	-	E	F	G	H	H
	3.2	F	G	H	H	-	E	F	G	H	H
	4.0	F	G	H	-	-	E	F	H	H	-
	5.0	G	H	-	-	-	E	F	H	-	-
	6.0	G	H	-	-	-	E	F	H	-	-
5.1	2.0	F	F	G	H	H	E	F	G	G	H
	3.0	F	G	H	H	-	E	F	G	H	H
	3.5	F	G	H	-	-	E	F	G	H	-
	4.0	G	G	H	-	-	E	F	H	H	-
	5.0	G	H	-	-	-	E	F	H	-	-
	6.0	G	H	-	-	-	E	G	H	-	-
5.4	2.0	F	F	G	H	H	E	F	G	G	H
	2.8	F	G	H	H	-	E	F	G	H	H
	3.0	F	G	H	-	-	E	F	G	H	-
	4.0	G	H	H	-	-	E	F	H	-	-
	5.0	G	H	-	-	-	E	F	H	-	-
	6.0	G	H	-	-	-	E	G	H	-	-

LINTEL FIXING OPTIONS

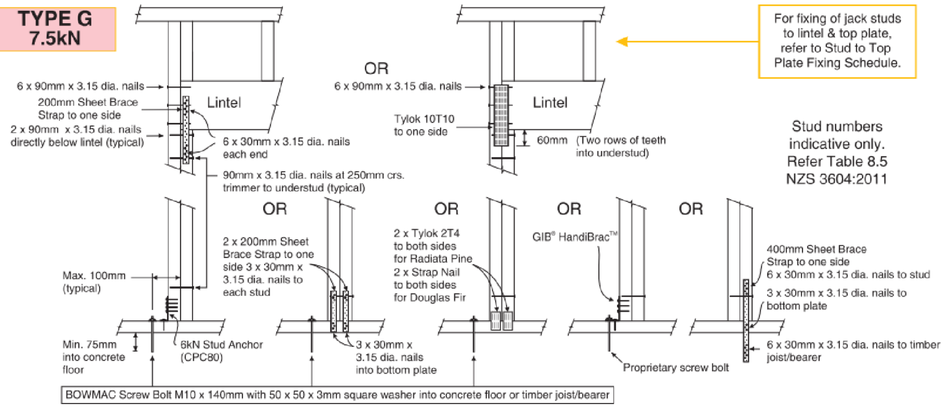
TYPE E 1.4kN



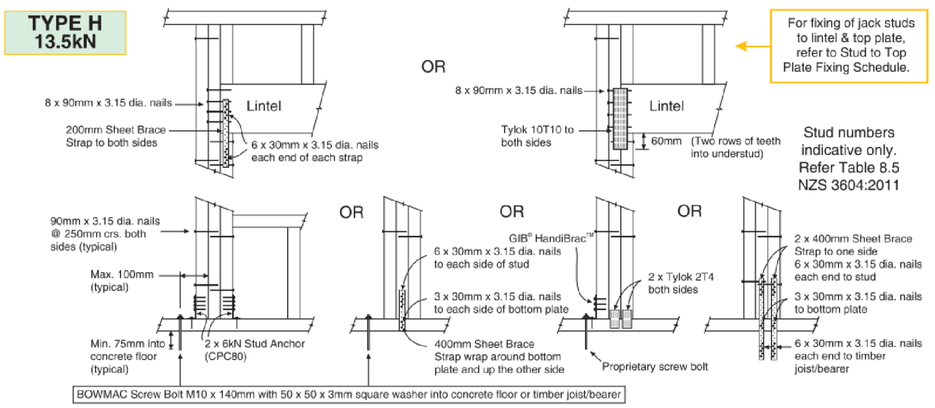
TYPE F 4.0kN



TYPE G 7.5kN



TYPE H 13.5kN



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MITEK® LUMBERLOK® BOWMAC®

REV	DATE	DESCRIPTION
0	240325	Issued for Consent

Structural Concepts
Consulting Engineers

Napier Office: 06 842 0111
Level 3 Dunvegan house,
215 Hastings Street, Napier
info@structuralconcepts.co.nz

New Commercial Building

Standard Details

CLIENT
Westwood Property Group Limited

PROJECT ADDRESS
Lot 3 328 Ngaumutawa Road Masterton

SCL NUMBER 4226-10302
A1 | SHEET 045 | REV 0

DATE: 27/02/24 DES: PR DRG: SP K:_CAD\4226-10302 Lot 6 328 Ngaumutawa Rd (Loaders)\4226-10302 DRG Lot 3 328 Ngaumutawa Rd (Loaders).rvt

07/2011

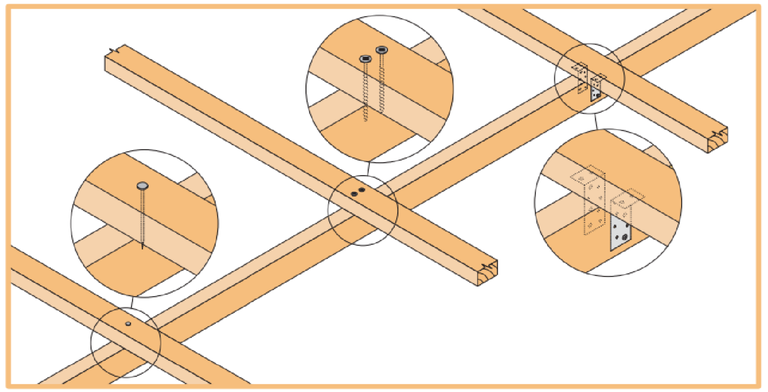
LUMBERLOK®

PURLIN & BATTEN FIXING CHART

ALTERNATIVE SOLUTION TO NZS 3604:2011 TABLES 10.10 & 10.12

NOTE:

- ★ All purlin and batten sizes are as per NZS 3604:2011.
- ★ All fixings assume that the purlin and battens are installed on their flat over the top of the rafter or truss.
- ★ The minimum fixing requirements apply to all purlin locations within the roof area.
- ★ The LUMBERLOK BLUE SCREW where specified requires a minimum of 30mm penetration into rafter or truss i.e. it is suitable for rough sawn timber up to 50mm thick at 18% moisture content.



SELECTION CHART FIXING OPTIONS

(minimum fixing requirements)

ROOF WEIGHT	MAX. PURLIN SPAN (mm)	MAX. PURLIN CRS. (mm)	WIND ZONE				
			L	M	H	VH	EH
HEAVY ROOF Tile Battens	900	370	A	A	A	A	A
LIGHT ROOF Tile Battens	900	370	A	A	B	C	C
	1200	370	A	B	C	C	C
LIGHT ROOF Purlins	900	900	C	C	C	C	D
	1200	900	C	C	C	D	D
	1200	1200	C	C	D	E	E

Wind Zone:
As per NZS 3604:2011

L = Low Wind
M = Medium Wind
H = High Wind
VH = Very High Wind
EH = Extra High Wind

SCAN FOR INSTALLATION VIDEO

https://vimeo.com/117353340

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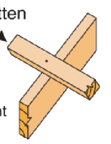
STANDARD FIXING OPTIONS

FIXING TYPE A 0.55kN

1 NAIL

Note: Two nails maybe preferred to prevent batten rolling over with high roof pitches.

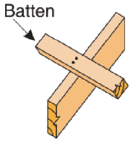
Purlin / Batten



FIXING TYPE B 0.8kN

2 NAILS

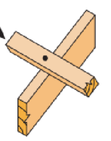
Purlin / Batten



FIXING TYPE C 2.4kN

1 BLUE SCREW

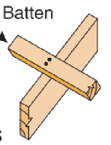
Purlin / Batten



FIXING TYPE D 3.45kN

2 BLUE SCREWS
OR
2 SKEW NAILS plus 2 WIRE DOGS
(for purlin on edge)

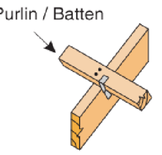
Purlin / Batten

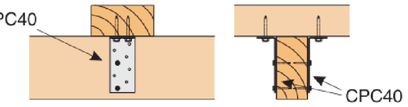


FIXING TYPE E 5.5kN

2 NAILS plus 1 CT200
OR
1 PAIR of CPC40

Purlin / Batten





FIXING DEFINITIONS

NAIL = Either 90mm x 3.15 dia. power-driven nail or 100mm x 3.75 dia. hand-driven nail

BLUE SCREW = 80mm x 10 gauge LUMBERLOK BLUE SCREW

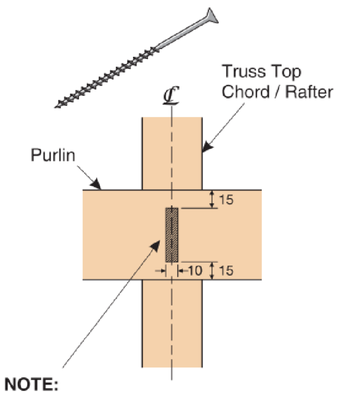
WIRE DOG = LUMBERLOK WIRE DOG either LH or RH

CT200 = LUMBERLOK Ceiling Tie CT200 bend over purlin, 4 x LUMBERLOK Product Nails 30mm x 3.15 dia. each end

CPC40 = LUMBERLOK CPC40 with 2 x Type 17 - 14g x 35mm Hex Head Screws per flange

FIXING TOLERANCES

LUMBERLOK BLUE SCREW



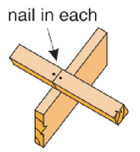
NOTE:
Locate fixings within the shaded area. Care to be taken to avoid over tightening of screws.

PURLIN / BATTEN SPLICE FIXING OPTIONS

FIXING TYPE A & B OVER PURLIN SPLICE

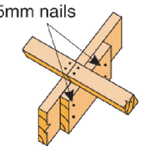
NOTE:
Skew nail when fixing to 35mm rafter or truss

1 nail in each



FIXING TYPE C, D or E OVER PURLIN SPLICE

90 x 35mm block fixed to chord or rafter with 4 x 75mm nails



- TYPE C
  1 SCREW
  to each purlin
- TYPE D & E
  1 NAIL plus 1 SCREW to each purlin

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New Commercial Building

Standard Details

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SCL NUMBER 4226-10302
A1 | SHEET 046 | REV *0*

DES: PR DRG: SP K:_CAD\4226-10302 Lot 6 328 Ngaumutawa Rd (Loaders)\4226-10302 DRG Lot 3 328 Ngaumutawa Rd (Loaders).rvt
DATE: 27/02/24

08/2017

LUMBERLOK®

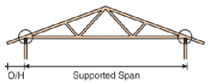
STUD TO TOP PLATE FIXING SCHEDULE

ALTERNATIVE TO TABLE 8.18 NZS 3604:2011

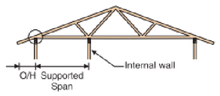
NOTE:

- ★ 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.

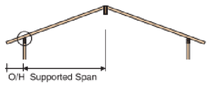
LOADED DIMENSION DEFINITION



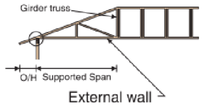
External wall
Standard truss



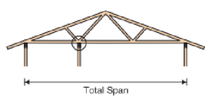
External wall
Internally supported truss



External wall
Rafter roof



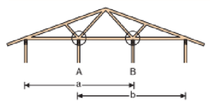
External wall
Jack truss



Internal wall
Internally supported truss
(overhang dimension does not apply)

EXTERNAL WALL
LOADED DIMENSION =
$\frac{\text{SUPPORTED SPAN}}{2}$ + O/H

INTERNAL WALL
LOADED DIMENSION =
$\frac{\text{TOTAL SPAN}}{2}$



Multiple internal walls
(overhang dimension does not apply)

MULTIPLE INTERNAL WALL
LOADED DIMENSION FOR
WALL A = $\frac{a}{2}$
WALL B = $\frac{b}{2}$

FIXING SELECTION CHART

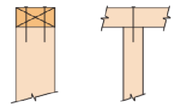
(Suitable for walls supporting roof members at 600, 900 or 1200mm crs.)
Wind Zones L, M, H, VH, EH, as per NZS 3604:2011

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

FIXING OPTIONS

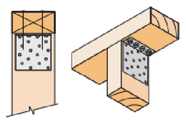
FIXING TYPE A 0.7kN

2 x 90mm x 3.15 dia. plain steel wire nails driven vertically into stud.



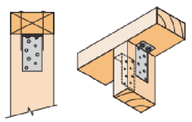
FIXING TYPE B 4.7kN — **CHOOSE ANY OF THE 3 OPTIONS BELOW**

2 x 90mm x 3.15 dia. plain steel wire nails driven vertically into stud.



Plus
LUMBERLOK
6kN Stud Anchor
(CPC80)

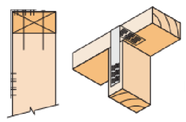
2 x 90mm x 3.15 dia. plain steel wire nails driven vertically into stud.



Plus
2 x LUMBERLOK
CPC40

Recommended for internal wall options to avoid lining issues

2 x 90mm x 3.15 dia. plain steel wire nails driven vertically into stud.



Plus
LUMBERLOK
Stud Strap
(one face only)

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.

SCAN FOR INSTALLATION VIDEO

https://vimeo.com/117353604

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REV	DATE	DESCRIPTION
0	240325	Issued for Consent

Structural Concepts
Consulting Engineers

Napier Office: 06 842 0111
Level 3 Dunvegan house,
215 Hastings Street, Napier
info@structuralconcepts.co.nz

New Commercial Building

Standard Details

CLIENT
Westwood Property Group Limited

PROJECT ADDRESS
Lot 3 328 Ngaumutawa Road Masterton

SCL NUMBER 4226-10302
A1 | SHEET 047 | REV *0*

DES: PR DRG: SP K:_CAD\4226-10302 Lot 6 328 Ngaumutawa Rd (Loaders)\4226-10302 DRG Lot 3 328 Ngaumutawa Rd (Loaders).rvt
DATE: 27/02/24

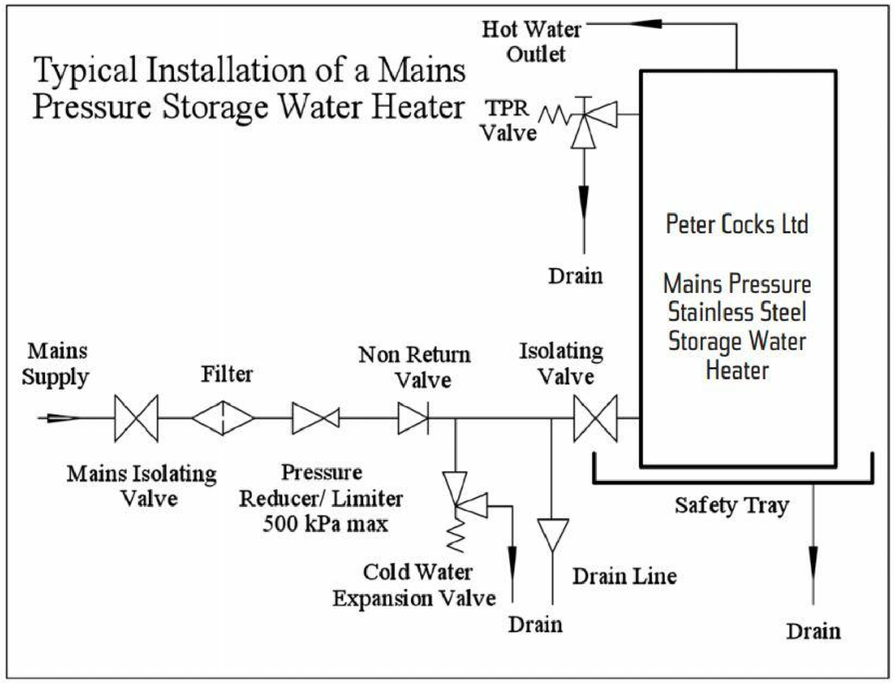
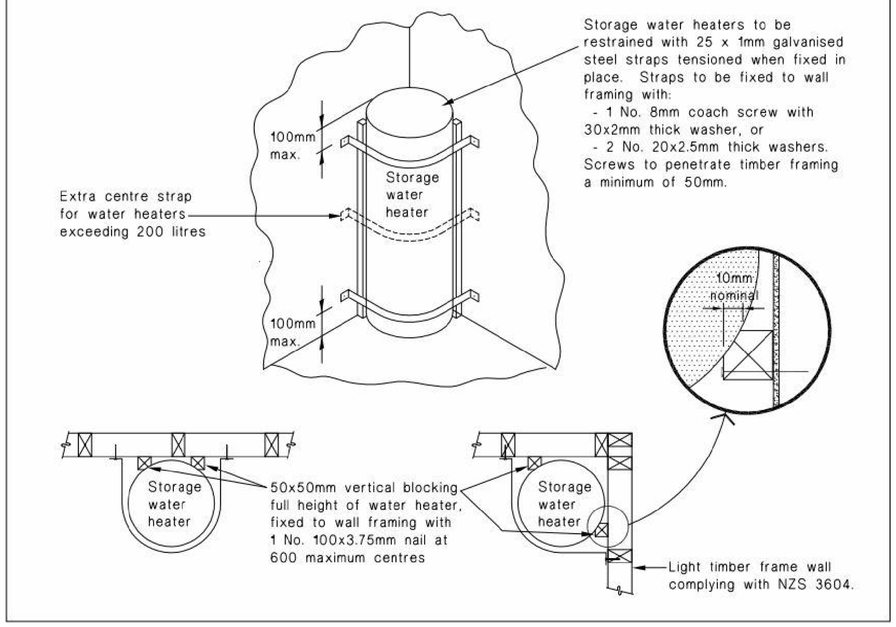


Figure 14: **Seismic Restraint of Storage Water Heaters 90 – 360 litres**
Paragraph 6.11.4



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Standard Details

CLIENT
Westwood Property Group Limited

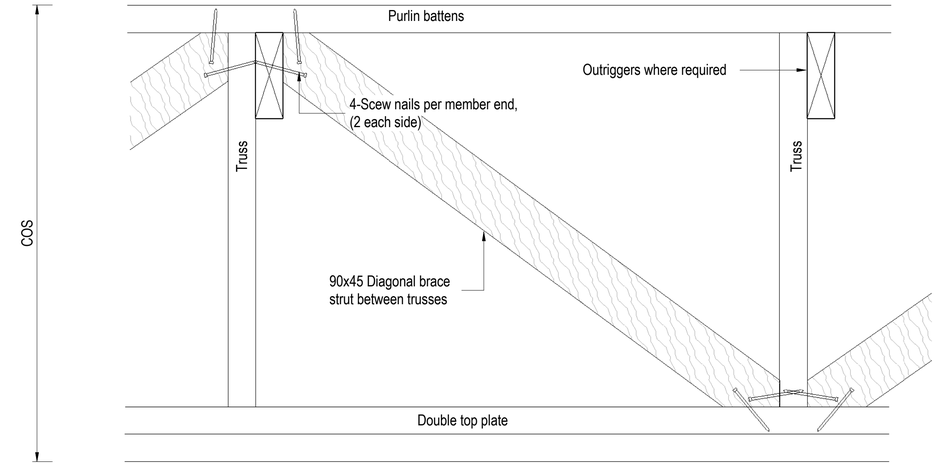
PROJECT ADDRESS
Lot 3 328 Ngaumutawa Road Masterton

SCL NUMBER 4226-10302

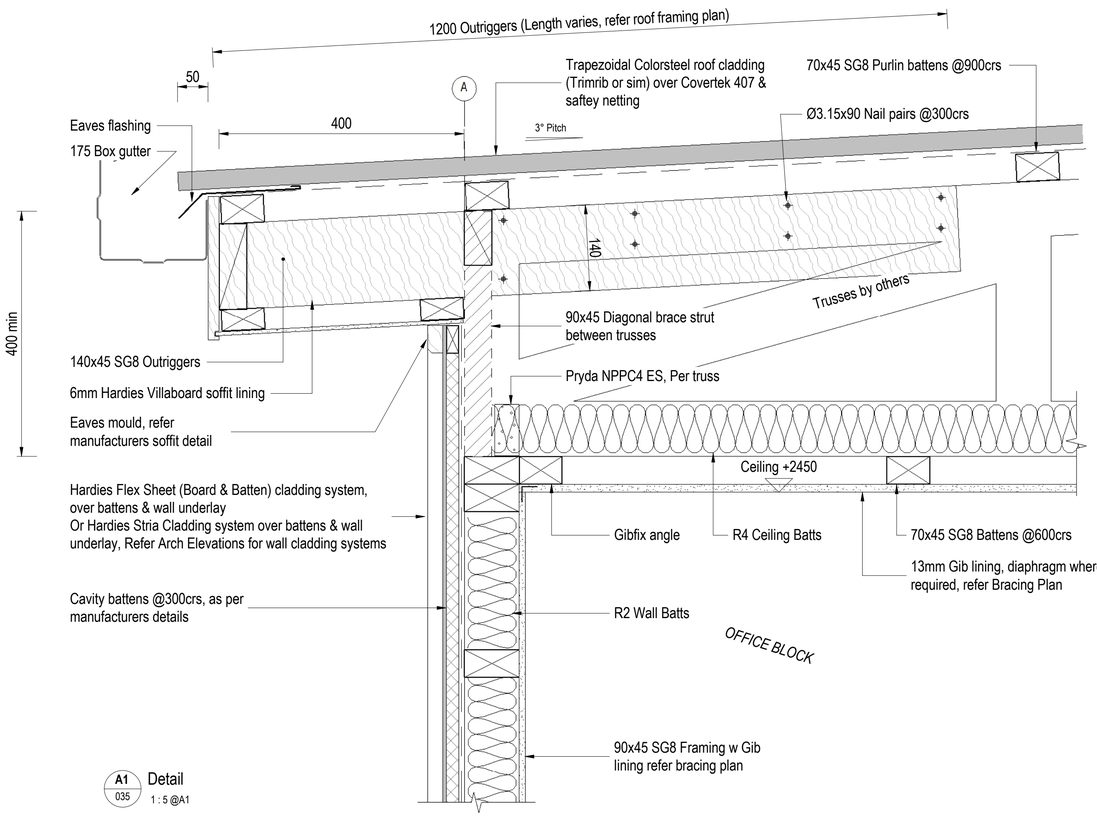
A1 | SHEET 048 | REV *0*

DES: PR DRG: SP K:_CAD\4226-10302 Lot 6 328 Ngaumutawa Rd (Loaders)\4226-10302 DRG Lot 3 328 Ngaumutawa Rd (Loaders).rvt

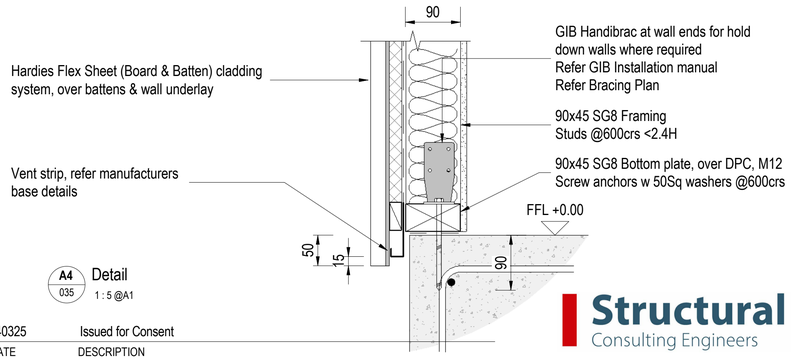
DATE: 27/02/24



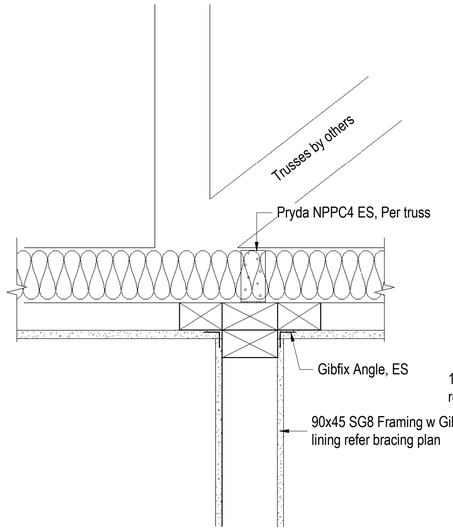
A6 Detail
1 : 5 @A1



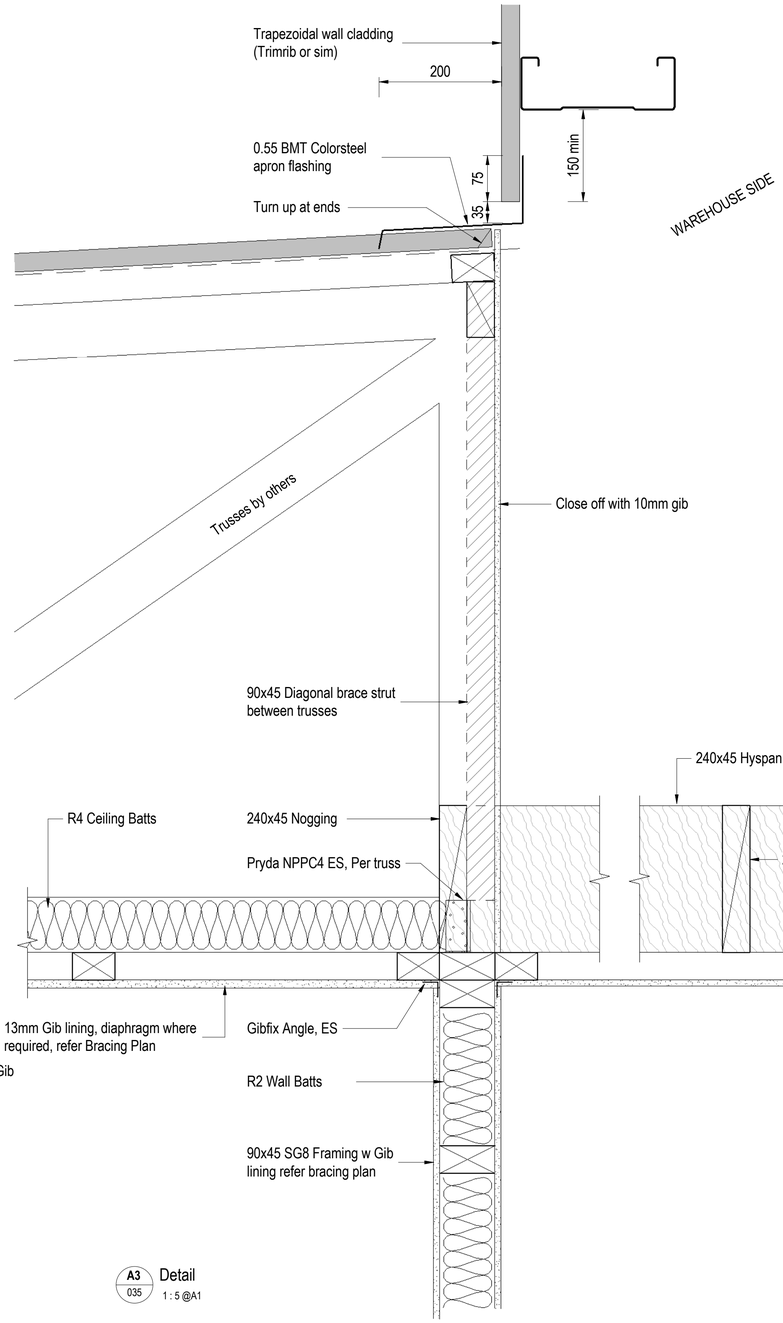
A1 035 Detail
1 : 5 @A1



A4 035 Detail
1 : 5 @A1



A2 035 Detail
1 : 5 @A1



A3 035 Detail
1 : 5 @A1

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SCL NUMBER
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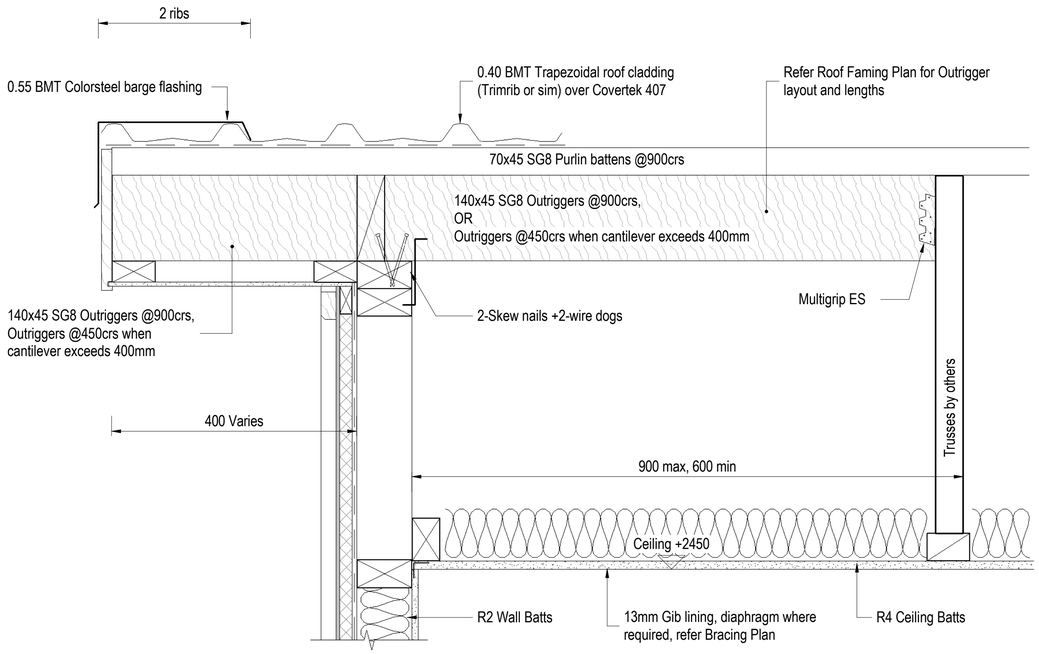
A1 | SHEET 050 | REV *0*

DES: PR DRG: SP K:_CAD\4226-10302 Lot 6 328 Ngaumutawa Rd (Loaders)\4226-10302 DRG Lot 3 328 Ngaumutawa Rd (Loaders).rvt
DATE: 27/02/24



A5 Office Barge
1 : 5 @A1

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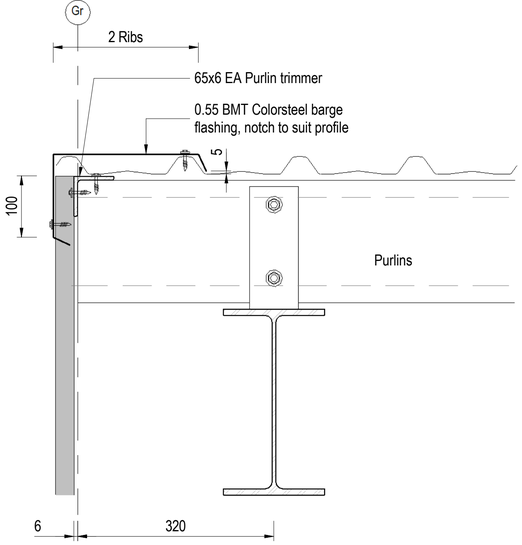
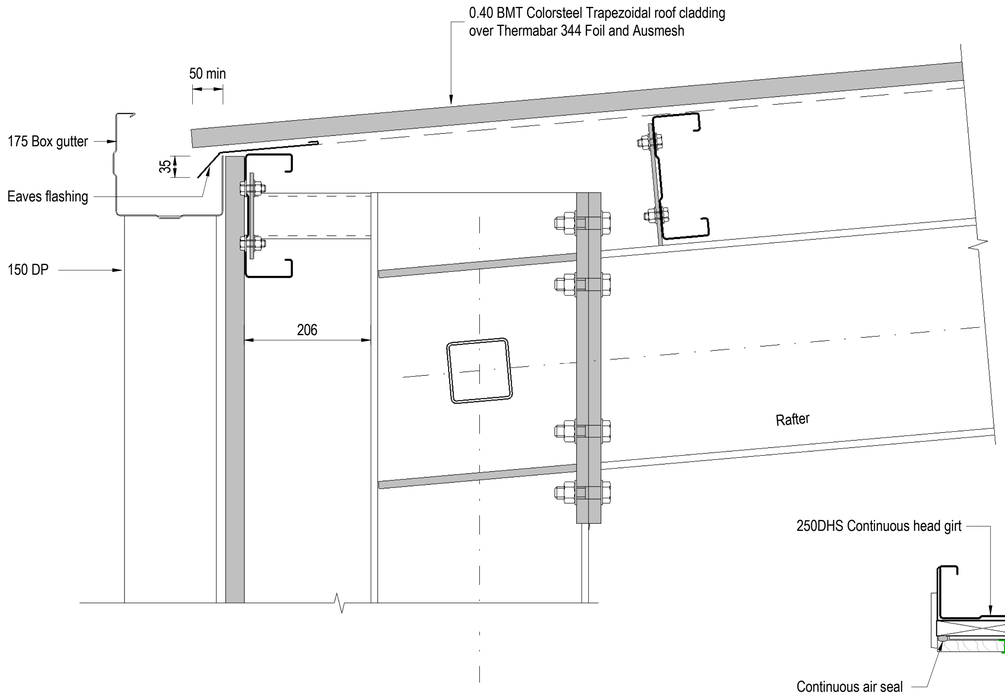
SCL NUMBER
4226-10302

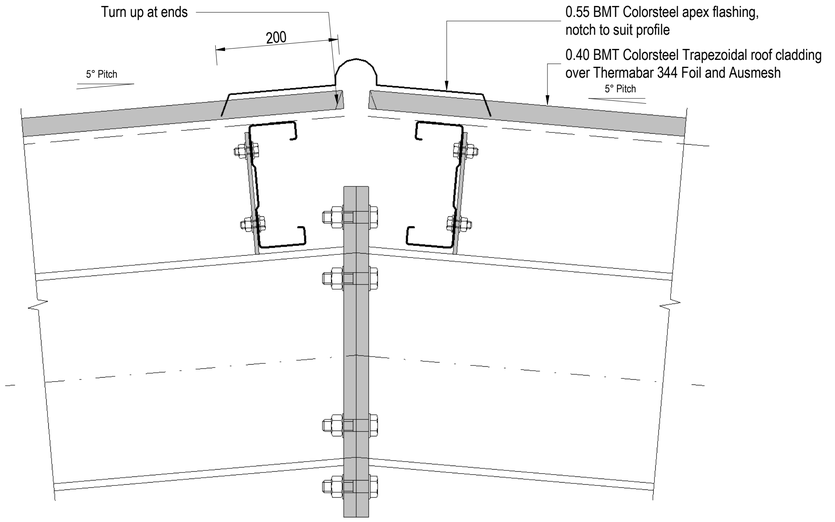
A1 | SHEET 051 | REV *0*

DES: PR DRG: SP K:_CAD\4226-10302 Lot 6 328 Ngaumutawa Rd (Loaders)\4226-10302 DRG Lot 3 328 Ngaumutawa Rd (Loaders).rvt

DATE: 27/02/24

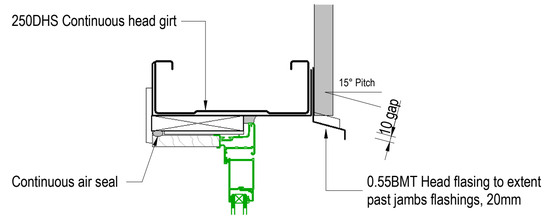




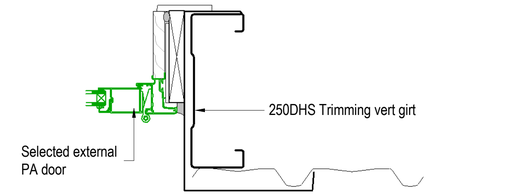


Details- Warehouse

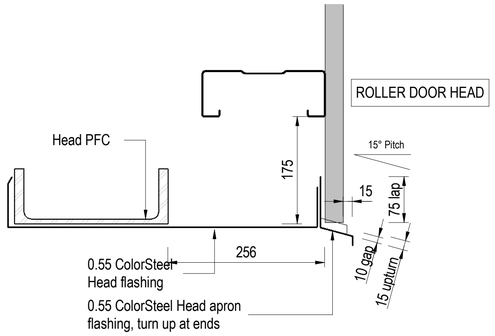
1 : 5 @ A1

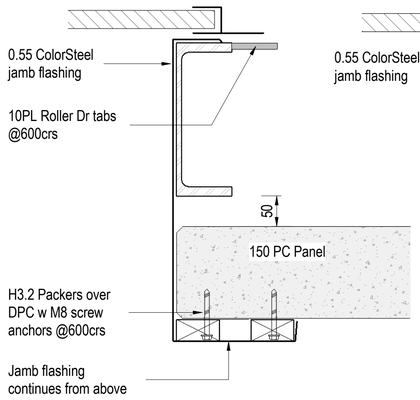


PA DOOR HEAD

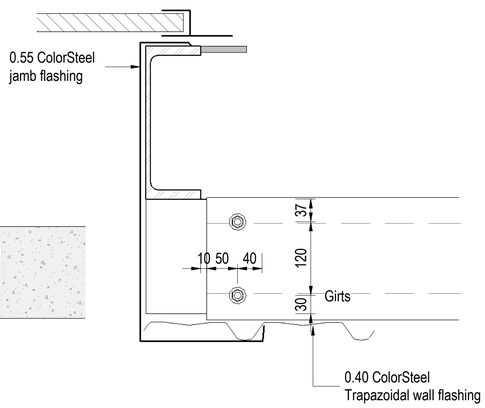


PA DOOR JAMB @ TRIMRIB CLADDING





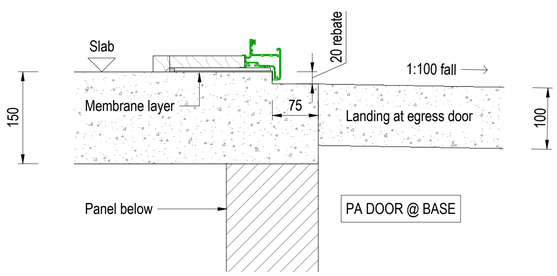
ROLLER DOOR JAMB AT PC PANEL LEVEL



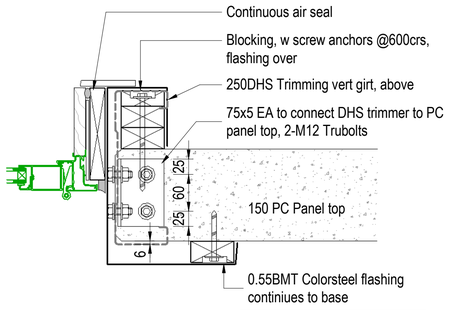
ROLLER DOOR JAMB AT GIRT LEVEL

Details- Roller Door

1 : 5 @ A1



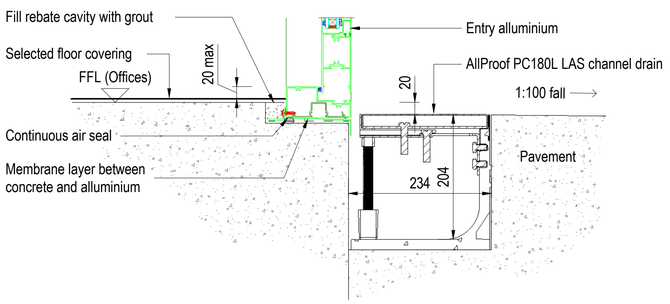
PA DOOR @ BASE



PA DOOR JAMB @ PC PANEL

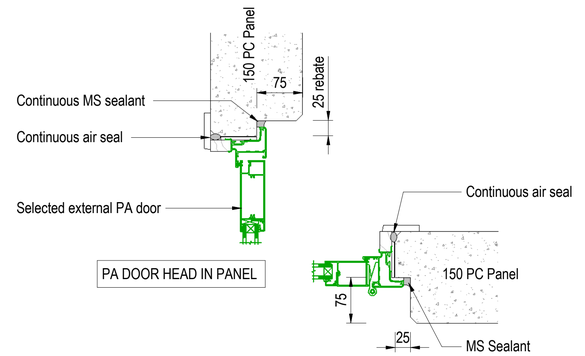
PA DOOR IN PC PANEL / CLADDING

1 : 5 @ A1



Main Entry Base

1 : 5 @ A1



PA DOOR HEAD IN PANEL

PA DOOR JAMB IN PANEL

PA Door in PC Panel

1 : 5 @ A1

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New Commercial Building

Arch Details

CLIENT
Westwood Property Group Limited

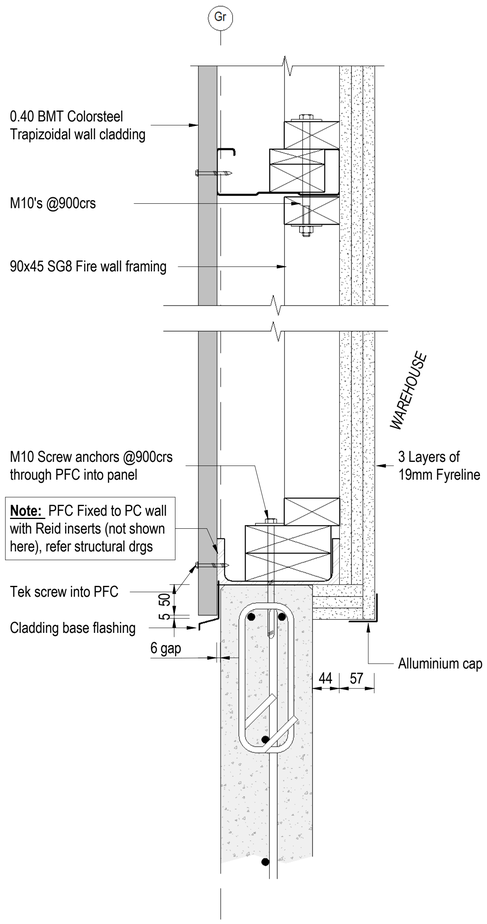
PROJECT ADDRESS
Lot 3 328 Ngaumutawa Road Masterton

SCL NUMBER
4226-10302

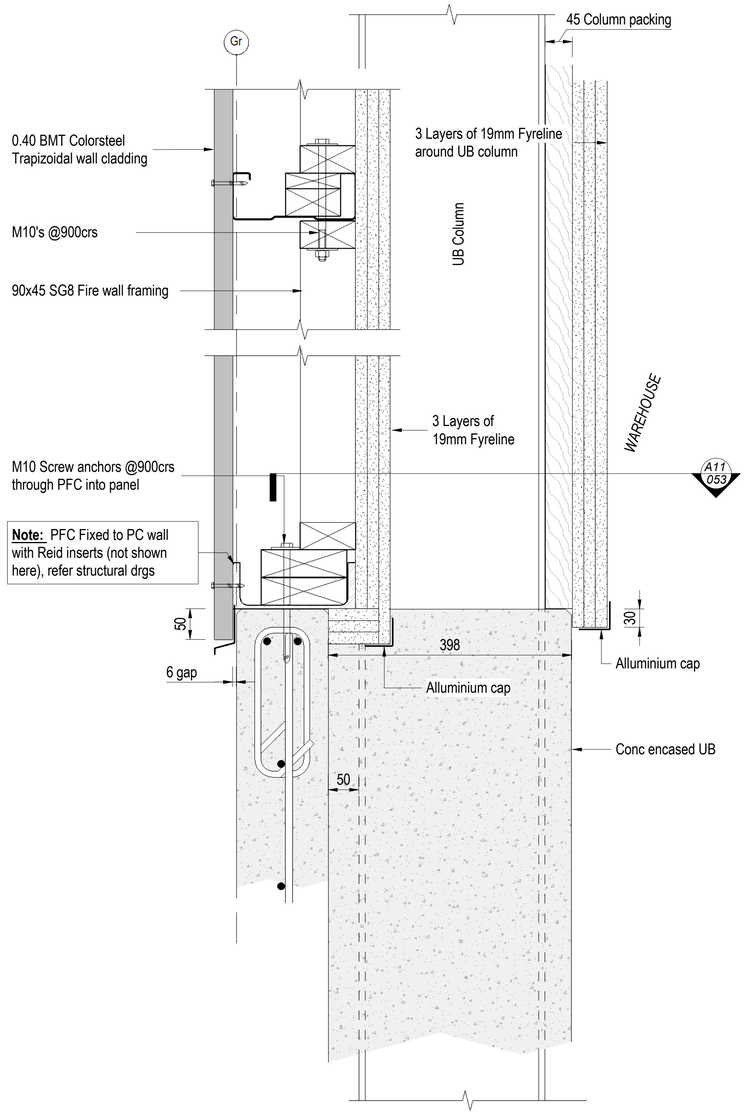
A1 | SHEET 052 | REV *0*

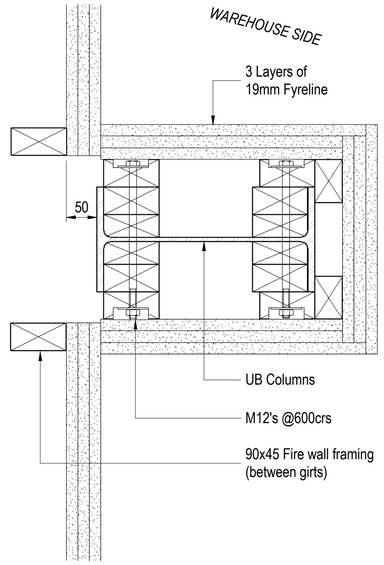
DES: PR DRG: SP K:_CAD\4226-10302 Lot 6 328 Ngaumutawa Rd (Loaders)\4226-10302 DRG Lot 3 328 Ngaumutawa Rd (Loaders).rvt

DATE: 27/02/24



A10 011 Fire Rated Lining
1 : 5 @A1





A11 011 UB Column Fire Lining
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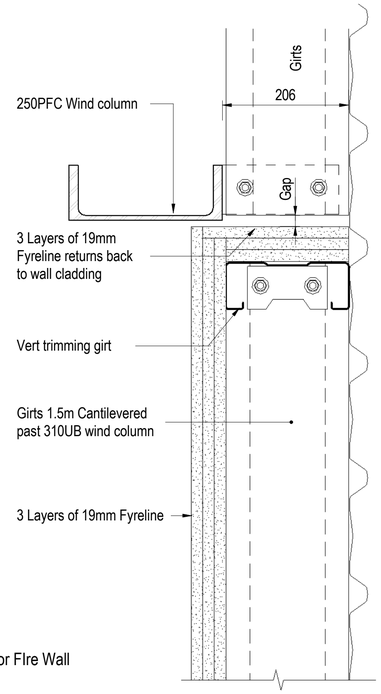
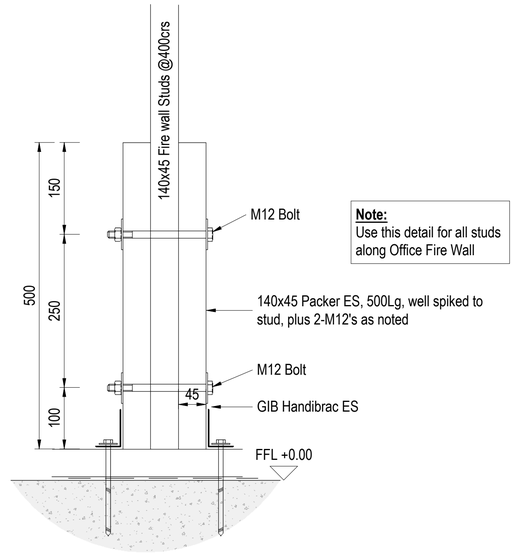


A12 011 Cantilevered Girts for FIre Wall
1 : 5 @A1



A30 011 Office Stud for Fire Wall
1 : 5 @A1

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215 Hastings Street, Napier
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New Commercial Building

Arch Details

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Westwood Property Group Limited

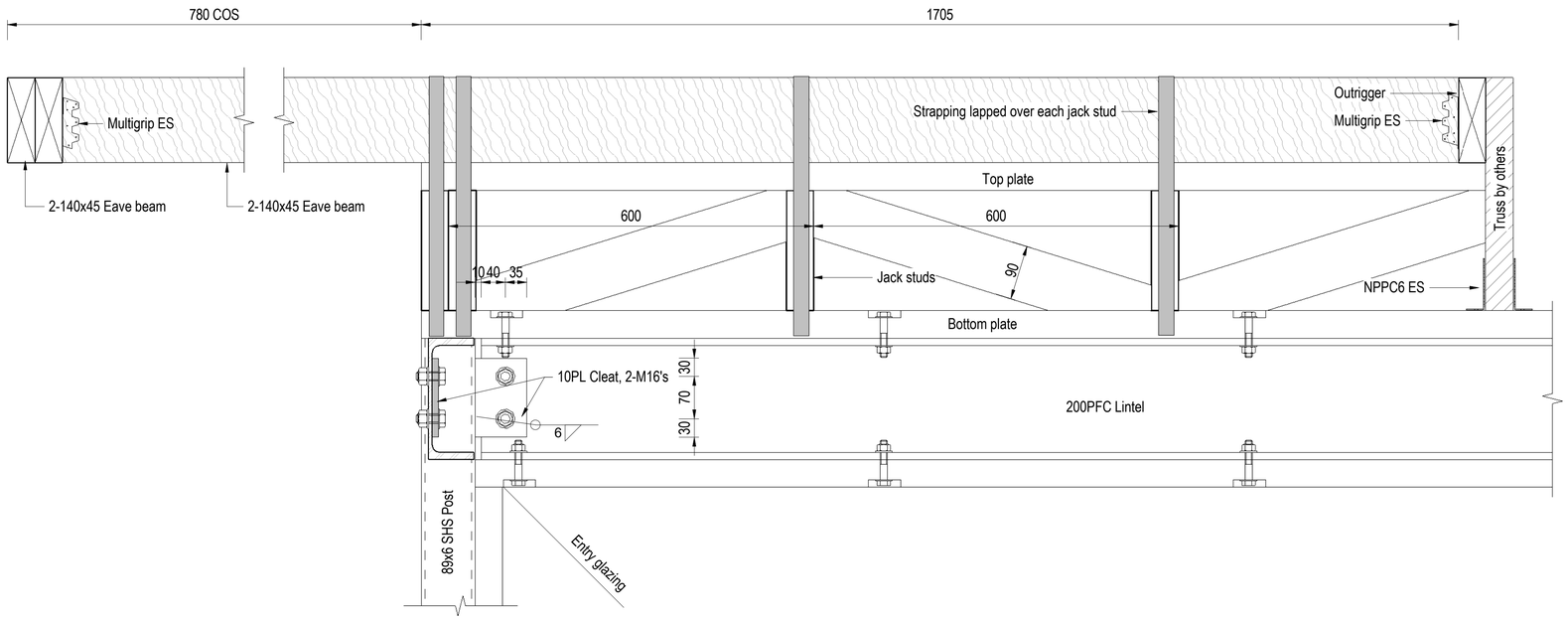
PROJECT ADDRESS
Lot 3 328 Ngaumutawa Road Masterton

SCL NUMBER 4226-10302

A1	SHEET	REV
	053	*0*

DES: PR DRG: SP K:_CAD\4226-10302 Lot 6 328 Ngaumutawa Rd (Loaders)\4226-10302 DRG Lot 3 328 Ngaumutawa Rd (Loaders).rvt

DATE: 27/02/24



A20 035 Detail
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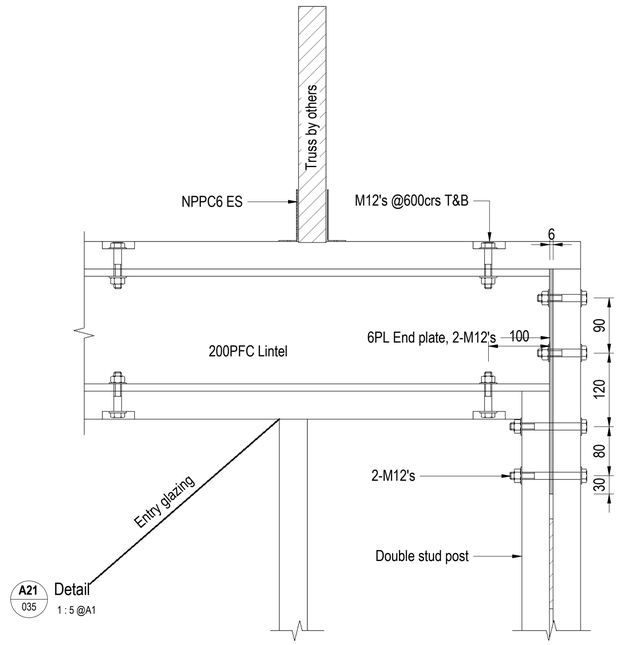
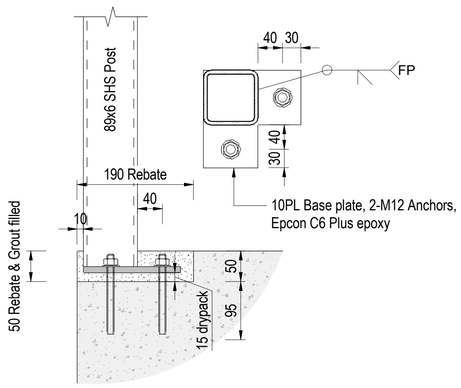
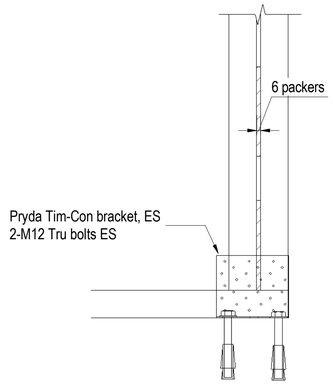


A21 035 Detail
1 : 5 @A1



A22 035 Detail
1 : 5 @A1



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New Commercial Building

Arch Details, PFC Lintel

CLIENT
Westwood Property Group Limited

PROJECT ADDRESS
Lot 3 328 Ngaumutawa Road Masterton

SCL NUMBER
4226-10302

A1	SHEET	REV
	054	*0*

DES: PR DRG: SP K:_CAD\4226-10302 Lot 6 328 Ngaumutawa Rd (Loaders)\4226-10302 DRG Lot 3 328 Ngaumutawa Rd (Loaders).rvt
DATE: 27/02/24

Figure 1: Framing set out

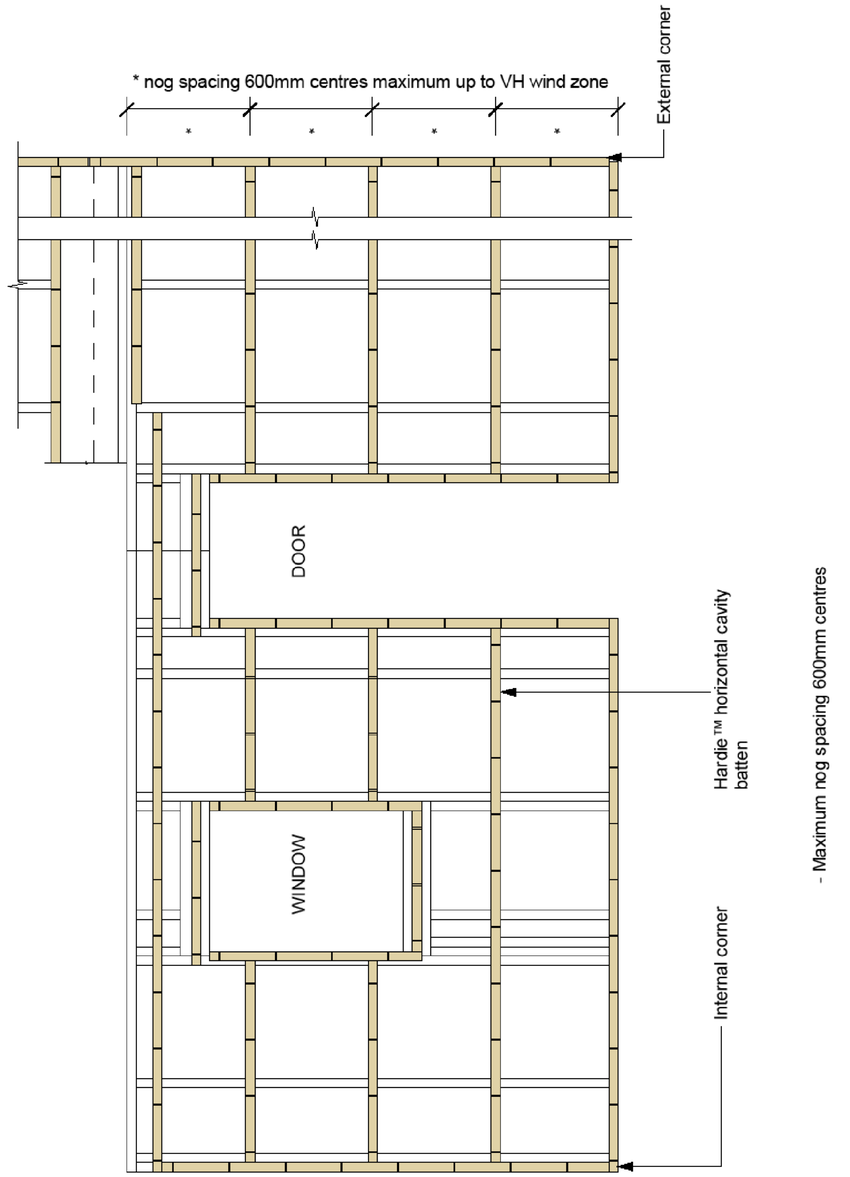
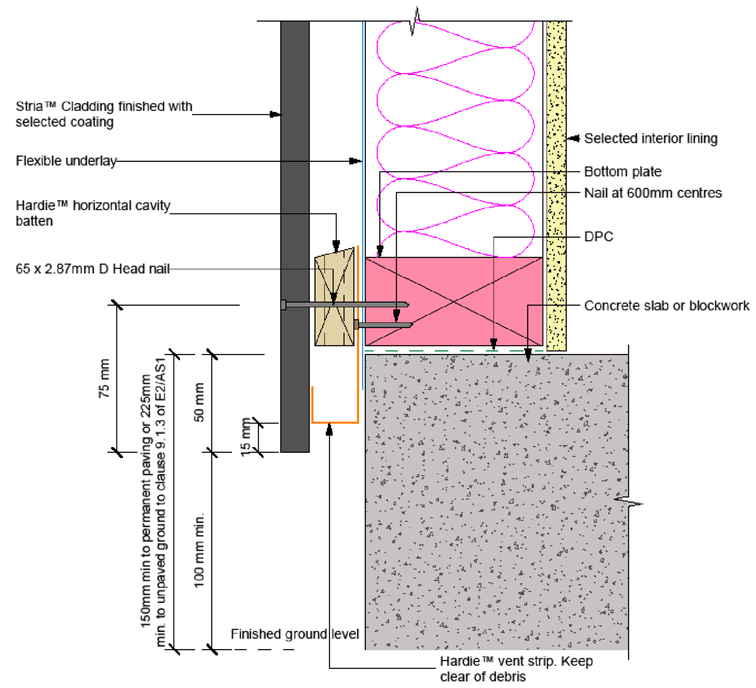


Figure 3: Foundation details



Note: Site cut edges to be primed

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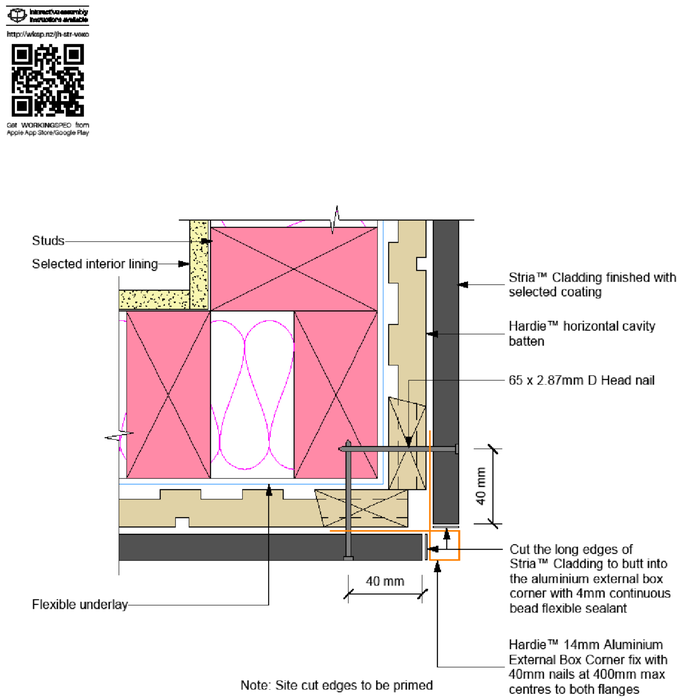
Lot 3 328 Ngaumutawa Road Masterton

SCL NUMBER		
4226-10302		
A1	SHEET 060	REV *0*

DES: PR DRG: SP K:_CAD\4226-10302 Lot 6 328 Ngaumutawa Rd (Loaders)\4226-10302 DRG Lot 3 328 Ngaumutawa Rd (Loaders).rvt

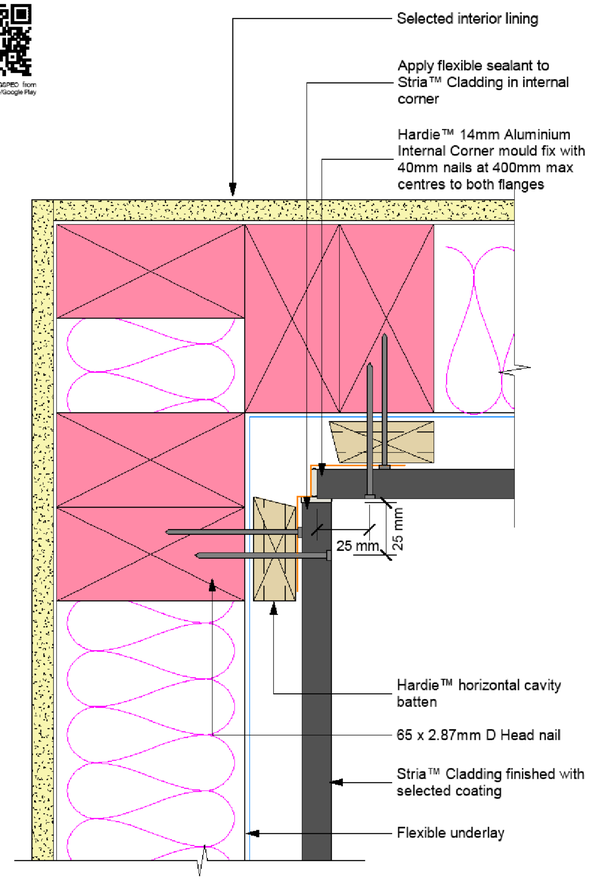
DATE: 27/02/24

Figure 6: External aluminium box corner



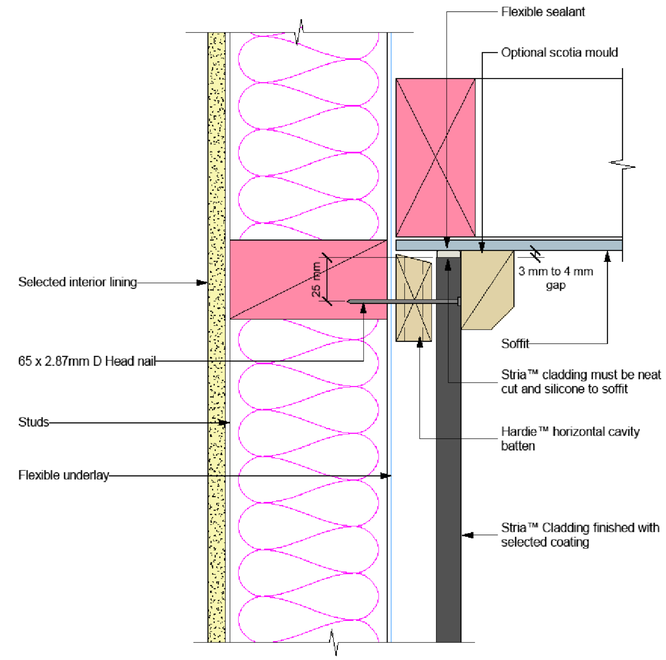
Note: Site cut edges to be primed

Figure 9: Internal aluminium corner



Note: Site cut edges to be primed

Figure 10: Soffit detail



Note: Site cut edges to be primed

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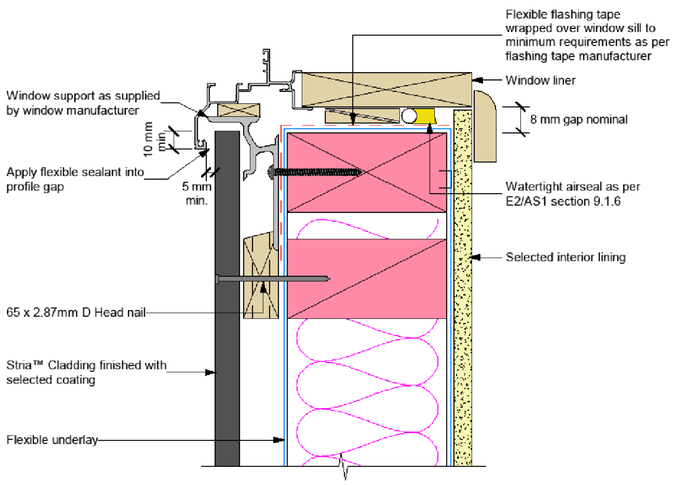
Lot 3 328 Ngaumutawa Road Masterton

SCL NUMBER
4226-10302

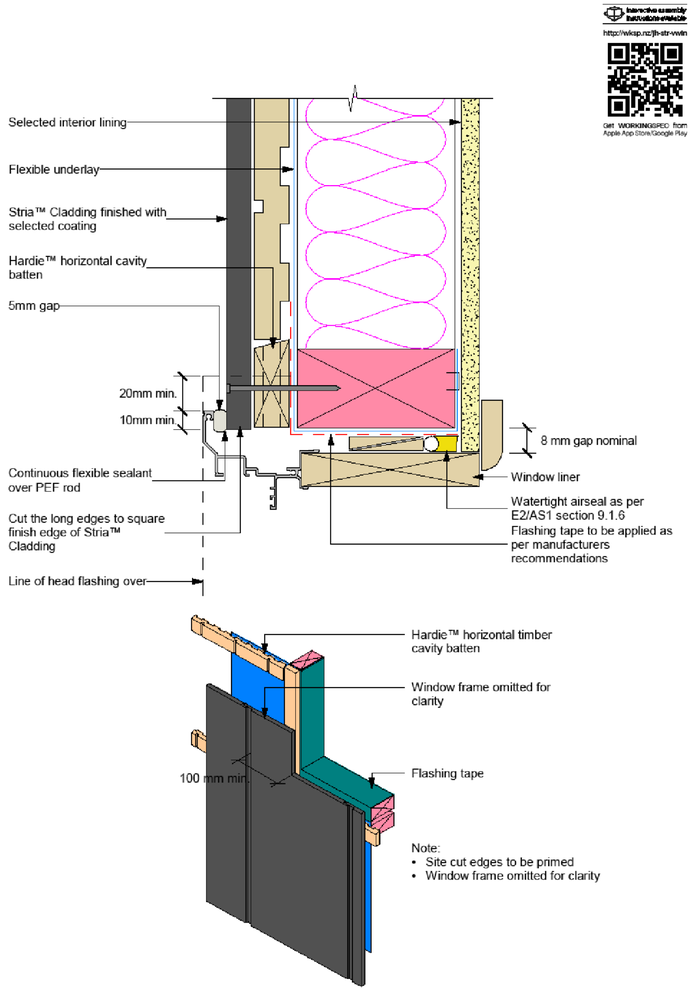
A1 | SHEET 061 | REV *0*

Figure 12: Window sill



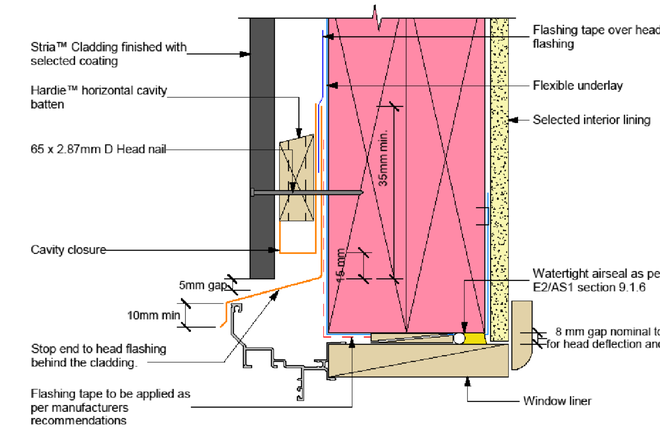
Note: Site cut edges to be primed

Figure 13: Window jamb



Note:
- Site cut edges to be primed
- Window frame omitted for clarity

Figure 15: Window head



Note:
1. Site cut edges to be primed
2. Sealant must be installed between head flashing and window flange in VH and above wind zones. Refer to Figure 71 of E2/AS1
3. Alternatively, the head flashings can be formed with stop ends as per E2/AS1

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Westwood Property Group Limited

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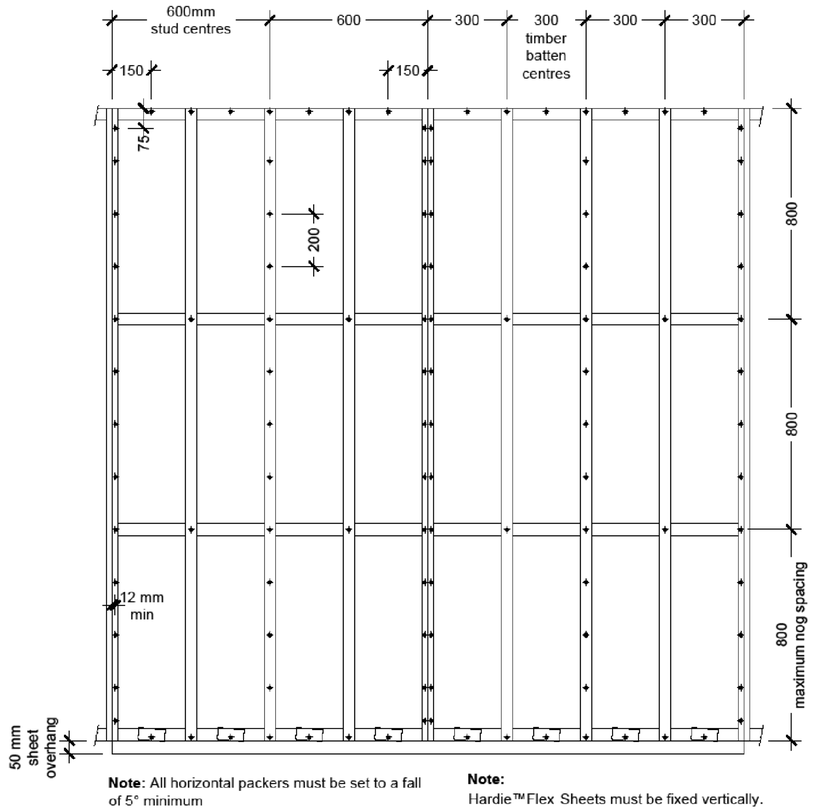
SCL NUMBER
4226-10302

A1 | SHEET 062

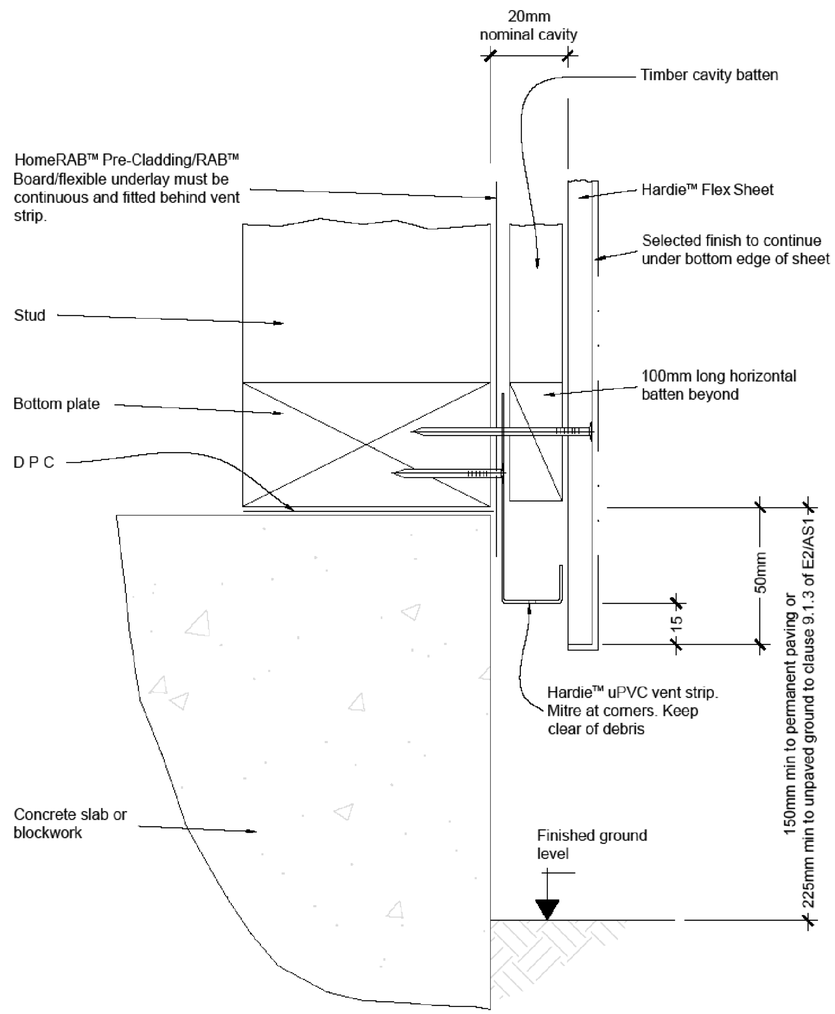
Figure 21: Cavity sheet fixing



Note: All horizontal packers must be set to a fall of 5° minimum

Note:
Hardie™ Flex Sheets must be fixed vertically.

Figure 22: Cavity concrete foundation detail



Foundation Detail

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New Commercial Building

Board & Batten Details

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PROJECT ADDRESS
Lot 3 328 Ngaumutawa Road Masterton

SCL NUMBER		
4226-10302		
A1	SHEET 065	REV *0*

DES: PR DRG: SP K:_CAD\4226-10302 Lot 6 328 Ngaumutawa Rd (Loaders)\4226-10302 DRG Lot 3 328 Ngaumutawa Rd (Loaders).rvt

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Figure 23: Cavity vertical uPVC joint

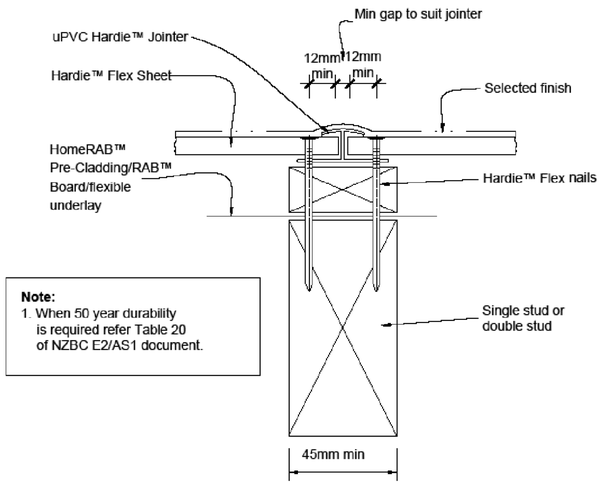
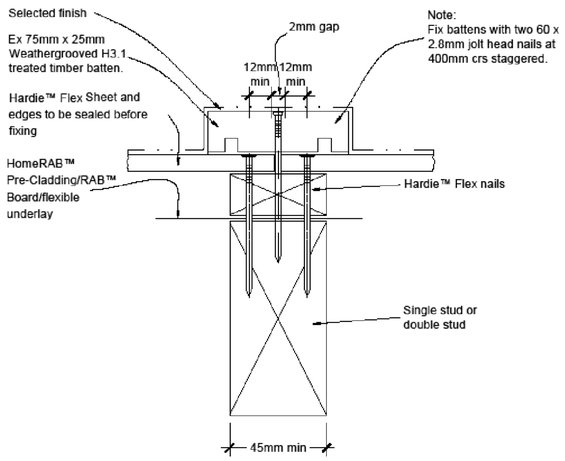
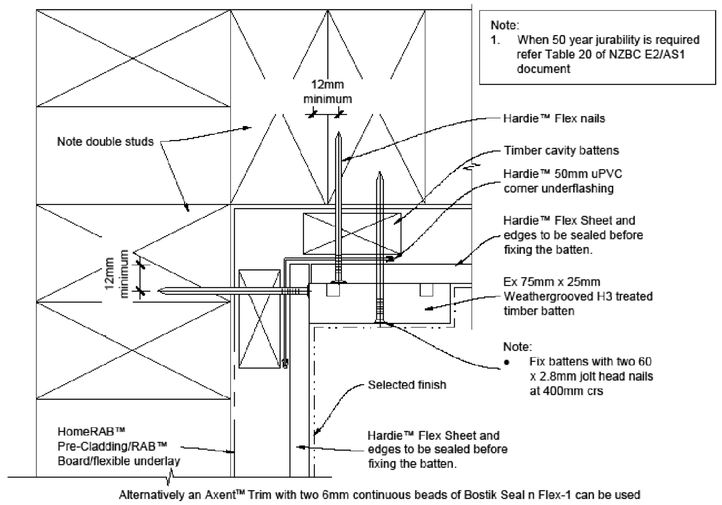


Figure 24: Cavity vertical timber batten joint



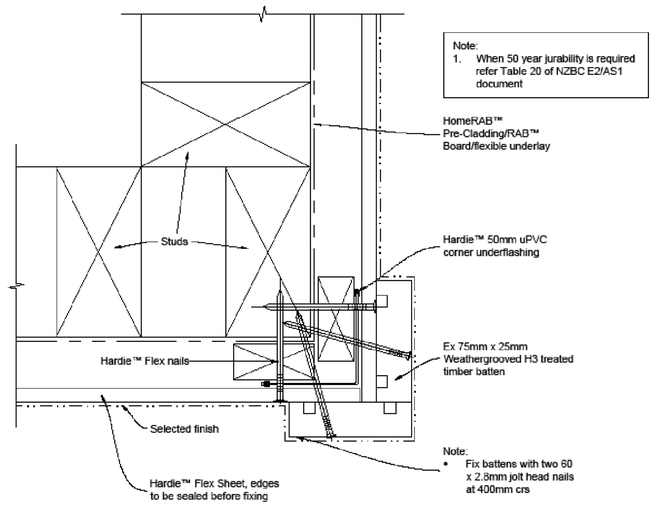
Alternatively an Axent™ Trim with two 6mm continuous beads Bostik Seal N Flex-1 can be used.

Figure 28: Cavity internal timber batten corner



Alternatively an Axent™ Trim with two 6mm continuous beads of Bostik Seal n Flex-1 can be used

Figure 29: Cavity external timber batten corner



Alternatively an Axent™ Trim with two 6mm continuous beads of Bostik Seal n Flex-1 can be used

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0	240325	Issued for Consent

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New Commercial Building

Board & Batten Details

CLIENT
Westwood Property Group Limited

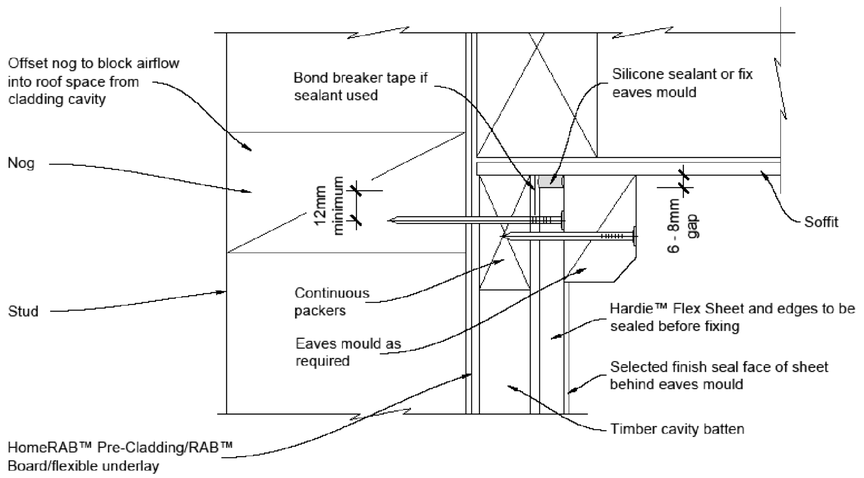
PROJECT ADDRESS
Lot 3 328 Ngaumutawa Road Masterton

SCL NUMBER 4226-10302

A1 | SHEET 066 | REV *0*

DATE: 27/02/24 DES: PR DRG: SP K:_CAD\4226-10302 Lot 6 328 Ngaumutawa Rd (Loaders)\4226-10302 DRG Lot 3 328 Ngaumutawa Rd (Loaders).rvt

Figure 32: Cavity soffit detail



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Board & Batten Details

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PROJECT ADDRESS
Lot 3 328 Ngaumutawa Road Masterton

SCL NUMBER
4226-10302

A1 | SHEET 067 | REV *0*

DES: PR DRG: SP K:_CAD\4226-10302 Lot 6 328 Ngaumutawa Rd (Loaders)\4226-10302 DRG Lot 3 328 Ngaumutawa Rd (Loaders).rvt

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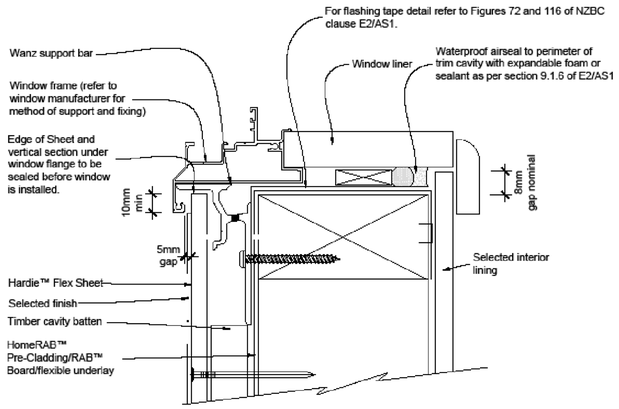
Figure 35: Cavity window sill

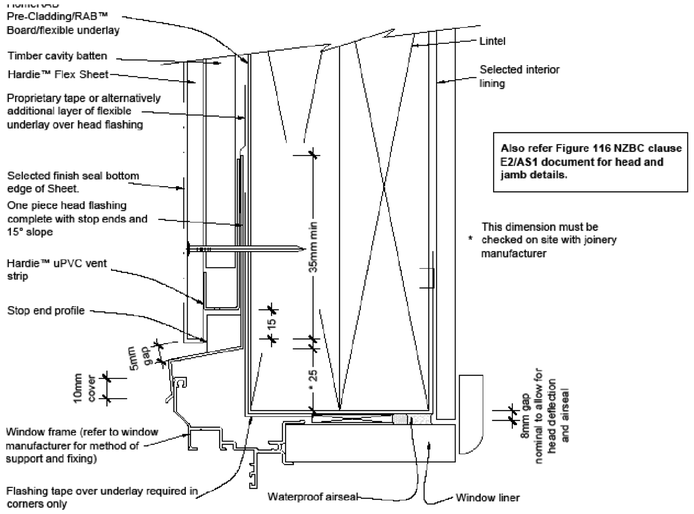


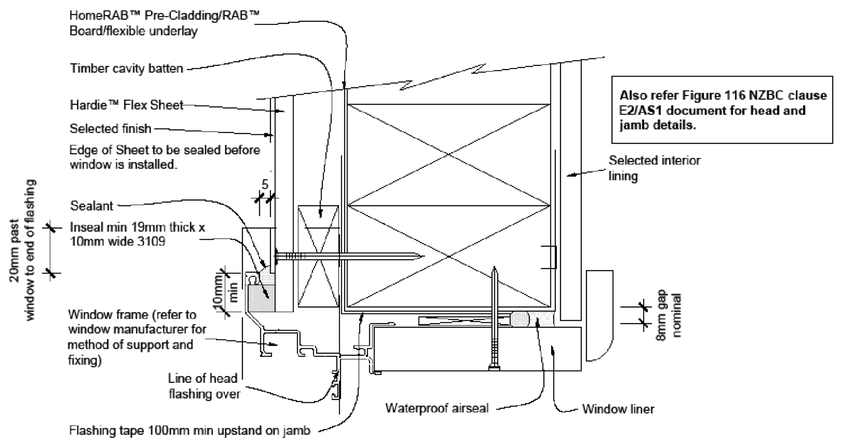
General notes for materials selection

1. Flashing materials must be selected based on environmental exposure, refer to NZS 3604 and Table 20 of NZBC clause 'E2/AS1'.
2. Flexible underlay must comply with acceptable solution NZBC clause 'E2/AS1' and NZS 3604.
3. Flashing tape must have proven compatibility with the selected flexible underlay and other materials with which it comes into contact as per Table 21 of NZBC clause 'E2/AS1'.

Refer to the manufacturer or supplier for technical information for these materials.

Figure 36: Cavity window head





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Board & Batten Details

CLIENT
Westwood Property Group Limited

PROJECT ADDRESS
Lot 3 328 Ngaumutawa Road Masterton

SCL NUMBER 4226-10302

A1	SHEET	REV
	068	*0*

DES: PR DRG: SP K:_CAD\4226-10302 Lot 6 328 Ngaumutawa Rd (Loaders)\4226-10302 DRG Lot 3 328 Ngaumutawa Rd (Loaders).rvt

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GIB EzyBrace® Systems specification BL1-H

Specification code	Minimum length (m)	Lining requirement	Other requirements
BL1-H	0.4	10mm or 13mm GIB Braceline® to one side only	Hold downs

WALL FRAMING
Wall framing to comply with;

- NZBC B1 — Structure B1/AS1 Clause 3 Timber (NZS 3604:2011).
- NZBC B2 — Durability B2/AS1 Clause 3.2 Timber (NZS 3602).

Framing dimensions and height as determined by NZS 3604:2011 stud and top plate tables for load bearing and non-bearing walls. The use of kiln dried stress graded timber is recommended.

BOTTOM PLATE FIXING
Timber floor
Use panel hold downs at each end of the bracing element. The GIB HandiBrac® is recommended. See details in GIB EzyBrace® Systems or GIB® Site Guide.

Pairs of hand driven 100 x 3.75mm nails at 600mm centres; or Three power driven 90 x 3.15mm nails at 600mm centres.

Concrete floor
Use panel hold downs at each end of the bracing element. The GIB HandiBrac® is recommended. See details in GIB EzyBrace® Systems or GIB® Site Guide. Within the length of the bracing element bottom plates are to be fixed in accordance with the requirements of NZS 3604:2011.

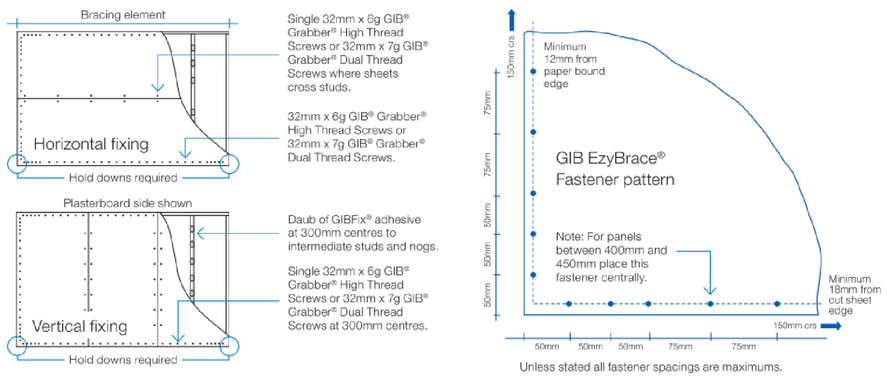
WALL LINING
- A layer of 10mm or 13mm GIB Braceline®
- Sheets can be fixed vertically or horizontally.
- Sheet joints shall be touch fitted.
- Use full length sheets where possible.

PERMITTED ALTERNATIVES
For permitted GIB® plasterboard alternatives refer to p. 5 in GIB EzyBrace® Systems literature.

FASTENING THE LINING
Fasteners
32mm x 6g GIB® Grabber® High Thread Screws or 32mm x 7g GIB® Grabber® Dual Thread Screws. If using the GIBFix® Framing System or if fastening through GIBFix® Angles use only 32mm x 7g GIB® Grabber® Dual Thread Screws.

Fastener centres
50,100,150, 225, 300mm from maximum each corner and 150mm thereafter around the perimeter of the bracing element. For vertically fixed sheets place fasteners at 300mm maximum centres to the sheet joint. For horizontally fixed sheets place single fasteners to the sheet edge where it crosses the stud. Use daubs of GIBFix® adhesive at 300mm maximum centres to intermediate studs. Place fasteners no closer than 12mm from paper bound sheet edges and 18mm from any sheet end or cut edge.

JOINTING
Joint strength is important in delivering bracing system performance. All fastener heads stopped and all sheet joints GIB® Joint Tape reinforced and stopped in accordance with the GIB® Site Guide.



Unless stated all fastener spacings are maximums.

In order for GIB® systems to perform as tested, all components must be installed exactly as prescribed. Substituting components produces an entirely different system and may seriously compromise performance. Follow the specifications. This specification sheet is issued in conjunction with the publication GIB EzyBrace® Systems

GIB EzyBrace® Systems specification GS1-N

Specification code	Minimum length (m)	Lining requirement
GS1-N	0.4	Any 10mm or 13mm GIB® Standard plasterboard to one side only

WALL FRAMING
Wall framing to comply with;

- NZBC B1 — Structure B1/AS1 Clause 3 Timber (NZS 3604:2011).
- NZBC B2 — Durability B2/AS1 Clause 3.2 Timber (NZS 3602).

Framing dimensions and height as determined by NZS 3604:2011 stud and top plate tables for load bearing and non-bearing walls. The use of kiln dried stress graded timber is recommended.

BOTTOM PLATE FIXING
Timber floor
Pairs of hand driven 100 x 3.75mm nails at 600mm centres; or three power driven 90 x 3.15mm nails at 600mm centres.

Concrete floor
Internal Wall Bracing Lines: In accordance with the requirements of NZS 3604:2011 for internal wall plate fixing or 75 x 3.8mm shot fired fasteners with 16mm discs spaced at 150mm and 300mm from end studs and 600mm centres thereafter.

External Wall Bracing Lines: In accordance with the requirements of NZS 3604:2011 for external wall bottom plate fixing.

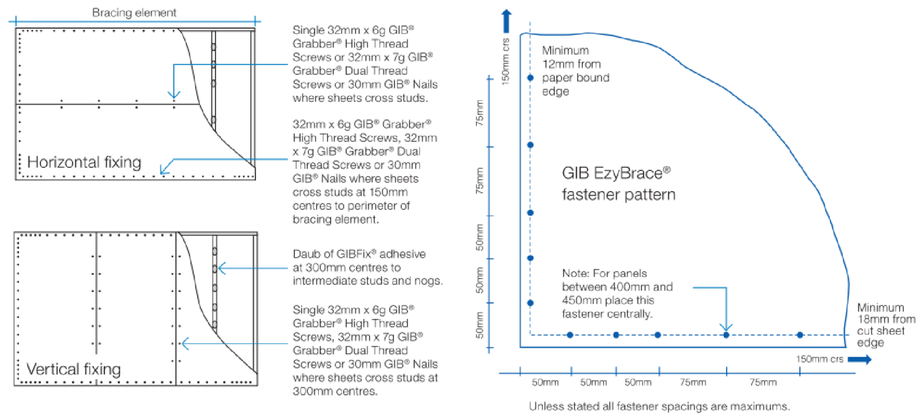
WALL LINING
- Any 10mm or 13mm GIB® plasterboard lining.
- Sheets can be fixed vertically or horizontally.
- Sheet joints shall be touch fitted.
- Use full length sheets where possible.

PERMITTED ALTERNATIVES
For permitted GIB® plasterboard alternatives refer to p. 5 in GIB EzyBrace® Systems literature.

FASTENING THE LINING
Fasteners
32mm x 6g GIB® Grabber® High Thread Screws, 32mm x 7g GIB® Grabber® Dual Thread Screws or 30mm GIB® Nails. If using the GIBFix® Angle use only 32mm x 7g GIB® Grabber® Dual Thread Screws.

Fastener centres
50,100,150, 225, 300mm maximum from each corner and 150mm thereafter around the perimeter of the bracing element. For vertically fixed sheets place fasteners at 300mm maximum centres to intermediate sheet joints. For horizontally fixed sheets place single fasteners to the sheet edge where it crosses the stud. Use daubs of GIBFix® adhesive at 300mm maximum centres to intermediate studs. Place fasteners no closer than 12mm from paper bound sheet edges and 18mm from any sheet end or cut edge.

JOINTING
Joint strength is important in delivering bracing system performance. All fastener heads stopped and all sheet joints GIB® Joint Tape reinforced and stopped in accordance with the GIB® Site Guide.



Unless stated all fastener spacings are maximums.

In order for GIB® systems to perform as tested, all components must be installed exactly as prescribed. Substituting components produces an entirely different system and may seriously compromise performance. Follow the specifications. This specification sheet is issued in conjunction with the publication GIB EzyBrace® Systems

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Structural Concepts
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New Commercial Building
GIB Nailing

CLIENT
Westwood Property Group Limited
PROJECT ADDRESS
Lot 3 328 Ngaumutawa Road Masterton

SCL NUMBER 4226-10302
A1 | SHEET 070 | REV *0*

DES: PR DRG: SP K:_CAD\4226-10302 Lot 6 328 Ngaumutawa Rd (Loaders)\4226-10302 DRG Lot 3 328 Ngaumutawa Rd (Loaders).rvt
DATE: 27/02/24

Ceiling diaphragms

GIB® plasterboard ceiling diaphragms are stiff and strong horizontal elements which effectively transfer loads to bracing walls. They themselves do not have a bracing unit rating but are used when bracing lines exceed 6m separation. The basic shape of a ceiling diaphragm is square or rectangular. Protrusions are permitted but cut-outs are not. The length of a ceiling diaphragm shall not exceed twice its width. Dimensions are measured between supporting bracing lines. Supporting bracing lines shall have a bracing capacity no less than the greater of 100 bracing units or 15 bracing units per metre of diaphragm dimension, measured at right angles to the line being considered, see figure 21.

Limitations for GIB® plasterboard ceiling diaphragms

Ceiling diaphragms may be constructed using any GIB® plasterboard provided perimeter fixing is at;

150mm centres for: Diaphragms up to 7.5m in length, no steeper than 15°.

100mm centres for: Diaphragms up to 7.5m in length, no steeper than 45°. Diaphragms up to 12m in length, no steeper than 25°.

Diaphragms outside these parameters must be specifically designed.

General fixing requirements for GIB® Ceiling Diaphragms:

- Linings must be installed over the entire area of the diaphragm.
- Fastening must be no less than 12mm from sheet edges and not less than 18mm from sheet ends.
- Sheets must be supported by framing members (e.g., ceiling battens) spaced at no more than 500mm centres for 10mm GIB® plasterboard and at no more than 600mm centres for 13mm GIB® plasterboard.
- Sheets within the diaphragm area may be fastened and finished conventionally in accordance with the publication entitled, "GIB® Site Guide". All joints shall be GIB® Joint Tape reinforced and stopped. It is recommended that sheet butt joints are formed off framing and back-blocked (see "GIB® Site Guide").
- Use full width sheets where possible. At least 900mm wide sheets with a length not less than 1800mm shall be used. Sheets less than 900mm wide but no less than 600mm may be used provided all joints with adjacent sheets are back-blocked (see "GIB® Site Guide" and figure 22).
- Fasteners are placed at the specified centres around the ceiling diaphragm with the corners fastened using the GIB EzyBrace® fastener pattern.

FIGURE 20: PROTRUSIONS AND CUTOUTS

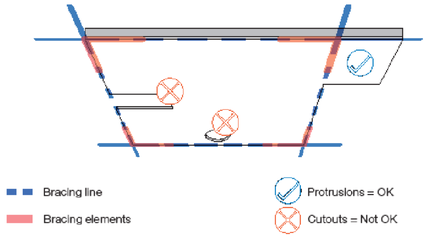


FIGURE 21: DIAPHRAGM BRACING LINING SPACINGS

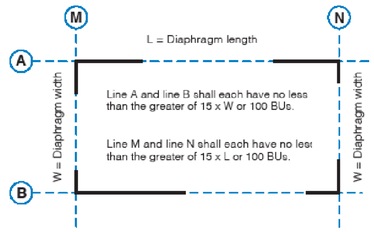
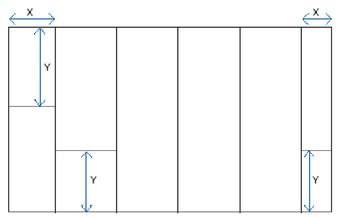
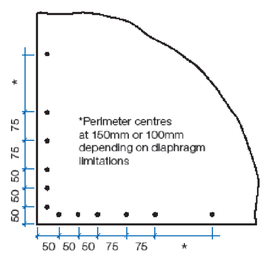


FIGURE 22: GIB® CEILING DIAPHRAGM SHEET WIDTHS AND LENGTHS



X = 900mm min or 600–900mm min provided all adjacent joints are back-blocked.
Y = 1800mm min sheet lengths at ends of ceiling diaphragms.

FIGURE 23: GIB EZYBRACE® FASTENER PATTERN



Unless stated all fastener spacings are maximums.

GEB015

Ceiling battens in ceiling diaphragms

Ceiling diaphragms may be constructed using steel or timber ceiling battens.

Battens shall be spaced at a maximum of:
- 500mm for 10mm GIB® plasterboard.
- 600mm for 13mm GIB® plasterboard.

Timber battens shall be fixed in accordance with the requirements of NZS 3604:2011.

Metal battens shall be GIB® Rondo® battens with two external flanges of 8mm to allow direct screw fixing to roof framing.

GIB® Rondo® metal battens shall be fixed with 2/32mm x 8g GIB® Grabber® Wafer Head Self Tapping screws to supporting framing.

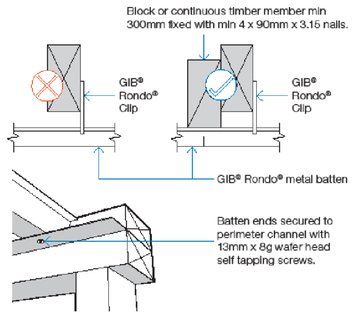
GIB® Rondo® metal battens must be fixed directly to the roof framing. If a clip system has been used, a timber block (min 300mm) or a continuous timber member can be fixed alongside the bottom chord to permit a direct connection to the batten, see figure 26.

For GIB® Rondo® metal battens, a GIB® Rondo® metal channel or metal angle is required at the perimeter of the diaphragm. The perimeter channel shall be fastened to the top plate with 32mm x 8g GIB® Grabber® Wafer Head Self Tapping screws or 32mm x 7g GIB® Grabber® Dual Thread screw at 300mm centres maximum.

Linings are fastened to metal using 25mm x 6g GIB® Grabber® Self Tapping screws and to timber framing using 32mm x 6g GIB® Grabber® High Thread screws. Alternatively 32mm x 7g GIB® Grabber® Dual Thread screws can be used in both cases. Fastener centres are specified on p.18.

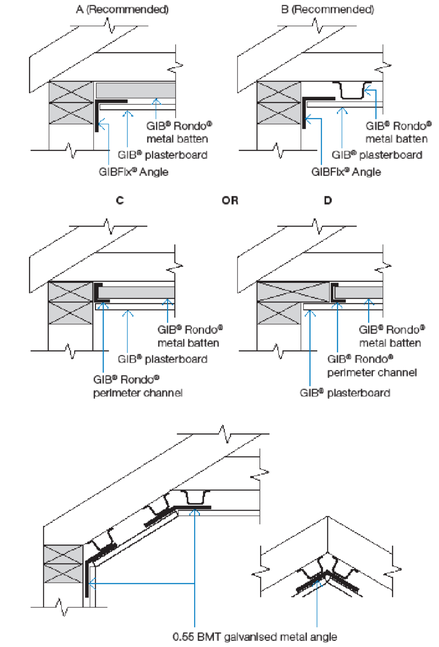
Coved ceiling diaphragms can be achieved by using nominally 32 x 32 x 0.55mm proprietary galvanised metal angles ("back-flashing") at the changes in direction. These angles shall be:
- Fastened at 300mm on each edge to metal battens using 32mm x 8g GIB® Grabber® Wafer Head Self Tapping screws or 32mm x 7g GIB® Grabber® Dual Thread screws.
- Fastened to timber framing using 32mm x 7g GIB® Grabber® Dual Thread screws when linings are installed.

FIGURE 26: GIB® RONDO® METAL CEILING BATTEN INSTALLATION



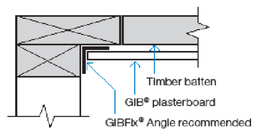
GEB016

FIGURE 27: GIB® RONDO® METAL CEILING BATTENS WITH CORNER ANGLES



GEB017

FIGURE 28: TIMBER CEILING BATTENS*



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New Commercial Building

GIB Ceiling Diaphragm

CLIENT
Westwood Property Group Limited

PROJECT ADDRESS
Lot 3 328 Ngaumutawa Road Masterton

SCL NUMBER 4226-10302
A1 | SHEET 071 | REV 0

DATE: 27/02/24 DES: PR DRG: SP K:_CAD\4226-10302 Lot 6 328 Ngaumutawa Rd (Loaders)\4226-10302 DRG Lot 3 328 Ngaumutawa Rd (Loaders).rvt

One way FRR — timber or steel frame

Specification number	Performance		Specifications	
GBUW 180	**FRR**	180/180/180	**Lining**	3 layers 19mm GIB Fyreline® one side
			LB/NLB	Load bearing

FRAMING AND WALL HEIGHT

Timber or steel frame designed to meet durability and structural criteria for strength and serviceability under dead and live loads.

The width of framing supporting the linings shall be 35mm minimum.

The cavity depth shall be 90mm minimum.

Framing spacing shall be at 600mm centres maximum.

Timber frame height and dimensions as determined by NZS 3604 stud tables or specific design.

LINING (FIRE SIDE)

3 layers of 19mm GIB Fyreline® to one side of the frame.

Vertical or horizontal fixing permitted. For vertical fixing, full height sheets shall be used where possible.

Sheets shall be touch fitted.

All sheet joints must be formed over framing, except for longitudinal joints when the outer layer is fixed horizontally.

When sheet end butt joints are unavoidable, they shall be formed over nogs.

Offset sheet joints between layers.

In steel-framed options, linings are installed hard to floor.

FASTENING THE LINING

Fasteners

Layer	Timber frame	Steel frame
Inner layer	41mm x 6g GIB® Grabber® High Thread Drywall Screws	32mm x 6g GIB® Grabber® Self Tapping Drywall Screws
Second layer	57mm x 7g GIB® Grabber® High Thread Drywall Screws	51mm x 7g GIB® Grabber® Self Tapping Drywall Screws
Third layer	76mm x 8g GIB® Grabber® Self Tapping Drywall Screws	76mm x 8g GIB® Grabber® Self Tapping Drywall Screws

Fastener centres

Inner layer: 600mm centres up each stud.

Second and third layers: 300mm centres up each stud.

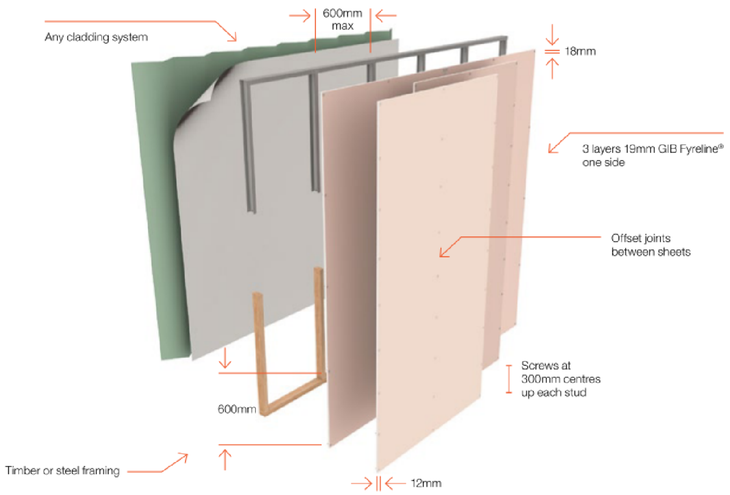
Place fasteners 12mm from longitudinal sheet edges and 18mm from sheet ends.

Place fasteners at 200mm centres along sheet end butt joints.

JOINTING

Inner layer: Unstopped.

Outer layer: All screw heads stopped and all sheet joints tape reinforced and stopped in accordance with the publication entitled "GIB® Site Guide".



Fire rated protection of columns and beams — timber strapping

SCOPE OF USE

The options offered in this section provide quick reference solutions for the fire protection of structural steel, timber and concrete columns and beams. The illustrations below show steel members.

For engineered solutions, tailored to meet specific column and beam types, sizes and loading conditions, specific fire engineering design is required.

Specification number	FRR (structural adequacy rating*)	Lining requirement steel, timber, concrete columns and beams
GBCBT 15	15/-/-	1 x 13mm GIB® Standard
GBCBT 30a	30/-/-	1 x 16mm GIB Fyreline®
GBCBT 30b	30/-/-	2 x 10mm GIB Fyreline®
GBCBT 60	60/-/-	2 x 13mm GIB Fyreline®
GBCBT 90	90/-/-	2 x 16mm GIB Fyreline®
GBCBT 120	120/-/-	2 x 19mm GIB Fyreline®
GBCBT 180	180/-/-	3 x 19mm GIB Fyreline®

**The FRR comprises values for structural adequacy/integrity/insulation. For loadbearing structural steel members (primary elements), the structural adequacy rating is usually the only requirement and prevents failure under vertical gravity loads during a fire.*

STRAPPING

Strap column or beams with a timber cradle frame with a minimum nominal thickness of 35mm ensuring that the linings are supported by framing members spaced at 600mm centres maximum.

No air gap is required as long as support is provided to the protective linings at no more than 600mm centres each side of the structural member.

The protective linings can be direct fixed to timber columns and beams.

LINING

Install the linings in accordance with the required FRR as specified above. First and second layer joints must be formed over framing. In double-layer systems, the joints between the first and second layer must be offset by 300mm minimum.

FASTENING THE LINING

Fasteners

GIB® Grabber® High Thread Drywall Screws.

The fastener length must ensure a 20mm minimum penetration into timber.

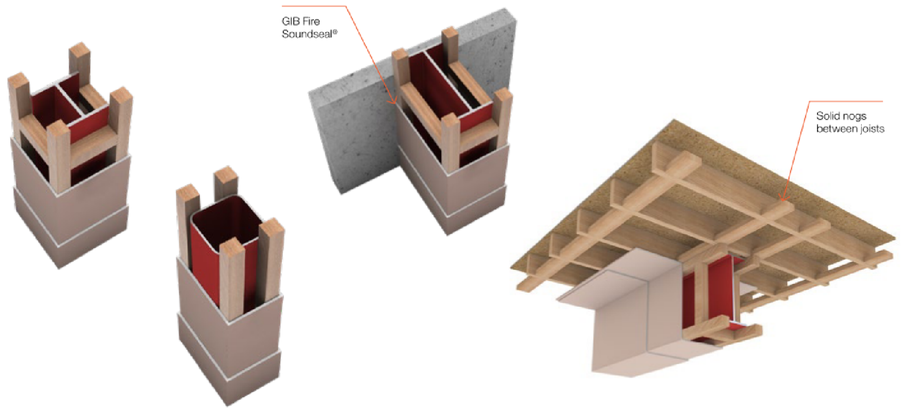
Fastener centres

Single or outer layers must be fixed at 300mm centres maximum to framing spaced at 600mm centres maximum. Inner layers can be fixed at 600mm centres maximum to framing spaced at 600mm centres maximum.

JOINTING

Inner layer: Unstopped.

Outer layer: All fastener heads stopped and all sheet joints tape reinforced and stopped in accordance with the publication entitled "GIB® Site Guide".



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New Commercial Building

GIB Fyreline

CLIENT
Westwood Property Group Limited

PROJECT ADDRESS
Lot 3 328 Ngaumutawa Road Masterton

SCL NUMBER 4226-10302
A1 | SHEET 072 | REV *0*

DES: PR DRG: SP K:_CAD\4226-10302 Lot 6 328 Ngaumutawa Rd (Loaders)\4226-10302 DRG Lot 3 328 Ngaumutawa Rd (Loaders).rvt
DATE: 27/02/24

Foundation Key:

P1= 1500x1500x400Dp Pad

EB1= 900x400Dp Edge Beam
EB2= 1050x400Dp Edge Beam
EB3= 200x400DP Edge Beam

TB= 400x400Dp Tie Beam
SB= 300x200Dp Strip Beam

CJ= Contruction Joint
SC= 50x6mm Saw Cut

Foundation / Slab Plan

1 : 100 @ A1

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Foundation Plan

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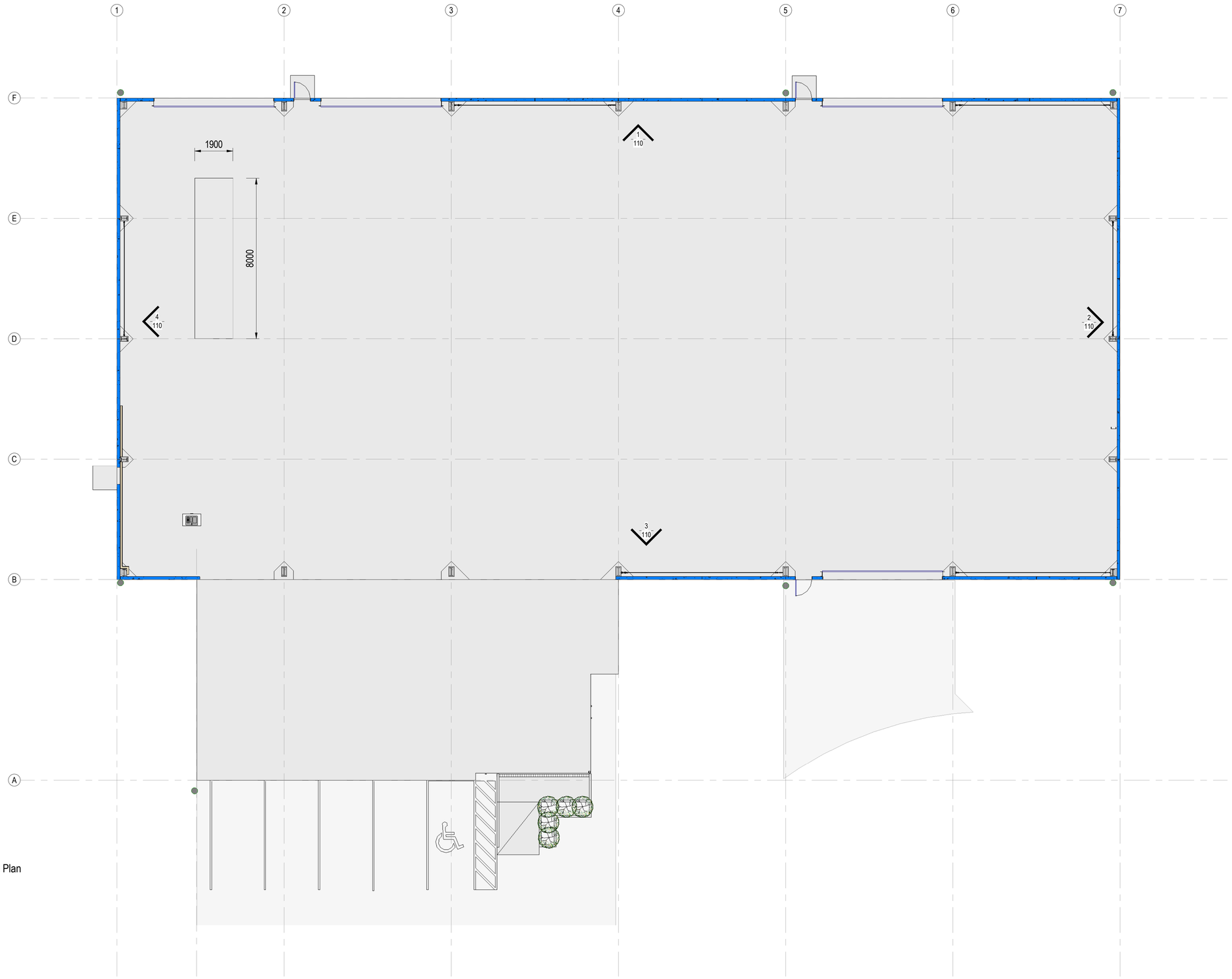
DATE: 27/02/24

PC Wall Key:

150 thk Precast walls

Print this sheet in colour



PC Panel Plan

1 : 100 @ A1

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New Commercial Building

PC Panel Plan

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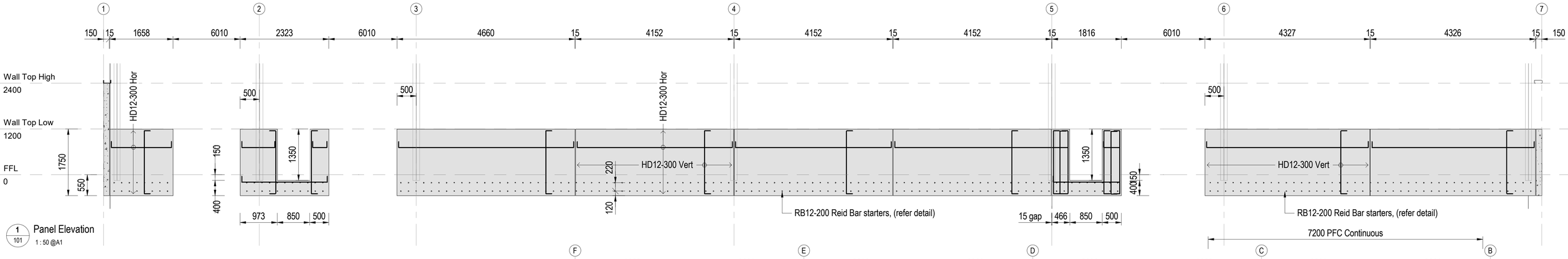
4226-10302

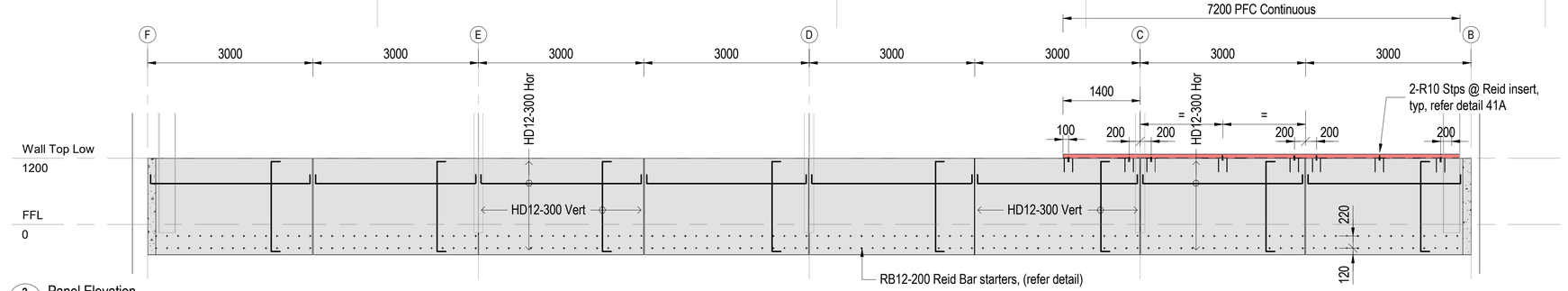
A1	SHEET	REV
	101	*0*

DES: PR DRG: SP K:_CAD\4226-10302 Lot 6 328 Ngaumutawa Rd (Loaders)\4226-10302 DRG Lot 3 328 Ngaumutawa Rd (Loaders).rvt

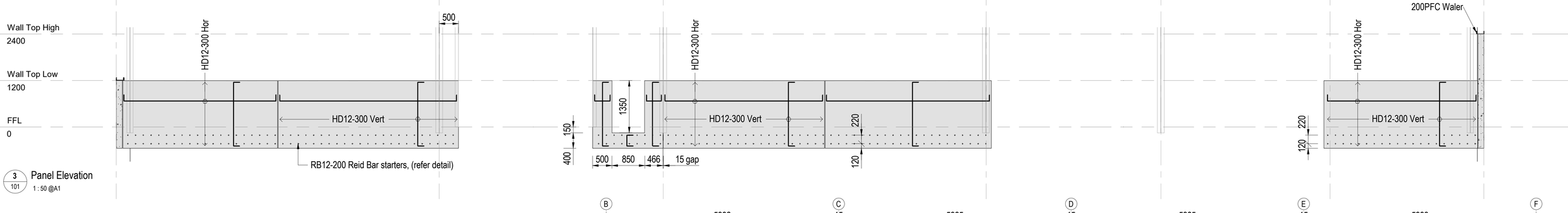
DATE: 27/02/24



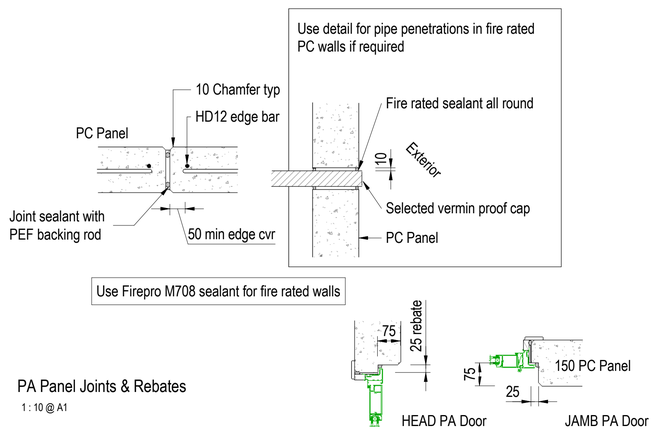
1/101 Panel Elevation
1 : 50 @A1



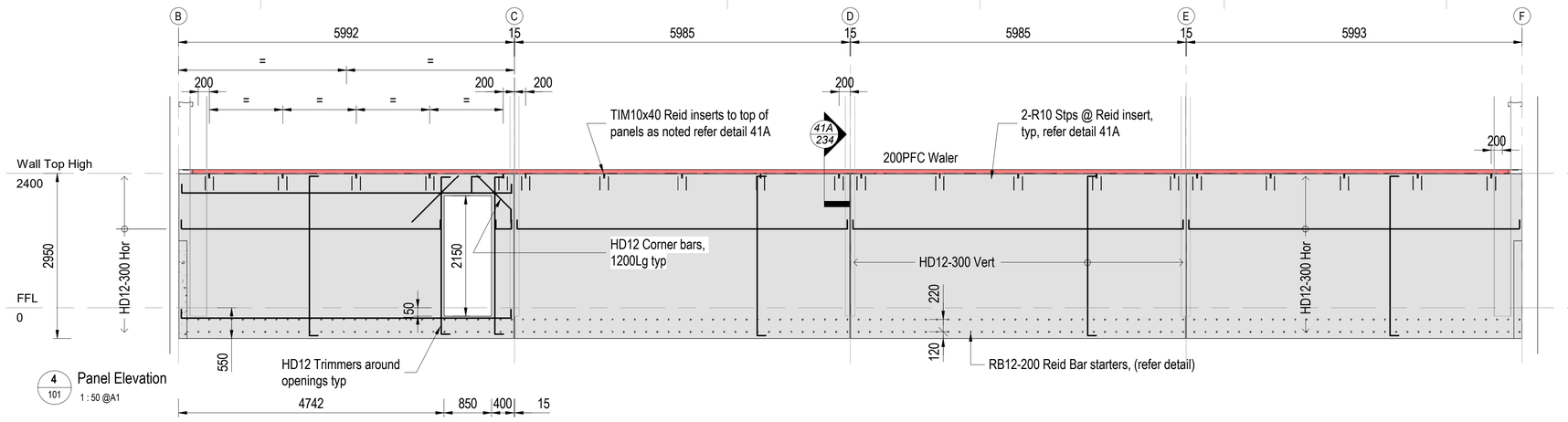
2/101 Panel Elevation
1 : 50 @A1



3/101 Panel Elevation
1 : 50 @A1



PA Panel Joints & Rebates
1 : 10 @ A1



4/101 Panel Elevation
1 : 50 @A1

REV	DATE	DESCRIPTION
0	240325	Issued for Consent

Structural Concepts
Consulting Engineers

Napier Office: 06 842 0111
Level 3 Dunvegan house,
215 Hastings Street, Napier
info@structuralconcepts.co.nz

New Commercial Building

PC Panel Elevations

CLIENT
Westwood Property Group Limited

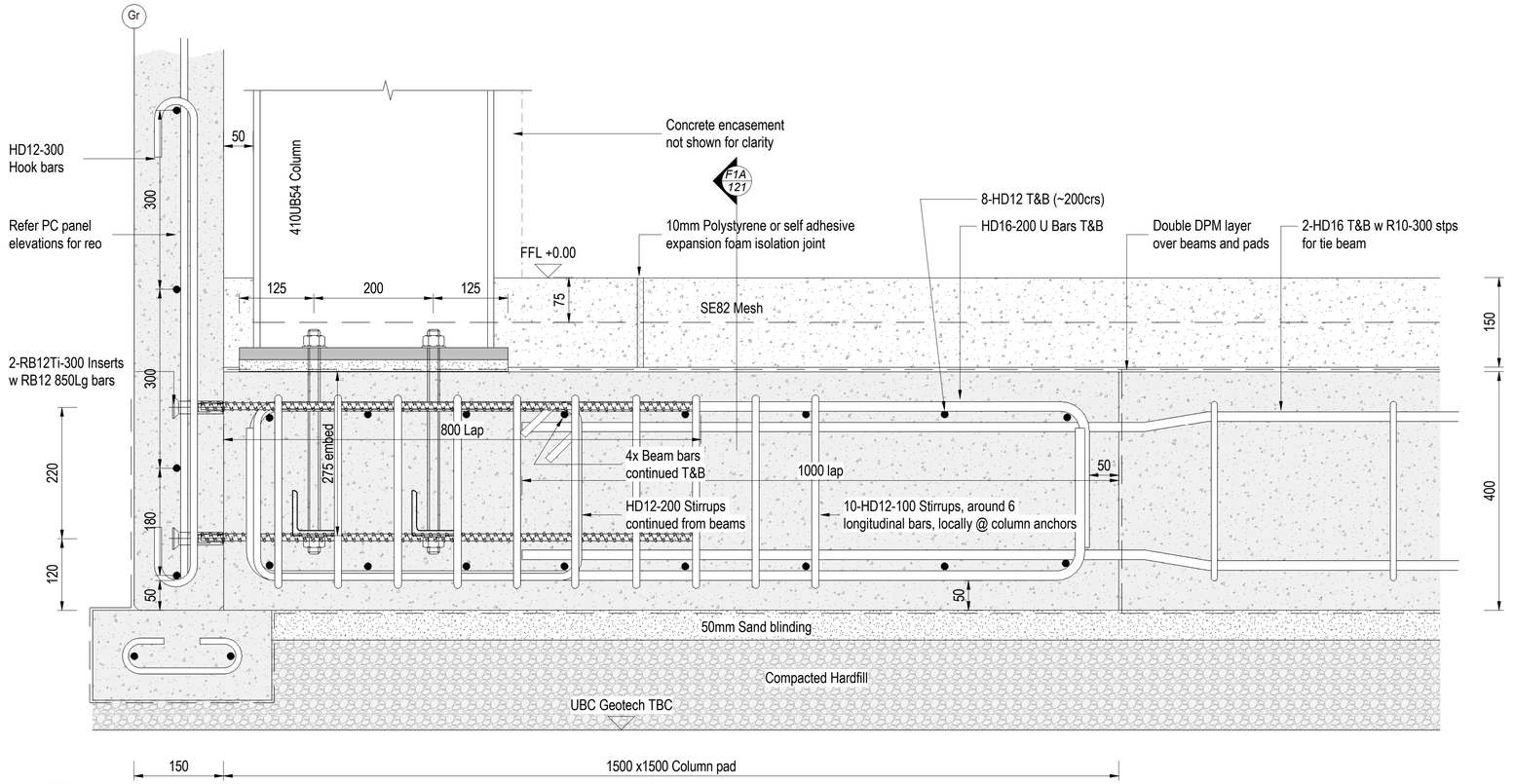
PROJECT ADDRESS
Lot 3 328 Ngaumutawa Road Masterton

SCL NUMBER
4226-10302

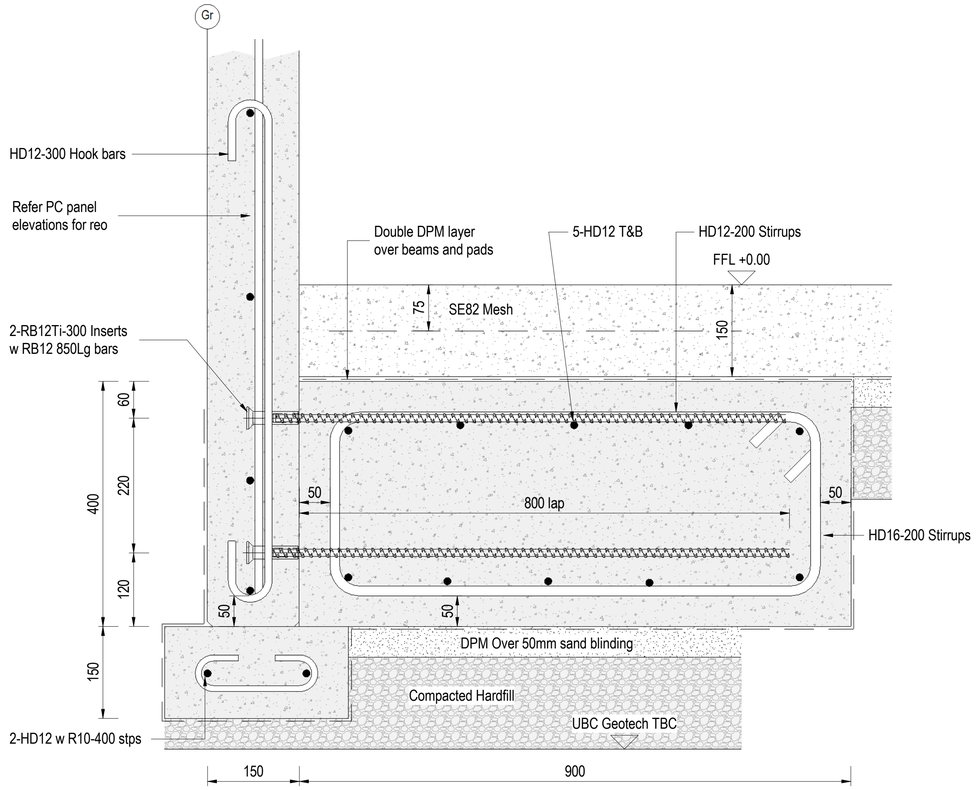
A1	SHEET	REV
	110	*0*

DES: PR DRG: SP K:_CAD\4226-10302 Lot 6 328 Ngaumutawa Rd (Loaders)\4226-10302 DRG Lot 3 328 Ngaumutawa Rd (Loaders).rvt

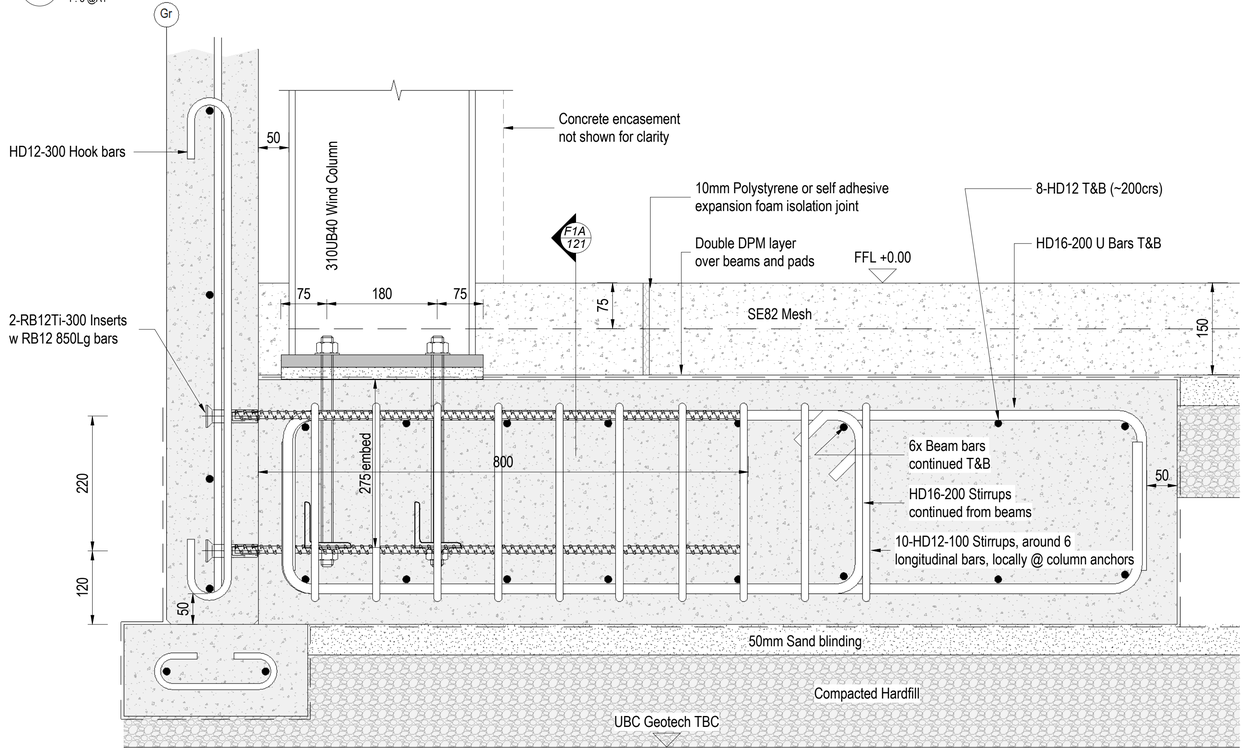
DATE: 27/02/24



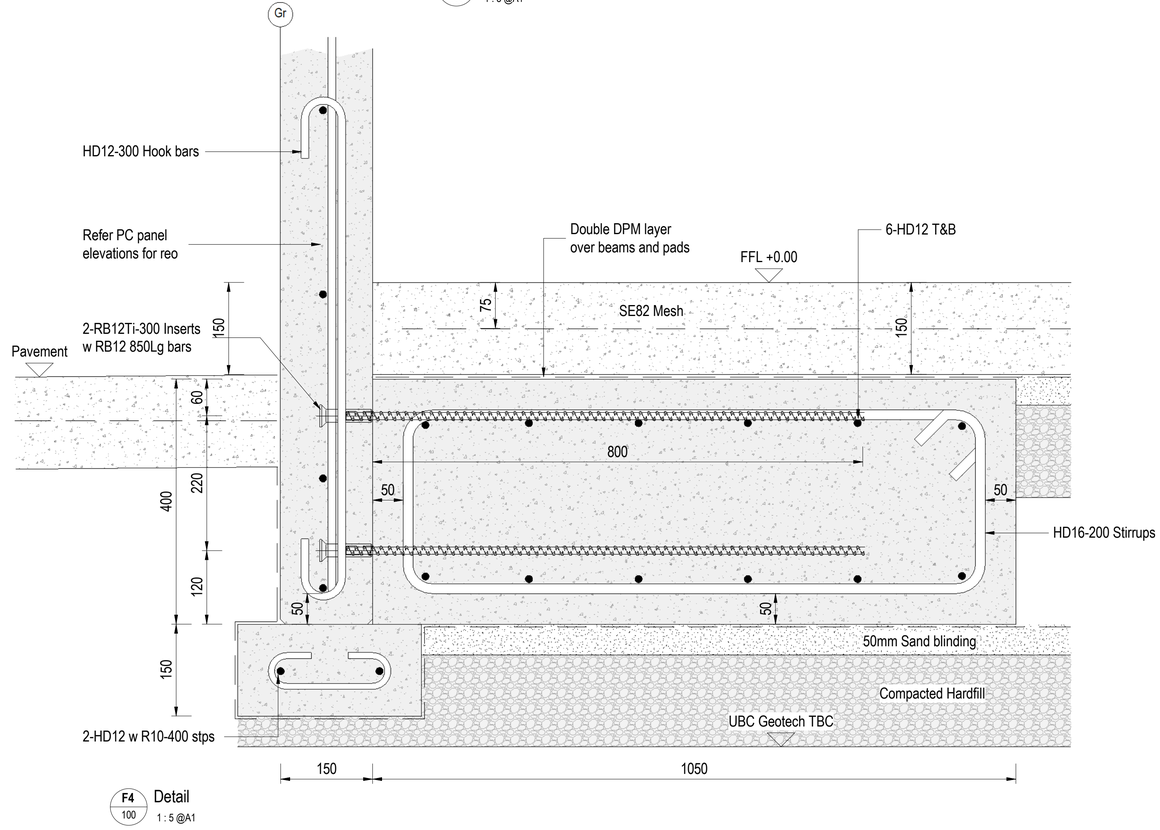
F1 100 Detail
1 : 5 @A1



F3 100 Detail
1 : 5 @A1



F2 100 Detail
1 : 5 @A1



F4 100 Detail
1 : 5 @A1

REV	DATE	DESCRIPTION
0	240325	Issued for Consent

Structural Concepts
Consulting Engineers

Napier Office: 06 842 0111
Level 3 Dunvegan house,
215 Hastings Street, Napier
info@structuralconcepts.co.nz

New Commercial Building

Foundation Details

CLIENT
Westwood Property Group Limited

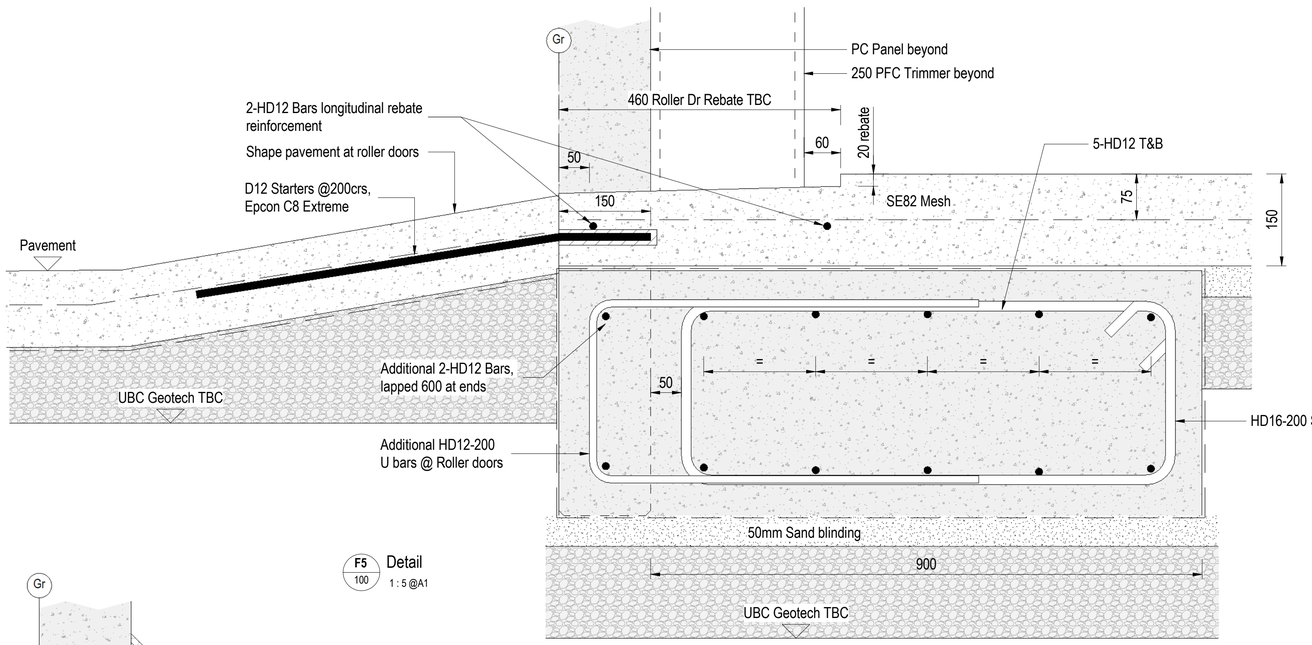
PROJECT ADDRESS
Lot 3 328 Ngaumutawa Road Masterton

SCL NUMBER
4226-10302

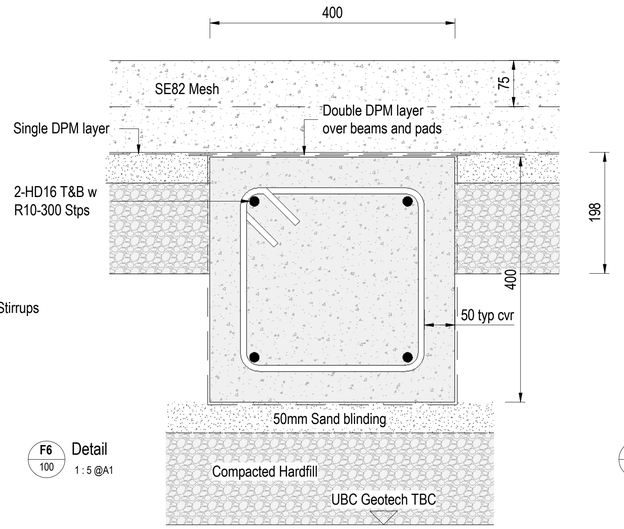
A1	SHEET	REV
	120	*0*

DES: PR DRG: SP K:_CAD\4226-10302 Lot 6 328 Ngaumutawa Rd (Loaders)\4226-10302 DRG Lot 3 328 Ngaumutawa Rd (Loaders).rvt

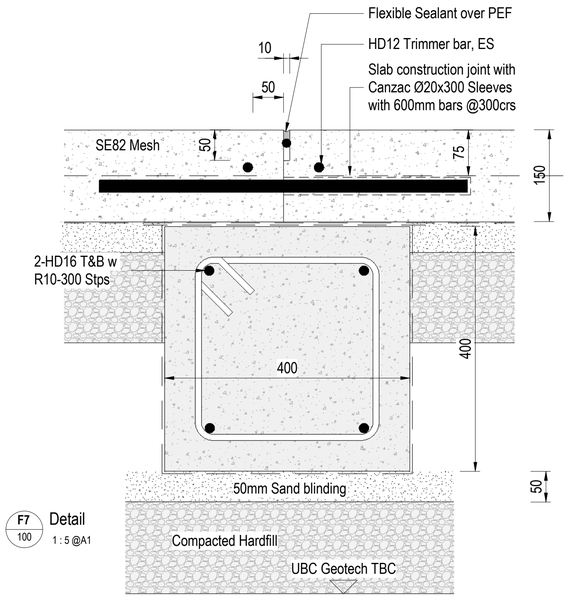
DATE: 27/02/24



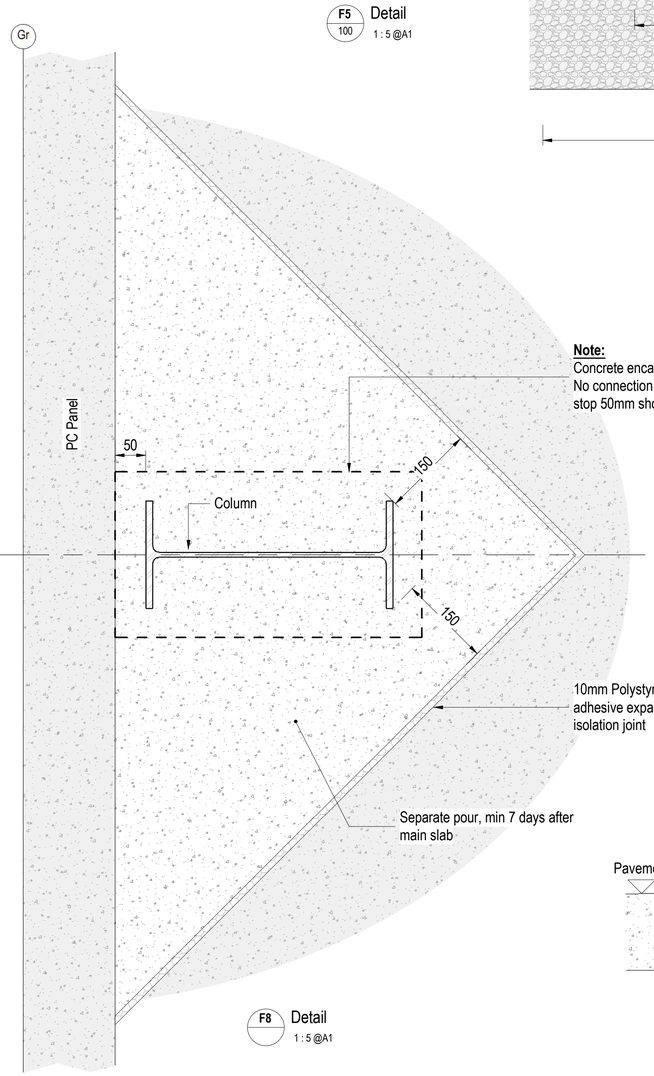
F5 / 100 Detail
1 : 5 @A1



F6 / 100 Detail
1 : 5 @A1



F7 / 100 Detail
1 : 5 @A1

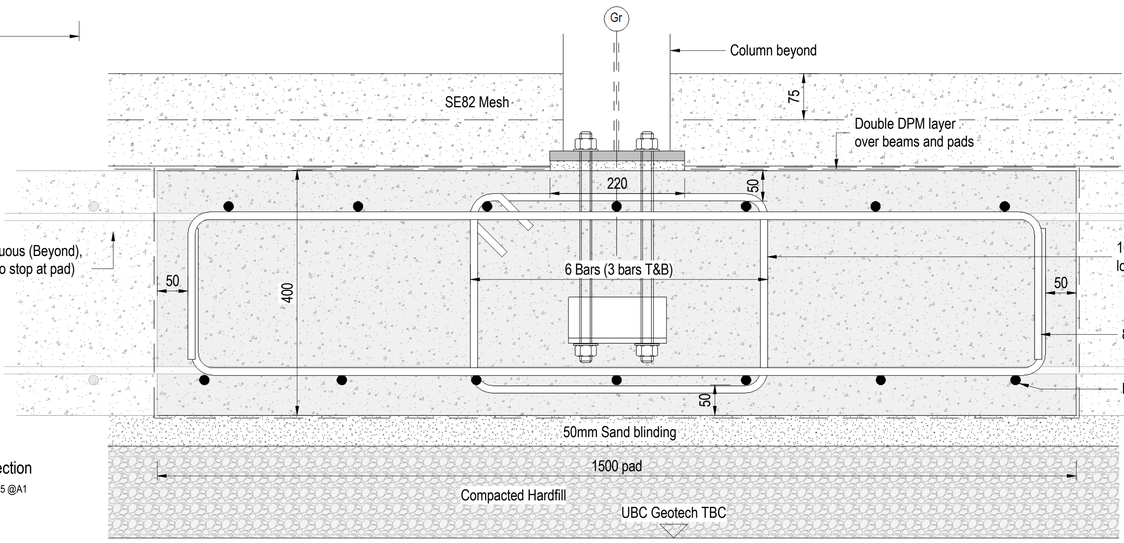


Note:
Concrete encasement to be poured after triangle slab. No connection or starters to base. Reinforcement to stop 50mm short of FFL

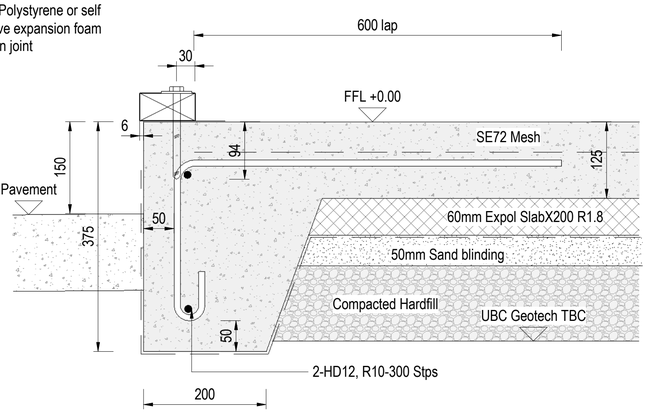
10mm Polystyrene or self adhesive expansion foam isolation joint

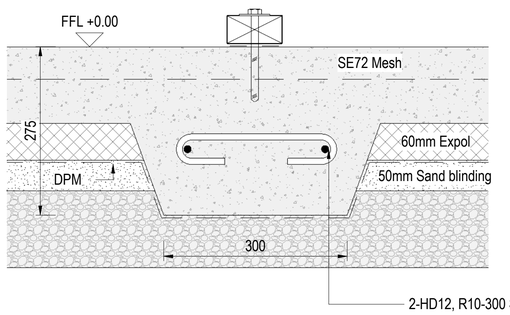
Separate pour, min 7 days after main slab

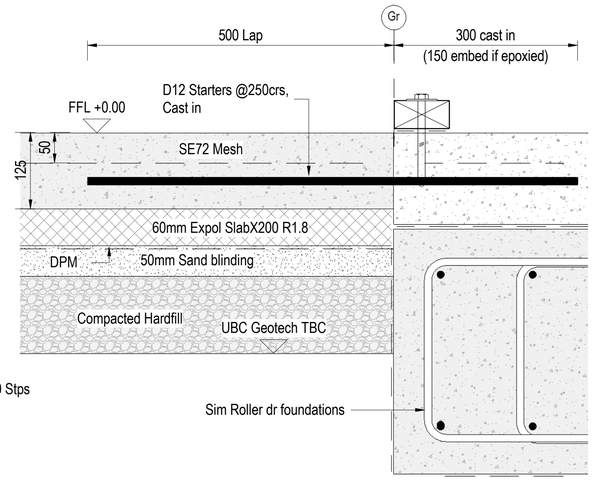
F8 / 100 Detail
1 : 5 @A1



F1A / 120 Section
1 : 5 @A1







F10 / 100 Detail Offices
1 : 5 @A1

REV	DATE	DESCRIPTION
0	240325	Issued for Consent

Structural Concepts
Consulting Engineers

Napier Office: 06 842 0111
Level 3 Dunvegan house,
215 Hastings Street, Napier
info@structuralconcepts.co.nz

New Commercial Building

Foundation Details

CLIENT
Westwood Property Group Limited

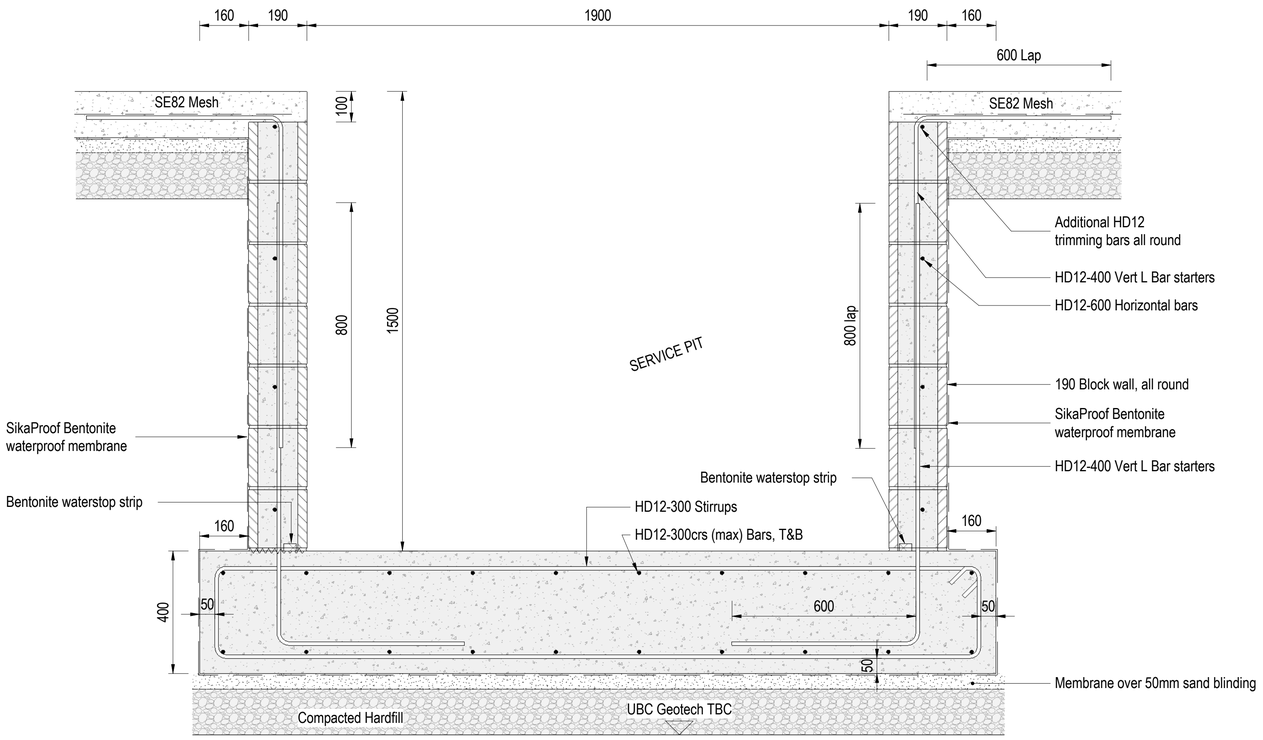
PROJECT ADDRESS
Lot 3 328 Ngaumutawa Road Masterton

SCL NUMBER 4226-10302

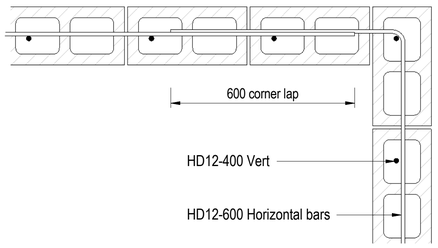
A1	SHEET	REV
	121	*0*

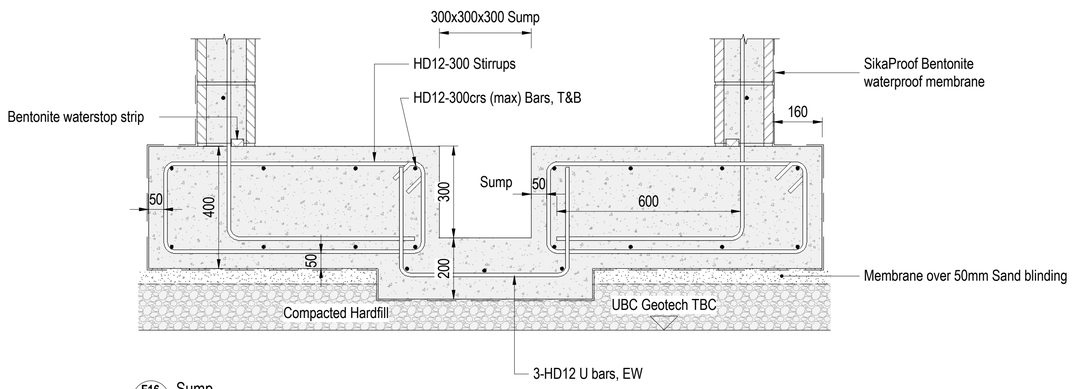
DES: PR DRG: SP K:_CAD\4226-10302 Lot 6 328 Ngaumutawa Rd (Loaders)\4226-10302 DRG Lot 3 328 Ngaumutawa Rd (Loaders).rvt

DATE: 27/02/24



F15 100 Service Pit
1 : 10 @A1





F16 100 Sump
1 : 10 @A1

REV	DATE	DESCRIPTION
0	240325	Issued for Consent

Structural Concepts
Consulting Engineers

Napier Office: 06 842 0111
Level 3 Dunvegan house,
215 Hastings Street, Napier
info@structuralconcepts.co.nz

New Commercial Building

Foundation Details

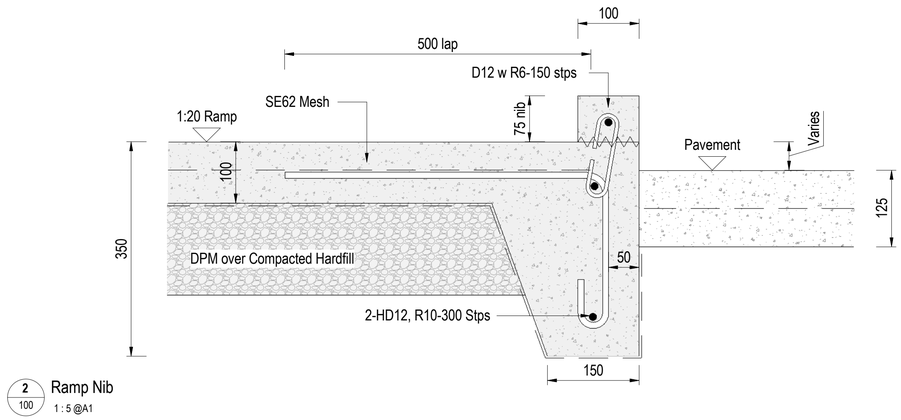
CLIENT
Westwood Property Group Limited

PROJECT ADDRESS
Lot 3 328 Ngaumutawa Road Masterton

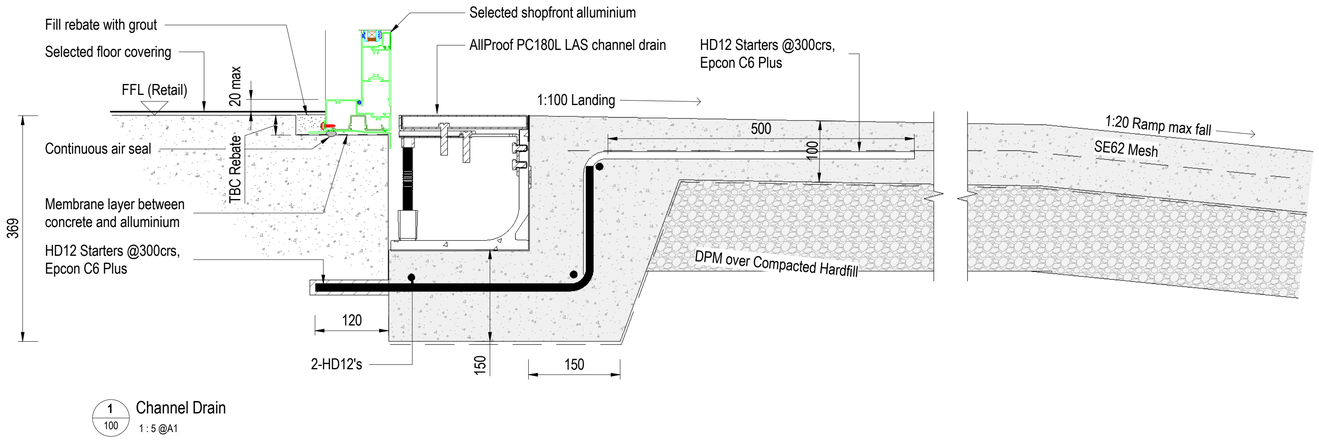
SCL NUMBER
4226-10302

A1	SHEET	REV
	122	*0*

DES: PR DRG: SP K:_CAD\4226-10302 Lot 6 328 Ngaumutawa Rd (Loaders)\4226-10302 DRG Lot 3 328 Ngaumutawa Rd (Loaders).rvt
DATE: 27/02/24



2/100 Ramp Nib
1 : 5 @A1



1/100 Channel Drain
1 : 5 @A1

REV	DATE	DESCRIPTION
0	240325	Issued for Consent

Structural Concepts
Consulting Engineers

Napier Office: 06 842 0111
Level 3 Dunvegan house,
215 Hastings Street, Napier
info@structuralconcepts.co.nz

New Commercial Building

Foundation Details

CLIENT
Westwood Property Group Limited

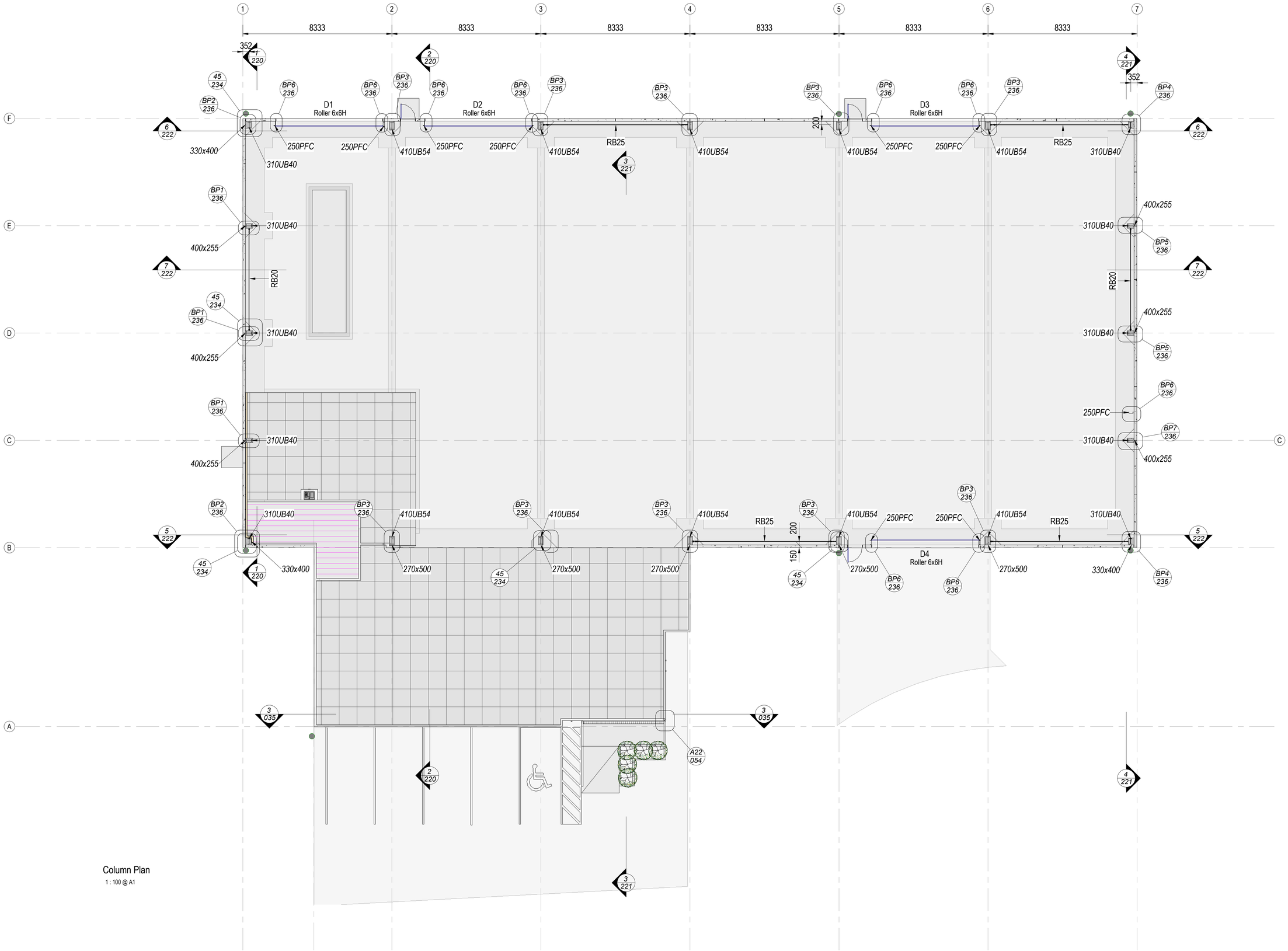
PROJECT ADDRESS
Lot 3 328 Ngaumutawa Road Masterton

SCL NUMBER 4226-10302

A1 | SHEET 123 | REV *0*

DES: PR DRG: SP K:_CAD\4226-10302 Lot 6 328 Ngaumutawa Rd (Loaders)\4226-10302 DRG Lot 3 328 Ngaumutawa Rd (Loaders).rvt

DATE: 27/02/24



Column Plan

1 : 100 @ A1

REV	DATE	DESCRIPTION
0	240325	Issued for Consent

Structural Concepts
Consulting Engineers

Napier Office: 06 842 0111
Level 3 Dunvegan house,
215 Hastings Street, Napier
info@structuralconcepts.co.nz

New Commercial Building

Column Plan

CLIENT
Westwood Property Group Limited

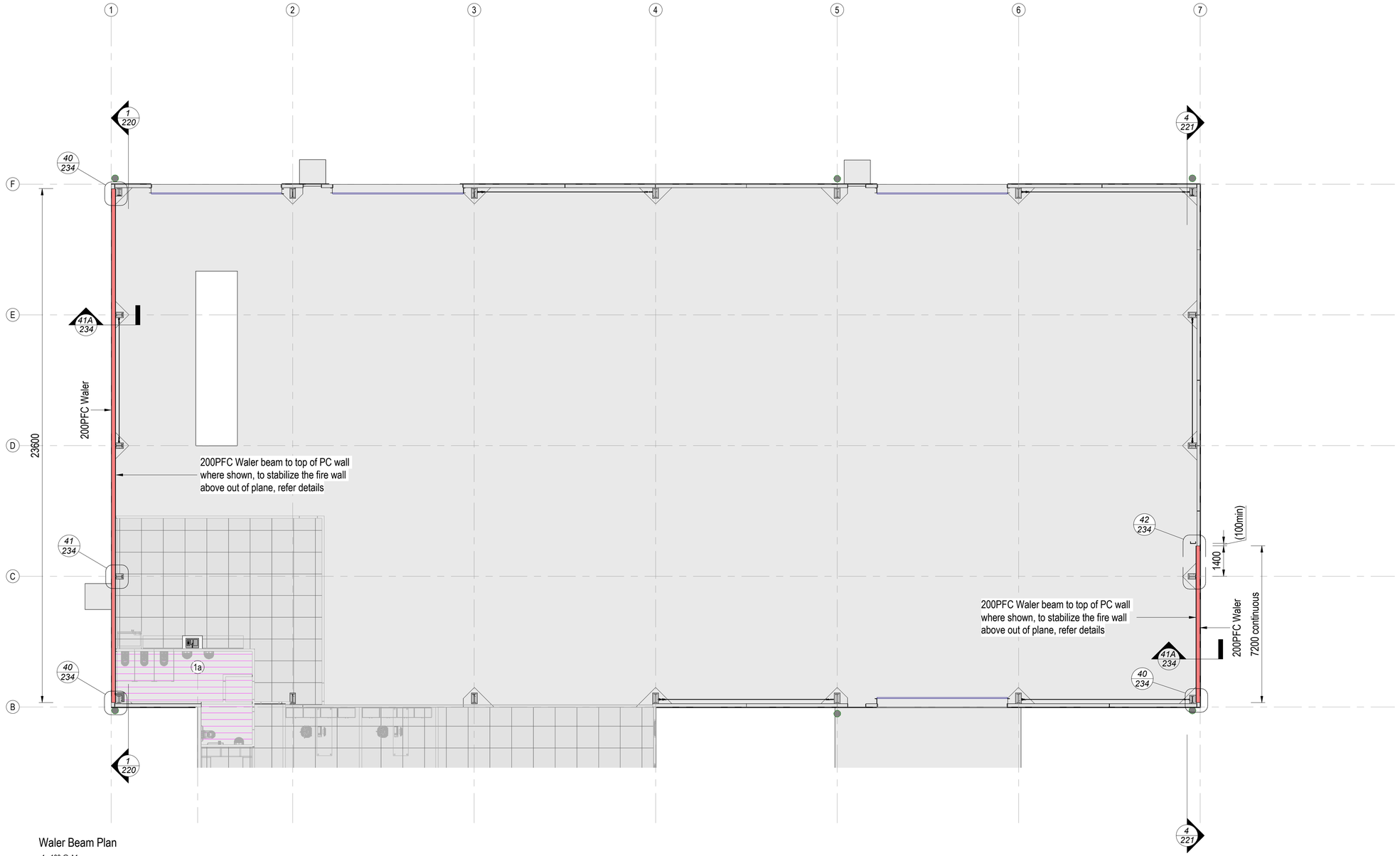
PROJECT ADDRESS
Lot 3 328 Ngaumutawa Road Masterton

SCL NUMBER
4226-10302

A1	SHEET	REV
	200	*0*

DES: PR DRG: SP K:_CAD\4226-10302 Lot 6 328 Ngaumutawa Rd (Loaders)\4226-10302 DRG Lot 3 328 Ngaumutawa Rd (Loaders).rvt

DATE: 27/02/24



Waler Beam Plan

1 : 100 @ A1

REV	DATE	DESCRIPTION
0	240325	Issued for Consent

Structural Concepts
Consulting Engineers

Napier Office: 06 842 0111
Level 3 Dunvegan house,
215 Hastings Street, Napier
info@structuralconcepts.co.nz

New Commercial Building

Waler Plan

CLIENT
Westwood Property Group Limited

PROJECT ADDRESS
Lot 3 328 Ngaumutawa Road Masterton

SCL NUMBER
4226-10302

A1	SHEET	REV
	201	*0*

DES: PR DRG: SP K:_CAD\4226-10302 Lot 6 328 Ngaumutawa Rd (Loaders)\4226-10302 DRG Lot 3 328 Ngaumutawa Rd (Loaders).rvt

DATE: 27/02/24

Fly Brace Plan (Girts @ RL +4800)

1 : 100 @ A1

REV	DATE	DESCRIPTION
0	240325	Issued for Consent

Structural Concepts
Consulting Engineers

Napier Office: 06 842 0111
Level 3 Dunvegan house,
215 Hastings Street, Napier
info@structuralconcepts.co.nz

New Commercial Building

Walls Fly Brace Plan

CLIENT
Westwood Property Group Limited

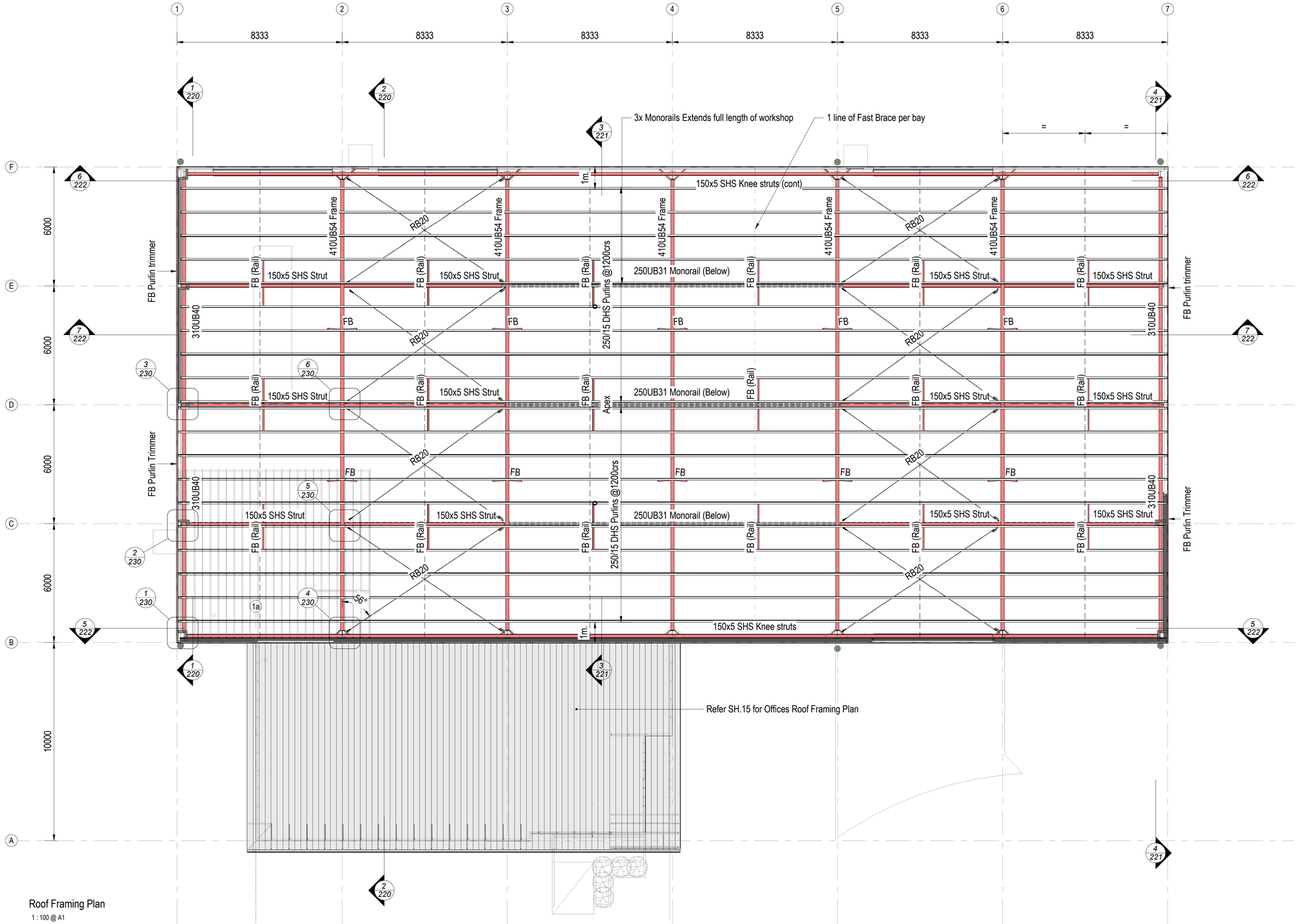
PROJECT ADDRESS
Lot 3 328 Ngaumutawa Road Masterton

SCL NUMBER 4226-10302

A1	SHEET	REV
	202	*0*

DES: PR DRG: SP K:_CAD\4226-10302 Lot 6 328 Ngaumutawa Rd (Loaders)\4226-10302 DRG Lot 3 328 Ngaumutawa Rd (Loaders).rvt

DATE: 27/02/24



Roof Framing Plan

1 : 100 @ A1

REV	DATE	DESCRIPTION
0	240325	Issued for Consent

Structural Concepts
Consulting Engineers

Napier Office: 06 842 0111
Level 3 Dunvegan house,
215 Hastings Street, Napier
info@structuralconcepts.co.nz

New Commercial Building

Roof Framing Plan (WareHouse)

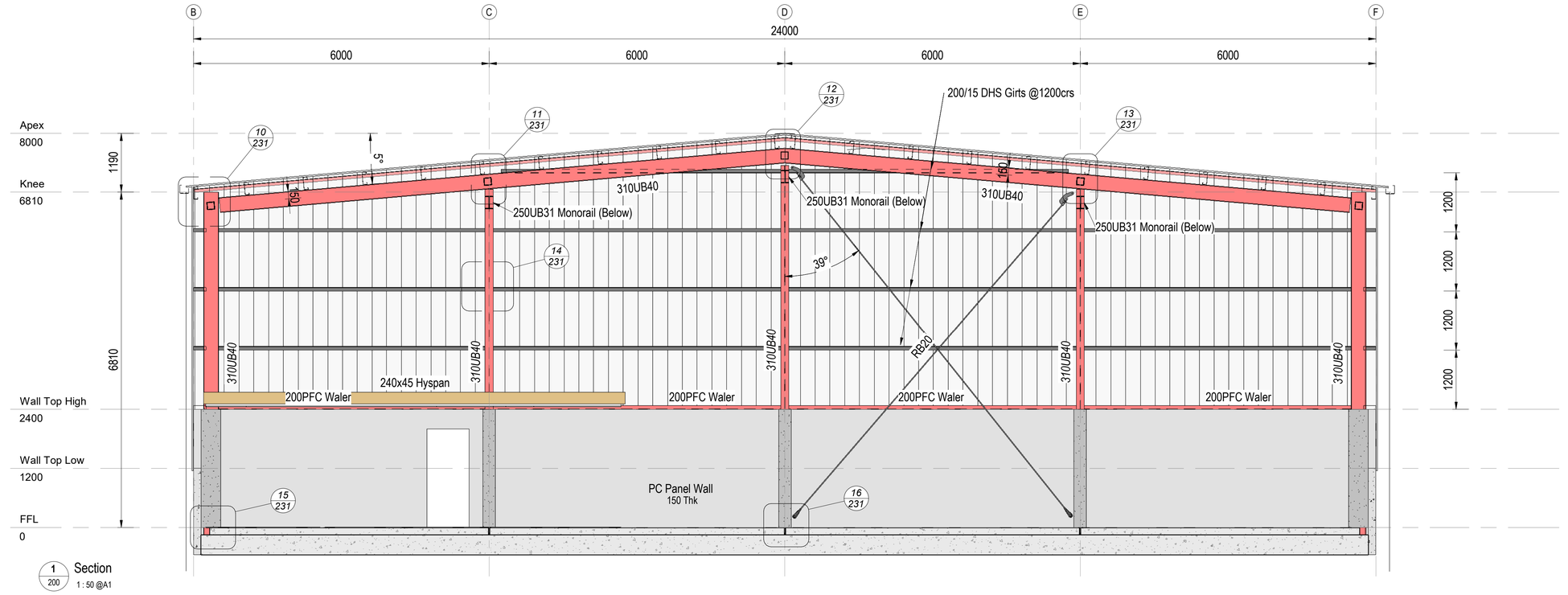
CLIENT
Westwood Property Group Limited

PROJECT ADDRESS
Lot 3 328 Ngaumutawa Road Masterton

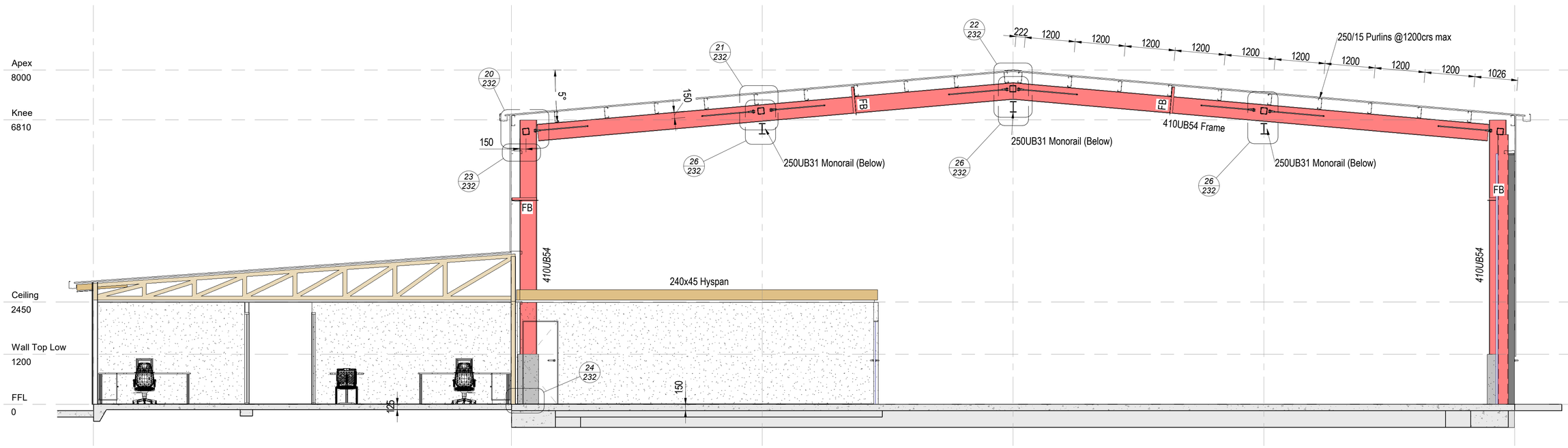
SCL NUMBER		
4226-10302		
A1	SHEET 205	REV *0*

DES: PR DRG: SP K:_CAD\4226-10302 Lot 6 328 Ngaumutawa Rd (Loaders)\4226-10302 DRG Lot 3 328 Ngaumutawa Rd (Loaders).rvt

DATE: 27/02/24



1 / 200 Section
1 : 50 @A1



2 / 200 Frames typ Grids 2,3,4,5,6
1 : 50 @A1

REV	DATE	DESCRIPTION
0	240325	Issued for Consent

Structural Concepts
Consulting Engineers

Napier Office: 06 842 0111
Level 3 Dunvegan house,
215 Hastings Street, Napier
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New Commercial Building

Sections

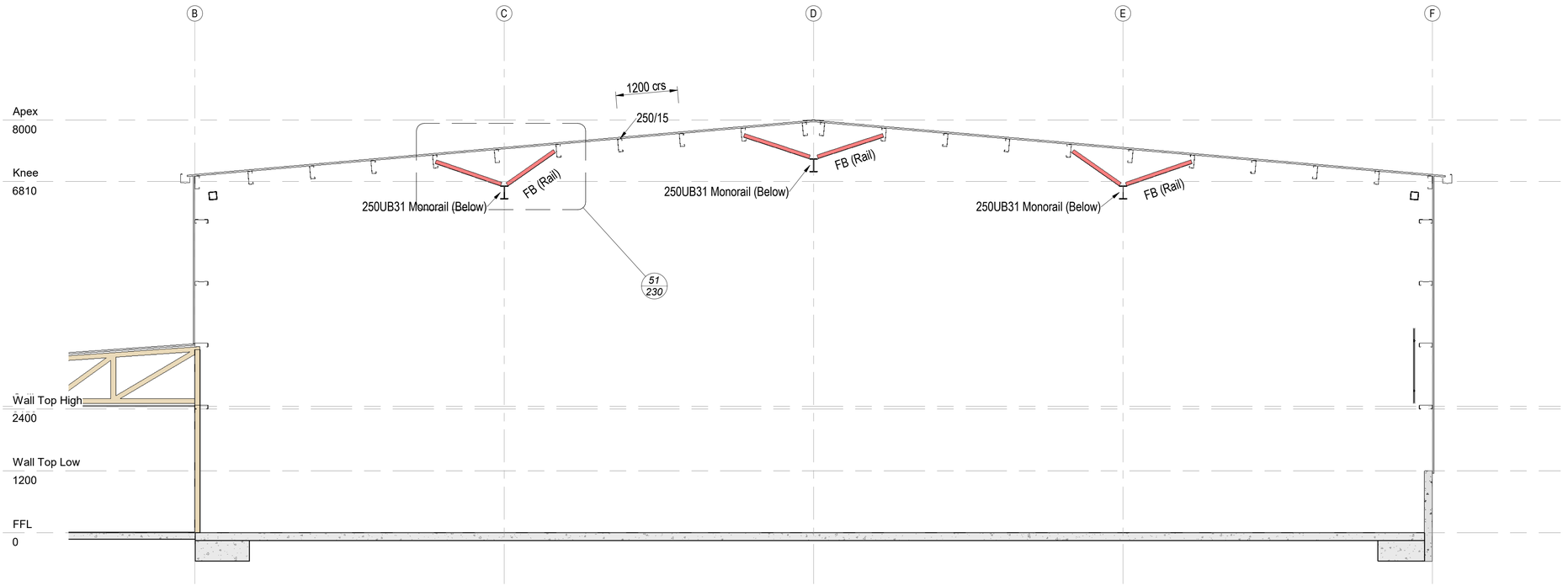
CLIENT
Westwood Property Group Limited

PROJECT ADDRESS
Lot 3 328 Ngaumutawa Road Masterton

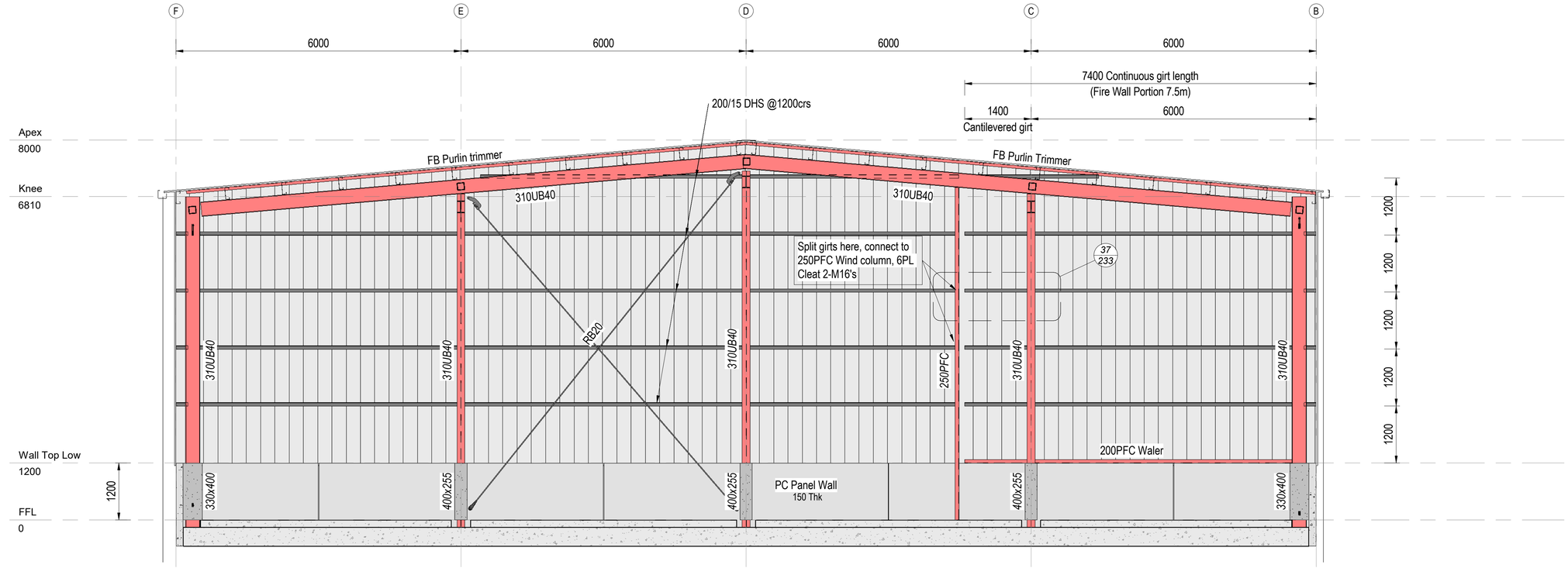
SCL NUMBER
4226-10302

A1	SHEET	REV
	220	*0*

DES: PR DRG: SP K:_CAD\4226-10302 Lot 6 328 Ngaumutawa Rd (Loaders)\4226-10302 DRG Lot 3 328 Ngaumutawa Rd (Loaders).rvt
DATE: 27/02/24



3 / 200 Section
1 : 50 @A1



4 / 200 Section
1 : 50 @A1

REV	DATE	DESCRIPTION
0	240325	Issued for Consent

Structural Concepts
Consulting Engineers

Napier Office: 06 842 0111
Level 3 Dunvegan house,
215 Hastings Street, Napier
info@structuralconcepts.co.nz

New Commercial Building

Sections

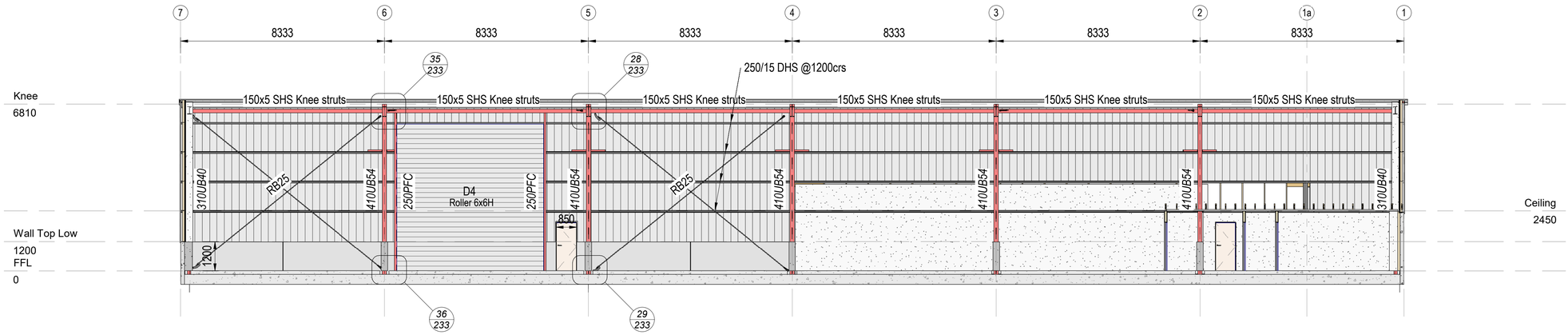
CLIENT
Westwood Property Group Limited

PROJECT ADDRESS
Lot 3 328 Ngaumutawa Road Masterton

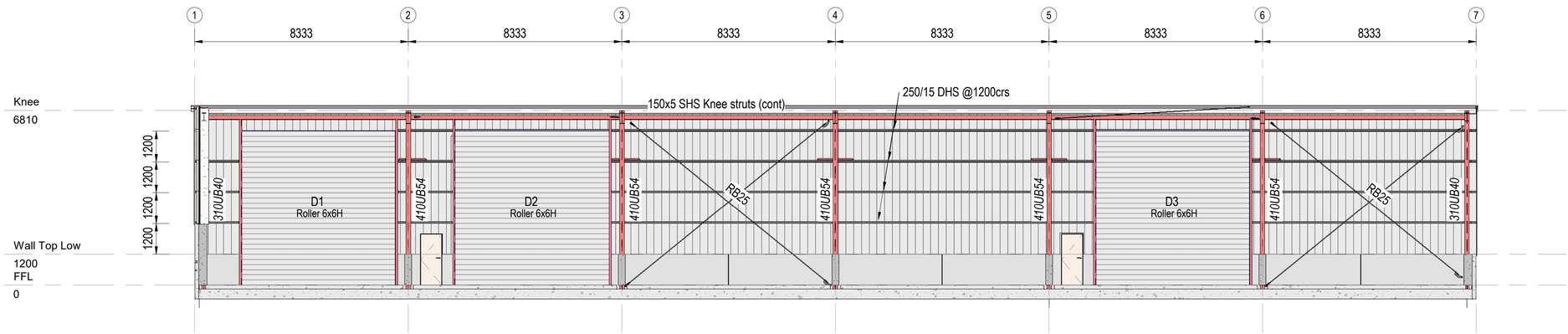
SCL NUMBER
4226-10302

A1	SHEET	REV
	221	*0*

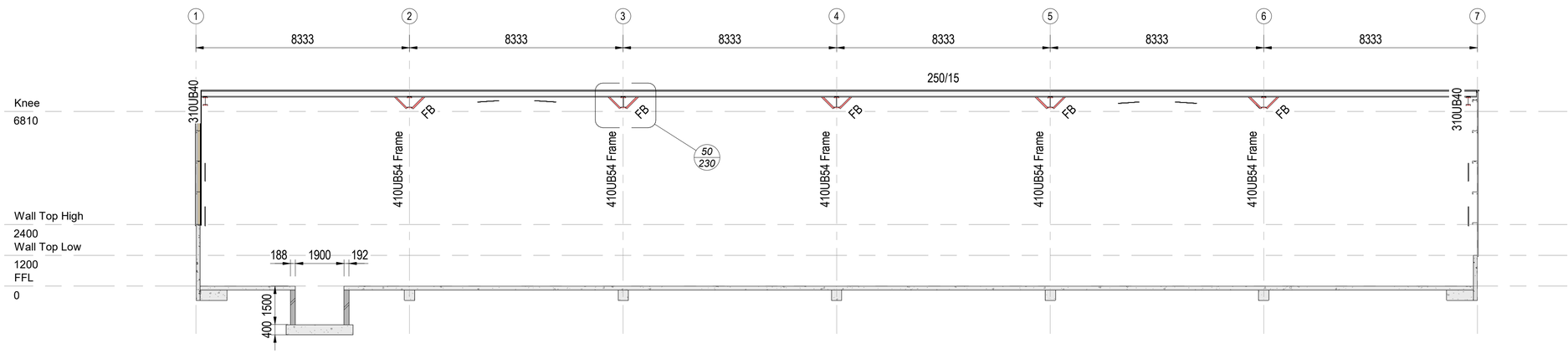
DES: PR DRG: SP K:_CAD\4226-10302 Lot 6 328 Ngaumutawa Rd (Loaders)\4226-10302 DRG Lot 3 328 Ngaumutawa Rd (Loaders).rvt
DATE: 27/02/24



5 / 200 Section
1 : 100 @A1



6 / 200 Section
1 : 100 @A1



7 / 200 Section
1 : 100 @A1

REV	DATE	DESCRIPTION
0	240325	Issued for Consent

Structural Concepts
Consulting Engineers

Napier Office: 06 842 0111
Level 3 Dunvegan house,
215 Hastings Street, Napier
info@structuralconcepts.co.nz

New Commercial Building

Sections

CLIENT
Westwood Property Group Limited

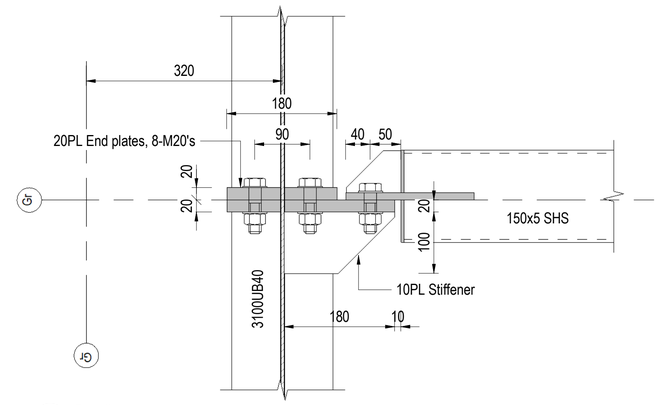
PROJECT ADDRESS
Lot 3 328 Ngaumutawa Road Masterton

SCL NUMBER
4226-10302

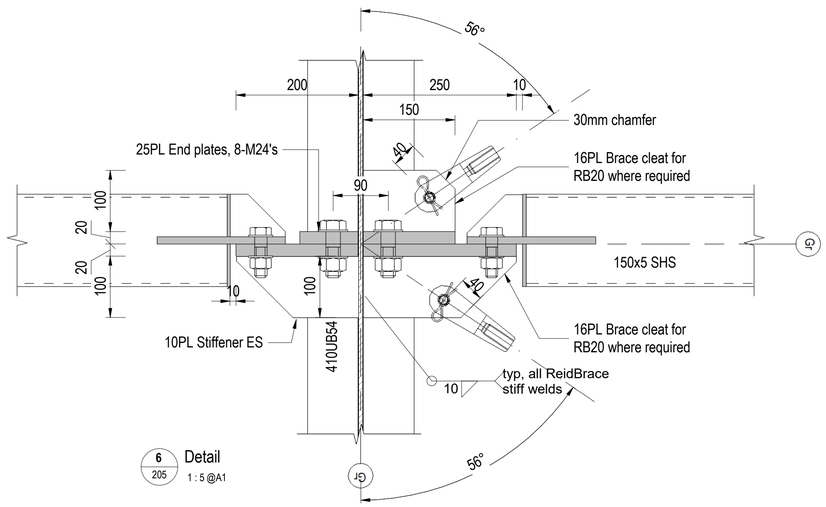
A1 | SHEET 222 | REV *0*

DES: PR DRG: SP K:_CAD\4226-10302 Lot 6 328 Ngaumutawa Rd (Loaders)\4226-10302 DRG Lot 3 328 Ngaumutawa Rd (Loaders).rvt

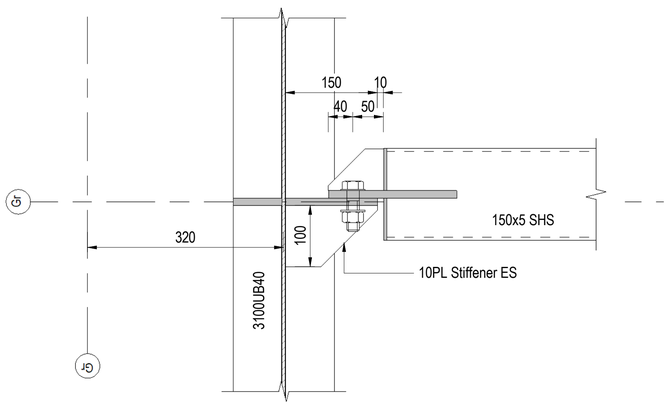
DATE: 27/02/24



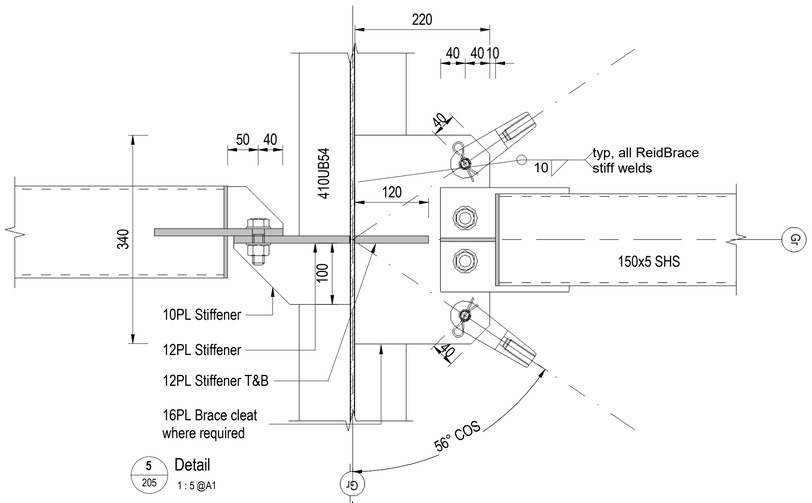
3 / 205 Detail
1 : 5 @A1



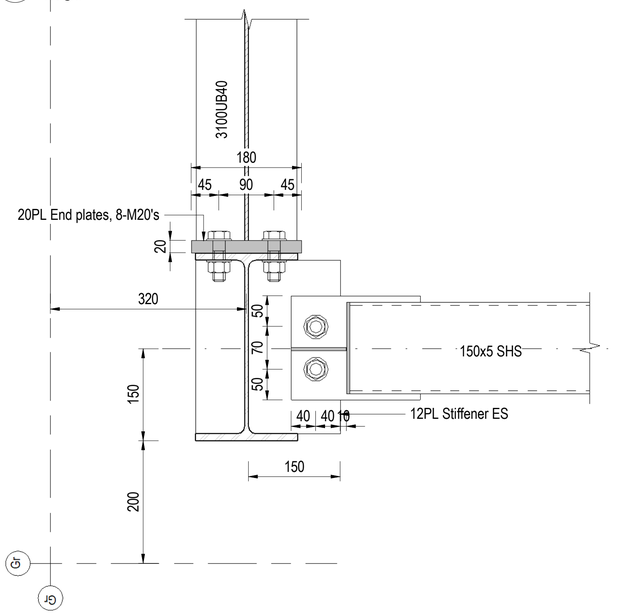
6 / 205 Detail
1 : 5 @A1



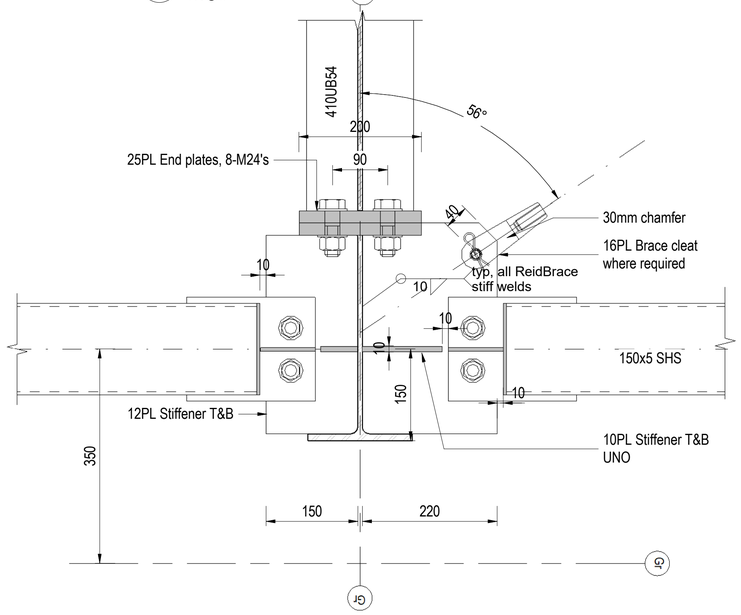
2 / 205 Detail
1 : 5 @A1



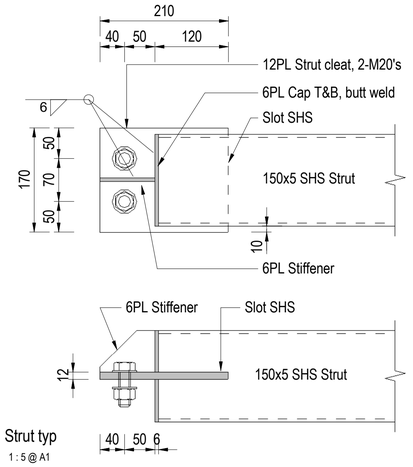
5 / 205 Detail
1 : 5 @A1



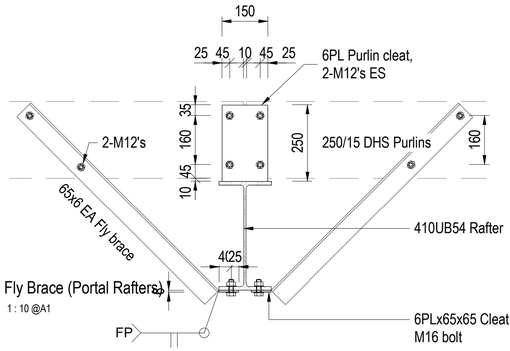
1 / 205 Detail
1 : 5 @A1



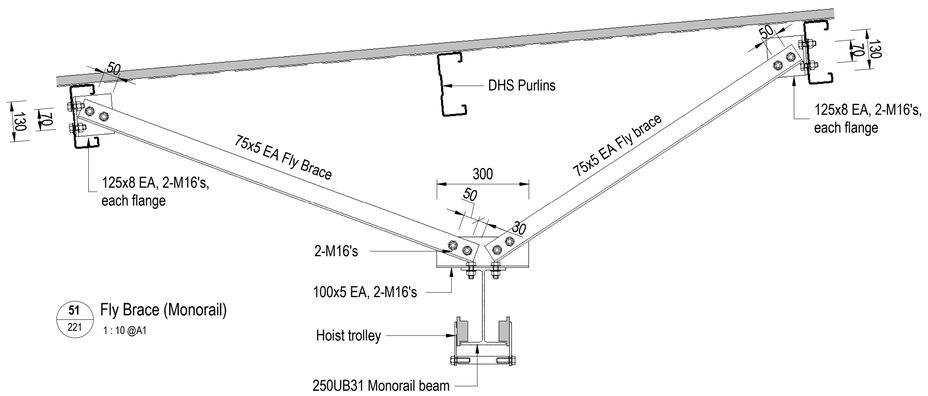
4 / 205 Detail
1 : 5 @A1



Strut typ
1 : 5 @ A1



50 / 222 Fly Brace (Portal Rafters)
1 : 10 @A1



51 / 221 Fly Brace (Monorail)
1 : 10 @A1

REV	DATE	DESCRIPTION
0	240325	Issued for Consent

Structural Concepts
Consulting Engineers

Napier Office: 06 842 0111
Level 3 Dunvegan house,
215 Hastings Street, Napier
info@structuralconcepts.co.nz

New Commercial Building

Details

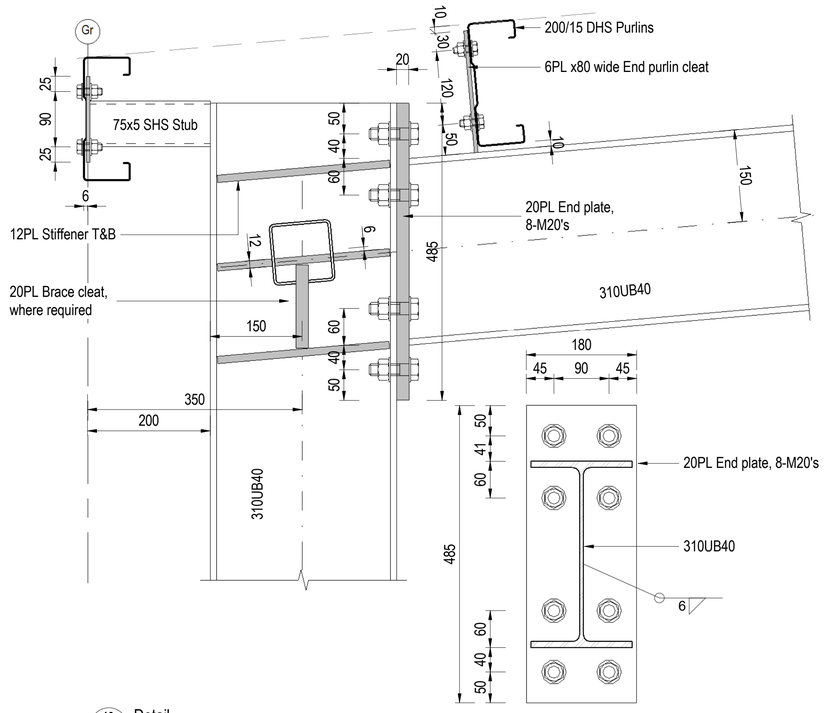
CLIENT
Westwood Property Group Limited

PROJECT ADDRESS
Lot 3 328 Ngaumutawa Road Masterton

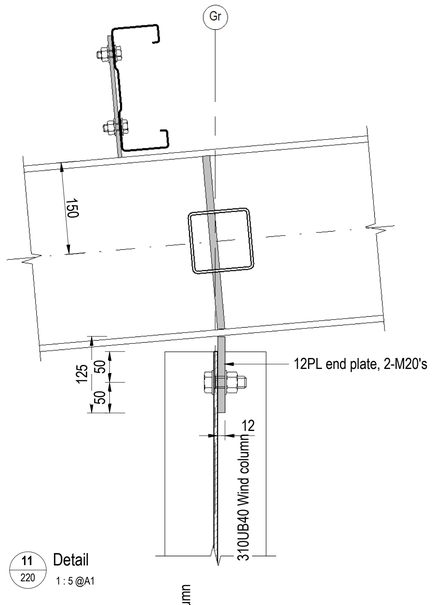
SCL NUMBER
4226-10302

A1 | SHEET 230 | REV *0*

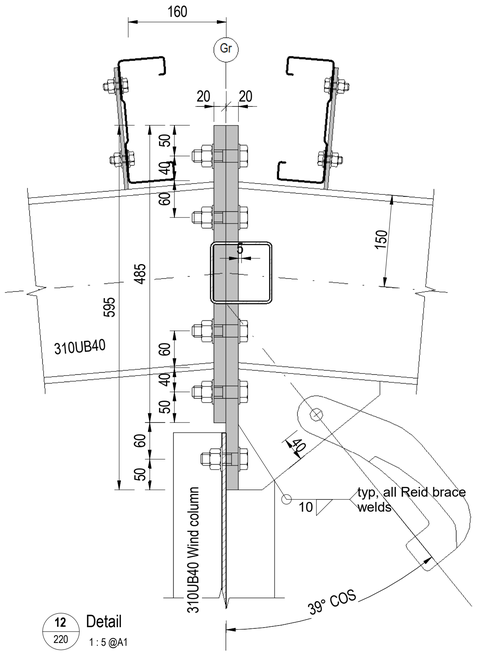
DATE: 27/02/24 DES: PR DRG: SP K:_CAD\4226-10302 Lot 6 328 Ngaumutawa Rd (Loaders)\4226-10302 DRG Lot 3 328 Ngaumutawa Rd (Loaders).rvt



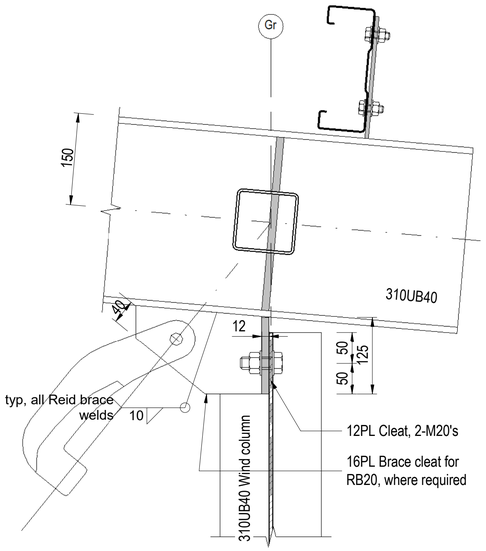
10 / 220 Detail
1 : 5 @A1



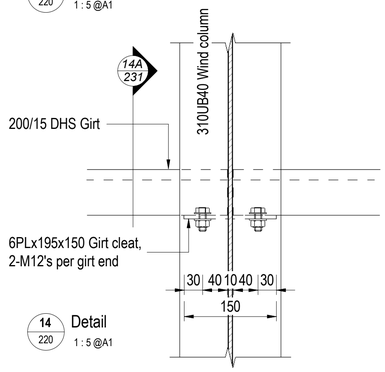
11 / 220 Detail
1 : 5 @A1



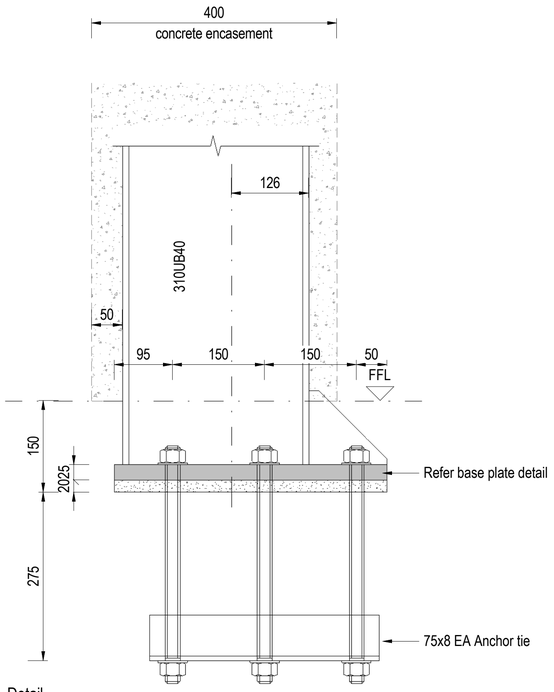
12 / 220 Detail
1 : 5 @A1



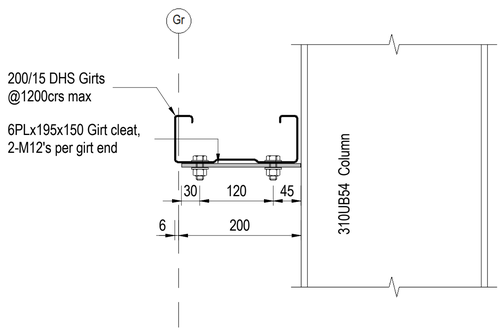
13 / 220 Detail
1 : 5 @A1



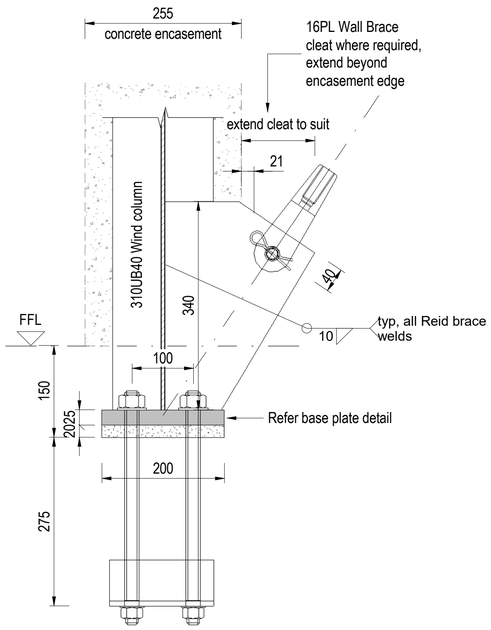
14 / 220 Detail
1 : 5 @A1



15 / 220 Detail
1 : 5 @A1



14A / 231 Section
1 : 5 @A1



16 / 220 Detail
1 : 5 @A1

REV	DATE	DESCRIPTION
0	240325	Issued for Consent

Structural Concepts
Consulting Engineers

Napier Office: 06 842 0111
Level 3 Dunvegan house,
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New Commercial Building

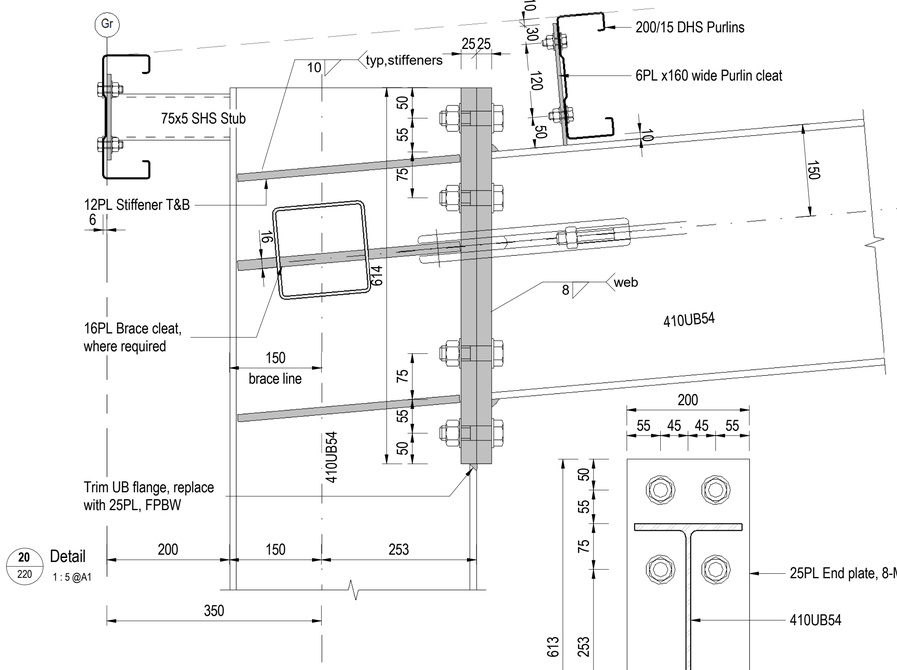
Details

CLIENT
Westwood Property Group Limited

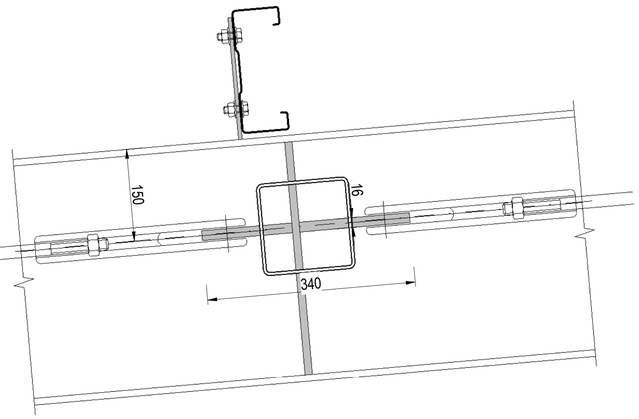
PROJECT ADDRESS
Lot 3 328 Ngaumutawa Road Masterton

SCL NUMBER 4226-10302
A1 | SHEET 231 | REV *0*

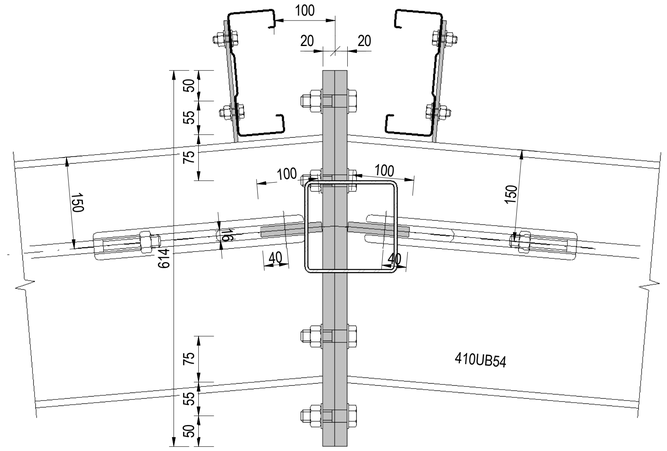
DES: PR DRG: SP K:_CAD\4226-10302 Lot 6 328 Ngaumutawa Rd (Loaders)\4226-10302 DRG Lot 3 328 Ngaumutawa Rd (Loaders).rvt
DATE: 27/02/24



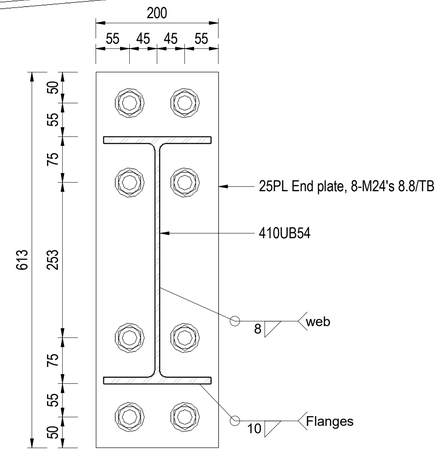
20 / 220 Detail
1 : 5 @A1

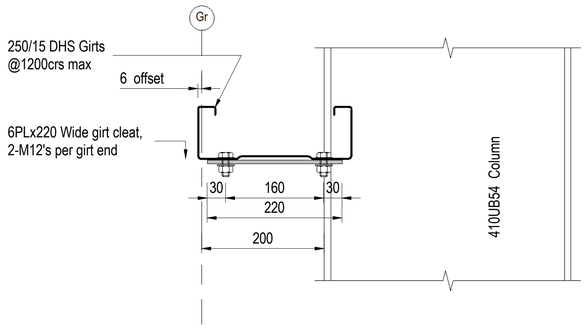


21 / 220 Detail
1 : 5 @A1

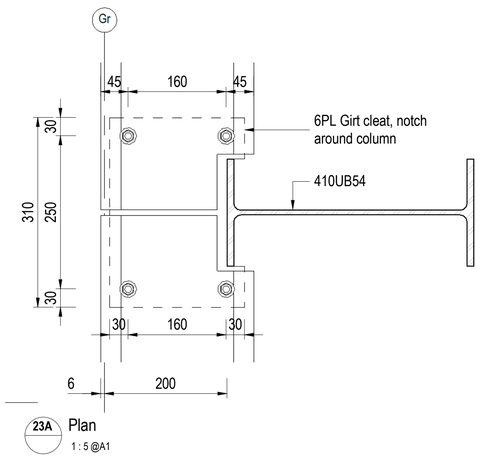


22 / 220 Detail
1 : 5 @A1

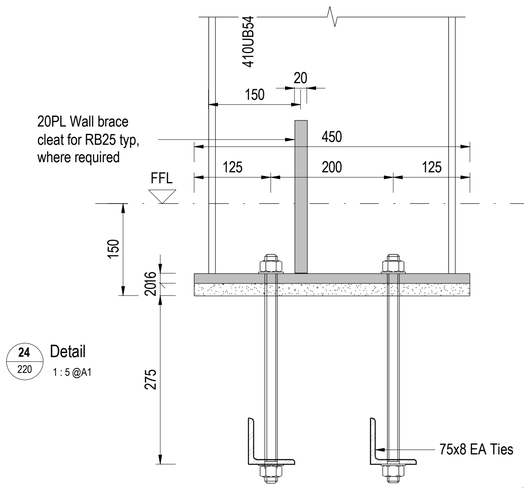




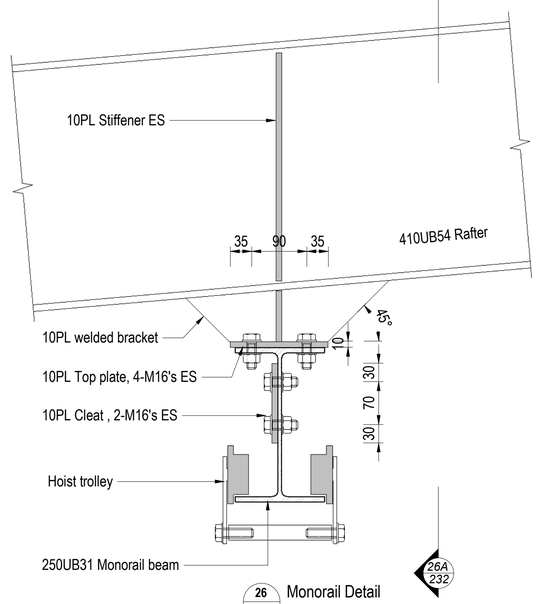
23 / 220 Detail
1 : 5 @A1



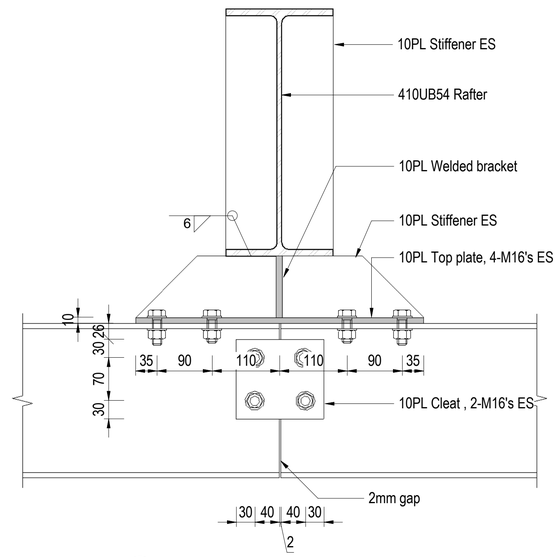
23A / Plan
1 : 5 @A1



24 / 220 Detail
1 : 5 @A1



26 / 220 Monorail Detail
1 : 5 @A1



26A / 232 Section
1 : 5 @A1

REV	DATE	DESCRIPTION
0	240325	Issued for Consent

Structural Concepts
Consulting Engineers

Napier Office: 06 842 0111
Level 3 Dunvegan house,
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info@structuralconcepts.co.nz

New Commercial Building

Details

CLIENT
Westwood Property Group Limited

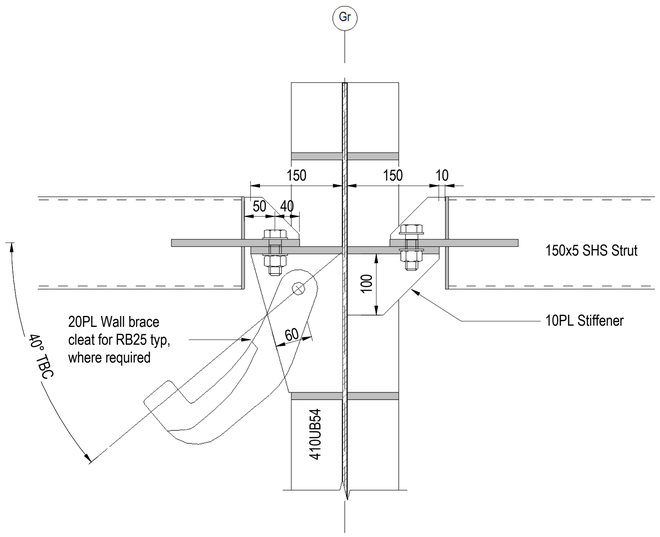
PROJECT ADDRESS
Lot 3 328 Ngaumutawa Road Masterton

SCL NUMBER
4226-10302

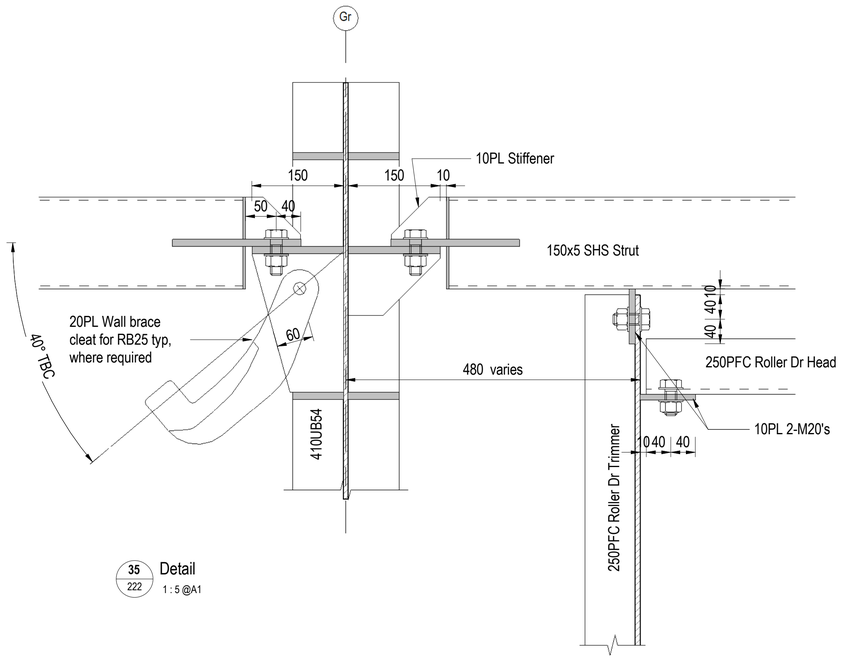
A1 | SHEET 232 | REV *0*

DES: PR DRG: SP K:_CAD\4226-10302 Lot 6 328 Ngaumutawa Rd (Loaders)\4226-10302 DRG Lot 3 328 Ngaumutawa Rd (Loaders).rvt

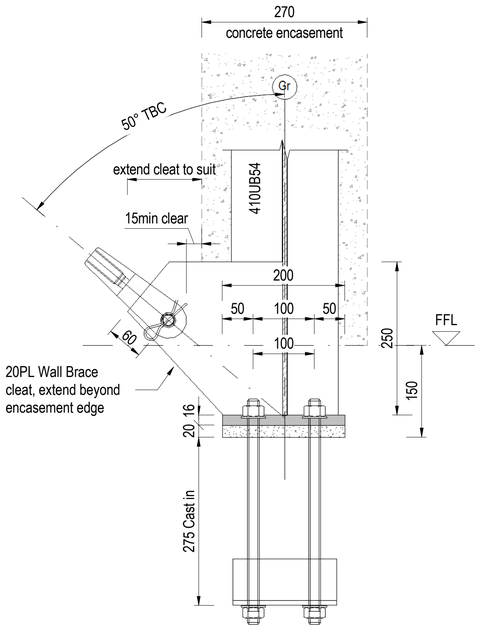
DATE: 27/02/24



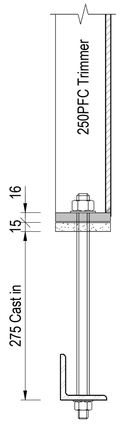
28 / 222 Detail
1 : 5 @A1



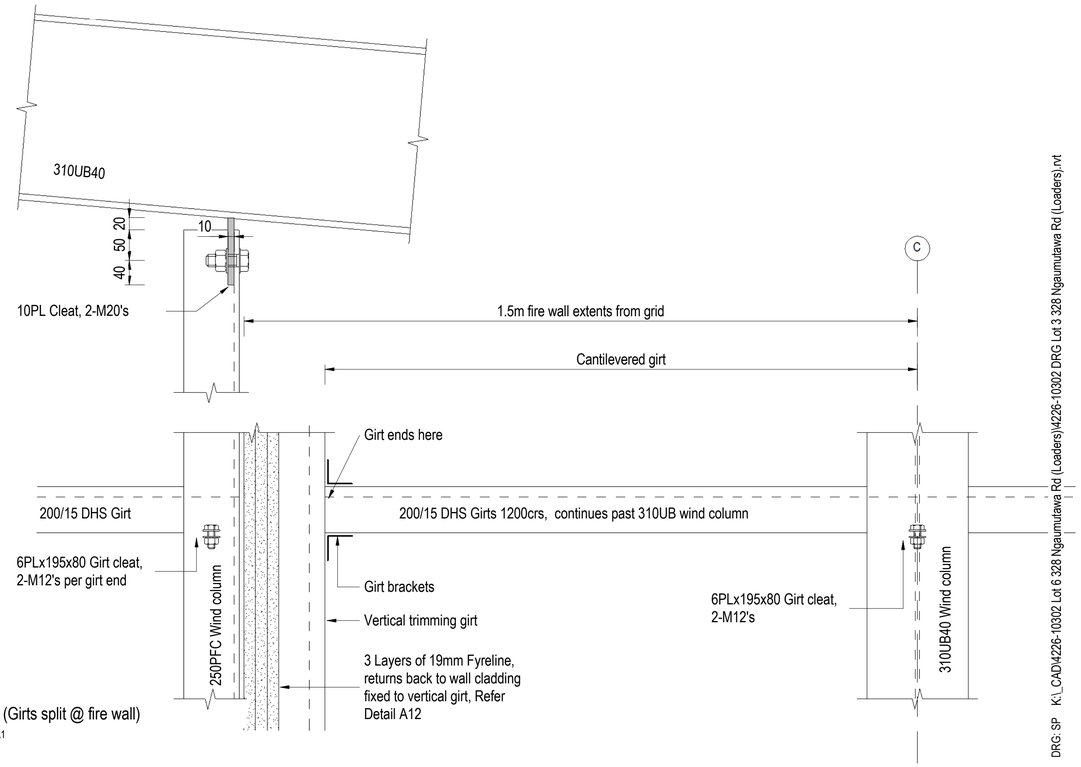
35 / 222 Detail
1 : 5 @A1



29 / 222 Detail
1 : 5 @A1



36 / 200 Detail
1 : 5 @A1



37 / 221 Detail (Girts split @ fire wall)
1 : 5 @A1

REV	DATE	DESCRIPTION
0	240325	Issued for Consent

Structural Concepts
Consulting Engineers

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New Commercial Building

Details

CLIENT
Westwood Property Group Limited

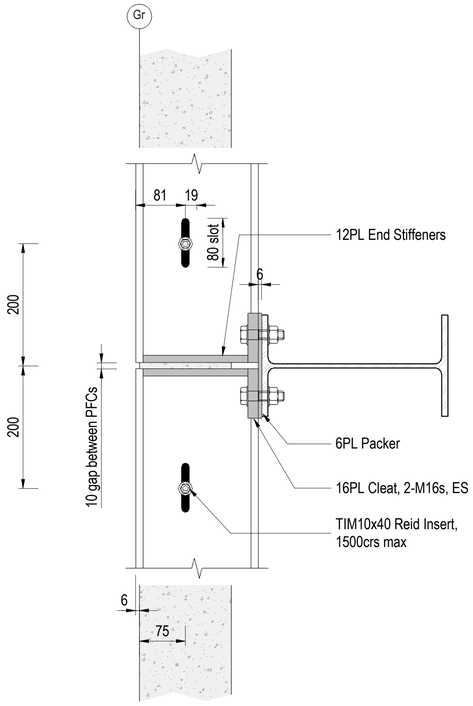
PROJECT ADDRESS
Lot 3 328 Ngaumutawa Road Masterton

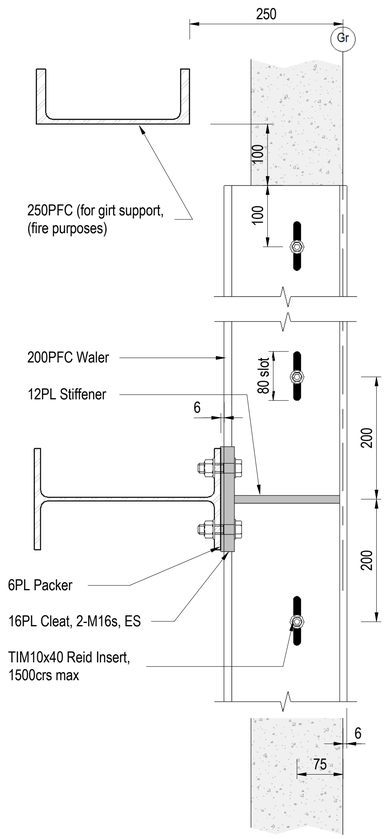
SCL NUMBER
4226-10302

A1	SHEET	REV
	233	*0*

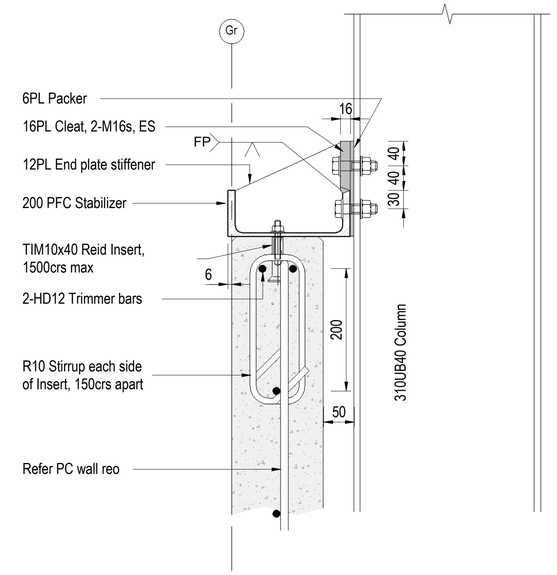
DES: PR DRG: SP K:_CAD\4226-10302 Lot 6 328 Ngaumutawa Rd (Loaders)\4226-10302 DRG Lot 3 328 Ngaumutawa Rd (Loaders).rvt

DATE: 27/02/24

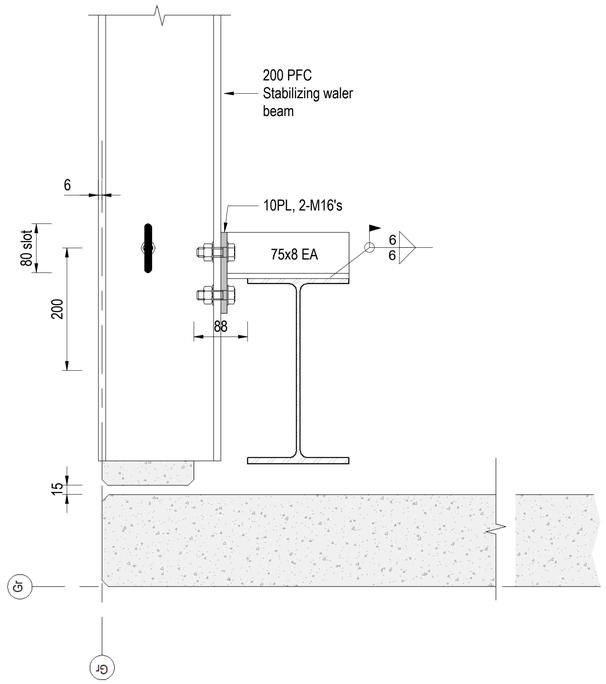




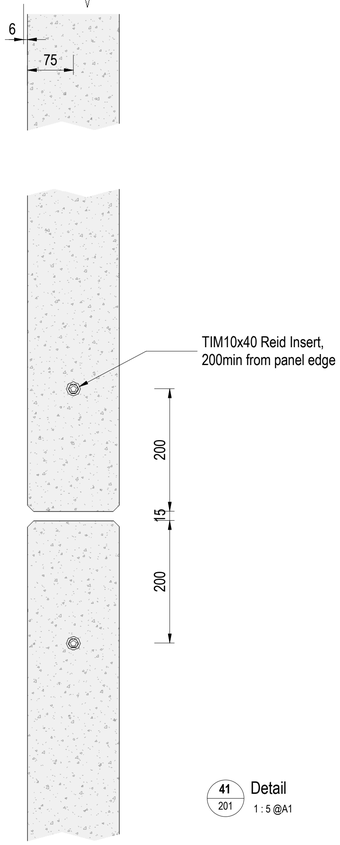
42 / 201 — 42
1 : 5 @A1



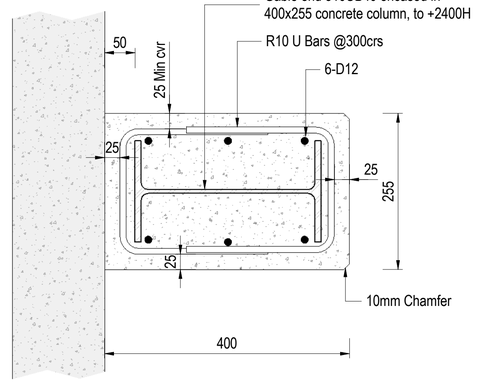
41A / 110 — Detail
1 : 5 @A1

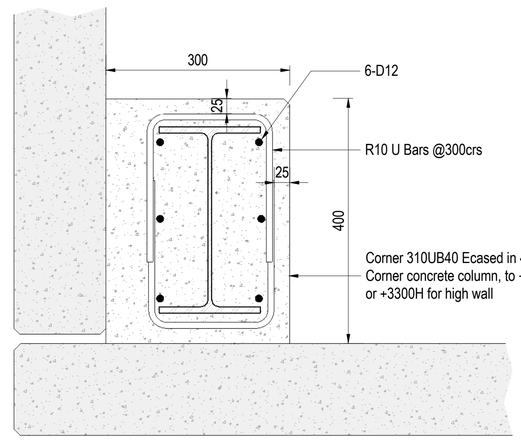


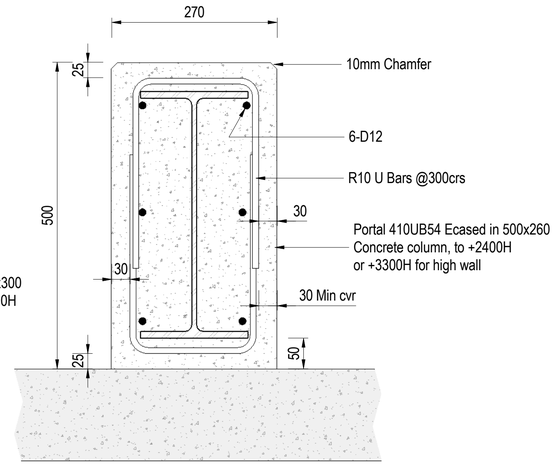
40 / 201 — Detail
1 : 5 @A1



41 / 201 — Detail
1 : 5 @A1







45 / 200 — Encasements
1 : 5 @A1

Note:
Do not tie encasement concrete to slab

REV	DATE	DESCRIPTION
0	240325	Issued for Consent

Structural Concepts
Consulting Engineers

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New Commercial Building

Details

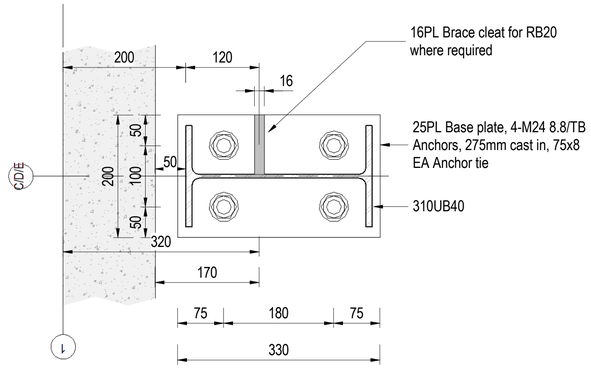
CLIENT
Westwood Property Group Limited

PROJECT ADDRESS
Lot 3 328 Ngaumutawa Road Masterton

SCL NUMBER 4226-10302
A1 | SHEET 234 | REV *0*

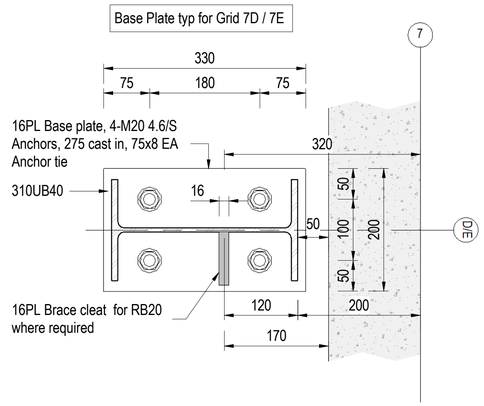
DES: PR DRG: SP K:_CAD\4226-10302 Lot 6 328 Ngaumutawa Rd (Loaders)\4226-10302 DRG Lot 3 328 Ngaumutawa Rd (Loaders).rvt
DATE: 27/02/24

Base Plate typ for Grid 1C / 1D / 1E



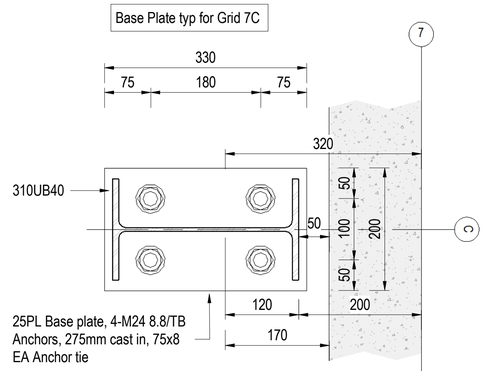
BP1 200 BP1
1 : 5 @A1

Base Plate typ for Grid 7D / 7E



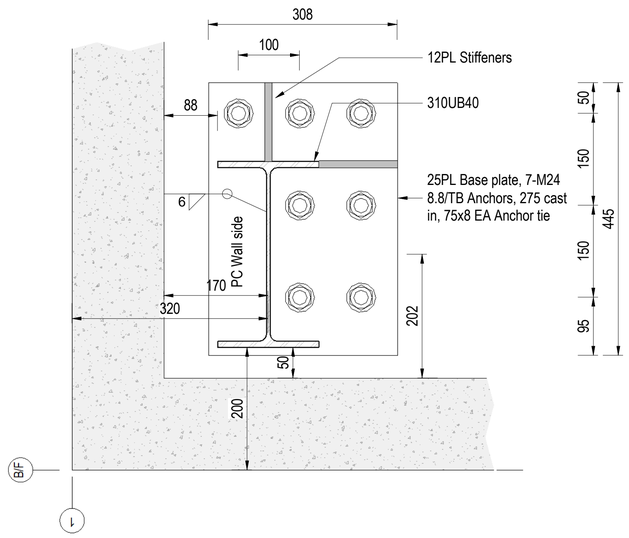
BP5 200 BP5
1 : 5 @A1

Base Plate typ for Grid 7C

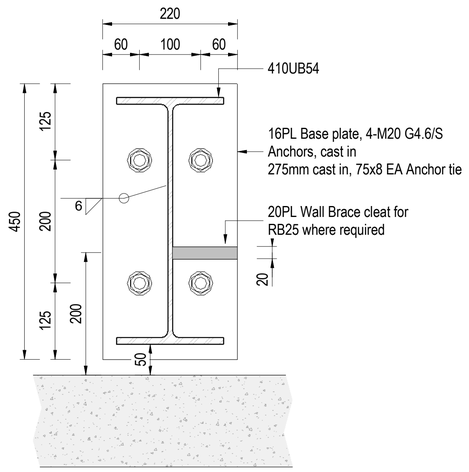


BP7 200 BP7
1 : 5 @A1

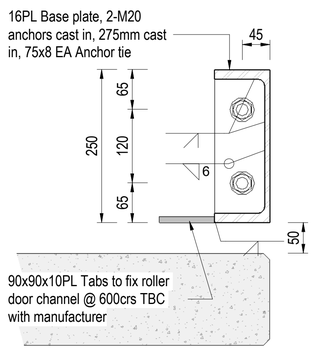
Base Plate typ for Grid 1B / 1F



BP2 200 BP2
1 : 5 @A1

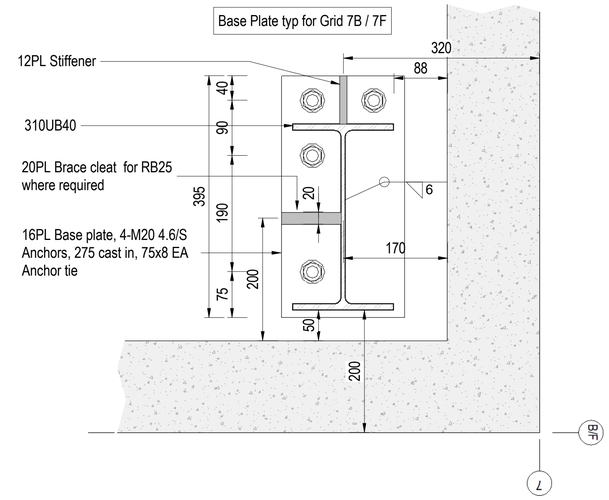


BP3 200 BP3
1 : 5 @A1



BP6 200 250PFC
1 : 5 @A1

Base Plate typ for Grid 7B / 7F



BP4 200 BP4
1 : 5 @A1

REV	DATE	DESCRIPTION
0	240325	Issued for Consent

Structural Concepts
Consulting Engineers

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New Commercial Building

Base Plates

CLIENT
Westwood Property Group Limited

PROJECT ADDRESS
Lot 3 328 Ngaumutawa Road Masterton

SCL NUMBER
4226-10302

A1	SHEET	REV
	236	*0*

DES: PR DRG: SP K:_CAD\4226-10302 Lot 6 328 Ngaumutawa Rd (Loaders)\4226-10302 DRG Lot 3 328 Ngaumutawa Rd (Loaders).rvt
DATE: 27/02/24

DISCLOSURE STATEMENT

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2. Bayleys and the Vendor do not warrant the accuracy or completeness of the information and recommends that all recipients undertake their own due diligence, obtain their own reports to their satisfaction and seek independent advice prior to committing to purchaser.