

### Architectural Sheet List

Sheet Number	Sheet Name	Current Revision	Current Revision Date
A0100	Site Plan	11	15/06/16
A0101	Site Plan Office		
A0200	Ground Floor	12	28/07/16
A0202	Ground floor callouts	15	19/04/17
A0300	Cross Sections	5	18/02/16
A0301	Cross Sections	12	28/07/16
A0303	Refrig Fitout Plan and Sections	12	28/07/16
A0304	Refrig Fitout Sections	3	09/02/16
A0305	Refrig Fitout Sections	12	28/07/16
A0400	Elevations A and C	9	02/05/16
A0401	Elevations B and D	9	02/05/16
A0500	Plumbing Ground Floor		
A0600	D W Ground Floor Plan	12	28/07/16
A0601	D W External		
A0602	D W Internal		
A0603	Balustrades		
A0800	Stairs and Decks		
A1300	Roof Plan	9	02/05/16
A1301	Flashing Details	4	16/02/16
A1302	Flashing Details 2	9	02/05/16
A1400	H1 Compliance		

NZ Dairy Collaborative Group  
Infant Formula Blending Plant

9 Ashford Ave., Ashburton

JOB #	12412
DATE:	23/01/16

**SITE PLAN**

PROJECT NAME: NZ Dairy Collaborative Group  
 PROJECT DESCRIPTION: Infant Formula Blending Plant  
 PROJECT ADDRESS: 9 Ashford Ave, Ashburton  
 APPELLATION: Lot 17 DP 427688

AREA OF PROPOSED NEW BUILDINGS:  
 Blending Plant = 4442m<sup>2</sup>  
 Office = 1005m<sup>2</sup> (Separate Building Consent)

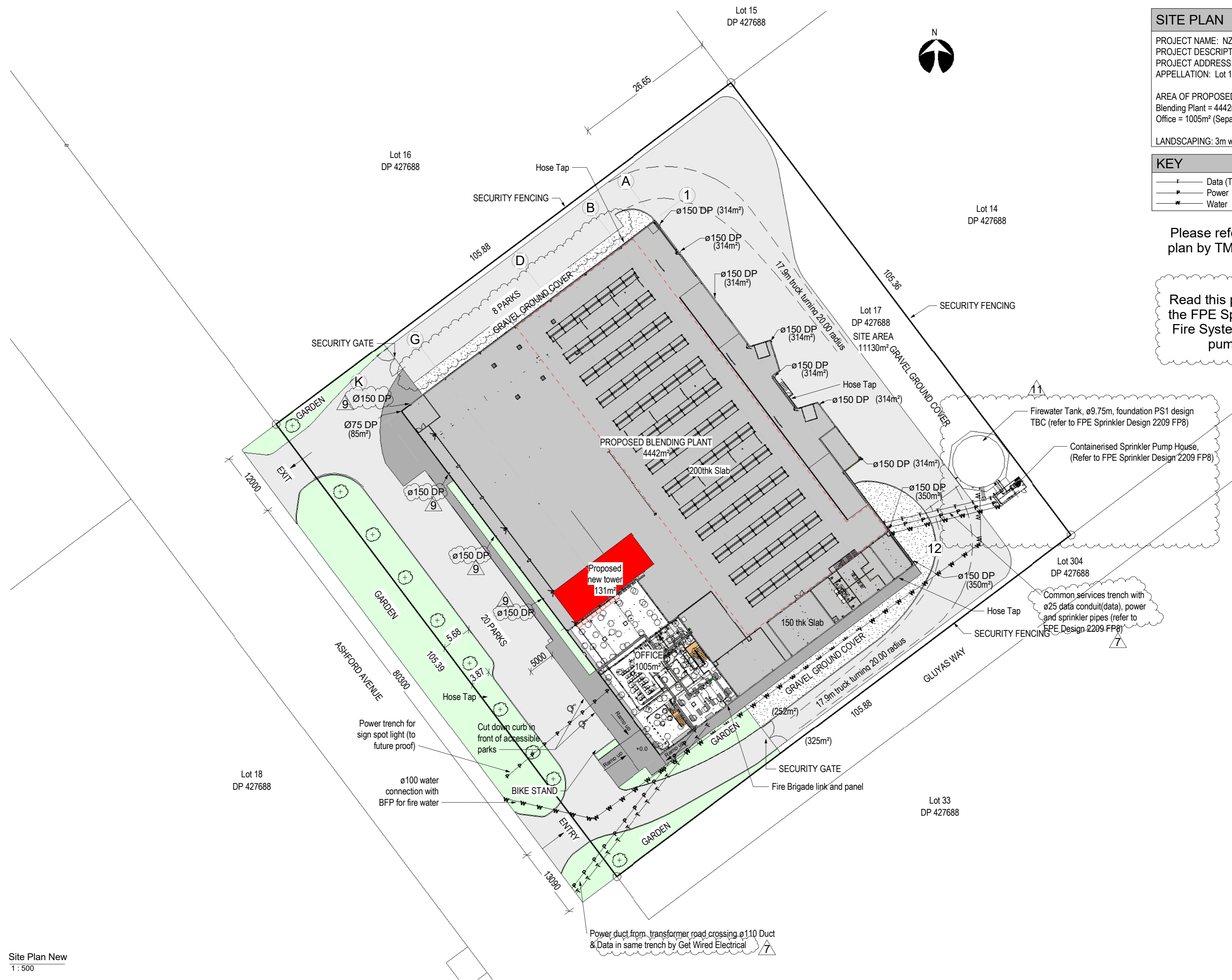
LANDSCAPING: 3m wide landscaping strip

**KEY**

- Data (Telephone)
- Power
- Water

Please refer to Civil and Services plan by TM Consultants for further information.

Read this plan in conjunction with the FPE Sprinkler design 2209 for Fire System, Fire water tank and pump house set out.



Site Plan New  
1:500



Thompson Engineering 2002 Ltd | PO Box 2081, Washdyke - Timaru | 9b Meadows Road - Timaru  
 PH 0800 688 716 | F (03) 688 7168 | www.thompsonengineering.co.nz | design@thompsonengineering.co.nz

PROJECT

Arch

NZ Dairy Collaborative Group  
 Infant Formula Blending Plant

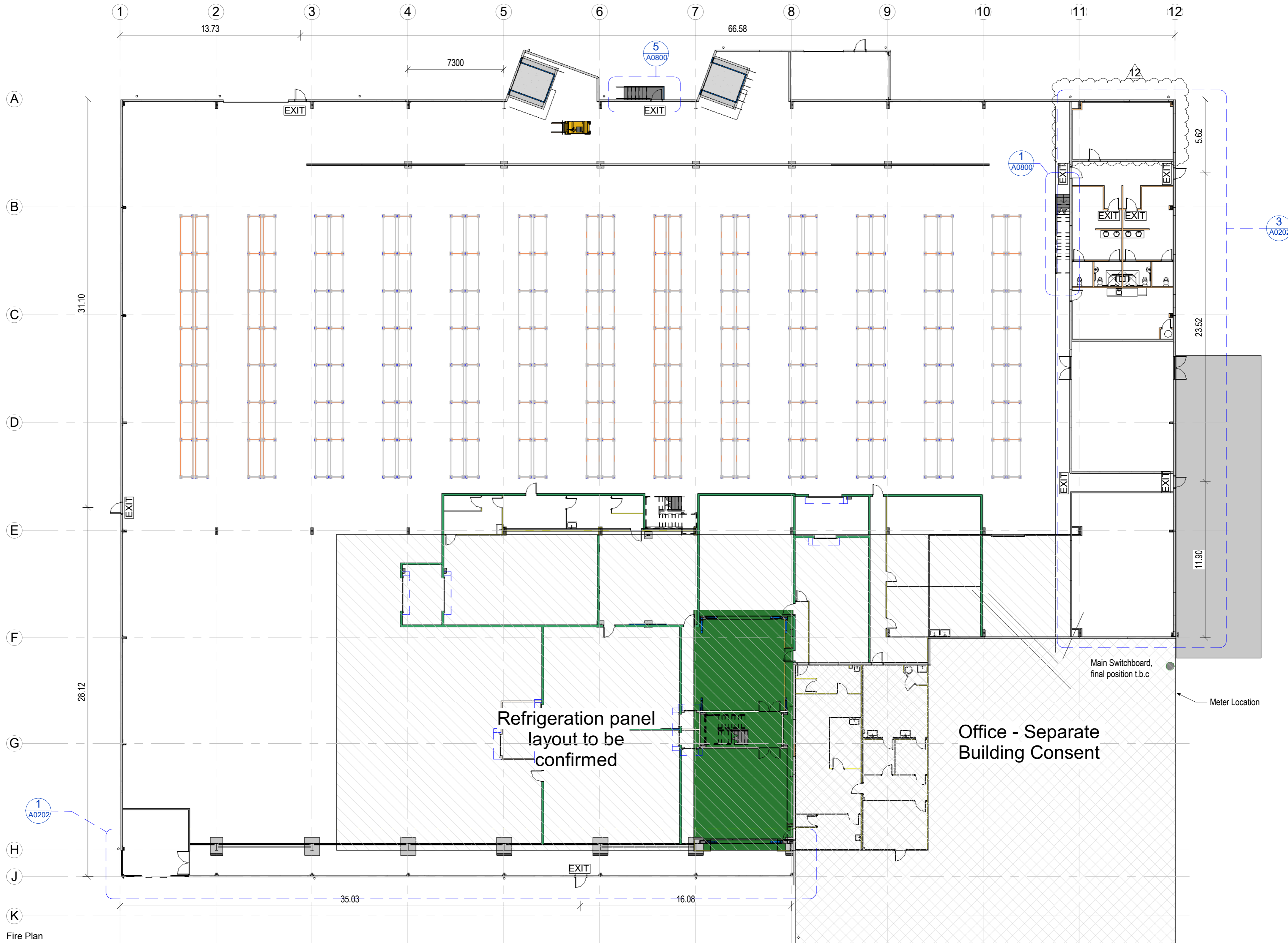
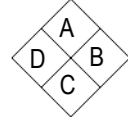
9 Ashford Ave., Ashburton

All Drawings property of Thompson Engineering 2002 Ltd

Rev#	Amendments	Date	SCALE	As indicated@ A2	JOB #	12412
1	PIM Parking	18/12/15	DRAWN BY	B.Holloway	DATE	23/01/16
7	Changes for sprinkler and electrical services	21/03/16	APPROVED BY	A. Cloake	REV	11
9	Changes to DP's	02/05/16	<b>Site Plan</b>		<b>A0100</b>	
11	Prelim Tank and Pump House layout	15/06/16	Please note: All dimensions to be verified on site			

Paper size: A2

ELEVATION KEY



Fire Plan  
1 : 200

PROJECT

Arch

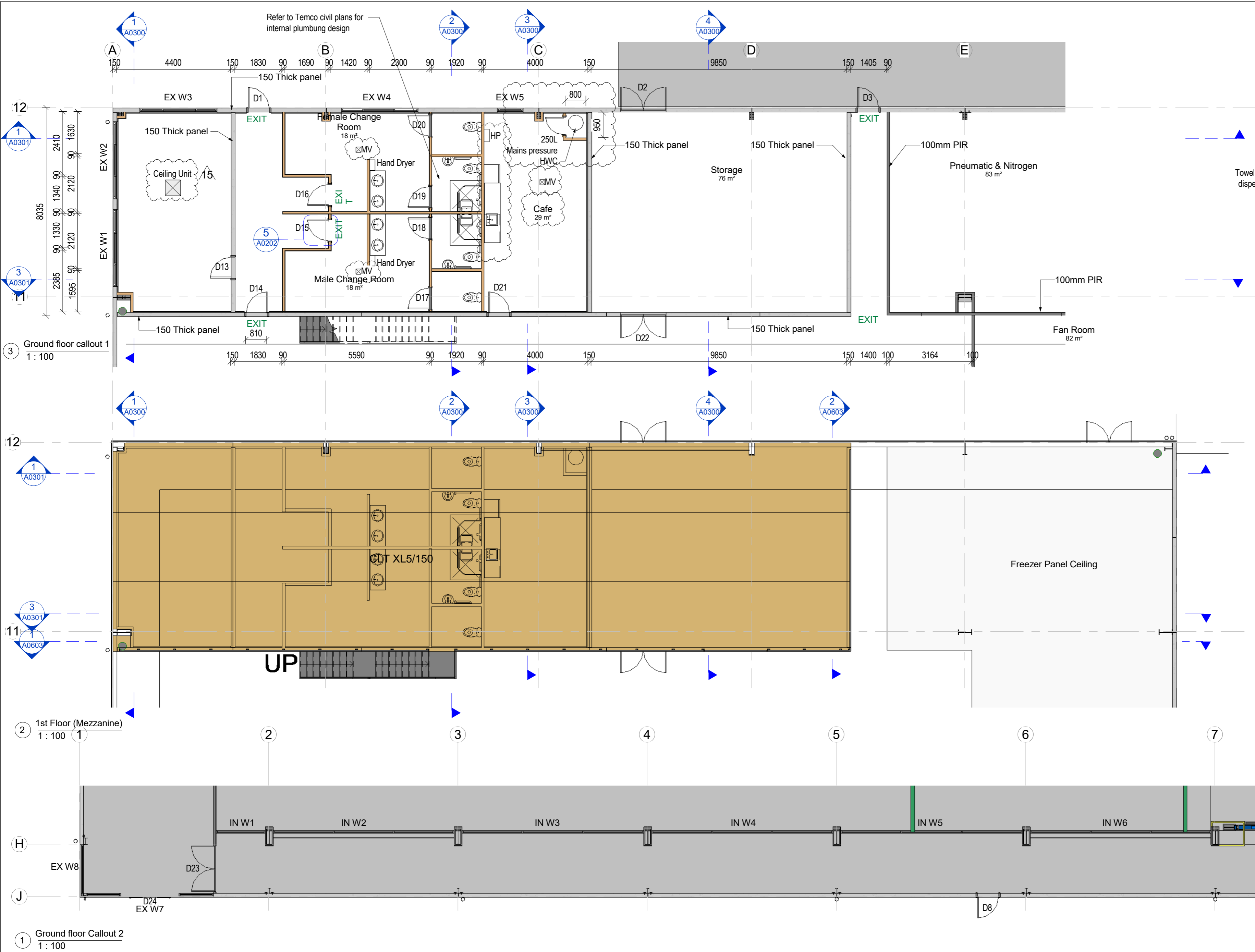
NZ Dairy Collaborative Group  
Infant Formula Blending Plant

9 Ashford Ave., Ashburton

All Drawings property of Thompson Engineering 2002 Ltd

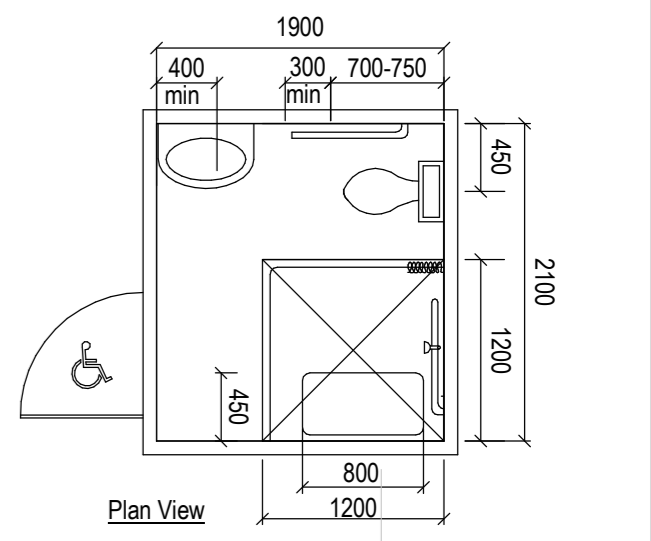
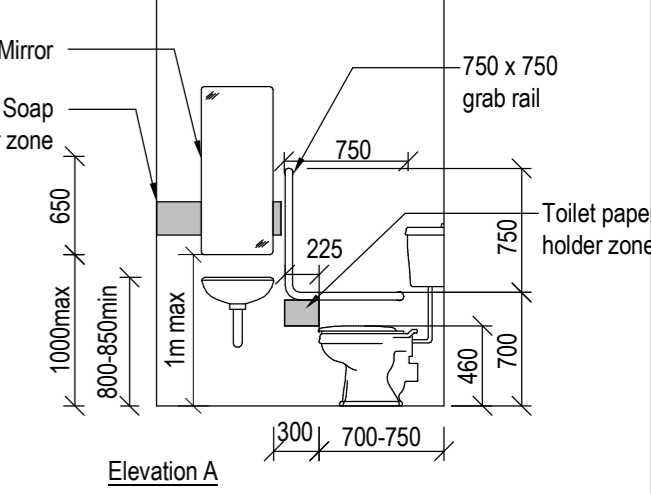
Rev#	Amendments	Date	SCALE	JOB #
12	Mods to operational fitout	28/07/16	As indicated@ A2	12412
			DRAWN BY C. White	DATE 23/01/16
			APPROVED BY A. Cloake	REV 12
			<b>Ground Floor</b>	<b>A0200</b>
Please note: All dimensions to be verified on site				Paper size: A2

Thompson Engineering 2002 Ltd | PO Box 2081, Washdyke - Timaru | 9b Meadows Road - Timaru  
PH 0800 688 716 | F (03) 688 7168 | www.thompsonengineering.co.nz | design@thompsonengineering.co.nz

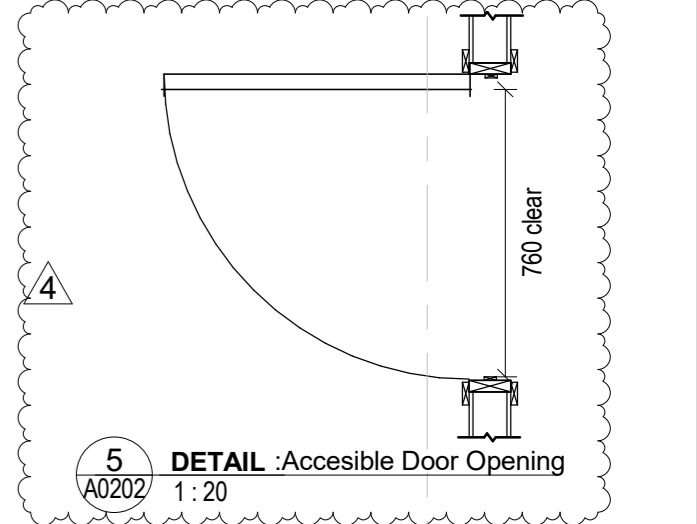


**G4 COMPLIANCE**

Where indicated, spaces have ventilation (sashed windows) which has open area 5% min. of the floor area.(G4/AS1)  
 Where open ventilation is not available, mechanical ventilation is supplied.  
 Outdoor air requirements are based on the relevant space designation as per Table 2, NZS4303:1990



To comply with NZS 4121:2001  
 Section 10 - Toilet and shower facilities  
 Figure 35 - Combined toilet and shower



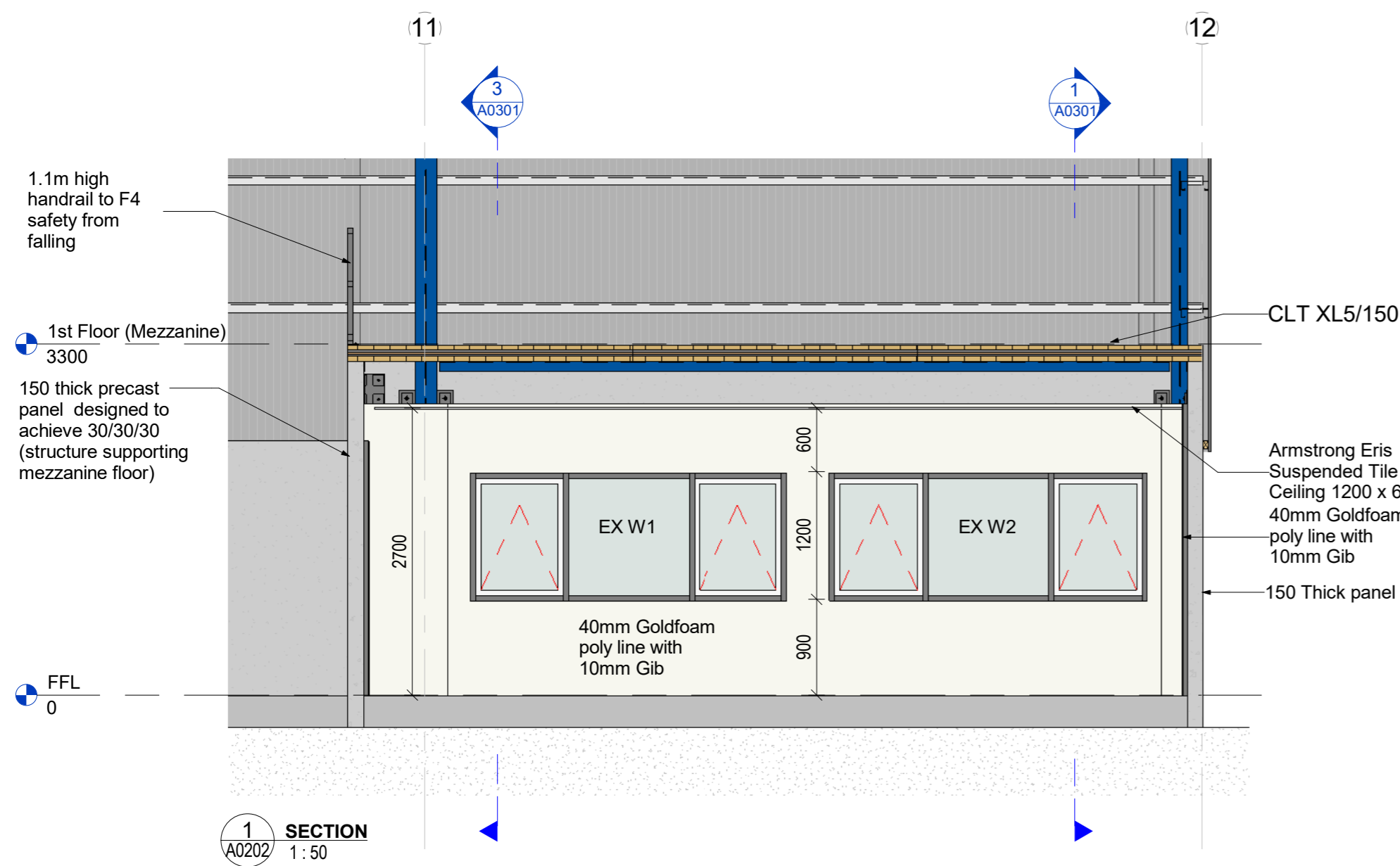
Thompson Engineering 2002 Ltd | PO Box 2081, Washdyke - Timaru | 9b Meadows Road - Timaru  
 PH 0800 688 716 | F (03) 688 7168 | www.thompsonengineering.co.nz | design@thompsonengineering.co.nz

PROJECT  
**Arch**  
 NZ Dairy Collaborative Group  
 Infant Formula Blending Plant  
 9 Ashford Ave., Ashburton

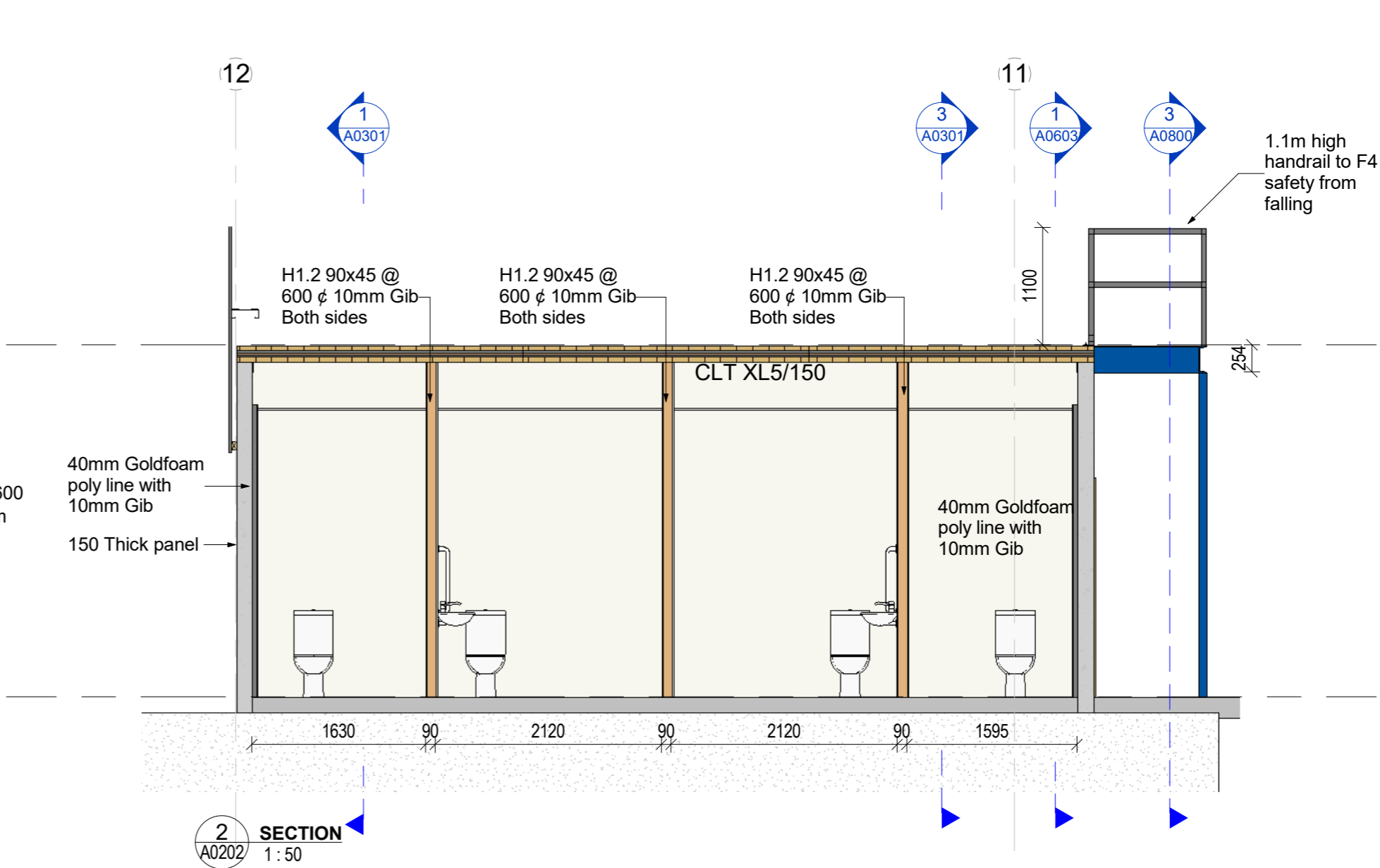
Rev#	Amendments	Date
4	Council RFI	16/02/16
15	Contract notes	19/04/17

SCALE	As indicated@ A2	JOB #	12412
DRAWN BY	C. White	DATE	23/01/16
APPROVED BY	A. Cloake	REV	15
<b>Ground floor callouts</b>		<b>A0202</b>	
Please note: All dimensions to be verified on site			
Paper size: <b>A2</b>			

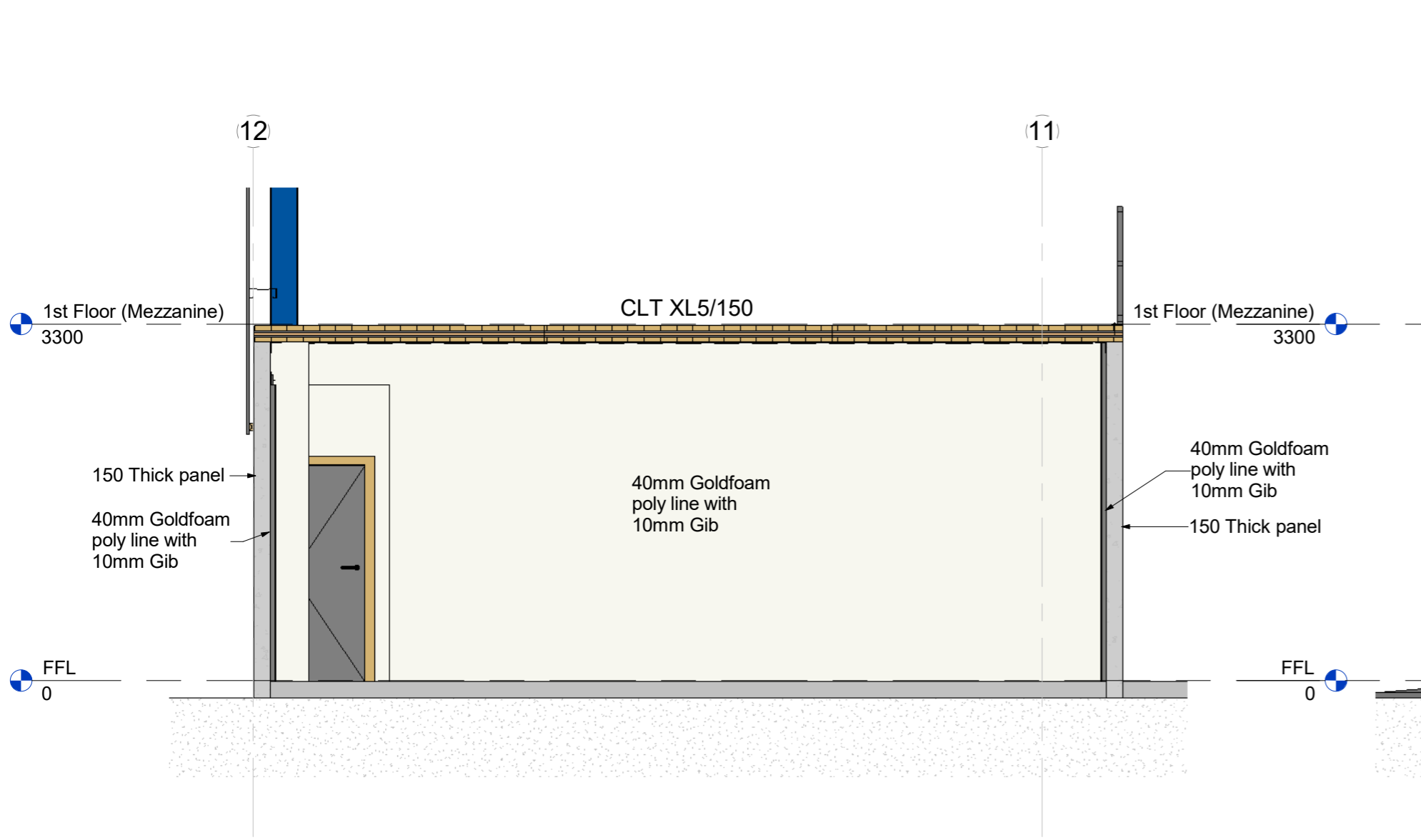
All Drawings property of Thompson Engineering 2002 Ltd



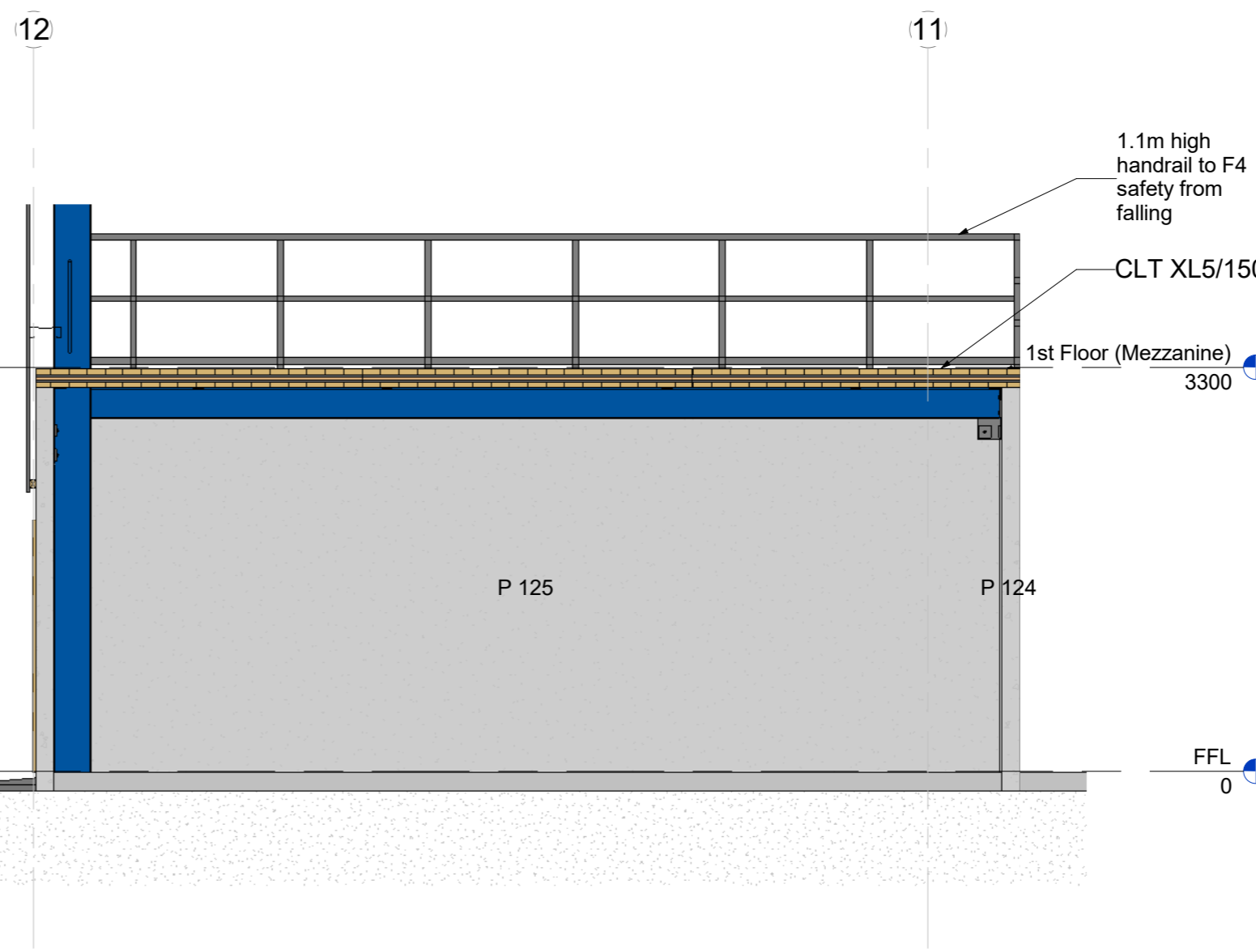
1 SECTION  
A0202 1:50



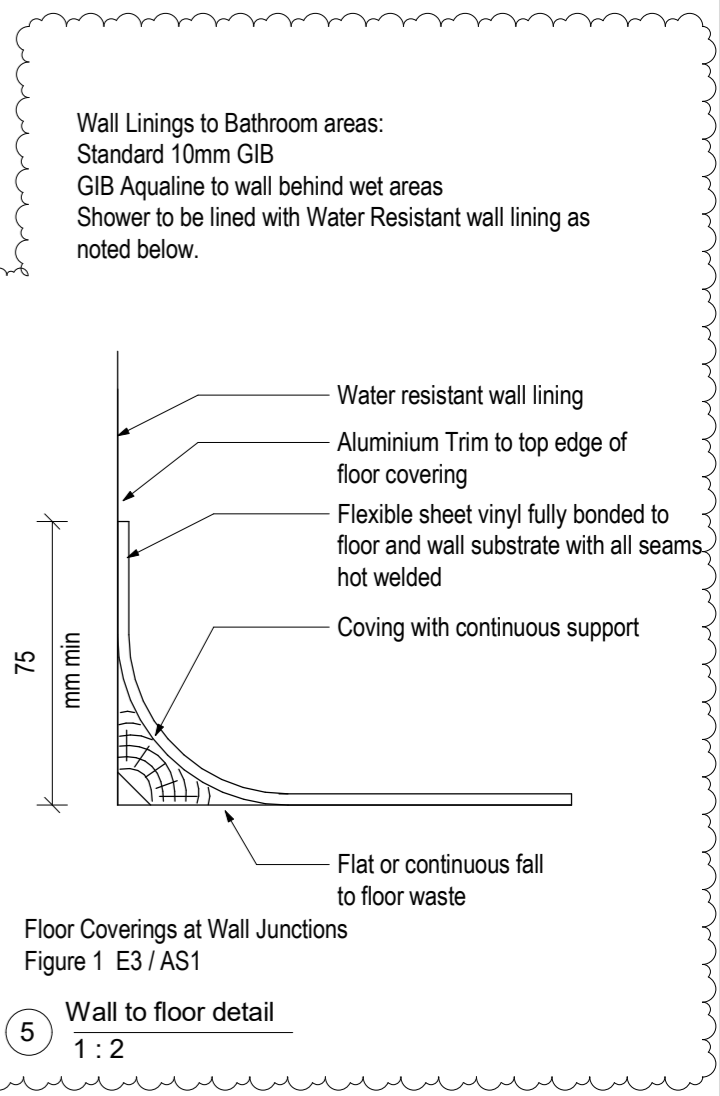
2 SECTION  
A0202 1:50



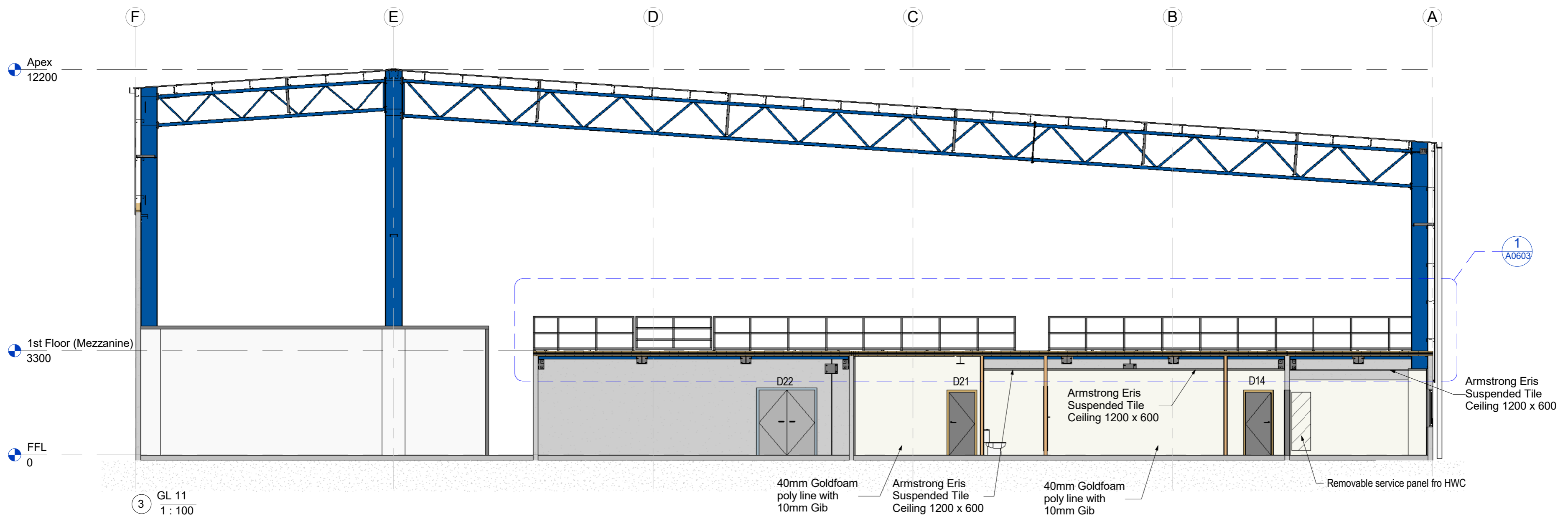
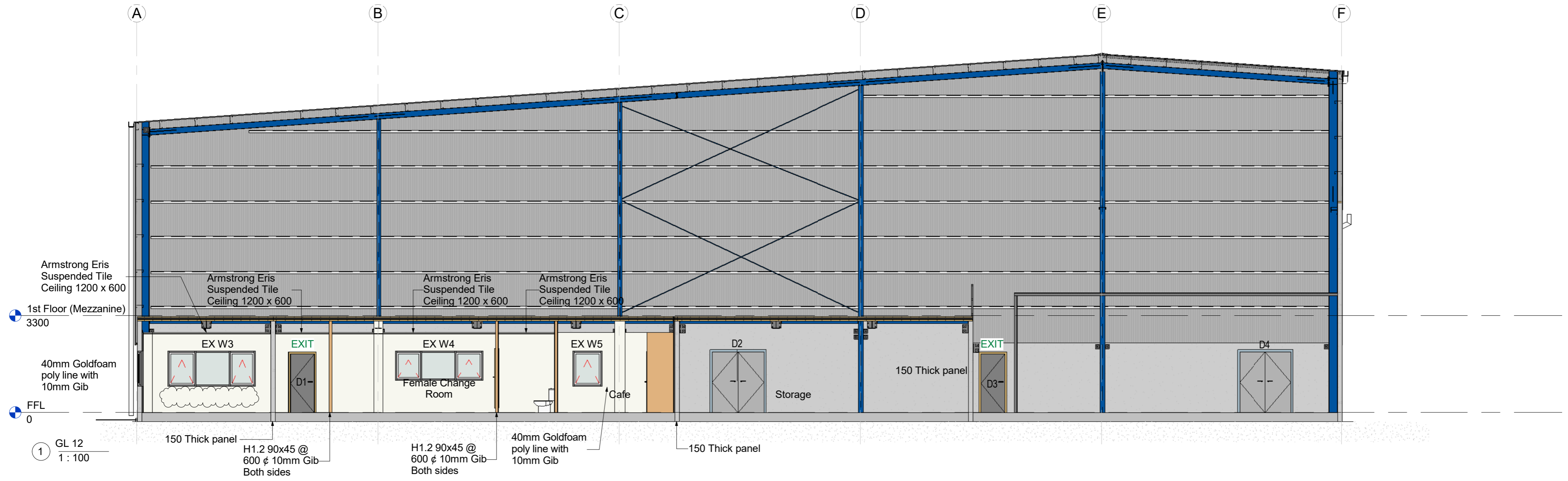
3 SECTION  
A0202 1:50

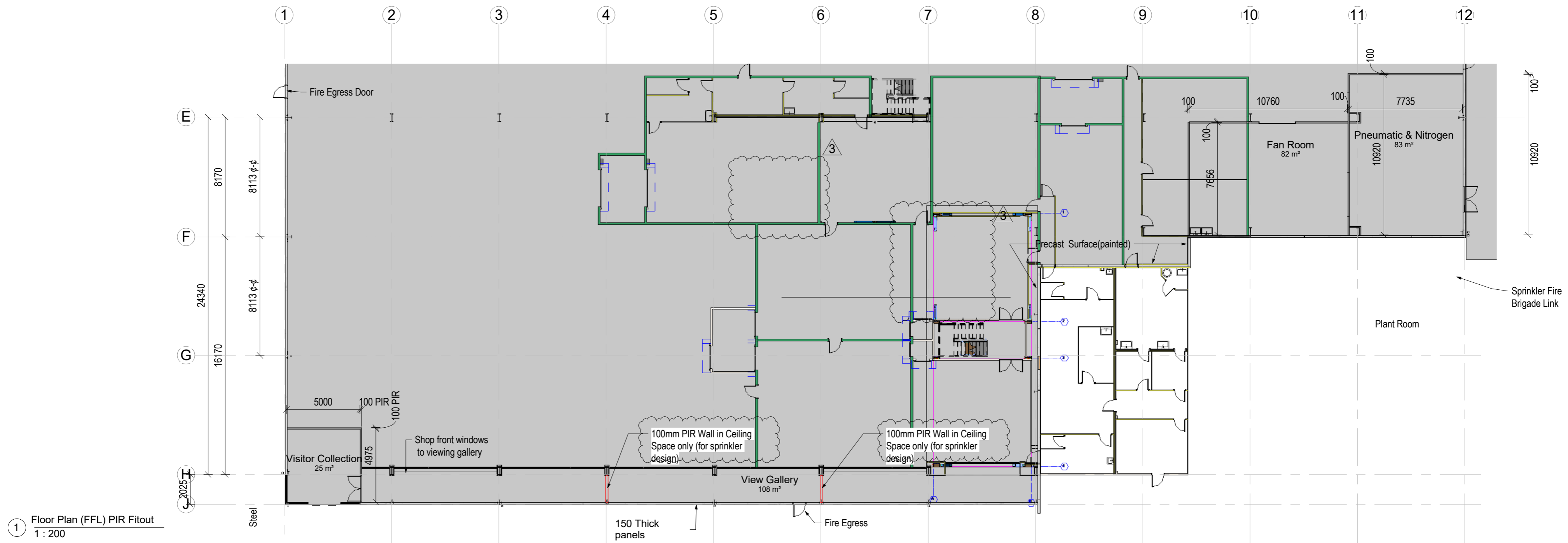


4 SECTION  
A0202 1:50

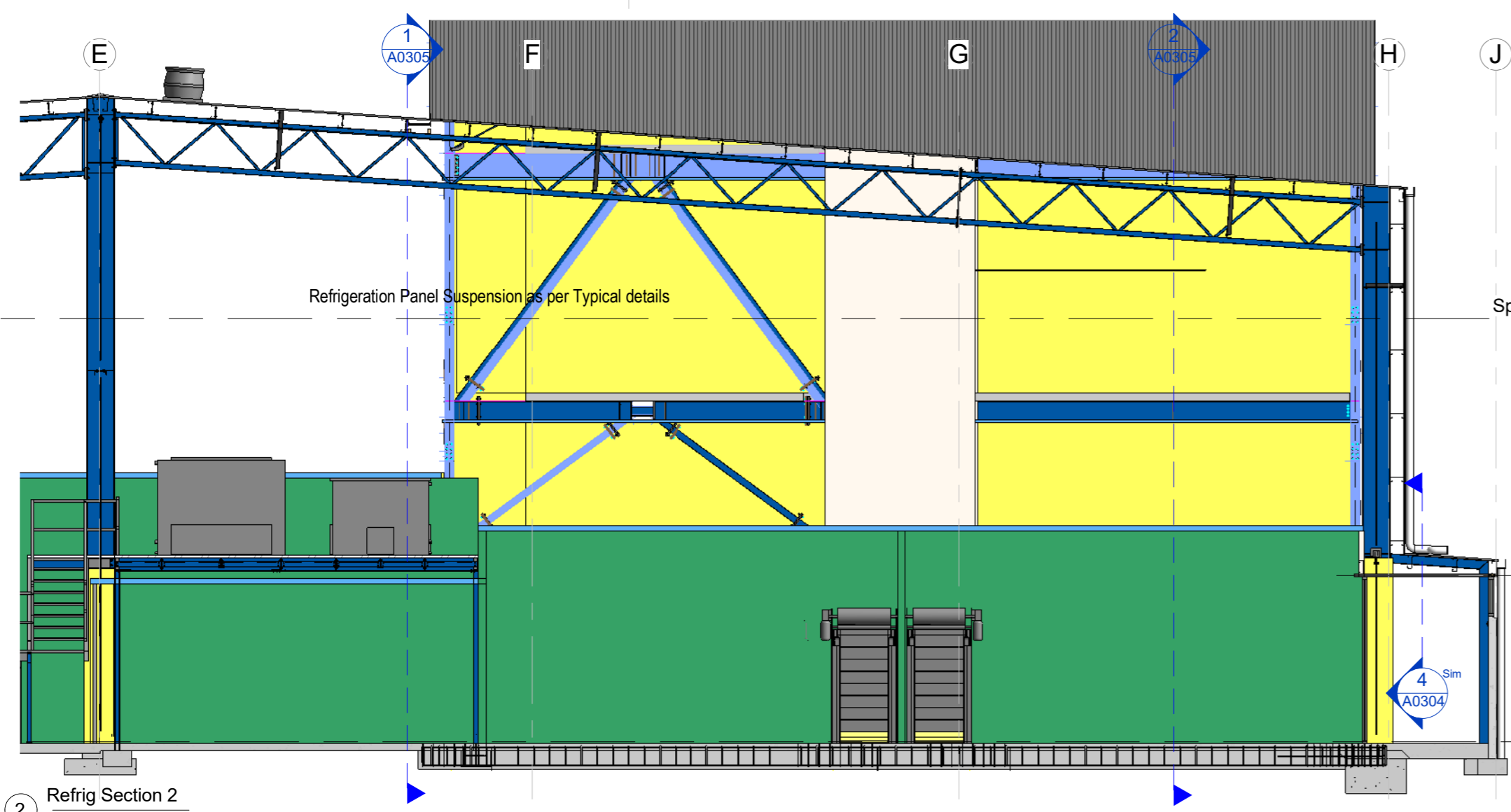


5 Wall to floor detail  
1:2

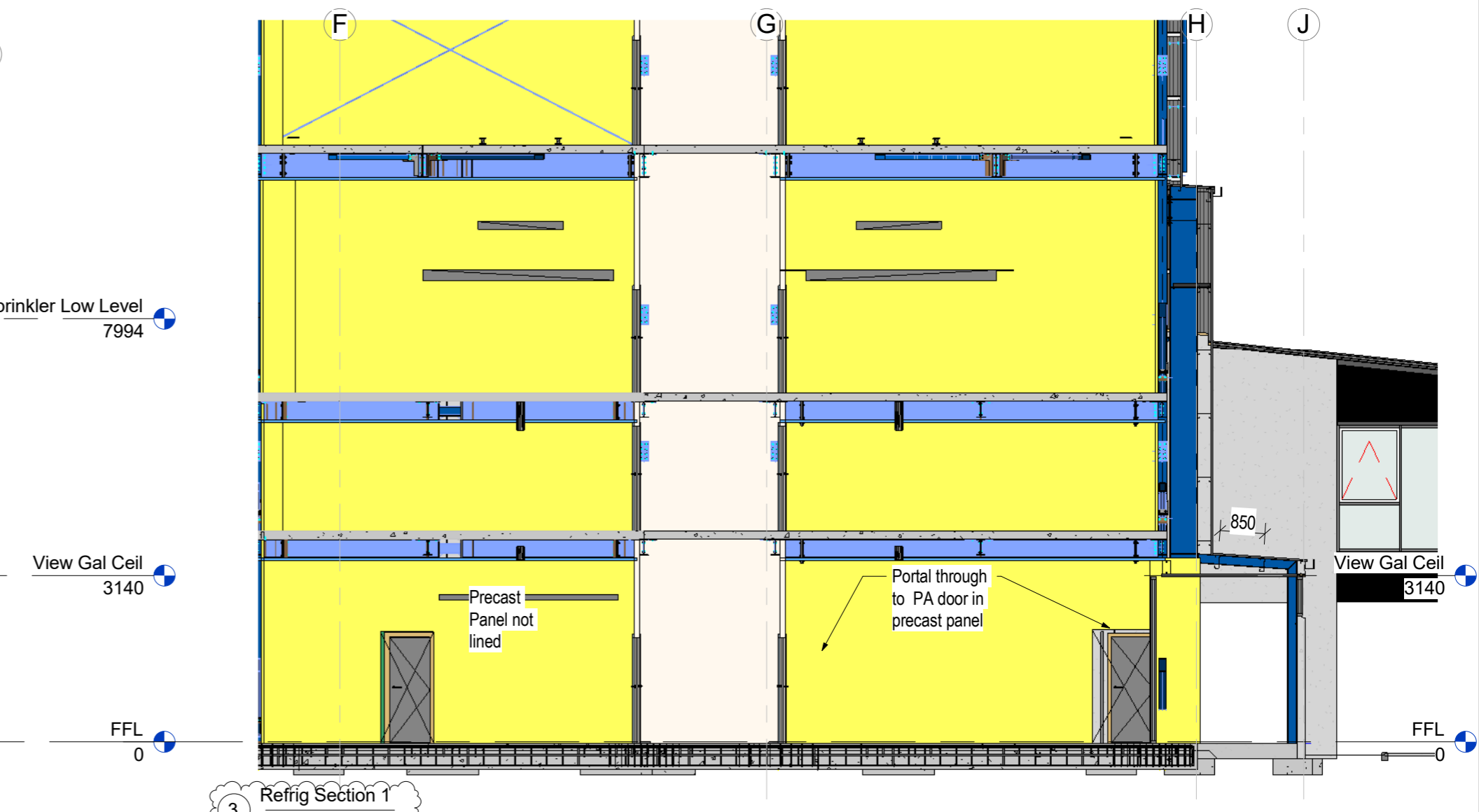




1 Floor Plan (FFL) PIR Fitout  
1 : 200



2 Refrig Section 2  
1 : 100



3 Refrig Section 1  
1 : 100

PROJECT

NZ Dairy Collaborative Group  
Infant Formula Blending Plant

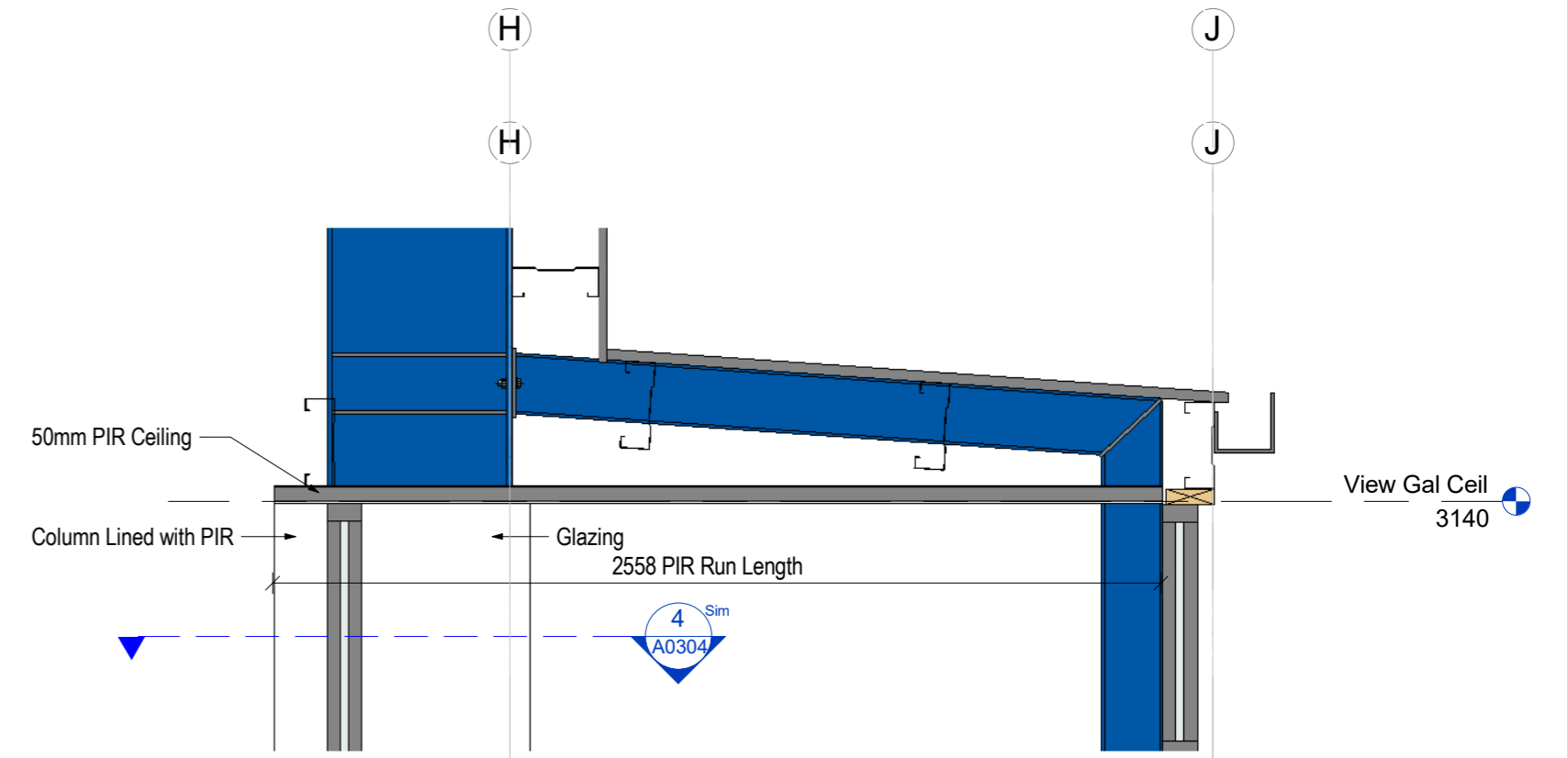
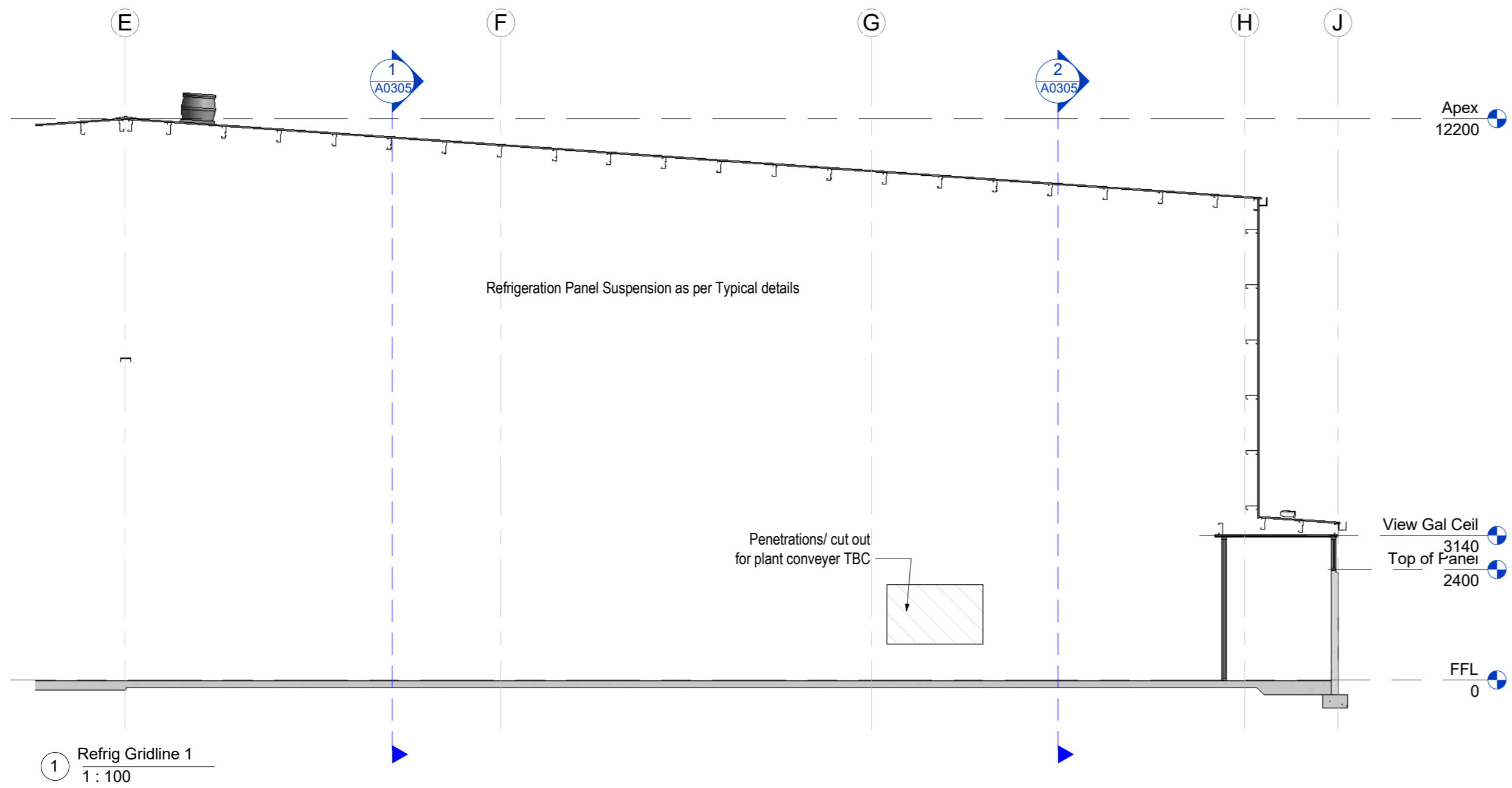
9 Ashford Ave., Ashburton

Arch

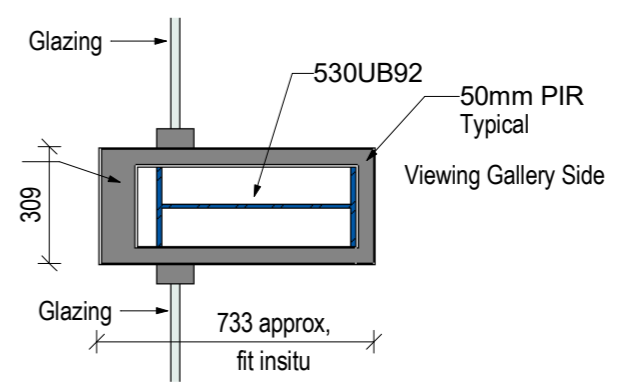
Thompson Engineering 2002 Ltd | PO Box 2081, Washdyke - Timaru | 9b Meadows Road - Timaru  
PH 0800 688 716 | F (03) 688 7168 | www.thompsonengineering.co.nz | design@thompsonengineering.co.nz

Rev#	Amendments	Date	SCALE	As indicated@ A2	JOB #
3	Mods to Operational Fitout	09/02/16			12412
12	Mods to operational fitout	28/07/16			
DRAWN BY B.Holloway			DATE 23/01/16		
APPROVED BY			REV 12		
<b>Refrig Fitout Plan and</b>					<b>A0303</b>
Please note: All dSections: verified on site					Paper size: A2

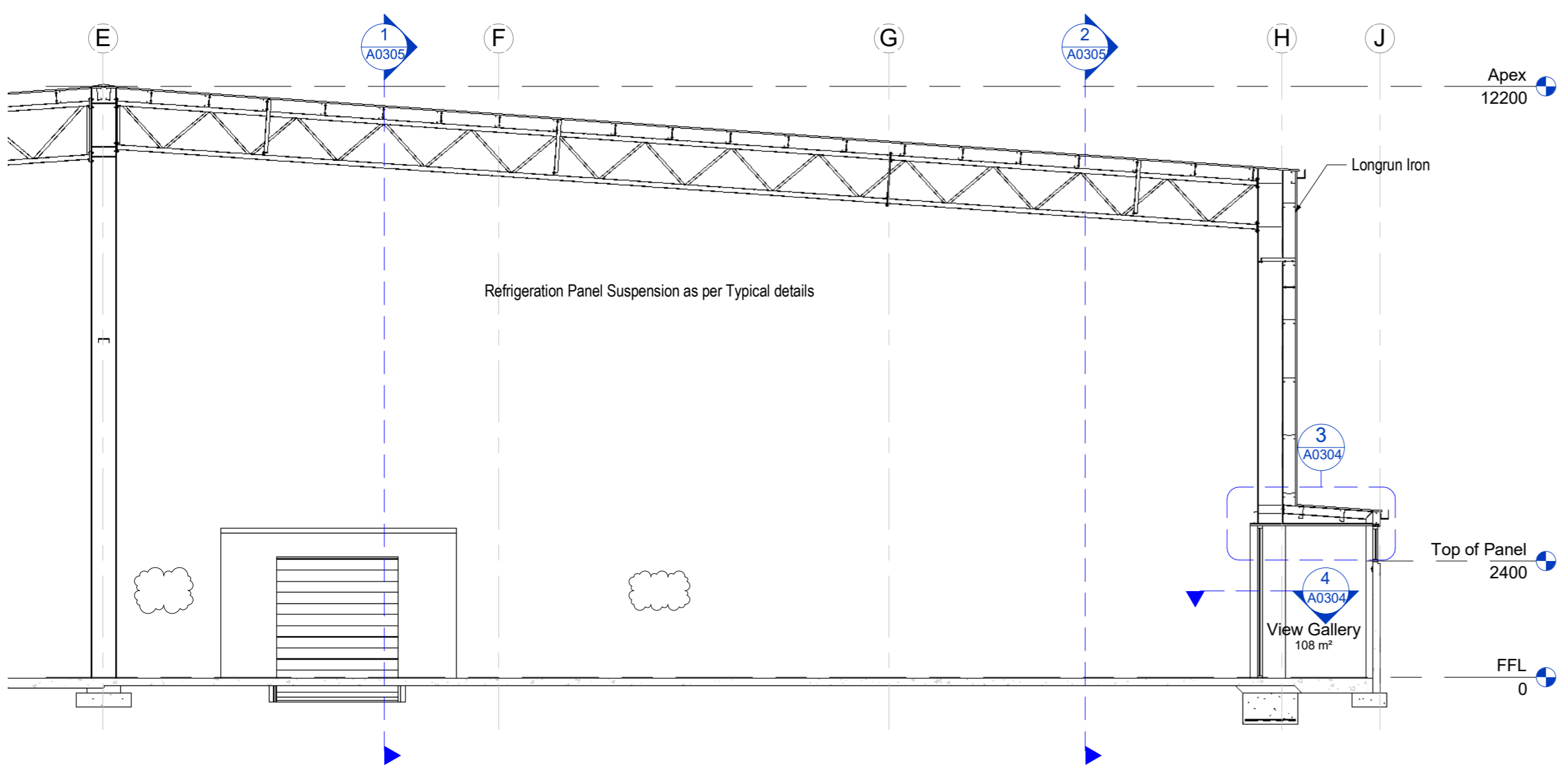
All Drawings property of Thompson Engineering 2002 Ltd



3 Viewing Gallery Ceiling  
1:20

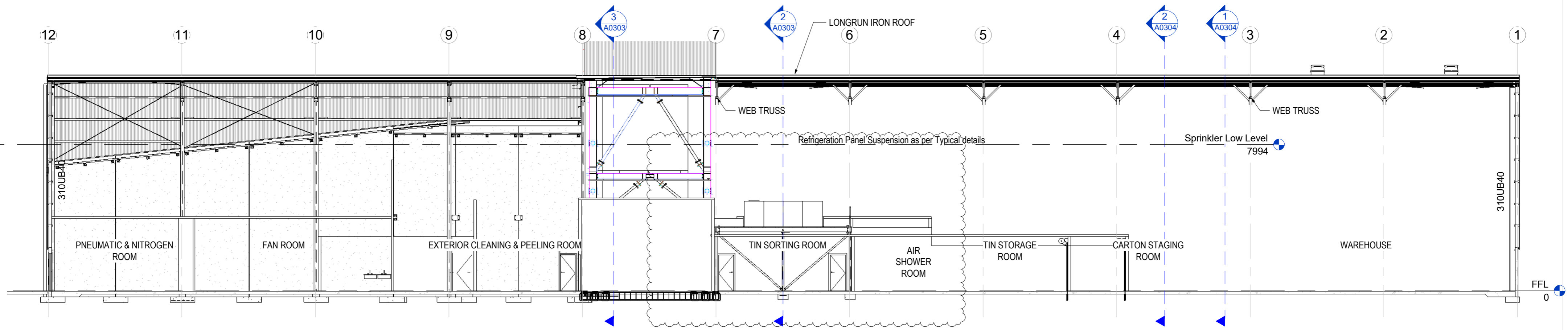


4 530UB92 Lining  
1:20

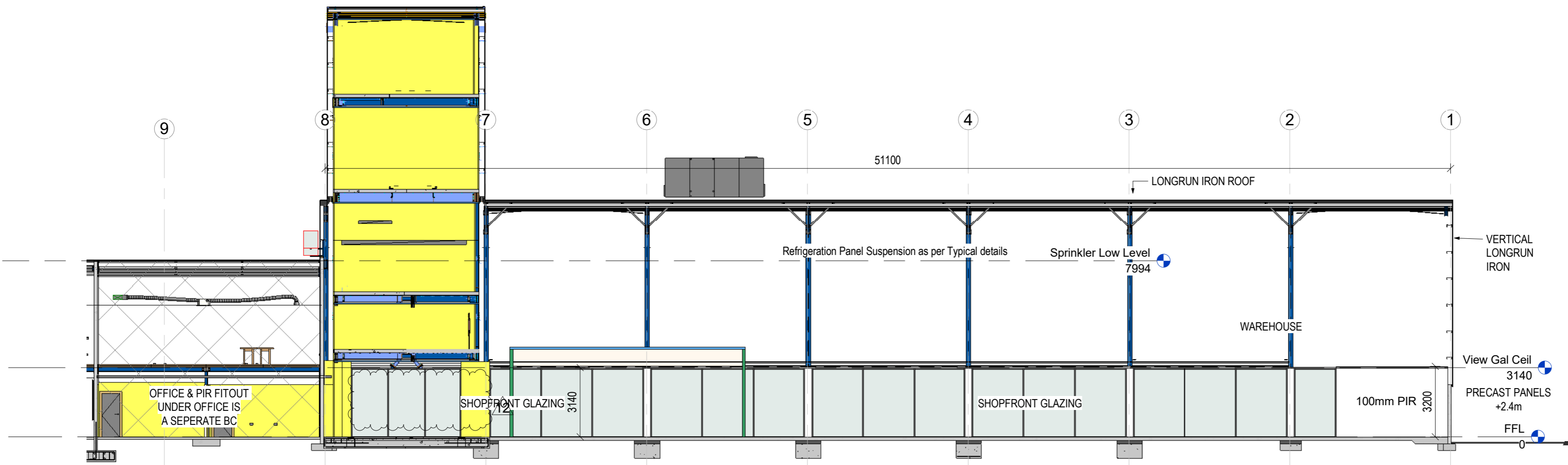


2 Refrig Gridline 4  
1:100

Rev#	Amendments	Date	SCALE	As indicated@ A2	JOB #
3	Mods to Operational Fitout	09/02/16	DRAWN BY	B.Holloway	12412
			APPROVED BY		DATE
					23/01/16
				REV	3
			<b>Refrig Fitout Sections</b>		<b>A0304</b>
			Please note: All dimensions to be verified on site		Paper size: A2

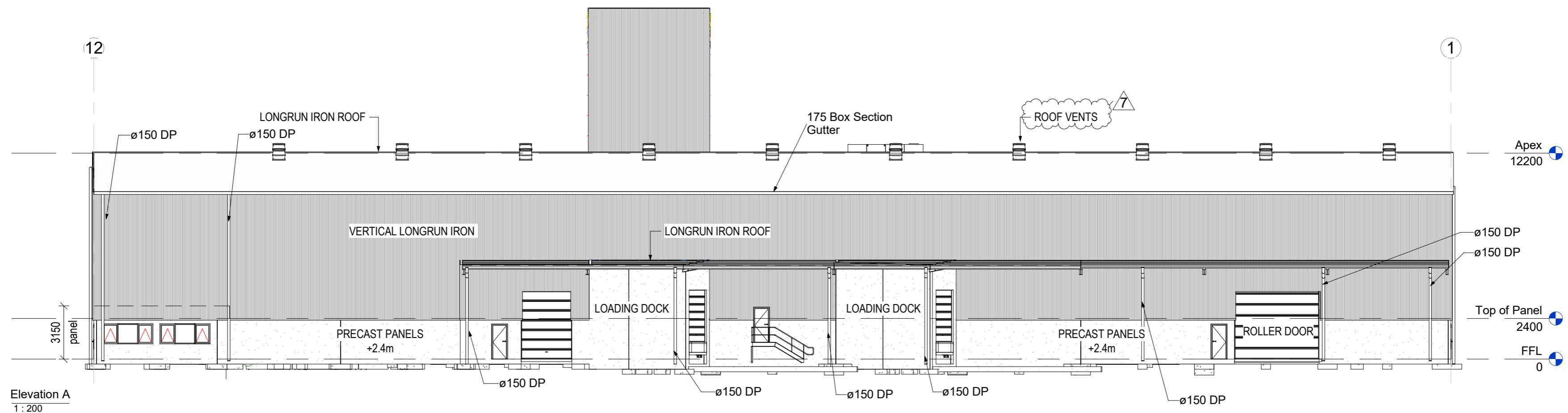


1 Refrig Gridline D  
1 : 150

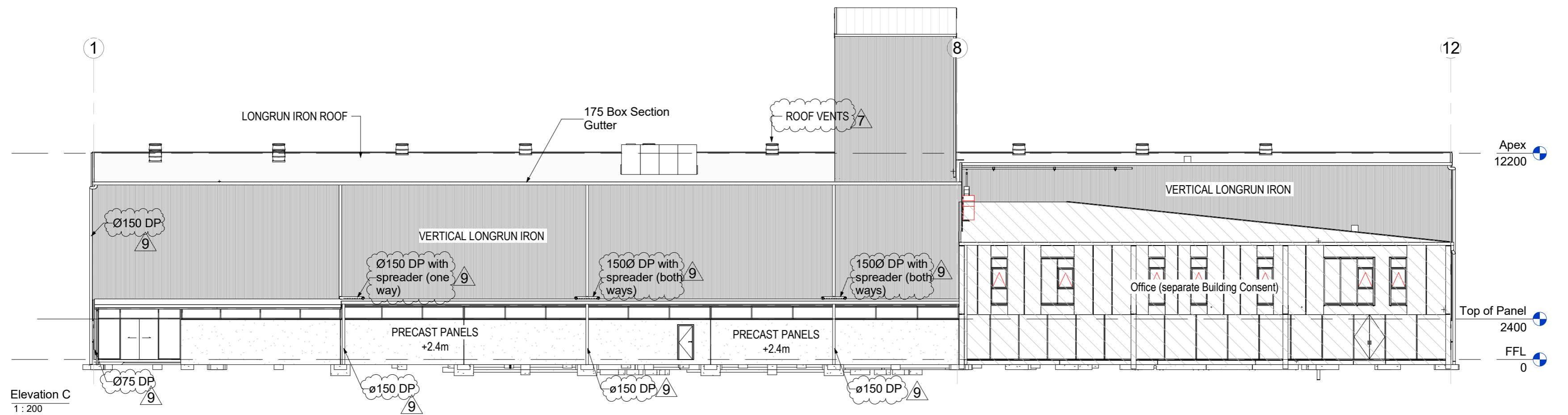


2 Refrig Gridline E  
1 : 150

Rev#	Amendments	Date	SCALE	JOB #
3	Mods to Operational Fitout	09/02/16	1 : 150 @ A2	12412
12	Mods to operational fitout	28/07/16		
DRAWN BY B.Holloway			DATE 23/01/16	
APPROVED BY			REV 12	
<b>Refrig Fitout Sections</b>			<b>A0305</b>	
Please note: All dimensions to be verified on site			Paper size: A2	



Elevation A  
1:200



Elevation C  
1:200

PROJECT

Arch

NZ Dairy Collaborative Group  
Infant Formula Blending Plant

9 Ashford Ave., Ashburton

Rev#

7  
9

Amendments

Changes for sprinkler and electrical services  
Changes to DP's

Date

21/03/16  
02/05/16

SCALE 1:200 @ A2

DRAWN BY M Valentine

APPROVED BY A. Cloake

JOB # 12412

DATE 23/01/16

REV 9

Elevations A and C

A0400

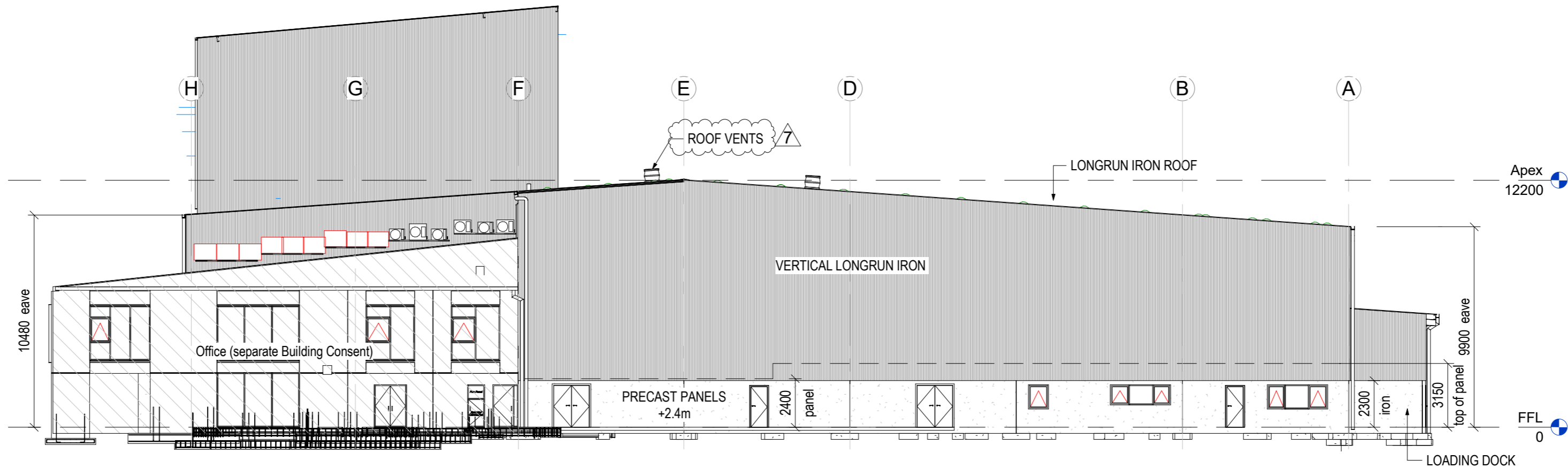
Please note: All dimensions to be verified on site

Paper size: A2

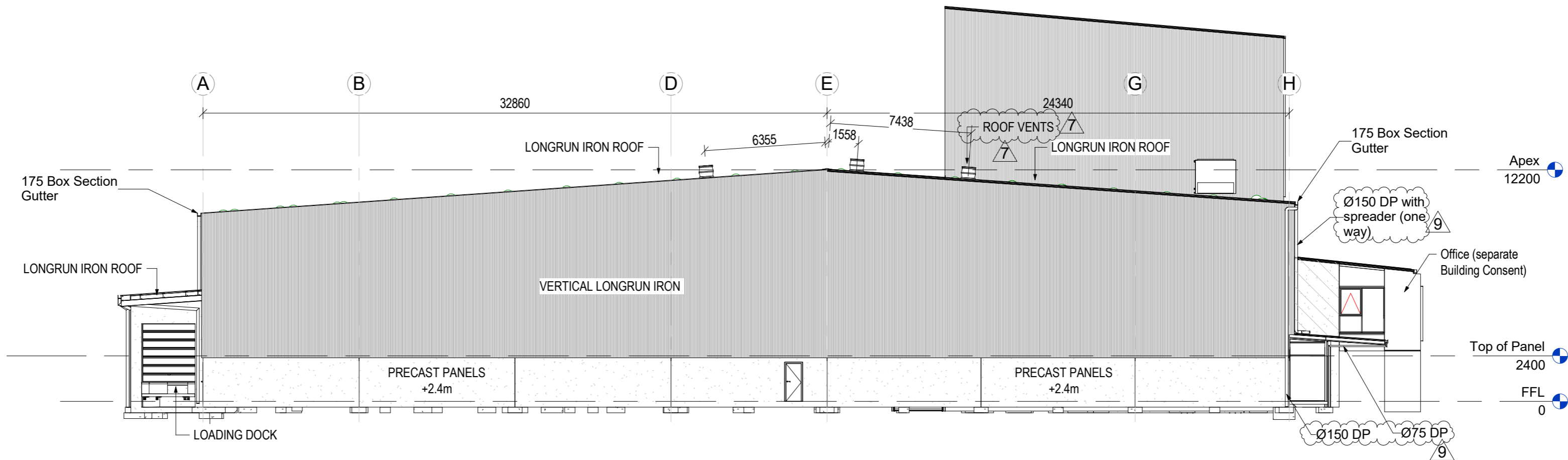


Thompson Engineering 2002 Ltd | PO Box 2081, Washdyke - Timaru | 9b Meadows Road - Timaru  
PH 0800 688 716 | F (03) 688 7168 | www.thompsonengineering.co.nz | design@thompsonengineering.co.nz

All Drawings property of Thompson Engineering 2002 Ltd



Elevation B  
1:200



Elevation D  
1:200

PROJECT

Arch

NZ Dairy Collaborative Group  
Infant Formula Blending Plant

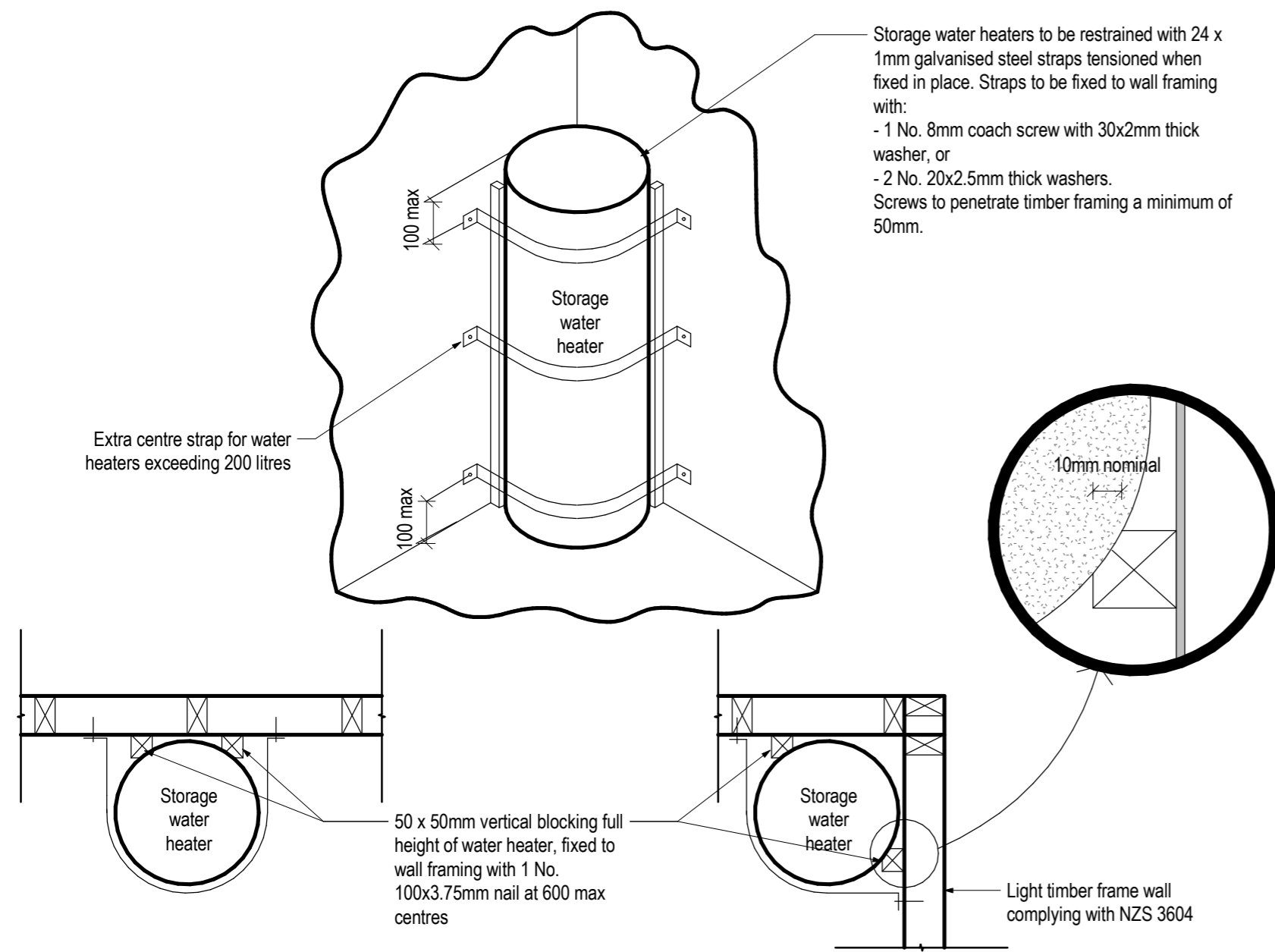
9 Ashford Ave., Ashburton

Rev#	Amendments	Date	SCALE	JOB #
7	Changes for sprinkler and electrical services	21/03/16	1:200 @ A2	12412
9	Changes to DP's	02/05/16		
DRAWN BY M Valentine			DATE 23/01/16	
APPROVED BY A. Cloake			REV 9	
<b>Elevations B and D</b>				<b>A0401</b>
Please note: All dimensions to be verified on site				Paper size: A2



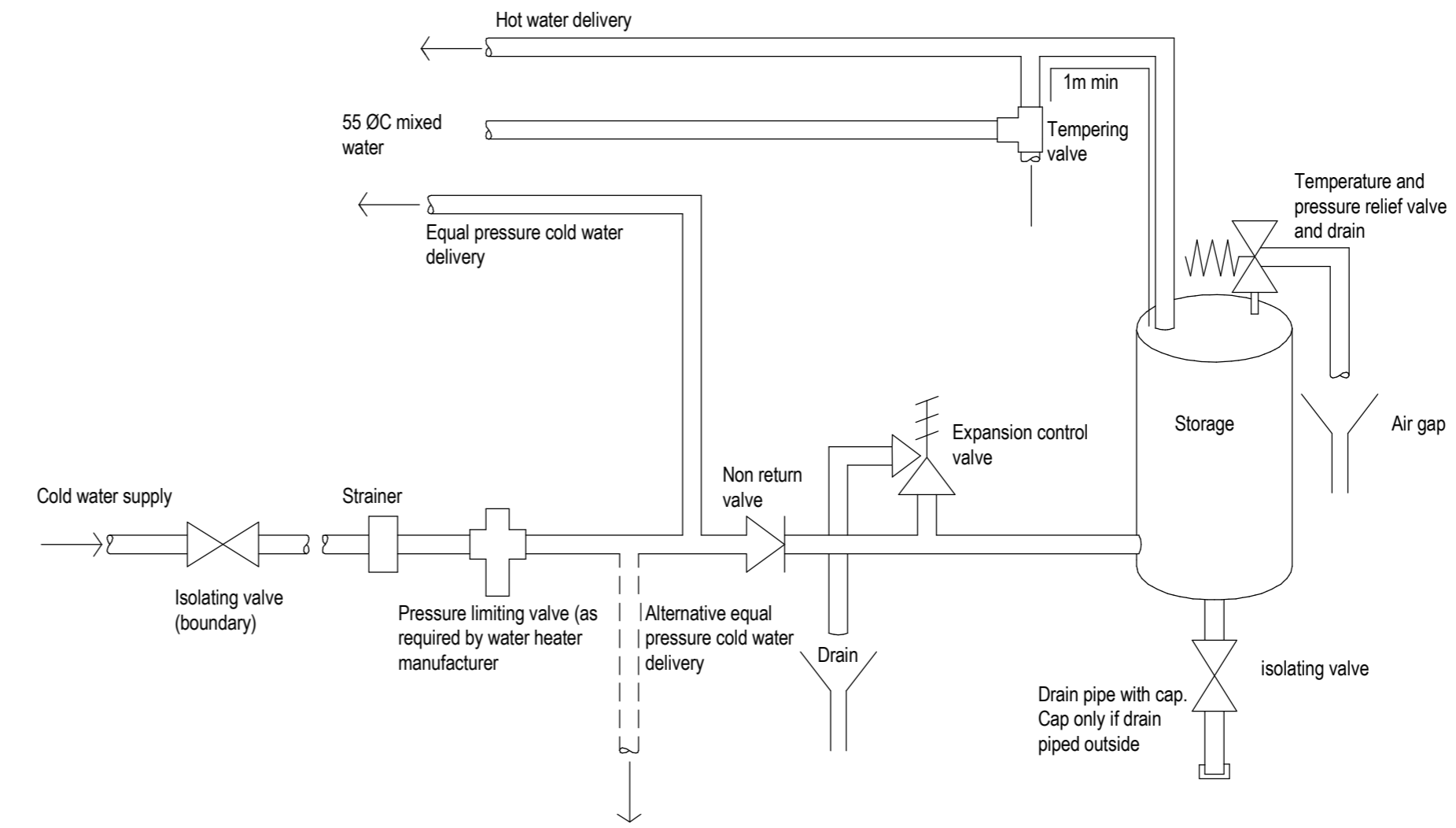
Thompson Engineering 2002 Ltd | PO Box 2081, Washdyke - Timaru | 9b Meadows Road - Timaru  
PH 0800 688 716 | F (03) 688 7168 | www.thompsonengineering.co.nz | design@thompsonengineering.co.nz

All Drawings property of Thompson Engineering 2002 Ltd



① HWC restraint  
1 : 10

② HWC (unvented)  
1 : 10



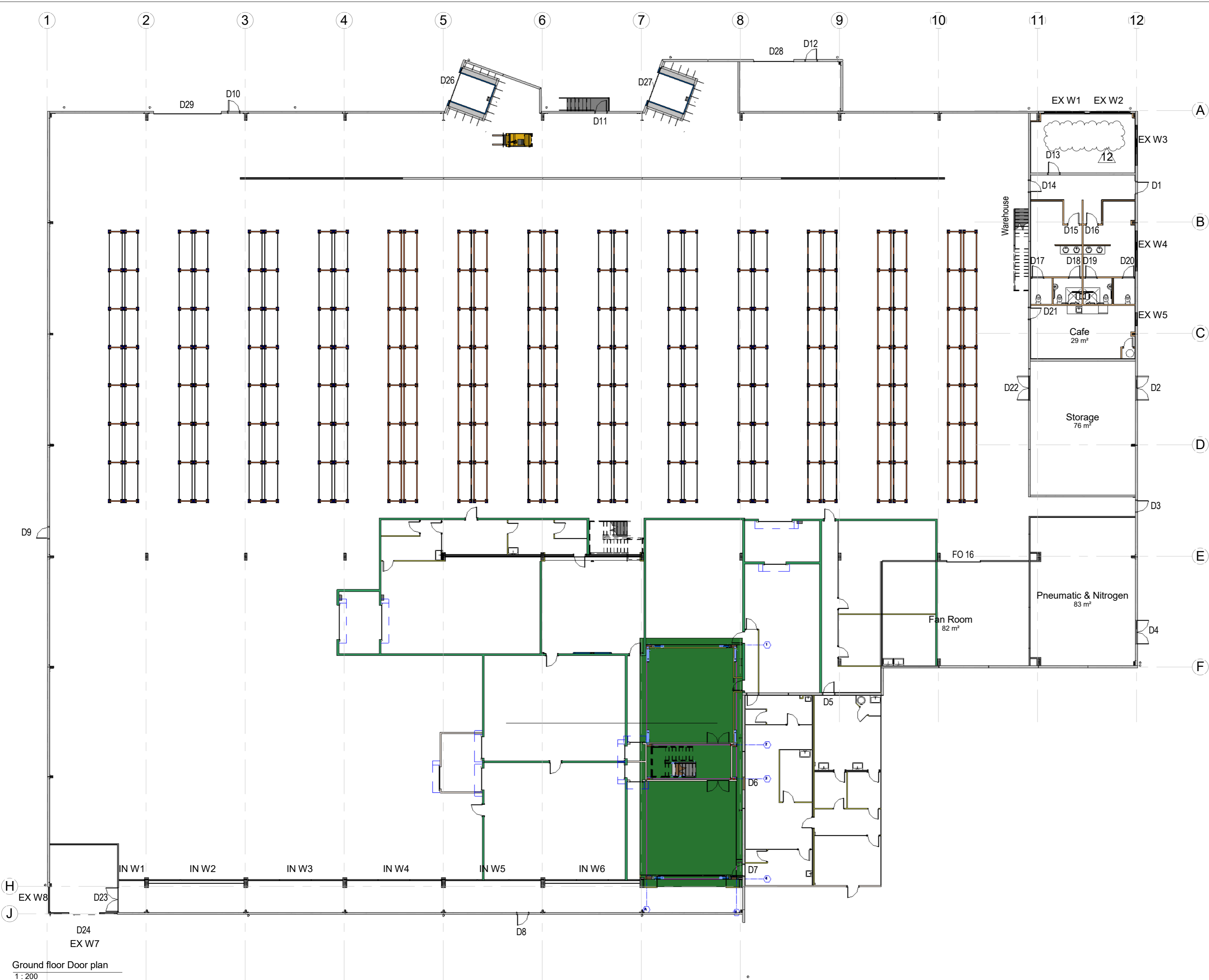
PLUMBING LEGEND		
FIXTURE	PIPE SIZE	GRADIENT
WC	100Ø	1:60
Vanities	65Ø	1:40
Wash Trough	40Ø	1:40
Shower	40Ø	1:40
Sink	65Ø	1:40
Urinal	50Ø	1:20
Foul Drain	100Ø	1:60
Stormwater	as per plan	as per plan

- - - sewer  
 - - - water  
 - - - stormwater

All fixtures to be back vented or to approval of inspector on-site

Internal plumbing to ASNZ 3500.2.2003

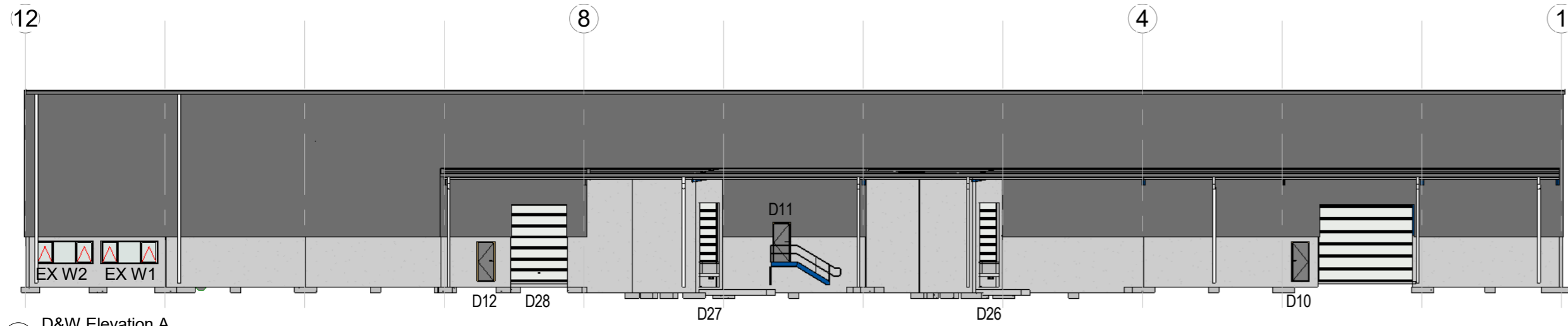
Refer to TM Consultants civil plans for plumbing and drainage for details



Ground floor Door plan  
1:200

Door Schedule			
Mark	Type	Width	Rough Height
D1	810 leaf in precast panel External	810	2000
D2	810 Double leaf in precast panel External	1760	2070
D3	810 leaf in precast panel External	810	2000
D4	810 Double leaf in precast panel External	1760	2070
D5	810 leaf in precast panel External	810	2000
D6	945 x 2100	945	2100
D7	810 leaf in precast panel External	810	2000
D8	810 leaf in precast panel External	810	2000
D9	810 leaf in precast panel External	810	2000
D10	810 leaf in precast panel External	810	2000
D11	810 leaf in precast panel External	810	2000
D12	810 leaf in precast panel External	810	2000
D13	810 leaf in precast panel Internal	810	2000
D14	810 leaf in precast panel Internal	810	2000
D15	810x1980 leaf in timber frame	810	1980
D16	810x1980 leaf in timber frame	810	1980
D17	810x1980 leaf in timber frame	810	1980
D18	810x1980 leaf in timber frame	810	1980
D19	810x1980 leaf in timber frame	810	1980
D20	810x1980 leaf in timber frame	810	1980
D21	810 leaf in precast panel Internal	810	2000
D22	810 Double leaf in precast panel Internal	1760	2070
D23	810 Double leaf in freezer panel	1760	2070
D24	Double Doors (Sliding)	2225	2400
D26	3.1m h x 3m w Roller Door(3p)	3000	3100
D27	3.1m h x 3m w Roller Door(3p)	3000	3100
D28	4m h x 3m w Roller Door(3p)	3000	4000
D29	4.5m h x 5m w Roller Door(3p)	5000	4500

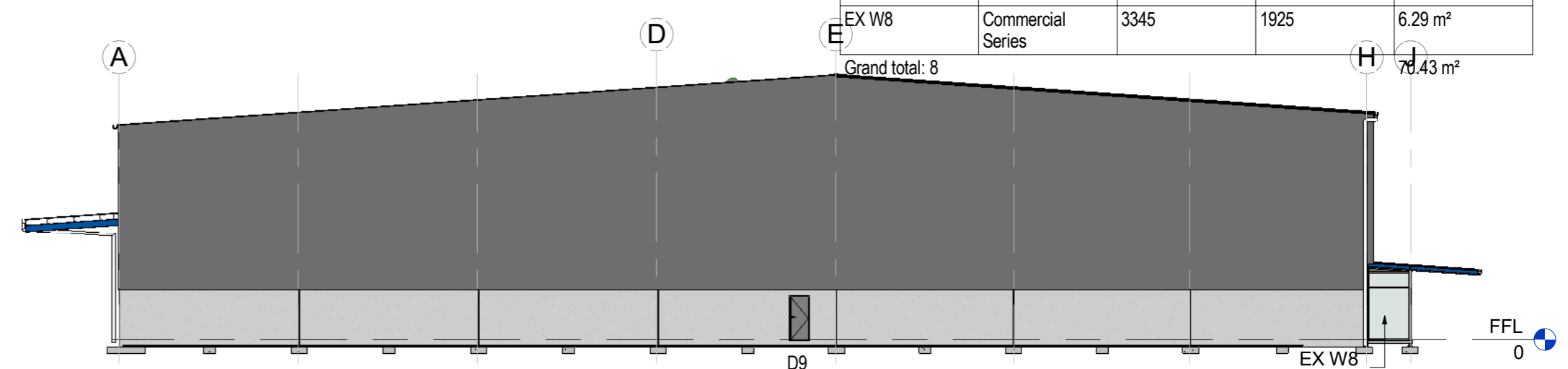
Refrig Fitout Door Schedule			
Mark	Type	Width	Rough Height
FO 16	2.7m h x 2.5m w Roller Door(3p)	2500	2700



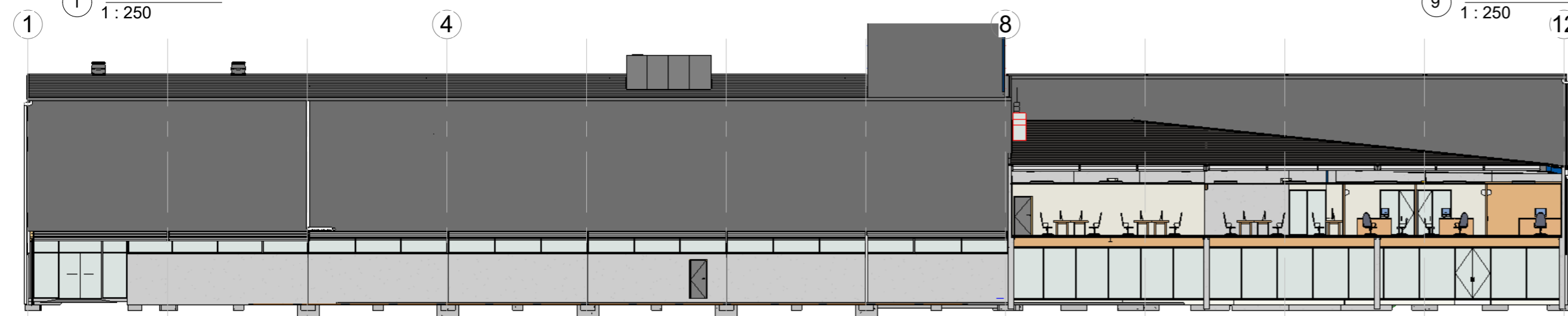
7 D&W Elevation A  
1 : 250



1 D&W Elevation B  
1 : 250



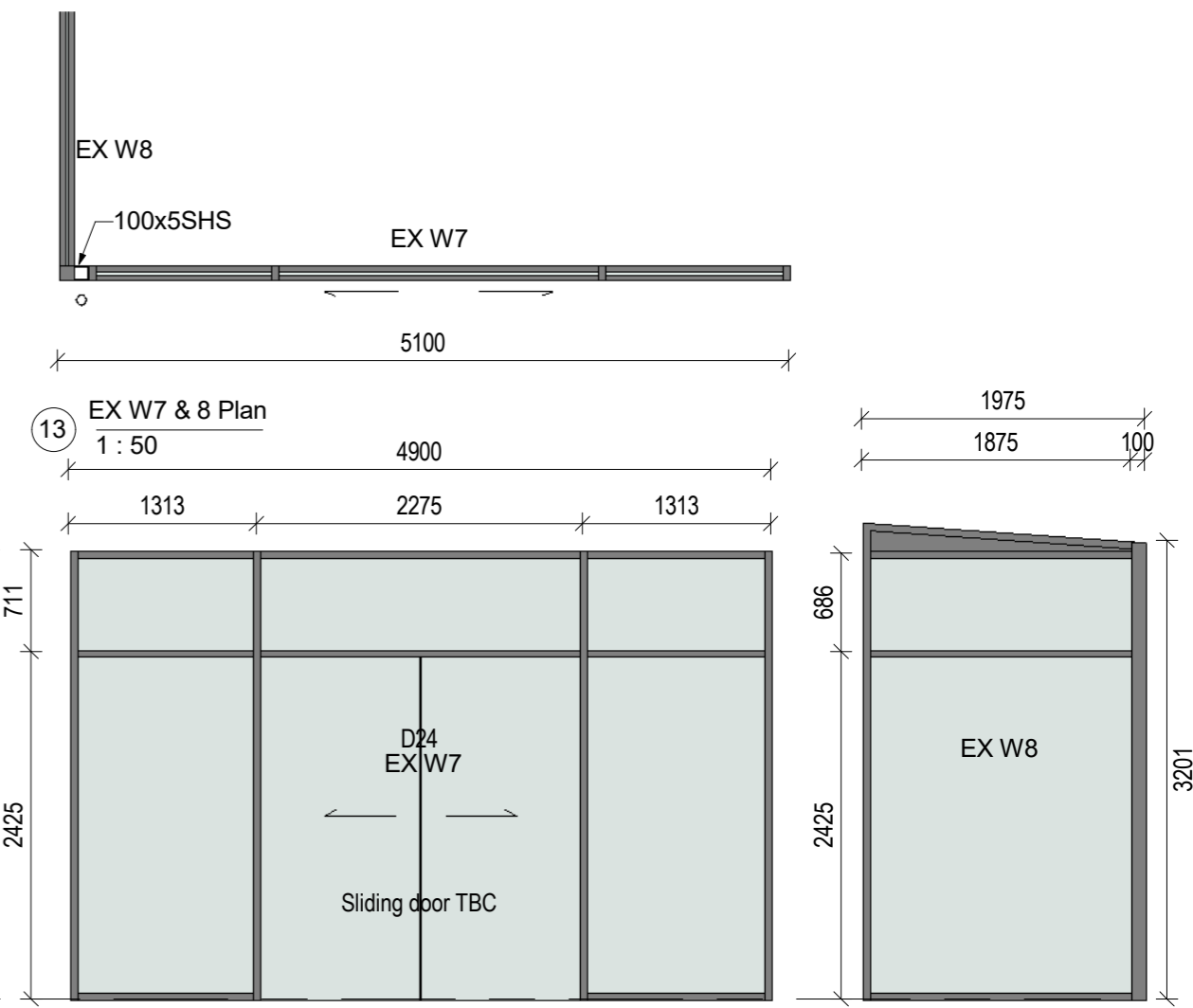
9 D&W Elevation D  
1 : 250



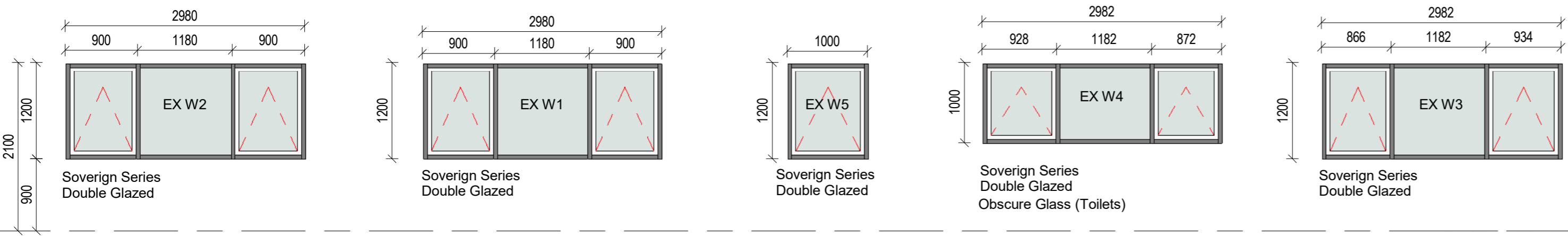
8 D&W Elevation C  
1 : 250

**D & W Schedule NOTE:**  
The main contractor is to ensure all door and window opening dimensions are checked prior to the manufacturer of any doors or windows, refer to the floor plans and elevations for positions. Glazing within 1500mm above the FFL is to be grade A safety glass in accordance with table 3.1, glazing greater than 1500 of the floor level to be annealed glass NZS 4223:part 4 & part 3

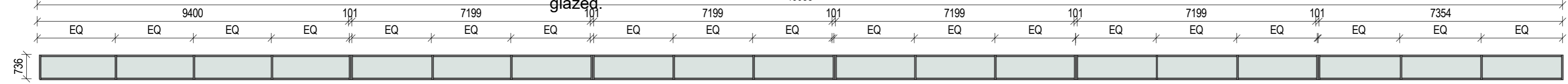
External Window Schedule				
Mark	Type	Unconnected Height	Length	Area
EX W1	Sovereign Series Double Glazed	1200	2980	3.58 m <sup>2</sup>
EX W2	Sovereign Series Double Glazed	1200	2980	3.58 m <sup>2</sup>
EX W3	Sovereign Series Double Glazed	1200	2982	3.58 m <sup>2</sup>
EX W4	Sovereign Series Double Glazed	1000	2982	2.98 m <sup>2</sup>
EX W5	Sovereign Series Double Glazed	1200	1000	1.2 m <sup>2</sup>
EX W6	Commercial Series	736	46080	33.86 m <sup>2</sup>
EX W7	Commercial Series	3136	4950	15.37 m <sup>2</sup>
EX W8	Commercial Series	3345	1925	6.29 m <sup>2</sup>
Grand total: 8				78.43 m <sup>2</sup>



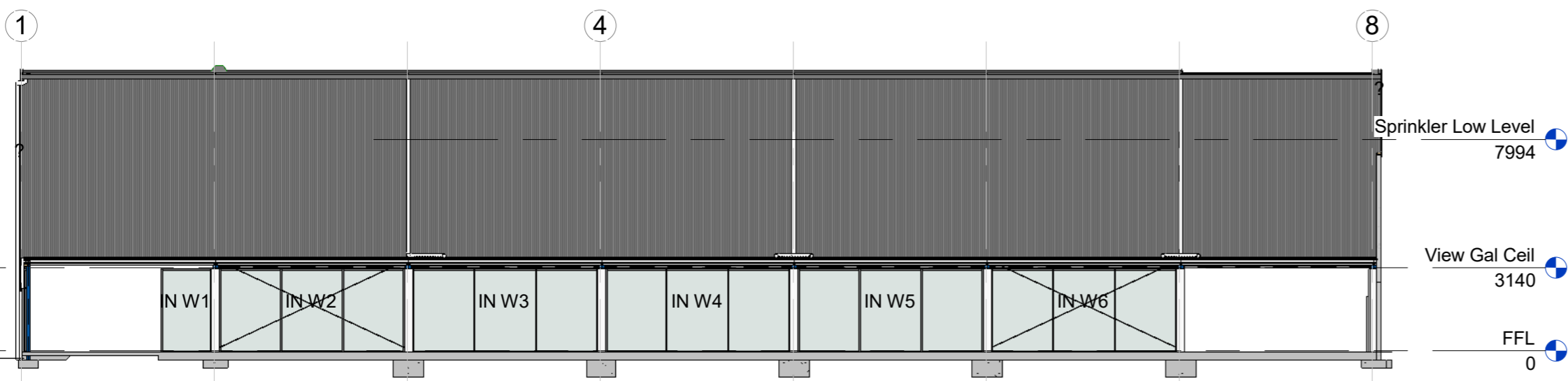
13 EX W7 & 8 Plan  
1 : 50



NOTE: All external joinery to be double glazed.



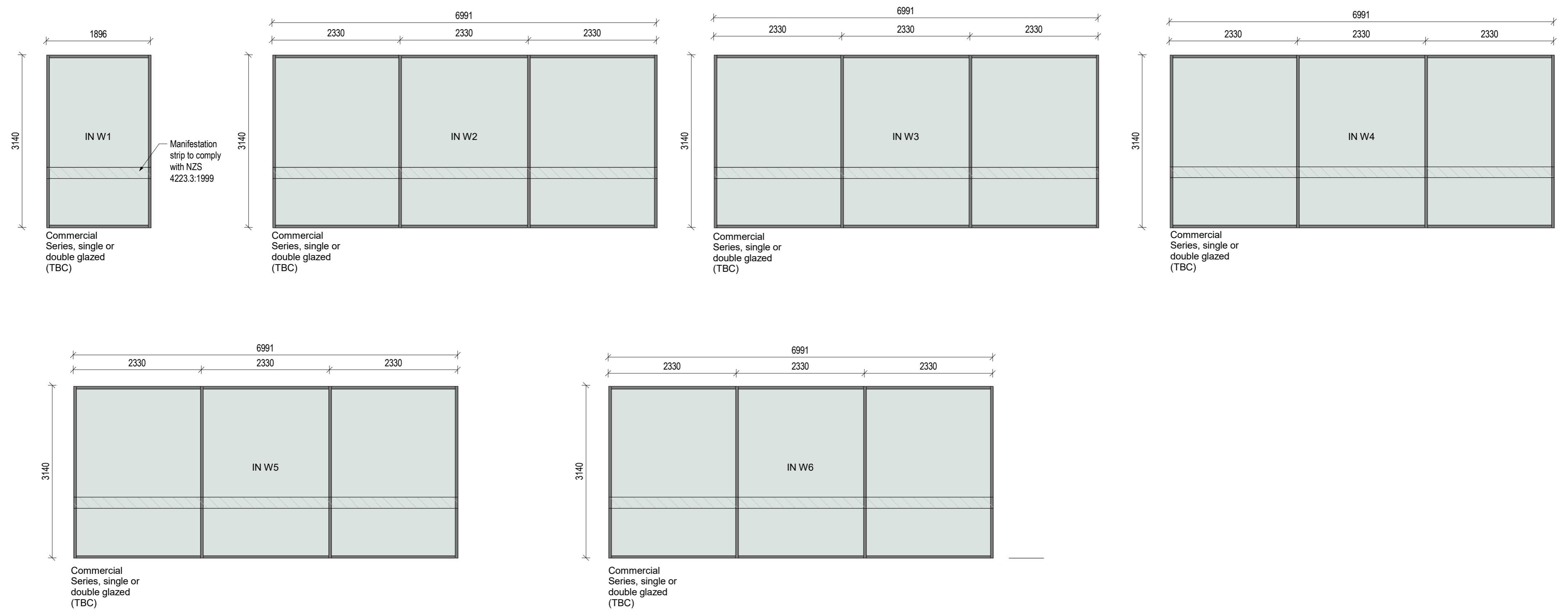
10 EX W6  
1 : 100

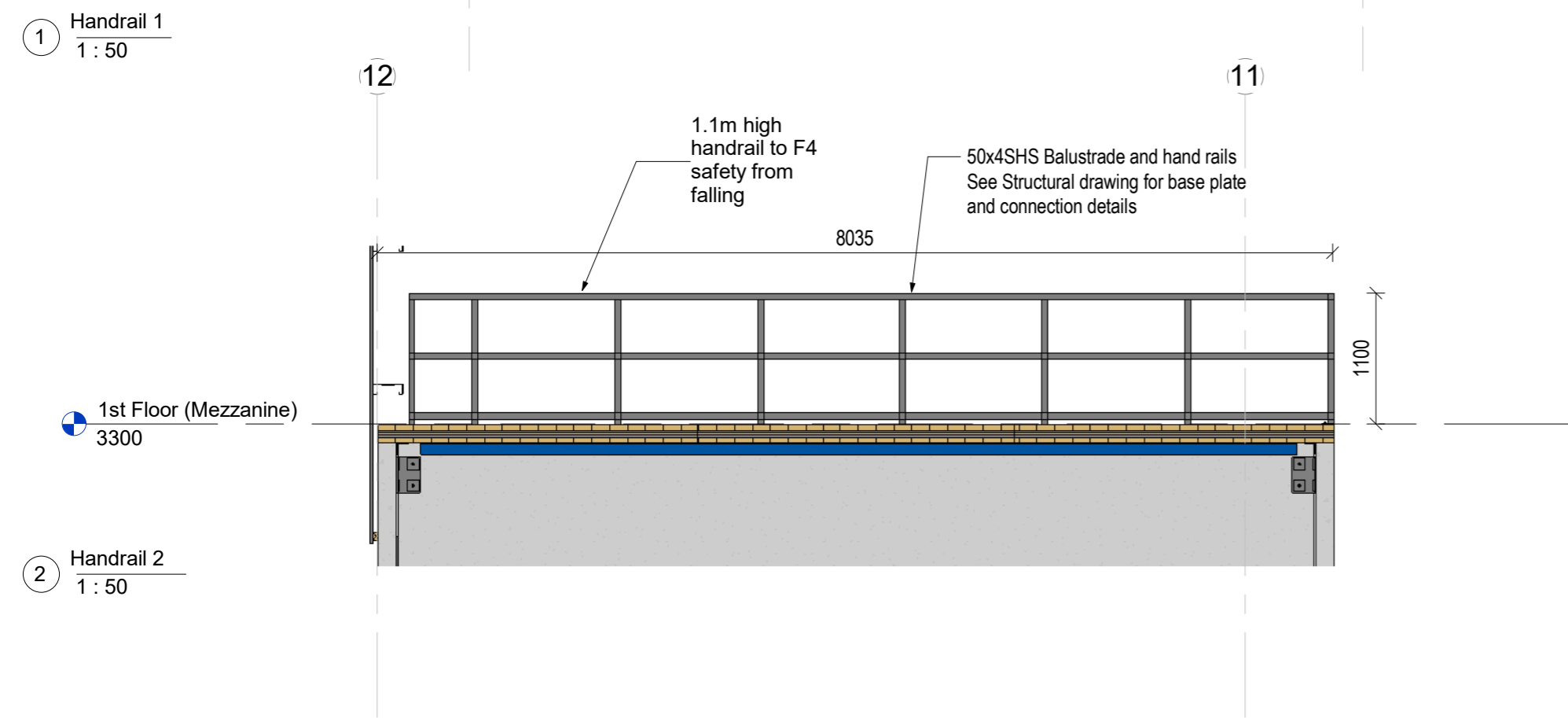
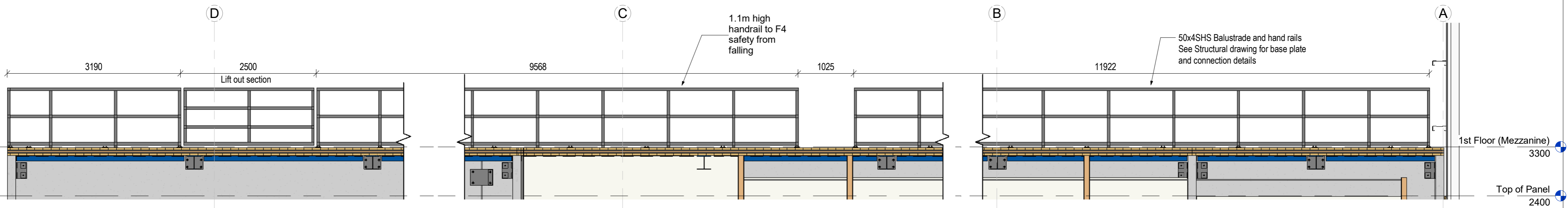


1 Internal window elevations  
1 : 200

**D & W Schedule NOTE:**  
The main contractor is to ensure all door and window opening dimensions are checked prior to the manufacturer of any doors or windows, refer to the floor plans and elevations for positions. Glazing within 1500mm above the FFL is to be grade A safety glass in accordance with table 3.1, glazing greater than 1500 of the floor level to be annealed glass NZS 4223:part 4 & part 3

Internal Window Schedule				
Mark	Type	Unconnected Height	Length	Area
IN W1	Commercial Series single glazed	3140	1971	5.95 m <sup>2</sup>
IN W2	Commercial Series single glazed	3140	7041	21.95 m <sup>2</sup>
IN W3	Commercial Series single glazed	3140	7041	21.95 m <sup>2</sup>
IN W4	Commercial Series single glazed	3140	7041	21.95 m <sup>2</sup>
IN W5	Commercial Series single glazed	3140	7041	21.95 m <sup>2</sup>
IN W6	Commercial Series single glazed	3140	7041	21.95 m <sup>2</sup>
Grand total: 6				115.71 m <sup>2</sup>





① Handrail 1  
1 : 50

② Handrail 2  
1 : 50

PROJECT

Arch

NZ Dairy Collaborative Group  
Infant Formula Blending Plant

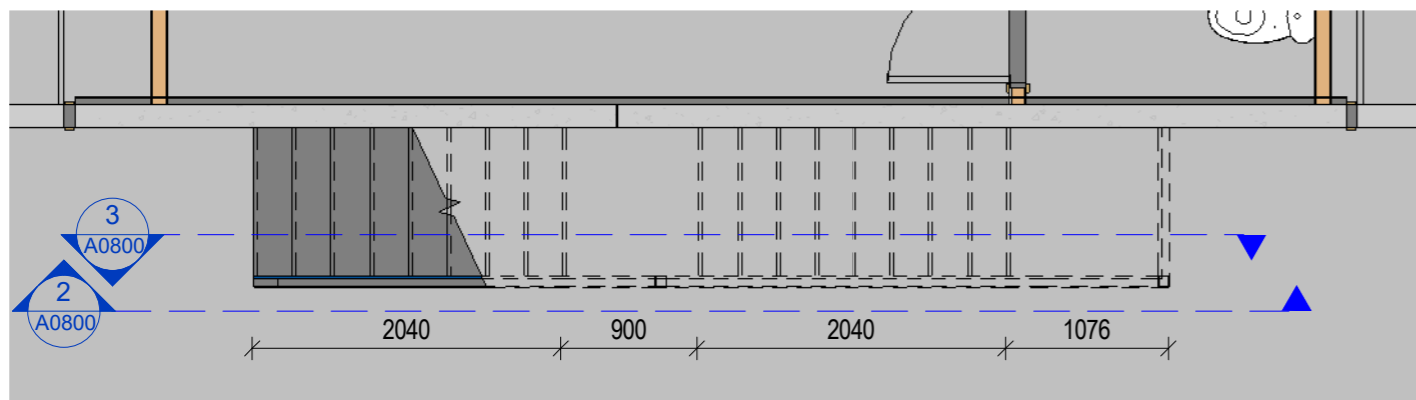
9 Ashford Ave., Ashburton

All Drawings property of Thompson Engineering 2002 Ltd

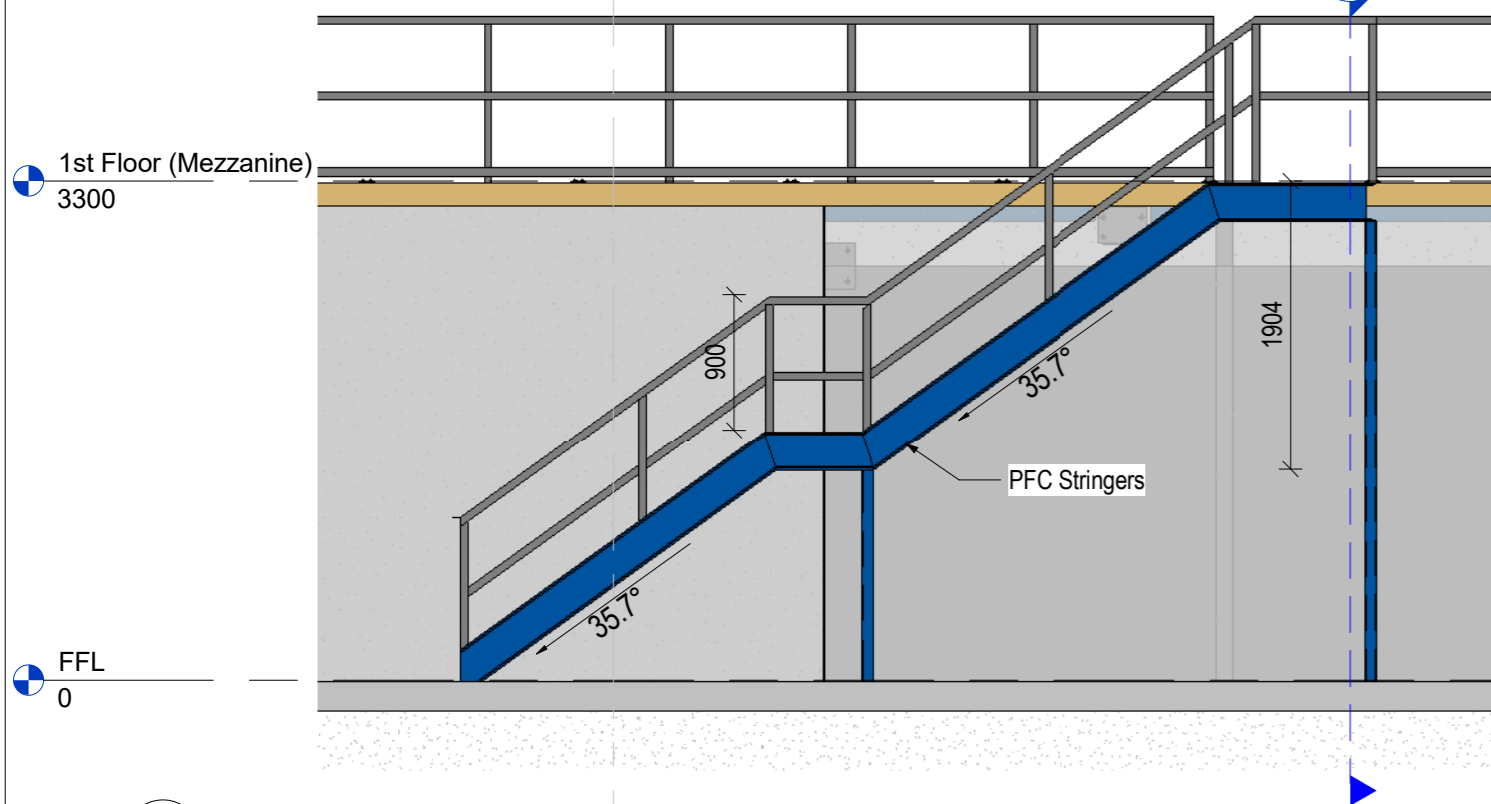
Rev#	Amendments	Date	SCALE	JOB #
			1 : 50 @ A2	12412
			DRAWN BY C. White	DATE 23/01/16
			APPROVED BY A. Cloake	REV
			<b>Balustrades</b>	<b>A0603</b>
Please note: All dimensions to be verified on site				Paper size: A2



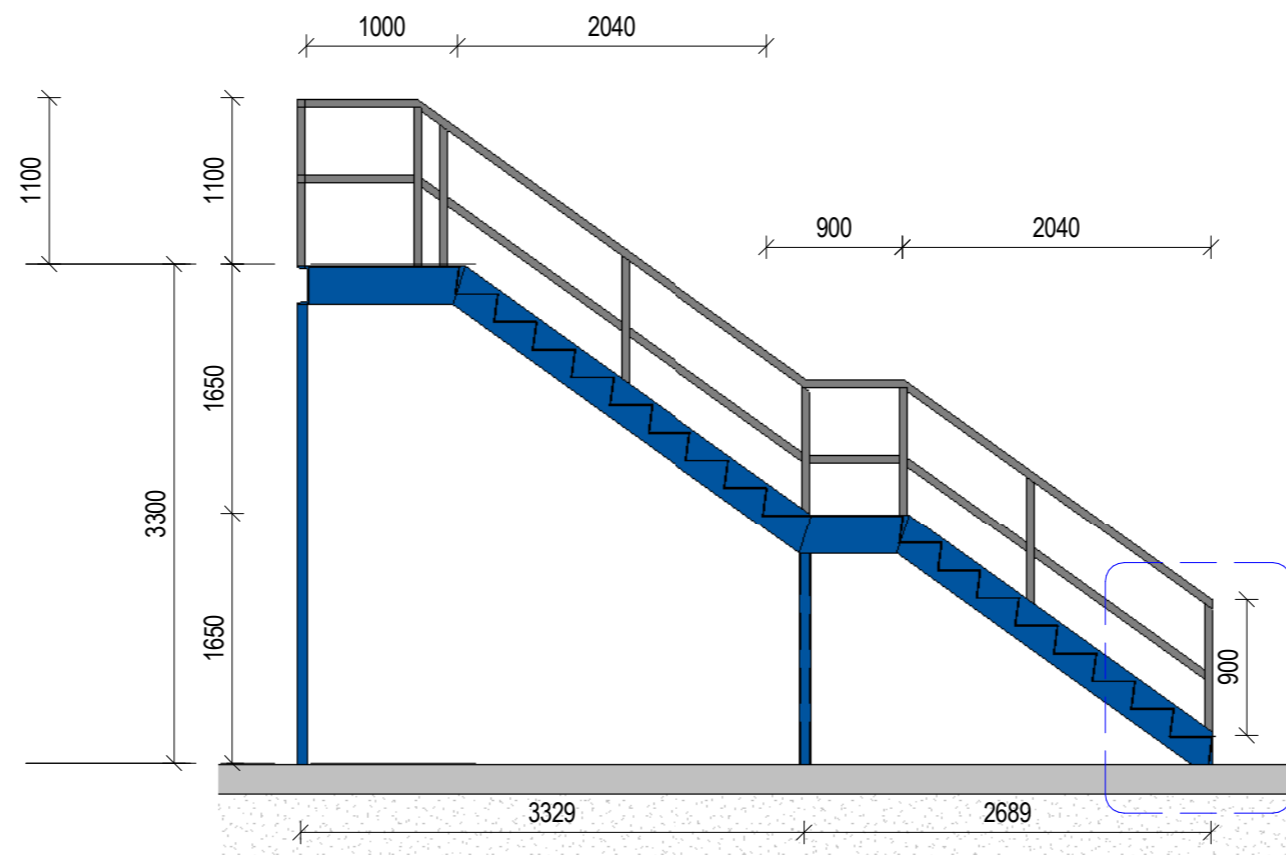
Thompson Engineering 2002 Ltd | PO Box 2081, Washdyke - Timaru | 9b Meadows Road - Timaru  
PH 0800 688 716 | F (03) 688 7168 | www.thompsonengineering.co.nz | design@thompsonengineering.co.nz



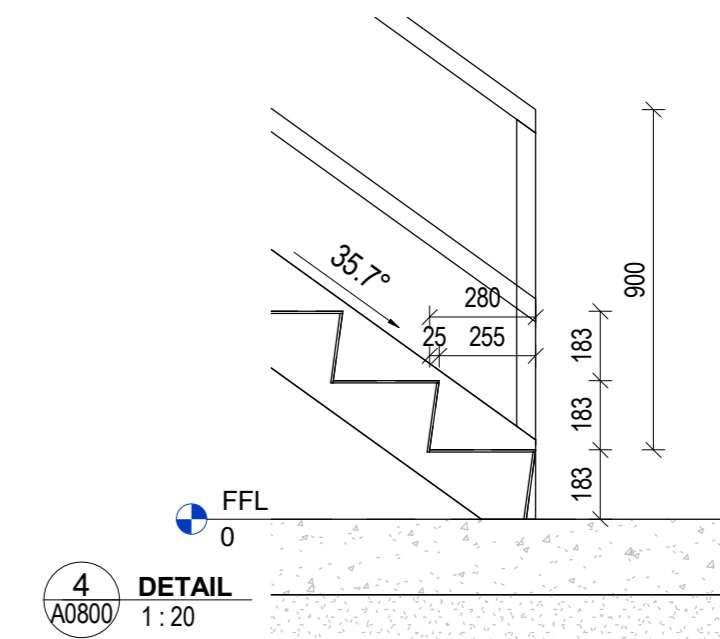
1 PLAN :Mezzanine Floor Stairs  
1: 50



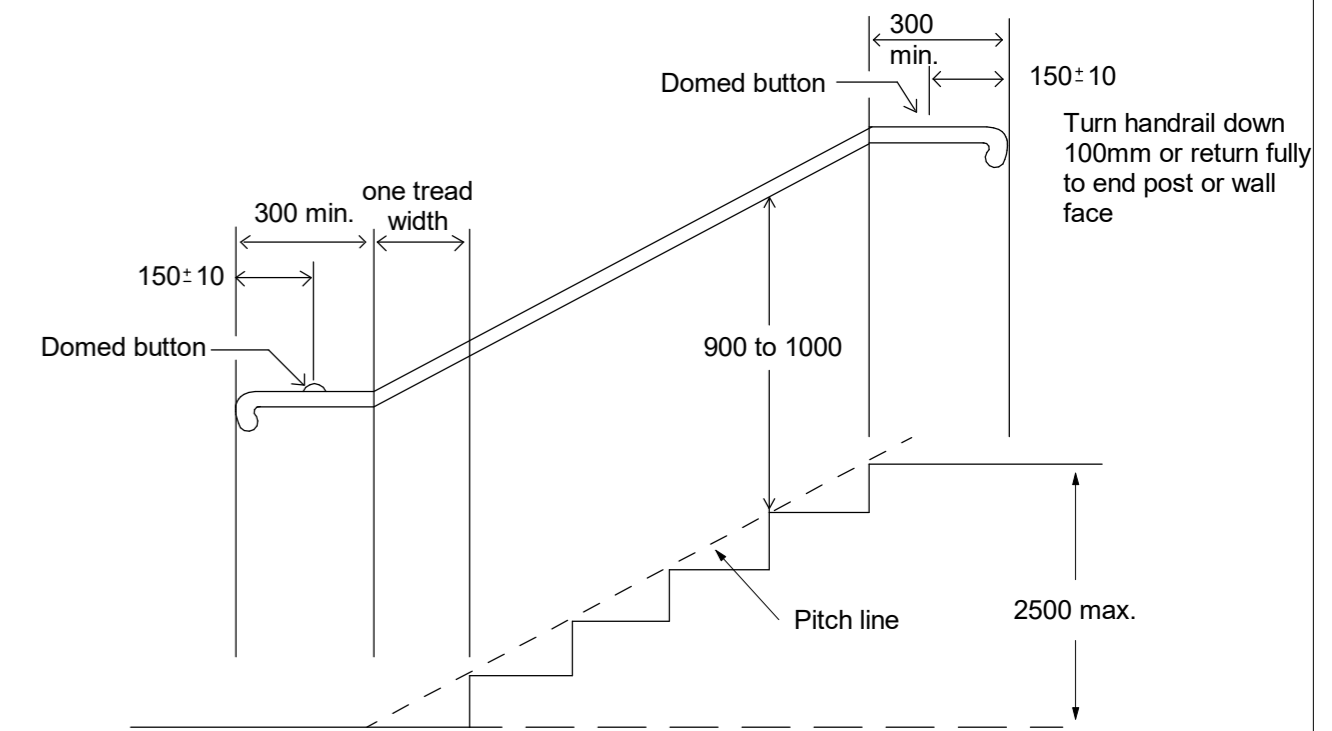
2 DETAIL :Mezzanine Floor Stairs  
1: 50



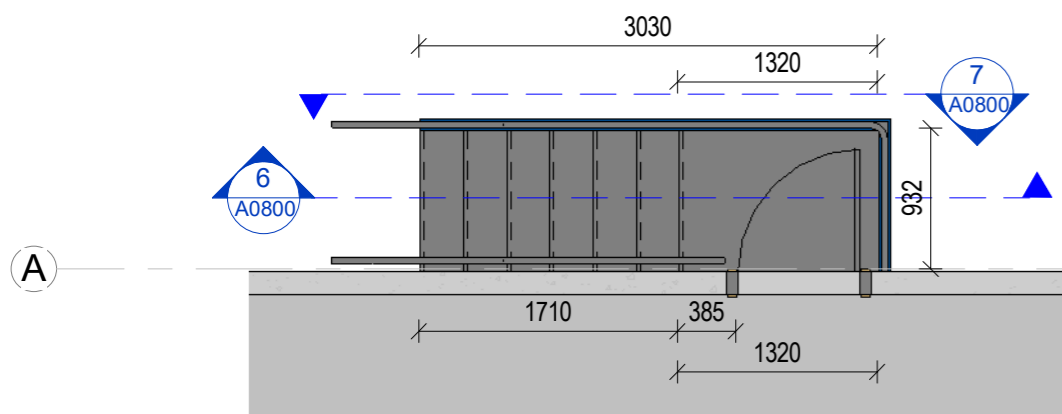
3 SECTION  
1: 50



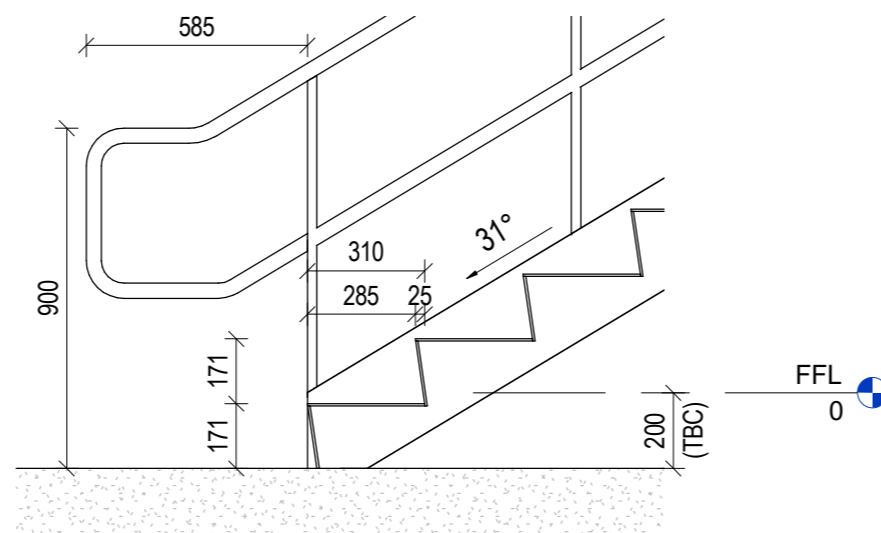
4 DETAIL  
1: 20



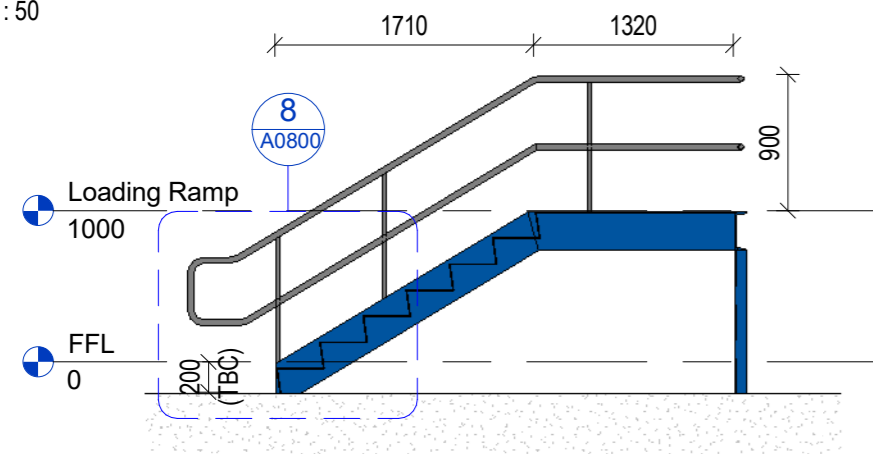
NOTE:  
(1) The dimensions indicating the heights of handrails are taken from the nosing of the tread to the top of the handrail.  
(2) The 300mm extension is not required where the handrail is continuous, e.g. on the inside of an intermediate landing.  
NZS 4121-2001 Figure 23 pitchline and extension of handrails  
1: 50



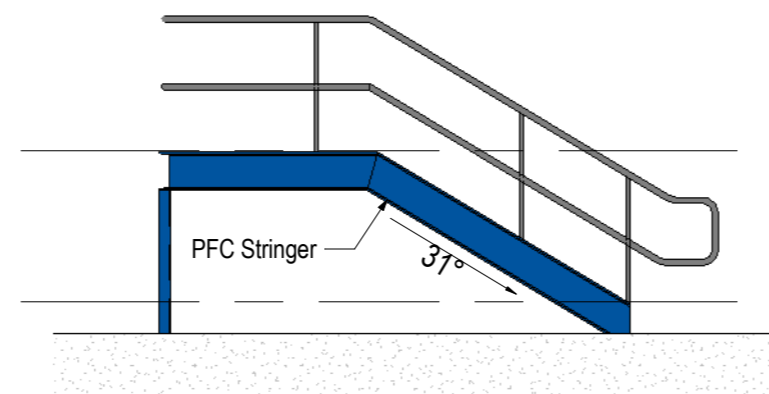
5 PLAN :Dock level Stairs  
1: 50



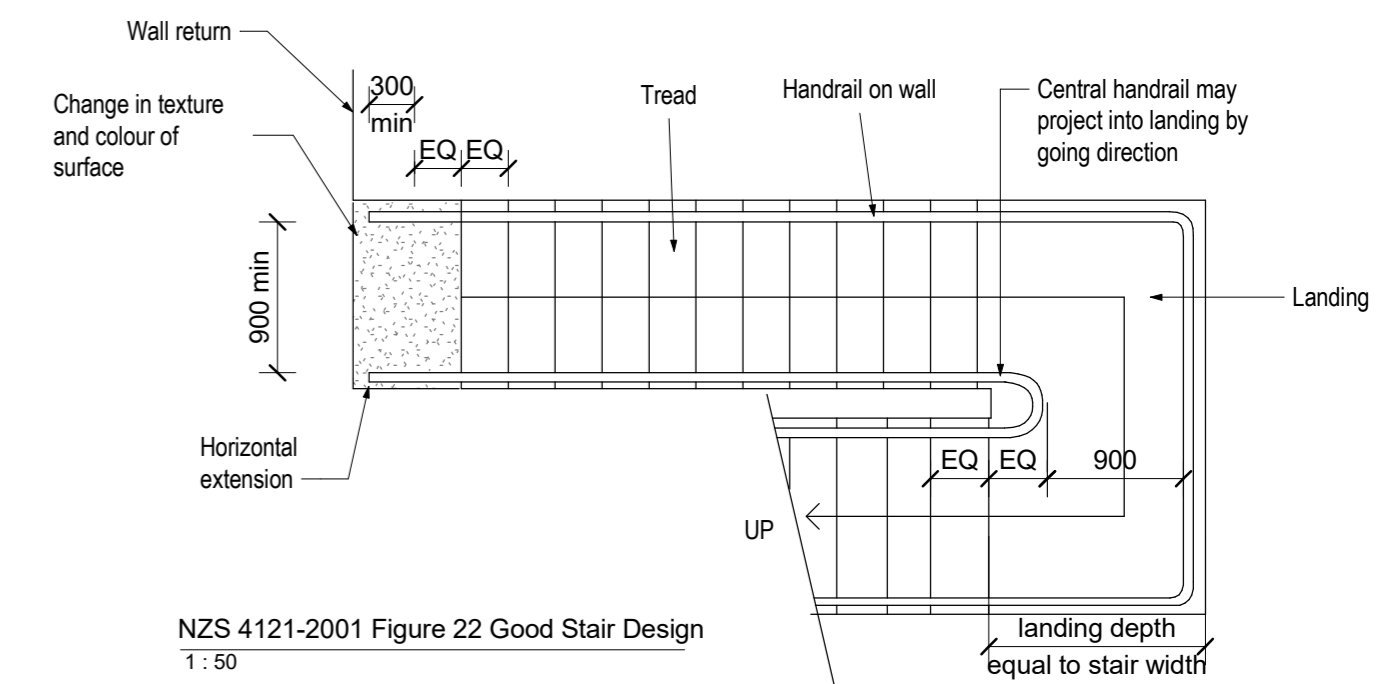
8 DETAIL  
1: 20



6 SECTION :Dock Stair  
1: 50



7 SECTION  
1: 50



NZS 4121-2001 Figure 22 Good Stair Design  
1: 50



Thompson Engineering 2002 Ltd | PO Box 2081, Washdyke - Timaru | 9b Meadows Road - Timaru  
PH 0800 688 716 | F (03) 688 7168 | www.thompsonengineering.co.nz | design@thompsonengineering.co.nz

PROJECT

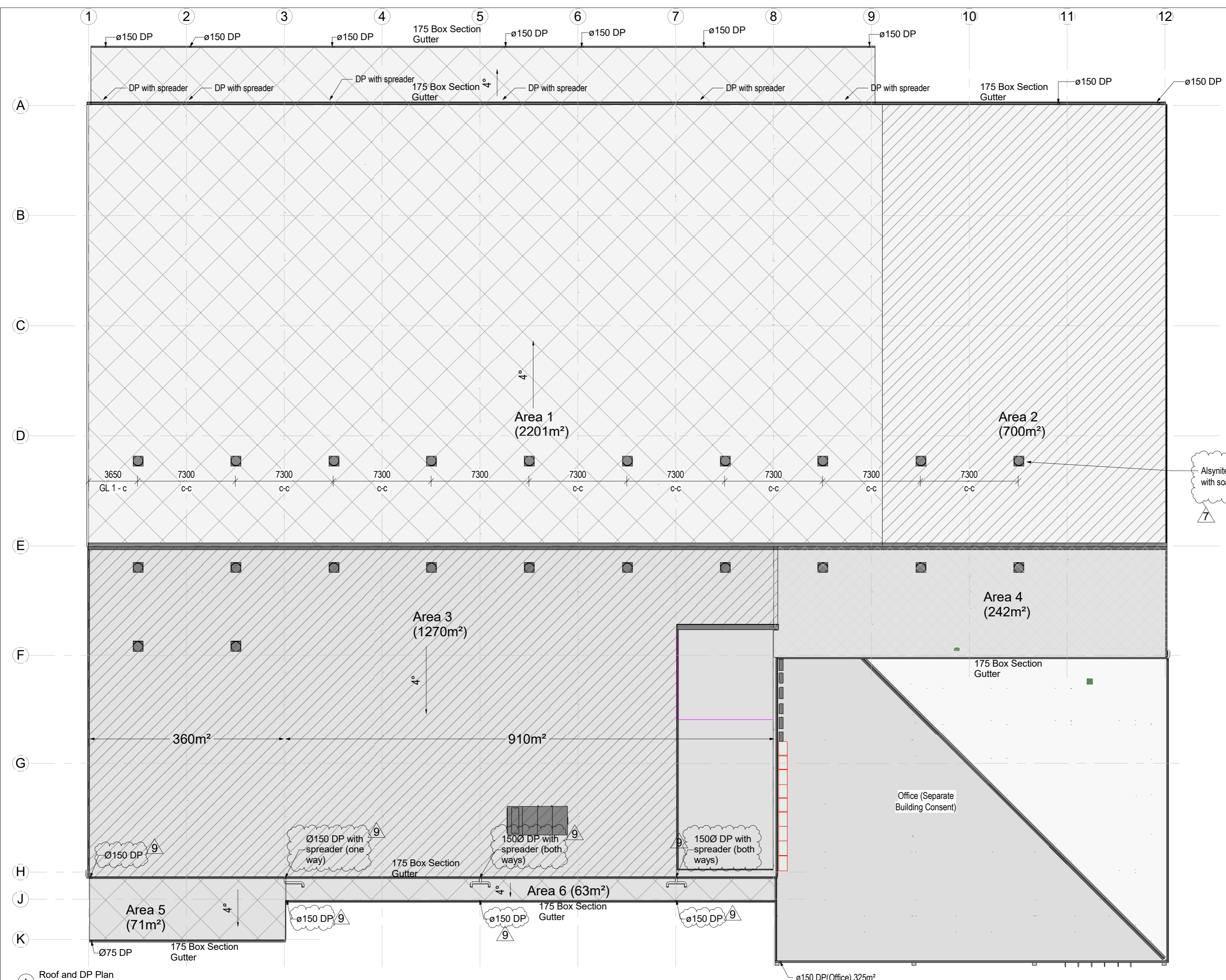
Arch

NZ Dairy Collaborative Group  
Infant Formula Blending Plant

9 Ashford Ave., Ashburton

All Drawings property of Thompson Engineering 2002 Ltd

Rev#	Amendments	Date	SCALE	As indicated@ A2	JOB #	12412
			DRAWN BY	C. White	DATE	23/01/16
			APPROVED BY	A. Cloake	REV	
			<b>Stairs and Decks</b>		<b>A0800</b>	
Please note: All dimensions to be verified on site						Paper size: <b>A2</b>



DOWNPIPE SCHEDULE	
Downpipe size (mm) for 0-25° pitch roof for given roof area	
Minimum internal Pipe Size	Plan area of roof served by the downpipe (m²)
63mm Ø	60
74mm Ø	85
100mm Ø	155
150mm Ø	350

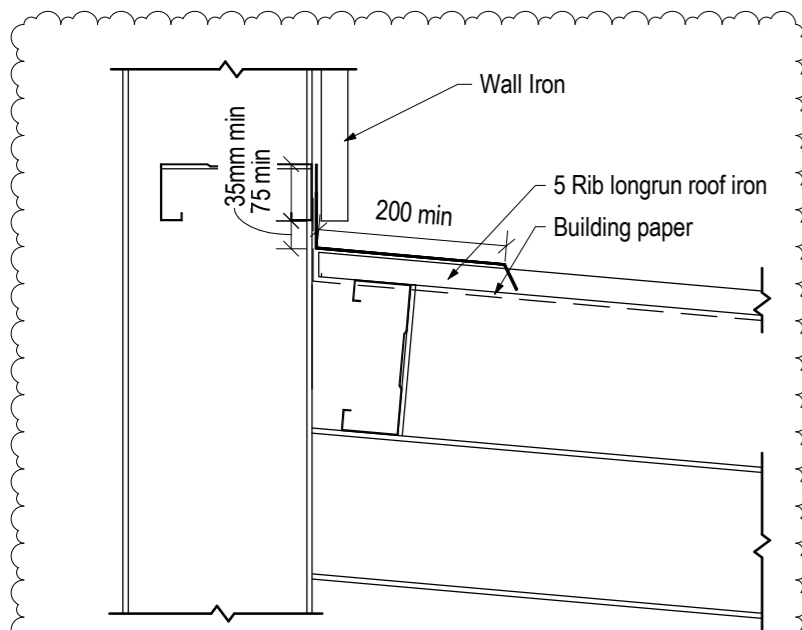
SURFACE AREA CATCHMENTS	
Total Roof Area = 4547m²	
area 1 = 2201m² - 7 x 150 Ø DP's	
area 2 = 700m² - 2 x 150 Ø DP's	
area 3 = 1270m² - 4 x 150 Ø DP's	
area 4 = 242m² - 1 x 150 Ø DP's	
area 5 = 71m² - 1 x 74Ø DP's	
area 6 = 63m² - 1 x 150 Ø DP's	

Alsynite Passive Ventilator AITV 900  
with soaker flashing as per NZBC E2/AS1

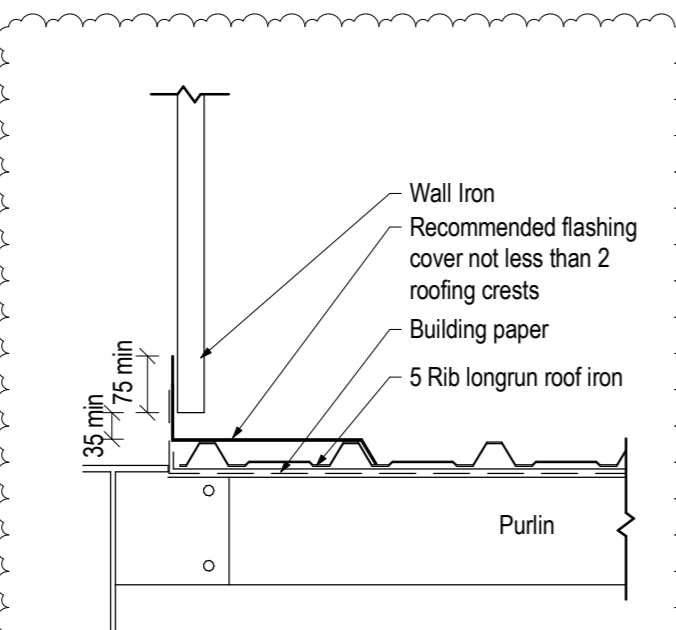
1 Roof and DP Plan  
1:200

Rev#	Amendments	Date
7	Changes for sprinkler and electrical services	21/03/16
9	Changes to DP's	02/05/16

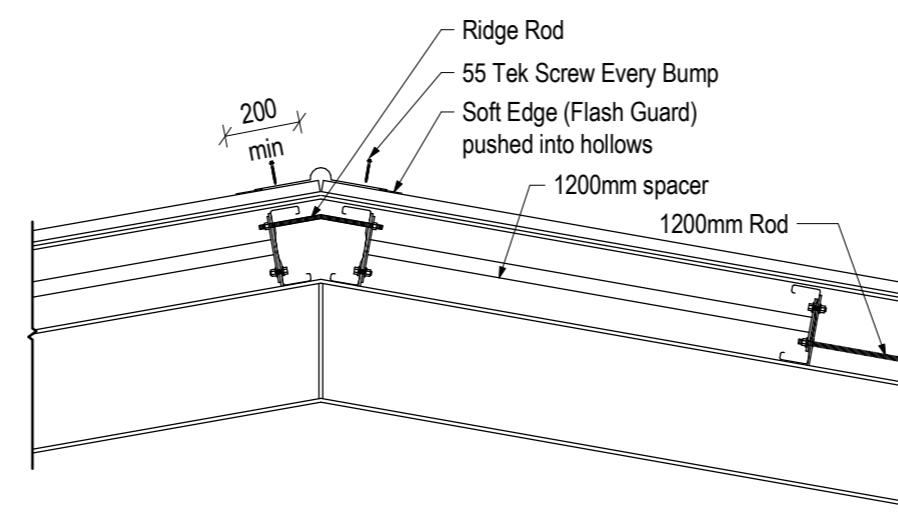
SCALE	As indicated@ A2	JOB #	12412
DRAWN BY	B Holloway	DATE	23/01/16
APPROVED BY	A. Cloake	REV	9
<b>Roof Plan</b>		<b>A1300</b>	
Please note: All dimensions to be verified on site			Paper size: <b>A2</b>



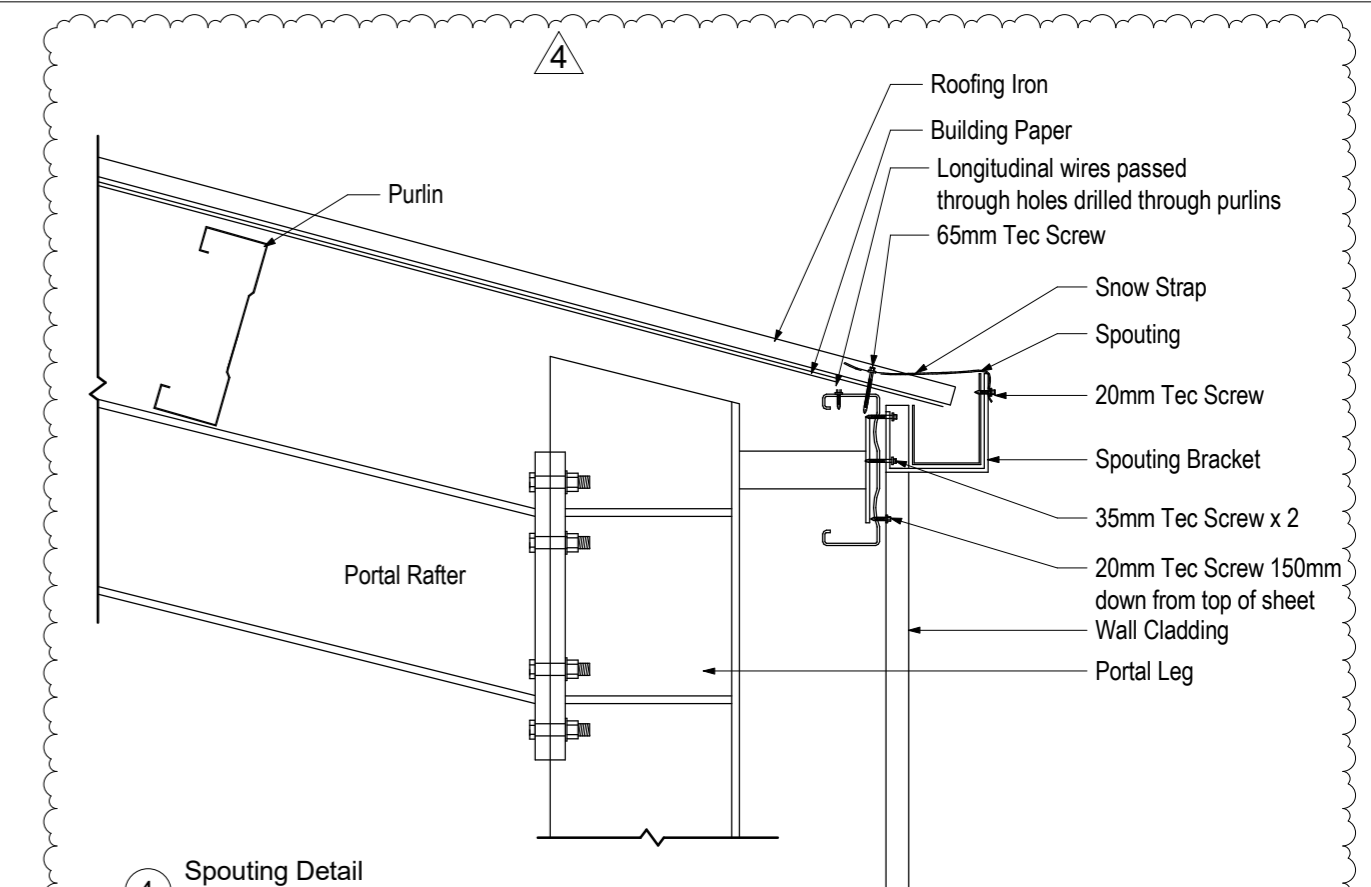
1 Apron Flashing to iron away  
1 : 10



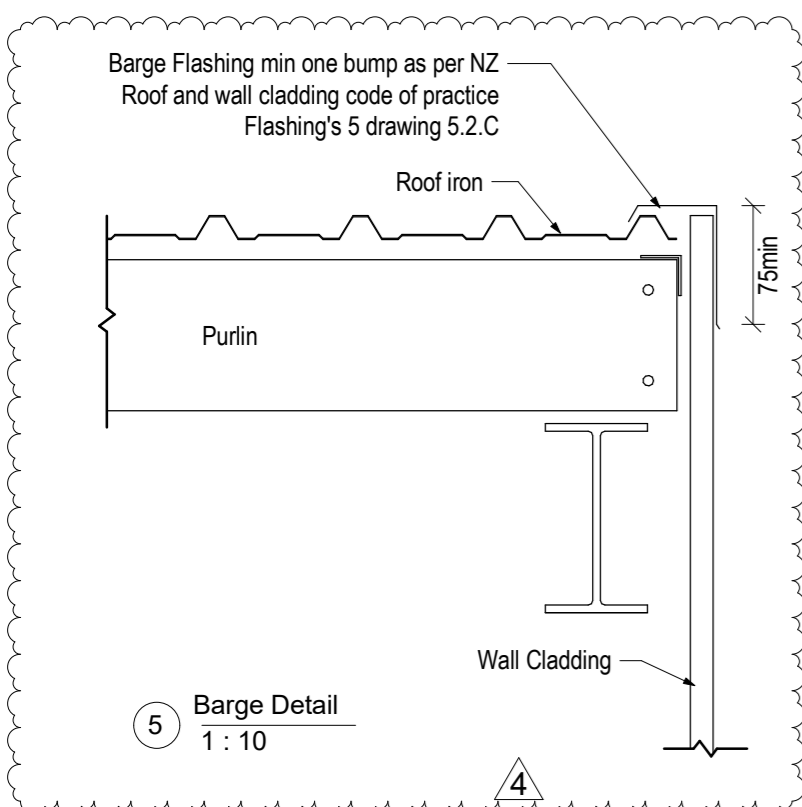
2 Apron Flashing to iron  
1 : 10



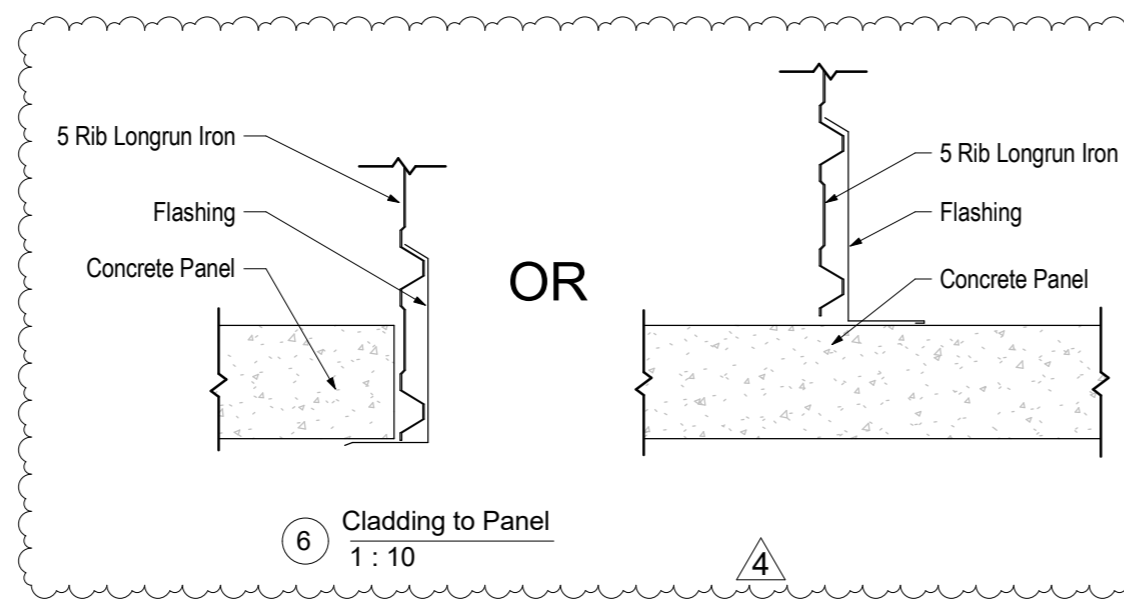
3 Ridge Flashing Detail  
1 : 20



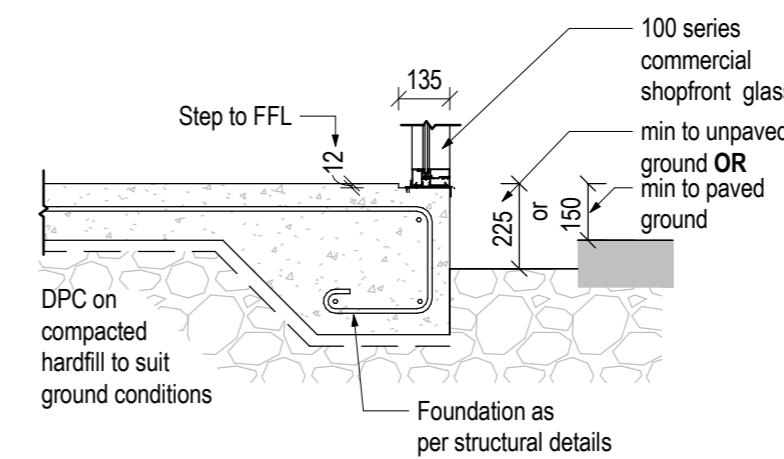
4 Spouting Detail  
1 : 10



5 Barge Detail  
1 : 10



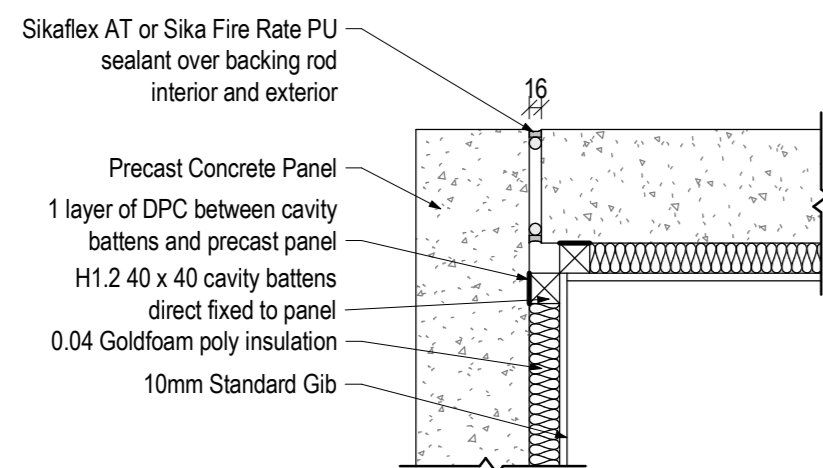
6 Cladding to Panel  
1 : 10



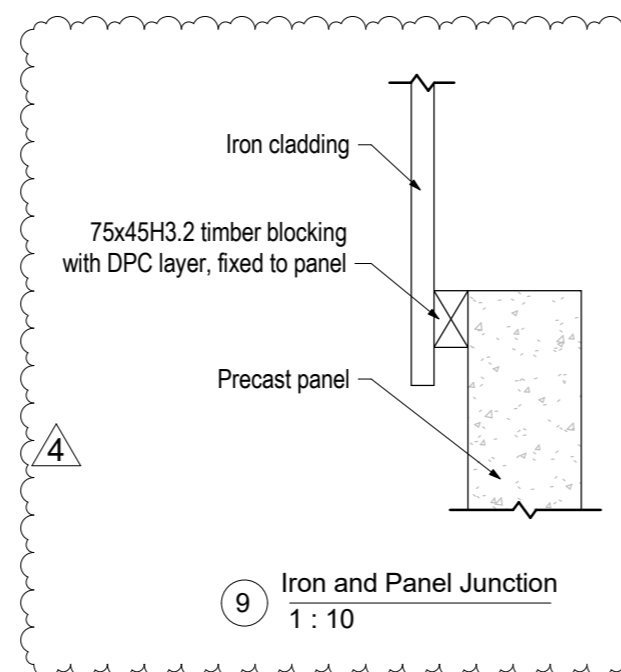
7 Clearances to ground (std detail)  
1 : 20

**Figure 53: Flashing for small pipes**  
Paragraphs 8.3.10, 8.4.17, 9.6.8.5 and 9.6.9.6

**NOTE:**  
(1) Max. roof pitch for this flashing 45°, minimum pitch 10° if base of flange covers one or more complete troughs.  
(2) For pipes up to 85 mm diameter.



8 External Corner Precast Detail  
1 : 10



9 Iron and Panel Junction  
1 : 10

PROJECT

Arch

NZ Dairy Collaborative Group  
Infant Formula Blending Plant

9 Ashford Ave., Ashburton

Rev#

4 Council RFI

Amendments

Date

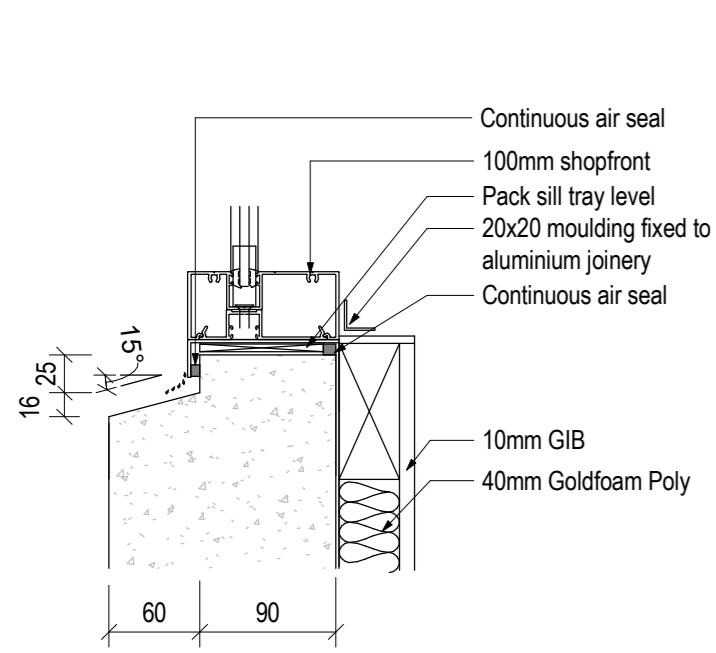
16/02/16

SCALE	As indicated@ A2	JOB #	12412
DRAWN BY	C. White	DATE	23/01/16
APPROVED BY	A. Cloake	REV	4
<b>Flashing Details</b>		<b>A1301</b>	
Please note: All dimensions to be verified on site			
Paper size: <b>A2</b>			

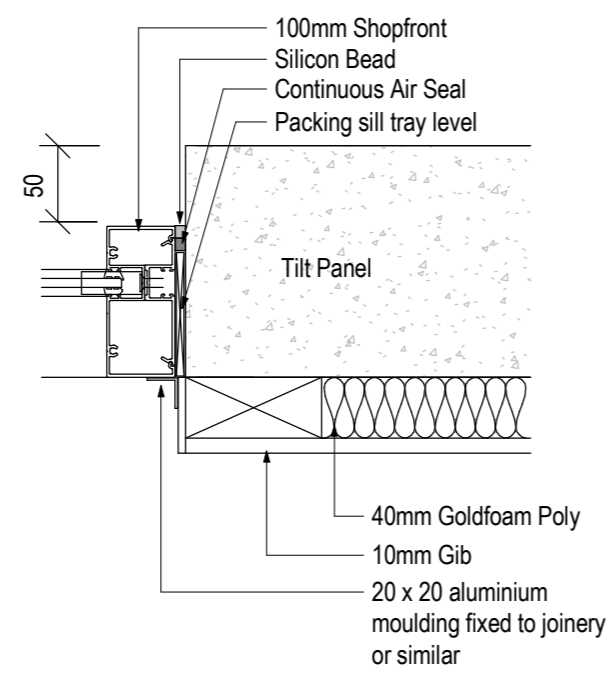


Thompson Engineering 2002 Ltd | PO Box 2081, Washdyke - Timaru | 9b Meadows Road - Timaru  
PH 0800 688 716 | F (03) 688 7168 | www.thompsonengineering.co.nz | design@thompsonengineering.co.nz

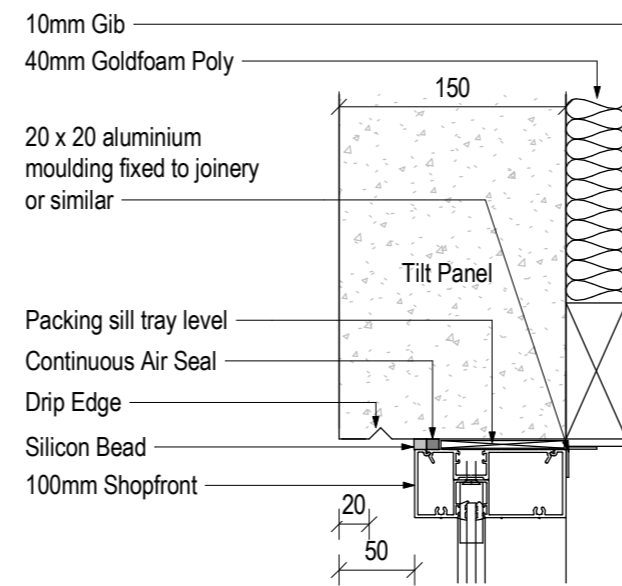
All Drawings property of Thompson Engineering 2002 Ltd



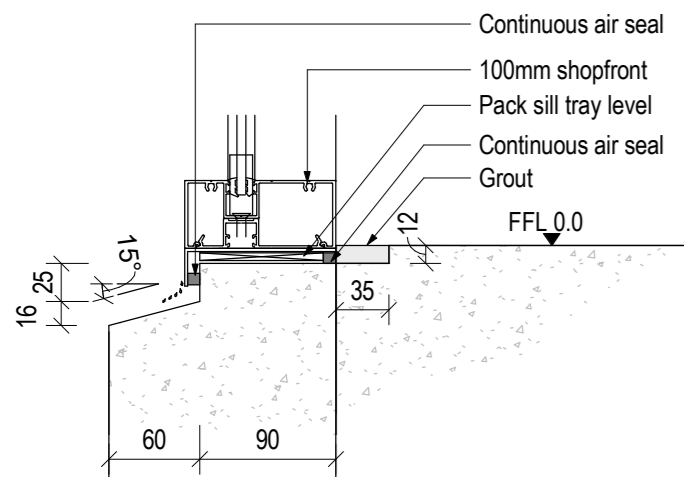
COMMERCIAL SILL DETAIL ABOVE FFL



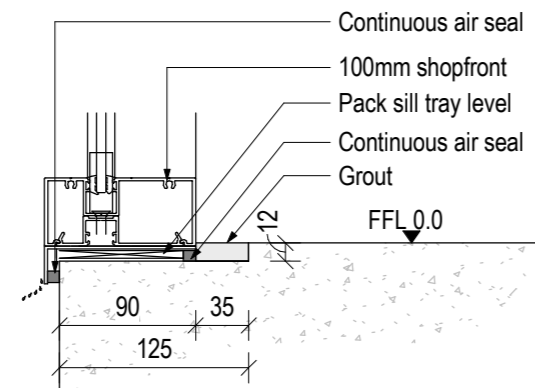
COMMERCIAL JAMB DETAIL



COMMERCIAL HEAD DETAIL

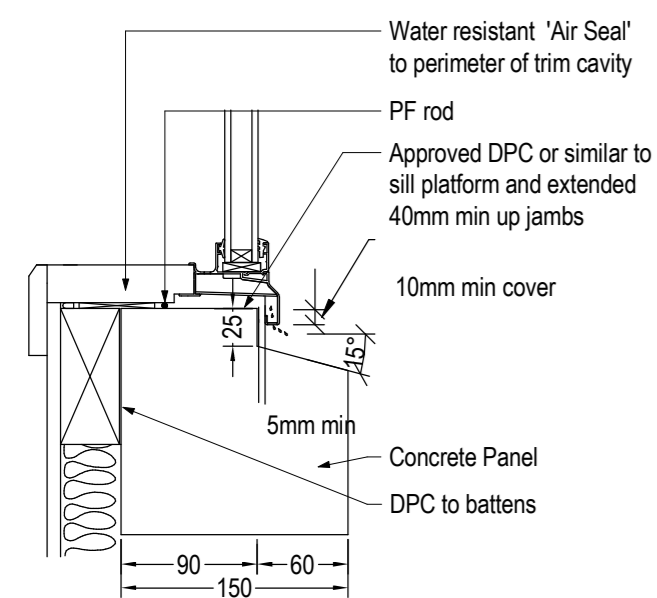


COMMERCIAL SILL DETAIL AT FFL IN PRECAST PANEL

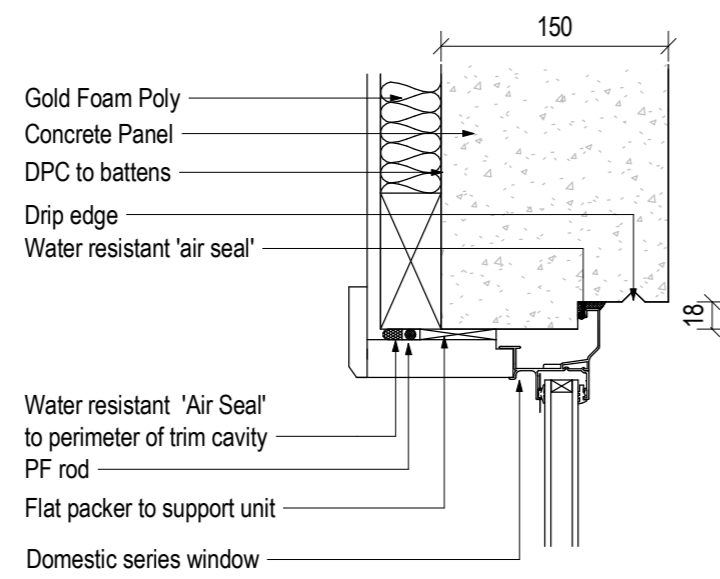


COMMERCIAL SILL DETAIL AT FFL STANDARD FOUNDATION EDGE

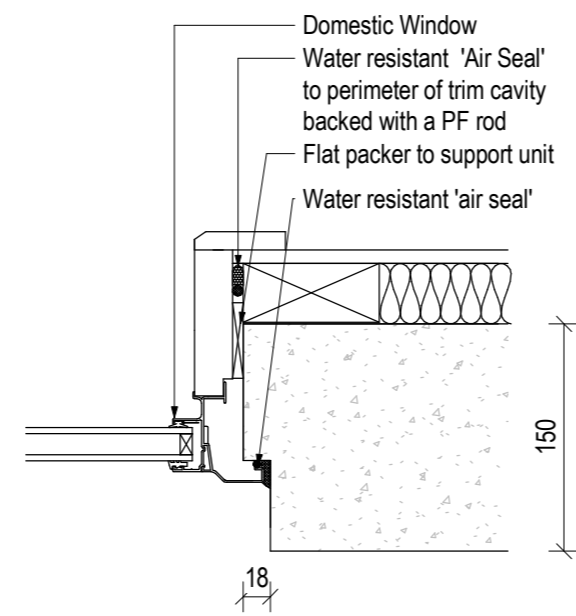
Commercial window details  
1:5



WINDOW SILL DETAIL

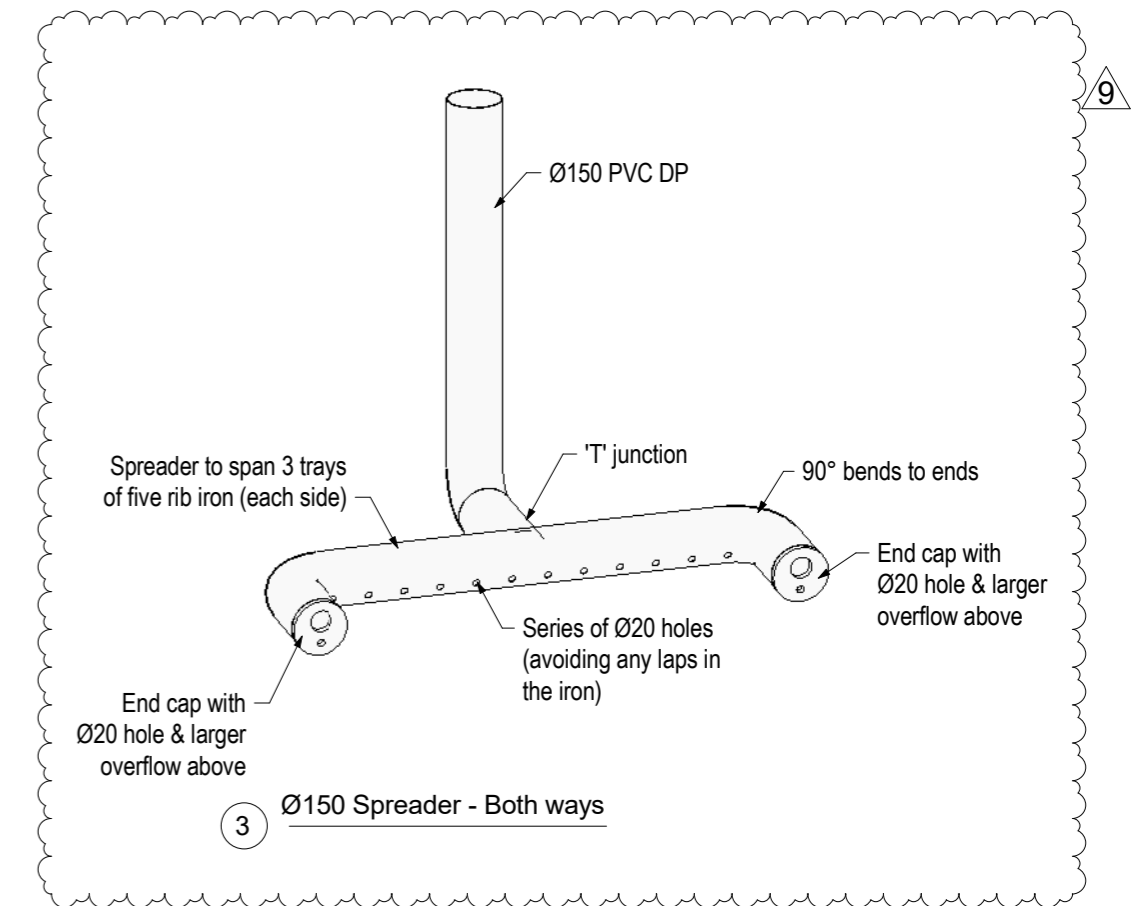


DOMESTIC HEAD DETAIL

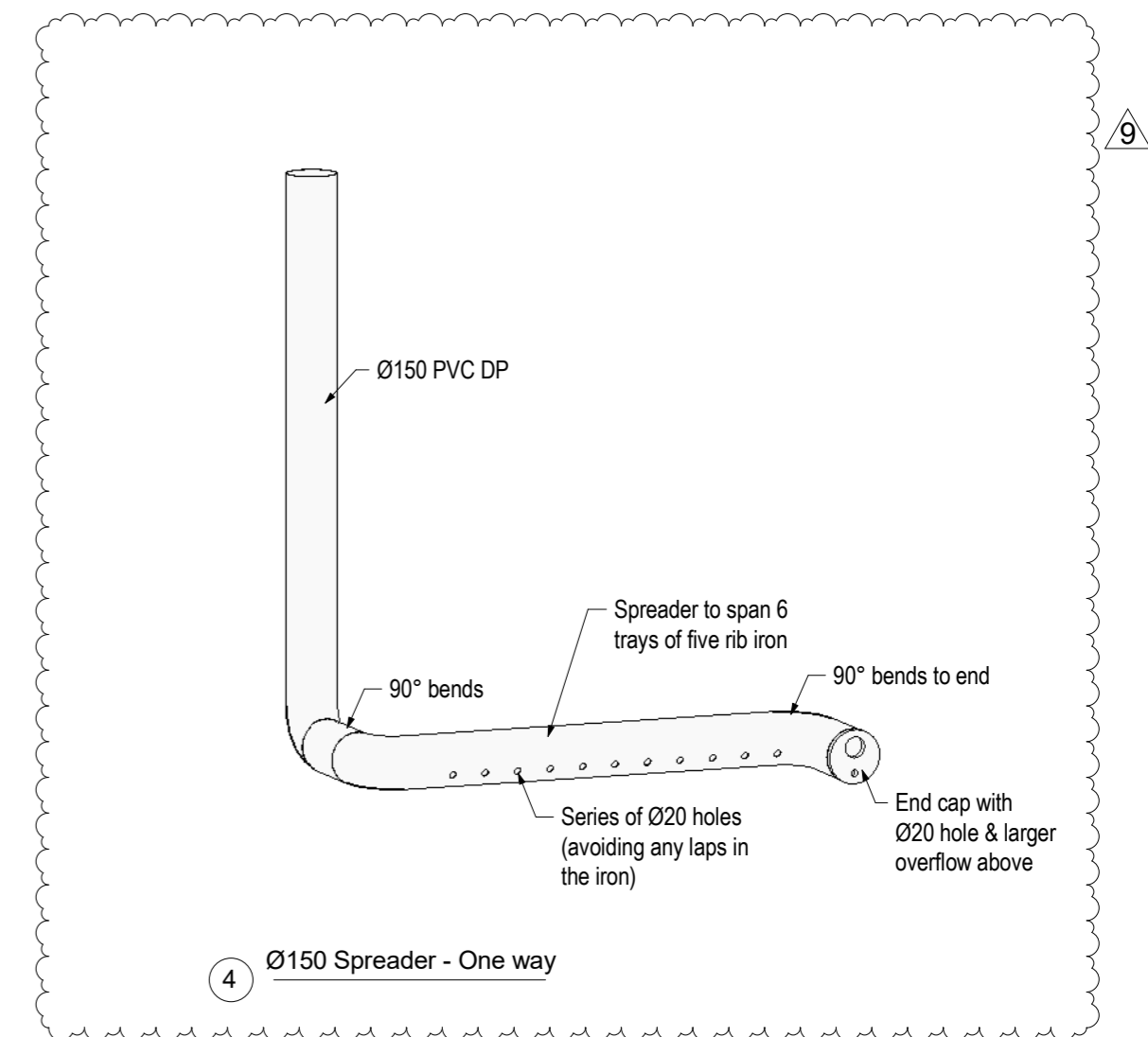


DOMESTIC JAMB DETAIL

Domestic window details  
1:5



Ø150 Spreader - Both ways



Ø150 Spreader - One way

**NZBC H1 ENERGY EFFICIENCY - Small Buildings (> 300m<sup>2</sup>)**

Floor Area - (to outside of external walls) 140m<sup>2</sup>

Wall Area	Glazing Area
South 20m <sup>2</sup>	South N/A (borders to factory)
East 490m <sup>2</sup>	East 17m <sup>2</sup>
West 490m <sup>2</sup>	West N/A (borders to factory)
Total Wall Area 1000m <sup>2</sup>	Total Glazing Area 17m <sup>2</sup>

Glazed Area = 0.17% of total wall area

If less than 30% then schedule method is OK

Climate Zone 3

**SCHEDULE METHOD VM H1/VM1**

Table 2(b) - Solid Construction (excluding solid timber) - Alternative minimum R-values for schedule method

Building Thermal Envelope Component	Minimum R-values climate zone 3 (option1)	Minimum R-values provided	
Roof	R 3.5	R 3.59	Complies
Wall	R 1.2	R 1.31	Complies
Floor	R 1.5	R 2.5	Complies
Glazing	R 0.26	R 0.26	Complies

Please refer to the attached design navigator tables showing material compliance with R values

R Value of mid floor construction	
150mm thick XLAM	1.22
R 2.2 Pink Batts	2.2
Armstrong Eris Suspended Ceiling	0.17
Total R Value achieved:	3.59

Name: Floortype 1 2.50 m<sup>2</sup>K/W

Type: Floor: Slab floor  
Slab floor

internal surface 0.09

Flooring : 50-100mm Concrete Topping Screed  
R-value: 0.04

Slab Insulation

Slab floor area [m<sup>2</sup>]: 140

Perimeter length [m]: 51.8

External wall thickness [mm]: 800 i

Soil conductivity [W/m °C]: 1.2 i

Underslab insulation: none Insulation : i

Piles Footings: Number: Penetration Diameter:

Slab edge insulation: none Insulation : i

**Thermal Design**

**Thermal Resistance of CLT**

NZS 4214 Table E provides thermal conductivities of materials and thermal resistances (R-values) calculated according to thickness. CLT has the same thermal performance as solid pine. The conductivity (U-Value) of Radiata Pine is 0.120 W/m<sup>2</sup>K at 12% moisture content which is the expected condition of CLT in use.

Thermal Resistance R-values (thickness in metres divided by conductivity) for XLam CLT panels are calculated as:

60mm CLT:	R 0.50
75mm CLT:	R 0.625
90mm CLT:	R 0.75
105mm CLT:	R 0.875
145mm CLT:	R 1.22
175mm CLT:	R 1.46

Name: Walltype 1 1.31 m<sup>2</sup>K/W

Type: Wall: Solid wall (concrete, masonry or other) without vented cavity, with internal insulation  
Solid wall (concrete, masonry or other) without vented cavity, with internal insulation

external surface 0.03

Cladding : None (facing outside air)  
R-value: 0.00

Solid Masonry : Structural Concrete 150mm  
R-value: 0.09

Strapping : Timber batten, 40mm deep, 45mm wide @ 600mm centers  
Strapping Area: 11.0% Cavity Area: 89.0%

Thermal Break : none  
R-value: 0.00

40mm Goldfoam, 30kg/m<sup>3</sup> 1.44  
still Airgap: none  
R-value: 0.00

Strapping :  
R-value: 0.34

Wall Lining : Gypsum plasterboard 10mm  
R-value: 0.04

internal surface 0.09



Thompson Engineering 2002 Ltd | PO Box 2081, Washdyke - Timaru | 9b Meadows Road - Timaru  
PH 0800 688 716 | F (03) 688 7168 | www.thompsonengineering.co.nz | design@thompsonengineering.co.nz

PROJECT

Arch

NZ Dairy Collaborative Group  
Infant Formula Blending Plant

9 Ashford Ave., Ashburton

All Drawings property of Thompson Engineering 2002 Ltd

Rev#	Amendments	Date	SCALE	JOB #
			1 : 100 @ A2	12412
			DRAWN BY A. Cloake	DATE 23/01/16
			APPROVED BY	REV
			<b>H1 Compliance</b>	<b>A1400</b>
			Please note: All dimensions to be verified on site	Paper size: A2

INTERNAL NOTE: Please refer to the site plan saved under the Warehouse



Thompson Engineering 2002 Ltd | PO Box 2081, Washdyke - Timaru | 9b Meadows Road - Timaru  
PH 0800 688 716 | F (03) 688 7168 | www.thompsonengineering.co.nz | design@thompsonengineering.co.nz

PROJECT

NZ Dairy Collaborative Group  
Infant Formula Blending Plant Offices

9 Ashford Ave., Ashburton

All Drawings property of Thompson Engineering 2002 Ltd

Rev#	Amendments	Date	SCALE	@ A2	JOB #
			DRAWN BY	Author	DATE 12413
			APPROVED BY	Checker	REV 13/05/16
				Site Plan Office	<b>A0101</b>
Please note: All dimensions to be verified on site					Paper size: <b>A2</b>

Construction Issue



## Architectural Drawings

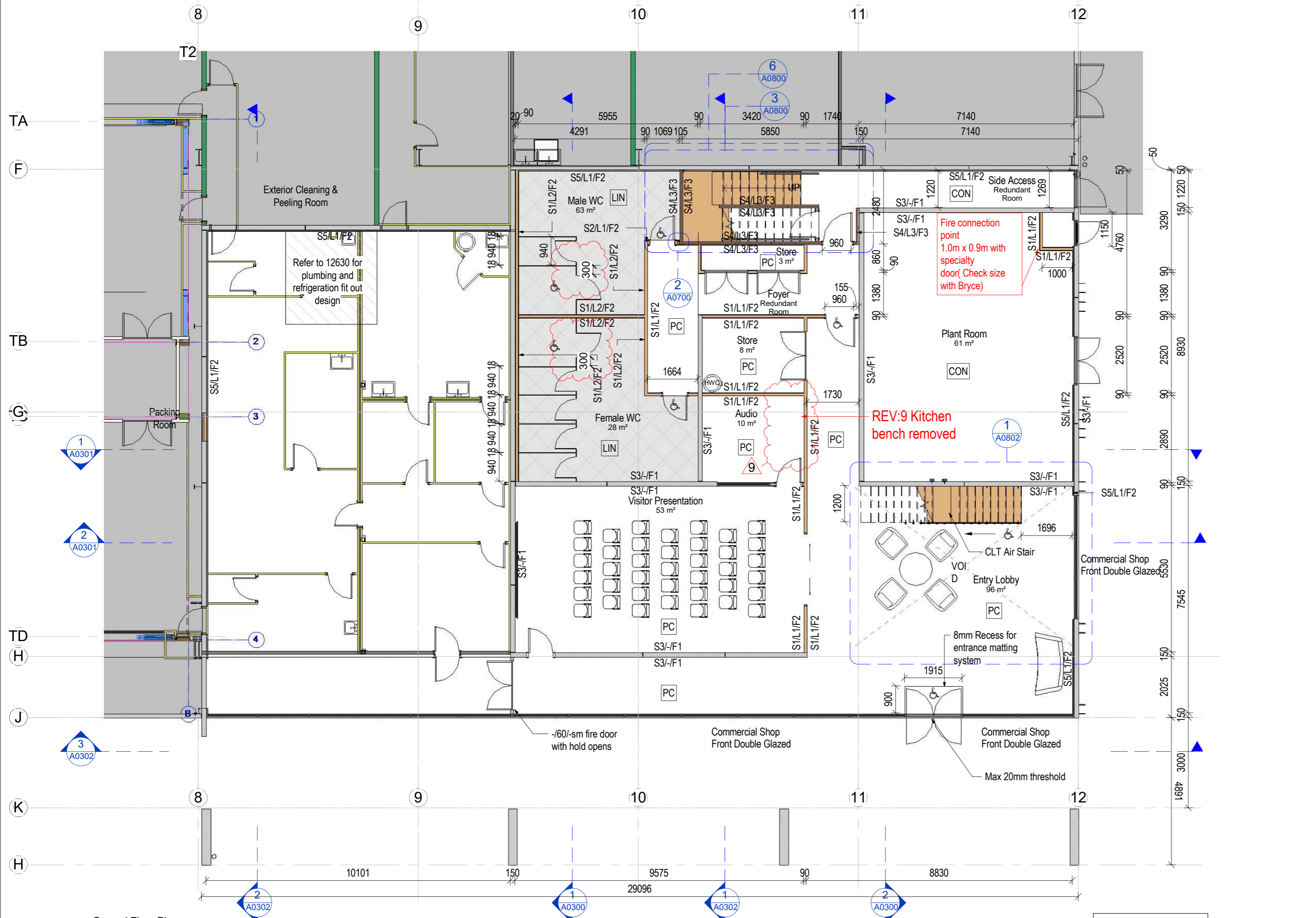
Sheet Number	Sheet Name	Current Revision	Current Revision Description	Current Revision Date
A0000	Cover	6	Council RFI's	16/6/16
A0101	Site Plan Office			
A0200	Arch Ground Floor Plan	9	Contract Issue	19/04/17
A0201	Arch First Floor Plan	9	Contract Issue	19/04/17
A0300	Cross Sections			
A0301	Cross Sections	5	Client Changes	24/05/16
A0302	Cross Sections			
A0400	Elevations			
A0500	Plumbing Ground Floor			
A0501	Plumbing First Floor			
A0600	D W Ground Floor Plan	6	Council RFI's	16/6/16
A0601	D W First Floor Plan			
A0602	D W External	6	Council RFI's	16/6/16
A0603	D W Internal	3	Fire Rated Mid Floor Steel	20/05/16
A0604	Balustrades	5	Client Changes	24/05/16
A0700	Fire Rating Plan GF	3	Fire Rated Mid Floor Steel	20/05/16
A0701	Fire Rating Plan FF	3	Fire Rated Mid Floor Steel	20/05/16
A0702	Fire Rating Sections	3	Fire Rated Mid Floor Steel	20/05/16
A0703	Fire Rating sections	3	Fire Rated Mid Floor Steel	20/05/16
A0800	Safe path CLT Stairs	6	Council RFI's	16/6/16
A0801	Safe path CLT Stair sections and details			
A0802	Foyer CLT Stairs	6	Council RFI's	16/6/16
A0803	Foyer Stair and Balustrade detail	5	Client Changes	24/05/16
A0900	Reflected Ceiling Ground Floor	6	Council RFI's	16/6/16
A0901	Reflected Ceiling First Floor			
A1000	Electrical Data Ground Floor			
A1001	Electrical Data Level 1			
A1100	Mechanical Ground Floor	4	Updated HVAC design	23/05/16
A1101	Mechanical Level 1	4	Updated HVAC design	23/05/16
A1102	Mechanical Roof Plan	6	Council RFI's	16/6/16
A1103	HVAC Sections	4	Updated HVAC design	23/05/16
A1200	Floor Coverings Ground Floor			
A1201	Floor Coverings First Floor	5	Client Changes	24/05/16
A1300	Roof Plan			
A1301	Roof Flashing Details			
A1303	Flashing Details			
A1400	H1 Compliance			

NZ Dairy Collaborative Group  
Infant Formula Blending Plant Offices

9 Ashford Ave., Ashburton

Construction Issue

<b>JOB #</b>	12413
<b>DATE:</b>	13/05/16



**NOTES**

**Wheelchair front entrance access**  
 Wheelchair Ramp no steeper than 1:12 gradient. To comply with NZS 4121:2001 Section 6 - Footpaths, Ramps and Landings.  
 Where ramp is over 1:20 fall a handrail at 1m high shall be installed. OR Stepped threshold, no greater than 20mm in compliance with Section 7 Entrances, Corridors and Doors.  
**Front Counter**  
 As there is no exchanging of goods - there is not front counter therefore not required to be WC accessible  
**Door Handles & Hardware**  
 The door handles and hardware shall comply with: NZS 4121:2001 Section 7 7.3.4 Door Handles and Hardware  
 Door handles and related hardware and accessories shall comply with the following requirements:  
 a) Handles shall be between 900mm and 1200mm (optimum 1000mm) above the finished floor level.  
 b) Handles operating locks and latches shall have a lever action and the end of the handle shall be returned towards the door.  
 c) The door opening pressure shall be the minimum required to suit specific use and conditions

**Timber Treatment**

Internal Timber Frames 90x45 H1.2 bottom plate to concrete slab with 1 layer of DPC  
 Timber top plate on top of panels exposed to weather H3.2 with 1 layer of DPC

**Note**

Please refer to the fire plan for the position of EXIT signs

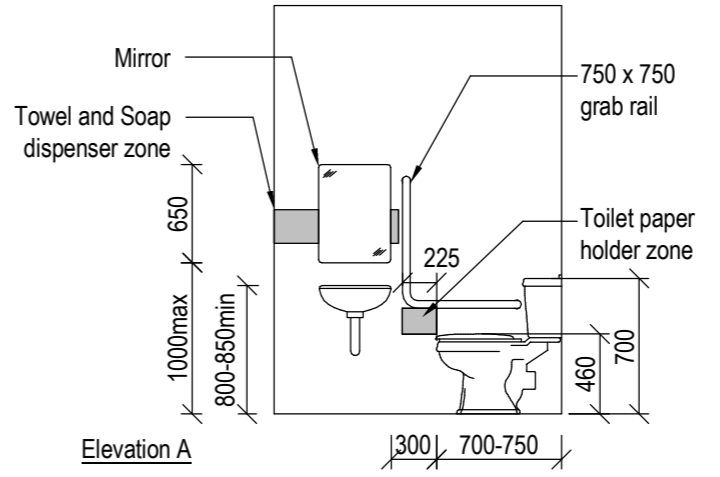
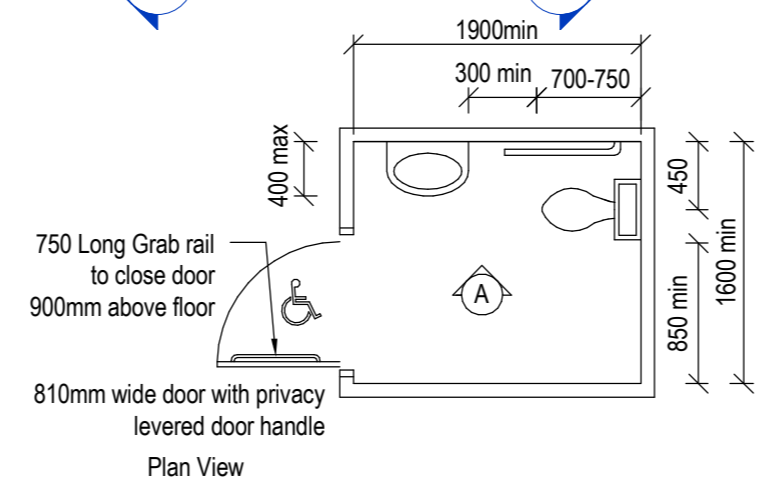
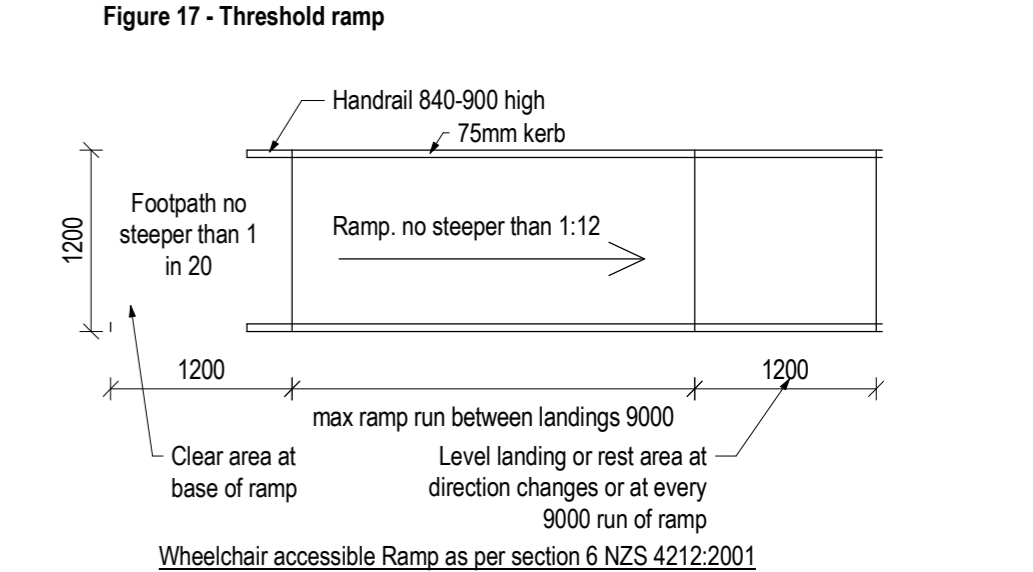
**Wall Key:**

**Wall Type:**  
 S1: 90x45 Timber frame  
 S2: 140x45 Timber frame  
 S3: PC Panel  
 S4: CLT  
 S5: 40mm goldfoam poly with 10mm Gib  
**Lining Type:**  
 L1: 10mm GIB plaster board  
 L2: Plasterboard wet area  
 L3: CLT  
**Finish Type:**  
 F1: Clear Finish  
 F2: Paint Finish  
 F3: Fireshield fire rated coating system

**Floor Finish Key:**

EM Entrance Matting System  
 LIN Linoleum  
 CPT Selected Carpet  
 PC Polished Concrete  
 CON Concrete Floor

**NZS 4121:2001 Section 7**  
**7.1.4 Thresholds**  
 Accessible entrances to a building or premises or to rooms within the premises shall have a level threshold. If a stepped threshold is necessary it shall be designed as follows  
**7.1.4.1 Stepped thresholds**  
 When a stepped threshold is required and change in level is 20mm or less, no ramp is required. A strong visually contrasted strip shall be incorporated that is effective when approaching from either direction.  
**7.1.4.2 Ramped threshold**  
 If the change in level is greater than 20 mm a ramp is required which shall have a gradient no steeper than 1 in 8 and a going of not more than 450mm

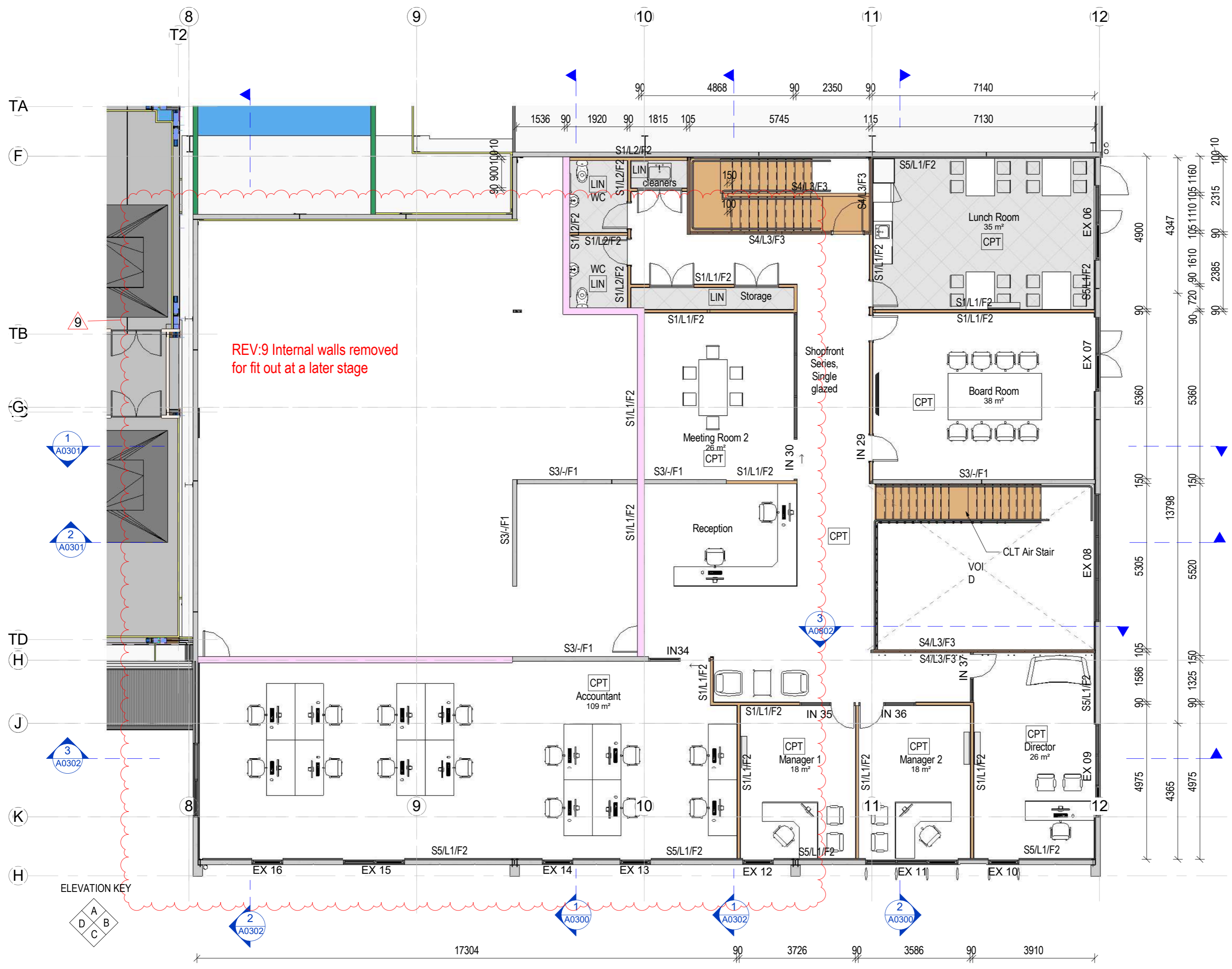


**THOMPSON**  
 CONSTRUCTION & ENGINEERING  
 Thompson Engineering 2002 Ltd | PO Box 2081, Washdyke - Timaru | 9b Meadows Road - Timaru  
 PH 0800 688 716 | F (03) 688 7168 | www.thompsonengineering.co.nz | design@thompsonengineering.co.nz

**PROJECT**  
 Arch  
 NZ Dairy Collaborative Group  
 Infant Formula Blending Plant Offices  
 9 Ashford Ave., Ashburton  
 All Drawings property of Thompson Engineering 2002 Ltd

Rev#	Amendments	Date	SCALE	As indicated@ A2	JOB #
6	Council RFI's	16/6/16	As indicated@ A2		12413
9	Contract Issue	19/04/17			
			<b>DRAWN BY</b>	C. White	<b>DATE</b>
			<b>APPROVED BY</b>	A.Cloake	<b>REV</b>
			Arch Ground Floor Plan		<b>A0200</b>
Please note: All dimensions to be verified on site					
Paper size: <b>A2</b>					

**Construction Issue**



REV:9 Internal walls removed for fit out at a later stage

Timber Treatment
Internal Timber Frames 90x45 H1.2 bottom plate to concrete slab with 1 layer of DPC
Timber top plate on top of panels exposed to weather H3.2 with 1 layer of DPC
Note
Please refer to the fire plan for the position of EXIT signs

Wall Key:
<b>Wall Type:</b>
S1: 90x45 Timber frame
S2: 140x45 Timber frame
S3: PC Panel
S4: CLT
S5: 40mm goldfoam poly with 10mm Gib
<b>Lining Type:</b>
L1: 10mm GIB plaster board
L2: Plasterboard wet area
L3: CLT
<b>Finish Type:</b>
F1: Clear Finish
F2: Paint Finish
F3: Fireshield fire rated coating system
Floor Finish Key:
EM Entrance Matting System
LIN Linoleum
CPT Selected Carpet
PC Polished Concrete
CON Concrete Floor

First Floor Plan  
1:100

Thompson Engineering 2002 Ltd | PO Box 2081, Washdyke - Timaru | 9b Meadows Road - Timaru  
PH 0800 688 716 | F (03) 688 7168 | www.thompsonengineering.co.nz | design@thompsonengineering.co.nz

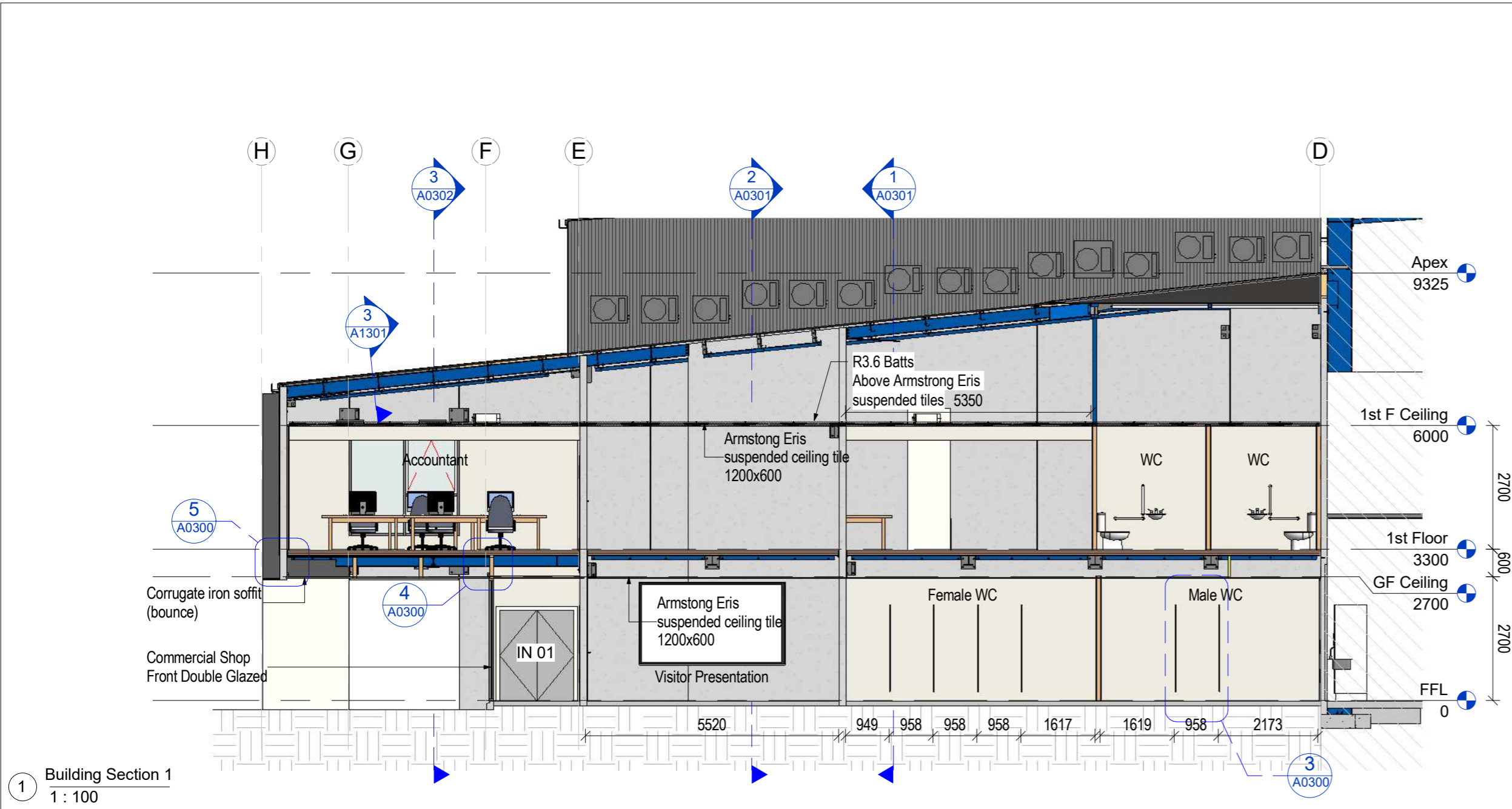
PROJECT  
**Arch**

NZ Dairy Collaborative Group  
Infant Formula Blending Plant Offices  
9 Ashford Ave., Ashburton

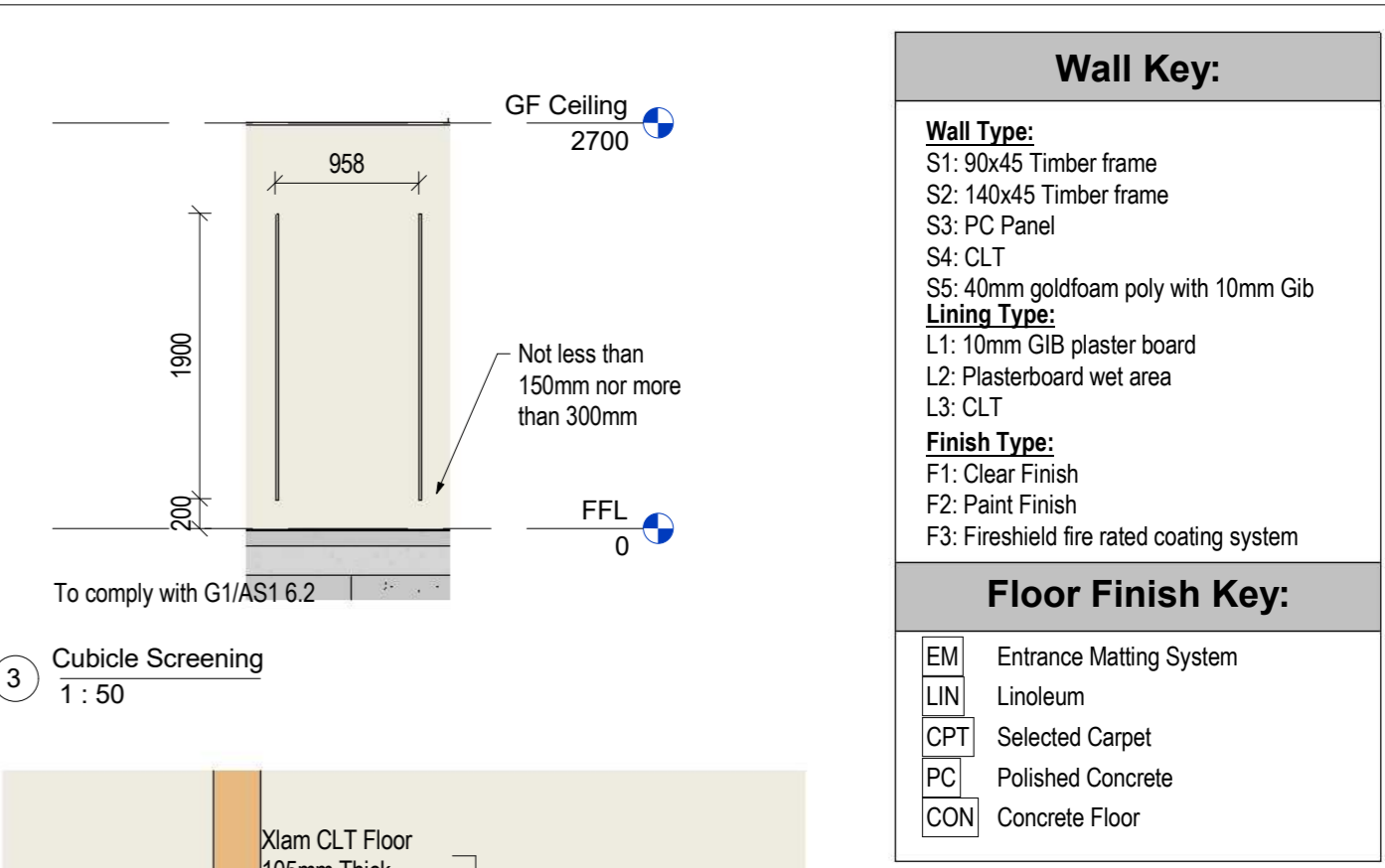
All Drawings property of Thompson Engineering 2002 Ltd

Rev#	Amendments	Date	SCALE	As indicated@ A2	JOB #	12413
9	Contract Issue	19/04/17	DRAWN BY	C. White	DATE	13/05/16
			APPROVED BY	A.Cloake	REV	9
			Arch First Floor Plan		<b>A0201</b>	
Please note: All dimensions to be verified on site						Paper size: <b>A2</b>

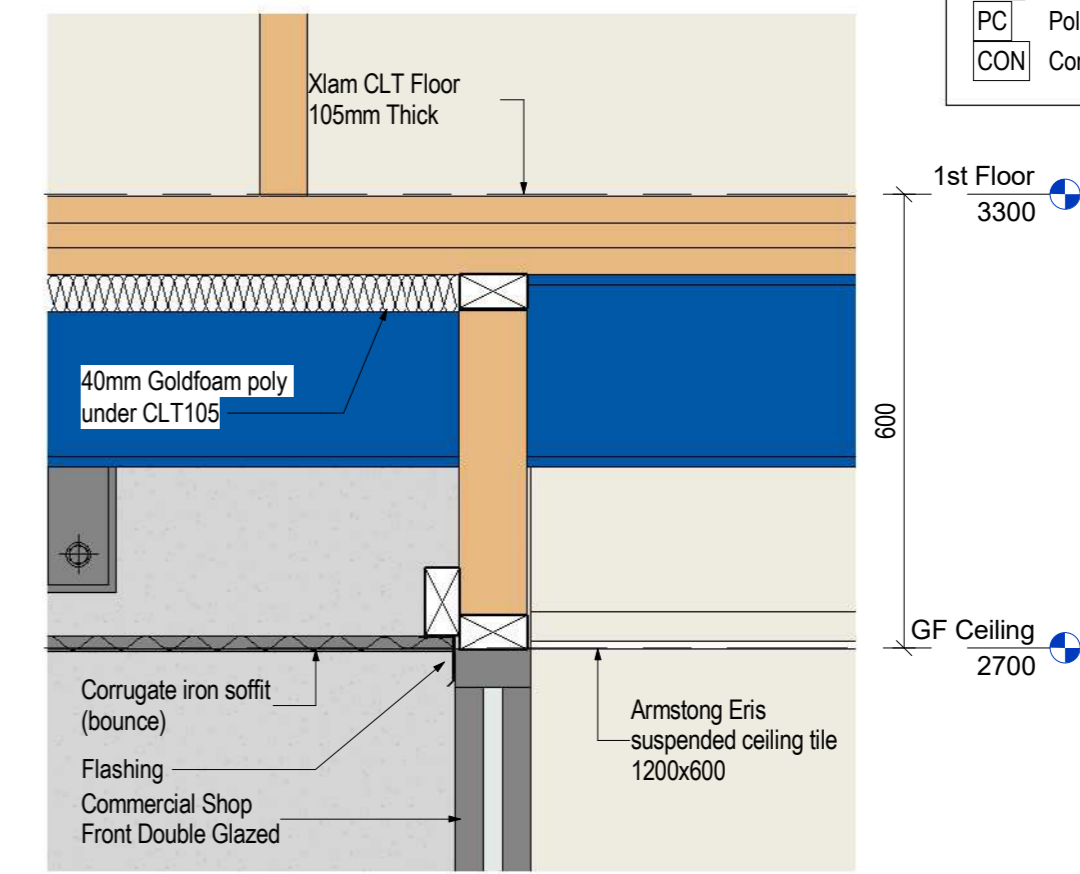
**Construction Issue**



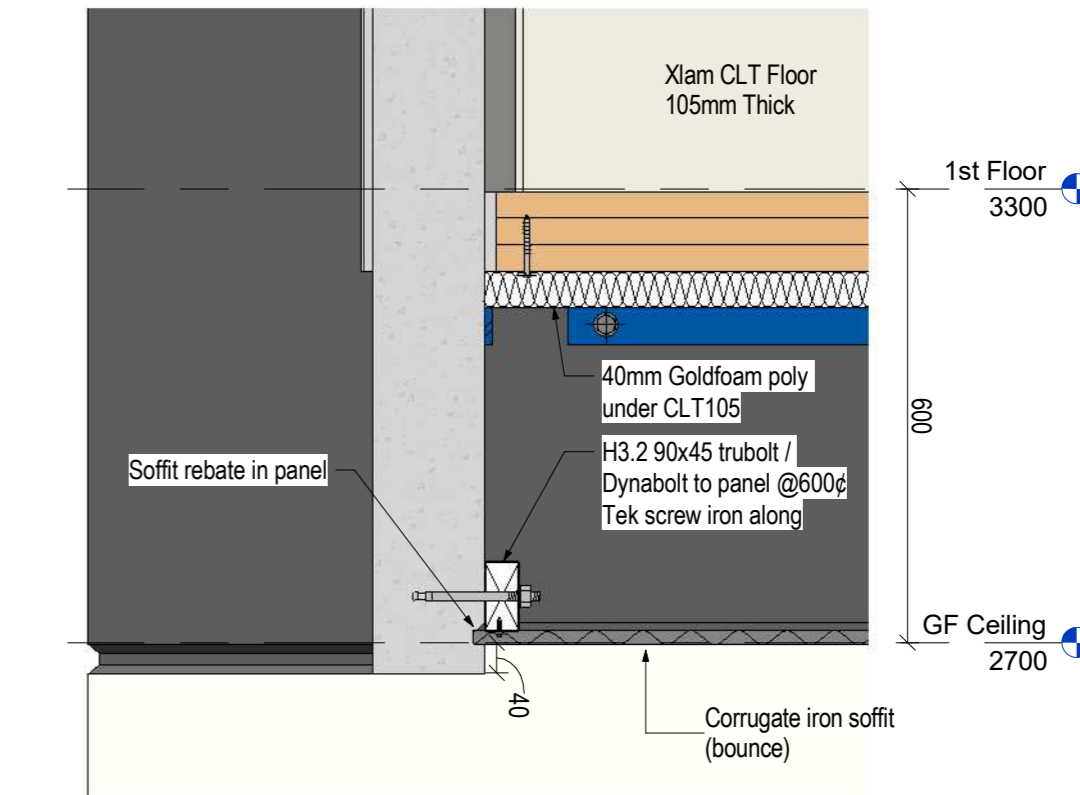
1 Building Section 1  
1 : 100



3 Cubicle Screening  
1 : 50



4 Soffit lining to window head  
1 : 10



5 Soffit lining to precast  
1 : 10



2 Building Section 2  
1 : 100

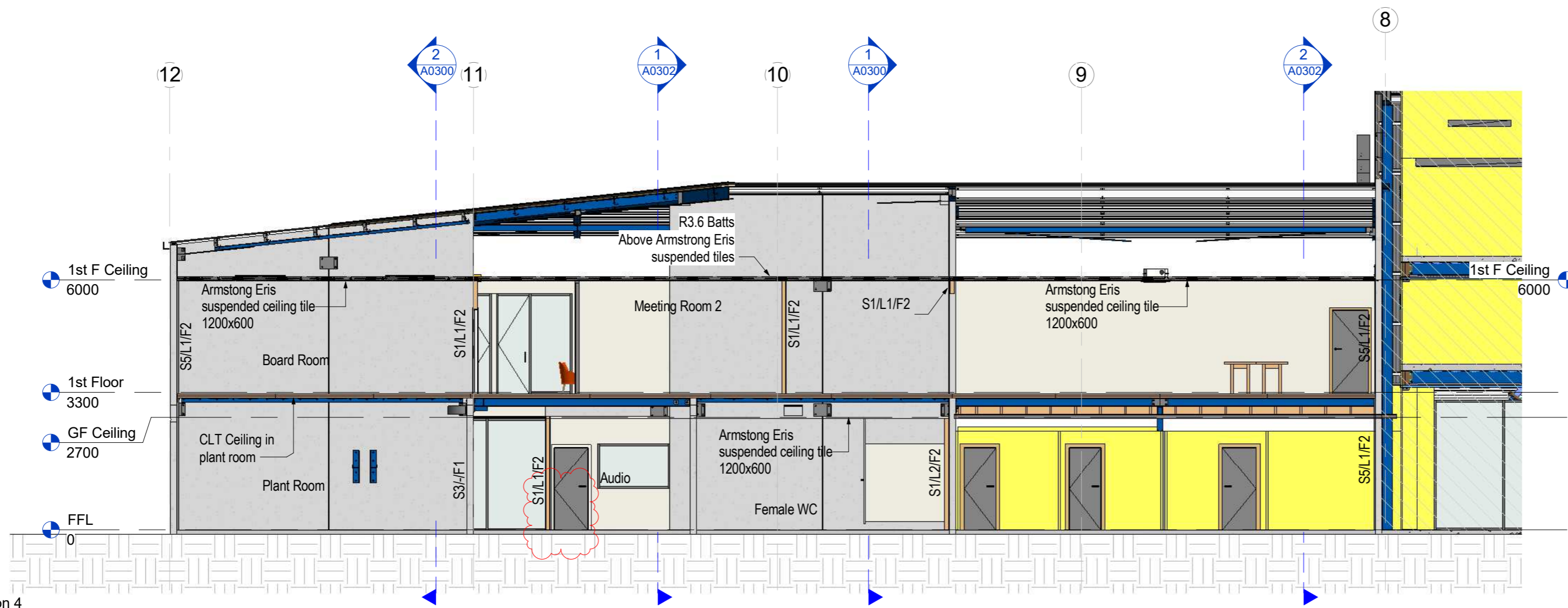
**Wall Key:**

- Wall Type:**  
 S1: 90x45 Timber frame  
 S2: 140x45 Timber frame  
 S3: PC Panel  
 S4: CLT  
 S5: 40mm goldfoam poly with 10mm Gib  
**Lining Type:**  
 L1: 10mm GIB plaster board  
 L2: Plasterboard wet area  
 L3: CLT  
**Finish Type:**  
 F1: Clear Finish  
 F2: Paint Finish  
 F3: Fireshield fire rated coating system

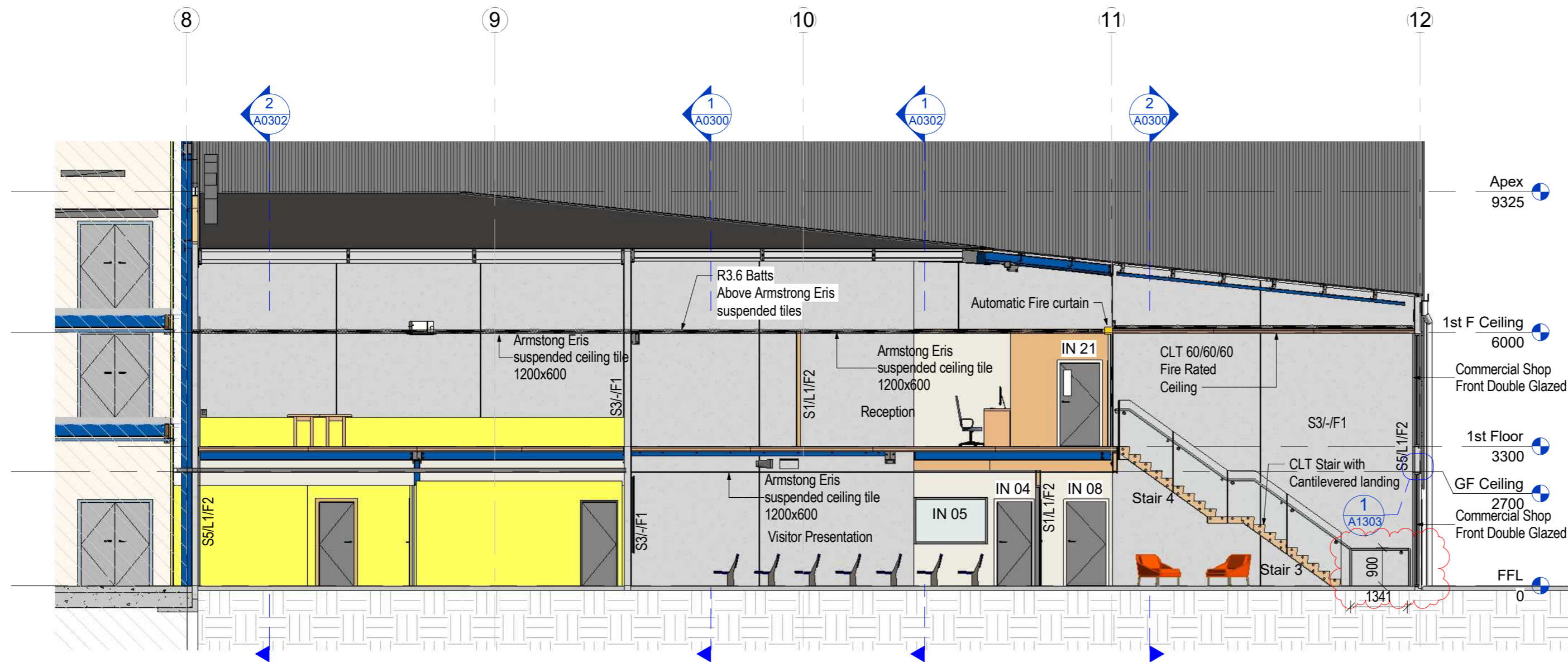
**Floor Finish Key:**

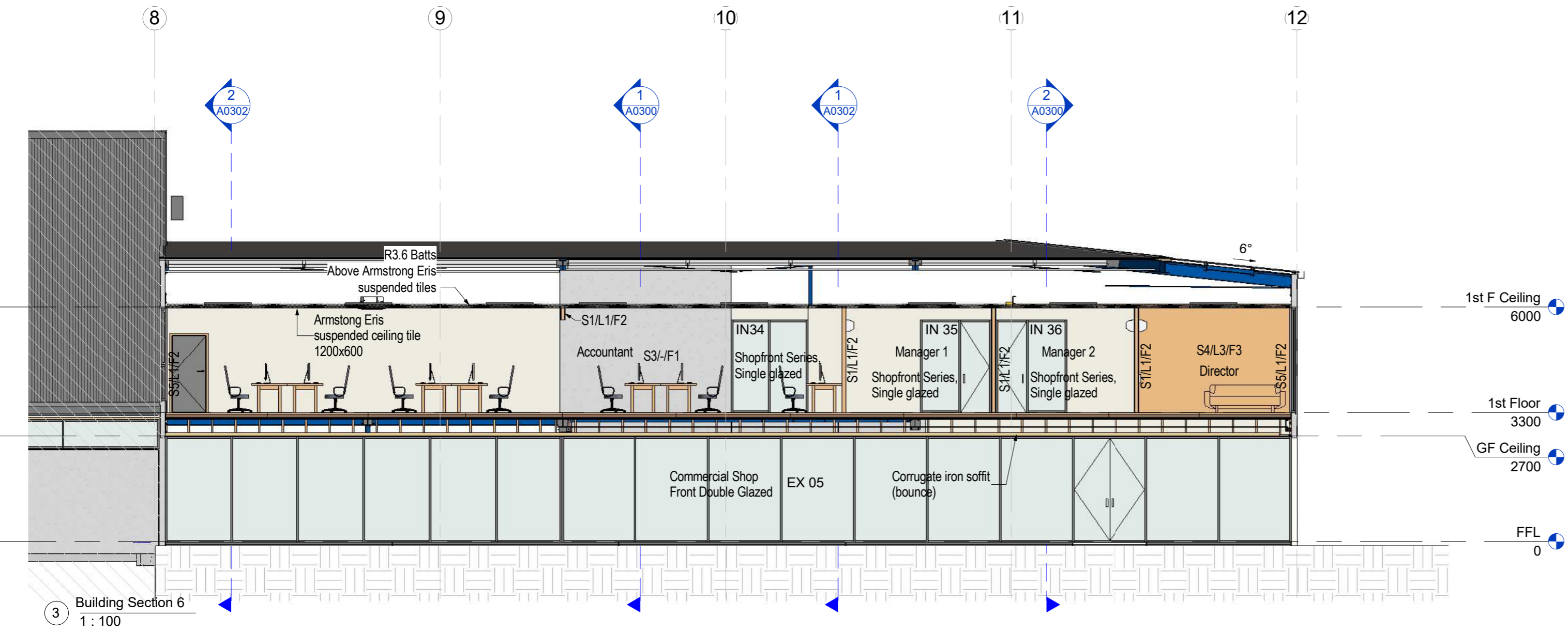
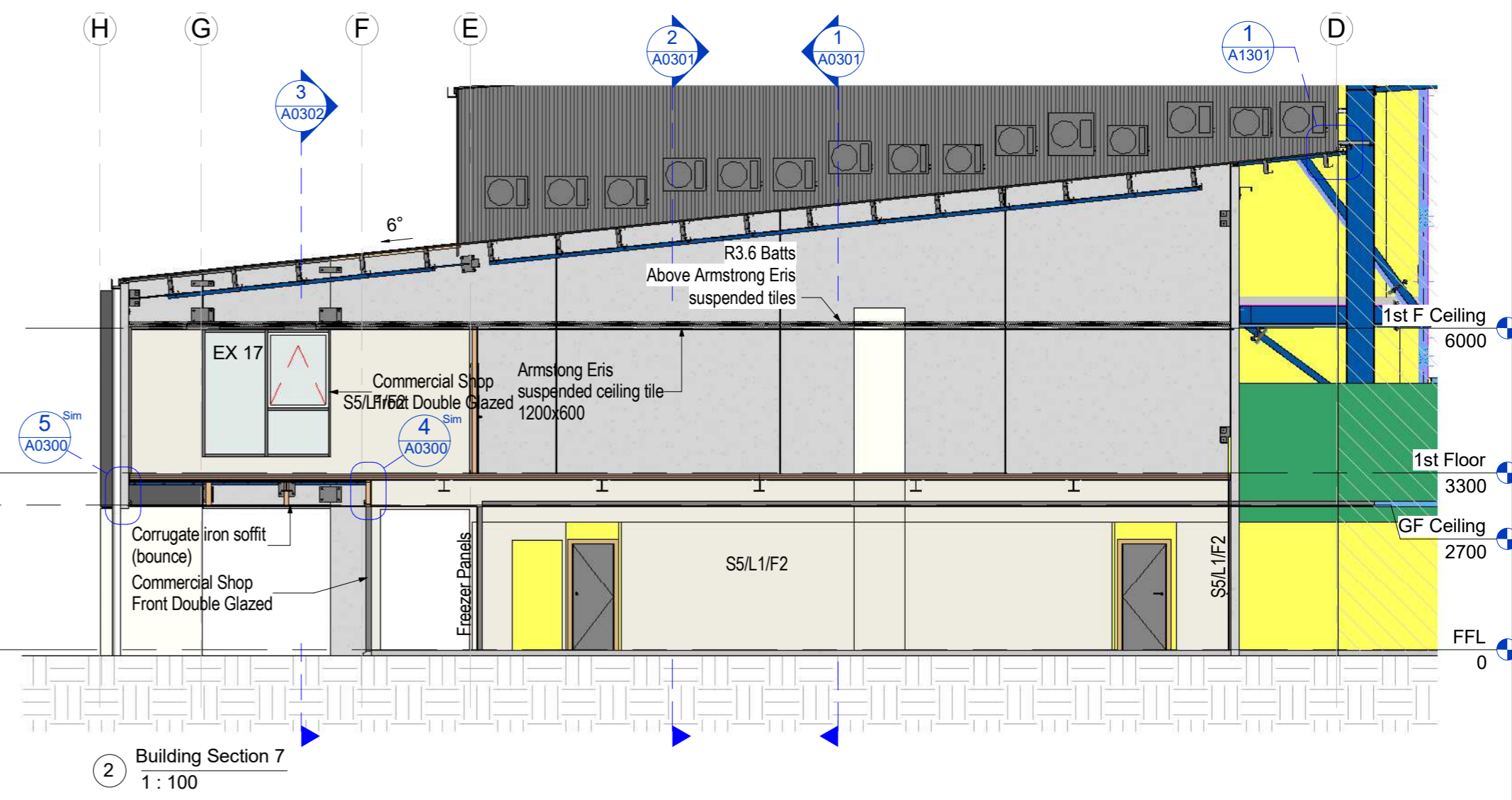
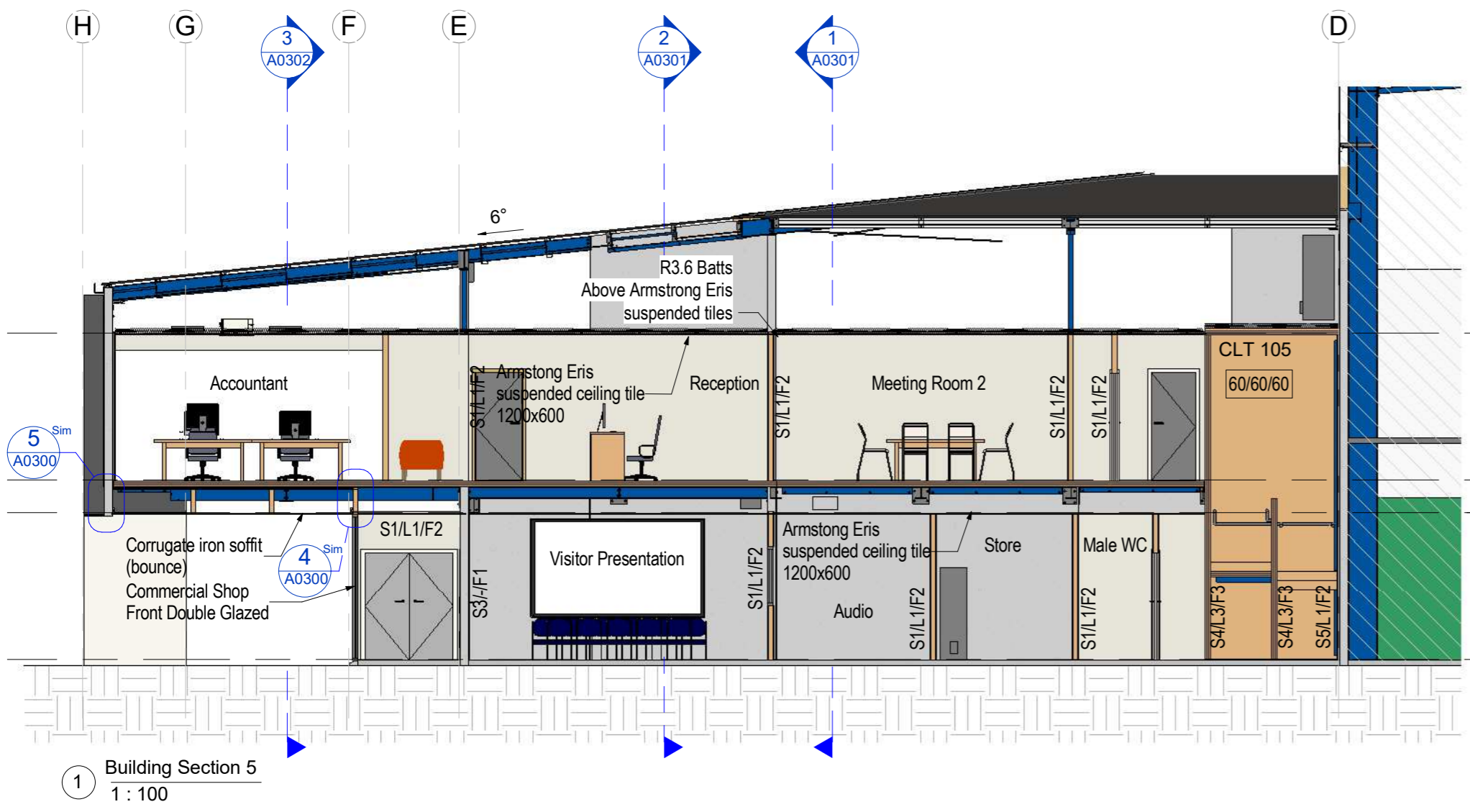
- EM Entrance Matting System  
 LIN Linoleum  
 CPT Selected Carpet  
 PC Polished Concrete  
 CON Concrete Floor

1 Building Section 4  
1 : 100



2 Building Section 3  
1 : 100



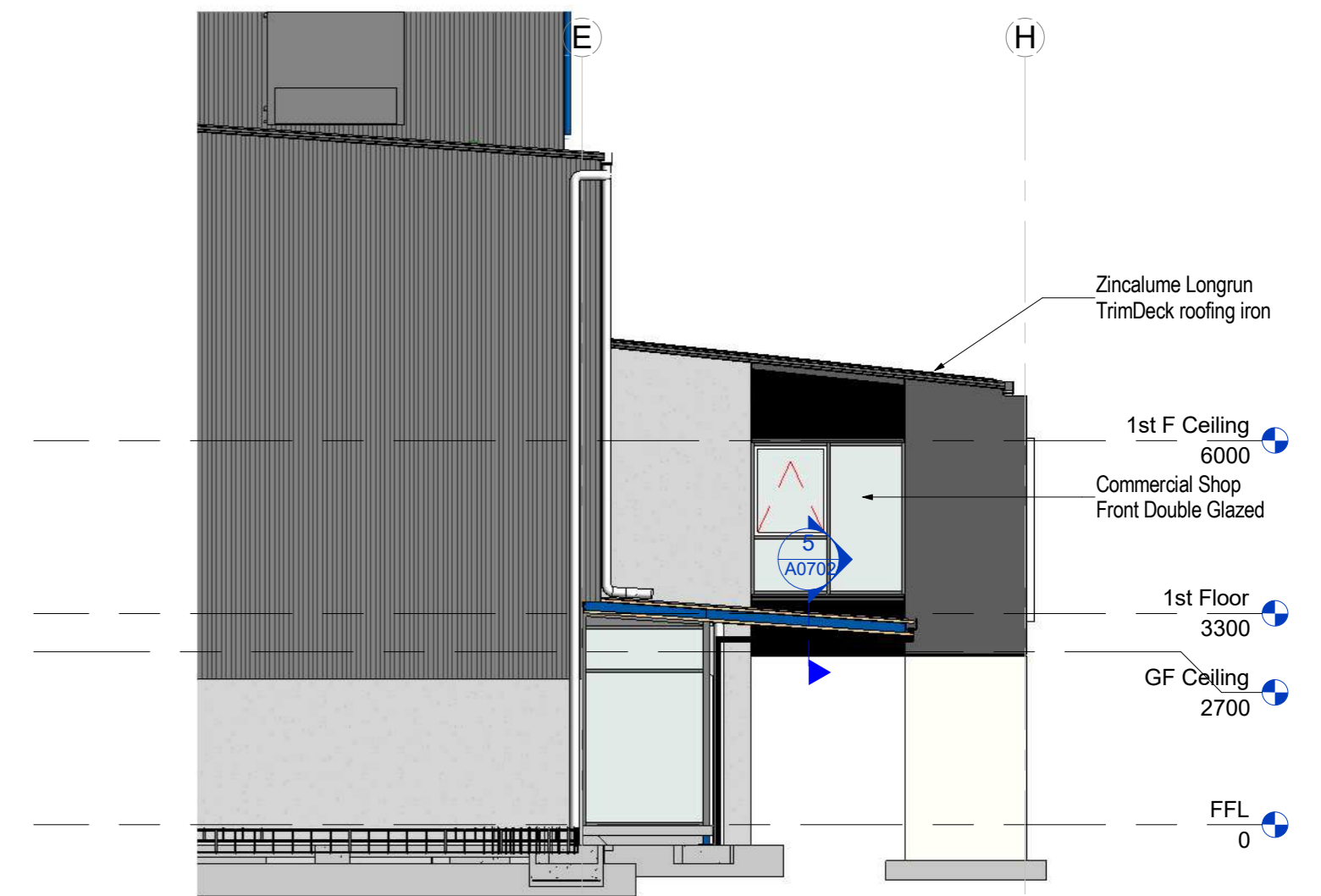


Wall Key:	
<b>Wall Type:</b>	
S1:	90x45 Timber frame
S2:	140x45 Timber frame
S3:	PC Panel
S4:	CLT
S5:	40mm goldfoam poly with 10mm Gib
<b>Lining Type:</b>	
L1:	10mm GIB plaster board
L2:	Plasterboard wet area
L3:	CLT
<b>Finish Type:</b>	
F1:	Clear Finish
F2:	Paint Finish
F3:	Fireshield fire rated coating system
Floor Finish Key:	
EM	Entrance Matting System
LIN	Linoleum
CPT	Selected Carpet
PC	Polished Concrete
CON	Concrete Floor

**Construction Issue**



Elevation B (Sth East)  
1:100



Elevation D (Nth West)  
1:100



Elevation C (Sth West)  
1:100



Thompson Engineering 2002 Ltd | PO Box 2081, Washdyke - Timaru | 9b Meadows Road - Timaru  
PH 0800 688 716 | F (03) 688 7168 | www.thompsonengineering.co.nz | design@thompsonengineering.co.nz

PROJECT

Arch

NZ Dairy Collaborative Group  
Infant Formula Blending Plant Offices

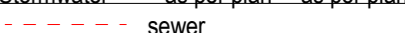

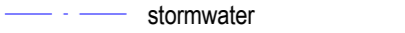
9 Ashford Ave., Ashburton

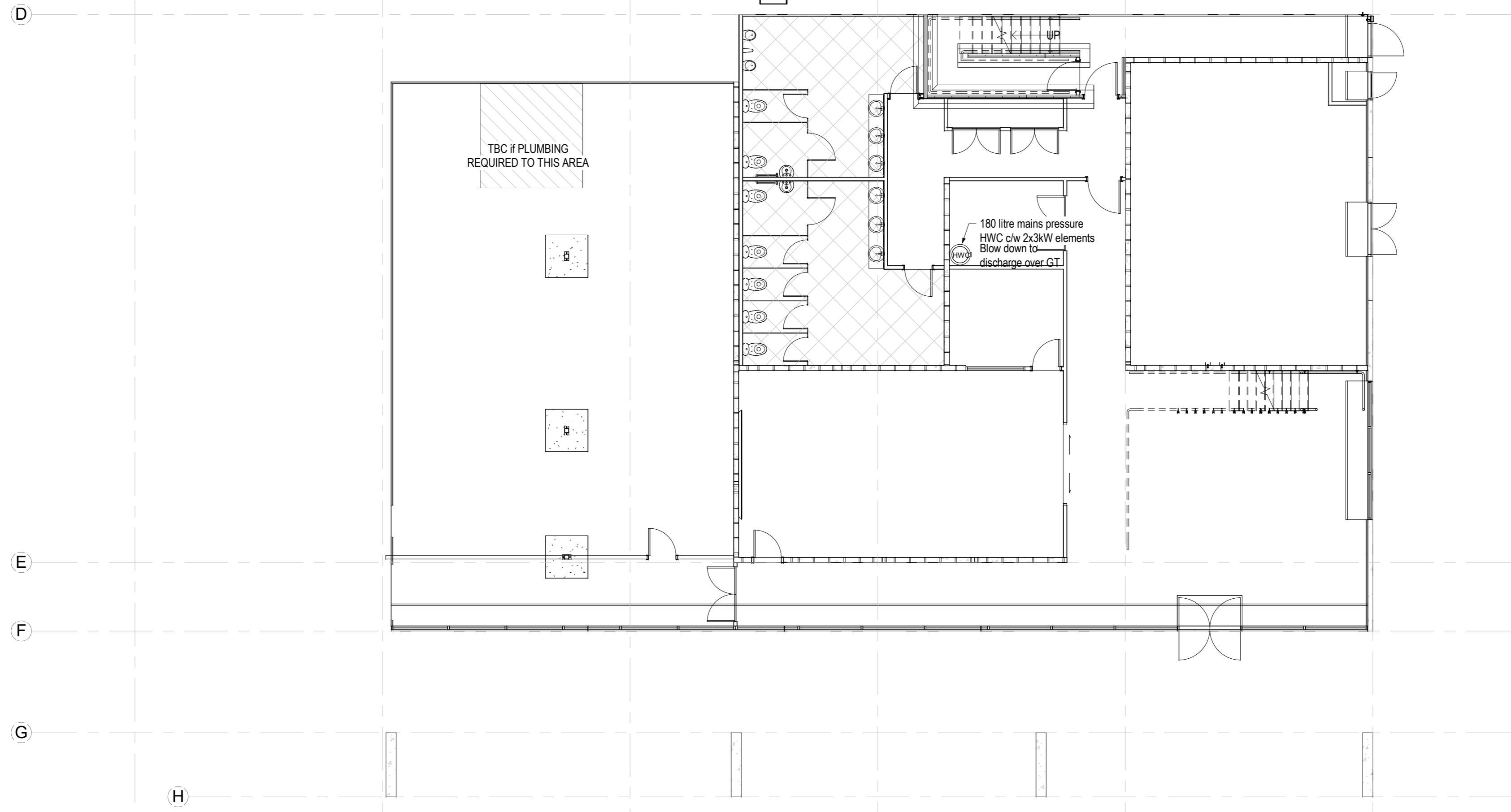
All Drawings property of Thompson Engineering 2002 Ltd

Rev#	Amendments	Date	SCALE	JOB #
			1:100 @ A2	12413
			DRAWN BY C. White	DATE 13/05/16
			APPROVED BY A. Cloake	REV
			Elevations	A0400
			Please note: All dimensions to be verified on site	
				Paper size: A2

Construction Issue

Refer to TM Consultants Civil plans

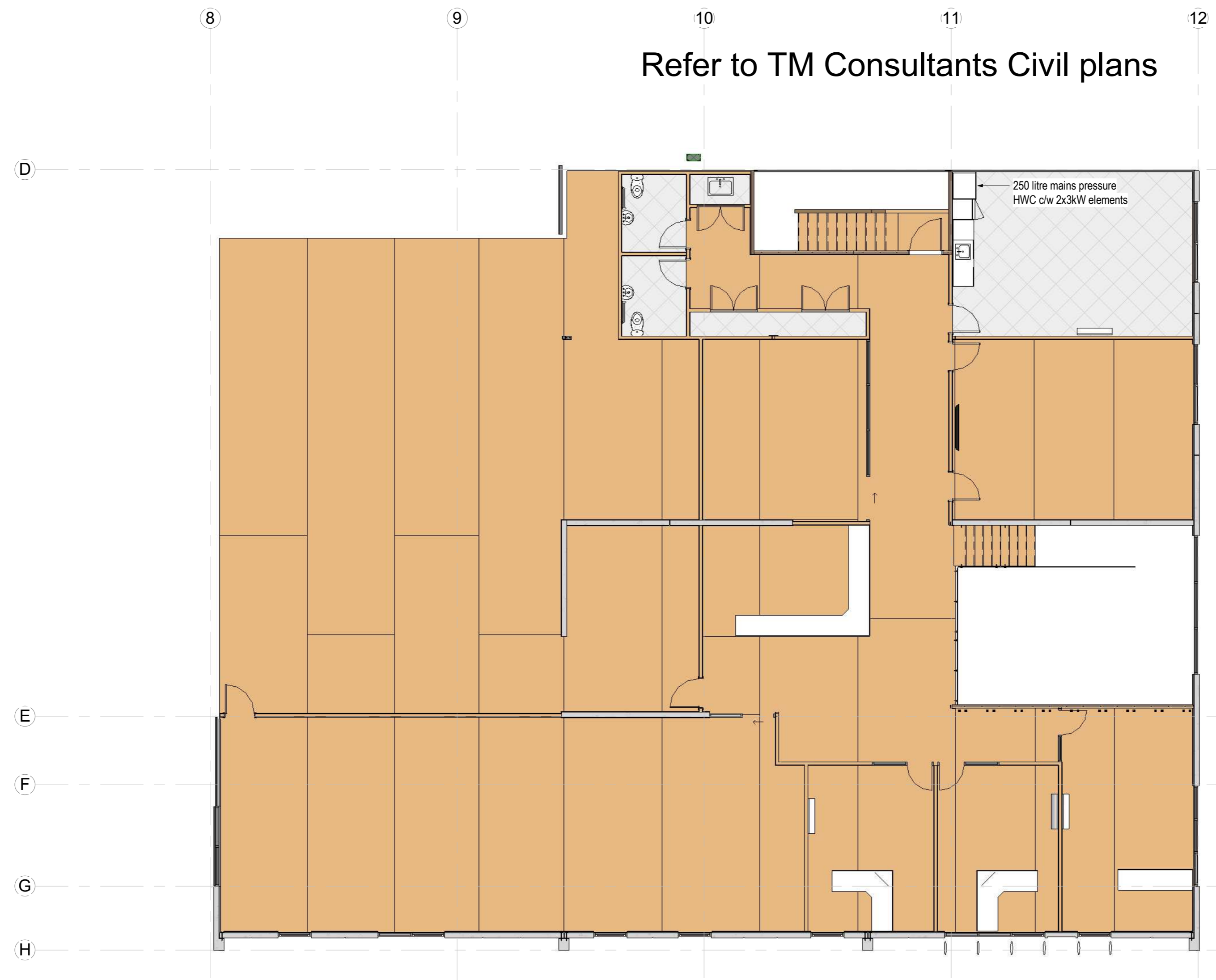
PLUMBING LEGEND		
FIXTURE	PIPE SIZE	GRADIENT
WC	100Ø	1:60
Vanities	65Ø	1:40
Wash Trough	40Ø	1:40
Shower	40Ø	1:40
Sink	65Ø	1:40
Urinal	50Ø	1:20
Foul Drain	100Ø	1:60
Stormwater	as per plan	as per plan
 sewer  water  stormwater		
All fixtures to be back vented or to approval of inspector on-site		
Internal plumbing to ASNZ 3500.2.2003		



1 Plumbing Ground Floor  
1 : 100

**Construction Issue**

Refer to TM Consultants Civil plans



1 Plumbing First Floor  
1 : 100

**Door Schedule Ground Floor**

Mark	Type Mark	Width	Height	Fire Rating	Thickness
IN 01	Solid Core	1620	1980	-/60/-sm	40
IN 02	Solid core	810	1980		40
IN 04	Solid Core	810	1980		40
IN 06	Solid Core	1620	1980		38
IN 07	Solid Core	810	1980		40
IN 08	Solid core	960	1980	-/1/-sm	40
IN 09	Solid Core	1420	1980	-/1/-sm	40
IN 10	Solid Core	1420	1980	-/1/-sm	40
IN 11	Solid Core	810	1980		40
IN 12	Solid Core	960	1980	-/30/-sm	40
IN 13	168	860	1980	-/30/-sm	40
IN 14	Partition Toilet Door	710	1830		18
IN 15	Partition Toilet Door Accessible	810	1830		18
IN 16	Partition Toilet Door Accessible	810	1830		18
IN 17	Partition Toilet Door	710	1830		18
IN 18	Partition Toilet Door	710	1830		18
IN 19	Partition Toilet Door	710	1830		18
IN 20	Partition Toilet Door	710	1830		18

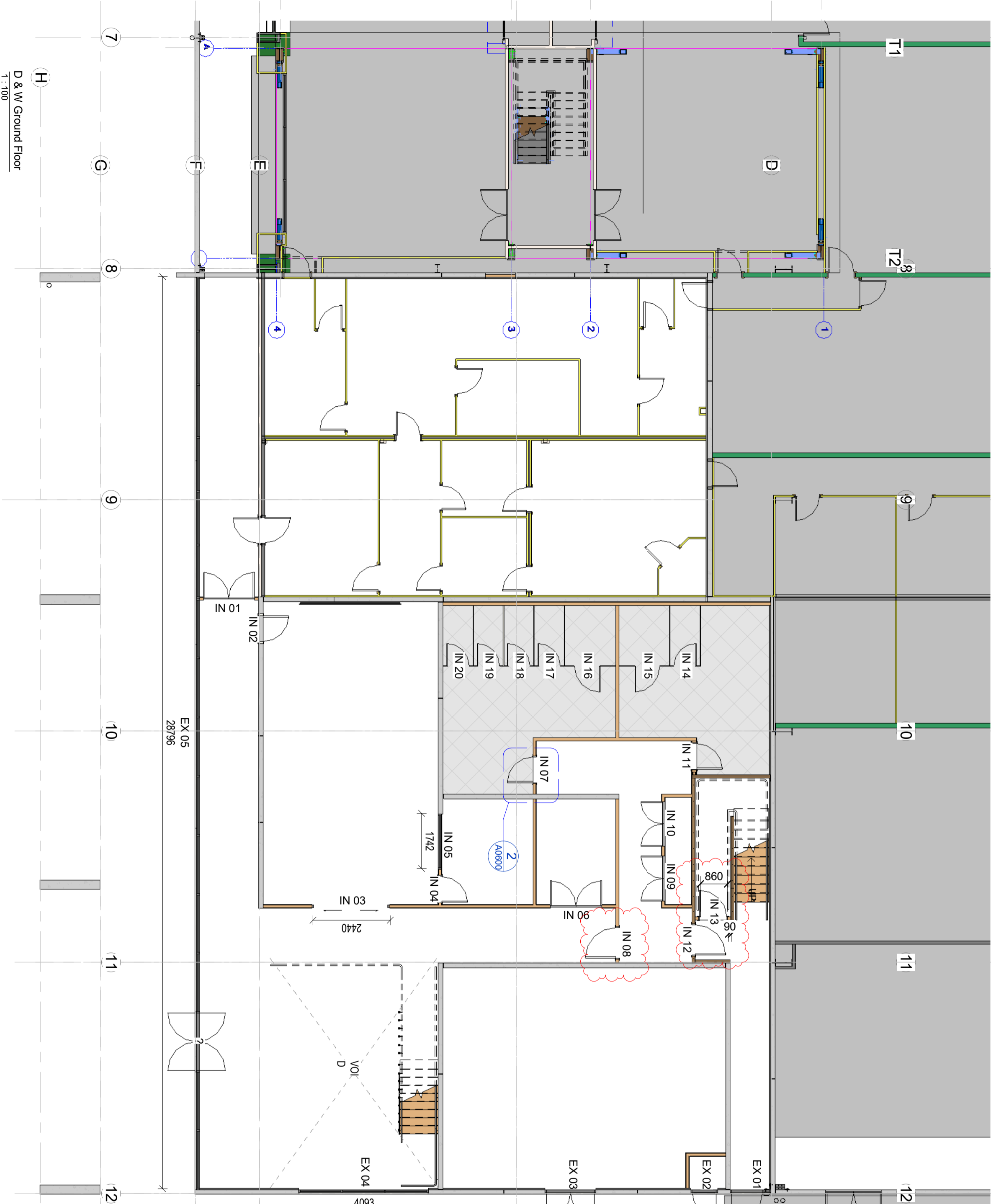
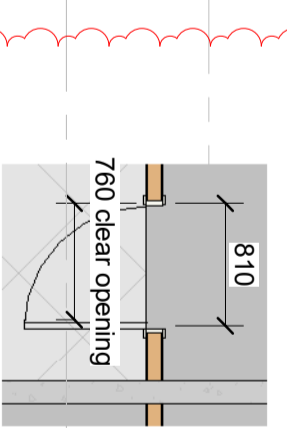
**Internal Aluminium Door and Window Schedule Ground floor**

Mark	Keynote	Length	Unconnected Height	Area	Base Constraint
IN 03	Commercial Shop Front Double Glazed Doors	2440	2400	6 m <sup>2</sup>	FFL
IN 05	Shopfront Series, Single glazed	1742	1100	2 m <sup>2</sup>	FFL

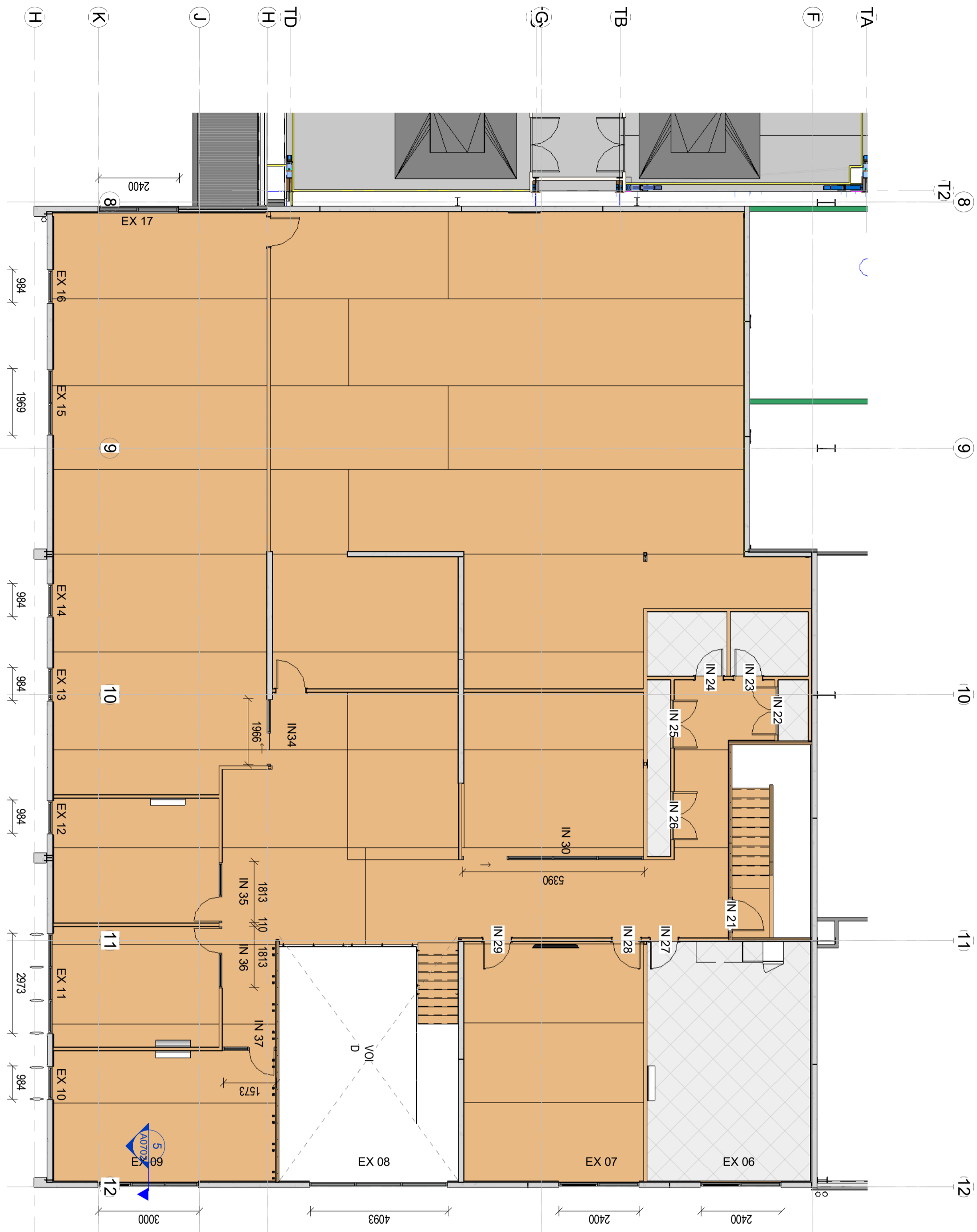
**External Aluminium Door and Window Schedule Ground...**

Mark	Keynote	Length	Unconnected Height	Area	Base Constraint
EX 01	Aluminium Solid Panel	1269	2100	3 m <sup>2</sup>	FFL
EX 02	Fire control Door	853	2100	2 m <sup>2</sup>	FFL
EX 03	Aluminium Solid Panel	1600	2100	3 m <sup>2</sup>	FFL
EX 04	Commercial Shop Front Double Glazed	4093	2700	11 m <sup>2</sup>	FFL
EX 05	Commercial Shop Front Double Glazed	28796	2712	78 m <sup>2</sup>	FFL
EX 08	Commercial Shop Front Double Glazed	4093	2700	11 m <sup>2</sup>	FFL

Grand total: 6 108 m<sup>2</sup>



D & W Ground Floor  
1:100



**Door Schedule 1st Floor**

Mark	Type Mark	Width	Height	Fire Rating	Thickness
IN 21	Solid Core	960	1980	-30/-sm	40
IN 22	Hollow Core	1420	1980		40
IN 23	Solid Core	810	1980		40
IN 24	Solid Core	810	1980		40
IN 25	Hollow Core	1420	1980		40
IN 26	Hollow Core	1420	1980		40
IN 27	Solid Core	810	1980		40
IN 28	Solid Core	810	1980		40
IN 29	Solid Core	810	1980		40
IN 31	168	860	1980	-30/-sm	40
IN 32	168	860	1980	-30/-sm	40

**Internal Aluminium Door and Window Schedule 1st floor**

Mark	Keynote	Length	Unconnecte d/Height	Area	Base Constraint
IN 30	Shopfront Series, Single glazed	5445	2700	15 m <sup>2</sup>	1st Floor
IN 35	Shopfront Series, Single glazed	1888	2400	4 m <sup>2</sup>	1st Floor
IN 36	Shopfront Series, Single glazed	1888	2400	4 m <sup>2</sup>	1st Floor
IN 37	Shopfront Series, Single glazed	1628	2400	4 m <sup>2</sup>	1st Floor

**External Aluminium Door and Window Schedule 1st Floor**

Mark	Keynote	Length	Unconnected Height	Area	Base Constraint
EX 06	Commercial Shop Front Double Glazed	2400	2700	6 m <sup>2</sup>	1st Floor
EX 07	Commercial Shop Front Double Glazed	2400	2700	6 m <sup>2</sup>	1st Floor
EX 09	Commercial Shop Front Double Glazed	3000	2700	8 m <sup>2</sup>	1st Floor
EX 10	Commercial Shop Front Double Glazed	984	2700	3 m <sup>2</sup>	1st Floor
EX 11	Commercial Shop Front Double Glazed	2973	2700	8 m <sup>2</sup>	1st Floor
EX 12	Commercial Shop Front Double Glazed	984	2700	3 m <sup>2</sup>	1st Floor
EX 13	Commercial Shop Front Double Glazed	984	2700	3 m <sup>2</sup>	1st Floor
EX 14	Commercial Shop Front Double Glazed	984	2700	3 m <sup>2</sup>	1st Floor
EX 15	Commercial Shop Front Double Glazed	1969	2700	5 m <sup>2</sup>	1st Floor
EX 16	Commercial Shop Front Double Glazed	984	2700	3 m <sup>2</sup>	1st Floor
EX 17	Commercial Shop Front Double Glazed	2400	2381	6 m <sup>2</sup>	1st Floor
Grand total: 11					53 m <sup>2</sup>

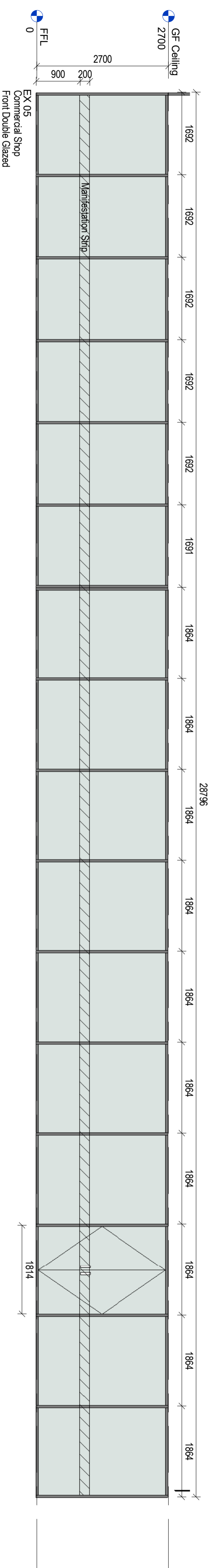
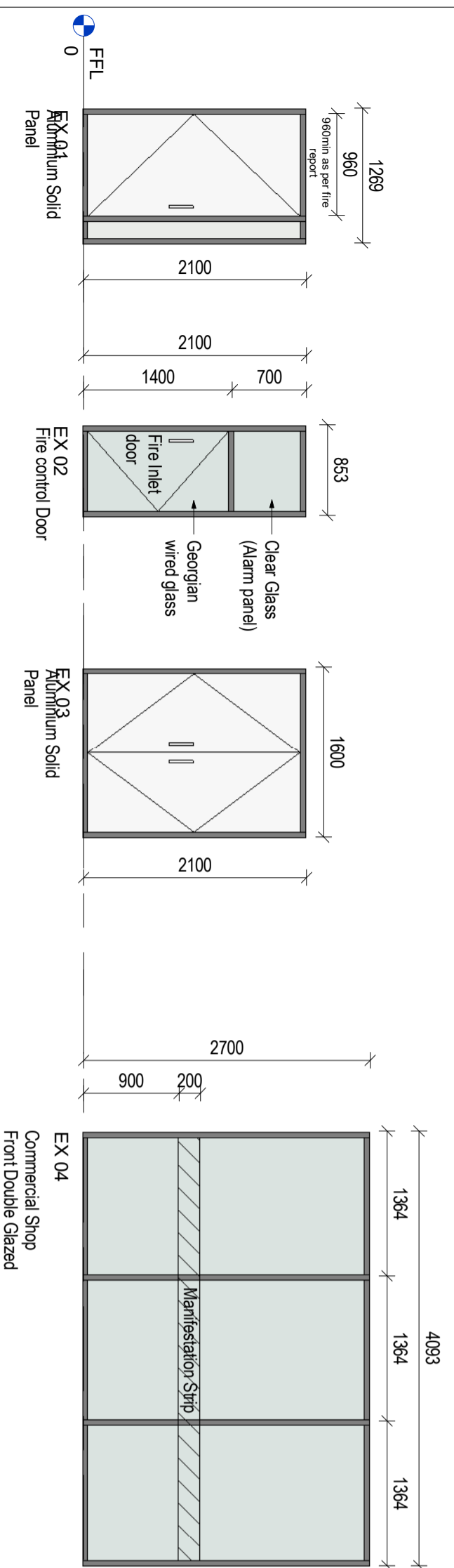
D & W First Floor  
1 : 100

**D & W Schedule NOTE:**

The main contractor is to ensure all door and window opening dimensions are checked prior to the manufacturer of any doors or windows.

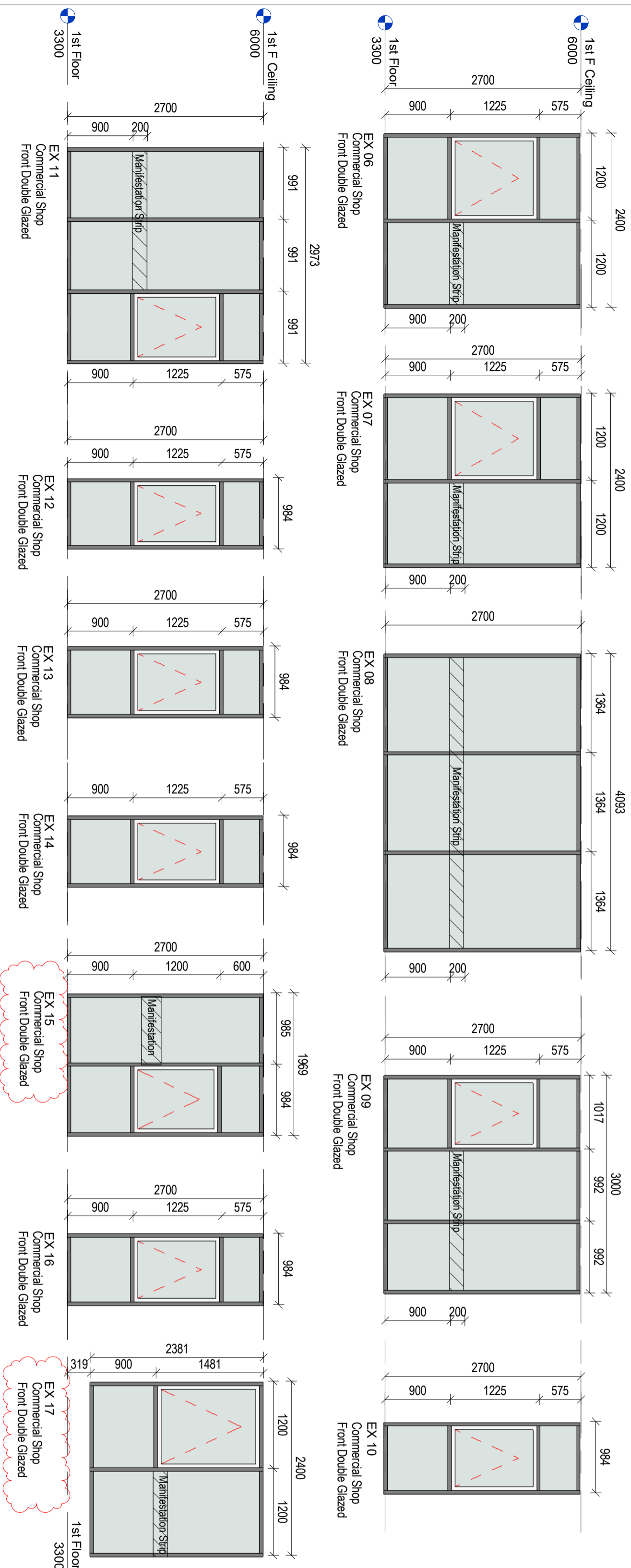
refer to the floor plans and elevations for positions.

Glazing within 1500mm above the FFL is to be grade A safety glass in accordance with table 3.1, glazing greater than 1500 of the floor level to be annealed glass NZS 4423:part 4 & part 3



**External Aluminium Door and Window Schedule**

Mark	Keynote	Length	Height	Area	Base Constraint
EX 01	Aluminium Solid Panel	1269	2100	3 m <sup>2</sup>	FFL
EX 02	Fire control Door	853	2100	2 m <sup>2</sup>	FFL
EX 03	Aluminium Solid Panel	1600	2100	3 m <sup>2</sup>	FFL
EX 04	Commercial Shop Front Double Glazed	4093	2700	11 m <sup>2</sup>	FFL
EX 05	Commercial Shop Front Double Glazed	28796	2712	78 m <sup>2</sup>	FFL
EX 06	Commercial Shop Front Double Glazed	2400	2700	6 m <sup>2</sup>	1st Floor
EX 07	Commercial Shop Front Double Glazed	2400	2700	6 m <sup>2</sup>	1st Floor
EX 08	Commercial Shop Front Double Glazed	4093	2700	11 m <sup>2</sup>	FFL
EX 09	Commercial Shop Front Double Glazed	3000	2700	8 m <sup>2</sup>	1st Floor
EX 10	Commercial Shop Front Double Glazed	984	2700	3 m <sup>2</sup>	1st Floor
EX 11	Commercial Shop Front Double Glazed	2973	2700	8 m <sup>2</sup>	1st Floor
EX 12	Commercial Shop Front Double Glazed	984	2700	3 m <sup>2</sup>	1st Floor
EX 13	Commercial Shop Front Double Glazed	984	2700	3 m <sup>2</sup>	1st Floor
EX 14	Commercial Shop Front Double Glazed	984	2700	3 m <sup>2</sup>	1st Floor
EX 15	Commercial Shop Front Double Glazed	1969	2700	5 m <sup>2</sup>	1st Floor
EX 16	Commercial Shop Front Double Glazed	984	2700	3 m <sup>2</sup>	1st Floor
EX 17	Commercial Shop Front Double Glazed	2400	2381	6 m <sup>2</sup>	1st Floor
Grand total: 17				2381	161 m <sup>2</sup>

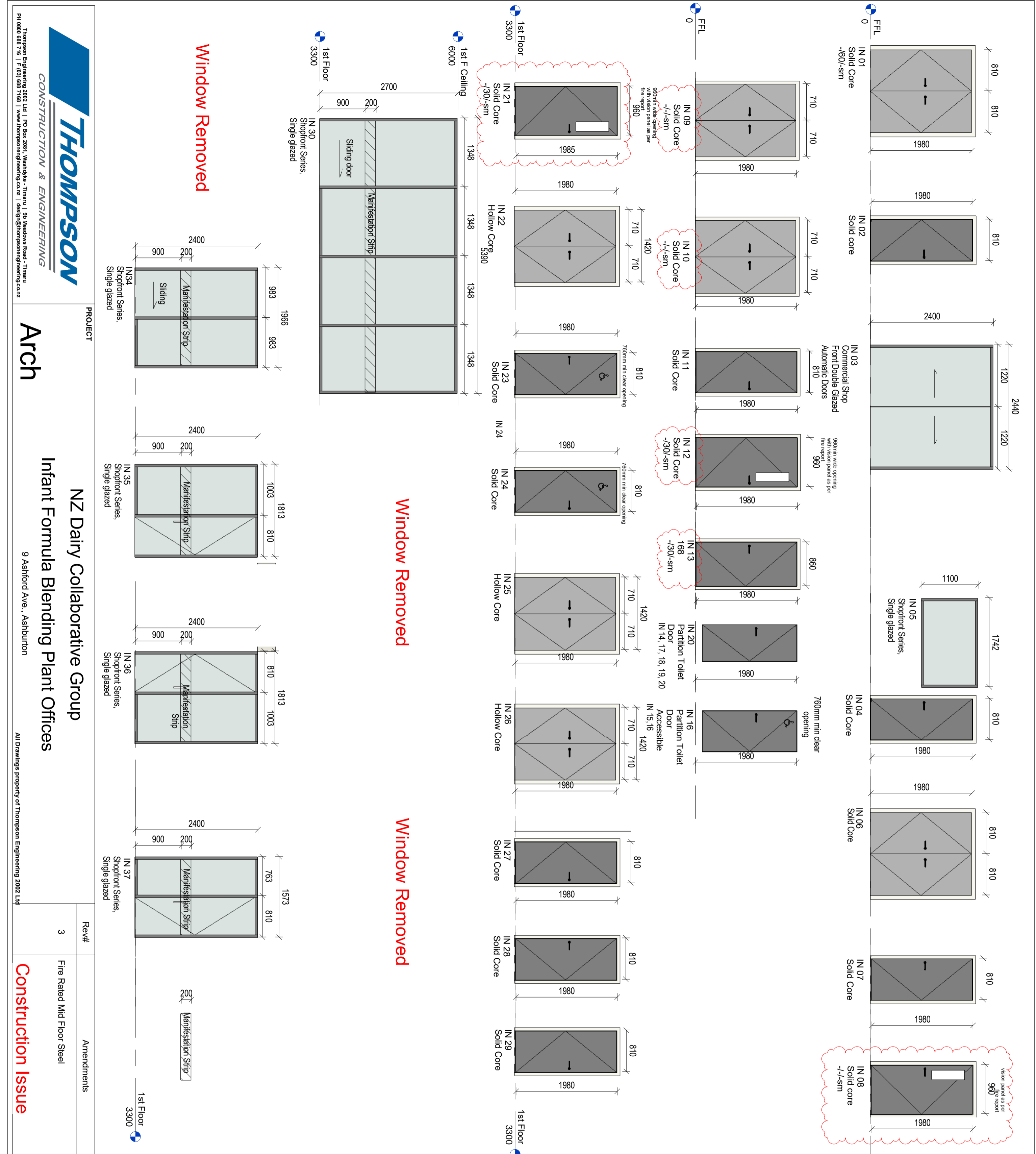


**Door Schedule**

Mark	Type	Mark	Width	Height	Fire Rating	Thickness
IN 01	Solid Core	1620	1980	-/60/-sm	40	
IN 02	Solid core	810	1980		40	
IN 04	Solid Core	810	1980		40	
IN 06	Solid Core	1620	1980		38	
IN 07	Solid Core	810	1980		40	
IN 08	Solid core	960	1980	-/1/-sm	40	
IN 09	Solid Core	1420	1980	-/1/-sm	40	
IN 10	Solid Core	1420	1980	-/1/-sm	40	
IN 11	Solid Core	810	1980		40	
IN 12	Solid Core	960	1980	-/30/-sm	40	
IN 13	168	860	1980	-/30/-sm	40	
IN 14	Partition Toilet Door	710	1830		18	
IN 15	Partition Toilet Door Accessible	810	1830		18	
IN 16	Partition Toilet Door Accessible	810	1830		18	
IN 17	Partition Toilet Door	710	1830		18	
IN 18	Partition Toilet Door	710	1830		18	
IN 19	Partition Toilet Door	710	1830		18	
IN 20	Partition Toilet Door	710	1830		18	
IN 21	Solid Core	960	1980	-/30/-sm	40	
IN 22	Hollow Core	1420	1980		40	
IN 23	Solid Core	810	1980		40	
IN 24	Solid Core	810	1980		40	
IN 25	Hollow Core	1420	1980		40	
IN 26	Hollow Core	1420	1980		40	
IN 27	Solid Core	810	1980		40	
IN 28	Solid Core	810	1980		40	
IN 29	Solid Core	810	1980		40	
IN 31	168	860	1980	-/30/-sm	40	
IN 32	168	860	1980	-/30/-sm	40	

**Internal Aluminium Door and Window Schedule**

Mark	Keynote	Length	Unconnected Height	Area	Base Constraint
IN 03	Commercial Shop Front Double Glazed Automatic Doors	2440	2400	6 m <sup>2</sup>	FFL
IN 05	Shopfront Series, Single glazed	1742	1100	2 m <sup>2</sup>	FFL
IN 30	Shopfront Series, Single glazed	5445	2700	15 m <sup>2</sup>	1st Floor
IN 35	Shopfront Series, Single glazed	1868	2400	4 m <sup>2</sup>	1st Floor
IN 36	Shopfront Series, Single glazed	1868	2400	4 m <sup>2</sup>	1st Floor
IN 37	Shopfront Series, Single glazed	1628	2400	4 m <sup>2</sup>	1st Floor



Window Removed

Window Removed

Window Removed

Rev#	Amendments
3	Fire Rated Mid Floor Steel

DATE	DATE	REV	REV
20/05/16	13/05/16	3	3

SCALE: 1:50 @ A2

JOB #: 12413

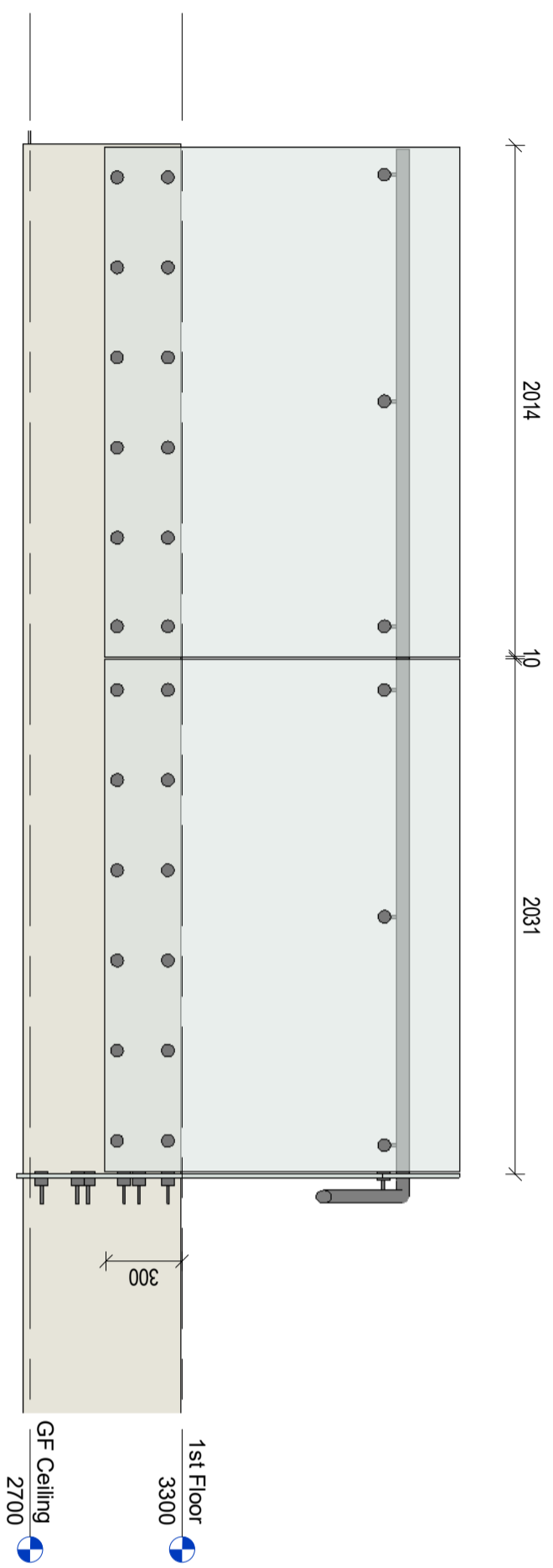
DRAWN BY: C. White

APPROVED BY: A. Cloake

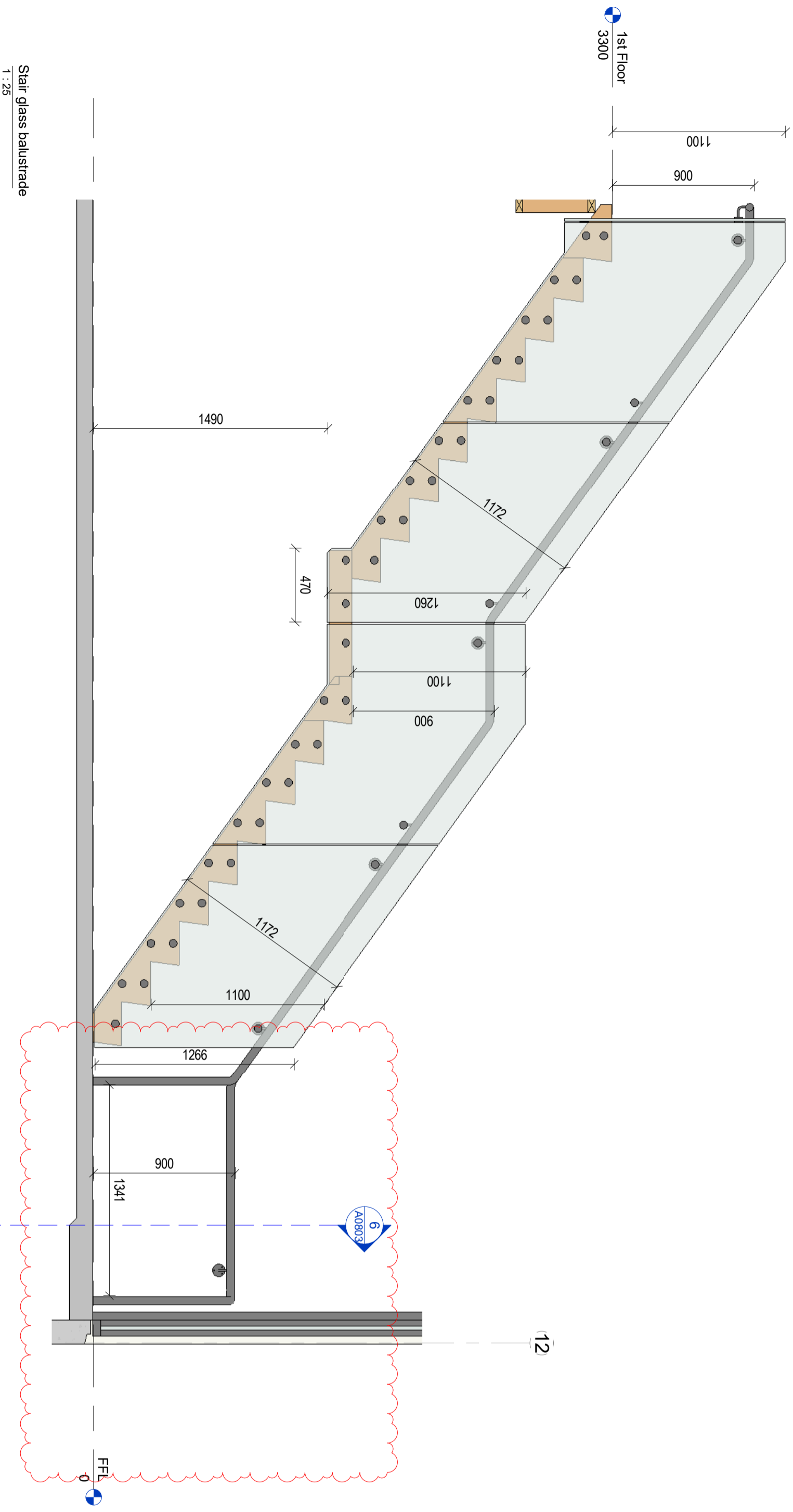
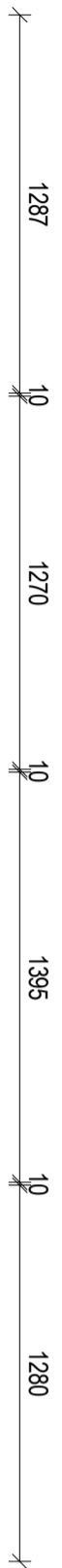
D W Internal

Project size: A2

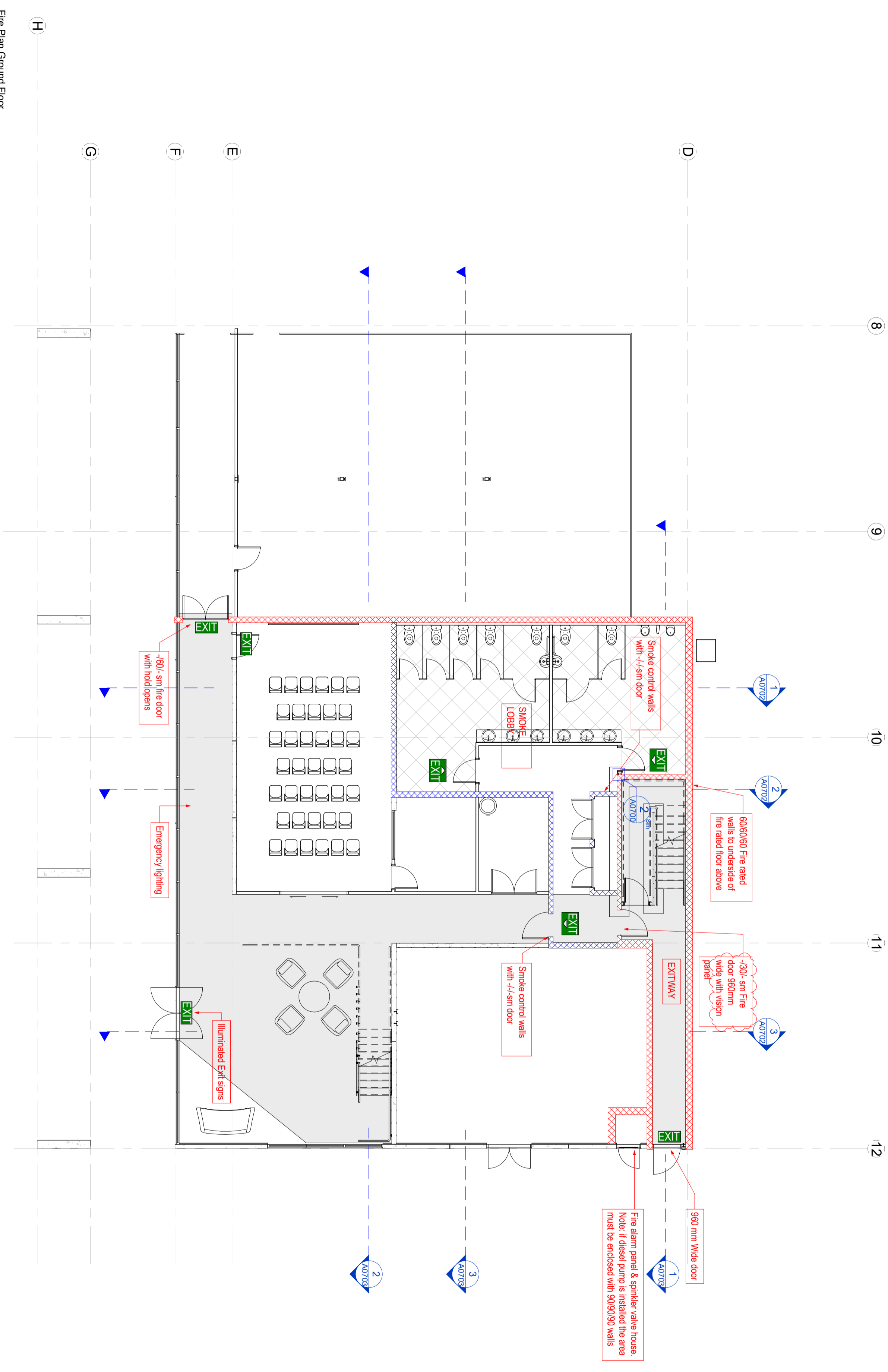
**Construction Issue**



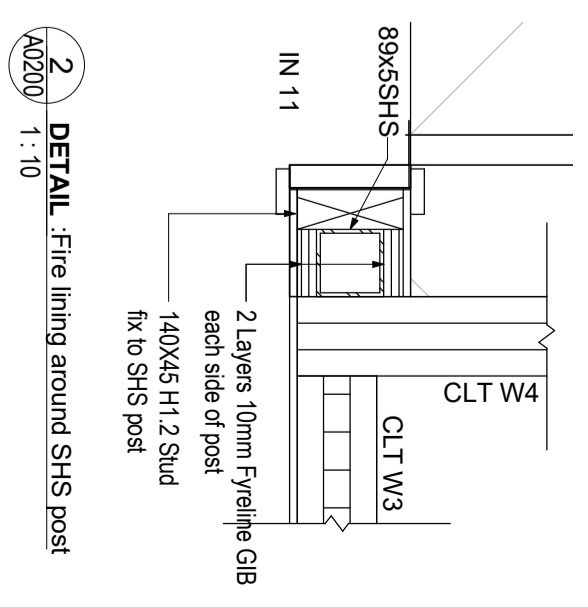
Glass Balustrade upstairs  
1:25



Rev/#	Amendments	Date	SCALE	JOB #
5	Client Changes	24/05/16	1:25 @ A2	12413
			DRAWN BY C. White	DATE 13/05/16
			APPROVED BY A. Cloake	REV 5
			Balustrades	A0604
			Please note: All dimensions to be verified on site	
			Paper size A2	



FIRE RATING KEY:	
	60/60/60 Fire Rated Wall
	+/- Smoke Control Wall



Fire Plan Ground Floor  
1:100

Rev#	Amendments	Date	SCALE	JOB #
3	Fire Rated Mid Floor Steel	20/05/16	As indicated@ A2	12413
	<b>Construction Issue</b>			
			DRAWN BY C. White	DATE 13/05/16
			APPROVED BY A. Cloake	REV 3
			Fire Rating Plan GF	<b>A0700</b>
			Please note: All dimensions to be verified on site	
				paper size <b>A2</b>

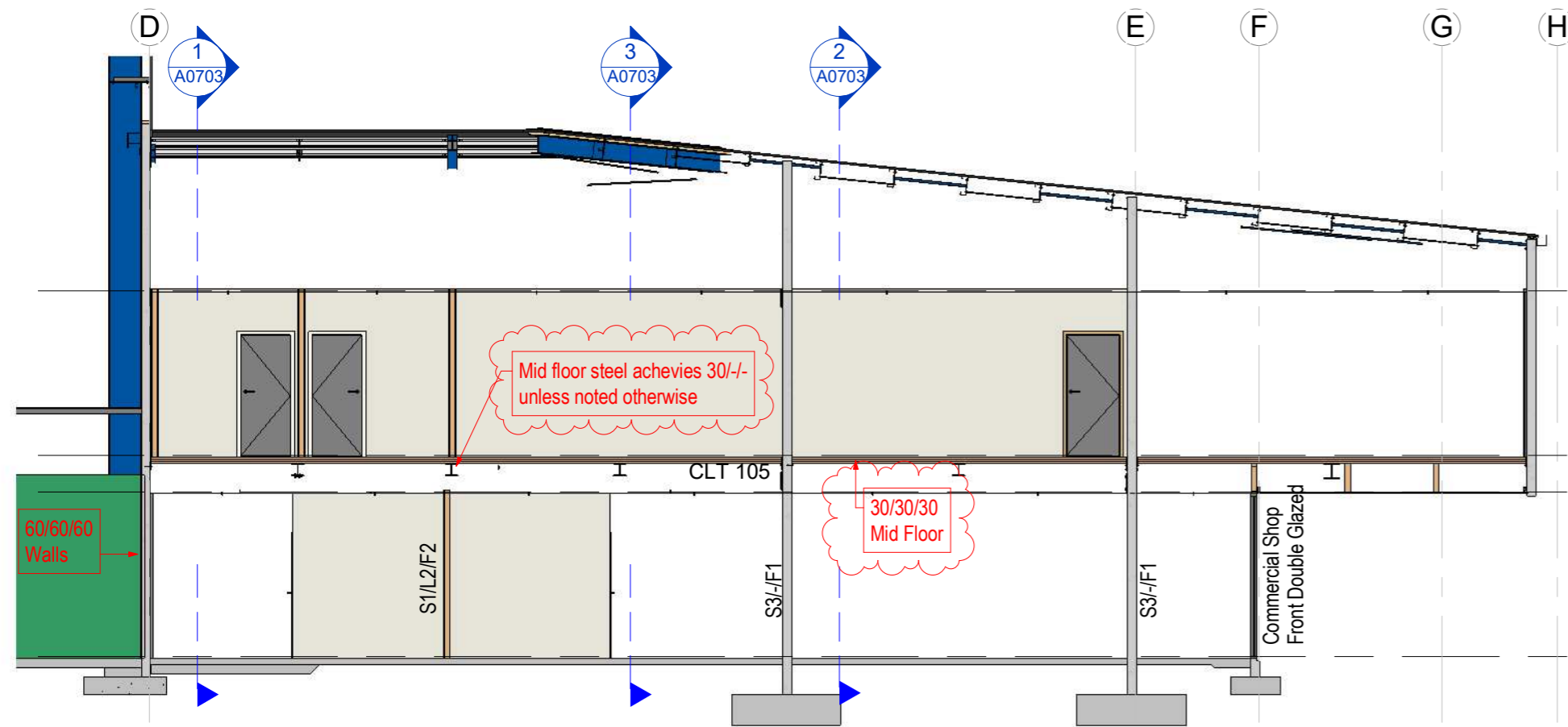
**FIRE RATING KEY:**

	60/60/60 Fire Rated Wall
	1/1 - Smoke Control Wall

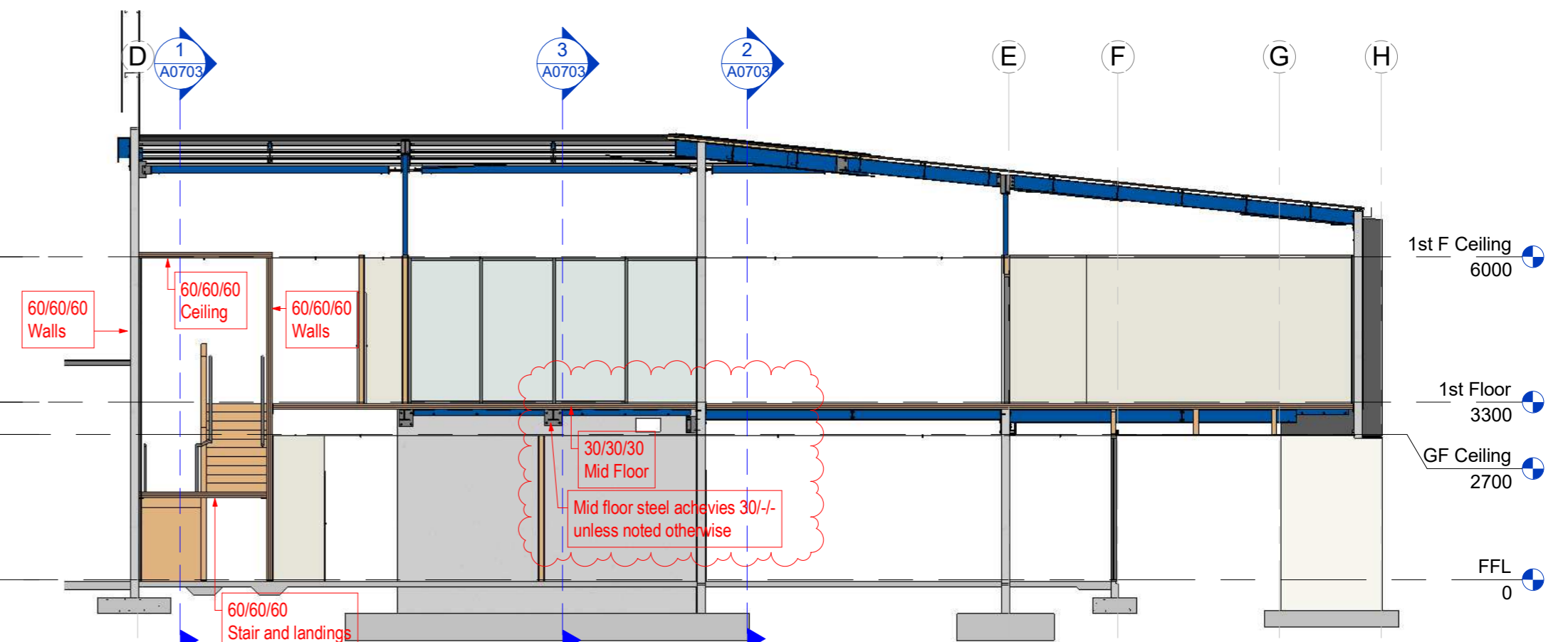


1 Fire Plan First Floor  
1 : 100

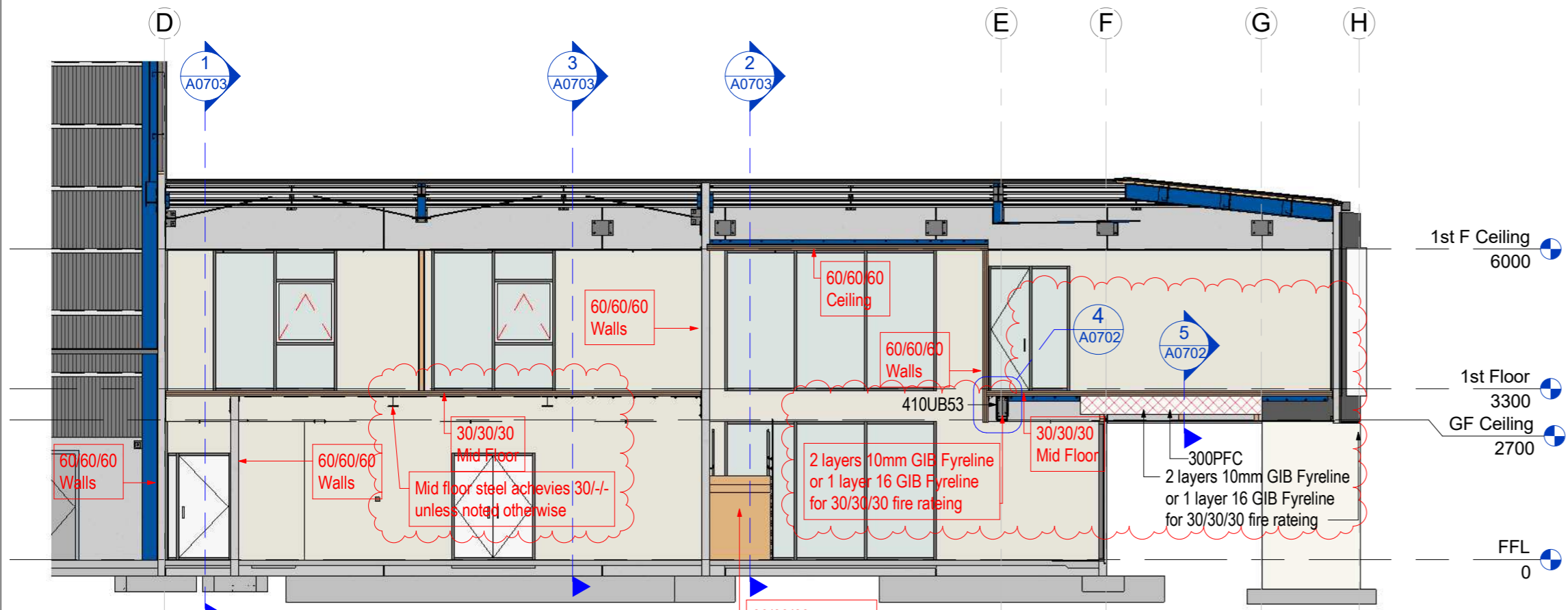
Rev#	Amendments	Date	SCALE	JOB #
3	Fire Rated Mid Floor Steel	20/05/16	As indicated@ A2	12413
	<b>Construction Issue</b>			
			DRAWN BY C. White	DATE 13/05/16
			APPROVED BY A. Cloake	REV 3
			Fire Rating Plan FF	A0701
			Please note: All dimensions to be verified on site	
				paper size A2



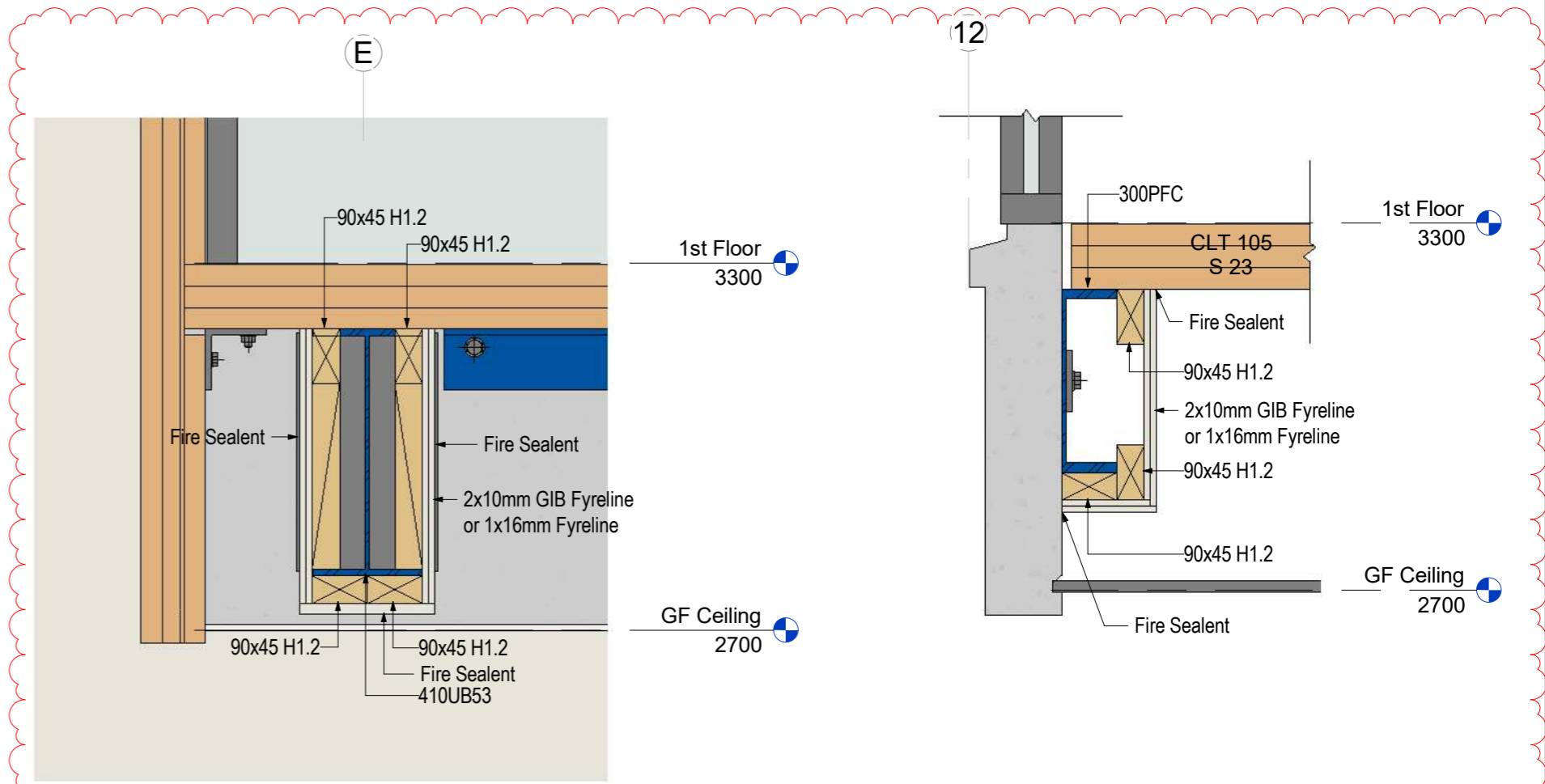
1 Fire rating section 1  
1 : 100



2 Fire rating section 2  
1 : 100

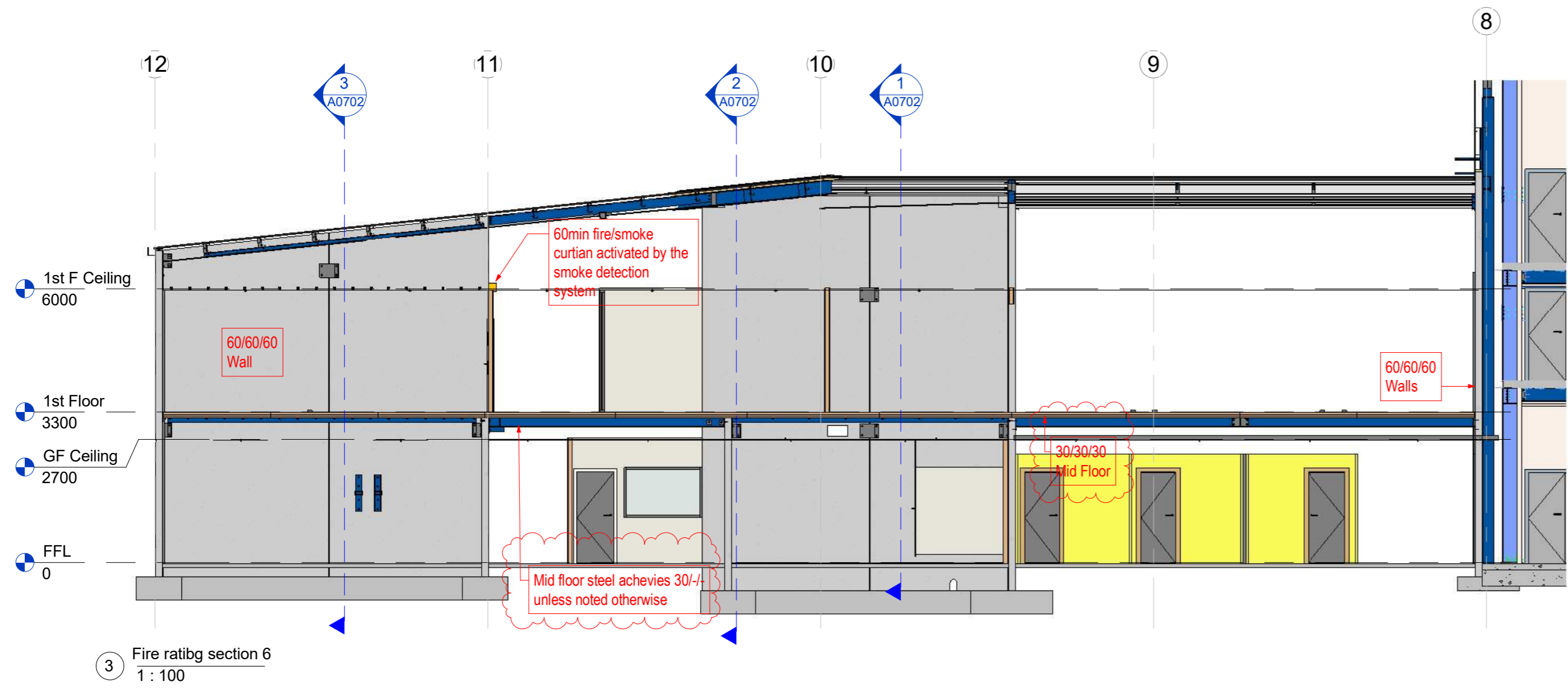
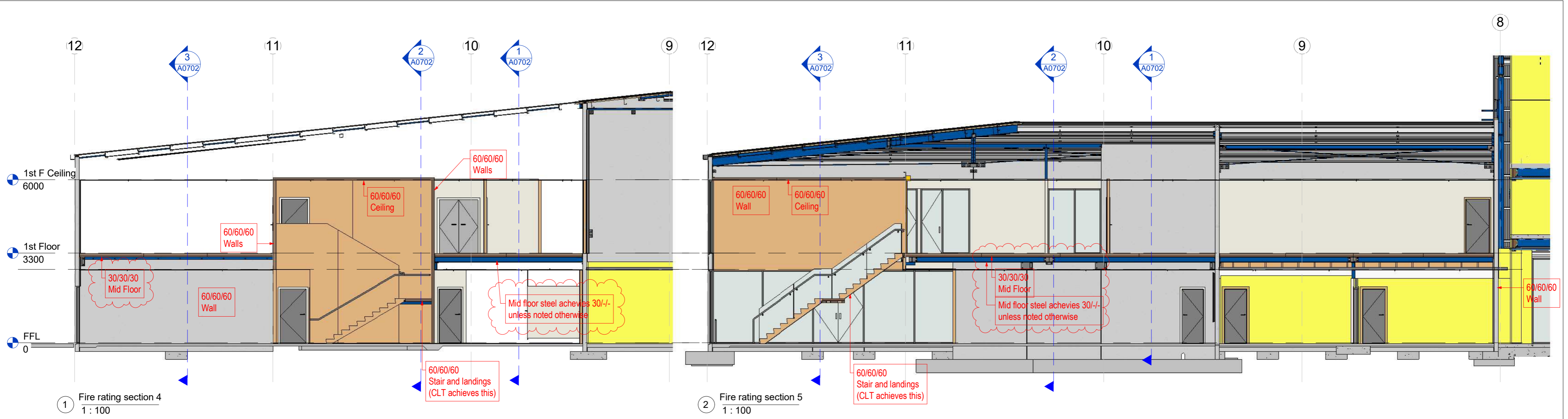


3 Fire rating section 3  
1 : 100



4 Fire rating around 410UB  
1 : 10

5 Fire rating around 300PFC  
1 : 10



Thompson Engineering 2002 Ltd | PO Box 2081, Washdyke - Timaru | 9b Meadows Road - Timaru  
PH 0800 688 716 | F (03) 688 7168 | www.thompsonengineering.co.nz | design@thompsonengineering.co.nz

PROJECT

Arch

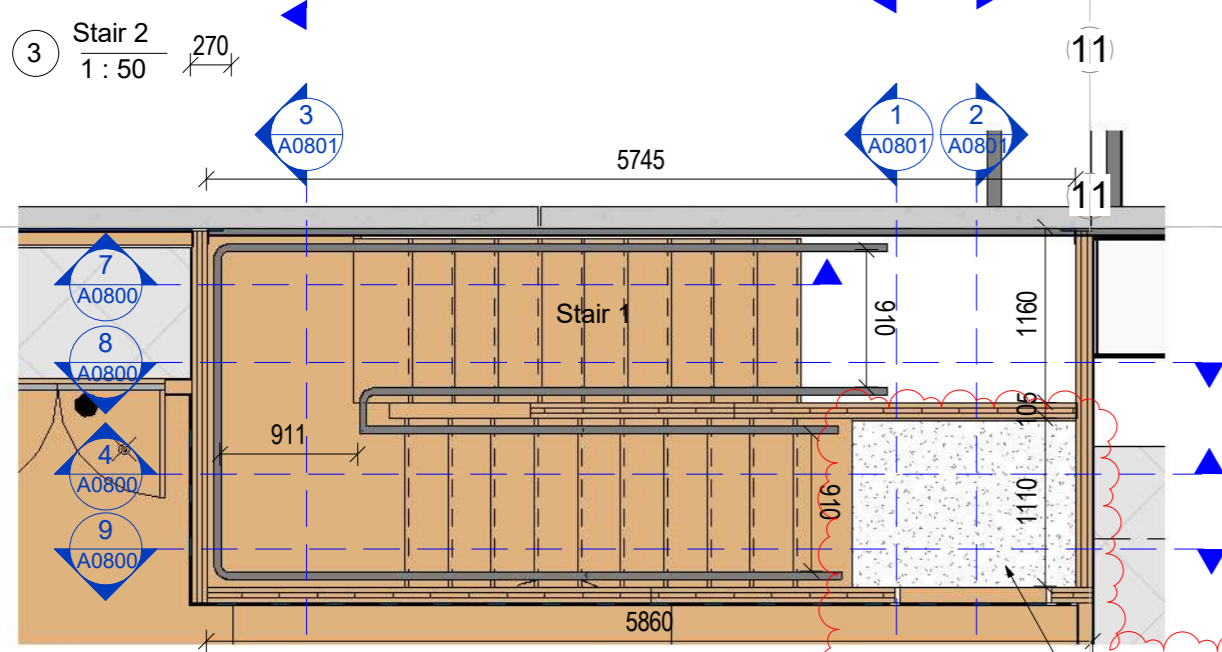
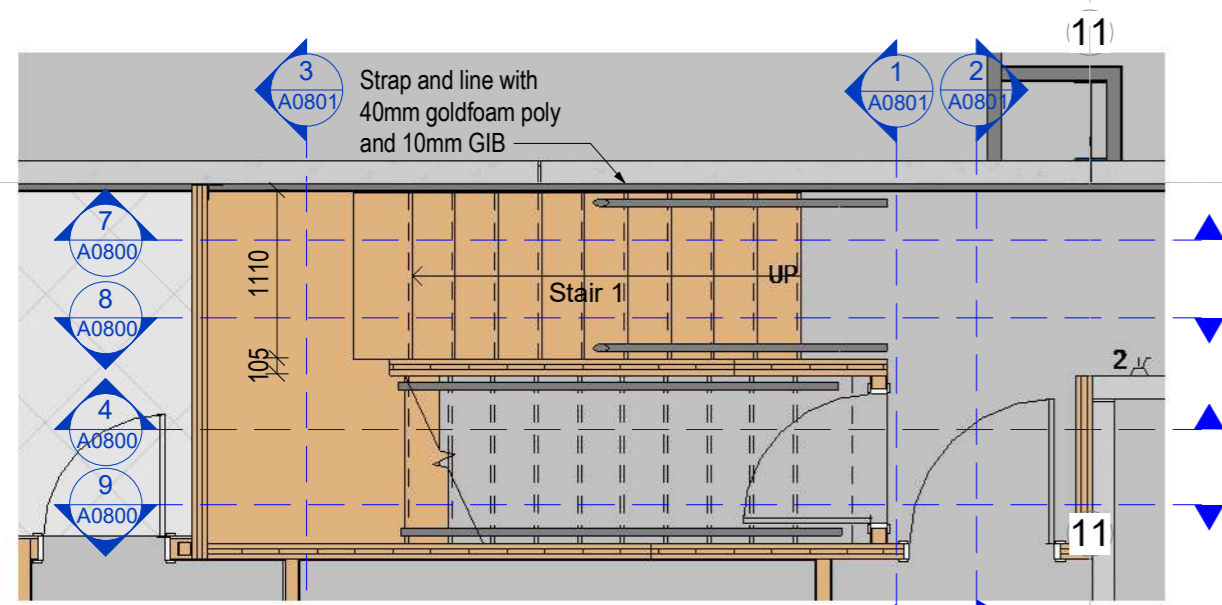
NZ Dairy Collaborative Group  
Infant Formula Blending Plant Offices

9 Ashford Ave., Ashburton

All Drawings property of Thompson Engineering 2002 Ltd

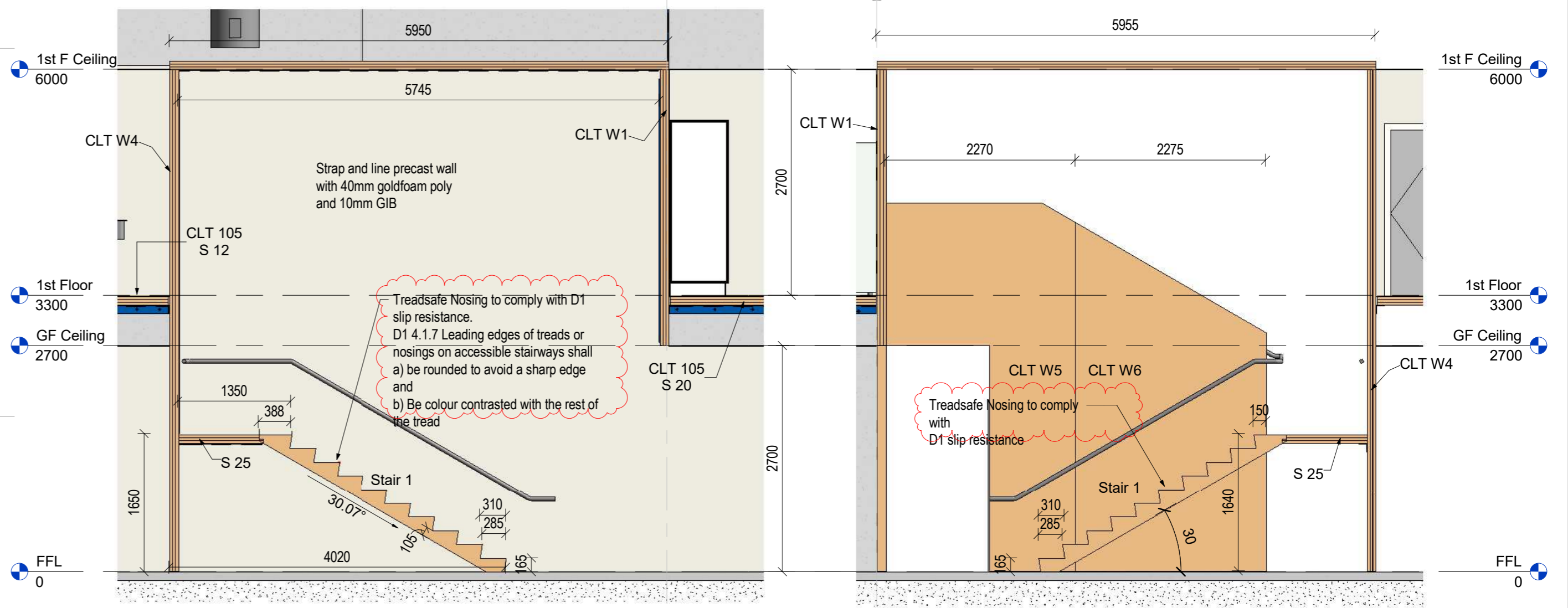
Rev#	Amendments	Date	SCALE	JOB #
3	Fire Rated Mid Floor Steel	20/05/16	1: 100 @ A2	12413
			DRAWN BY	DATE
			C. White	13/05/16
			APPROVED BY	REV
			A.Cloake	3
			Fire Rating sections	<b>A0703</b>
Please note: All dimensions to be verified on site				Paper size: <b>A2</b>

**Construction Issue**



6 Stair 2 Copy 1  
1:50

Change in texture and colour of surface (e.g. carpet tiles) to comply with NZS4121 8.5.1 Surface Treatment. A change in surface treatment with strong colour contrast shall be provided at the head and foot of any internal flight of steps.

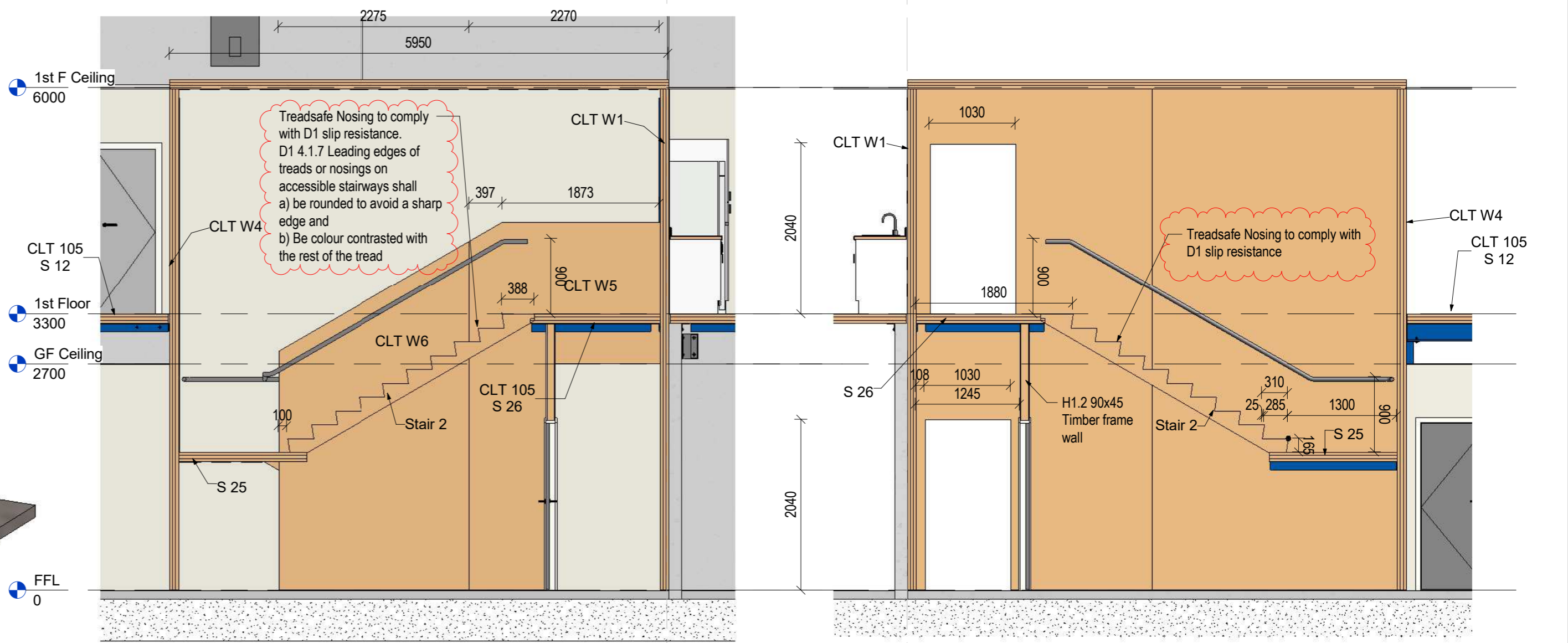


7 Stair 2 Section 1  
1:50

8 Stair 2 section 2  
1:50

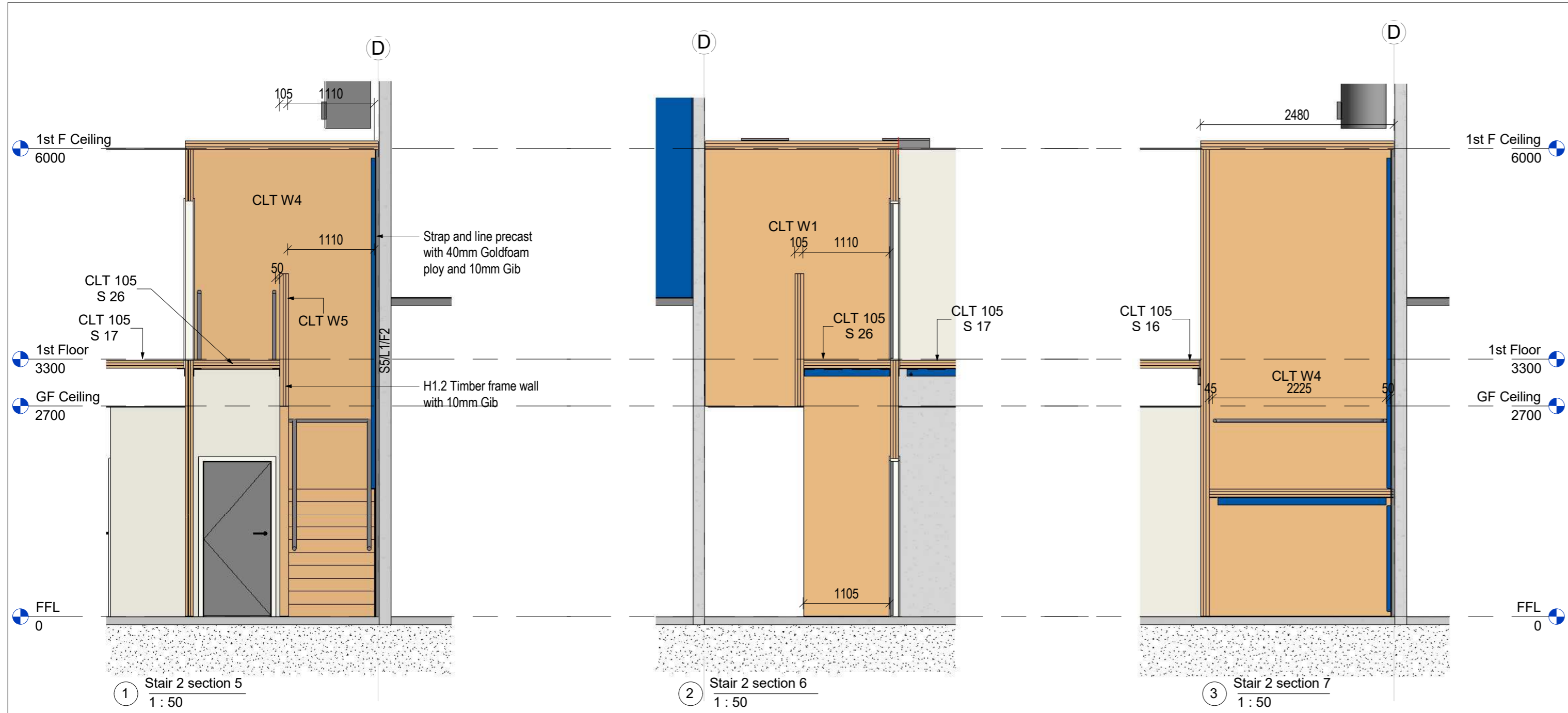


1 Safe path stairway



4 Stair 2 Section 3  
1:50

9 Stair 2 section 4  
1:50



Stair Schedule					
Mark	Type	Actual Number of Risers	Actual Riser Height	Actual Tread Depth	Comments
Stair 1	Monolithic CLT Stair	10	165	285	Safe path
Stair 2	Monolithic CLT Stair	10	165	285	Safe path
Stair 4	Monolithic CLT Stair Common	9	183.33	255	Foyer
Stair 3	Monolithic CLT Stair Common	9	183.33	255	Foyer



Thompson Engineering 2002 Ltd | PO Box 2081, Washdyke - Timaru | 9b Meadows Road - Timaru  
 PH 0800 688 716 | F (03) 688 7168 | www.thompsonengineering.co.nz | design@thompsonengineering.co.nz

PROJECT

Arch

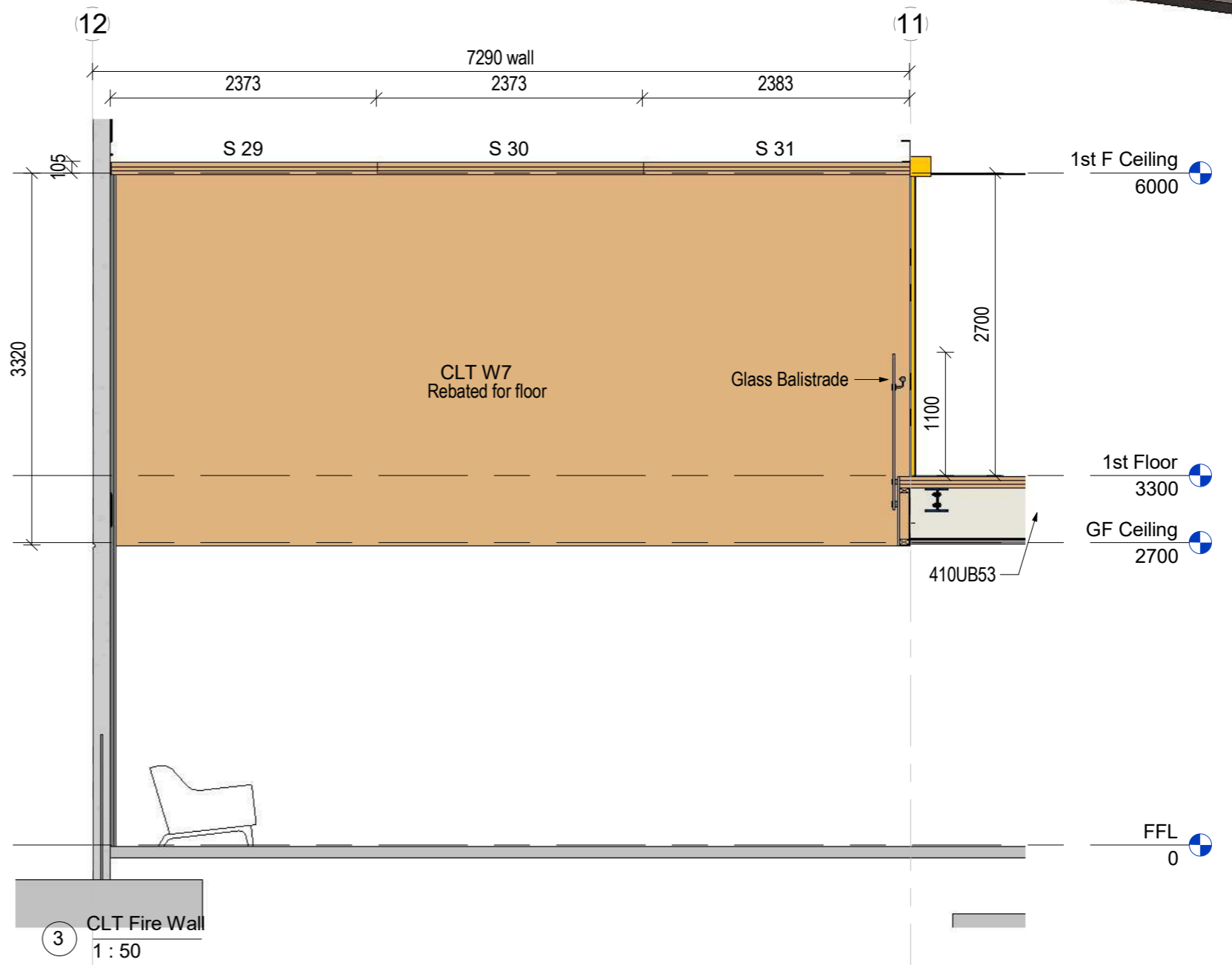
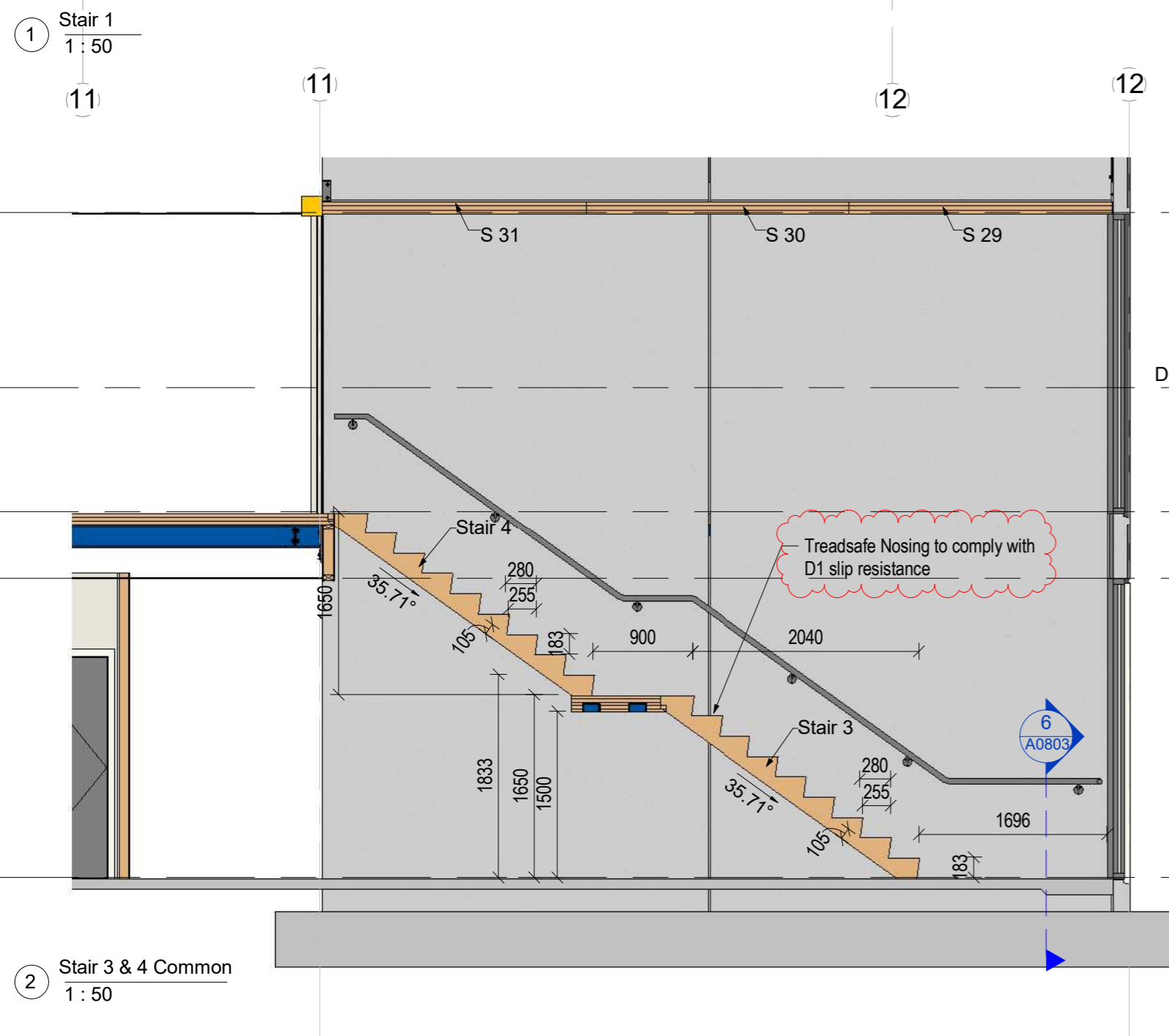
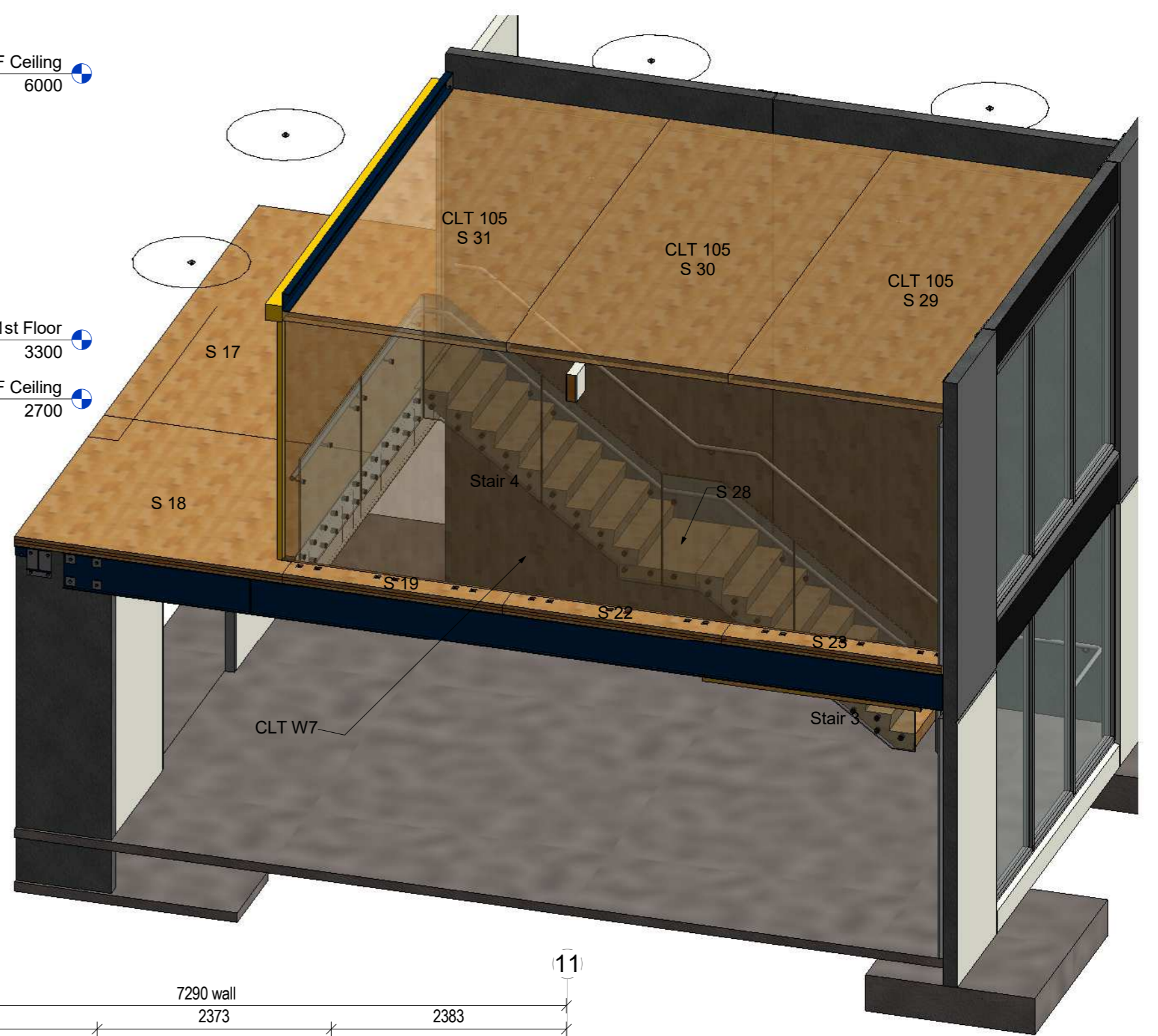
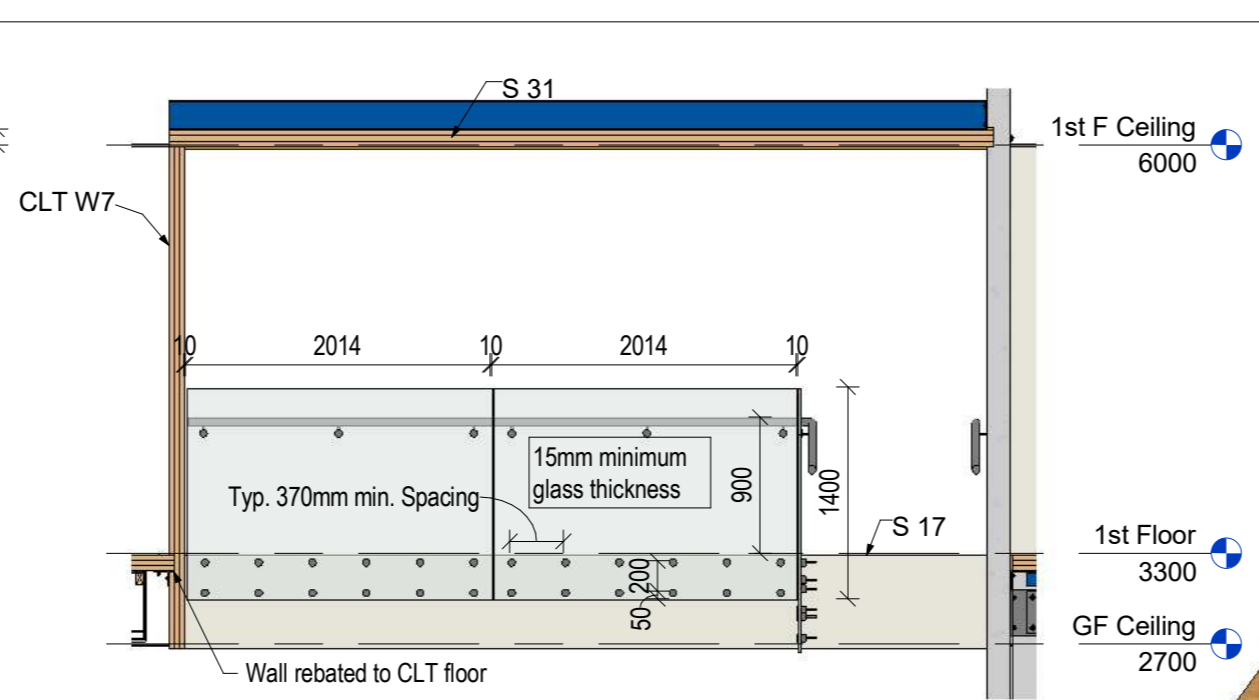
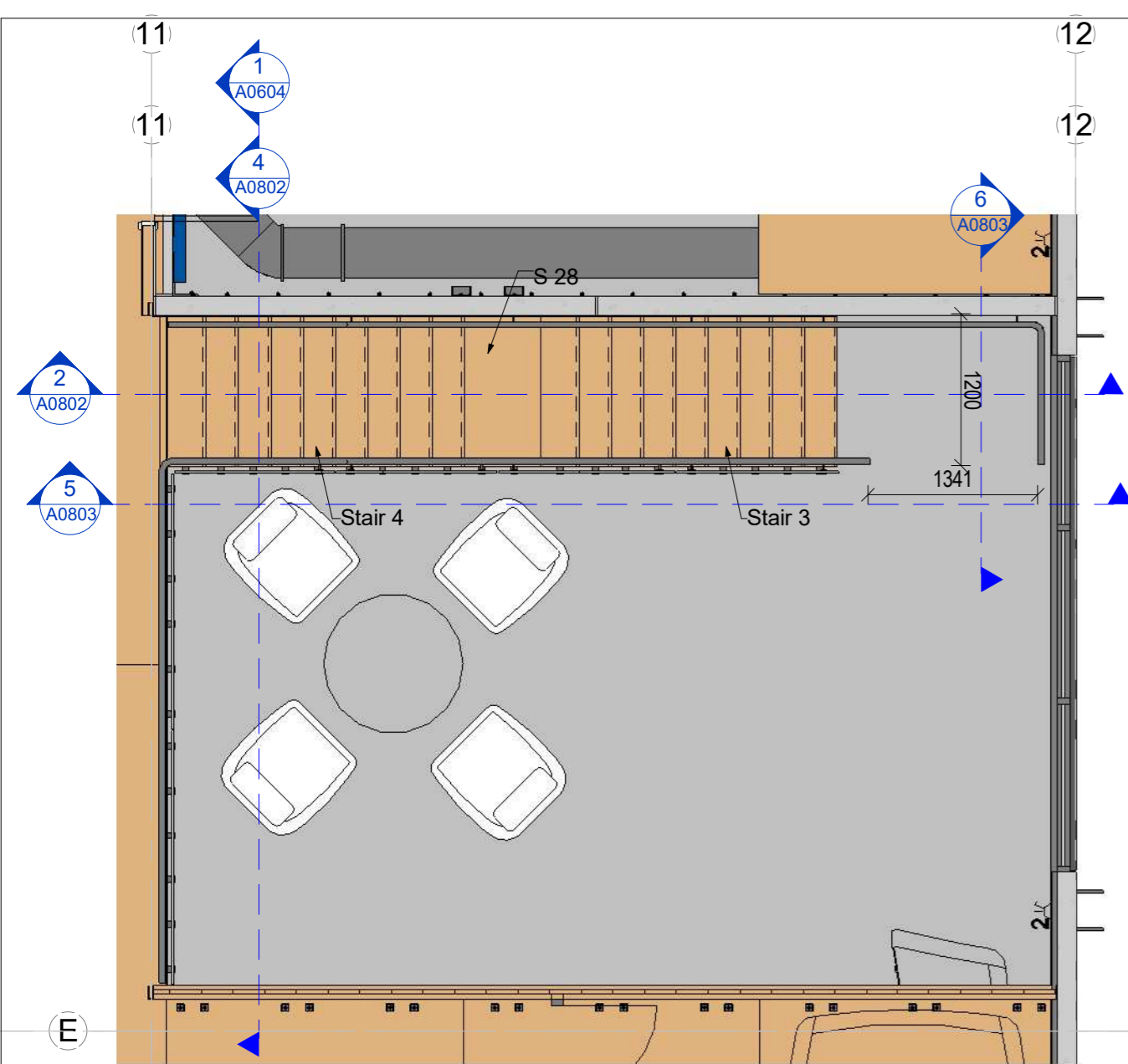
NZ Dairy Collaborative Group  
 Infant Formula Blending Plant Offices

9 Ashford Ave., Ashburton

All Drawings property of Thompson Engineering 2002 Ltd

Rev#	Amendments	Date	SCALE	JOB #
			1 : 50 @ A2	12413
			DRAWN BY C. White	DATE 13/05/16
			APPROVED BY A.Cloake	REV
			Safe path CLT Stair sections and details	<b>A0801</b>
			Please note: All dimensions to be verified on site	Paper size <b>A2</b>

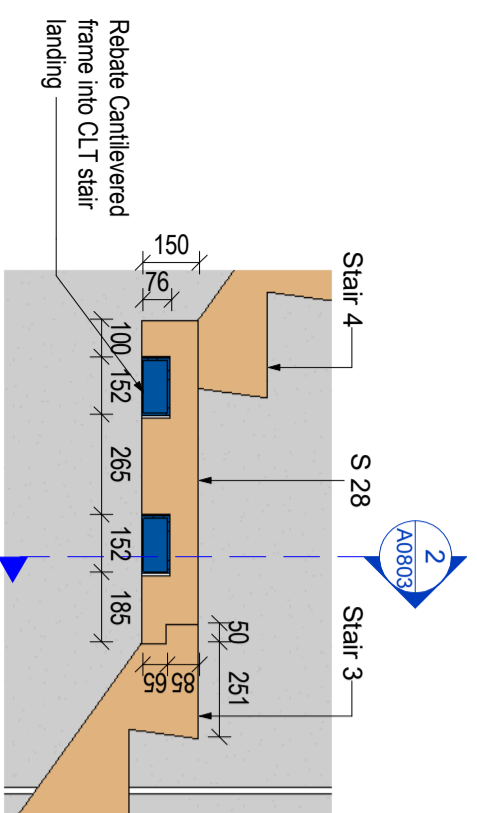
Construction Issue



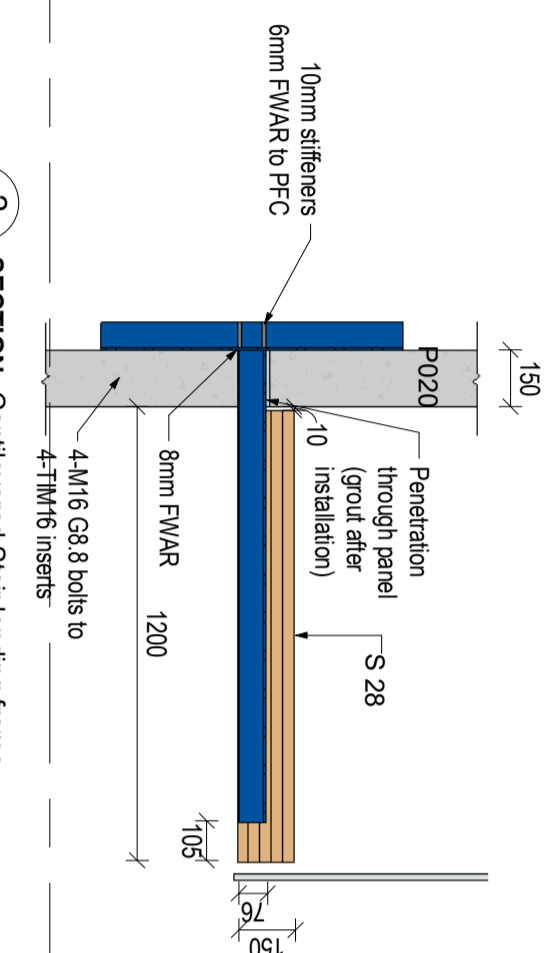
Rev#	Amendments	Date
6	Council RFI's	16/6/16

SCALE	JOB #
1:50 @ A2	12413
<b>DRAWN BY</b> C. White	<b>DATE</b> 13/05/16
<b>APPROVED BY</b> A. Cloake	<b>REV</b> 6
Foyer CLT Stairs	<b>A0802</b>
Please note: All dimensions to be verified on site	

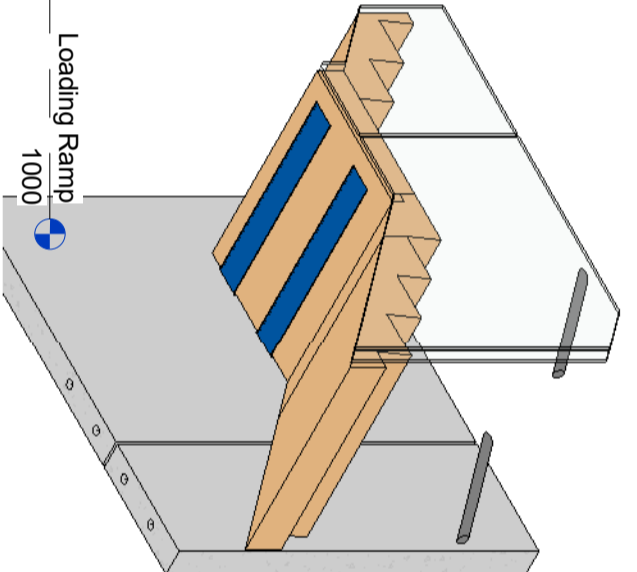
**Construction Issue**



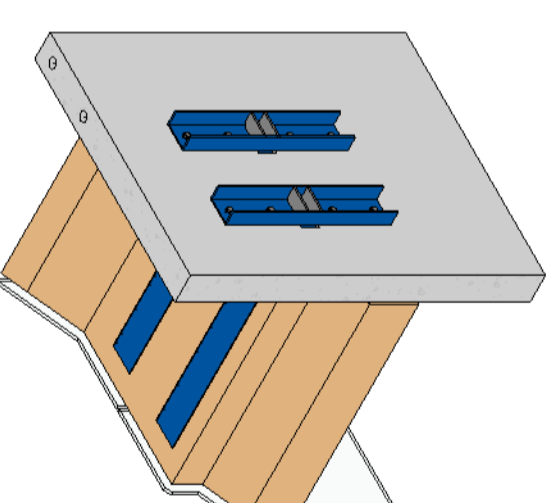
1 Common Stair 3 & 4 Cantilevered landing  
1 : 20



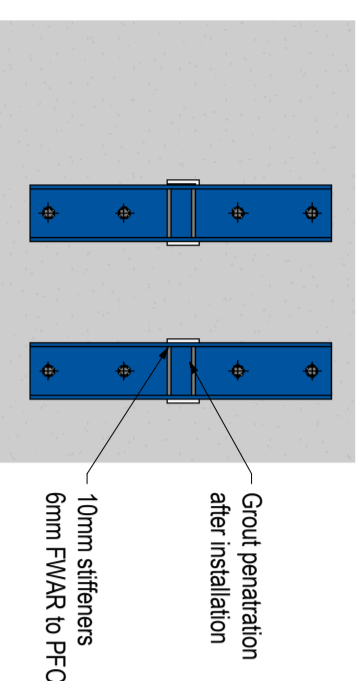
2 SECTION : Cantilevered Stair landing frame  
A0803 1 : 20



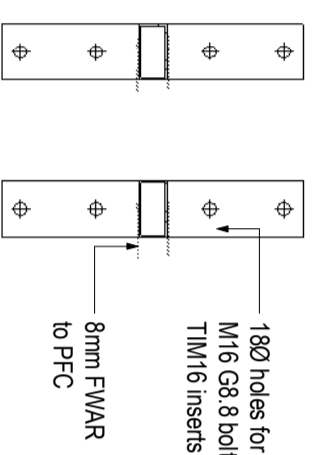
Cantilevered stair landing frame underside



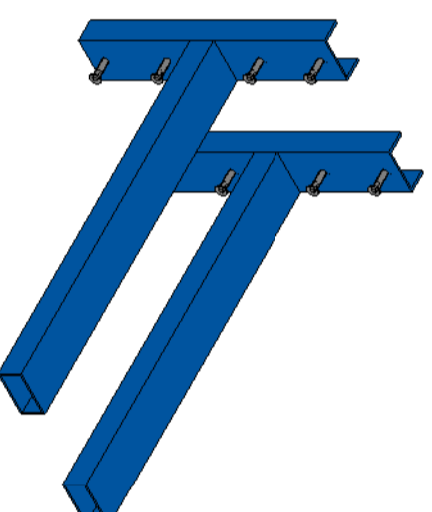
Cantilevered stair landing frame panel side



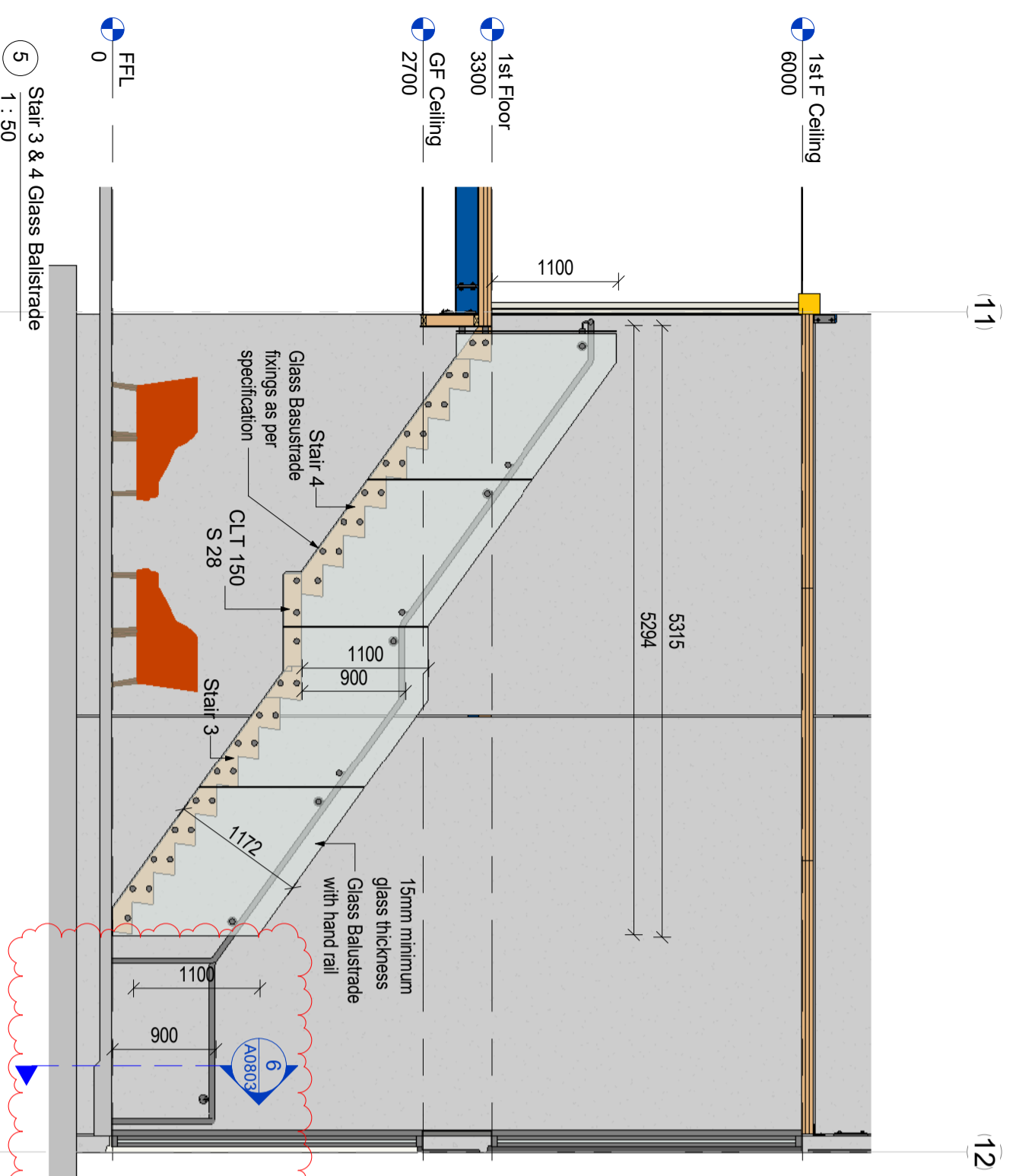
3 Cantilevered frame backing  
1 : 20



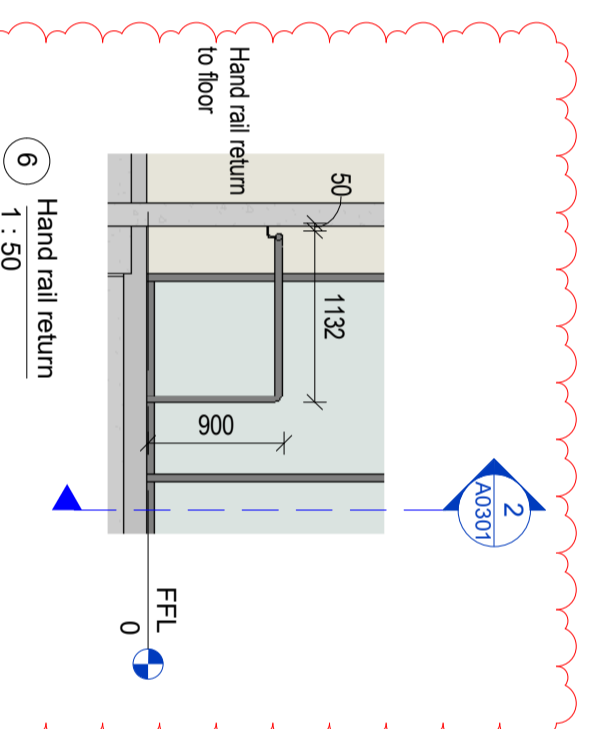
4 DETAIL : Cantilevered Steel frame  
1 : 20



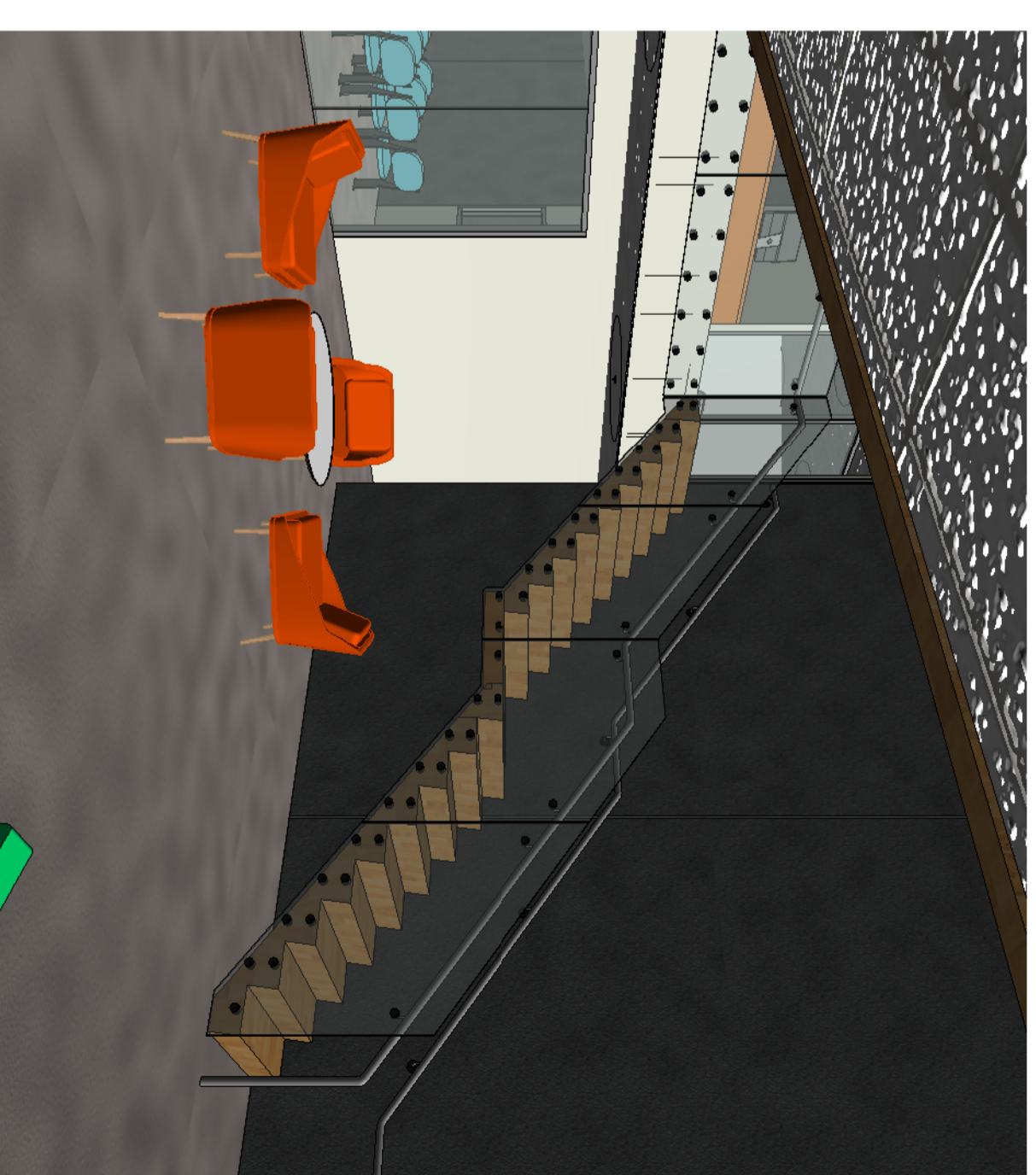
Cantilevered stair landing frame



5 Stair 3 & 4 Glass Balustrade  
1 : 50



6 Hand rail return  
1 : 50

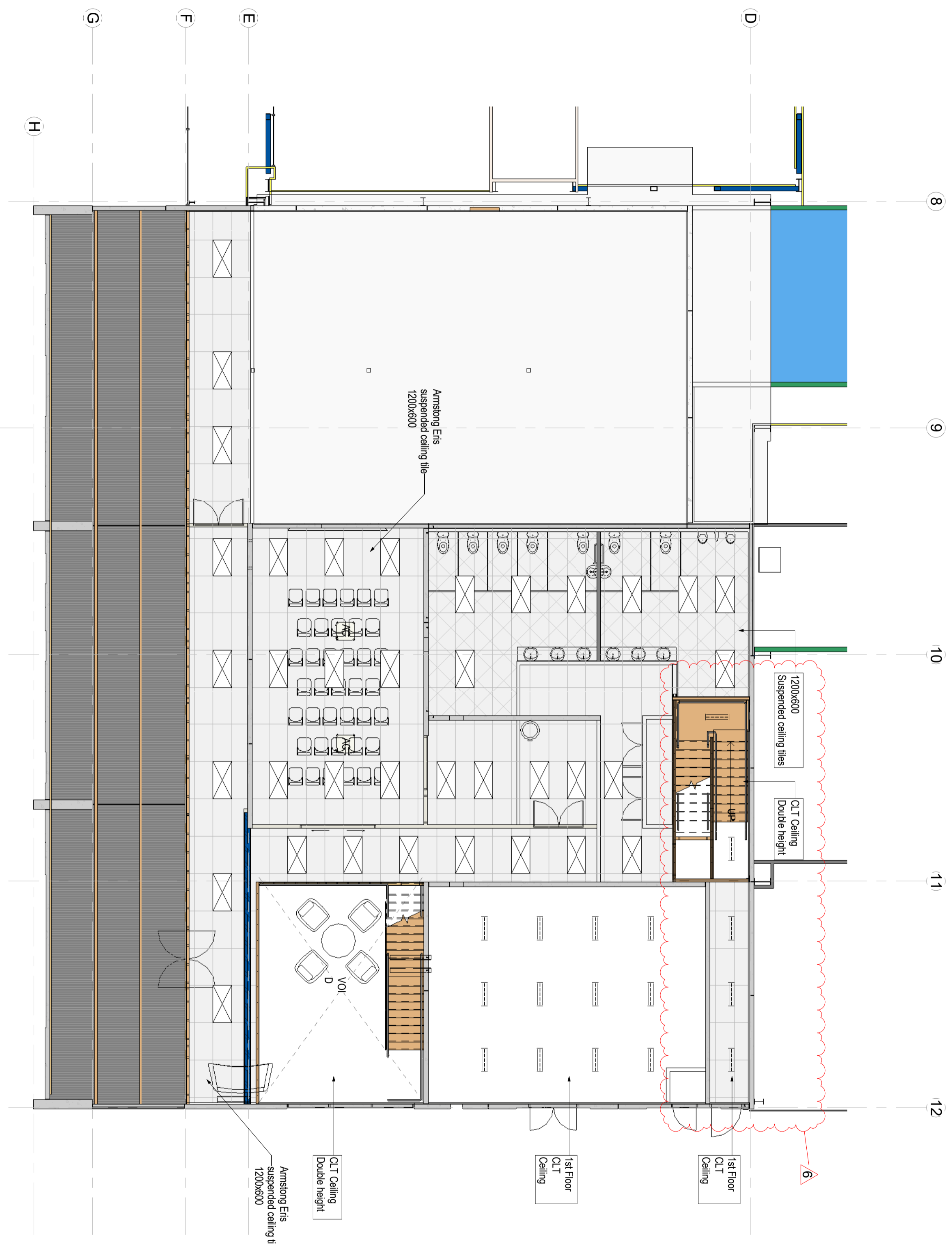


3D View 3

Rev#	Amendments	Date	SCALE	JOB #
5	Client Changes	24/05/16	As indicated@ A2	12413
			DRAWN BY C. White	DATE 13/05/16
			APPROVED BY A. Cloake	REV 5
			Foyer Stair and Balustrade detail	A0803
			Please note: All dimensions to be verified on site	Paper size A2

**ELECTRICAL SCHEDULE**

- ☒ 3 x 36w recessed troffer fitting - Thom TP42-336B2
  - 4 x 54w T5 Fitting Phillips TFS 150/4XS4
  - ▬ Phillips Mondelia Fitting TCS 125236 bare battens
  - ▬ Phillips Mondelia Fitting TCS 125236 with cover
  - ⊞ LED Downlight
  - ⊙ Pendant light
  - ⌘ 2 way switch
  - ⌘ 1 way switch
  - ⌘ 3 double power outlet
  - ⌘ 3 phase double power outlet & data
  - ⌘ External light
  - ⌘ Highway Light
  - ⊞ EXIT sign (refer to fire report) white on green background
- "similar or equivalent fittings can be offered"*



1 Ceiling Ground Floor  
1 : 100

Rev#	Amendments	Date
6	Council RFIs	16/6/16

SCALE	JOB #
1 : 100 @ A2	12413
DRAWN BY C. White	DATE 13/05/16
APPROVED BY A. Cloake	REV 6
Reflected Ceiling Ground Floor	<b>A0900</b>
Please see note. All dimensions to be verified on site	
Paper size <b>A2</b>	

**Construction Issue**

**ELECTRICAL SCHEDULE**

- ☒ 3 x 36w recessed troffer fitting - Thom T1P42-336B2
  - ☒ 4 x 54w T5 Fitting Phillips TPS 150/4X54
  - ☒ Phillips Mondella Fitting TCS 125236 bare ballasts
  - ☒ Phillips Mondella Fitting TCS 125236 with cover
  - ☒ LED Downlight
  - ☒ Pendant light
  - ☒ 2 way switch
  - ☒ 1 way switch
  - ☒ double power outlet
  - ☒ 3 phase
  - ☒ double power outlet & data
  - ☒ External light
  - ☒ Highway Light
  - ☒ EXIT sign (refer to fire report) Write on green background
- \*Similar or equivalent fittings can be offered\*



Ceiling First Floor  
1 : 100

Rev#	Amendments	Date	SCALE	JOB #
			1 : 100 @ A2	12413
			DRAWN BY C. White	DATE 13/05/16
			APPROVED BY A. Cloake	REV
			Reflected Ceiling First Floor	<b>A0901</b>
			Please note: All dimensions to be verified on site	Paper size <b>A2</b>

**Construction Issue**

**ELECTRICAL & DATA KEY**

- ☎ Single Phase Power Outlet (Double socket)
- ☎ Three Phase Power Outlet (Single socket)
- ▲ Wall Mounted Data Socket (Double data sockets)
- Ⓜ Floor Mounted Junction Box (Single Phase power and data sockets)

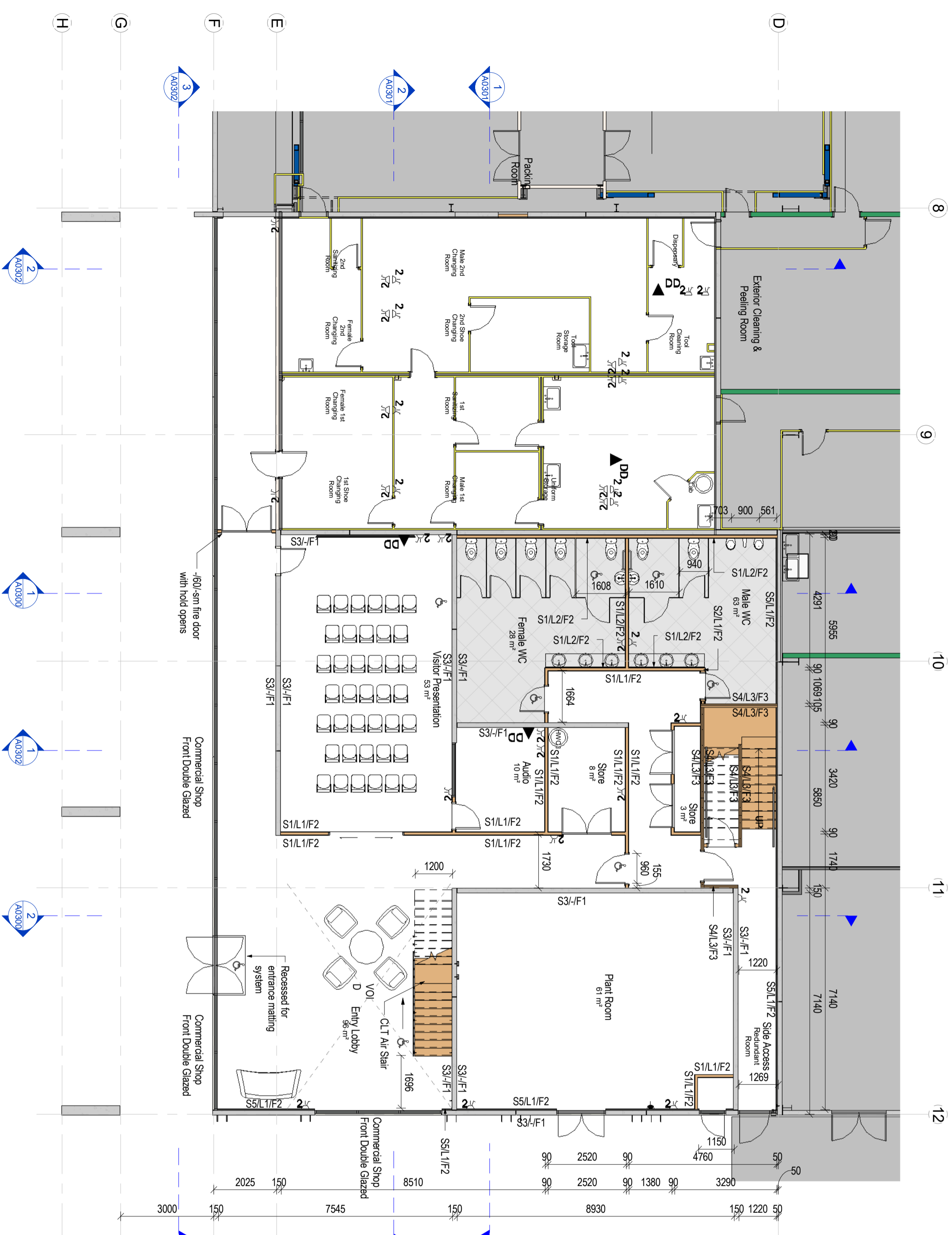
*"positions are not indicative and subject to site placement by client"*

**Electrical Fixture Schedule Ground Floor**

Type	Count
Std 3 Phase	1
Std Single Phase	34

**Data Device Schedule Ground Floor**

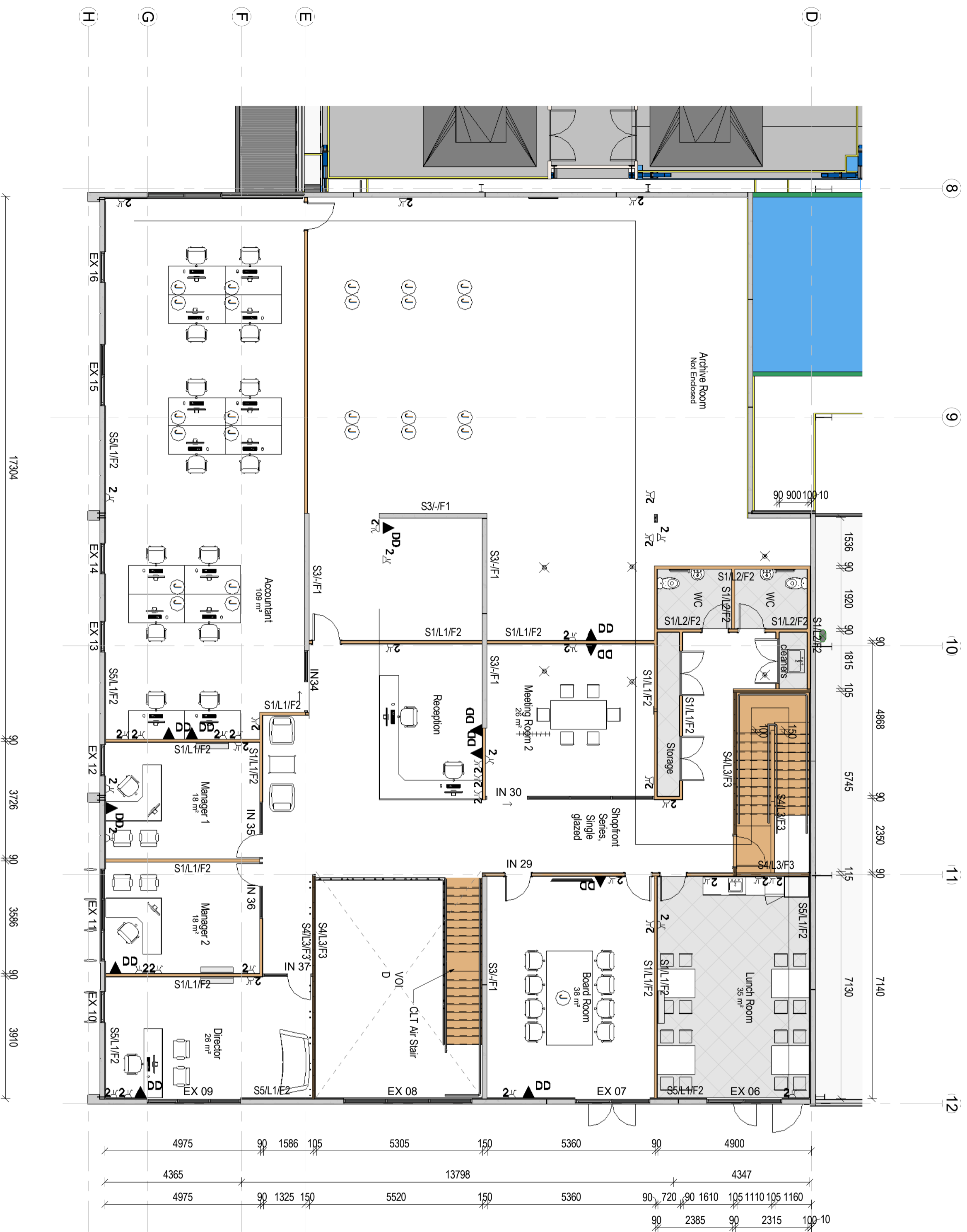
Type	Count
Data Double	4



1 Ground Floor Plan Electrical  
1 : 100

**Construction Issue**

All Drawings property of Thompson Engineering 2002 Ltd



1 First Floor Plan Electrical  
1 : 100

**ELECTRICAL & DATA KEY**

- 2 Single Phase Power Outlet (Double socket)
- Three Phase Power Outlet (Single socket)
- Wall Mounted Data Socket (Double data sockets)
- Floor Mounted Junction Box (Single Phase power and data sockets)

*Positions are not indicative and subject to site placement by client*

Electrical Fixture Schedule First Floor	
Type	Count
Std Single Phase	40

Data Device Schedule First Floor	
Family and Type	Count
Data Outlet: Data Double	12
Junction Boxes - Data: Data & Power	25

**Construction Issue**

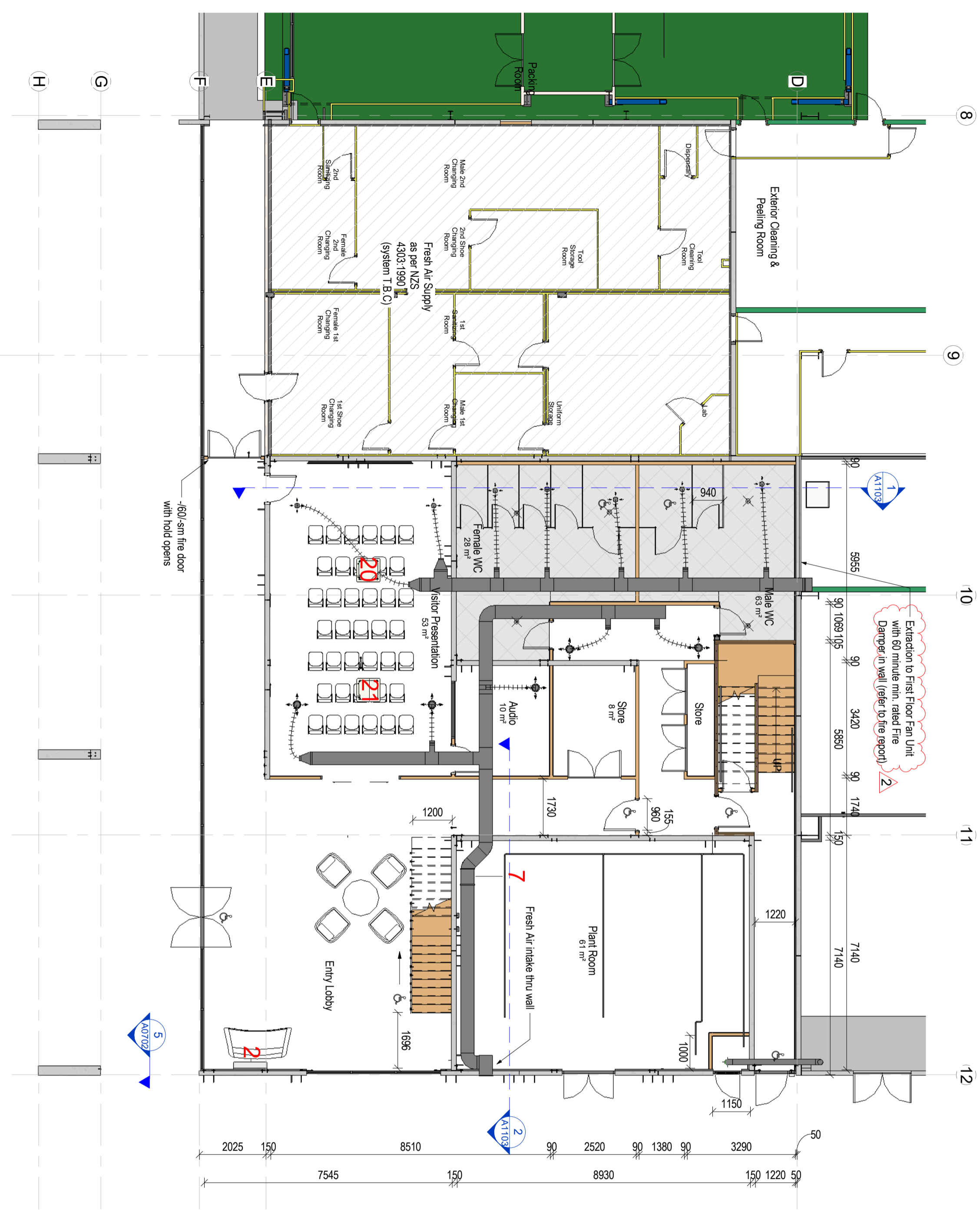
Mark	Type	Comments
7	Westaflex Inline Fan (with smoke detection)	Plant Room
20	Hitachi RC12.5 FSN3 6.3kw Cassette	Presentation Room
21	Hitachi RC12.5 FSN3 6.3kw Cassette	Presentation Room
2	Hitachi RAS-50YHA	Entry

**HVAC Key**

- Fresh Air Diffuser (supply)
- Foul Air Vent (extraction)
- Wall Mounted Heat Pump
- Ceiling Mounted Cassette Heat Pump

All Outdoor Fresh Air Requirements are relative to the use of the space as per Table 2.1 NZS 4303:1990.

\*positions are not indicative and subject to site placement by client\*



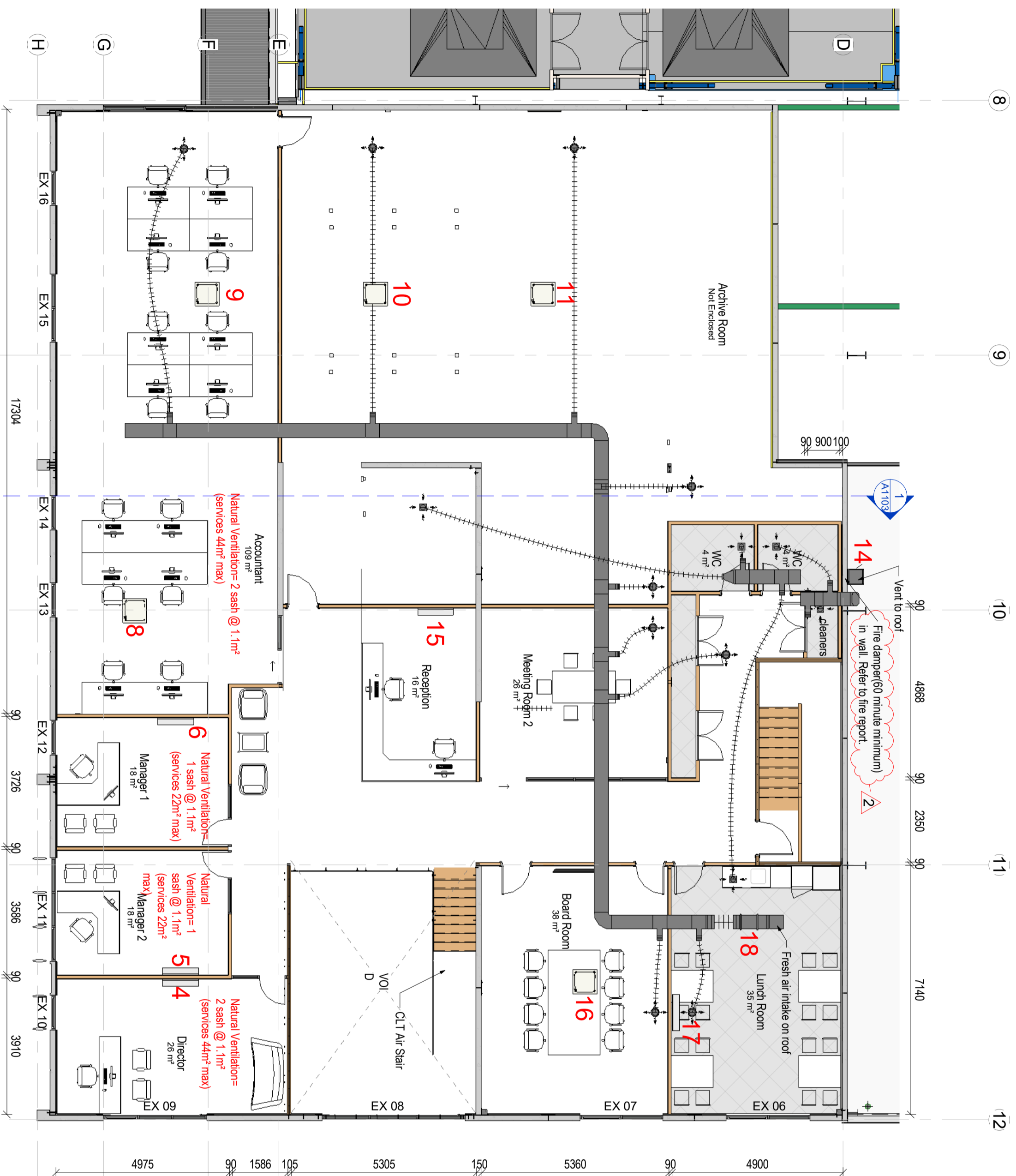
1 Ground Floor Plan HVAC  
1 : 100

Rev#	Amendments	Date	SCALE	JOB #
2	Changes at Fire Eng request	19/05/16	1 : 100 @ A2	12413
4	Updated HVAC design	23/05/16		13/05/16

**Construction Issue**

APPROVED BY	DATE	REV
B. Holloway		4
A. Cloake		

Mechanical Ground Floor  
Paper size **A1100**



1 First Floor Plan HVAC  
1 : 100

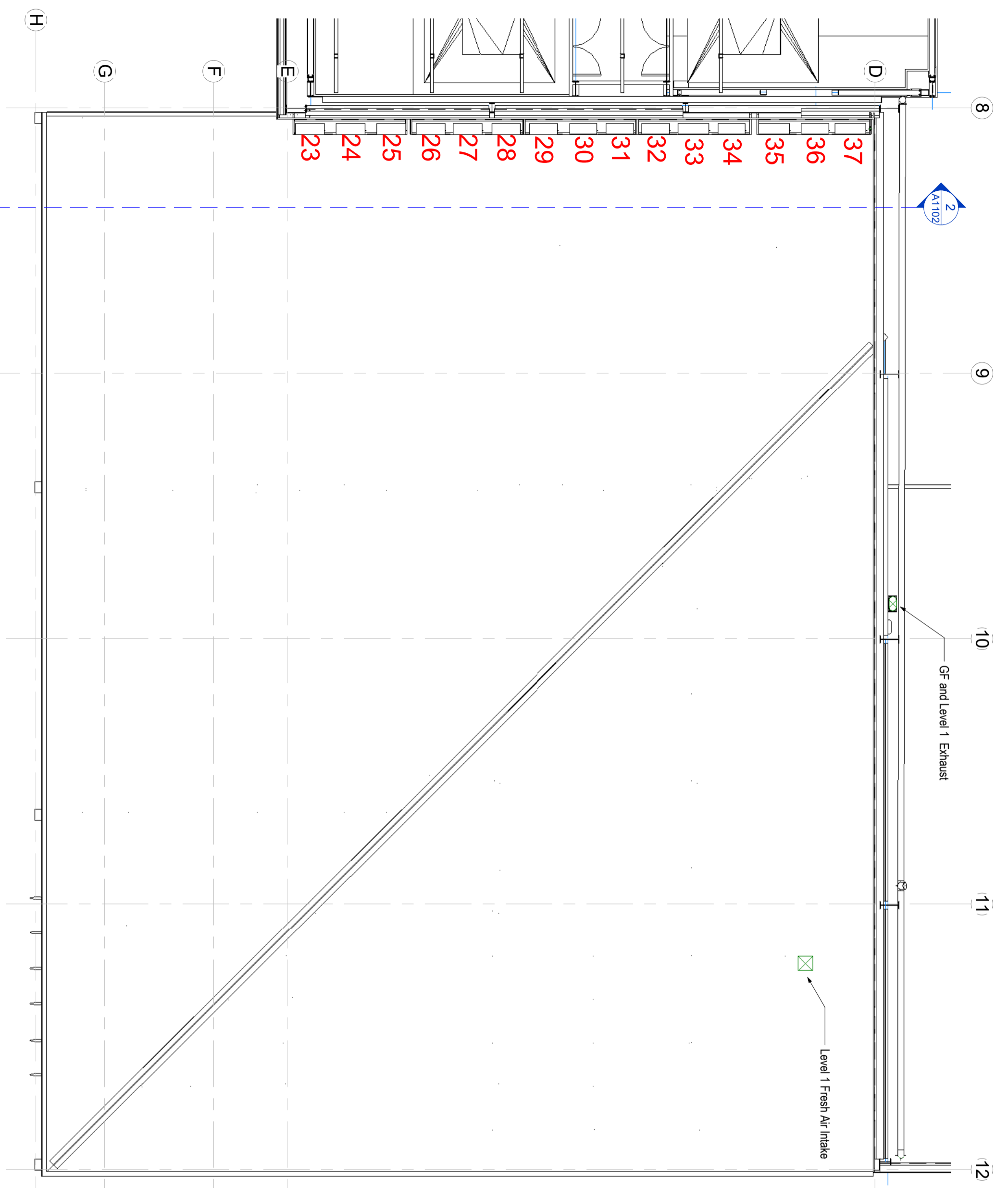
Mark	Type	Comments
4	Hitachi RAS 35YHA4 4.5kw HP	Director
5	Hitachi RAS 25YHA4 3.4kw HP	Manager 2
6	Hitachi RAS 25YHA4 3.4kw HP	Manager 1
8	Hitachi RC13.0 FSN3 8.0kW Cassette	Accountant
9	Hitachi RC13.0 FSN3 8.0kW Cassette	Open Plan Office
10	Hitachi RC13.0 FSN3 8.0kW Cassette	Open Plan Office
11	Hitachi RC13.0 FSN3 8.0kW Cassette	Open Plan Office
14	Fantech In Line Fan (with smoke detection)	Toilet Extract(In WH)
15	Hitachi RAS 35YHA4 4.5kw HP	Reception
16	Hitachi RC12.5 FSN3 6.3kw Cassette	Board Room
17	Hitachi RAS-50YHA	Lunch Room
18	Westaflex Inline Centrifugal Fan (with smoke detection)	Fresh Air supply (Lunch Room)

**HVAC Key**

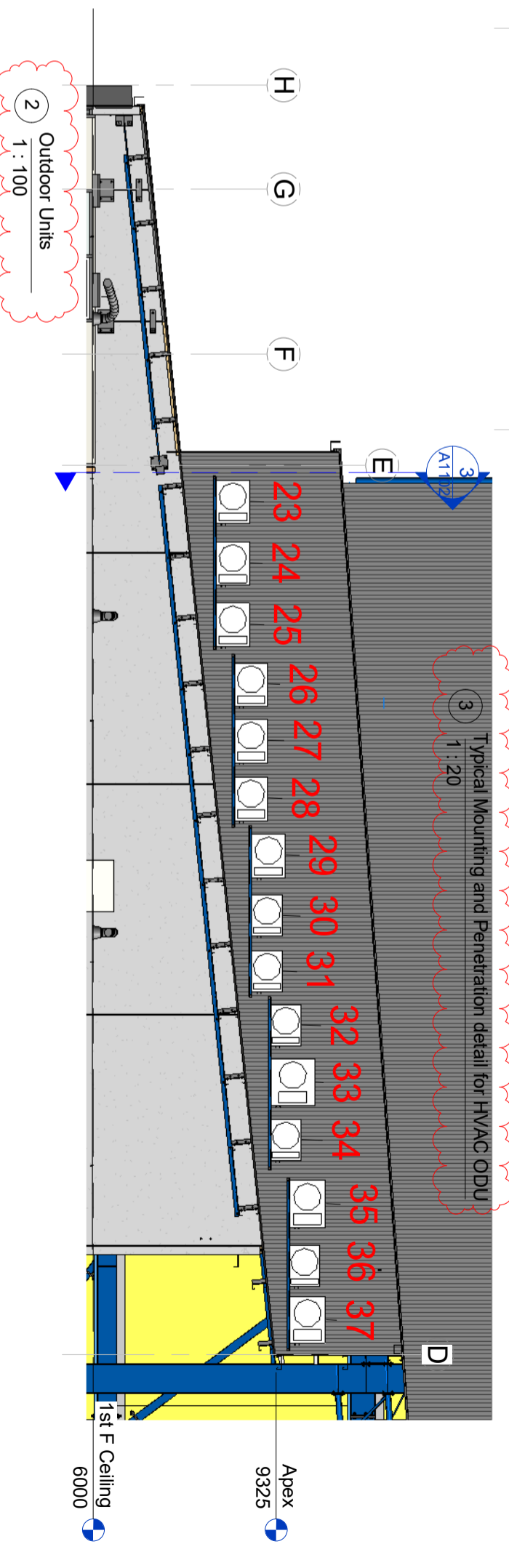
- Fresh Air Diffuser (supply)
- Foul Air Vent (extraction)
- Wall Mounted Heat Pump
- Ceiling Mounted Cassette Heat Pump

All Outdoor Fresh Air Requirements are relative to the use of the space as per Table 2.1 NZS 4303:1990.  
Positions are not indicative and subject to site placement by client.

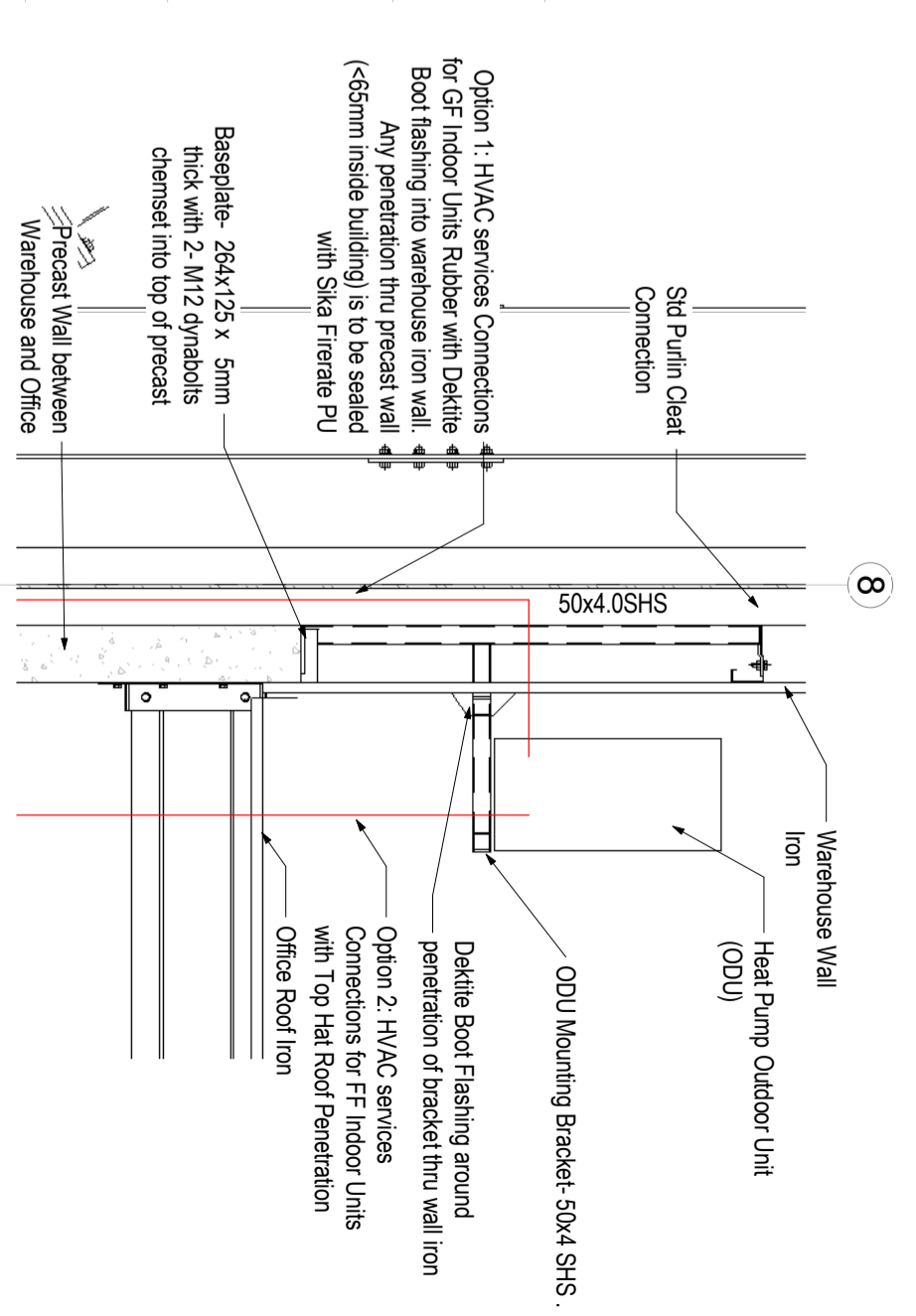
Mechanical Equipment Roof		
Mark	Type	Comments
23	Hitachi RAS 2.5HVNP	Presentation Room
24	Hitachi RAS 2.5HVNP	Presentation Room
25	Hitachi RAS 3HVNC	L1 Open Plan Office
26	Hitachi RAS 3HVNC	L1 Open Plan Office
27	Hitachi RAS 3HVNC	L1 Open Plan Office
28	Hitachi RAS 2.5HVNP	Board Room
29	Hitachi RAS 3HVNC	Accountant
30	Hitachi RAC-25YHA3	Manager 1
31	Hitachi RAC-25YHA3	Manager 2
32	Hitachi RAC-35YHA3	L1 Director
33	Hitachi RAC-80YHA3	Meeting Room 1
34	Hitachi RAC-35YHA3	Meeting Room 2
35	Hitachi RAC-50YHA3	Lunch Room
36	Hitachi RAC-35YHA3	Reception
37	Hitachi RAC-50YHA3	Entry



1 Roof Plan HVAC  
1 : 100

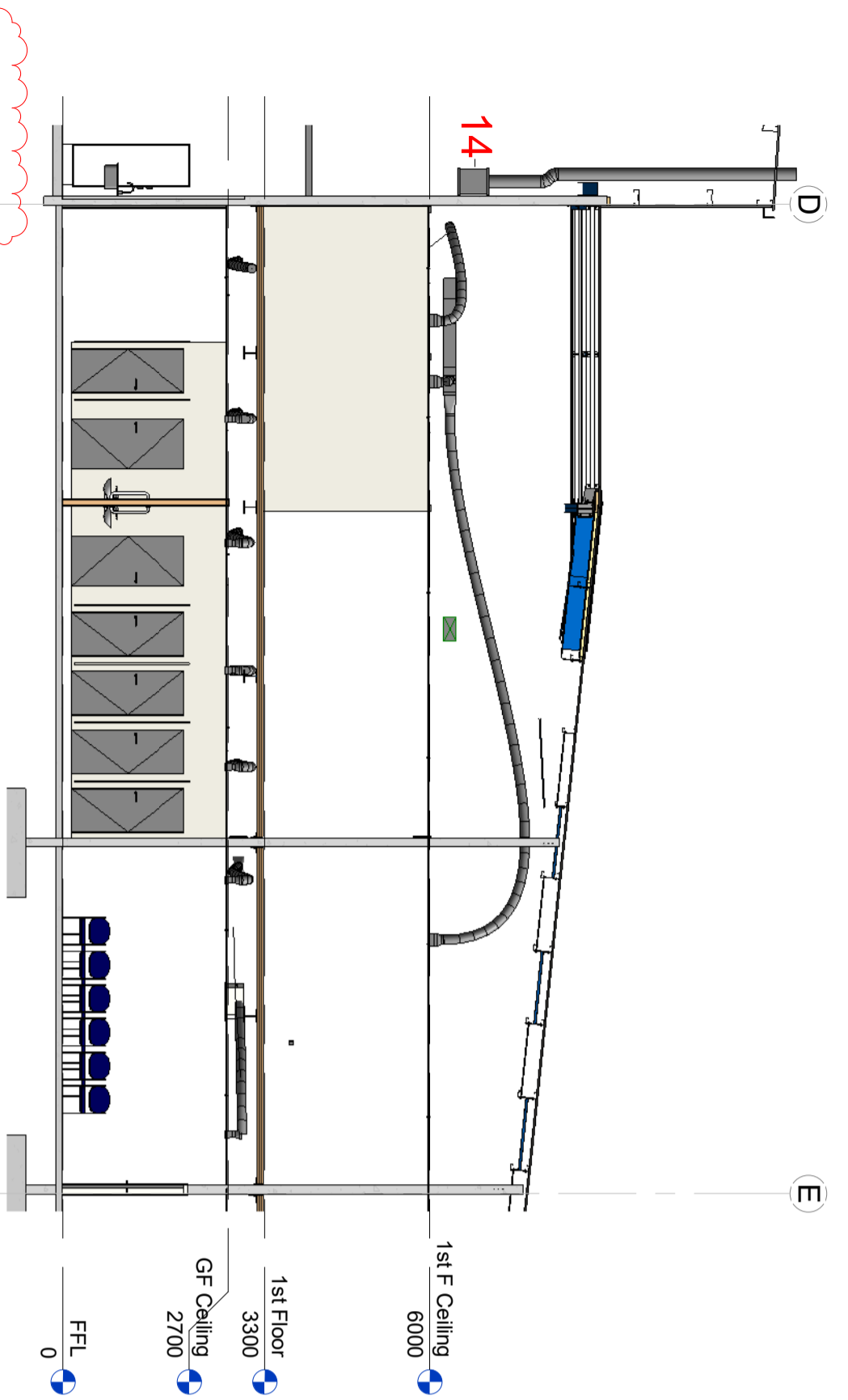


2 Outdoor Units  
1 : 100

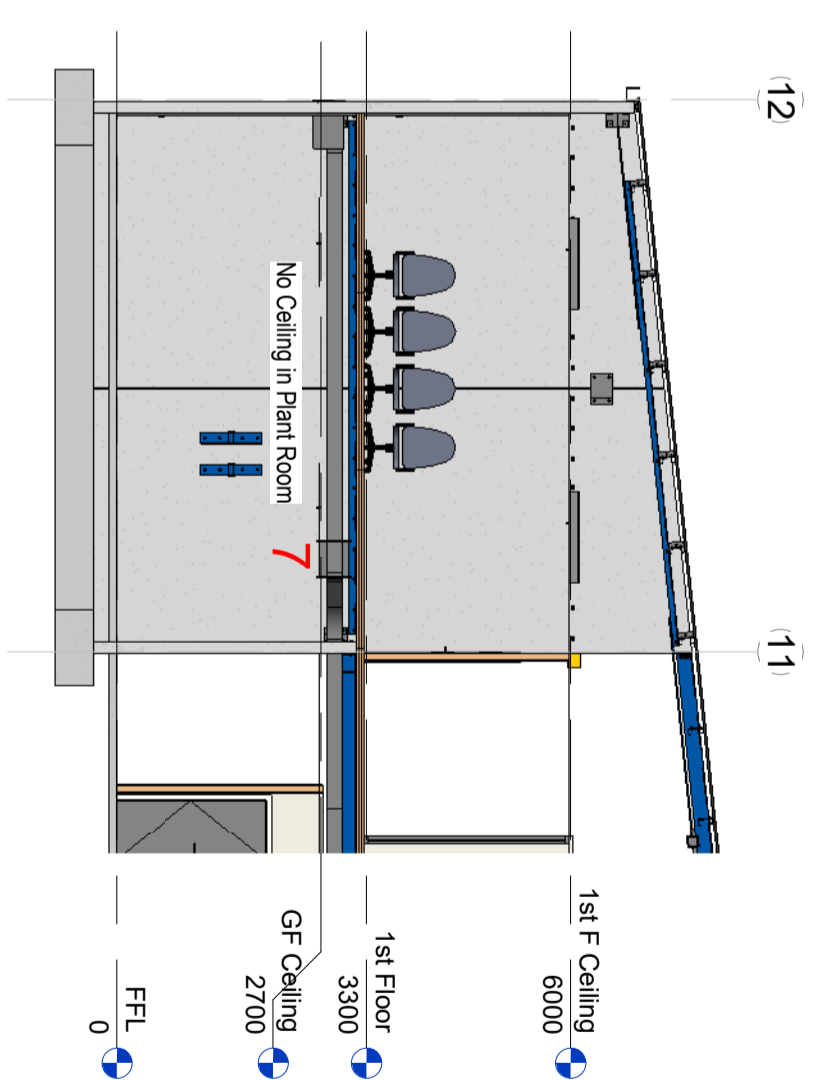


3 Typical Mounting and Penetration detail for HVAC ODU  
1 : 20

Rev#	Amendments	Date	SCALE	JOB #
4	Updated HVAC design	23/05/16	As indicated @ A2	12413
6	Council RFIs	16/6/16	DRAWN BY B. Holloway	DATE 13/05/16
<b>Construction Issue</b>			APPROVED BY A. Cloake	REV 6
			Mechanical Roof Plan	<b>A1102</b>
			Please note: All dimensions to be verified on site	Paper size A2



1 Air Extraction  
1 : 100



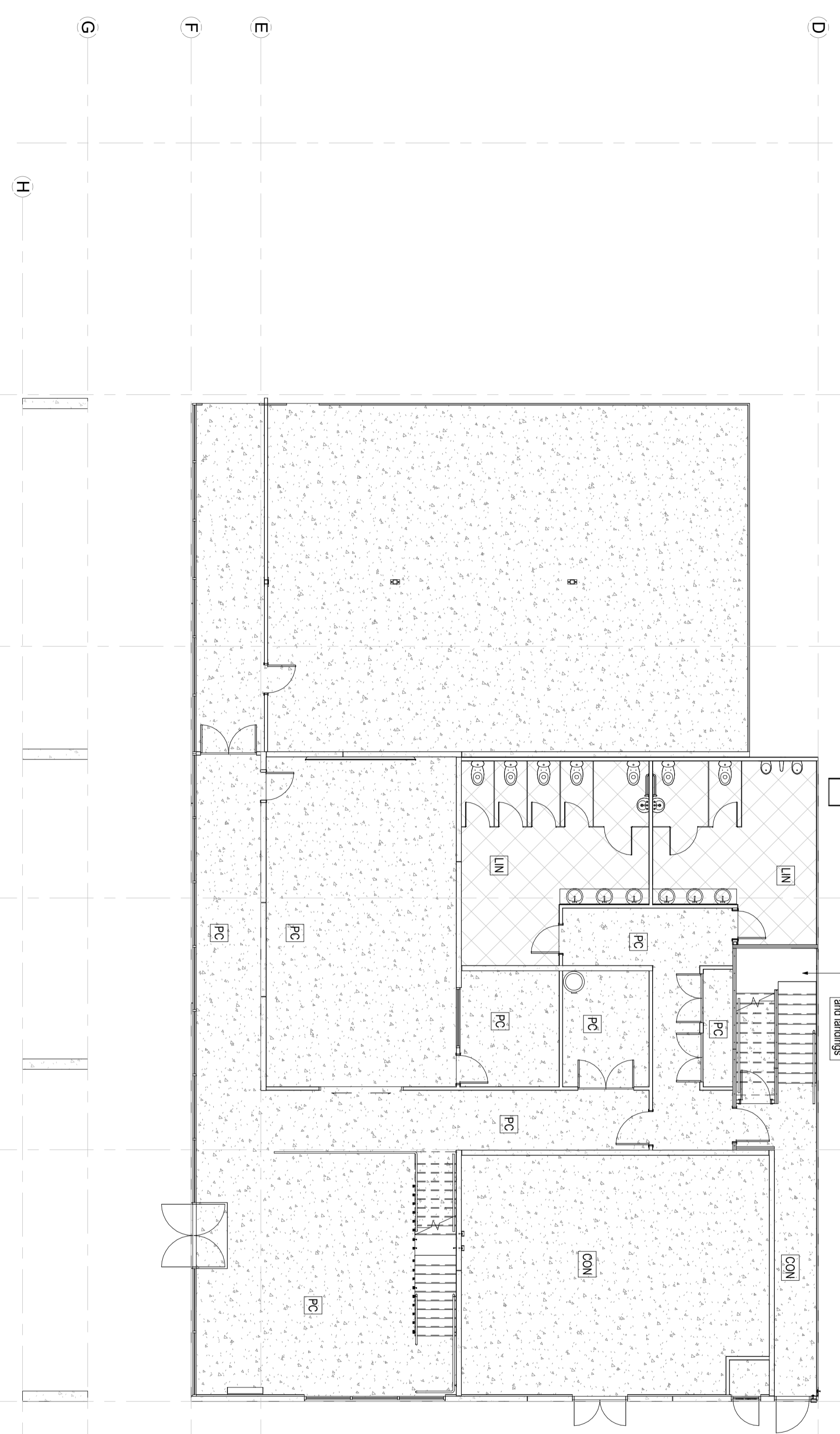
2 Fresh Air Fan in Plant Room  
1 : 100

Rev#	Amendments	Date	SCALE	JOB #
4	Updated HVAC design	23/05/16	1 : 100 @ A2	12413
			DRAWN BY	DATE
			B. Holloway	13/05/16
			APPROVED BY	REV
			A. Cloake	4
			HVAC Sections	
			A1103	
			Paper size A2	

Please note: All dimensions to be verified on site

**Construction Issue**

7 8 9 10 11 12



**FLOOR COVERINGS**

- Concrete
- PC = Polished finish
- CON = Power float finish
- Carpet (commercial)
- Linoleum - commercial (non slip in wet areas)
- Timber CLT Flooring

**Flooring Schedule**

Level	Type	Area
FFL	Linoleum	50 m <sup>2</sup>
1st Floor	Linoleum	48 m <sup>2</sup>

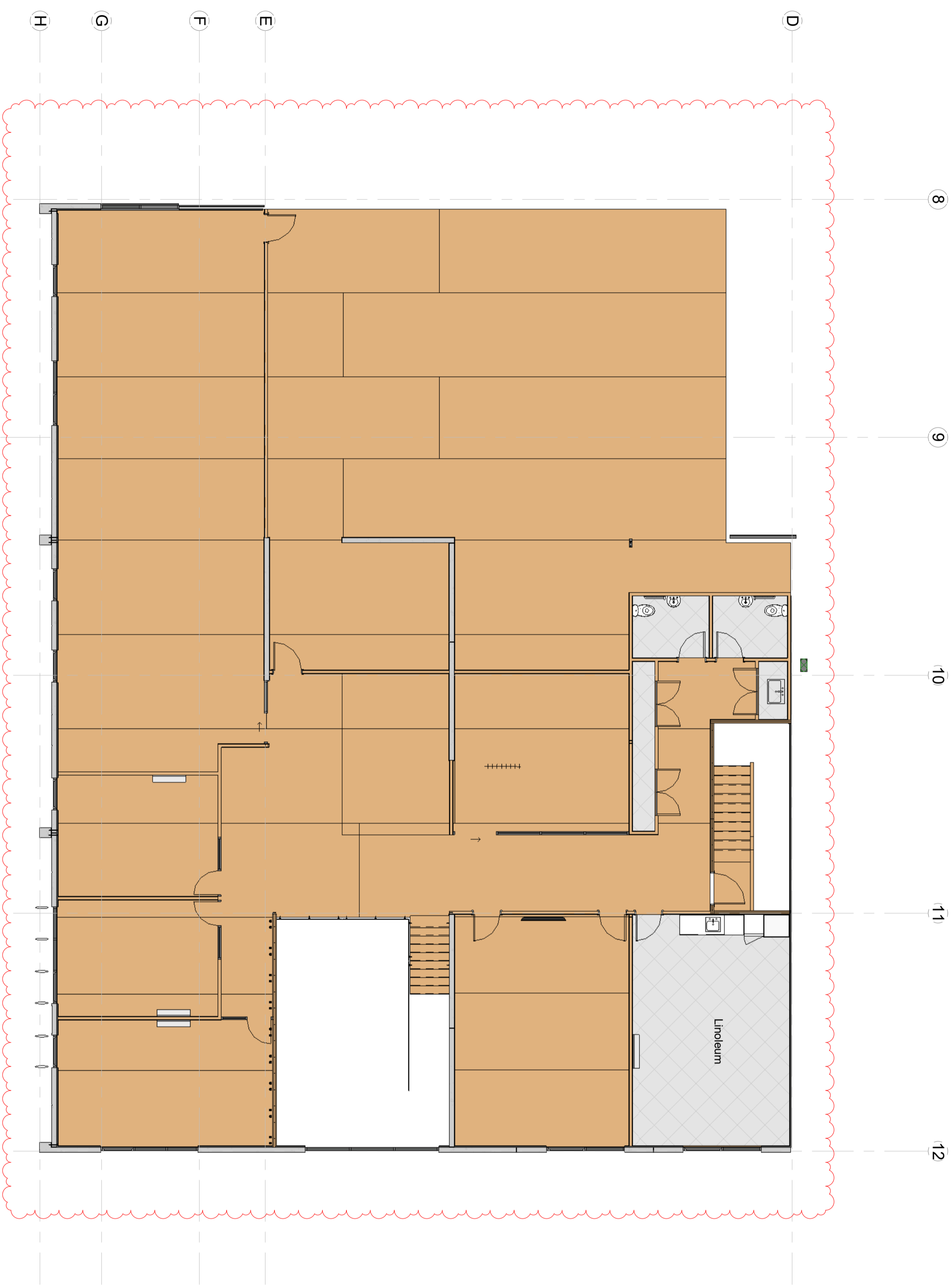
1-100  
Plumbing Ground Floor Copy 1

PROJECT  
**Arch**  
NZ Dairy Collaborative Group  
Infant Formula Blending Plant Offices  
9 Ashford Ave., Ashburton

Rev/#	Amendments	Date	SCALE	As indicated@ A2	JOB #	
			DRAWN BY	C. White	DATE	12413
			APPROVED BY	A. Cloake	REV	13/05/16
			Floor Coverings Ground Floor		<b>A1200</b>	
Please note: All dimensions to be verified on site						
Paper size <b>A2</b>						

**Construction Issue**

All Drawings property of Thompson Engineering 2002 Ltd



1 Plumbing First Floor Copy 1  
1 : 100

**FLOOR COVERINGS**

	Concrete
	PC = Polished CON = Power float Finish
	Carpet (commercial)
	Linoleum - commercial (non slip in wet areas)
	Timber CLT Flooring

**Flooring Schedule**

Level	Type	Area
FFL	Linoleum	50 m <sup>2</sup>
1st Floor	Linoleum	48 m <sup>2</sup>

Rev/#	Amendments	Date	SCALE	JOB #
5	Client Changes	24/05/16	As indicated @ A2	12413
			DRAWN BY C. White	DATE 13/05/16
			APPROVED BY A. Cloake	REV 5
			Floor Coverings First Floor	<b>A1201</b>
			Please note: All dimensions to be verified on site	Paper size <b>A2</b>

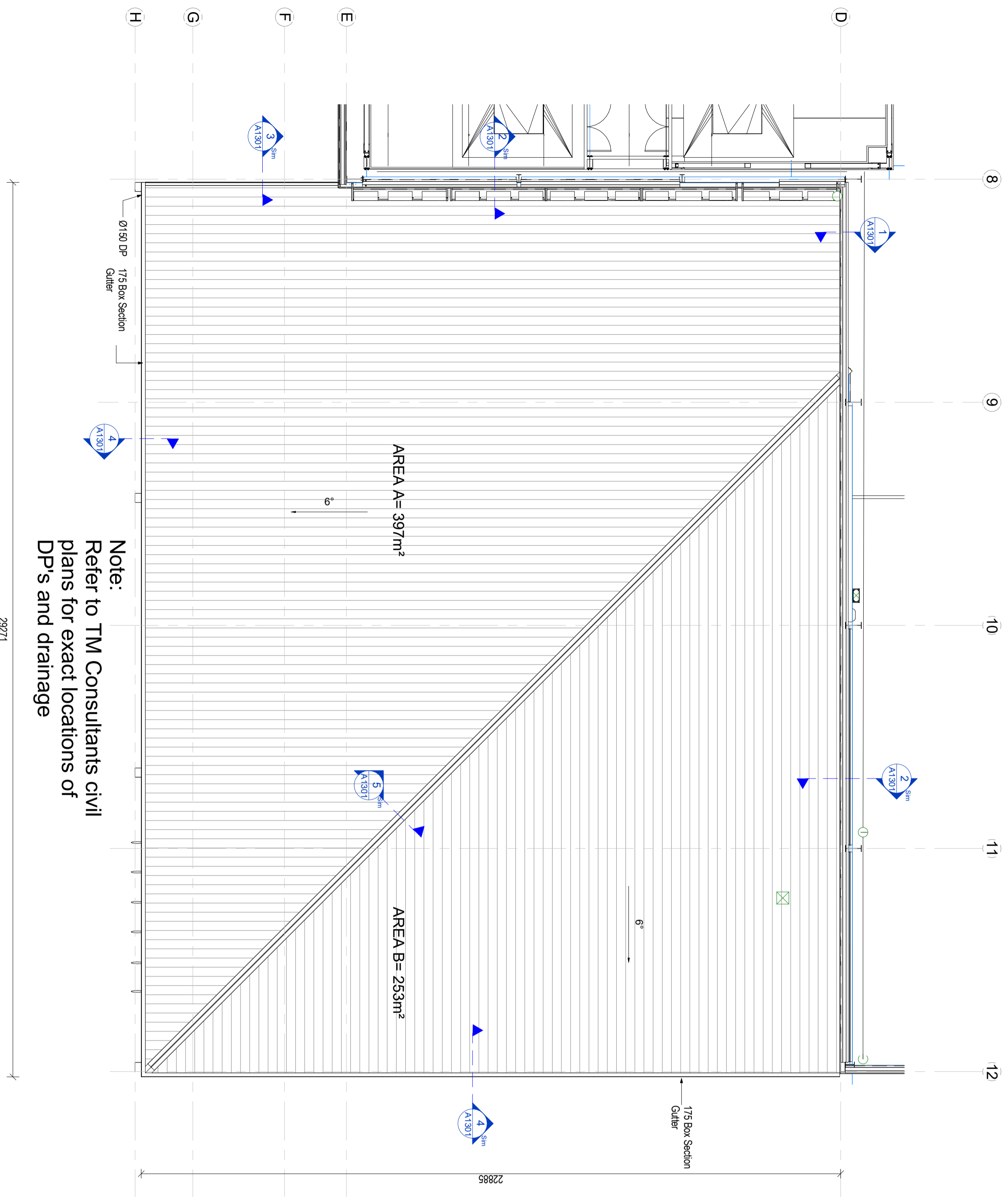
**Construction Issue**

**DOWNPIPE SCHEDULE**

Downpipe size (mm) for 0.25° pitch roof for given roof area	Plan area of roof served by the downpipe (m <sup>2</sup> )
Minimum Internal Pipe Size	
63mm Ø	60
74mm Ø	85
100mm Ø	155
150mm Ø	350

**SURFACE AREA CATCHMENTS**

Total Roof Area = 650m<sup>2</sup>  
 area A = 397m<sup>2</sup> - 1 x 150 Ø DP's  
 area B = 253m<sup>2</sup> - 1 x 150 Ø DP's  
 area 3 = \_\_\_\_\_ m<sup>2</sup> - \_\_\_\_\_ x \_\_\_\_\_ Ø DP's  
 area 4 = \_\_\_\_\_ m<sup>2</sup> - \_\_\_\_\_ x \_\_\_\_\_ Ø DP's

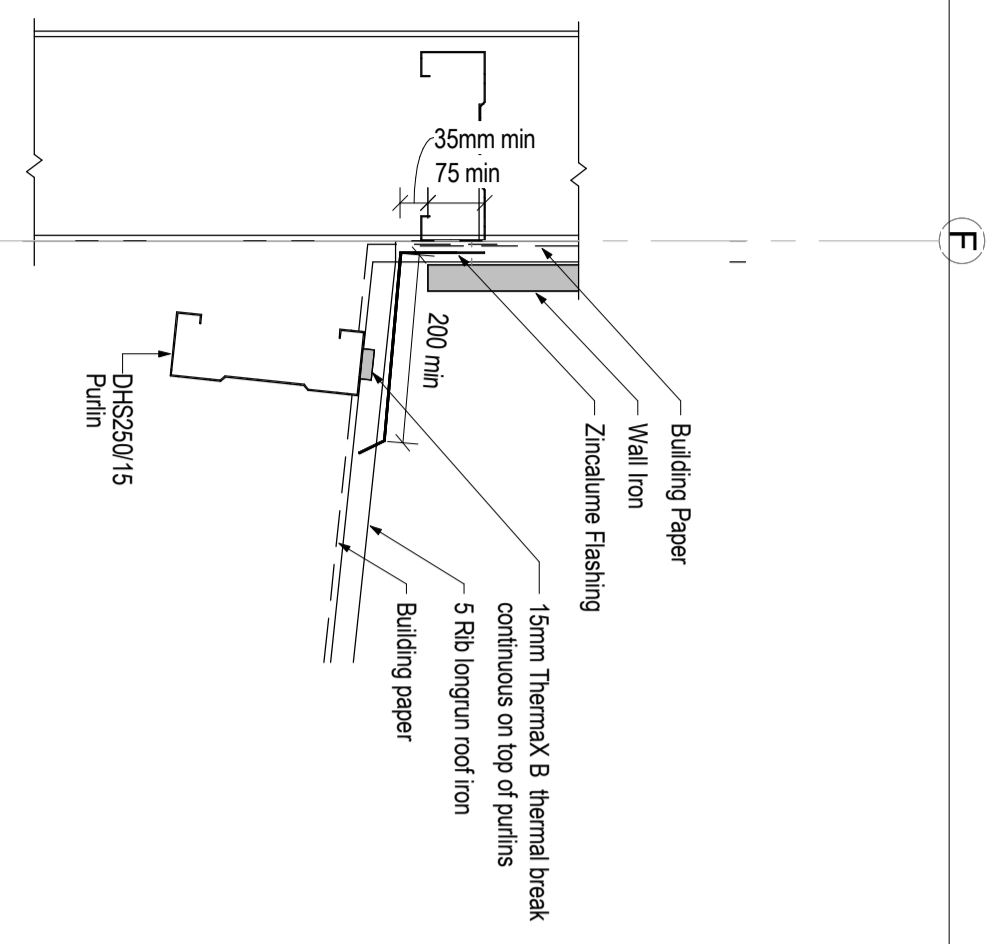


**Note:**  
 Refer to TM Consultants civil plans for exact locations of DP's and drainage

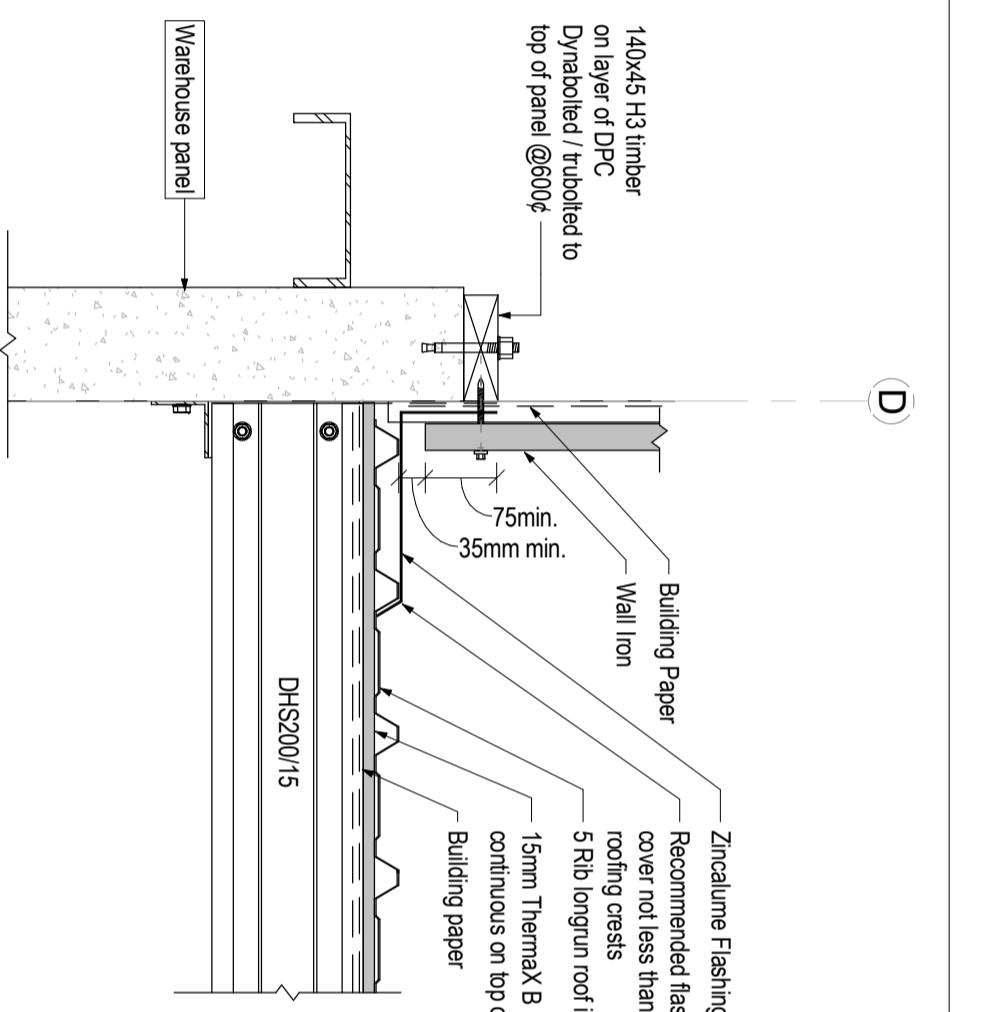
Roof Plan  
 1 : 100

Rev#	Amendments	Date	SCALE	JOB #
			1 : 100 @ A2	12413
			DRAWN BY C. White	DATE 13/05/16
			APPROVED BY A. Cloake	REV
			Roof Plan	<b>A1300</b>
Please see note. All dimensions to be verified on site				
Paper size <b>A2</b>				

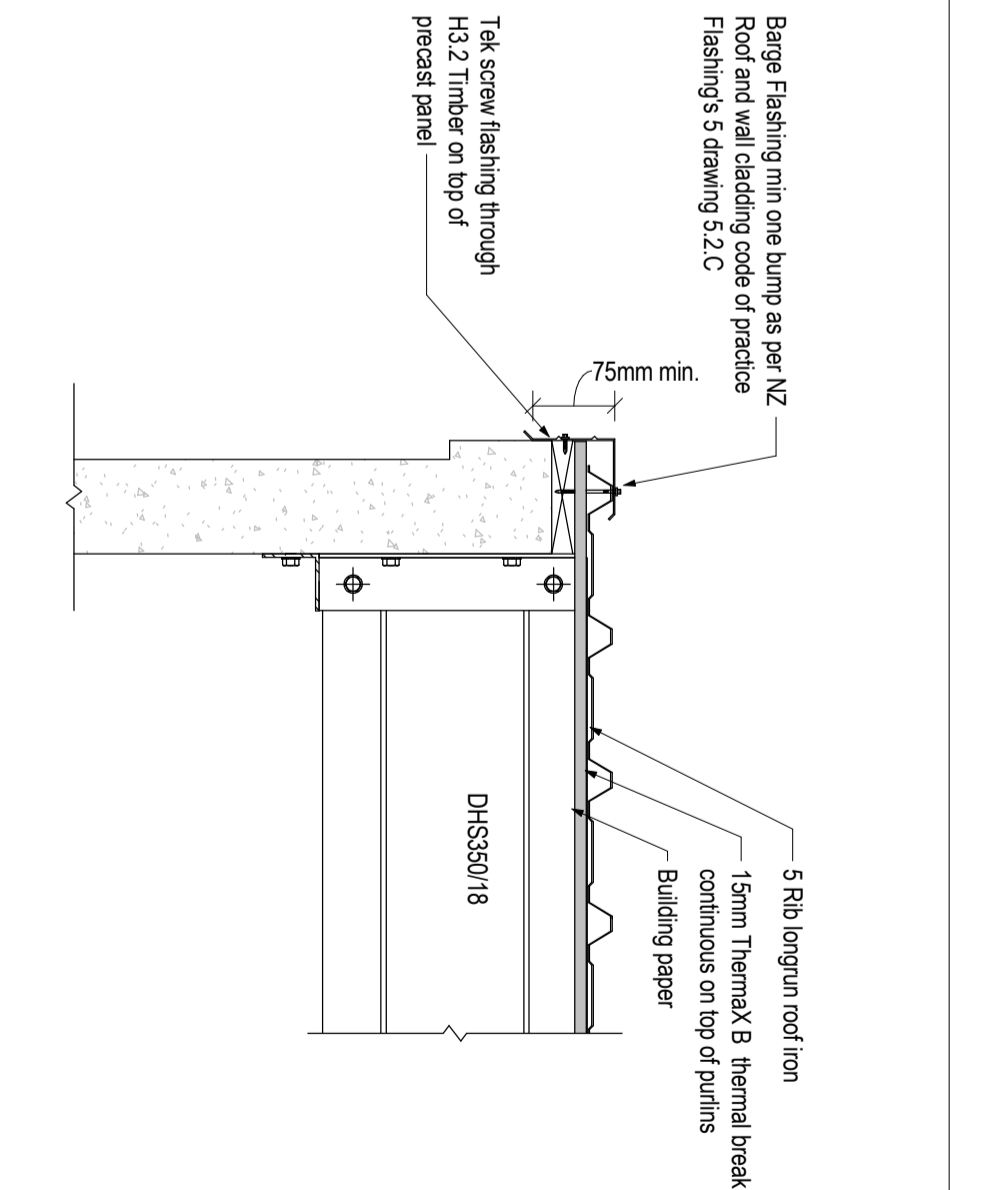
**Construction Issue**



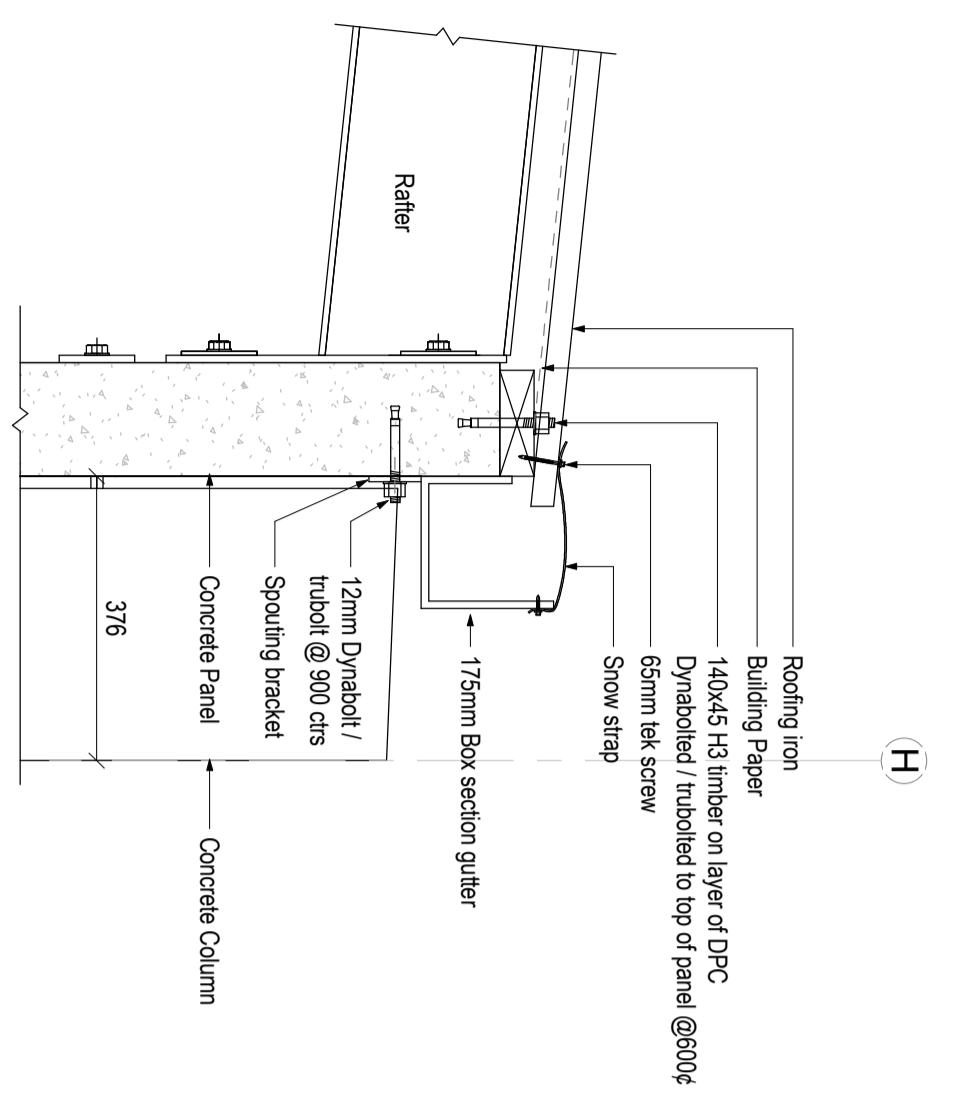
1 SECTION :Apron Flashing 1  
A0302 1 : 10



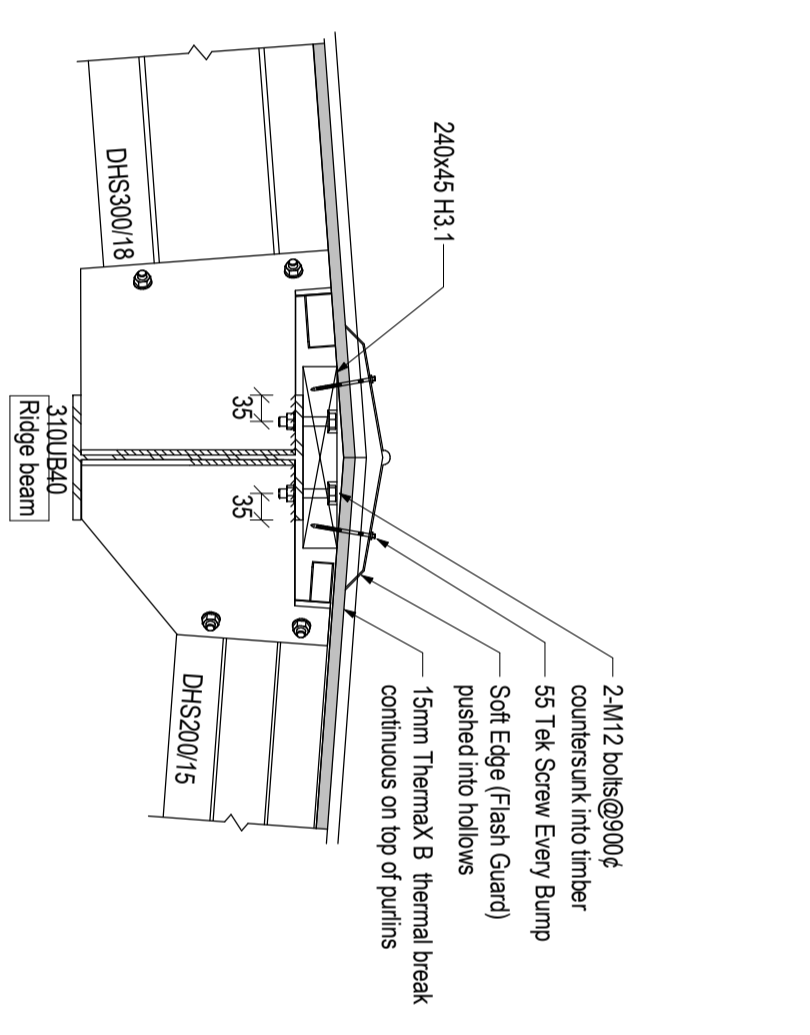
2 SECTION :Apron Flashing 2  
A1300 1 : 10



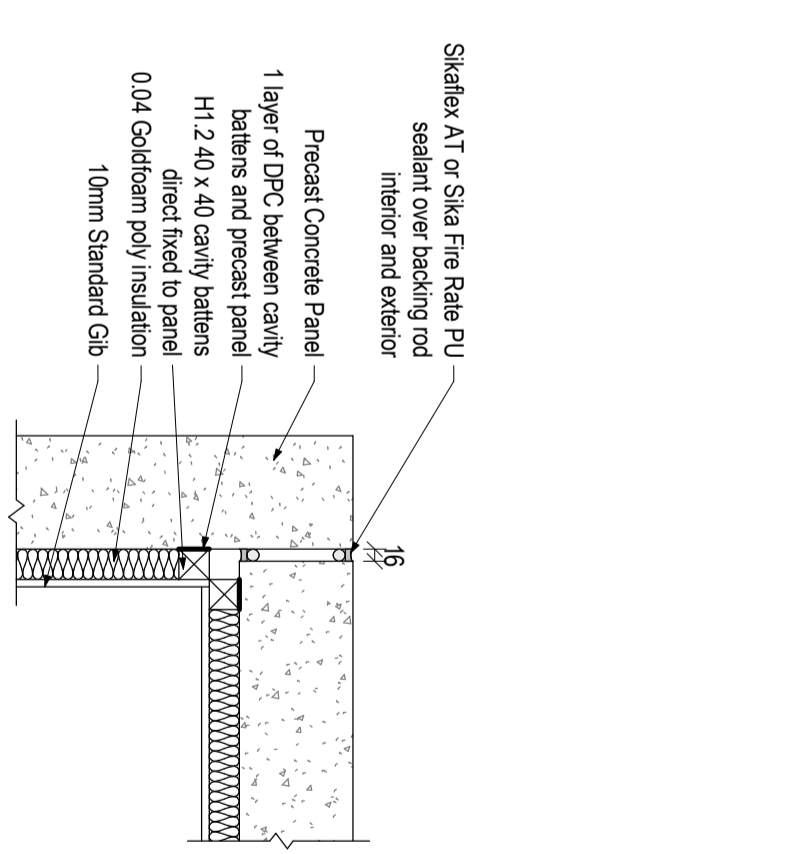
3 SECTION :Ridge Flashing to Precast  
A0300 1 : 10



4 SECTION :External gutter  
A1300 1 : 10



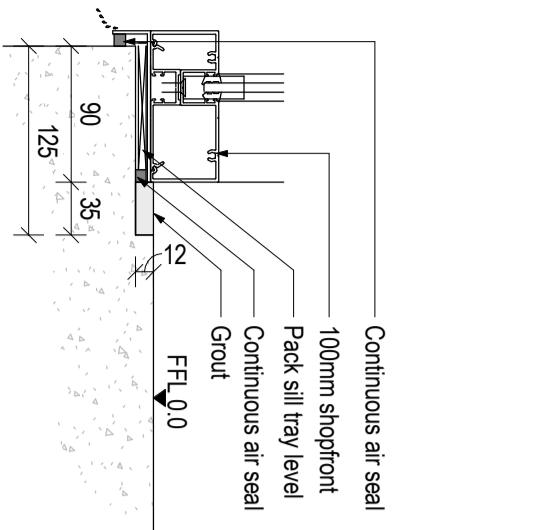
5 PLAN :Ridge Flashing detail  
A1300 1 : 10



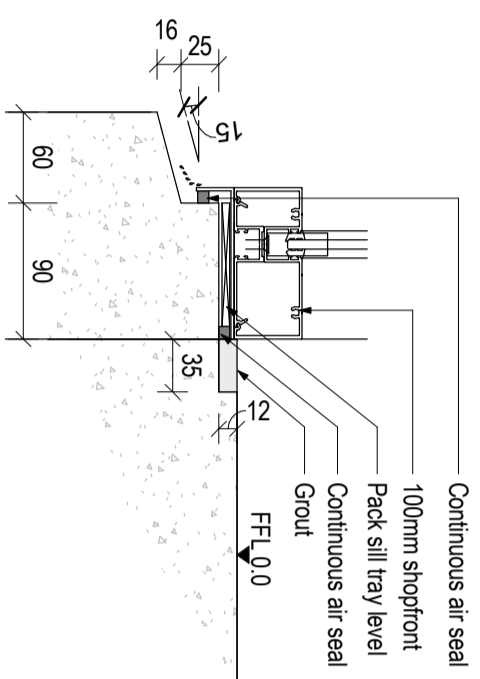
External Corner Precast Detail  
1 : 10

Rev#	Amendments	Date	SCALE	JOB #
			1 : 10 @ A2	12413
			DRAWN BY C. White	DATE 13/05/16
			APPROVED BY A. Cloake	REV
			Roof Flashing Details	A1301
			Please note: All dimensions to be verified on site	Paper size A2

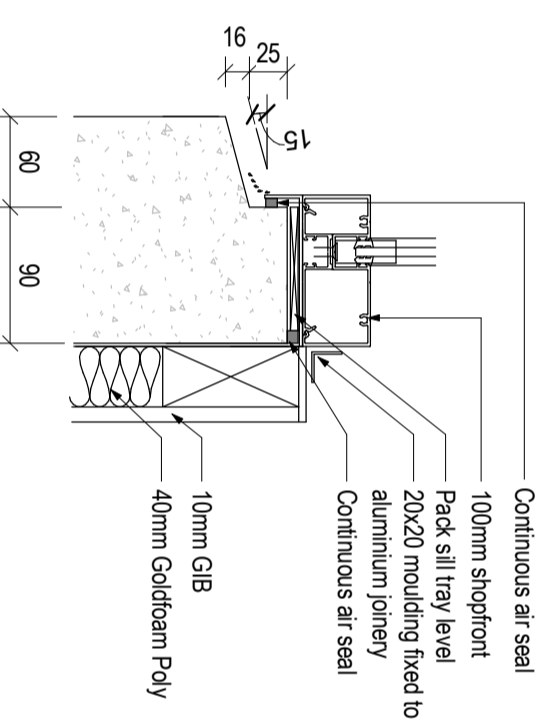
**Construction Issue**



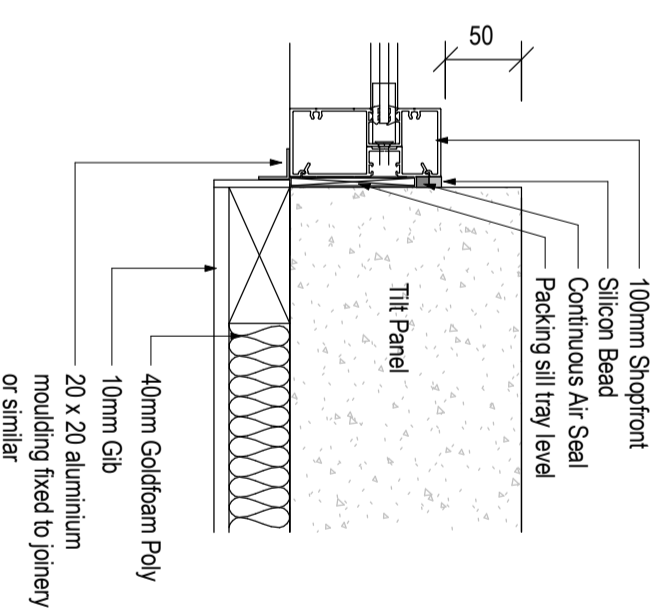
COMMERCIAL SILL DETAIL AT FFL STANDARD FOUNDATION EDGE



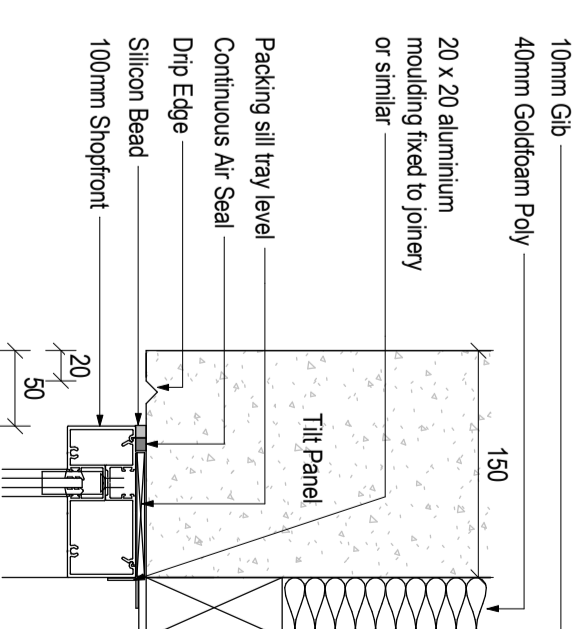
COMMERCIAL SILL DETAIL AT FFL IN PRECAST PANEL



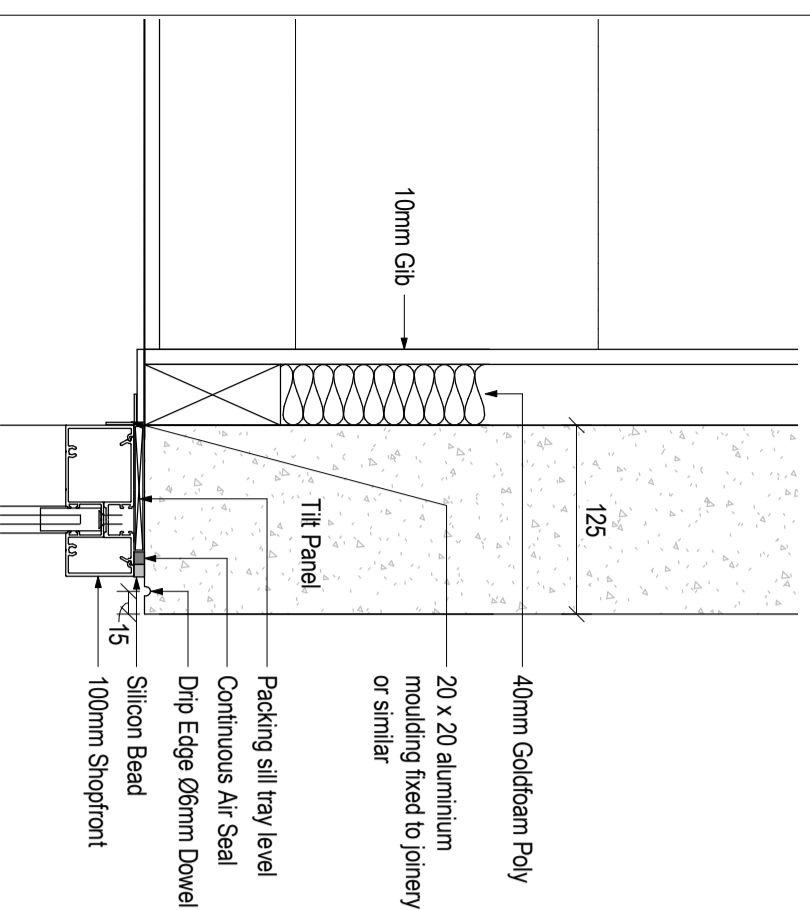
COMMERCIAL SILL DETAIL ABOVE FFL



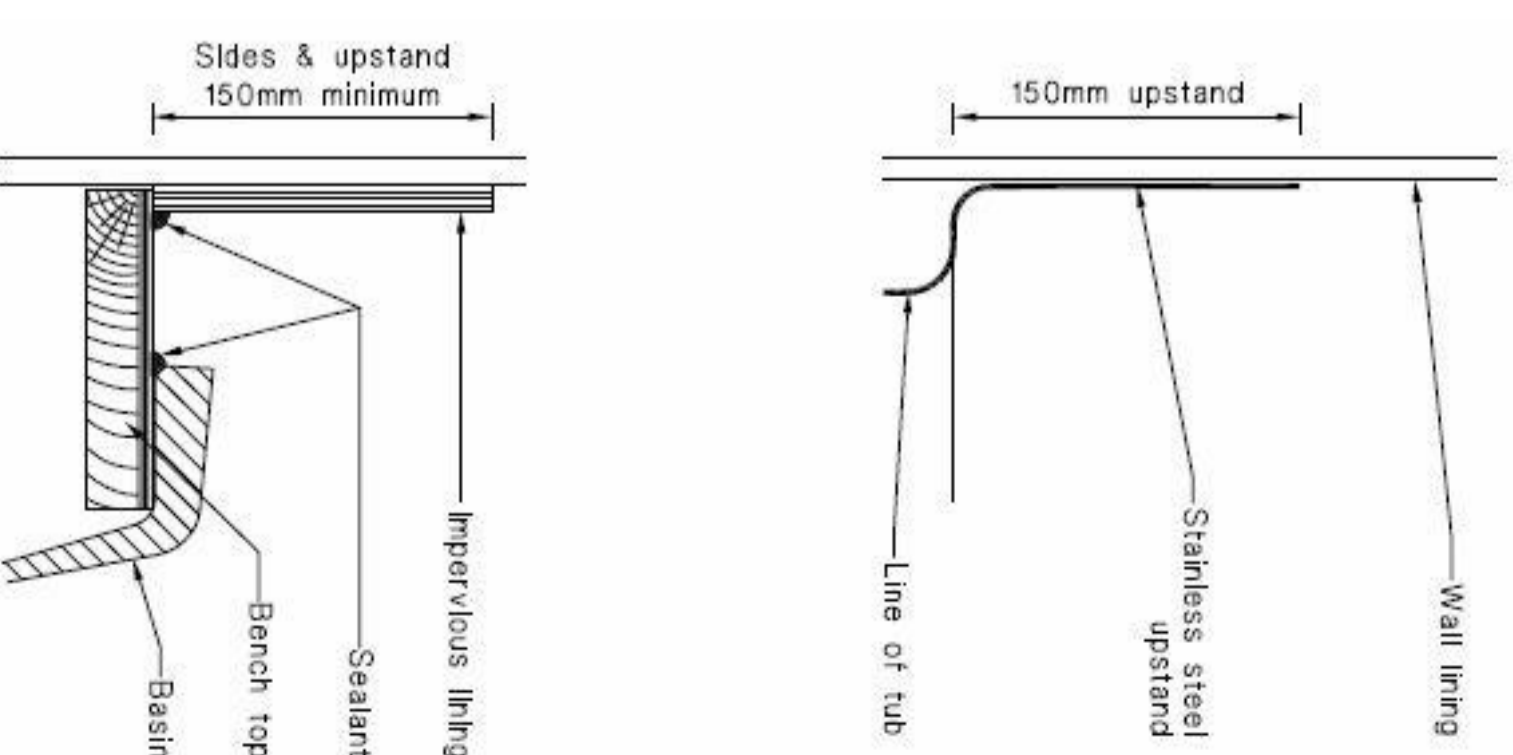
COMMERCIAL JAMB DETAIL



COMMERCIAL HEAD DETAIL



1  
AD3031  
DETAIL: Panel 4 drip edge  
1:5



(b) Tub, sink and basin

PROJECT

Arch

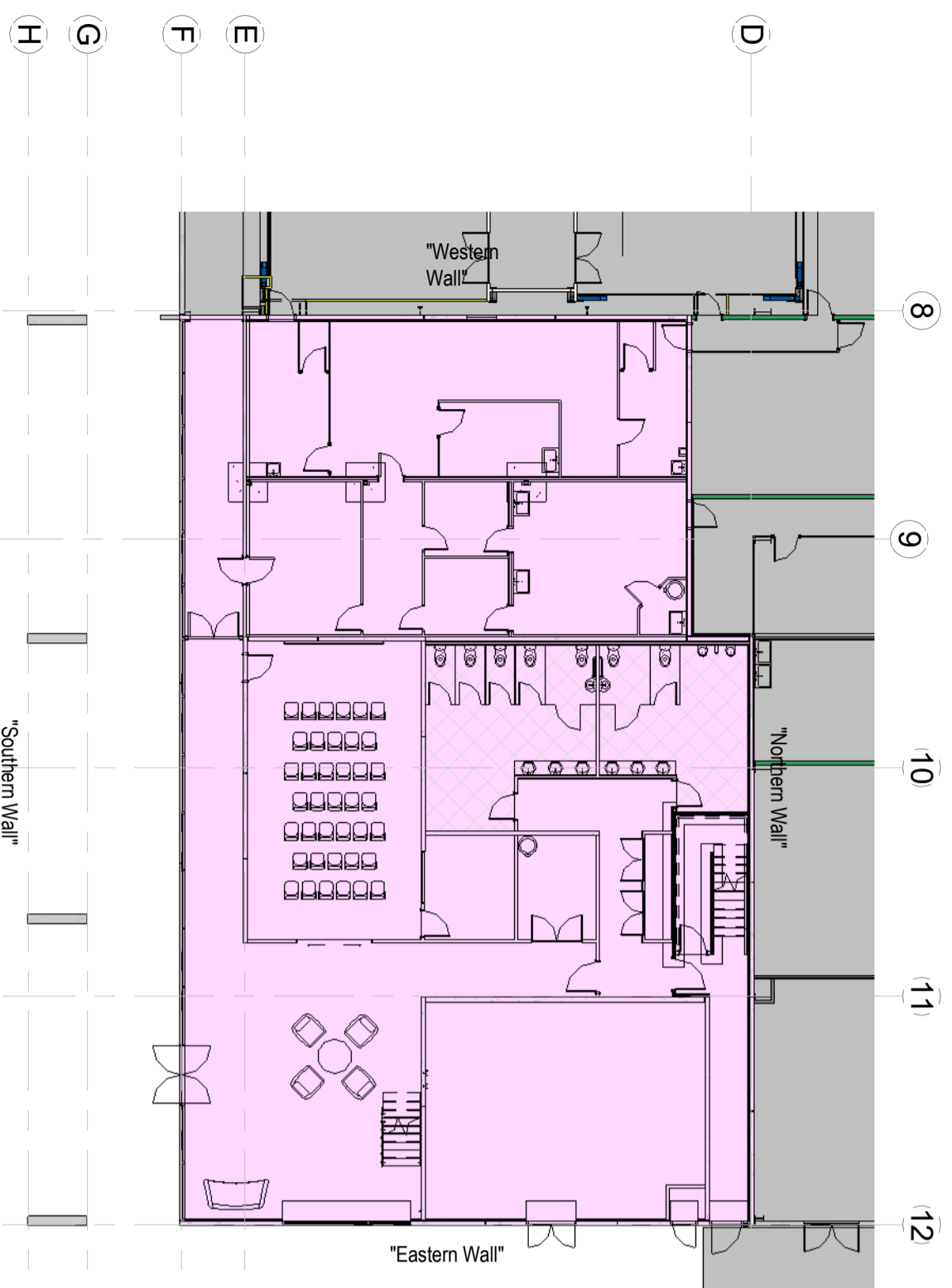
NZ Dairy Collaborative Group  
 Infant Formula Blending Plant Offices

9 Ashford Ave., Ashburton

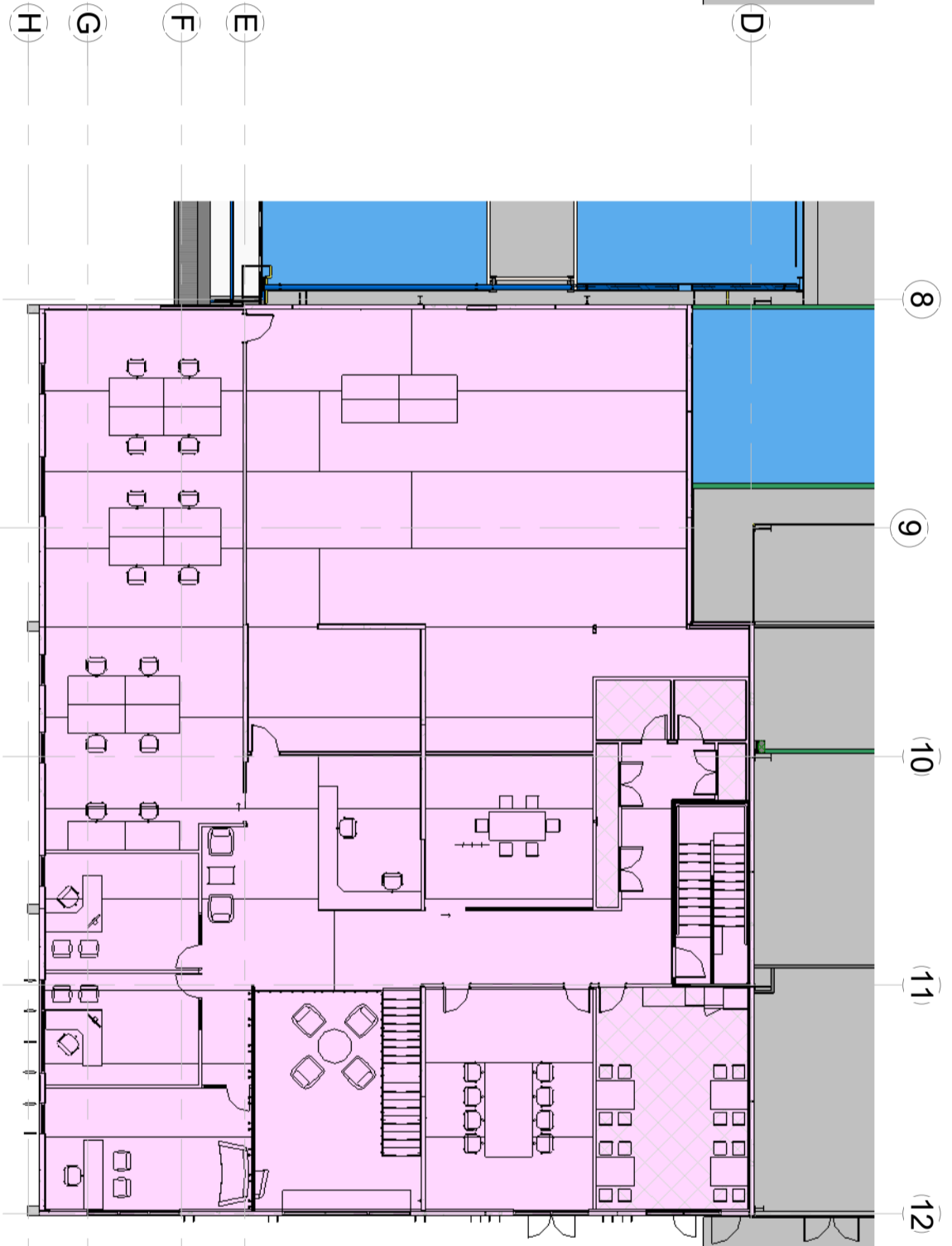
All Drawings property of Thompson Engineering 2002 Ltd

Rev#	Amendments	Date	SCALE	JOB #
			1:5 @ A2	12413
			DRAWN BY C. White	DATE 13/05/16
			APPROVED BY A. Cloake	REV
			Flashing Details	AT303
			Please note, All dimensions to be verified on site	Paper size A2

Construction Issue



Ground Floor Plan H1  
1:200



First Floor Plan H1  
1:200

NZBC H1 ENERGY EFFICIENCY - Large Buildings (> 300m <sup>2</sup> )			
Floor Area - (to outside of external walls)	644m <sup>2</sup>	Glazing Area	
Wall Area		North 0m <sup>2</sup> (faces to warehouse)	
North 192m <sup>2</sup> (faces to warehouse)		South 105m <sup>2</sup>	
South 192m <sup>2</sup>		East 43m <sup>2</sup>	
East 151m <sup>2</sup>		West 5.7m <sup>2</sup>	
West 27m <sup>2</sup>		Total Glazing Area	153.7m <sup>2</sup>
Total Wall Area		Glazed Area = 27.4% of total wall area	
362m <sup>2</sup>		If less than 50% then schedule method is OK	
		Climate Zone 3	

SCHEDULE METHOD NZS 4243: Part 1:2007			
Table 1 - min R values for schedule method			
Building Thermal Envelope Component	Minimum R-values climate zone 2 & 3 values provided	Minimum R-values climate zone 2 & 3 values provided	Minimum R-values climate zone 2 & 3 values provided
Roof	R 1.9	R 3.30	Complies
Wall	R 1.2	R 1.41	Complies
Floor	R 1.3	R 2.96 or 2.89	Complies
Glazing	No requirement	No requirement	Complies

Please refer to the attached design navigator tables showing material compliance with R values

Name: **Floortype 1** 2.96 m<sup>2</sup>K/W

Type: Floor: Slab floor

Flooring: 50-100mm Concrete Topping Screed  
R-value: 0.04

Internal surface 0.09  
R-value: 0.04

Slab Insulation

Slab floor area [m <sup>2</sup> ]	513
Perimeter length [m]	95
External wall thickness [mm]	200
Soil conductivity [W/m °C]	1.2

Underslab insulation: none

Piles Footings: none

Slab edge insulation: none

Name: **Roof type 1** 3.30 m<sup>2</sup>K/W

Type: Roof: Steel framed roof, suspended ceiling

Roofing: Steel framed roof, suspended ceiling

external surface 0.03  
R-value: 0.01

Insulation: Corrugate iron with building paper  
R-value: 0.01

Steel Frame & Cavity: 300/180DHS (300x85x175) rafters or joists @ 1000mm, battens covered with insulation  
R-value: 0.01

Roof space (still air) [m <sup>2</sup> ]	0.11
Roof space (still air) [m <sup>2</sup> ]	0.11
Roof space (still air) [m <sup>2</sup> ]	0.11

Thermal Break: Thermax B 10mm  
R-value: 0.45

Roof Lining: Ceiling tiles  
R-value: 0.08

Internal surface 0.09  
R-value: 0.09

Ceiling Area [m<sup>2</sup>]: 360  
Number of downlights: 12  
Clearance from lamp holder side [m]: 0.7

Name: **Walltype 1** 1.41 m<sup>2</sup>K/W

Type: Wall: Solid wall (concrete, masonry or other) without vented cavity, with internal insulation

external surface 0.03  
R-value: 0.10

Cladding: 100-150mm natural stone or schist  
R-value: 0.10

Solid Masonry: Structural Concrete 150mm  
R-value: 0.09

Strapping: Timber batten, 40mm deep, 45mm wide @ 600mm centers  
Strapping Area: 11.0%

Thermal Break	none	R-value: 0.00
Strapping	40mm Goldfoam, 30kg/m <sup>3</sup>	1.44
Strapping	none	0.34
Wall Lining	Gypsum plasterboard 10mm	0.04
Internal surface		0.09

Name: **Floortype 3** 2.89 m<sup>2</sup>K/W

Type: Floor: Slab floor

Flooring: XLam CLT 105mm  
R-value: 0.88

internal surface 0.09  
R-value: 0.88

Slab Insulation

Slab floor area [m <sup>2</sup> ]	142
Perimeter length [m]	67.8
External wall thickness [mm]	150
Soil conductivity [W/m °C]	1.2

Underslab insulation: none

Piles Footings: none

Slab edge insulation: none

XLAM first floor that suspends to south side of building

CONSTRUCTION & ENGINEERING

Thompson Engineering 2002 Ltd, PO Box 204, Mairaki, Timaru, 9th Maxwell Road, Timaru  
PH 0300 688 716 | F (03) 688 716 | www.thompsonengineering.co.nz | design@thompsonengineering.co.nz

PROJECT

**Arch**

NZ Dairy Collaborative Group

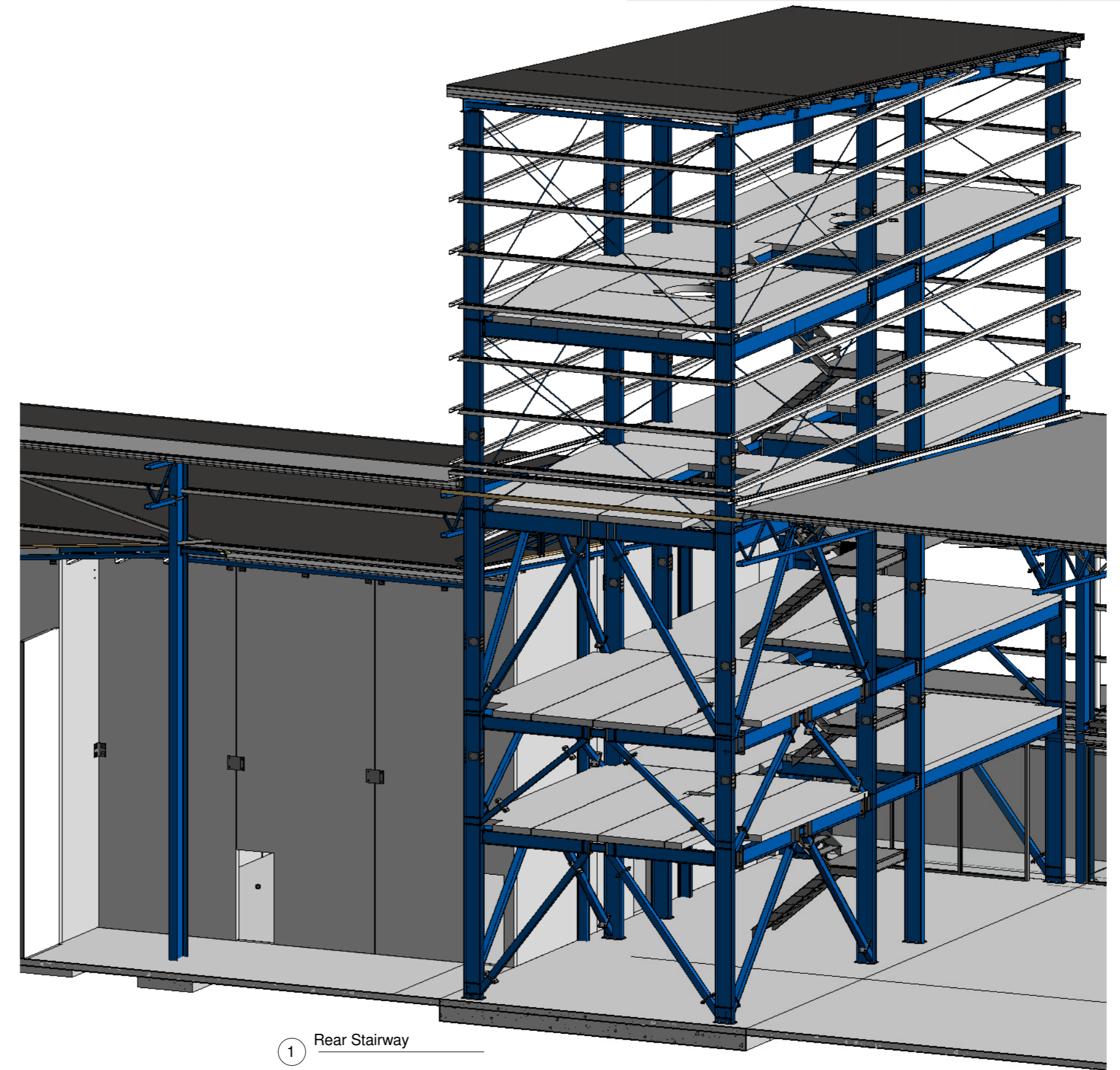
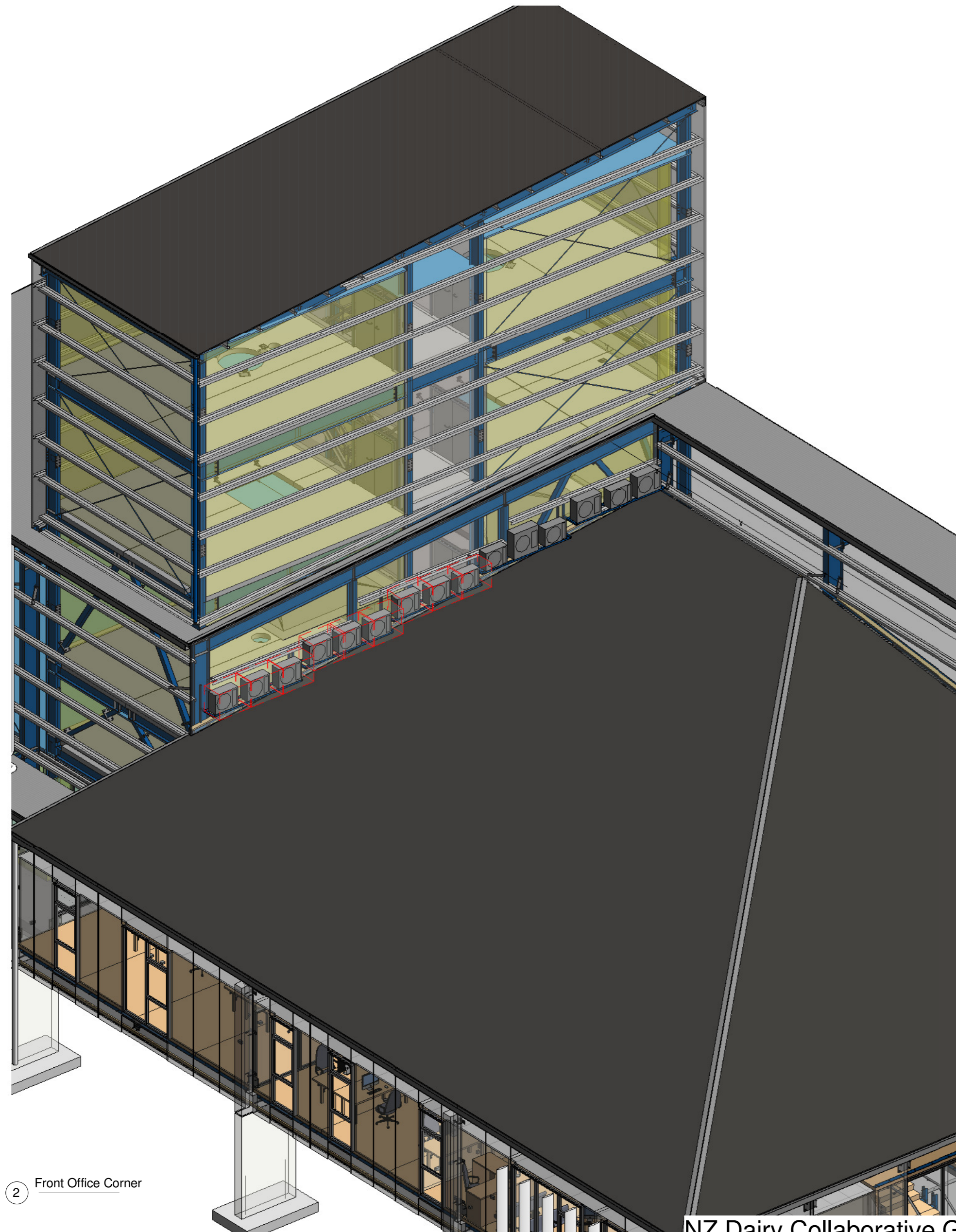
Infant Formula Blending Plant Offices

9 Ashford Ave., Ashburton

All Drawings property of Thompson Engineering 2002 Ltd

Rev#	Amendments	Date	SCALE	JOB #
			As indicated@ A2	12413
			DRAWN BY C. White	DATE 13/05/16
			APPROVED BY A. Cloake	REV
			H1 Compliance	A1400
			Please note, All dimensions to be verified on site	Paper size A2

Arch Sheet List			
Sheet Number	Sheet Name	Current Revision	Current Revision Date
A0100	Site		
A0200	Fit Out Ground Floor Plan		
A0201	Fitout Groundfloor Plan with Plant		
A0202	Level T1	2	21/11/16
A0203	Level T2, T3, T4		
A0300	Cross Sections and Stairs		
A0301	Cross Section BB		
A0302	Cross Section CC		
A0303	Cross Section GL6		
A0400	Elevations C		
A0401	Elevations B		
A0500	Plumbing Ground Floor	4	20/12/16
A0600	D W Ground Floor Plan		
A1300	Roof Plan		
A1301	Flashing Details	2	21/11/16



NZ Dairy Collaborative Group  
Tower Extension  
9 Ashford Ave, Ashburton

JOB # 12630  
DATE: 27/10/16

**SITE PLAN**

PROJECT NAME: NZ Dairy Collaborative Group  
 PROJECT DESCRIPTION: Infant Formula Blending Plant  
 PROJECT ADDRESS: 9 Ashford Ave, Ashburton  
 APPELLATION: Lot 17 DP 427688

AREA OF PROPOSED NEW BUILDINGS:  
 Blending Plant = 4442m<sup>2</sup>  
 Office = 1005m<sup>2</sup> (Separate Building Consent)

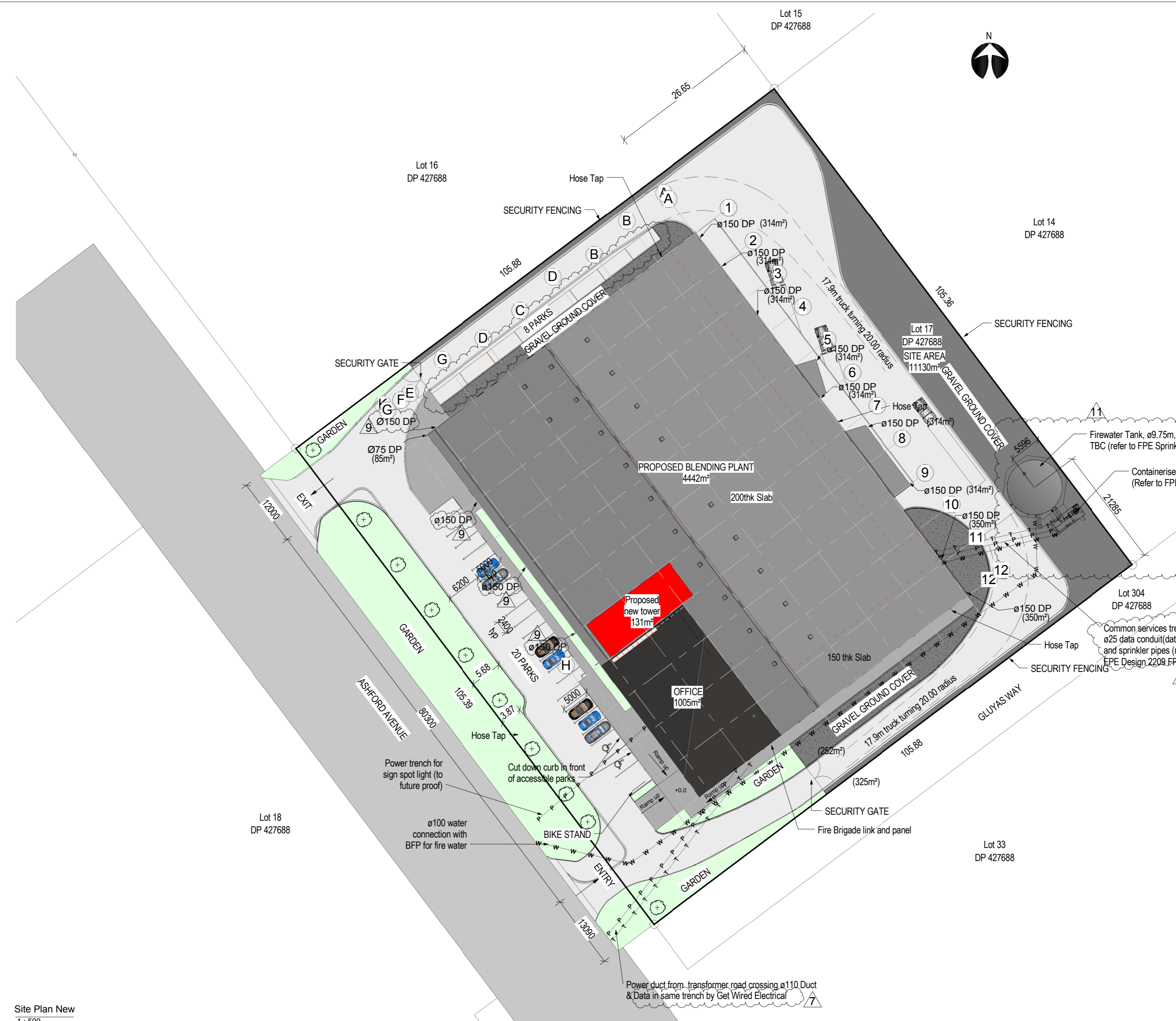
LANDSCAPING: 3m wide landscaping strip

**KEY**

	Data (Telephone)
	Power
	Water

Please refer to Civil and Services plan by TM Consultants for further information.

Read this plan in conjunction with the FPE Sprinkler design 2209 for Fire System, Fire water tank and pump house set out.



Site Plan New  
1:500

Thompson Engineering 2002 Ltd | PO Box 2081, Washdyke - Timaru | 9b Meadows Road - Timaru  
 PH 0800 688 716 | F (03) 688 7168 | www.thompsonengineering.co.nz | design@thompsonengineering.co.nz

PROJECT

**Arch**

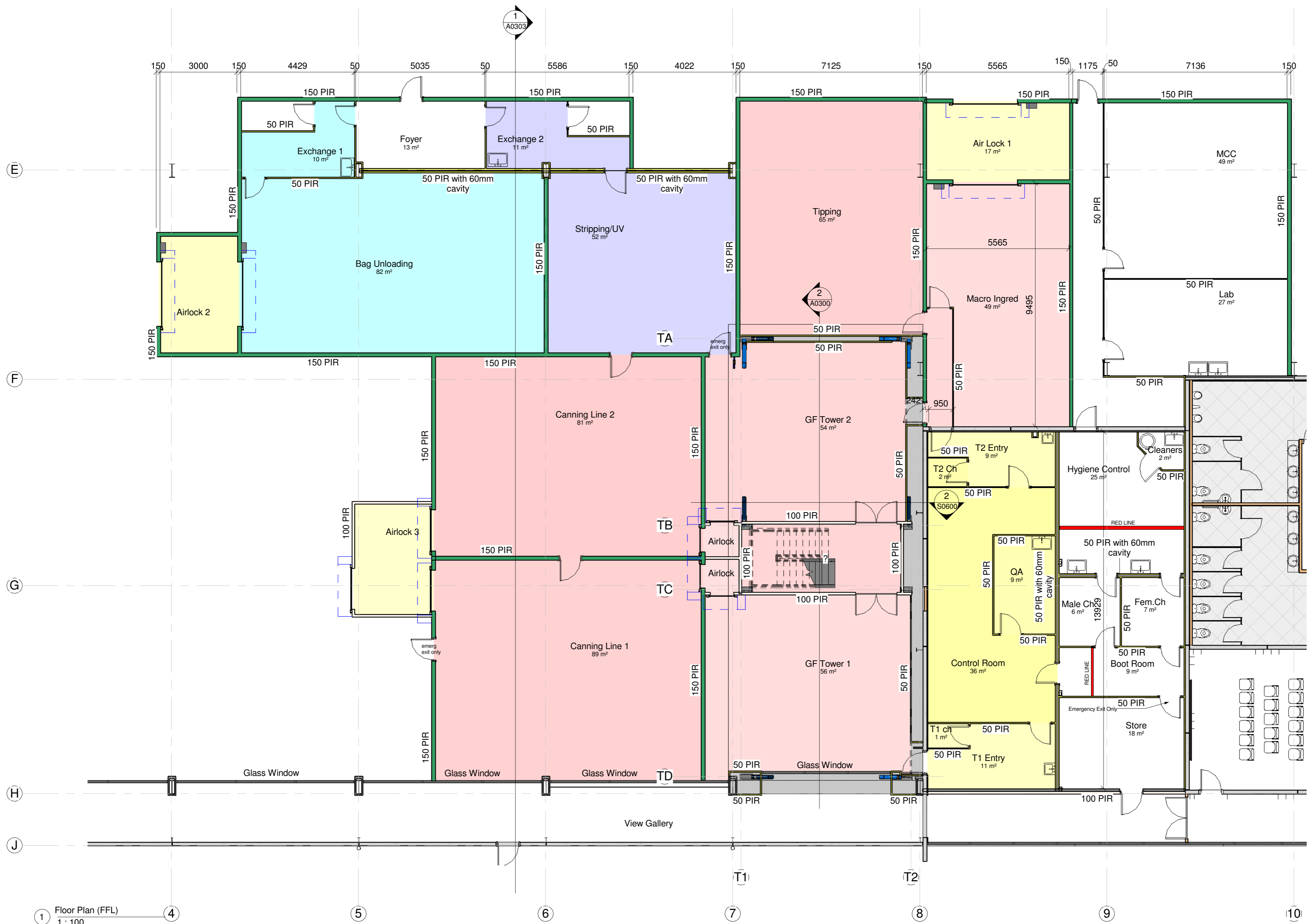
**NZ Dairy Collaborative Group  
 Infant Formula Blending Plant**

9 Ashford Ave., Ashburton

All Drawings property of Thompson Engineering 2002 Ltd

Rev#	Amendments	Date
1	PIM Parking	18/12/15
7	Changes for sprinkler and electrical services	21/03/16
9	Changes to DP's	02/05/16
11	Prelim Tank and Pump House layout	15/06/16

SCALE	As indicated@ A2	JOB #	12412
DRAWN BY	B.Holloway	DATE	23/01/16
APPROVED BY	A. Cloake	REV	11
<b>Site Plan</b>		<b>A0100</b>	
Please note: All dimensions to be verified on site			
Paper size: <b>A2</b>			



1 Floor Plan (FFL)  
1 : 100

PROJECT

NZ Dairy Collaborative Group  
Tower Extension

9 Ashford Ave, Ashburton

Rev#

Amendments

Date

SCALE 1 : 100 @ A2

JOB # 12630

DRAWN BY B Holloway

DATE 27/10/16

CHECKED BY

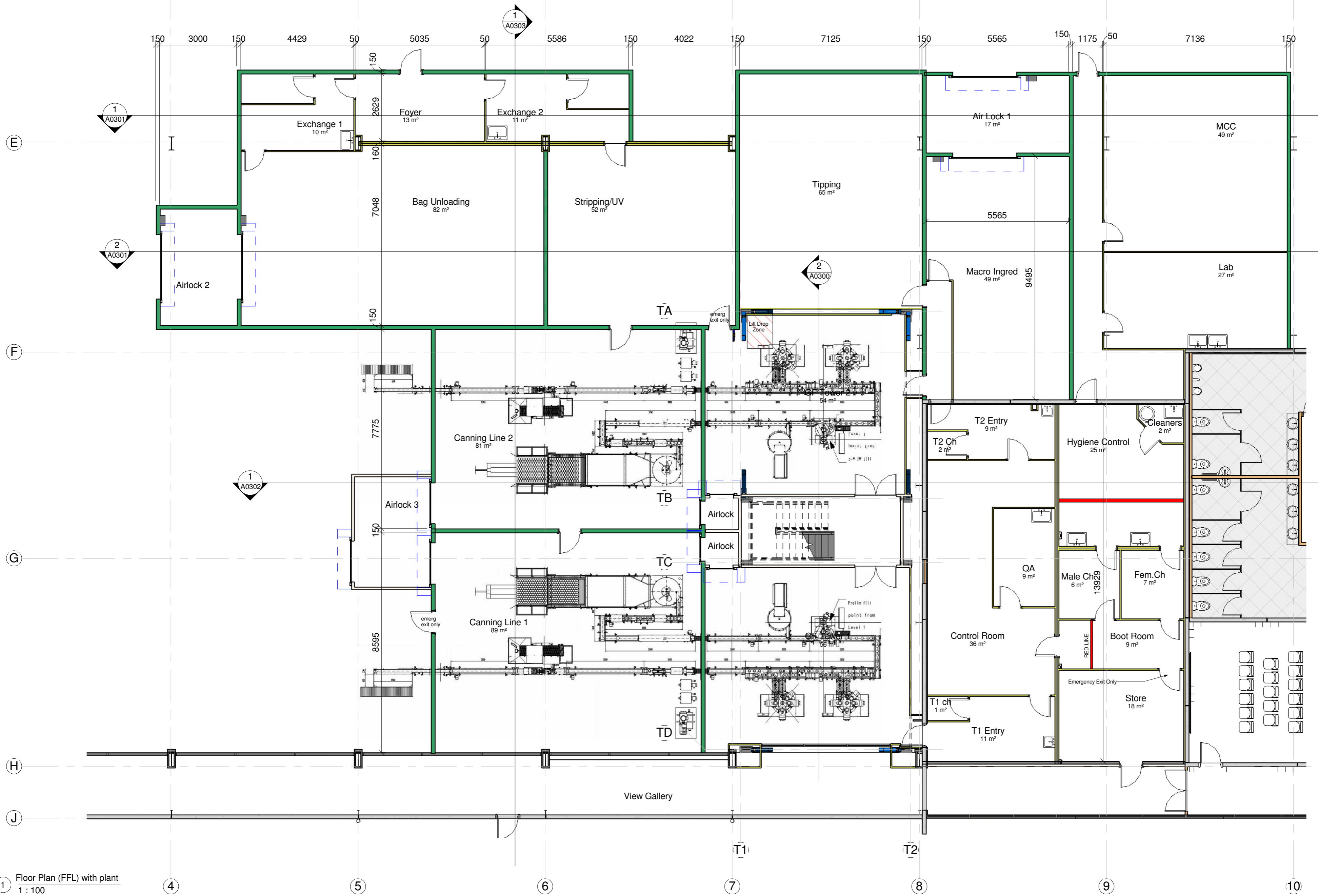
REV

Fit Out Ground Floor Plan

A0200

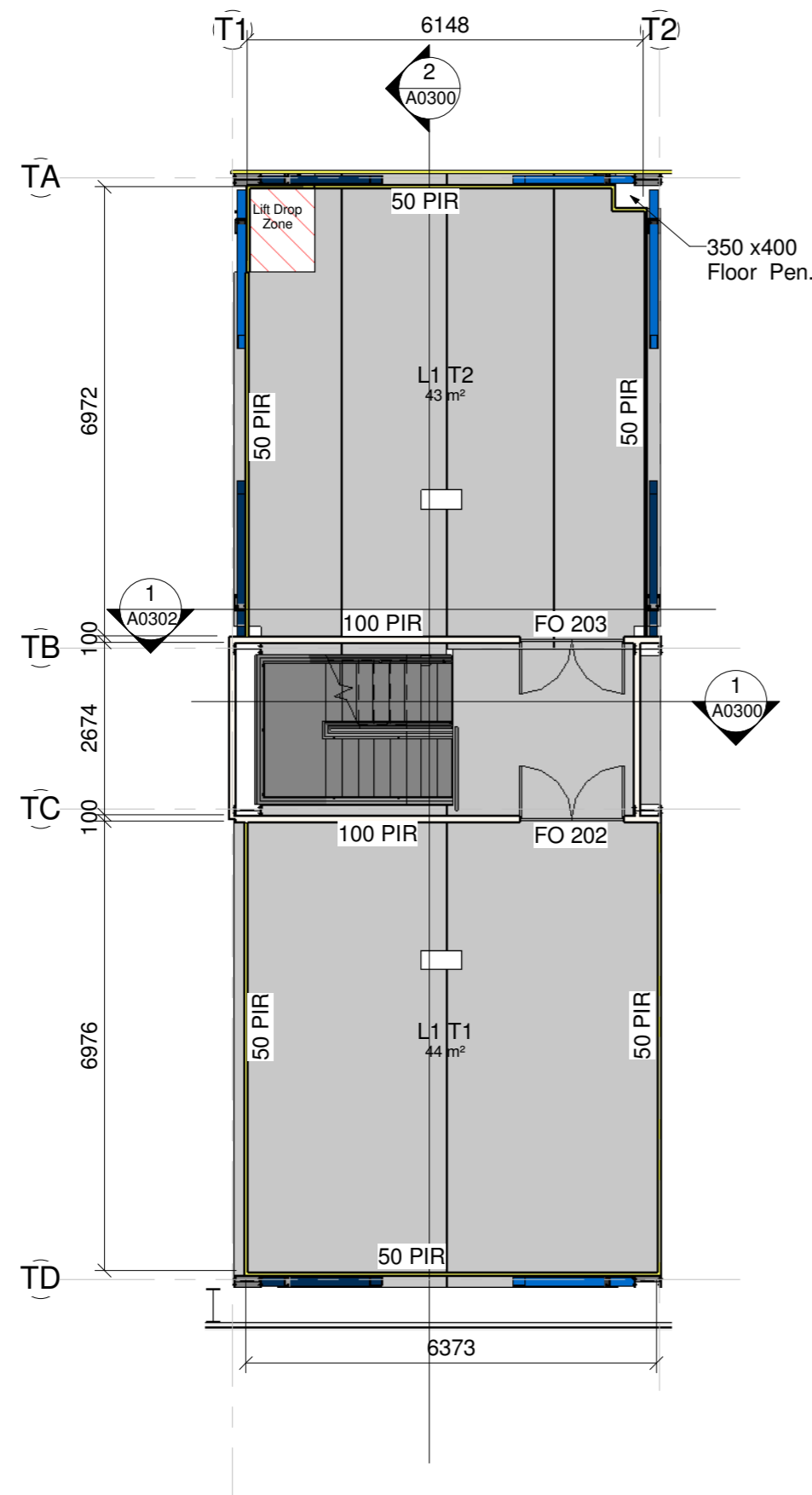
Please note: All dimensions to be verified on site

Paper size: A2



1 Floor Plan (FFL) with plant  
1 : 100

Rev#	Amendments	Date	SCALE	JOB #
			1 : 100 @ A2	12630
			DRAWN BY B Holloway	DATE 27/10/16
			CHECKED BY A.Cloake	REV
			<b>Fitout Groundfloor Plan with</b>	<b>A0201</b>
			Please note: All dimensions to be verified on site	Paper size: A2



1 Level T1  
1:100

Fresh Air Supply to comply with G4					
Room	Supplied Airflow (l/s)	Area (m <sup>2</sup> )	Calc. Occupancy (NZS 4303 calc)	Supply Ratio	Flow reqd (L/S)
Bag Unloading	3332	82	8	10 L/s per person	65.6
Stripping/UV	5085	52	5	10 L/s per person	41.6
Bag Tipping	3775	65	7	10 L/s per person	52
Macro Ingrid	2809	49	5	10 L/s per person	39.2
Canning Line 2	6532	81	8	10 L/s per person	64.8
Canning Line 1	6532	89	9	10 L/s per person	71.2
Tower 2 (4 levels @ 54m <sup>2</sup> )	7131	216	22	10 L/s per person	172.8
Tower 1 (4 levels @ 56m <sup>2</sup> )	6713	224	22	10 L/s per person	179.2
Control Room & QA	55 min. *1	68	7	10 L/s per person	54.4
Hygiene Control and change rooms	128 min. *1	51	5	2.5L/s per m <sup>2</sup>	127.5
Lab	22 min. *1	27	3 *2	10 L/s per person	30

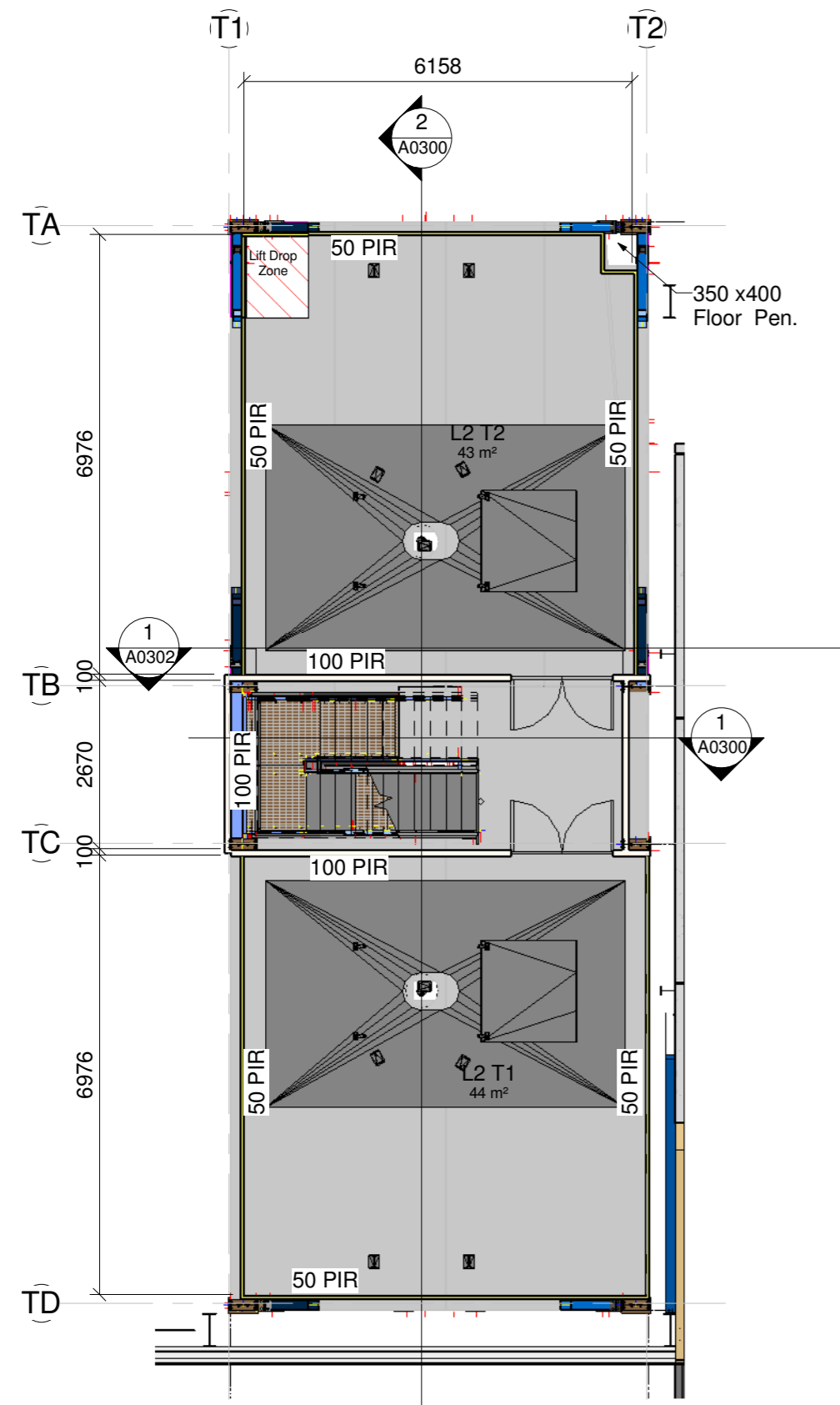
Fresh air Supply Rates from NZS 4303 Table 1				
Application	Estimated Maximum** Occupancy P/1000 ft <sup>2</sup> or 100 m <sup>2</sup>	Outdoor Air Requirements		
		cfm/person	L/s person	cfm/ft <sup>2</sup> L/s m <sup>2</sup>
Meat processing	10	15	8	
Locker rooms				0.50 2.50

Notes:

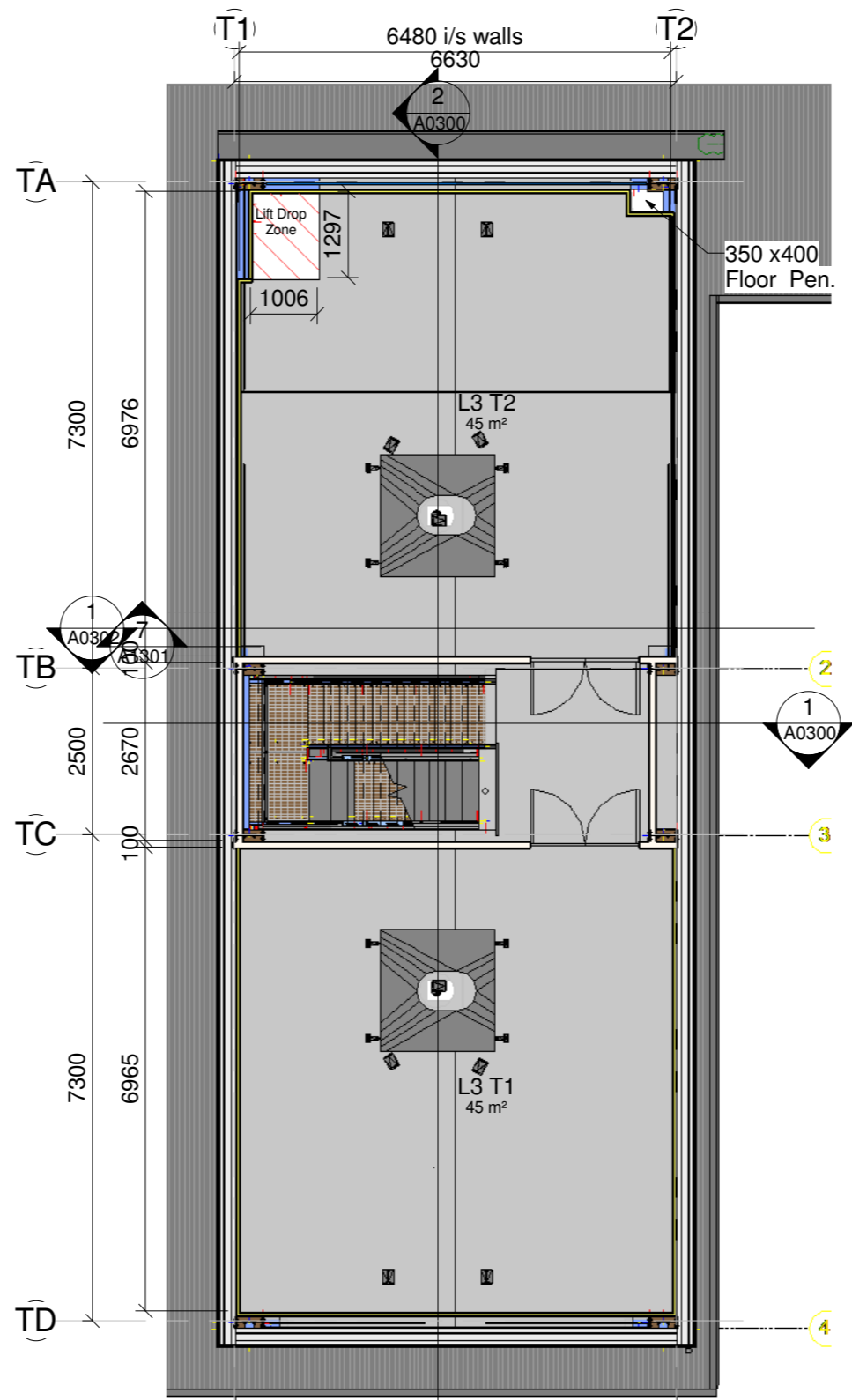
\*1: Air supply transferred from tower air supply (higher pressure room)

\*2: Known Occupancy

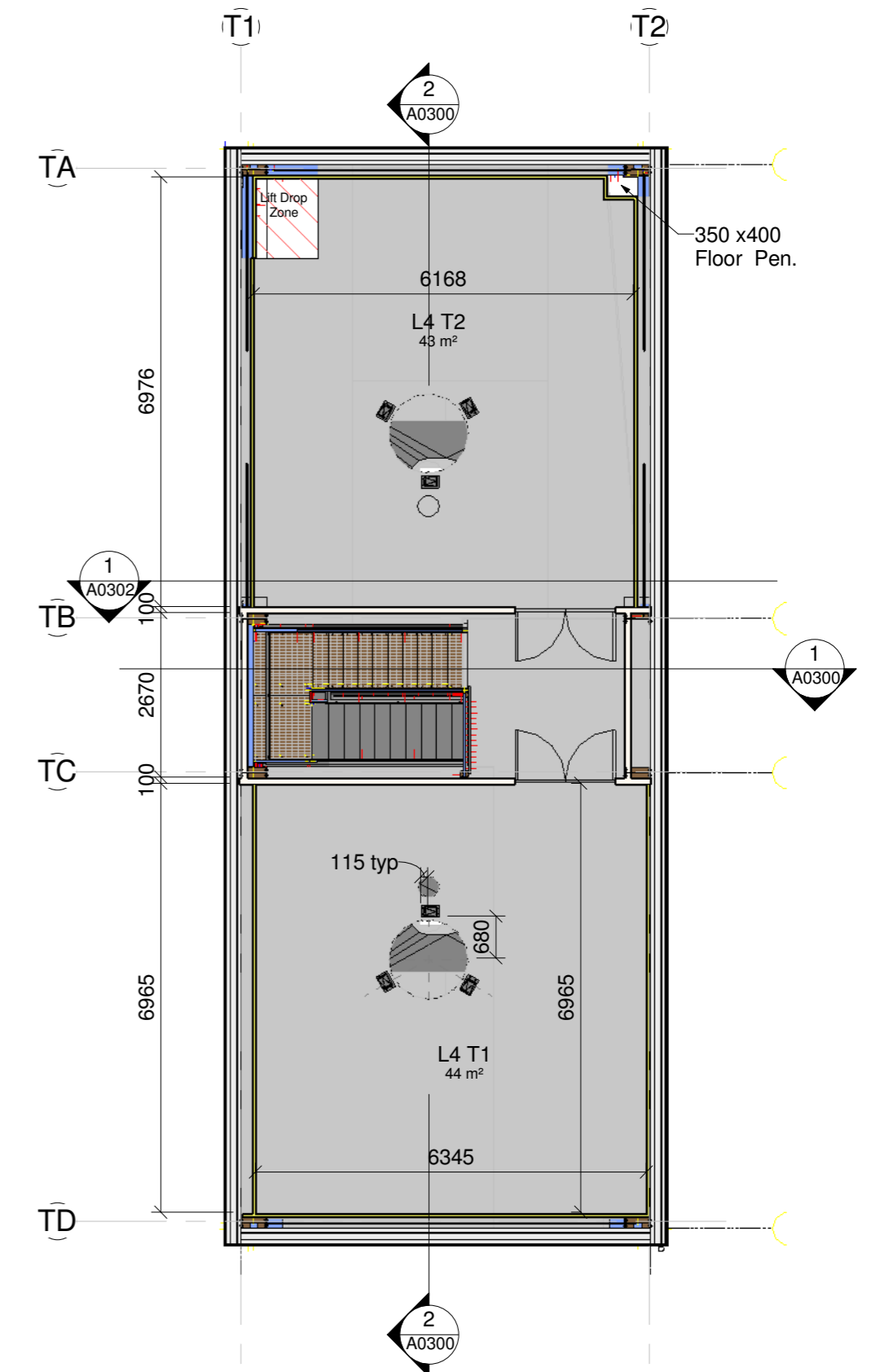
2 Ventilation  
1:10



① Level T2  
1 : 100



② Level T3  
1 : 100



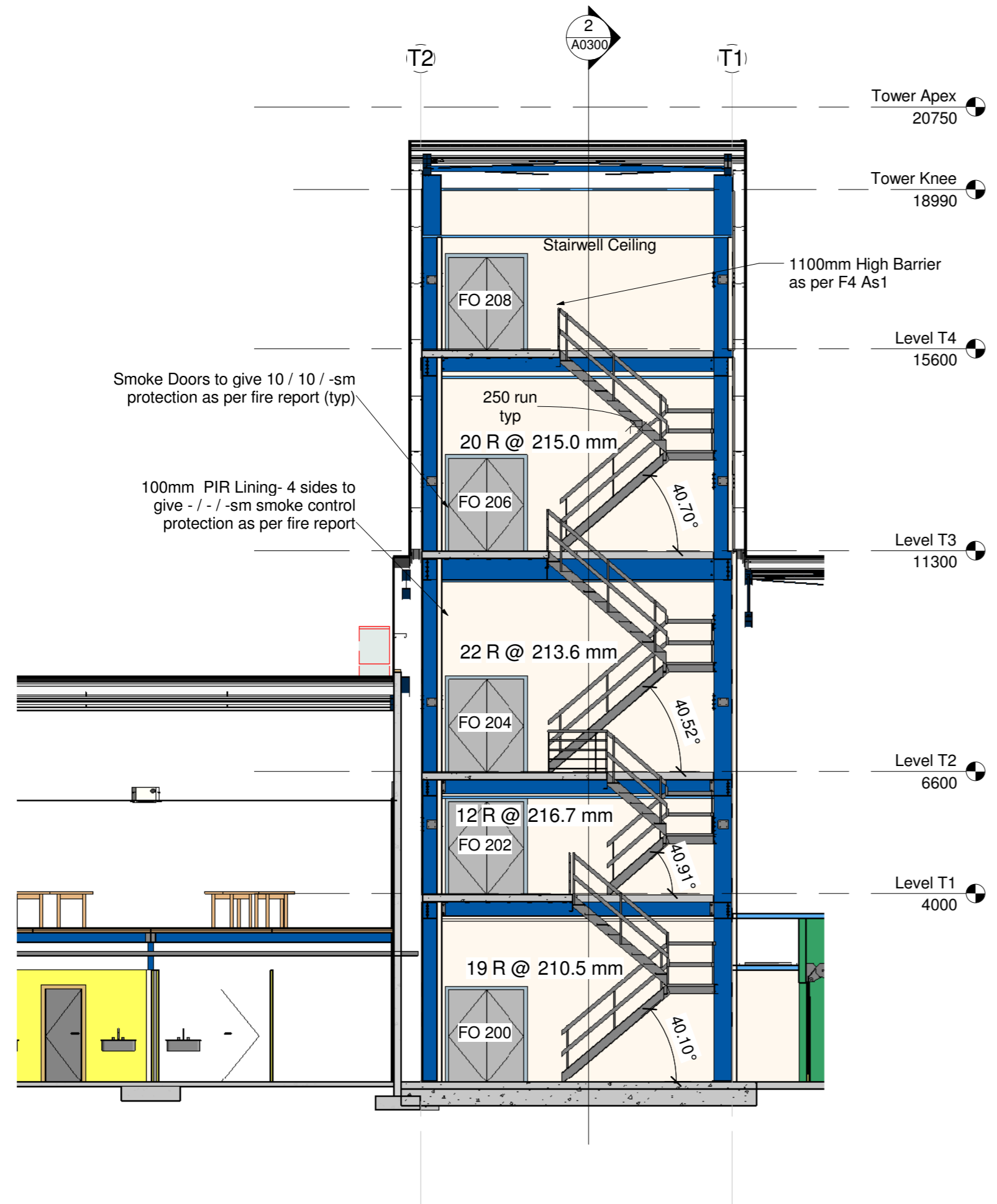
③ Level T4  
1 : 100



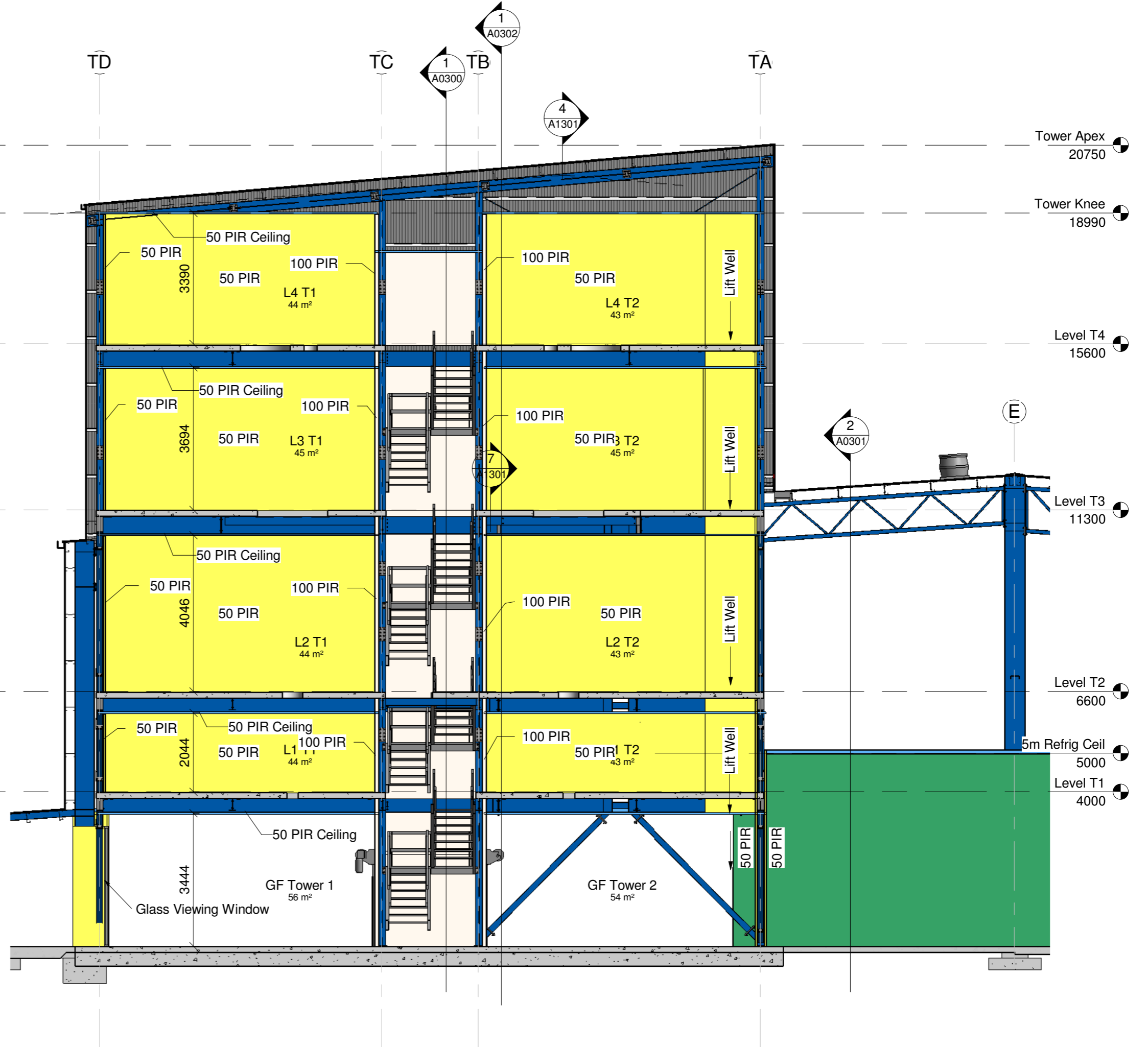
Thompson Engineering 2002 Ltd | PO Box 2081, Washdyke - Timaru | 9b Meadows Road - Timaru  
PH 0800 688 716 | F (03) 688 7168 | www.thompsonengineering.co.nz | design@thompsonengineering.co.nz

PROJECT  
**NZ Dairy Collaborative Group**  
**Tower Extension**  
 9 Ashford Ave, Ashburton  
 All Drawings property of Thompson Engineering 2002 Ltd

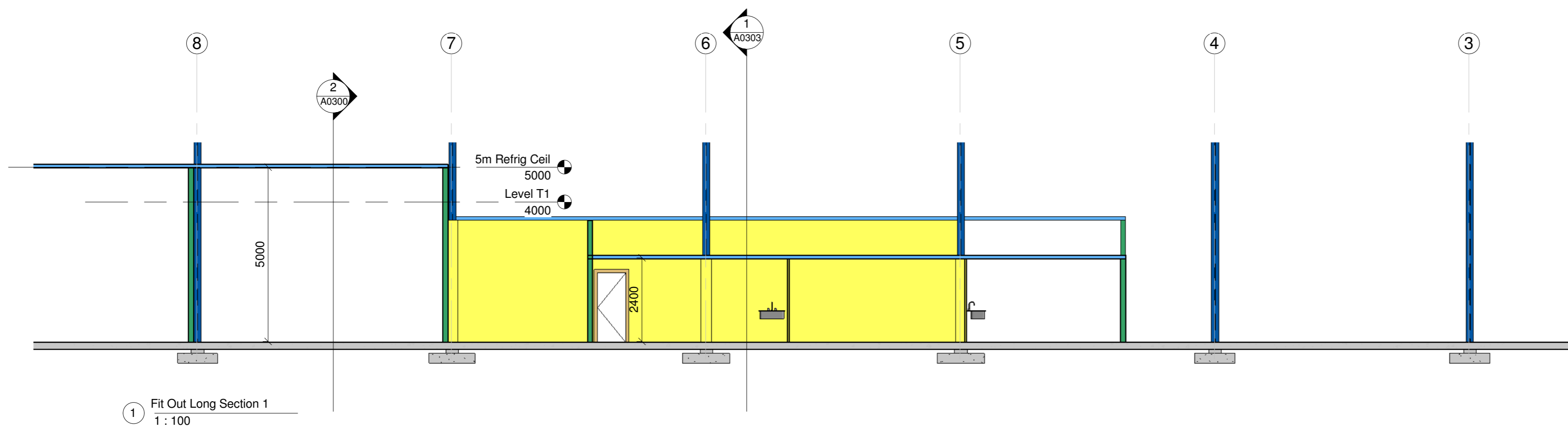
Rev#	Amendments	Date	SCALE	JOB #
			1 : 100 @ A2	12630
			DRAWN BY B Holloway	DATE 27/10/16
			CHECKED BY Checker	REV
			<b>Level T2, T3, T4</b>	<b>A0203</b>
Please note: All dimensions to be verified on site				Paper size: A2



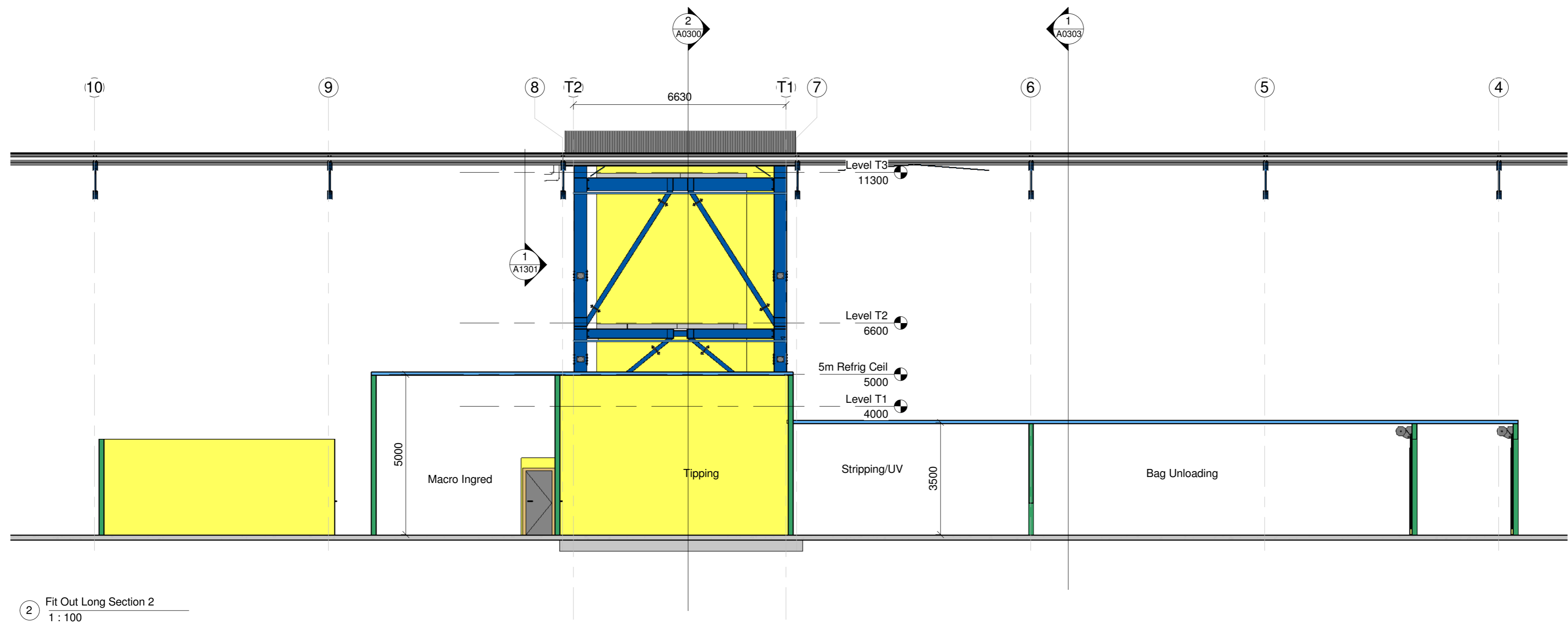
1 Tower Stair Detail  
1 : 100



2 Tower Cross Section 2  
1 : 100



1 Fit Out Long Section 1  
1 : 100



2 Fit Out Long Section 2  
1 : 100



PROJECT

NZ Dairy Collaborative Group  
Tower Extension

9 Ashford Ave, Ashburton

Rev#

Amendments

Date

SCALE 1 : 100 @ A2

JOB # 12630

DRAWN BY B Holloway

DATE 27/10/16

CHECKED BY

REV

Cross Section BB

A0301

Please note: All dimensions to be verified on site

Paper size: A2



1 Fit Out Long Section 3  
1 : 100



PROJECT

NZ Dairy Collaborative Group  
Tower Extension

9 Ashford Ave, Ashburton

Rev#

Amendments

Date

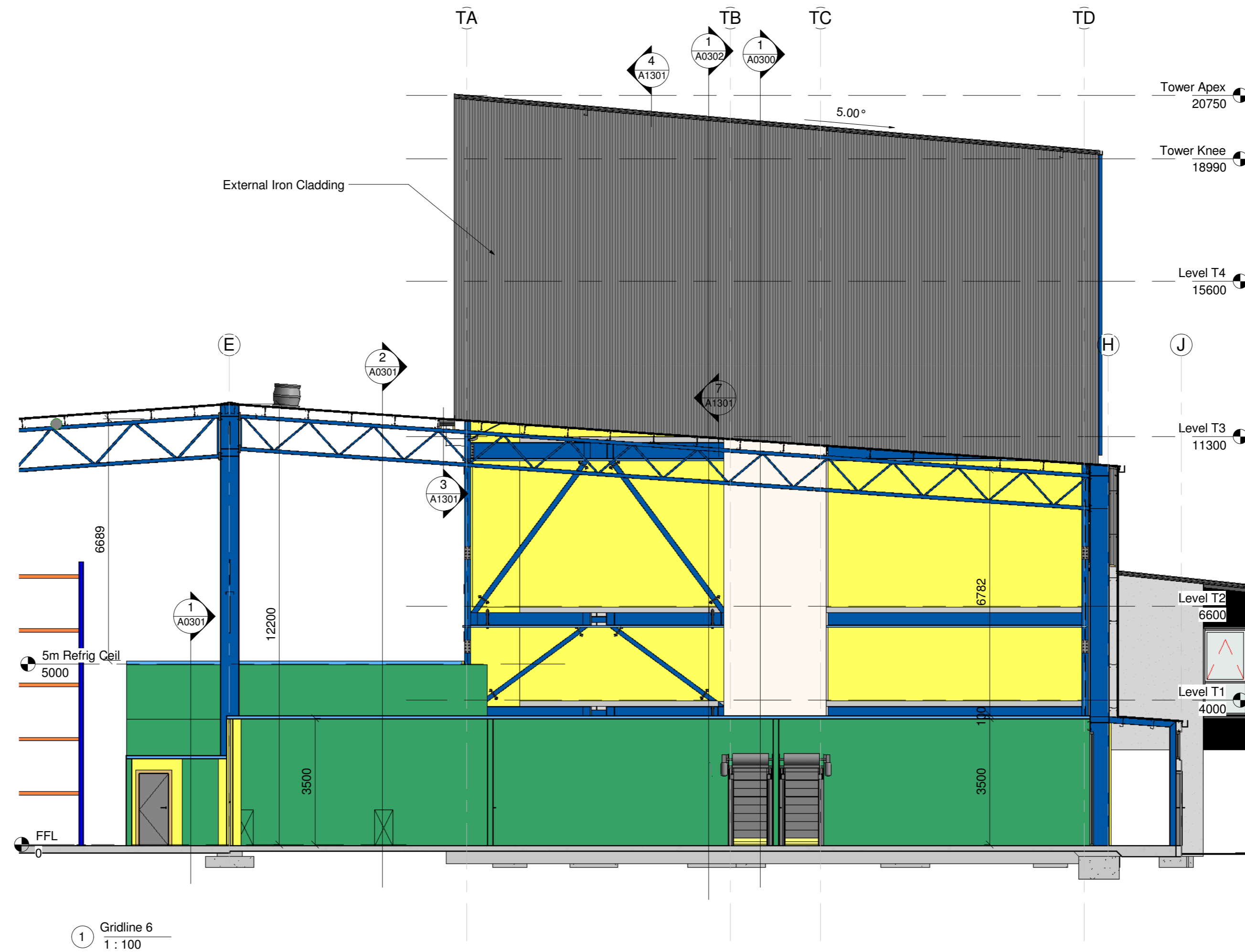
SCALE 1 : 100 @ A2 JOB # 12630

DRAWN BY B Holloway DATE 27/10/16

CHECKED BY REV

Cross Section CC A0302

Please note: All dimensions to be verified on site Paper size: A2

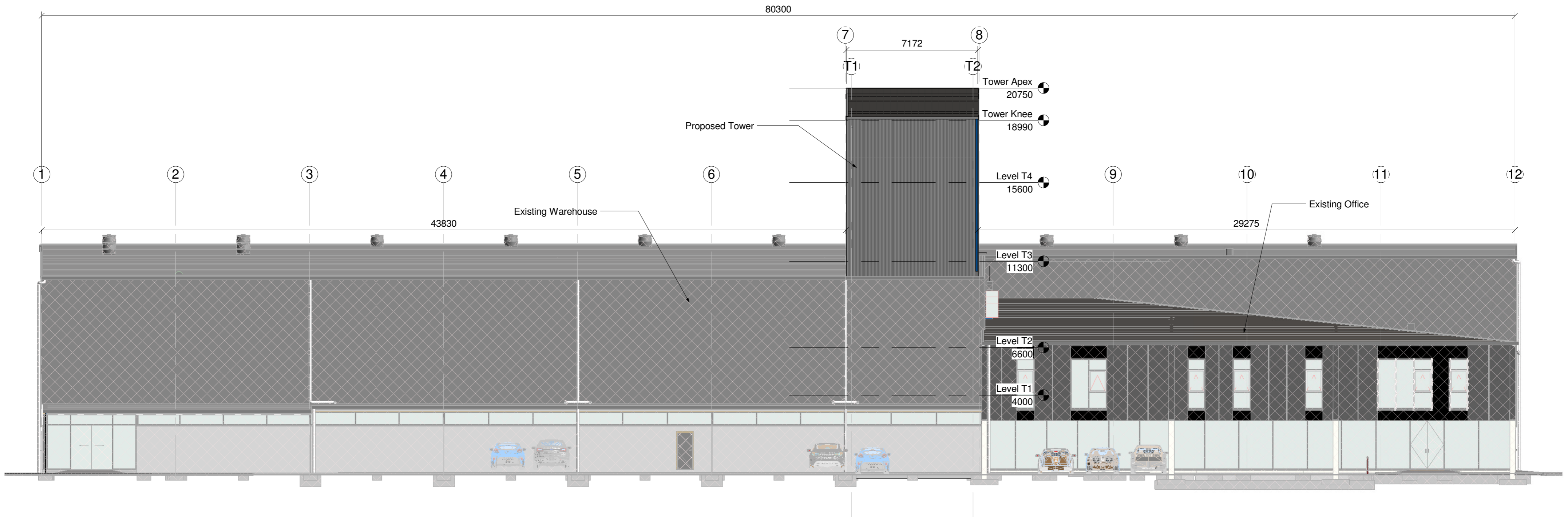


Thompson Engineering 2002 Ltd | PO Box 2081, Washdyke - Timaru | 9b Meadows Road - Timaru  
 PH 0800 688 716 | F (03) 688 7168 | www.thompsonengineering.co.nz | design@thompsonengineering.co.nz

PROJECT  
**NZ Dairy Collaborative Group  
 Tower Extension**  
 9 Ashford Ave, Ashburton  
 All Drawings property of Thompson Engineering 2002 Ltd

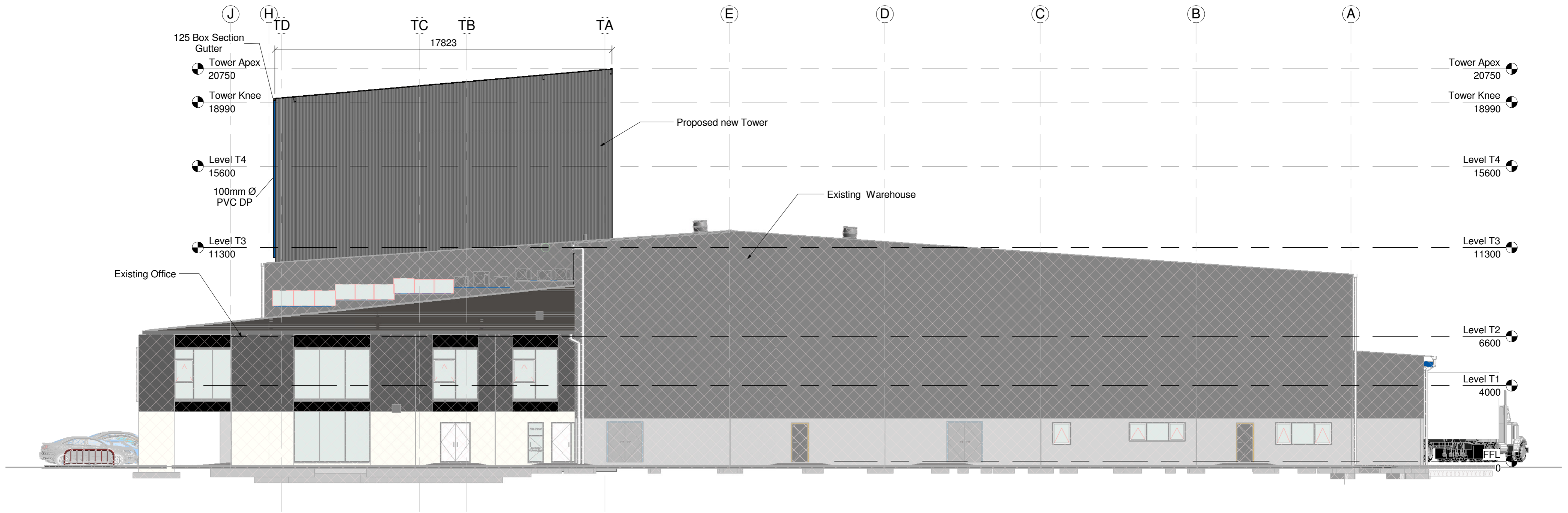
Rev#	Amendments	Date

SCALE	1 : 100 @ A2	JOB #	12630
DRAWN BY	B Holloway	DATE	27/10/16
CHECKED BY	Checker	REV	
<b>Cross Section GL6</b>			<b>A0303</b>
Please note: All dimensions to be verified on site			
Paper size: <b>A2</b>			



① Elevation C  
1 : 150

 <p>Thompson Engineering 2002 Ltd   PO Box 2081, Washdyke - Timaru   9b Meadows Road - Timaru PH 0800 688 716   F (03) 688 7168   www.thompsonengineering.co.nz   design@thompsonengineering.co.nz</p>	PROJECT	<p>NZ Dairy Collaborative Group Tower Extension 9 Ashford Ave, Ashburton</p> <p>All Drawings property of Thompson Engineering 2002 Ltd</p>	Rev#	Amendments	Date	SCALE 1 : 150 @ A2	JOB # 12630	
							DRAWN BY B Holloway	DATE 27/10/16
							CHECKED BY	REV
							<b>Elevations C</b>	<b>A0400</b>
							Please note: All dimensions to be verified on site	
							Paper size: A2	



1 Elevation B  
1 : 150



PROJECT  
**NZ Dairy Collaborative Group  
 Tower Extension**  
 9 Ashford Ave, Ashburton  
 All Drawings property of Thompson Engineering 2002 Ltd

Rev#	Amendments	Date

SCALE 1 : 150 @ A2	JOB # 12630
DRAWN BY B Holloway	DATE 27/10/16
CHECKED BY	REV
<b>Elevations B</b>	<b>A0401</b>
Please note: All dimensions to be verified on site	
Paper size: A2	

Thompson Engineering 2002 Ltd | PO Box 2081, Washdyke - Timaru | 9b Meadows Road - Timaru  
 PH 0800 688 716 | F (03) 688 7168 | www.thompsonengineering.co.nz | design@thompsonengineering.co.nz



PLUMBING LEGEND		
FIXTURE	PIPE SIZE	GRADIENT
WC	100Ø	1:60
Vanities	65Ø	1:40
Wash Trough	40Ø	1:40
Shower	40Ø	1:40
Sink	65Ø	1:40
Urinal	50Ø	1:20
Foul Drain	100Ø	1:60
Stormwater	as per plan as per plan	

- - - - - sewer  
 - - - - - water  
 - - - - - stormwater

All fixtures to be back vented or to approval of inspector on-site

*Internal plumbing to ASNZ 3500.2.2003*

1 Floor Plan (FFL) Plumbing  
1:100



PROJECT

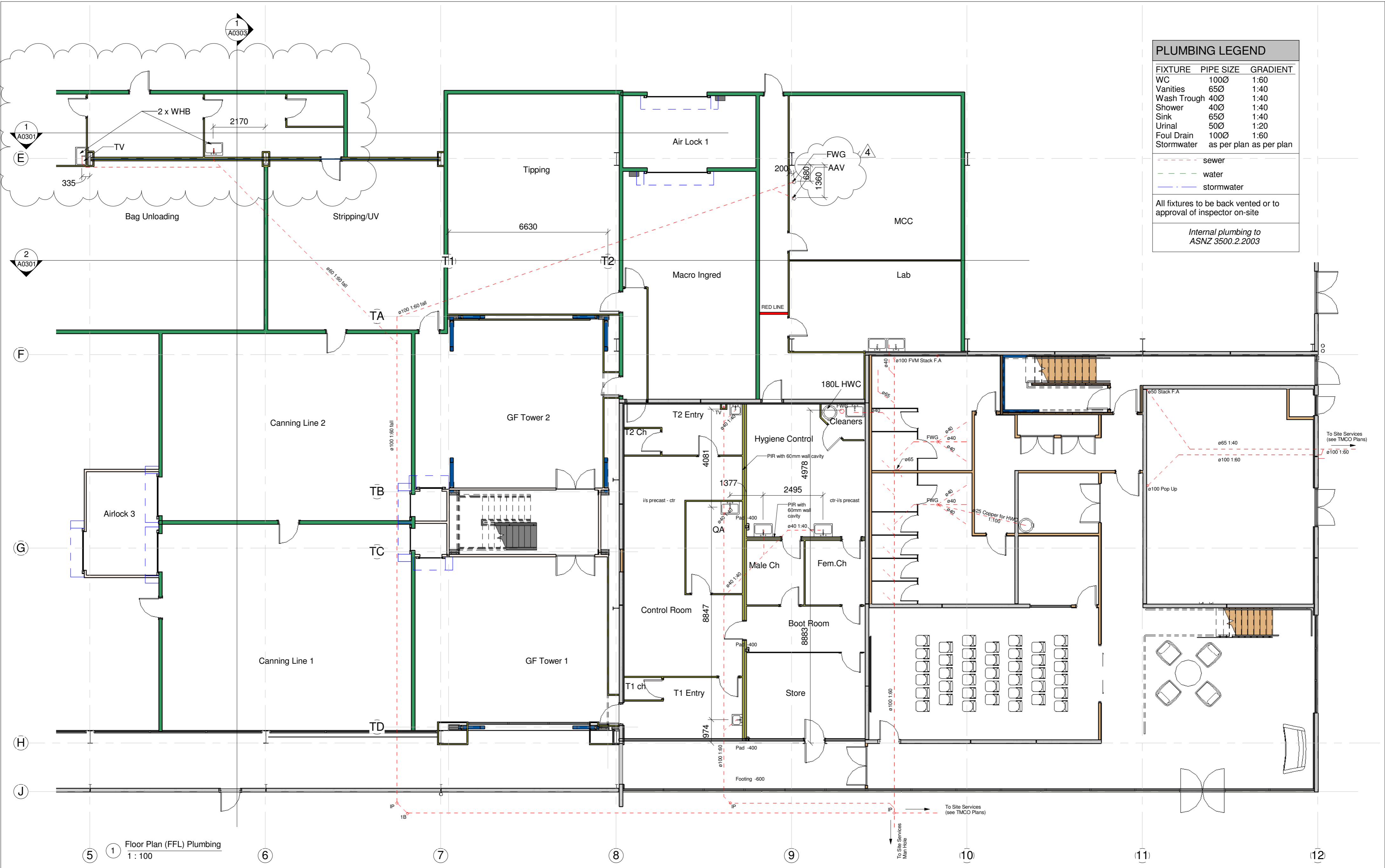
**NZ Dairy Collaborative Group  
Tower Extension**

9 Ashford Ave, Ashburton

All Drawings property of Thompson Engineering 2002 Ltd

Rev#	Amendments
3	MCC Waste

Date	SCALE	JOB #
12/12/16	1:100 @ A2	12630
	DRAWN BY	DATE
	B Holloway	27/10/16
	CHECKED BY	REV
		3
<b>Plumbing Ground Floor</b>		<b>A0500</b>
Please note: All dimensions to be verified on site		Paper size: A2



PLUMBING LEGEND		
FIXTURE	PIPE SIZE	GRADIENT
WC	100Ø	1:60
Vanities	65Ø	1:40
Wash Trough	40Ø	1:40
Shower	40Ø	1:40
Sink	65Ø	1:40
Urinal	50Ø	1:20
Foul Drain	100Ø	1:60
Stormwater	as per plan as per plan	

- - - - - sewer  
 ———— water  
 - - - - - stormwater

All fixtures to be back vented or to approval of inspector on-site

*Internal plumbing to ASNZ 3500.2.2003*

1 Floor Plan (FFL) Plumbing  
1:100



PROJECT  
**NZ Dairy Collaborative Group  
 Tower Extension**  
 9 Ashford Ave, Ashburton  
 All Drawings property of Thompson Engineering 2002 Ltd

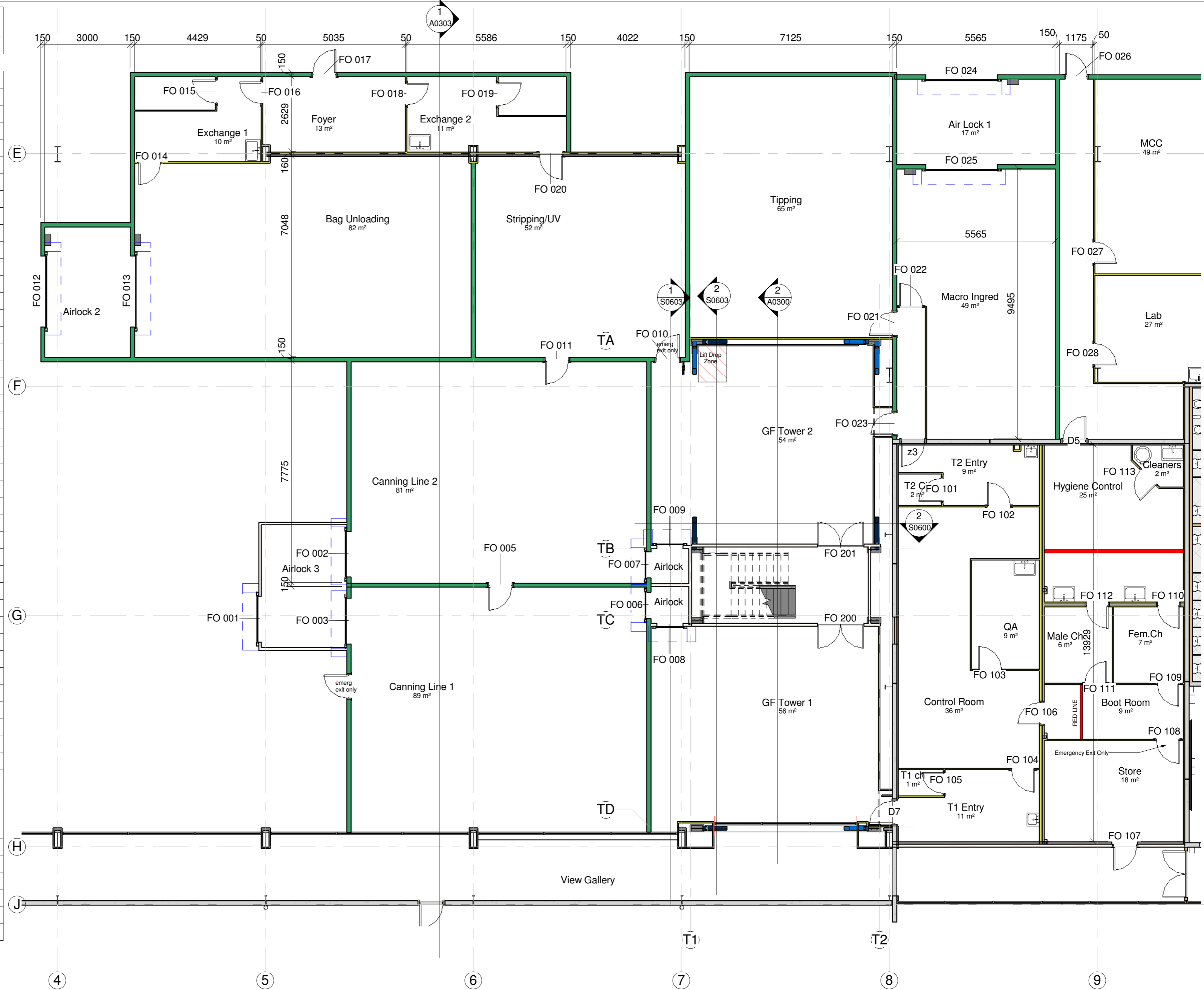
Rev#	Amendments
4	Plumbing Mods

Date	SCALE	JOB #
20/12/16	1:100 @ A2	12630
	DRAWN BY	DATE
	B Holloway	27/10/16
	CHECKED BY	REV
		4
<b>Plumbing Ground Floor</b>		<b>A0500</b>
Please note: All dimensions to be verified on site		Paper size: A2

Thompson Engineering 2002 Ltd | PO Box 2081, Washdyke - Timaru | 9b Meadows Road - Timaru  
 PH 0800 688 716 | F (03) 688 7168 | www.thompsonengineering.co.nz | design@thompsonengineering.co.nz

Door Schedule

Mark	Type	Type Comments	Level
FO 001	AlbanyRR300 2.1hx1.6w		FFL
FO 002	AlbanyRR300 2.1hx1.6w		FFL
FO 003	AlbanyRR300 2.1hx1.6w		FFL
FO 004	810 leaf internal door		FFL
FO 005	810 leaf internal door		FFL
FO 006	Airlock 1200w x 900 w	TBC by client	FFL
FO 007	Airlock 1200w x 900 w	TBC by client	FFL
FO 008	Airlock 1200w x 900 w	TBC by client	FFL
FO 009	Airlock 1200w x 900 w	TBC by client	FFL
FO 010	810 leaf internal door		FFL
FO 011	810 leaf internal door		FFL
FO 012	Envico Micro 3.0hx2.5w(1p)		FFL
FO 013	Envico Micro 3.0hx2.5w(1p)		FFL
FO 014	760 leaf internal door		FFL
FO 015	810 leaf internal door		FFL
FO 016	760 leaf internal door		FFL
FO 017	810 leaf internal door		FFL
FO 018	760 leaf internal door		FFL
FO 019	810 leaf internal door		FFL
FO 020	810 leaf internal door		FFL
FO 021	810 leaf internal door		FFL
FO 022	810 leaf internal door		FFL
FO 023	760 leaf internal door		FFL
FO 024	Envico Maxim 4.5hx2.5w		FFL
FO 025	Envico Maxim 4.5hx2.5w		FFL
FO 026	760 leaf internal door		FFL
FO 027	760 leaf internal door		FFL
FO 028	760 leaf internal door		FFL
FO 101	810 leaf internal door		FFL
FO 102	810 leaf internal door		FFL
FO 103	810 leaf internal door		FFL
FO 104	810 leaf internal door		FFL
FO 105	760 leaf internal door		FFL
FO 106	760 leaf internal door		FFL
FO 107	810 leaf internal door		FFL
FO 108	810 leaf internal door		FFL
FO 109	760 leaf internal door		FFL
FO 110	760 leaf internal door		FFL
FO 111	760 leaf internal door		FFL
FO 112	760 leaf internal door		FFL
FO 113	760 leaf internal door		FFL
FO 200	810 x 810 Double Leaf Door	FRR 10/10/-Sm	FFL
FO 201	810 x 810 Double Leaf Door	FRR 10/10/-Sm	FFL
FO 202	810 x 810 Double Leaf Door	FRR 10/10/-Sm	Level T1
FO 203	810 x 810 Double Leaf Door	FRR 10/10/-Sm	Level T1
FO 204	810 x 810 Double Leaf Door	FRR 10/10/-Sm	Level T2
FO 205	810 x 810 Double Leaf Door	FRR 10/10/-Sm	Level T2
FO 206	810 x 810 Double Leaf Door	FRR 10/10/-Sm	Level T3
FO 207	810 x 810 Double Leaf Door	FRR 10/10/-Sm	Level T3
FO 208	810 x 810 Double Leaf Door	FRR 10/10/-Sm	Level T4
FO 209	810 x 810 Double Leaf Door	FRR 10/10/-Sm	Level T4



1 Door and Window Plan GF  
1 : 100

NOTE: Refer to Sheet A0202 and A0203 for doors on Levels T1 -T4

PROJECT

NZ Dairy Collaborative Group  
Tower Extension

9 Ashford Ave, Ashburton

All Drawings property of Thompson Engineering 2002 Ltd

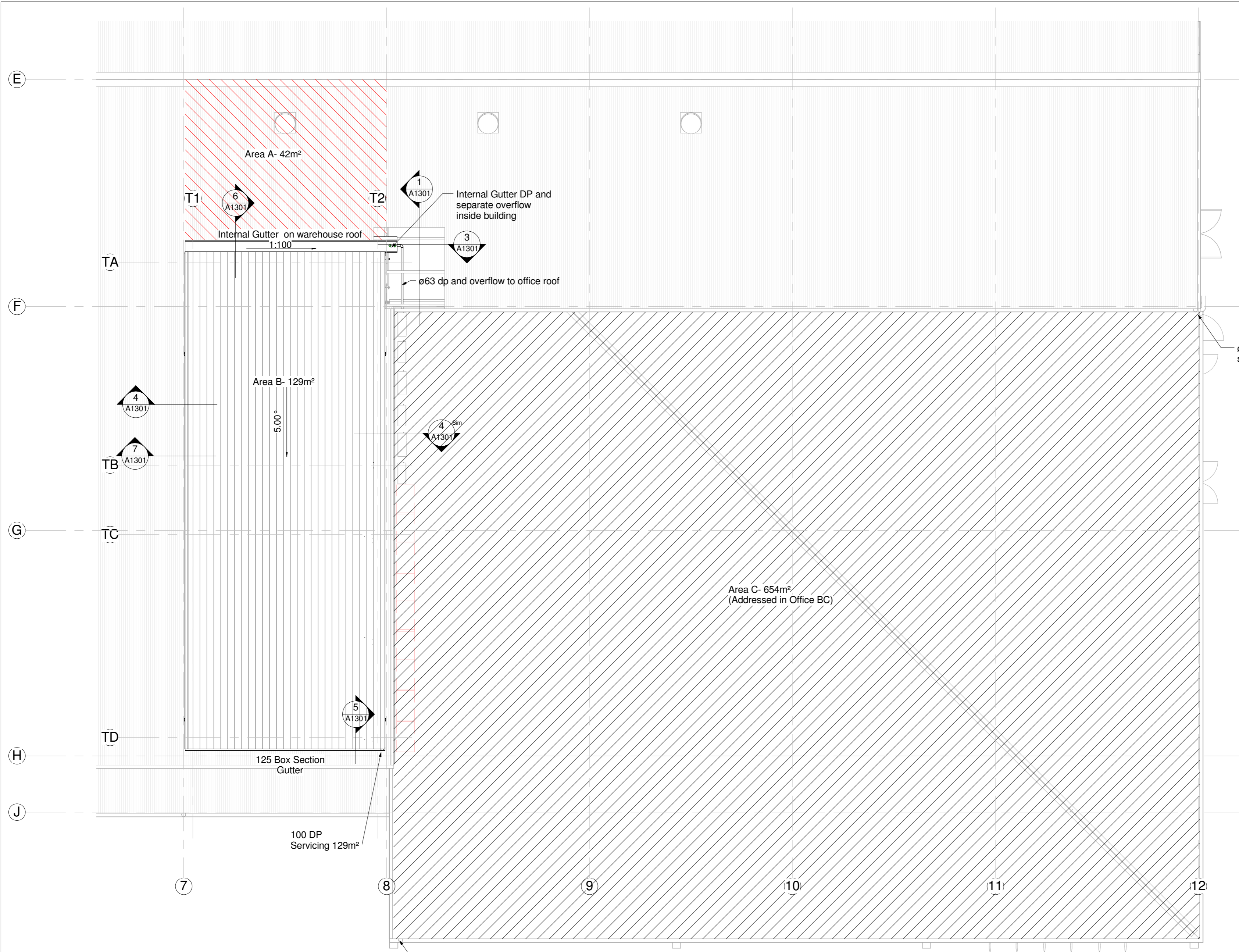
Rev#	Amendments	Date	SCALE	JOB #
			1 : 100 @ A2	12630
			DRAWN BY B.Holloway	DATE 27/10/16
			CHECKED BY	REV
			<b>D W Ground Floor Plan</b>	<b>A0600</b>
			Please note: All dimensions to be verified on site	
			Paper size: A2	

**DOWNPIPE SCHEDULE**

Downpipe size (mm) for 0-25° pitch roof for given roof area	
Minimum internal Pipe Size	Plan area of roof served by the downpipe (m²)
63mm Ø	60
74mm Ø	85
100mm Ø	155
150mm Ø	350

**SURFACE AREA CATCHMENTS**

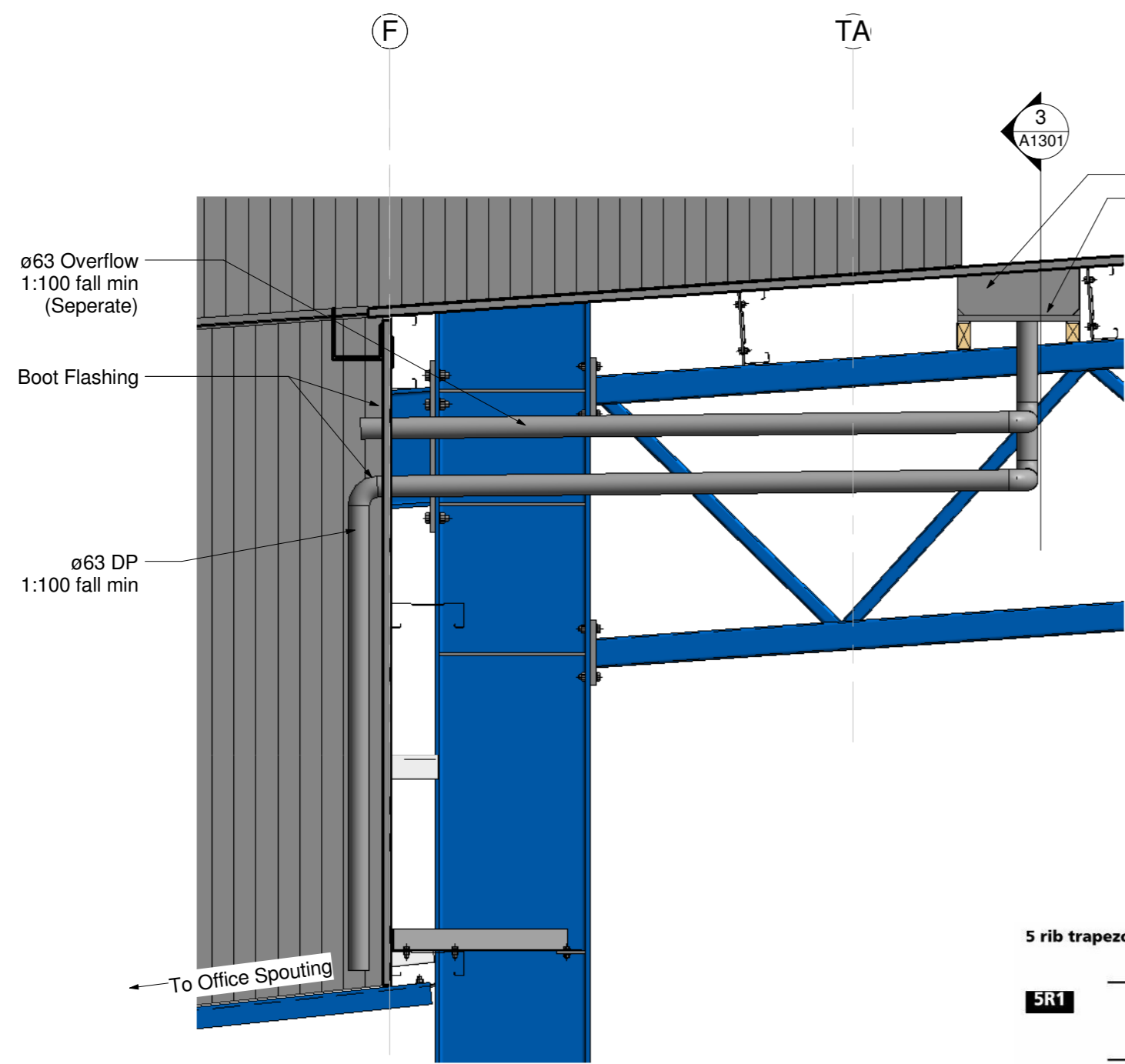
area 1 = 42m² - 1 x 63 Ø DP min  
 area 2 = 129m² - 1 x 100 Ø DP min  
 area 3 = 696m² - 2 x 150 Ø DP (existing in office BC)



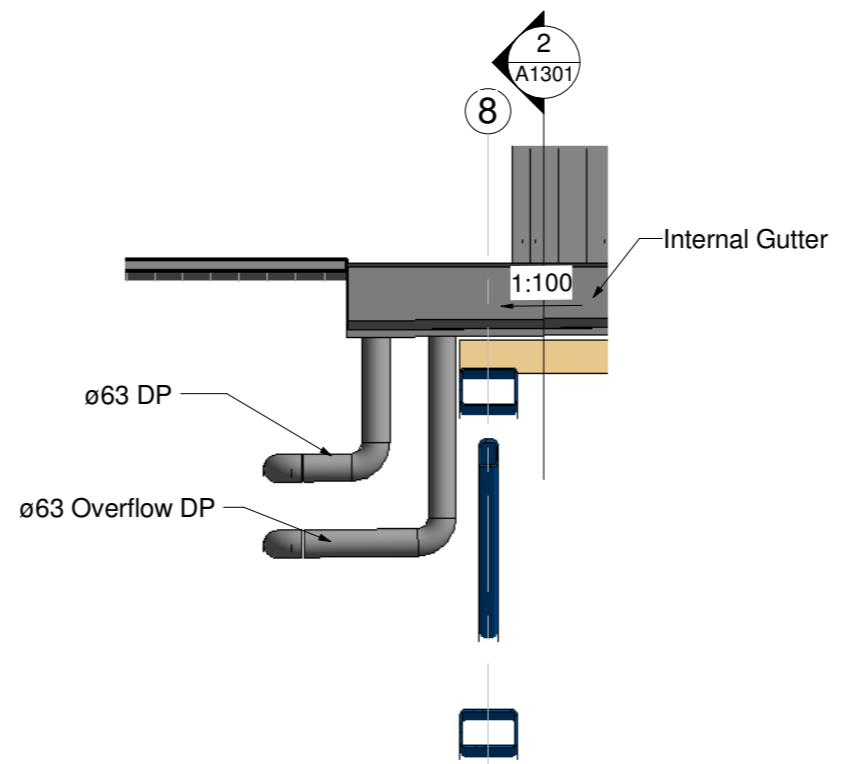
1 Tower Roof Plan  
1 : 100

ø150 DP as part of existing office servicing 304m² of office roof and 42m² from Warehouse Internal Gutter (behind tower)  
Total Area Serviced = 346m²

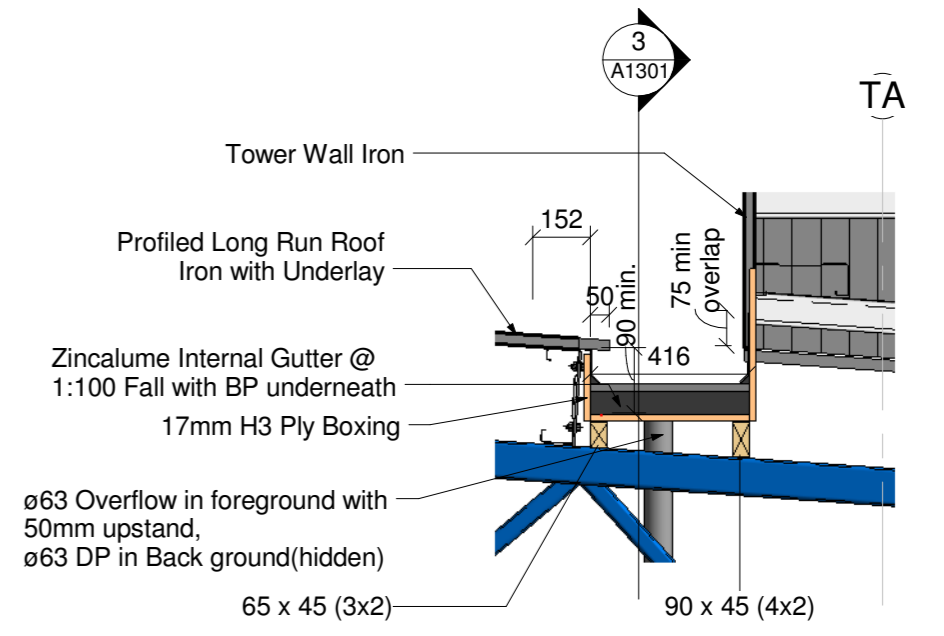
ø150 DP as part of existing office servicing 350m² of office roof



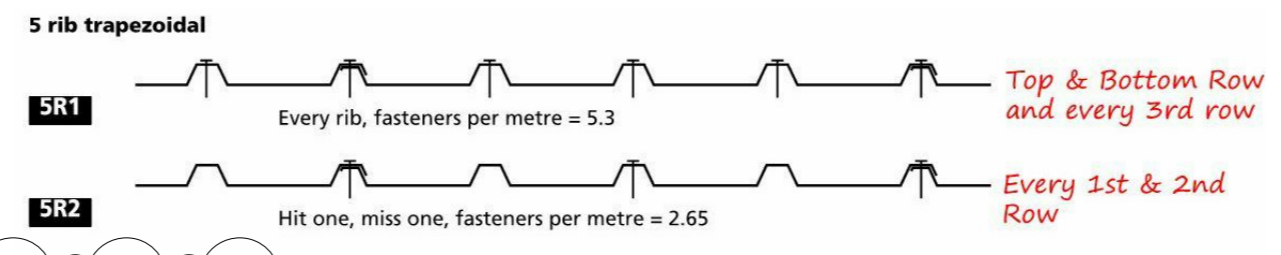
1 Internal Gutter side  
1 : 20



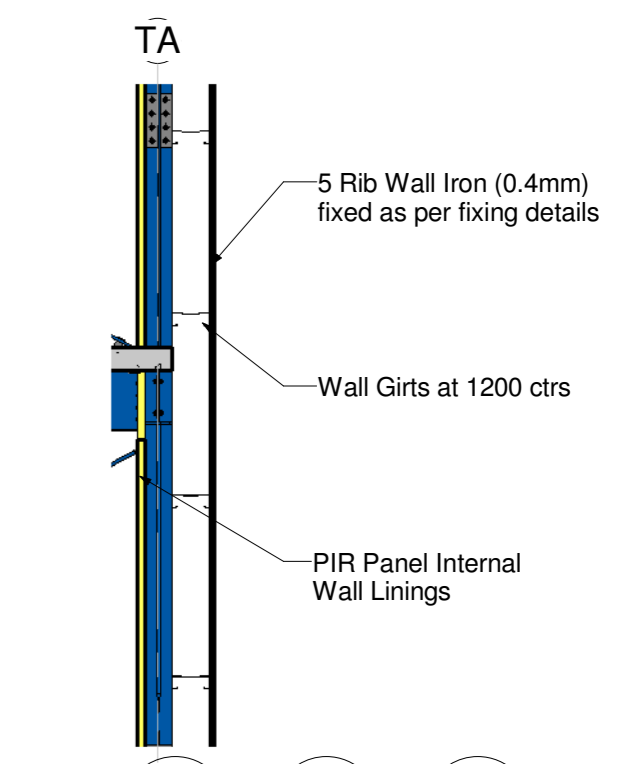
3 Internal Gutter DP Detail  
1 : 20



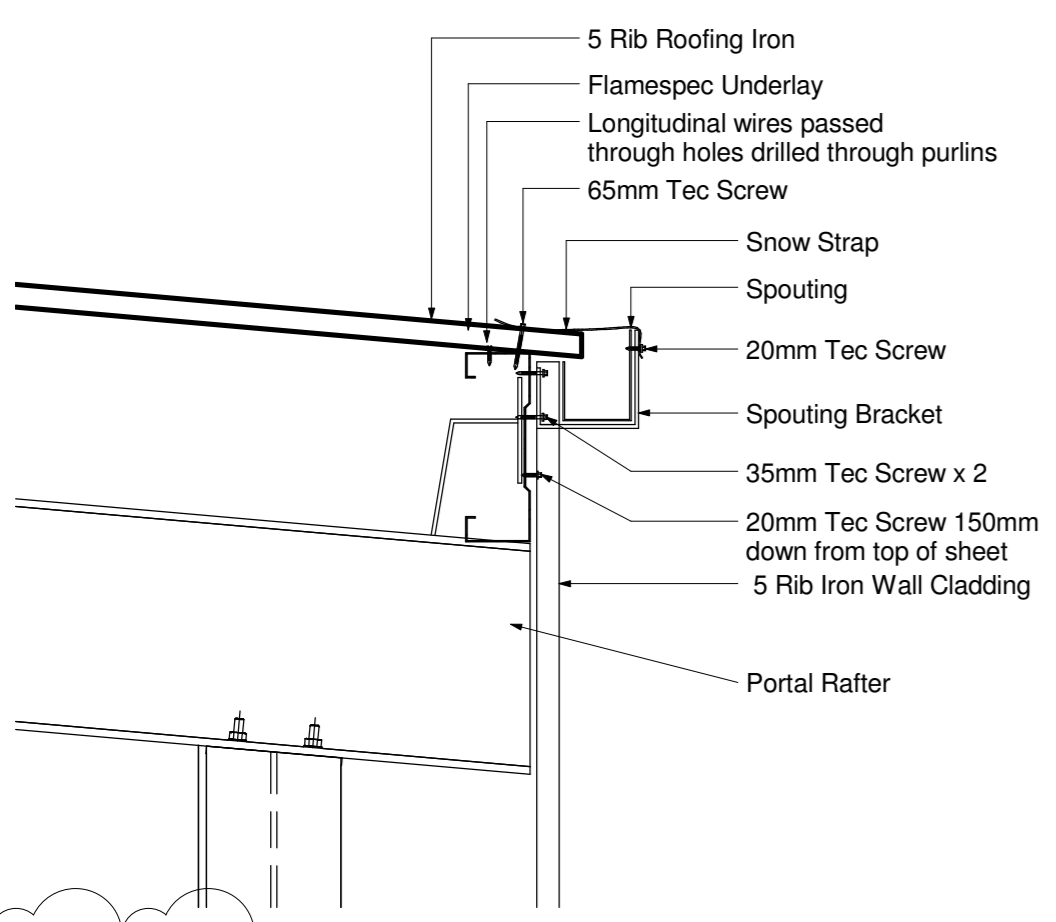
2 Internal Gutter Cross Section  
1 : 20



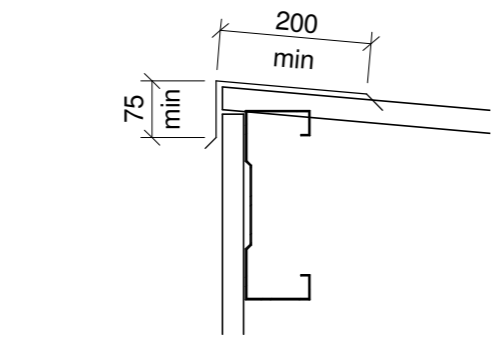
9 Fixing Pattern  
1 : 25



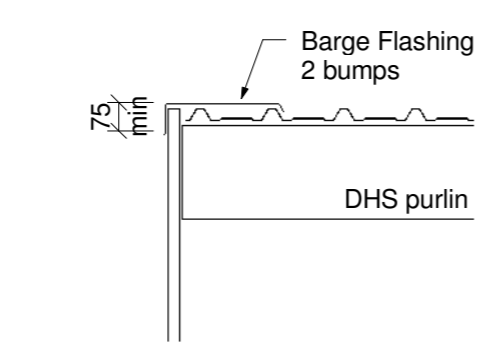
10 Cladding Cross section  
1 : 50



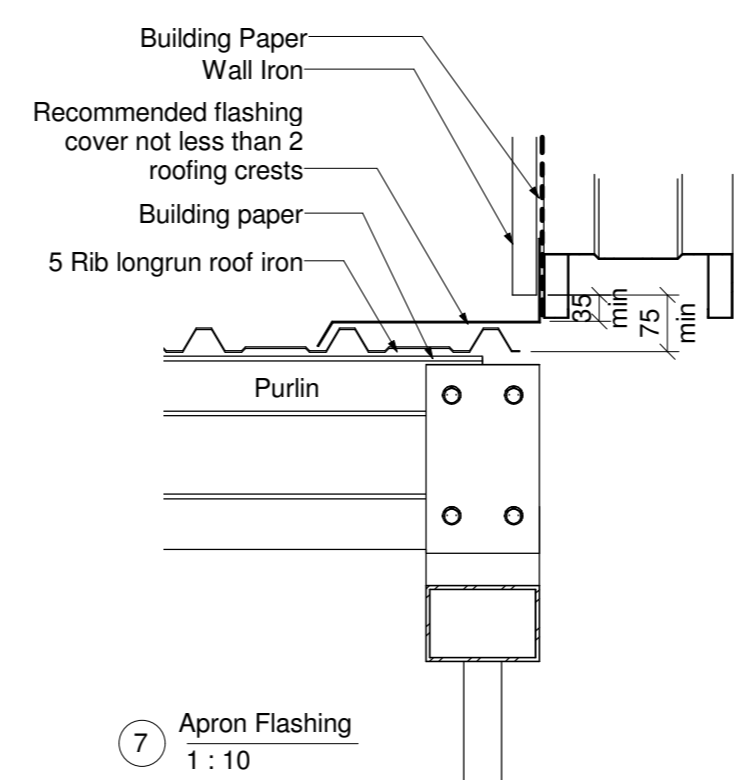
5 Spouting detail  
1 : 10



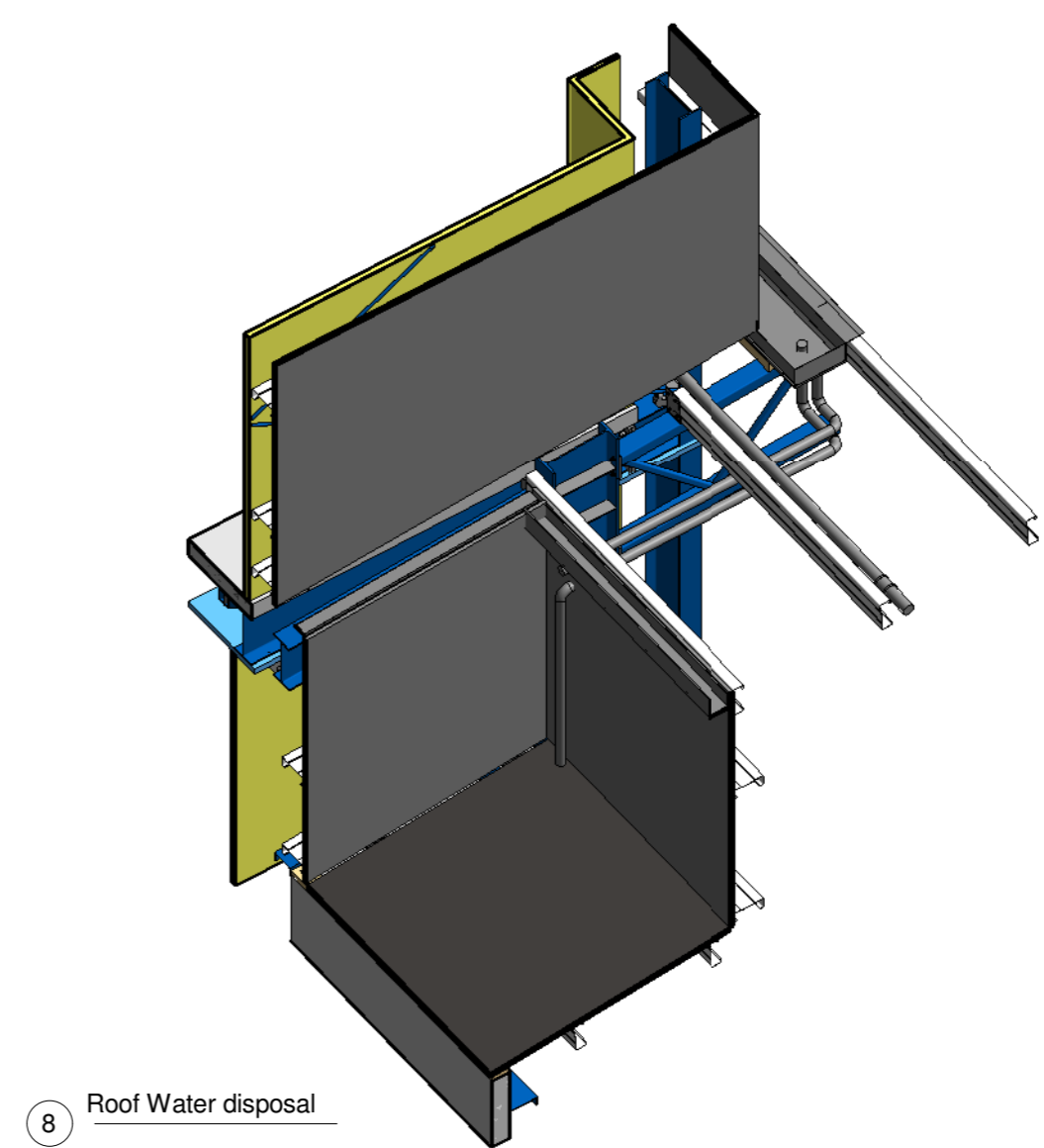
6 Barge Flashing Top  
1 : 10



4 Barge Flashing Detail  
1 : 20

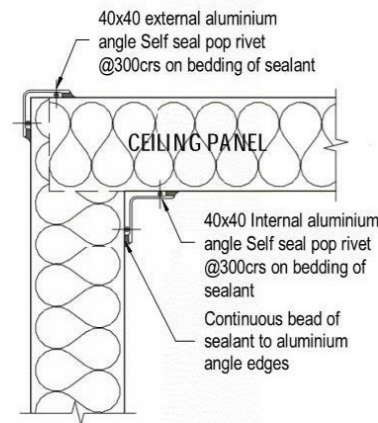


7 Apron Flashing  
1 : 10

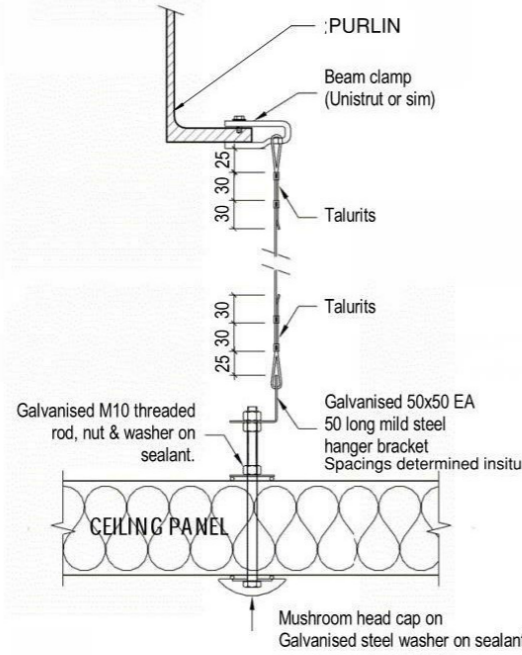


8 Roof Water disposal

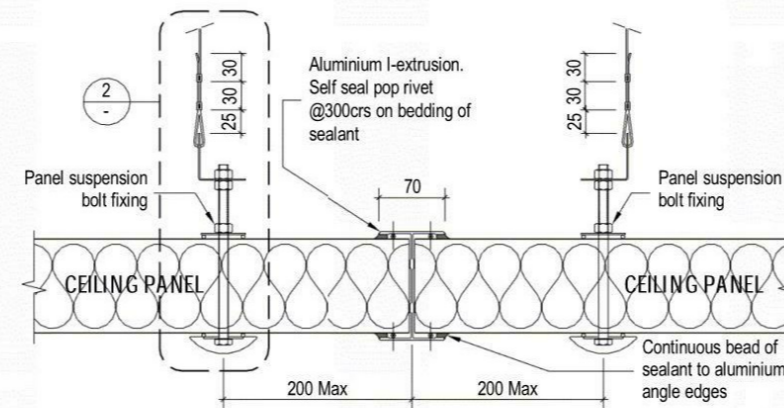
# TYPICAL CONNECTION DETAILS FOR INSULATED PANEL FIT OUT



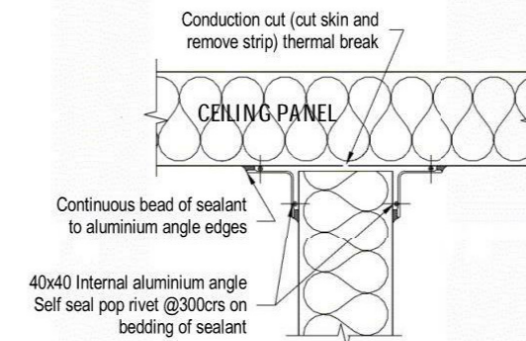
1 Section Detail  
1:5



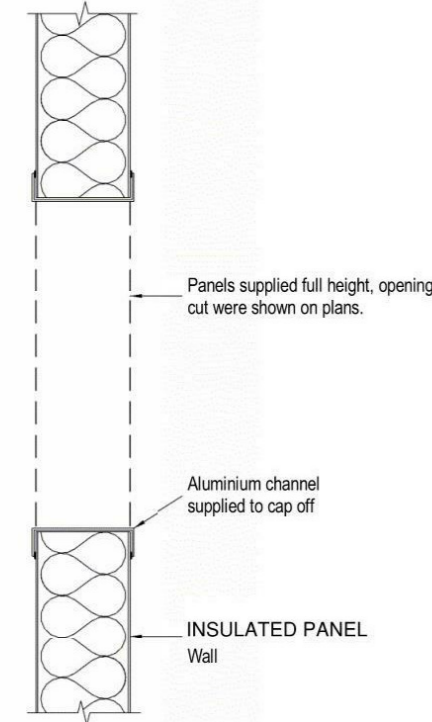
2 CEILING FIXING  
1:5



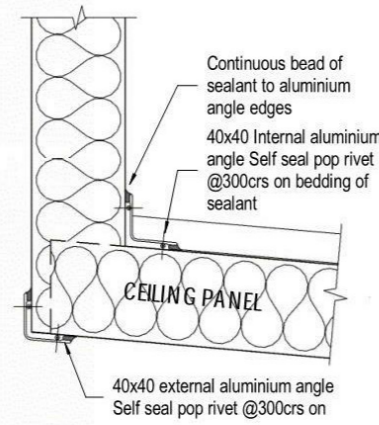
3 Ceiling Panel End to End Detail  
1:5



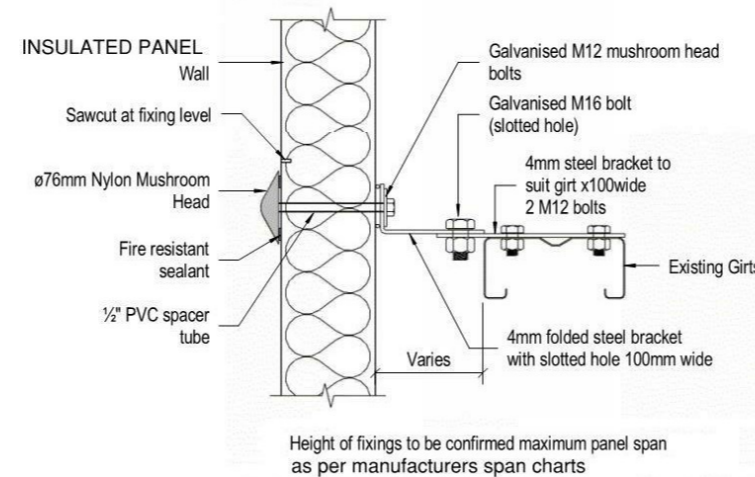
4 Section Detail  
1:5



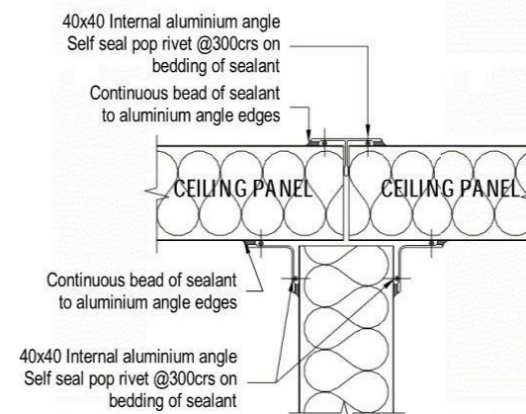
5 Typical Opening Cut Detail  
1:5



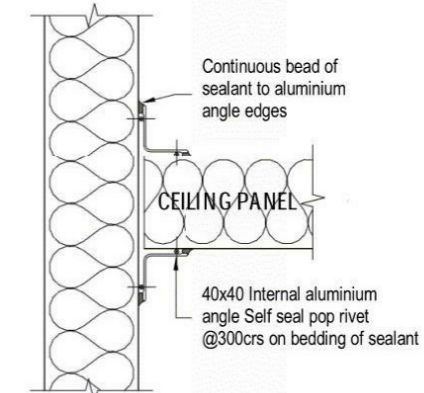
6 Section Detail  
1:5



11 Section Detail  
1:5

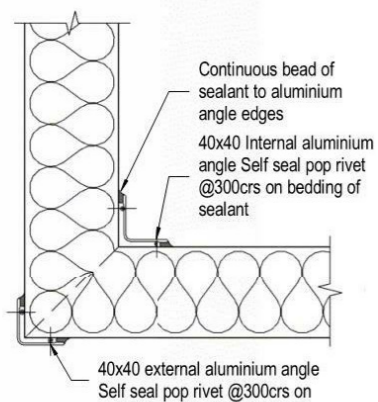


7 Section Detail  
1:5

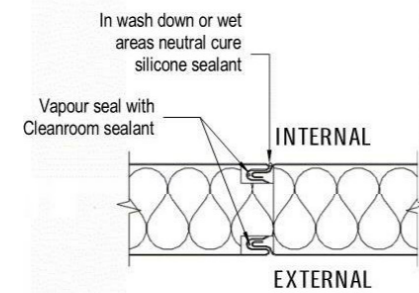


12 Section Detail  
1:5

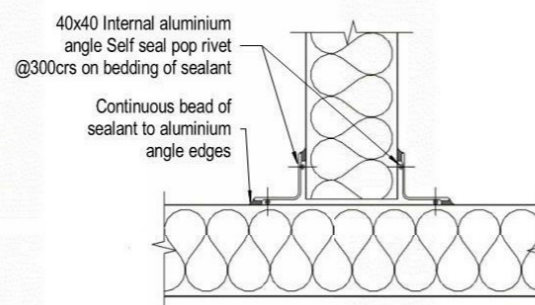
Note:  
• All aluminium to be anodised to 20 microns.  
• All other flashings to be 0.55 folded Colorsteel



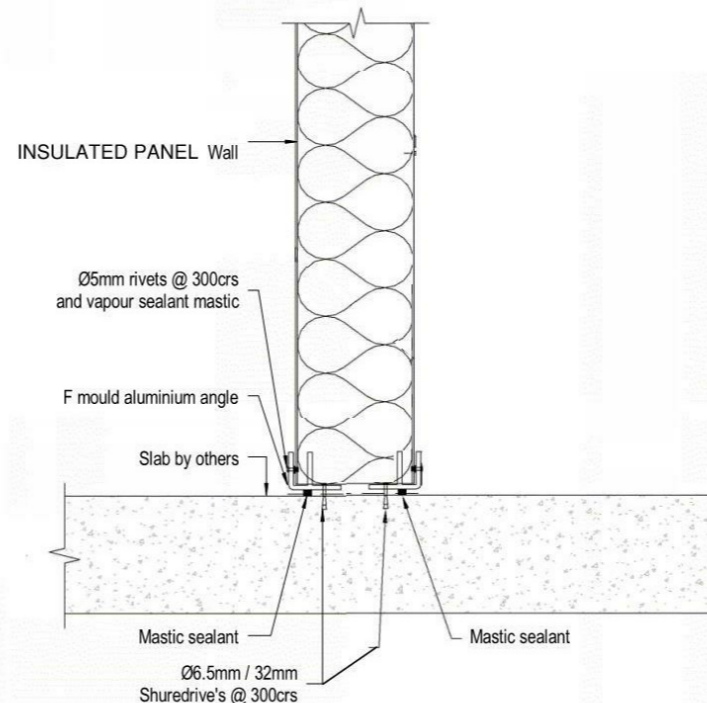
8 Plan Detail  
1:5



9 Typical Panel Connection Detail  
1:5



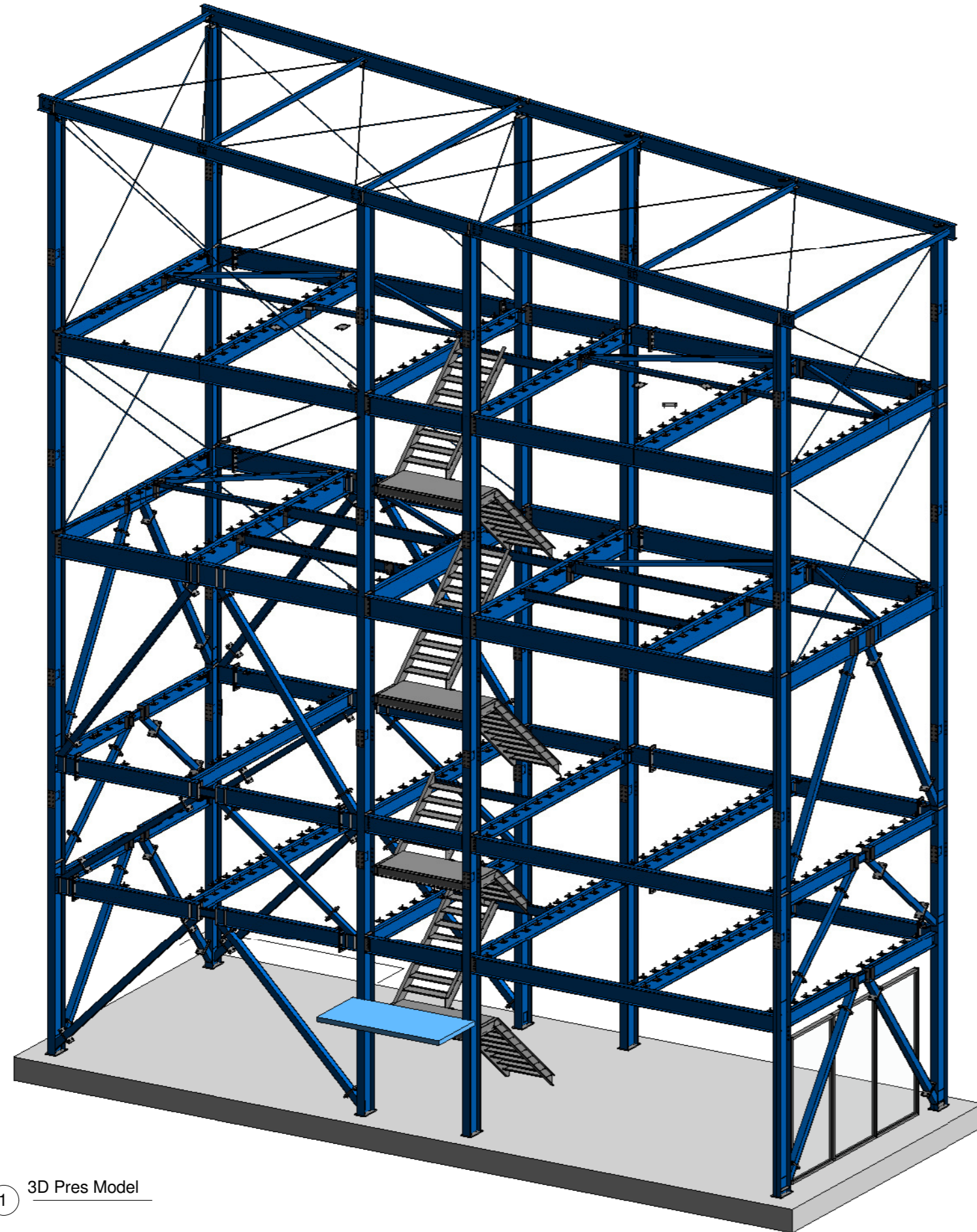
10 Plan Detail  
1:5



13 Wall / Floor Detail  
1:5

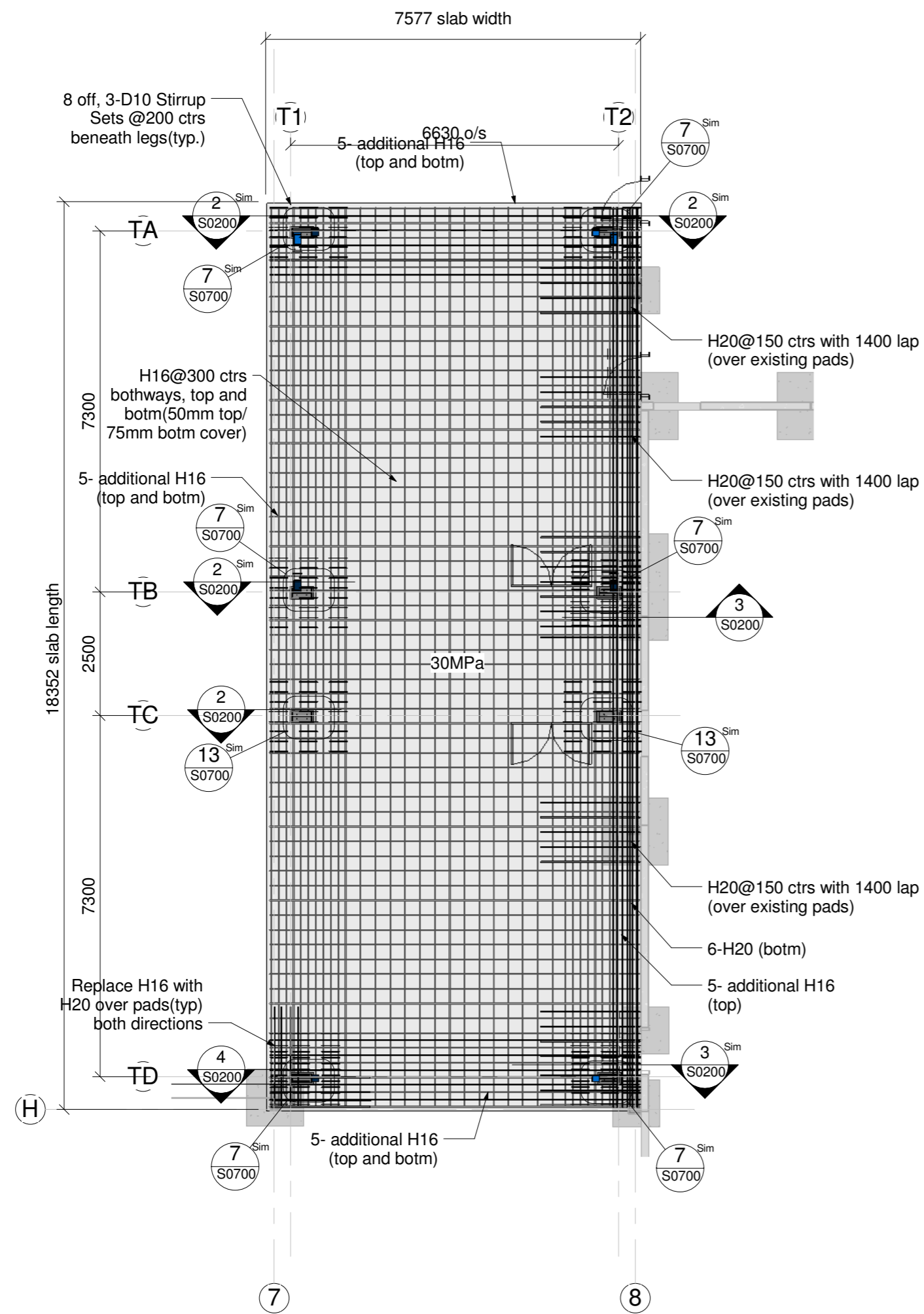
Note: Coving in corners may be installed at the discretion of the installer and MPI consultant.

4/05/2015 3:52:33 p.m.

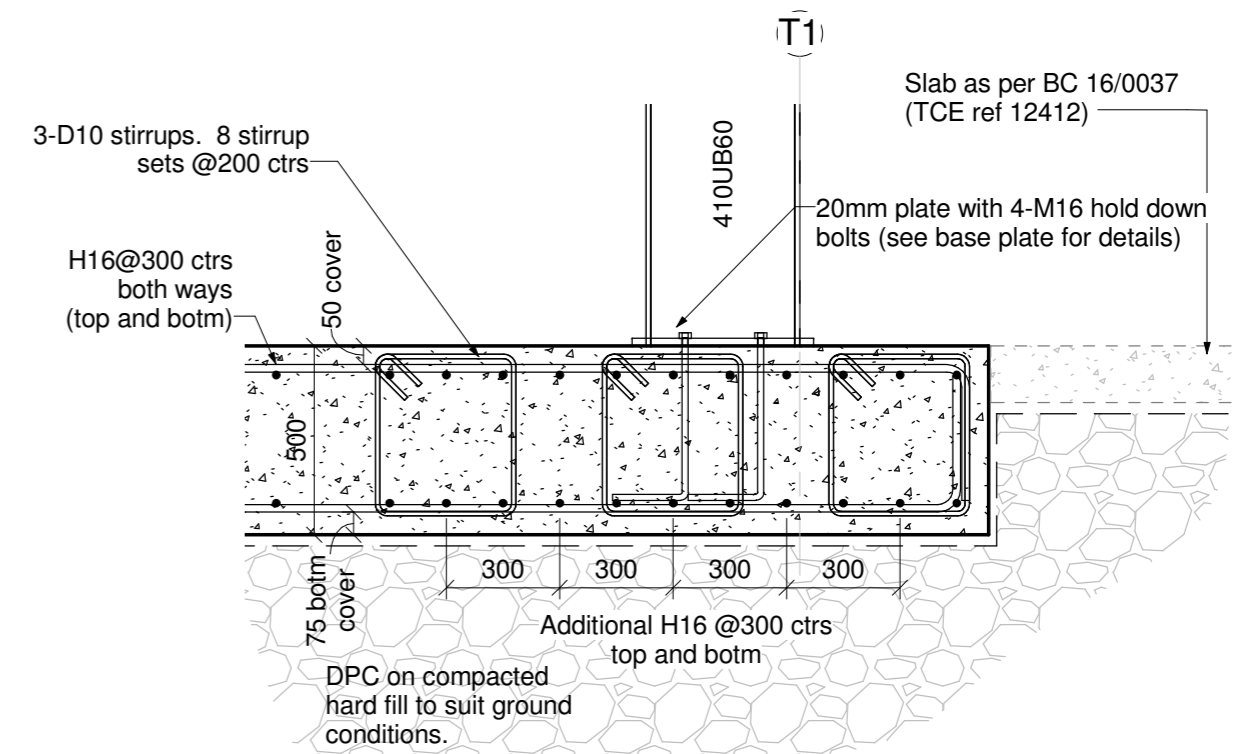


① 3D Pres Model

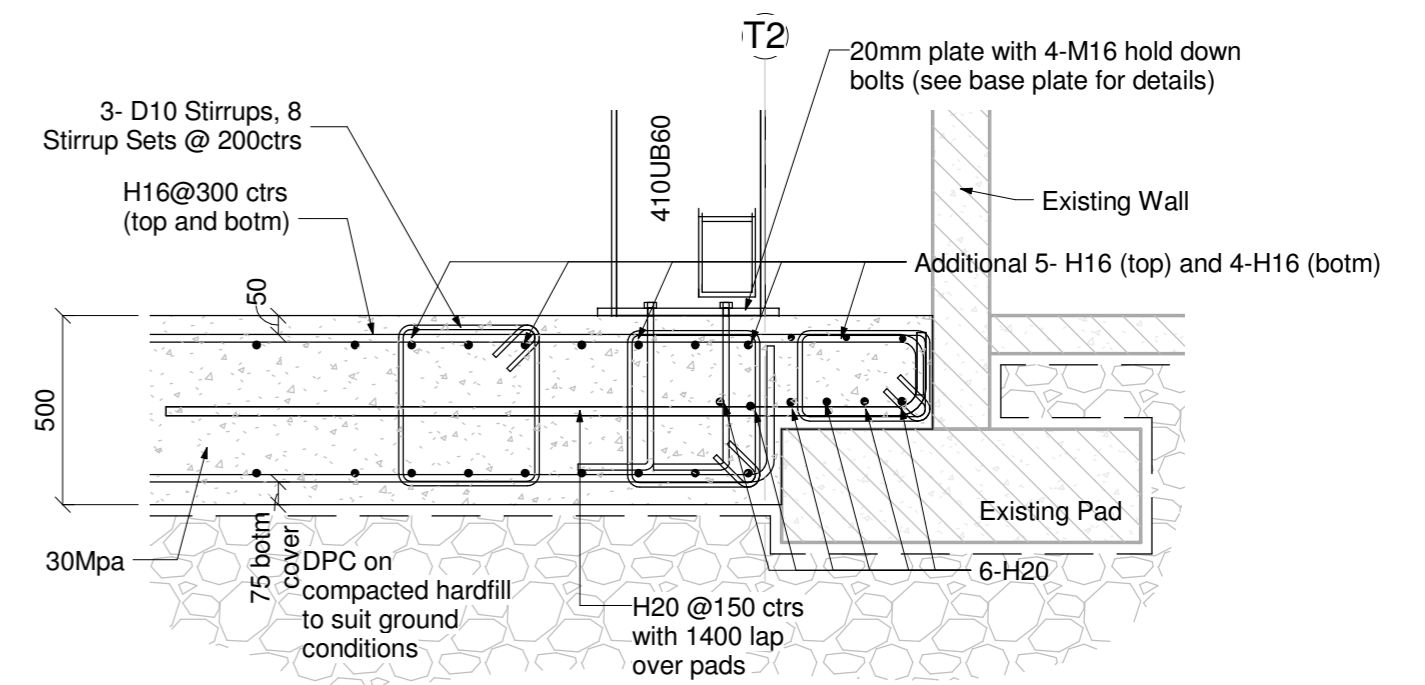
Sheet List			
Sheet Number	Sheet Name	Current Revision	Current Revision Date
S0200	Foundation Plan		
S0300	Full Building Plan		
S0301	Ground Floor		
S0302	Tower Level 1		
S0303	Tower Level 2		
S0304	Tower Level 3		
S0305	Tower Level 4		
S0401	Panel Layout 3D		
S0402	Panel Floor Detail Level 1		
S0403	Panel Floor Detail Level 2		
S0404	Panel Floor Detail Level 3		
S0405	Panel Floor Detail Level 4		
S0500	Structural Roof Plan		
S0600	Sections		
S0603	Gridline T1 and T2		
S0700	Structural Details		
S0701	Structural Details		
S0703	Structural Details- Stairs		



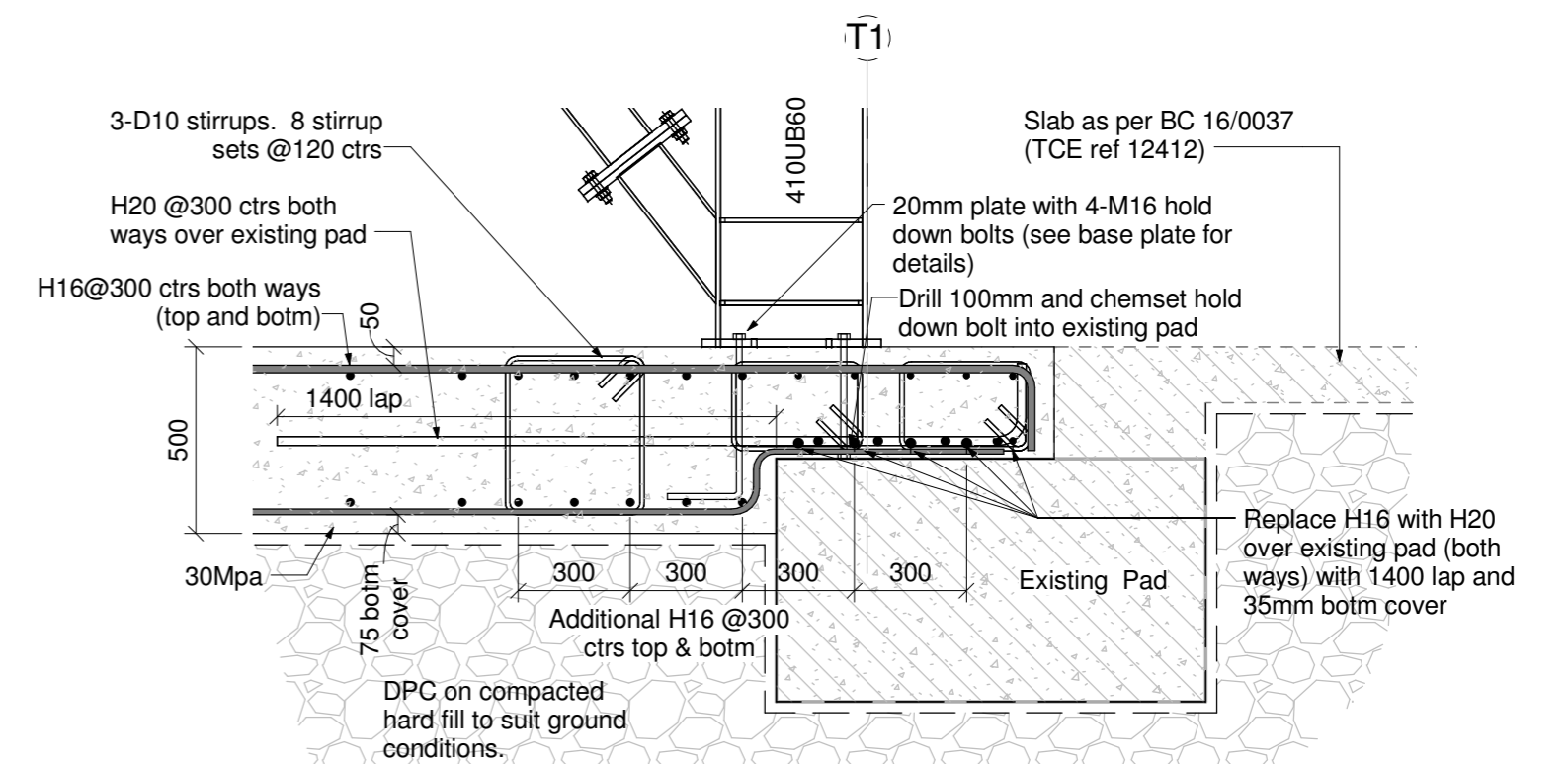
1 Foundation Plan  
1 : 100



2 Std Column Foundation  
1 : 20

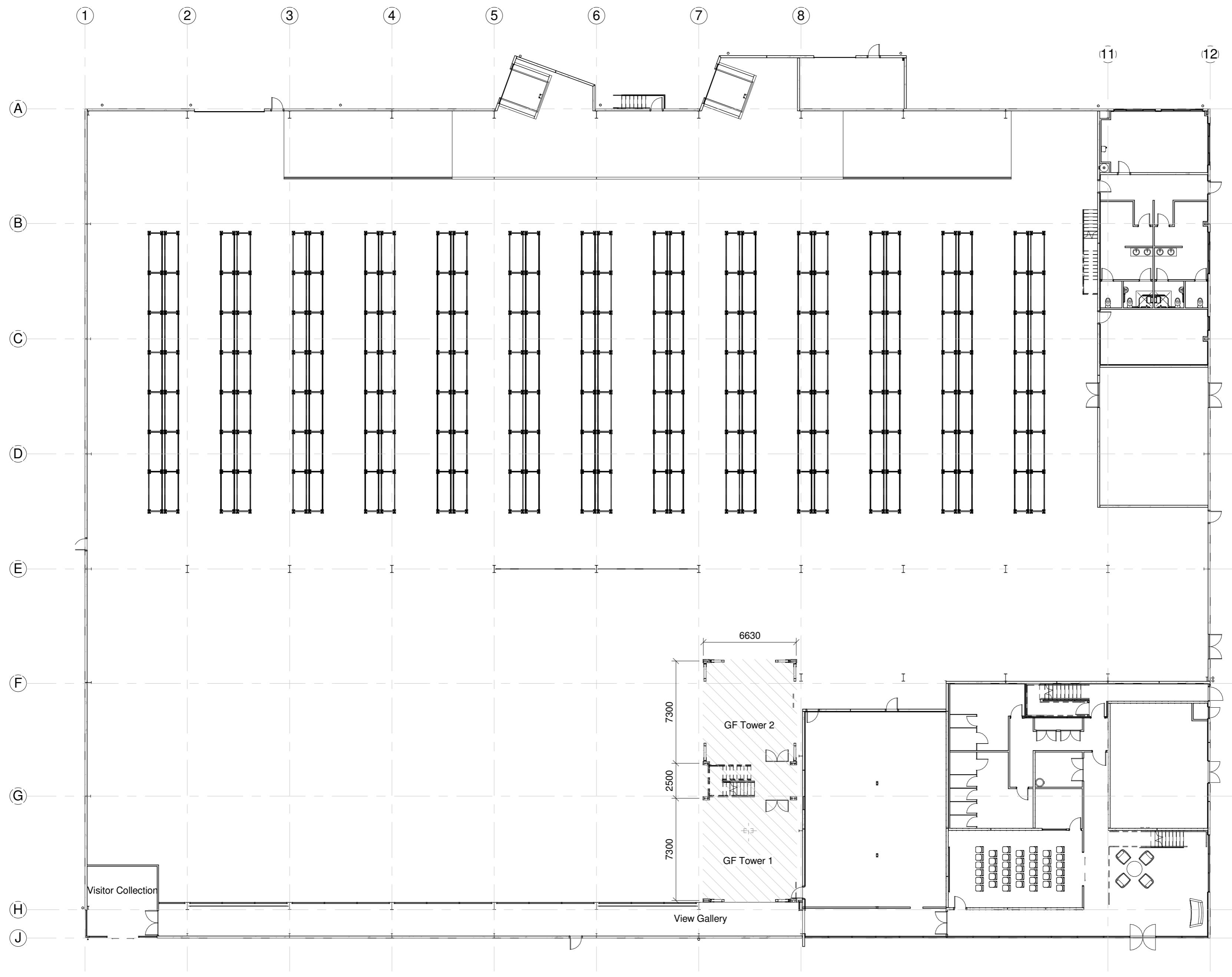


3 Foundation detail near precast wall  
1 : 20



4 T1 TD Column Foundation  
1 : 20

Rev#	Amendments	Date	SCALE	As indicated@ A2	JOB #	12630
			DRAWN BY	B Holloway	DATE	27/10/16
			CHECKED BY	A.Chapman	REV	
<b>Foundation Plan</b>					<b>S0200</b>	
Please note: All dimensions to be verified on site						Paper size: <b>A2</b>



1 Floor Plan (FFL) Whole Building Struct  
1 : 200

PROJECT

NZ Dairy Collaborative Group  
Tower Extension

9 Ashford Ave, Ashburton

Rev#

Amendments

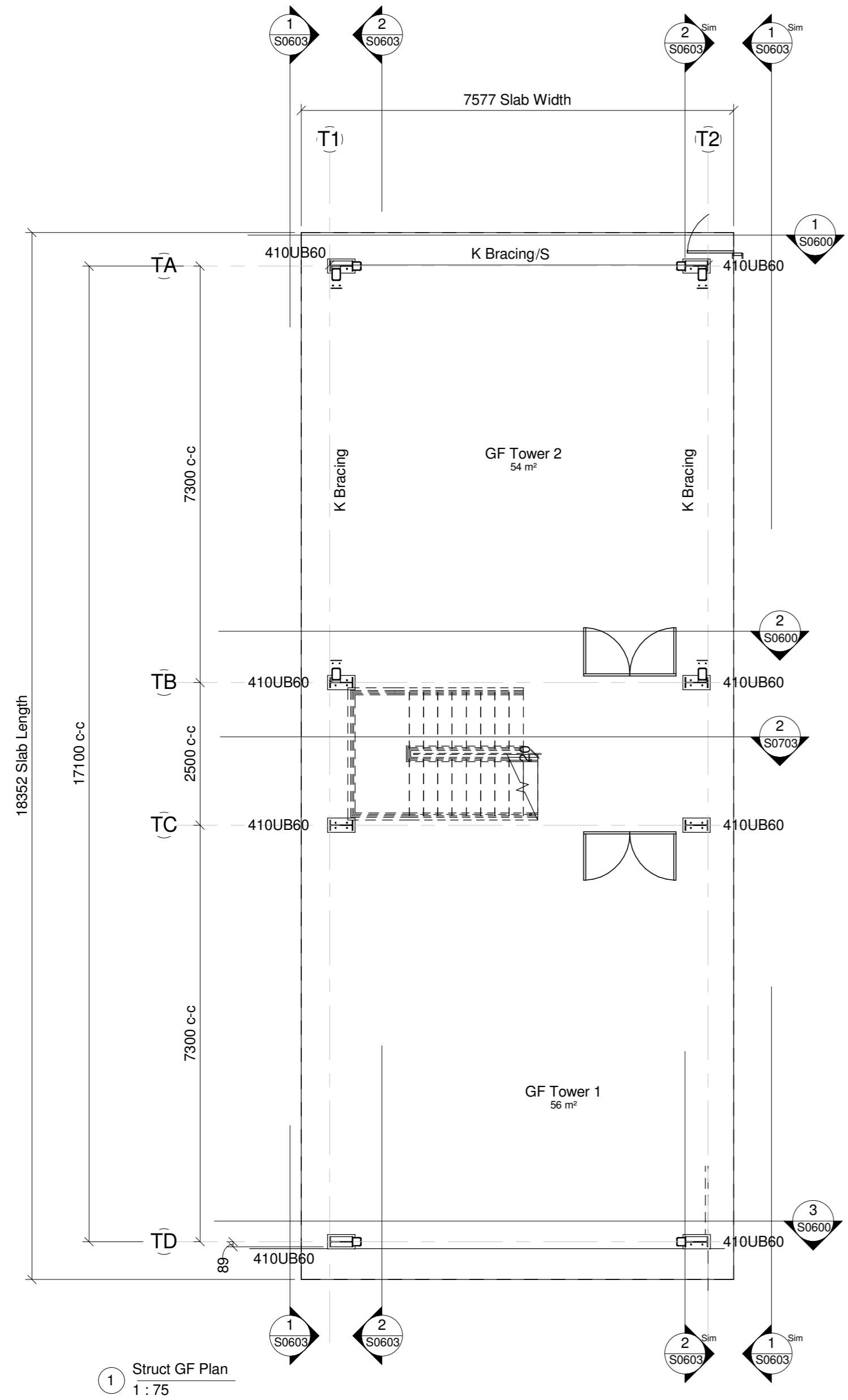
Date

SCALE	1 : 200 @ A2	JOB #	12630
DRAWN BY	B Holloway	DATE	27/10/16
CHECKED BY	A.Chapman	REV	
<b>Full Building Plan</b>			<b>S0300</b>
Please note: All dimensions to be verified on site			Paper size: A2



Thompson Engineering 2002 Ltd | PO Box 2081, Washdyke - Timaru | 9b Meadows Road - Timaru  
PH 0800 688 716 | F (03) 688 7168 | www.thompsonengineering.co.nz | design@thompsonengineering.co.nz

All Drawings property of Thompson Engineering 2002 Ltd



Thompson Engineering 2002 Ltd | PO Box 2081, Washdyke - Timaru | 9b Meadows Road - Timaru  
 PH 0800 688 716 | F (03) 688 7168 | www.thompsonengineering.co.nz | design@thompsonengineering.co.nz

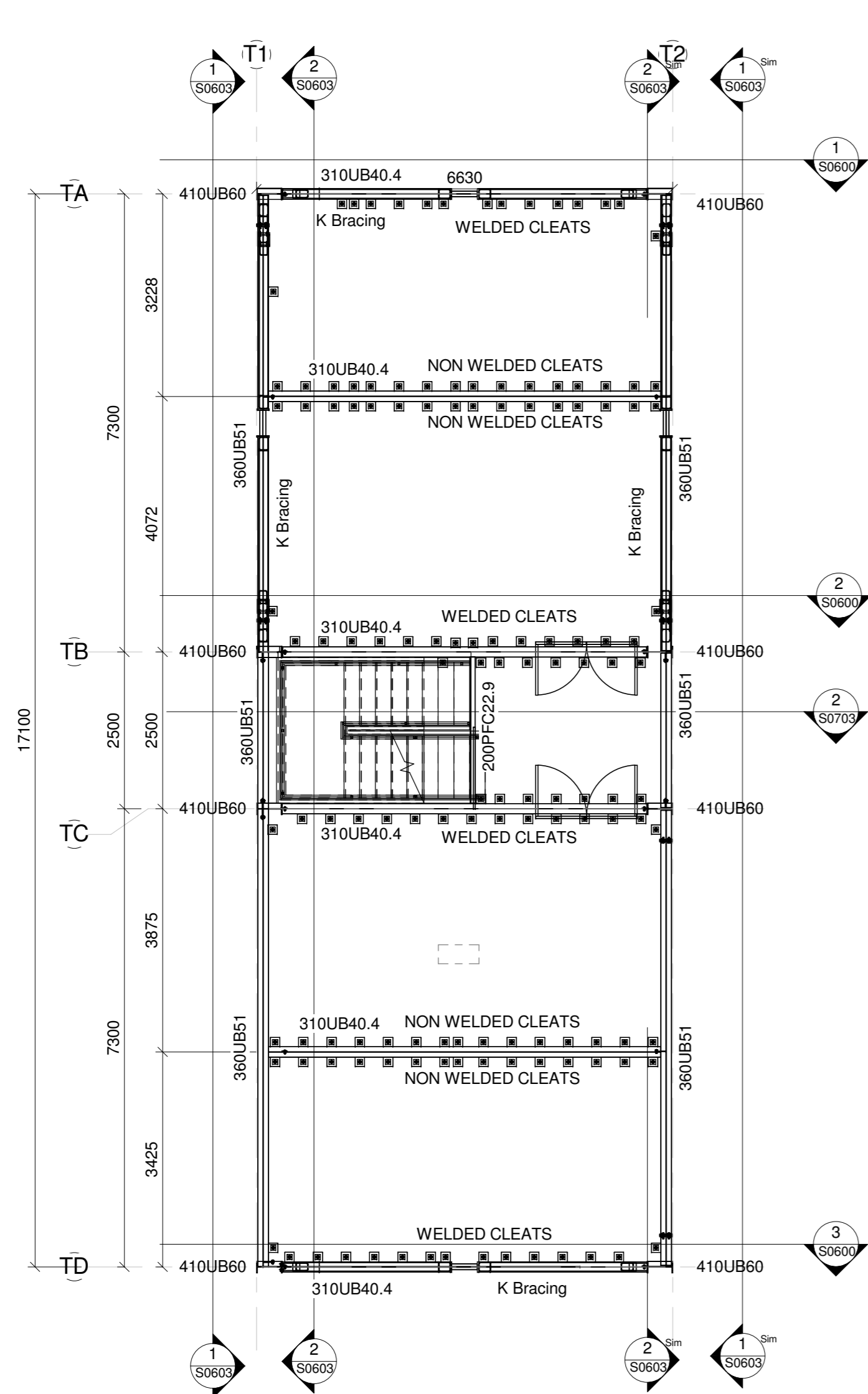
PROJECT

NZ Dairy Collaborative Group  
 Tower Extension

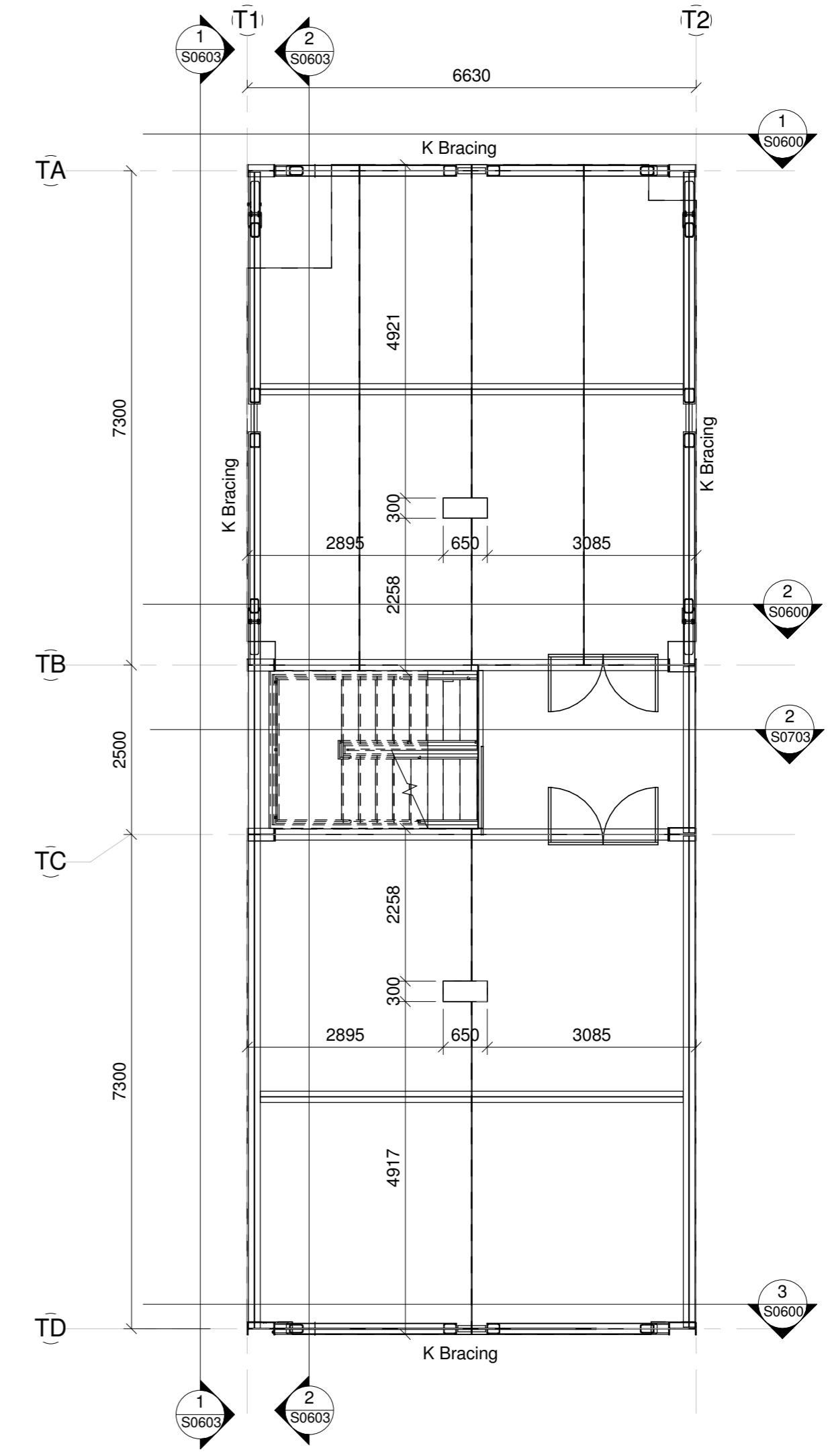
9 Ashford Ave, Ashburton

All Drawings property of Thompson Engineering 2002 Ltd

Rev#	Amendments	Date	SCALE	JOB #
			1 : 75 @ A2	12630
			DRAWN BY B Holloway	DATE 27/10/16
			CHECKED BY A.Chapman	REV
			<b>Ground Floor</b>	<b>S0301</b>
Please note: All dimensions to be verified on site				Paper size: A2



2 Struct Level T1 Midfloor  
1 : 75



1 Struct Level T1 Plant  
1 : 75

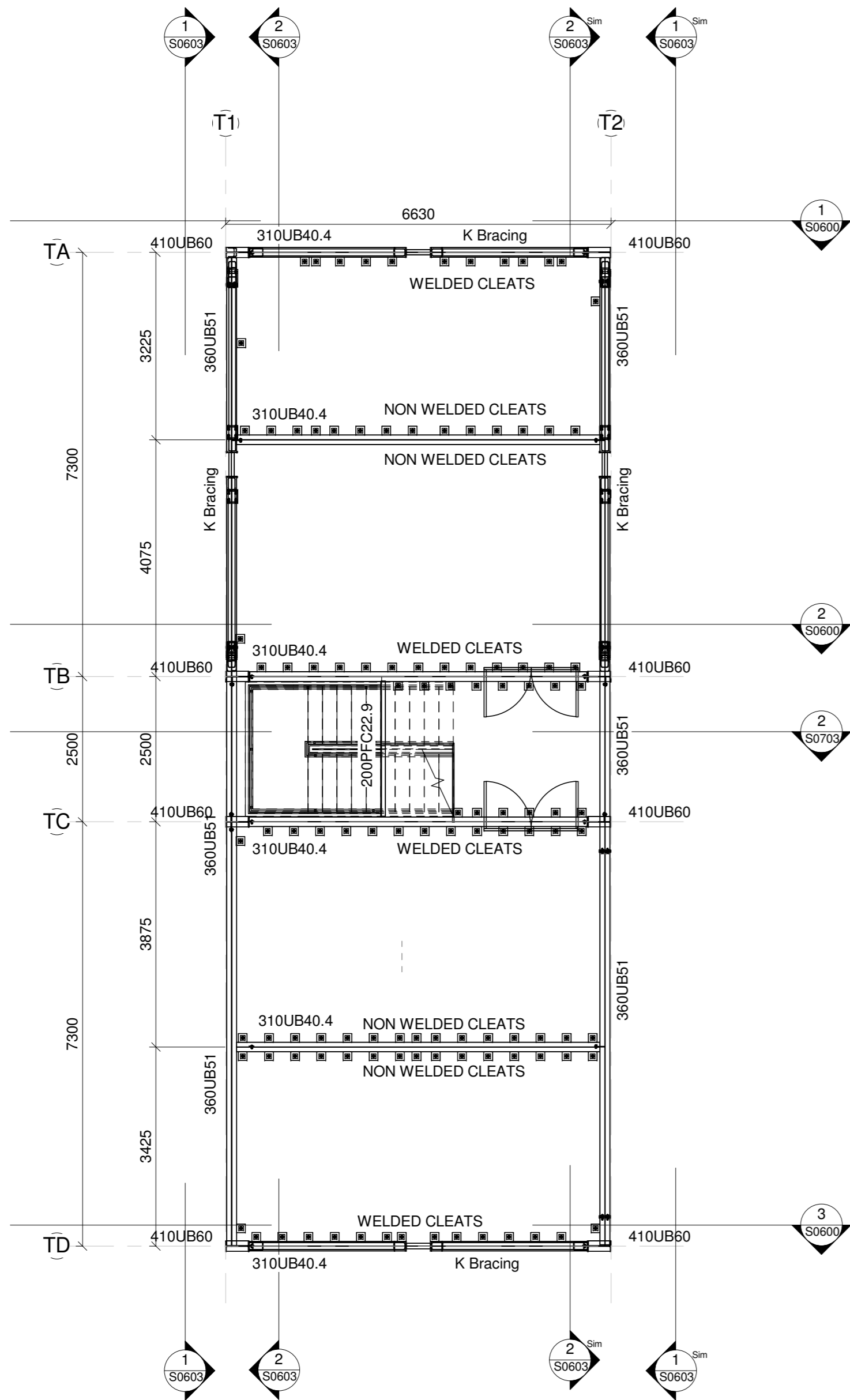
TOWER 2  
PENETRATIONS  
MIRROR OF  
TOWER 1



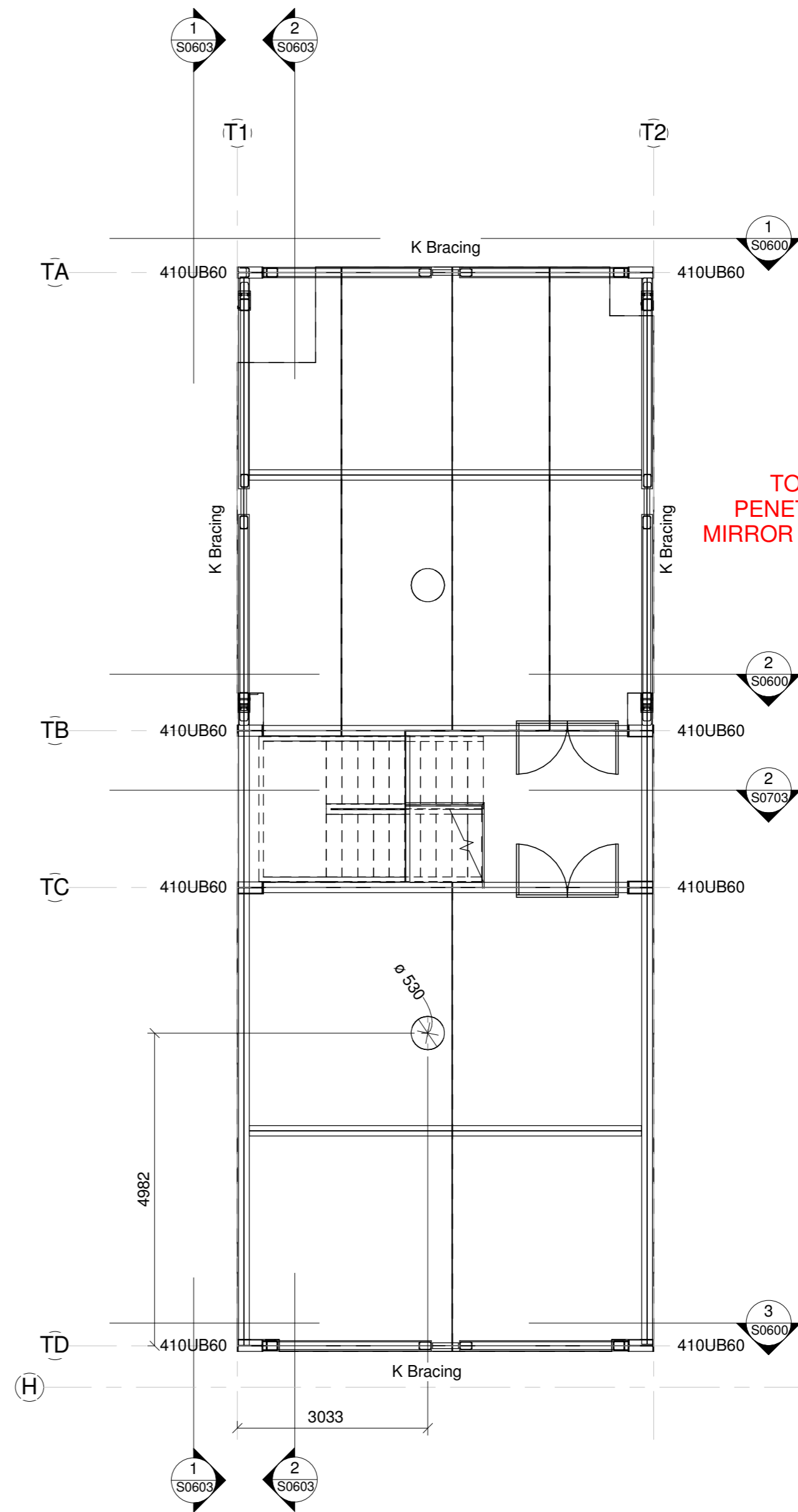
PROJECT  
**NZ Dairy Collaborative Group**  
**Tower Extension**  
 9 Ashford Ave, Ashburton  
 All Drawings property of Thompson Engineering 2002 Ltd

Rev#	Amendments	Date	SCALE	JOB #
			1 : 75 @ A2	12630
			DRAWN BY B Holloway	DATE 27/10/16
			CHECKED BY A.Chapman	REV
			<b>Tower Level 1</b>	<b>S0302</b>
Please note: All dimensions to be verified on site				Paper size: A2

Thompson Engineering 2002 Ltd | PO Box 2081, Washdyke - Timaru | 9b Meadows Road - Timaru  
 PH 0800 688 716 | F (03) 688 7168 | www.thompsonengineering.co.nz | design@thompsonengineering.co.nz



1 Struct Level T2 Midfloor  
1 : 75



2 Struct Level T2 Plant  
1 : 75

TOWER 2  
PENETRATIONS  
MIRROR OF TOWER 1

PROJECT

NZ Dairy Collaborative Group  
Tower Extension

9 Ashford Ave, Ashburton

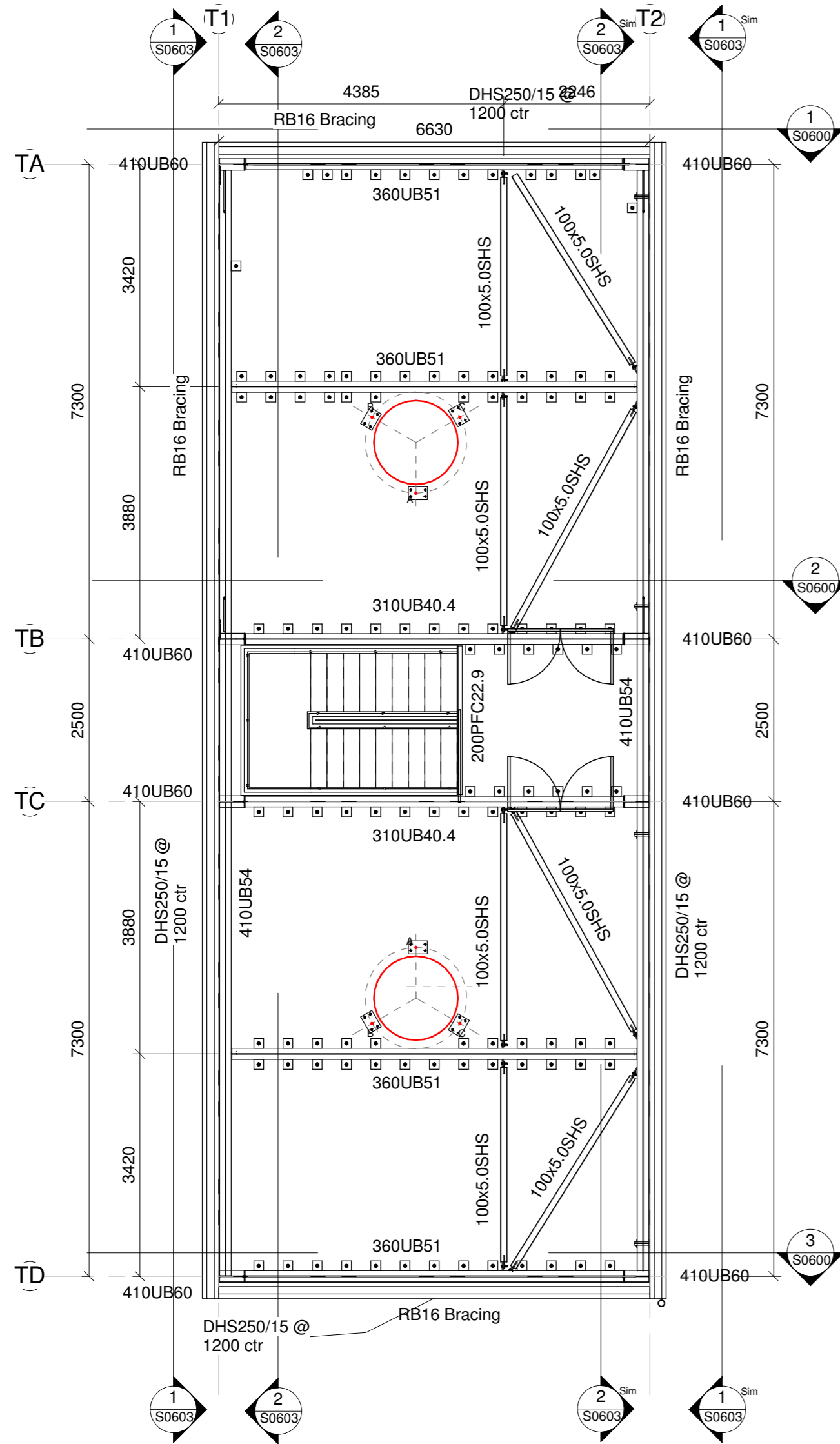
All Drawings property of Thompson Engineering 2002 Ltd

Rev#	Amendments	Date	SCALE	JOB #
			1 : 75 @ A2	12630
			DRAWN BY B Holloway	DATE 27/10/16
			CHECKED BY A.Chapman	REV
			<b>Tower Level 2</b>	<b>S0303</b>
Please note: All dimensions to be verified on site				Paper size: A2



Thompson Engineering 2002 Ltd | PO Box 2081, Washdyke - Timaru | 9b Meadows Road - Timaru  
PH 0800 688 716 | F (03) 688 7168 | www.thompsonengineering.co.nz | design@thompsonengineering.co.nz

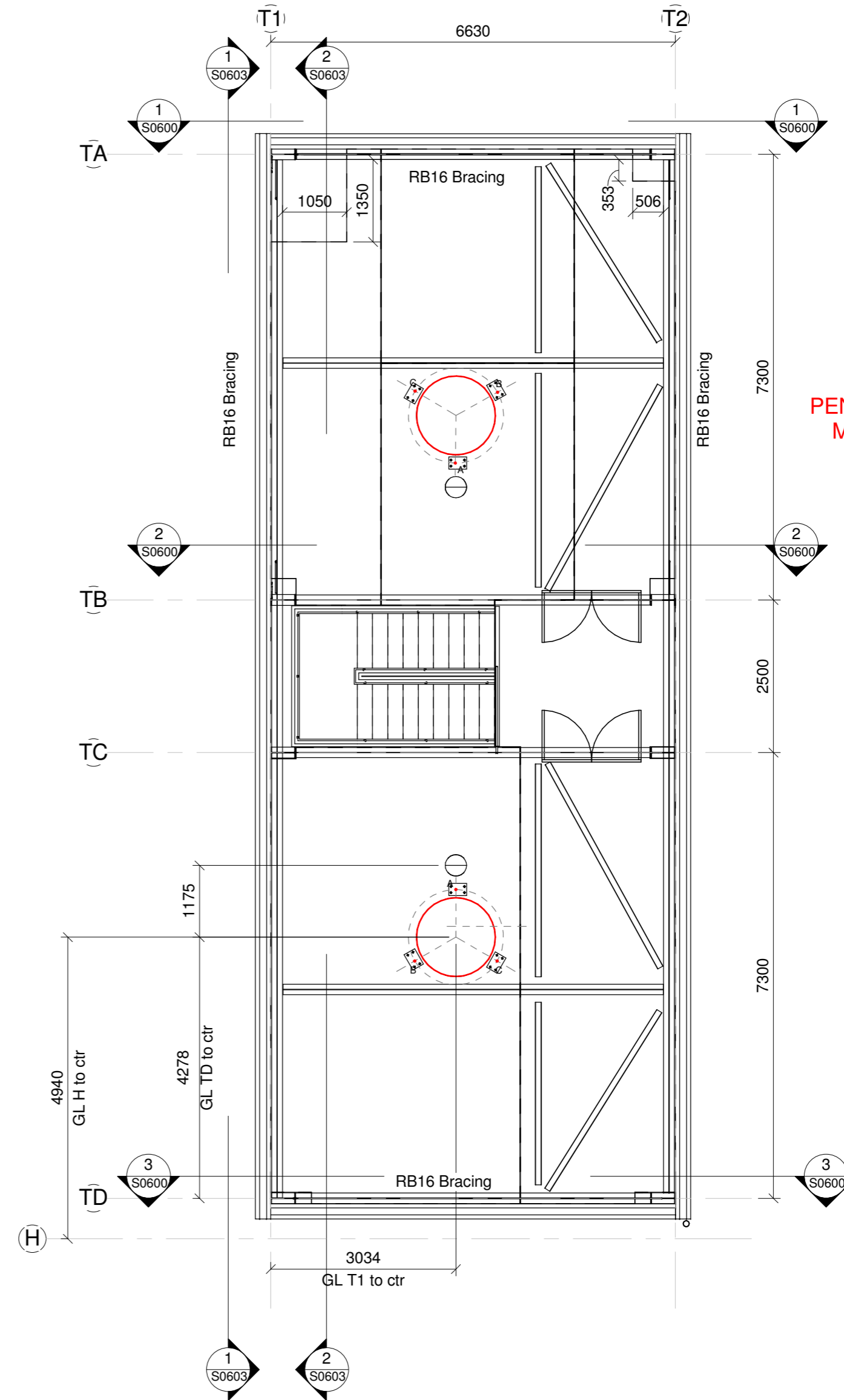




① Struct Level T4 Midfloor  
1 : 75

Seperator Point Loads from GEA 21018-0200 (GEA to check prior to PS1 issue)

VESEL: 1.5m <sup>3</sup> SEPARATOR	PRODUCT: TO BE CONFIRMED		
LOADING TYPE	LOAD AT A (kN)	LOAD AT B (kN)	LOAD AT C (kN)
EMPTY	1.7	1.7	1.7
FILLED WITH PRODUCT	4.0	4.0	4.0
WATER FILLED	8.1	8.1	8.1



② Struct Level T4 Plant  
1 : 75

TOWER 2  
PENETRATIONS  
MIRROR OF  
TOWER 1



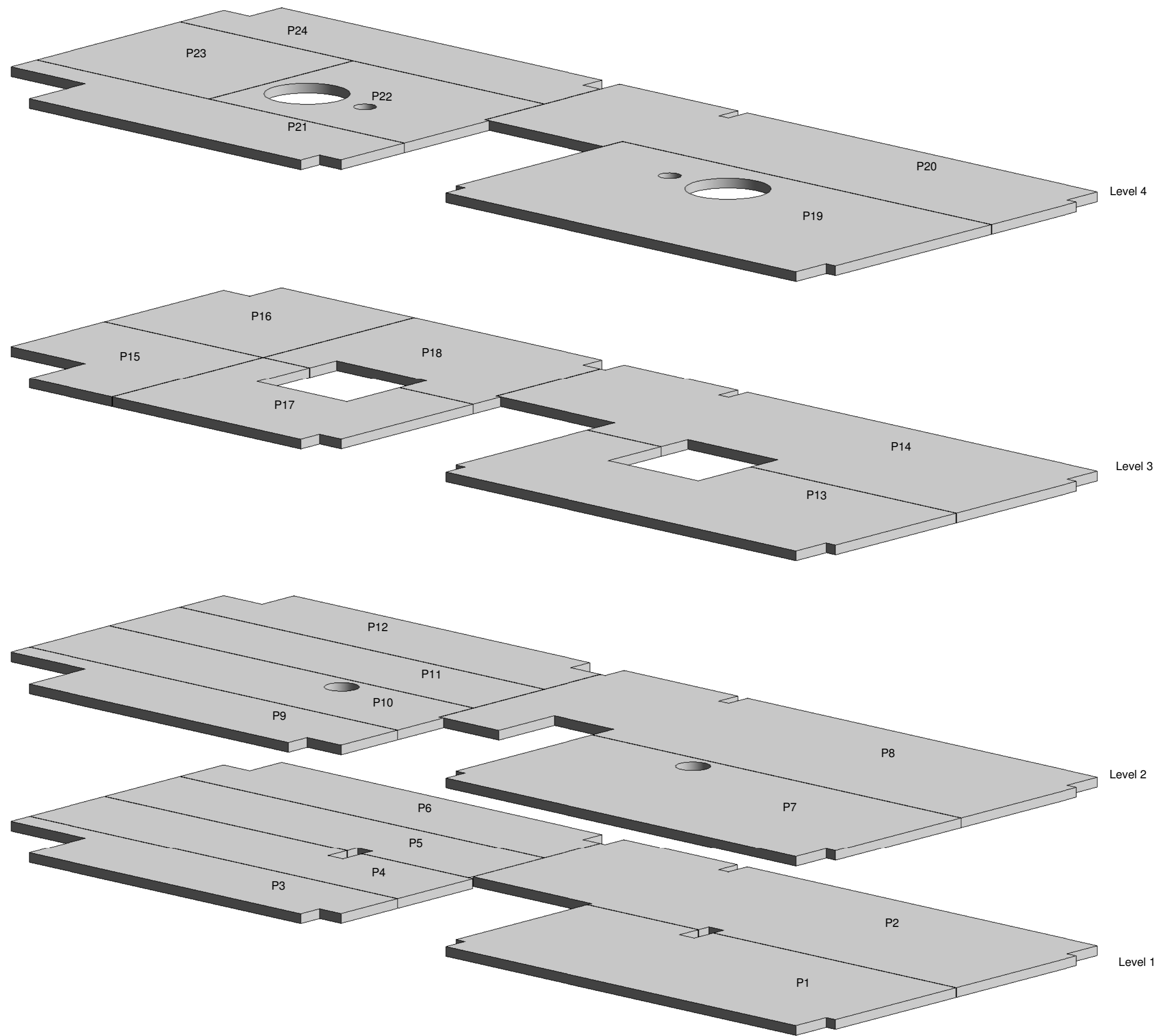
PROJECT

NZ Dairy Collaborative Group  
Tower Extension

9 Ashford Ave, Ashburton

All Drawings property of Thompson Engineering 2002 Ltd

Rev#	Amendments	Date	SCALE	As indicated@ A2	JOB #	12630
			DRAWN BY	B Holloway	DATE	27/10/16
			CHECKED BY	A.Chapman	REV	
			<b>Tower Level 4</b>		<b>S0305</b>	
Please note: All dimensions to be verified on site						Paper size: A2



1 Panels 3d

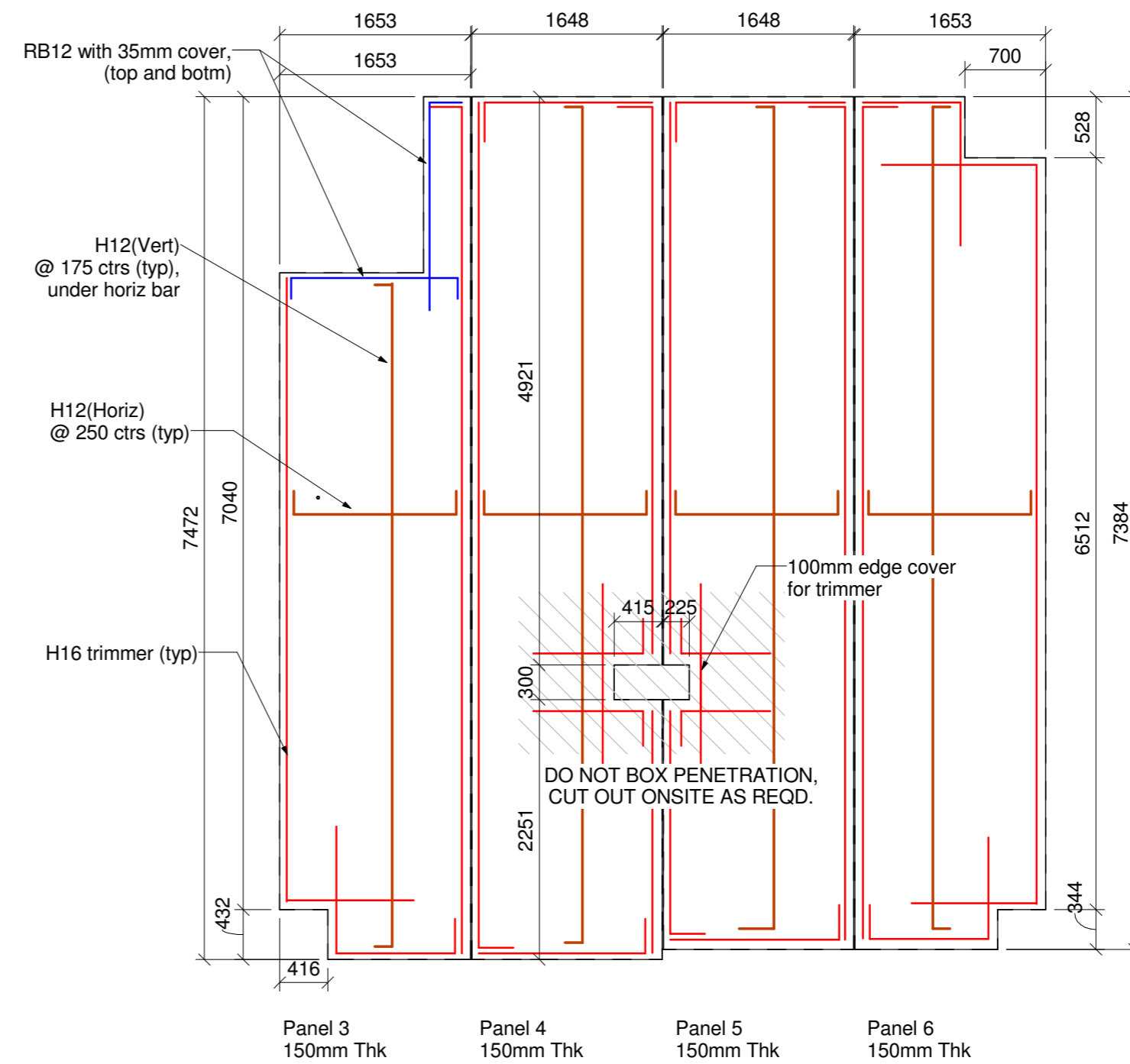
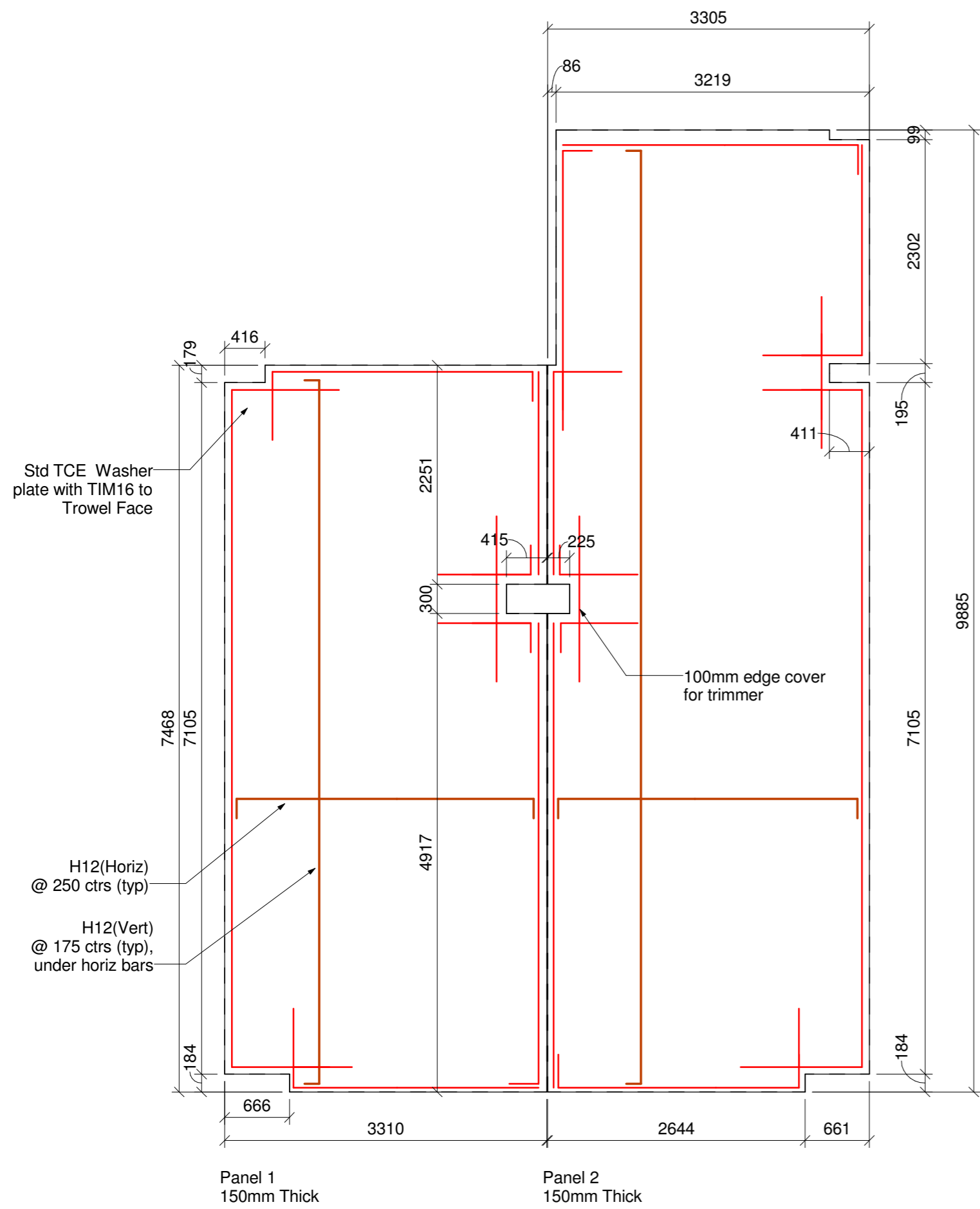


Thompson Engineering 2002 Ltd | PO Box 2081, Washdyke - Timaru | 9b Meadows Road - Timaru  
 PH 0800 688 716 | F (03) 688 7168 | www.thompsonengineering.co.nz | design@thompsonengineering.co.nz

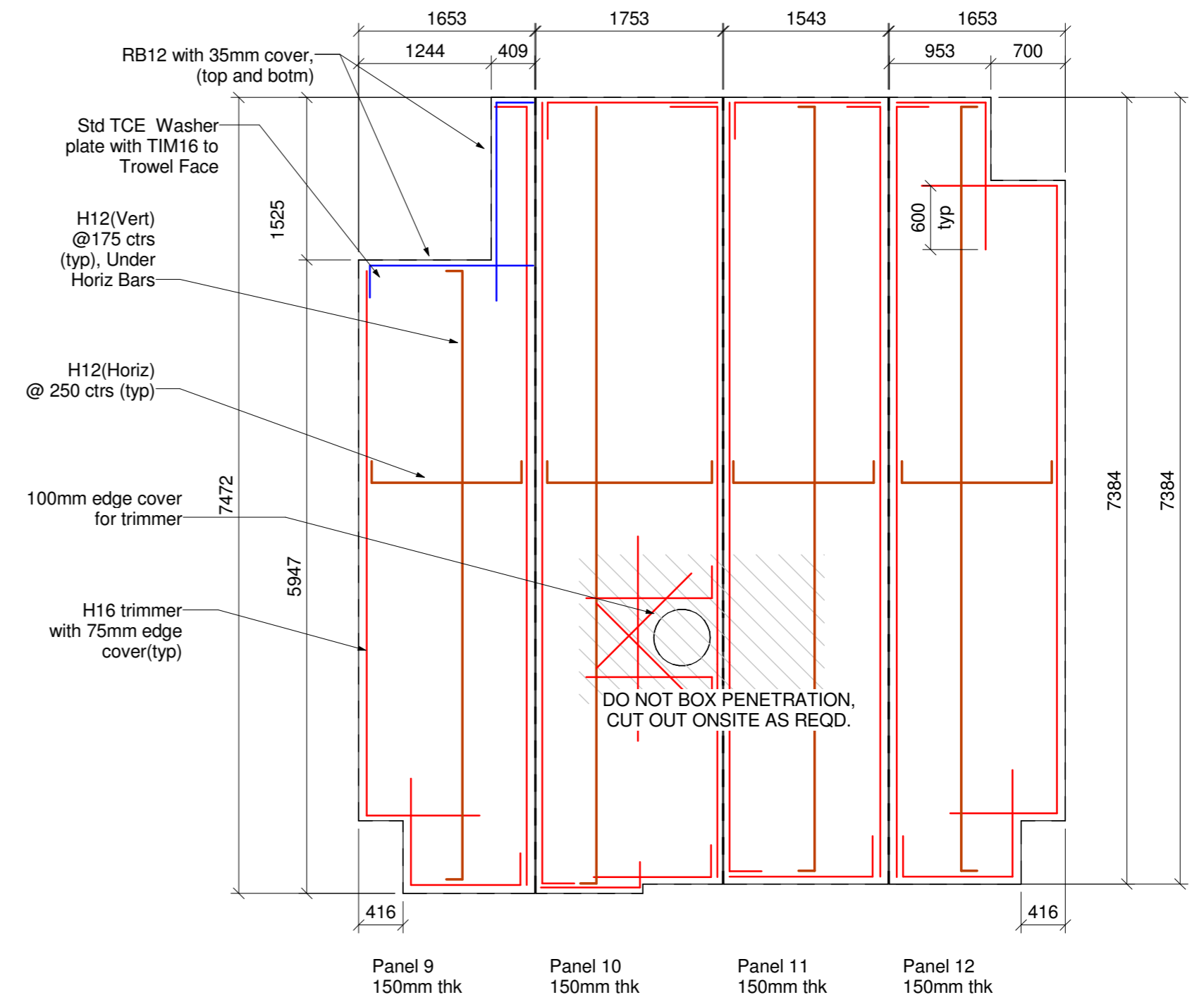
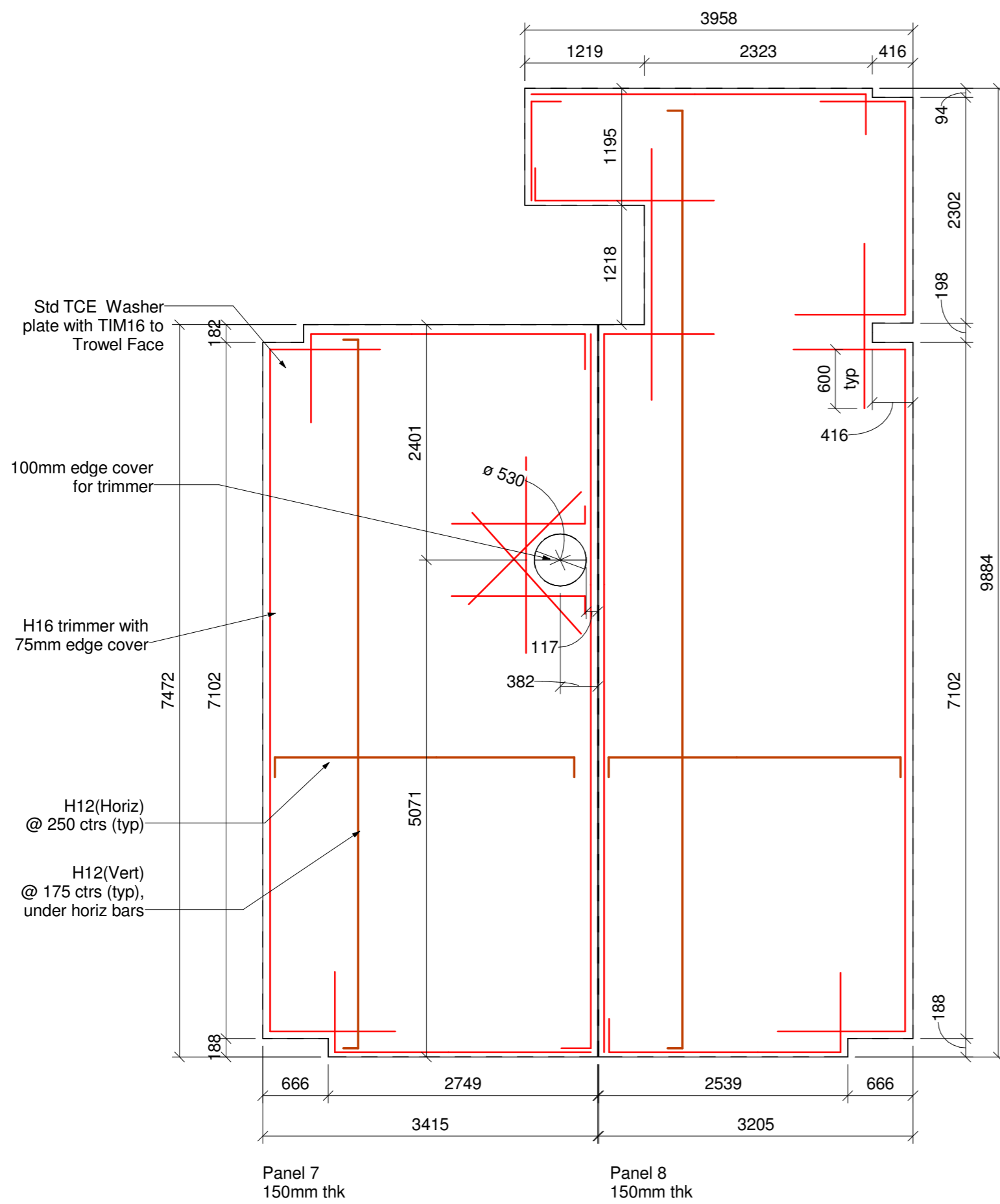
PROJECT  
 NZ Dairy Collaborative Group  
 Tower Extension  
 9 Ashford Ave, Ashburton  
 All Drawings property of Thompson Engineering 2002 Ltd

Rev#	Amendments	Date

SCALE	@ A2	JOB #	12630
DRAWN BY	B Holloway	DATE	27/10/16
CHECKED BY	A.Chapman	REV	
Panel Layout 3D			S0401
Please note: All dimensions to be verified on site			Paper size: A2



Rev#	Amendments	Date	SCALE	JOB #
			1 : 50 @ A2	12630
			DRAWN BY B Holloway	DATE 27/10/16
			CHECKED BY A.Chapman	REV
			<b>Panel Floor Detail Level 1</b>	<b>S0402</b>
Please note: All dimensions to be verified on site				Paper size: A2



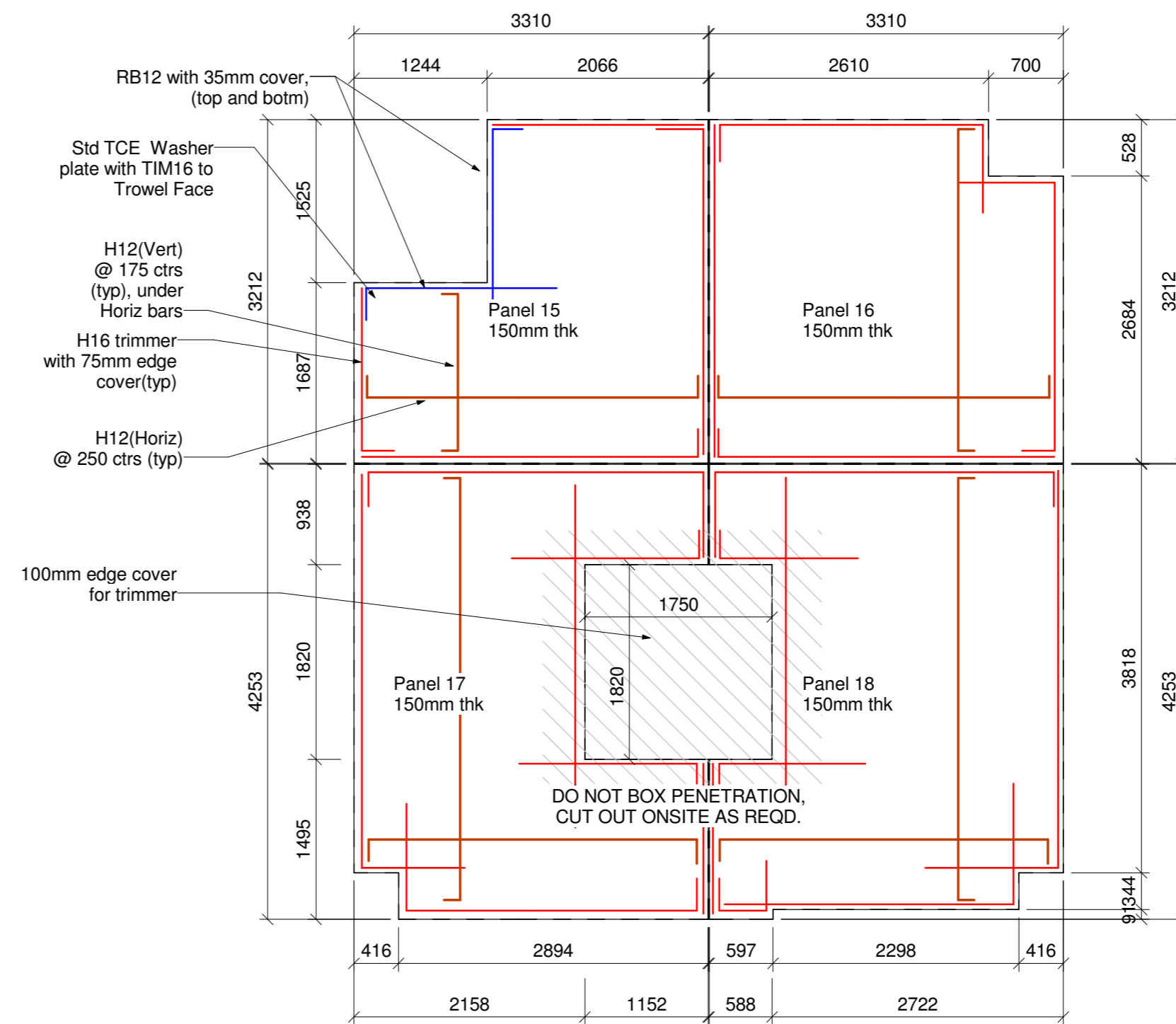
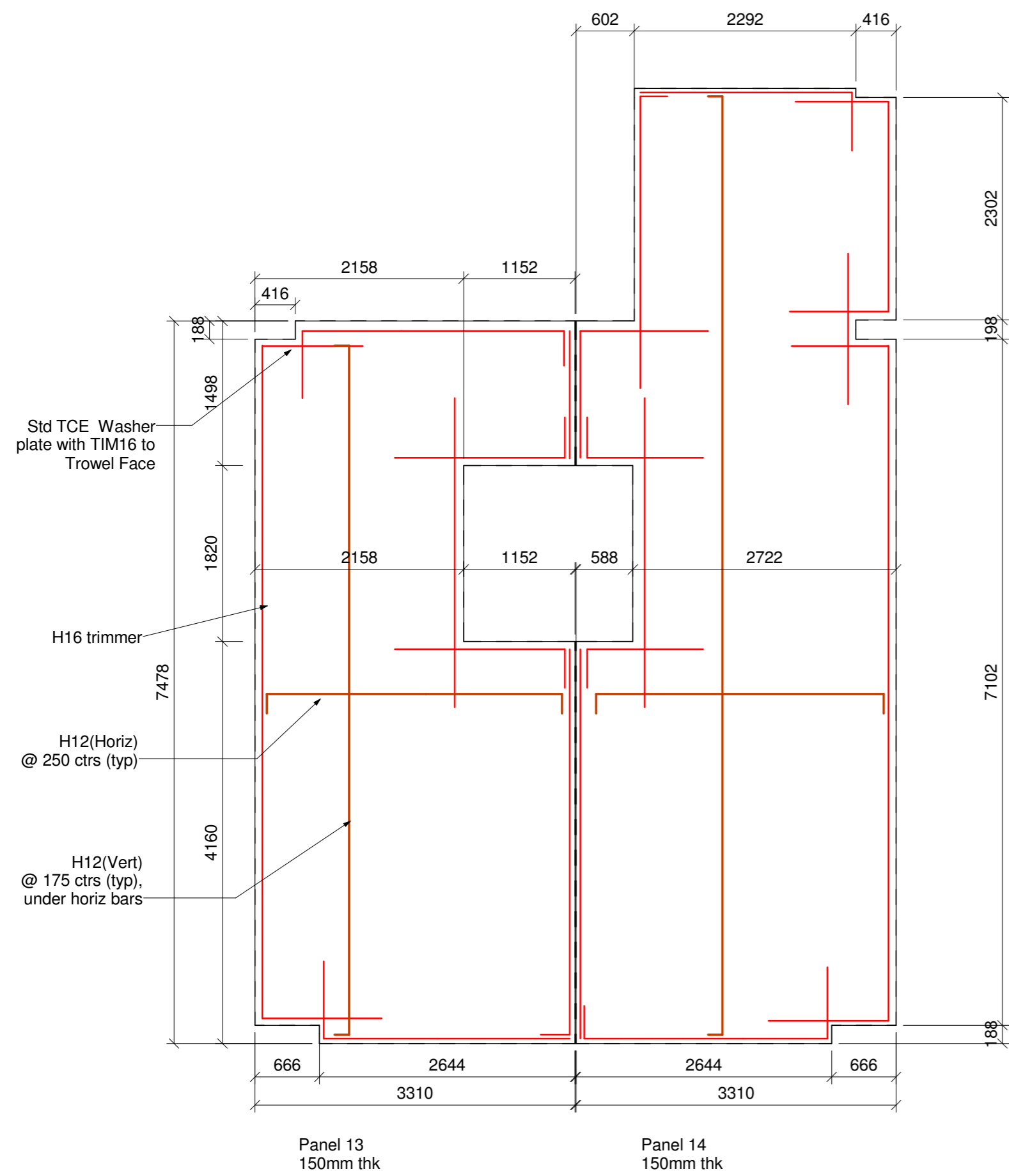
DO NOT BOX PENETRATION,  
CUT OUT ONSITE AS REQD.



PROJECT  
**NZ Dairy Collaborative Group  
 Tower Extension**  
 9 Ashford Ave, Ashburton  
 All Drawings property of Thompson Engineering 2002 Ltd

Rev#	Amendments	Date	SCALE	JOB #
			1 : 50 @ A2	12630
			DRAWN BY B Holloway	DATE 27/10/16
			CHECKED BY A.Chapman	REV
			<b>Panel Floor Detail Level 2</b>	<b>S0403</b>
Please note: All dimensions to be verified on site				Paper size: A2

Thompson Engineering 2002 Ltd | PO Box 2081, Washdyke - Timaru | 9b Meadows Road - Timaru  
 PH 0800 688 716 | F (03) 688 7168 | www.thompsonengineering.co.nz | design@thompsonengineering.co.nz



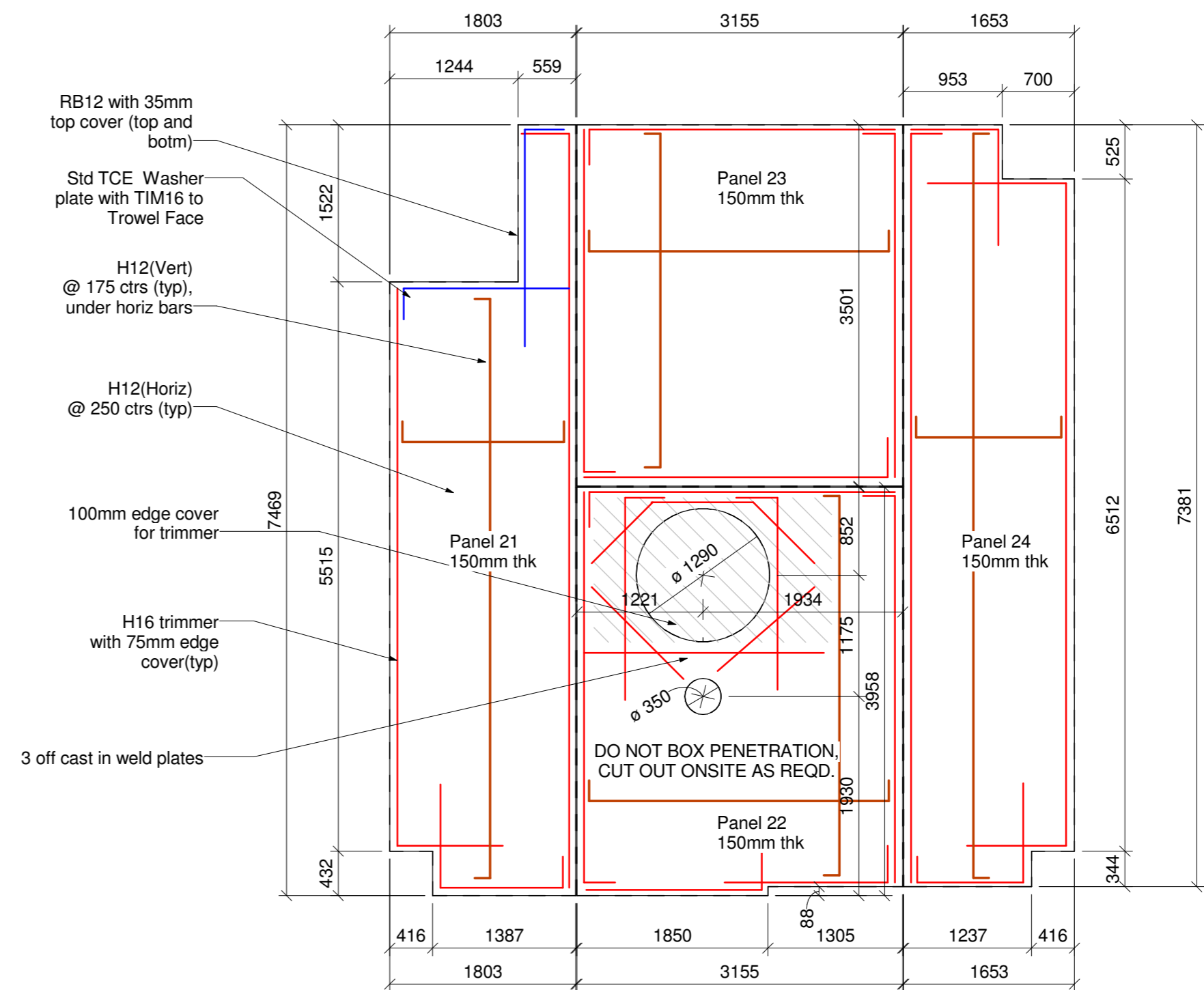
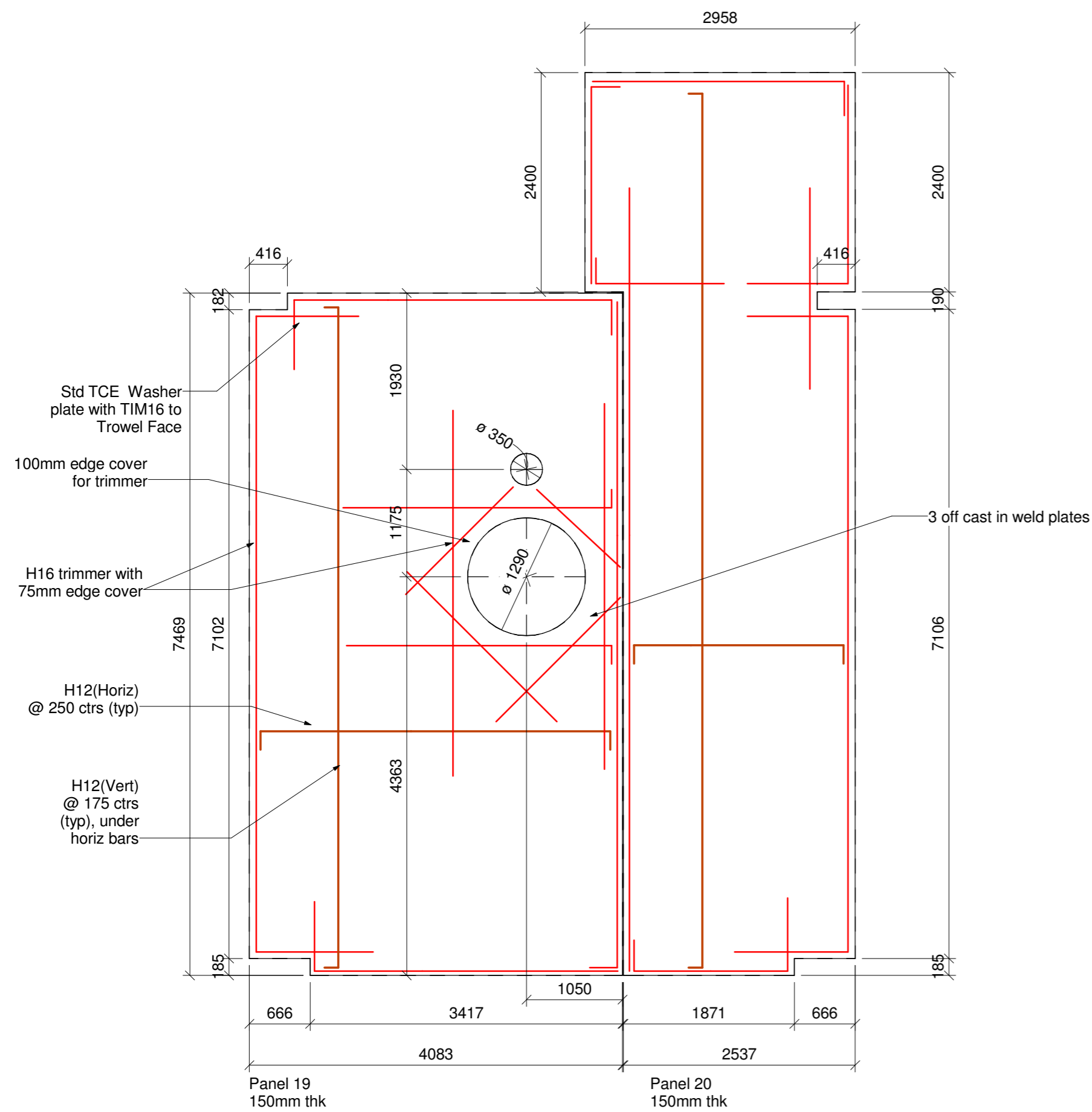
PROJECT

NZ Dairy Collaborative Group  
Tower Extension

9 Ashford Ave, Ashburton

All Drawings property of Thompson Engineering 2002 Ltd

Rev#	Amendments	Date	SCALE	JOB #
			1 : 50 @ A2	12630
			DRAWN BY B Holloway	DATE 27/10/16
			CHECKED BY A.Chapman	REV
			<b>Panel Floor Detail Level 3</b>	<b>S0404</b>
Please note: All dimensions to be verified on site				Paper size: A2



PROJECT

NZ Dairy Collaborative Group  
Tower Extension

9 Ashford Ave, Ashburton

Rev#

Amendments

Date

SCALE 1 : 50 @ A2

JOB # 12630

DRAWN BY B Holloway

DATE 27/10/16

CHECKED BY A.Chapman

REV

Panel Floor Detail Level 4

S0405

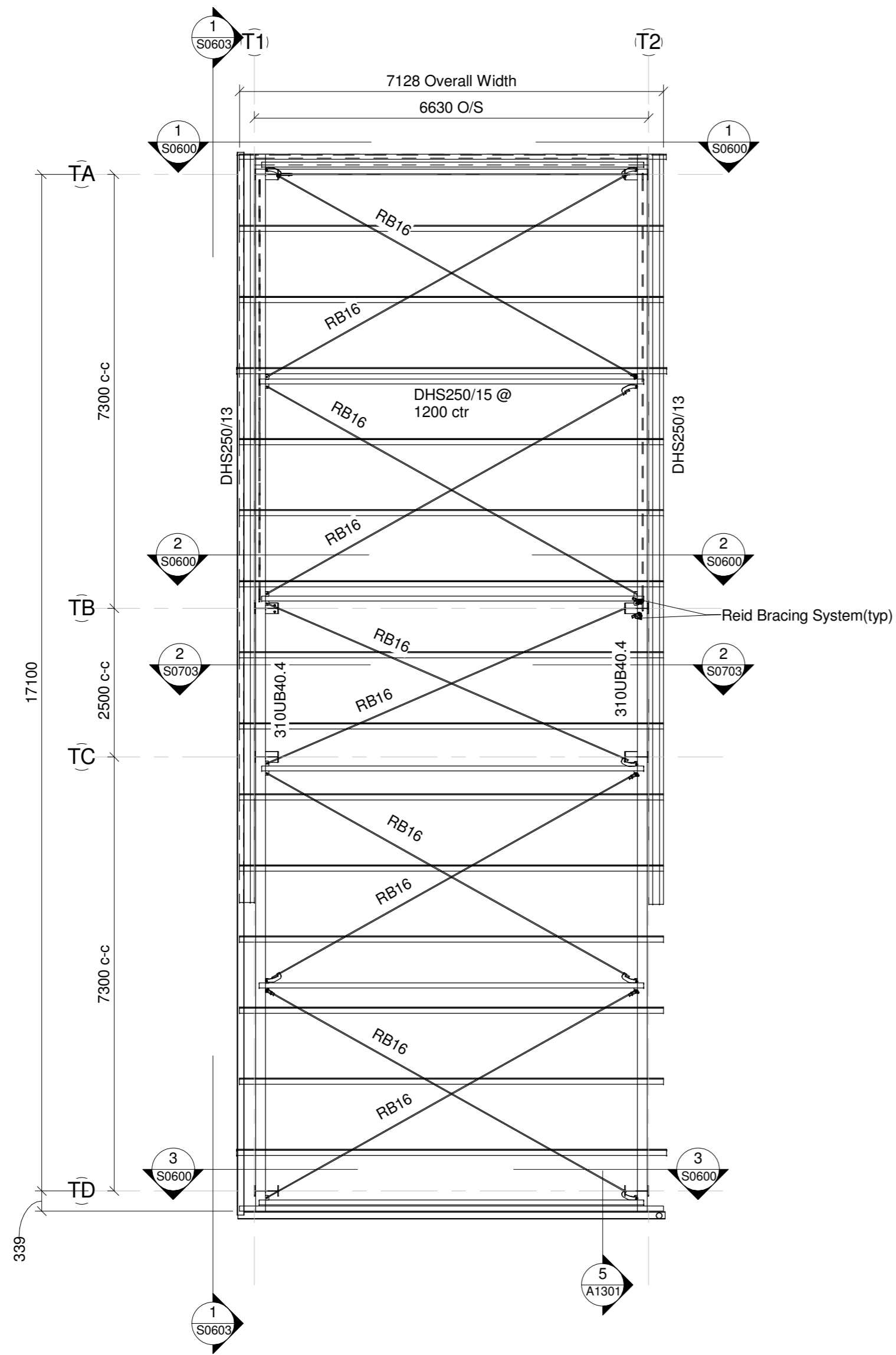
Please note: All dimensions to be verified on site

Paper size: A2



Thompson Engineering 2002 Ltd | PO Box 2081, Washdyke - Timaru | 9b Meadows Road - Timaru  
PH 0800 688 716 | F (03) 688 7168 | www.thompsonengineering.co.nz | design@thompsonengineering.co.nz

All Drawings property of Thompson Engineering 2002 Ltd



1 Structural Roof Plan  
1 : 75

PROJECT

NZ Dairy Collaborative Group  
Tower Extension

9 Ashford Ave, Ashburton

Rev#

Amendments

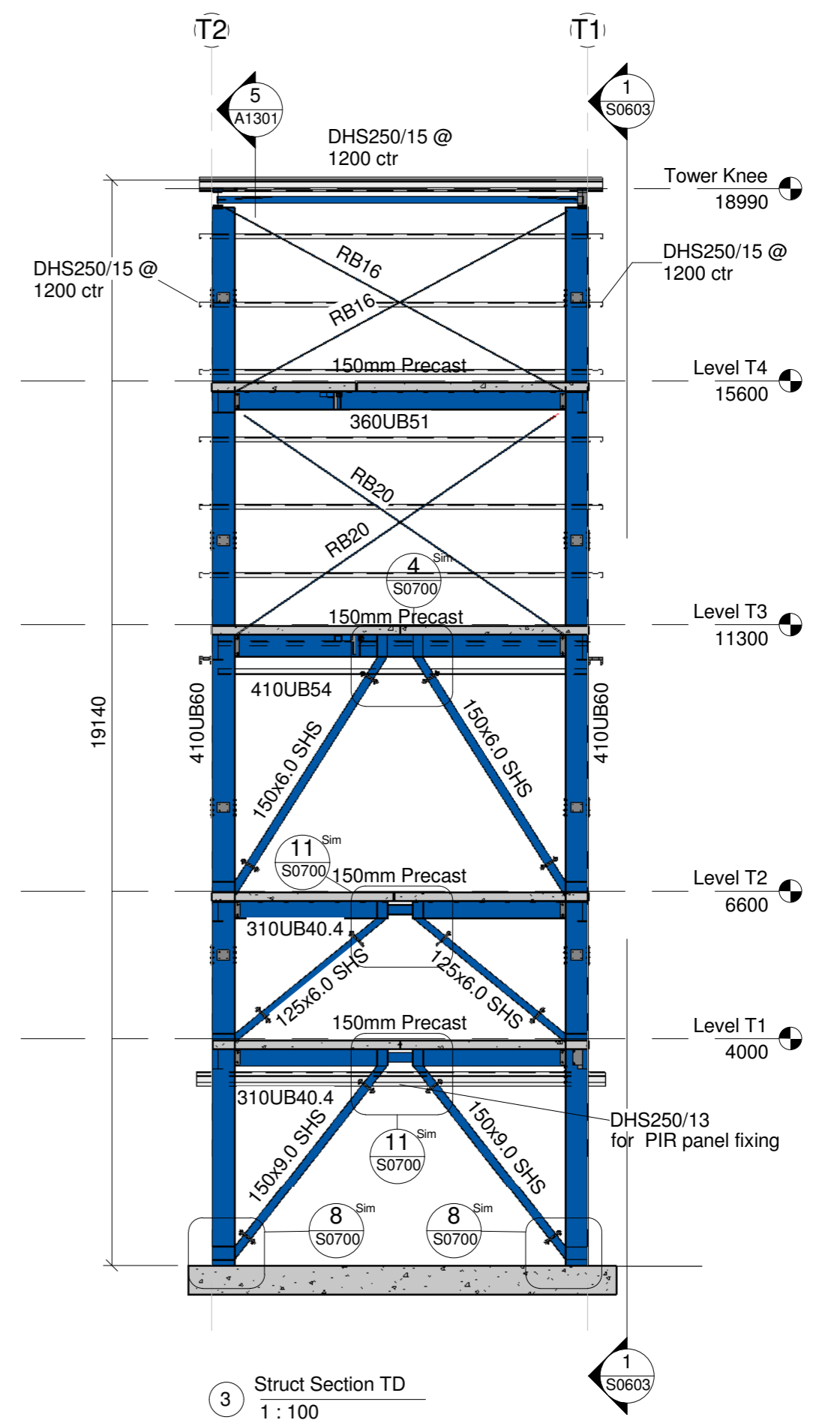
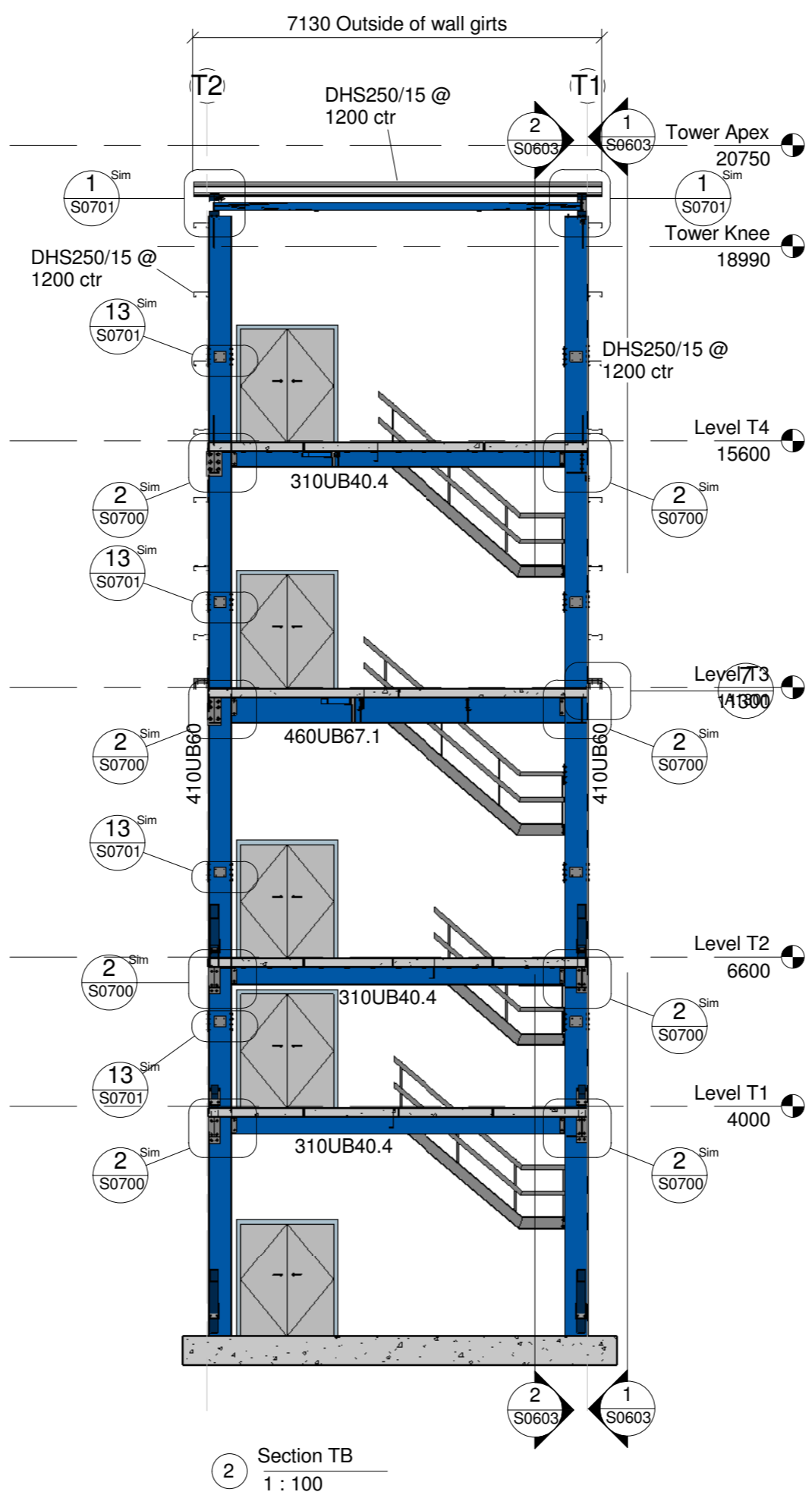
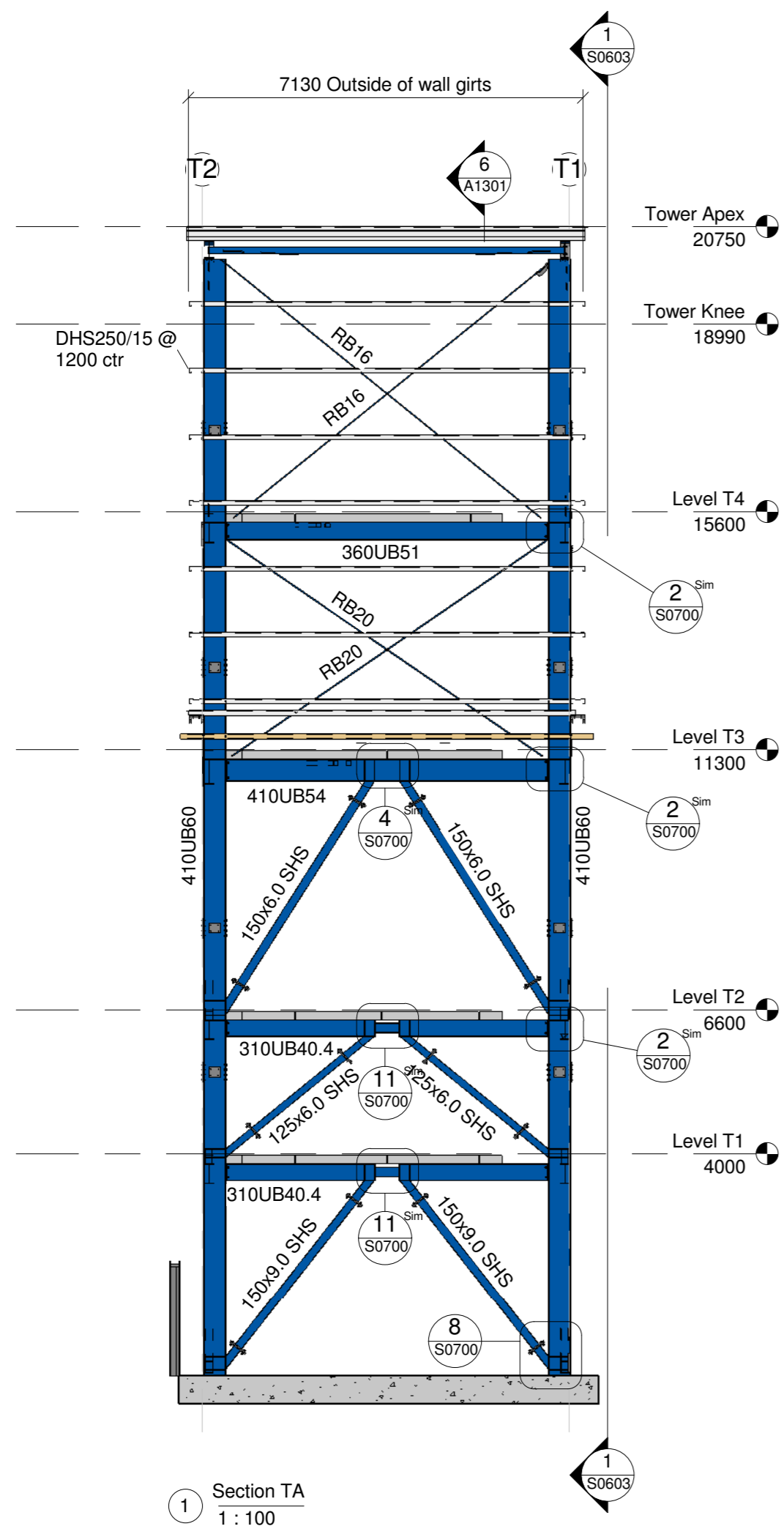
Date

SCALE	1 : 75 @ A2	JOB #	12630
DRAWN BY	B Holloway	DATE	27/10/16
CHECKED BY	A.Chapman	REV	
<b>Structural Roof Plan</b>			<b>S0500</b>
Please note: All dimensions to be verified on site			Paper size: A2



Thompson Engineering 2002 Ltd | PO Box 2081, Washdyke - Timaru | 9b Meadows Road - Timaru  
PH 0800 688 716 | F (03) 688 7168 | www.thompsonengineering.co.nz | design@thompsonengineering.co.nz

All Drawings property of Thompson Engineering 2002 Ltd



PROJECT

NZ Dairy Collaborative Group  
Tower Extension

9 Ashford Ave, Ashburton

Rev#

Amendments

Date

SCALE 1 : 100 @ A2

JOB # 12630

DRAWN BY B Holloway

DATE 27/10/16

CHECKED BY A.Chapman

REV

Sections

S0600

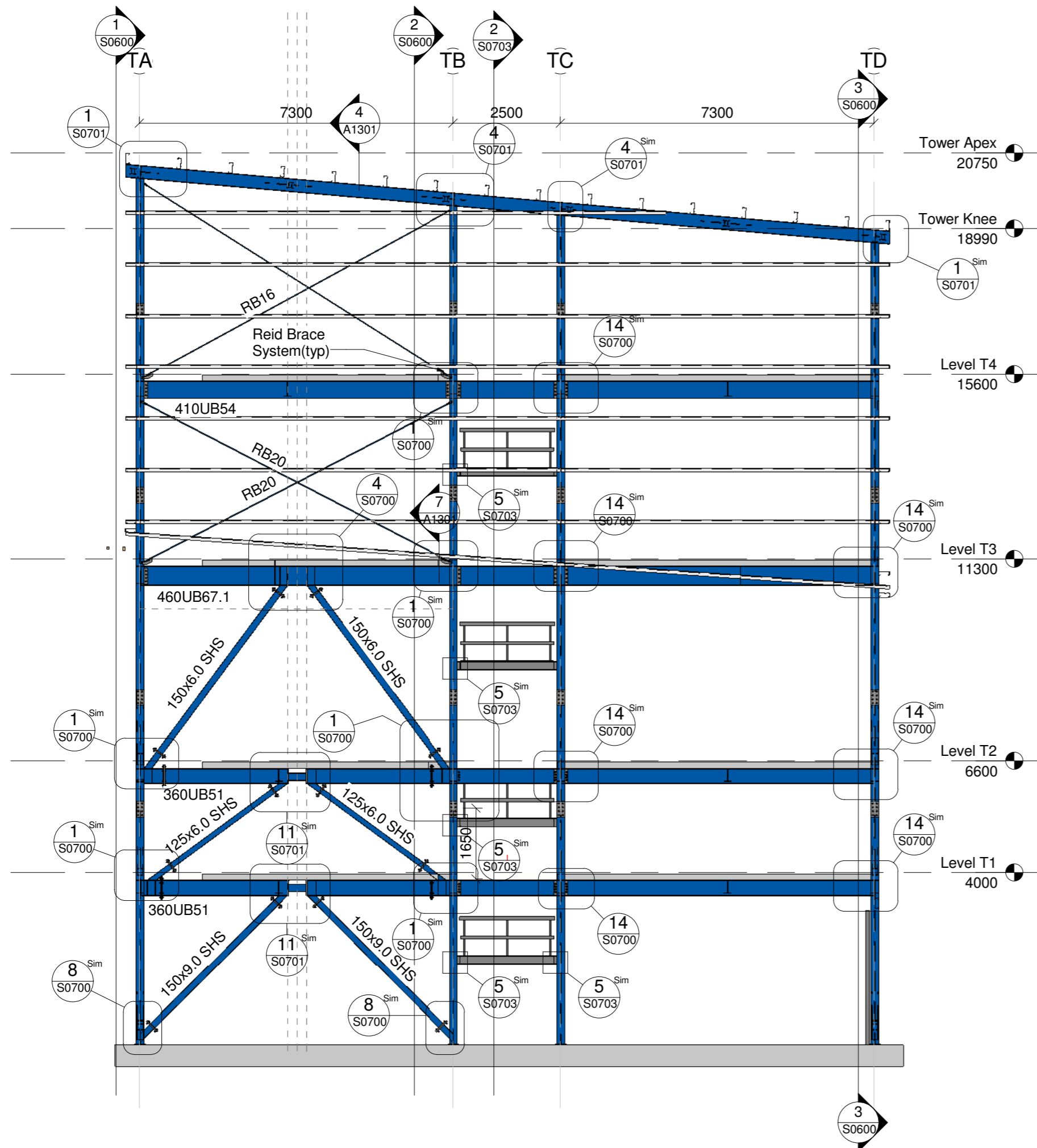
Please note: All dimensions to be verified on site

Paper size: A2

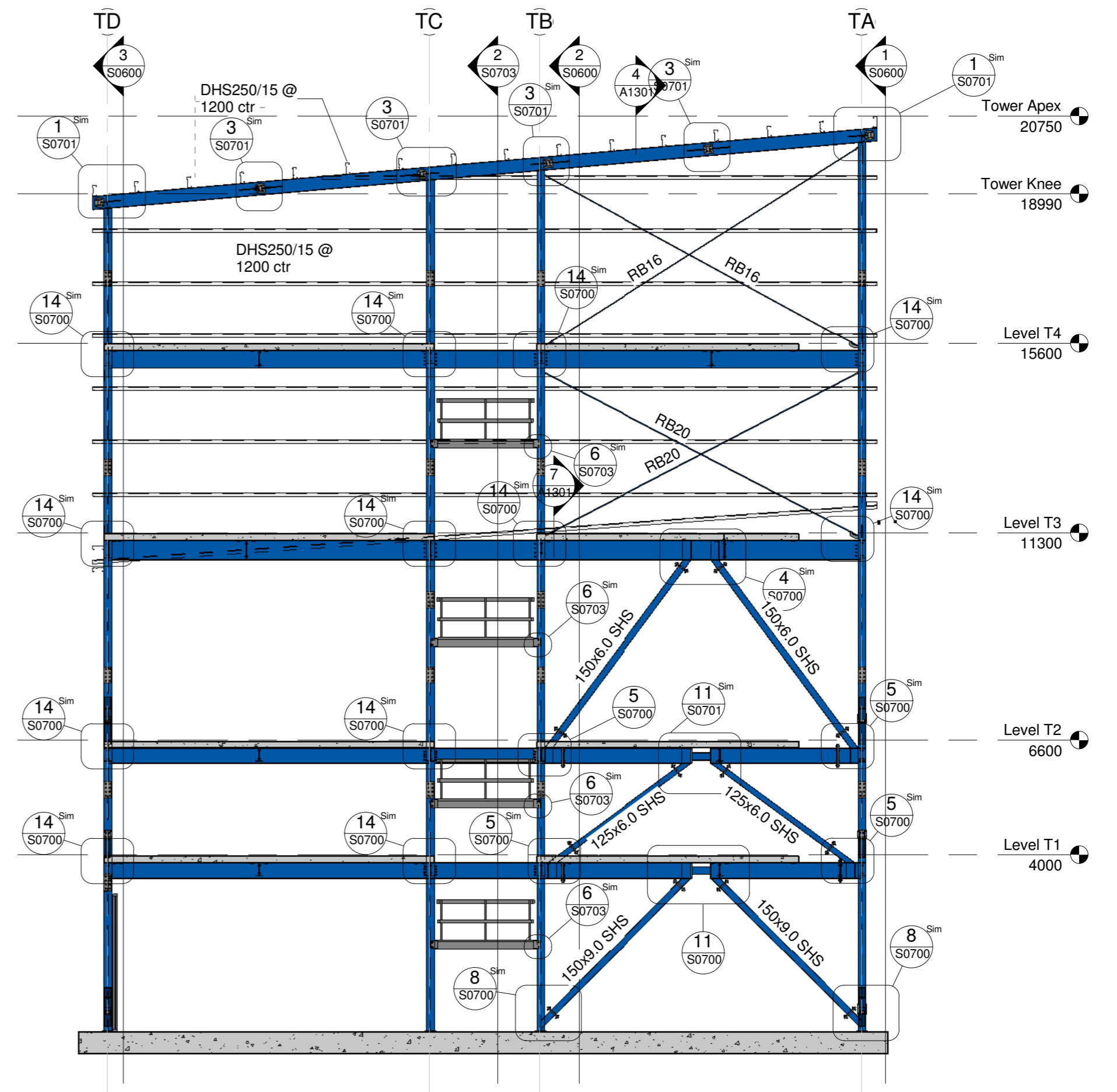


Thompson Engineering 2002 Ltd | PO Box 2081, Washdyke - Timaru | 9b Meadows Road - Timaru  
PH 0800 688 716 | F (03) 688 7168 | www.thompsonengineering.co.nz | design@thompsonengineering.co.nz

All Drawings property of Thompson Engineering 2002 Ltd



1 T1 Section  
1 : 100



2 Gridline T1 Inside  
1 : 100



PROJECT

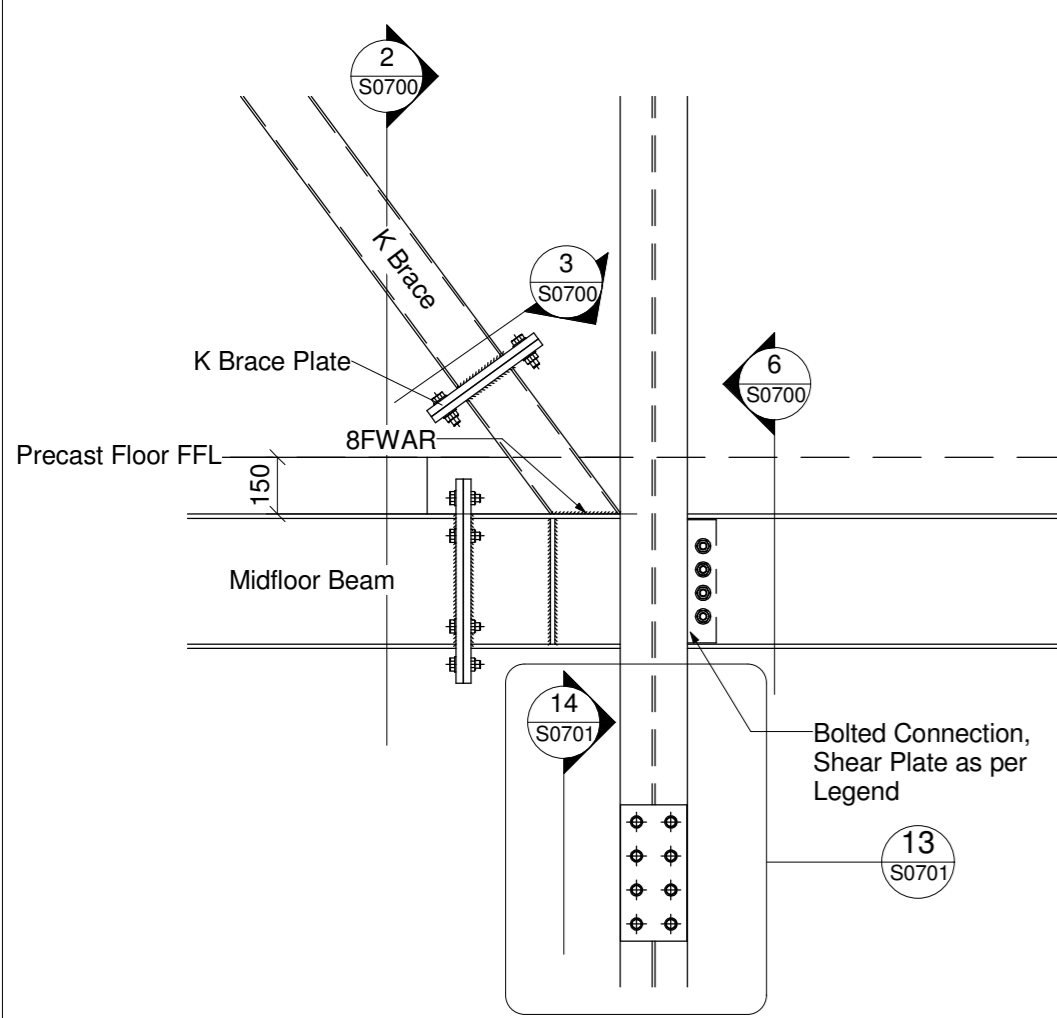
NZ Dairy Collaborative Group  
Tower Extension

9 Ashford Ave, Ashburton

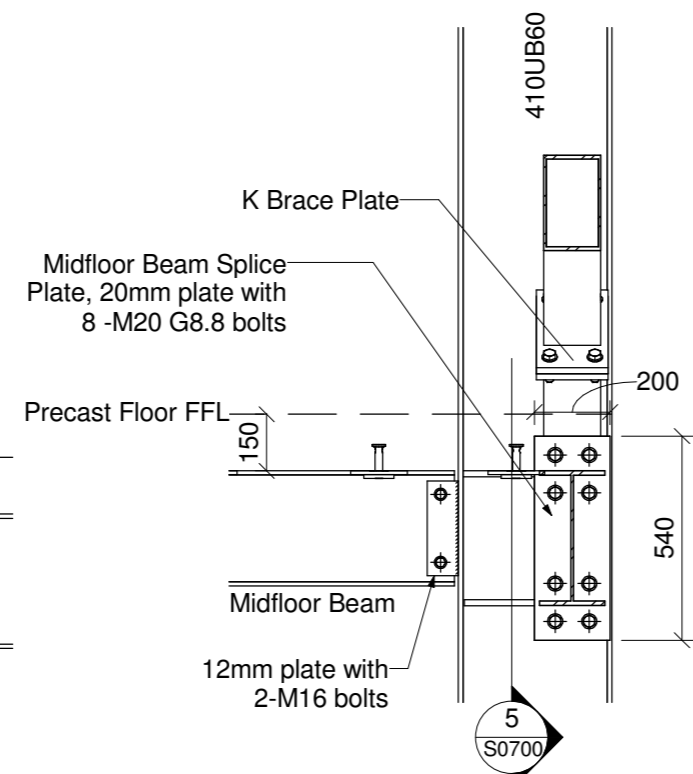
Thompson Engineering 2002 Ltd | PO Box 2081, Washdyke - Timaru | 9b Meadows Road - Timaru  
PH 0800 688 716 | F (03) 688 7168 | www.thompsonengineering.co.nz | design@thompsonengineering.co.nz

All Drawings property of Thompson Engineering 2002 Ltd

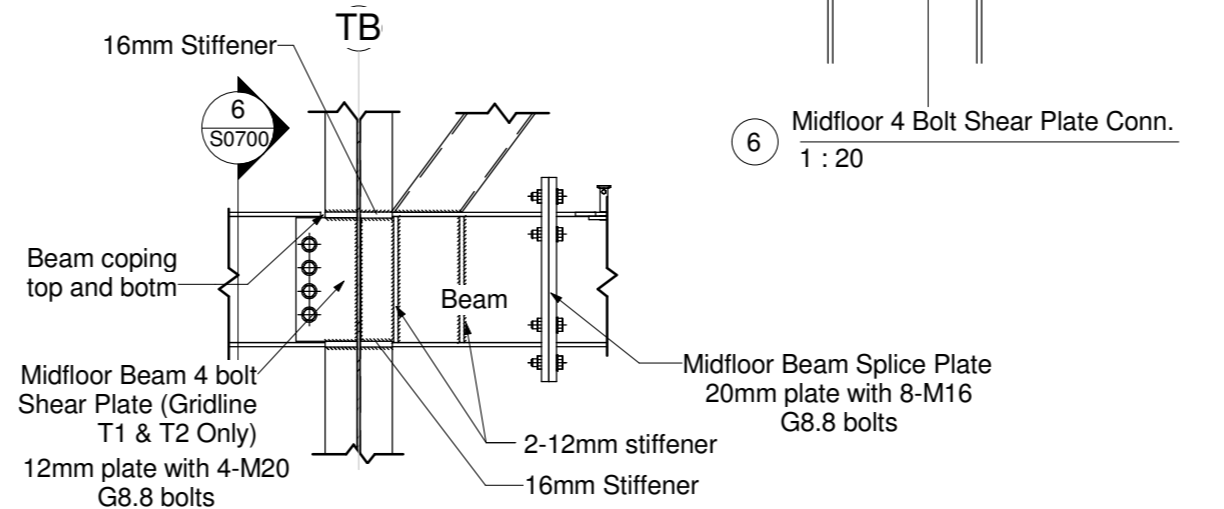
Rev#	Amendments	Date	SCALE	JOB #
			1 : 100 @ A2	12630
			DRAWN BY B Holloway	DATE 27/10/16
			CHECKED BY A.Chapman	REV
			<b>Gridline T1 and T2</b>	<b>S0603</b>
Please note: All dimensions to be verified on site				Paper size: A2



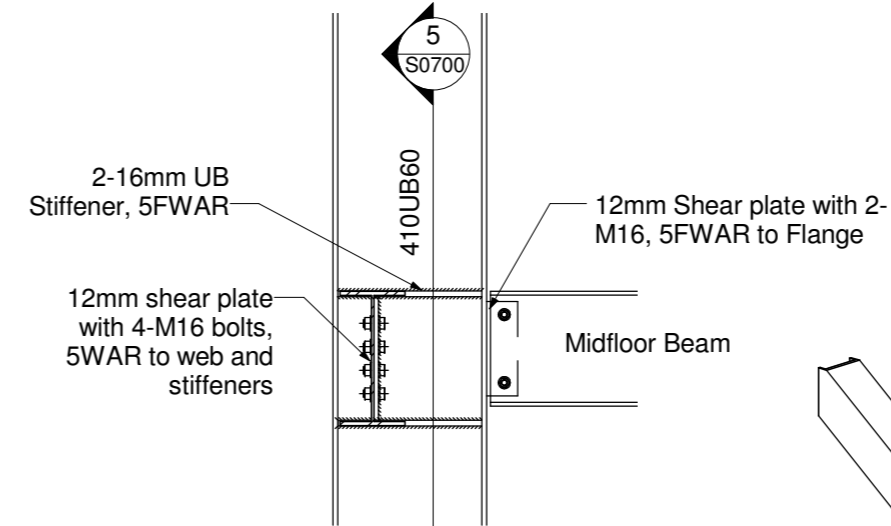
1 Typical K Bracing & Midfloor Conn 1  
1 : 20



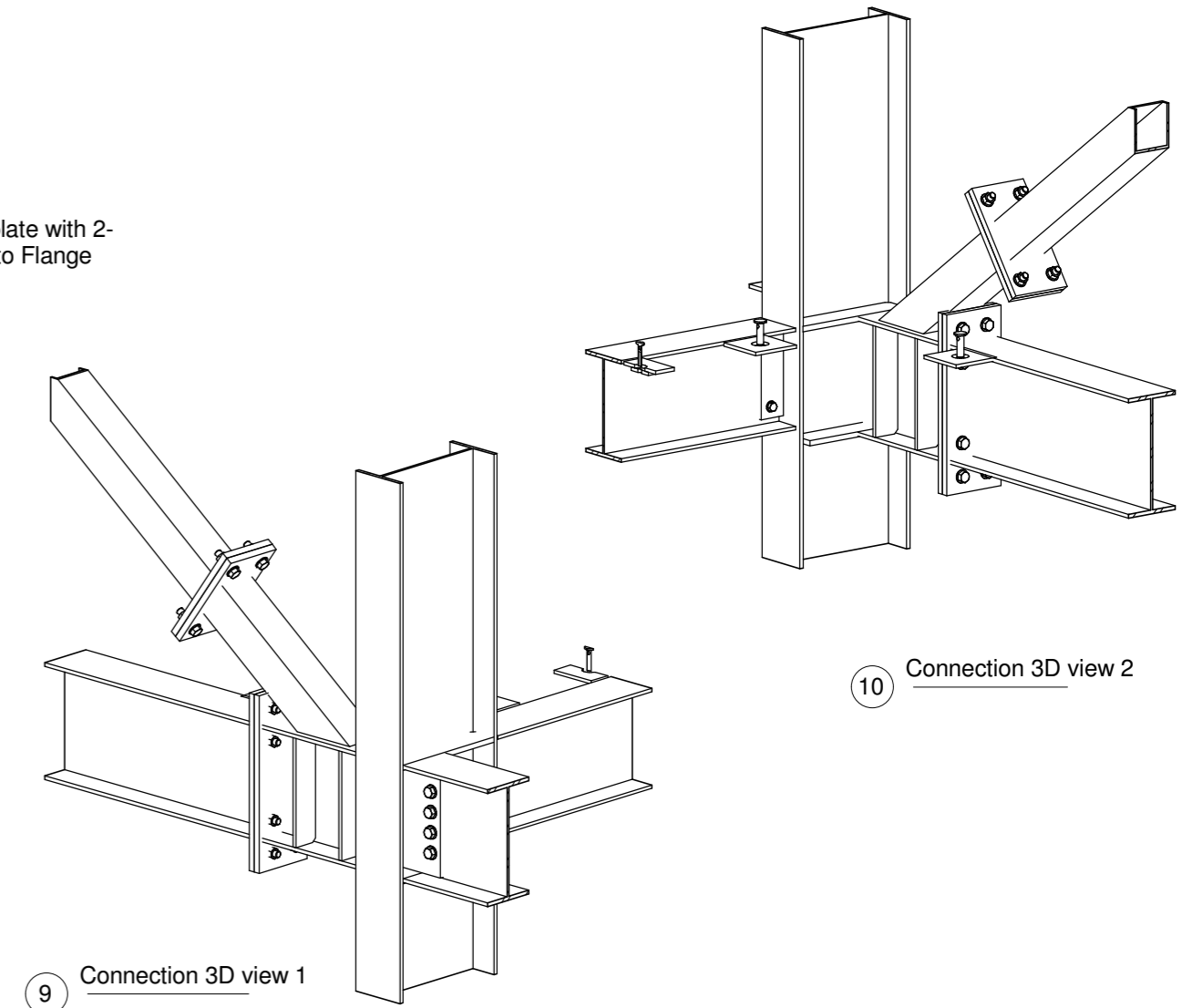
2 Midfloor Connection Detail  
1 : 20



5 Typical Web Connection Section  
1 : 20

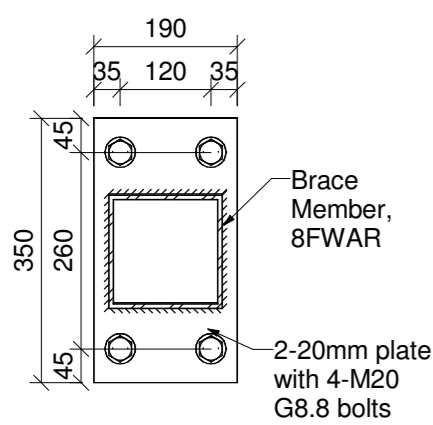


6 Midfloor 4 Bolt Shear Plate Conn.  
1 : 20

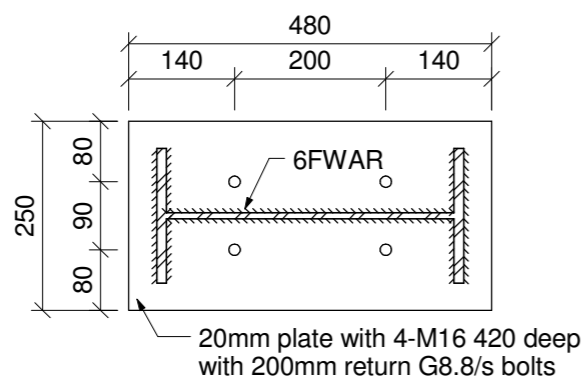


9 Connection 3D view 1

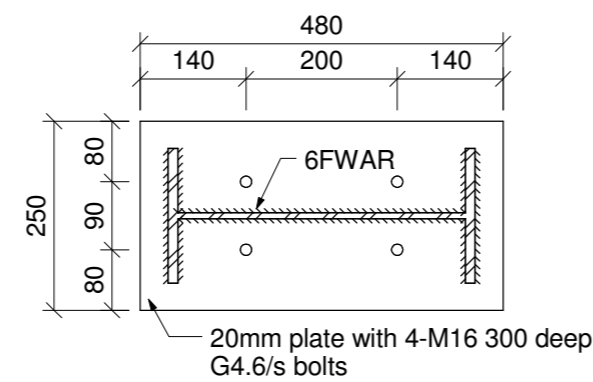
10 Connection 3D view 2



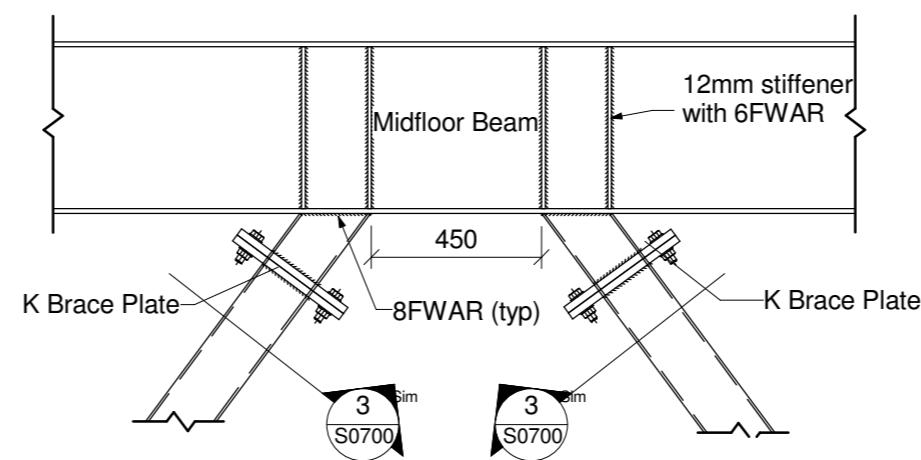
3 K Brace Splice Plate Detail  
1 : 10



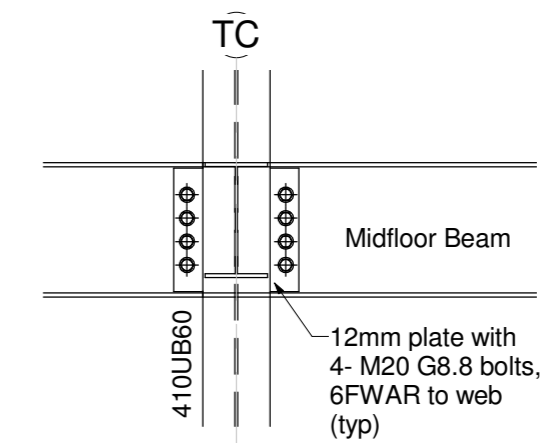
7 410 UB Base Plate (K Brace Legs)  
1 : 10



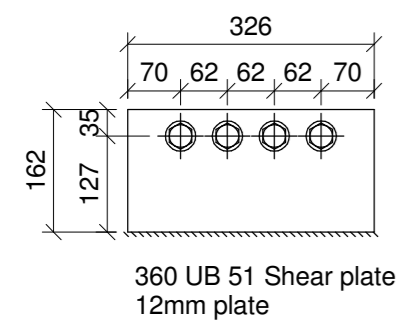
13 410 UB Base Plate (no K brace)  
1 : 10



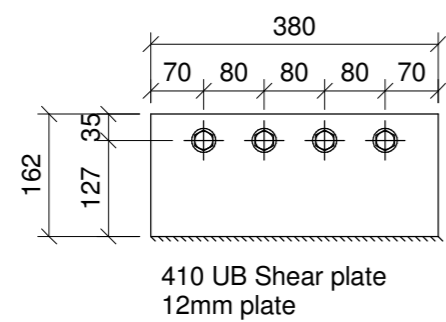
4 Typical Bracing Top Connection  
1 : 20



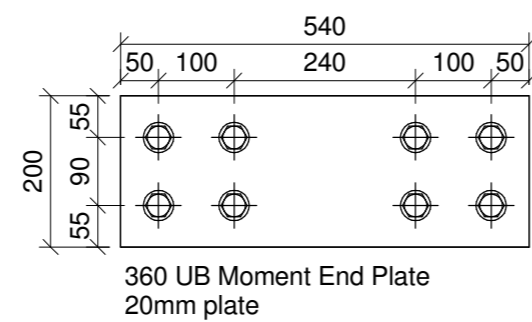
14 Midfloor Beam Conn 2  
1 : 20



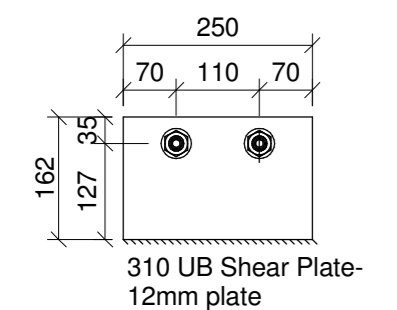
360 UB 51 Shear plate  
12mm plate



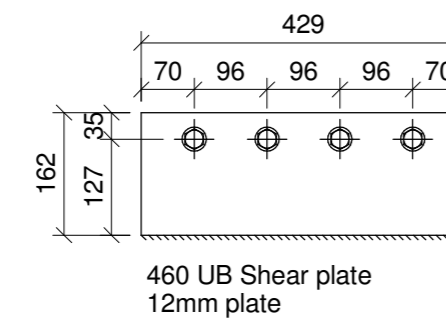
410 UB Shear plate  
12mm plate



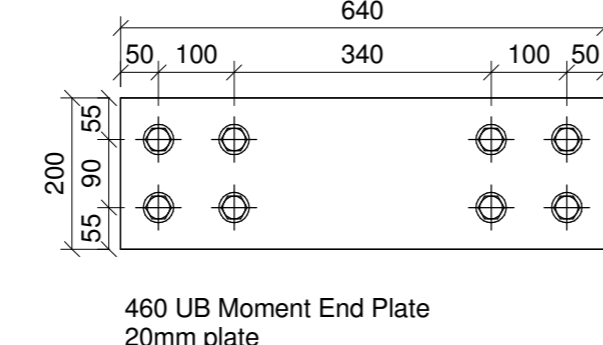
360 UB Moment End Plate  
20mm plate



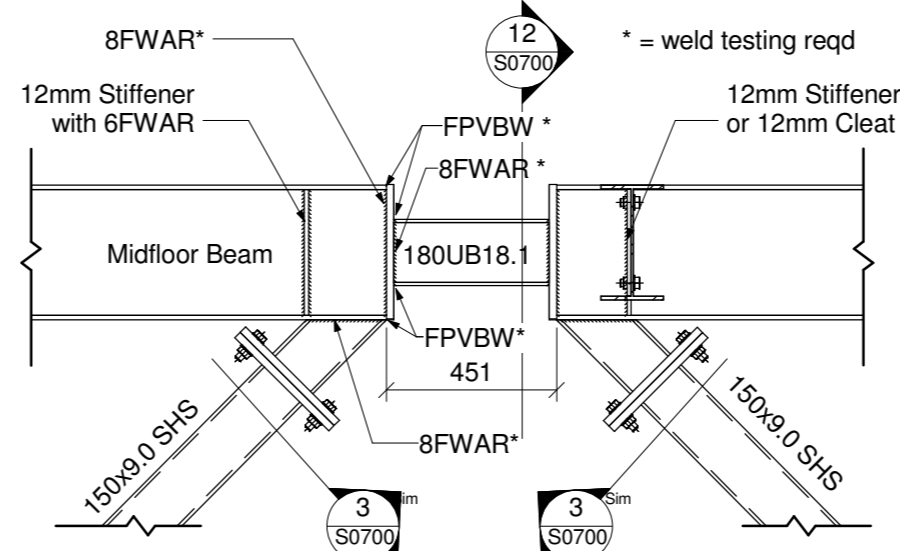
310 UB Shear Plate  
12mm plate



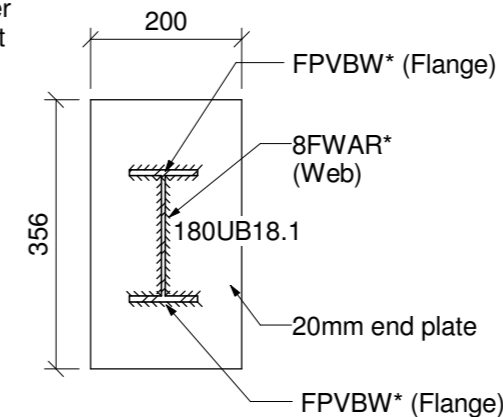
460 UB Shear plate  
12mm plate



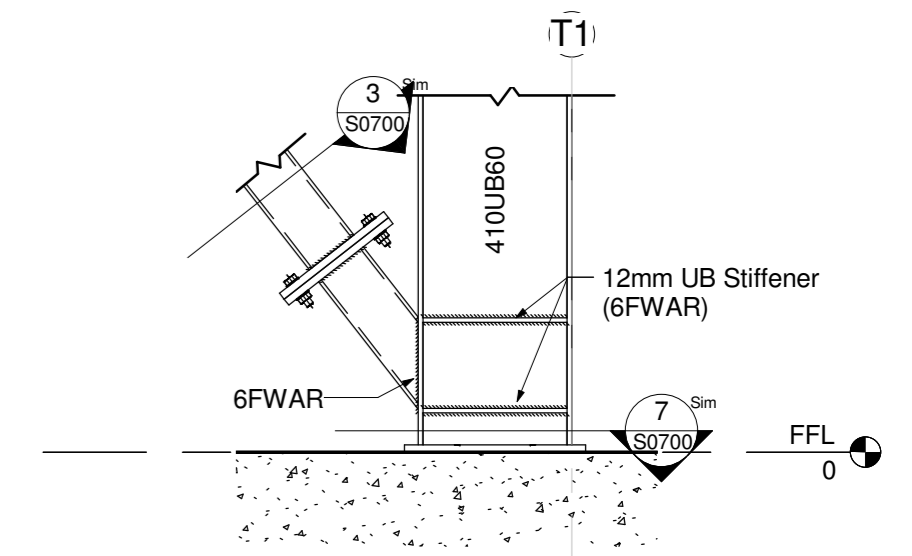
460 UB Moment End Plate  
20mm plate



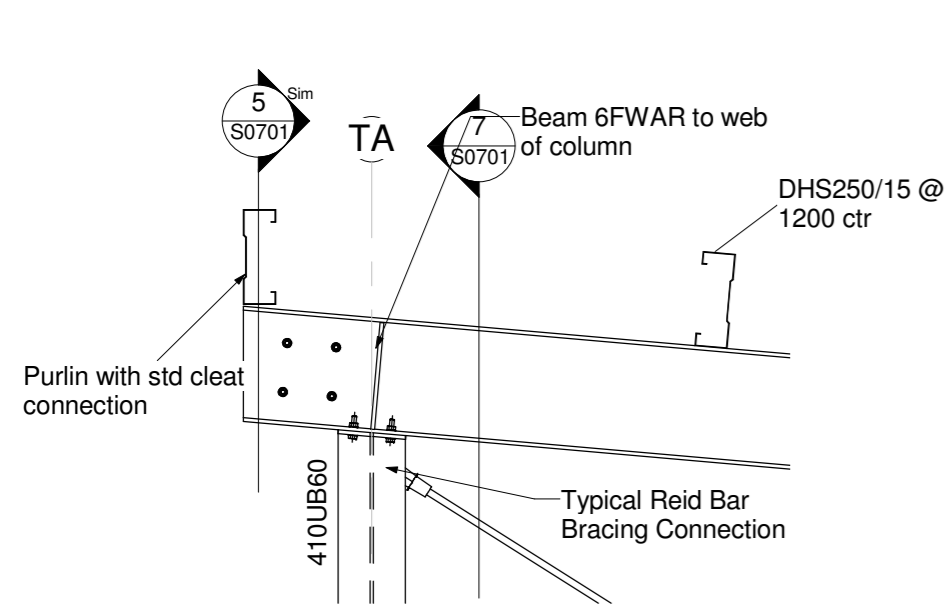
11 Typical Bracing with active Conn  
1 : 20



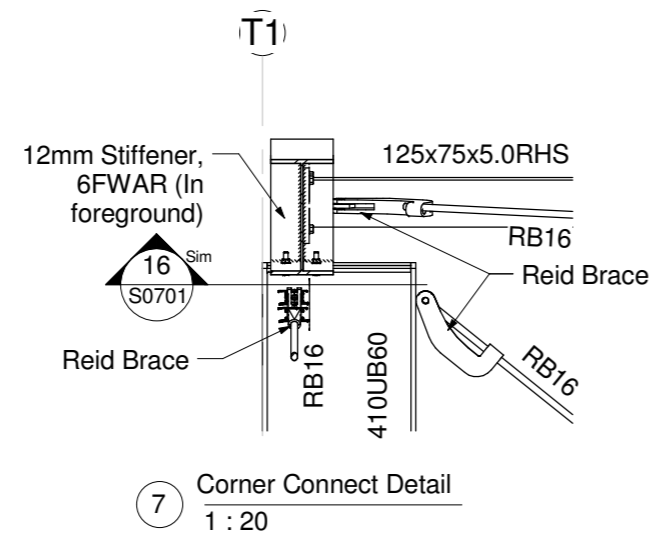
12 Active Connection  
1 : 10



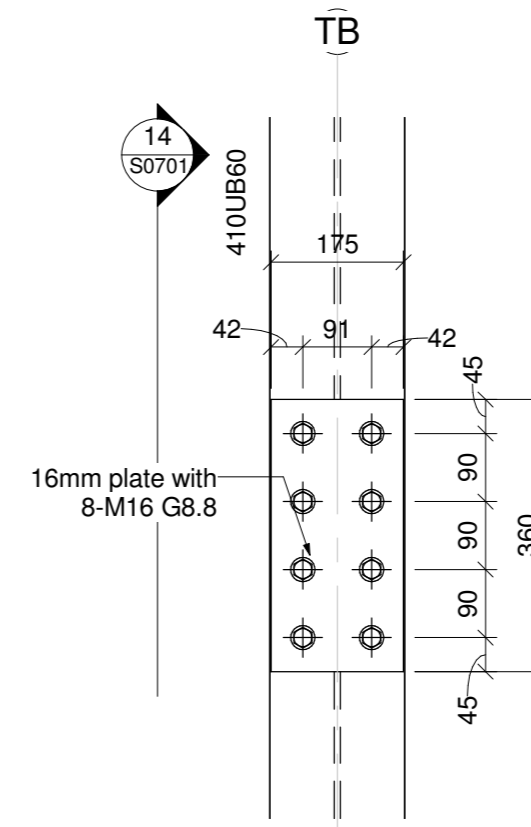
8 GF K Brace Conn.  
1 : 20



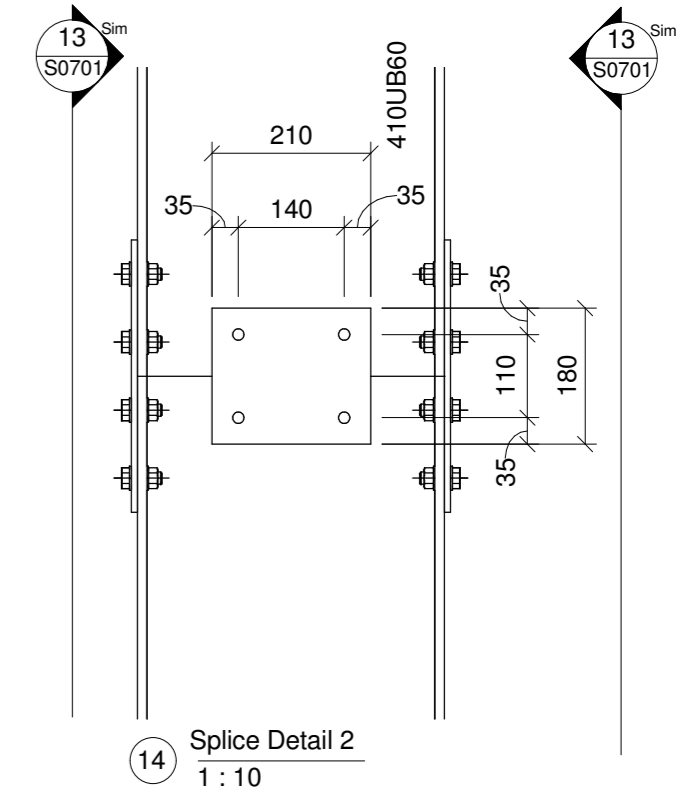
1 Apex Connection  
1 : 20



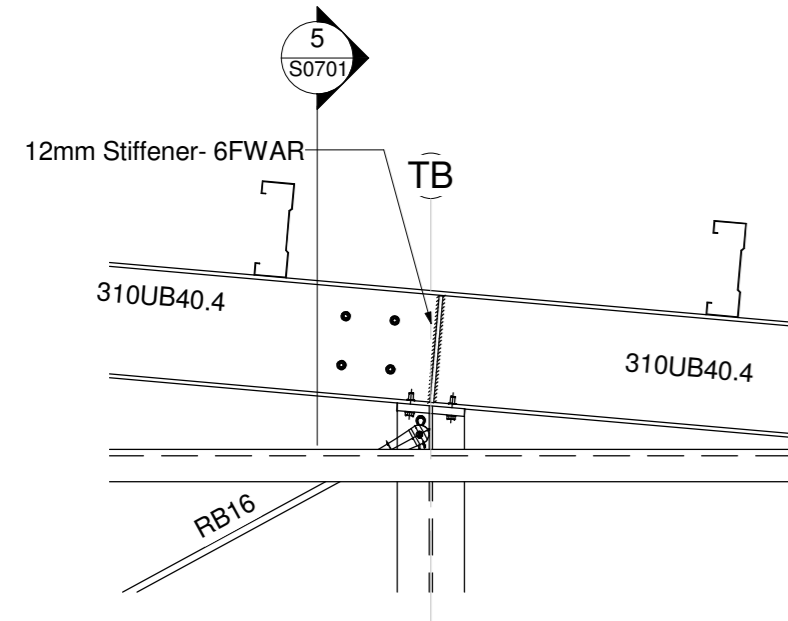
7 Corner Connect Detail  
1 : 20



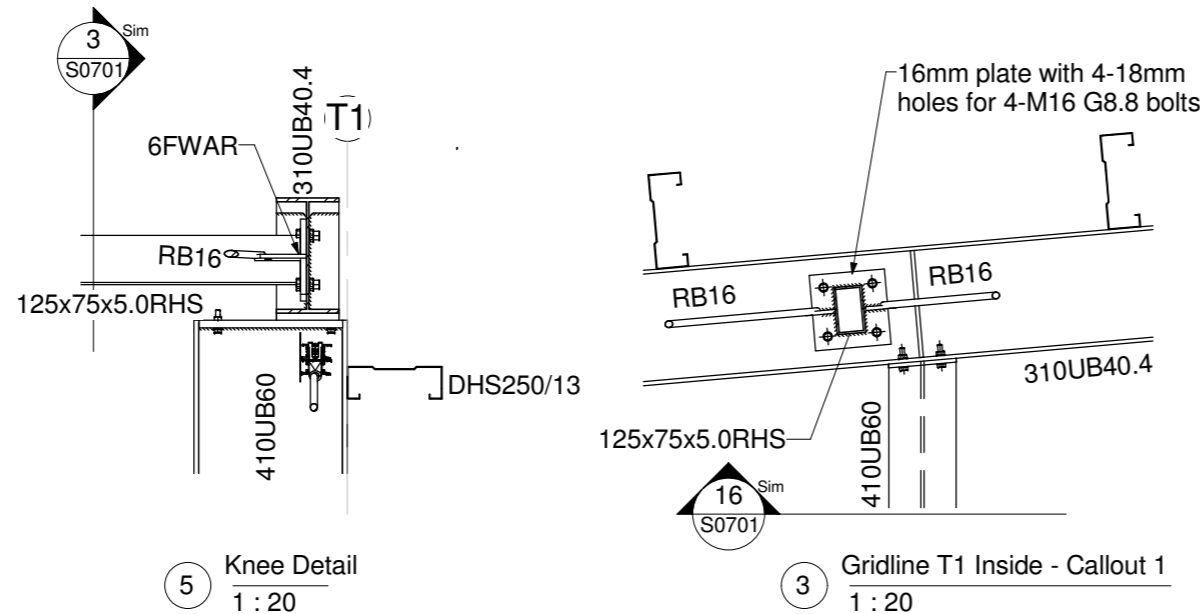
13 Splice Detail  
1 : 10



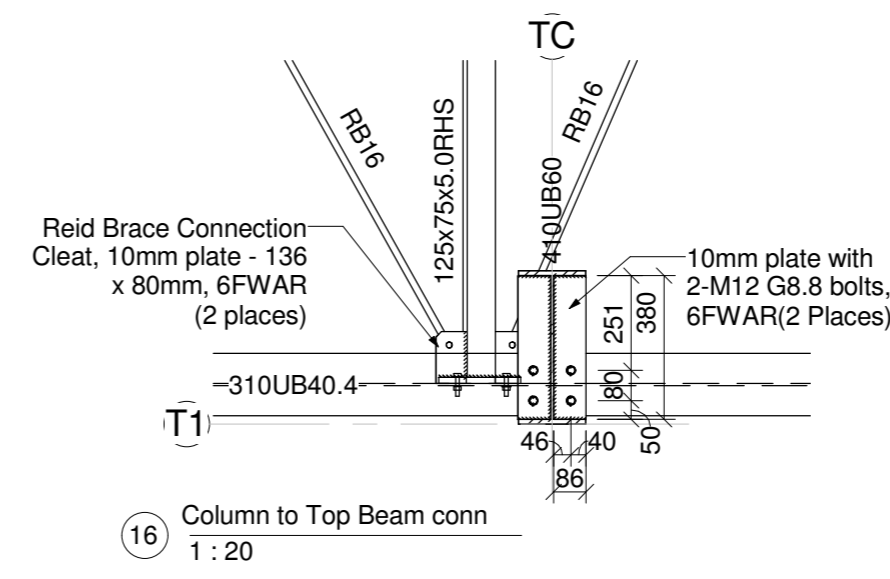
14 Splice Detail 2  
1 : 10



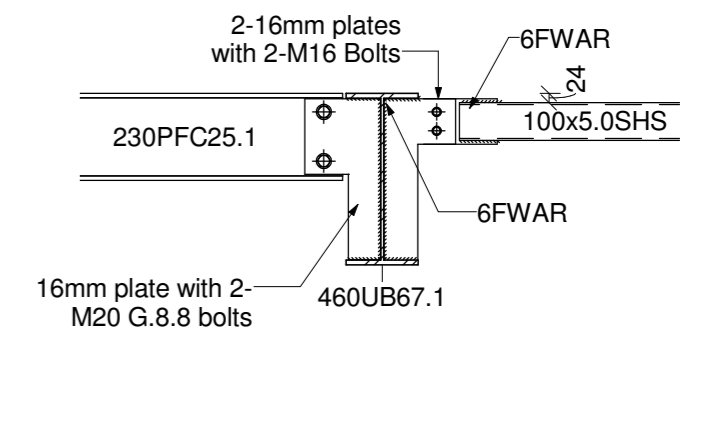
4 Mid Column Connection  
1 : 20



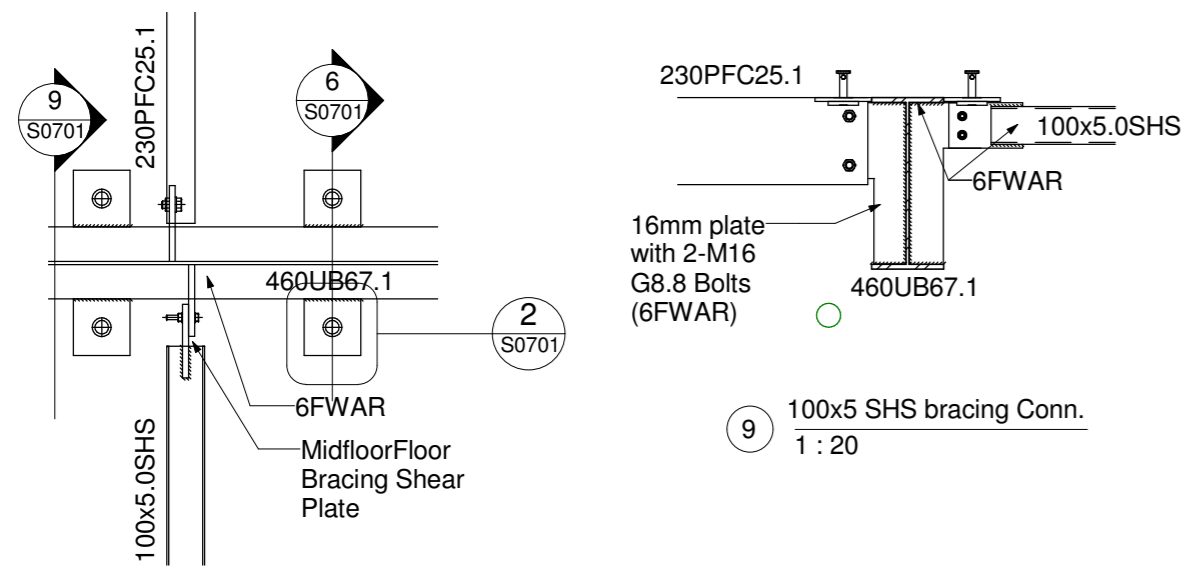
3 Gridline T1 Inside - Callout 1  
1 : 20



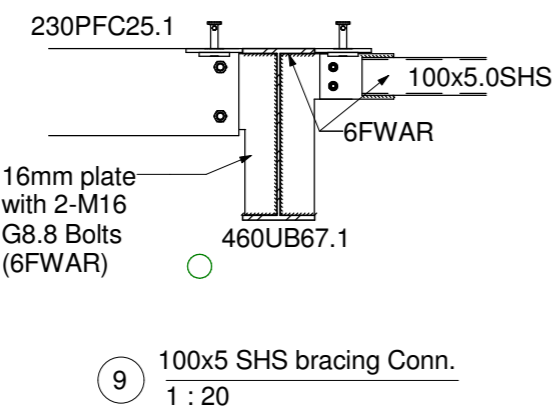
16 Column to Top Beam conn  
1 : 20



15 Midfloor bracing and PFC Conn  
1 : 20



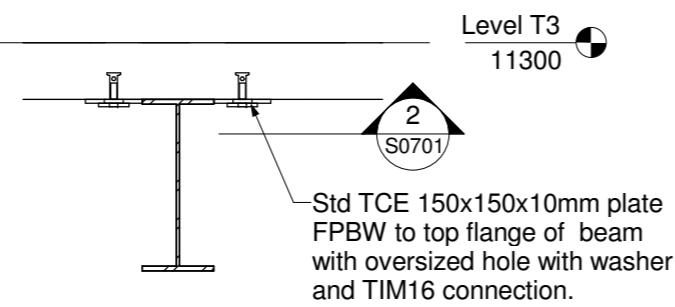
8 Midfloor Bracing Conn.  
1 : 20



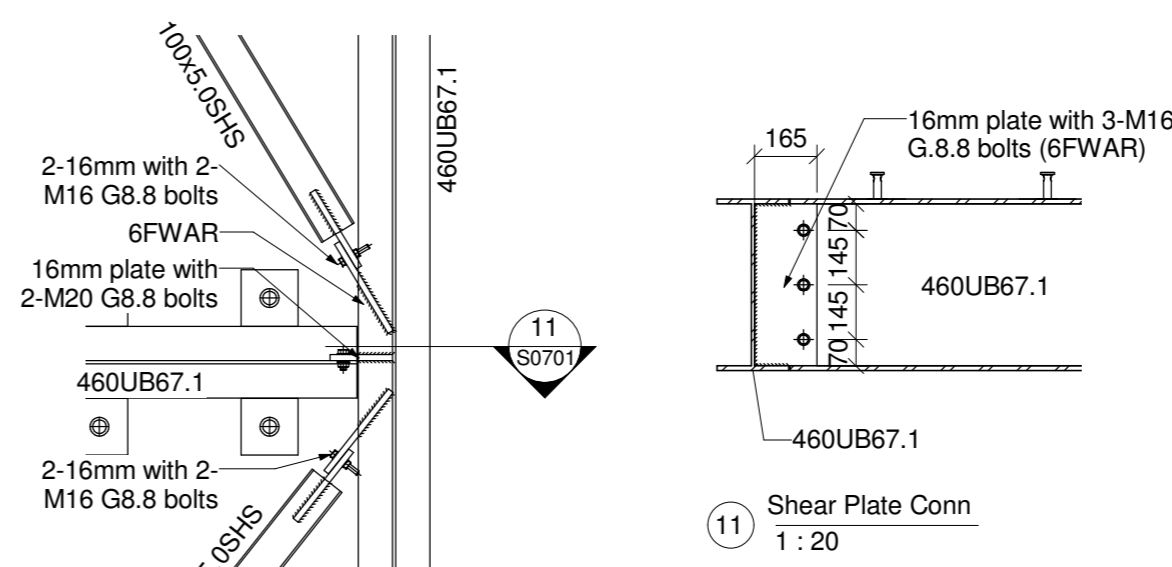
2 100x5 SHS bracing Conn.  
1 : 20

ONLY ON CLEATS AT THE END OF PRECAST PLANKS:  
6FW 2 sides parallel to beam  
Std TCE 150x150x10mm plate FPBW to top flange of beam with oversized hole with washer and TIM16 connection.

2 Cleat Weld Detail  
1 : 10

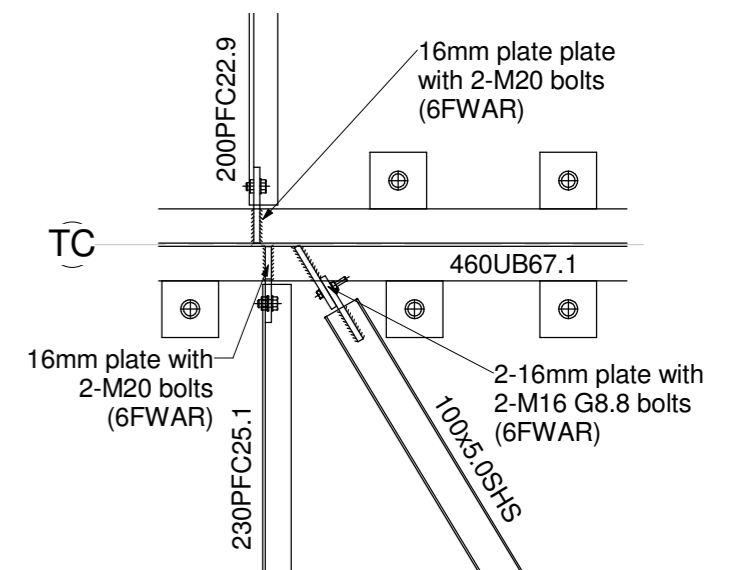


6 TIM Cross Section  
1 : 20

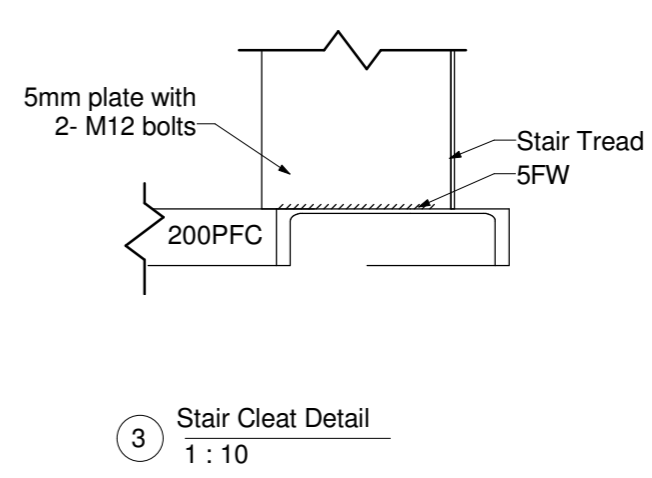
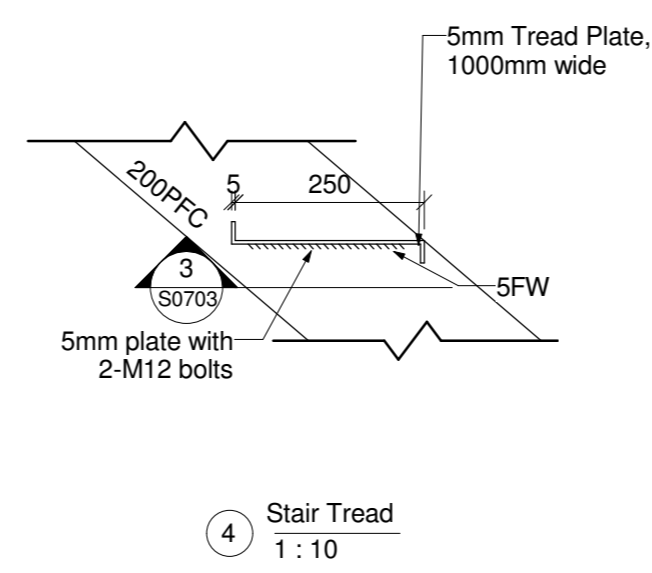
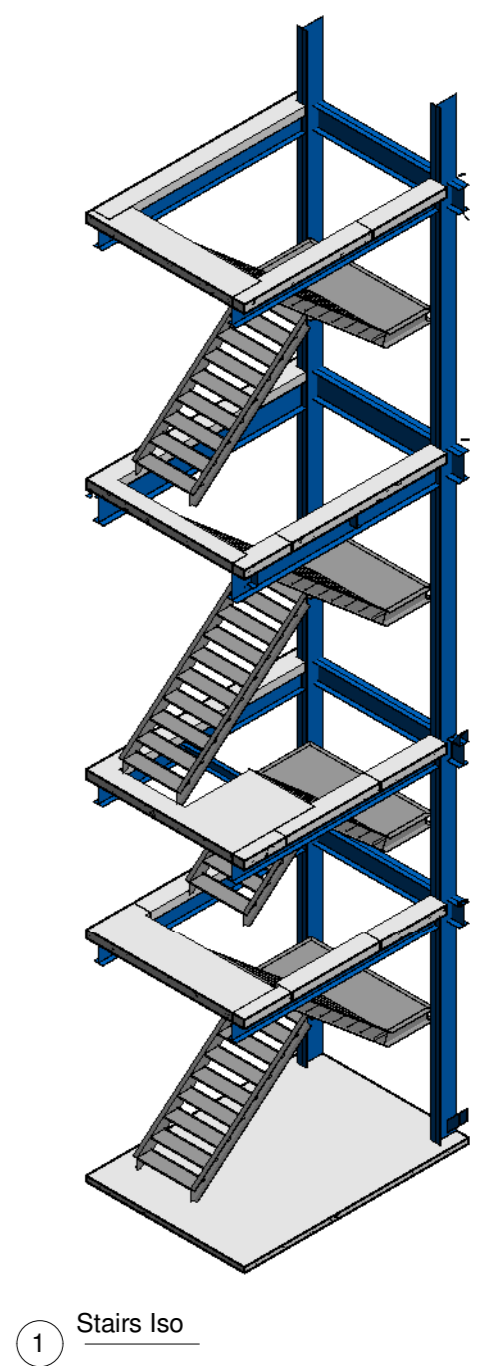
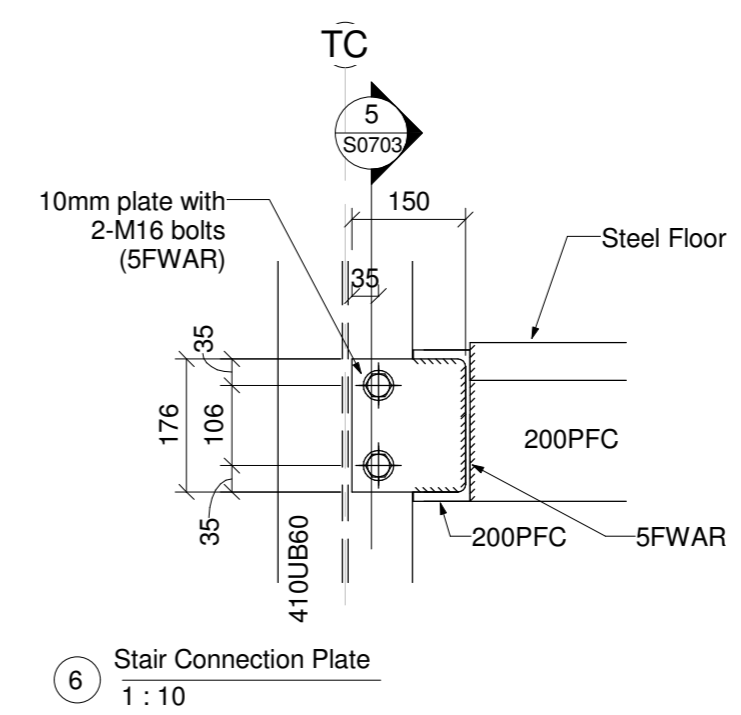
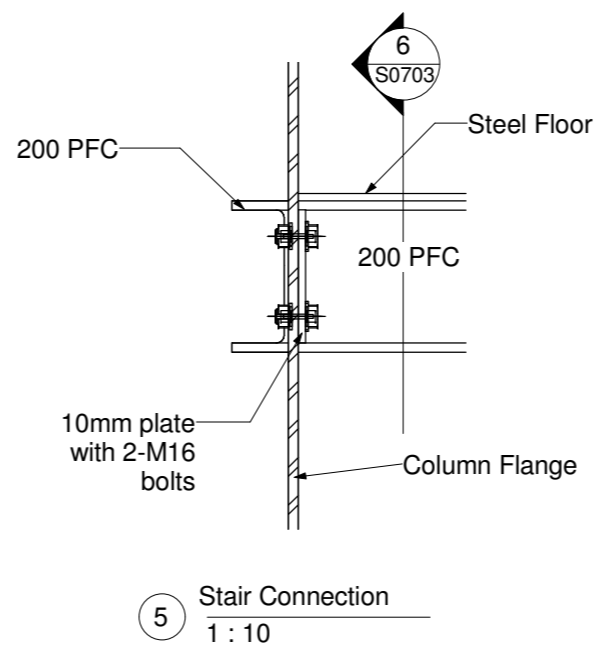
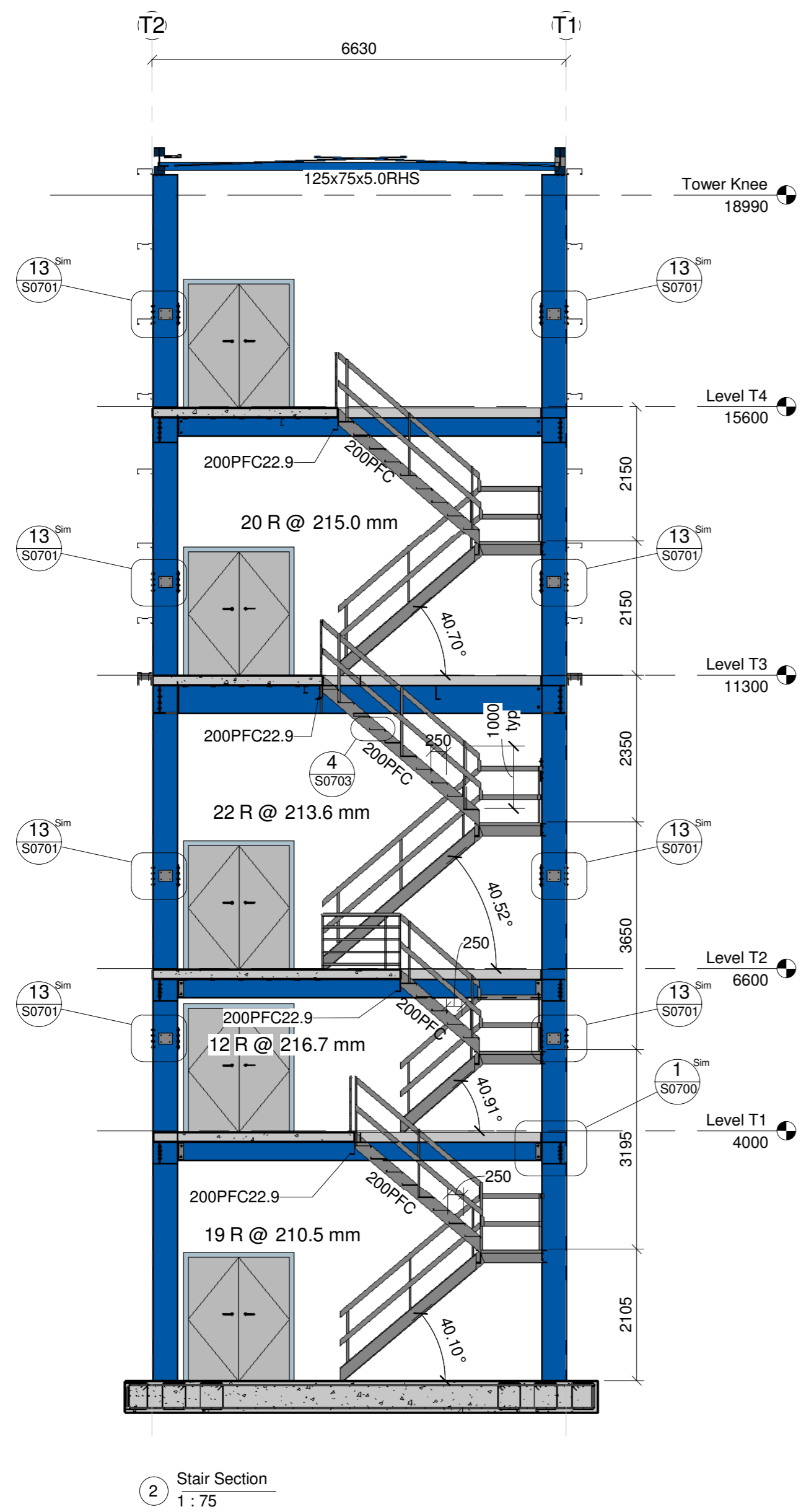


11 Shear Plate Conn  
1 : 20

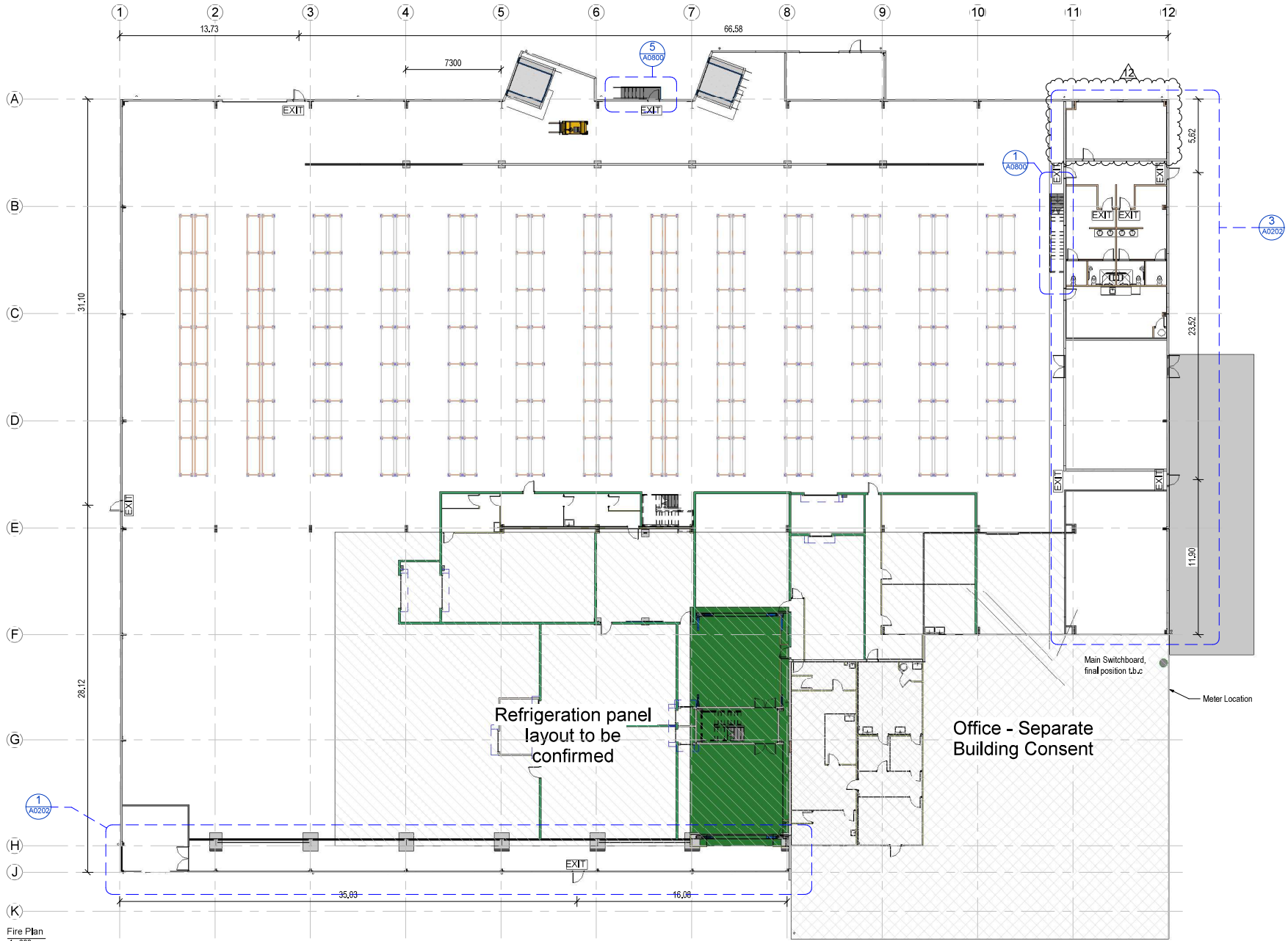
10 Midfloor Conn 2  
1 : 20



12 Struct Level T3 Midfloor - Callout 2  
1 : 20



ELEVATION KEY



Fire Plan  
1:200



PROJECT

Arch

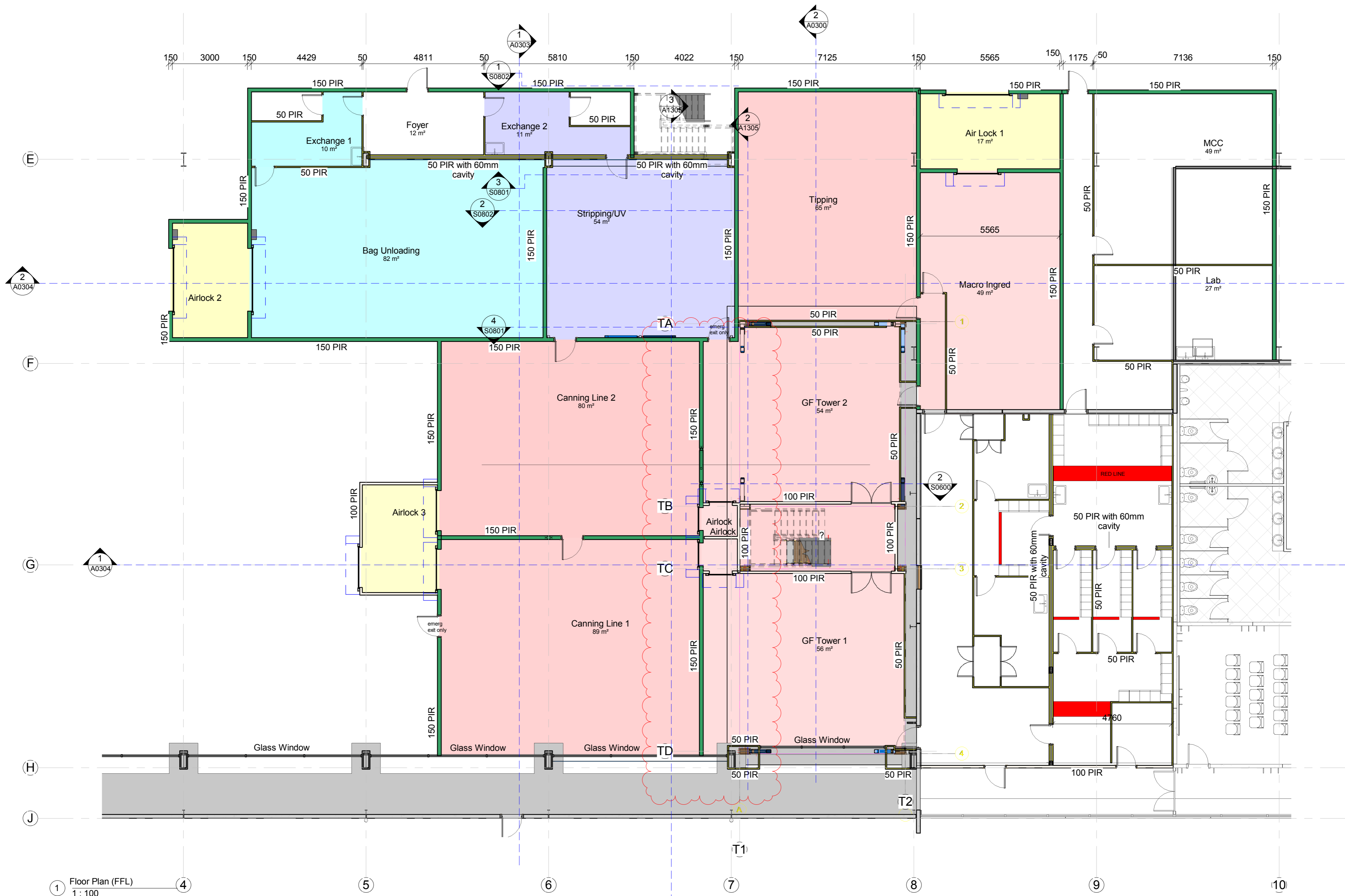
NZ Dairy Collaborative Group  
Infant Formula Blending Plant

9 Ashford Ave., Ashburton

Rev#	Amendments	Date	SCALE	As indicated@	JOB #
12	Mods to operational fitout	28/07/16	A2	C. White	12412
			APPROVED BY	DATE	
			A. Cloake	23/01/16	
				REV	12
				<b>Ground Floor</b>	<b>A0200</b>
Please note: All dimensions to be verified on site					
					Page size A2

Thompson Engineering 2002 Ltd | PO Box 2081, Washdyke - Timaru | 10s Meadows Road - Timaru  
PH 0800 688 716 | F (03) 688 7168 | www.thompsonengineering.co.nz | design@thompsonengineering.co.nz

All Drawings property of Thompson Engineering 2002 Ltd



1 Floor Plan (FFL)  
1: 100



PROJECT  
**Arch**

**NZ Dairy Collaborative Group  
Tower Extension**

9 Ashford Ave, Ashburton

All Drawings property of Thompson Engineering 2002 Ltd

Rev#	Amendments	Date
5	AHU Platform and Stairs	20/03/16

SCALE	JOB #
1: 100 @ A2	12630
<b>DRAWN BY</b> B Holloway	<b>DATE</b> 06/09/17
<b>CHECKED BY</b>	<b>REV</b> 5
<b>Fit Out Ground Floor Plan</b>	
<b>A0200</b>	
Please note: All dimensions to be verified on site	
Paper size: A2	



## Contract Instruction



Architype Ltd.  
7 Bath Street  
Dunedin Central 9016

(t) 03-552-0621  
(m) 021 069 2404  
info@architype.co.nz  
www.architype.co.nz

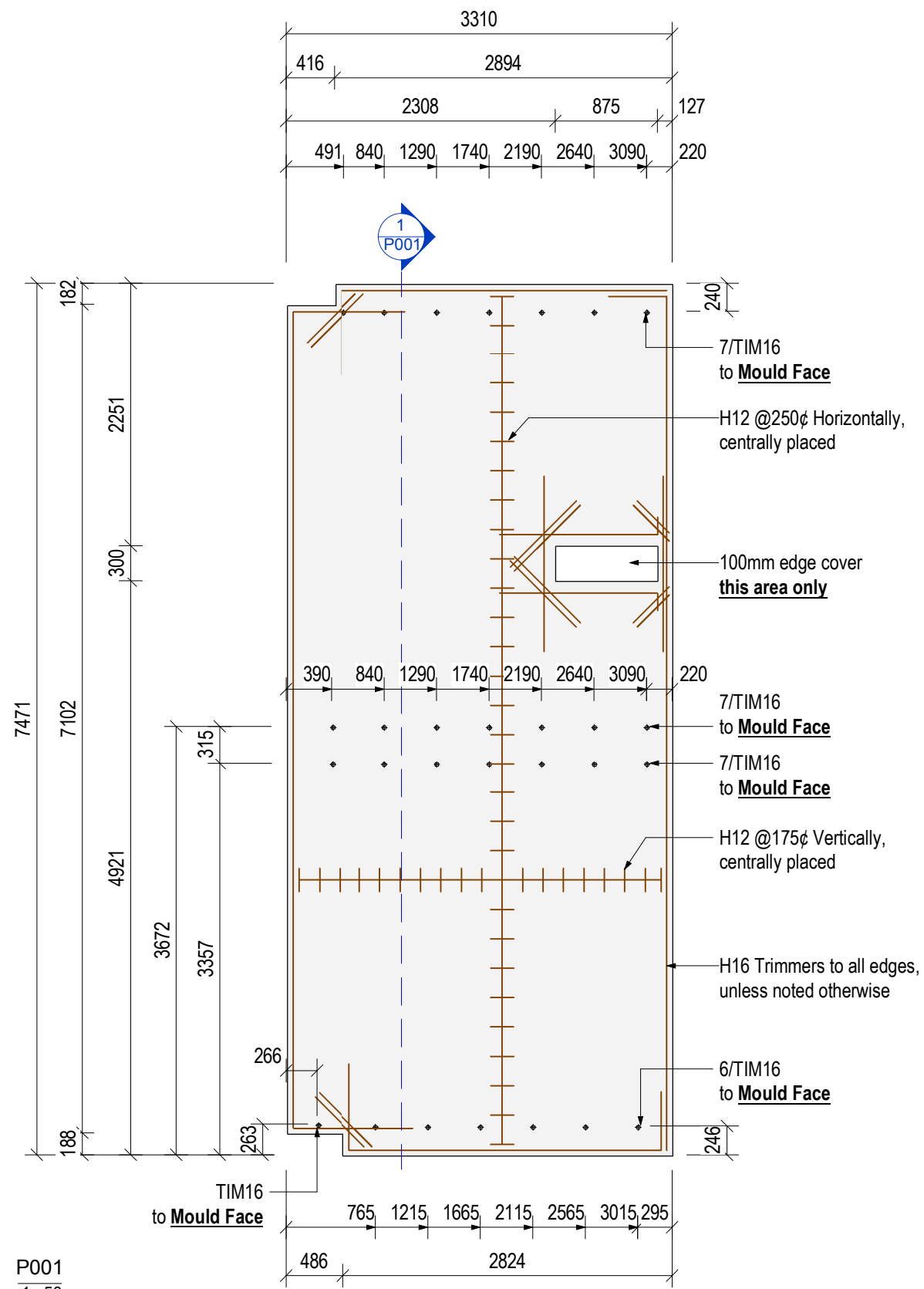
project	<b>NZ DAIRY INFANT FORMULA BLENDING PLANT UTILITIES FITOUT</b>	file ref.	1504/4
date	<b>18 MAY 2017</b>	pages (inc attach).	<b>2</b>
issued by:	<b>MW</b>	Approved	<b>TR</b>
issued to:	<input checked="" type="checkbox"/> <b>THOMPSON CONSTRUCTION AND ENGINEERING- EMILY</b>		
copies to:	<input checked="" type="checkbox"/> <b>NZ DAIRY- SOLOMON</b>		
	<input checked="" type="checkbox"/> <b>WARD CONSULTING- GRAHAM</b>		

Consecutive No. **CI-02**

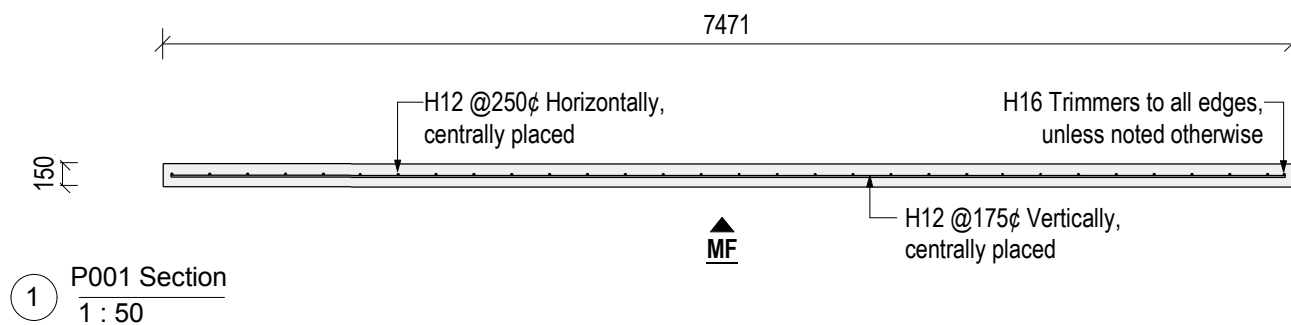
**Ref: Kitchenette Layout**

- Kitchenette Layout shall be as attached

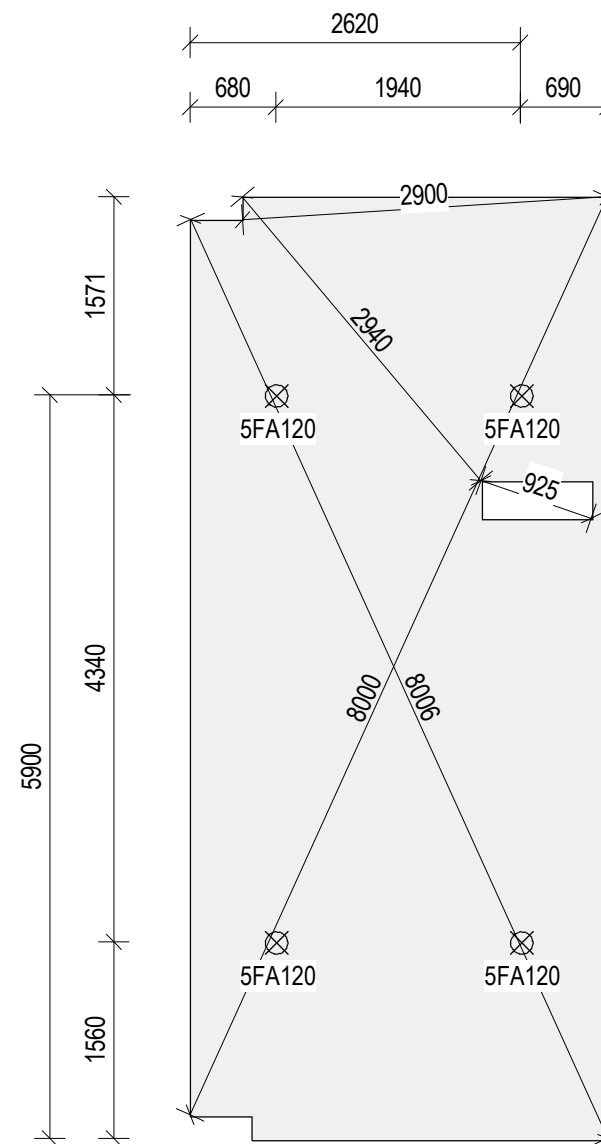




P001  
1 : 50



1 P001 Section  
1 : 50



P001 Lifting Design  
1 : 60

# PRECAST PANEL FABRICATION DRAWINGS



148 Meadows Road, Washdyke  
Office 03 6887534  
Design Team 03 6887164

All Drawings property of Thompson Precast

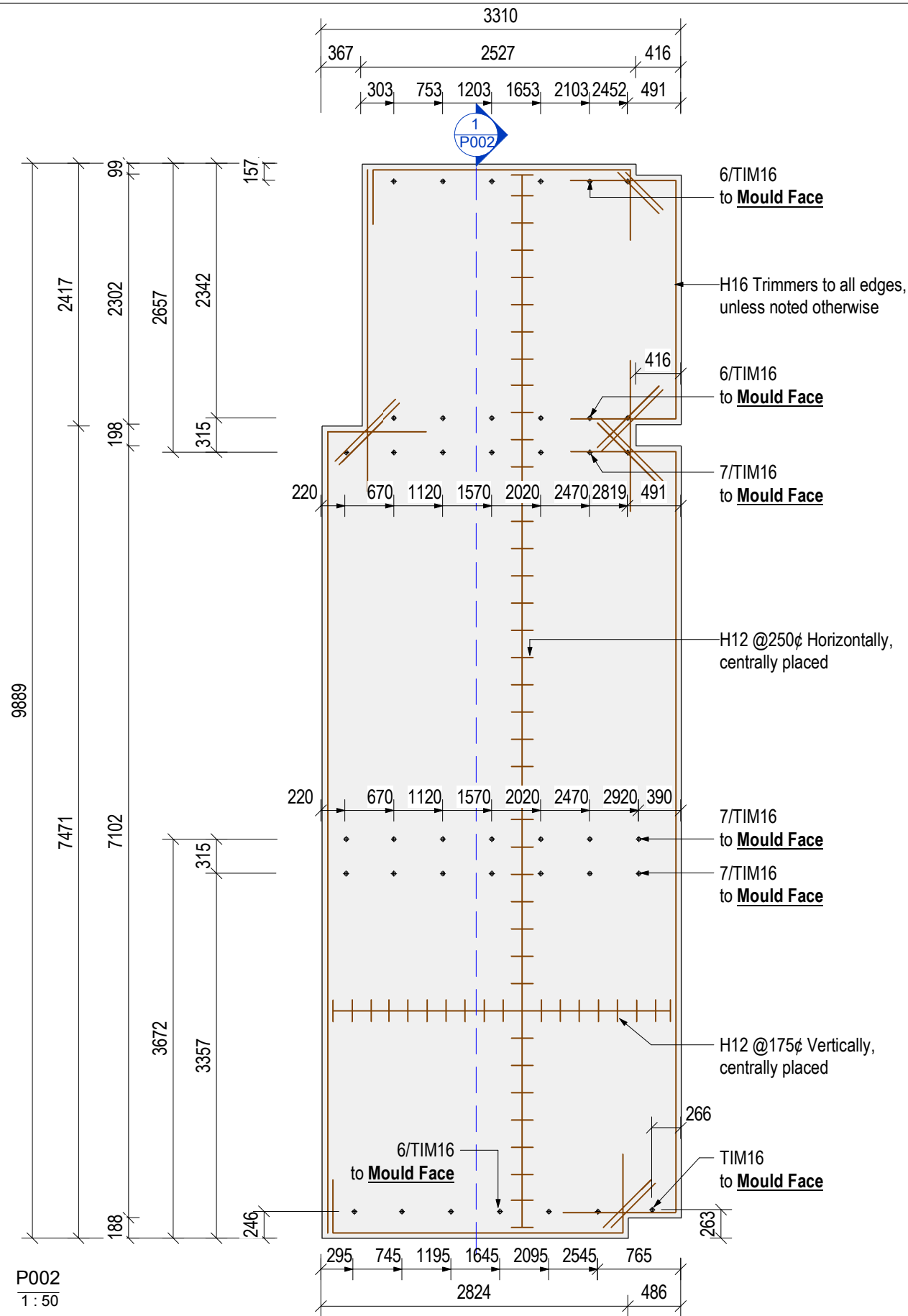
1. All materials and workmanship to be in accordance with the NZ building code
2. The client shall verify all dimensions on site before commencing work
3. All concrete work shall comply with NZS3109
4. Cover to reinforcing is to be 50mm min or as shown. Tolerance  $\pm 5$ mm

NZ Dairy Collaborative Group

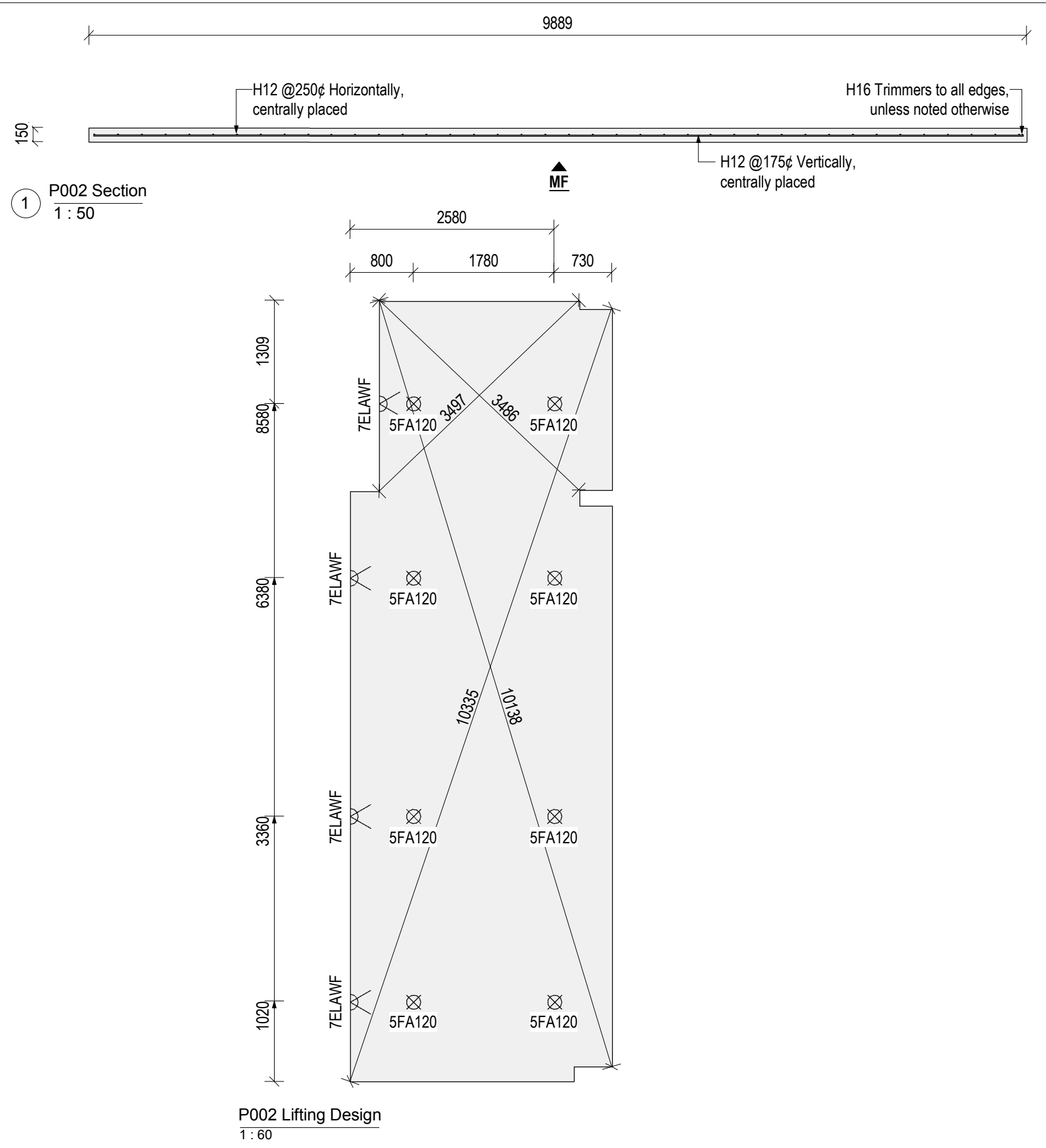
Tower

9 Ashford Ave, Ashburton


Panel Information		Approval and Date	Drawing Details	
Weight (t)	9.11	No req 1	Q A onsite	DRAWN BY T. Langr DATE 02/12/16
Volume	3.64 m <sup>3</sup>	Finish	Operations	APPROVED BY DS, AC, CP, ML, JB, BH Dwg Sheet P001
Thickness	150mm	MPa (at 28 days) 35MPa min.	Final	ISSUE PRELIM JOB # PC11720
		MPa (at Lift) 15MPa	Special Additives	SCALE As indicated Panel # Panel 001
Please note: All panels are drawn looking down on the trowel face, Unless noted otherwise.				
				Paper size: A3

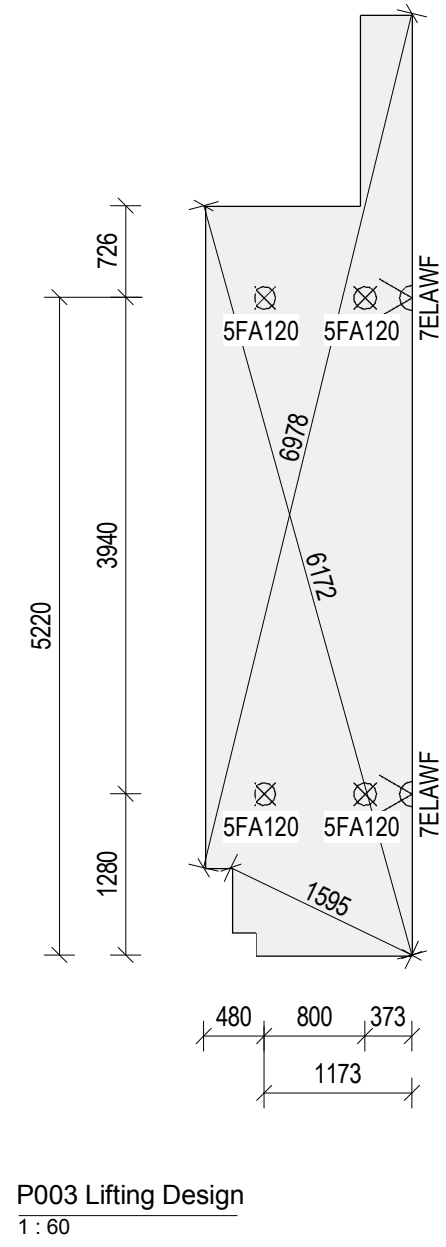
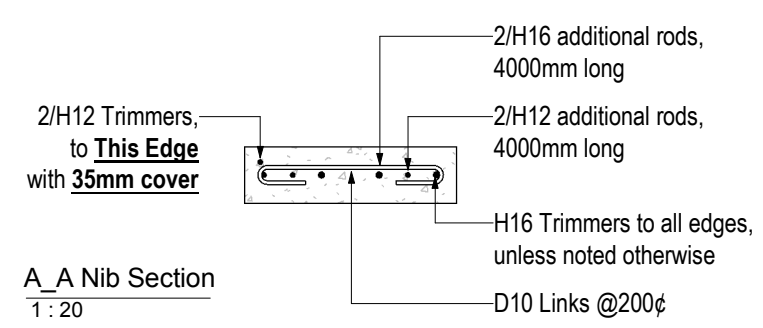
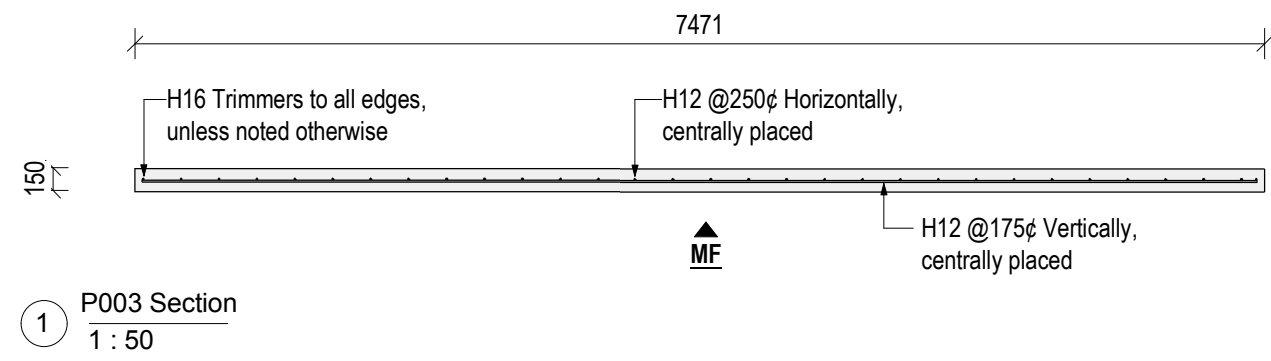
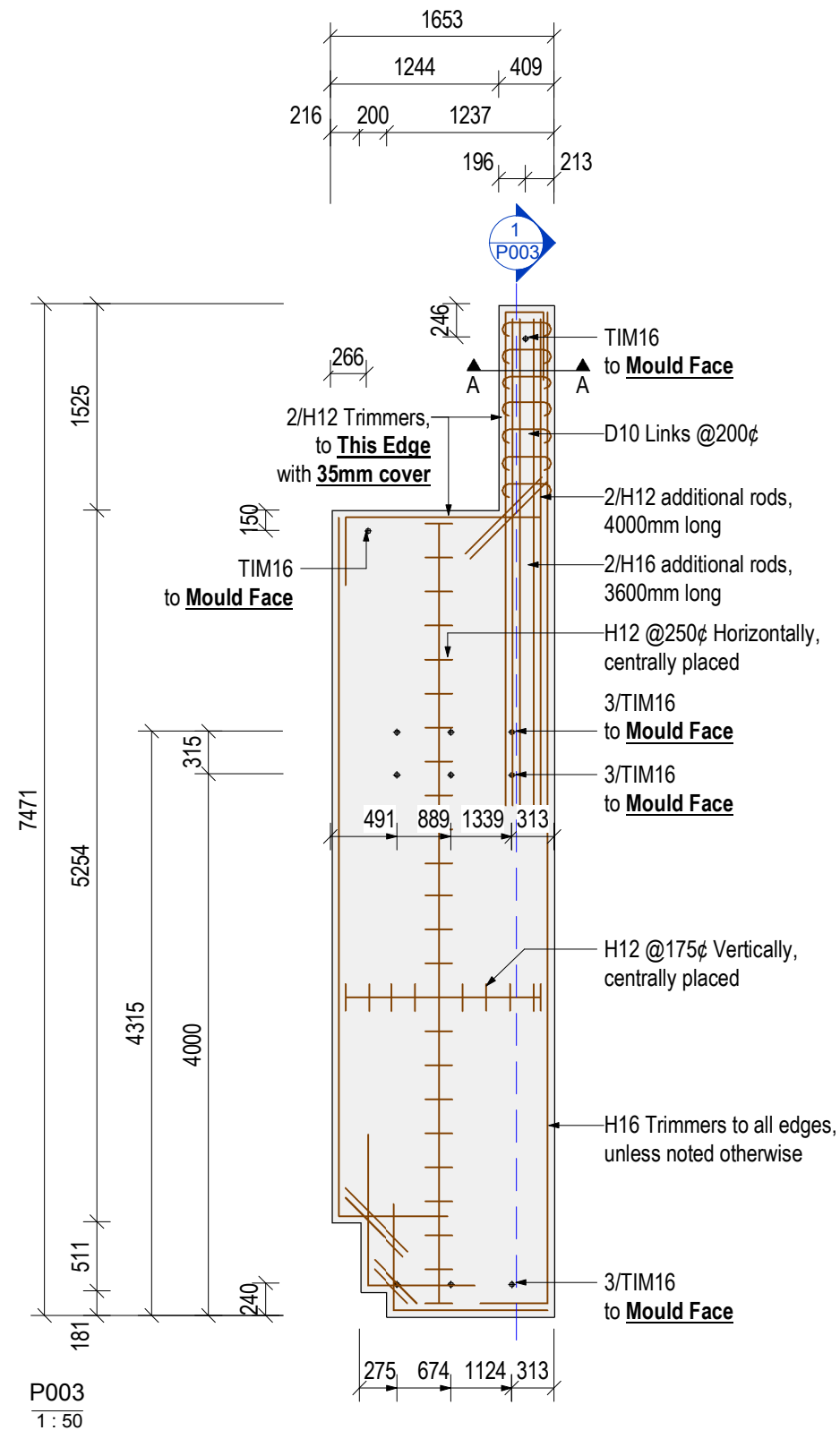


P002  
1 : 50



P002 Lifting Design  
1 : 60

PRECAST PANEL FABRICATION DRAWINGS		Panel Information	Approval and Date	Drawing Details				
 <p>148 Meadows Road, Washdyke Office 03 6887534 Design Team 03 6887164 All Drawings property of Thompson Precast</p>	<p>1. All materials and workmanship to be in accordance with the NZ building code 2. The client shall verify all dimensions on site before commencing work 3. All concrete work shall comply with NZS3109 4. Cover to reinforcing is to be 50mm min or as shown. Tolerance ± 5mm</p>	<p>NZ Dairy Collaborative Group <b>Tower</b> 9 Ashford Ave, Ashburton</p>		<p>Weight (t) <b>11.86</b></p>	<p>No req <b>1</b></p>	<p><b>Q A onsite</b></p>	<p>DRAWN BY <b>T. Langr</b></p>	<p>DATE <b>02/12/16</b></p>
		<p>Volume <b>4.74 m<sup>3</sup></b></p>	<p>Finish</p>	<p><b>Operations</b></p>	<p>APPROVED BY <b>DS, AC, CP, ML, JB, BH</b></p>	<p>Dwg Sheet <b>P002</b></p>		
		<p>Thickness <b>150mm</b></p>	<p>MPa (at 28 days) <b>35MPa min.</b></p>	<p><b>Final</b></p>	<p>ISSUE <b>PRELIM</b></p>	<p>JOB # <b>PC11720</b></p>		
			<p>MPa (at Lift) <b>15MPa</b></p>	<p><b>Special Additives</b></p>	<p>SCALE <b>As indicated</b></p>	<p>Panel # <b>Panel 002</b></p>		
<p>Please note: All panels are drawn looking down on the trowel face, Unless noted otherwise.</p>						<p>Paper size: <b>A3</b></p>		



**PRECAST PANEL FABRICATION DRAWINGS**

**THOMPSON**  
PRECAST CONCRETE

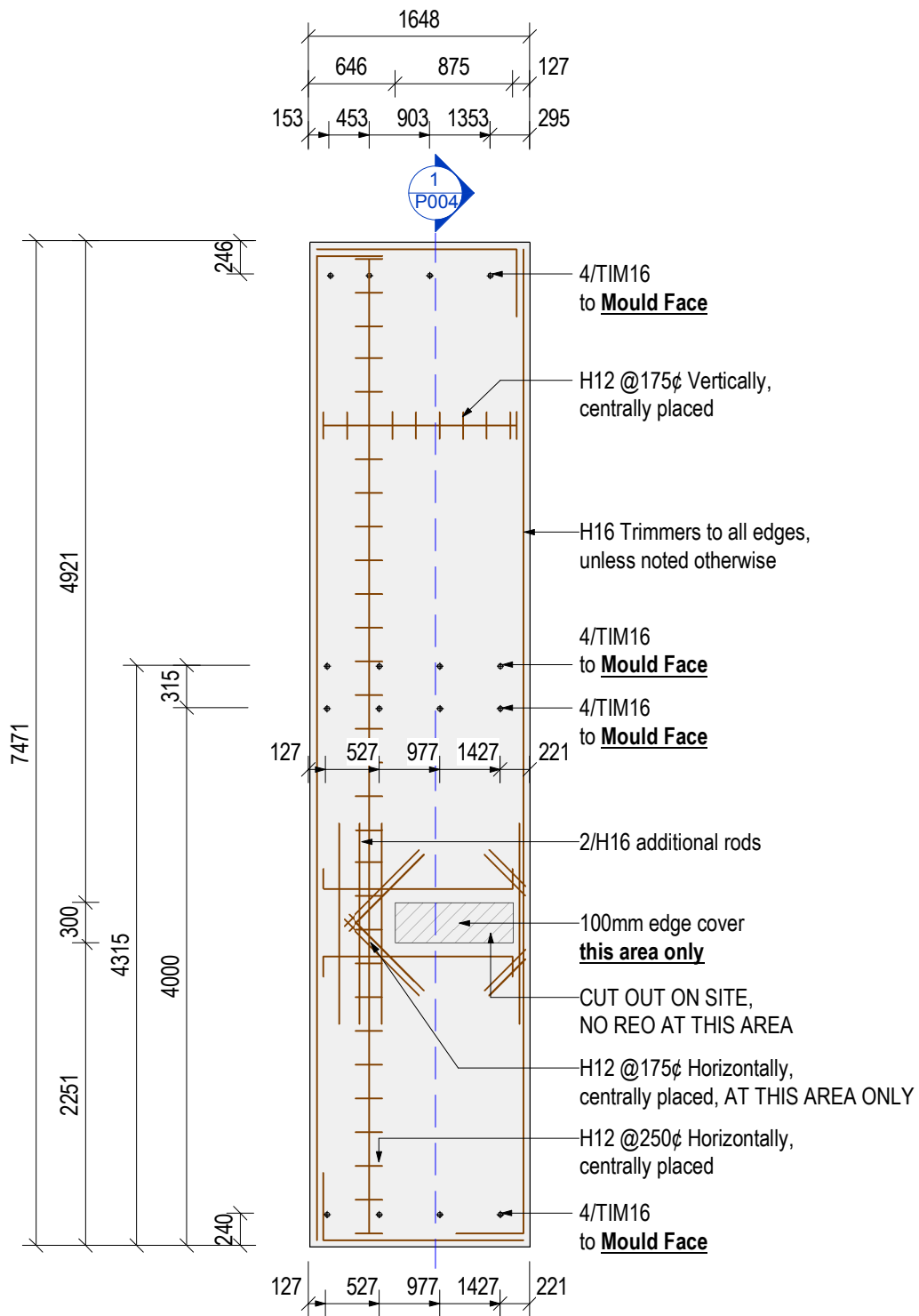
148 Meadows Road, Washdyke  
Office 03 6887534  
Design Team 03 6887164

All Drawings property of Thompson Precast

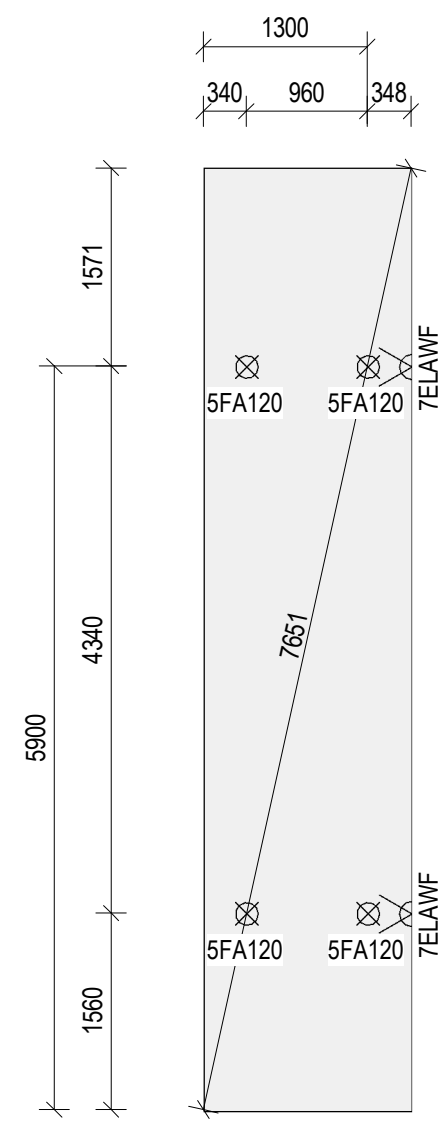
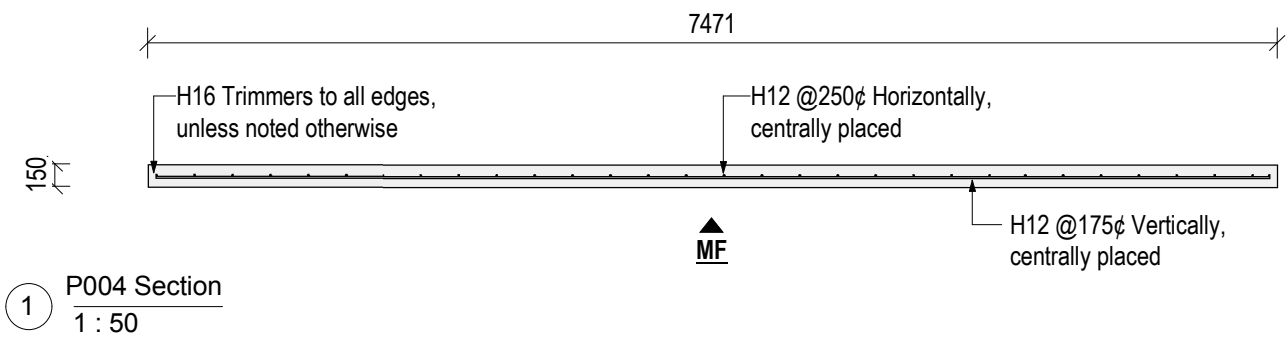
- All materials and workmanship to be in accordance with the NZ building code
- The client shall verify all dimensions on site before commencing work
- All concrete work shall comply with NZS3109
- Cover to reinforcing is to be 50mm min or as shown. Tolerance ± 5mm

NZ Dairy Collaborative Group  
**Tower**  
 9 Ashford Ave, Ashburton

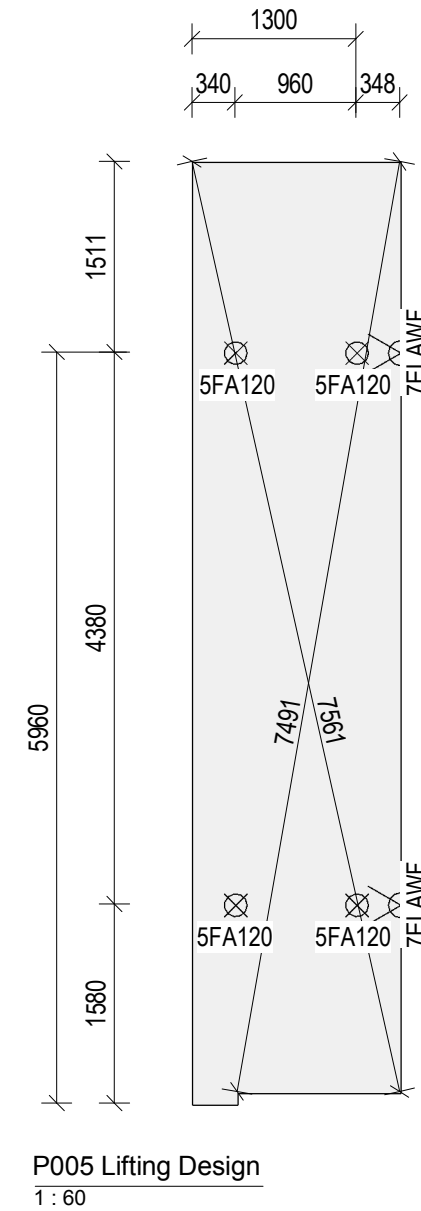
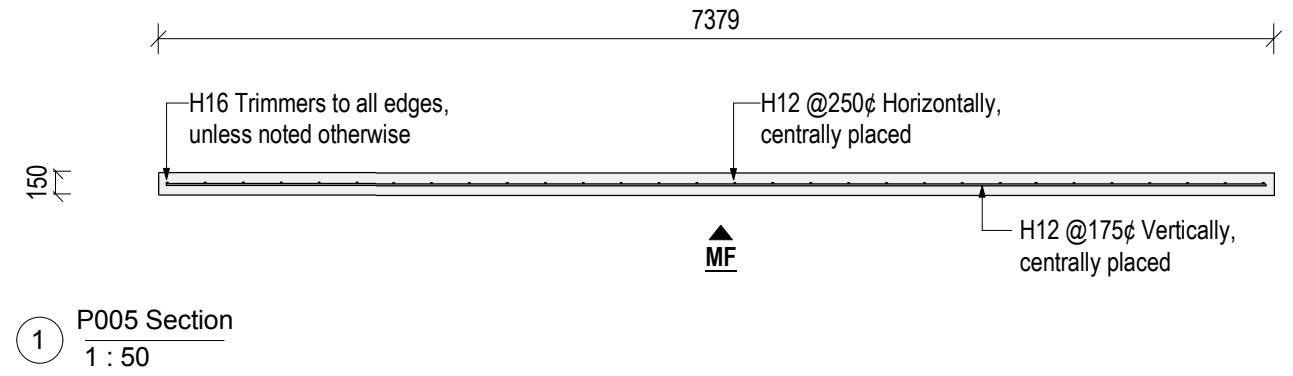
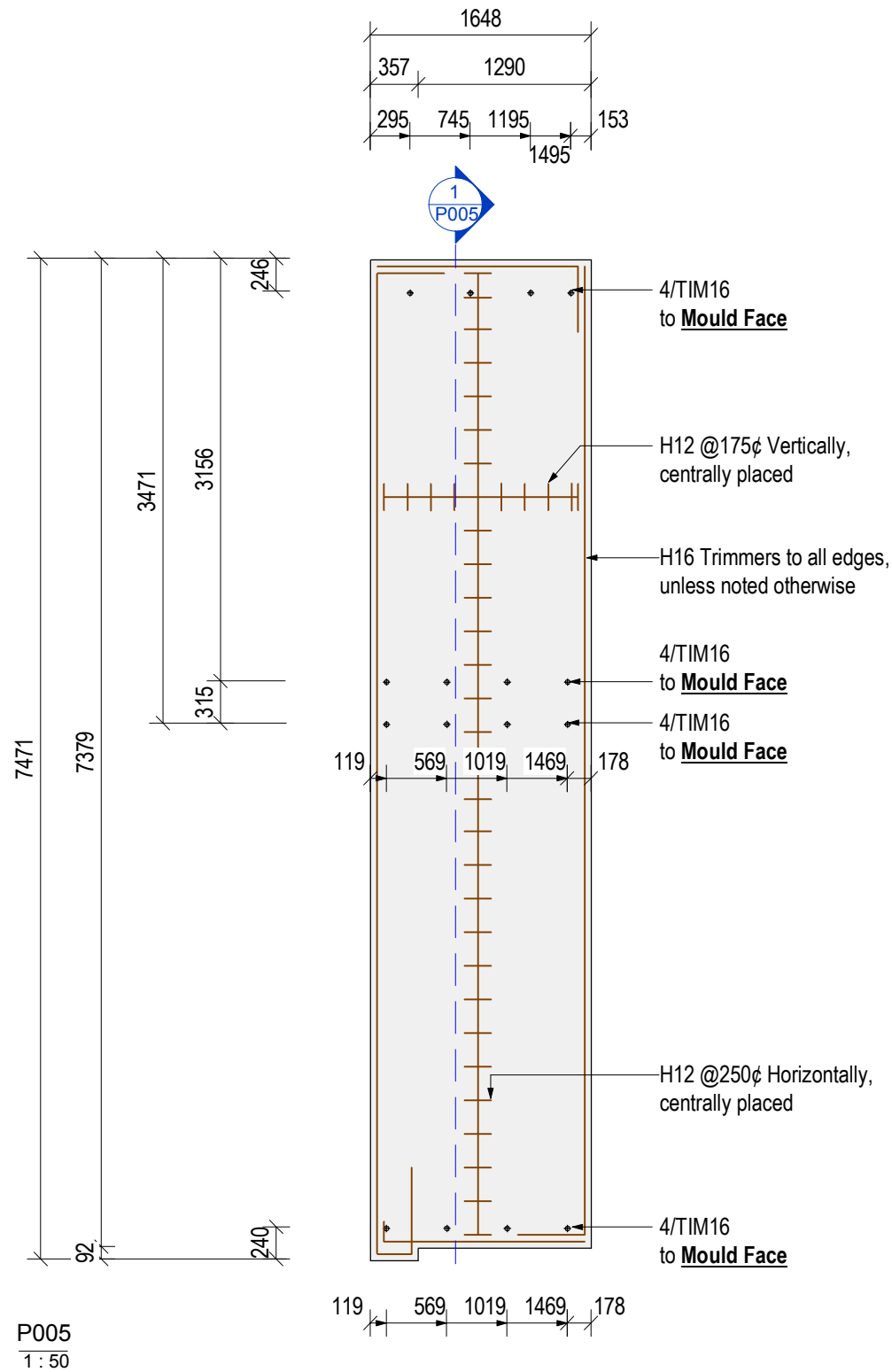
Panel Information		Approval and Date	Drawing Details	
Weight (t)	3.85	No req 1	Q A onsite	DRAWN BY T. Langr DATE 02/12/16
Volume	1.54 m <sup>3</sup>	Finish	Operations	APPROVED BY DS, AC, CP, ML, JB, BH Dwg Sheet P003
Thickness	150mm	MPa (at 28 days) 35MPa min.	Final	ISSUE CON B JOB # PC11720
		MPa (at Lift) 20MPa	Special Additives	SCALE As indicated Panel # Panel 003
Please note: All panels are drawn looking down on the trowel face, Unless noted otherwise.				Paper size: <b>A3</b>



P004  
1 : 50



PRECAST PANEL FABRICATION DRAWINGS		Panel Information	Approval and Date	Drawing Details								
<p>148 Meadows Road, Washdyke Office 03 6887534 Design Team 03 6887164 All Drawings property of Thompson Precast</p>	<p>1. All materials and workmanship to be in accordance with the NZ building code</p> <p>2. The client shall verify all dimensions on site before commencing work</p> <p>3. All concrete work shall comply with NZS3109</p> <p>4. Cover to reinforcing is to be 50mm min or as shown. Tolerance <math>\pm</math> 5mm</p>	<p>NZ Dairy Collaborative Group <b>Tower</b> 9 Ashford Ave, Ashburton</p>		Weight (t)	4.62	No req	1	Q A onsite	DRAWN BY	T. Langr	DATE	02/12/16
				Volume	1.85 m <sup>3</sup>	Finish		Operations	APPROVED BY	DS, AC, CP, ML, JB, BH	Dwg Sheet	P004
				Thickness	150mm	MPa (at 28 days)	35MPa min.	Final	ISSUE	CON B	JOB #	PC11720
						MPa (at Lift)	15MPa	Special Additives	SCALE	As indicated	Panel #	Panel 004
<p>Please note: All panels are drawn looking down on the trowel face, Unless noted otherwise.</p>												Paper size: <b>A3</b>



# PRECAST PANEL FABRICATION DRAWINGS



148 Meadows Road, Washdyke  
Office 03 6887534  
Design Team 03 6887164

All Drawings property of Thompson Precast

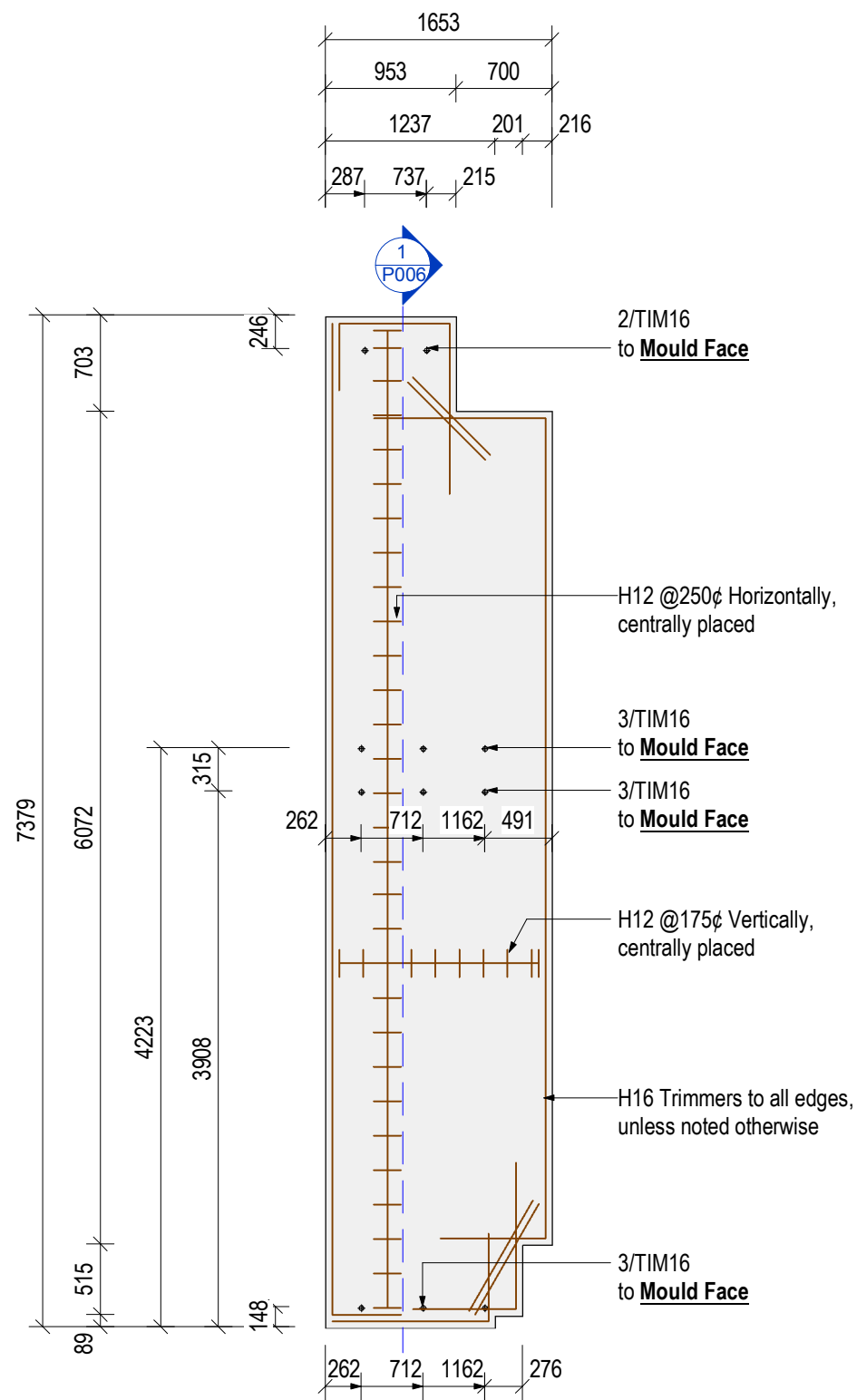
- All materials and workmanship to be in accordance with the NZ building code
- The client shall verify all dimensions on site before commencing work
- All concrete work shall comply with NZS3109
- Cover to reinforcing is to be 50mm min or as shown. Tolerance  $\pm$  5mm

NZ Dairy Collaborative Group

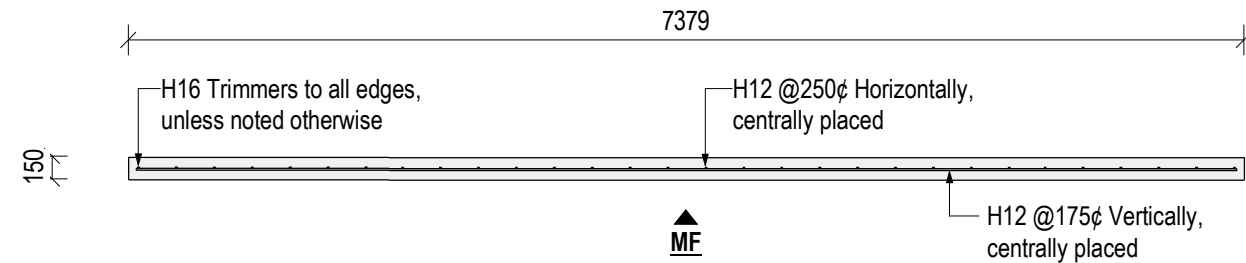
Tower

9 Ashford Ave, Ashburton

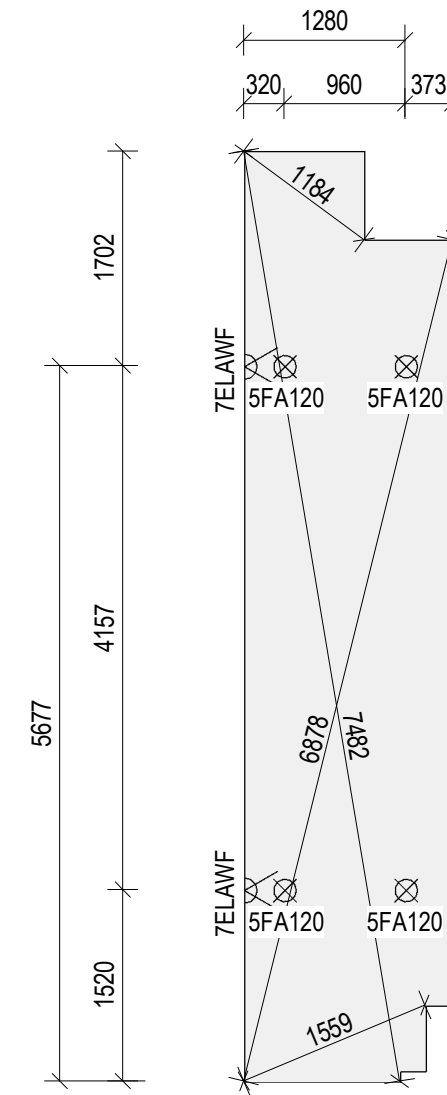
Panel Information		Approval and Date	Drawing Details	
Weight (t)	4.57	No req 1	Q A onsite	DRAWN BY T. Langr DATE 02/12/16
Volume	1.83 m <sup>3</sup>	Finish	Operations	APPROVED BY DS, AC, CP, ML, JB, BH Dwg Sheet P005
Thickness	150mm	MPa (at 28 days) 35MPa min.	Final	ISSUE CON B JOB # PC11720
		MPa (at Lift) 15MPa	Special Additives	SCALE As indicated Panel # Panel 005
Please note: All panels are drawn looking down on the trowel face, Unless noted otherwise.				Paper size: A3



P006  
1 : 50



1 P006 Section  
1 : 50



P006 Lifting Design  
1 : 60

# PRECAST PANEL FABRICATION DRAWINGS



148 Meadows Road, Washdyke  
Office 03 6887534  
Design Team 03 6887164

All Drawings property of Thompson Precast

- All materials and workmanship to be in accordance with the NZ building code
- The client shall verify all dimensions on site before commencing work
- All concrete work shall comply with NZS3109
- Cover to reinforcing is to be 50mm min or as shown. Tolerance  $\pm$  5mm

NZ Dairy Collaborative Group

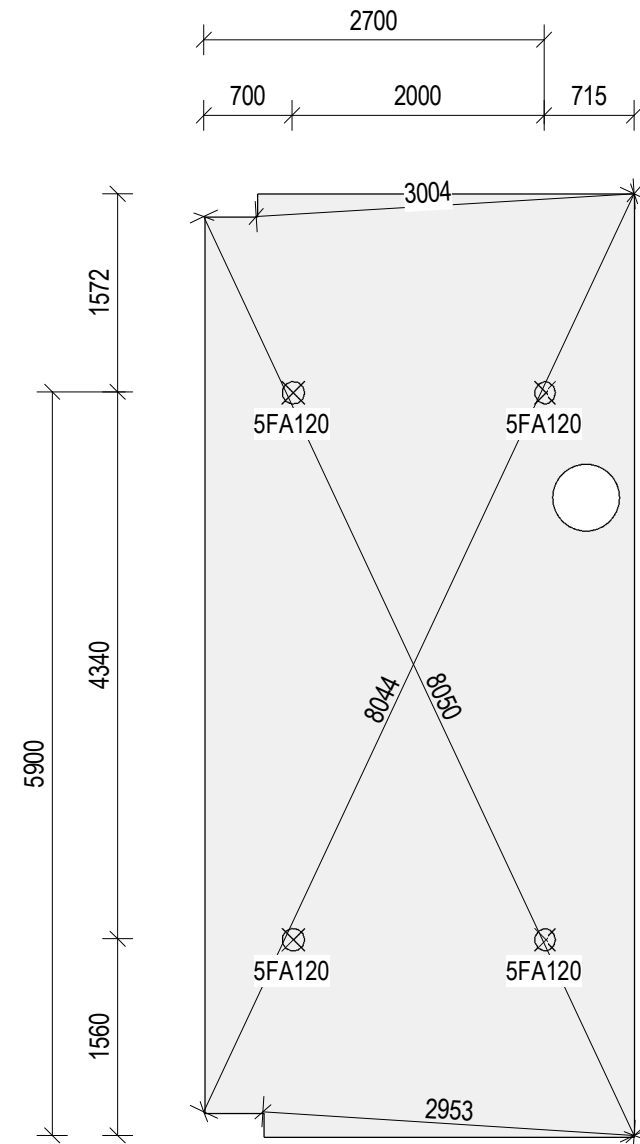
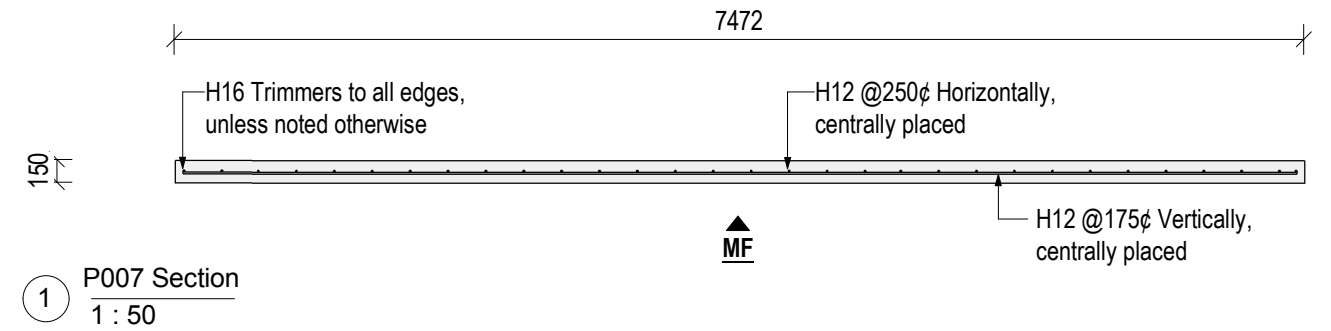
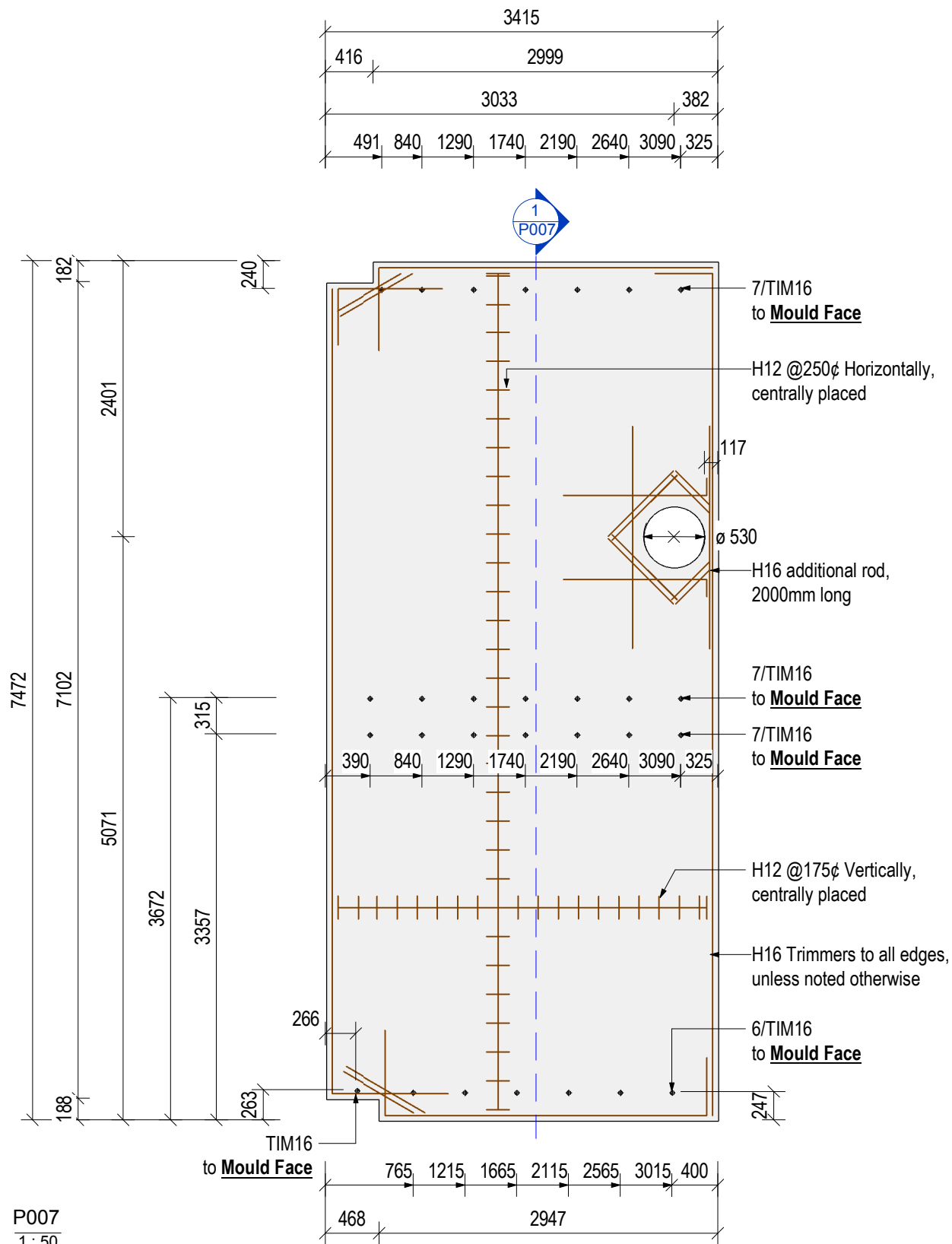
Tower

9 Ashford Ave, Ashburton

Panel Information		Approval and Date	Drawing Details	
Weight (t)	4.33	No req 1	Q A onsite	DRAWN BY T. Langr DATE 02/12/16
Volume	1.73 m <sup>3</sup>	Finish	Operations	APPROVED BY DS, AC, CP, ML, JB, BH Dwg Sheet P006
Thickness	150mm	MPa (at 28 days) 35MPa min.	Final	ISSUE CON B JOB # PC11720
		MPa (at Lift) 15MPa	Special Additives	SCALE As indicated Panel # Panel 006

Please note: All panels are drawn looking down on the trowel face, Unless noted otherwise.

Paper size: A3



# PRECAST PANEL FABRICATION DRAWINGS



148 Meadows Road, Washdyke  
Office 03 6887534  
Design Team 03 6887164

All Drawings property of Thompson Precast

- All materials and workmanship to be in accordance with the NZ building code
- The client shall verify all dimensions on site before commencing work
- All concrete work shall comply with NZS3109
- Cover to reinforcing is to be 50mm min or as shown. Tolerance ± 5mm

NZ Dairy Collaborative Group

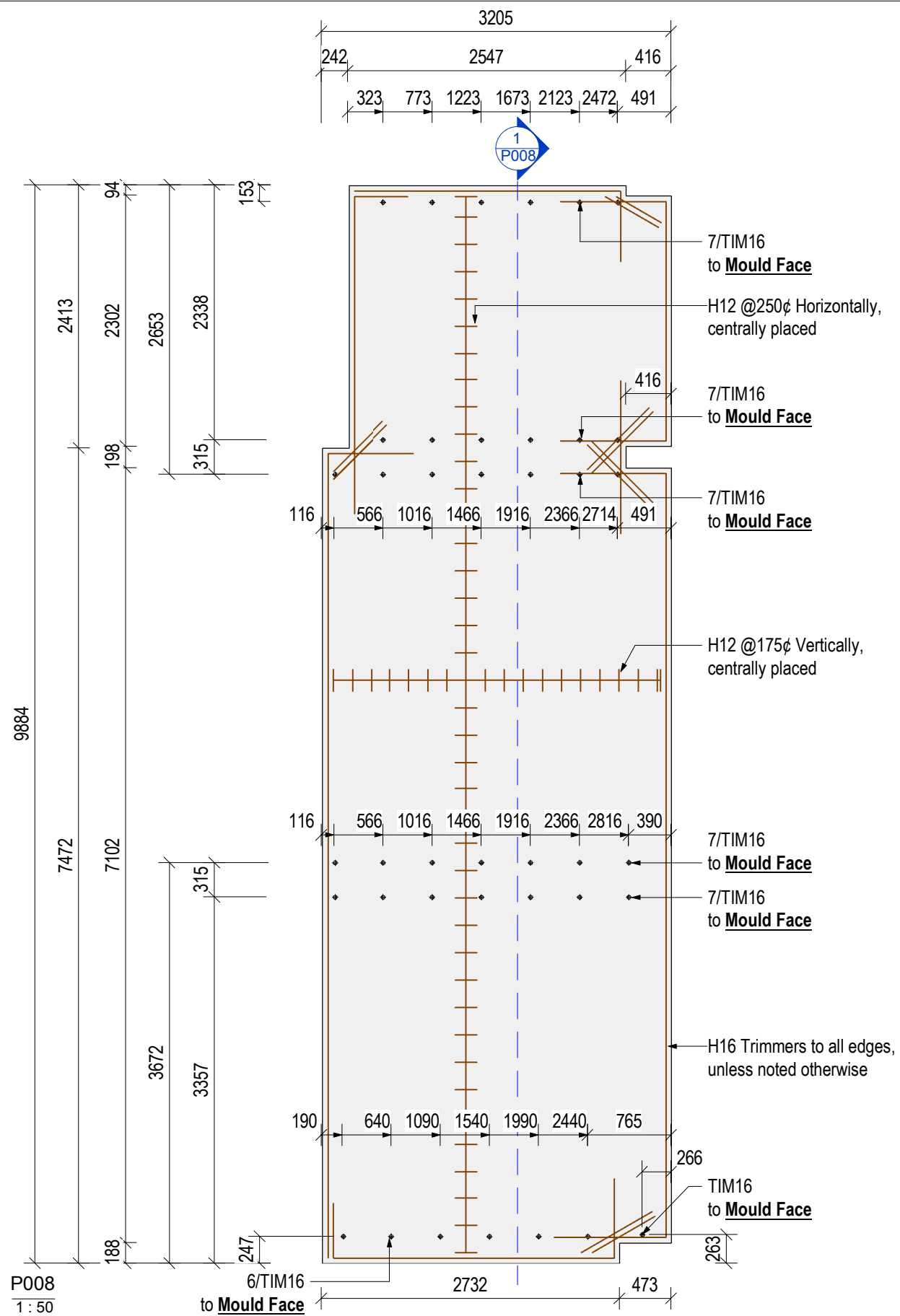
Tower

9 Ashford Ave, Ashburton

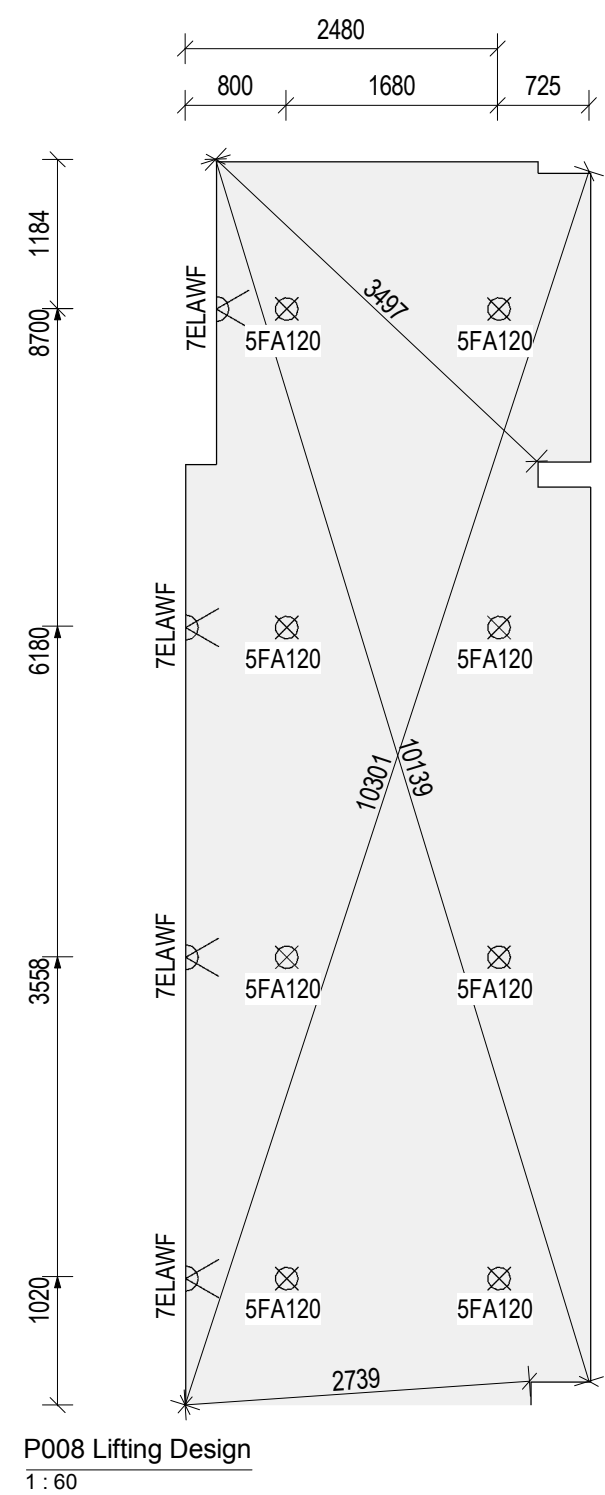
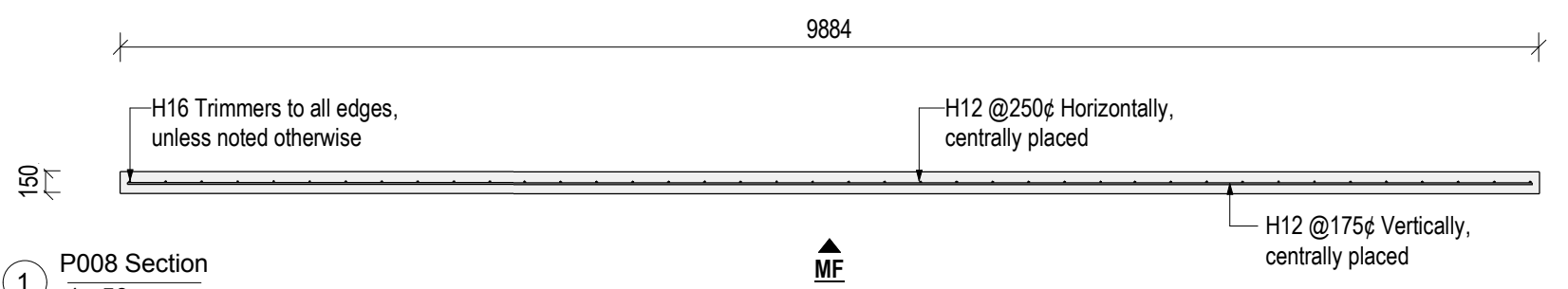
Panel Information		Approval and Date	Drawing Details	
Weight (t)	9.42	No req 1	Q A onsite	DRAWN BY T. Langr DATE 02/12/16
Volume	3.77 m <sup>3</sup>	Finish	Operations	APPROVED BY DS, AC, CP, ML, JB, BH Dwg Sheet P007
Thickness	150mm	MPa (at 28 days) 35MPa min.	Final	ISSUE PRELIM JOB # PC11720
		MPa (at Lift) 15MPa	Special Additives	SCALE As indicated Panel # Panel 007

Please note: All panels are drawn looking down on the trowel face, Unless noted otherwise.

Paper size: A3



1 P008 Section  
1:50



P008 Lifting Design  
1:60

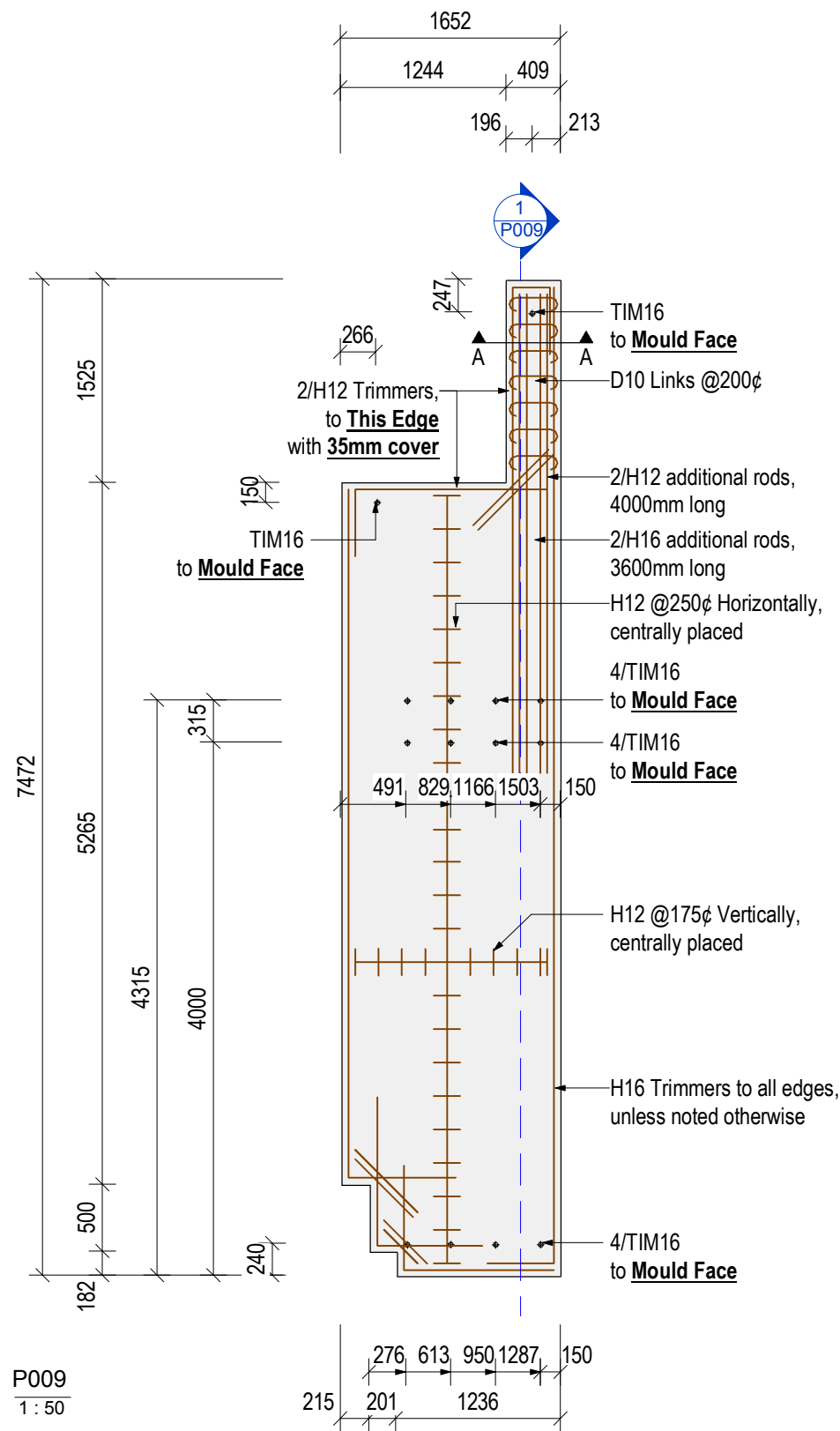
# PRECAST PANEL FABRICATION DRAWINGS



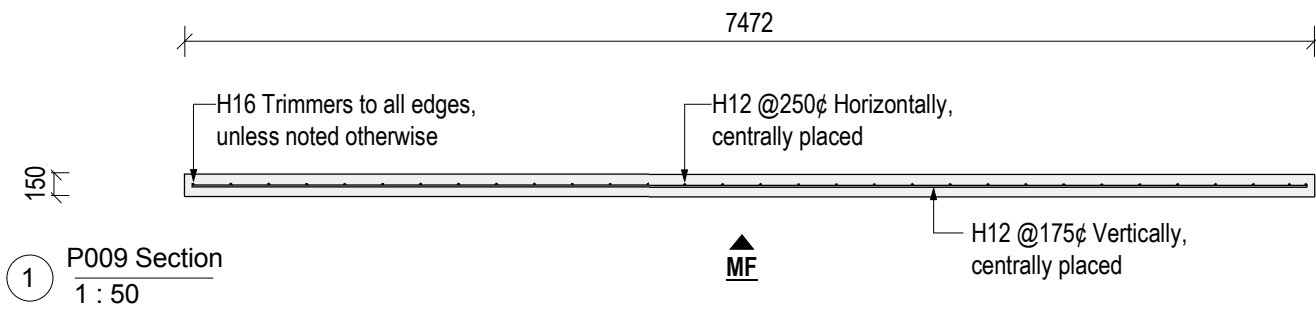
- All materials and workmanship to be in accordance with the NZ building code
- The client shall verify all dimensions on site before commencing work
- All concrete work shall comply with NZS3109
- Cover to reinforcing is to be 50mm min or as shown. Tolerance  $\pm 5$ mm

NZ Dairy Collaborative Group  
Tower  
9 Ashford Ave, Ashburton

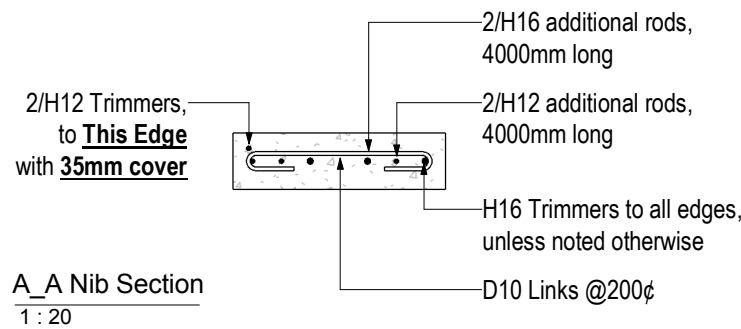
Panel Information		Approval and Date	Drawing Details	
Weight (t)	11.58	No req 1	Q A onsite	DRAWN BY T. Langr DATE 02/12/16
Volume	4.63 m <sup>3</sup>	Finish	Operations	APPROVED BY DS, AC, CP, ML, JB, BH Dwg Sheet P008
Thickness	150mm	MPa (at 28 days) 35MPa min.	Final	ISSUE CON B JOB # PC11720
		MPa (at Lift) 20MPa	Special Additives	SCALE As indicated Panel # Panel 008
Please note: All panels are drawn looking down on the trowel face, Unless noted otherwise.				
				Paper size: A3



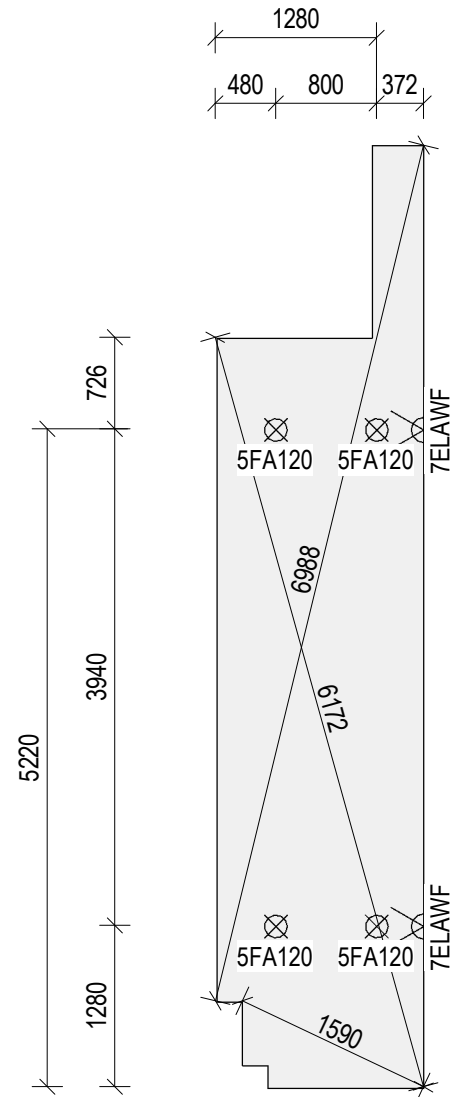
P009  
1 : 50



1 P009 Section  
1 : 50



A\_A Nib Section  
1 : 20



P009 Lifting Design  
1 : 60

# PRECAST PANEL FABRICATION DRAWINGS



148 Meadows Road, Washdyke  
Office 03 6887534  
Design Team 03 6887164

All Drawings property of Thompson Precast

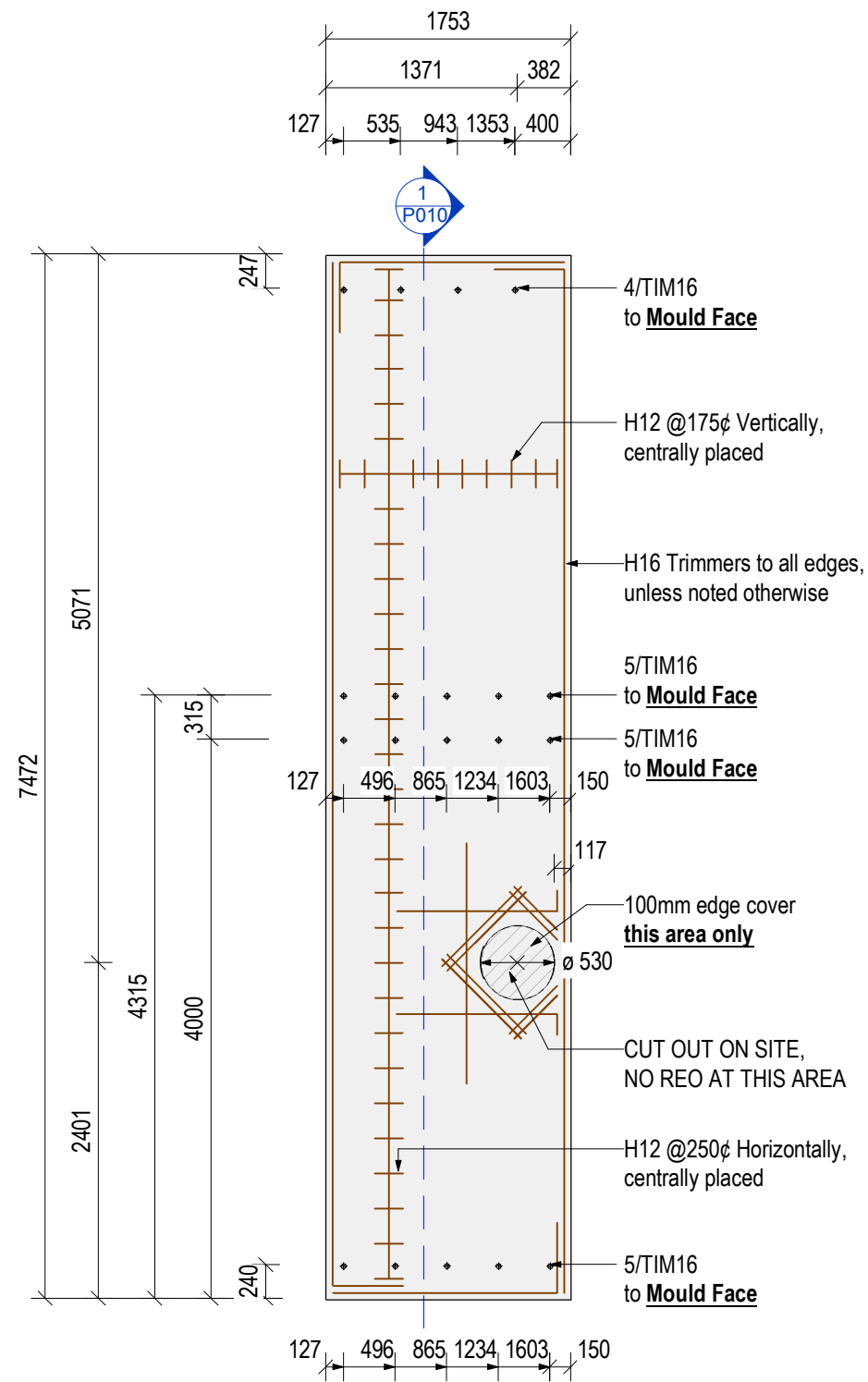
- All materials and workmanship to be in accordance with the NZ building code
- The client shall verify all dimensions on site before commencing work
- All concrete work shall comply with NZS3109
- Cover to reinforcing is to be 50mm min or as shown. Tolerance  $\pm 5$ mm

NZ Dairy Collaborative Group

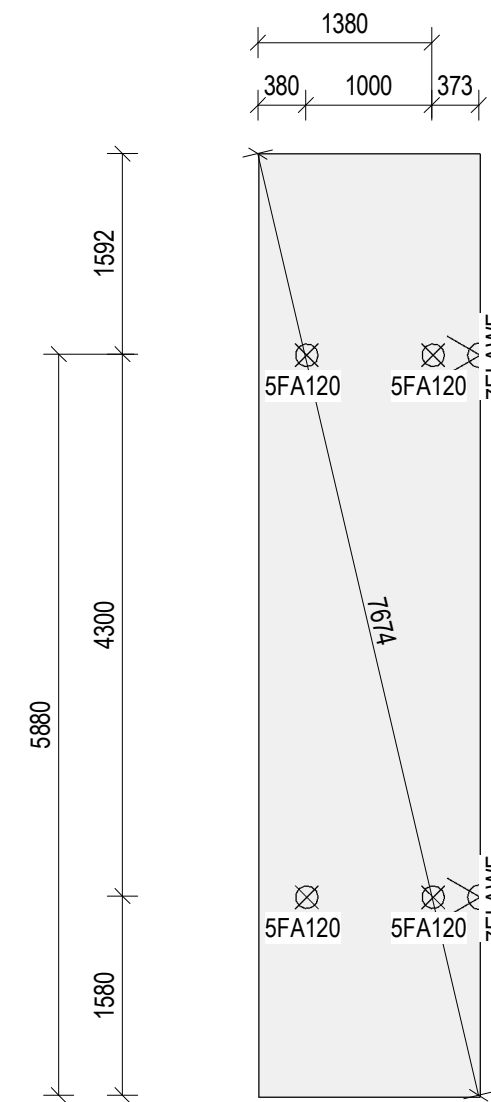
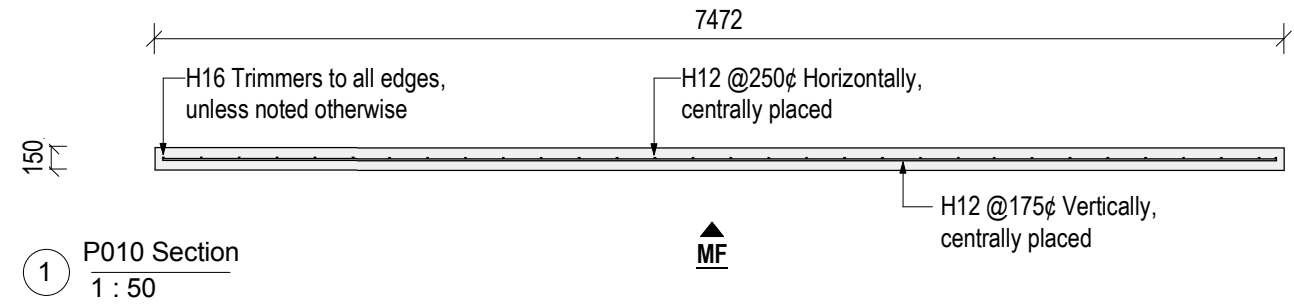
Tower

9 Ashford Ave, Ashburton

Panel Information		Approval and Date	Drawing Details	
Weight (t)	3.85	No req 1	Q A onsite	DRAWN BY T. Langr DATE 02/12/16
Volume	1.54 m <sup>3</sup>	Finish	Operations	APPROVED BY DS, AC, CP, ML, JB, BH Dwg Sheet P009
Thickness	150mm	MPa (at 28 days) 35MPa min.	Final	ISSUE CON B JOB # PC11720
		MPa (at Lift) 20MPa	Special Additives	SCALE As indicated Panel # Panel 009
Please note: All panels are drawn looking down on the trowel face, Unless noted otherwise.				Paper size: A3



P010  
1 : 50



P010 Lifting Design  
1 : 60

# PRECAST PANEL FABRICATION DRAWINGS



148 Meadows Road, Washdyke  
Office 03 6887534  
Design Team 03 6887164

All Drawings property of Thompson Precast

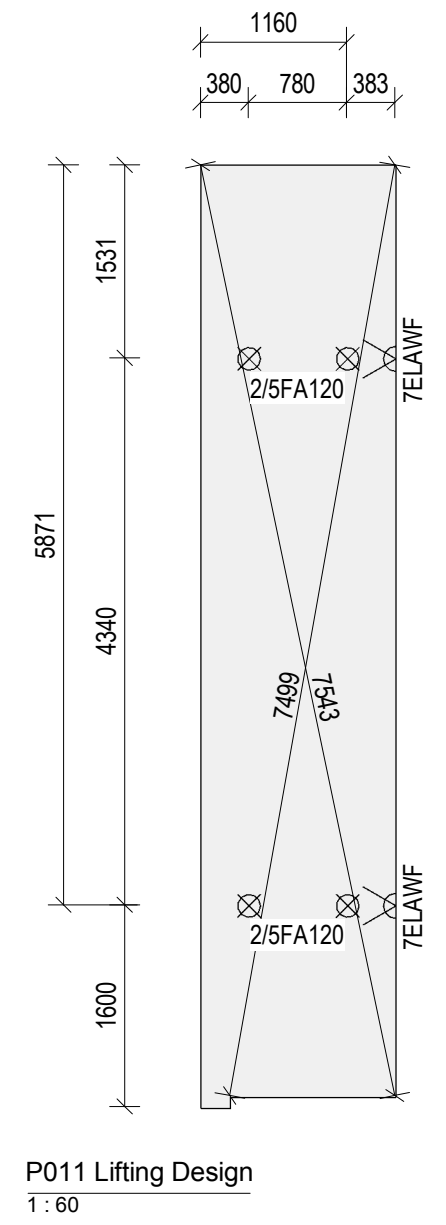
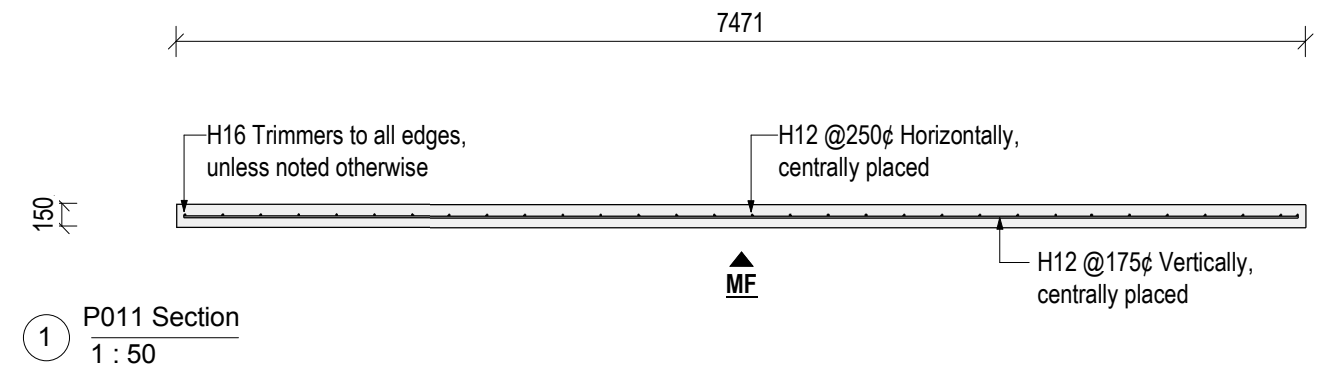
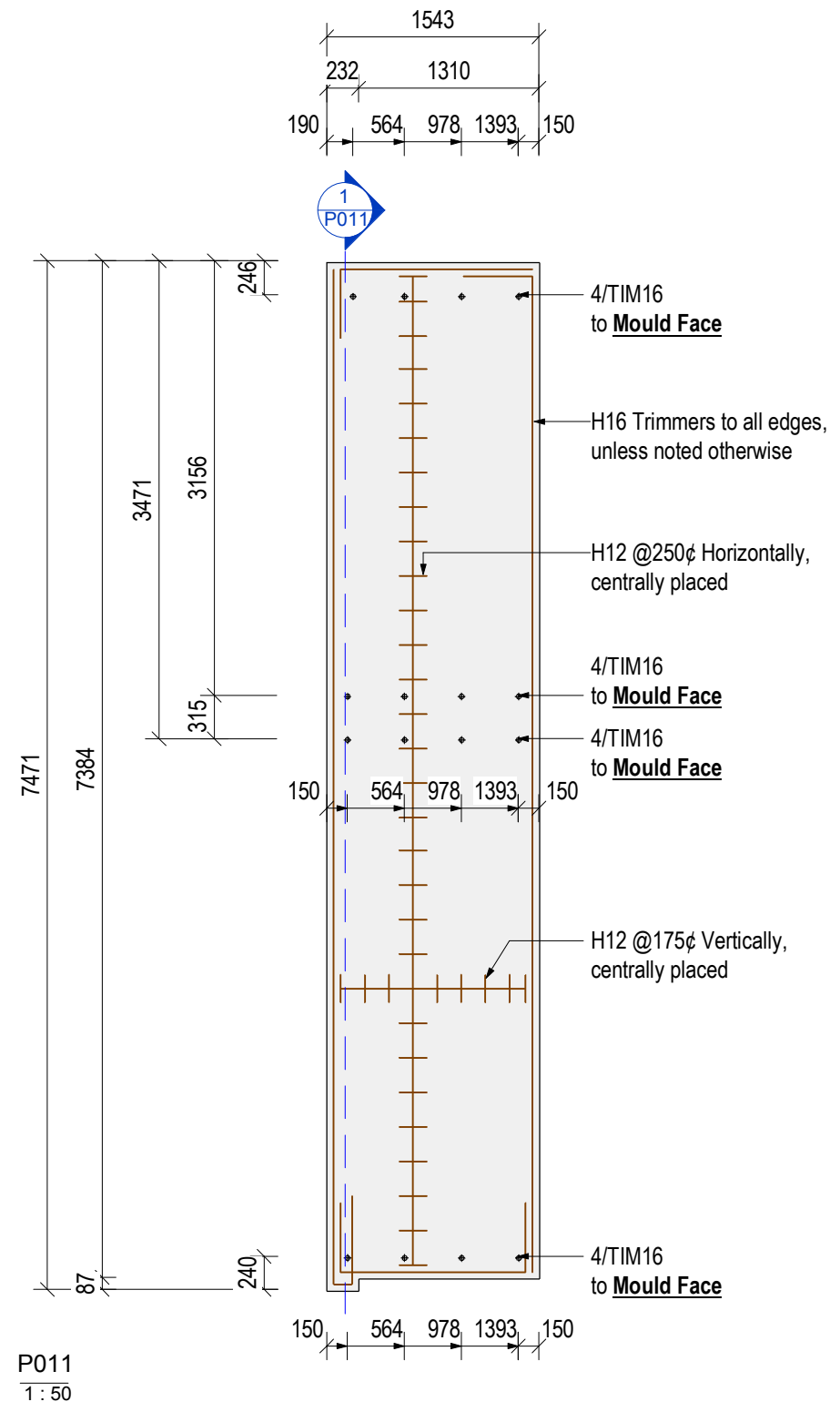
- All materials and workmanship to be in accordance with the NZ building code
- The client shall verify all dimensions on site before commencing work
- All concrete work shall comply with NZS3109
- Cover to reinforcing is to be 50mm min or as shown. Tolerance  $\pm$  5mm

NZ Dairy Collaborative Group

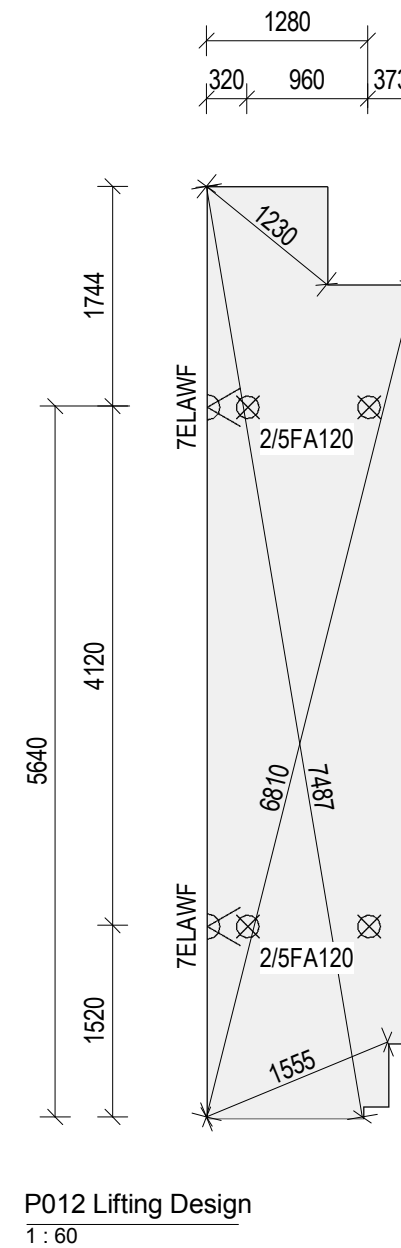
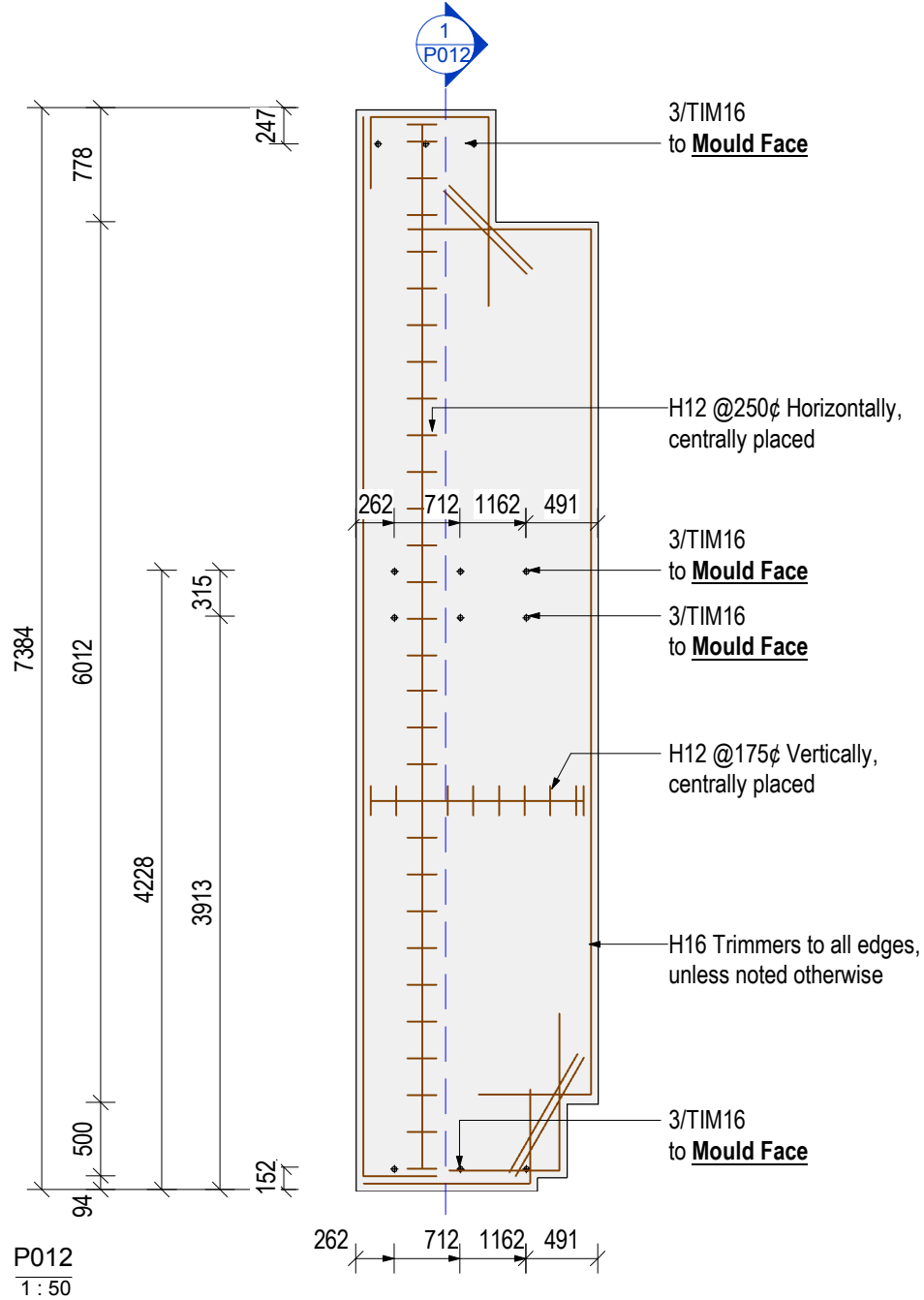
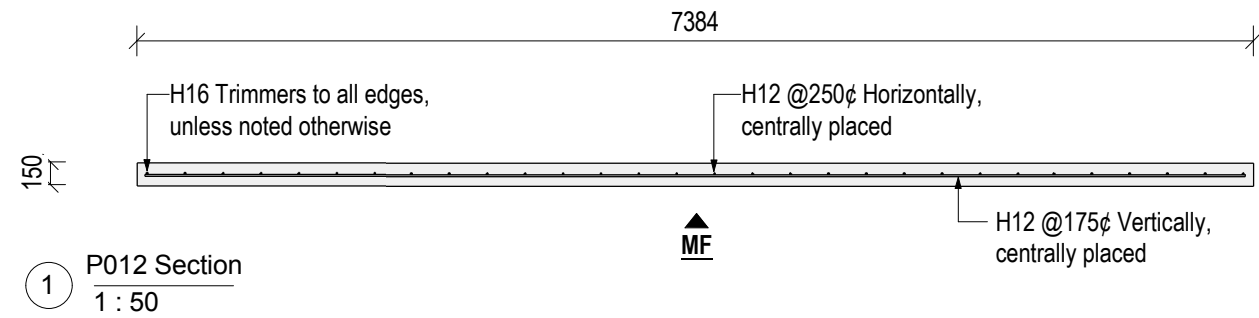
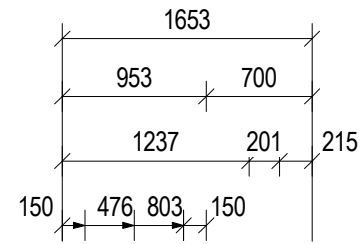
Tower

9 Ashford Ave, Ashburton

Panel Information		Approval and Date	Drawing Details	
Weight (t)	4.91	No req 1	Q A onsite	DRAWN BY T. Langr DATE 02/12/16
Volume	1.54 m <sup>3</sup>	Finish	Operations	APPROVED BY DS, AC, CP, ML, JB, BH Dwg Sheet P010
Thickness	150mm	MPa (at 28 days) 35MPa min.	Final	ISSUE CON B JOB # PC11720
		MPa (at Lift) 17MPa	Special Additives	SCALE As indicated Panel # Panel 010
Please note: All panels are drawn looking down on the trowel face, Unless noted otherwise.				
				Paper size: A3



PRECAST PANEL FABRICATION DRAWINGS			Panel Information	Approval and Date	Drawing Details		
<p>148 Meadows Road, Washdyke Office 03 6887534 Design Team 03 6887164 All Drawings property of Thompson Precast</p>	<p>1. All materials and workmanship to be in accordance with the NZ building code 2. The client shall verify all dimensions on site before commencing work 3. All concrete work shall comply with NZS3109 4. Cover to reinforcing is to be 50mm min or as shown. Tolerance ± 5mm</p>	<p>NZ Dairy Collaborative Group <b>Tower</b> 9 Ashford Ave, Ashburton</p>	Weight (t) <b>4.28</b>	No req <b>1</b>	Q A onsite	DRAWN BY T. Langr	DATE 02/12/16
			Volume <b>1.71 m<sup>3</sup></b>	Finish	Operations	APPROVED BY DS, AC, CP, ML, JB, BH	Dwg Sheet <b>P011</b>
			Thickness <b>150mm</b>	MPa (at 28 days) <b>35MPa min.</b>	Final	ISSUE <b>CON B</b>	JOB # <b>PC11720</b>
				MPa (at Lift) <b>15MPa</b>	Special Additives	SCALE <b>As indicated</b>	Panel # <b>Panel 011</b>
			Please note: All panels are drawn looking down on the trowel face, Unless noted otherwise.			Paper size: <b>A3</b>	



# PRECAST PANEL FABRICATION DRAWINGS



148 Meadows Road, Washdyke  
Office 03 6887534  
Design Team 03 6887164

All Drawings property of Thompson Precast

- All materials and workmanship to be in accordance with the NZ building code
- The client shall verify all dimensions on site before commencing work
- All concrete work shall comply with NZS3109
- Cover to reinforcing is to be 50mm min or as shown. Tolerance  $\pm 5$ mm

## NZ Dairy Collaborative Group

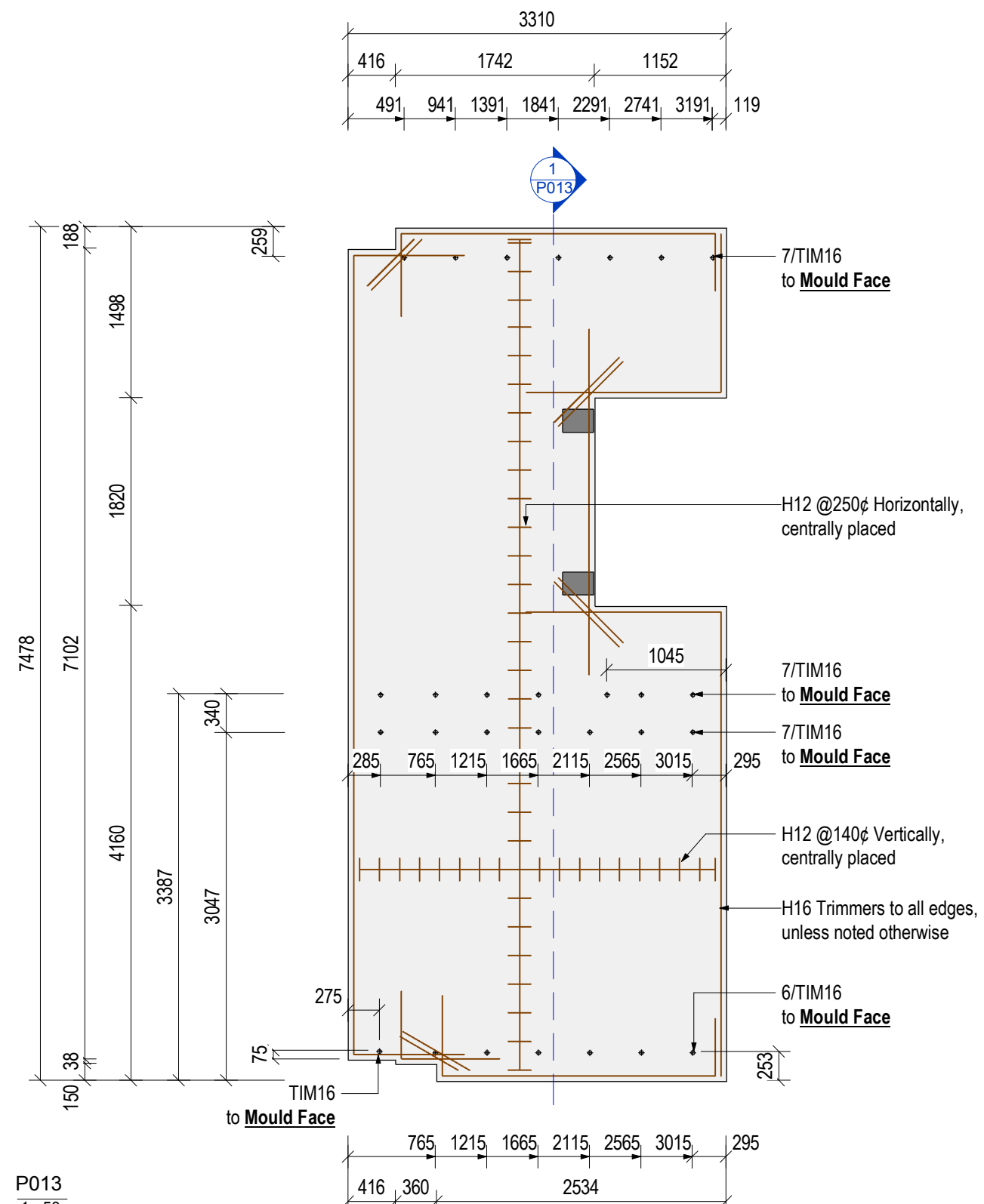
### Tower

9 Ashford Ave, Ashburton

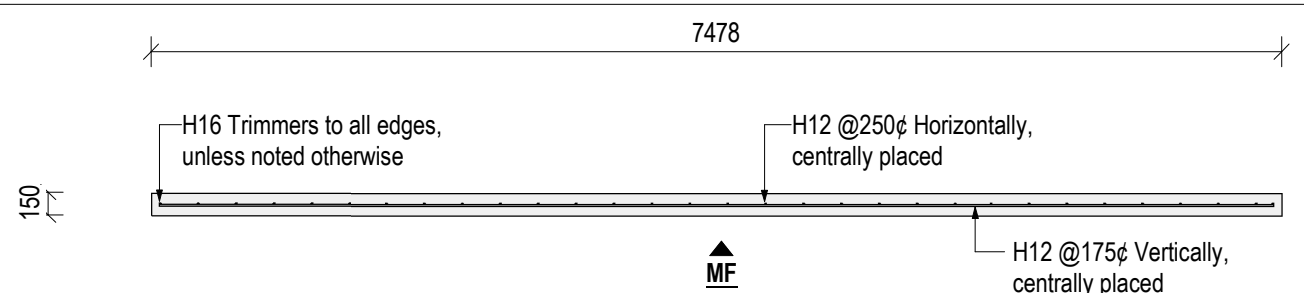
Panel Information		Approval and Date	Drawing Details	
Weight (t)	4.32	No req 1	Q A onsite	DRAWN BY T. Langr DATE 02/12/16
Volume	1.73 m <sup>3</sup>	Finish	Operations	APPROVED BY DS, AC, CP, ML, JB, BH Dwg Sheet P012
Thickness	150mm	MPa (at 28 days) 35MPa min.	Final	ISSUE CON B JOB # PC11720
		MPa (at Lift) 15MPa	Special Additives	SCALE As indicated Panel # Panel 012

Please note: All panels are drawn looking down on the trowel face, Unless noted otherwise.

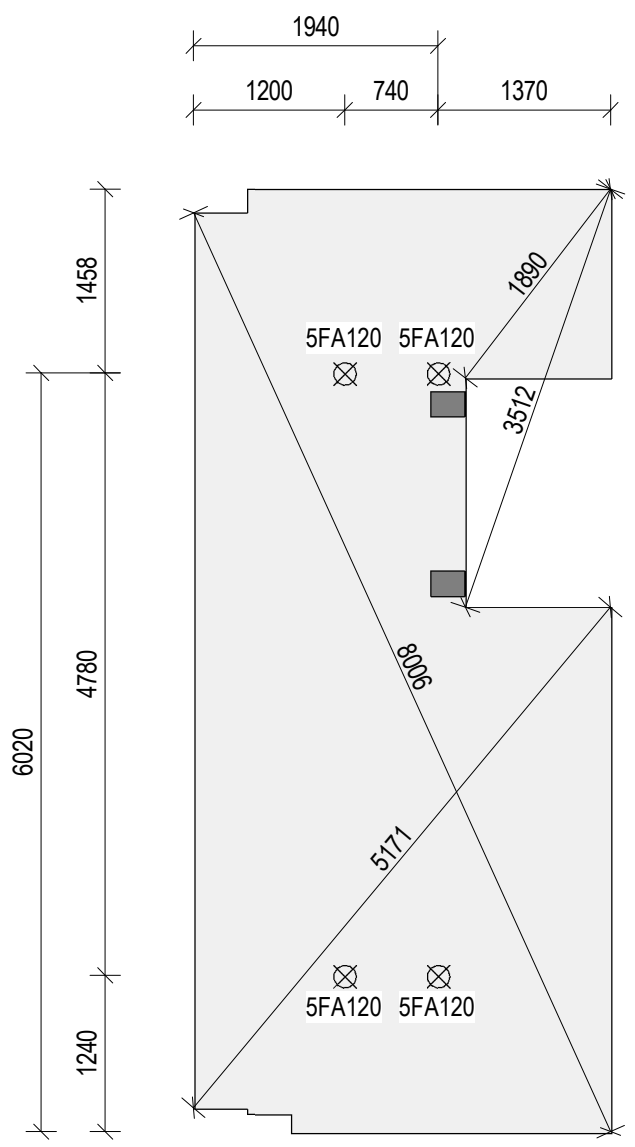
Paper size: A3



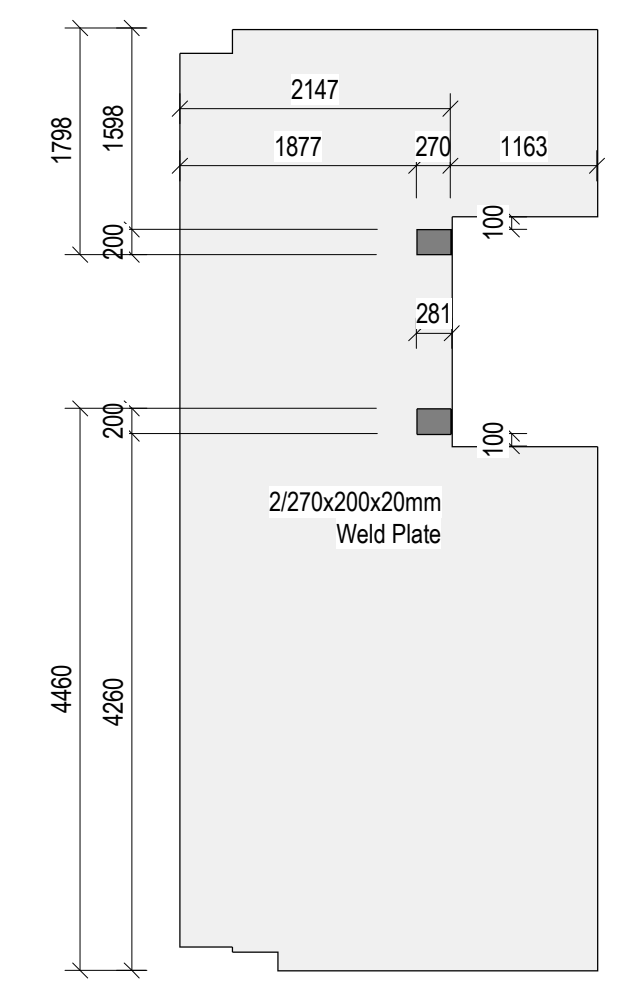
P013  
1 : 50



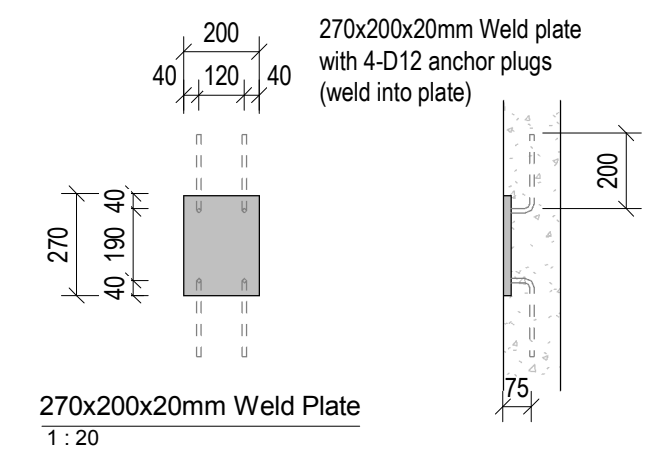
1 P013 Section  
1 : 50



P013 Lifting Design  
1 : 60



P013 Weld Plates Locations  
1 : 60



270x200x20mm Weld Plate  
1 : 20

**PRECAST PANEL FABRICATION DRAWINGS**

**THOMPSON**  
PRECAST CONCRETE  
148 Meadows Road, Washdyke  
Office 03 6887534  
Design Team 03 6887164  
All Drawings property of Thompson Precast

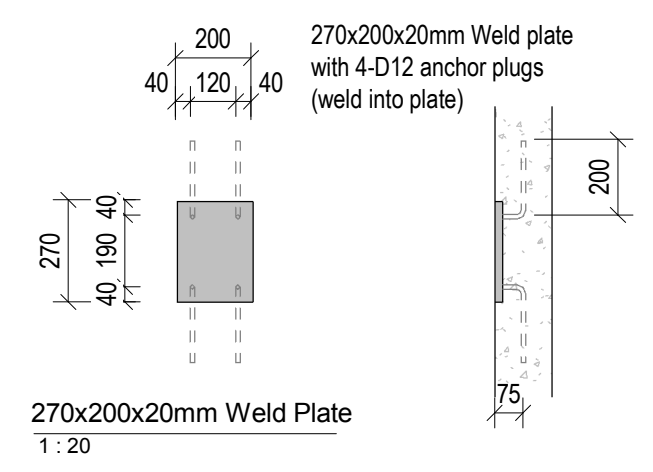
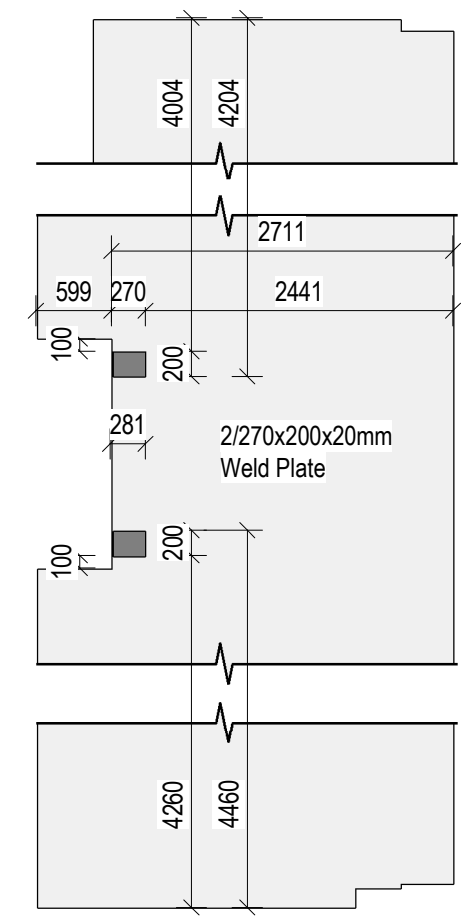
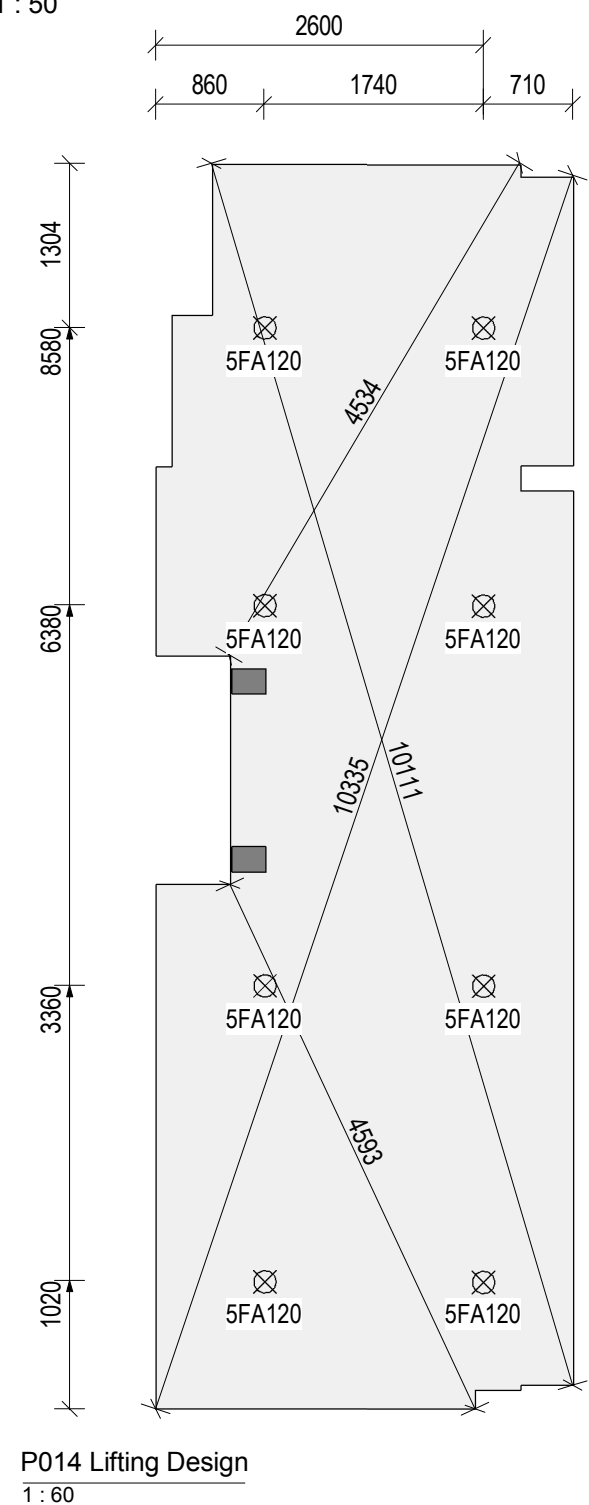
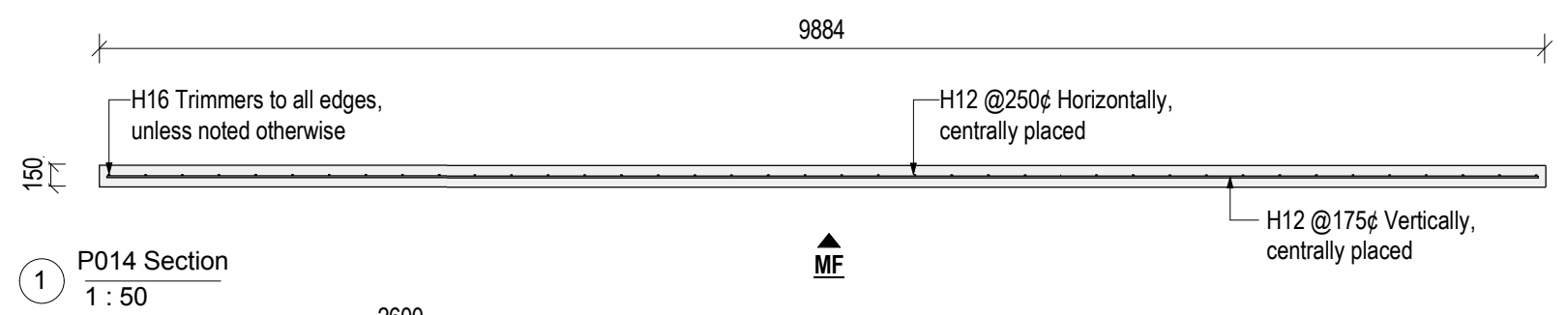
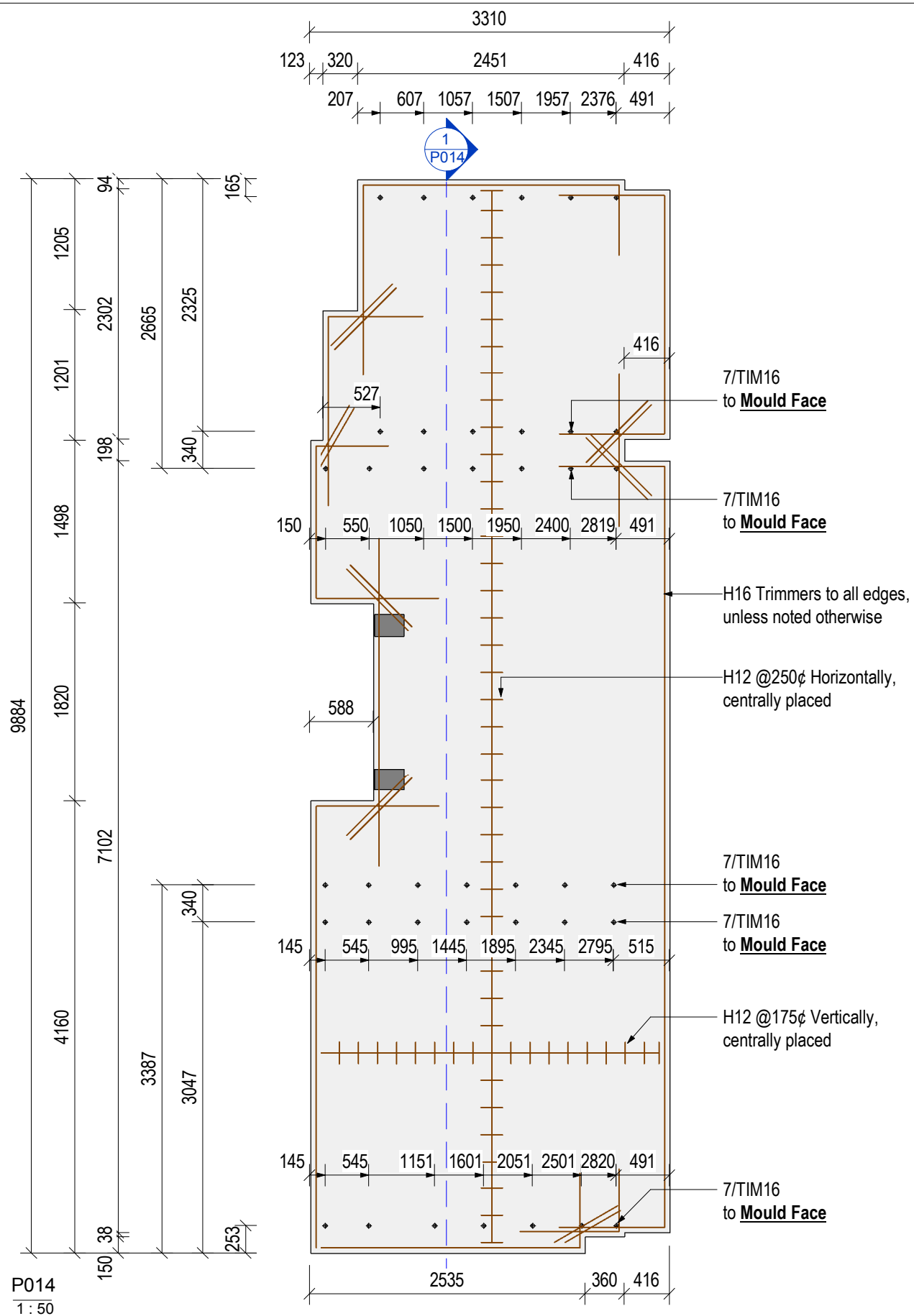
- All materials and workmanship to be in accordance with the NZ building code
- The client shall verify all dimensions on site before commencing work
- All concrete work shall comply with NZS3109
- Cover to reinforcing is to be 50mm min or as shown. Tolerance  $\pm 5$ mm

**NZ Dairy Collaborative Group**  
**Tower**  
9 Ashford Ave, Ashburton

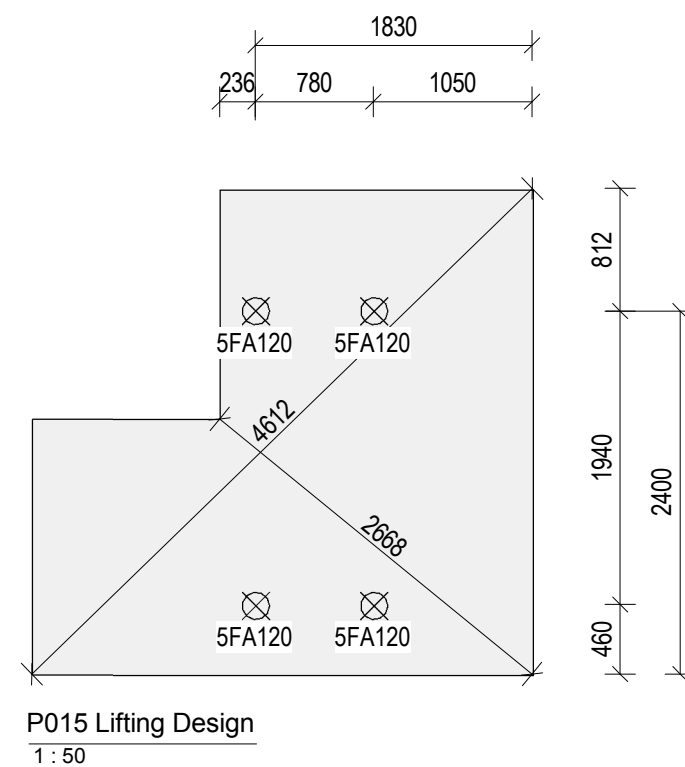
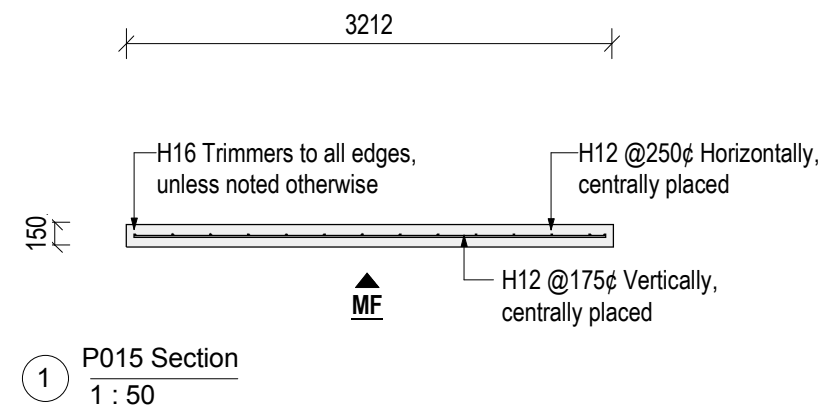
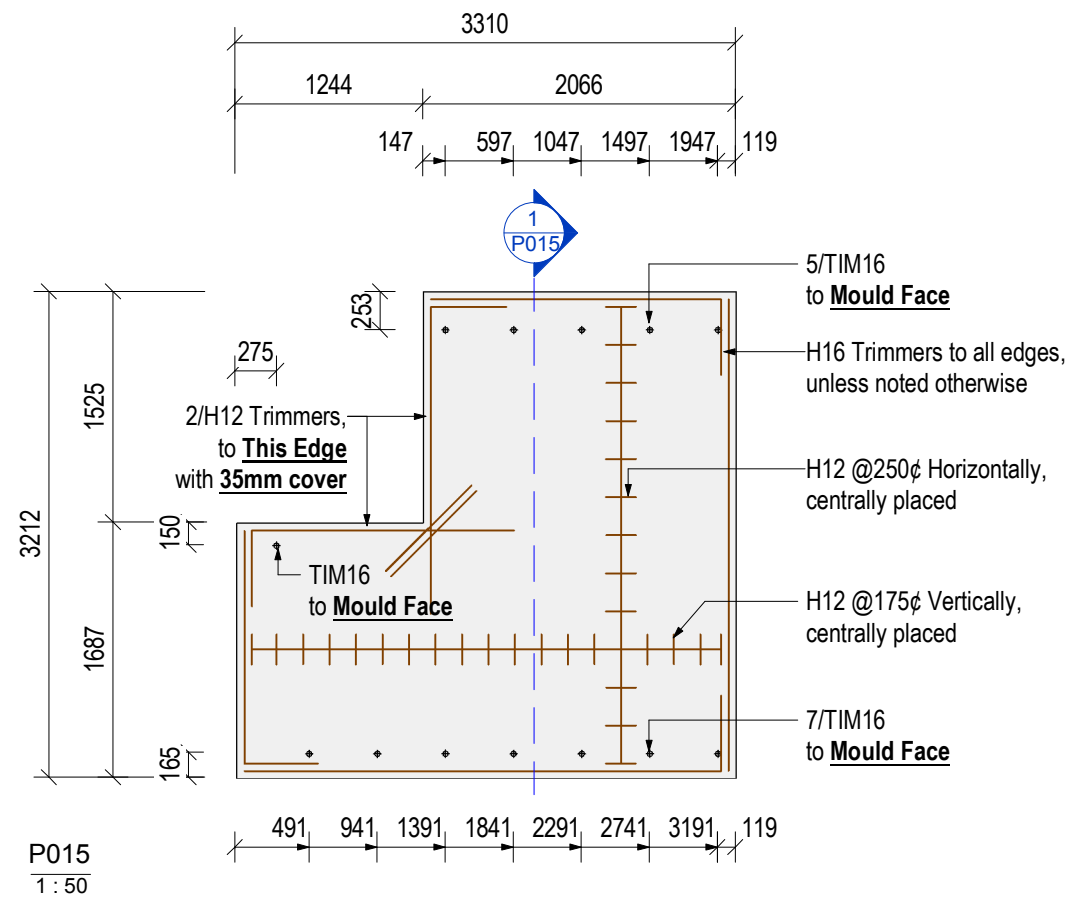
Panel Information		Approval and Date	Drawing Details	
Weight (t)	8.41	No req	Q A onsite	DRAWN BY T. Langr
Volume	3.36 m <sup>3</sup>	1	Operations	DATE 02/12/16
Thickness	150mm	Finish	APPROVED BY DS, AC, CP, ML, JB, BH	Dwg Sheet P013
		MPa (at 28 days)	ISSUE PRELIM	JOB # PC11720
		35MPa min.	SCALE As indicated	Panel # Panel 013
		MPa (at Lift)	Special Additives	
		20MPa		

Please note: All panels are drawn looking down on the trowel face, Unless noted otherwise.

Paper size: **A3**



PRECAST PANEL FABRICATION DRAWINGS		Panel Information	Approval and Date	Drawing Details		
<p>148 Meadows Road, Washdyke Office 03 6887534 Design Team 03 6887164 All Drawings property of Thompson Precast</p>	<p>1. All materials and workmanship to be in accordance with the NZ building code</p> <p>2. The client shall verify all dimensions on site before commencing work</p> <p>3. All concrete work shall comply with NZS3109</p> <p>4. Cover to reinforcing is to be 50mm min or as shown. Tolerance ± 5mm</p>	Weight (t) 11.51	No req 1	Q A onsite	DRAWN BY T. Langr	DATE 02/12/16
		Volume 4.60 m <sup>3</sup>	Finish	Operations	APPROVED BY DS, AC, CP, ML, JB, BH	Dwg Sheet P014
		Thickness 150mm	MPa (at 28 days) 35MPa min.	Final	ISSUE CON B	JOB # PC11720
			MPa (at Lift) 15MPa	Special Additives	SCALE As indicated	Panel # Panel 014
<p>NZ Dairy Collaborative Group</p> <p>Tower</p> <p>9 Ashford Ave, Ashburton</p>		<p>Please note: All panels are drawn looking down on the trowel face, Unless noted otherwise.</p>		<p>Paper size: A3</p>		



# PRECAST PANEL FABRICATION DRAWINGS



148 Meadows Road, Washdyke  
Office 03 6887534  
Design Team 03 6887164

All Drawings property of Thompson Precast

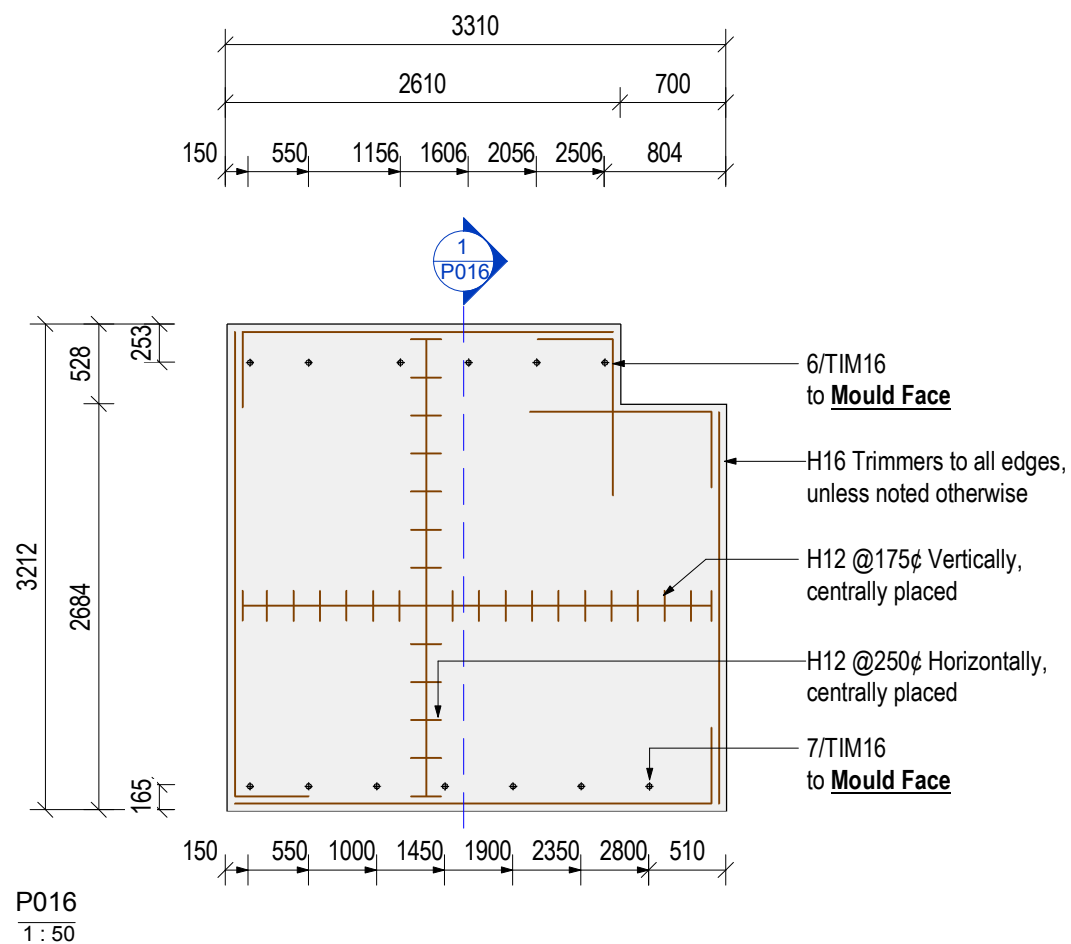
- All materials and workmanship to be in accordance with the NZ building code
- The client shall verify all dimensions on site before commencing work
- All concrete work shall comply with NZS3109
- Cover to reinforcing is to be 50mm min or as shown. Tolerance  $\pm$  5mm

NZ Dairy Collaborative Group

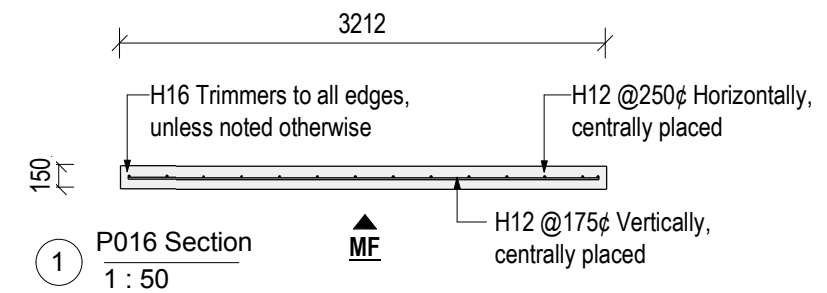
Tower

9 Ashford Ave, Ashburton

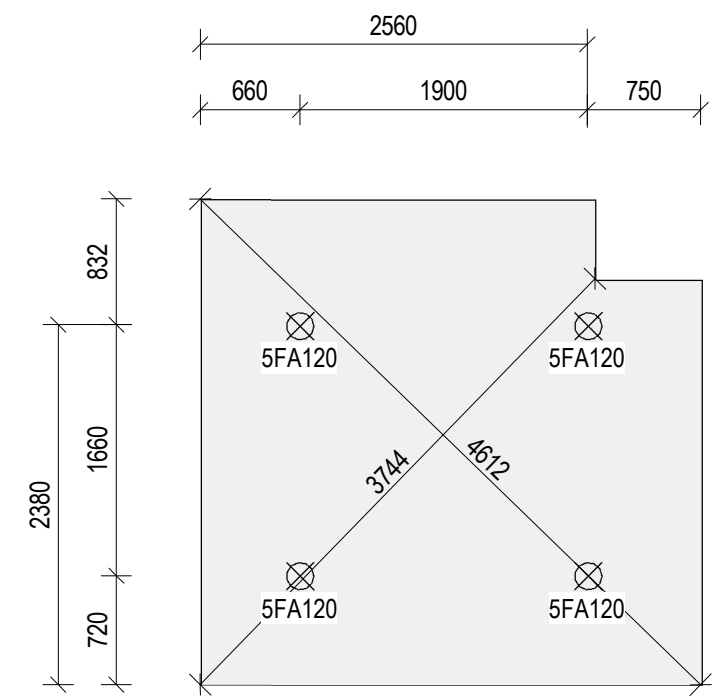
Panel Information		Approval and Date	Drawing Details	
Weight (t)	3.28	No req 1	Q A onsite	DRAWN BY T. Langr DATE 02/12/16
Volume	1.31 m <sup>3</sup>	Finish	Operations	APPROVED BY AC, CP, ML, JB, BH Dwg Sheet P015
Thickness	150mm	MPa (at 28 days) 35MPa min.	Final	ISSUE CON A JOB # PC11720
		MPa (at Lift) 15MPa	Special Additives	SCALE 1 : 50 Panel # Panel 015
Please note: All panels are drawn looking down on the trowel face, Unless noted otherwise.				Paper size: A3



P016  
1 : 50



1 P016 Section  
1 : 50



P016 Lifting Design  
1 : 50

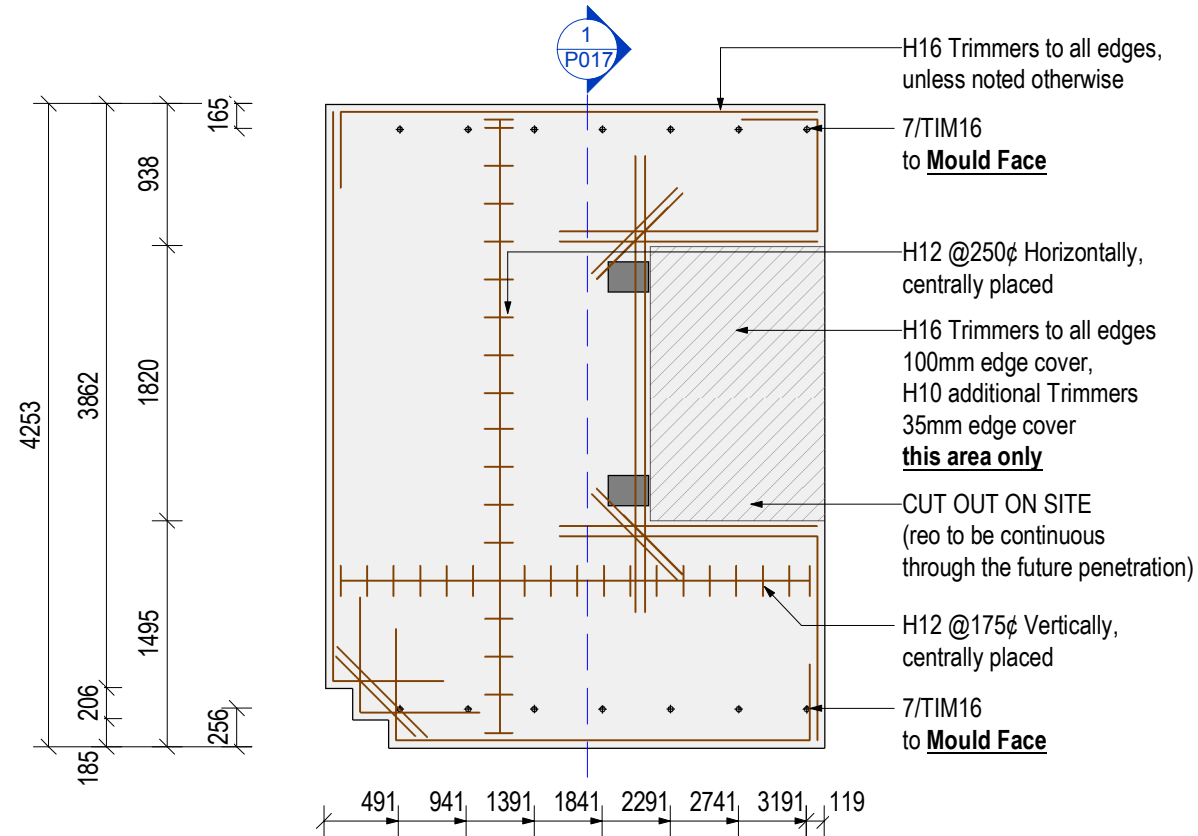
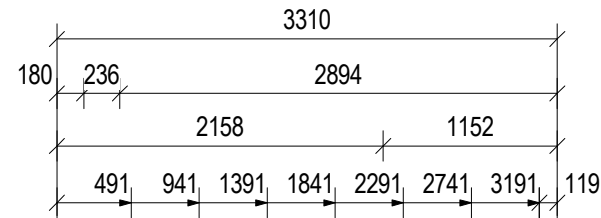
# PRECAST PANEL FABRICATION DRAWINGS

148 Meadows Road, Washdyke  
Office 03 6887534  
Design Team 03 6887164  
All Drawings property of Thompson Precast

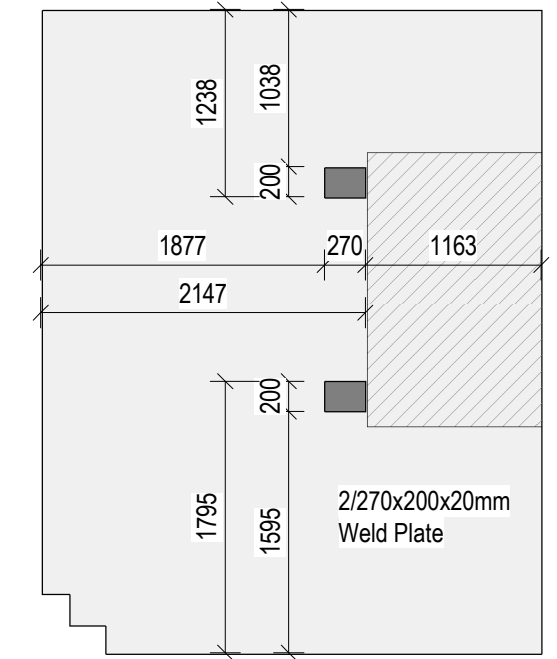
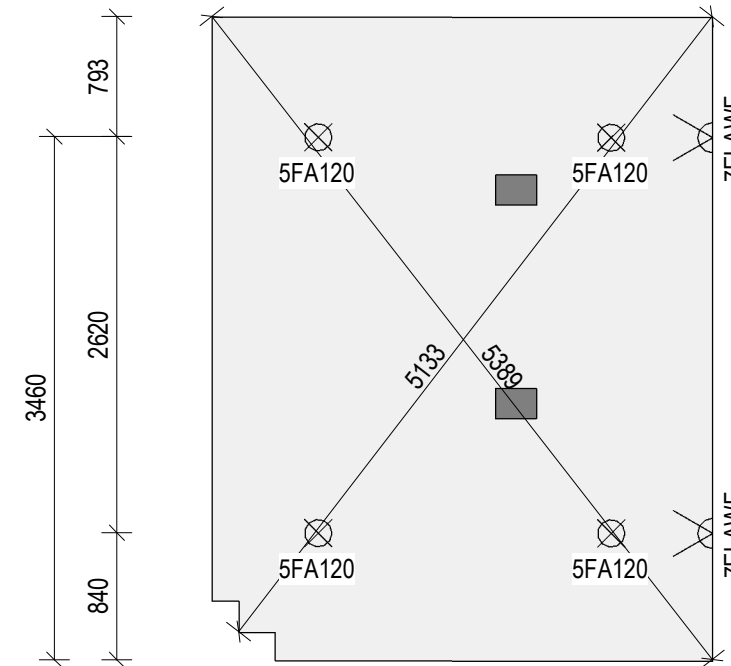
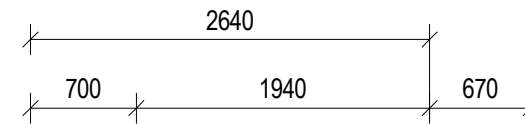
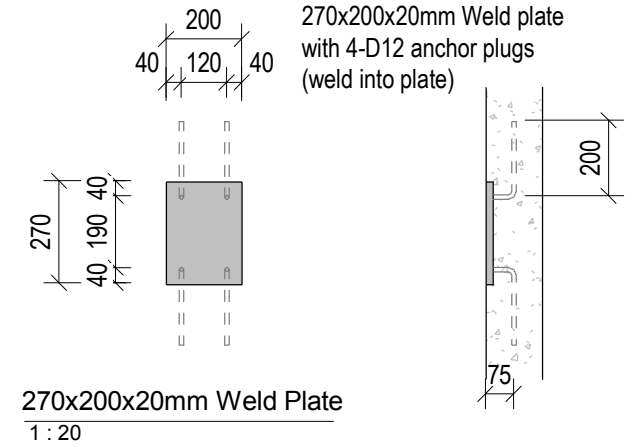
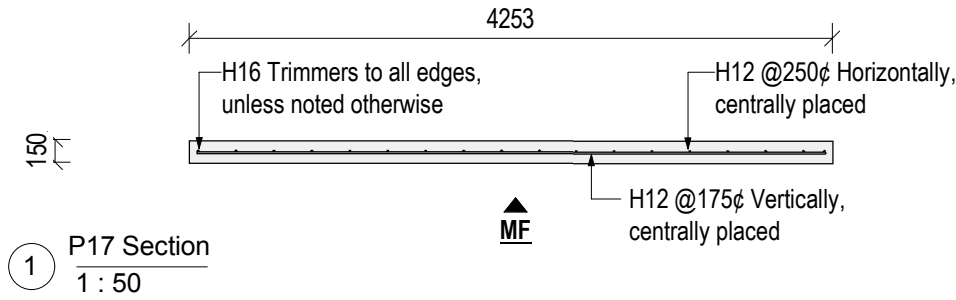
- All materials and workmanship to be in accordance with the NZ building code
- The client shall verify all dimensions on site before commencing work
- All concrete work shall comply with NZS3109
- Cover to reinforcing is to be 50mm min or as shown. Tolerance  $\pm$  5mm

NZ Dairy Collaborative Group  
Tower  
9 Ashford Ave, Ashburton

Panel Information		Approval and Date	Drawing Details	
Weight (t)	3.85	No req 1	Q A onsite	DRAWN BY T. Langr DATE 02/12/16
Volume	1.54 m <sup>3</sup>	Finish	Operations	APPROVED BY AC, CP, ML, JB, BH Dwg Sheet P016
Thickness	150mm	MPa (at 28 days) 35MPa min.	Final	ISSUE CON A JOB # PC11720
		MPa (at Lift) 15MPa	Special Additives	SCALE 1 : 50 Panel # Panel 016
Please note: All panels are drawn looking down on the trowel face, Unless noted otherwise.				Paper size: A3



P017  
1:50



# PRECAST PANEL FABRICATION DRAWINGS



148 Meadows Road, Washdyke  
Office 03 6887534  
Design Team 03 6887164

All Drawings property of Thompson Precast

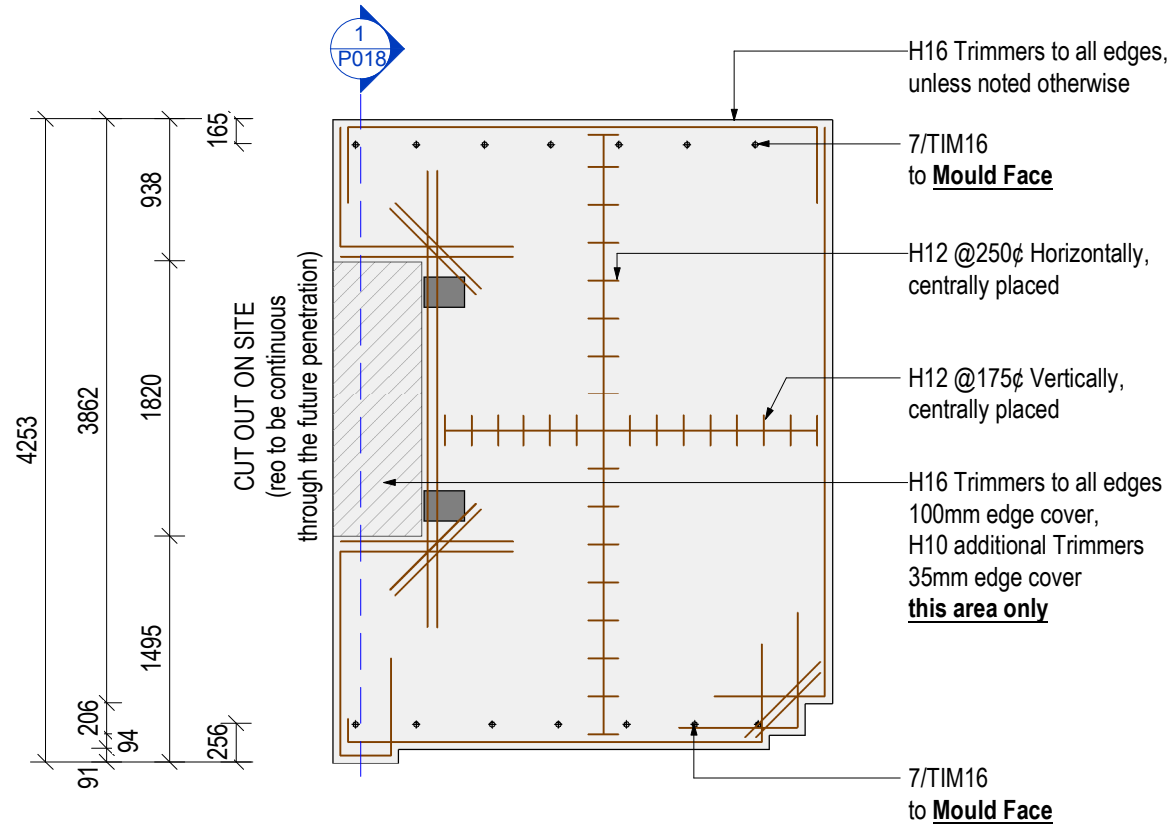
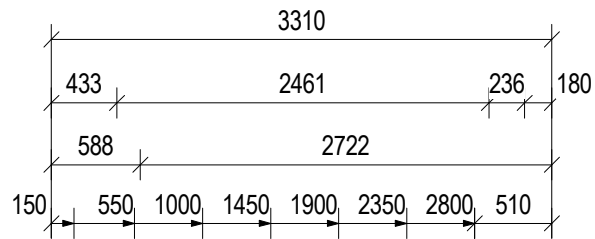
- All materials and workmanship to be in accordance with the NZ building code
- The client shall verify all dimensions on site before commencing work
- All concrete work shall comply with NZS3109
- Cover to reinforcing is to be 50mm min or as shown. Tolerance ± 5mm

NZ Dairy Collaborative Group

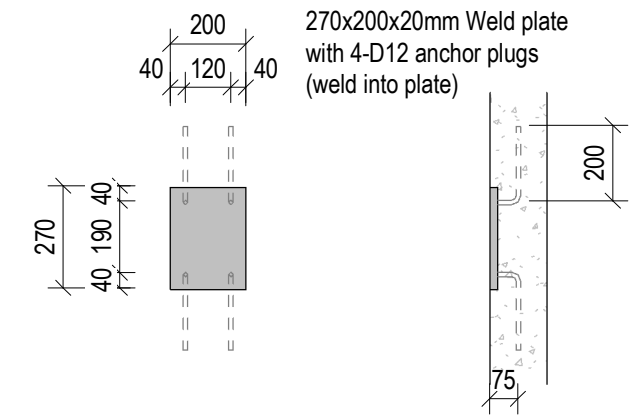
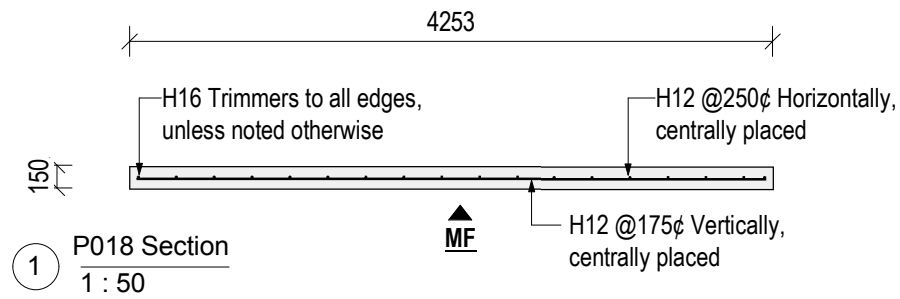
Tower

9 Ashford Ave, Ashburton

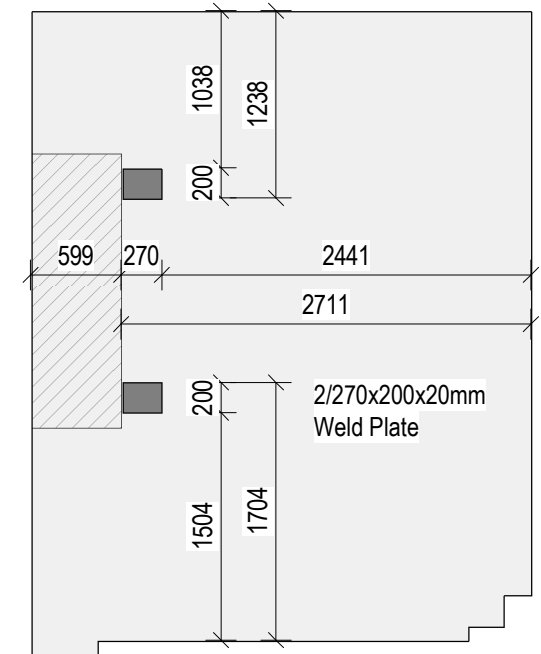
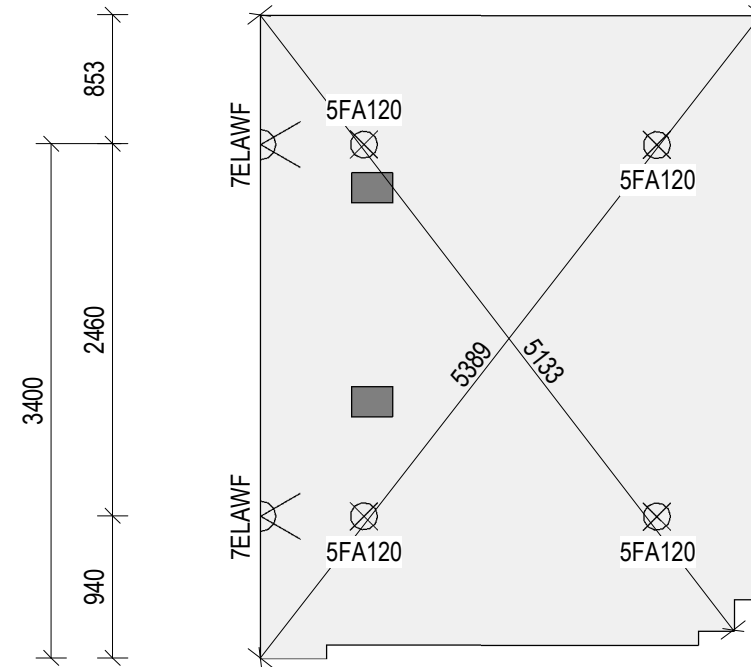
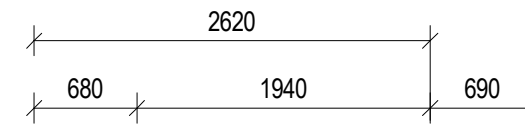
Panel Information		Approval and Date	Drawing Details	
Weight (t)	5.23	No req	1	Q A onsite
Volume	2.09 m <sup>3</sup>	Finish		Operations
Thickness	150mm	MPa (at 28 days)	35MPa min.	Final
		MPa (at Lift)	15MPa	Special Additives
Please note: All panels are drawn looking down on the trowel face, Unless noted otherwise.		Q A onsite	DRAWN BY	DATE
		Operations	T. Langr	02/12/16
		Final	APPROVED BY	Dwg Sheet
		Special Additives	DS, AC, CP, ML, JB, BH	P017
		SCALE	CON B	JOB #
		As indicated		PC11720
			Panel #	Panel 017
				Paper size: A3



P018  
1 : 50



270x200x20mm Weld Plate  
1 : 20



# PRECAST PANEL FABRICATION DRAWINGS



148 Meadows Road, Washdyke  
Office 03 6887534  
Design Team 03 6887164

All Drawings property of Thompson Precast

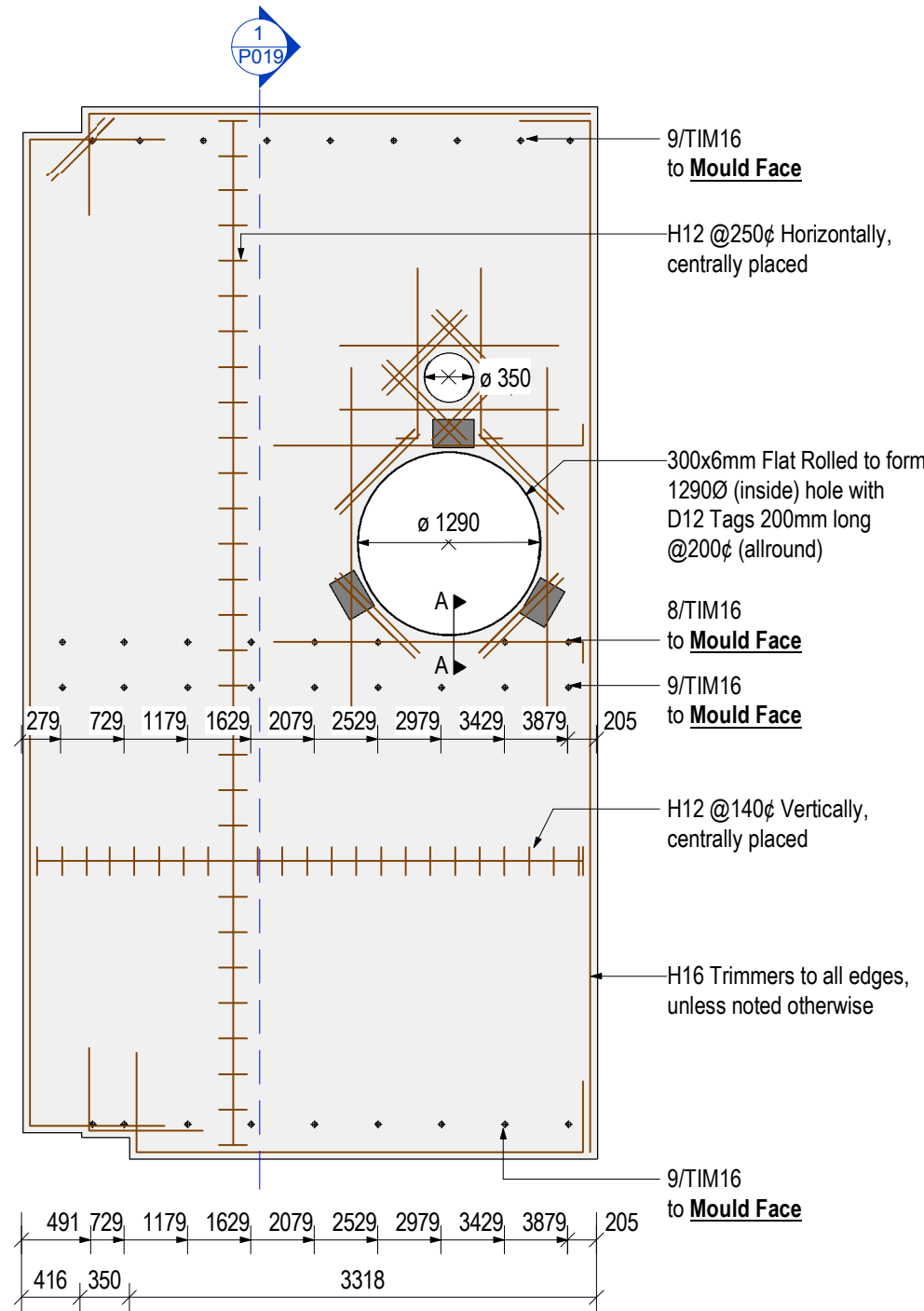
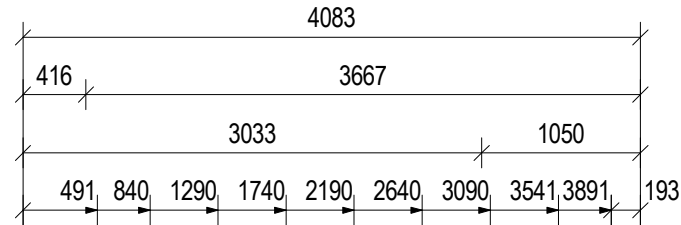
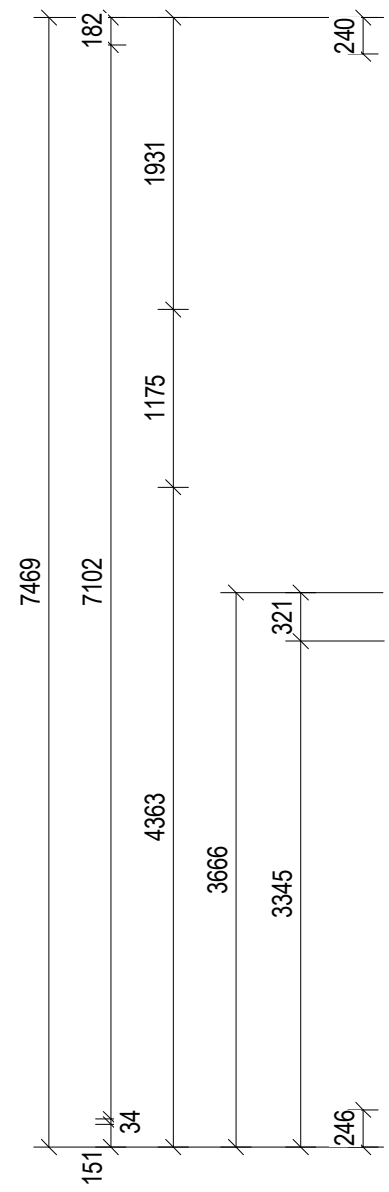
- All materials and workmanship to be in accordance with the NZ building code
- The client shall verify all dimensions on site before commencing work
- All concrete work shall comply with NZS3109
- Cover to reinforcing is to be 50mm min or as shown. Tolerance ± 5mm

NZ Dairy Collaborative Group

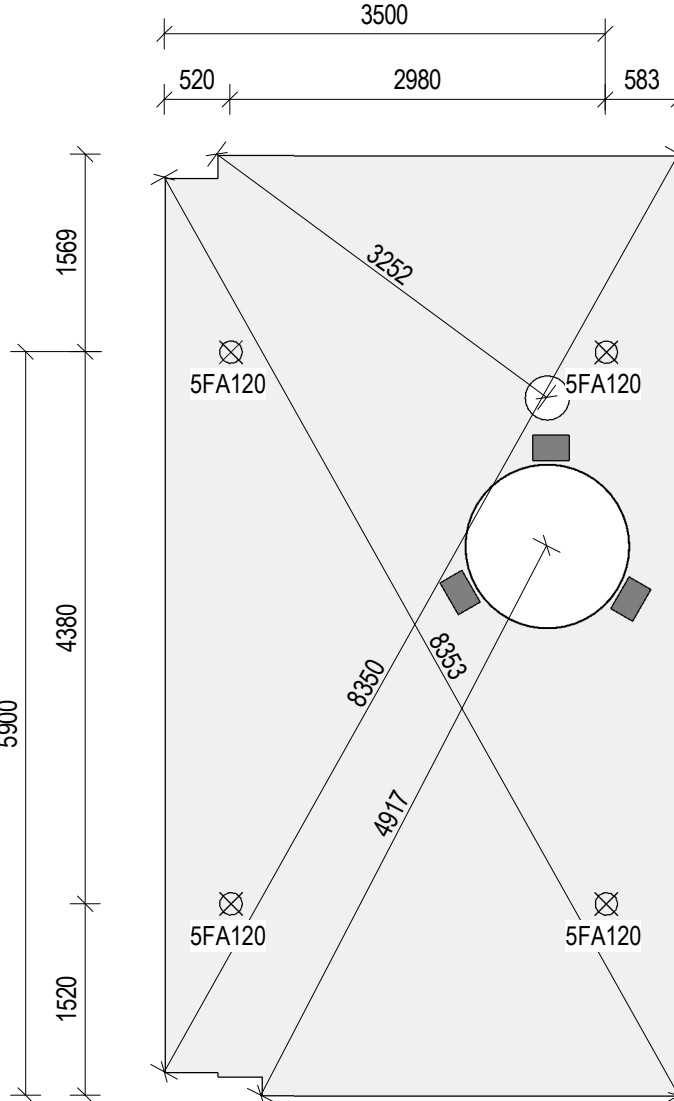
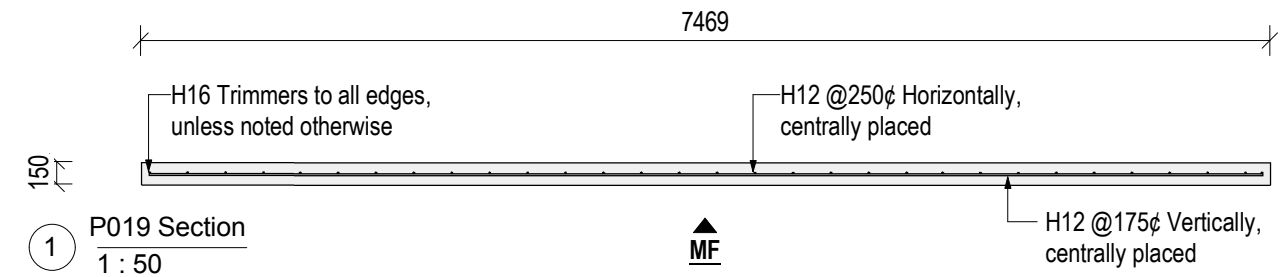
Tower

9 Ashford Ave, Ashburton

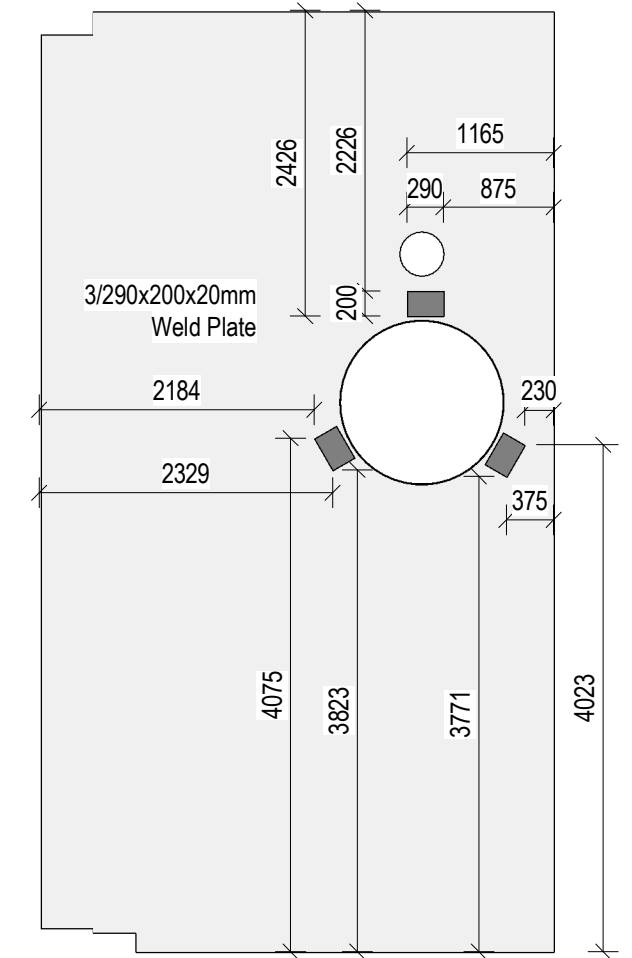
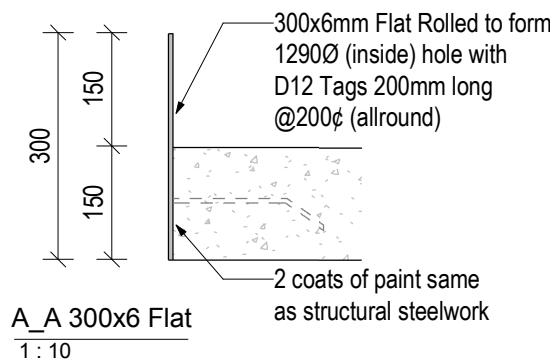
Panel Information		Approval and Date	Drawing Details	
Weight (t)	5.15	No req 1	Q A onsite	DRAWN BY T. Langr DATE 02/12/16
Volume	2.06 m <sup>3</sup>	Finish	Operations	APPROVED BY DS, AC, CP, ML, JB, BH Dwg Sheet P018
Thickness	150mm	MPa (at 28 days) 35MPa min.	Final	ISSUE CON B JOB # PC11720
		MPa (at Lift) 15MPa	Special Additives	SCALE As indicated Panel # Panel 018
Please note: All panels are drawn looking down on the trowel face, Unless noted otherwise.				Paper size: A3



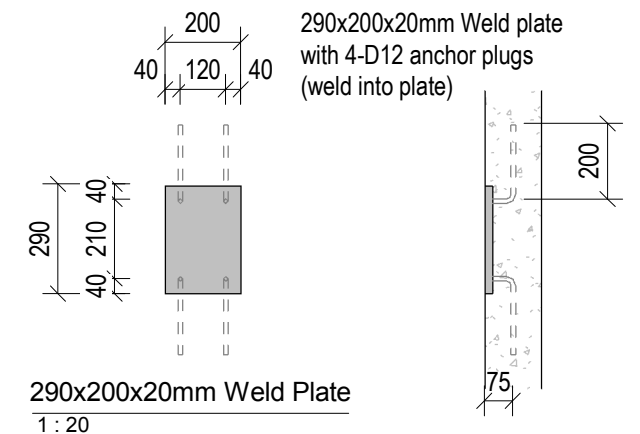
P019  
1:50



P019 Lifting Design  
1:60



P019 Weld Plates locations  
1:60



# PRECAST PANEL FABRICATION DRAWINGS



148 Meadows Road, Washdyke  
Office 03 6887534  
Design Team 03 6887164

All Drawings property of Thompson Precast

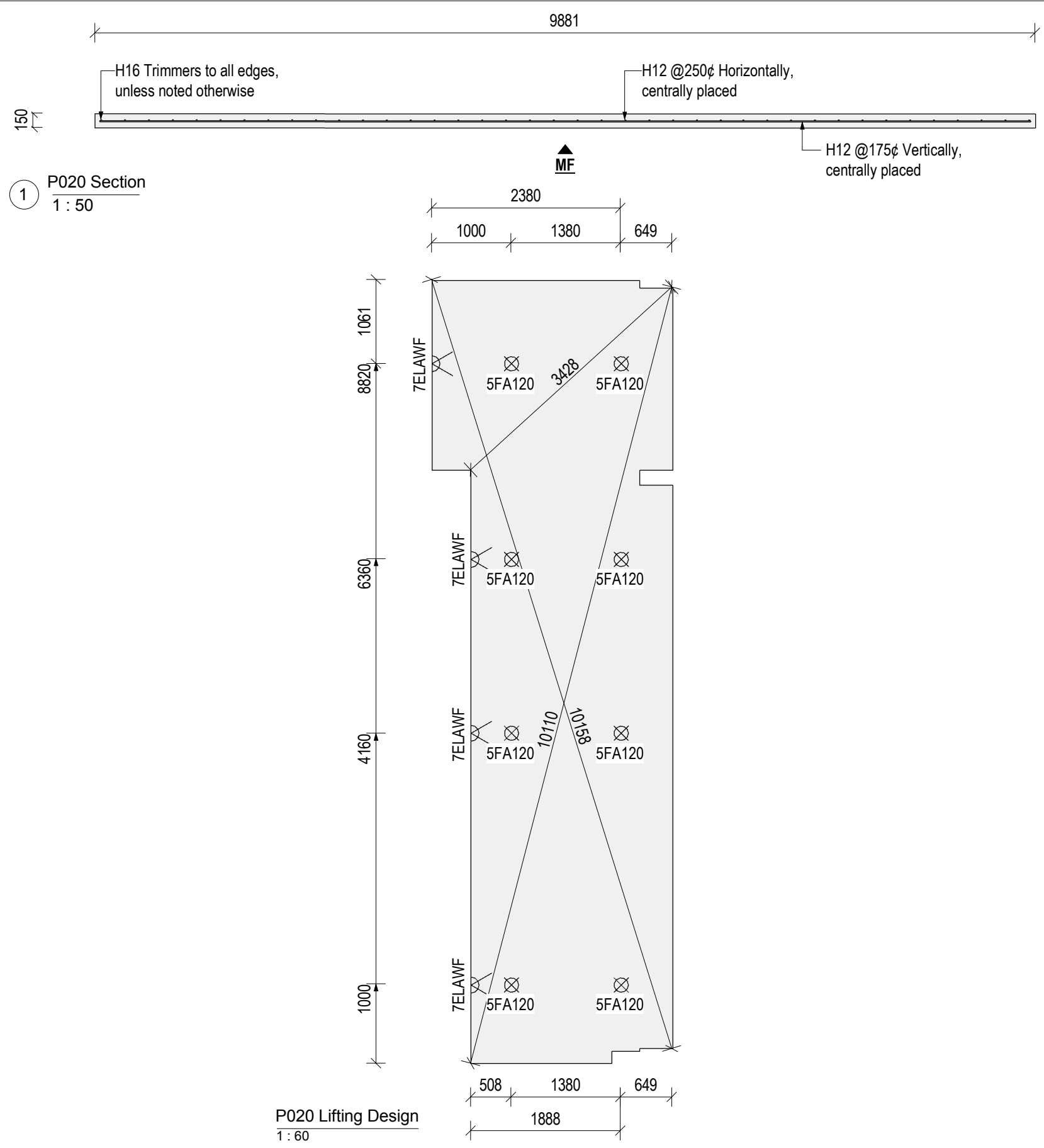
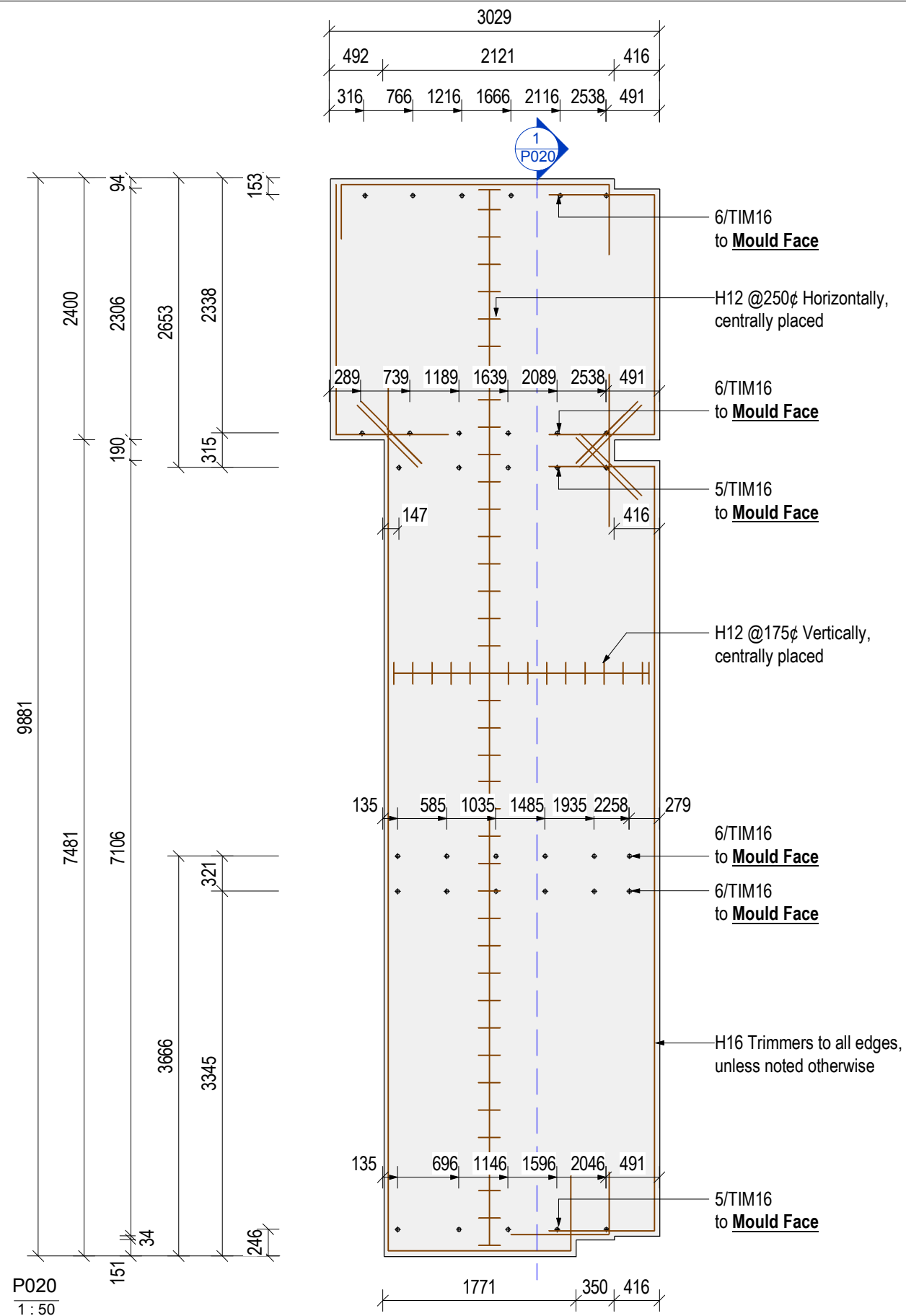
- All materials and workmanship to be in accordance with the NZ building code
- The client shall verify all dimensions on site before commencing work
- All concrete work shall comply with NZS3109
- Cover to reinforcing is to be 50mm min or as shown. Tolerance  $\pm$  5mm

NZ Dairy Collaborative Group

Tower

9 Ashford Ave, Ashburton

Panel Information		Approval and Date	Drawing Details	
Weight (t)	10.81	No req	1	Q A onsite
Volume	4.33 m <sup>3</sup>	Finish		Operations
Thickness	150mm	MPa (at 28 days)	35MPa min.	Final
		MPa (at Lift)	20MPa	Special Additives
Please note: All panels are drawn looking down on the trowel face, Unless noted otherwise.		Q A onsite	DATE	02/12/16
		Operations	DRAWN BY	T. Langr
		Final	APPROVED BY	DS, AC, CP, ML, JB, BH
		Special Additives	ISSUE	PRELIM
		SCALE	As indicated	Dwg Sheet
			Panel #	P019
			JOB #	PC11720
			Panel #	Panel 019
				Paper size: A3



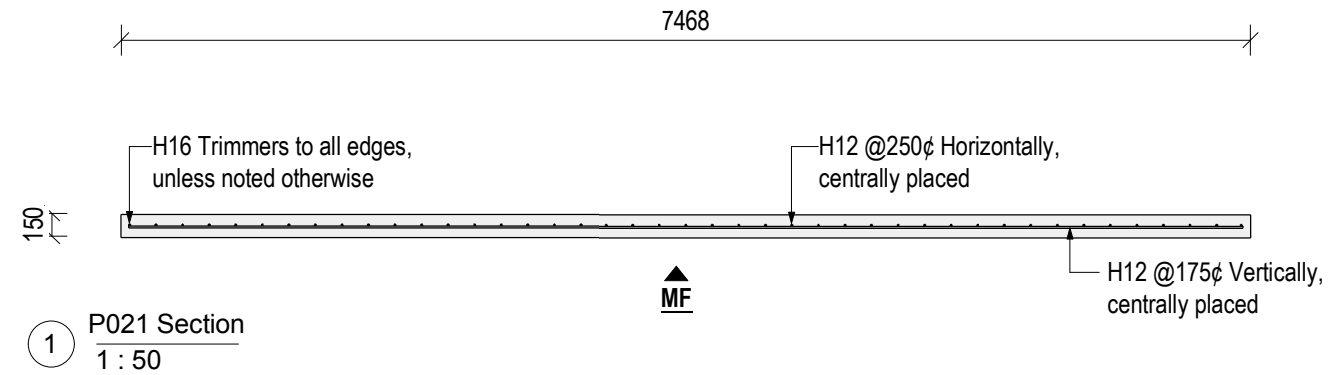
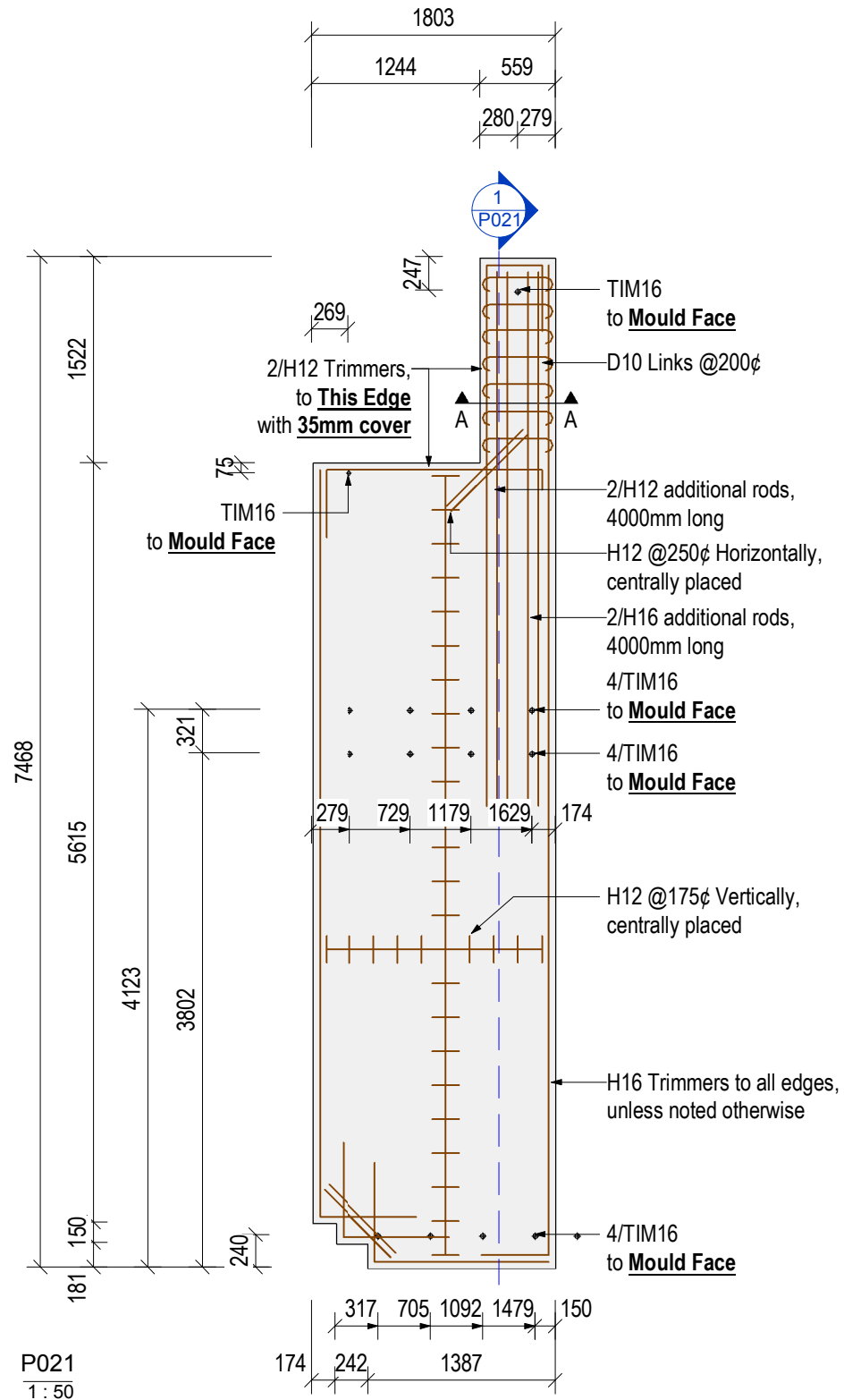
# PRECAST PANEL FABRICATION DRAWINGS



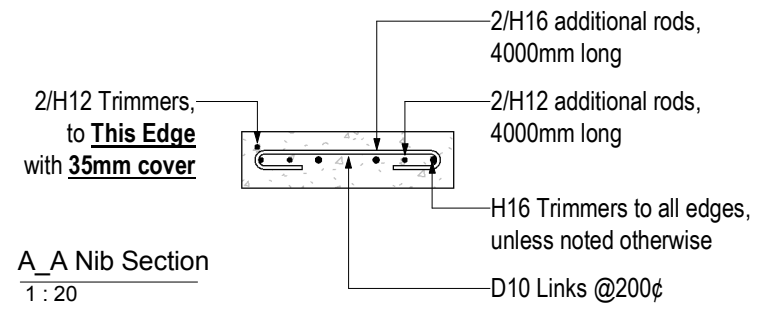
- All materials and workmanship to be in accordance with the NZ building code
- The client shall verify all dimensions on site before commencing work
- All concrete work shall comply with NZS3109
- Cover to reinforcing is to be 50mm min or as shown. Tolerance ± 5mm

NZ Dairy Collaborative Group  
**Tower**  
 9 Ashford Ave, Ashburton

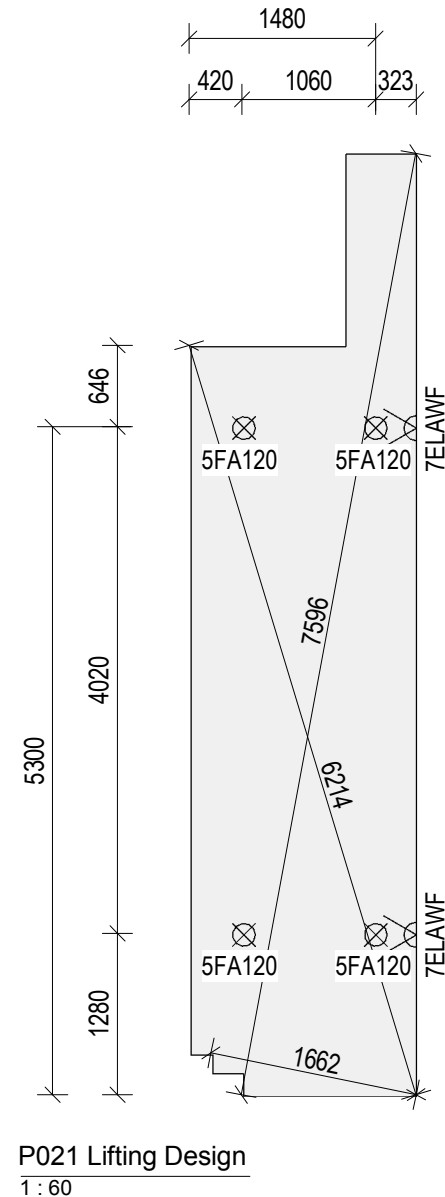
Panel Information		Approval and Date	Drawing Details			
Weight (t)	9.75	No req	1	Q A onsite	DRAWN BY T. Langr	DATE 02/12/16
Volume	3.90 m <sup>3</sup>	Finish		Operations	APPROVED BY DS, AC, CP, ML, JB, BH	Dwg Sheet P020
Thickness	150mm	MPa (at 28 days)	35MPa min.	Final	ISSUE CON B	JOB # PC11720
		MPa (at Lift)	20MPa	Special Additives	SCALE As indicated	Panel # Panel 020
Please note: All panels are drawn looking down on the trowel face, Unless noted otherwise.						Paper size: A3



1 P021 Section  
1 : 50



A\_A Nib Section  
1 : 20



P021 Lifting Design  
1 : 60

# PRECAST PANEL FABRICATION DRAWINGS



148 Meadows Road, Washdyke  
Office 03 6887534  
Design Team 03 6887164

All Drawings property of Thompson Precast

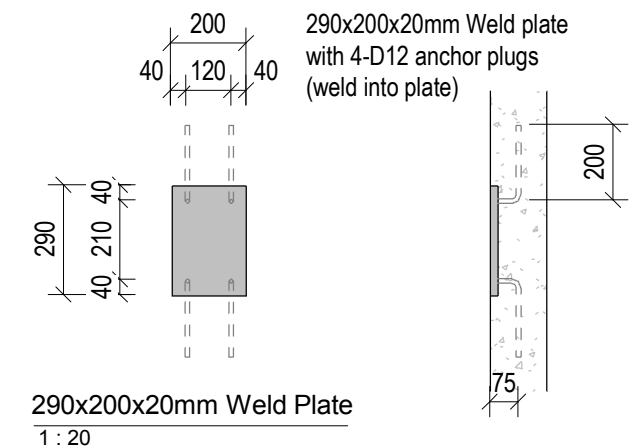
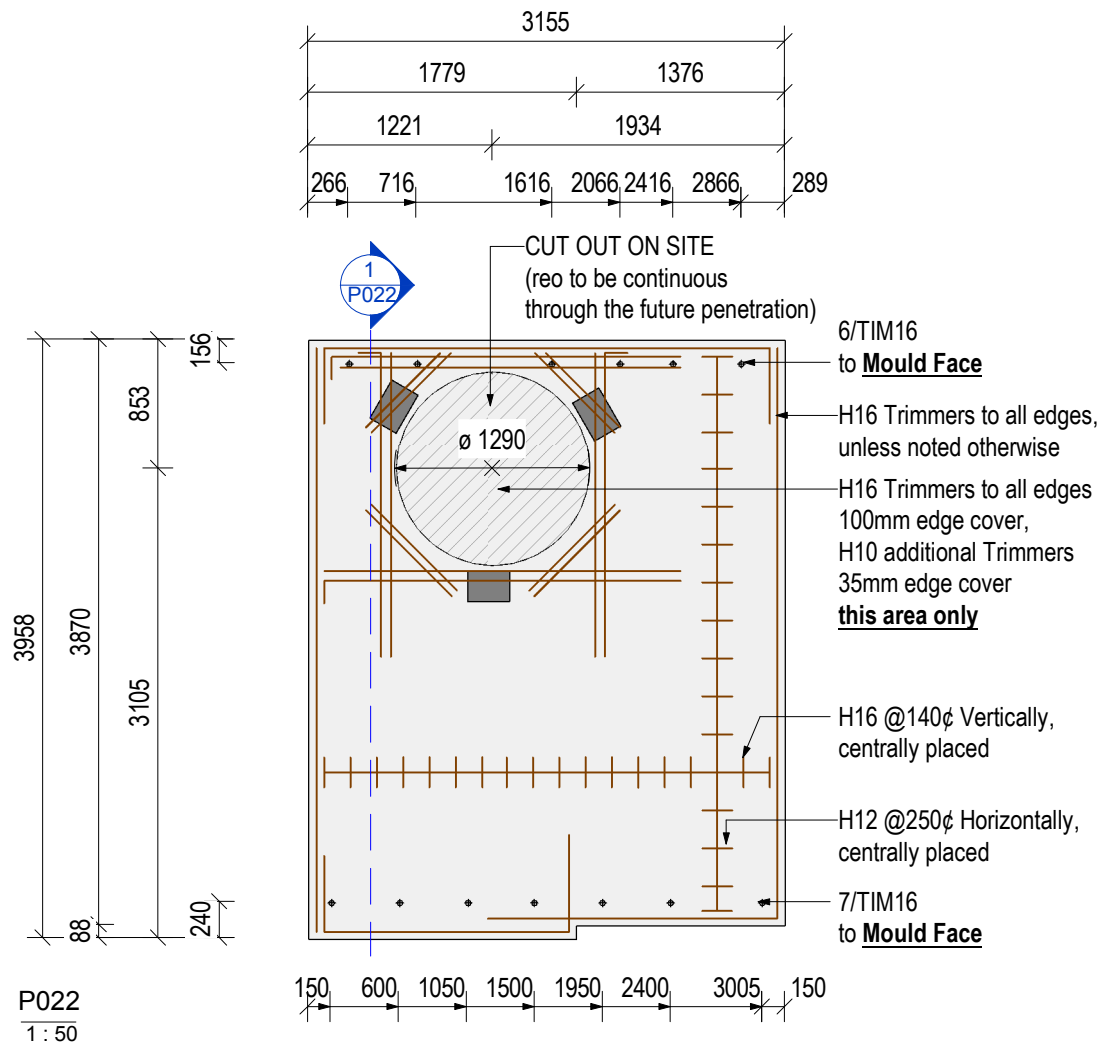
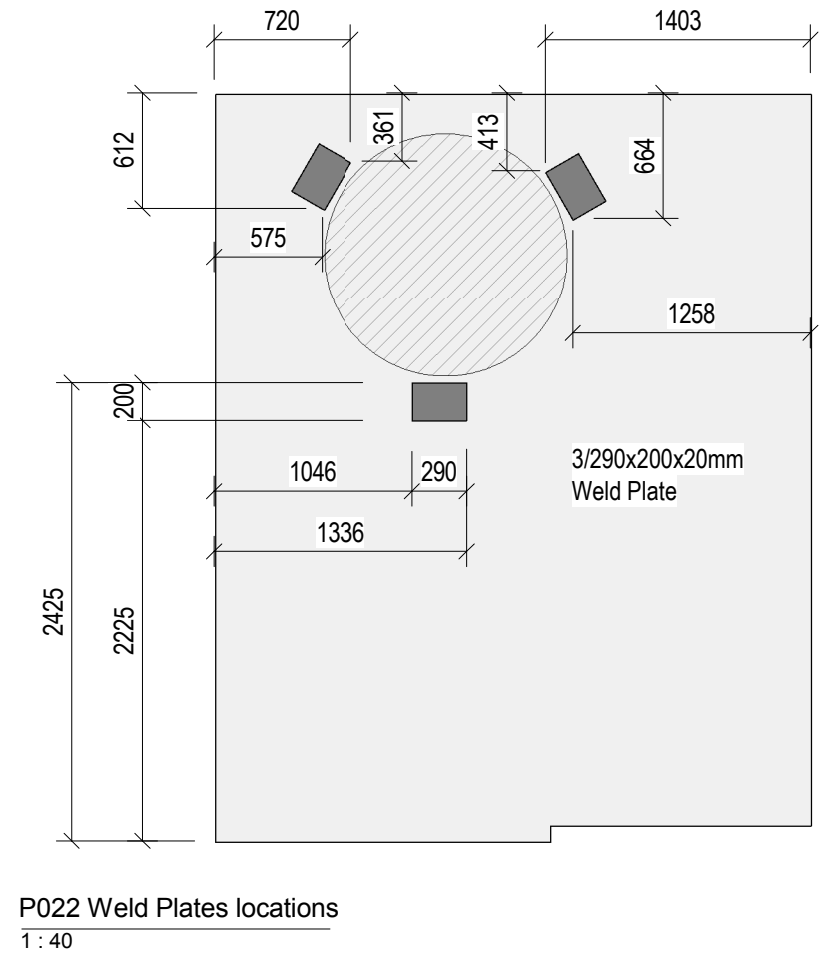
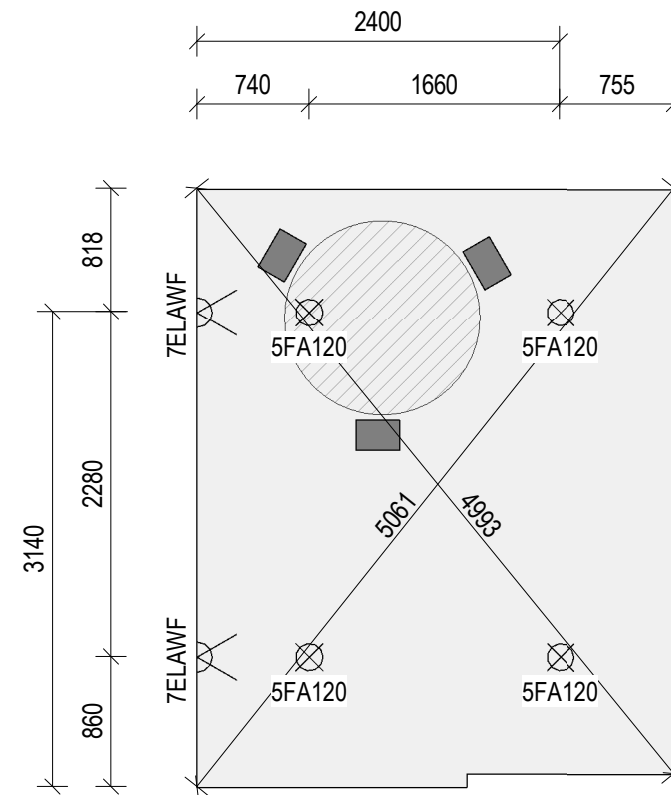
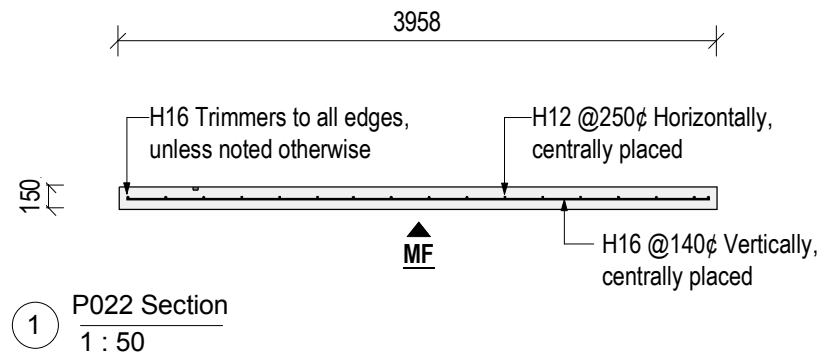
- All materials and workmanship to be in accordance with the NZ building code
- The client shall verify all dimensions on site before commencing work
- All concrete work shall comply with NZS3109
- Cover to reinforcing is to be 50mm min or as shown. Tolerance  $\pm$  5mm

NZ Dairy Collaborative Group

Tower

9 Ashford Ave, Ashburton

Panel Information		Approval and Date	Drawing Details	
Weight (t)	4.3	No req 1	Q A onsite	DRAWN BY T. Langr DATE 02/12/16
Volume	1.72 m <sup>3</sup>	Finish	Operations	APPROVED BY DS, AC, CP, ML, JB, BH Dwg Sheet P021
Thickness	150mm	MPa (at 28 days) 35MPa min.	Final	ISSUE CON B JOB # PC11720
		MPa (at Lift) 20MPa	Special Additives	SCALE As indicated Panel # Panel 021
Please note: All panels are drawn looking down on the trowel face, Unless noted otherwise.				Paper size: A3



# PRECAST PANEL FABRICATION DRAWINGS



148 Meadows Road, Washdyke  
Office 03 6887534  
Design Team 03 6887164

All Drawings property of Thompson Precast

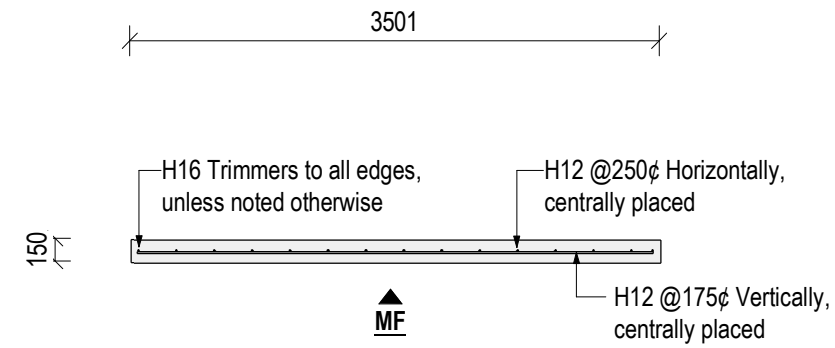
- All materials and workmanship to be in accordance with the NZ building code
- The client shall verify all dimensions on site before commencing work
- All concrete work shall comply with NZS3109
- Cover to reinforcing is to be 50mm min or as shown. Tolerance ± 5mm

NZ Dairy Collaborative Group

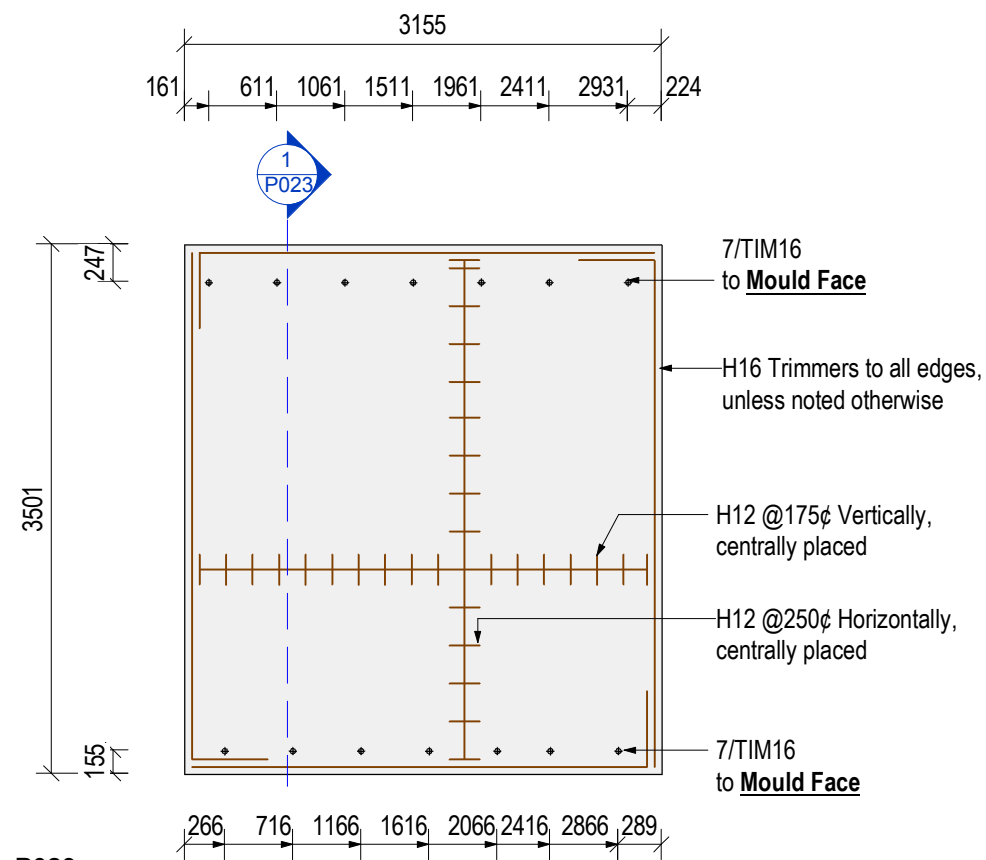
Tower

9 Ashford Ave, Ashburton

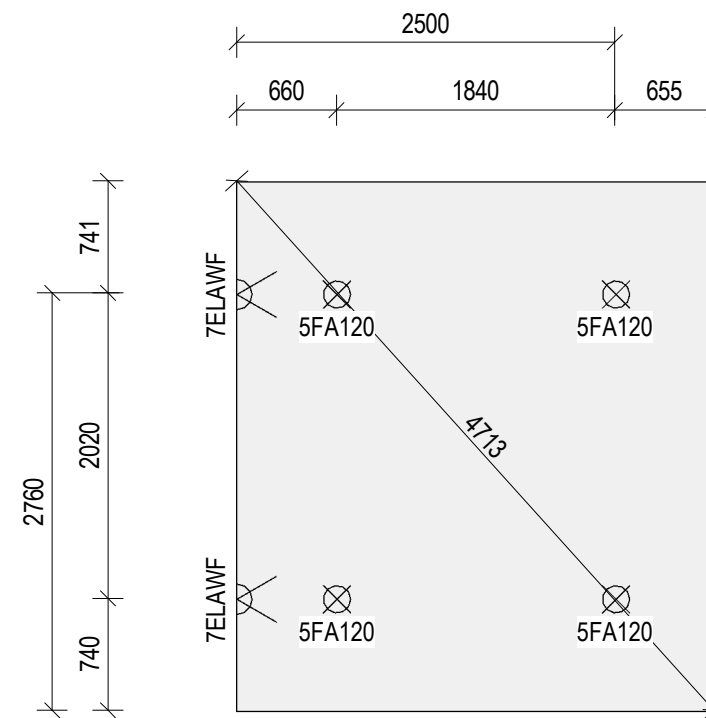
Panel Information		Approval and Date	Drawing Details	
Weight (t)	4.63	No req 1	Q A onsite	DRAWN BY T. Langr DATE 02/12/16
Volume	1.85 m <sup>3</sup>	Finish	Operations	APPROVED BY DS, AC, CP, ML, JB, BH Dwg Sheet P022
Thickness	150mm	MPa (at 28 days) 35MPa min.	Final	ISSUE CON B JOB # PC11720
		MPa (at Lift) 15MPa	Special Additives	SCALE As indicated Panel # Panel 022
Please note: All panels are drawn looking down on the trowel face, Unless noted otherwise.				Paper size: A3



① P023 Section  
1 : 50



P023  
1 : 50



P023 Lifting Design  
1 : 50

# PRECAST PANEL FABRICATION DRAWINGS



148 Meadows Road, Washdyke  
Office 03 6887534  
Design Team 03 6887164

All Drawings property of Thompson Precast

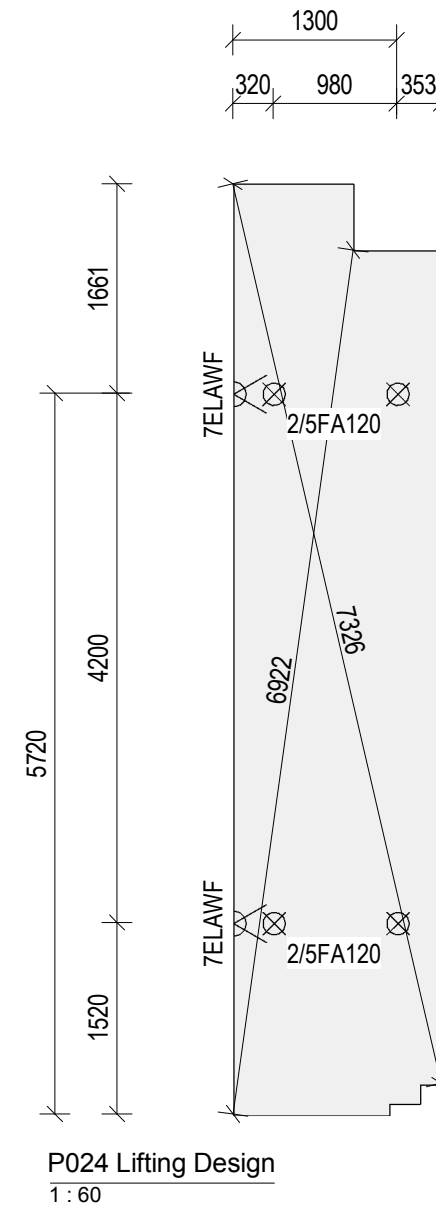
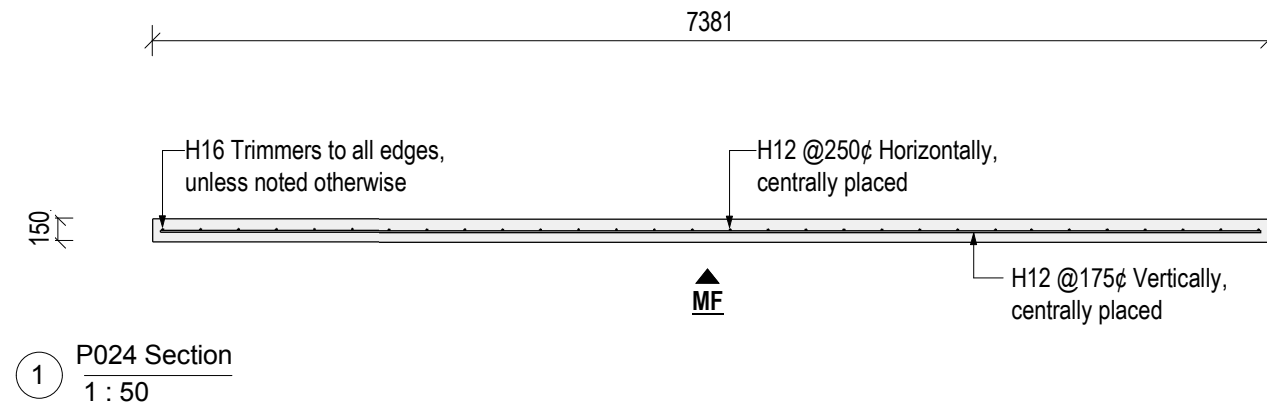
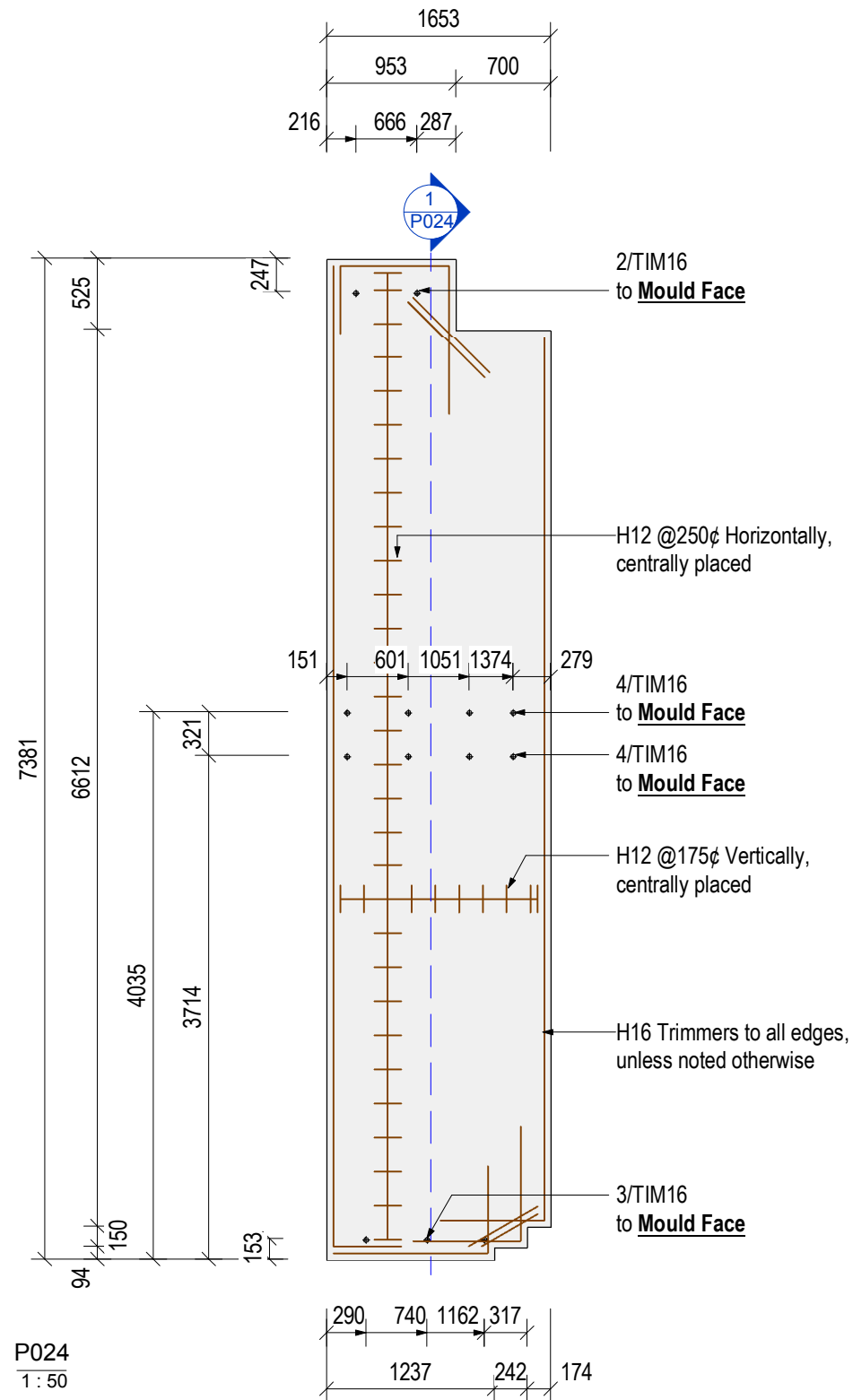
1. All materials and workmanship to be in accordance with the NZ building code
2. The client shall verify all dimensions on site before commencing work
3. All concrete work shall comply with NZS3109
4. Cover to reinforcing is to be 50mm min or as shown. Tolerance  $\pm$  5mm

## NZ Dairy Collaborative Group

### Tower

9 Ashford Ave, Ashburton

Panel Information		Approval and Date	Drawing Details	
Weight (t)	4.14	No req 1	Q A onsite	DRAWN BY T. Langr DATE 02/12/16
Volume	1.66 m <sup>3</sup>	Finish	Operations	APPROVED BY DS, AC, CP, ML, JB, BH Dwg Sheet P023
Thickness	150mm	MPa (at 28 days) 35MPa min.	Final	ISSUE CON B JOB # PC11720
		MPa (at Lift) 15MPa	Special Additives	SCALE 1 : 50 Panel # Panel 023
Please note: All panels are drawn looking down on the trowel face, Unless noted otherwise.				Paper size: A3



# PRECAST PANEL FABRICATION DRAWINGS



148 Meadows Road, Washdyke  
Office 03 6887534  
Design Team 03 6887164

All Drawings property of Thompson Precast

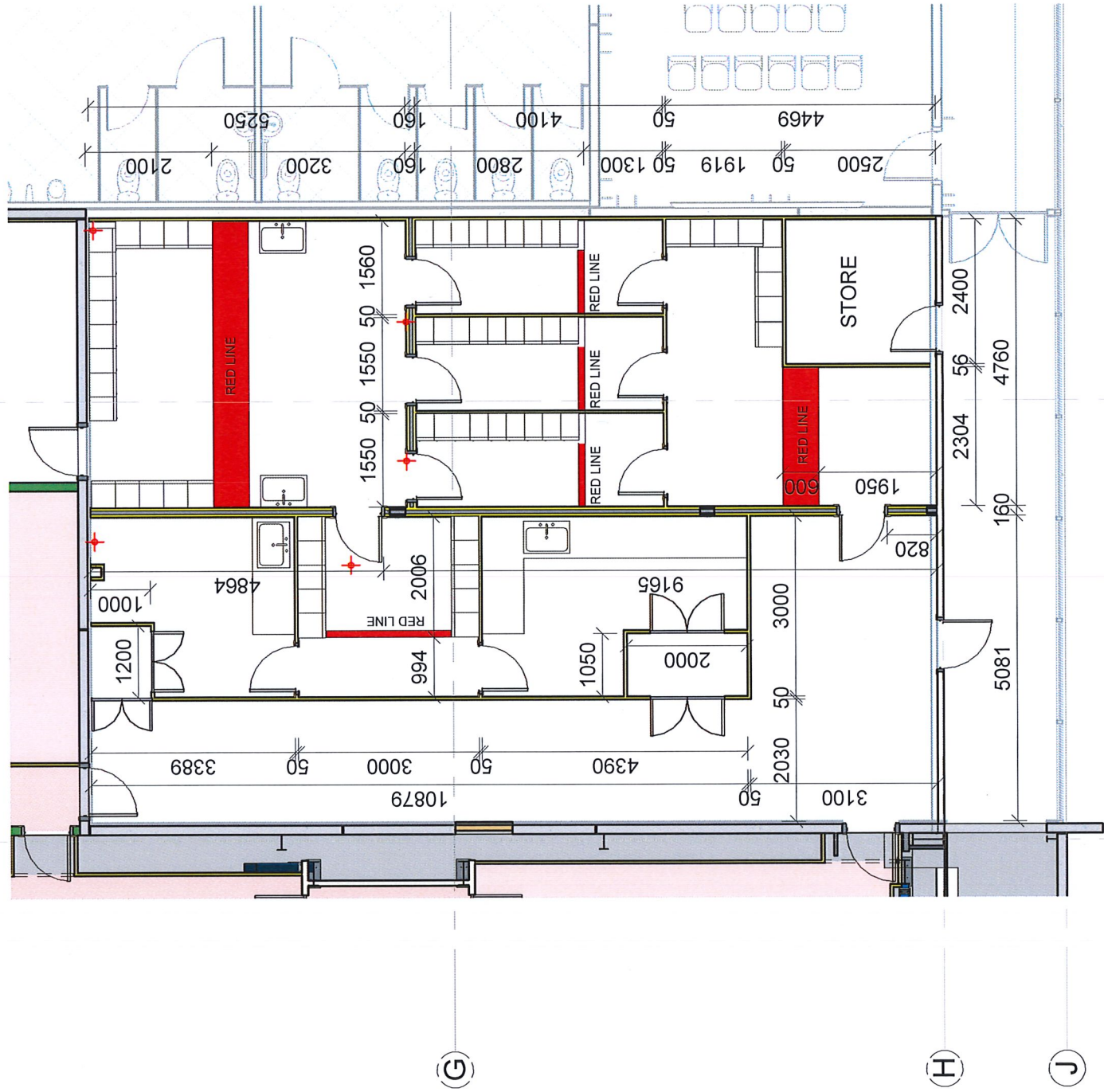
1. All materials and workmanship to be in accordance with the NZ building code
2. The client shall verify all dimensions on site before commencing work
3. All concrete work shall comply with NZS3109
4. Cover to reinforcing is to be 50mm min or as shown. Tolerance ± 5mm

NZ Dairy Collaborative Group

Tower

9 Ashford Ave, Ashburton

Panel Information		Approval and Date	Drawing Details	
Weight (t)	4.41	No req 1	Q A onsite	DRAWN BY T. Langr DATE 02/12/16
Volume	1.76 m <sup>3</sup>	Finish	Operations	APPROVED BY DS, AC, CP, ML, JB, BH Dwg Sheet P024
Thickness	150mm	MPa (at 28 days)	Final	ISSUE CON B JOB # PC11720
		MPa (at Lift)	Special Additives	SCALE As indicated Panel # Panel 024
Please note: All panels are drawn looking down on the trowel face, Unless noted otherwise.				Paper size: A3



8

Red Line Setout  
1 : 100

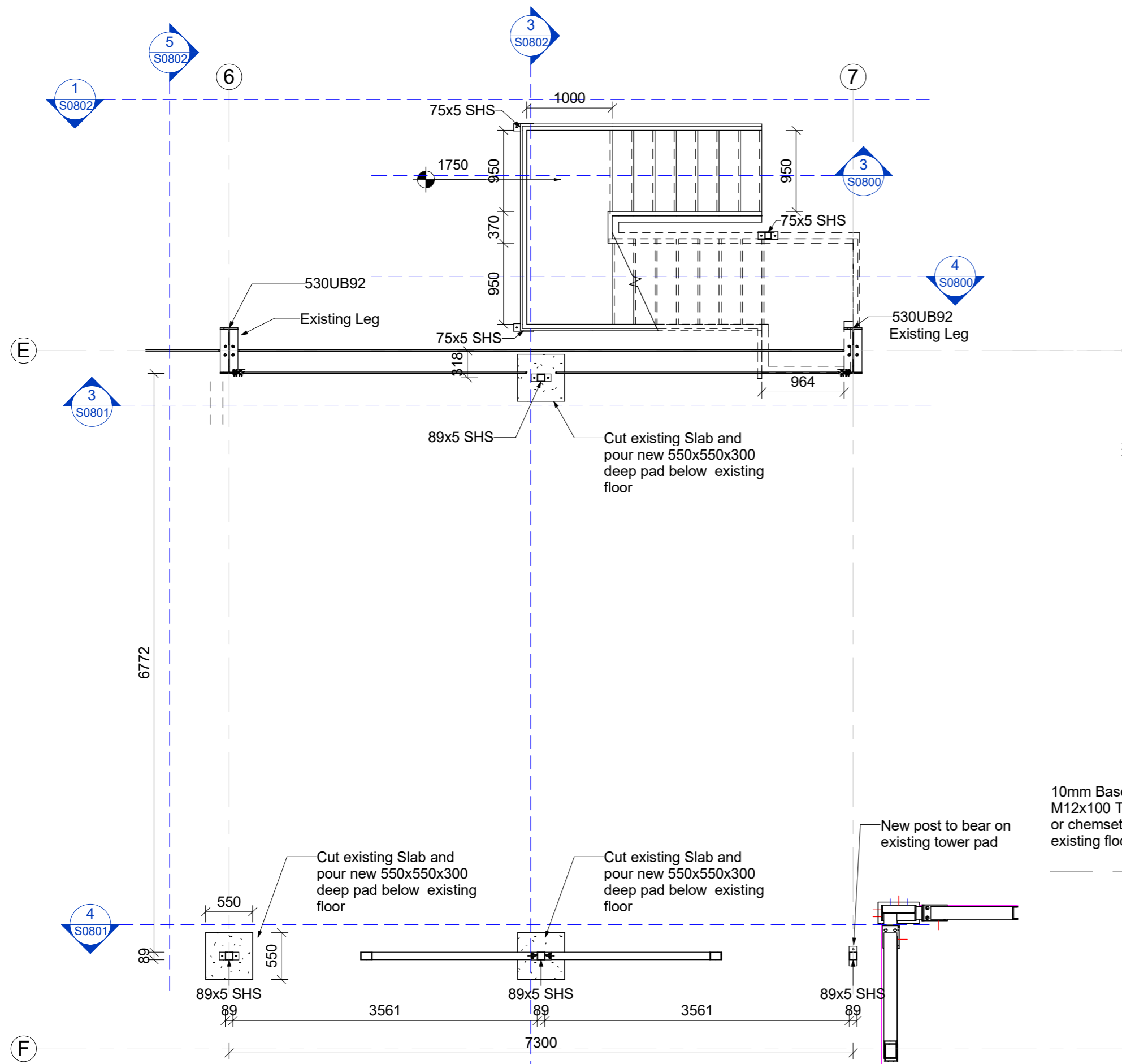
9

SCALE	JOB #	PROJECT	
1 : 100	12630	NZ Dairy Collaborative Group Tower Extension	
DRAWN BY	DATE	9 Ashford Ave, Ashburton	
D. Shand	06/09/17		
CHECKED BY			
Red Line Setout			
DWG NO	A1304		

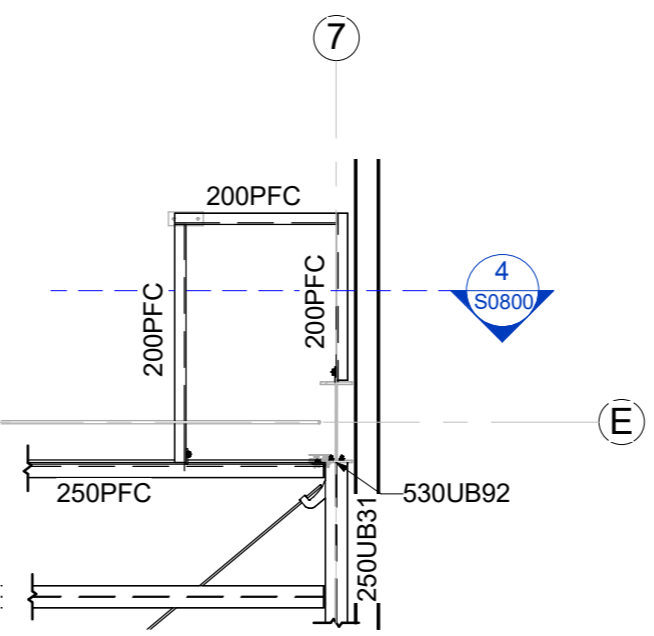
Please note: All dimensions to be verified on site. Paper size: A3



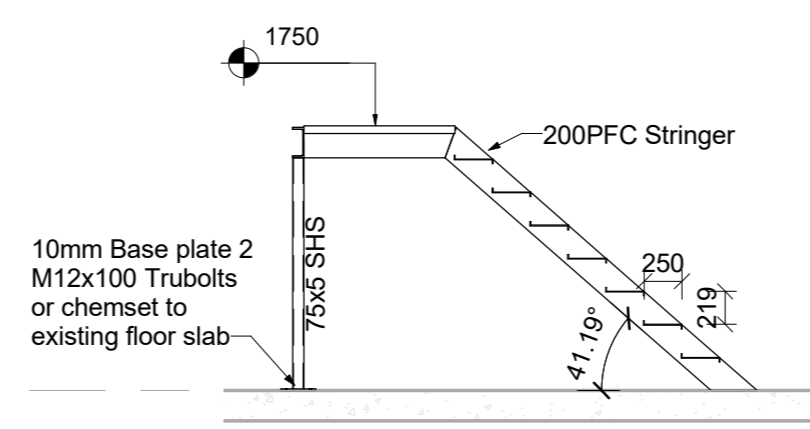
Thompson Engineering 2002 Ltd  
 PO Box 2081, Washdyke - Timaru | 9b Meadows Road - Timaru  
 PH 0800 688 716 | F (03) 688 7168  
 www.thompsonengineering.co.nz | Design@thompsonengineering.co.nz  
 All Drawings property of Thompson Engineering 2002 Ltd



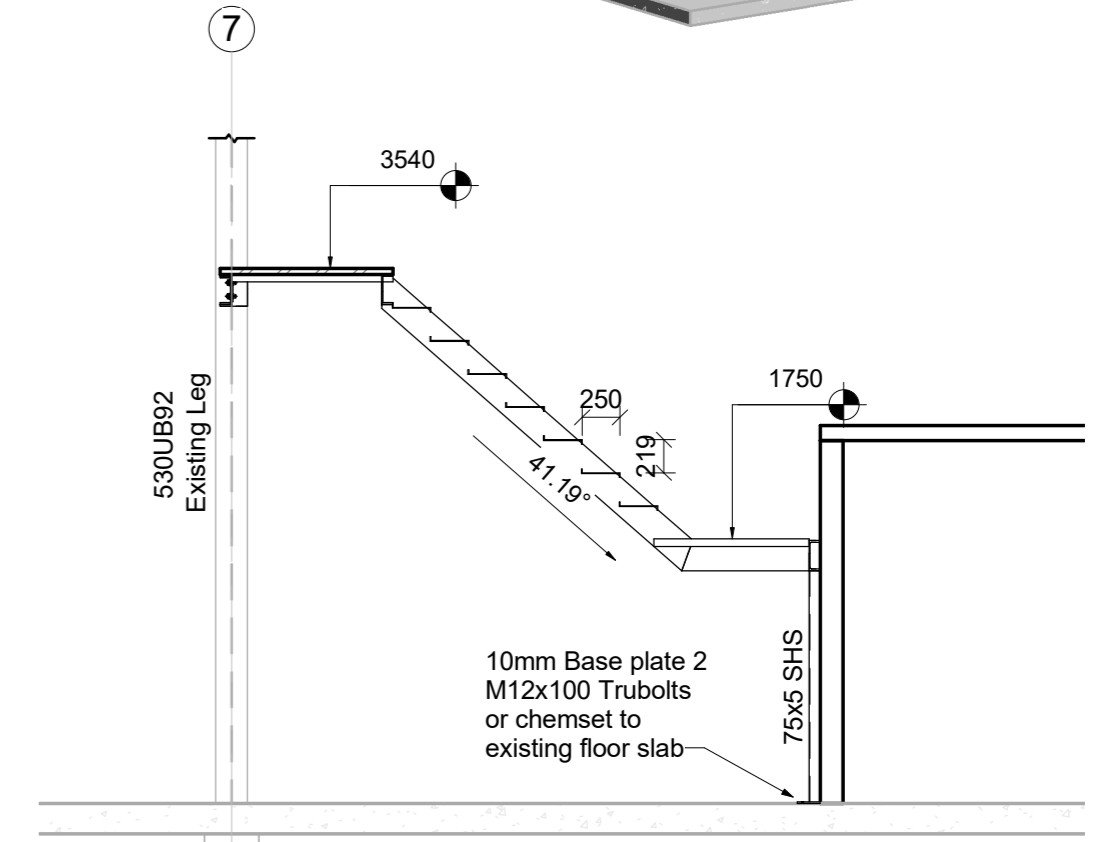
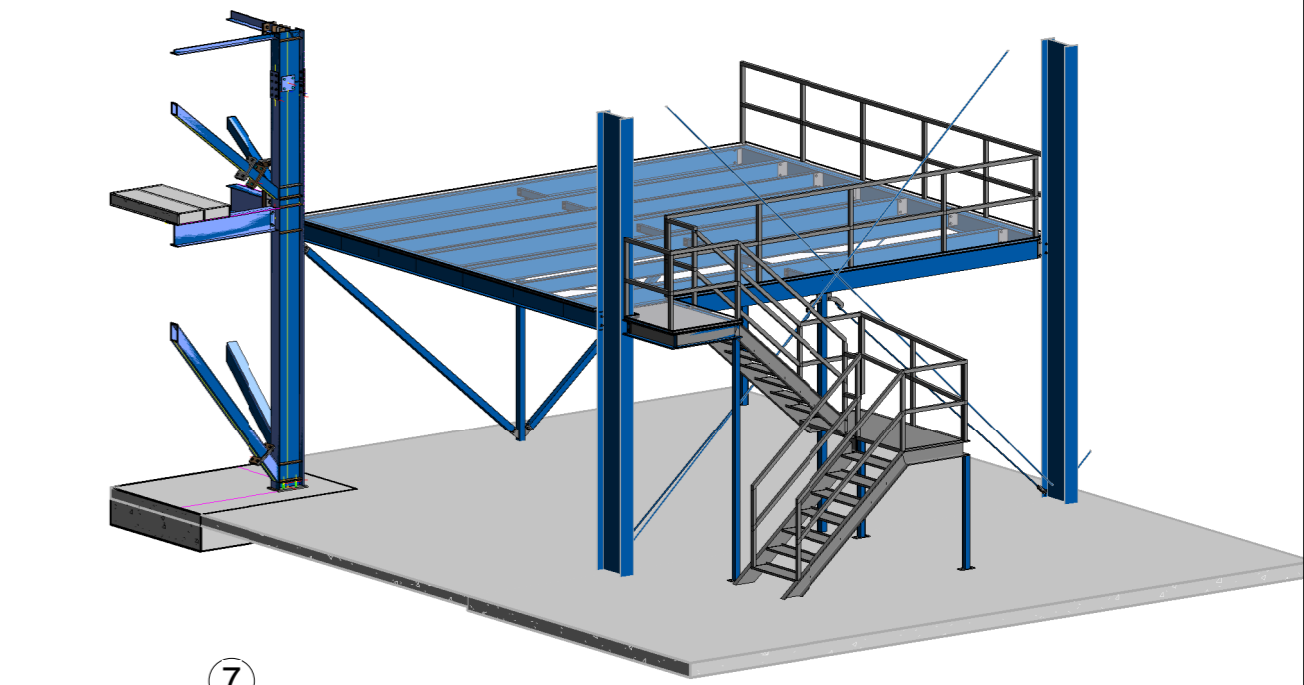
1 Floor Plan (FFL) AHU Platform  
1:50



2 AHU Platform Stair landing  
1:50

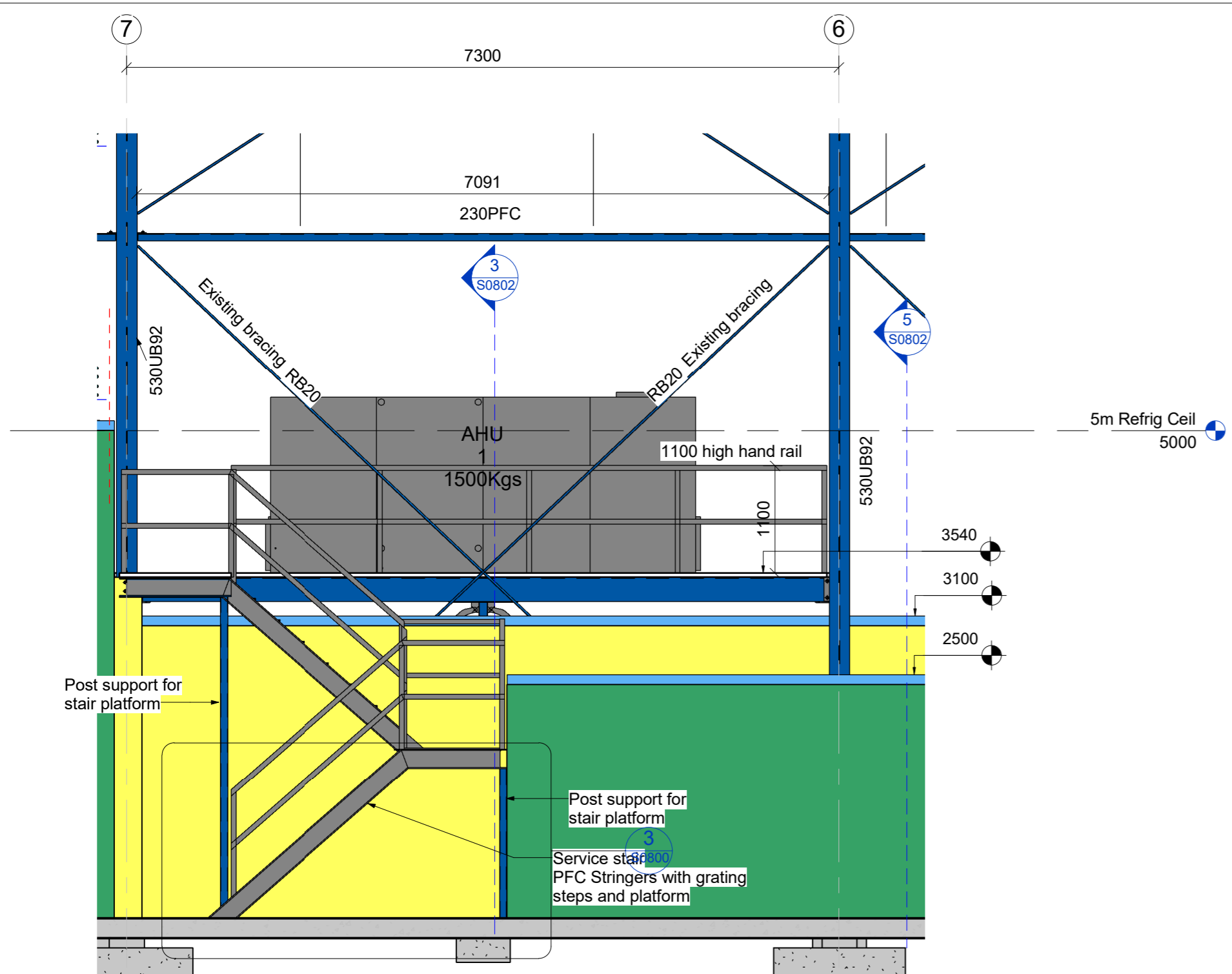


3 AHU lower stair  
1:50

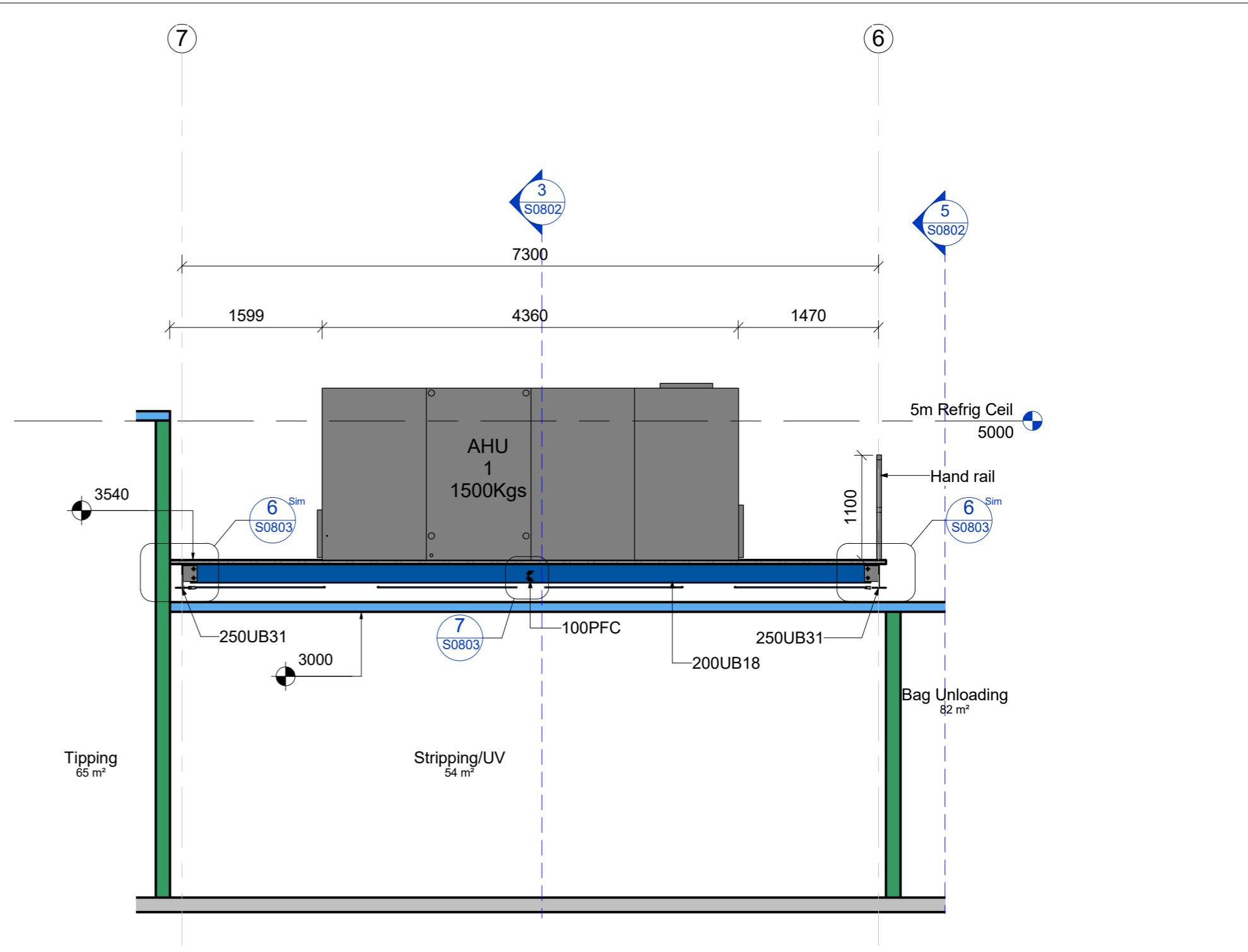


4 AHU Upper stair  
1:50

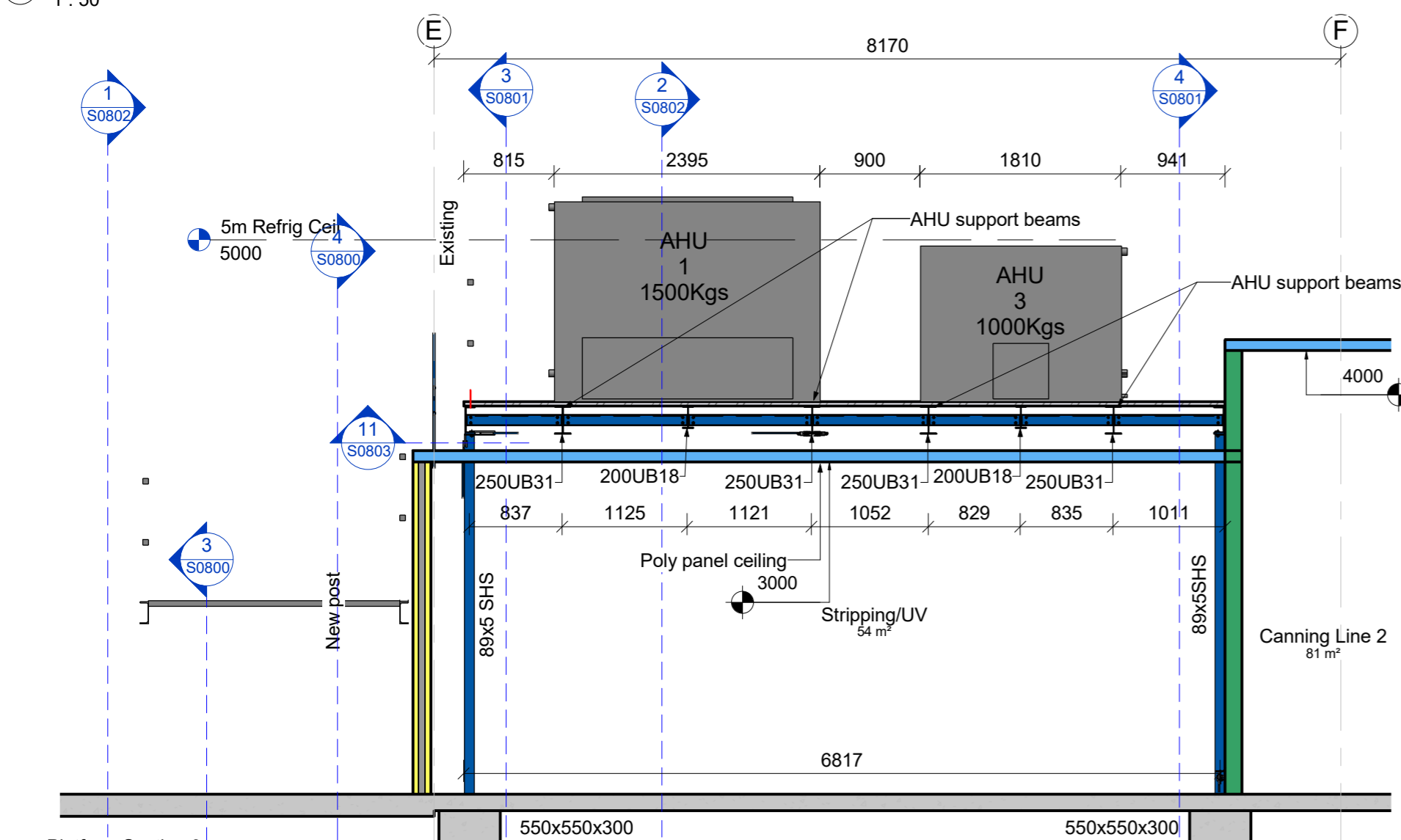




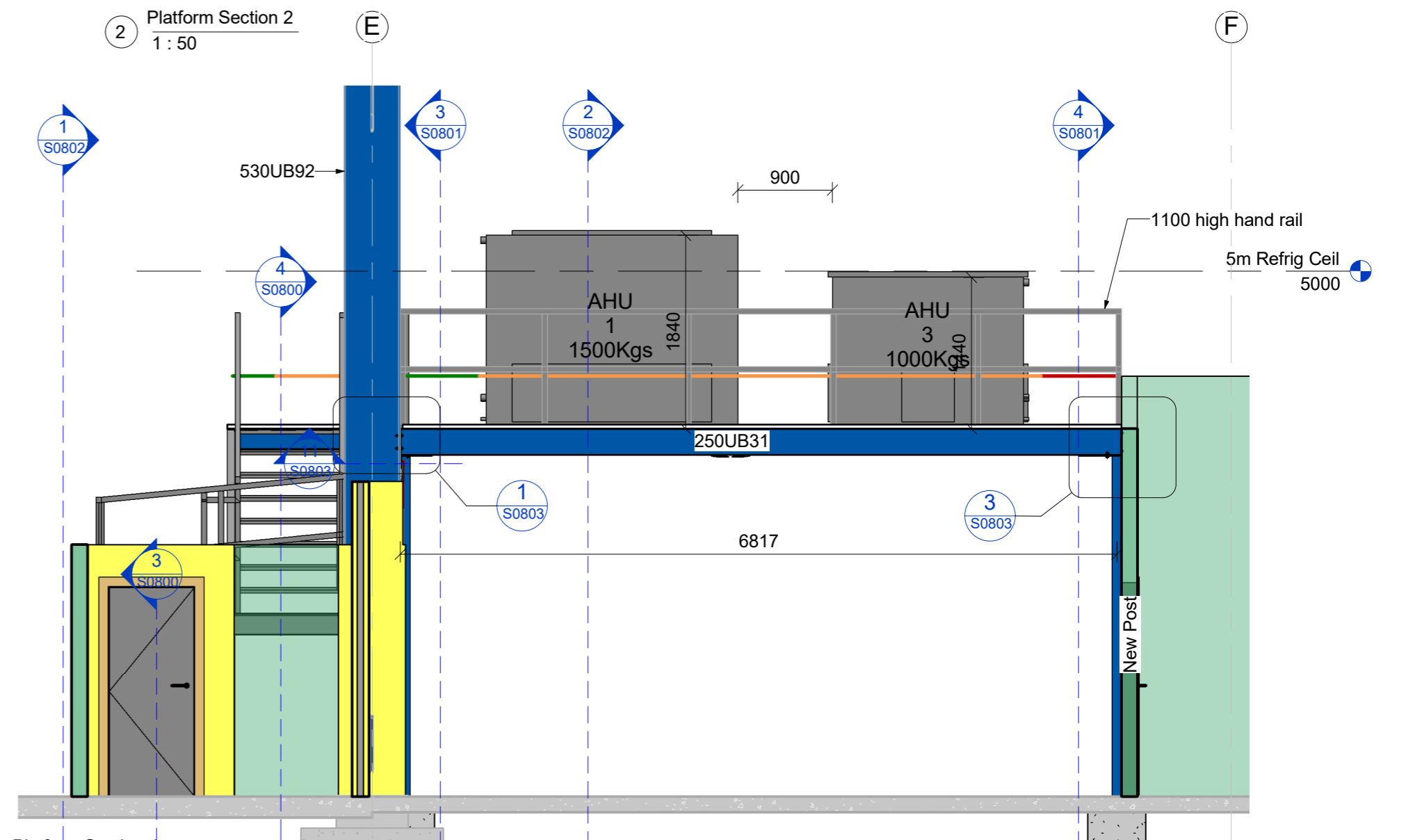
1 Platform Section 1  
1 : 50



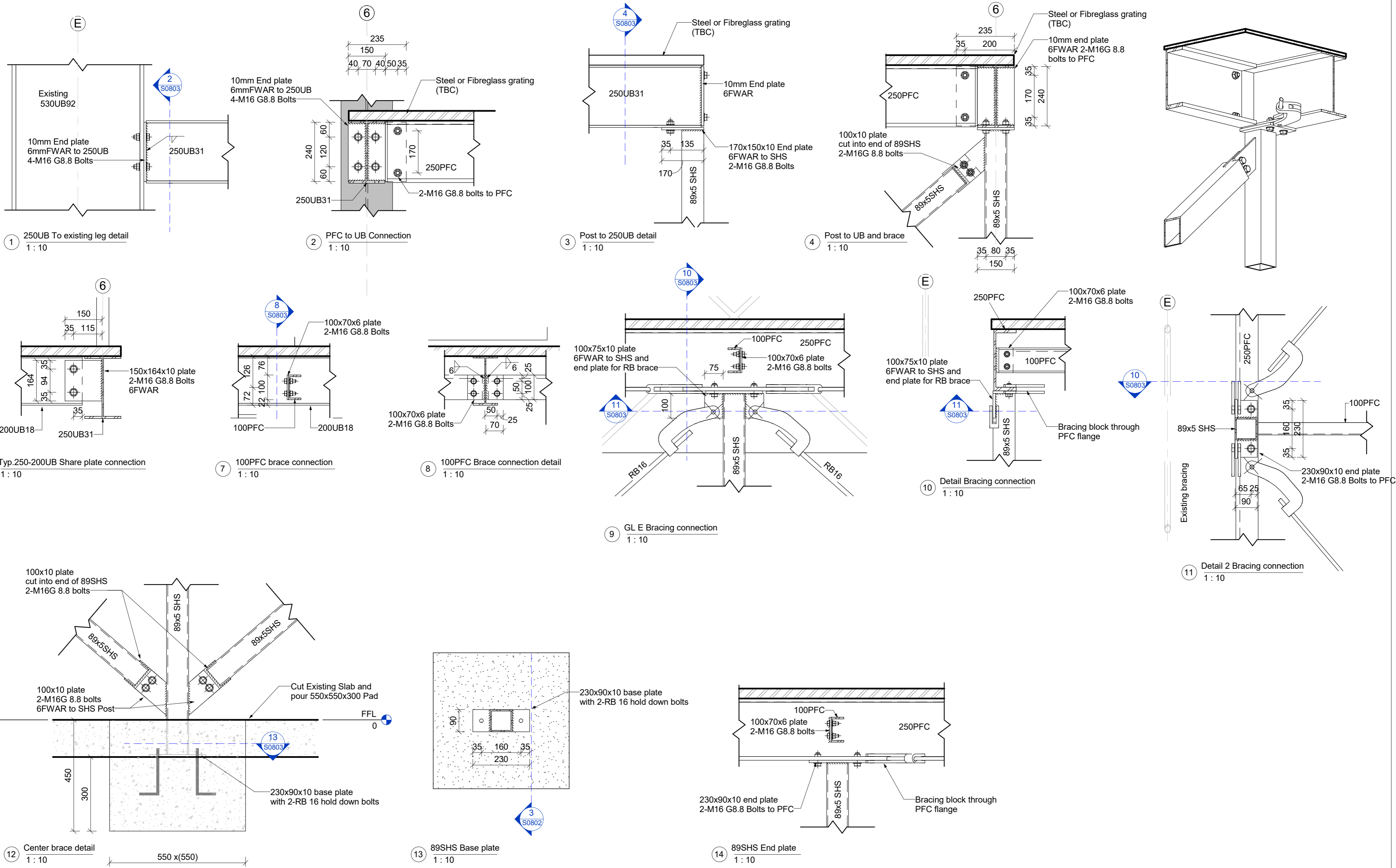
2 Platform Section 2  
1 : 50

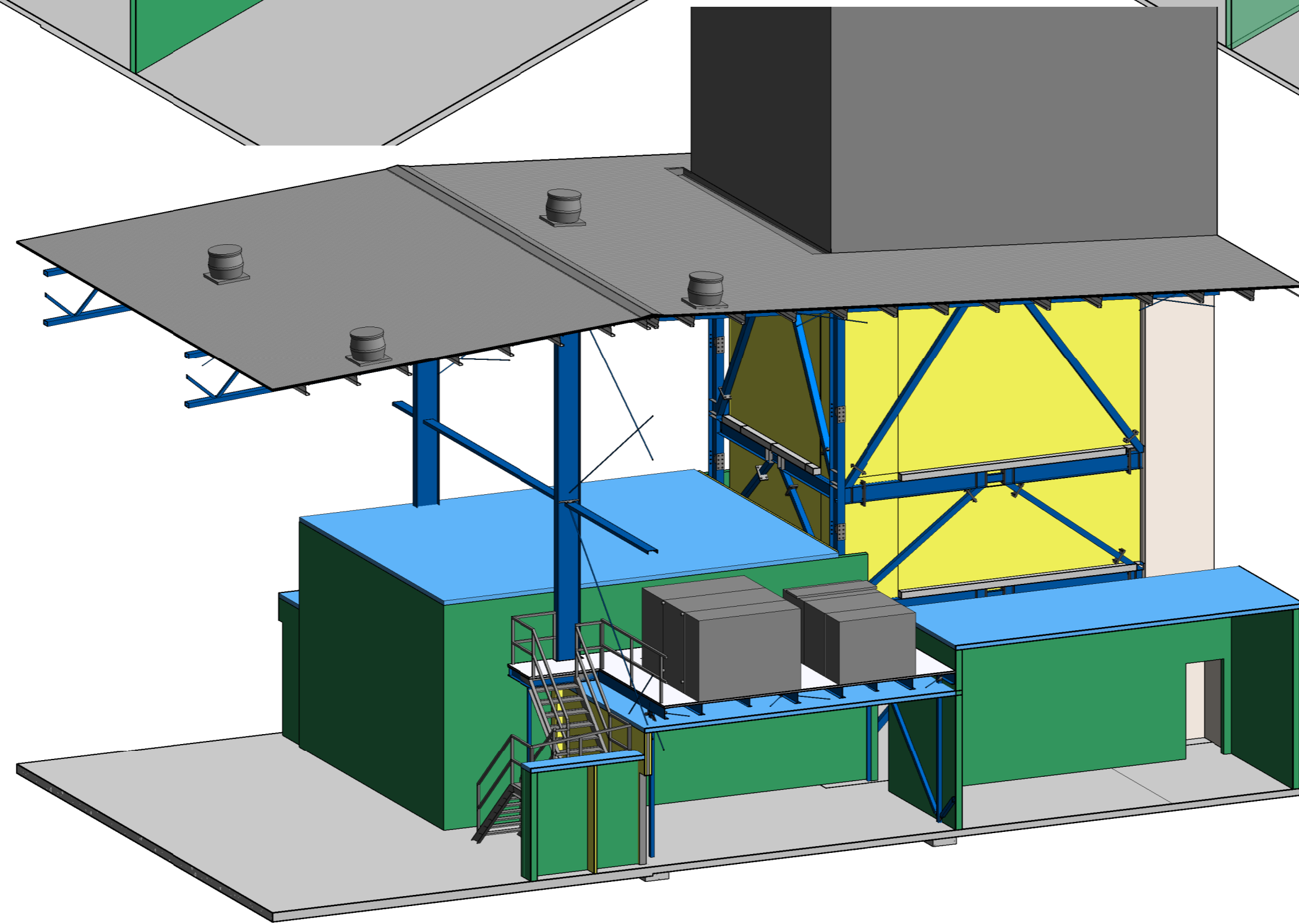
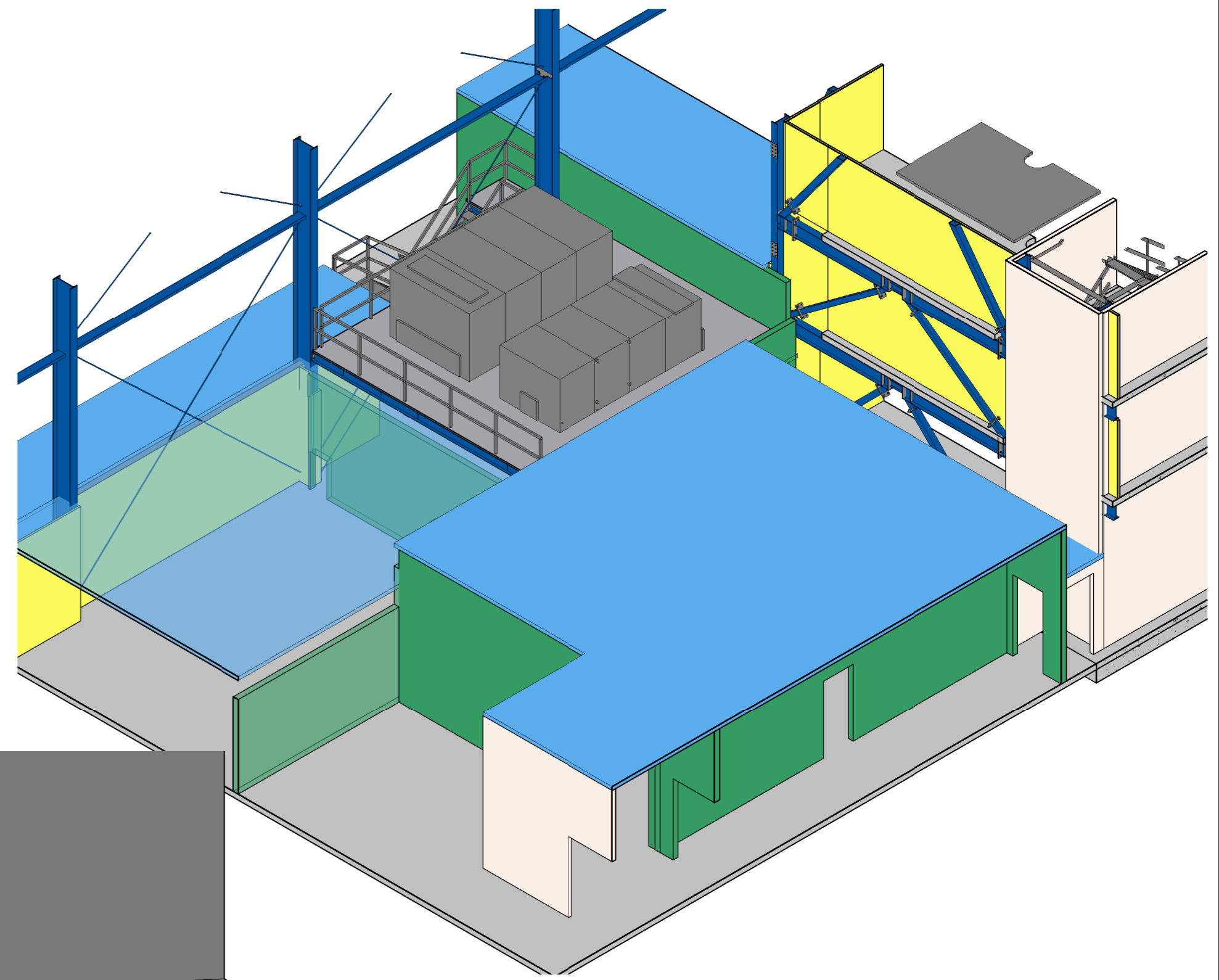
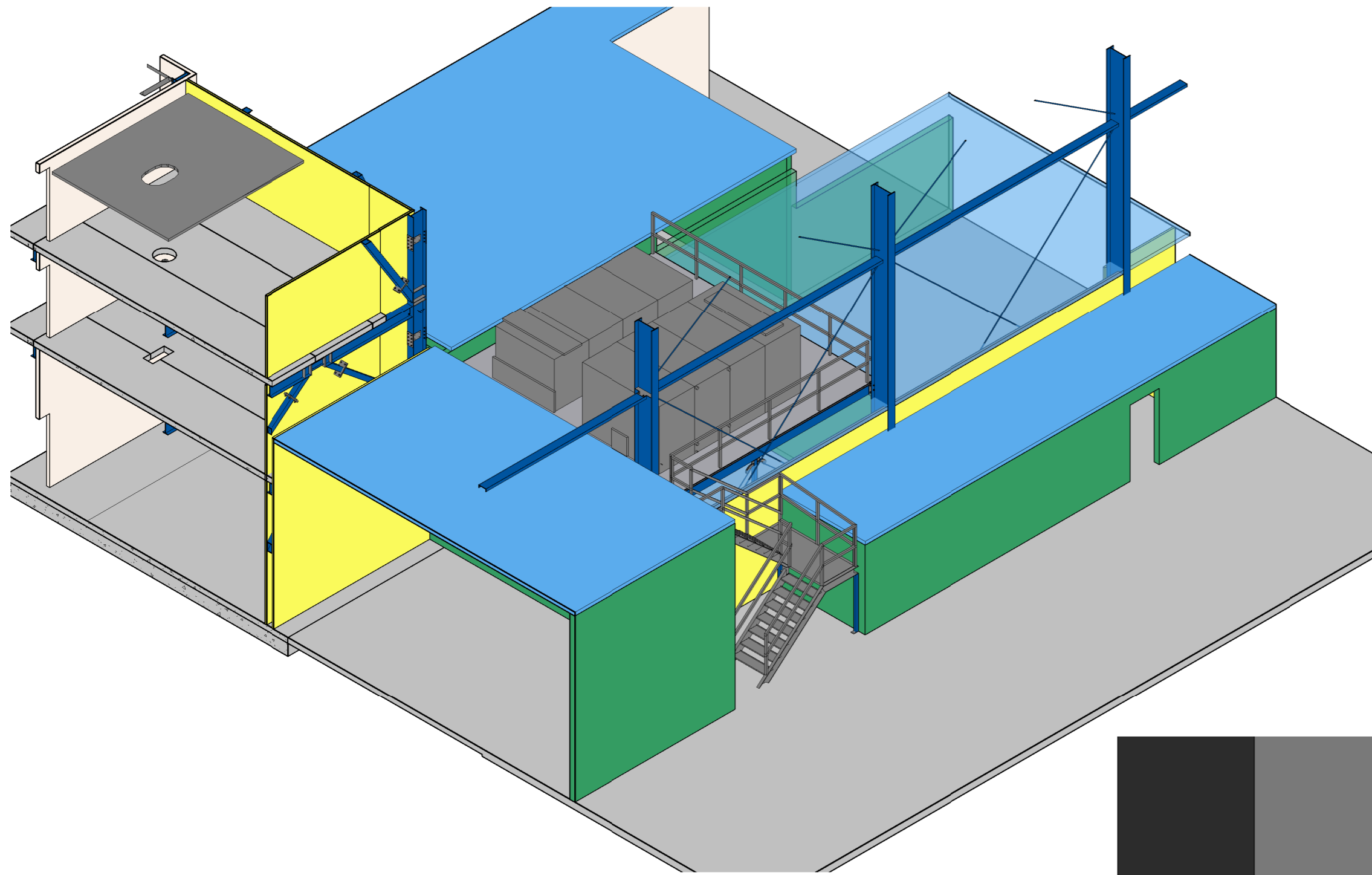


3 Platform Section 3  
1 : 50



5 Platform Section 4  
1 : 50





PROJECT

NZ Dairy Collaborative Group  
 Tower Extension  
 9 Ashford Ave, Ashburton

**Preliminary**  
 Subject to Structural Engineering

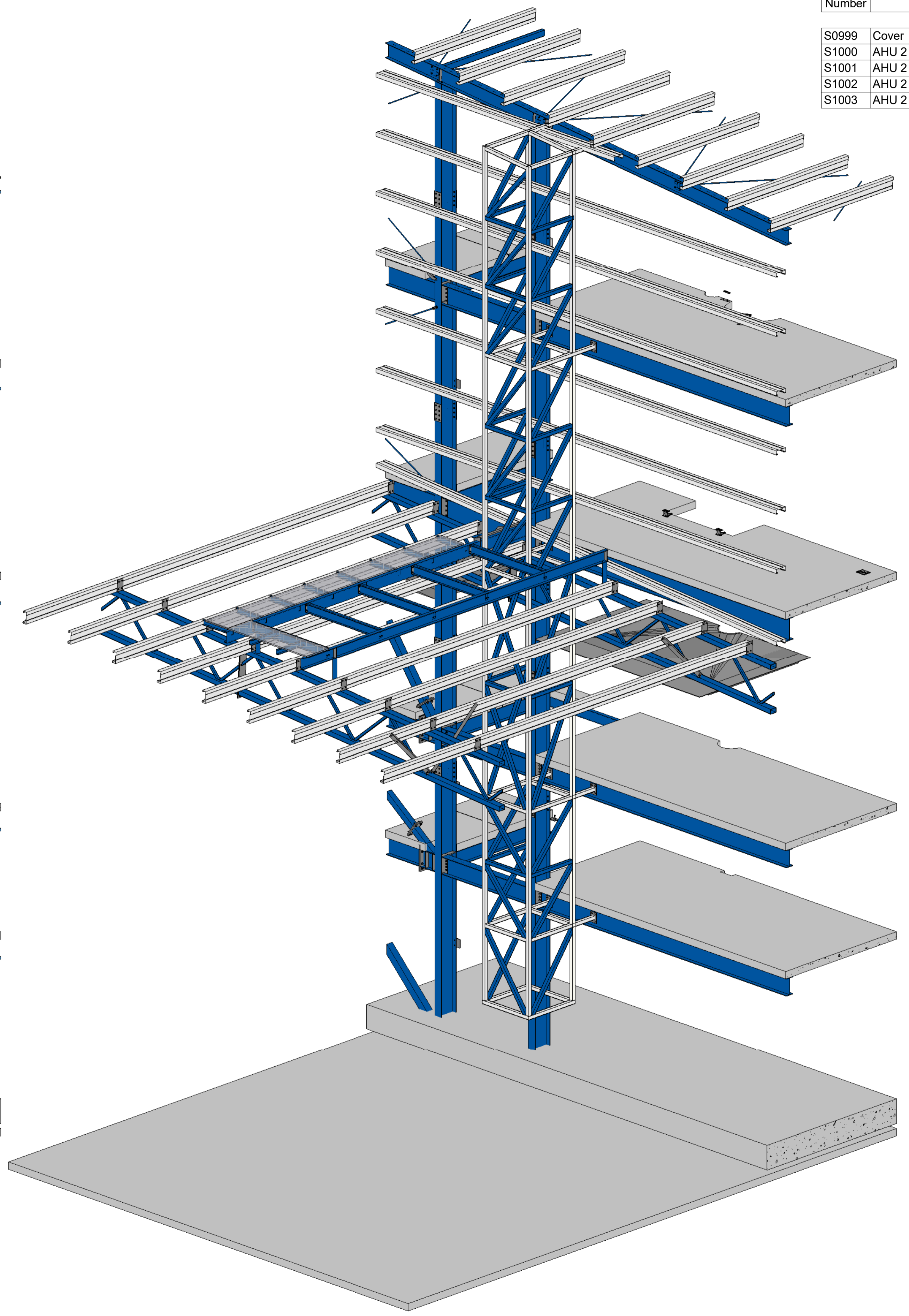
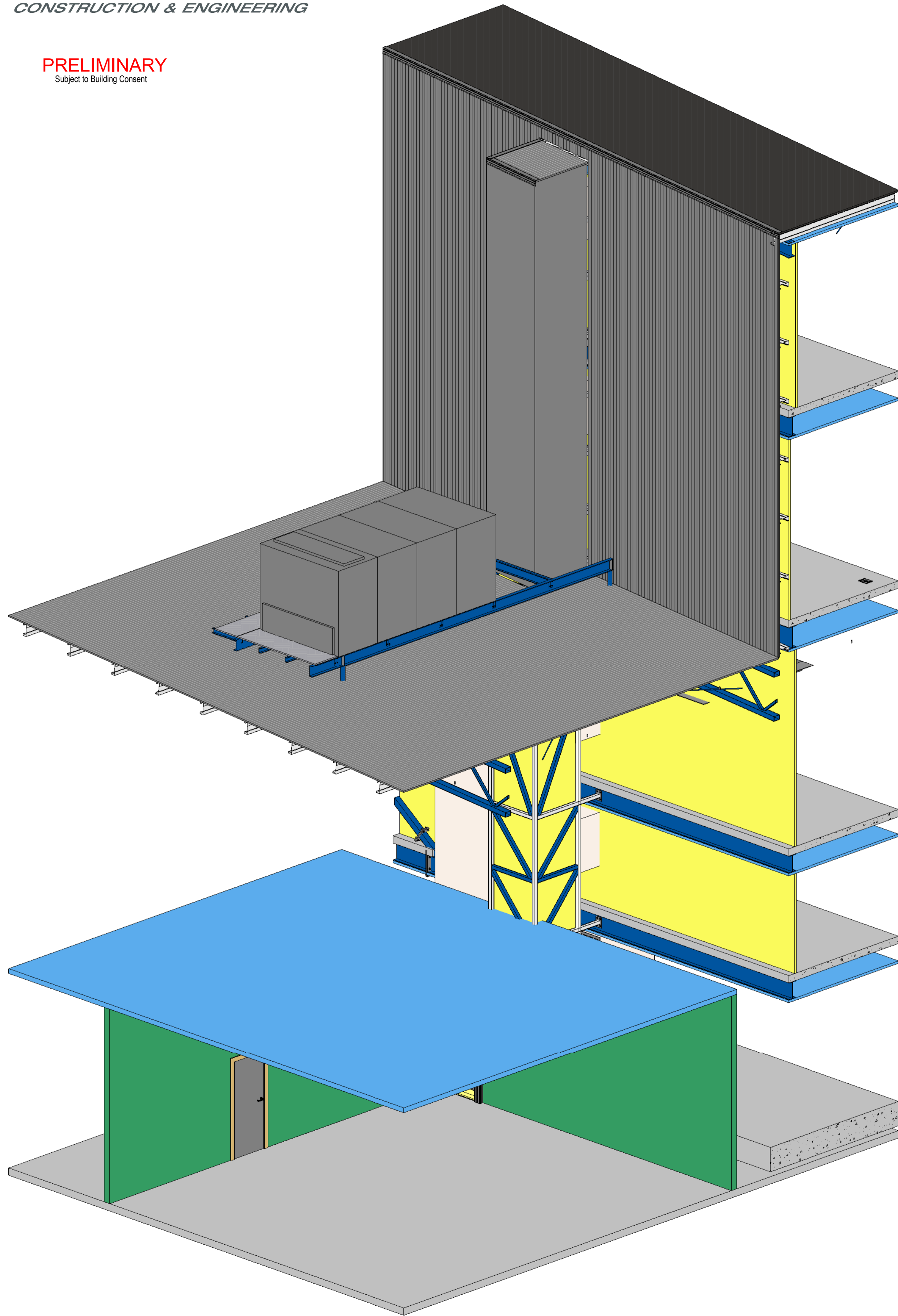
All Drawings property of Thompson Engineering 2002 Ltd

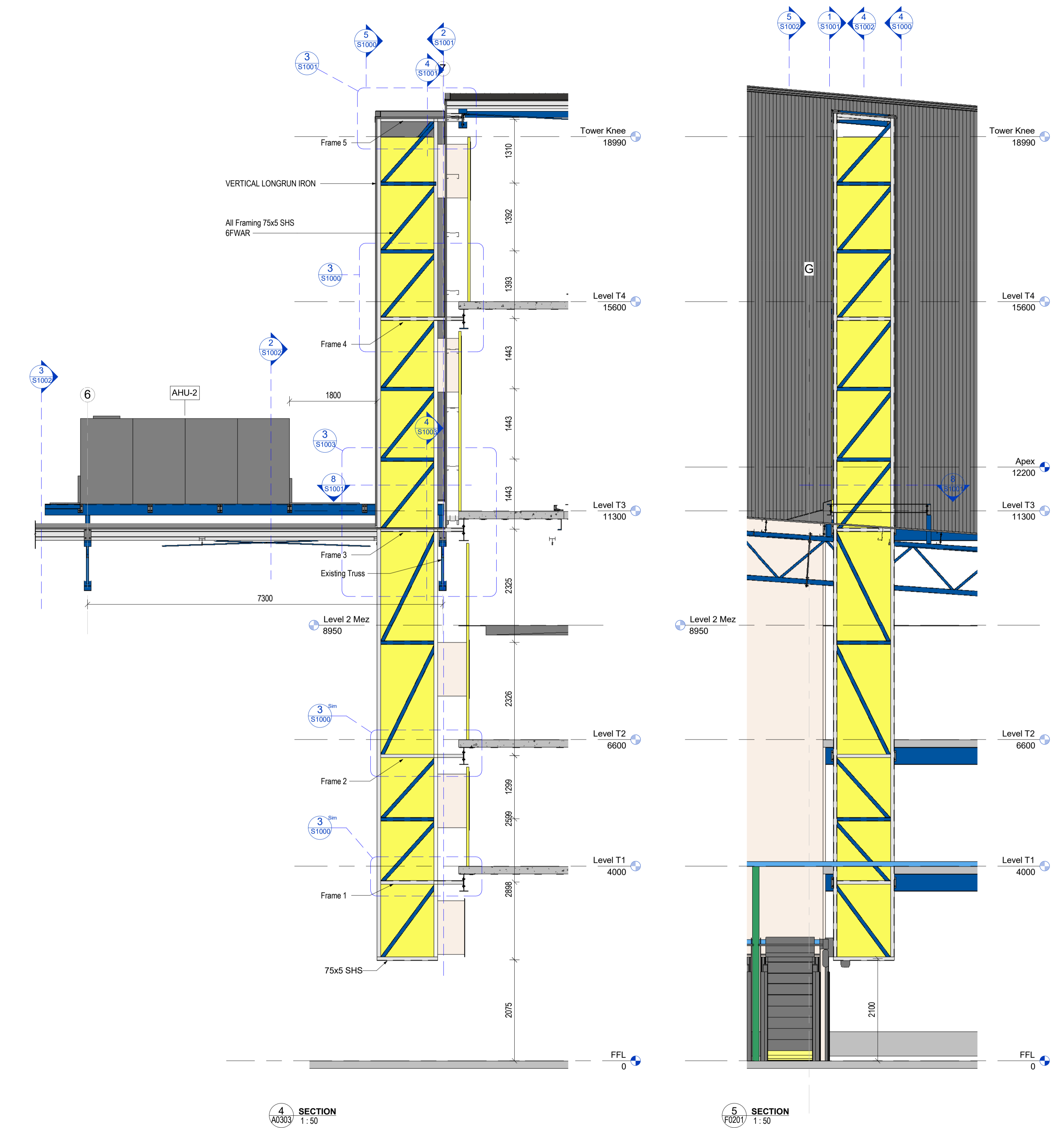
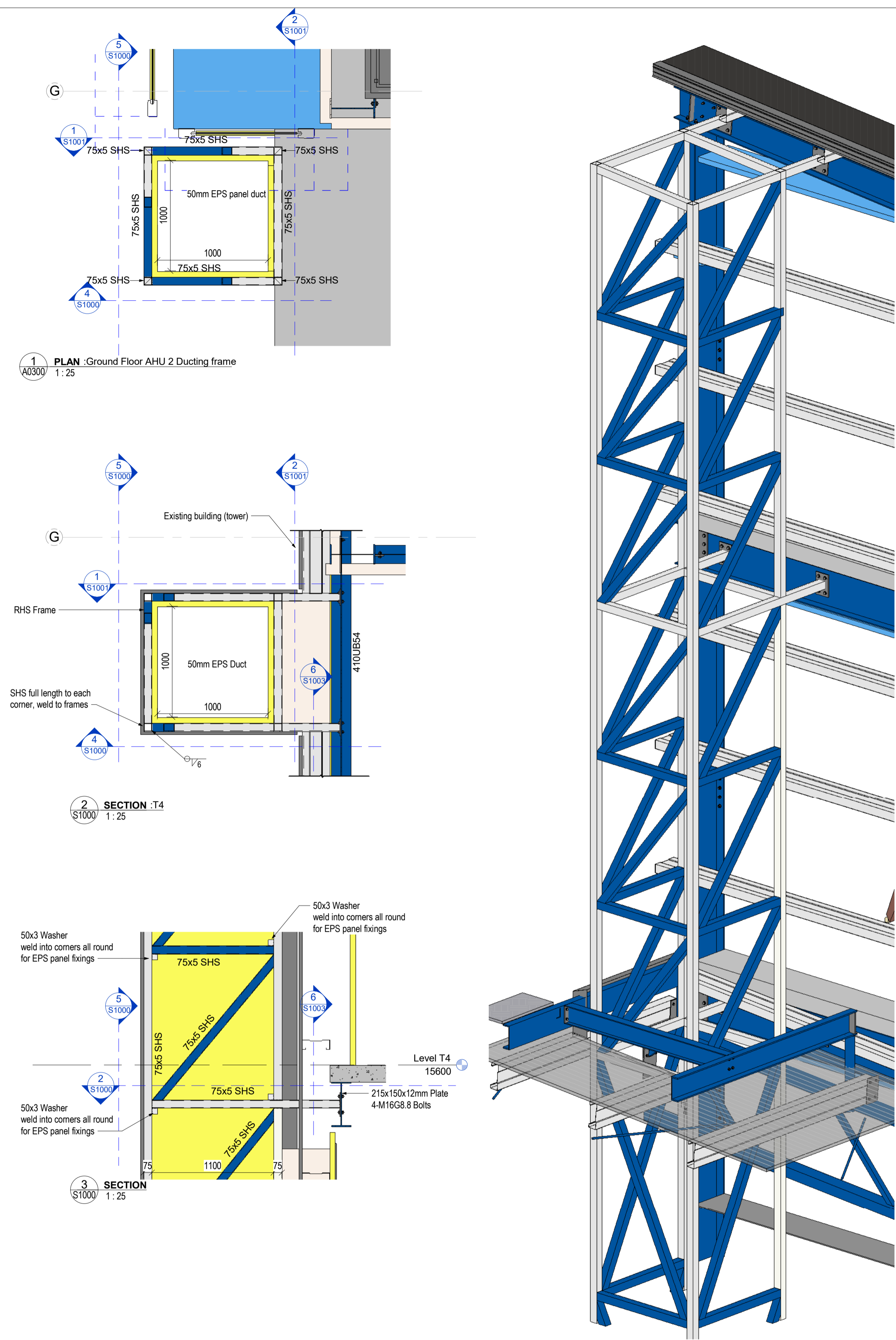
Rev#	Amendments
5	AHU Platform and Stairs

Date	SCALE @ A2	JOB #
20/03/16		12630
	DRAWN BY C. White	DATE 27/10/16
	CHECKED BY For Review	REV 5
	<b>AHU 3D</b>	<b>S0804</b>
Please note: All dimensions to be verified on site		Paper size: <b>A2</b>

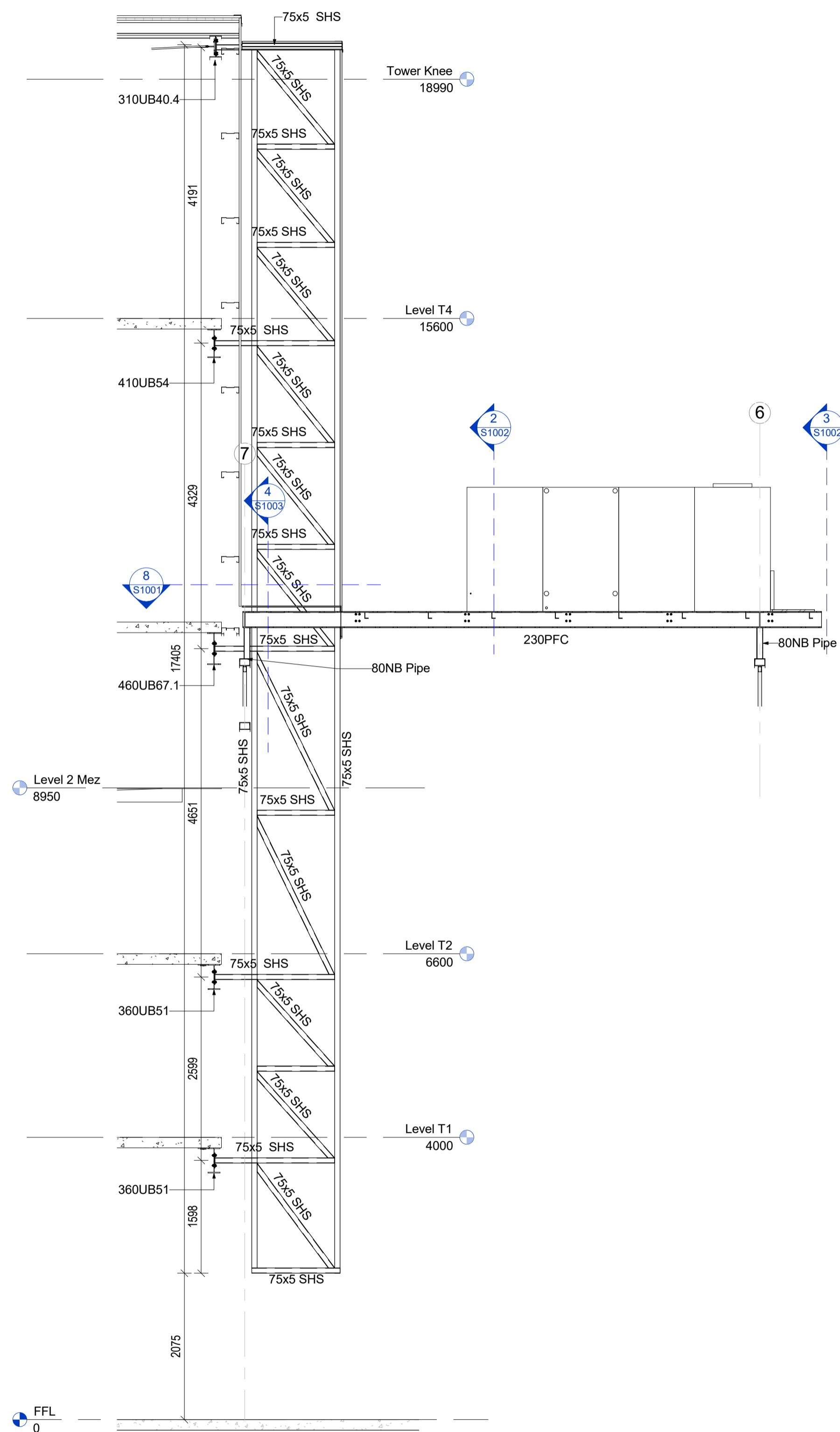
**PRELIMINARY**  
Subject to Building Consent

AHU-2 Sheet List			
Sheet Number	Sheet Name	Current Revision	Current Revision Date
S0999	Cover	16	10/05/17
S1000	AHU 2 Ducting Frame	16	10/05/17
S1001	AHU 2 Ducting Frame Details	16	10/05/17
S1002	AHU 2 Frame	16	10/05/17
S1003	AHU 2 Frame Details	16	10/05/17

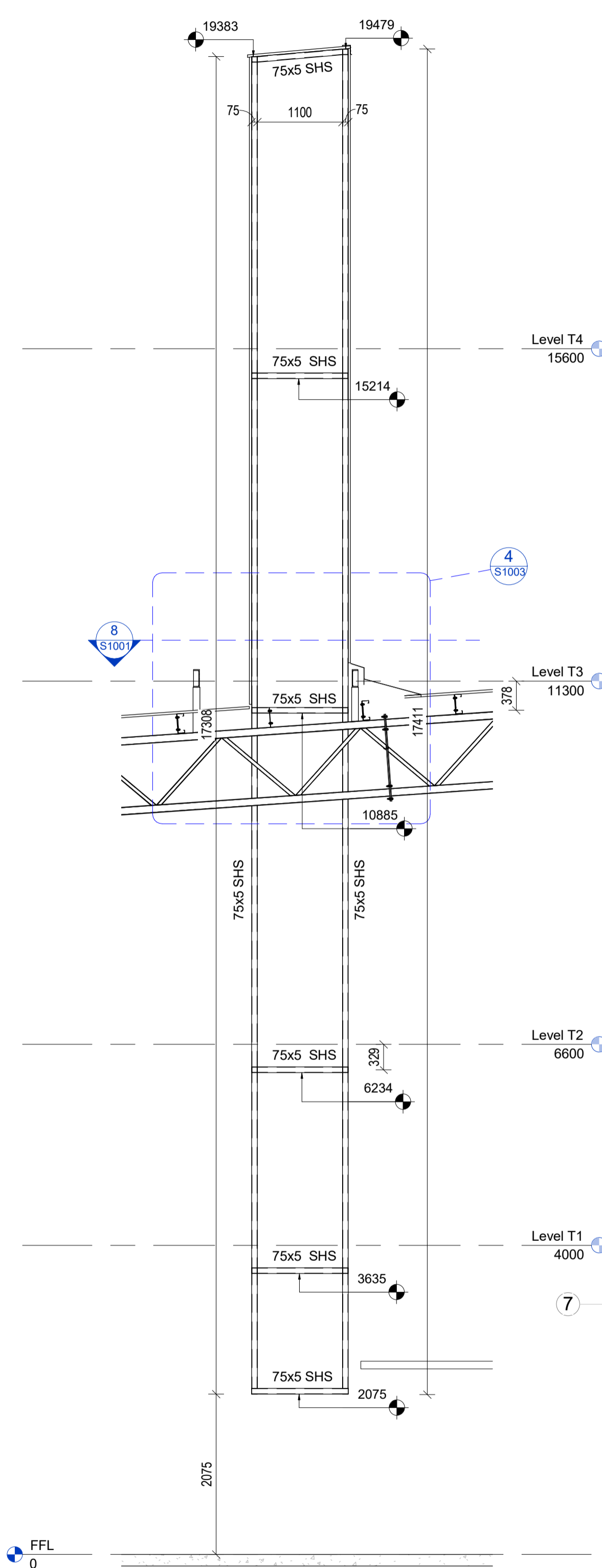




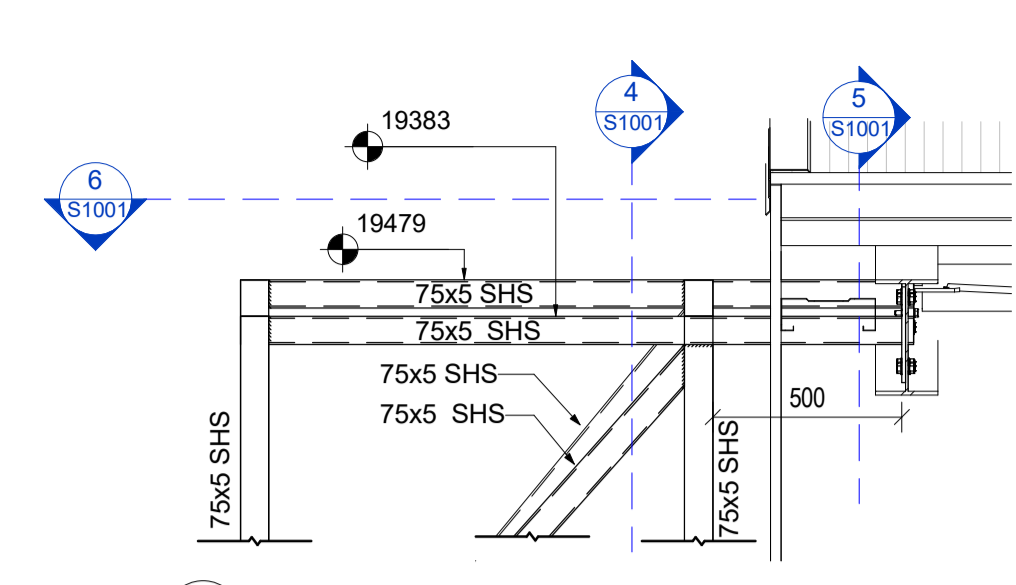
Rev#	Amendments	Date	SCALE	As indicated	JOB #
16	AHU-2 platform and Ducting	10/05/17	As indicated		12412
			<b>DRAWN BY</b>	C. White	<b>DATE</b>
			<b>CHECKED BY</b>	R. Qadeer	16
			AHU 2 Ducting Frame		S1000
Please note: All dimensions to be verified on site					



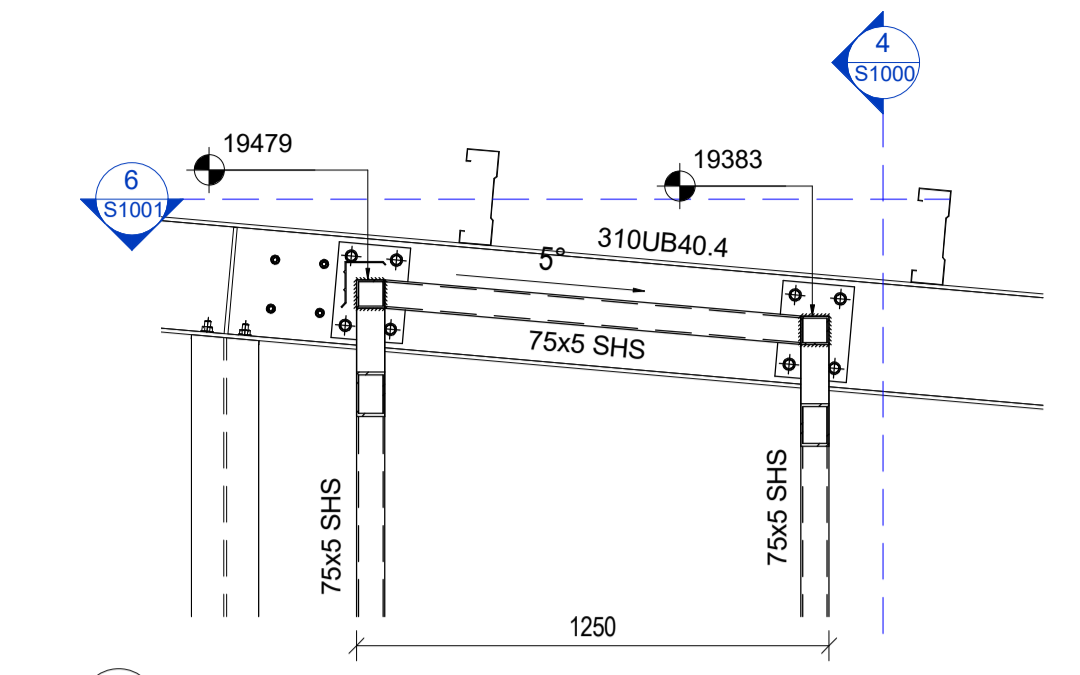
1 Duct frame side elevation  
1:50



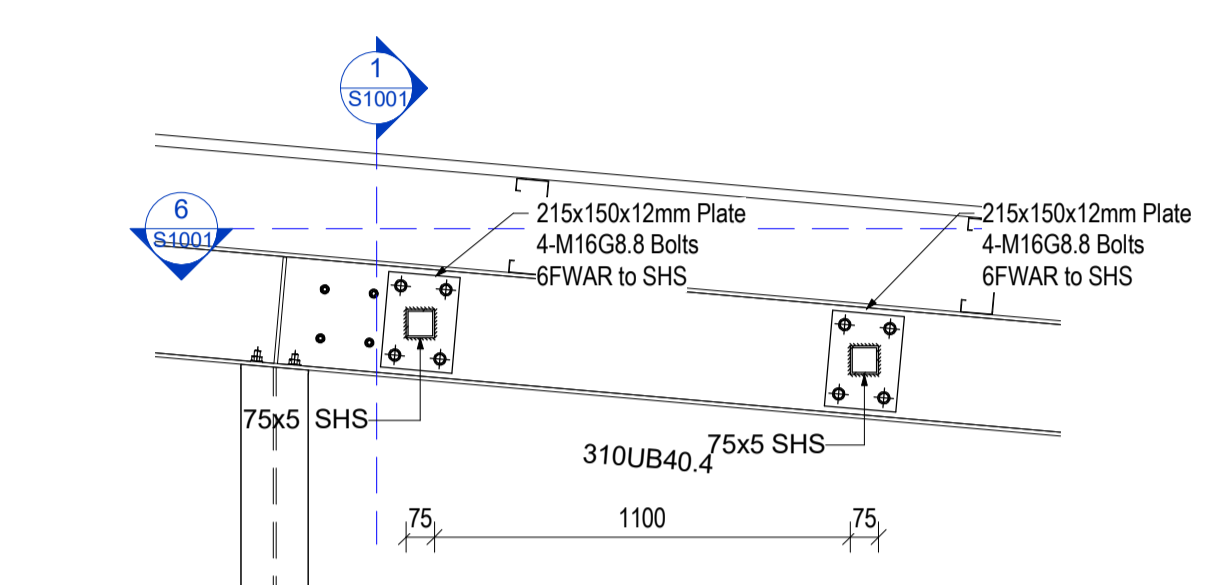
2 Duct frame Back Elevation  
1:50



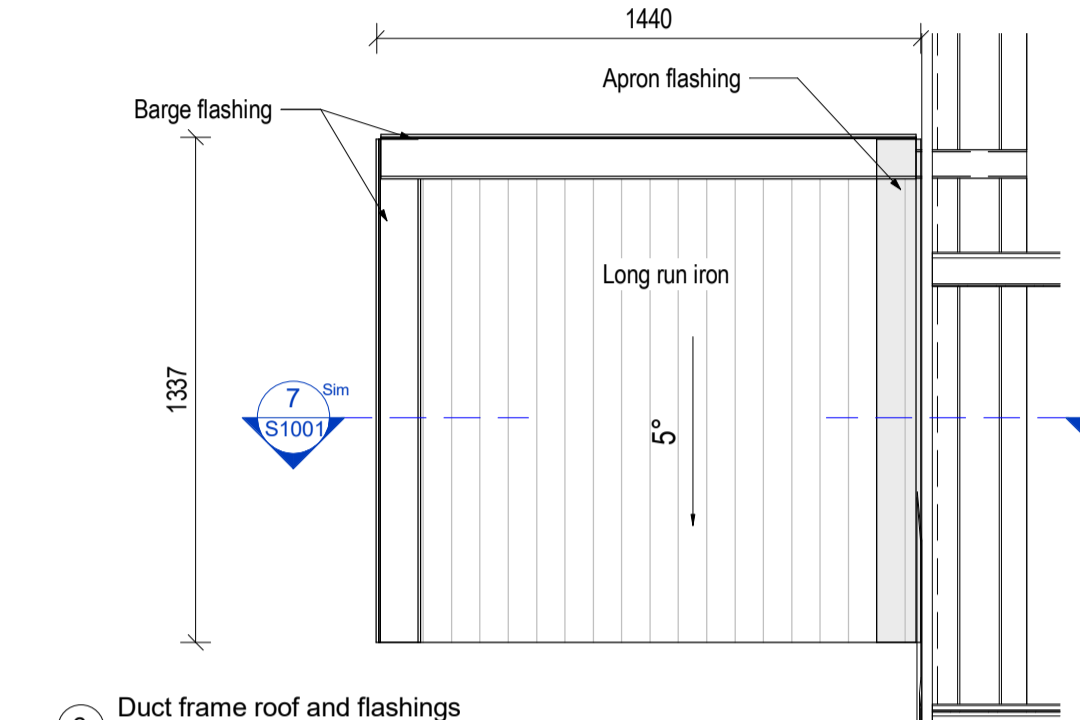
3 SECTION :Top of duct frame  
1:20



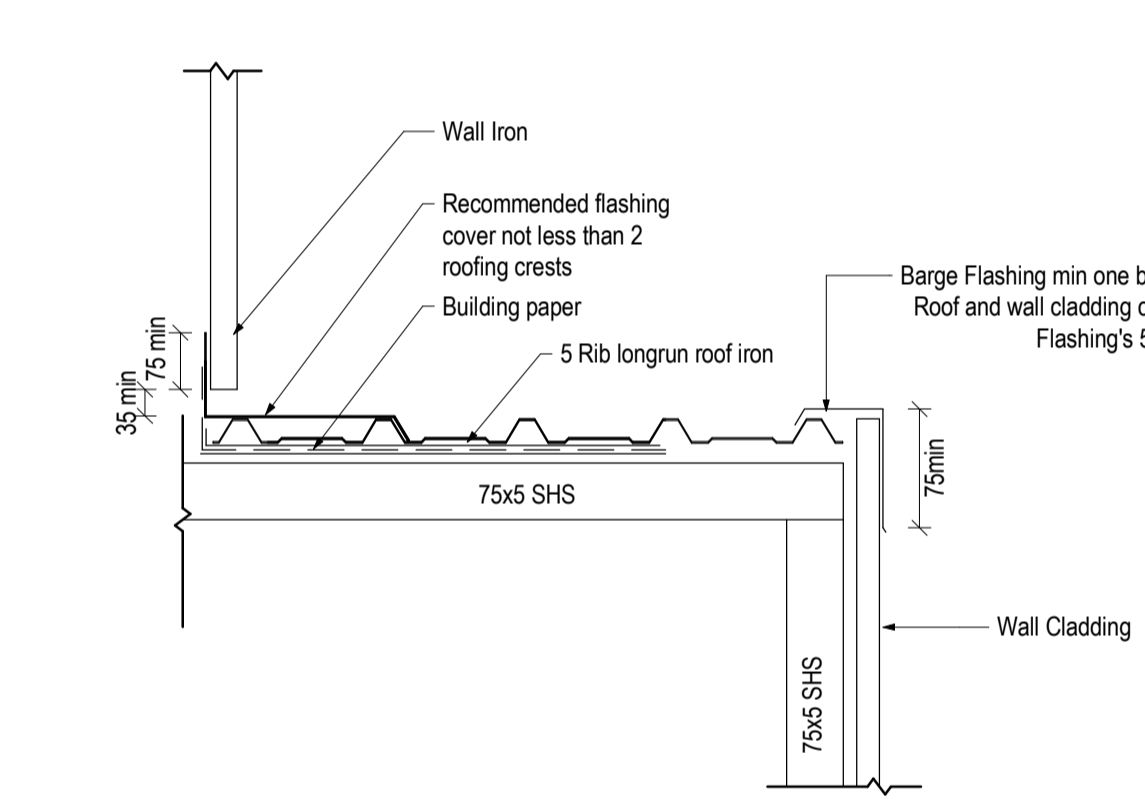
4 DETAIL :Top frame  
1:20



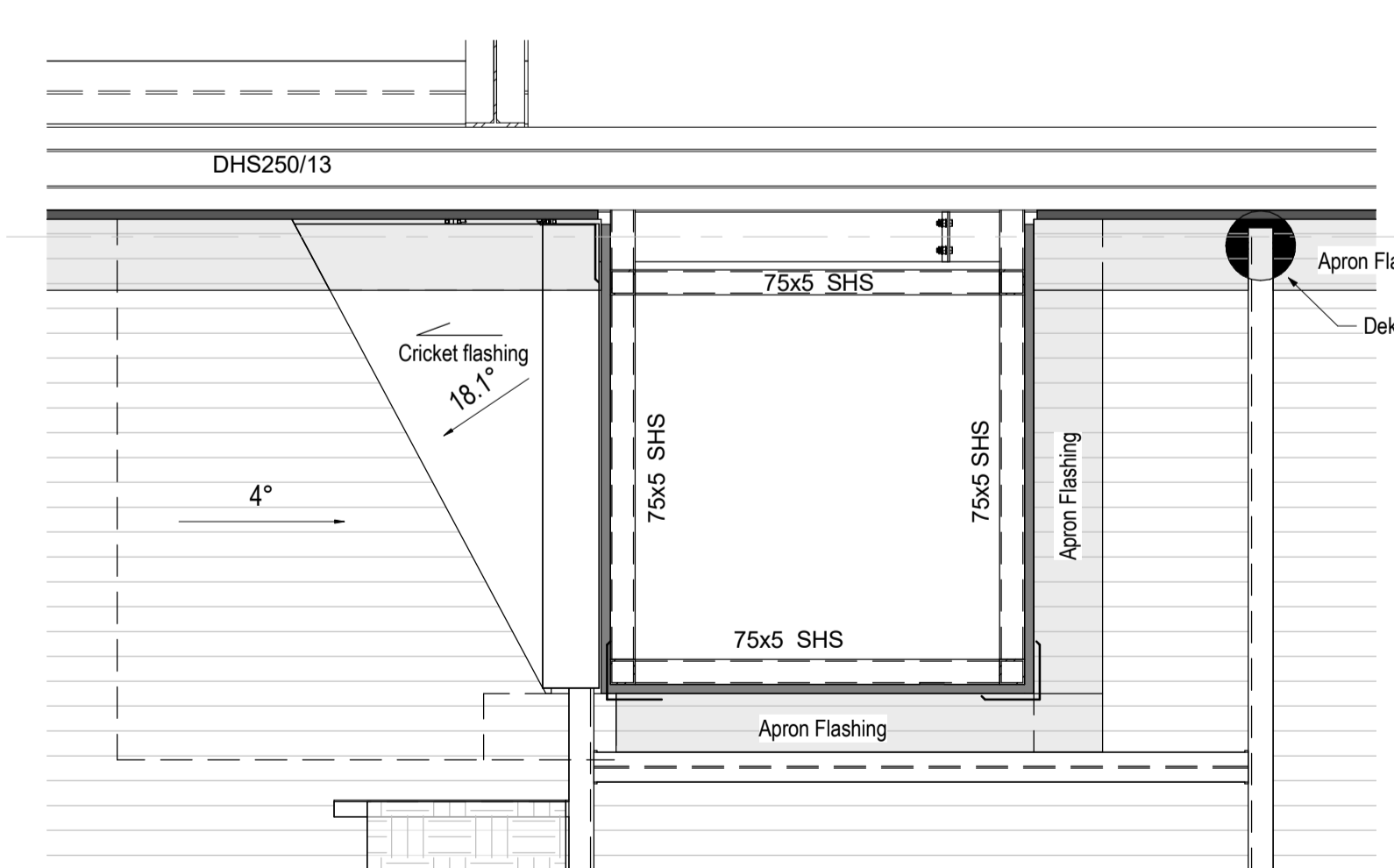
5 DETAIL :Top of duct frame connection  
1:20



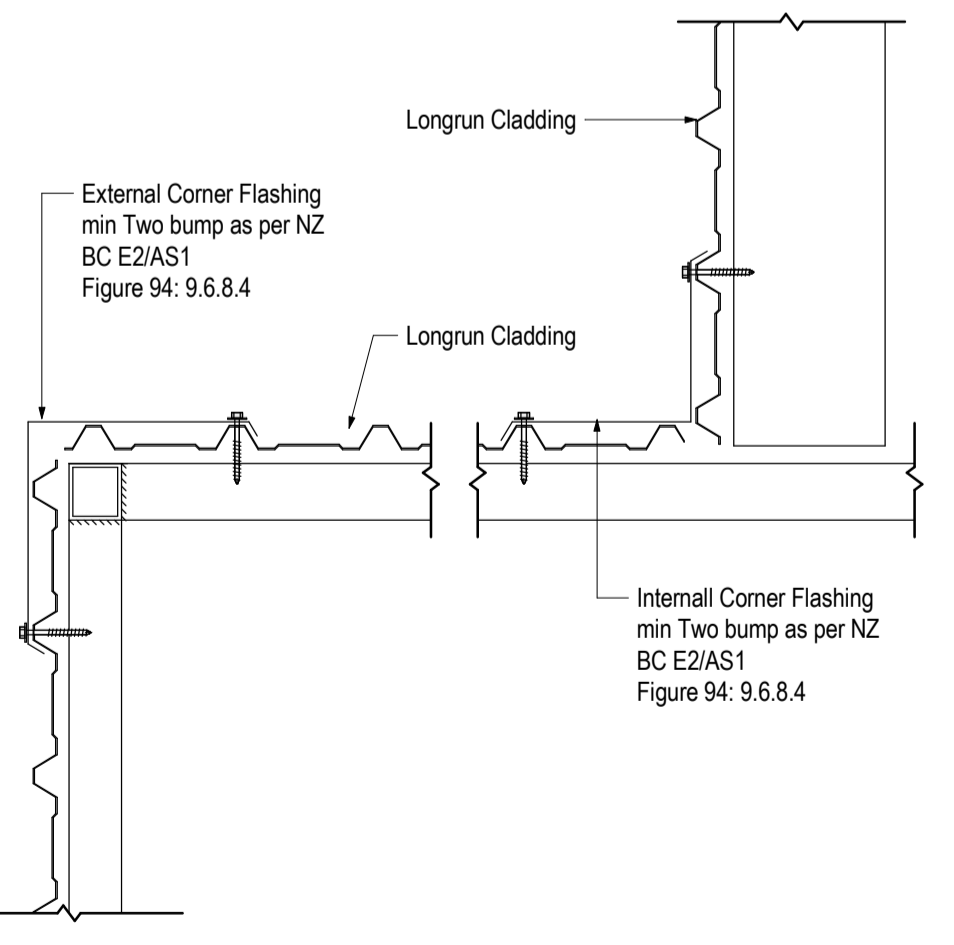
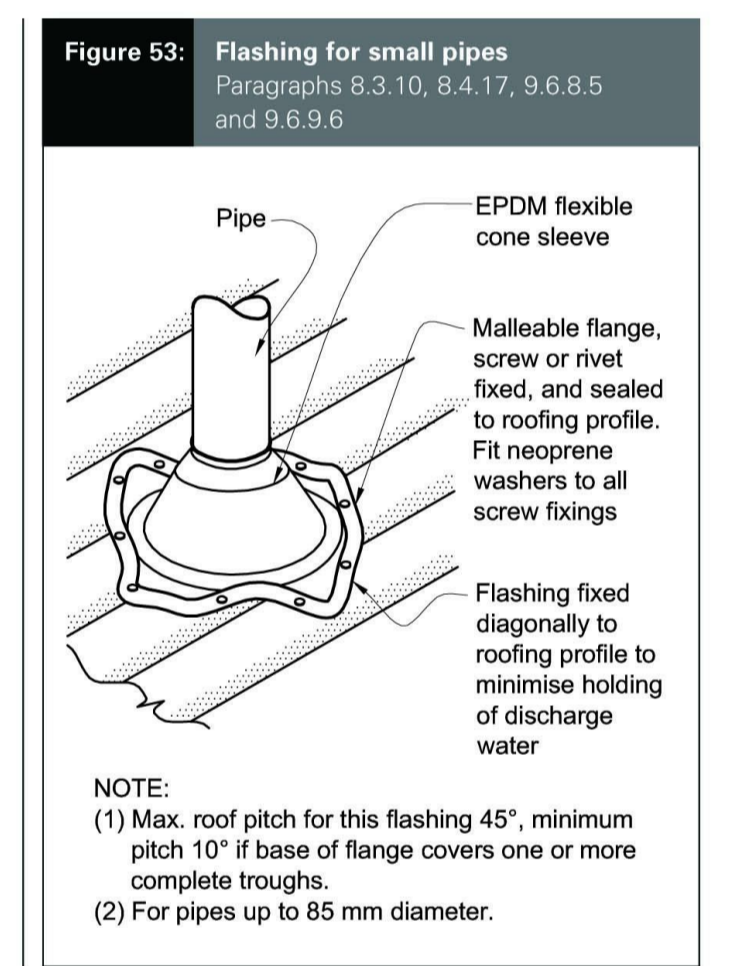
6 Duct frame roof and flashings  
1:20



7 Barge and Apron Flashing Detail  
1:10

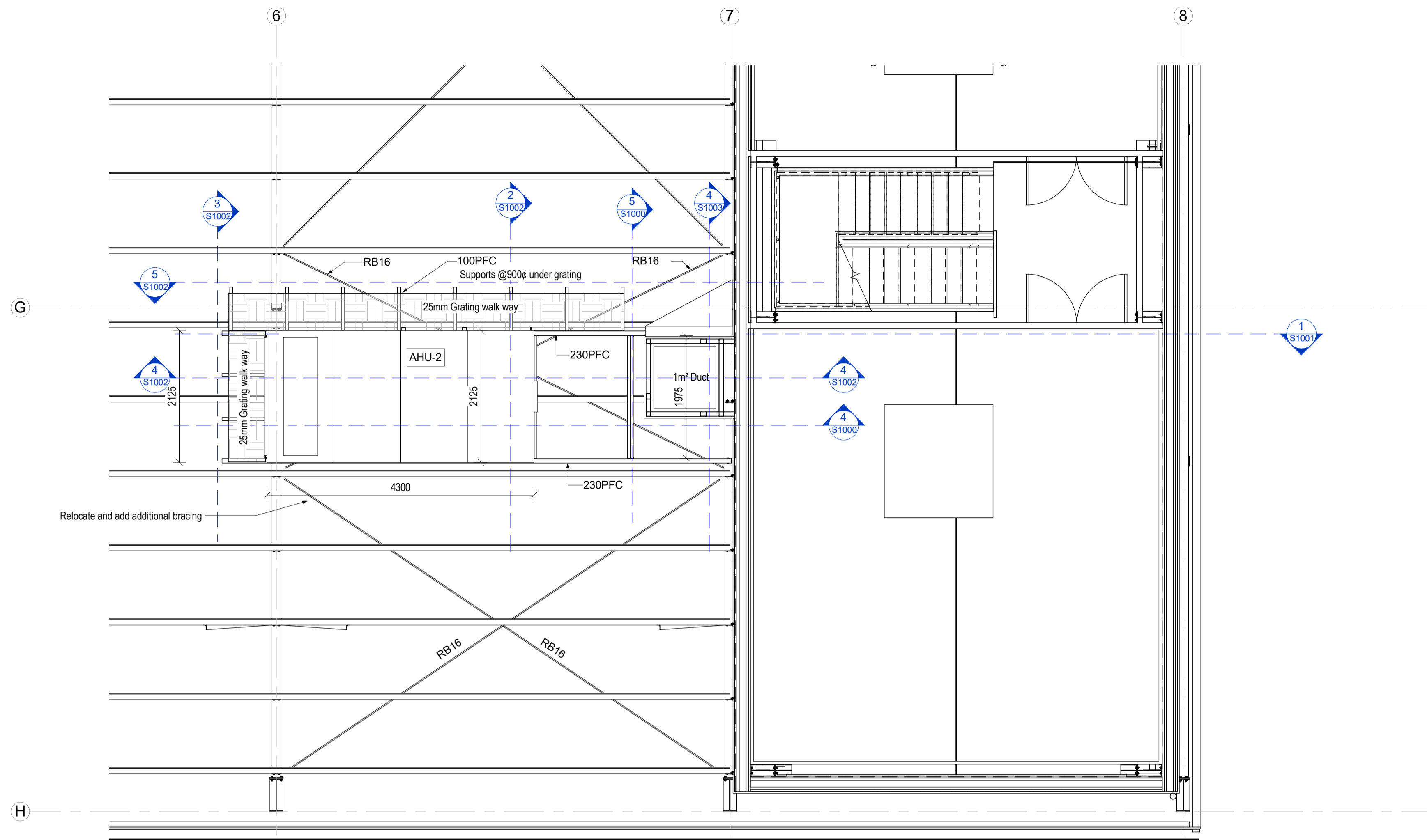


8 Duct Frame flashings  
1:20

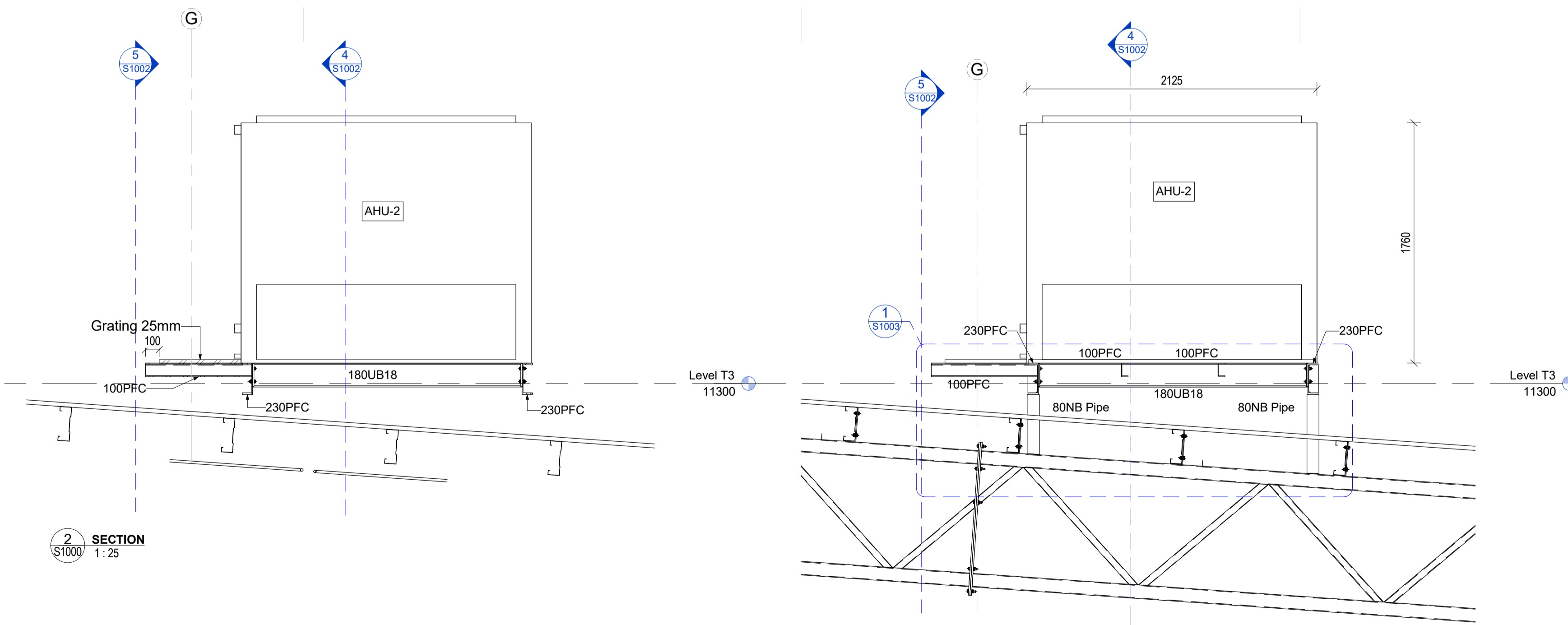


8 Corner Flashings for profiled metal  
1:10

Rev#	Amendments	Date	SCALE	As indicated	JOB #
16	AHU-2 platform and Ducting Subject to Building Consent	10/05/17	As indicated	12412	
DRAWN BY C. White			DATE	23/05/2017	
CHECKED BY R. Qadeer				16	
AHU 2 Ducting Frame Details				S1001	
Please note: All dimensions to be verified on site					
Paper size A1					

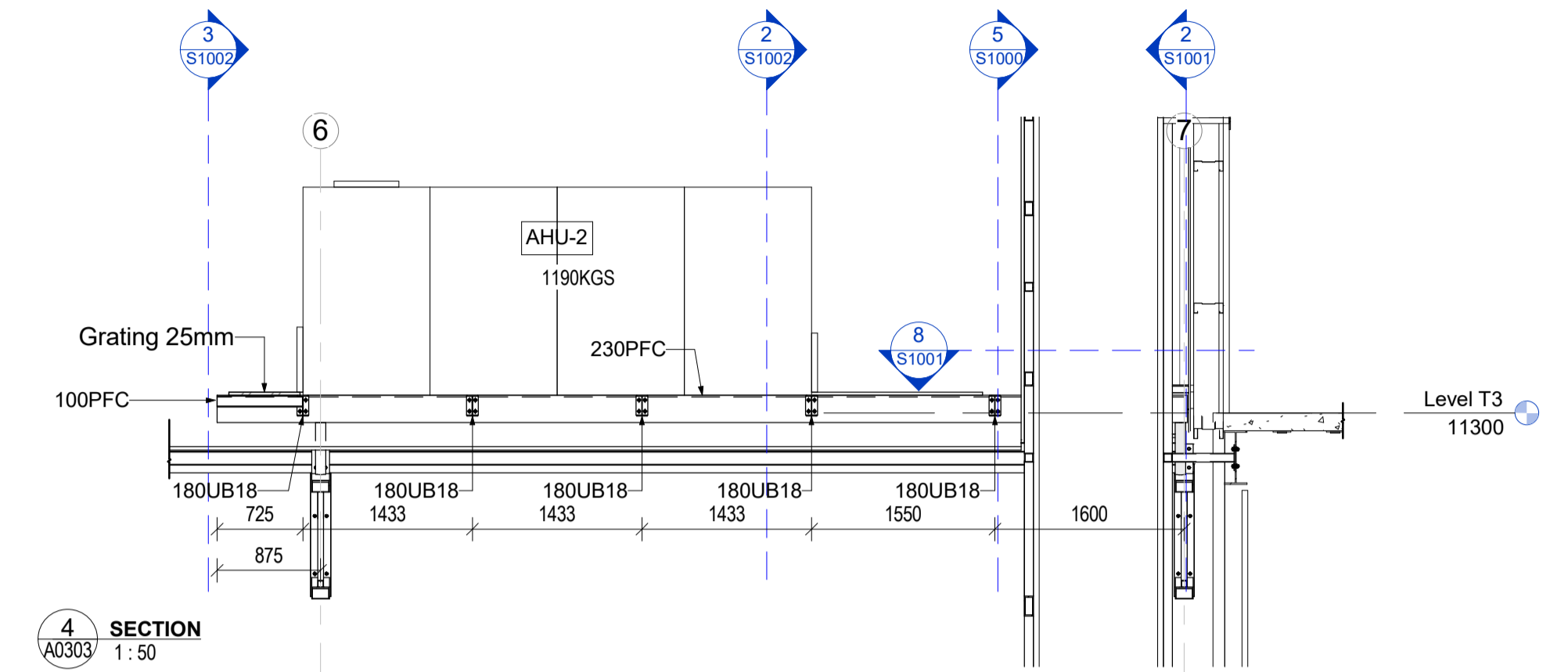


1 Roof Plan AHU 2  
1:50

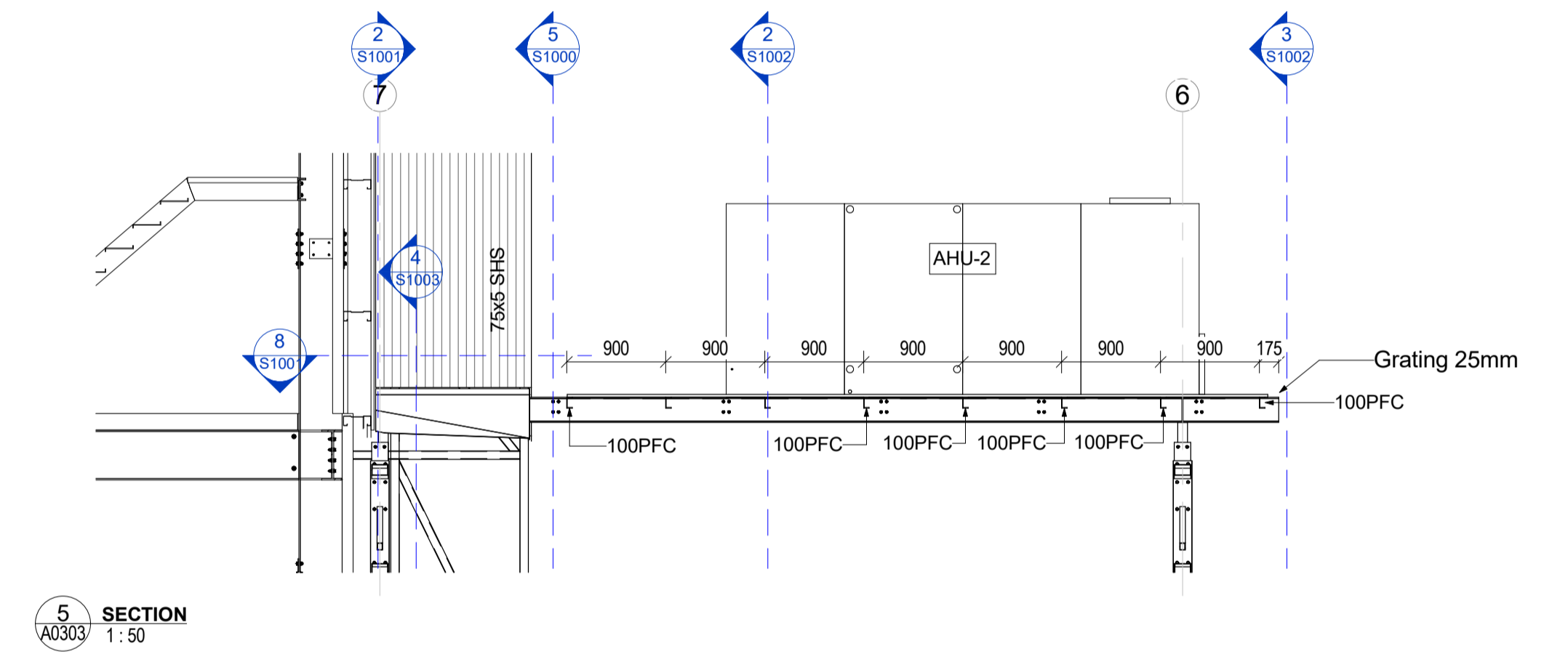


2 SECTION  
S1000  
1:25

3 SECTION  
S1000  
1:25



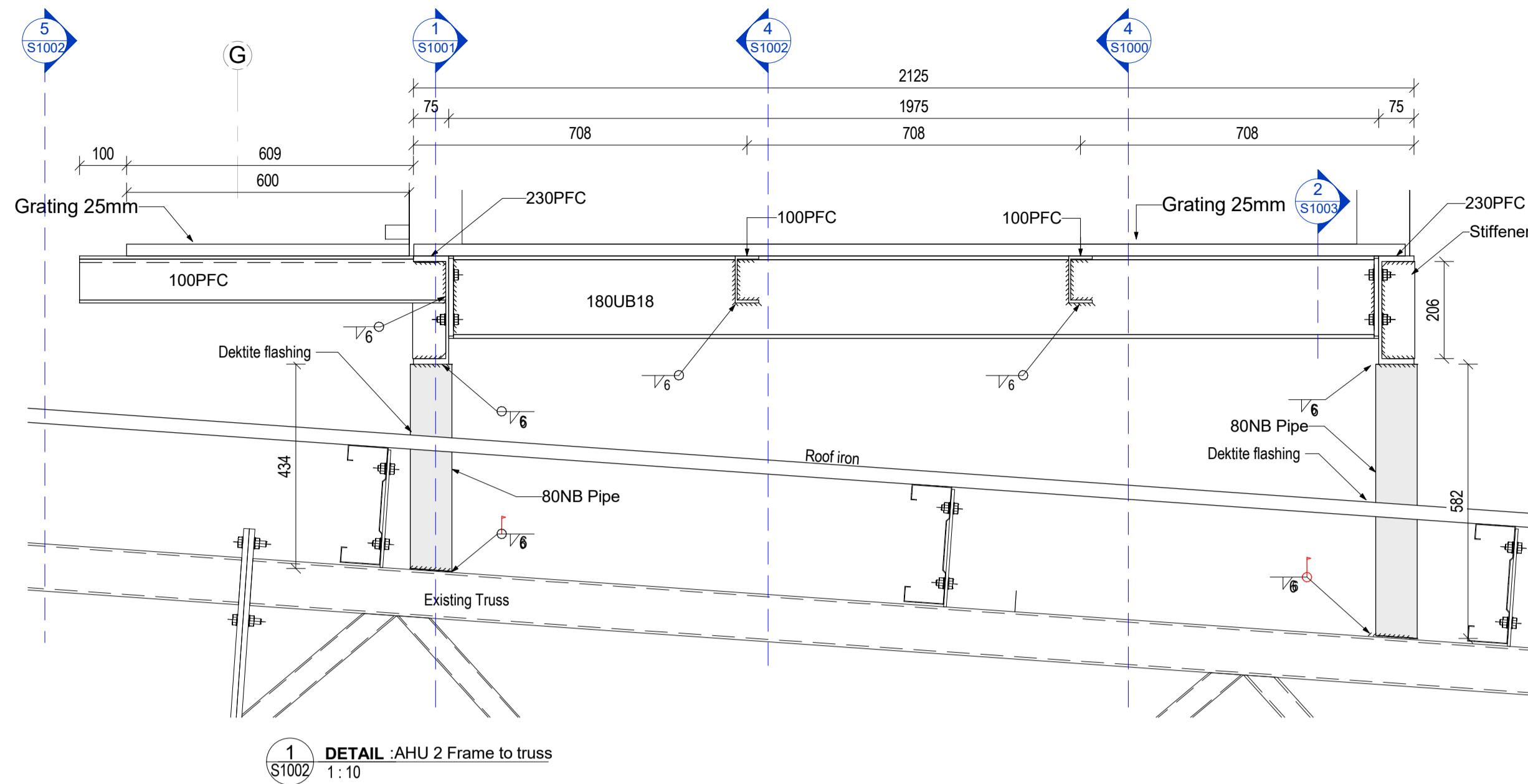
4 SECTION  
A0303  
1:50



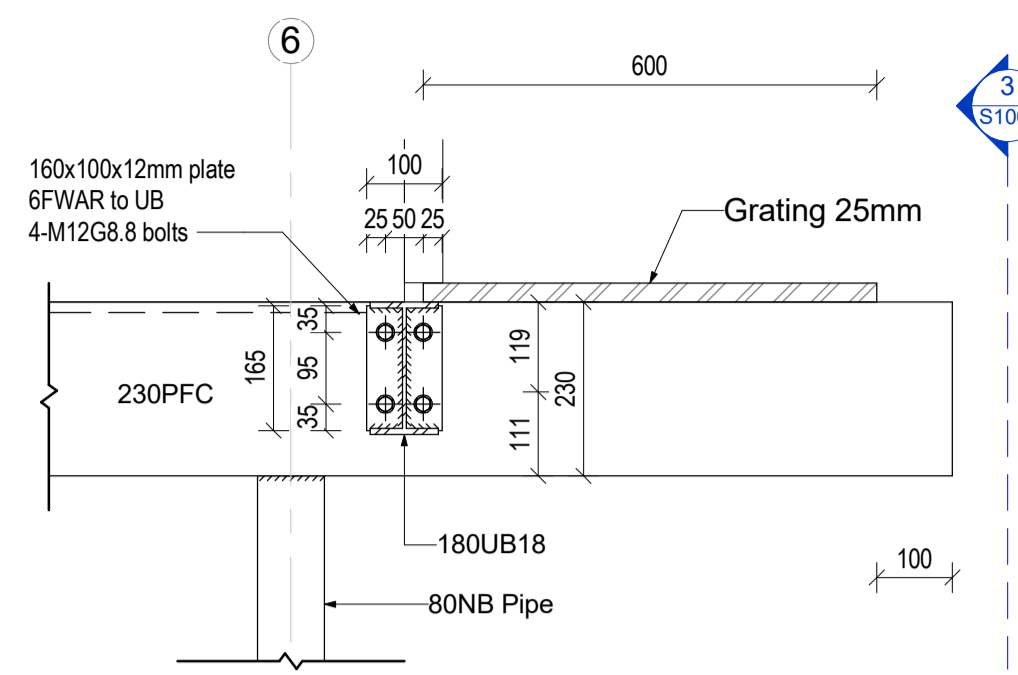
5 SECTION  
A0303  
1:50

NOTE:  
All External Steel to be  
Hot Dipped Galvanized

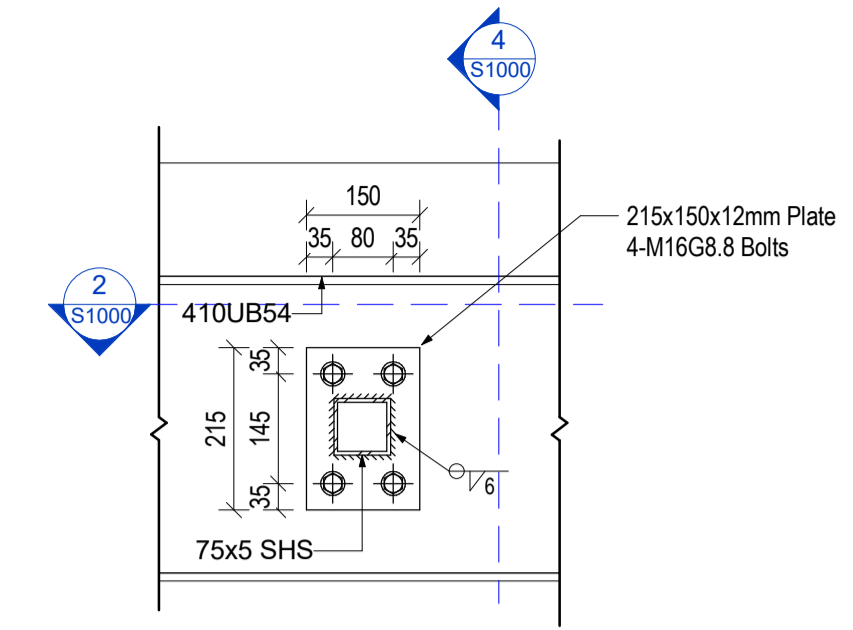
Rev#	Amendments	Date	SCALE	As indicated	JOB #	12412
16	AHU-2 platform and Ducting	10/05/17	DRAWN BY	C. White	DATE	23/05/2017
			CHECKED BY	R. Qadeer	16	
			AHU 2 Frame		S1002	
Please note: All dimensions to be verified on site						Paper size A1



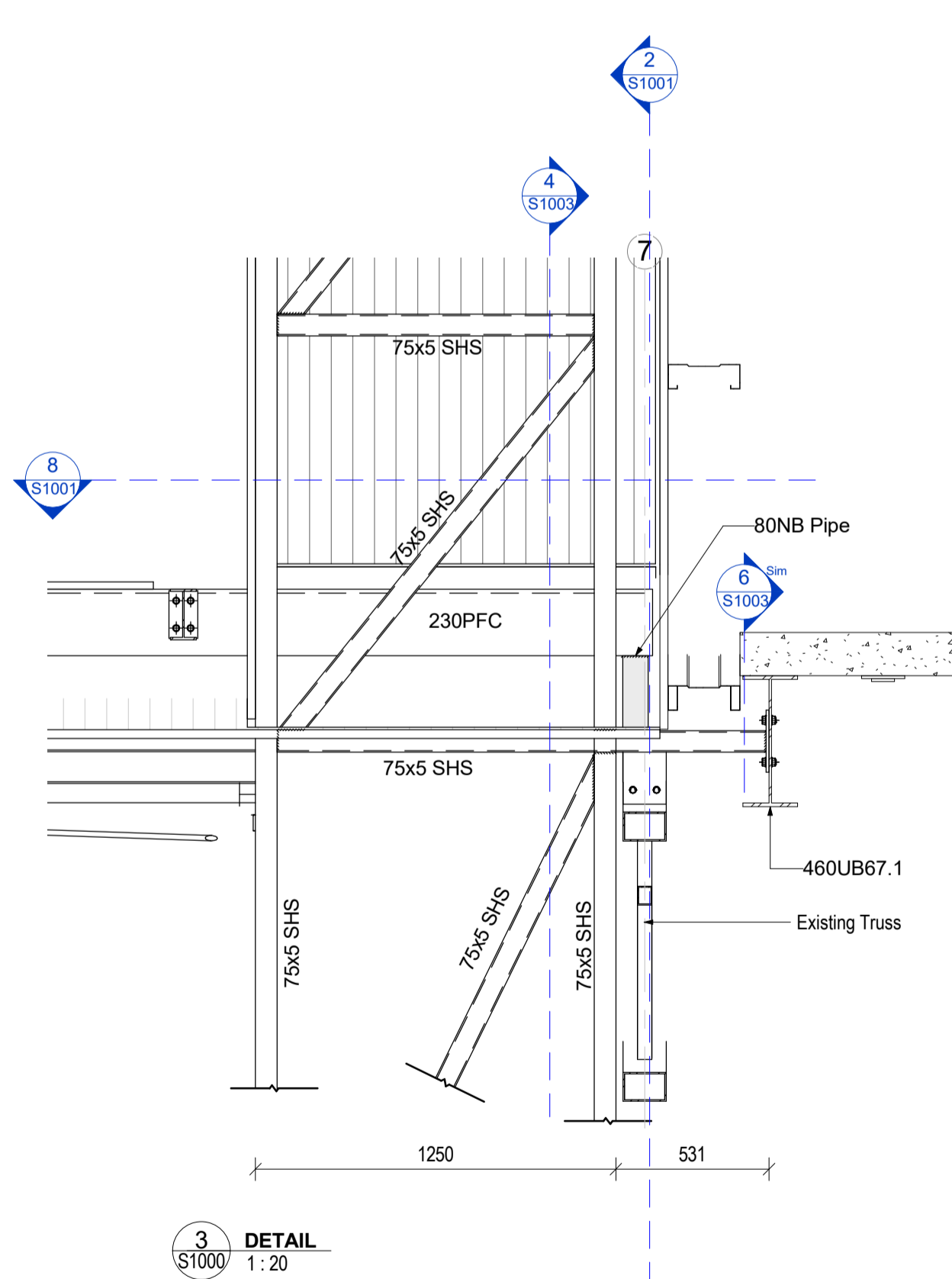
1 DETAIL :AHU 2 Frame to truss  
S1002 1:10



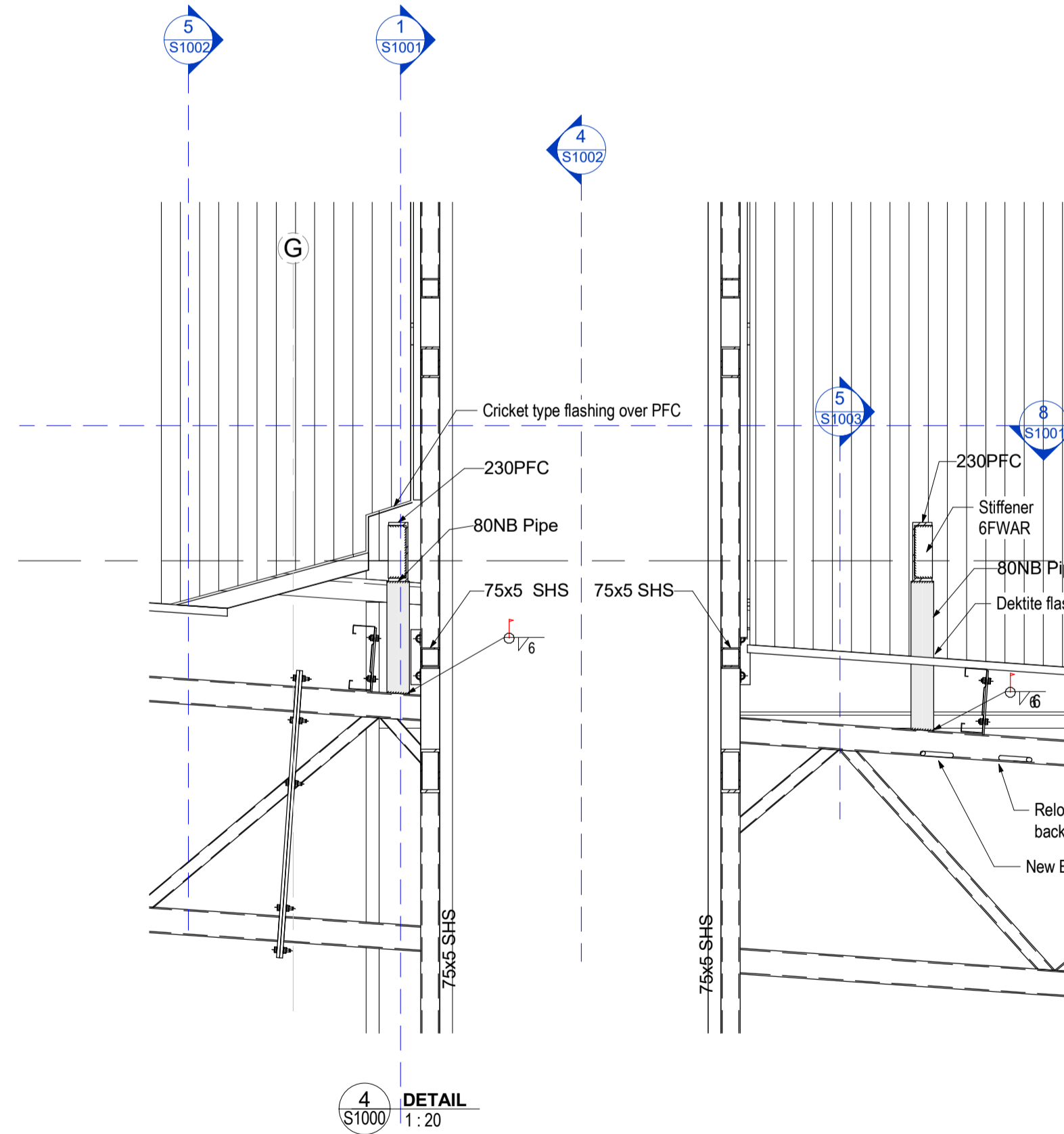
2 DETAIL :180UB End plate typ.  
S1003 1:10



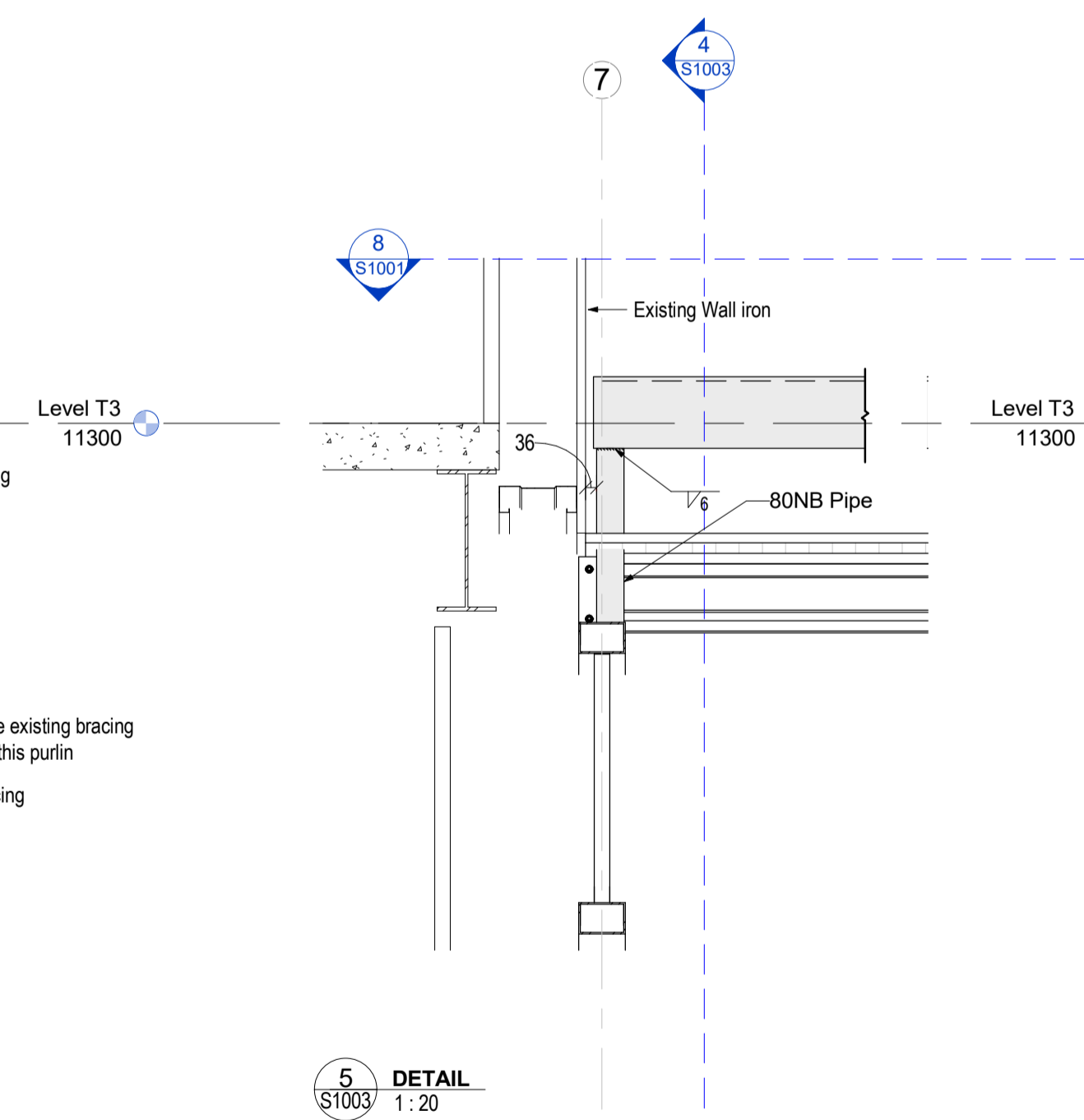
6 DETAIL :75x5 SHS End plate typ.  
S1000 1:10



3 DETAIL  
S1000 1:20



4 DETAIL  
S1000 1:20



5 DETAIL  
S1003 1:20

AHU 2 Structural Column Schedule

Type	Length	Volume	Weight (Kgs)
75x5 SHS	13064	0.02 m³	146.31
75x5 SHS	17329	0.02 m³	194.09
75x5 SHS	17233	0.02 m³	193
75x5 SHS	17329	0.02 m³	194.09
75x5 SHS	4094	0.01 m³	45.85
80NB Pipe	446	0.00 m³	4.57
80NB Pipe	586	0.00 m³	6.06
80NB Pipe	446	0.00 m³	4.59
80NB Pipe	586	0.00 m³	6.09
Grand total:	9	0.10 m³	794.66

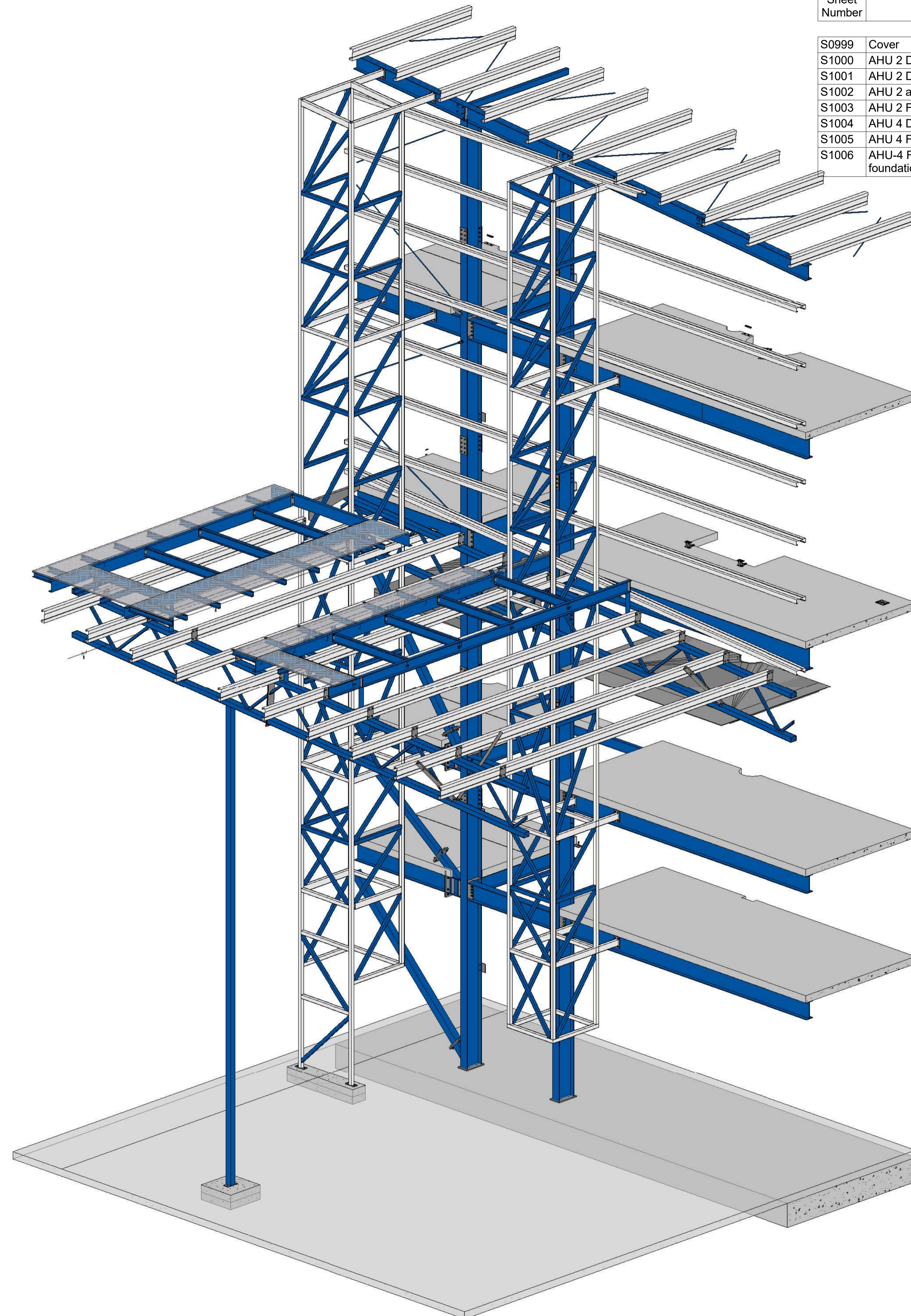
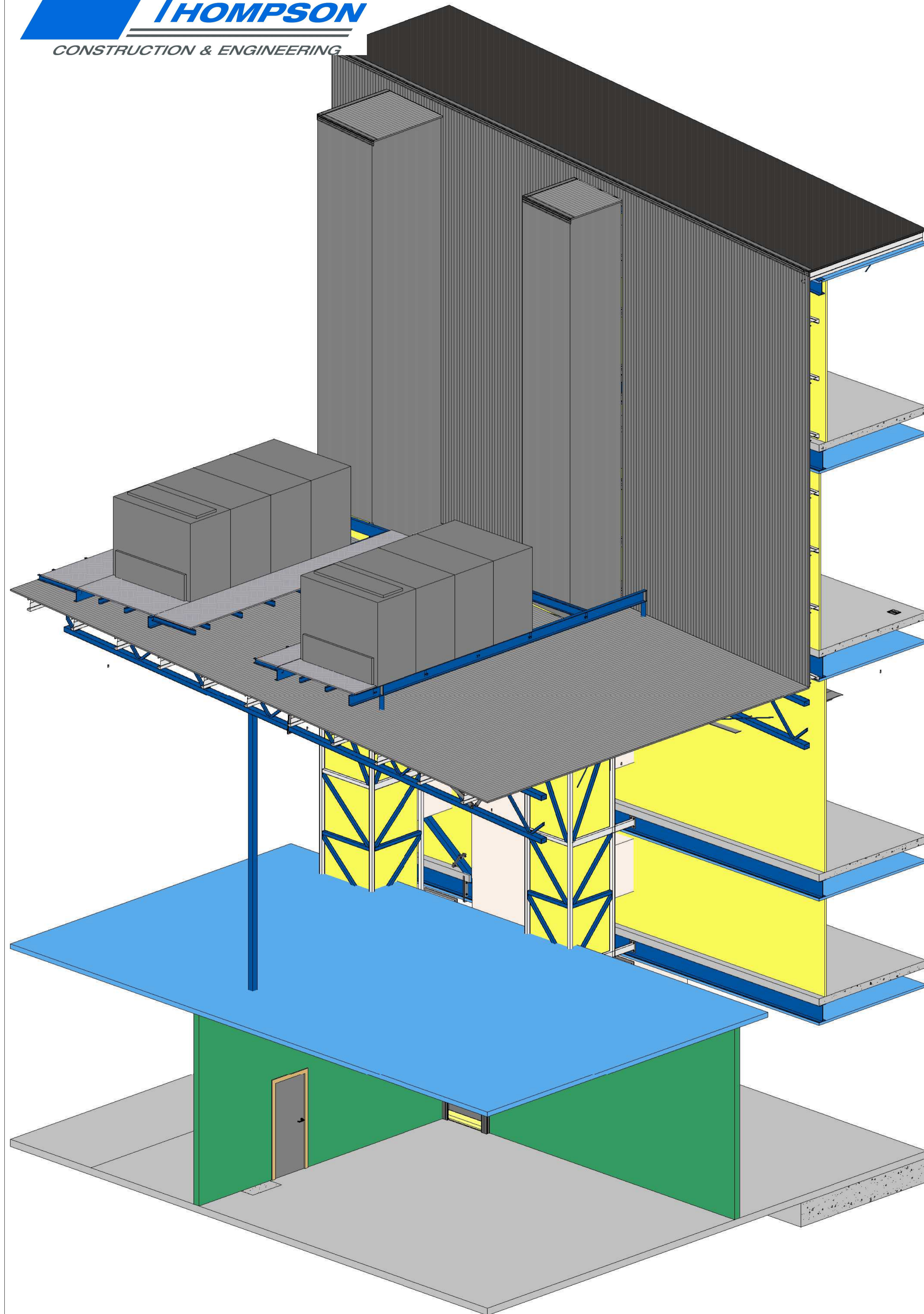
AHU- 2 Structural Framing Schedule

Type	Count	Cut Length	Volume	Weight (Kgs)
75x5 SHS	15	20084	0.00 m³	224.1
75x5 SHS	60	83750	0.00 m³	1018.7
100PFC	10	7697	0.00 m³	61.56
180UB18	5	9855	0.00 m³	176.21
230PFC	2	16405	0.03 m³	411.97
Grand total:	92	147791		1892.53

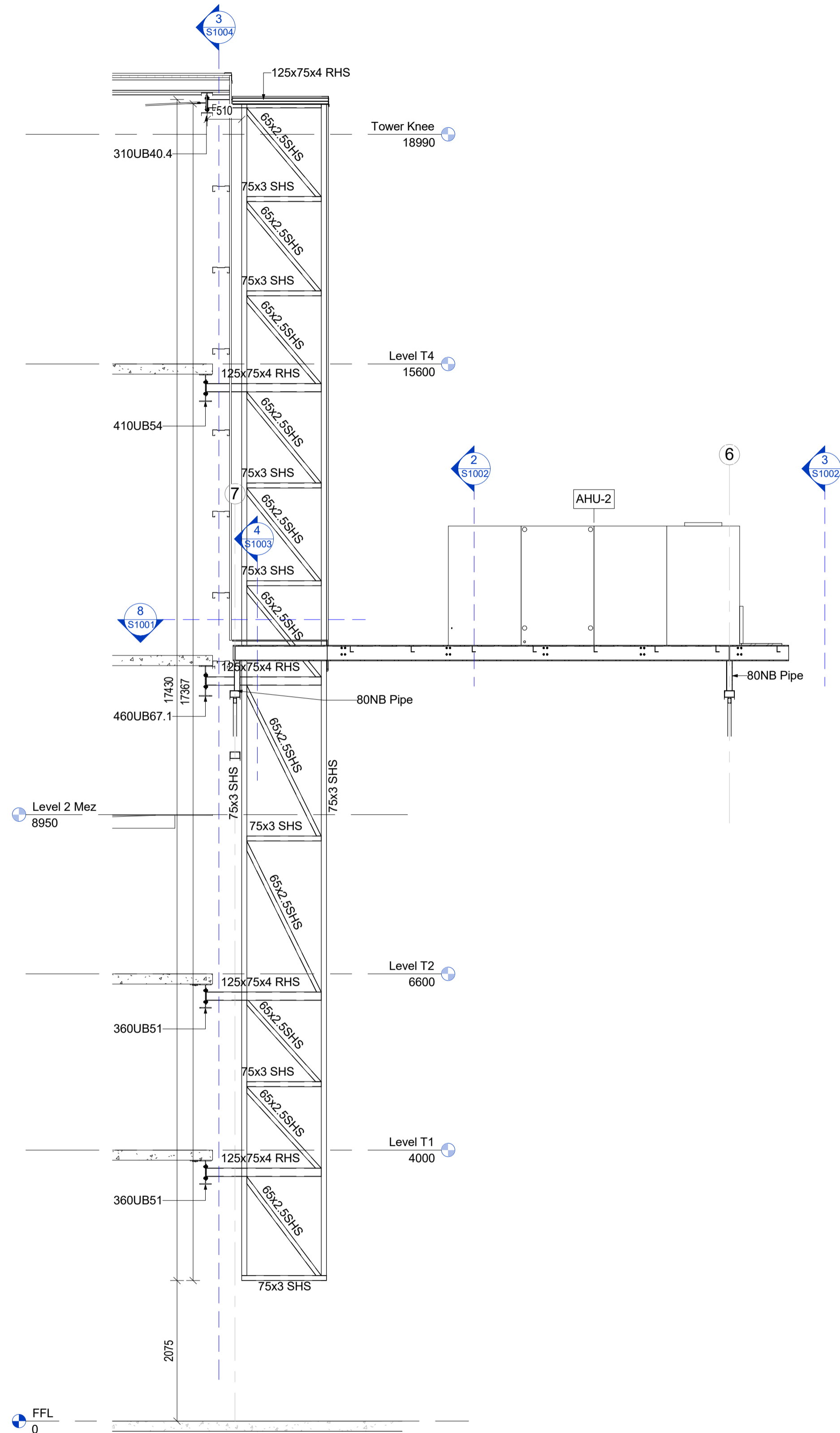
**AHU-2 and 4 Sheet List**

Sheet Number	Sheet Name	Current Revision	Current Revision Date
S0999	Cover	18	7/7/17
S1000	AHU 2 Ducting Frame	18	7/7/17
S1001	AHU 2 Ducting Frame Details	18	7/7/17
S1002	AHU 2 and 4 Frames	18	7/7/17
S1003	AHU 2 Frame Details	18	7/7/17
S1004	AHU 4 Ducting Frame	18	7/7/17
S1005	AHU 4 Frame Details	18	7/7/17
S1006	AHU-4 Floor plan and foundation details	18	7/7/17

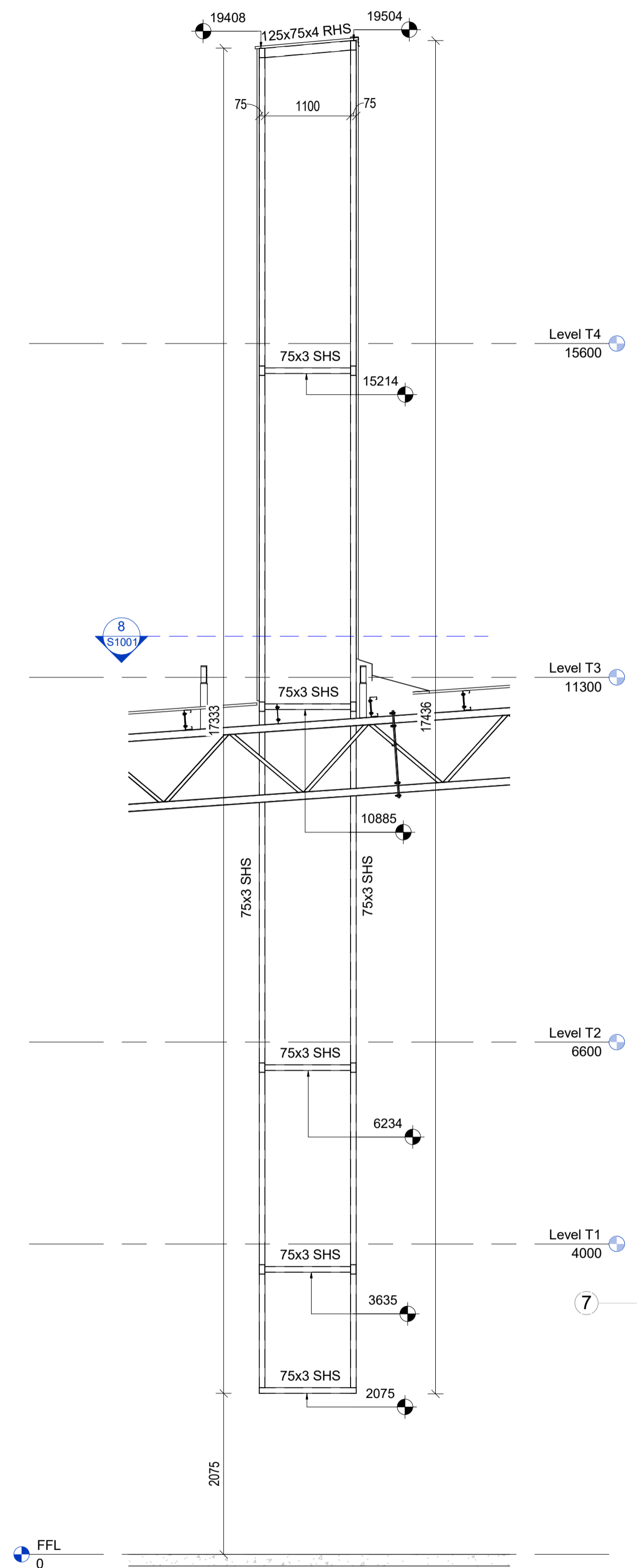
**PRELIMINARY**  
Subject to Structural Engineering  
and Building Consent



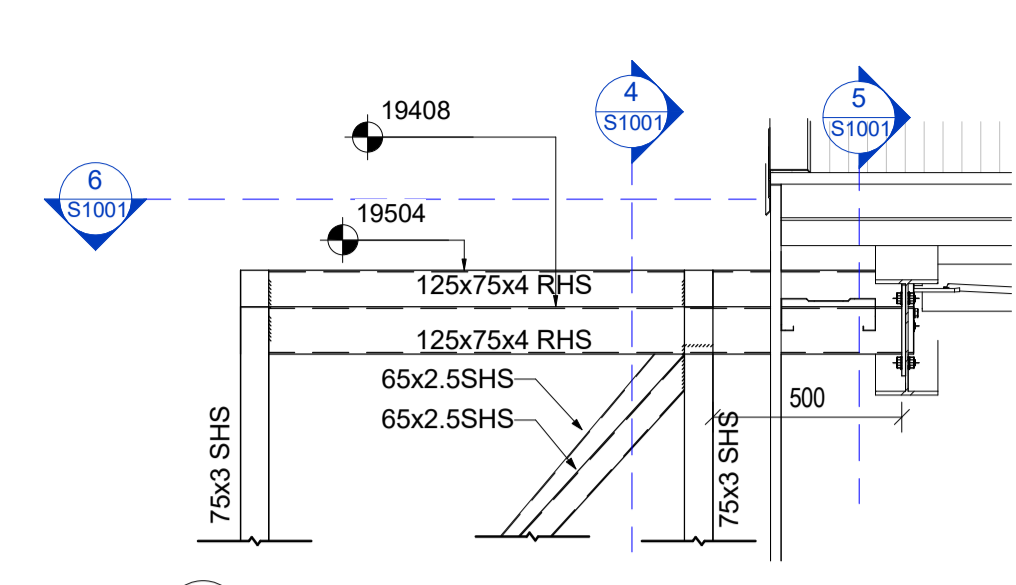




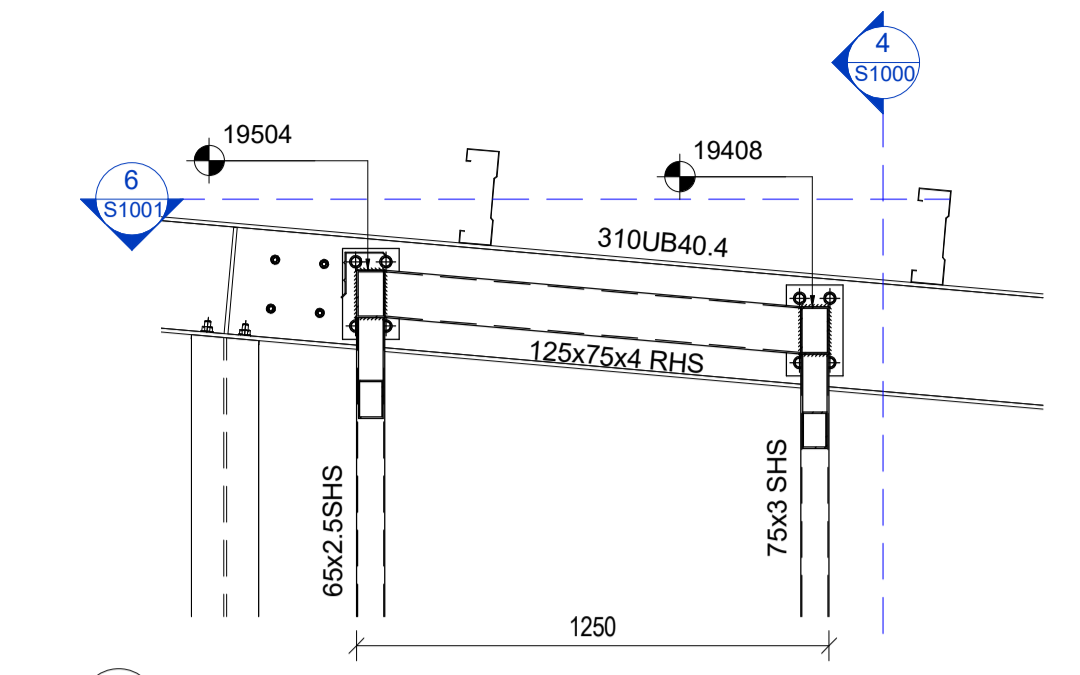
1 Duct frame side elevation  
1:50



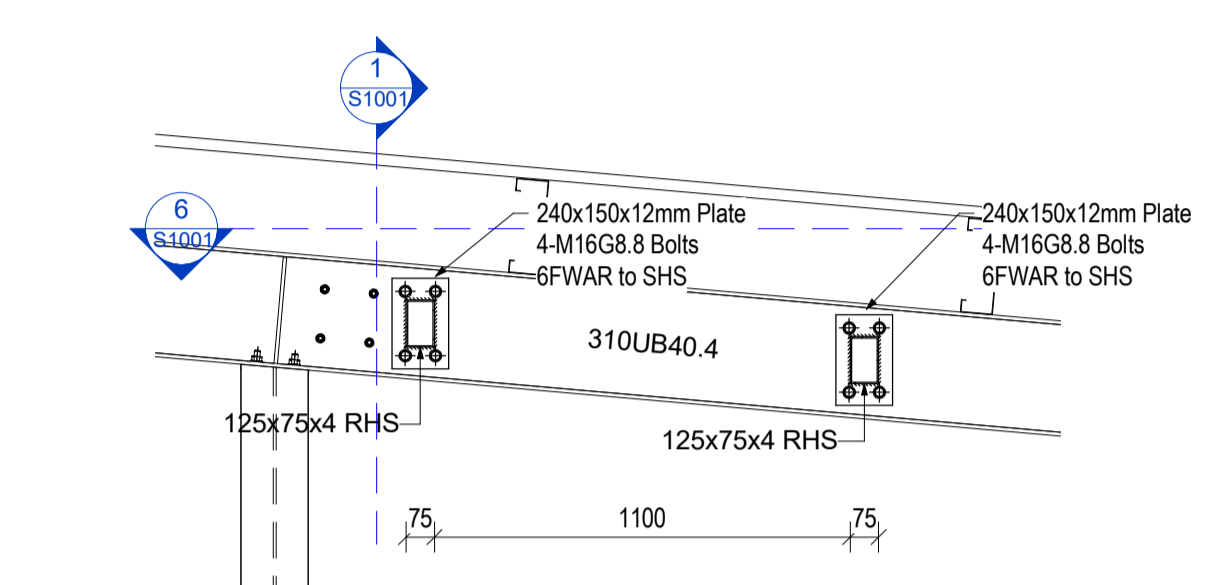
2 Duct frame Back Elevation  
1:50



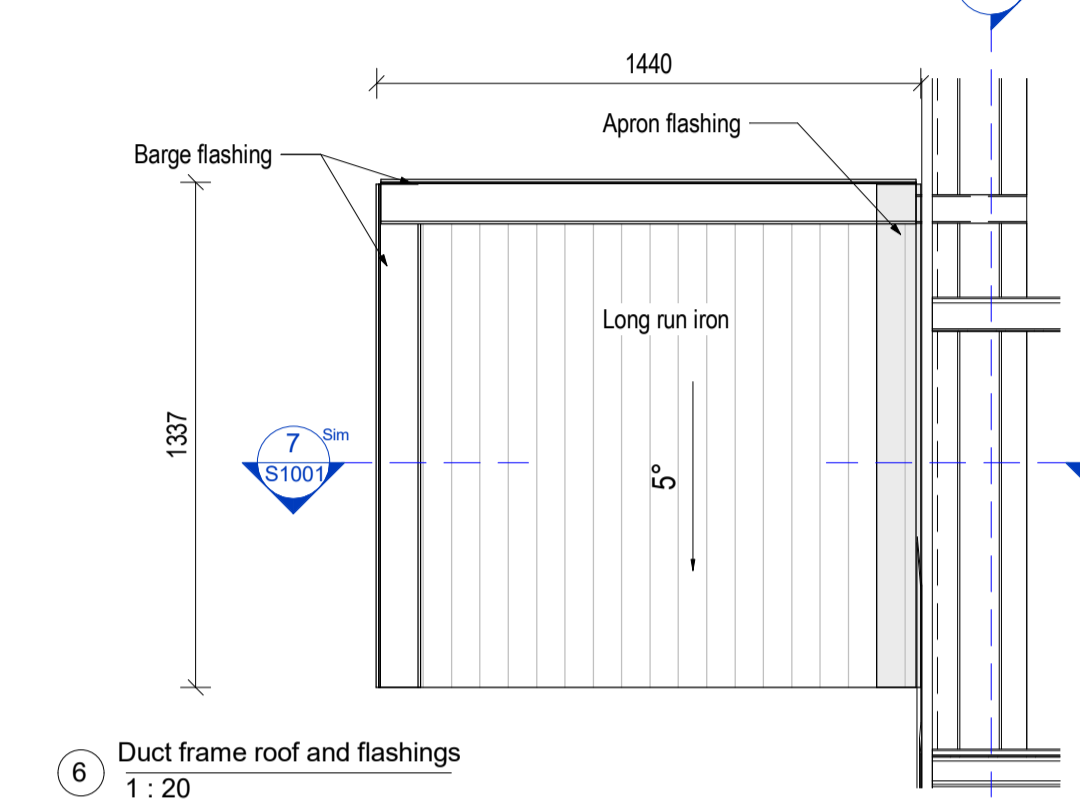
3 SECTION :Top of duct frame  
1:20



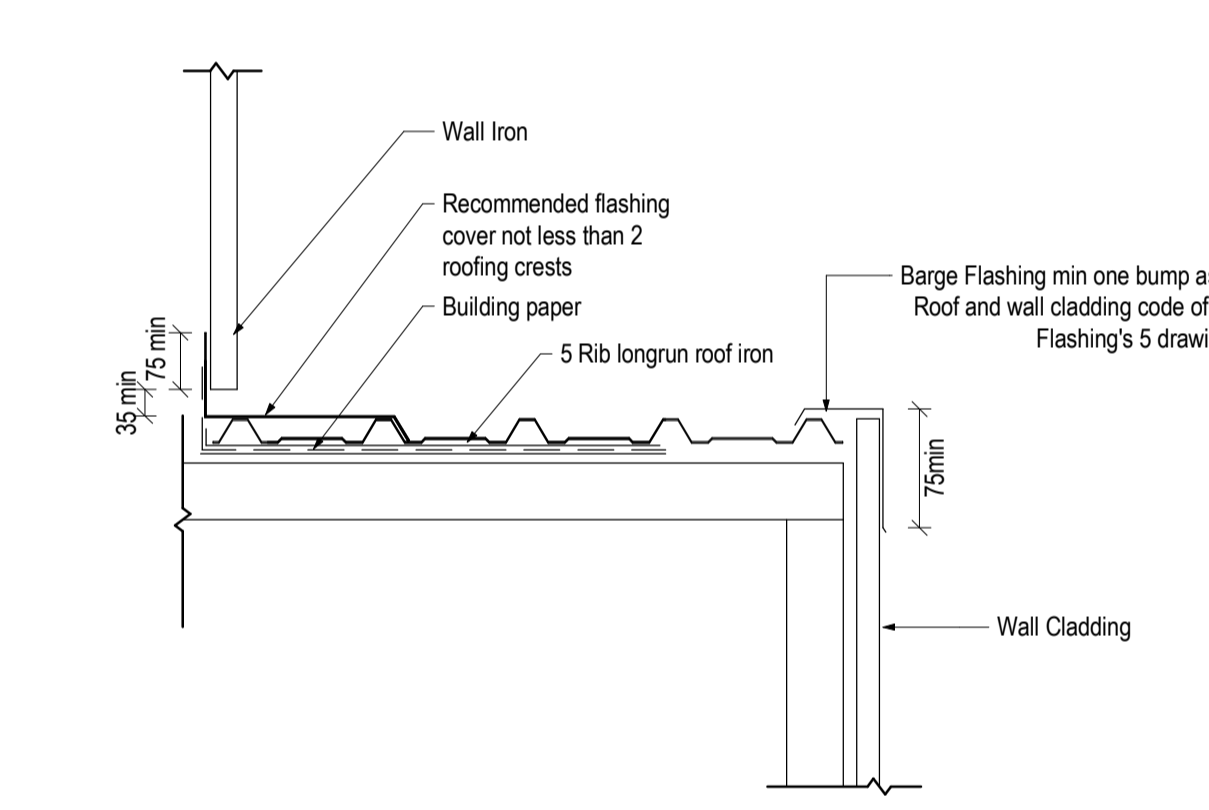
4 DETAIL :Top frame  
1:20



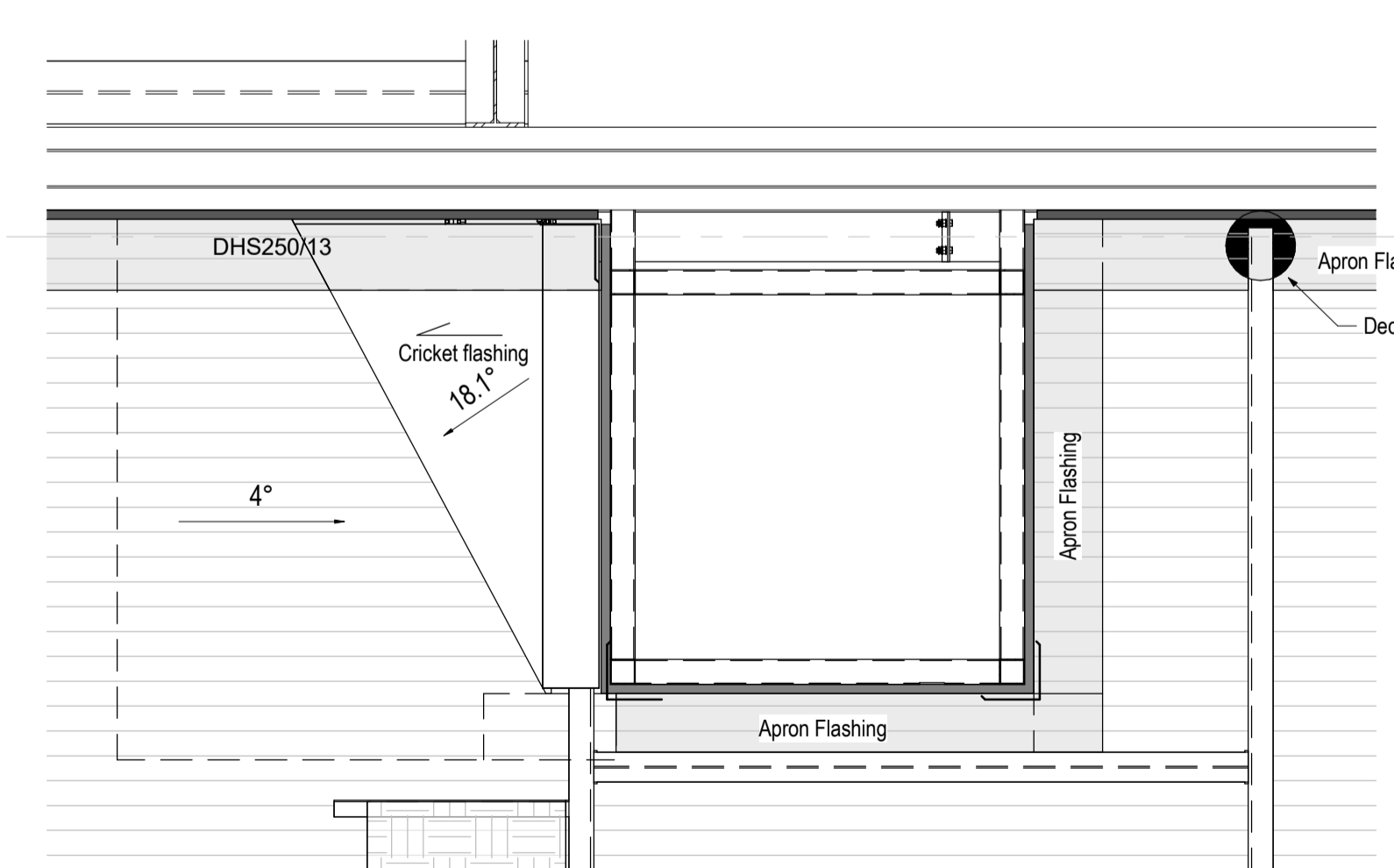
5 DETAIL :Top of duct frame connection  
1:20



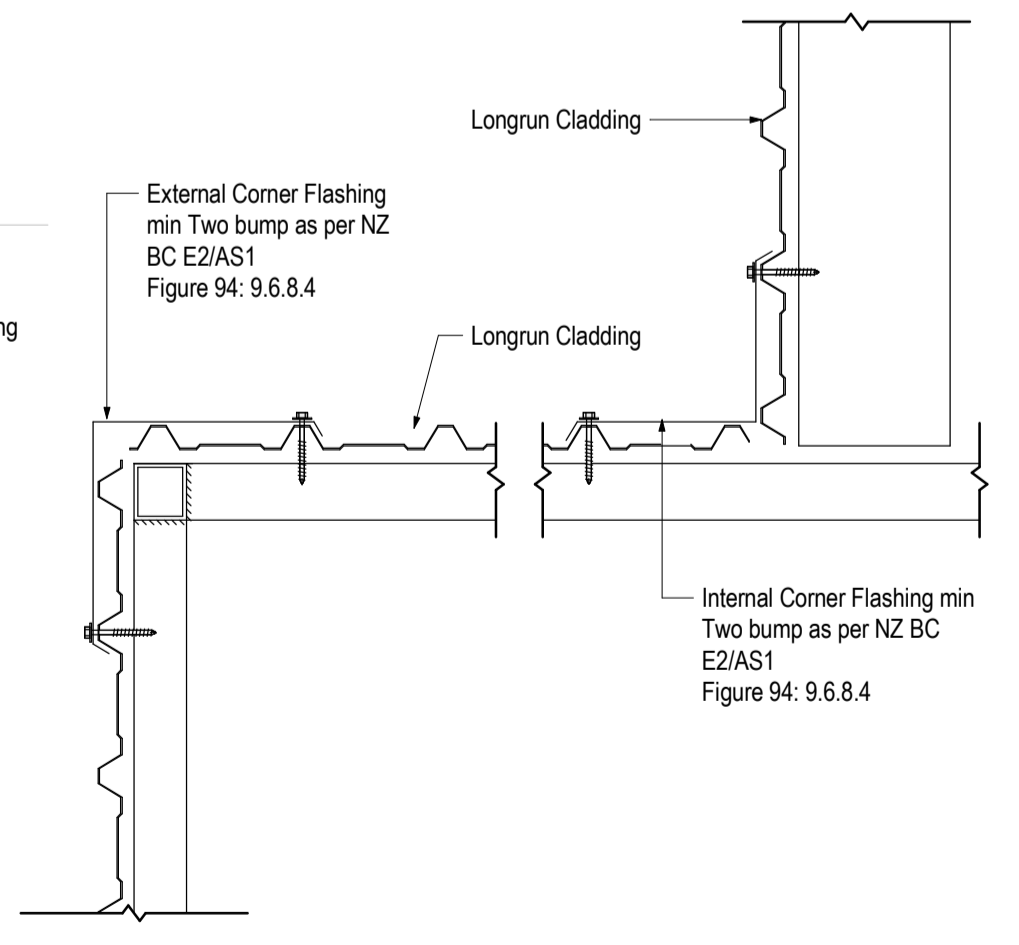
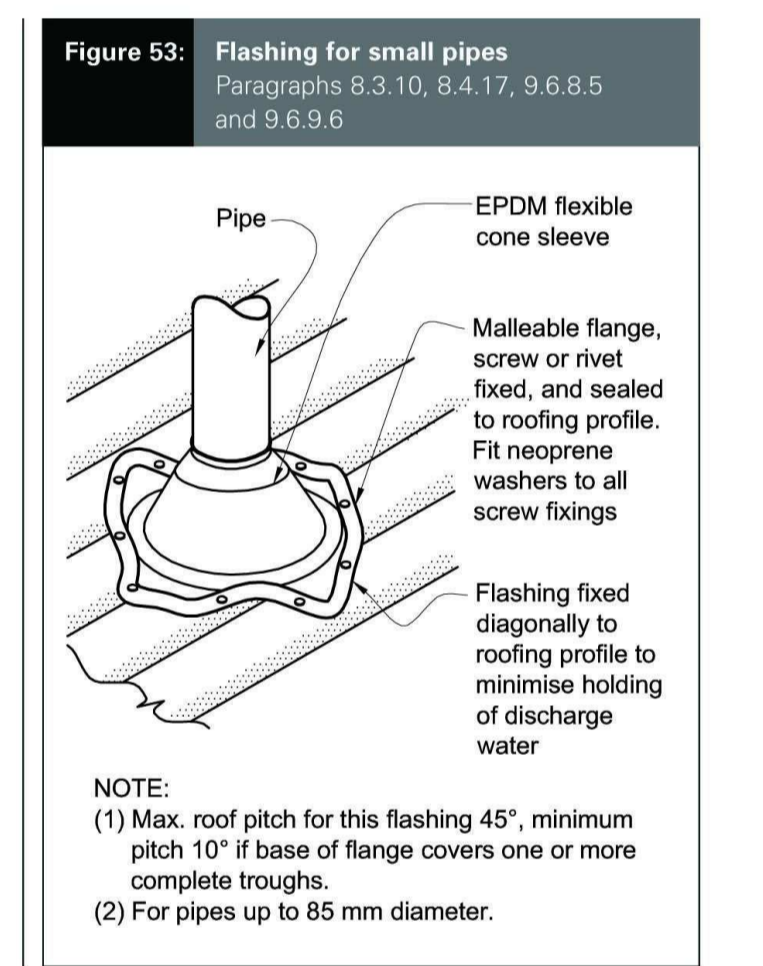
6 Duct frame roof and flashings  
1:20



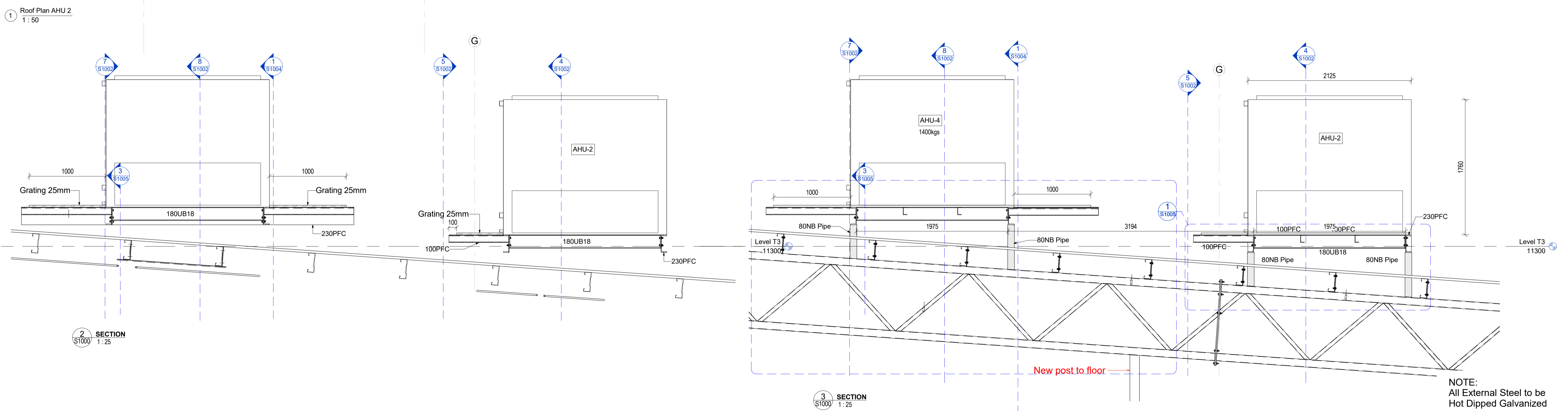
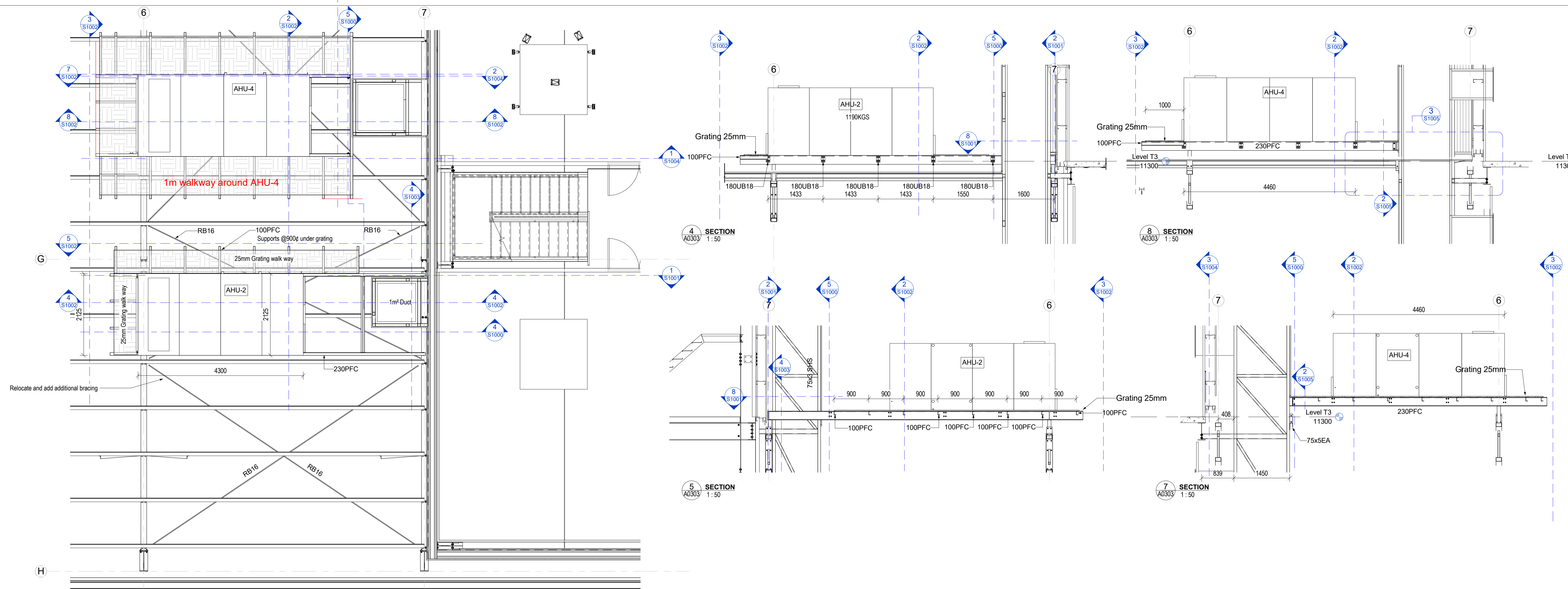
7 Barge and Apron Flashing Detail  
1:10



8 Duct Frame flashings  
1:20

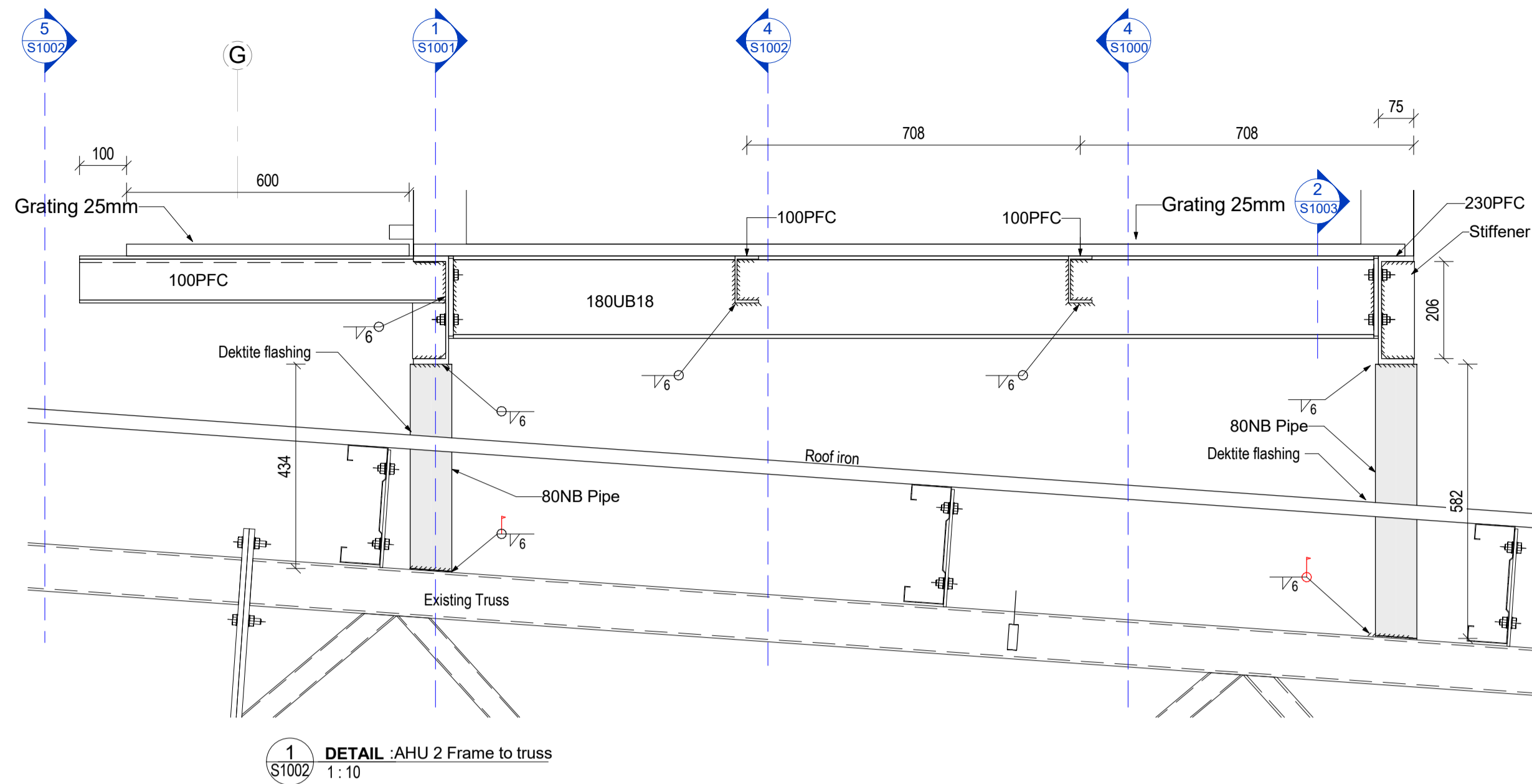


8 Corner Flashings for profiled metal  
1:10

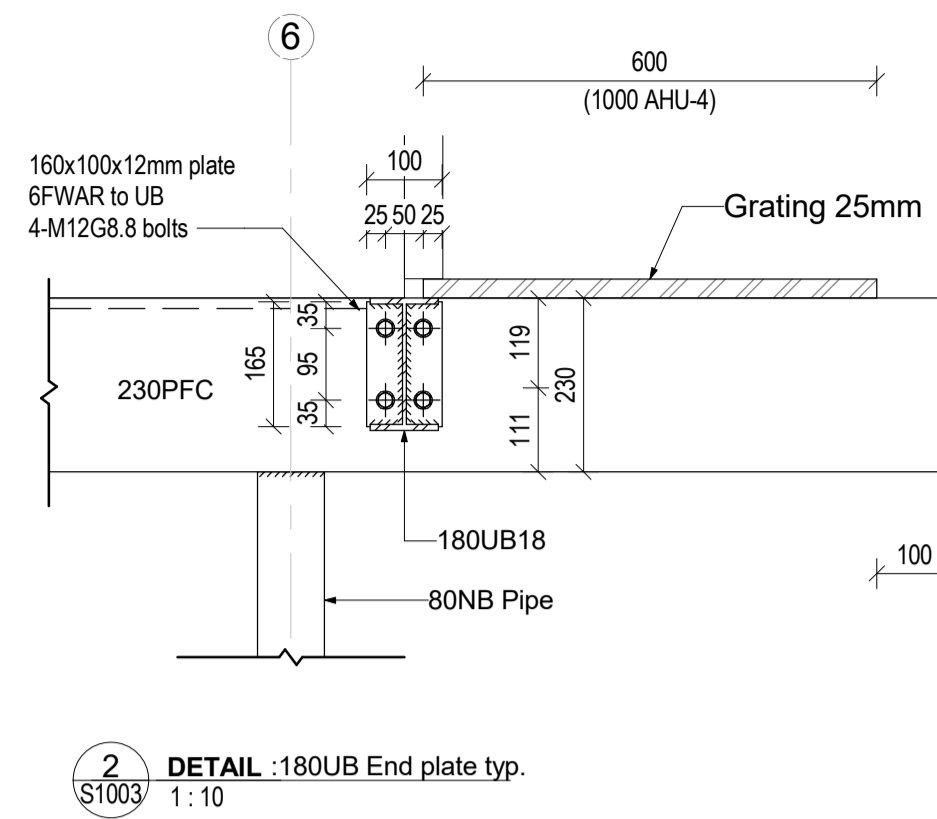


Rev#	Amendments	Date
16	AHU-2 platform and Ducting	23/05/17
17	AHU-2 platform downsize of steel	31/05/17
18	AHU-4 Platform and Ducting	7/7/17

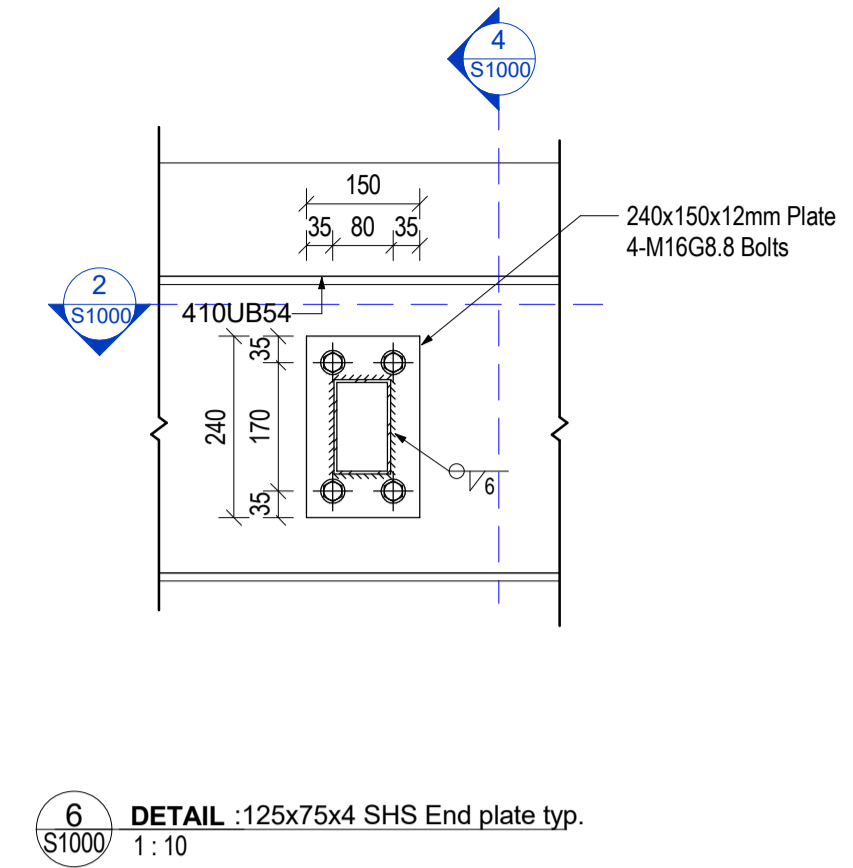
SCALE	As indicated	JOB #	12412
DRAWN BY	C. White	DATE	23/05/2017
CHECKED BY	R. Qadeer		18
AHU 2 and 4 Frames		S1002	
Please note: All dimensions to be verified on site			
Paper size A1			



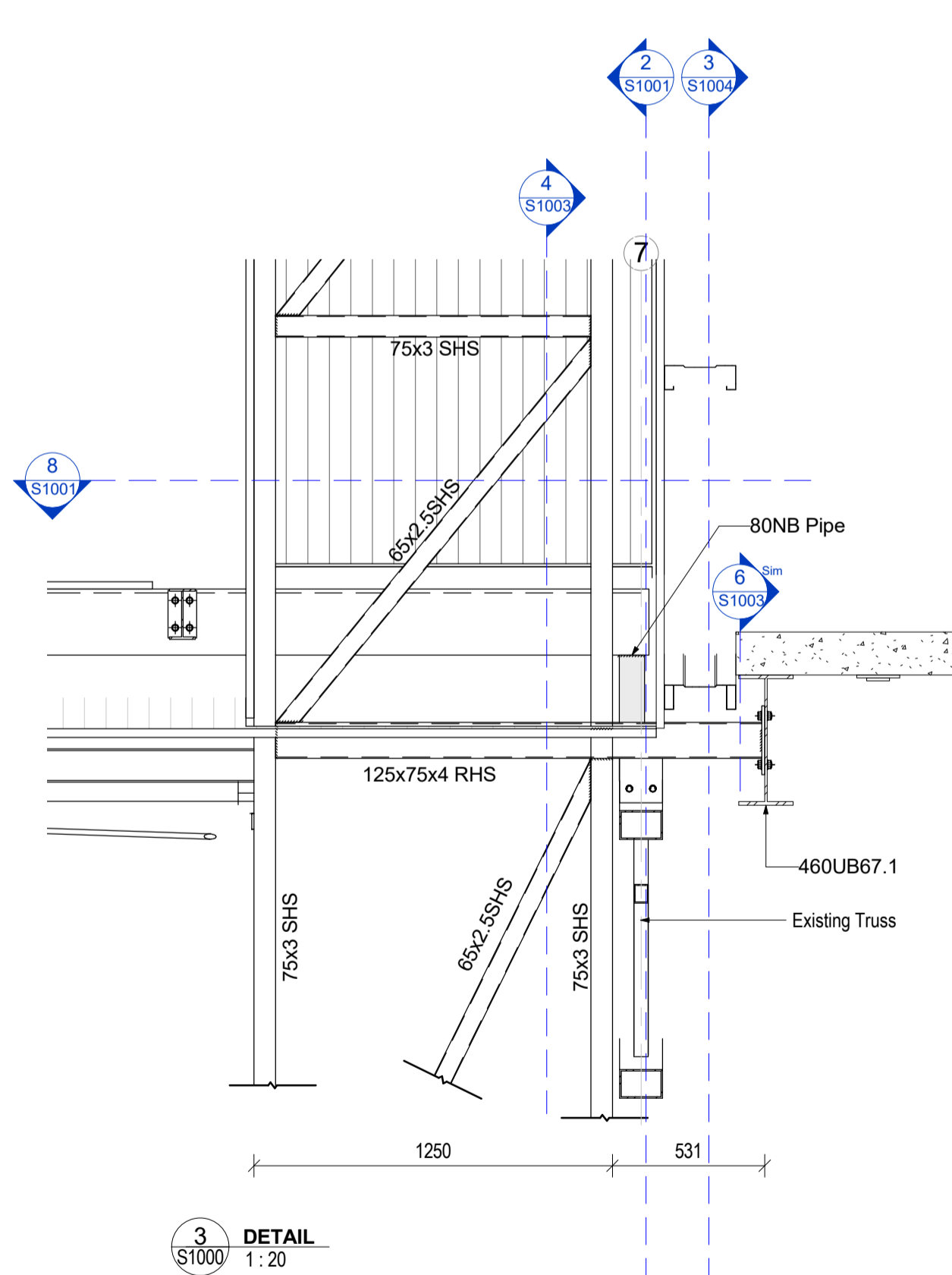
1 DETAIL :AHU 2 Frame to truss  
1:10



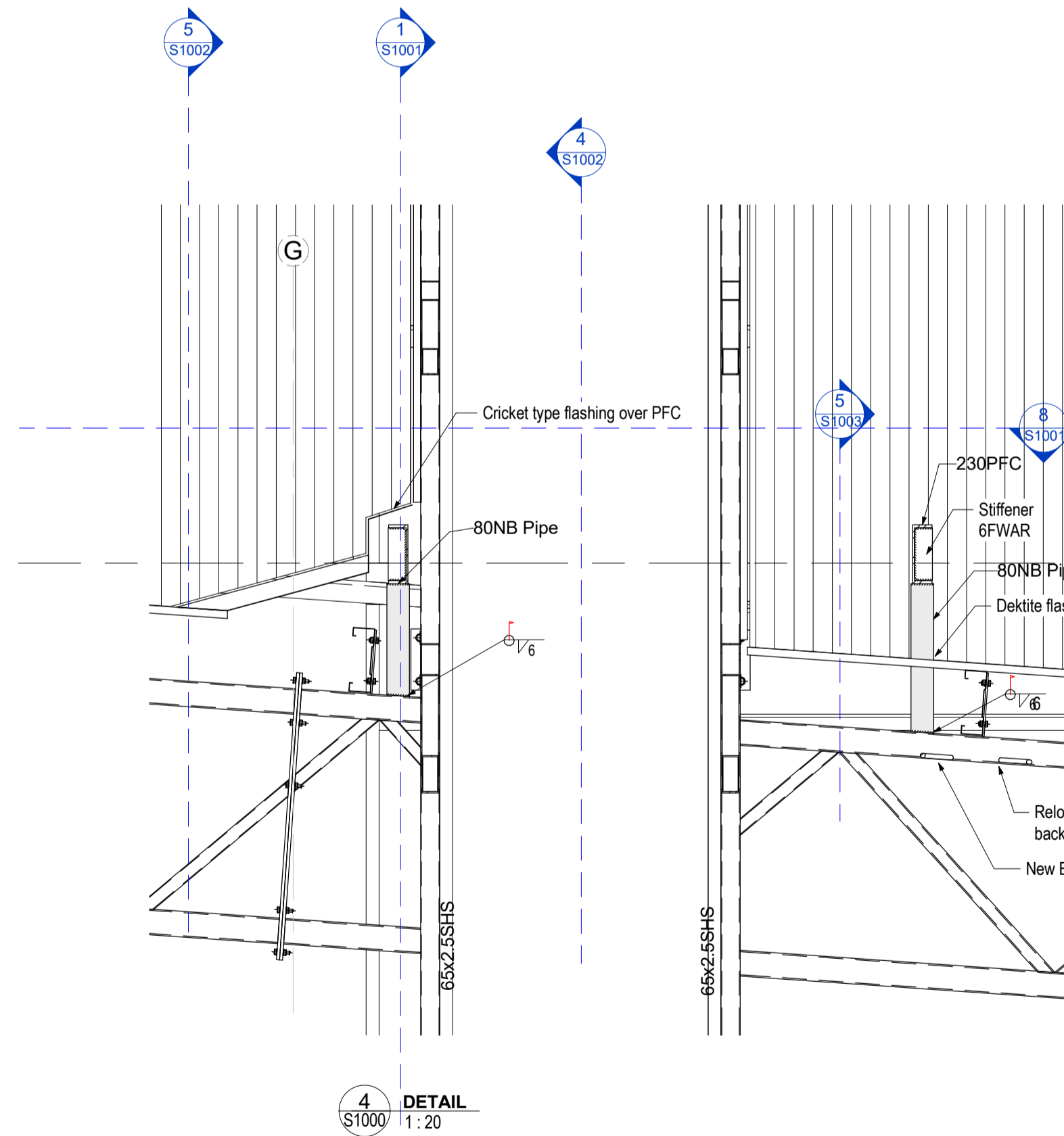
2 DETAIL :180UB End plate typ.  
1:10



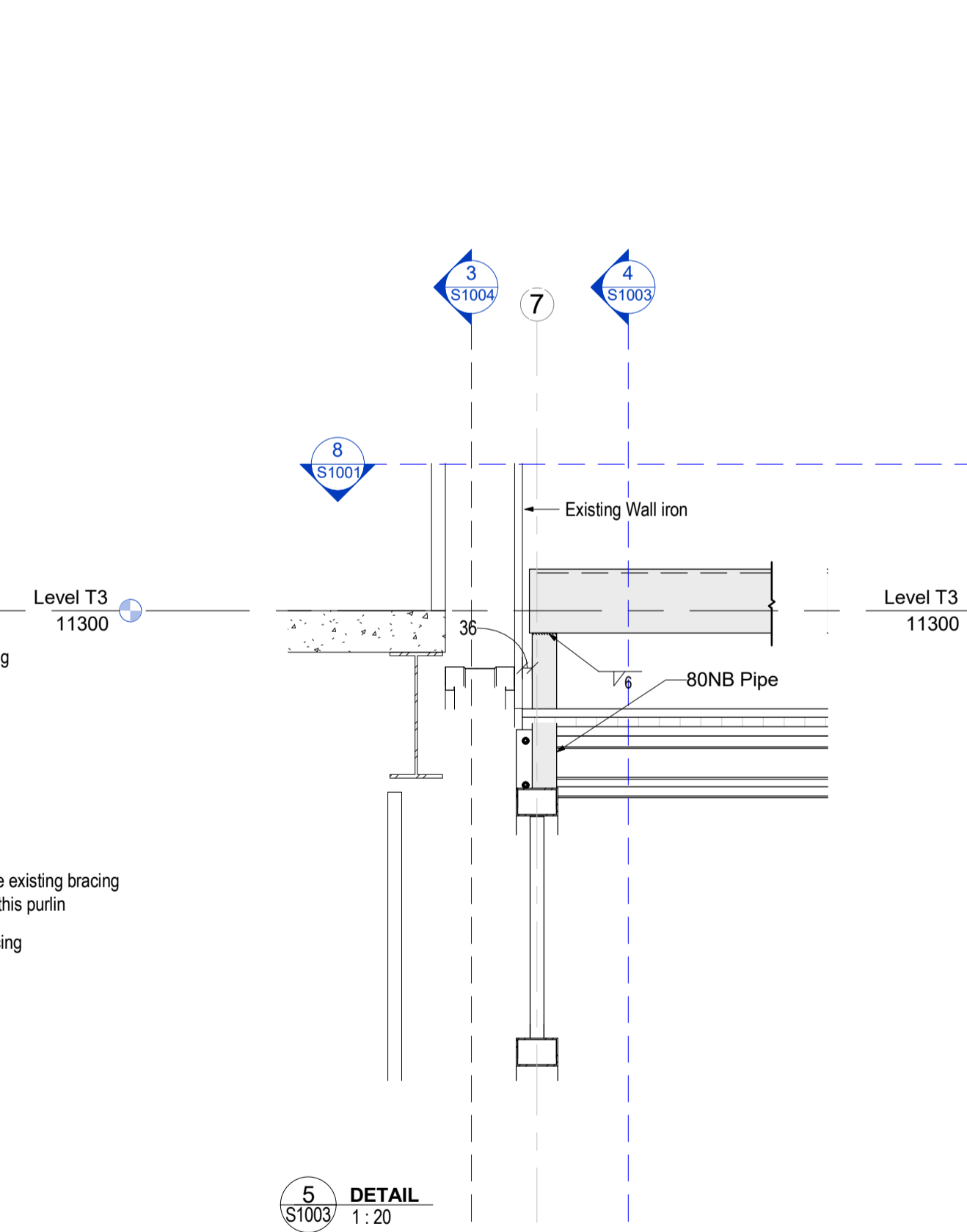
6 DETAIL :125x75x4 SHS End plate typ.  
1:10



3 DETAIL  
1:20



4 DETAIL  
1:20



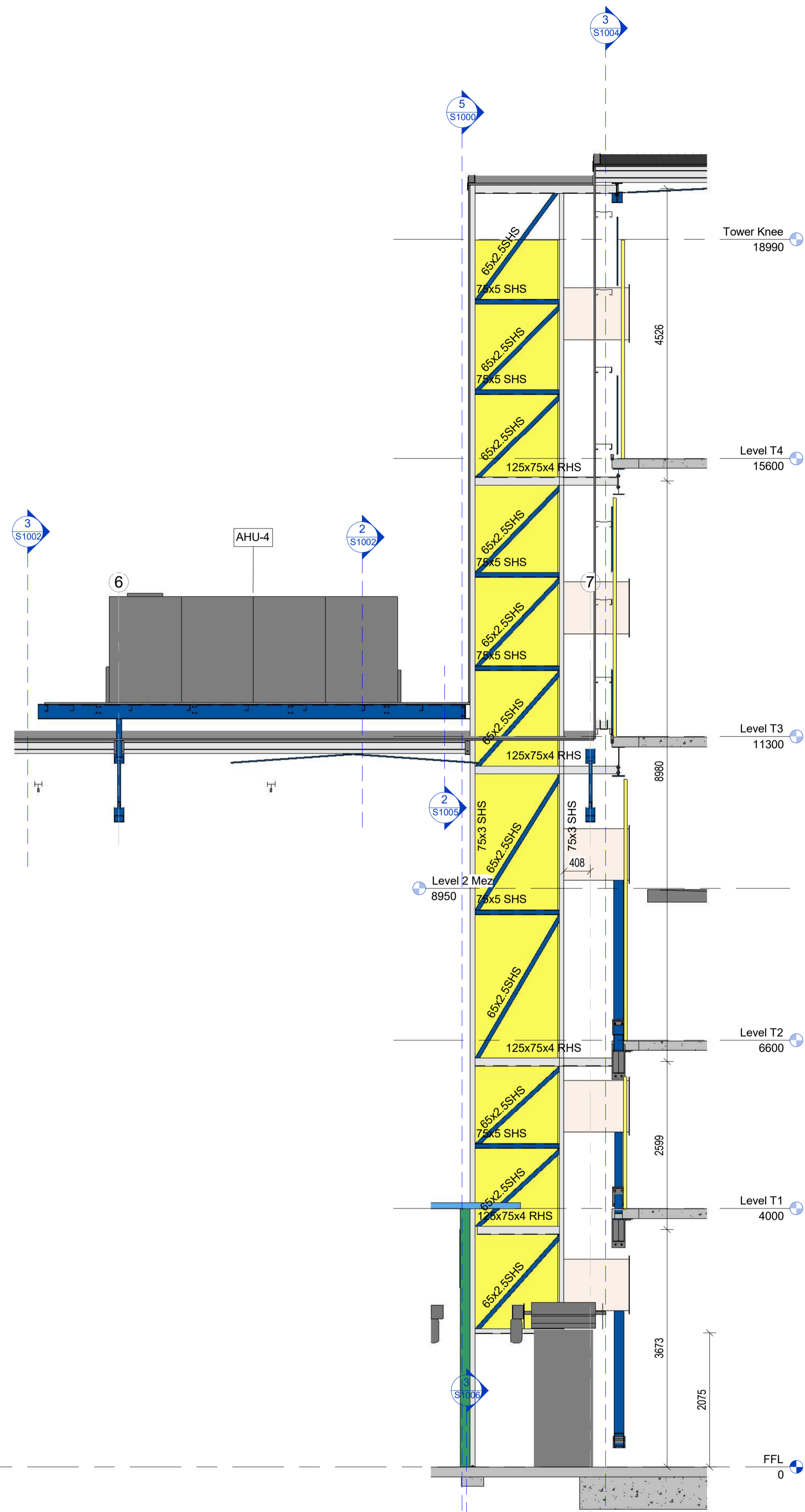
5 DETAIL  
1:20

AHU 2 Structural Column Schedule

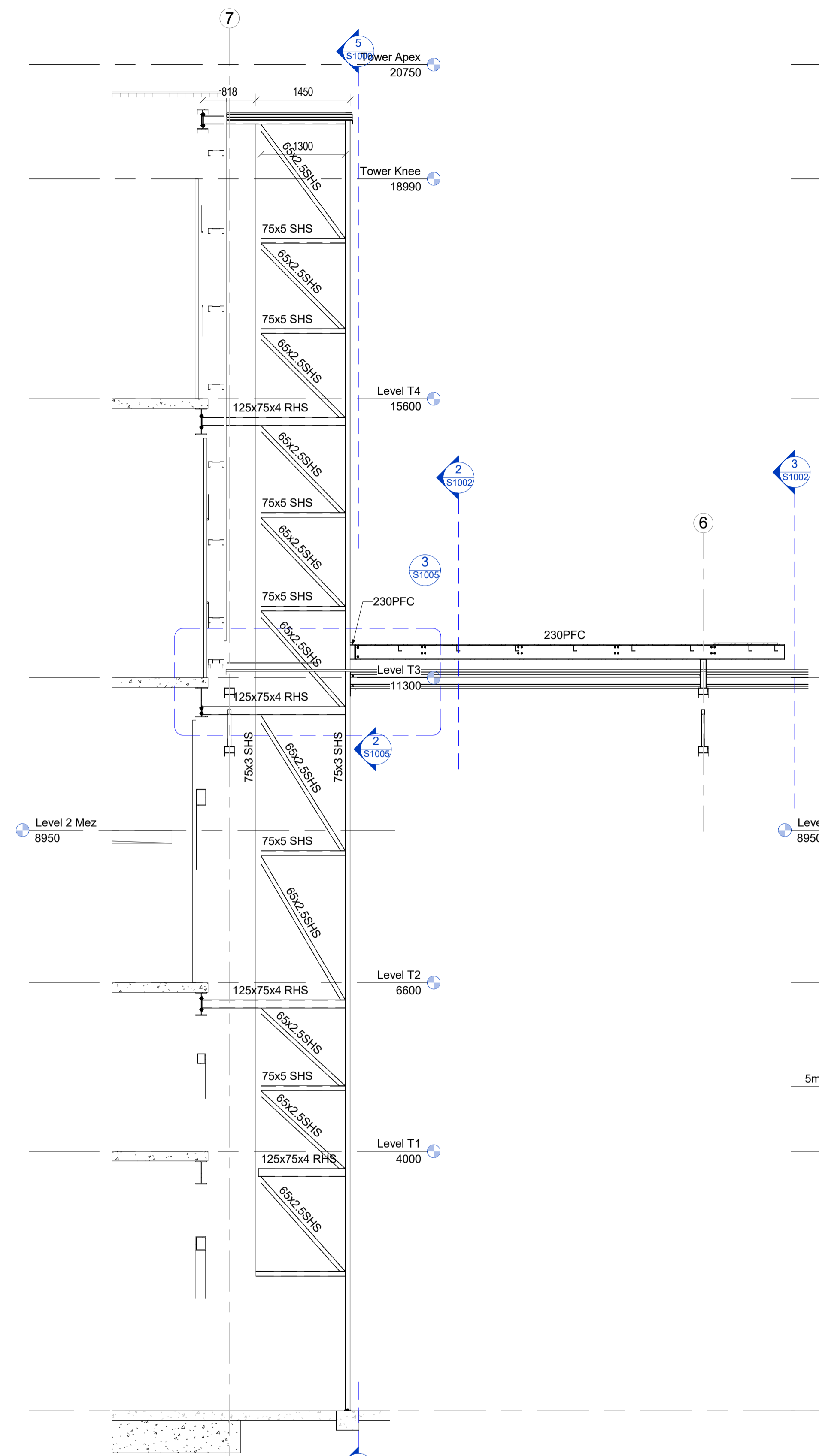
Type	Length	Volume	Weight (Kgs)
75x3 SHS	13039	0.01 m³	90.12
75x3 SHS	17354	0.01 m³	119.95
75x3 SHS	17258	0.01 m³	119.28
75x3 SHS	17354	0.01 m³	119.95
75x3 SHS	4094	0.00 m³	28.3
75x3 SHS	17564	0.02 m³	121.4
75x3 SHS	17685	0.02 m³	122.24
75x3 SHS	19960	0.02 m³	137.96
75x3 SHS	19839	0.02 m³	137.13
80NB Pipe	446	0.00 m³	4.57
80NB Pipe	586	0.00 m³	6.06
80NB Pipe	446	0.00 m³	4.59

AHU- 2 Structural Framing Schedule

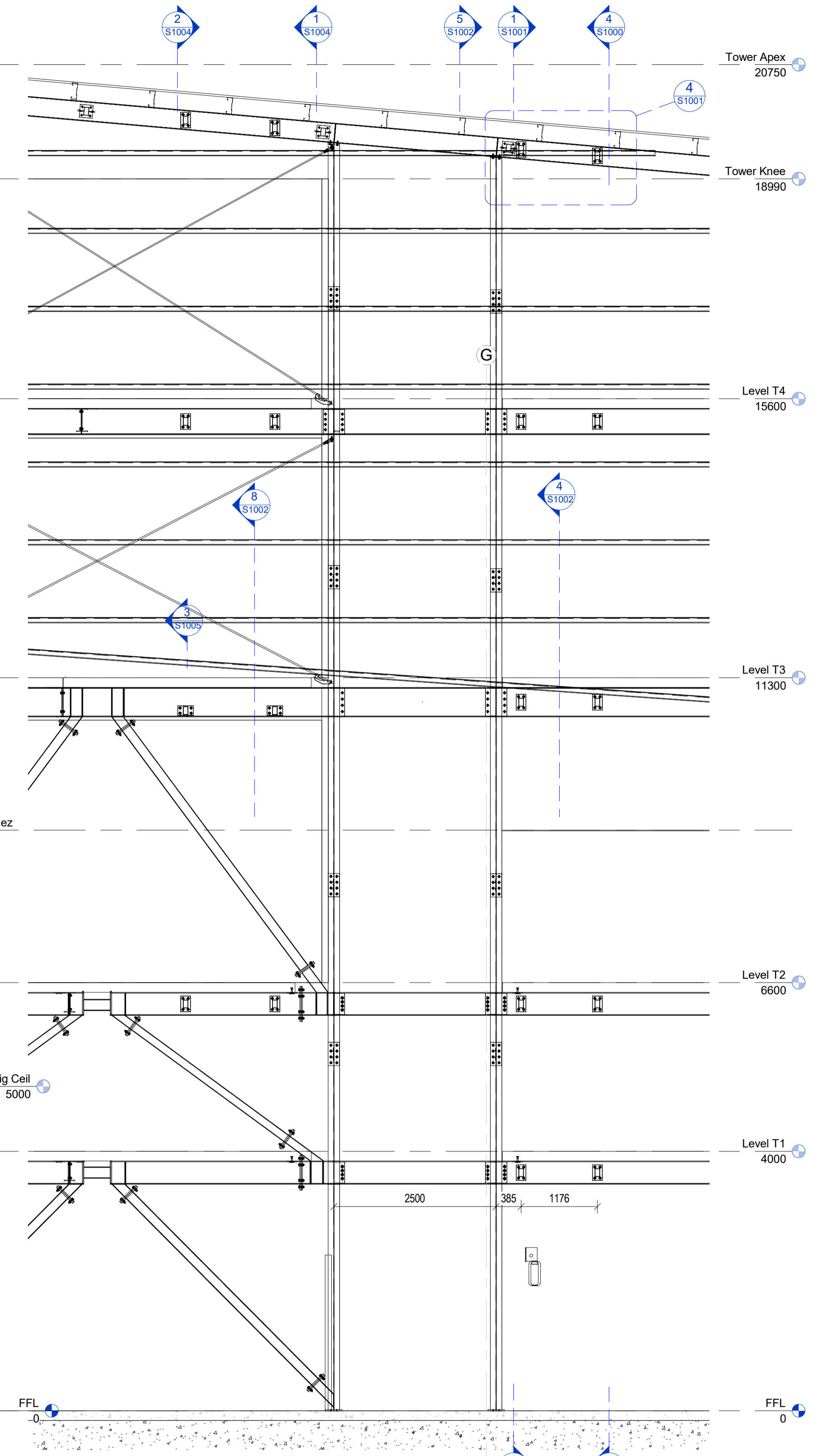
80NB Pipe Type	947	Col.000 m²	Cut length	Volume	Weight (Kgs)
Grand total:	15	147961	0.13 m³	1028.34	
65x2.5SHS	32		59677	0.00 m³	287.35
75x3 SHS	49		58400	0.00 m³	400.55
100PFC	28		28588	0.00 m³	230.96
125x75x4 RHS	24		42246	0.00 m³	518.58
180UB18	9		17755	0.00 m³	317.46
230PFC	5		33944	0.00 m³	852.39
Grand total:	147		240609		2607.29



1 AHU-4 Duct frame side elevation  
1:50

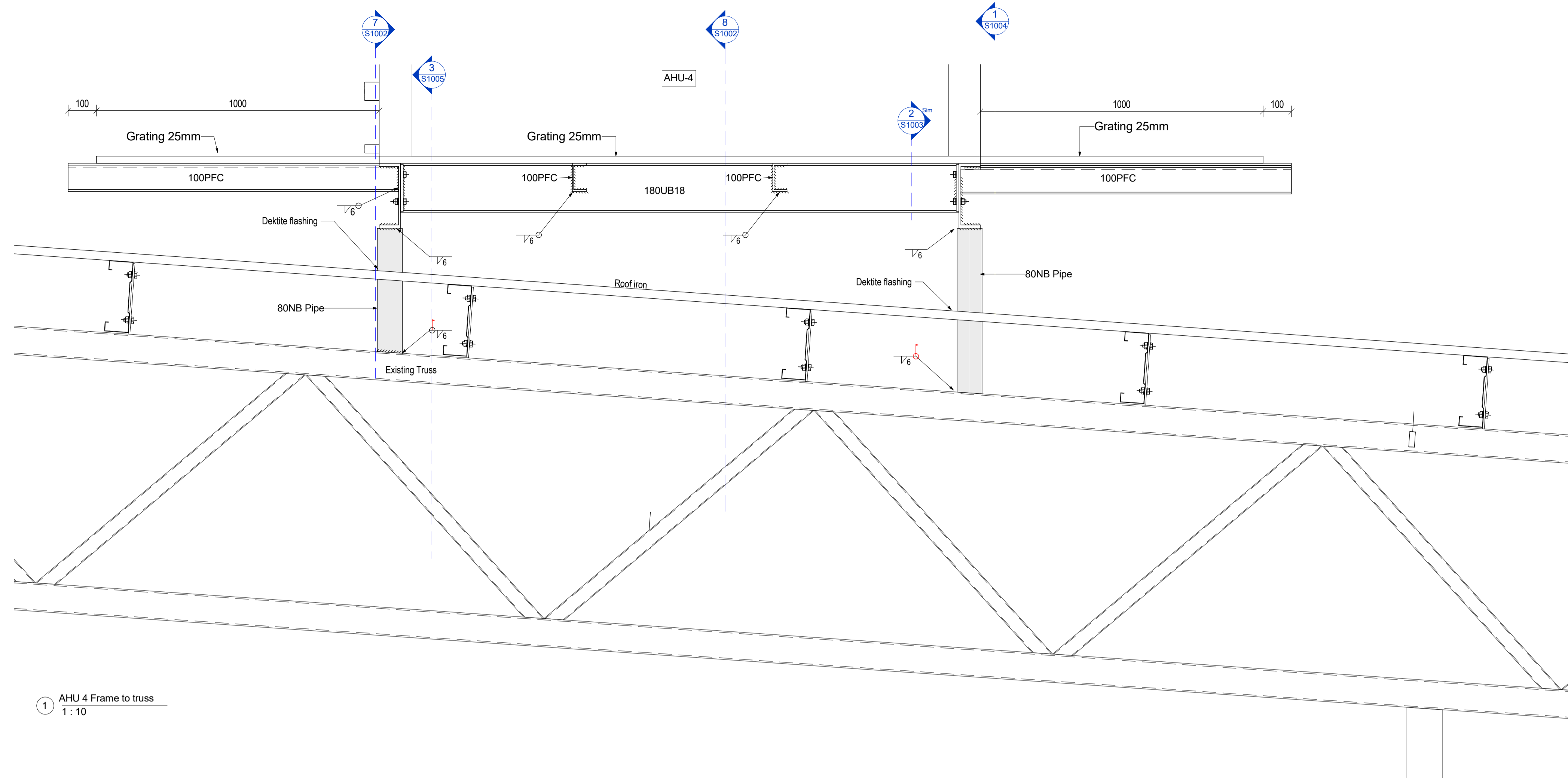


2 DETAIL :AHU-4 Duct frame side elevation1  
1:50

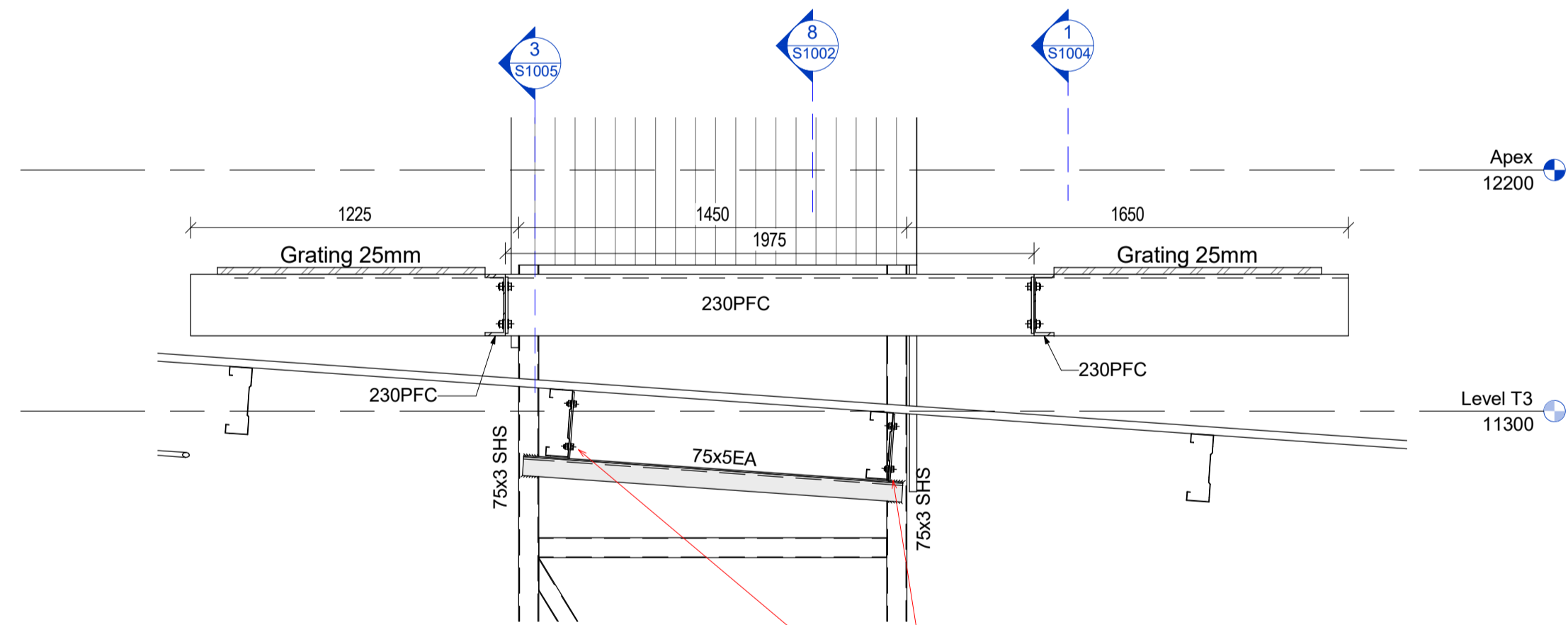
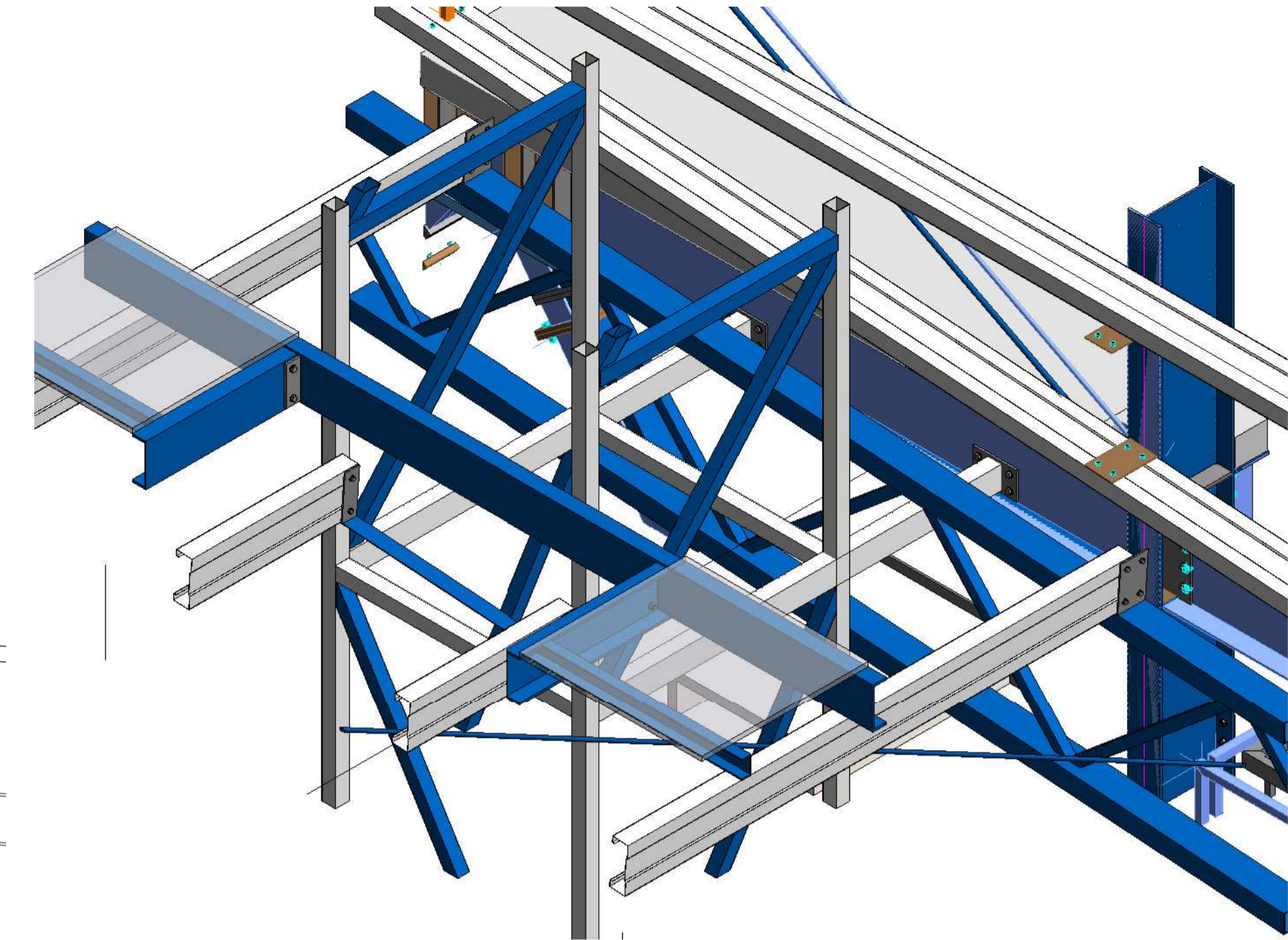


3 Duct frame Back Elevation1  
1:50

Rev#	Amendments	Date	SCALE	As indicated	JOB #
18	AHU-4 Platform and Ducting	7/7/17	As indicated		12412
DRAWN BY C. White			DATE	23/01/16	
CHECKED BY			Checker	18	
AHU 4 Ducting Frame				S1004	
Please note: All dimensions to be verified on site					
Paper size A1					

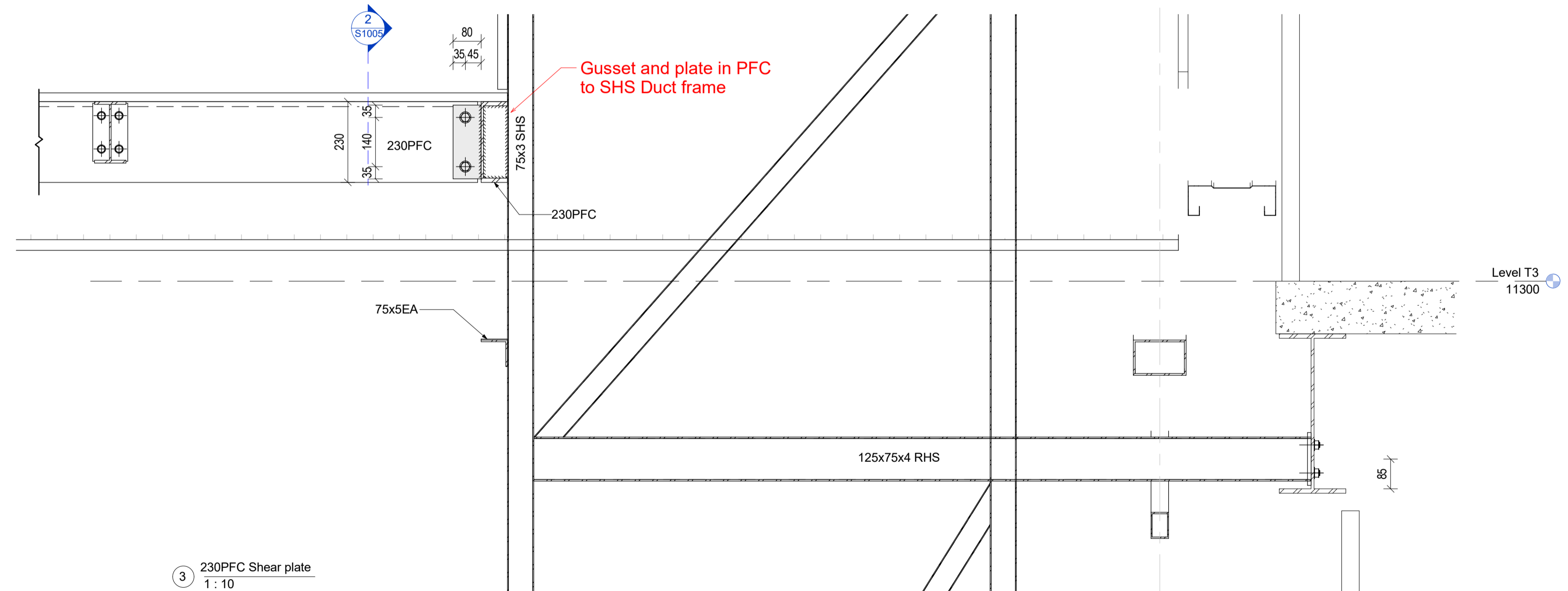


1 AHU 4 Frame to truss  
1:10

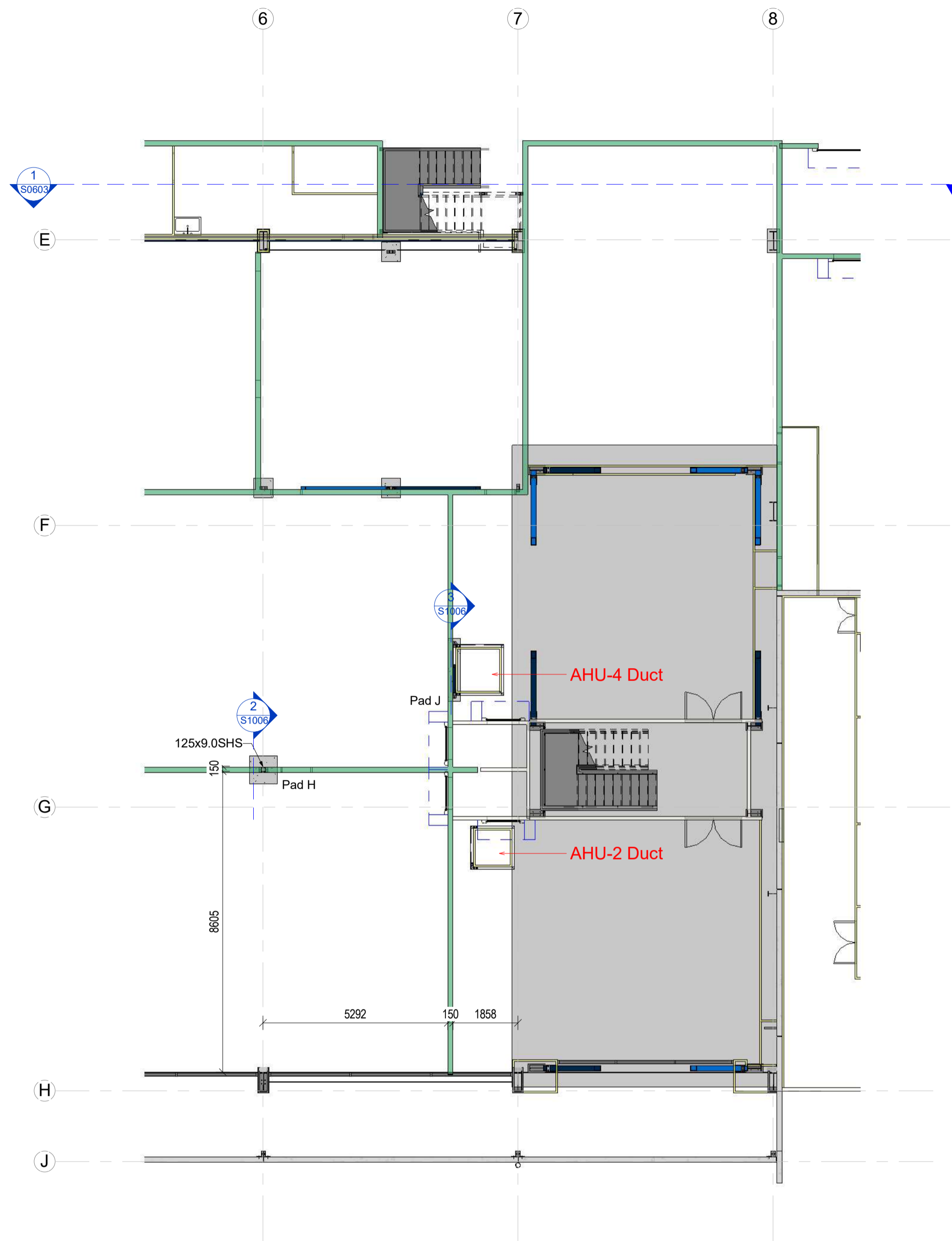


2 DETAIL :230PFC to Duct frame  
1:20

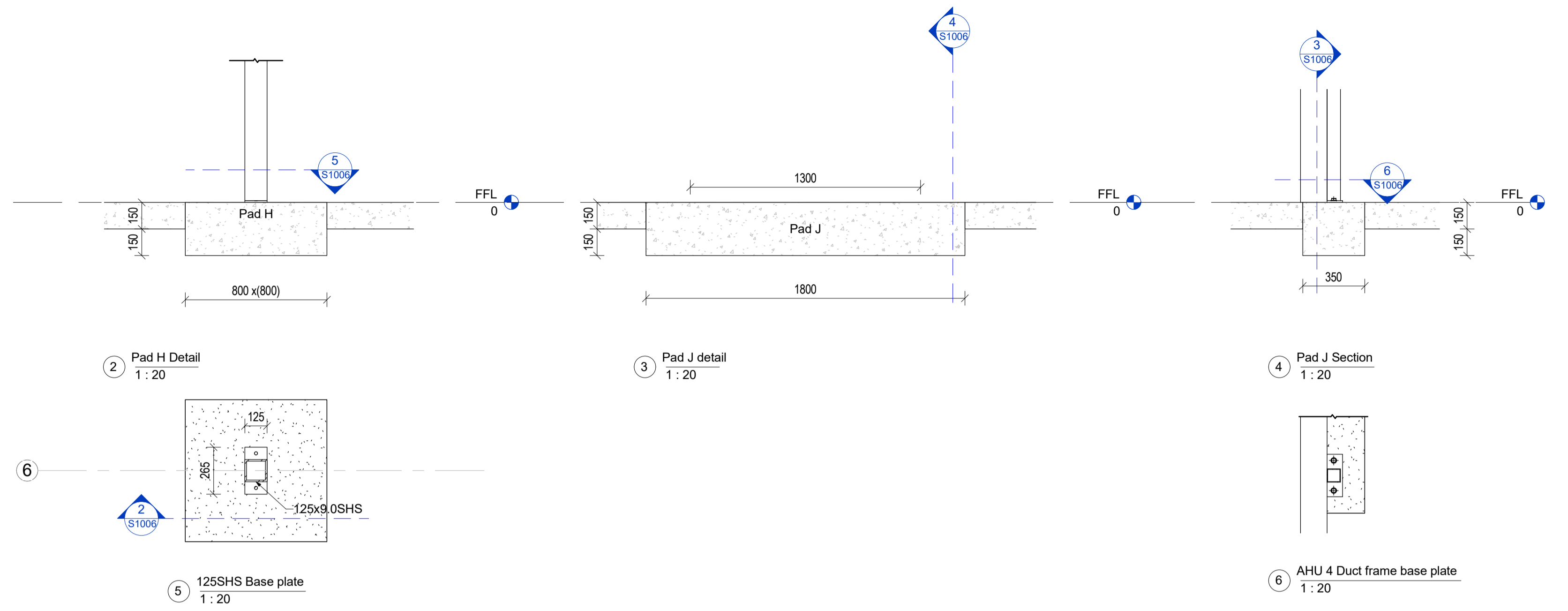
Cut Existing purlins and attach to new new purlin cleats on 75x5EA



3 230PFC Shear plate  
1:10



1 Floor Plan AHU4  
1:100



2 Pad H Detail  
1:20

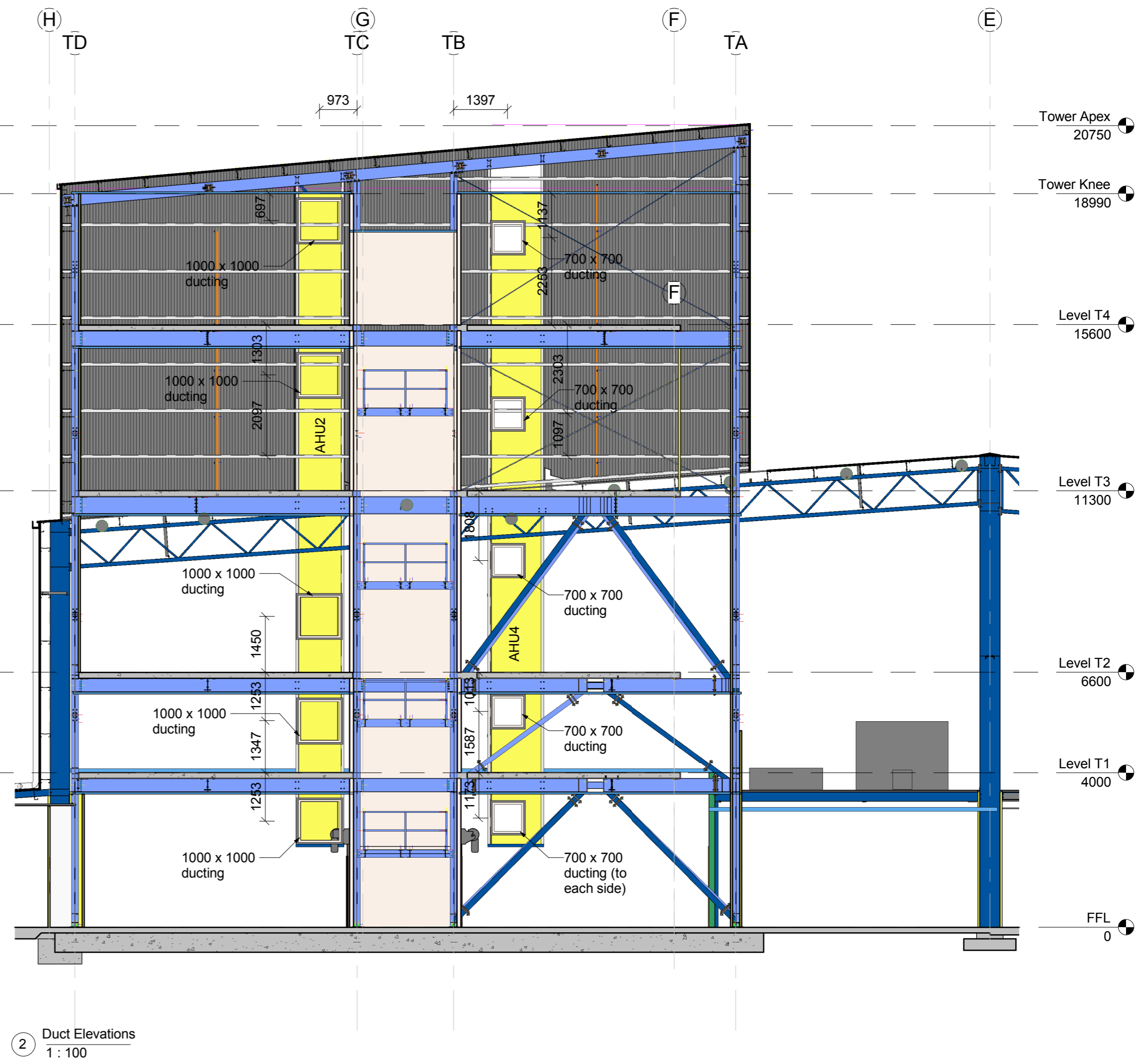
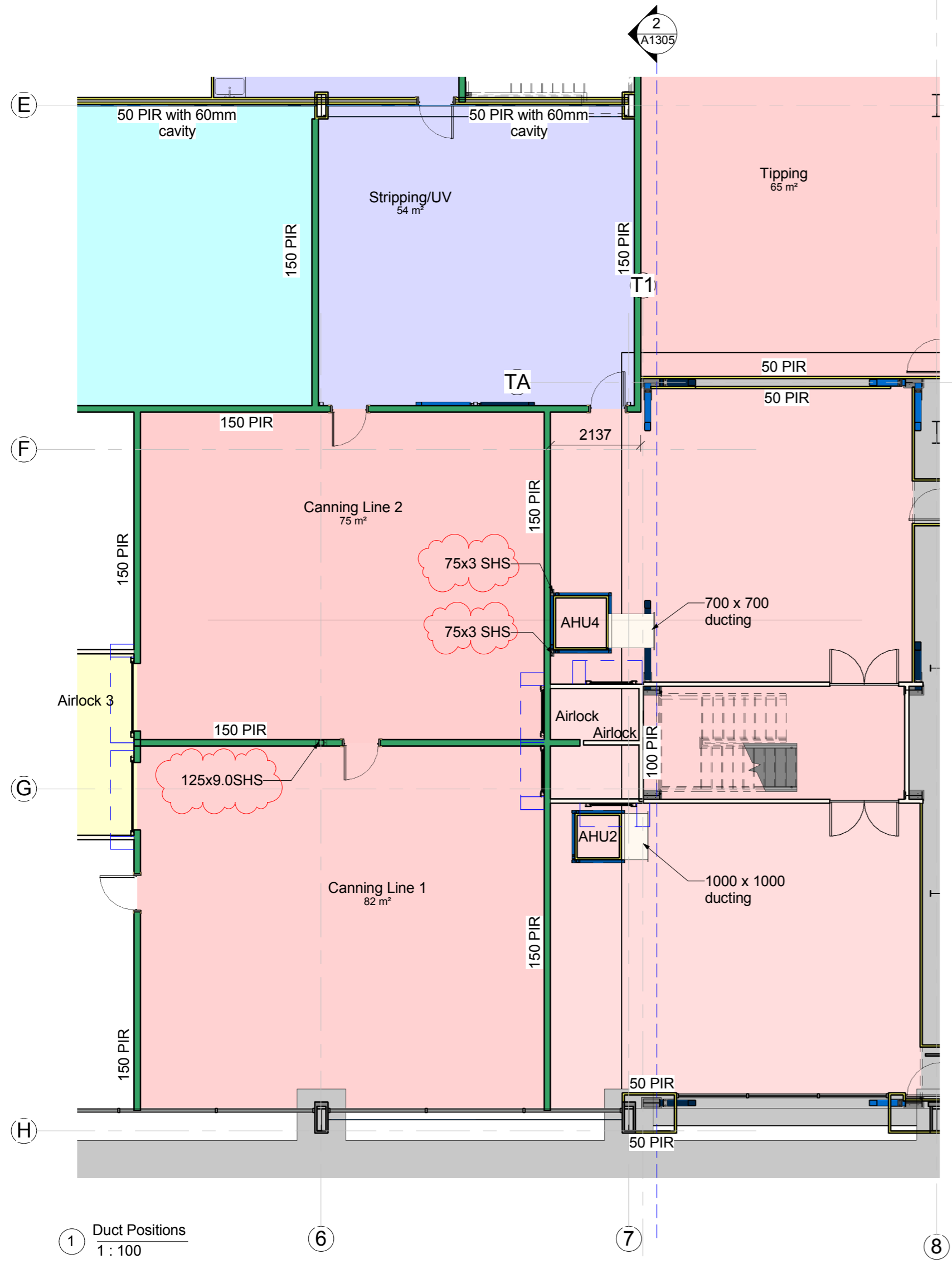
3 Pad J detail  
1:20

4 Pad J Section  
1:20

5 125SHS Base plate  
1:20

6 AHU 4 Duct frame base plate  
1:20

Rev#	Amendments	Date	SCALE	As indicated	JOB #
18	AHU-4 Platform and Ducting	7/7/17	As indicated		12412
DRAWN BY C. White		DATE	23/01/16		
CHECKED BY Checker			18		
AHU-4 Floor plan and foundation details			S1006		
Please note, all dimensions to be verified on site					Paper size A1



PROJECT

NZ Dairy Collaborative Group  
Tower Extension

9 Ashford Ave, Ashburton

Rev#

Amendments

Date

SCALE 1 : 100 @ A2

JOB # 12630

5

AHU Platform and Stairs

20/03/16

DRAWN BY D. Shand

DATE 17/07/17

CHECKED BY

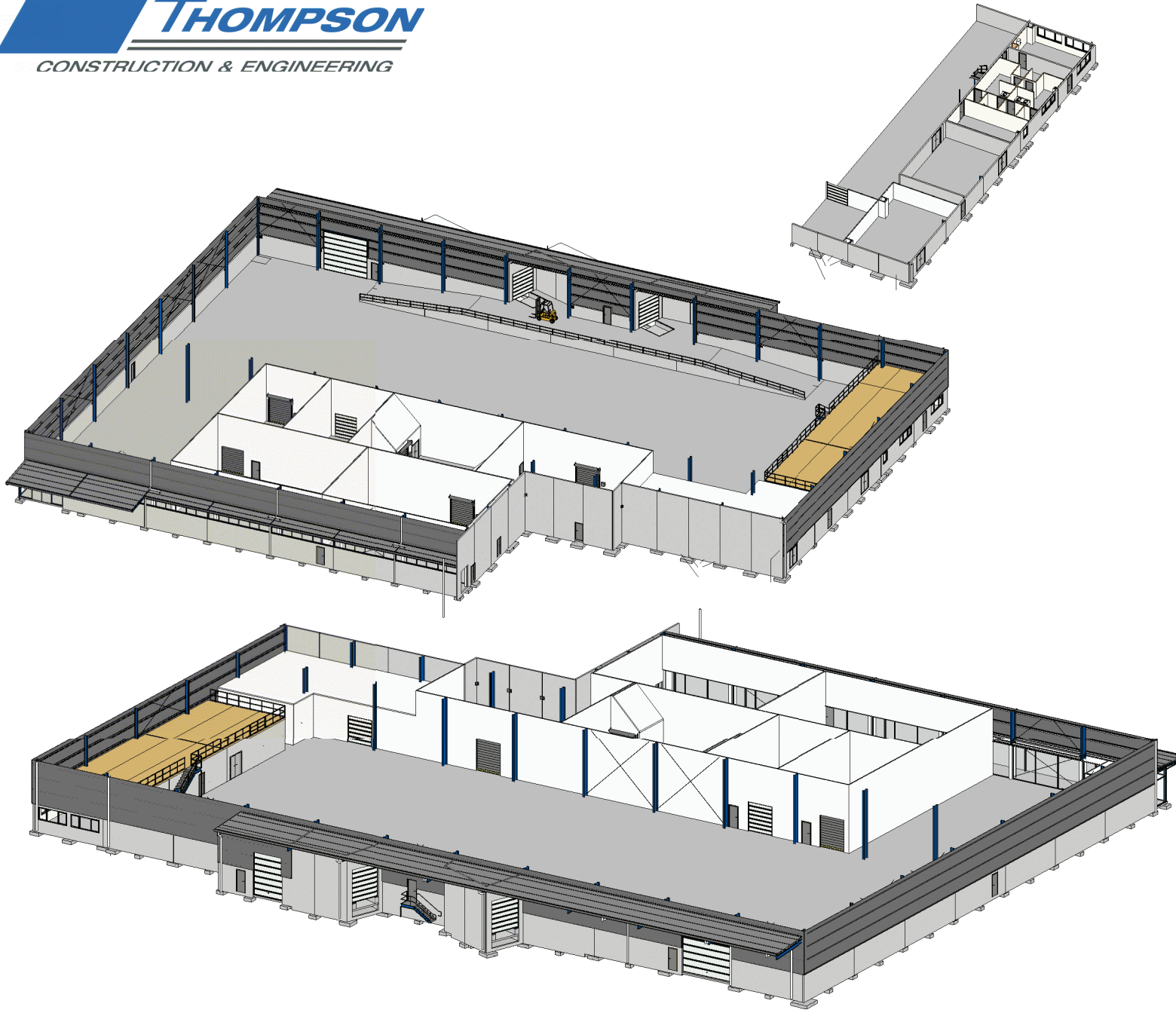
REV 5

Duct Positions

A1305

Please note: All dimensions to be verified on site

Paper size: A2



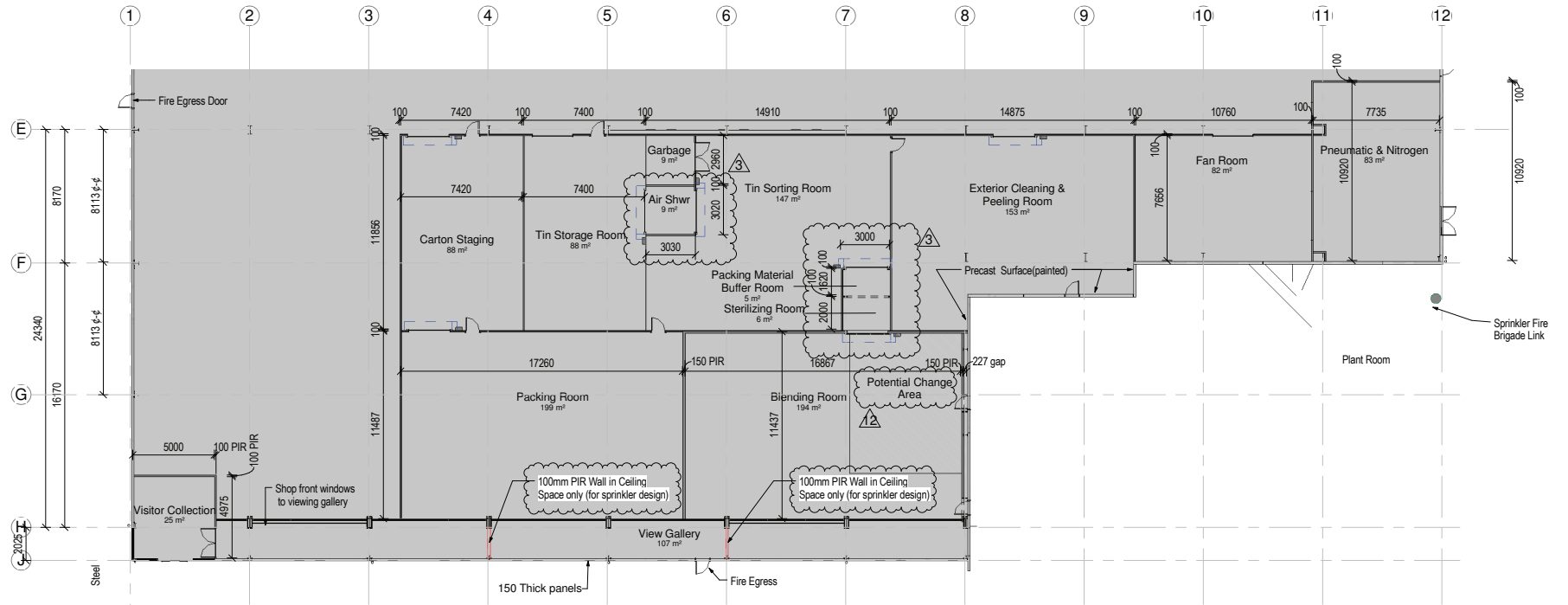
### Architectural Sheet List

Sheet Number	Sheet Name	Current Revision	Current Revision Date
A0100	Site Plan	11	15/06/16
A0101	Site Plan Office		
A0200	Ground Floor	12	28/07/16
A0202	Ground floor callouts	12	28/07/16
A0300	Cross Sections	5	18/02/16
A0301	Cross Sections	12	28/07/16
A0303	Refrig Fitout Plan and Sections	12	28/07/16
A0304	Refrig Fitout Sections	3	09/02/16
A0305	Refrig Fitout Sections	12	28/07/16
A0400	Elevations A and C	9	02/05/16
A0401	Elevations B and D	9	02/05/16
A0500	Plumbing Ground Floor		
A0600	D W Ground Floor Plan	12	28/07/16
A0601	D W External		
A0602	D W Internal		
A0603	Balustrades		
A0800	Stairs and Decks		
A1300	Roof Plan	9	02/05/16
A1301	Flashing Details	4	16/02/16
A1302	Flashing Details 2	9	02/05/16
A1400	H1 Compliance		

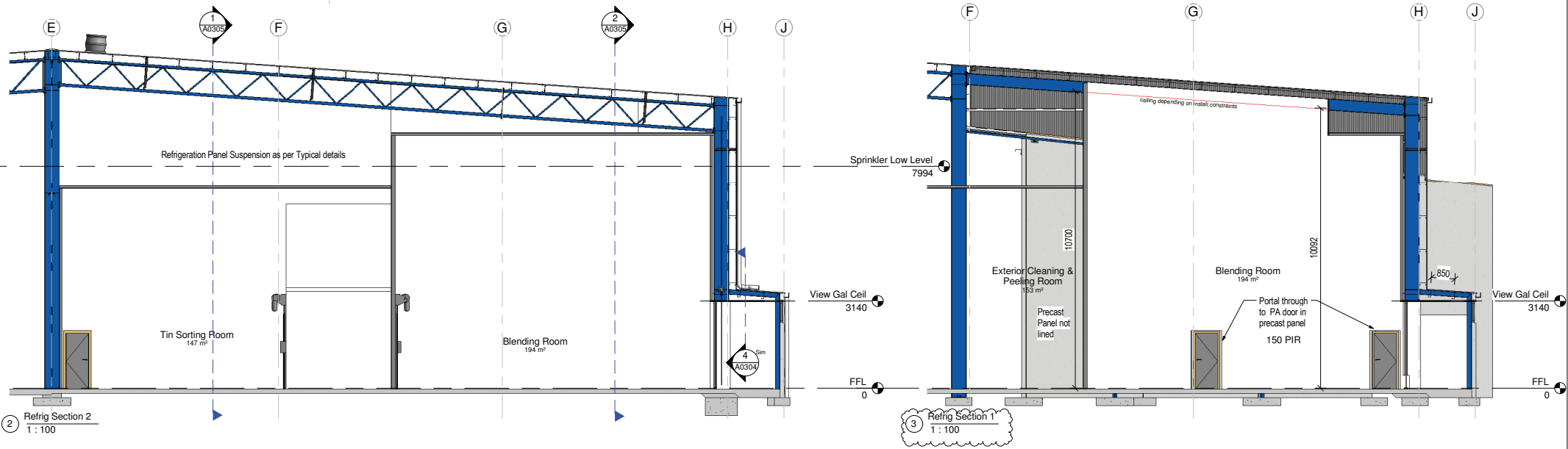
NZ Dairy Collaborative Group  
Infant Formula Blending Plant

9 Ashford Ave., Ashburton

JOB #	12412
DATE:	23/01/16



① Floor Plan (FFL) PIR Fitout  
1 : 200



② Refrig Section 2  
1 : 100

③ Refrig Section 1  
1 : 100

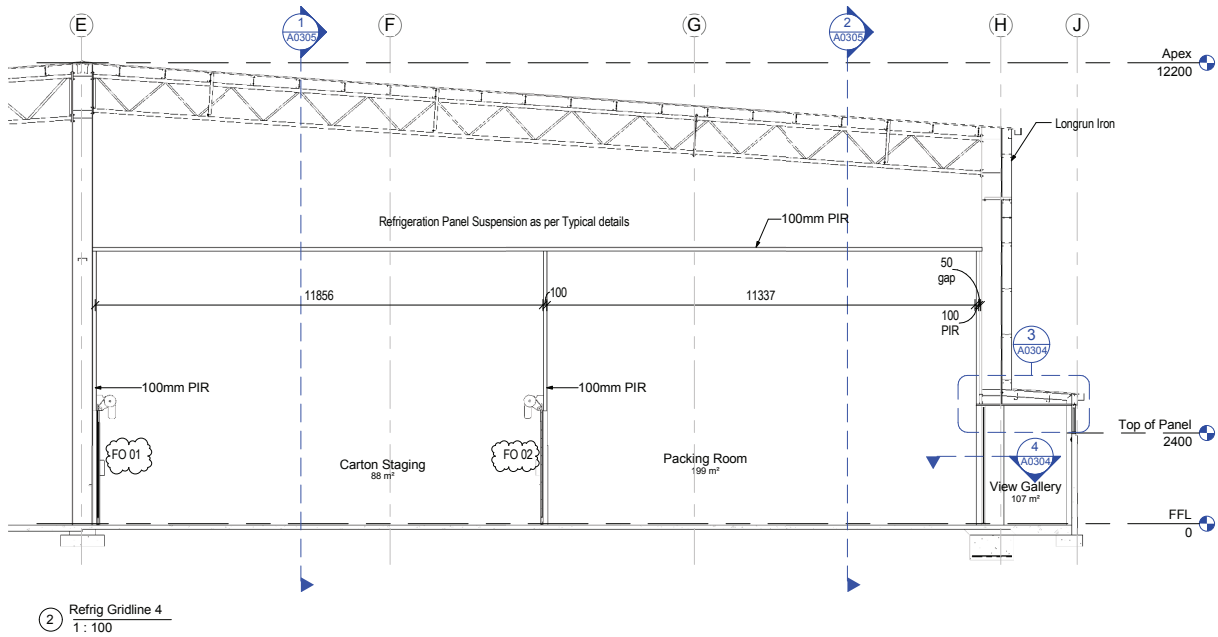
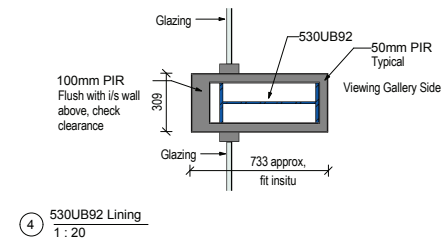
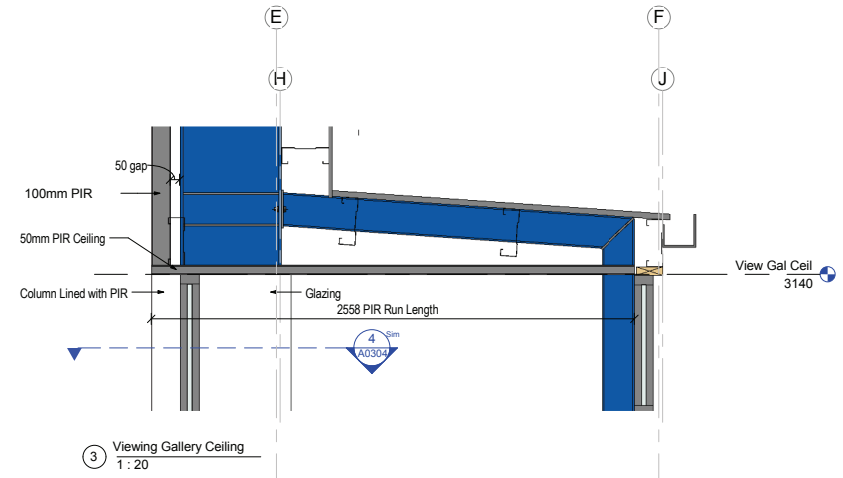
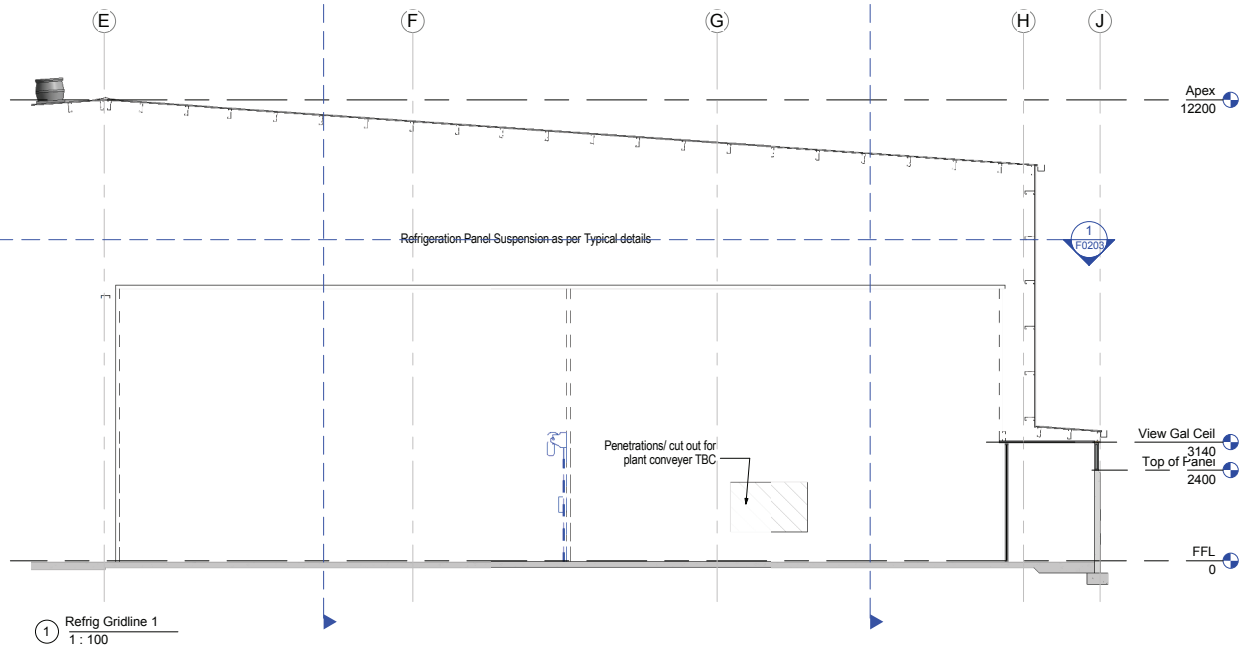
PROJECT

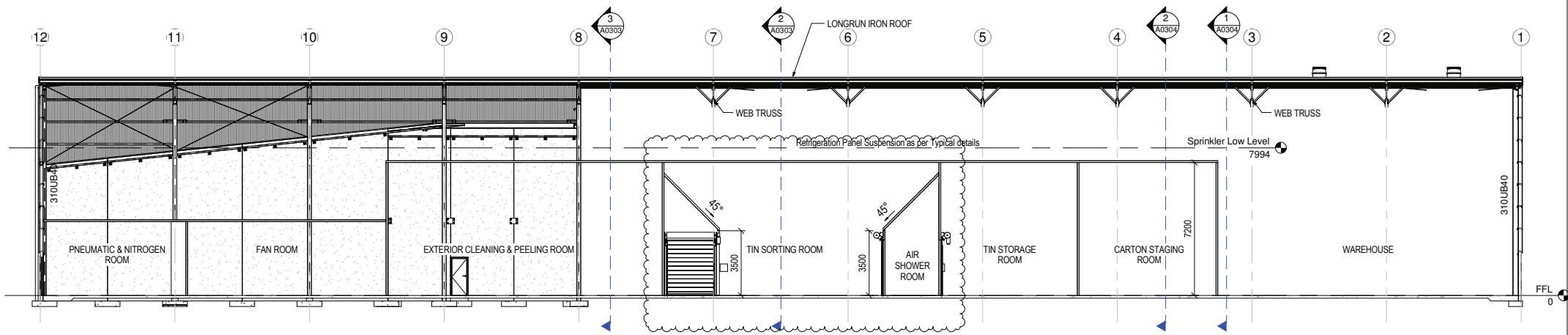
NZ Dairy Collaborative Group  
Infant Formula Blending Plant

9 Ashford Ave., Ashburton

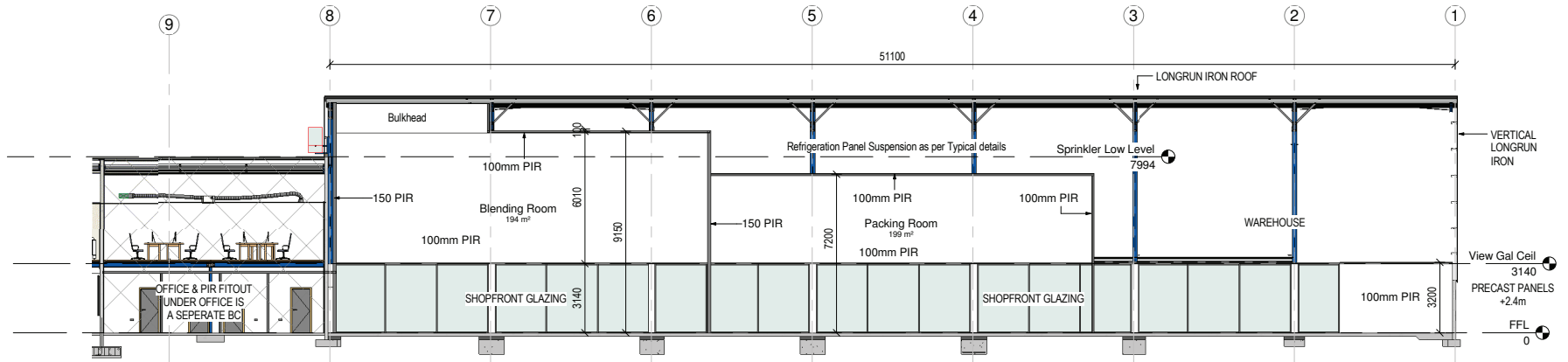
Arch

Rev#	Amendments	Date	SCALE	As indicated@ A2	JOB #
3	Mods to Operational Fitout	09/02/16			12412
12	Mods to operational fitout	28/07/16			
DRAWN BY		DATE			
B.Holloway		23/01/16			
APPROVED BY		REV			
		12			
<b>Refrig Fitout Plan and Sections</b>					<b>A0303</b>
Please note: All dimensions to be verified on site					Paper size: A2





1 Refrig Gridline D  
1 : 150



2 Refrig Gridline E  
1 : 150

Rev#	Amendments	Date	SCALE	JOB #
3	Mods to Operational Fitout	09/02/16	1 : 150 @ A2	12412
12	Mods to operational fitout	28/07/16		
DRAWN BY		DATE		
B.Holloway		23/01/16		
APPROVED BY		REV		
		12		
Refrig Fitout Sections			A0305	
Please note: All dimensions to be verified on site				Paper size: A2