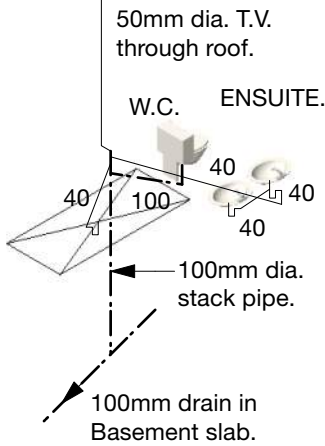


Wind Zone: High
EQ Zone: 1
Corrosion: B
Lot Size: 3389 m2
LLRZ : 1489 m2
Allowable site coverage 20%: 298 m2
Actual site coverage 19%: 282 m2
Permeable site area = 1115 m2 (75%)

- Proposed 100 mm dia. subsoil drain behind retaining walls.
- Proposed 100 mm dia. stormwater line with min. 1:90 fall.
- Proposed 100 mm dia. sewer line with min. 1:60 fall.
- Proposed 50 mm dia. thick walled alkathene LDPE pressure pipe.

SHEET INDEX:	
Sht. 1	Site Plan
Sht. 2	Proposed Floor Plan
Sht. 3	Proposed Basement Floor Plan
Sht. 4	Proposed Elevations 1 & 2
Sht. 5	Proposed Elevations 3 & 4
Sht. 6	Floor Plan Wall Bracing Plan
Sht. 7	Sections A-A
Sht. 8	Sections B-B
Sht. 9	Section C-C
Sht. 10	Section D-D
Sht. 11	Section E-E
Sht. 12	Mid Floor Framing Plan
Sht. 13	Basement Foundation / Pile Plan
Sht. 14	Basement Wall Bracing Plan
Sht. 15	Engineering Notes & Details
Sht. 16	Details Cont.
Sht. 17	Details Cont.
Sht. 18	Basement Steel Beam Elavations
Sht. 19	Basement Steel Beam Details
Sht. 20	Roof Framing Plan
Sht. 21	Floor Plan Electrical Plan
Sht. 22	Basement Electrical Plan
Sht. 23	Bank Steel Beam Elavations
R1	Renders 1
R2	Renders 2
R3	Renders 2



First Floor Ensuite
Drainage Isometric.

First Floor Bathroom
Drainage Isometric.

Stormwater Note:
Trickle feed and Roof water to discharge into 2x25000L water tanks as shown with over flow piped to the bottom of the gully and discharge through a level spreader onto an erosion control blanket of rock. Refer to Engineers Design Report by TITUS Consulting Engineers Ref. 11122 N.B. 50,000L caters for min. reservoir capacity of 45,000L for Fire fighting purposes as per Rule 25.13.4.4d

Sanitary Sewer Note:
Sewer lines to discharge into Engineer designed septic tank system as shown. Refer to Engineers Design Report by TITUS Consulting Engineers Ref. 11122

FIXTURE PIPE SIZES:	
Basin	40mm dia. @ 1:40 fall
Bath	40mm dia. @ 1:40 fall
Shower	40mm dia. @ 1:40 fall
Sink	50mm dia. @ 1:40 fall
Tub	50mm dia. @ 1:40 fall
W.C. & waste pipes under conc. slab.	100mm dia. @ 1:60 fall

KEY:	
T.V.	Terminal Vent
AAV	Air Admittance Valve
V	Vent
G.T.	Gully Trap
O.R.G.	Overflow Relief Gully
I.J.	Inspection Joint
I.B.	Inspection Bend
D.P.	100mm dia. Down Pipe

Note:
All foul water sanitary plumbing and drainage shall comply with AS/NZS 3500.
All stormwater drainage shall comply with NZBC E1 / AS1
All plumbing fixtures to be low flow and to have a min. 3 star rating to comply with NZ water efficiency scheme.

B	22/9/22	Ancillary Flat living court, service court and parking shown. Water tanks relocated, SS & SW Amended as per as-built plan.
A	28/01/22	Amendments for Resource Consent Application.
REVISION:	DATE:	REVISION NOTE:

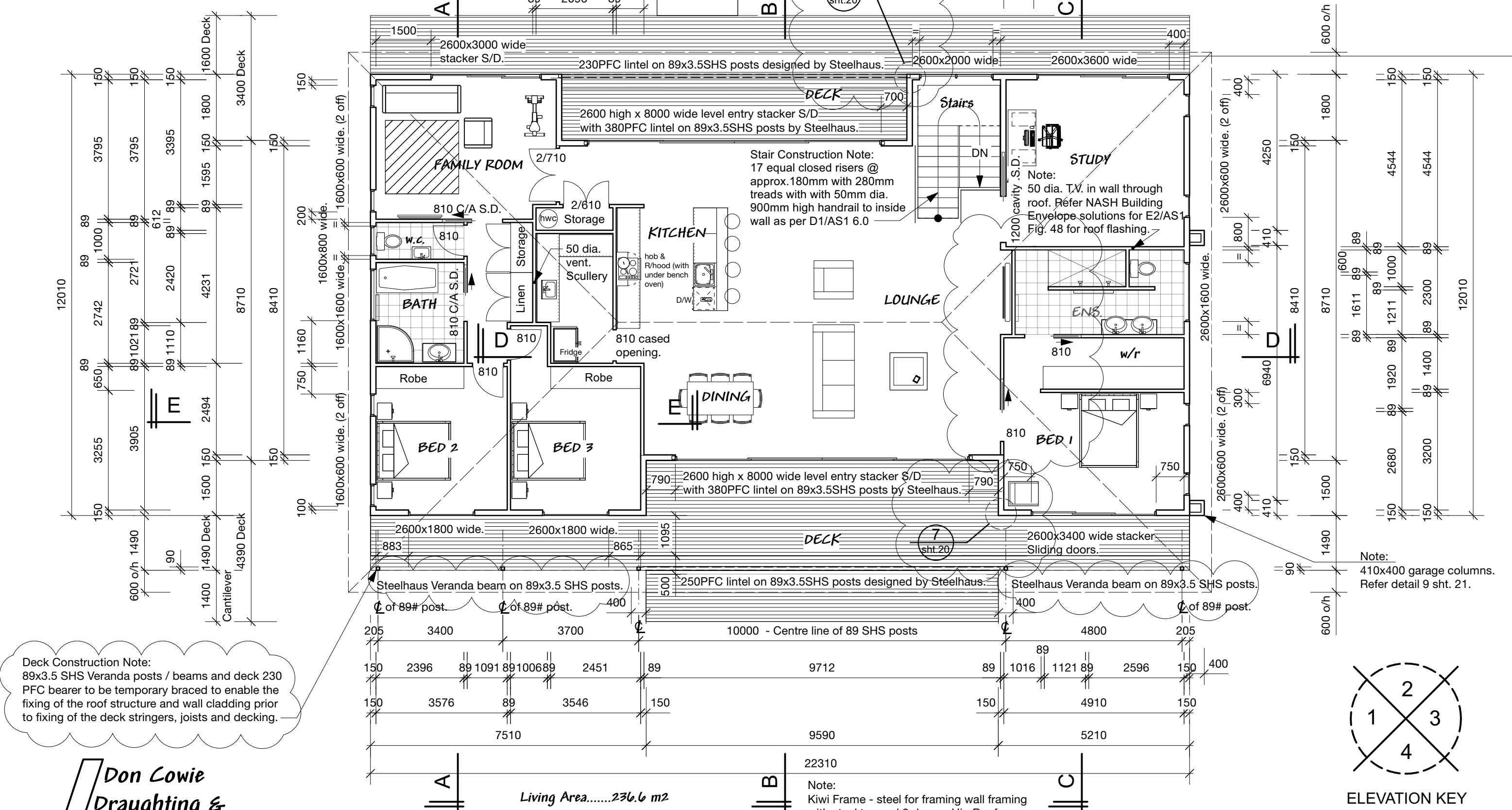
SITE PLAN - GULLY PROTECTION OVERLAY				
DRAWN	CHECKED	DATE	SCALE @ A3	JOB No.
D. Cowie	D. Cowie	3/12/21	1:250	2107

DWG No.	1
B	REV
OF	23

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PROPOSED CAMERON RESIDENCE
AT LOT 2 SH26 HAMILTON.

Wet Areas Note:
- All wet areas are to have approved safety glazing to windows and shower screens/doors and tiled or vinyl floors with tiled / painted finish to walls on 10mm Gib Aqualine wall lining and painted 13mm Aqualine ceiling linings to E3/AS1.
First Floor Bathroom, W.C. & Ensuite to have tiled floors Refer attached E3/AS1 Fig.1(b),Fig.3(b), Ens. tiled shower refer Fig.4(c). Basement Bathroom & L'dry. to have vinyl floors & cubical showers refer E3/AS1 Fig.1(a), Fig.3(b) & Fig.4(b). N.B. Main First floor Bathroom also has cubical shower (Fig.3(b))



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PROPOSED CAMERON RESIDENCE
AT LOT 2 SH26 HAMILTON.

PROPOSED FIRST FLOOR PLAN					DWG No. 2 REV OF 23
DRAWN	CHECKED	DATE	SCALE @ A3	JOB No.	
D. Cowie	D. Cowie	3/12/21	1:100	2107	

REVISION:

DATE:

REVISION NOTE:

A

Jan. 23

Verandah beam / Deck posts changed to 230 PFC on 89 x 3.5 SHS posts. Fire place removed.

B

28/1/22

Bathroom wet areas note, column note, Deck construction note & T.V. note added.

Note:
2/290x45 SG8 H3.2 Deck Bearers
continuous over 2 spans supported
on 200 SED HDT driven piles. ———

Architectural section drawing showing a building facade with a window unit and service court. The drawing includes vertical dimensions and labels for components.

Vertical dimensions (from top to bottom):

- 5815
- 5556
- 6658
- 1500
- 150
- 150
- 150
- 4285

Labels and components:

- Ancillary Unit 1
- Service Court
- 1200Dx2600W Window Lintel by Steelhaus.

Note:
230 PFC bearer supported on
89x3.5 SHS verandah posts.

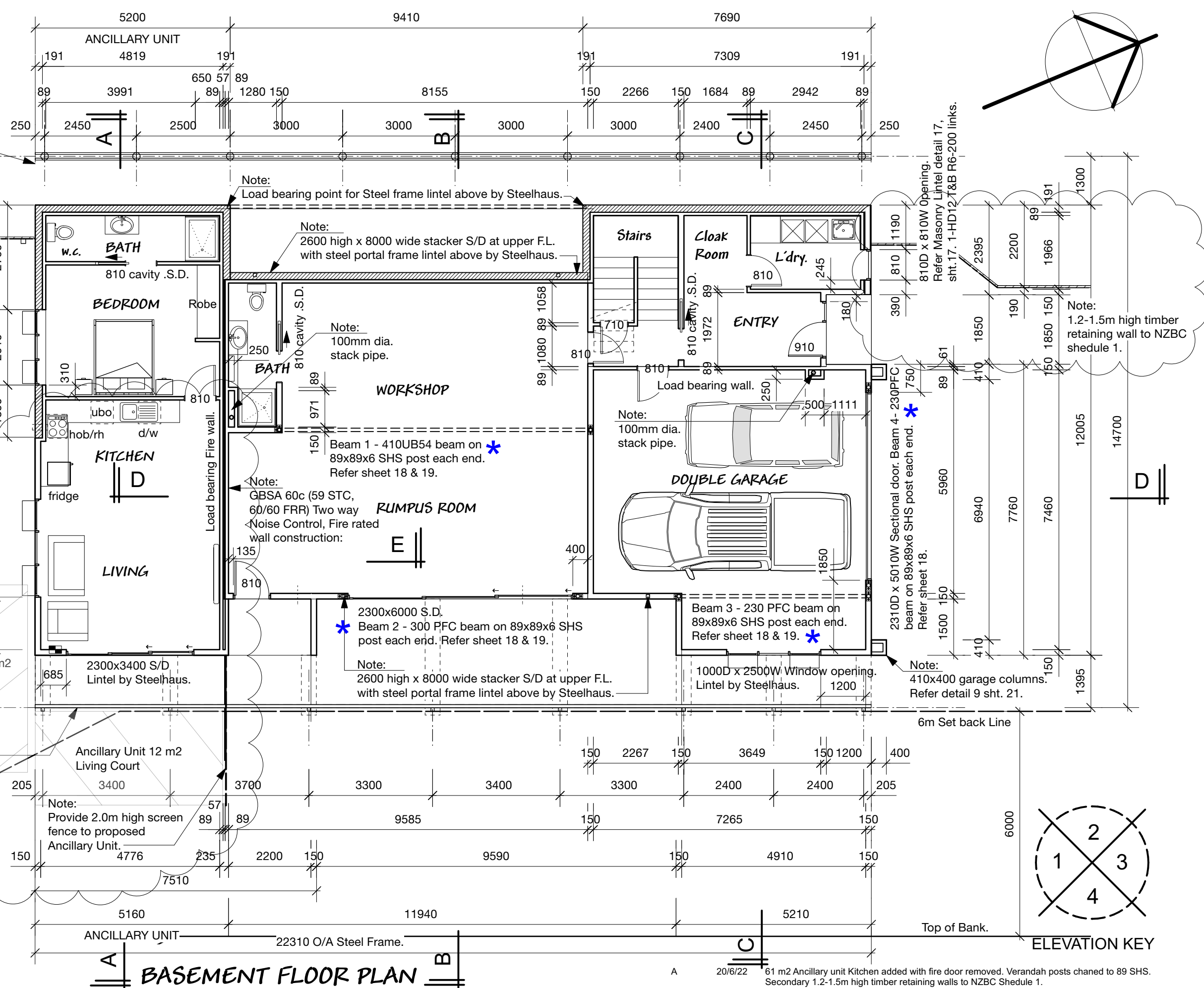
Entry / L'dry. / Stairs Area.....30.5 m2
Workshop / Rumpus Area.....84.5 m2
Ancillary Unit Area.....61 m2
Garage Area.....55 m2
Total Basement Area....231.0 m2 (Outside block/Slab)

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Pt Date 31.08.23

Job No 12843 Signed _____



PROPOSED CAMERON RESIDENCE
AT LOT 2 SH26 HAMILTON.

A	20/6/22	61 m2 Ancillary unit Kitchen added with fire door removed. Verandah posts chanced to 89 SHS. Secondary 1.2-1.5m high timber retaining walls to NZBC Schudule 1.			
REVISION:	DATE:	REVISION NOTE:			
BASEMENT FLOOR PLAN					
DRAWN	CHECKED	DATE	SCALE @ A3	JOB No.	
D. Cowie	D. Cowie	3/12/21	1:100	2107	
					DWG No. 3 A REV
					OF 23

Insulation Notes:
Compliance with H1

- The proposed Basement meets the criteria required by using the 'Schedule Method' and the First Floor level meets the criteria by using the "Calculation Method" (refer attached calc's.)

Insulation:

- Ceiling
- Walls
- Joinery
- Mid Floor/ceiling.
- Ground Floor slab.

R3.1 -R3.2 'Mammoth' Insulation.
R2.0 -R2.8 'Mammoth' Insulation.
R0.26 - Clear double glazed with Aluminium frame.
R3.1 -R3.2 'Mammoth' Insulation.
R1.3 -Conc. slab on DPM.
(Area/perimeter ratio=2.8)

Basement Floor Level
'Schedule Method':

NORTH ELEVATION:
Wall area 31m2
Joinery area 1.9m2
6% < 30% O.K.

COMBINED WEST, EAST & SOUTH ELEVATIONS:
Wall area 150m2
Joinery area 31.4m2
21% < 30% O.K.

TOTAL ELEVATIONS:
Wall area 181m2
Joinery area 33.3m2
18% < 30% O.K.

'H1 - First Floor Level':

TOTAL ELEVATIONS:
Wall area 200m2
Joinery area 99.8m2
49.9% < 50% O.K.



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PROPOSED ELEVATIONS
PROPOSED CAMERON RESIDENCE
AT LOT 2 SH26 HAMILTON.

Note:
S.G. - shown on elevations denotes required safety glazing to comply with NZS 4223.3:2016

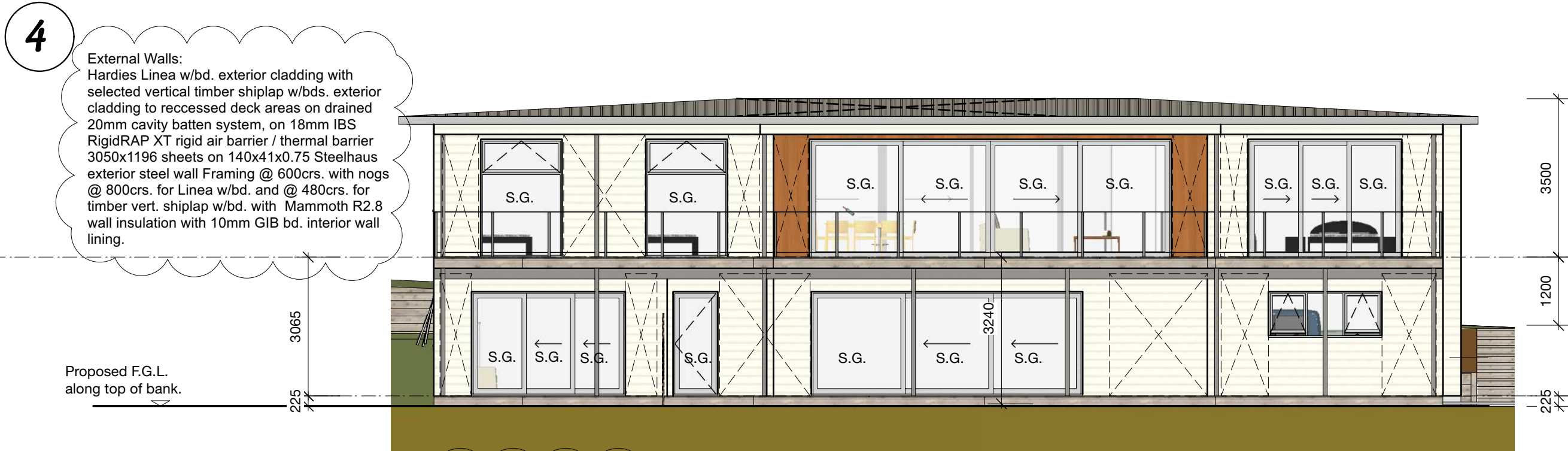
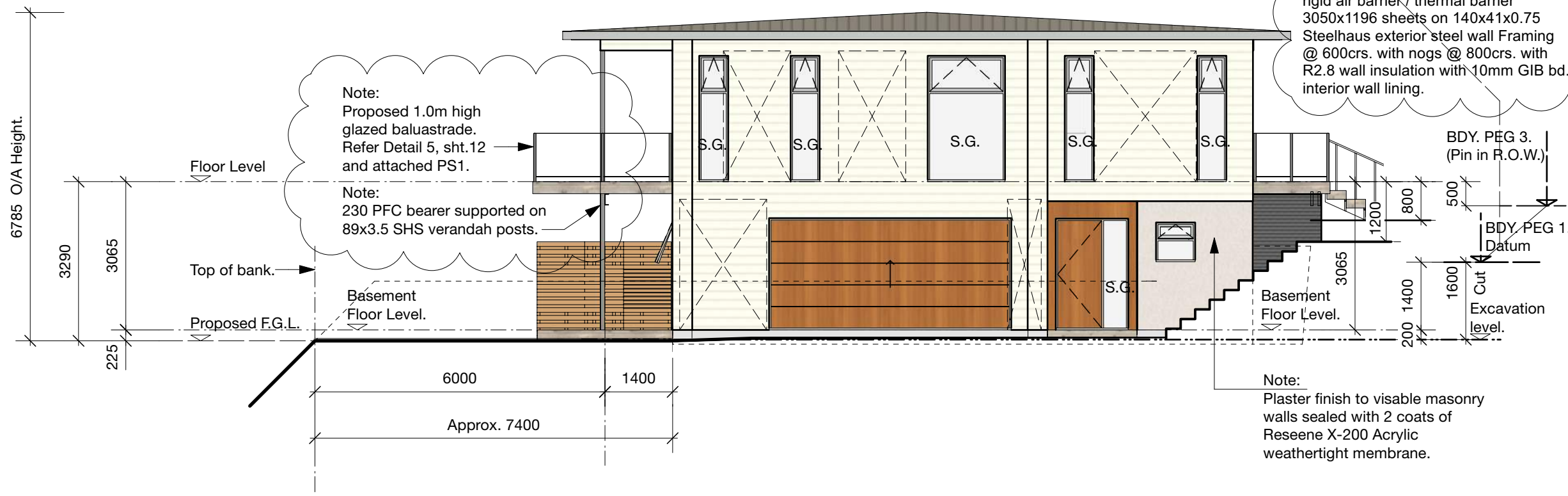
B Jan. 23 Exterior cladding changed to Linea W/bds. & Vert. timber shiplap W/bds. Verandah beam / Deck posts changed to 230PFC on 89 x 3.5 SHS posts. Fire & chimney removed. Ancillary Flat.
A 28/01/22 Safety glass to elevation 1 wet areas, H1 Compliance. notes amended.

PROPOSED ELEVATIONS 1 & 2				
DRAWN	CHECKED	DATE	SCALE @ A3	JOB No.
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DWG No. 4
REV. B
OF 23

Colorsteel Trapazoidal longrun roofing iron on 3 degree hip roof with colorstel 185 metal fascia and external box guttering.

Aluminium joinery. (Double glazed)
Refer to spec. for NASH Building Envelope solutions for E2/AS1 Fig. 107 and clause 9.8.8 for head,jamb & sill details.



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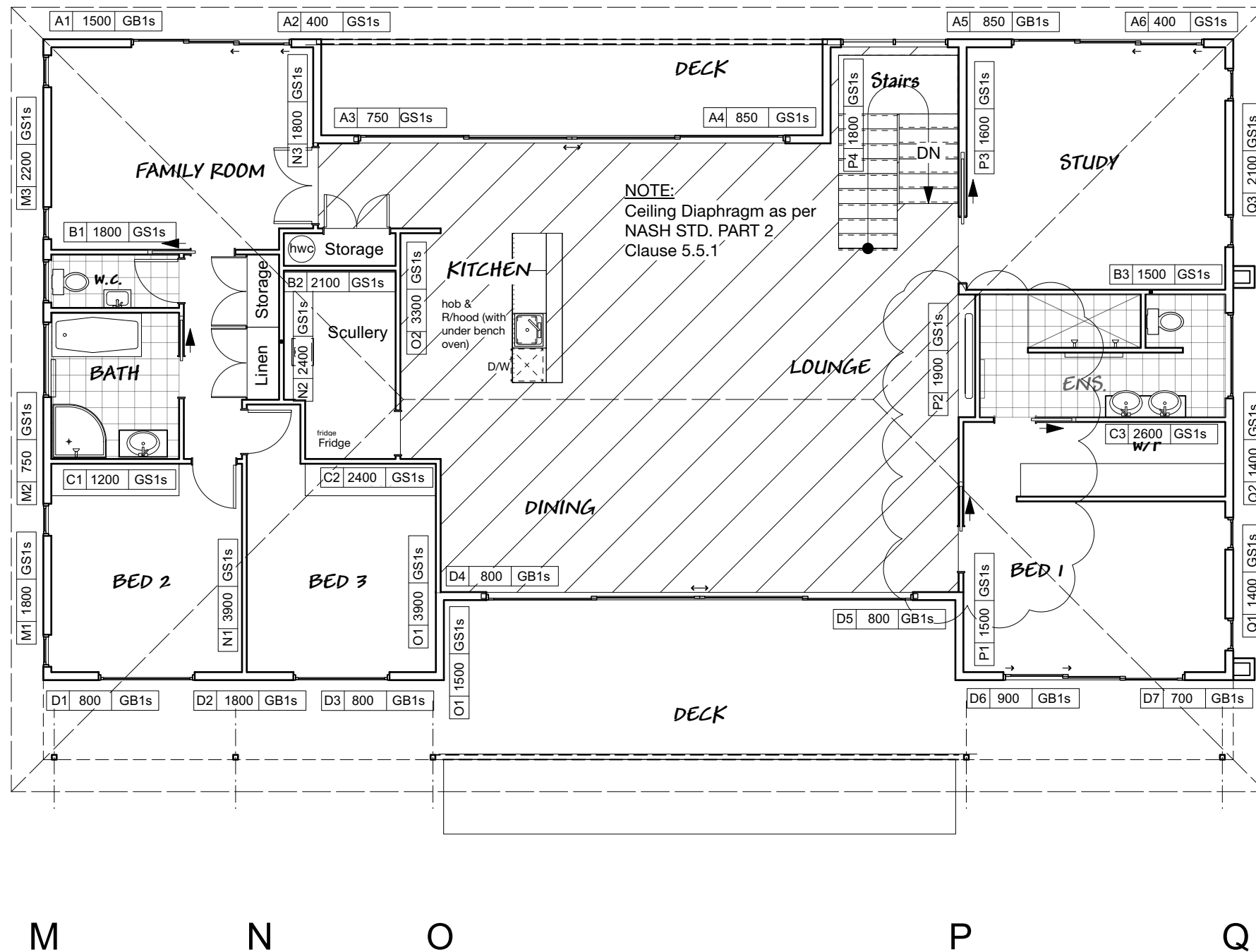
PROPOSED ANCILLARY UNIT
AT BASEMENT LEVEL
PROPOSED ELEVATIONS

PROPOSED CAMERON RESIDENCE
AT LOT 2 SH26 HAMILTON.

Note:
S.G. - shown on elevations denotes required safety glazing to comply with NZS 4223.3:2016

B	Jan. 23	Exterior cladding changed to Linea W/bds. & Vert. timber shiplap W/bds. Verandah beam / Deck posts changed to 230PFC on 89 x 3.5 SHS posts. Fire & chimney removed. Ancillary Flat.
A	28/01/22	PS1 reference on handrail note.
REVISION:	DATE:	REVISION NOTE:
PROPOSED ELEVATIONS		
DRAWN	CHECKED	DATE
D. Cowie	D. Cowie	31/12/21
SCALE @ A3	JOB No.	
1:100	2107	

DWG No. **5**
B REV
OF 23



NOTE:
Wall Bracing as per NASH STD. PART 2
Clause 5.0 to 5.5

Wind Zone: Very High

WALL BRACING PLAN

PROPOSED CAMERON RESIDENCE
AT LOT 2 SH26 HAMILTON.

B 18/10/22 Fire place removed, Wall brace P2 moved to accomodate internal S/D to bed 1.
A 28/2/22 Wall Bracing designed to NASH STD. PART 2.
REVISION: DATE: REVISION NOTE:

FIRST FLOOR WALL BRACING PLAN

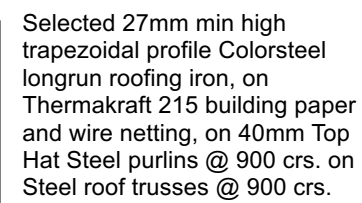
DRAWN	CHECKED	DATE	SCALE @ A3	JOB No.
D. Cowie	D. Cowie	3/12/21	1:100	2107

DWG No. **6**
B
REV
OF 23

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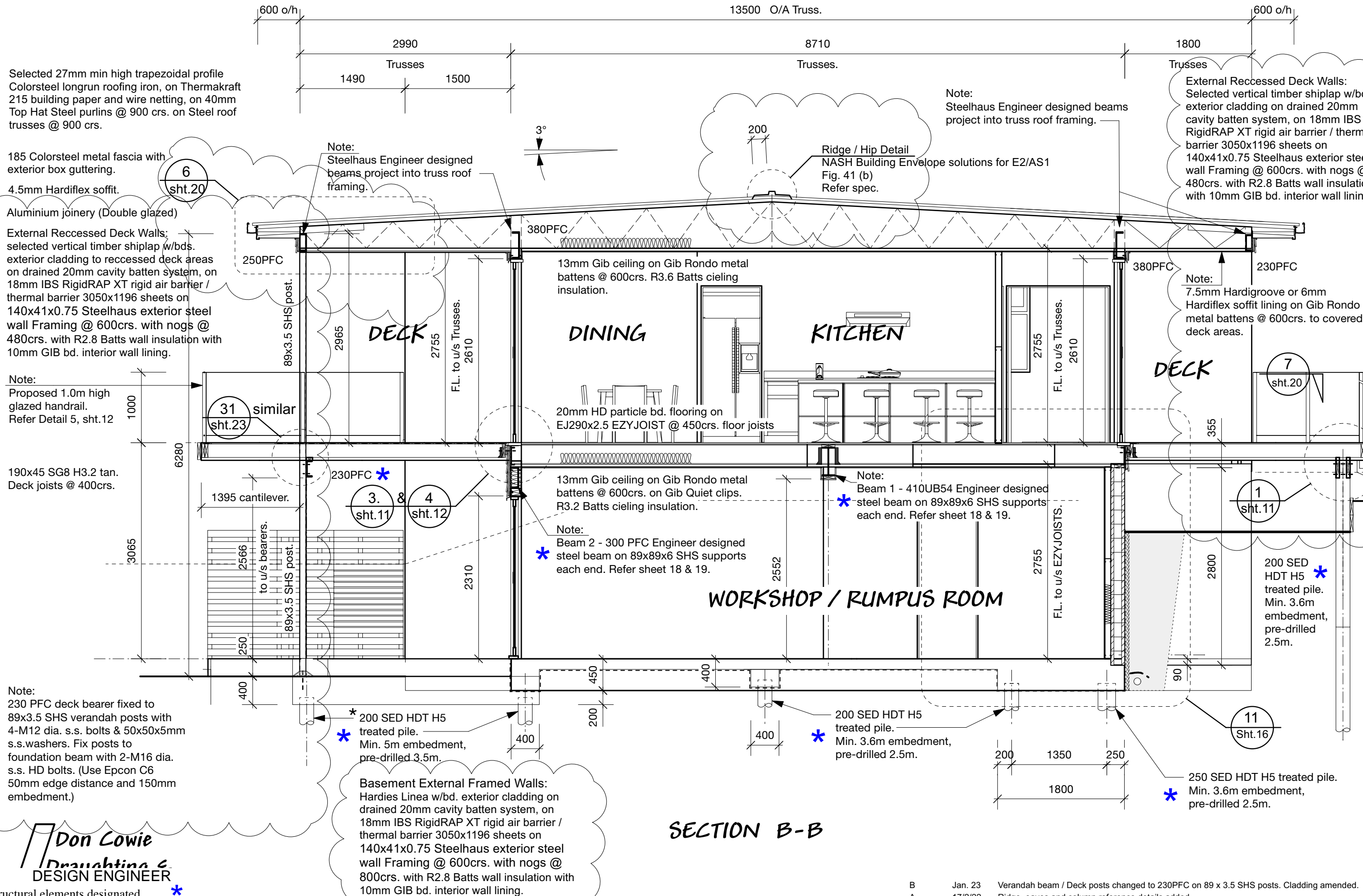
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<div> <div>REVISION:</div> <div>DATE:</div> <div>REVISION NOTE:</div> </div>				
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DRAWN	CHECKED	DATE	SCALE @ A3	JOB No.
D. Cowie	D. Cowie	3/12/21	1:50' 1:20	2107

WG No. **7** **B**
REV
OF **23**



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DESIGN ENGINEER

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Date 31.08.23
Job No 12843 Signed *[Signature]*

Basement External Framed Walls:
Hardies Linea w/bd. exterior cladding on
drained 20mm cavity batten system, on
18mm IBS RigidRAP XT rigid air barrier /
thermal barrier 3050x1196 sheets on
140x41x0.75 Steelhaus exterior steel
wall Framing @ 600crs. with nogs @
800crs. with R2.8 Batts wall insulation with
10mm GIB bd. interior wall lining.

SECTION B-B

**PROPOSED CAMERON RESIDENCE
AT LOT 2 SH26 HAMILTON.**

B	Jan. 23	Verandah beam / Deck posts changed to 230PFC on 89 x 3.5 SHS posts. Cladding amended.		
A	17/2/22	Ridge, eaves and column reference details added.		
REVISION:	DATE:	REVISION NOTE:		
SECTIONS B-B				
DRAWN	CHECKED	DATE	SCALE @ A3	JOB No.
D. Cowie	D. Cowie	3/12/21	1:50	2107

DWG No.
8
E
REV
OF 23

Note:
7.5mm Hardigroove or 6mm Hardiflex
soffit lining on Gib Rondo metal battens
@ 600crs. to covered deck areas.

185 Colorsteel metal fascia with
exterior box guttering.
4.5mm Hardiflex soffit.
Aluminium joinery (Double glazed)

External Walls:
Hardies Linea w/bds. exterior cladding on
drained 20mm cavity batten system, on 18mm
IBS RigidRAP XT rigid air barrier / thermal
barrier 3050x1196 sheets on 140x41x0.75
Steelhaus exterior steel wall Framing @
600crs. with nogs @ 800crs. with R2.8
Batts wall insulation with 10mm GIB bd.
interior wall lining.

190x45 SG8 H3.2 tan. Deck joists @ 400crs.

Note:
230 PFC deck bearer fixed to
89x3.5 SHS verandah posts with
4-M12 dia. s.s. bolts & 50x50x5mm
s.s.washers. Fix posts to
foundation beam with 2-M16 dia.
s.s. HD bolts. (Use Epcor C6
50mm edge distance and 150mm
embedment.)

Selected 27mm min high trapezoidal profile
Colorsteel longrun roofing iron, on Thermakraft
215 building paper and wire netting, on 40mm
Top Hat Steel purlins @ 900 crs. on Steel roof
trusses @ 900 crs.

Internal Walls:
89x41x0.75 Steelhaus interior steel
wall Framing @ 600crs. with nogs @
1350crs. with 10mm GIB bd. interior wall
lining fixed horizontal.

20mm HD particle bd. flooring on
EJ290x2.5 EZYJOIST @ 400crs. floor joists

13mm Gib ceiling on Gib Rondo metal
battens @ 600crs. on Gib Quiet clips.
R3.2 Batts cieling insulation.

Note:
Trim for tiled shower in
Ensuite to suit 25mm falls
to waste outlet as shown.

Note:
* Beam 3 - 230 PFC Engineer designed
steel beam on 89x89x6 SHS supports
each end. Refer sheet 18 & 19.

FL. to u/s Trusses.

Note:
89x41x0.75 Steelhaus
interior steel wall
Framing @ 600crs.
with nogs @ 1350crs.
with 10mm GIB bd.
interior wall lining fixed
horizontal.
N.B. Provide D.P.C.
between masonry wall.

200 SED
HDT H5
treated pile.
Min. 3.6m
embedment,
pre-drilled
2.5m.

* 200 SED HDT H5
treated pile.
Min. 5m embedment,
pre-drilled 3.5m.

* 200 SED HDT H5
treated pile.
Min. 3.6m embedment,
pre-drilled 2.5m.

* 250 SED HDT H5 treated pile.
Min. 3.6m embedment,
pre-drilled 2.5m.

SECTION C-C

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PROPOSED CAMERON RESIDENCE
AT LOT 2 SH26 HAMILTON.

DESIGN ENGINEER

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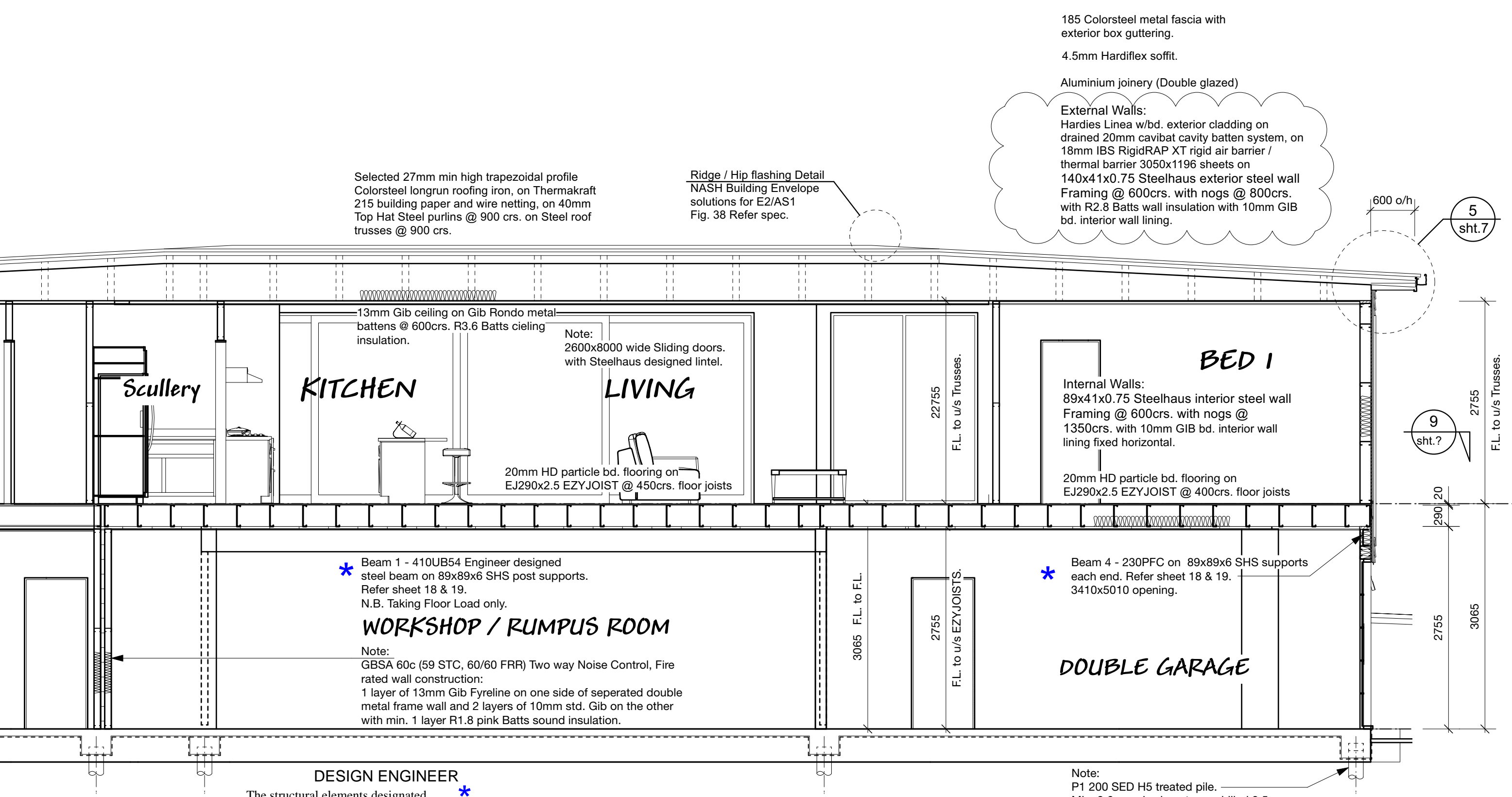
Date 31.08.23

Job No 12843

Signed

B Jan. 23 Verandah beam / Deck posts changed to 230PFC on 89 x 3.5 SHS posts. Cladding amended.
A 17/2/22 Eaves and column reference details added.
REVISION: DATE: REVISION NOTE:

REVISION					DATE	REVISION NOTE	DWG No. 9 REV	
SECTION C-C								
DRAWN		CHECKED		DATE		SCALE @ A3		JOB No.
D. Cowie		D. Cowie		3/12/21		1:50		2107
								OF 23



Selected 27mm min high trapezoidal profile Colorsteel longrun roofing iron, on Thermakraft 215 building paper and wire netting, on 40mm Top Hat Steel purlins @ 900 crs. on Steel roof trusses @ 900 crs.

Ridge / Hip flashing Detail
NASH Building Envelope solutions for E2/AS1
Fig. 38 Refer spec.

185 Colorsteel metal fascia with exterior box guttering.

4.5mm Hardiflex soffit.

Aluminium joinery (Double glazed)

External Walls:
Hardies Linea w/bd. exterior cladding on drained 20mm cavibat cavity batten system, on 18mm IBS RigidRAP XT rigid air barrier / thermal barrier 3050x1196 sheets on 140x41x0.75 Steelhaus exterior steel wall Framing @ 600crs. with nogs @ 800crs. with R2.8 Batts wall insulation with 10mm GIB bd. interior wall lining.

13mm Gib ceiling on Gib Rondo metal battens @ 600crs. R3.6 Batts cieling insulation.

Note:
2600x8000 wide Sliding doors. with Steelhaus designed lintel.

20mm HD particle bd. flooring on EJ290x2.5 EZYJOIST @ 450crs. floor joists

Internal Walls:
89x41x0.75 Steelhaus interior steel wall Framing @ 600crs. with nogs @ 1350crs. with 10mm GIB bd. interior wall lining fixed horizontal.

20mm HD particle bd. flooring on EJ290x2.5 EZYJOIST @ 400crs. floor joists

* Beam 1 - 410UB54 Engineer designed steel beam on 89x89x6 SHS post supports. Refer sheet 18 & 19. N.B. Taking Floor Load only.

WORKSHOP / RUMPUS ROOM

Note:
GBSA 60c (59 STC, 60/60 FRR) Two way Noise Control, Fire rated wall construction:
1 layer of 13mm Gib Fyrelite on one side of seperated double metal frame wall and 2 layers of 10mm std. Gib on the other with min. 1 layer R1.8 pink Batts sound insulation.

* Beam 4 - 230PFC on 89x89x6 SHS supports each end. Refer sheet 18 & 19. 3410x5010 opening.

DOUBLE GARAGE

Note:
P1 200 SED H5 treated pile. Min. 3.6m embedment, pre-drilled 2.5m.

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SECTION D-D

PROPOSED CAMERON RESIDENCE
AT LOT 2 SH26 HAMILTON.

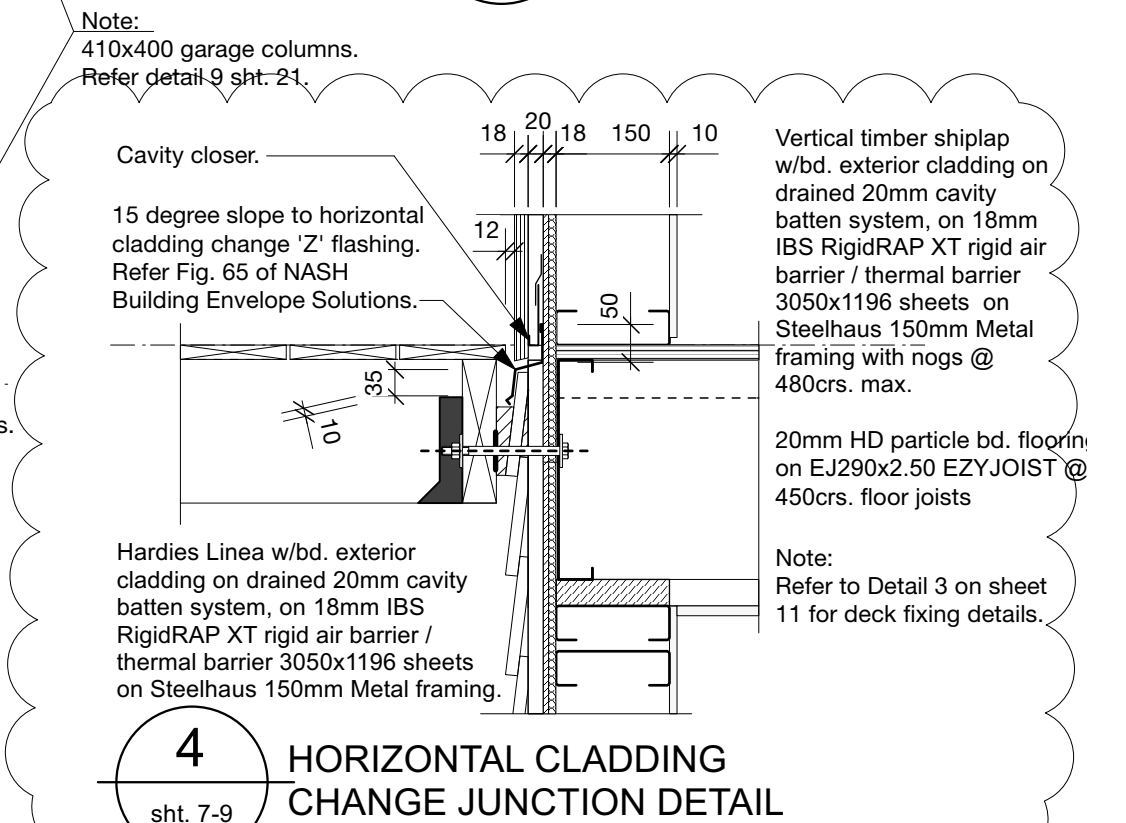
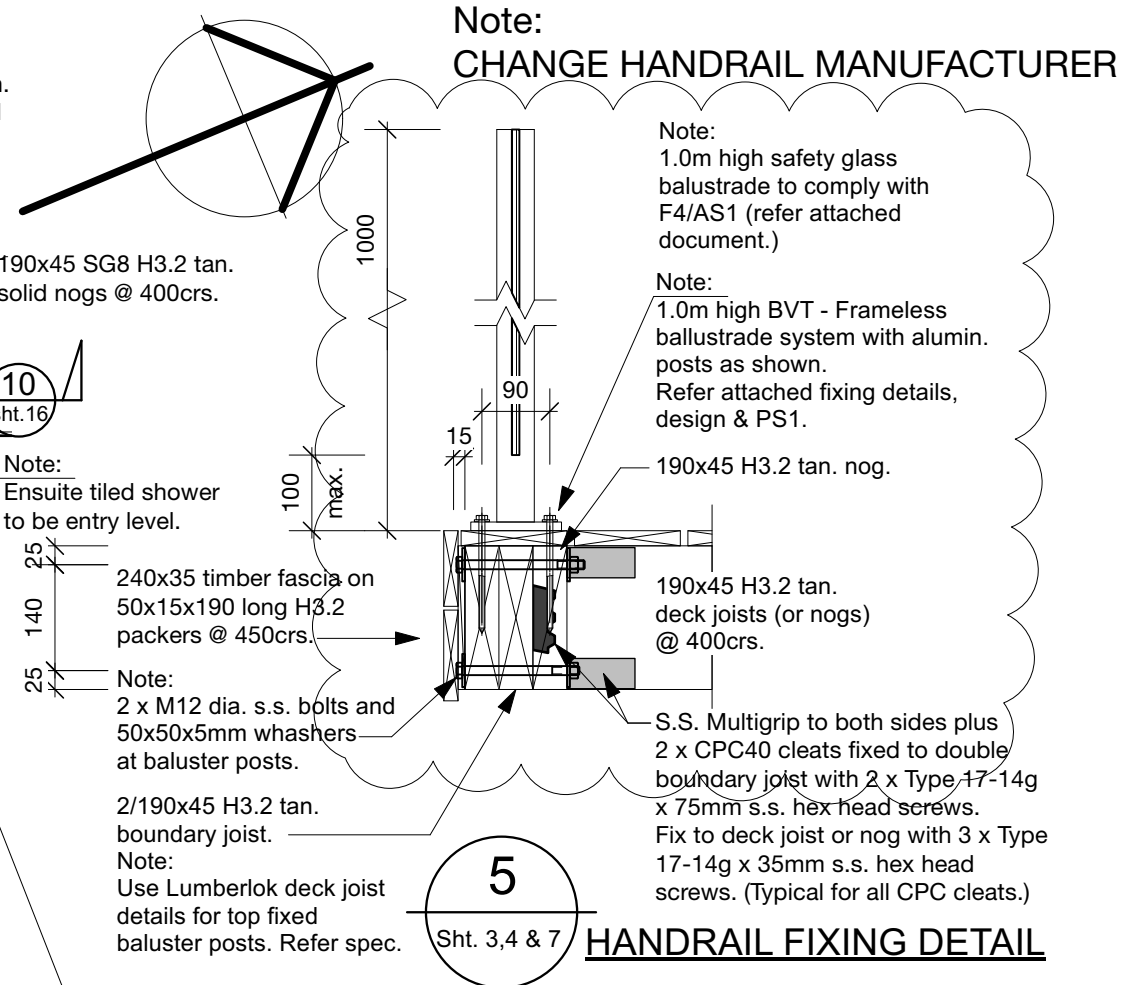
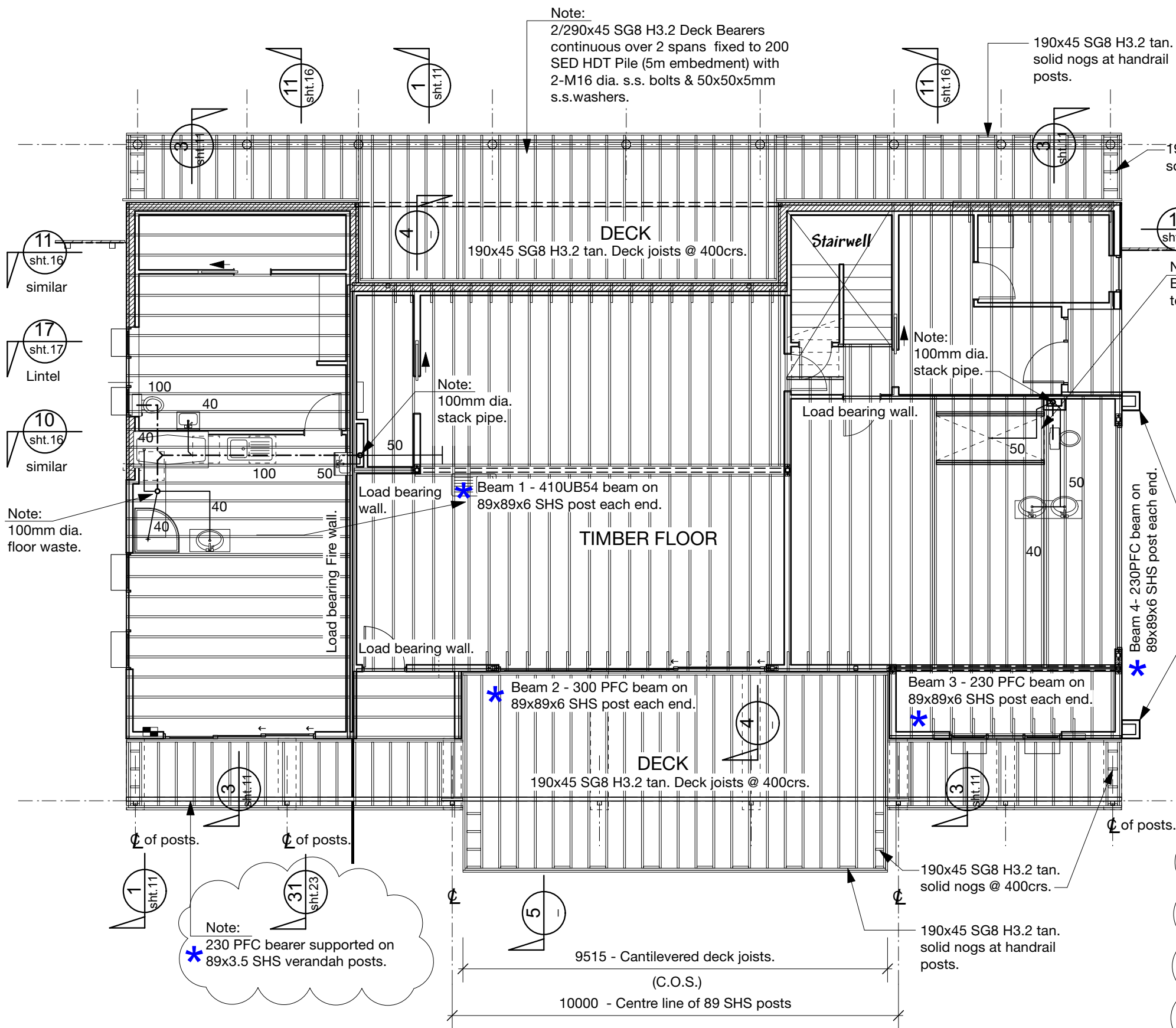
B Jan. 23 Cladding amended.
A 17/2/22 Ridge / Hip flashing, Eaves and column reference details added.
REVISION: DATE: REVISION NOTE:

SECTION D-D				
DRAWN	CHECKED	DATE	SCALE @ A3	JOB No.
D. Cowie	D. Cowie	3/12/21	1:50	2107

DWG No.	10	B
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Draug Design
DESIGN ENGINEER

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20 Waimarie Street Date 31.08.23
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Email: dcowie_de

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MID FLOOR FRAMING PLAN

PROPOSED CAMERON RESIDENCE
AT LOT 2 SH26 HAMILTON.

B	Jan. 23	Verandah beam / Deck posts changed to 230PFC on 89 x 3.5 SHS posts. Detail 4 amended. Deck balustrade changed to BVT- Frameless system.
A	17/2/22	Column reference details added. Multi grips & CT160 added to deck joists.
REVISION: DATE: REVISION NOTE:		
MID FLOOR FRAMING PLAN		
DRAWN	CHECKED	DATE
D. Cowie	D. Cowie	3/12/21
SCALE @ A3	JOB No.	
1:100	2107	

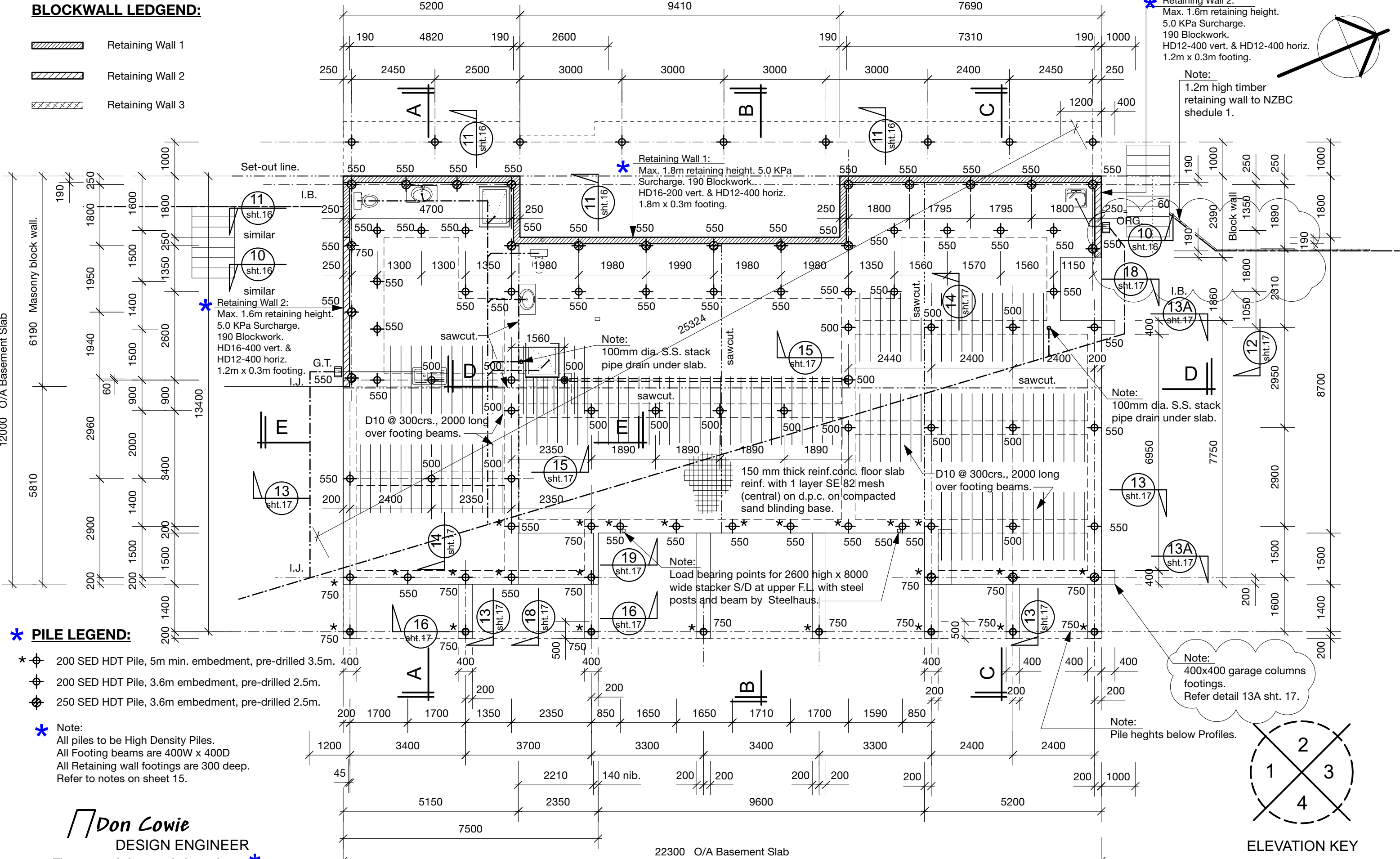
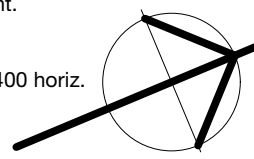
DWG No.
12
B
REV
OF 23

BLOCKWALL LEDGEND:

- Retaining Wall 1
- Retaining Wall 2
- Retaining Wall 3

Retaining Wall 2:
Max. 1.6m retaining height.
5.0 KPa Surcharge.
190 Blockwork.
HD12-400 vert. & HD12-400 horiz.
1.2m x 0.3m footing.

Note:
1.2m high timber
retaining wall to NZBC
shedule 1.



* PILE LEGEND:

- * 200 SED HDT Pile, 5m min. embedment, pre-drilled 3.5m.
- * 200 SED HDT Pile, 3.6m embedment, pre-drilled 2.5m.
- * 250 SED HDT Pile, 3.6m embedment, pre-drilled 2.5m.

Note:
All piles to be High Density Piles.
All Footing beams are 400W x 400D
All Retaining wall footings are 300 deep.
Refer to notes on sheet 15.

Don Cowie
DESIGN ENGINEER

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Date 31.08.23

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Job No 12843 Signed

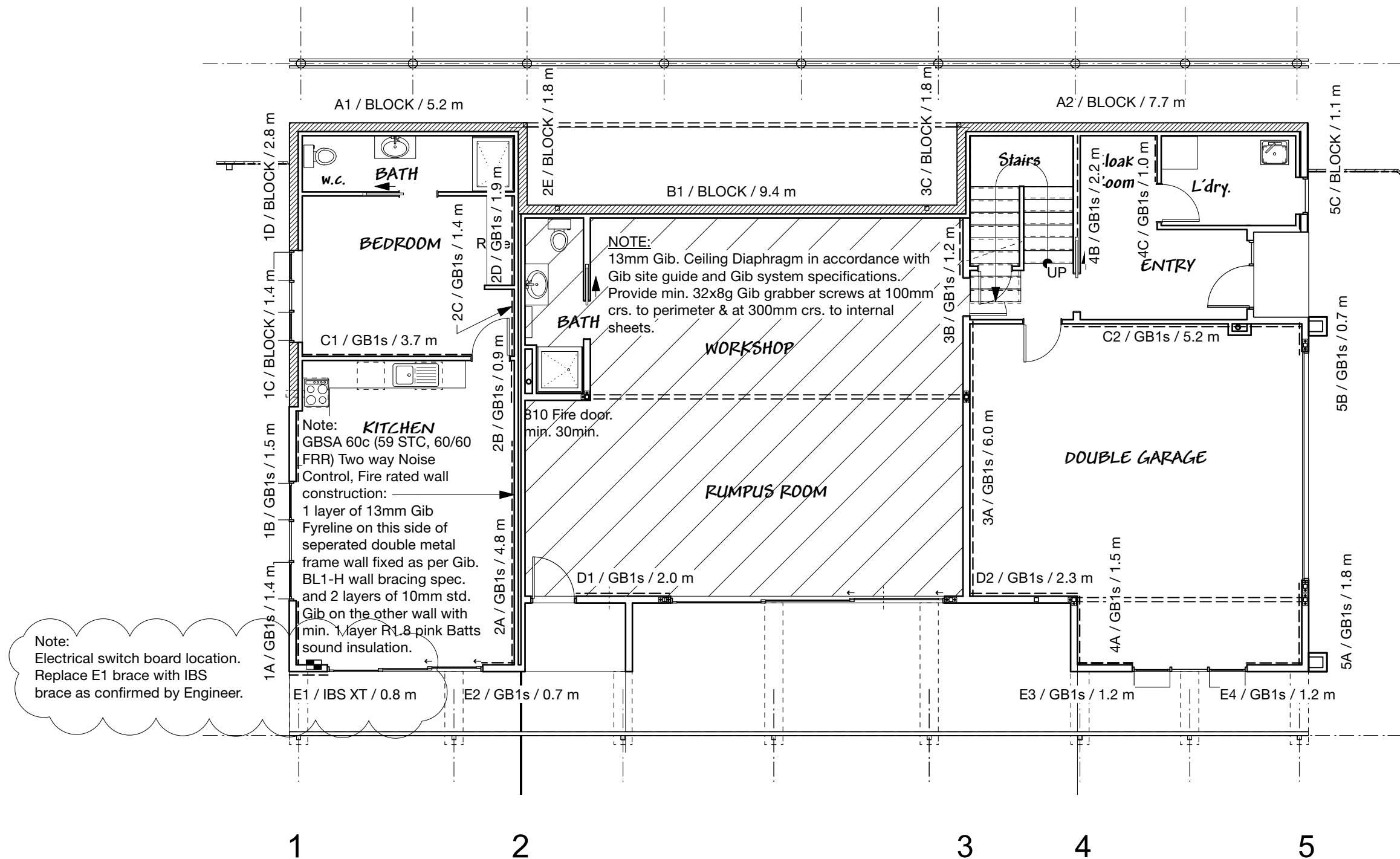
PROPOSED CAMERON RESIDENCE
AT LOT 2 SH26 HAMILTON.

BASEMENT / FOUNDATION PLAN

B 13/7/23 S.S. under slab drainage amended as per as drainlayers built plan.
A 17/2/22 Column reference details added.
REVISION: DATE: REVISION NOTE:

BASEMENT / FOUNDATION PLAN				
DRAWN	CHECKED	DATE	SCALE @ A3	JOB No.
D. Cowie	D. Cowie	3/12/21	1:100	2107

DWG No.
13
REV
OF 23



A
B
C
D
E

DESIGN ENGINEER

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Date 31.08.23

Job No 12843

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BASEMENT WALL BRACING LEGEND:

Brace Type	Lining requirement	Bottom plate fixing
GB1s	Min 10mm Gib Braceline on one side.	Gib EzyBrace end brace hold down washer as per NASH Gib System Specifications
BLOCK	190 series concrete blockwall.	N/A
IBIS XT	18mm IBS RigidRap XT	Gib EzyBrace end brace hold down washer as per NASH Gib System Specifications

REVISION: 13/7/23 DATE: 13/7/23 REVISION NOTE: Wall brace E1 amended.

* BASEMENT WALL BRACING PLAN

Note:

Refer to Gib Ezy Brace literature for full system installation details.

PROPOSED CAMERON RESIDENCE
AT LOT 2 SH26 HAMILTON.

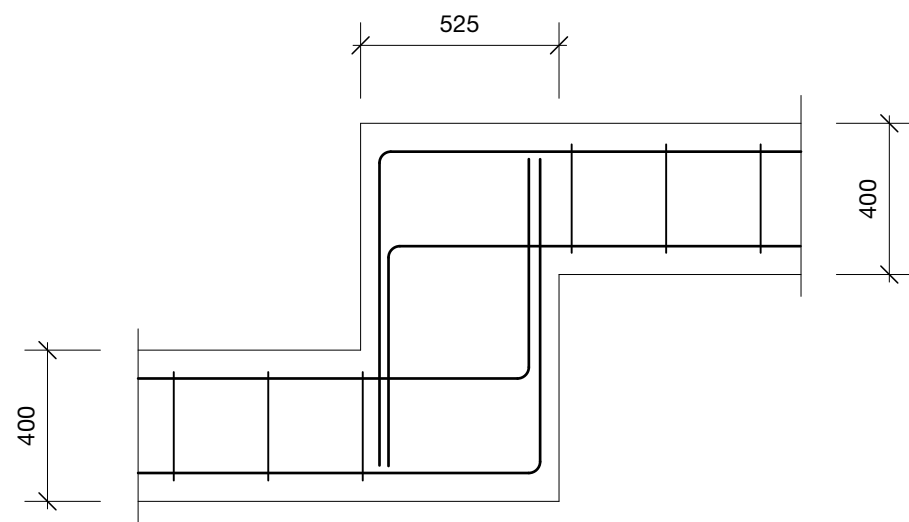
BASEMENT WALL BRACING PLAN

DRAWN	CHECKED	DATE	SCALE @ A3	JOB No.
D. Cowie	D. Cowie	3/12/21	1:100	2107

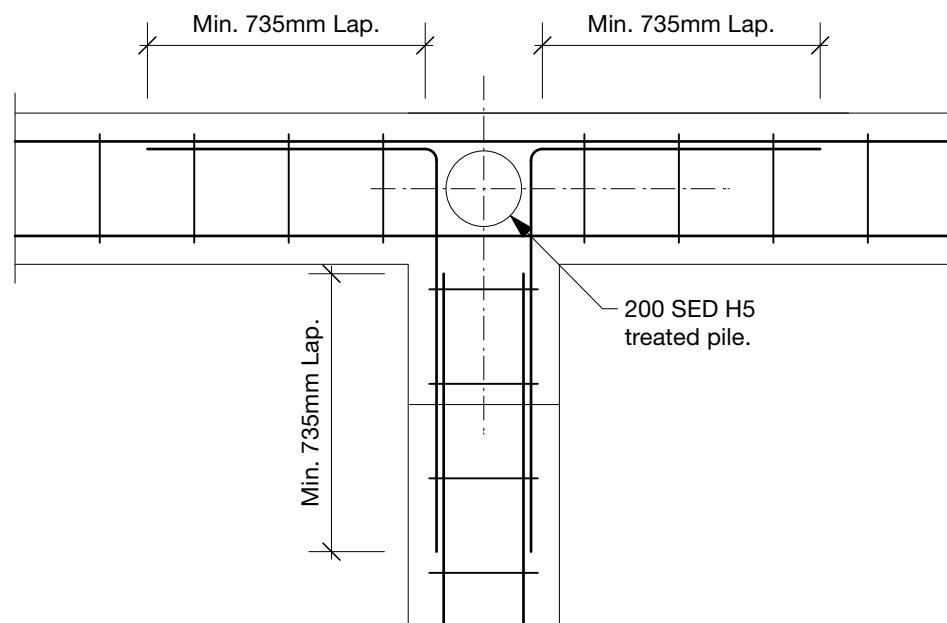
DWG No. 14 A REV OF 23

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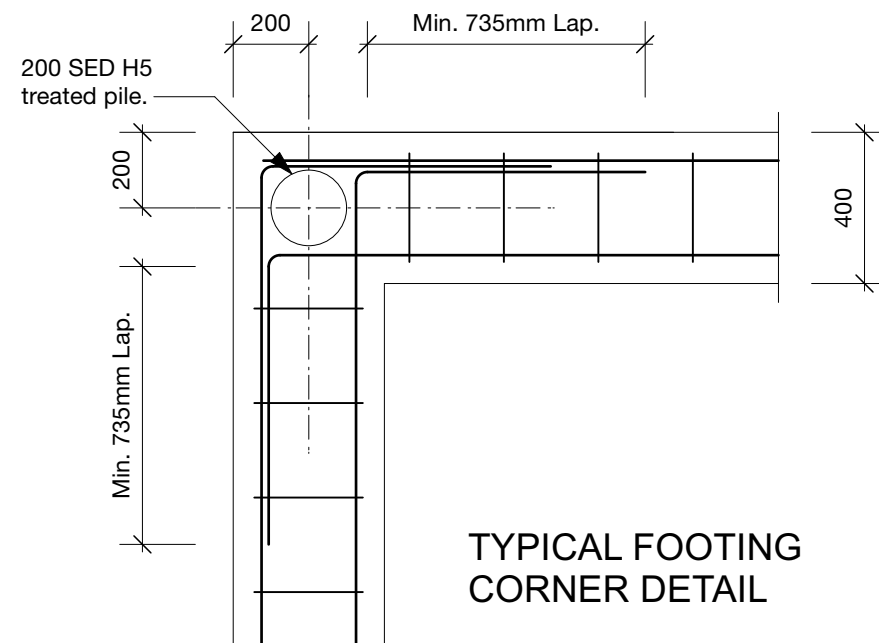
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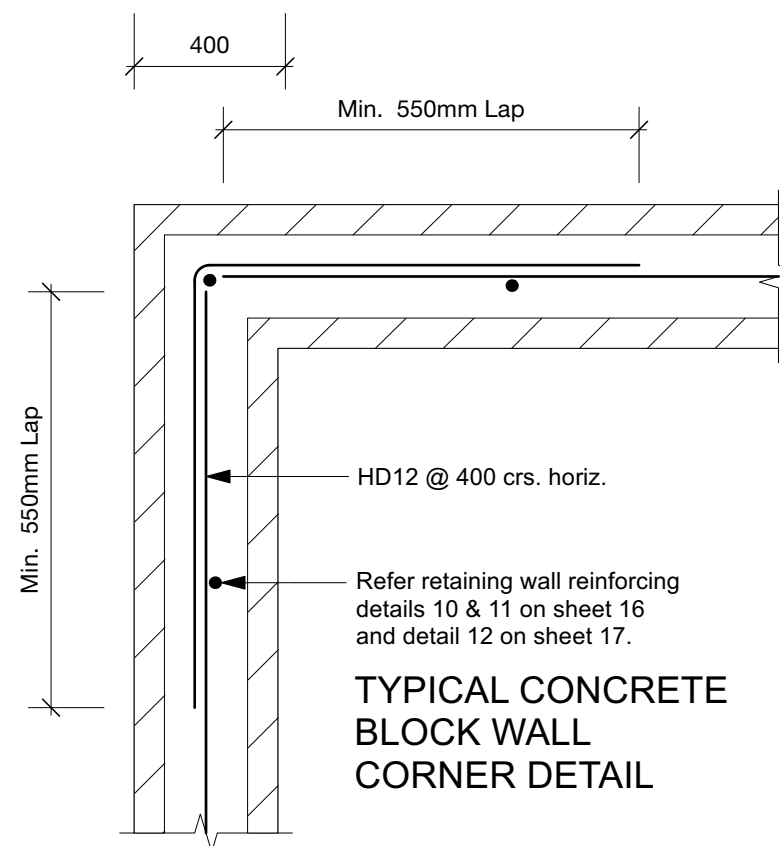
FOOTING STEP ELEVATION



TYPICAL FOOTING INTERSECTION DETAIL




TYPICAL FOOTING CORNER DETAIL



TYPICAL CONCRETE BLOCK WALL CORNER DETAIL

DESIGN ENGINEER

The structural elements designated  on this drawing have been designed by Arnold & Johnstone 2015 Ltd, Consulting Engineers

Date 31.08.23

Job No 12843 Signed 

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PROPOSED CAMERON RESIDENCE
AT LOT 2 SH26 HAMILTON.

CONCRETE NOTES

- 1 CONCRETE TO BE 20MPa
- 2 ALL STEEL INCLUDING MESH SHALL BE DUCTILITY CLASS E IN ACCORDANCE WITH NZS 4671
- 3 BAR REINFORCEMENT SHALL BE GRADE 500 UNO.
- 4 LAP MESH 225mm MINIMUM OR GREATER IF MANUFACTURER RECOMMENDS.
- 5 CONCRETE PLACING, FINISHING & CURING SHALL BE IN ACCORDANCE WITH NZS3109:1997.
- 6 CURING OF THE CONCRETE MUST TAKE PLACE IMMEDIATELY AFTER FINISHING THE CONCRETE BY PONDING OR CONTINUOUSLY SPRINKLING OF WATER.
- 7 SHRINKAGE CONTROL JOINTS: GENERALLY SAW CUTS ARE TO COINCIDE WITH MAJOR CHANGES IN PLAN. WHERE THE CONCRETE IS TO BE EXPOSED OR BRITTLE COVERING PLACED OVER, SPACED AT 6m CENTRES MAXIMUM TO CREATE BAYS WITH LENGTH: WIDTH RATIO OF 2:1.
- 8 SHRINKAGE CONTROL JOINTS SHALL BE FORMED BY SAW CUTTING 25mm DEEP AFTER CONCRETE HARDENING AND NO LATER THEN 24 HOURS.
- 9 PLUMBING & SERVICES SHALL BE CONVEYED UNDERGROUND TO THEIR PLAN LOCATION AND THEN BROUGHT UP THROUGH THE SYSTEM. AT NO STAGE SHALL ANY OF THE REINFORCEMENT BARS BE RELOCATED OR CUT TO ALLOW FOR THE SERVICES. SERVICES ARE TO BE PLACED CENTRALLY WITHIN AN OPENING 50mm GREATER IN DIAMETER THAN THE PIPE. HORIZONTAL PENETRATIONS THROUGH BEAMS SHALL BE LOCATED IN THE CENTRAL THIRD. ALL PIPES SHALL BE WRAPPED IN DENSO TAPE AND THE GAP SEALED WITH COMPRESSIVE FOAM.
- 10 PROVIDE MIN. 75MM COVER TO FOOTING REINFORCEMENT.

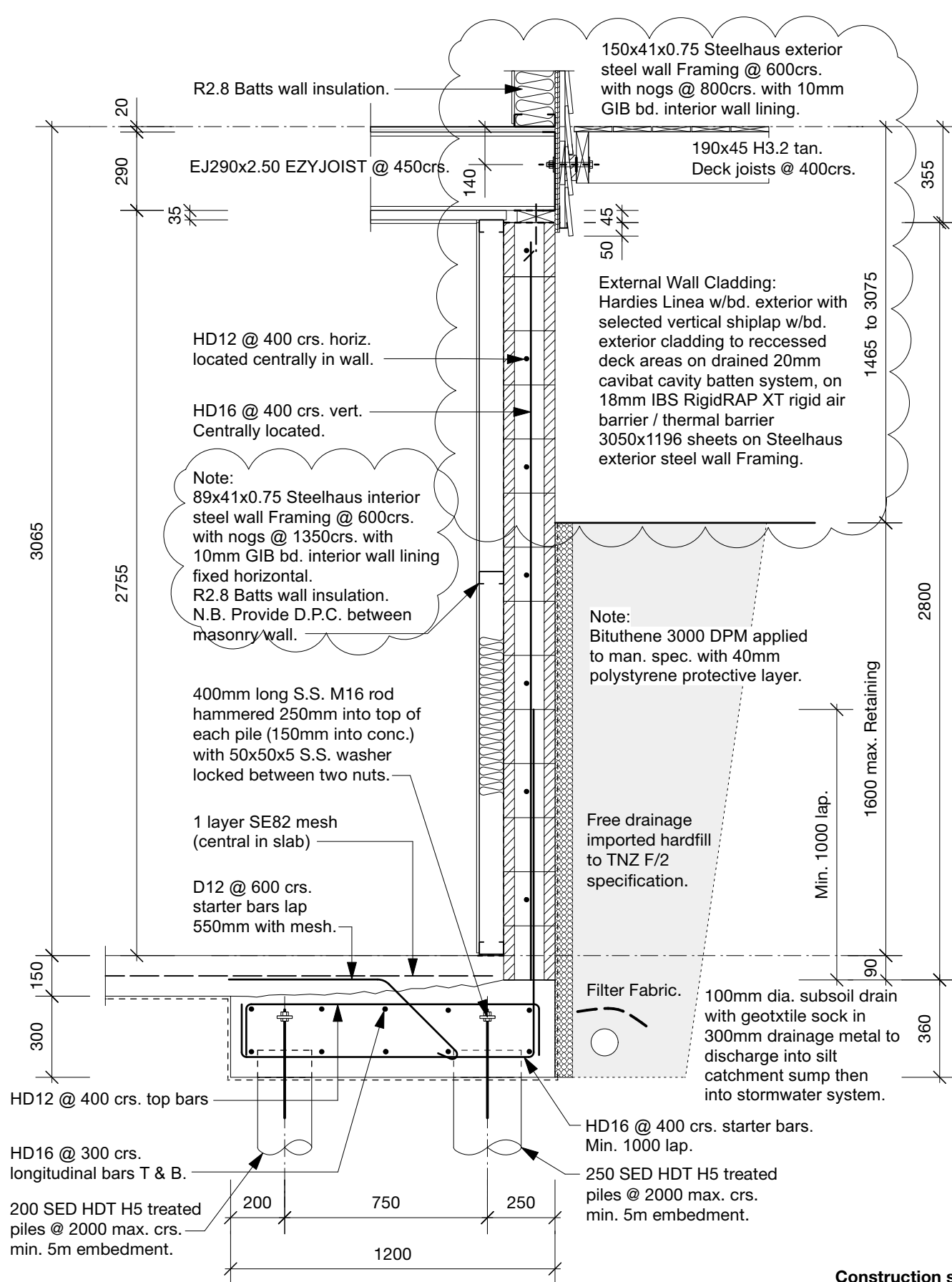
PILE NOTES

- 1 ALL PILES TO BE PLACED SMALL END DOWN AND DRIVEN TO THE FOLLOWING CRITERIA;
200 SED PILES:
HAMMER WEIGHT = 500kg
DROP = 1.0m
SET = 15mm / BLOW
250 SED PILES:
HAMMER WEIGHT = 500kg
DROP = 1.0m
SET = 10mm / BLOW
- 2 MINIMUM PILE EMBEDMENT DEPTH TO BE 5m min. for leading edge piles.
- 3 PRE-DRILL HOLES 2.5m. CARE IS TO BE TAKEN WHEN DRIVING PILES IN TERMS OF VIBRATION EFFECTS ON ADJACENT STRUCTURES & SERVICES
- 4 ENGINEER TO OBSERVE THREE TEST PILES AT OPPOSITE ENDS OF THE SITE
- 5 DRAWINGS TO BE READ IN CONJUNCTION WITH TITUS CONSULTING ENGINEERING ASSESSMENT AND DESIGN REPORT 11122 DATED 19 JUNE 2020
- 6 CUT TOP SURFACES ON PILES TO BE TREATED WITH TWO COATS OF METALEX
- 7 ALL PILES TO BE HIGH DENSITY PILES
- 8 ALL PILES TO BE TREATMENT CLASS H5
9. BACKFILL HOLES AROUND LEADING EDGE PILES WITH LOOSE SAND OR CONCRETE TO ENSURE NO VOIDS ARE PRESENT.

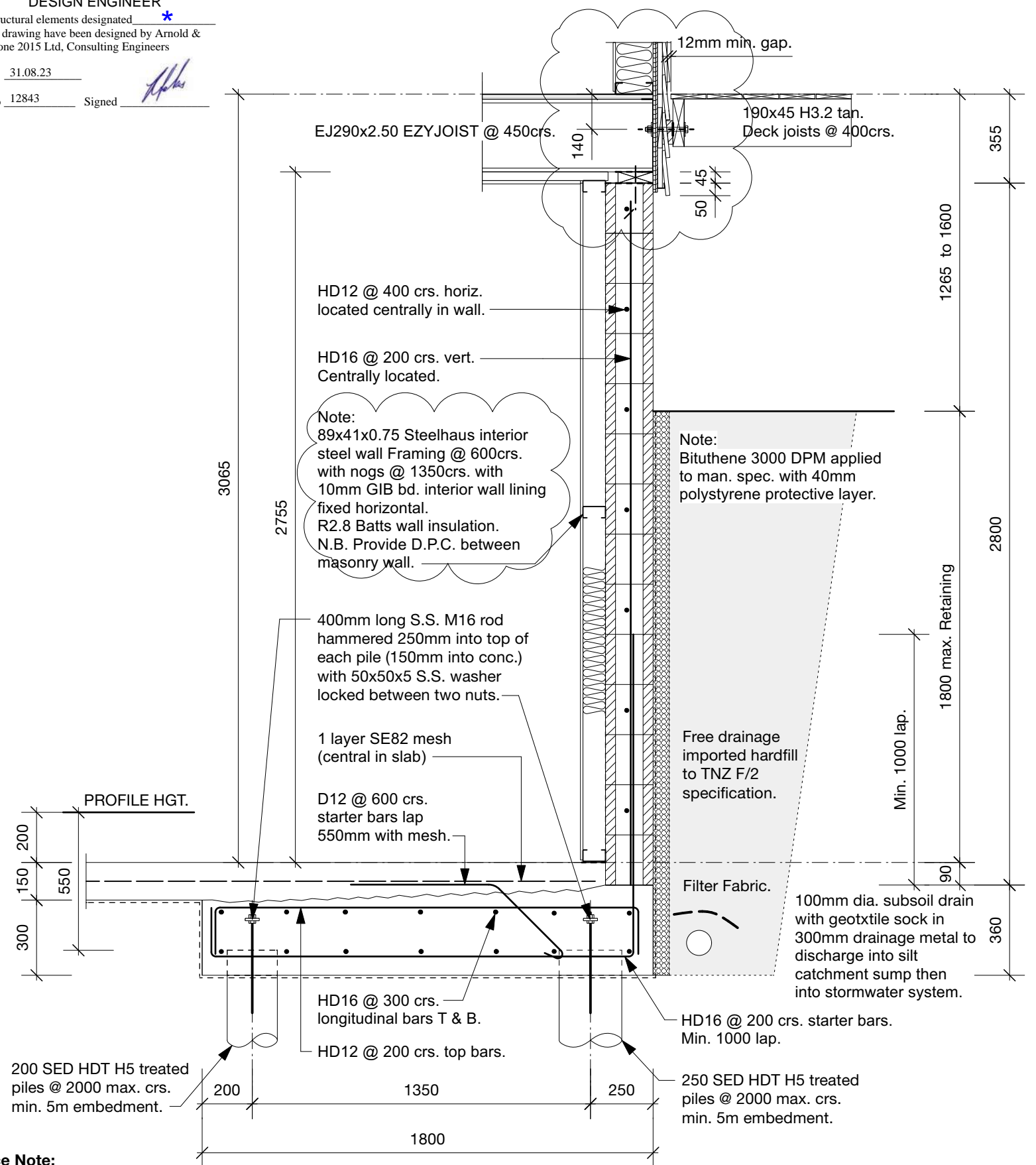
MASONRY NOTES

- 1 ALL MASONRY WALL SHALL BE LAID STRETCHER (RUNNING) BOND
- 2 ALL MASONRY GROUT TO BE 20MPa MIN. STRENGTH AFTER 28 DAYS
- 3 ALL GROUTING SHALL BE CARRIED OUT USING THE HIGH LIFT GROUTING METHOD
- 4 ALL MASONRY UNITS SHALL BE SOLID FILLED WITH GROUT
- 5 ALL WALL ENDS TO BE TRIMMED WITH HD12 BAR (U.N.O.) ALL WALLS TO HAVE HD12 BOND BEAM AT TOP UNO
- 6 PROVIDE CONTROL JOINTS: - MAXIMUM 5.0m CENTRES OR ONE SIDE OF DOOR OPENINGS
- 7 CONTROL JOINTS ARE NOT REQUIRED IN RETAINING WALLS (U.N.O.)
- 8 ALL HORIZONTAL AND VERTICAL WALL REINFORCEMENT TO HAVE 200mm HOOK RETURN ENDS

REVISION:	DATE:	REVISION NOTE:				DWG No. <div>15</div> <div>REV</div>
<div>* FOUNDATION NOTES & DETAILS</div>						
DRAWN	CHECKED	DATE	SCALE @ A3	JOB No.		
D. Cowie	D. Cowie	3/12/21	1:20	2107		OF 23



DESIGN ENGINEER
 The structural elements designated *
 on this drawing have been designed by Arnold &
 Johnstone 2015 Ltd, Consulting Engineers
 Date 31.08.23
 Job No 12843 Signed *Arnold*



Construction sequence Note:
 Retaining wall foundations are to be poured first followed by laying of the bottom course of conc. blocks, then the remainder of the Basement foundations can be boxed and poured with the concrete slab.

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10
 Sht. 13
BASEMENT RETAINING WALL 2 DETAIL *

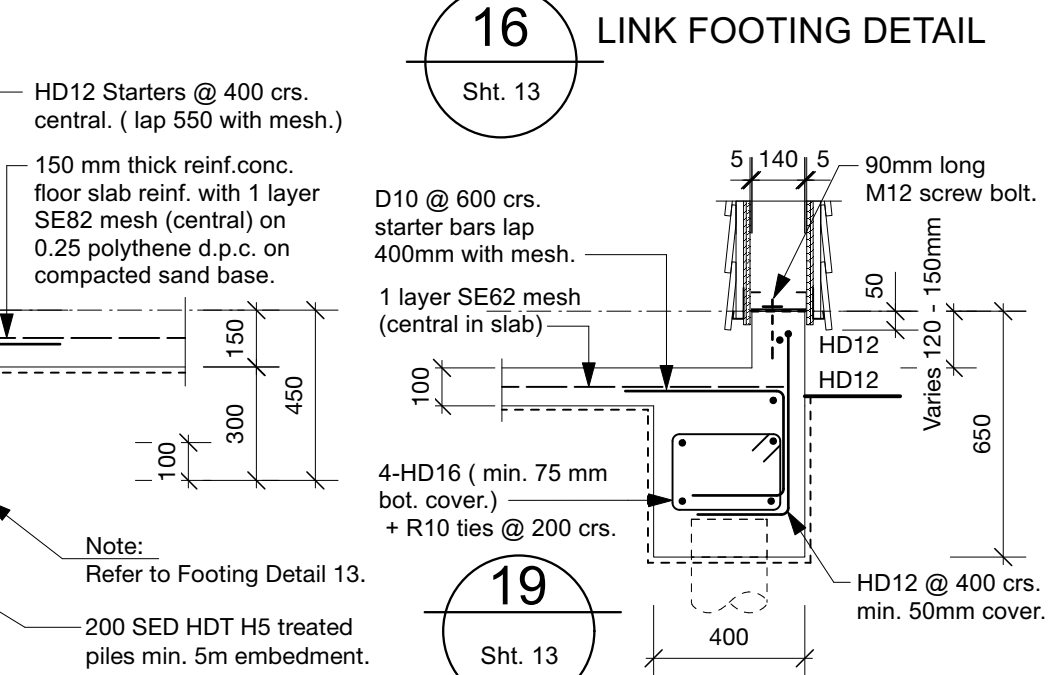
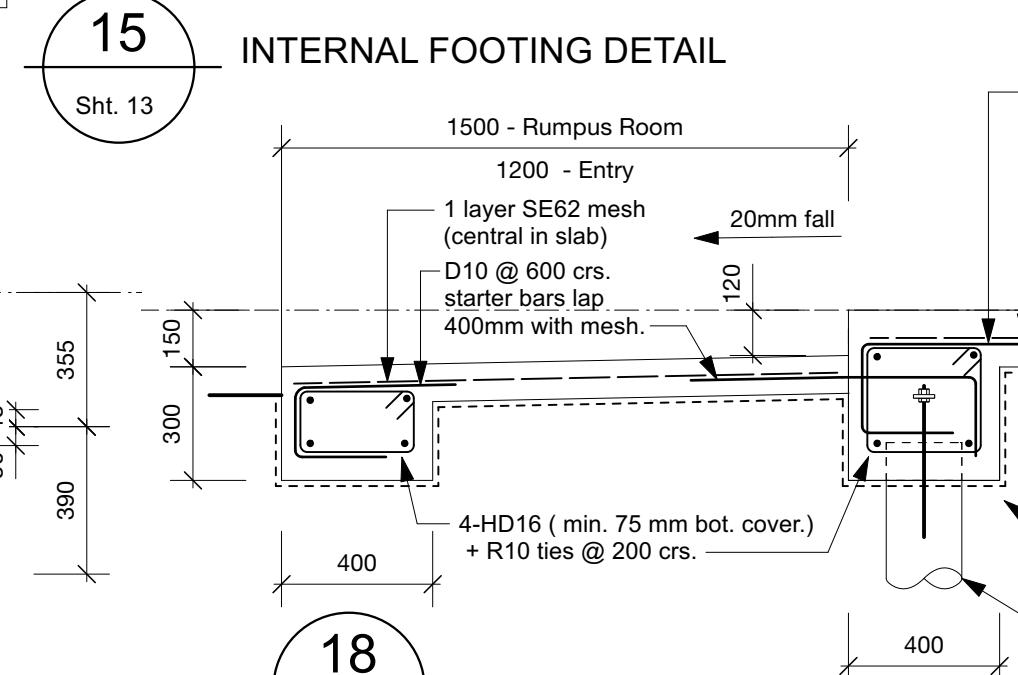
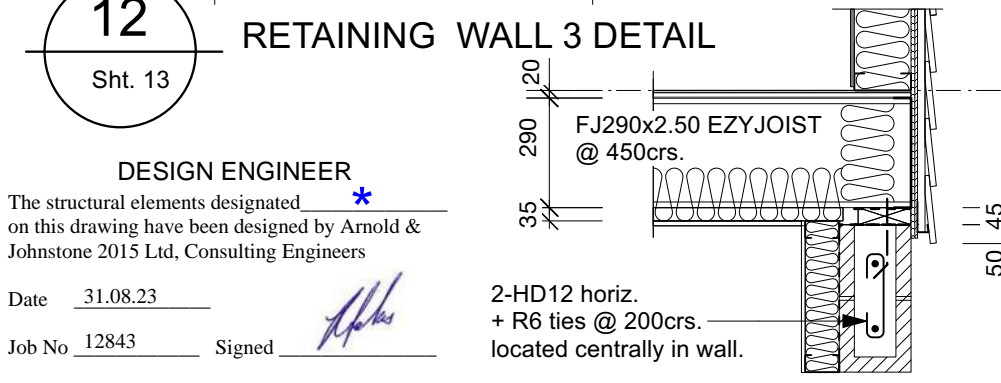
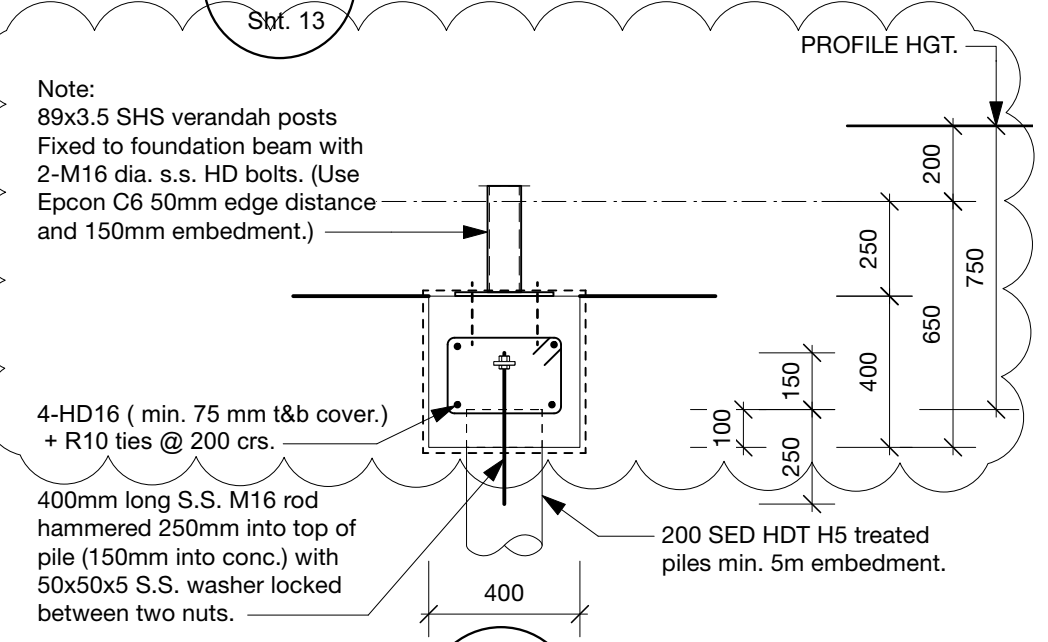
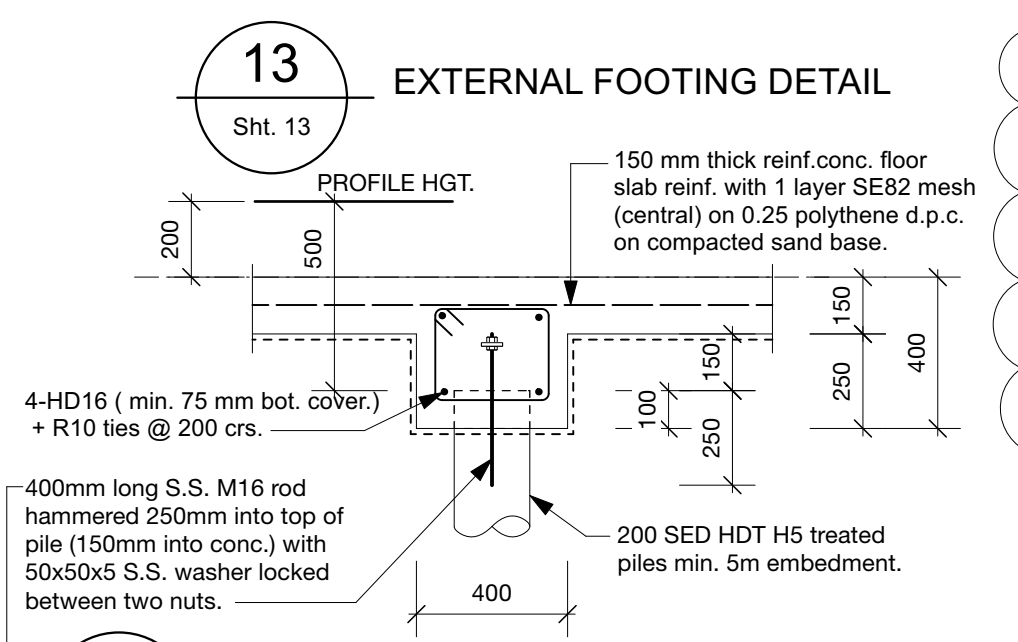
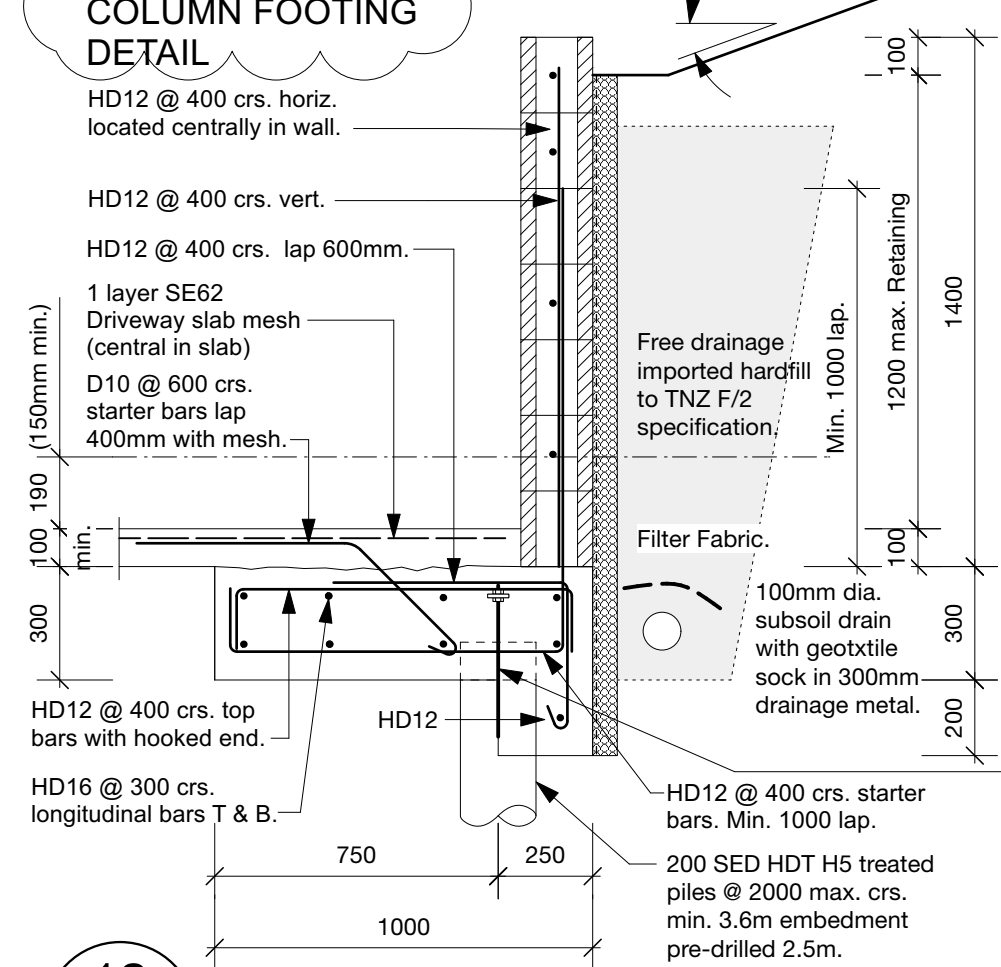
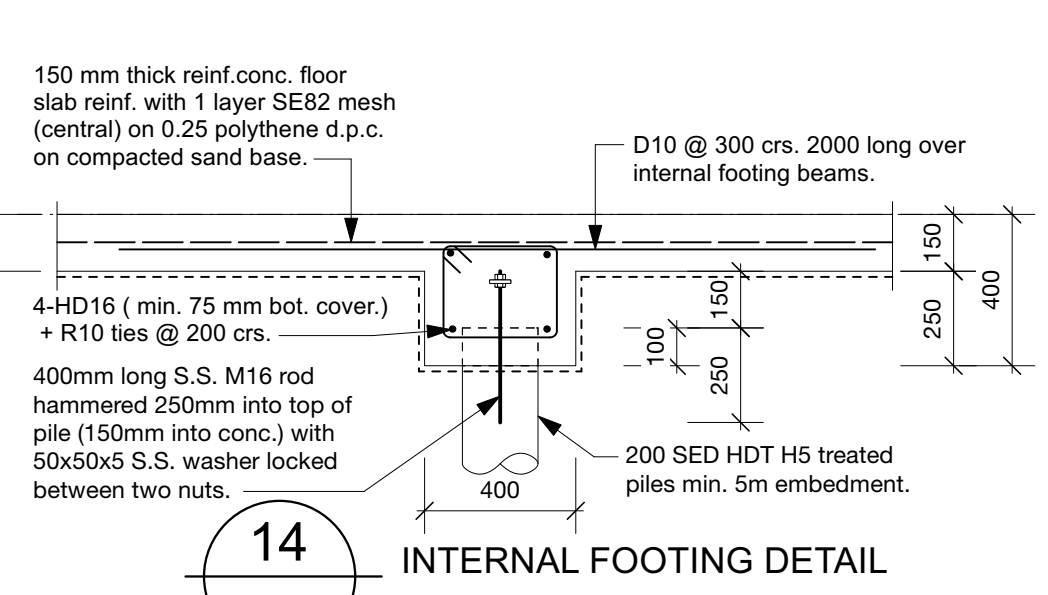
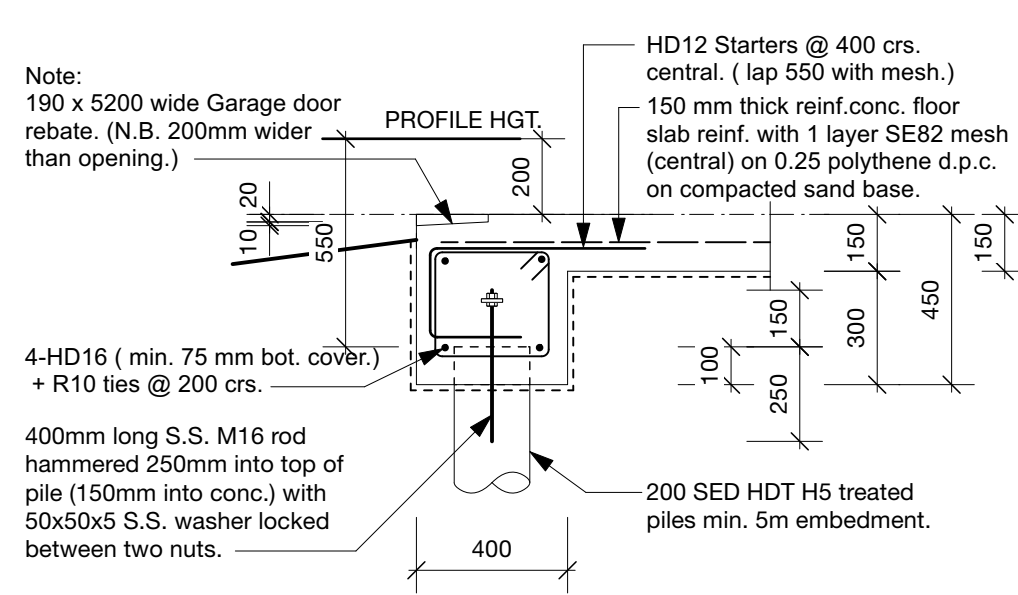
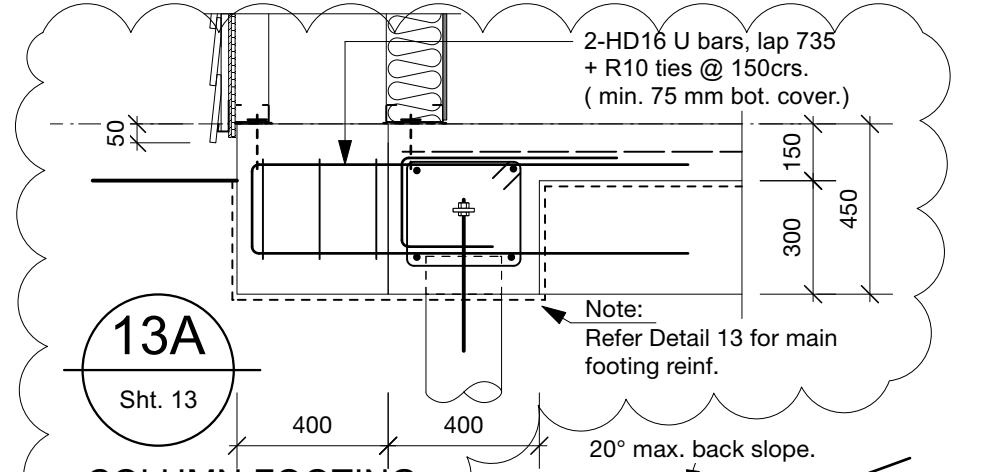
PROPOSED CAMERON RESIDENCE
AT LOT 2 SH26 HAMILTON.

11
 Sht. 7-9,13
BASEMENT RETAINING WALL 1 DETAIL *

B Jan. 23 Exterior cladding amended.
 A 17/2/22 Steel framing and wall cladding shown.
 REVISION: DATE: REVISION NOTE:

FOUNDATION DETAILS CONTINUED				
DRAWN	CHECKED	DATE	SCALE @ A3	JOB No.
D. Cowie	D. Cowie	3/12/21	1:20	2107

DWG No. **16**
 B REV
 OF 23



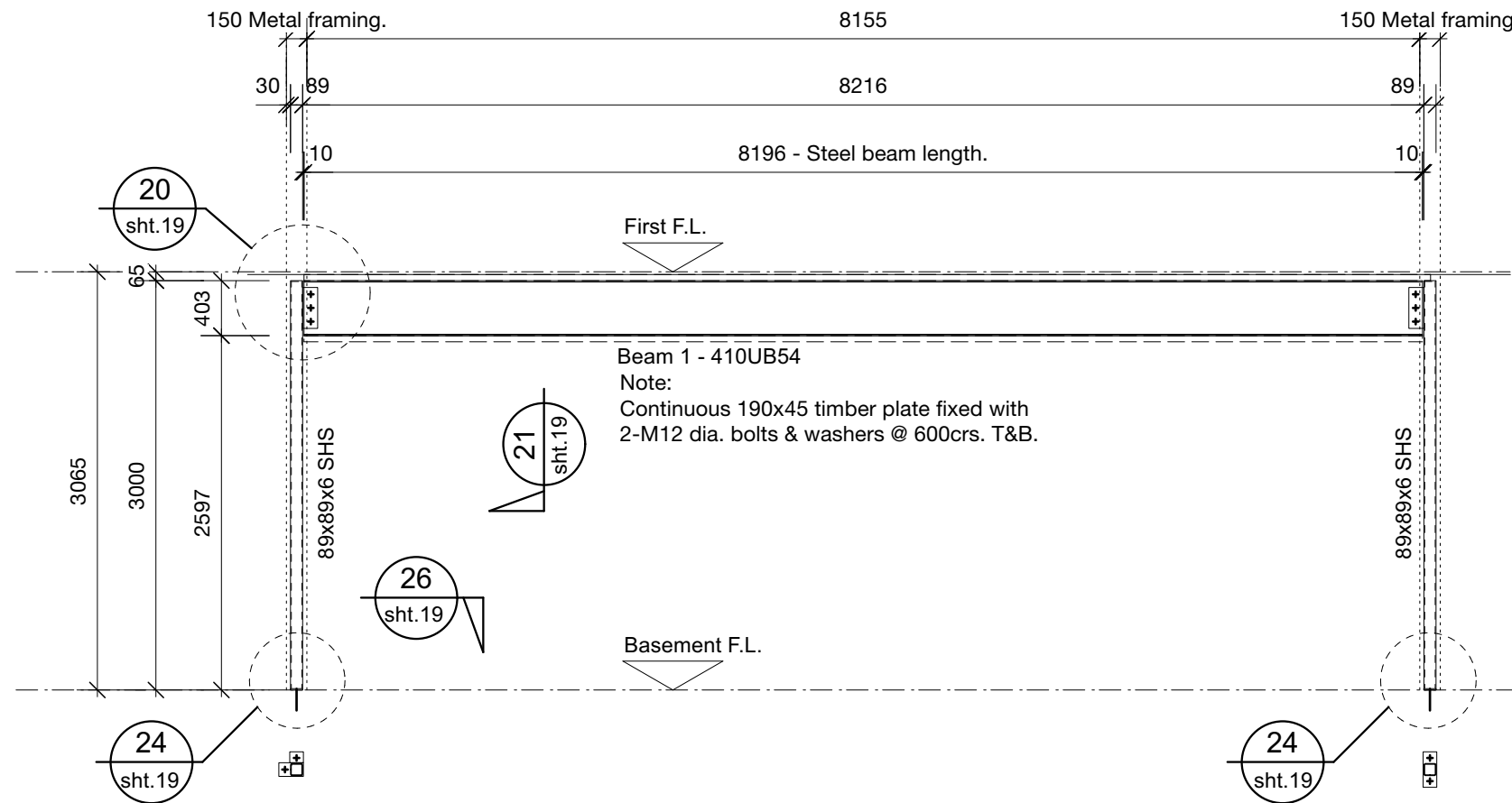
DESIGN ENGINEER
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Date 31.08.23
Job No 12843 Signed *[Signature]*

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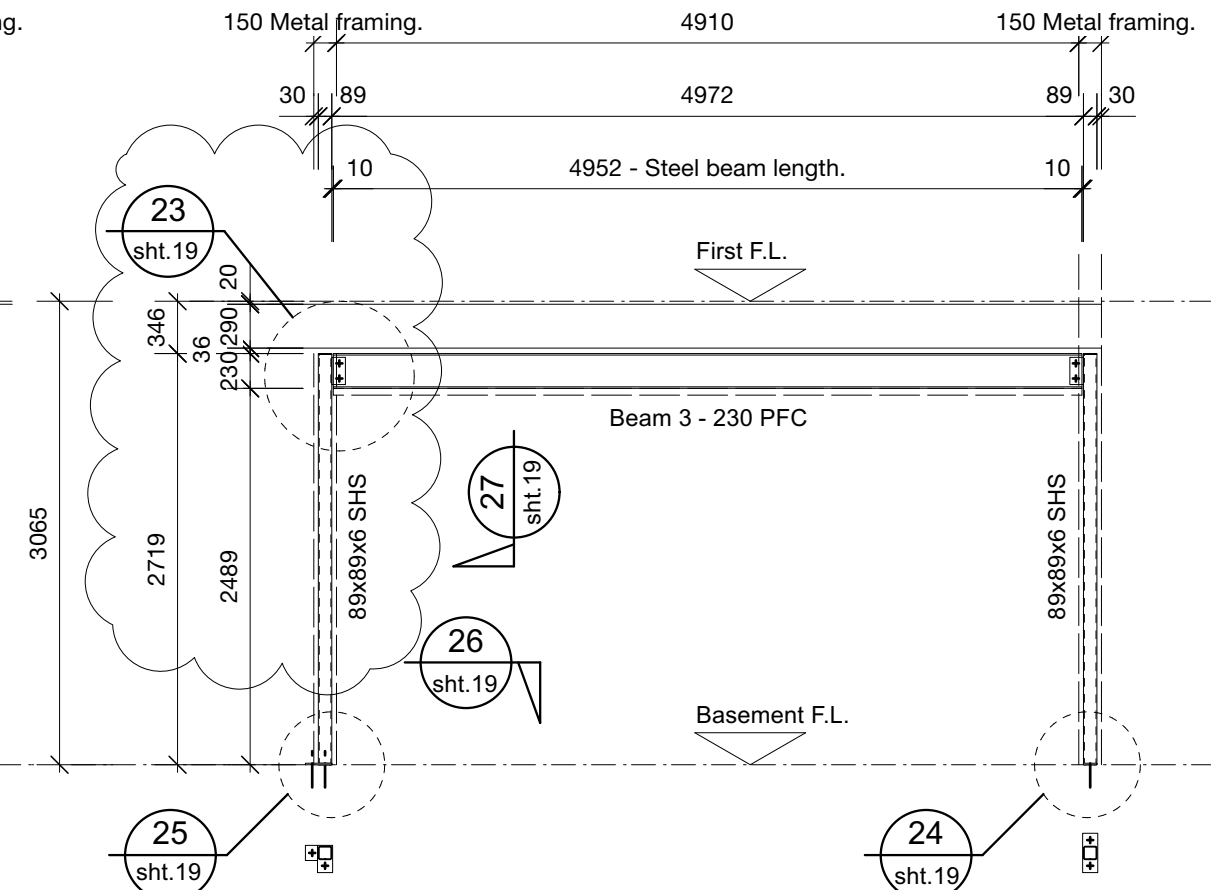
PROPOSED CAMERON RESIDENCE AT LOT 2 SH26 HAMILTON.

B	9/7/23	Detail 16 Amended to show 89 SHS veranda post fixing. Detail 13A, 17 & 19 cladding change.
A	17/2/22	Detail 13A added for Garage columns.
REVISION:	DATE:	REVISION NOTE:
* FOUNDATION DETAILS		
DRAWN	CHECKED	DATE
D. Cowie	D. Cowie	3/12/21
SCALE @ A3	JOB No.	
1:20	2107	

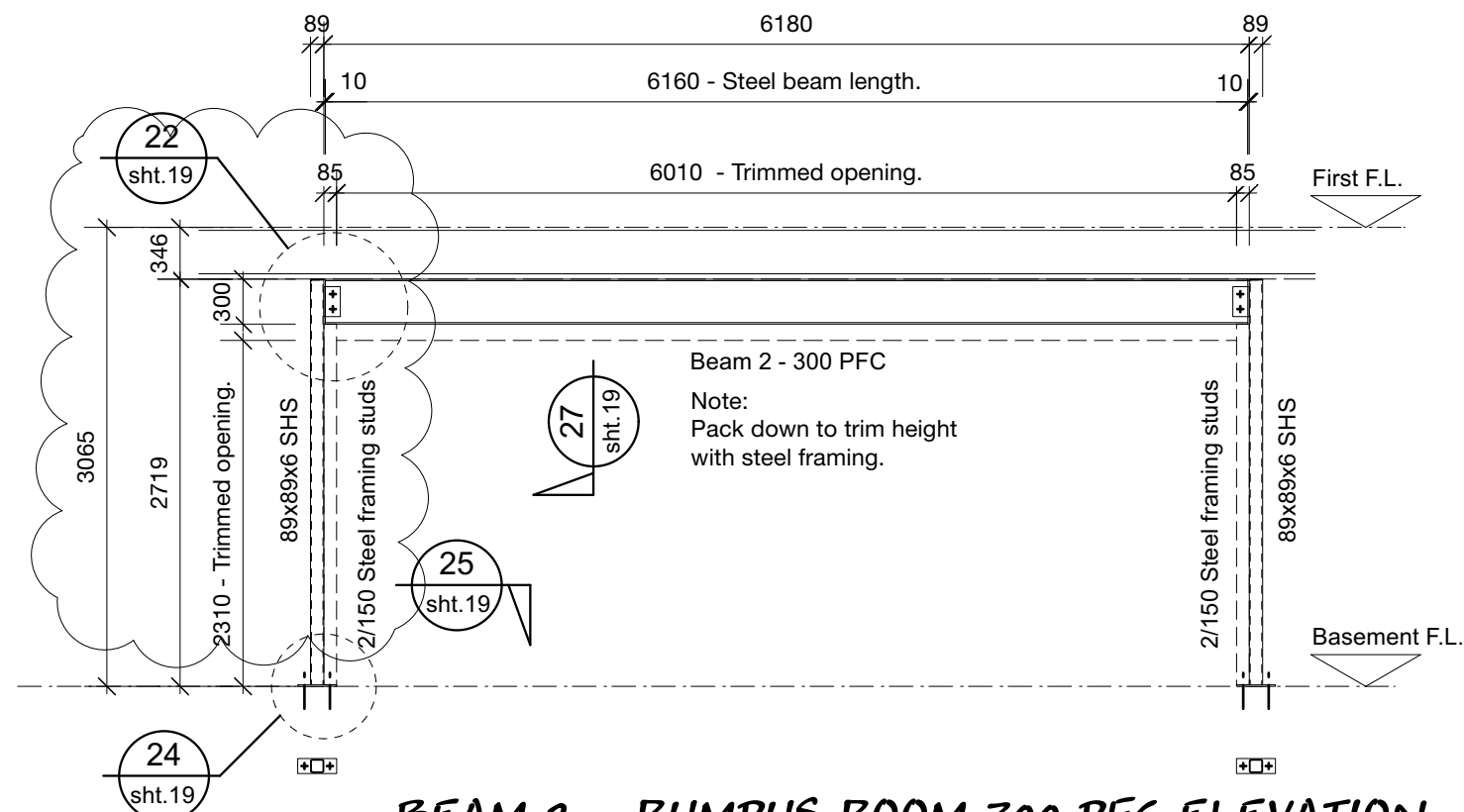
DWG No. **17**
 OF **23**



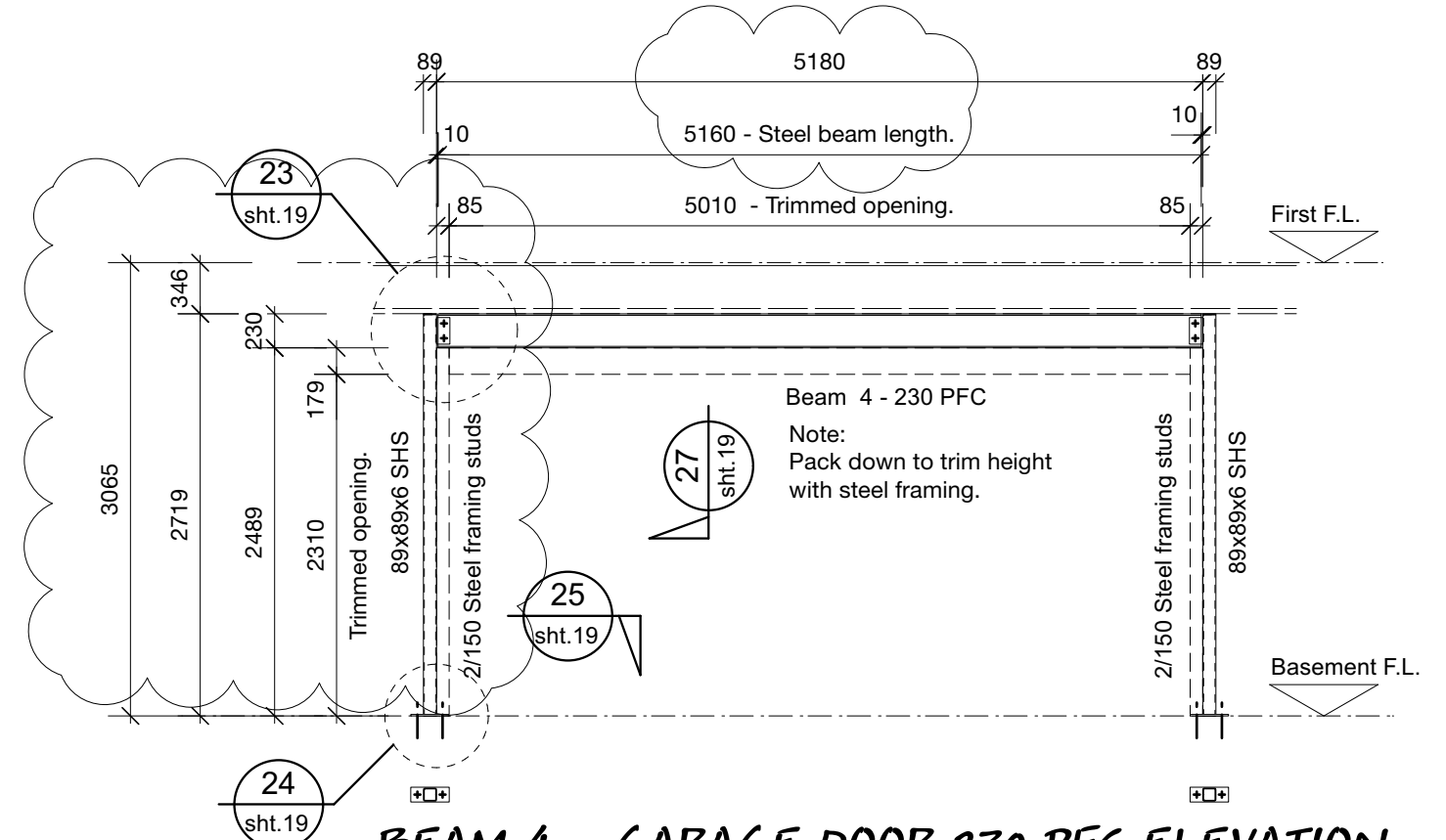
BEAM 1 - WORKSHOP 410UB54 ELEVATION



BEAM 3 - GARAGE 230 PFC ELEVATION



BEAM 2 - RUMPUS ROOM 300 PFC ELEVATION



BEAM 4 - GARAGE DOOR 230 PFC ELEVATION

Don Cowie
DESIGN ENGINEER
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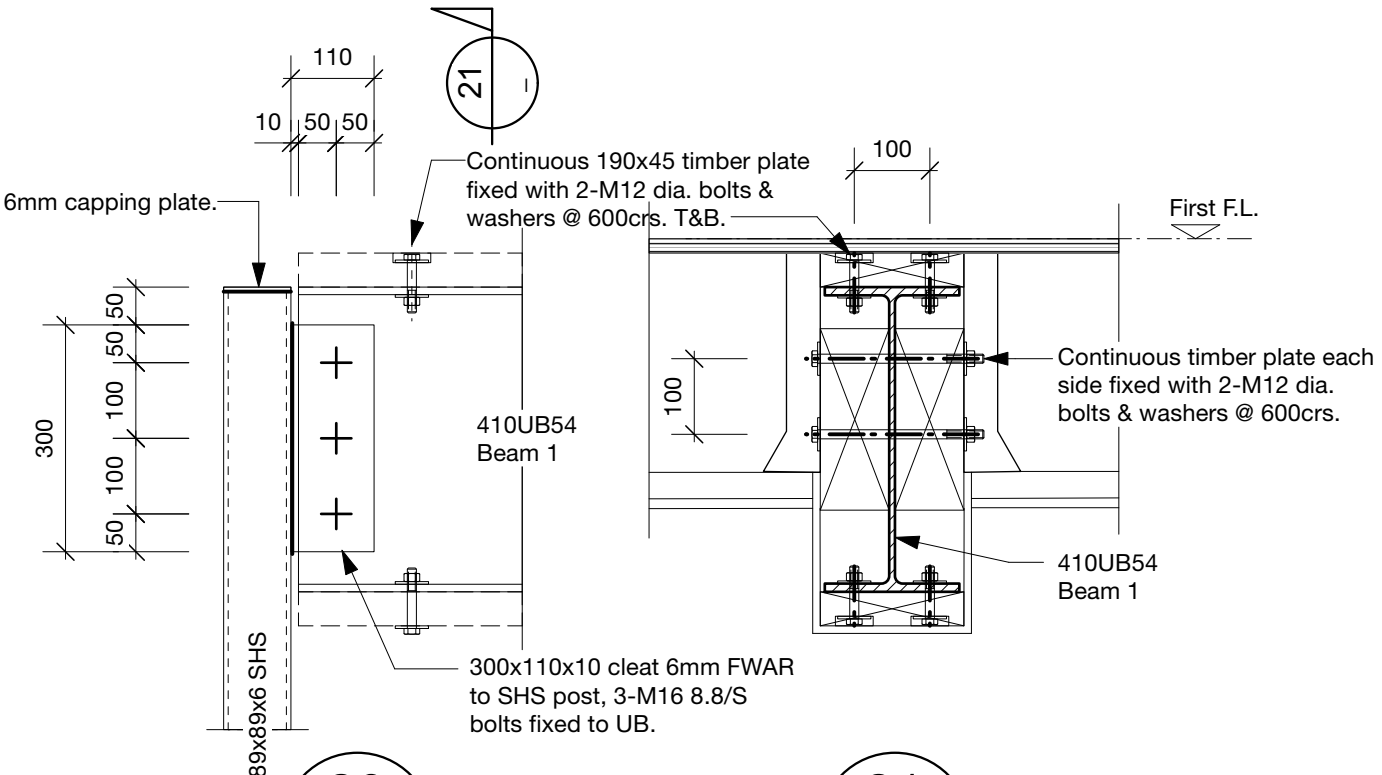
Date 31.08.23
20 Waimarie
Ph. 07 847 8
Email: dc.Job No 12843
Signed *[Signature]*

**PROPOSED CAMERON RESIDENCE
AT LOT 2 SH26 HAMILTON.**

A
REVISION: 17/2/22 Steel frame heights amended to suit steel framing.
DATE: REVISION NOTE:

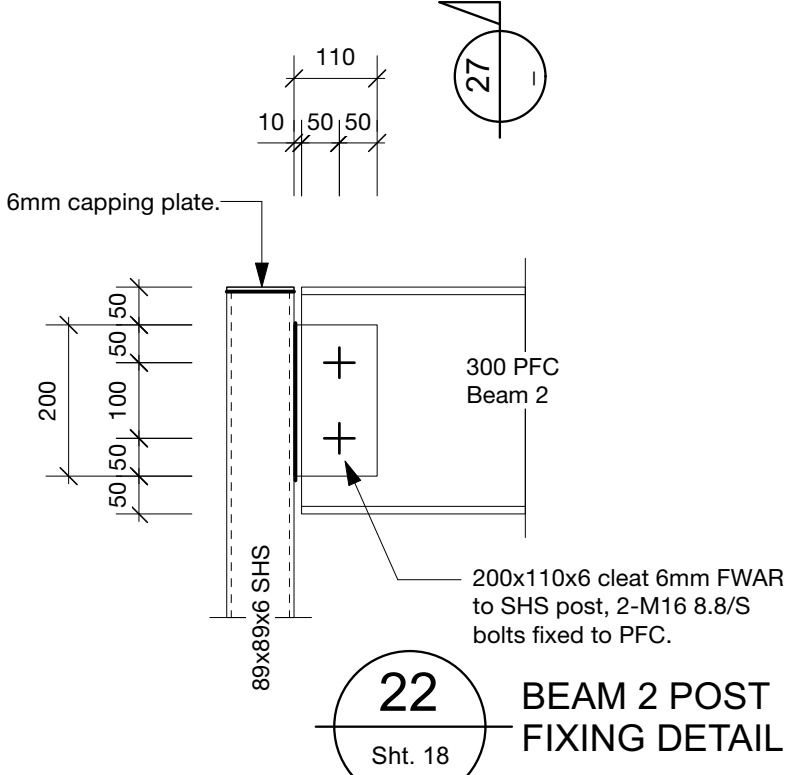
* BASEMENT STEEL BEAM ELEVATIONS				
DRAWN	CHECKED	DATE	SCALE @ A3	JOB No.
D. Cowie	D. Cowie	3/12/21	1:50	2107

DWG No. **18**
A
REV
OF 23

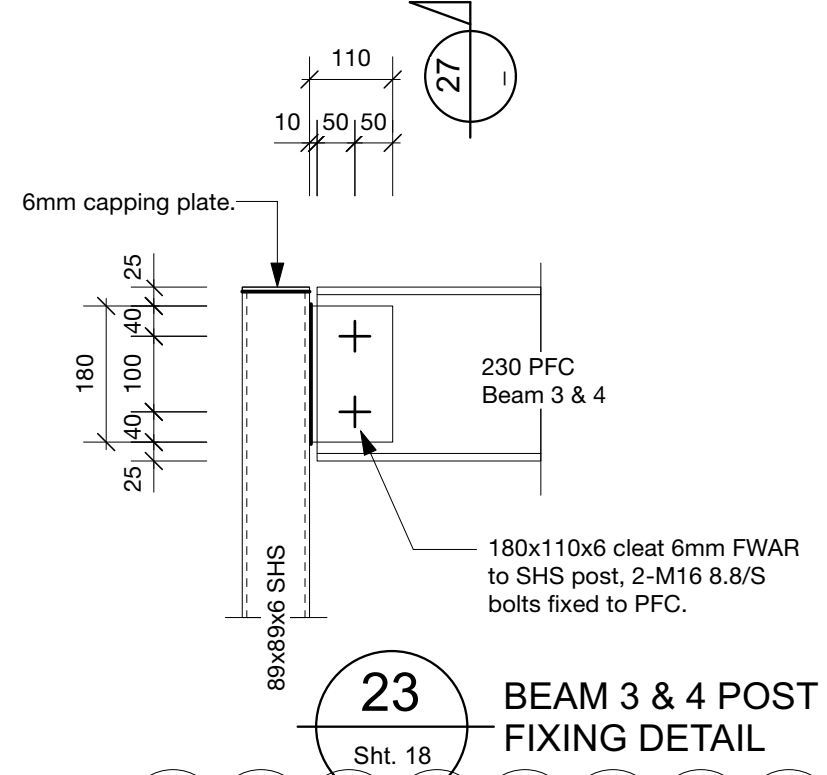


20
Sht. 18
**BEAM 1 POST
FIXING DETAIL**

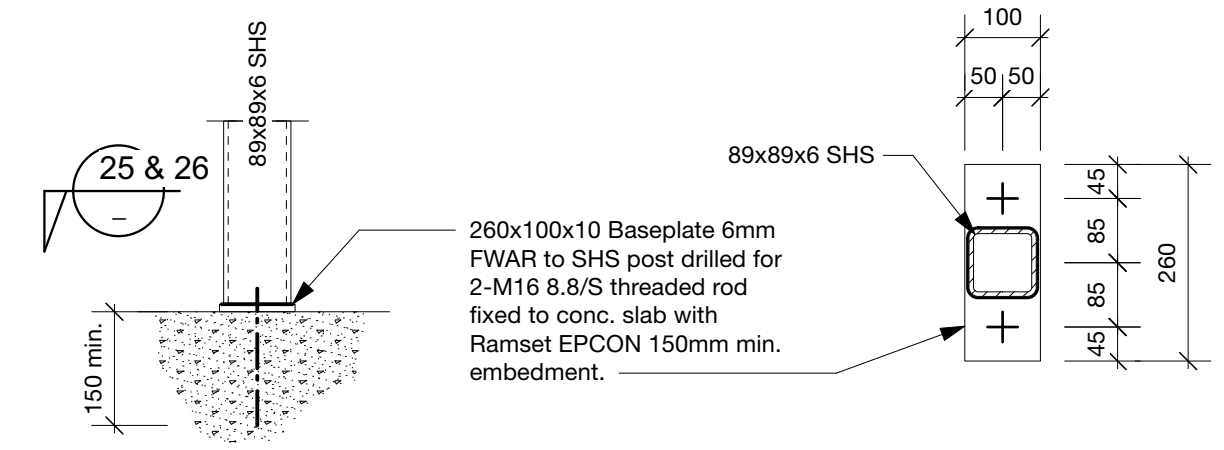
21
Sht. 18
**BEAM 2 JOIST
FIXING DETAIL**



22
Sht. 18
**BEAM 2 POST
FIXING DETAIL**

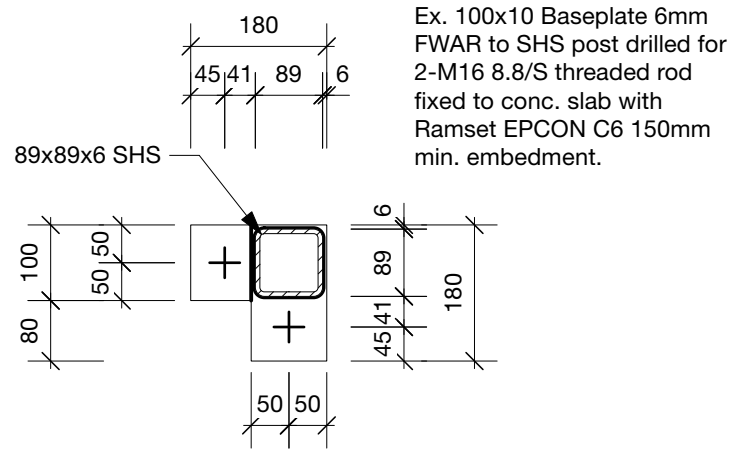


23
Sht. 18
**BEAM 3 & 4 POST
FIXING DETAIL**

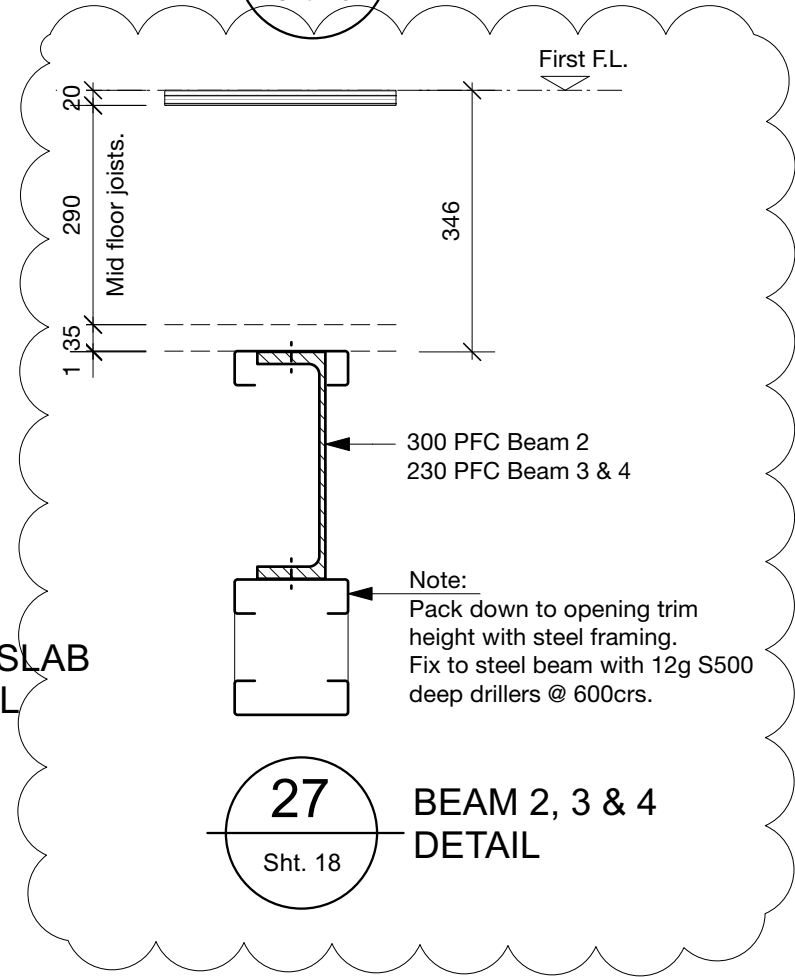


24
Sht. 18
**BEAM 1, 2, 3 & 4
POST / SLAB
FIXING DETAIL**

25
Sht. 18
**BEAM 1, 2, 3 & 4
POST / SLAB PLAN
FIXING DETAIL**



26
Sht. 18
**BEAM 1 & 3 POST / SLAB
PLAN FIXING DETAIL**



27
Sht. 18
**BEAM 2, 3 & 4
DETAIL**

Notes:

1. All internal steelwork to be shop primed and painted with Resene 22 interior paint specification.
2. All external steelwork to be painted with Resene Armourcote 210 as per Resene spec.
3. Allow for holes for M12 - 600crs. bolts into beam 1 as required shown for fixing to timber framing.
4. Fasten any HySpan members together with 2 rows of 90x3.3 dia. nails @ 100mm crs. as per figure 9 of the Futurebuild LVL Residential Design Guide.

DESIGN ENGINEER

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Date 31.08.23

Job No 12843 Signed

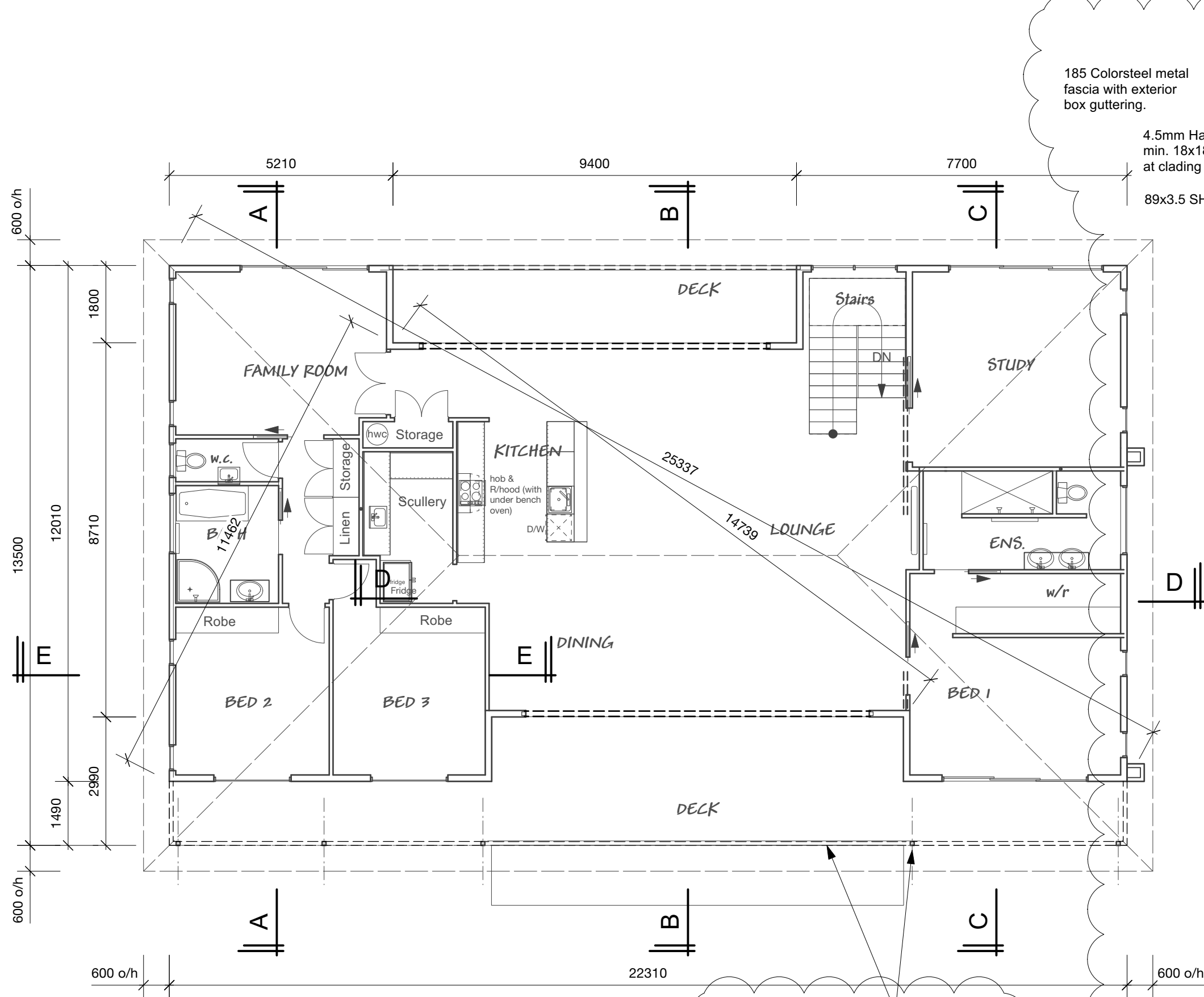
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PROPOSED CAMERON RESIDENCE
AT LOT 2 SH26 HAMILTON.

B Aug. 23 External steelwork paint finish note added.
A 172/22 Steel frame heights amended to suit steel framing.
REVISION: DATE: REVISION NOTE:

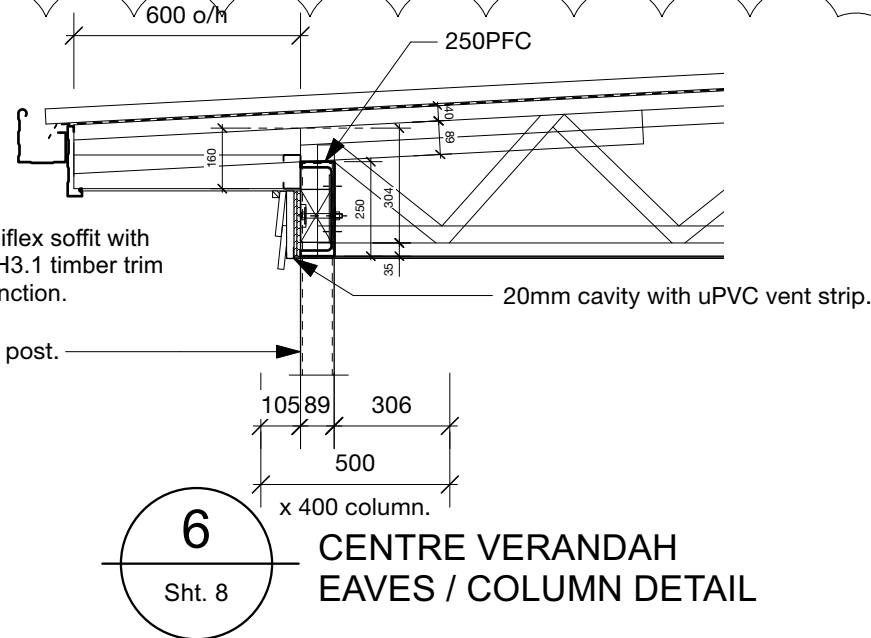
* BASEMENT STEELWORK DETAILS				
DRAWN	CHECKED	DATE	SCALE @ A3	JOB No.
D. Cowie	D. Cowie	3/12/21	1:10	2107

DWG No. **19**
B REV
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FIRST FLOOR FRAMING / ROOF SET-OUT PLAN

PROPOSED CAMERON RESIDENCE
AT LOT 2 SH26 HAMILTON.



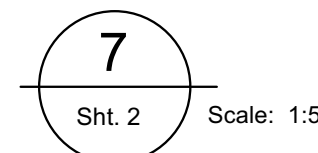
Hardies Linea w/bds. exterior cladding on drained 20mm
cavity batten system 18mm IBS RigidRAP XT rigid air barrier /
thermal barrier on 140x41x0.75 Steelhaus exterior steel wall
Framing @ 600crs. with nogs @ 800crs.

Scriber

Hardies or timber
90x20 trim.

75x75mm aluminium or
Polythylene back flashing with
folded edges as per E2/AS1.

Selected Hardwood vertical
shiplap w/bds. exterior
cladding to recessed deck
areas on drained 20mm
castellated cavity batten
system, on 18mm IBS
RigidRAP XT rigid air barrier
/ thermal barrier on
140x41x0.75 Steelhaus
exterior steel wall
Framing @ 600crs. with
nogs @ 480crs. max.



B 13/7/23 Cladding amended on detail 6, detail 7 amended & 8 deleted.
A 17/2/22 Column details 6, 7 & 8 added. Deck construction note added.
REVISION: DATE: REVISION NOTE:

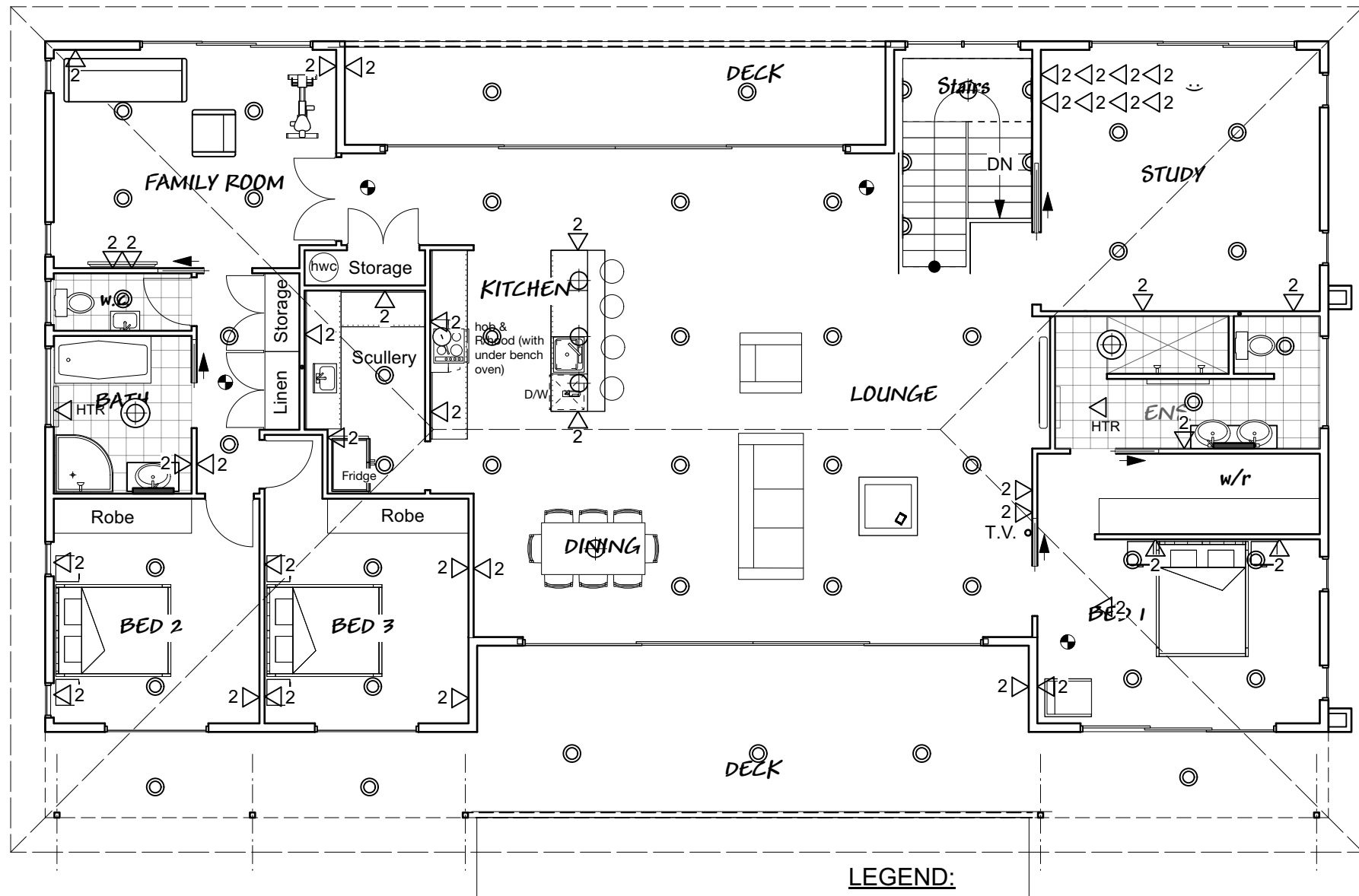
FIRST FLOOR FRAMING / ROOF SET-OUT PLAN

DRAWN	CHECKED	DATE	SCALE @ A3	JOB No.
D. Cowie	D. Cowie	3/12/21	1:100	2107

DWG No.
20
REV
OF 23

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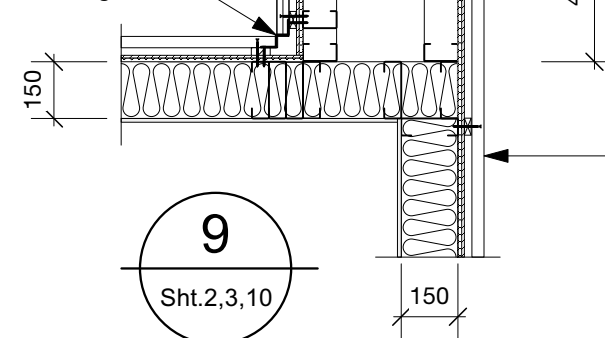
Note:
All outlets to be protected by surge device at switch board.
Seperate switching is not shown for:
Hot water cylinder, Kitchen fittings (cook top, wall oven, dishwasher & microwave. Allow to wire for and install.

Note:
180 l electric mains presure hot water cylinder to be fitted as per Acceptable Solutions G12/AS1 fig. 8 with tempering valve as per fig. 16 and seismic restraint to fig. 14 with 40mm dia. min. drain pipe outlet and overflow tray to comply with G12/AS1 6.11.3 & .5.2.3.

Note:
Extractor fan to Ensuite and Bathroom and Kitchen range hood to be vented to underside of eaves.
N.B. Flow rates not less than 25 L/sec. for Bathrooms and 50 L/sec. for Kitchen Range hood as per G4/AS1 1.3.3

- LEGEND:**
- Light batten fitting
 - Single LED wall light
 - Single LED downlight with IC or IC-F rating.
 - Exterior Flood light with sensor
 - LED Strip light
 - Double Power Point
 - Heated Towell Rail
 - Telephone
 - Television
 - Extractor fan with light (Vented to underside of eaves)
 - Meter Board
 - Switch Board
 - Domestic Smoke Detector (with hush switch)
 - 180 l electric mains presure hot water cylinder. Refer adjacent note.

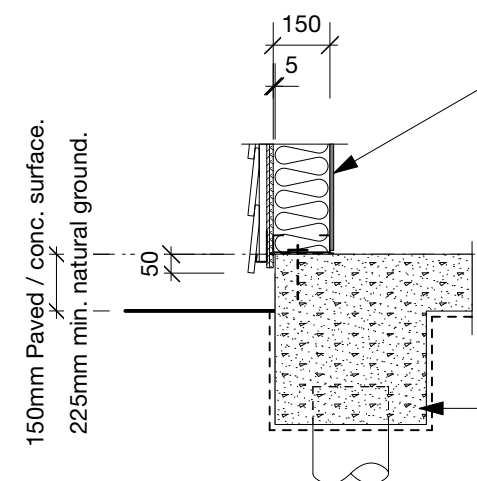
50x50 uPVC corner under flashing.
Hardies Linea 180 w/bd. S.S. corner soakers.
Hardies Linea aluminium 'W' flashing.



FIRST FLOOR/ BASEMENT GARAGE COLUMN DETAIL

Column Cladding:
Hardies Linea w/bd. exterior cladding on drained 20mm cavity batten system, on 18mm IBS RigidRAP XT rigid air barrier / thermal barrier 3050x1196 sheets on 89x41x0.75 Steelhaus exterior steel wall Framing @ 600crs. with nogs @ 800crs.

Wall Cladding:
Hardies Linea w/bd. exterior cladding on drained 20mm cavity batten system, on 18mm IBS RigidRAP XT rigid air barrier / thermal barrier 3050x1196 sheets on 140x41x0.75 Steelhaus exterior steel wall Framing @ 600crs. with nogs @ 800crs. with R2.8 Batts wall insulation with 10mm GIB bd. interior wall lining.

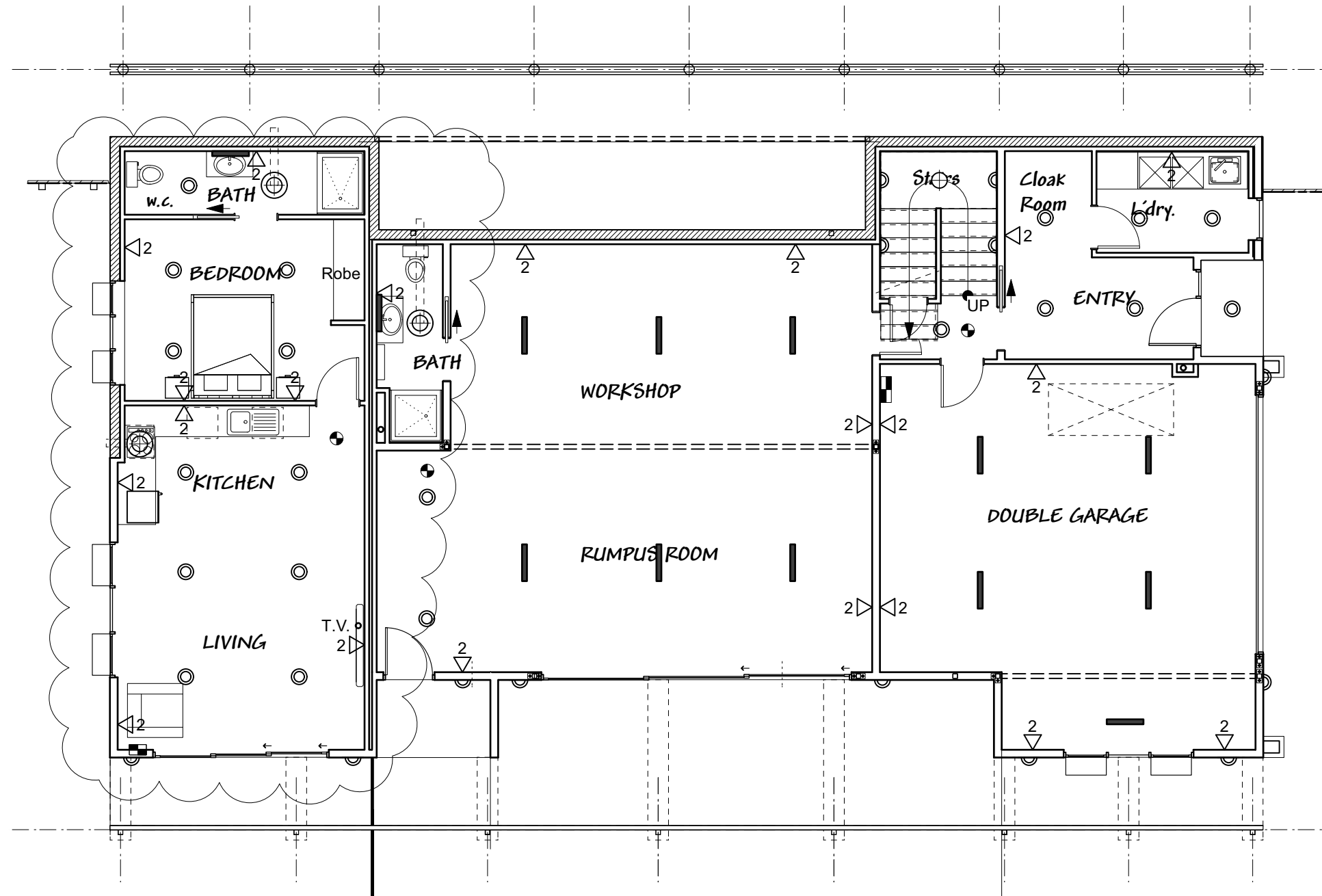


External Walls:
Hardies Linea w/bd. exterior cladding on drained 20mm cavity batten system, on 18mm IBS RigidRAP XT rigid air barrier / thermal barrier 3050x1196 sheets on 140x41x0.75 Steelhaus exterior steel wall Framing @ 600crs. with nogs @ 800crs. with R2.8 Batts wall insulation with 10mm GIB bd. interior wall lining.

Note:
Refer Detail 13, sheet 17 for main footing reinf.

TYPICAL CLADDING FOUNDATION DETAIL

NOTE:
REFER DETAIL 4, SHEET 12 FOR HORIZONTAL CLADDING CHANGE DETAIL



LEGEND:

- ⊕ Light batten fitting
- ⌒ Single LED wall light
- ⊙ Single LED downlight with IC or IC-F rating.
- ◁ Exterior Flood light with sensor
- LED Strip light
- ◁2 Double Power Point
- ◁HTR Heated Towell Rail
- T/ph Telephone
- T.V. Television
- ⊕ Extractor fan with light (Vented through wall)
- ▬ Meter Board
- ▬ Switch Board
- ⊙ Domestic Smoke Detector (with hush switch)

Note:
All outlets to be protected by surge device at switch board.
Seperate switching is not shown for Ancillary Flat:
Hot water cylinder, Kitchen fittings (cook top, wall oven, dishwasher & microwave. Allow to wire for and install.

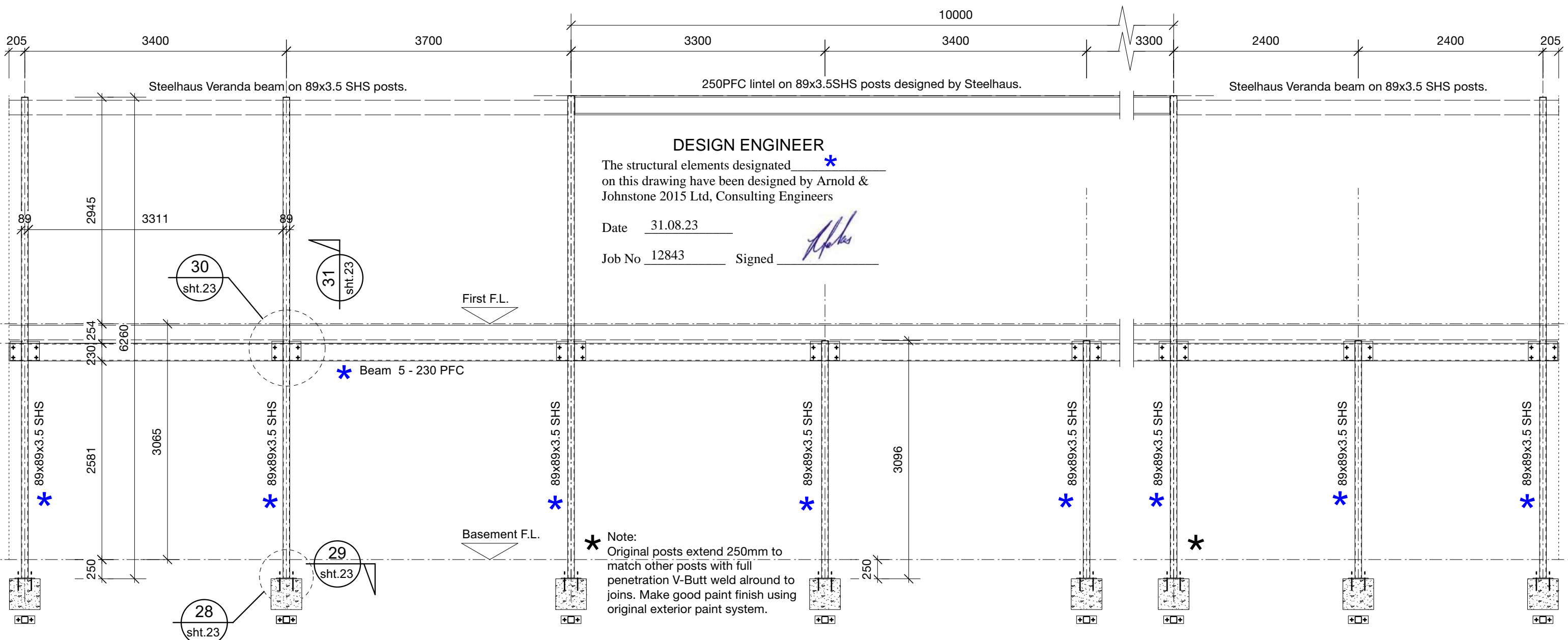
Note:
Extractor fans to Bathrooms and Kitchen range hood to be vented through walls.
N.B. Flow rates not less than 25 L/sec. for Bathrooms and 50 L/sec. for Kitchen Range hood as per G4/AS1 1.3.3

BASEMENT ELECTRICAL PLAN

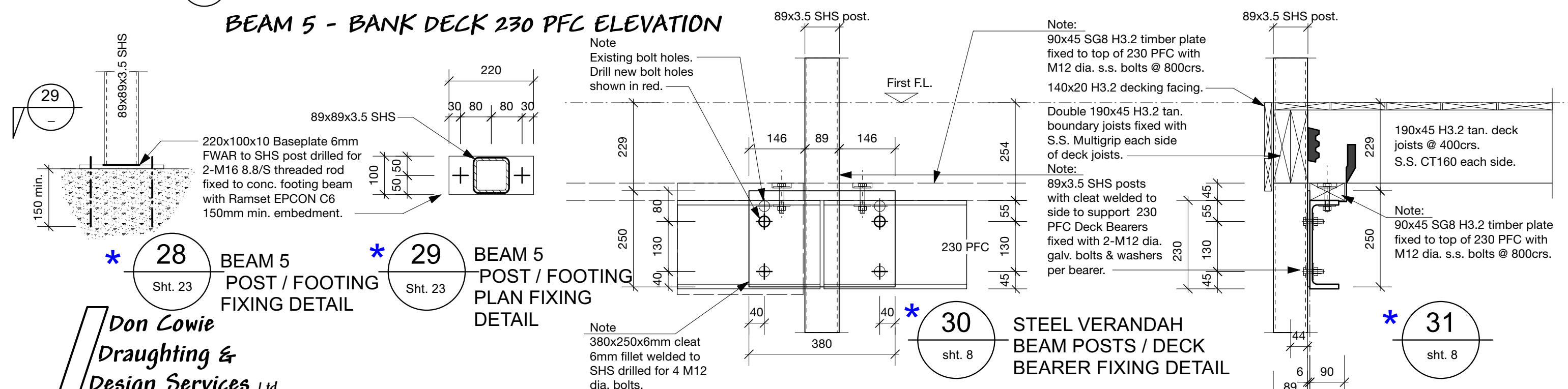
PROPOSED CAMERON RESIDENCE
AT LOT 2 SH26 HAMILTON.

B 18/8/23 Ancillary Flat switch board & Range hood location shown.
A 17/2/22 as Infinity unit note removed from Legend.
REVISION: DATE: REVISION NOTE:

BASEMENT ELECTRICAL PLAN					DWG No. 22 REV
DRAWN	CHECKED	DATE	SCALE @ A3	JOB No.	
S. Fowler	D. Cowie	3/12/21	1:100	2107	OF 23



BEAM 5 - BANK DECK 230 PFC ELEVATION



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PROPOSED CAMERON RESIDENCE
AT LOT 2 SH26 HAMILTON.

REVISION: DATE: REVISION NOTE:				
BANK STEEL DECK BEAM ELEVATION				
DRAWN	CHECKED	DATE	SCALE @ A3	JOB No.
D. Cowie	D. Cowie	1/23	1:50, 1:10	2107

DWG No.

23

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OF 23



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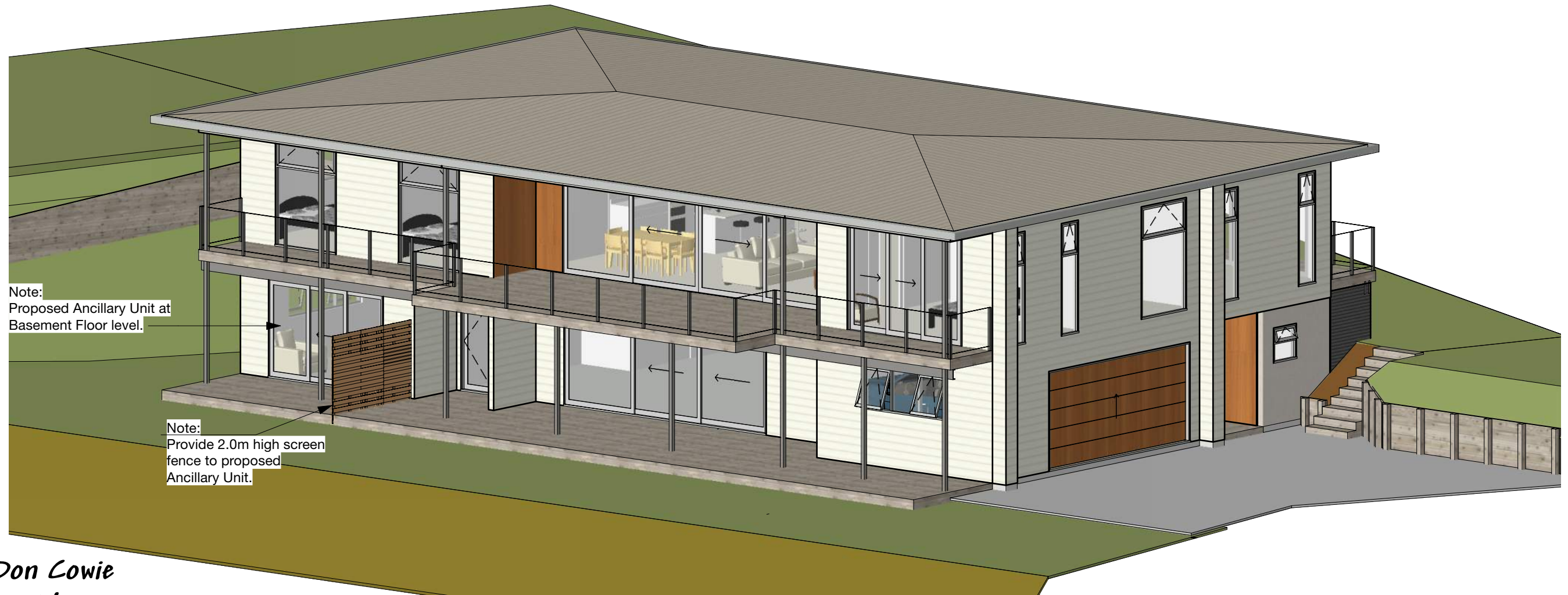
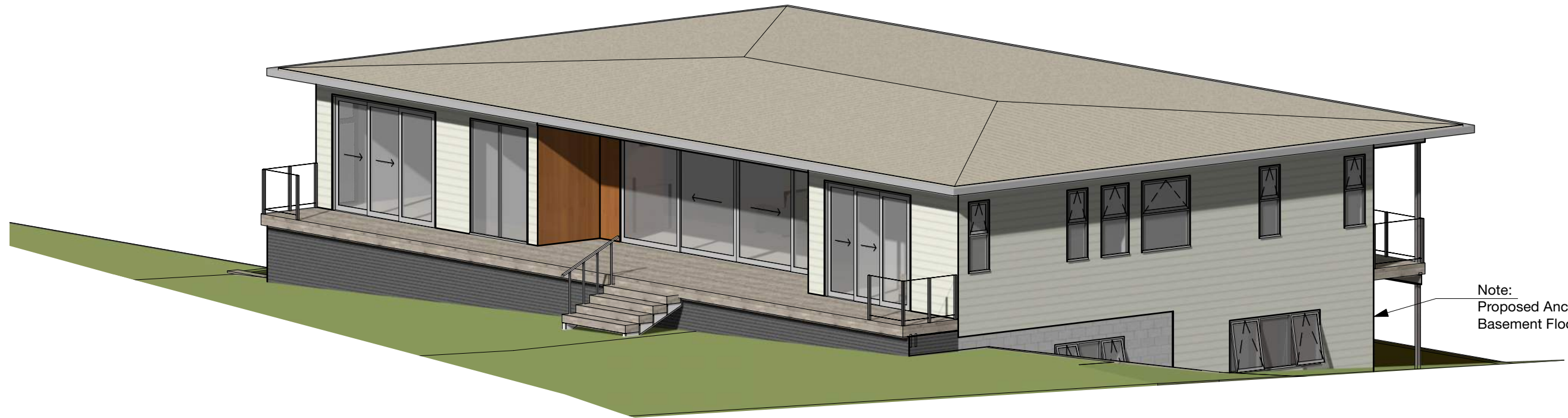
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PROPOSED CAMERON RESIDENCE
AT LOT 2 SH26 HAMILTON.

A Jan. /23 Cladding change and ancillary Flat shown.
REVISION: DATE: REVISION NOTE:

PROPOSED RENDERS 1				
DRAWN	CHECKED	DATE	SCALE @ A3	JOB No.
D. Cowie	D. Cowie	May 2022	NTS	2107

DWG No.	R1	A
REV		
OF	23	



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PROPOSED CAMERON RESIDENCE
AT LOT 2 SH26 HAMILTON.

A Jan. /23 Cladding change and ancillary Flat shown.
REVISION: DATE: REVISION NOTE:

PROPOSED RENDERERS 2				
DRAWN	CHECKED	DATE	SCALE @ A3	JOB No.
D. Cowie	D. Cowie	May 2022	NTS	2107

DWG No. **R2**
REV. **A**
OF **23**



Don Cowie
Draughting &
Design Services Ltd

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PROPOSED CAMERON RESIDENCE
AT LOT 2 SH26 HAMILTON.

B Jan. 23 Cladding change and ancillary Flat shown.
 A 17/2/22 Deck amended for resource consent application.
 REVISION: DATE: REVISION NOTE:

PROPOSED RENDERS 3

DRAWN	CHECKED	DATE	SCALE @ A3	JOB No.
D. Cowie	D. Cowie	Feb. 2022	NTS	2107

DWG No. **R3**
 B
 REV
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