

## ENGINEERING SCHEDULE



**Best Sheds**  
151 Smeaton Grange Road,  
Smeaton Grange, NSW, 2567

**Ph: (02) 4648 7777**  
**Fax: (02) 4648 7700**

CERTIFIED STEEL PORTAL FRAME SHED DESIGN FOR "REGION A" TERRAIN CATEGORY 2.0, 2.5 & 3.0 – IMPORTANCE LEVEL 2.

Design Snow Load: 0 KPa, Roof Snow Load: 0 KPa, Ground Snow Load: 0 KPa

Customer: **Christopher Farmer**

Site Address: **4004 Clarence Town Road, Brookfield**

Main Building: Span: 15, Length: 30, Height: 4.2, Roof Pitch: 11 degrees

The length being comprised of 5 bays, the largest bay is 6m bays.

Left LeanTo: NA

Right LeanTo: NA

### INTERNAL PORTALS

Column: C30030  
Rafter: C30030  
Knee Brace: C15024  
Knee Brace Length: 2600  
Apex Brace: C15024  
Apex Brace Length: 5400

### END PORTALS

Column: C30030  
Rafter: C30030  
Knee Brace: NA  
Knee Brace Length: NA  
Apex Brace: NA  
Apex Brace Length: NA  
End Wall Mullion: C30030

### LEFT LEAN TO PORTALS

Internal Column: NA  
Internal Rafter: NA  
End Column: NA  
End Rafter: NA  
Knee Brace: NA  
Knee Brace Length: NA

### RIGHT LEANTO PORTALS

Internal Column: NA  
Internal Rafter: NA  
End Column: NA  
End Rafter: NA  
Knee Brace: NA  
Knee Brace Length: NA

NOTE: All unclad intermediate columns are back to back always back to back (refer to drawing: Floor Plan).

### PURLINS AND GIRTS

Eave Purlin: TH120100	Spacing: 1000	Overlap: 100mm
Side Wall Girts: TH120100	Spacing: 986	Overlap: 100mm
Front End Wall Girts: TH120100	Spacing: 986	Overlap: 100mm
Back End Wall Girts: TH120100	Spacing: 1091	Overlap: 100mm
Roof Purlins: TH120100		

NOTE: Girt spacing will vary to a maximum 1m where window/s are located.

### Fasteners

Sleeve Anchor Bolts: M16x105 Sleeve Anchor Yellow Zinc  
Frame Bolts: M16x45 Purlin Assembly Zinc (Mild)  
Frame Screws: Frame Screw 14x14x22  
Cross Bracing Strap: Strap Brace 32mmx1.2mmx30m  
Open Bay Header Height: NA

Mr Camilo Pineda Moreno  
Beng MIEAust RPEng  
RPEQ 15562 TBP EC41817 (VIC)

Signature:  Date 30/06/18



**EMERALD**  
DESIGN & CONSTRUCTION

CIVIL & STRUCTURAL ENGINEERS  
COMMERCIAL - INDUSTRIAL - RESIDENTIAL - FORENSIC - STEEL DETAILING  
E: info@edcstruct.com.au  
M: 0416 797 422  
www.edcstruct.com.au





**Best Sheds**  
151 Smeaton Grange Road,  
Smeaton Grange, NSW, 2567

**Ph: (02) 4648 7777**  
**Fax: (02) 4648 7700**

## DOMESTIC & LIGHT INDUSTRIAL STEEL PORTAL FRAME SHED STRUCTURES

This structure is designed in compliance with AS4600, AS3600 and AS1170 1 to 4 as Importance Level 2 with a Live Load of 0.25kPa as "Air Leaky Structures" providing stability when openings are prevalent.

The structures are clad with corrugated pre-painted finish, 0.42mm walls and 0.42mm roof (compliant with AS1562.1 Metal) over cold formed 450 to 550mPa galvanized steel C sections primary frames.

Primary framing is fastened together with 4.6 Class galvanized bolts adequately tensioned on ground prior to erection.

Secondary framing steel bracing, with purlins and girts lapped, are all tek fastened to primary steel with a minimum of two (2) teks per connection as specified in details.

All rainwater products are compliant with AS2179.1 (Metal).

## ENGINEERING

The undersigning engineer has checked that the design of the structure complies with relevant current Australian Standards as stated above and the following i.e AS4671- 2001 Steel Reinforcing materials, AS3600 - Concrete structures. However, he will not be present during construction, neither will he conduct inspections nor construction supervision.

The class 10a buildings are designed for erection on pad footings or slab based on soil of classification "A"- "P" with minimum bearing capacity 100kPa (i.e. organic soil is to be removed to a suitable material below natural surface).

Where (suitable) fill is required to level the site, it should be placed and compacted in layers of 150mm maximum.

Concrete pad footings and slab supply and placement is to be in compliance with AS2870-2011 Residential Slabs & Footings, AS3600-2009 Concrete Structures for A2 and B2 exposure (i.e. 25mPa strength @ 28 days strength) with recommended slump 75 to 80mm for light pneumatic tyred traffic all trafficable floors.

For sites where these conditions are considered to be inadequate, a customized foundation design for the structure can be supplied to suit a specific purpose.

## CONSTRUCTION

Erection of the structure is to be in compliance with local and state ordinances,

Occupational Health and Safety Regulations and with plans provided.

## GENERAL

The designs as portrayed on the drawings remain the intellectual property of Best Sheds Pty Ltd and are provided for building approval and construction purposes only and are only valid when blue ink signed and dated by the engineer.

## SNOW LOAD

Following conditions only apply to buildings with snow loading:

- No maintenance or roof traffic permitted on the roof while there is snow present.
- No other structure to be erected within 500mm of the gutters of this building.

Mr Camilo Pineda Moreno  
Beng MIEAust RPEng  
RPEQ 15562 TBP EC41817 (VIC)

Signature.  Date 30/06/18



**EMERALD**  
DESIGN & CONSTRUCTION

CIVIL & STRUCTURAL ENGINEERS  
COMMERCIAL - INDUSTRIAL - RESIDENTIAL - FORENSIC - STEEL DETAILING  
E. info@edcstruct.com.au  
M. 0416 797 422  
www.edcstruct.com.au



# ENGINEERING SCHEDULE



**Best Sheds**  
151 Smeaton Grange Road,  
Smeaton Grange, NSW, 2567

**Ph: (02) 4648 7777**  
**Fax: (02) 4648 7700**

## GENERAL SLAB DESIGN FOR DOMESTIC & LIGHT INDUSTRIAL USES

Thickness: 100mm with minimum 30mm cover. Refer to Slab Foundation table for reinforcing specification.

Strength: 25mPa

Thickened section under columns. Refer to Slab Foundation table for footing / pier specification.

SLAB FOUNDATIONS DOMESTIC / LIGHT INDUSTRIAL (100mm minimum concrete slab included)					
SOIL CLASSIFICATION (COMPACTED)	REINFORCING IN SLAB	EDGE BEAM	PIER	EDGE BEAM (slab thickness not included)	
	MESH REINFORCING	TRENCH MESH	Ø x DEPTH	DEPTH	WIDTH
A, S, & M	SL72	-	450 x 400	-	-
M - D	SL82	L11TM3	-	300	300
H TO H - D	SL82	L11TM3	-	400	300
E TO E - D	SL82	L11TM4	-	400	400
P (DROP EDGE BEAM OR STANDARD EDGE BEAM WITH PIERS UNDER COLUMNS 300 INTO FIRM GROUND)	SL82	L11TM4	450 Ø	400	400

Mr Camilo Pineda Moreno  
Beng MIEAust RPEng  
RPEQ 15562 TBP EC41817 (VIC)

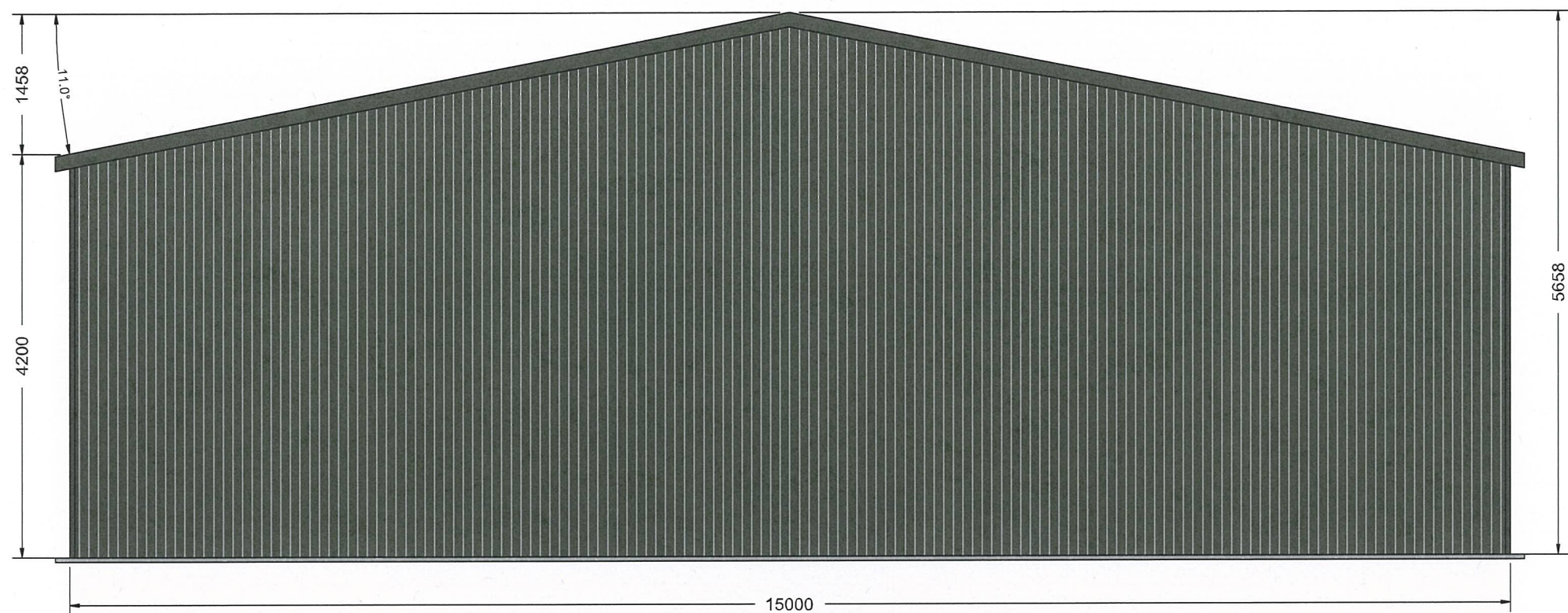
Signature..... Date 30/06/18



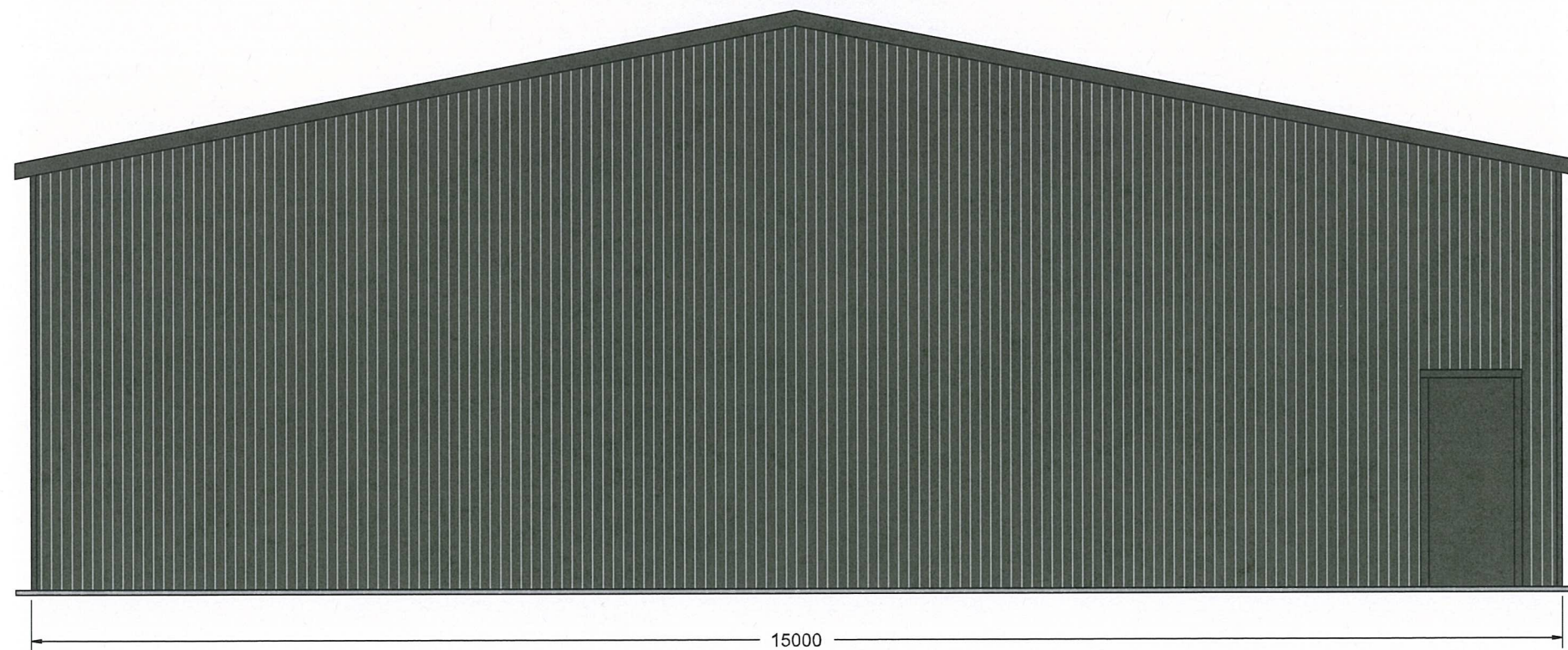
**EMERALD**  
DESIGN & CONSTRUCTION

CIVIL & STRUCTURAL ENGINEERS  
COMMERCIAL - INDUSTRIAL - RESIDENTIAL - FORENSIC - STEEL DETAILING  
E. info@edcstruct.com.au  
M. 0416 797 422  
www.edcstruct.com.au



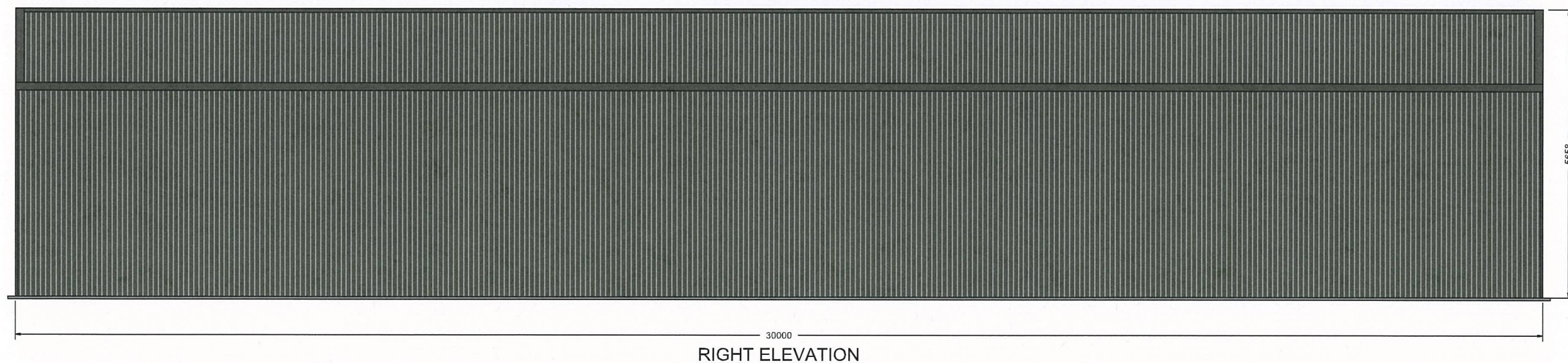
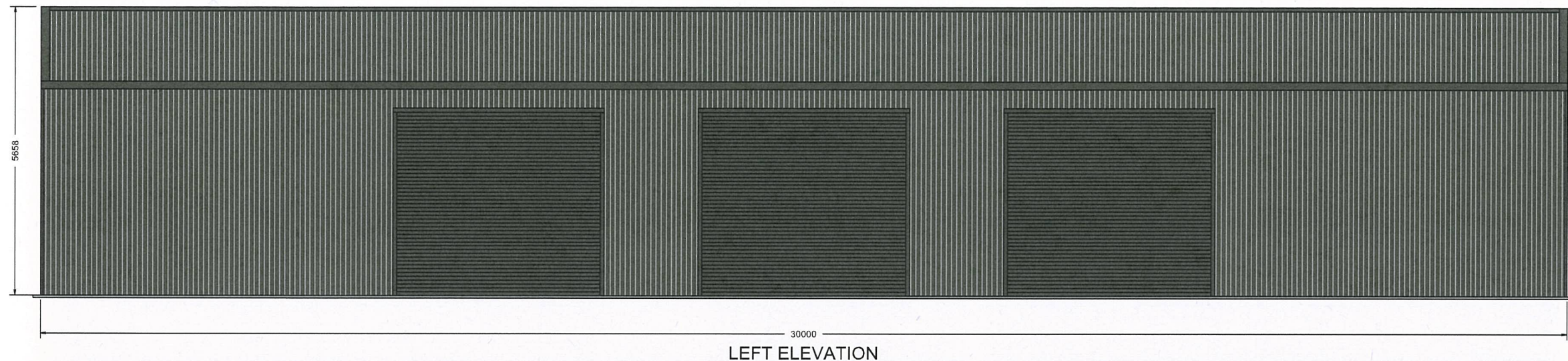


FRONT ELEVATION

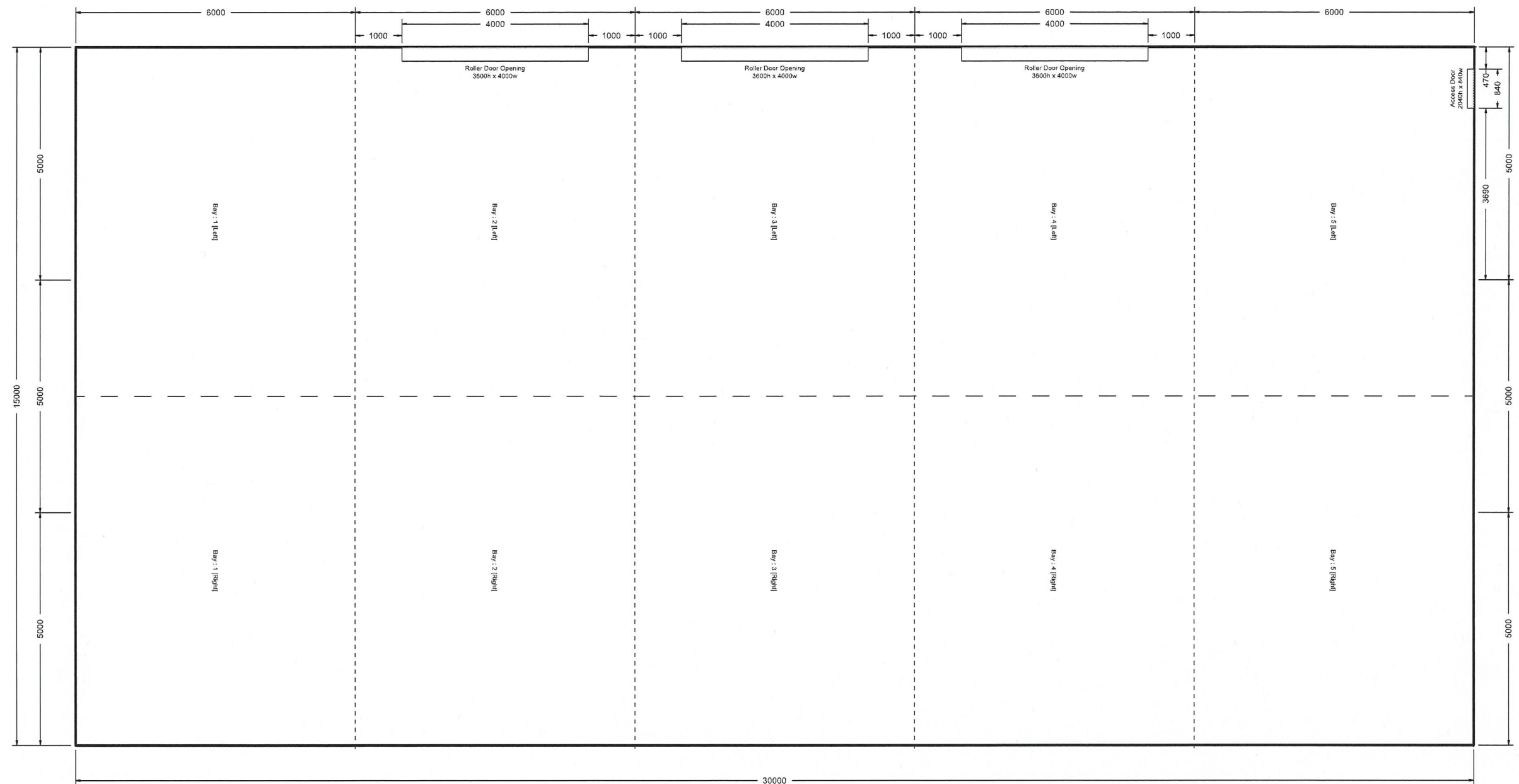


REAR ELEVATION

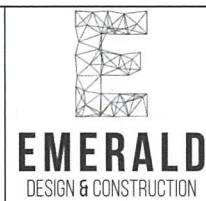








151 Smeaton Grange Road,  
Smeaton Grange, NSW, 2567  
Phone: 02 4648 7777  
Fax: 02 4648 7700  
Email: sales@bestsheds.com.au

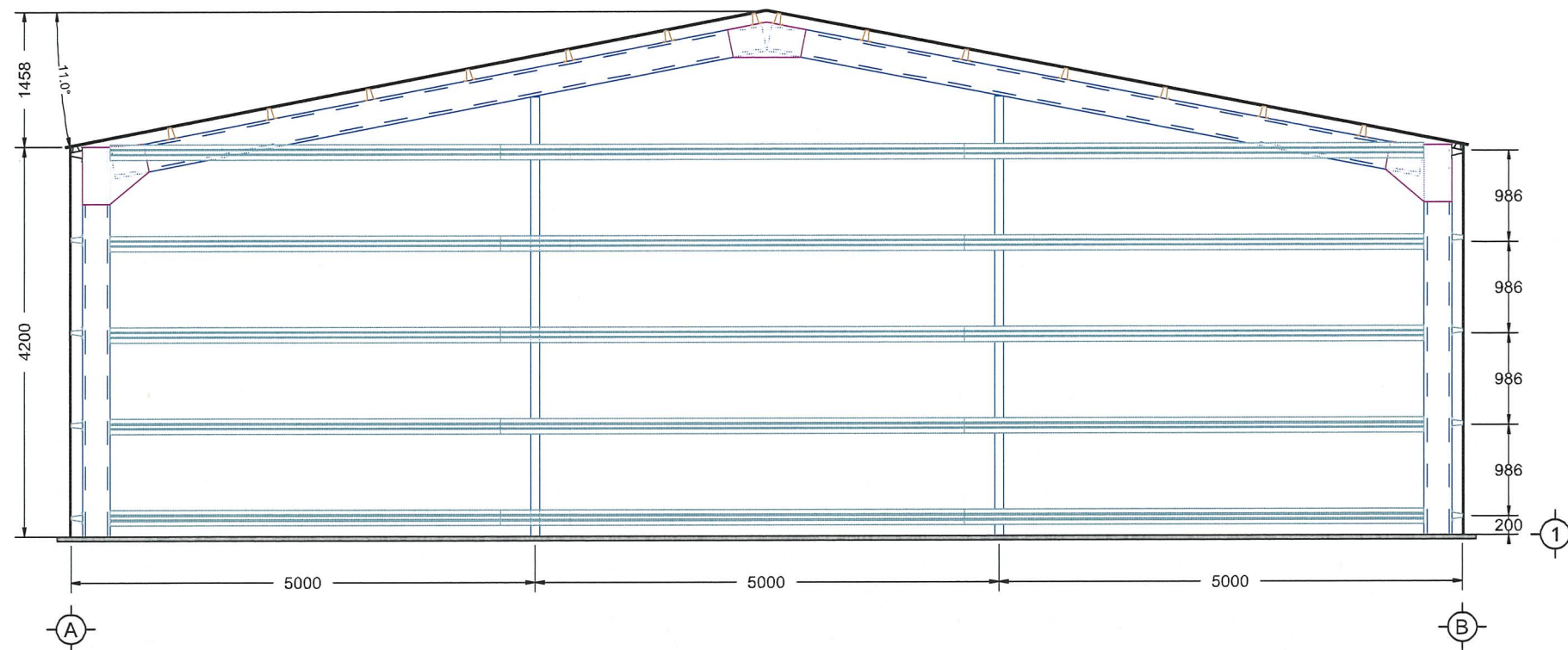


CIVIL & STRUCTURAL ENGINEERS  
COMMERCIAL - INDUSTRIAL - RESIDENTIAL - FORENSIC - STEEL DETAILING  
**CAMILO PINEDA MORENO**  
Beng MIEAust RPEng  
RPEQ 15562 TBP EC41817 (VIC)  
Signature: Date: 30/06/18

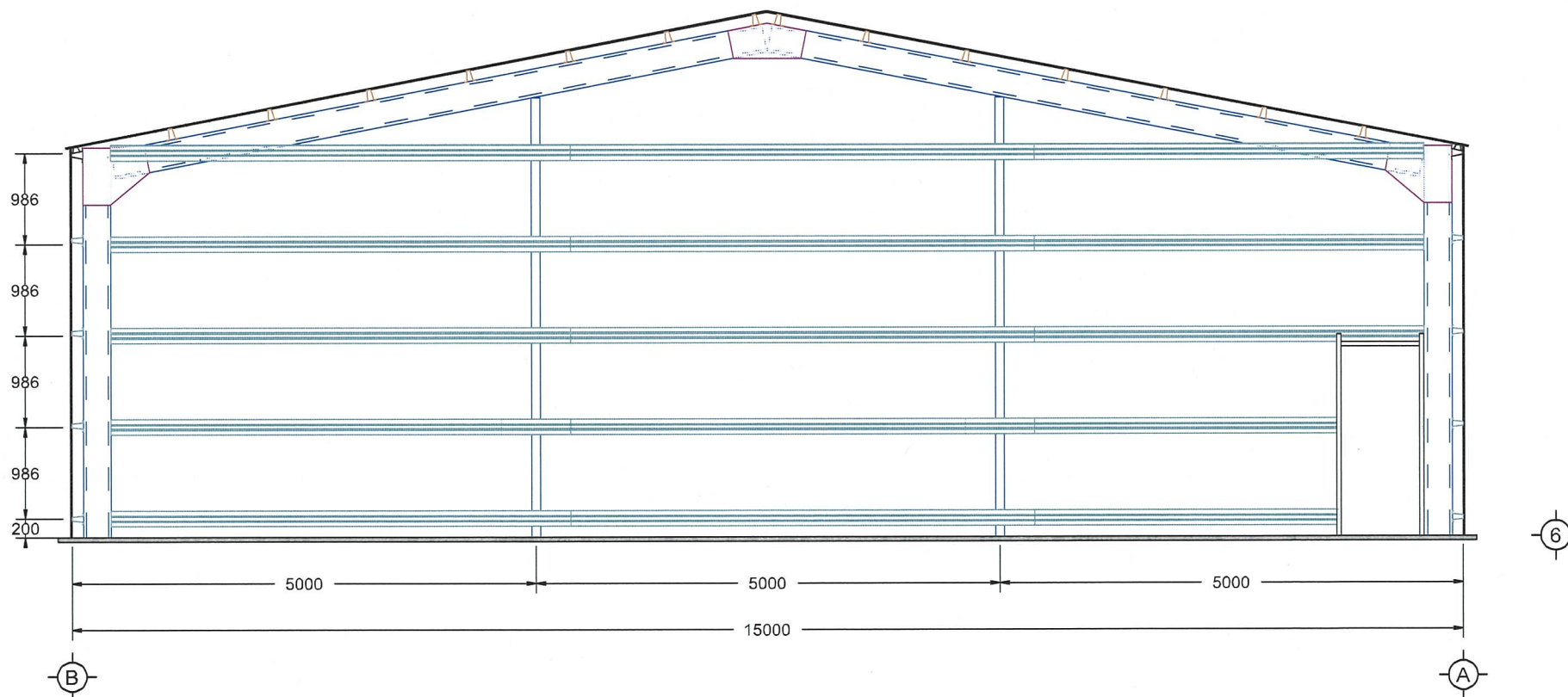
Customer Name: Christopher Farmer  
Site Address: 4004 Clarence Town Road, Brookfield

Drawing Title: Plan Elevations  
Scale: 1:137.311  
Date :25-06-2018  
Job Number: 407492  
Page: 3 of 9





FRONT ELEVATION

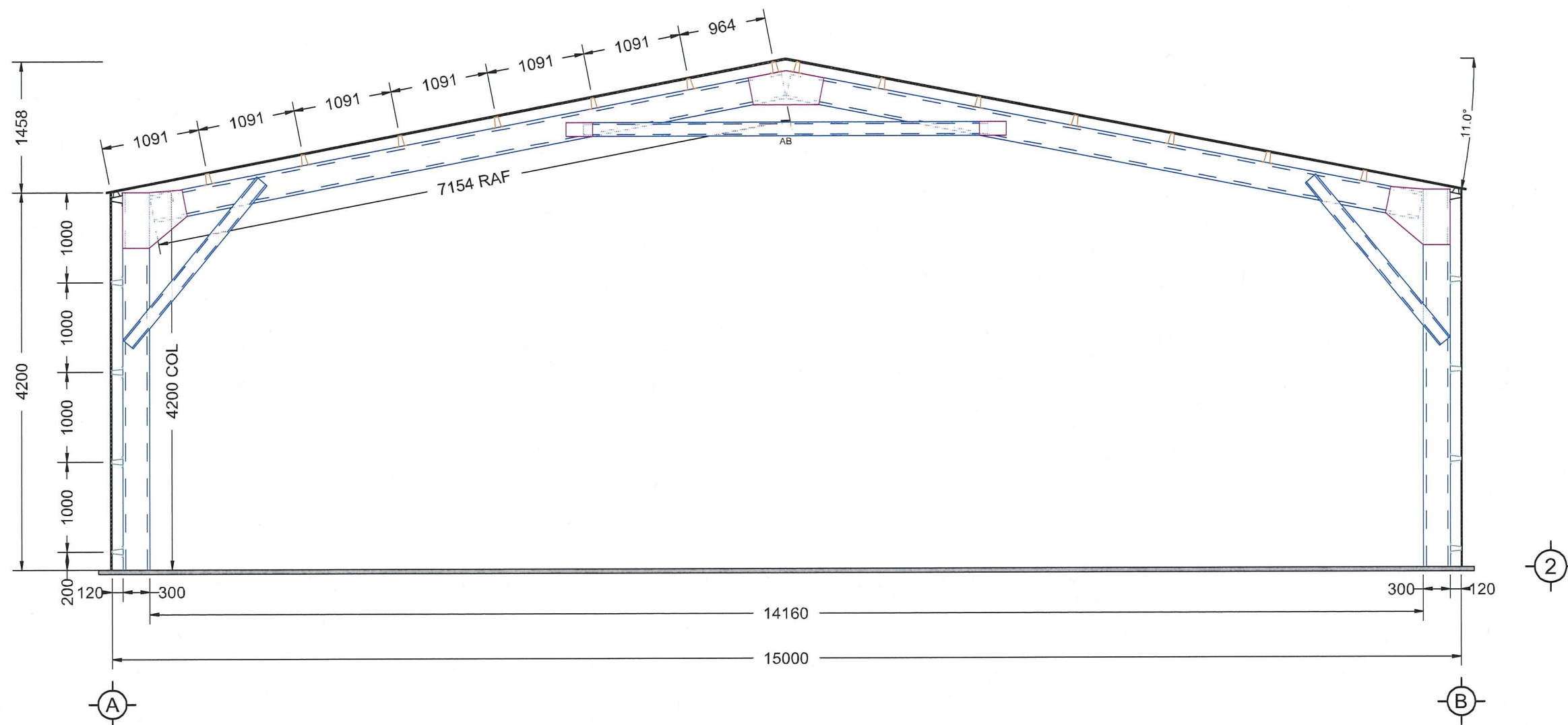


REAR ELEVATION



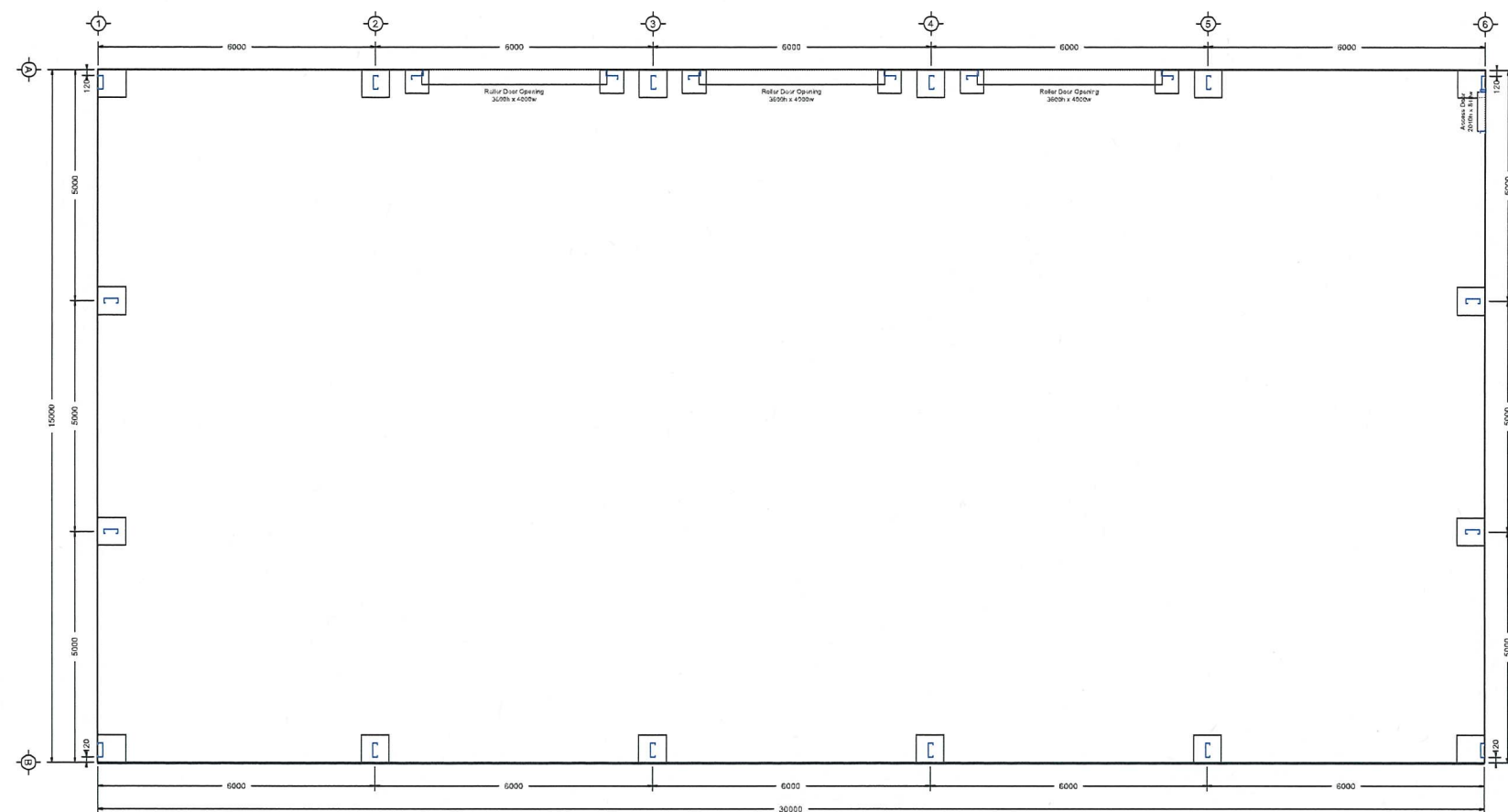






INTERMEDIATE ELEVATION

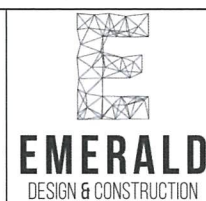




### FLOOR PLAN



151 Smeaton Grange Road,  
Smeaton Grange, NSW, 2567  
Phone: 02 4648 7777  
Fax: 02 4648 7700  
Email: [sales@bestsheds.com.au](mailto:sales@bestsheds.com.au)



**CIVIL & STRUCTURAL ENGINEERS**  
COMMERCIAL - INDUSTRIAL - RESIDENTIAL - FORENSIC - STEEL DETAILING  
**CAMILO PINEDA MORENO**  
Beng MIEAust RPeng  
RPEQ 15562 TBP EC41817 (VIC)

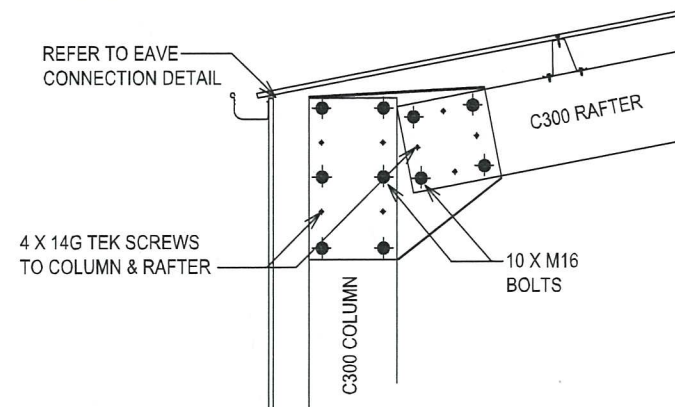
Signature:

Date: 30/06/18

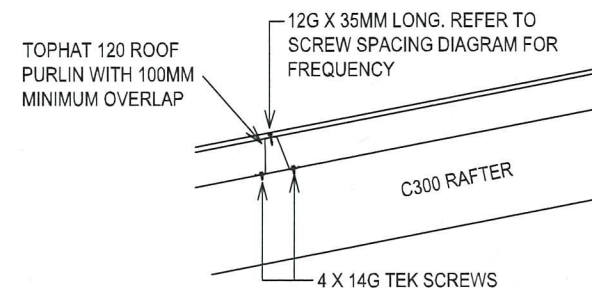
Customer Name: Christopher Farmer  
Site Address: 4004 Clarence Town Road, Brookfield

Drawing Title: Floor Plan  
Scale: 1:201.002  
Date :25-06-2018  
Job Number: 407492  
Page: 7 of 9

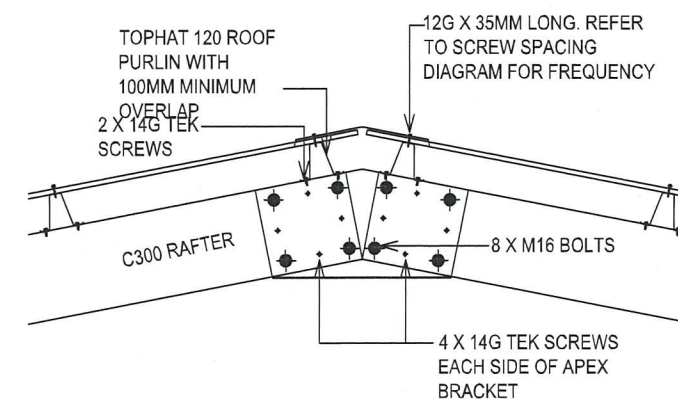




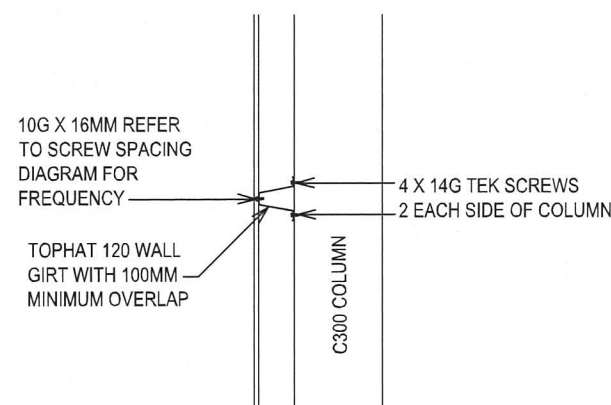
3 COLUMN AND EAVE DETAIL



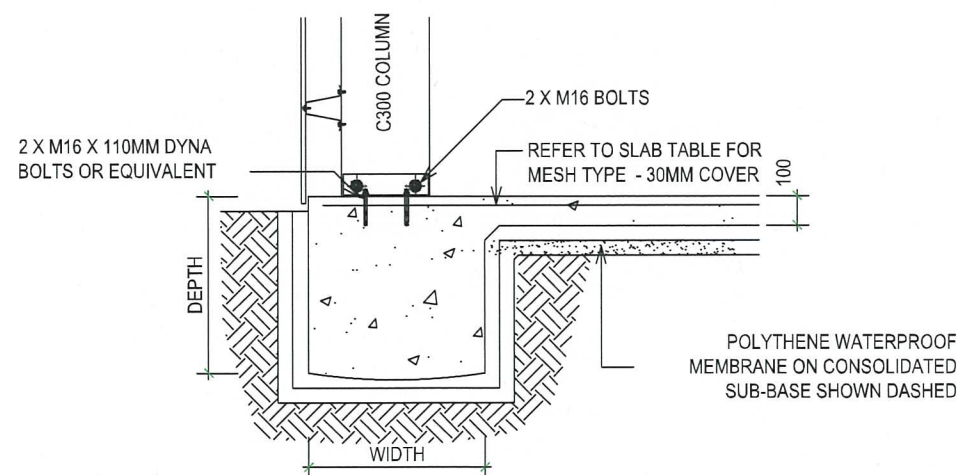
4 ROOF PURLIN DETAIL



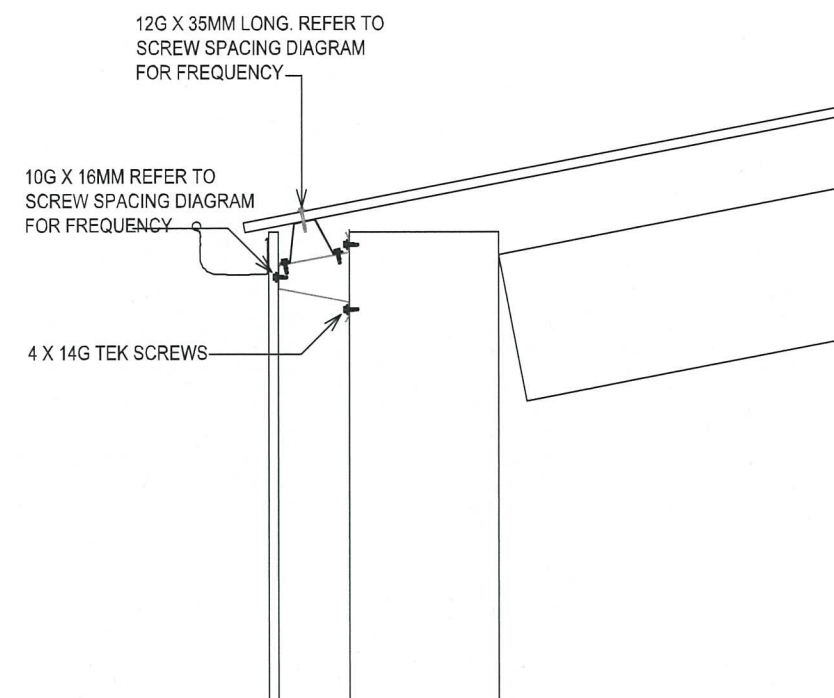
5 APEX DETAIL



2 WALL GIRT DETAIL

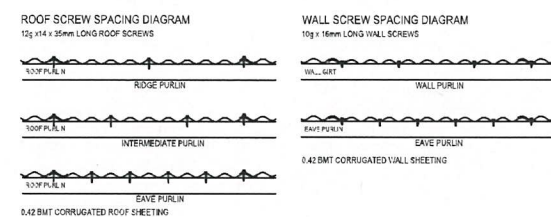
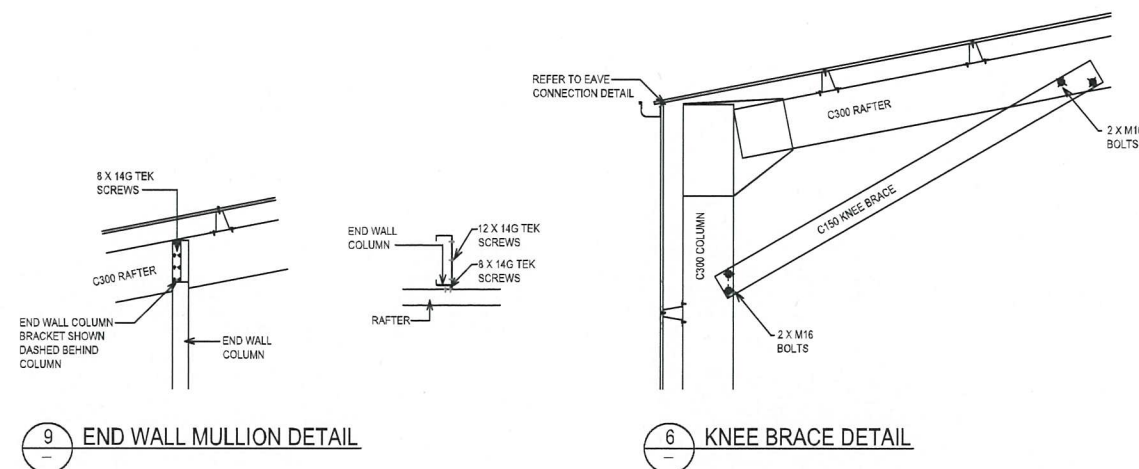


1 CONCRETE SLAB AND FOOTING DETAIL



10 EAVE CONNECTION DETAIL





**CLADDING FIXING DETAILS**

