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HOME OF **GANG-NAIL®** BUILDING SYSTEMS

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## DESIGN INFORMATION - FARM BUILDING

### LT30380

#### LOADS and TIMBER

- Poles, Outer Zone Density Normal 350 kg/m<sup>3</sup> fb= 38MPa, Pole taper 6mm per 1.0m length.
- Purlins and girts - Radiata Pine or Douglas Fir - Rough Sawn VSG8 / MSG8
- Rafters - Radiata Pine or Douglas Fir - Rough Sawn VSG8 / MSG8
- Moisture content can be green. Our recommendation is 20% or less at time of installation.

#### DESIGN LOADS

- Dead loads for Light Roof - 0.25kPa (includes weight of purlins, associated framing and galvanized iron roof).
- Live loads - 1.1kN concentrated load, 0.25kPa uniform load.
- The enclosed charts have been designed for a Building Importance level 1, with 50 years working life. Refer to AS/NZS 1170.0:2002.
- Wind loads - building designed for a modified High Wind
- Snow Loads - building designed for sg= 0.9 kPa
- E/Quake Zone - 1
- (The Snow Load has been calculated specifically for the job site shown on our documentation)
- Soil conditions - ALL foundations to be into natural ground with a minimum bearing capacity of 300 kPa, Øb=0.5

#### DESIGN LOAD REFERENCES

Compliance Document for the New Zealand Building Code Clause B1 Structure Amendment 8	
NZS3603:1993 Amendment 4	Cited Verification Method - B1 / VM1 - Timber Structures Standard
NZS 3604 Amendment 2	Cited Acceptable Solution - B1 / AS1 - Timber Framed Buildings
AS/NZS 1170 Part 0: 2002	Cited Verification Method - B1 / VM1 - Structural Design Actions
AS/NZS 1170 Part 1: 2002	Cited Verification Method - B1 / VM1 - Structural Design Actions
AS/NZS 1170 Part 2: 2002	Cited Verification Method - B1 / VM1 - Structural Design Actions
AS/NZS 1170 Part 3: 2003	Cited Verification Method - B1 / VM1 - Structural Design Actions
ANSI/TPI1 - 2002	Alternative Solution - Metal Plate for Wood Connections
Rutledge Method	Alternative Solution - Footing Design for Cantilever Poles

#### BUILDING ERECTION

Proper bracing must be installed to hold the components true and plumb and in a safe condition until permanent bracing is fixed. All permanent bracing and fixings must be installed before applying any loads.

#### LOAD DETAILS

These drawings have been prepared using the above design loads.

It is the responsibility of the user to ensure that the design data and loads are still correct at the time of construction.

## PRODUCT SPECIFICATION

These details have been designed using specific **GANG-NAIL®**, **LUMBERLOK®** and **BOWMAC®** products and the performance of the building and validity of the Producer Statement is reliant on the correct choice of product.

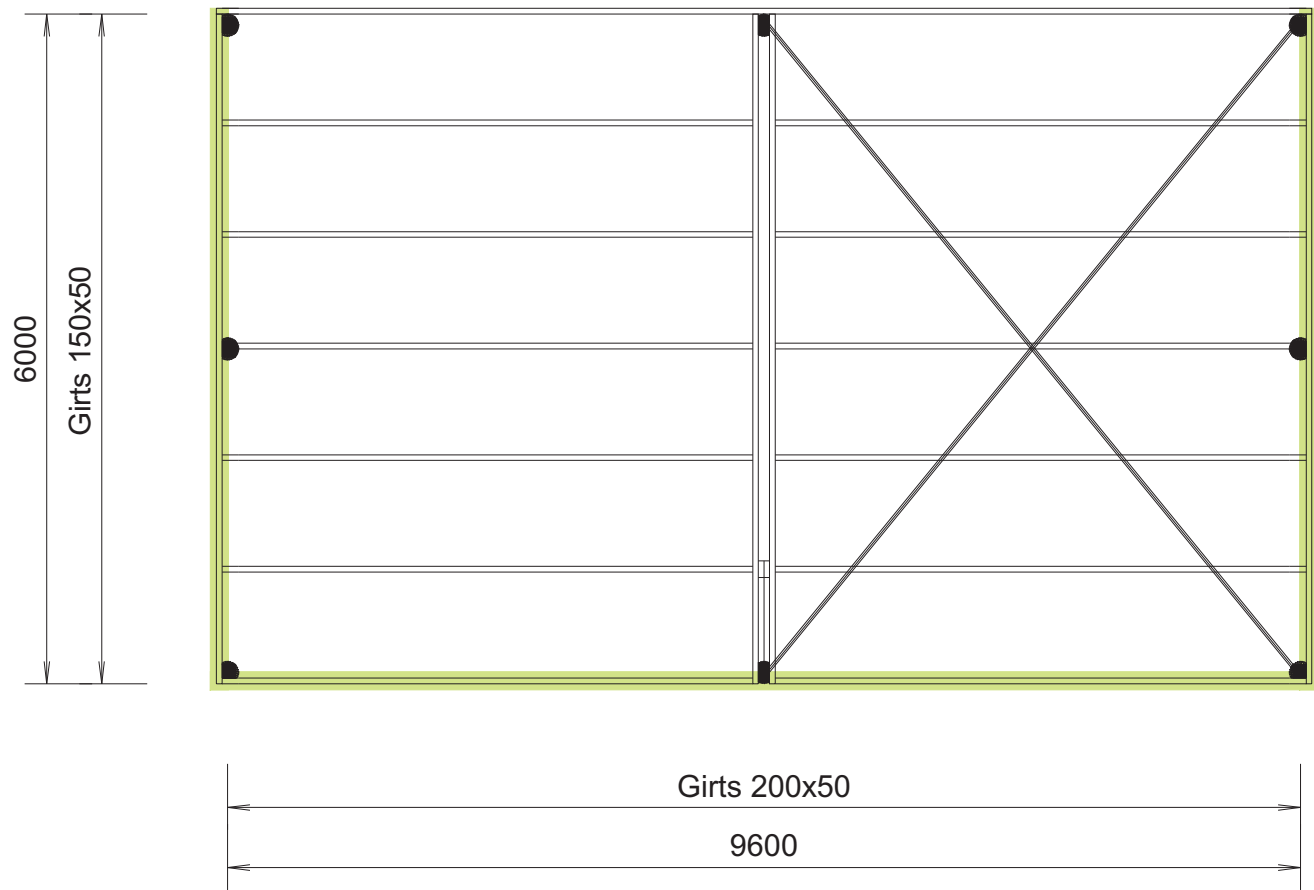
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**GANG-NAIL®**

**LUMBERLOK®**

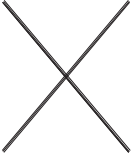
**BOWMAC®**





Pitch = 5.71 deg. by others.

**Regarding any future alterations to this shed:**  
 If at any time the cladding (internal or external) needs to be removed from a wall along a rafter, rafter props must be added.  
 If this is the case please contact MiTek Farm Buildings for further information.

 = CLAD WALLS

 Single row of tensioned Multibrace laid over purlins. Fix at each end with 11x30x3.15 nails and 3 at each purlin crossing.

 POLE     COLUMN

Wind Load: High	Girt Size: AS ABOVE	Pole Size: 175mm SED	Max. Pole Height: 3600mm
Sg = 0.9 kPa	Girt Centres: 1100mm	Pole Embedment Depth: 1200mm	Lower Pole Height: 3000mm
Earthquake Zone: 1	Purlin Size: 200 x 50mm	Column Type: Round Pole	Floor Type: Earth
Rafter Span: 6000mm	Purlin Centres: 1000mm	Int. Pole Size: 150mm	Rough Sawn VSG8 / MSG8
Pole/Bay Spacing: 4800mm	Rafter Size: 300 x 50mm	Props Required: 1 per span	

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Job Name: promo  
 Job Site: promo

Client Name: Thomsons ITM  
 Client Reference Number: promo

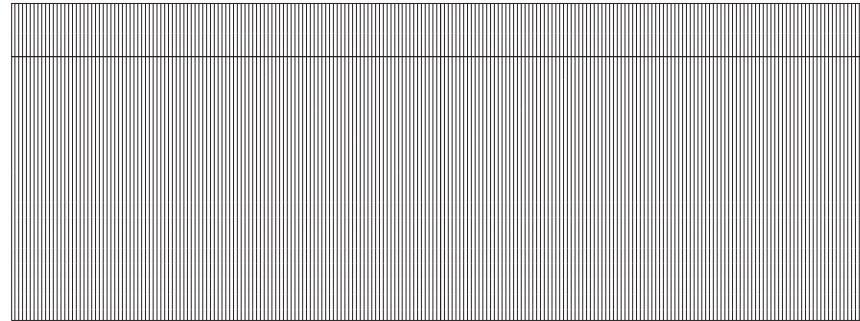
**PLAN**

Detailed by: C Richards  
 Checked by:

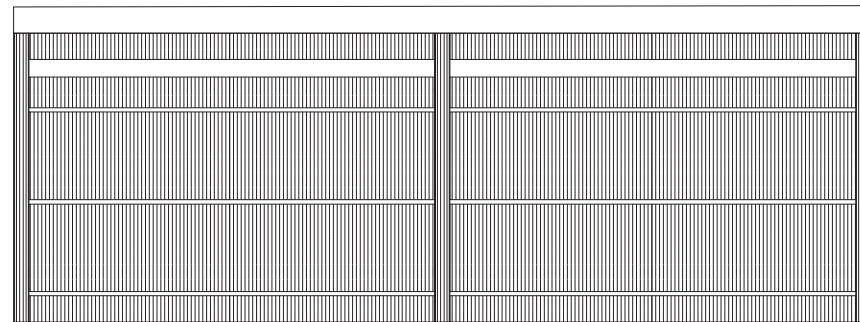
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Job Number: LT30380  
 Sheet Number: 1

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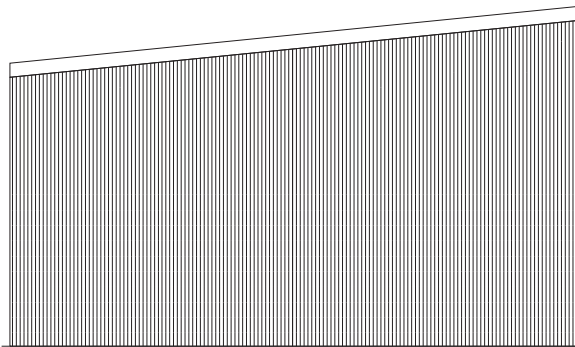


REAR ELEVATION

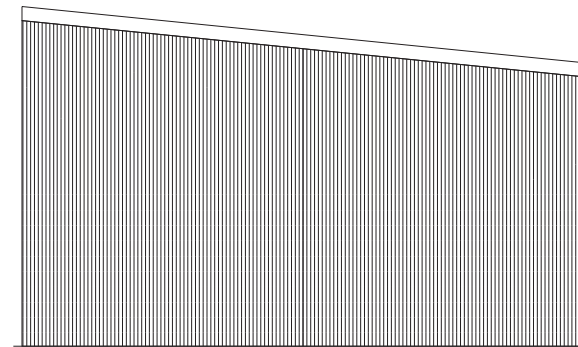


FRONT ELEVATION

N.B. This design does not include any design or detail of flashing requirements.



LEFT END ELEVATION



RIGHT END ELEVATION

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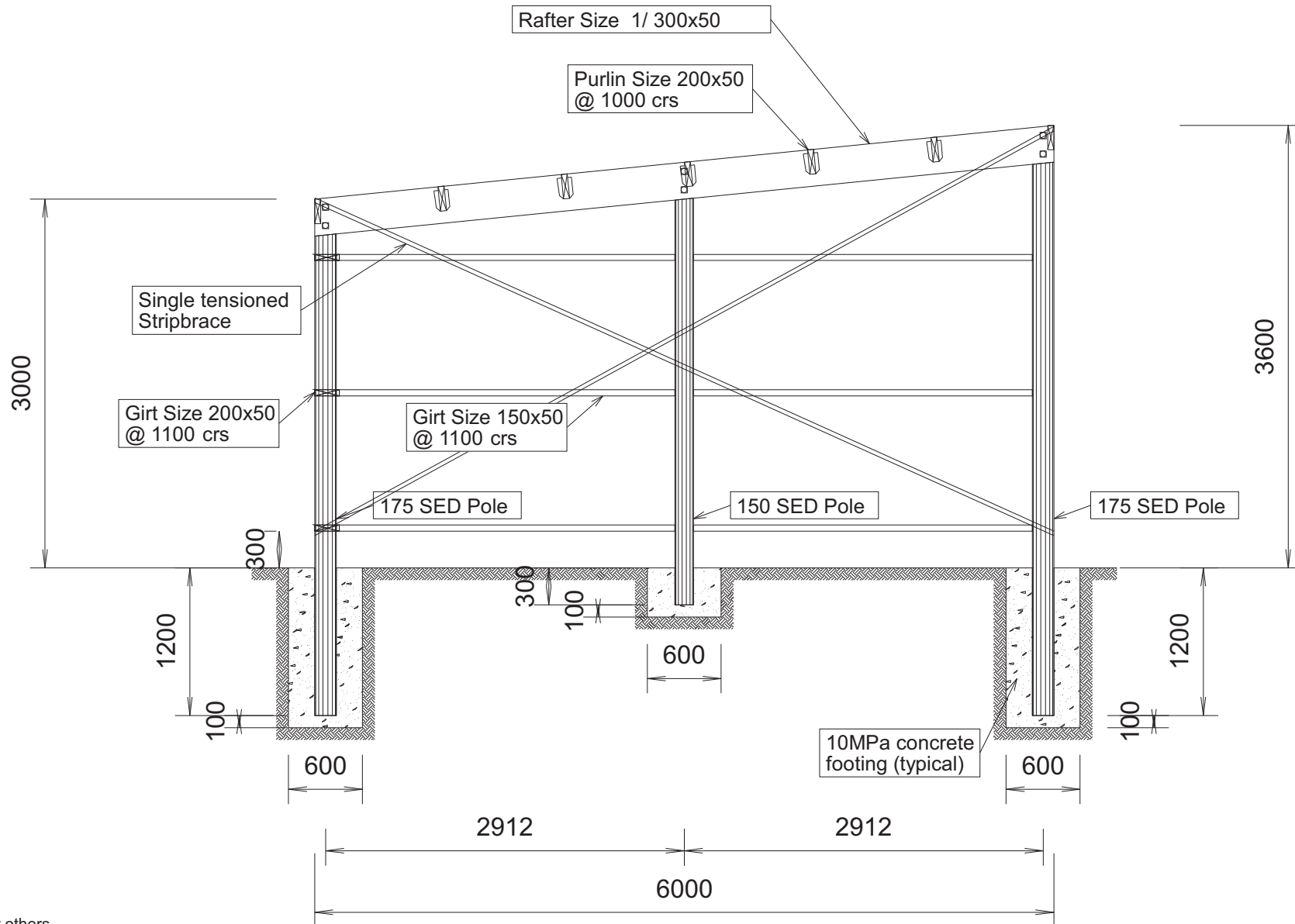
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Note: Girt pattern may vary, as long as spacings do not exceed 1100.



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**END ELEVATION**

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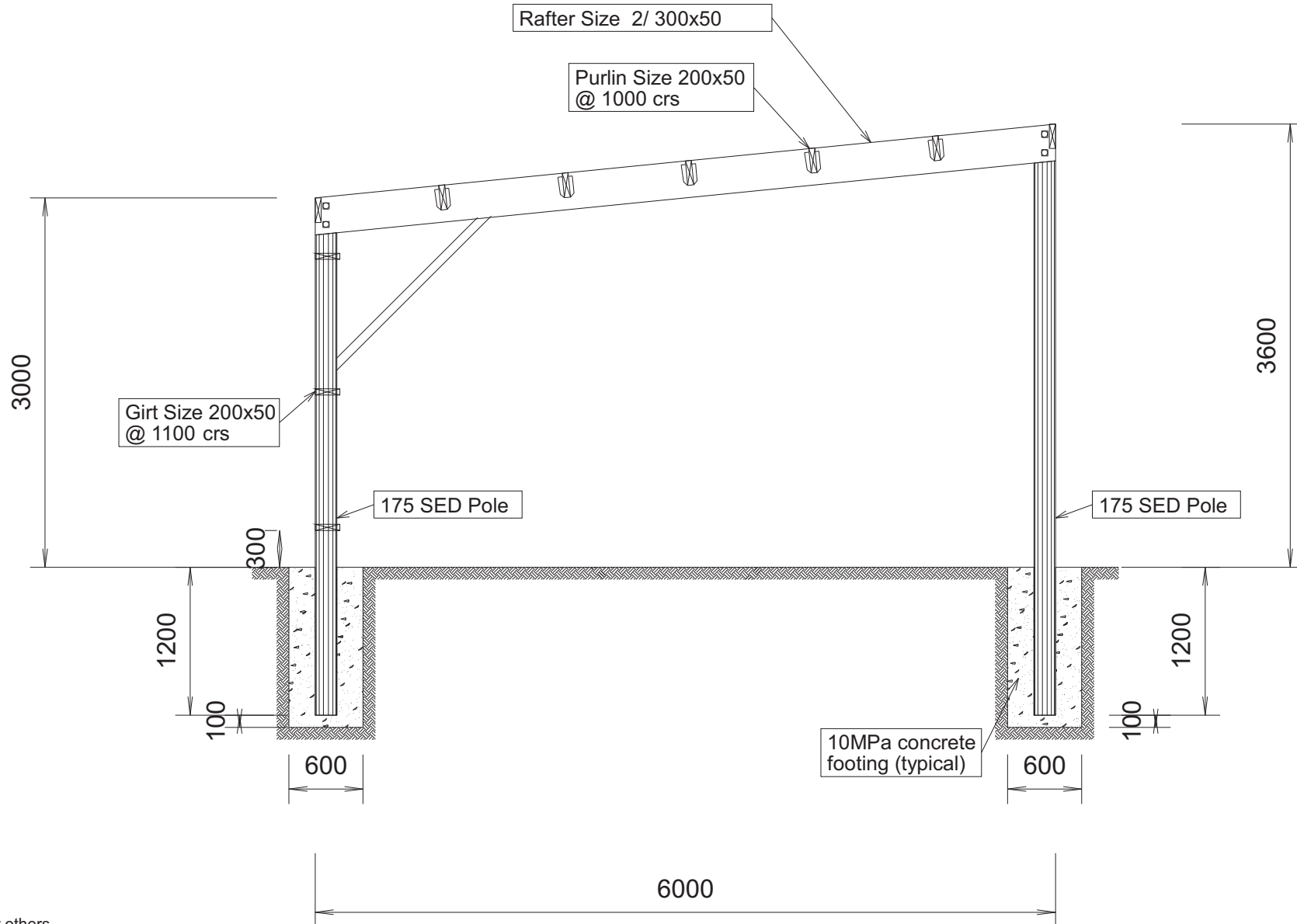
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**CENTRE SECTION**

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C Richards

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