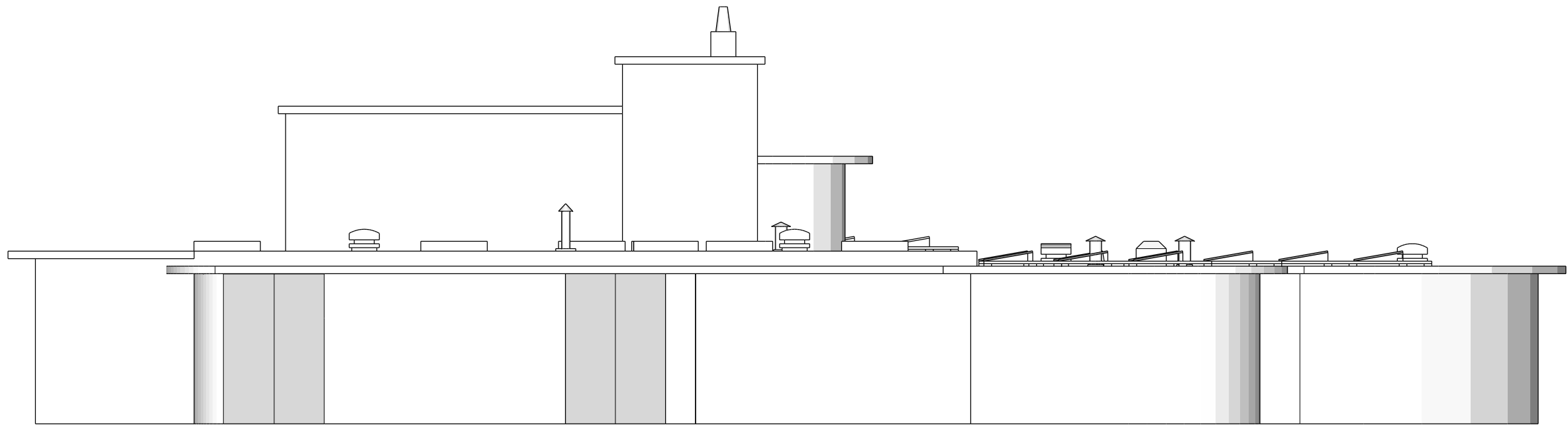


Argyll and Bute Council  
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20/00179/PP

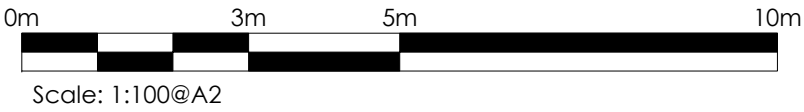
*Fergus Murray*  
Head of Development and Economic Growth  
1 October 2020

Existing SE Elevation (Right)



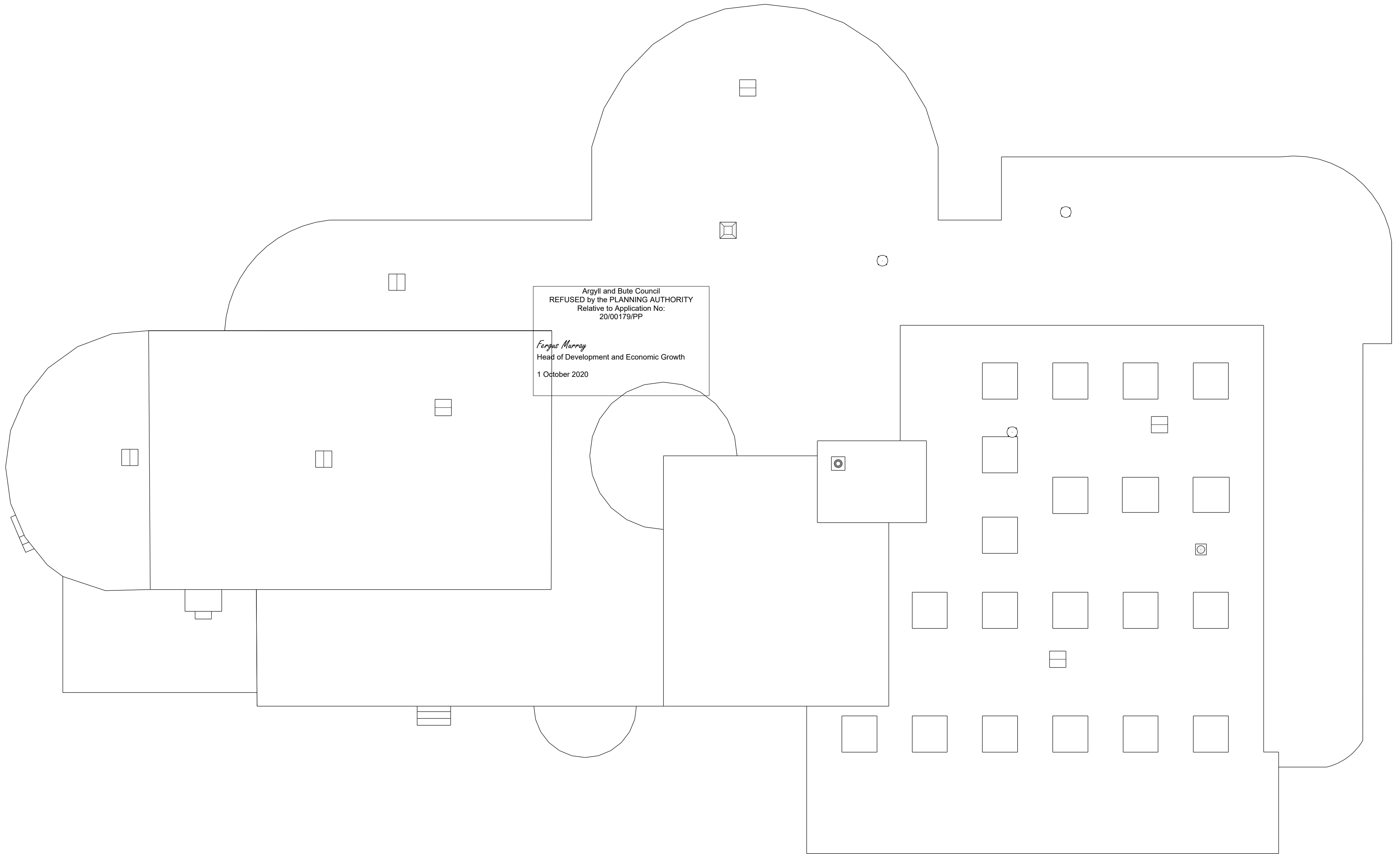
Proposed SE Elevation (Right

Notes:  
Do not scale from this drawing.  
All dimensions to be checked on site.



DATE	21/04/2020	DRAWN BY	LL	REVISION	001	SCALE	1: 100 @ A2	PAGE	4 OF 6
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PLANNING REFERENCE	20/00179/PP
CLIENT	Cardross Golf Club
TITLE	Existing and Proposed Elevations



Existing Roof Plan

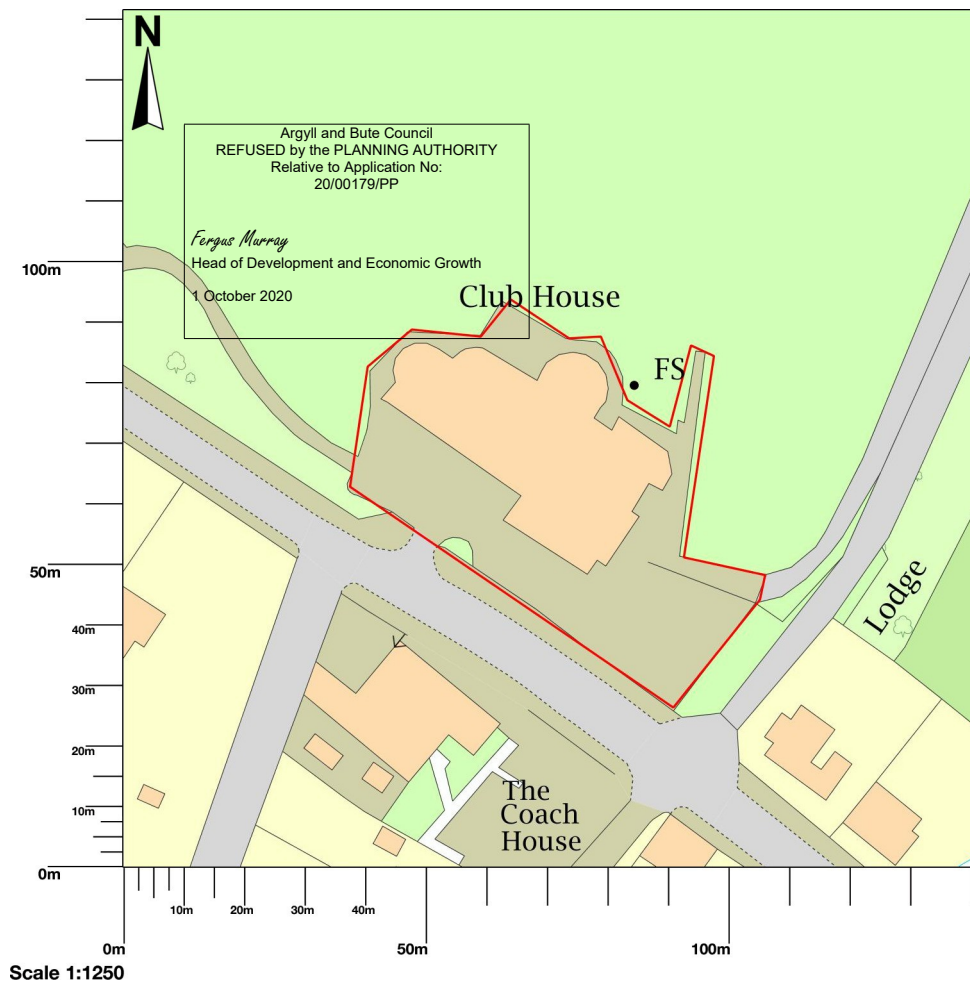


Notes:  
Do not scale from this drawing.  
All dimensions to be checked on site.

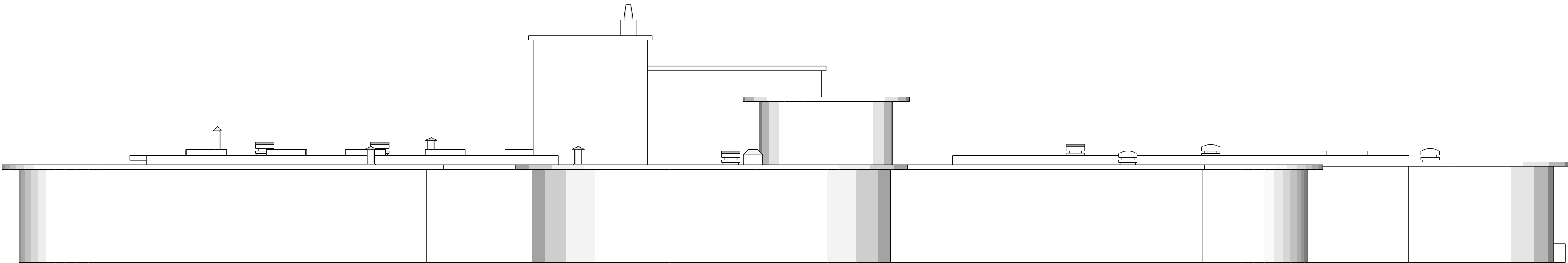
DATE	21/04/2020	DRAWN BY	LL	REVISION	001	SCALE	1: 100 @ A2	PAGE	5 OF 6
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PLANNING REFERENCE	20/00179/PP
CLIENT	Cardross Golf Club
TITLE	Existing Roof Plan

## Cardross Golf Club, Main Road, Cardross, Dumbarton, G82 5LB



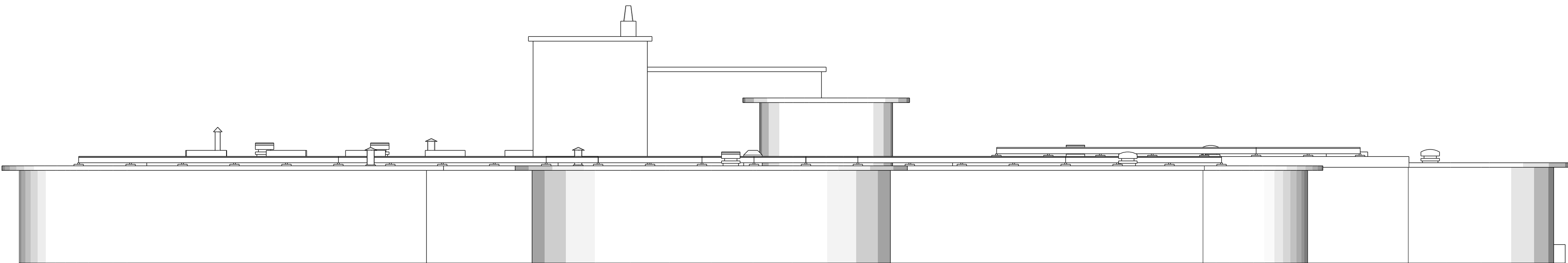
Map area bounded by: 234701,677371 234843,677513. Produced on 05 May 2020 from the OS National Geographic Database. Reproduction in whole or part is prohibited without the prior permission of Ordnance Survey. © Crown copyright 2020. Supplied by UKPlanningMaps.com a licensed OS partner (100054135). Unique plan reference: p2buk/453330/614646



Existing NE Elevation (Rear)

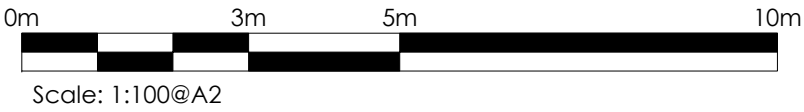
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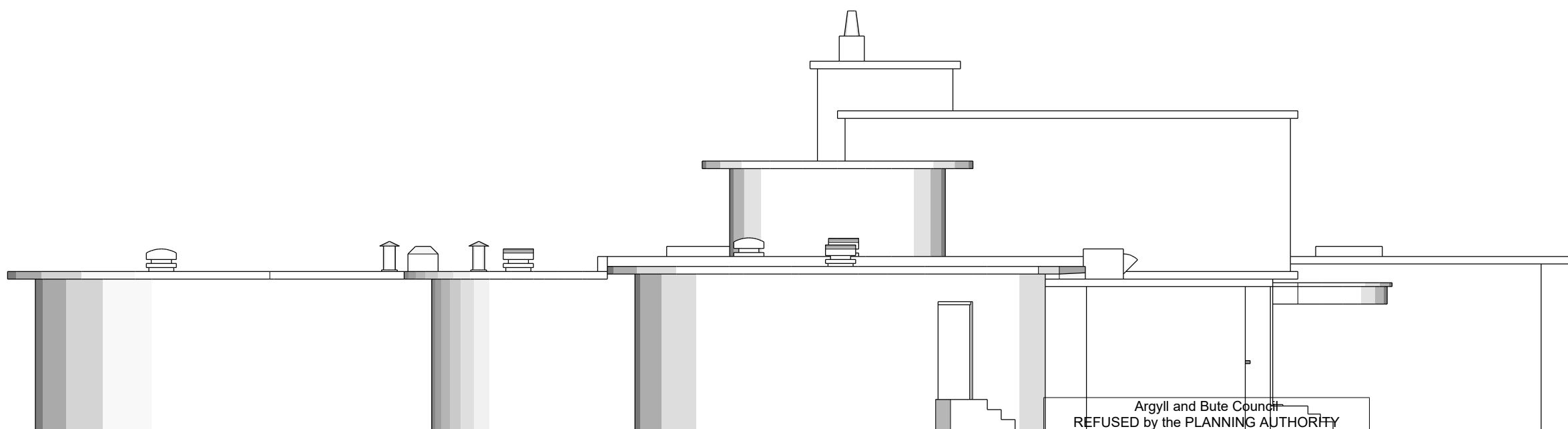
Proposed NE Elevation (Rear)

Notes:  
Do not scale from this drawing.  
All dimensions to be checked on site.



DATE	21/04/2020	DRAWN BY	LL	REVISION	001	SCALE	1: 100 @ A2	PAGE	3 OF 6
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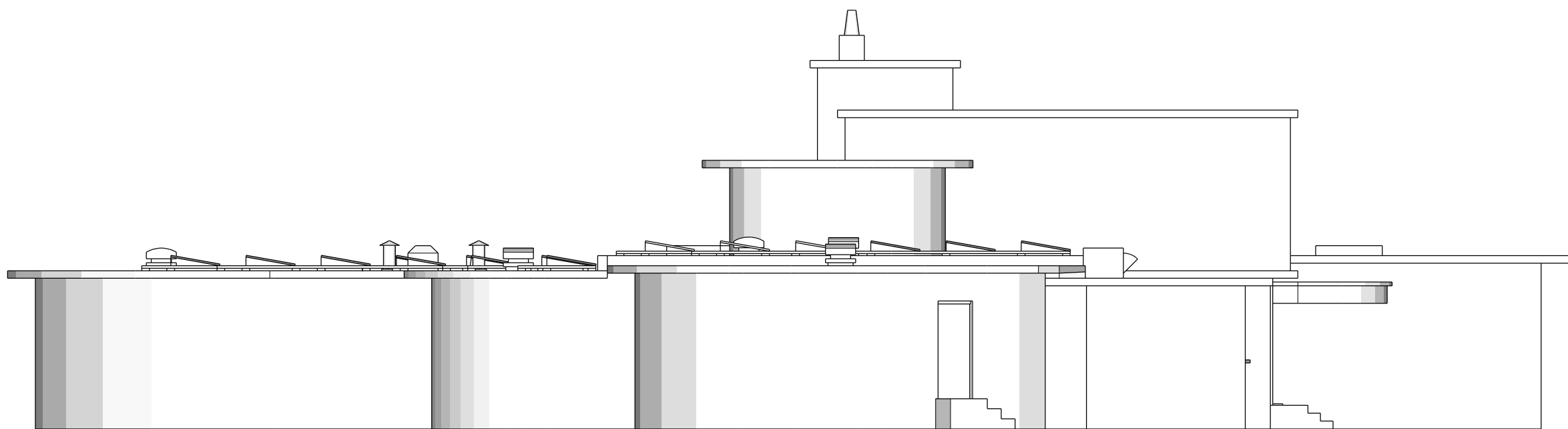
PLANNING REFERENCE	20/00179/PP
CLIENT	Cardross Golf Club
TITLE	Existing and Proposed Elevations



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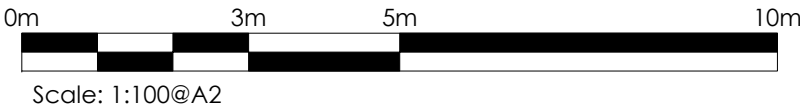
*Fergus Murray*  
Head of Development and Economic Growth  
1 October 2020

Existing NW Elevation (Left)



Proposed NW Elevation (Left)

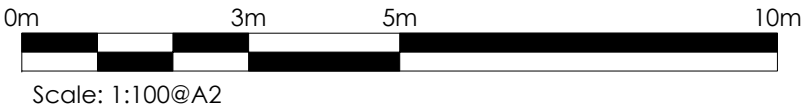
Notes:  
Do not scale from this drawing.  
All dimensions to be checked on site.



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20/00179/PP				
CLIENT				
Cardross Golf Club				
TITLE				
Existing and Proposed Elevations				
DATE	DRAWN BY	REVISION	SCALE	PAGE
21/04/2020	LL	001	1: 100 @ A2	2 OF 6



Proposed Roof Plan



Notes:  
Do not scale from this drawing.  
All dimensions to be checked on site.

DATE	21/04/2020	DRAWN BY	LL	REVISION	001	SCALE	1: 100 @ A2	PAGE	6 OF 6
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PLANNING REFERENCE	20/00179/PP
CLIENT	Cardross Golf Club
TITLE	Proposed Roof Plan

THE

Honey

FRAMED 60 LAYOUT MODULE

**60 LAYOUT**  
MULTICRYSTALLINE**285-300W**  
POWER OUTPUT RANGE**17.6%**  
MAXIMUM EFFICIENCY**0~+5W**  
POSITIVE POWER TOLARANCE

Founded in 1997, Trina Solar is the world's leading total solutions provider for solar energy. With local presence around the globe, Trina Solar is able to provide exceptional service to each customer in each market and deliver our innovative, reliable products with the backing of Trina as a strong, bankable brand. Trina Solar now distributes its PV products to over 100 countries all over the world. We are committed to building strategic, mutually beneficial collaborations with installers, developers, distributors and other partners in driving smart energy together.

**Comprehensive Products And System Certificates**

IEC61215/IEC61730/UL1703/IEC61701/IEC62716  
ISO 9001: Quality Management System  
ISO 14001: Environmental Management System  
ISO14064: Greenhouse gases Emissions Verification  
OHSAS 18001: Occupation Health and Safety Management System



## PRODUCTS

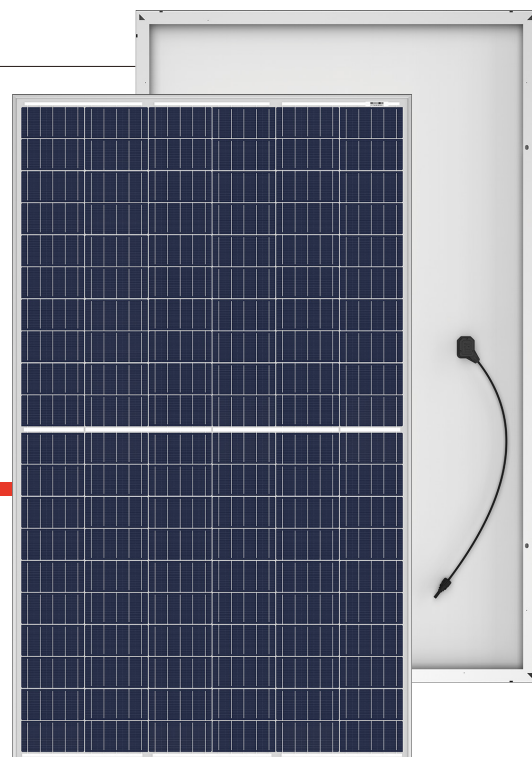
TSM-PE06H

## POWER RANGE

285-300W

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Relative to Application No:  
20/00179/PP

*Fergus Murray*  
Head of Development and Economic Growth  
1 October 2020

**Ideal for large scale installations**

- Reduce BOS cost with higher power bin and 1500V system voltage

**Half-cell design brings higher efficiency**

- Low thermal coefficients for greater energy production at high operating temperature
- Low cell connection power loss due to half-cell layout (120 multicrystalline)

**Highly reliable due to stringent quality control**

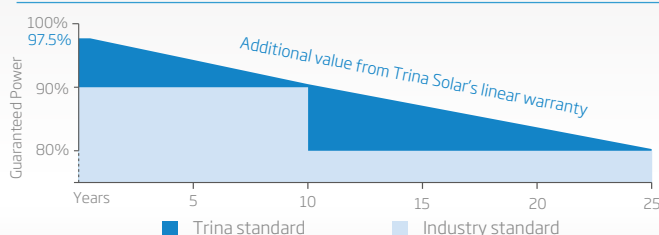
- Over 30 in-house tests (UV, TC, HF etc)
- Internal test requirement of Trina more stringent than certification authority
- PID resistant
- 100% EL double inspection

**Certified to withstand the most challenging environmental conditions**

- 2400 Pa negative load
- 5400 Pa positive load
- \* 2400/5400 is the measured load, and the safety factor is 1.5 times

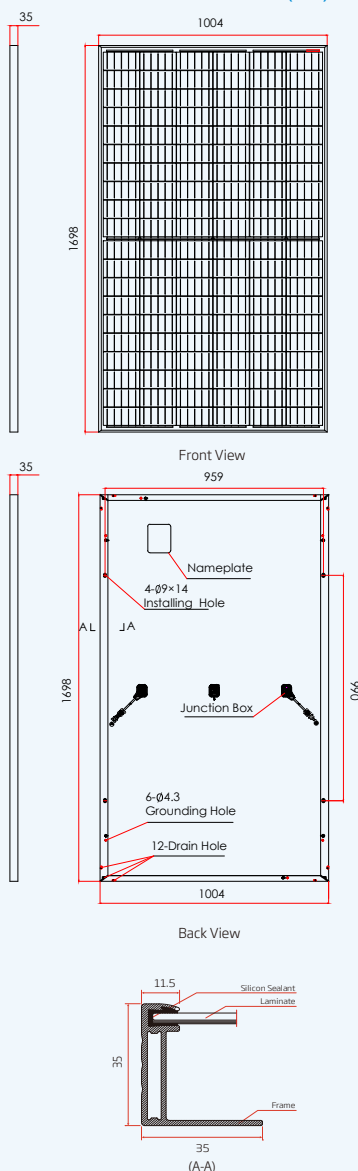
**LINEAR PERFORMANCE WARRANTY**

10 Year Product Warranty • 25 Year Linear Power Warranty

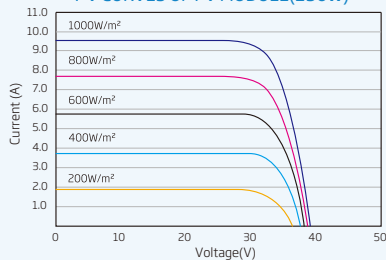




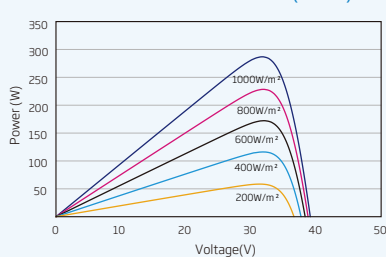
### DIMENSIONS OF PV MODULE(mm)



### I-V CURVES OF PV MODULE(290W)



### P-V CURVES OF PV MODULE(290W)



### ELECTRICAL DATA (STC)

Peak Power Watts-PMAX (Wp) *	285	290	295	300
Power Output Tolerance-PMAX (W)	0 ~ +5			
Maximum Power Voltage-VMPP (V)	31.5	31.8	32.1	32.3
Maximum Power Current-IMPP (A)	9.05	9.12	9.19	9.29
Open Circuit Voltage-VOC (V)	38.8	39.2	39.5	39.8
Short Circuit Current-ISC (A)	9.53	9.60	9.67	9.77
Module Efficiency $\eta_m$ (%)	16.7	17.0	17.3	17.6

STC: Irradiance 1000W/m², Cell Temperature 25°C, Air Mass AM1.5.  
\*Measuring tolerance: ±3%.

### ELECTRICAL DATA (NMOT)

Maximum Power-PMAX (Wp)	216	219	223	227
Maximum Power Voltage-VMPP (V)	29.8	30.1	30.4	30.6
Maximum Power Current-IMPP (A)	7.24	7.29	7.35	7.42
Open Circuit Voltage-VOC (V)	36.5	36.9	37.2	37.4
Short Circuit Current-ISC (A)	7.69	7.74	7.80	7.88

NMOT: Irradiance at 800W/m², Ambient Temperature 20°C, Wind Speed 1m/s.

### MECHANICAL DATA

Solar Cells	Multicrystalline
Cell Orientation	120 cells (6 × 20)
Module Dimensions	1698 × 1004 × 35 mm (66.85 × 39.53 × 1.38 inches)
Weight	18.7kg (41.2 lb)
Glass	3.2 mm (0.13 inches), High Transmission, AR Coated Heat Strengthened Glass
Encapsulant Material	EVA
Backsheet	White
Frame	35 mm (1.38 inches) Anodized Aluminium Alloy
J-Box	IP 68 rated
Cables	Photovoltaic Technology Cable 4.0mm² (0.006 inches²), Portrait: N 140mm/P 285mm(5.51/11.22inches) Landscape: N 1200 mm / P 1200 mm (47.24/47.24 inches)
Connector	TS4 / MC4 EV02

### TEMPERATURE RATINGS

NMOT (Nominal Module Operating Temperature)	41°C (±3°C)
Temperature Coefficient of PMAX	- 0.38%/°C
Temperature Coefficient of VOC	- 0.31%/°C
Temperature Coefficient of ISC	0.05%/°C

(DO NOT connect Fuse in Combiner Box with two or more strings in parallel connection)

### WARRANTY

- 10 year Product Workmanship Warranty
- 25 year Linear Power Warranty

(Please refer to product warranty for details)

### MAXIMUM RATINGS

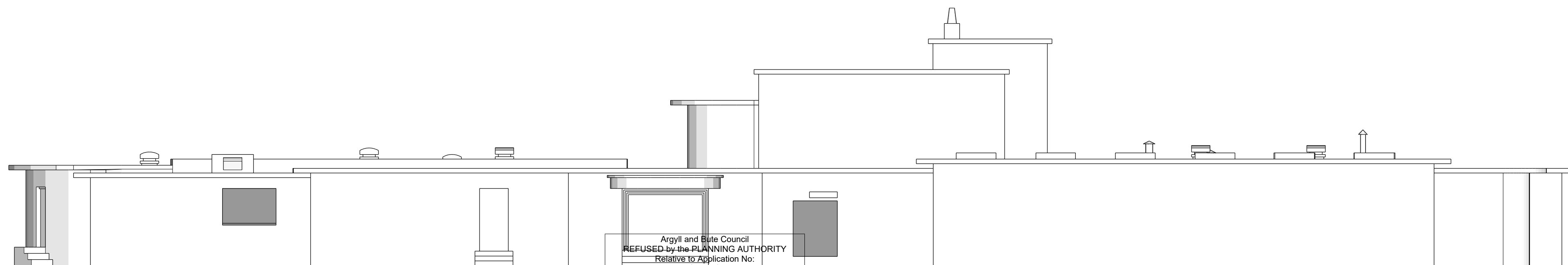
Operational Temperature	-40~+85°C
Maximum System Voltage	1500V DC (IEC) 1500V DC (UL)
Max Series Fuse Rating	20A

### PACKAGING CONFIGURATION

- Modules per box: 30 pieces
- Modules per 40' container: 720 pieces



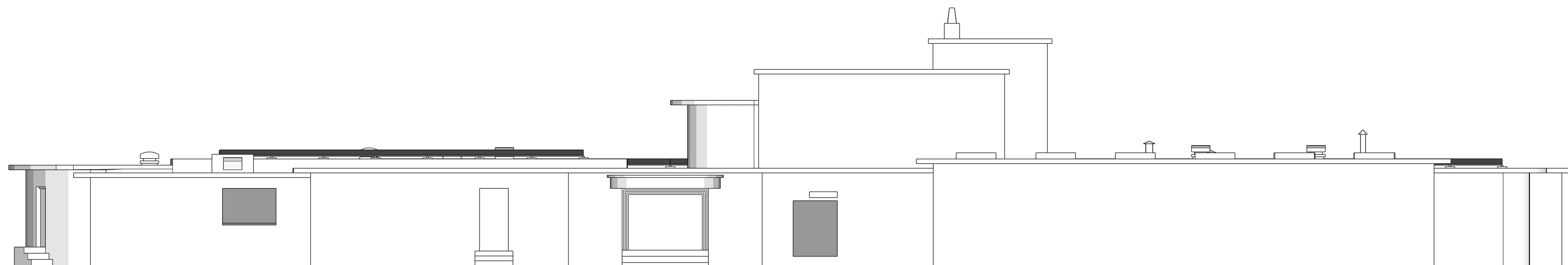




Argyll and Bute Council  
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Relative to Application No:  
20/00179/PP

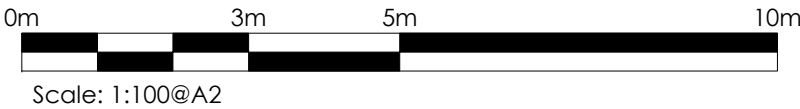
*Fergus Murray*  
Head of Development and Economic Growth  
1 October 2020

Existing SW Elevation (Front)



Proposed SW Elevation (Front)

Notes:  
Do not scale from this drawing.  
All dimensions to be checked on site.



PLANNING REFERENCE				
20/00179/PP				
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DATE	DRAWN BY	REVISION	SCALE	PAGE
21/04/2020	LL	001	1: 100 @ A2	1 OF 6

An aerial photograph of a large, light-colored building with a flat roof. The roof is partially covered with blue solar panels, arranged in several rows. The building has a central section with a series of square windows. The surrounding area includes a parking lot with several cars, a road, and green trees. A text box is overlaid on the solar panels.

Apex and Bala Council  
REFUSED by the PLANNING AUTHORITY  
Planning Application No.  
2000179/PP  
*Peter Henry*  
Head of Development and Economic Growth  
4 October 2020