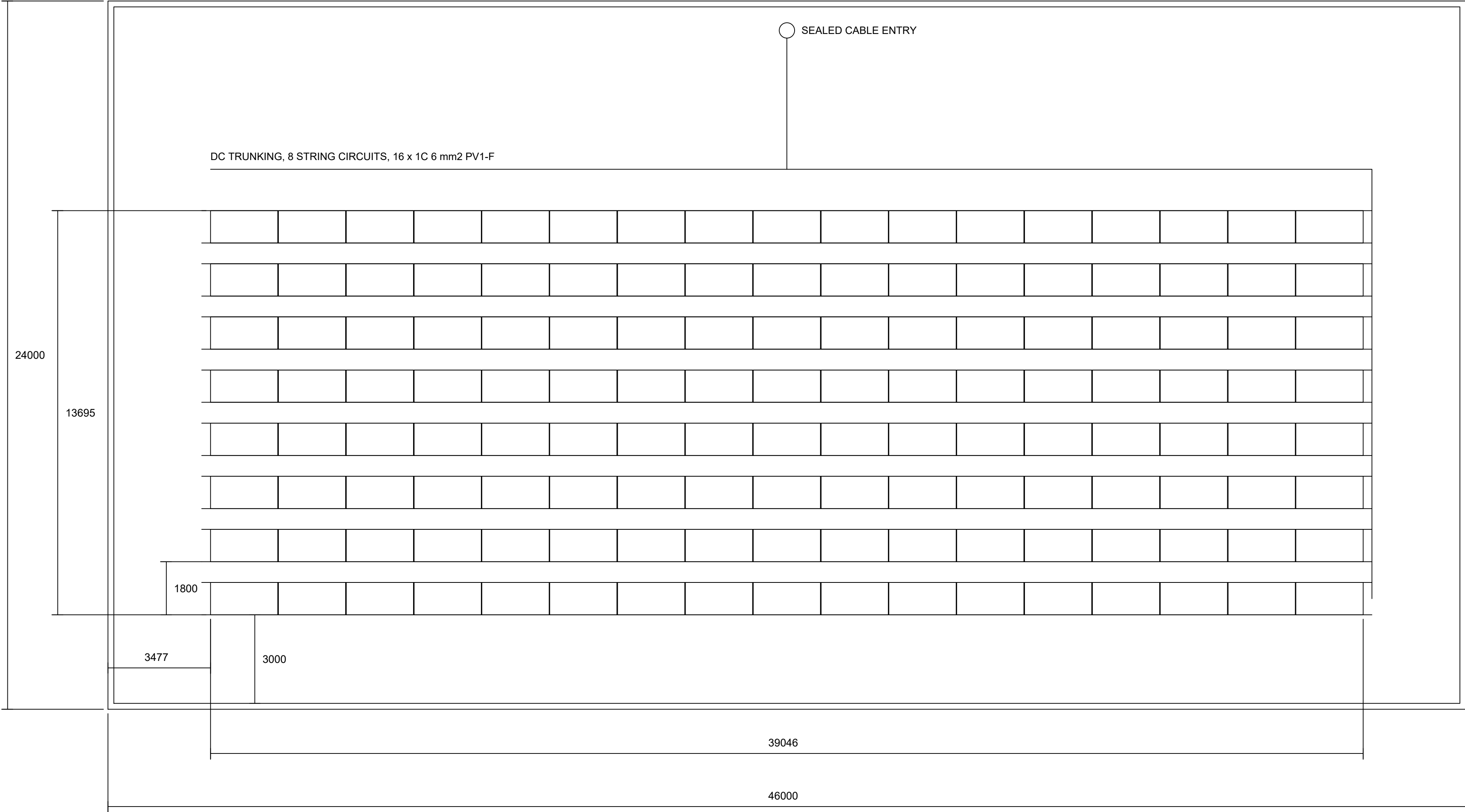


ROOF PLAN 136 No. MODULES, 78.88 kWp
8 ROWS OF 17, LANDSCAPE, 15 deg FIXED TILT, DUE SOUTH. SCALE 1:100



MECHANICAL NOTES

- ARRAY 136 No. JINKO JKM580N-72HL4-V, 2278 x 1134 x 30 mm, LANDSCAPE, 15 deg FIXED TILT, DUE SOUTH, IN 8 ROWS OF 17.
ONE ROW IS ONE STRING AND FEEDS ONE MPP TRACKER OF ITS OWN.
- ROW PITCH IS SET BY THE SHADING CASE, NOT BY A RULE OF THUMB.
ON 21 DECEMBER AT 09:00 THE SUN IS AT 18.6 deg ELEVATION AND 136.8 deg AZIMUTH. THE 294 mm BACK EDGE THEN CASTS A 635 mm SHADOW.
ON TOP OF THE 1095 mm PROJECTED MODULE DEPTH THAT GIVES 1731 mm MINIMUM, ROUNDED UP TO THE 1800 mm PITCH DRAWN.
- GROUND COVER RATIO 0.63. ARRAY FOOTPRINT 39046 x 13695 mm.
WHICH IS 534.7 m2 ON A 1104 m2 ROOF, SO THE ARRAY ENVELOPE TAKES 48.4 % OF IT.
- MOUNTING IS BALLASTED. NO ROOF PENETRATION FOR THE FRAME.
FRONT RAIL 300 mm AND REAR RAIL 594 mm ABOVE THE MEMBRANE.
- 3000 mm CLEAR TO THE SOUTH PARAPET AND A CLEAR WALKWAY ON THE NORTH SIDE FOR ACCESS AND FOR THE DC TRUNKING RUN.
- THE ONLY ROOF PENETRATION IS THE SEALED CABLE ENTRY SHOWN.
- BALLAST MASS, UPLIFT AND THE ADDED DEAD LOAD ON THE ROOF ARE TO BE CONFIRMED BY A SITE WIND LOAD AND STRUCTURAL ASSESSMENT BEFORE INSTALLATION. THE FIGURES ON THIS SHEET ARE DESIGN FIGURES.

STRING 8

STRING 7

STRING 6

STRING 5

STRING 4

STRING 3

STRING 2

STRING 1

EQUIPMENT SCHEDULE

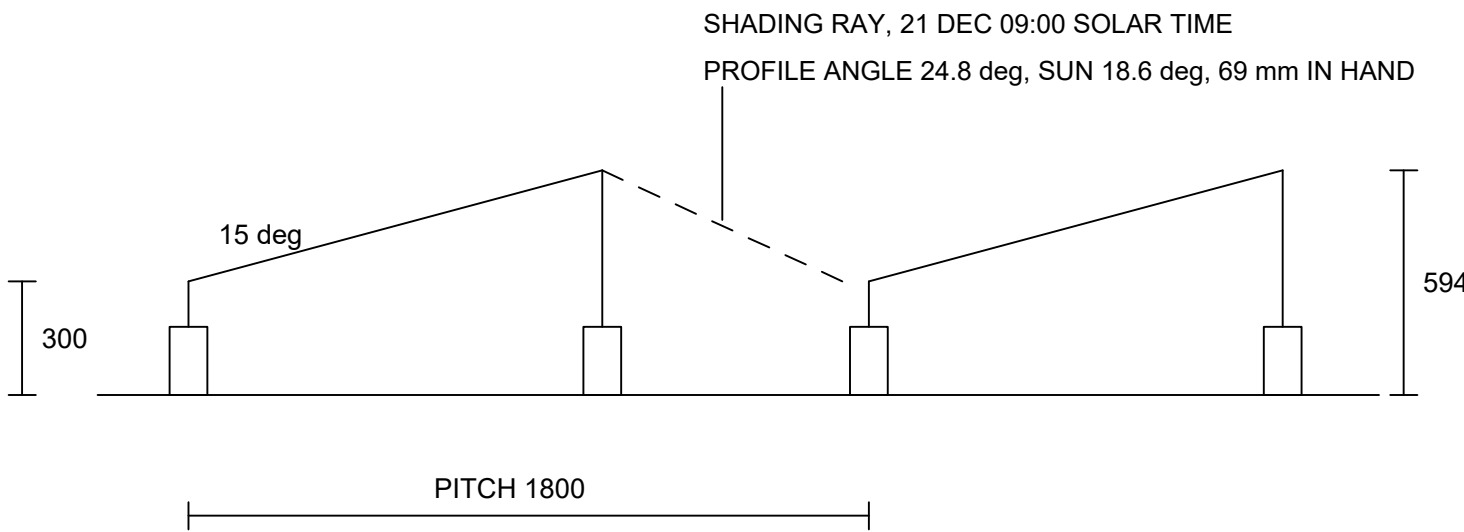
No.	EQUIPMENT	QTY	NOTE
1	JINKO JKM580N-72HL4-V 580 W	136	2278 x 1134 x 30
2	FOXESS P3-80-Plus INVERTER	1	80 kW, 8 MPPT
3	FOXESS CQ7 BATTERY MODULE	9	63.18 kWh TOTAL
4	BALLASTED TILT FRAME 15 deg	8 ROWS	FRONT 300, REAR 594
5	DC TRUNKING AND CABLE ENTRY	1 RUN	SEALED, SURFACE RUN

DESIGN SUMMARY

ARRAY	136 x 580 W = 78.88 kWp
STRINGS	8 STRINGS OF 17, ONE PER MPP TRACKER
TILT AND PITCH	15 deg, 1800 mm, GCR 0.63
INVERTER	FOXESS P3-80-Plus, 80 kW, DC/AC 0.99
BATTERY	63.18 kWh, 41.5 kW CONTINUOUS, 518.4 V NOMINAL
ARRAY ENVELOPE	534.7 m2 OF 1104 m2, 48.4 %

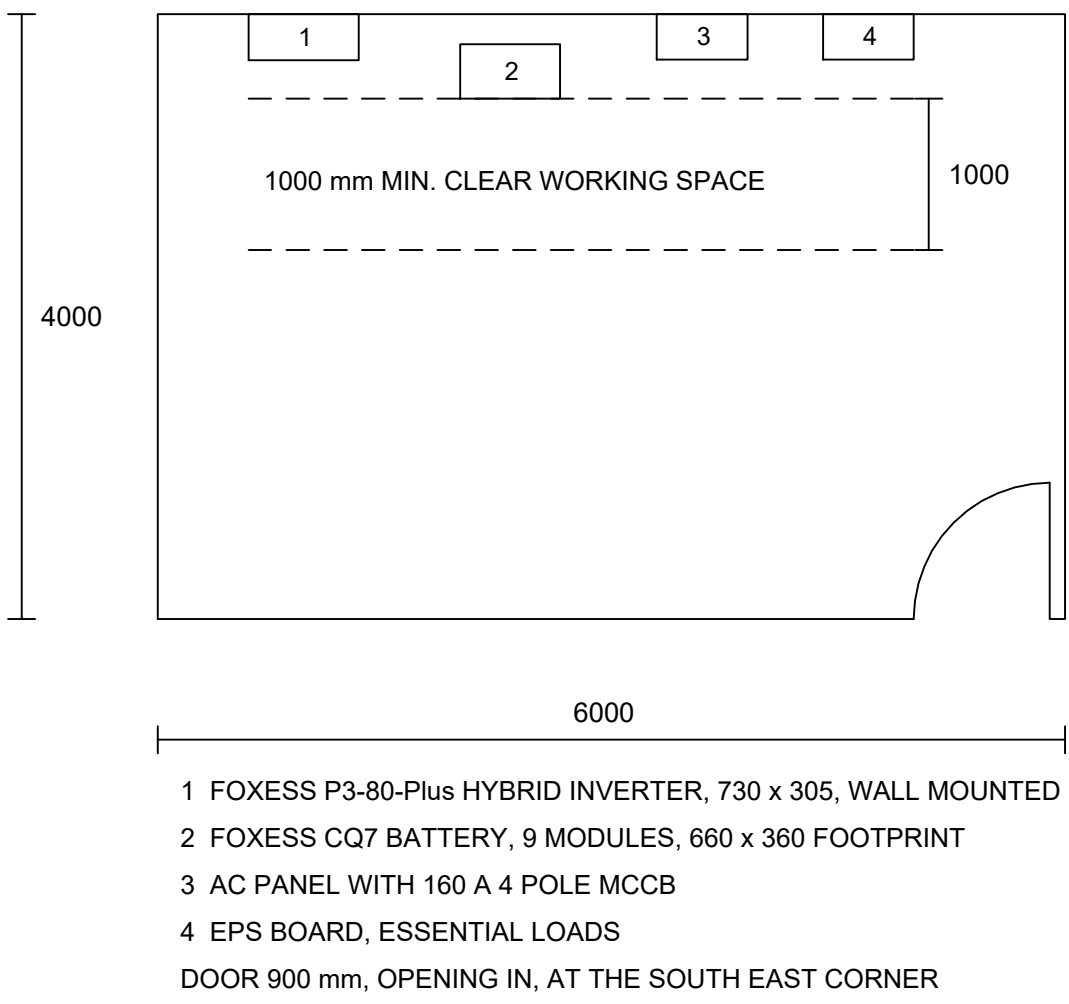
DETAIL A MOUNTING SECTION

SCALE 1:20, SOUTH ON THE LEFT



DETAIL B PLANT ROOM

SCALE 1:50



- FOXESS P3-80-Plus HYBRID INVERTER, 730 x 305, WALL MOUNTED
 - FOXESS CQ7 BATTERY, 9 MODULES, 660 x 360 FOOTPRINT
 - AC PANEL WITH 160 A 4 POLE MCCB
 - EPS BOARD, ESSENTIAL LOADS
- DOOR 900 mm, OPENING IN, AT THE SOUTH EAST CORNER

79 kWp ROOFTOP PV WITH 63 kWh BATTERY STORAGE

MECHANICAL LAYOUT AND ARRAY SETTING OUT

DRAWN USAMA JAVED SITE I-10 INDUSTRIAL AREA, ISLAMABAD	SCALE 1:100 @ A1, DETAILS AS NOTED DWG PV-01
REV P1 DATE 08.10.2026 CHK -- APP --	ISSUED FOR COMMENT