SUPPLY AND INSTALLATION OF ROOF-TOP SOLAR PHOTOVOLTAIC SYSTEMS ON SCHOOLS IN GAZA STRIP

Tender Ref.: PZA1203211-10026

LOT 1 SCHOOLS
FAHMI EL GERGAWI HIGH SCHOOL, AL BORAGE HIGH SCHOOL, HAMAD BEN KHALEFA HIGH SCHOOL, EL MANFALOTY HIGH SCHOOL, AHMED EL SHOQERI HIGH SCHOOL

Contracting Authority:

Designed by:

MAY 2023
Lot 1 - School Names:
- Fahmi Elgergawi School
- El Borage High School
- Hamad Ben Khalaida School
- Al Manfaloty High School
- Ahmad El Shoqari School

Project Name:
PV650

String No.1 (16X650W PV Module)

String No.2 (16X650W PV Module)

String No.3 (16X650W PV Module)

String No.4 (16X650W PV Module)

Project funded by Belgium

Contracting Authority
Enabel

Tendered by Ministry of Education

Utility

AC -input TO Battery inverter

AC -OUT TO Load
Lot 1 - School Names:
Fahmi Elgergawi School
El Borage High School
Hamad Ben Khalaida School
Al Manfaloty High School
Ahmad El Shoqari School

Project Name: SUPPLY AND INSTALLATION OF ROOF-TOP SOLAR PHOTOVOLTAIC SYSTEMS ON SCHOOLS IN GAZA STRIP

DC MCB 2x25 A 1000VDC
PV INV 2 - INPUT1 - MPPT2
DC SURGE ARRESTER
DC MCB 2x25 A 1000VDC
PV INV 2 - INPUT1 - MPPT2
DC SURGE ARRESTER
DC MCB 2x25 A 1000VDC
PV INV 1 - INPUT1 - MPPT1
DC SURGE ARRESTER
DC MCB 2x25 A 1000VDC
PV INV 1 - INPUT1 - MPPT2
DC SURGE ARRESTER
Lot 1 - School Names:
Fahmi Elgergawi School
El Borage High School
Hamad Ben Khalaida School
Al Manfaloty High School
Ahmad El Shoqari School
Lot 1 - School Names:
Fahmi Elgergawi School
El Borage High School
Hamad Ben Khalaida School
Al Manfaloty High School
Ahmad El Shoqari School

CABLE TRAY EXAMPLE DETAILS

Hot dip galvanized Heavy Duty Steel Cable Tray (20cm width)
With cover for DC and AC Cables

C. Steel Profile
40x40x2.7mm

Concrete Footing
50x30x20cm

20cmx8cm Covered perforated Cable Tray For strings DC Cables

(1x50)mm² Cu

20cmx8cm Covered Cable Tray For strings earthing Cables

Combiner Box

The diagram illustrates the supply and installation of rooftop solar photovoltaic systems on schools in Gaza Strip. The project involves the provision of battery banks, photovoltaic (PV) substations (PV MDB), and inverters for power generation and distribution.
Lot 1 - School Names:
- Fahmi Elgergawi School
- El Borraine High School
- Hamad Ben Khalaida School
- Al Manfaloty High School
- Ahmad El Shoqari School

SUPPLY AND INSTALLATION OF ROOF-TOP SOLAR PHOTOVOLTAIC SYSTEMS ON SCHOOLS IN GAZA STRIP

Project Name:
- Concrete Foundation 60x60x30cm
- G. Steel Profile Beam 40x40x2.7mm
- G. Steel Profile Column 60x60x2.7mm
- G. Steel Profile Beam 40x40x2.7mm
- G. Steel Profile Bracing 40x40x2.7mm
- G. Steel Profile Bracing 40x40x2.7mm
- G. Steel Profile Beam 40x40x2.7mm
- G. Steel Profile Column 60x60x2.7mm
- G. Steel Profile Beam 40x40x2.7mm
- G. Steel Profile Bracing 40x40x2.7mm
- G. Steel Profile Beam 40x40x2.7mm
- G. Steel Profile Bracing 40x40x2.7mm
- G. Steel Profile Beam 40x40x2.7mm
- G. Steel Profile Column 60x60x2.7mm
- G. Steel Profile Beam 40x40x2.7mm

MOUNTING STEEL STRUCTURE FOR PV STRINGS (2/2)

3-D VIEW OF A TYPICAL PART OF THE MOUNTING STRUCTURE
LOT 1 - SCHOOL NAMES:

- Fahmi Elgergawi School
- El Borage High School
- Hamad Ben Khalaida School
- Al Manfaloty High School
- Ahmad El Shoqari School

MOUNTING STEEL STRUCTURE FOR PV STRINGS (3 of 5)

SUPPLY AND INSTALLATION OF ROOF-TOP SOLAR PHOTOVOLTAIC SYSTEMS ON SCHOOLS IN GAZA STRIP

DETAIL 1

SECTION A-A

DETAIL 7

- 4MM WELDED CONNECTION
- SHS60X60X2.7
- 4XM10 BOLTS
- Plates250x250x4mm

G.S strip 4mm thick, 6 cm width, 40 cm long fixed to each stone by jambo screw

- 16.2
- 97.8