



public works

Department:
Public Works
REPUBLIC OF SOUTH AFRICA

**PAFURI LAND PORT OF ENTRY (LPOE):
SUPPLY AND INSTALLATION OF SOLAR PANEL AND WASTE WATER FACILITY
WCS 052476**

STRUCTURAL ENGINEERING WORKS

NO.	DESCRIPTION.	DRAWING NO.
1.	LIST OF DRAWINGS	S410492/600/1/A3
2.	FOUNDATION LAYOUT PLAN	S410492/600/2/A2
3.	FOUNDATION DETAILS & SECTIONS	S410492/600/3/A3
4.	STRUCTURE TYPE A & B - DETAILS	S410492/600/4/A2
5.	STRUCTURE TYPE C & D - DETAILS	S410492/600/5/A2
6.	STRUCTURE TYPE E & F - DETAILS	S410492/600/6/A2
7.	STRUCTUR TYPE G - DETAILS	S410492/600/7/A3
8.	ENERGY STORAGE & EQUIPMENT ROOM FOUNADITIONS & ROOF SLAB LAYOUT	S410492/600/8/A3
9.	ENERGY STORAGE & EQUIPMENT ROOM ROOF SLAB REINFORCING LAYOUT	S410492/600/9/A2
10.	LONGITUDINAL SECTION - ARRAY 1 & 2	S410492/600/10/A1
11.	LONGITUDINAL SECTION - ARRAY 3 & 4	S410492/600/11/A1
12.	LONGITUDINAL SECTION - ARRAY 5 & 6	S410492/600/12/A1
13.	LONGITUDINAL SECTION - ARRAY 7 & 8	S410492/600/13/A1
14.	LONGITUDINAL SECTION - ARRAY 9 & 10	S410492/600/14/A1
15.	LONGITUDINAL SECTION - ARRAY 13	S410492/600/15/A2
16.	TYPICAL ARRAY ROOF LAYOUT & ELEVATION	S410492/600/16/A1
17.	STRUCTURES A-H POSITIONING LAYOUT	S410492/600/17/A3
18.	ENERGY STORAGE & EQUIPMENT ROOM: ARRAY 11 & 12 LAYOUT & DETAILS	S410492/600/18/A2
19.	STRUCTURE TYPE H - DETAILS	S410492/600/19/A2
20.	LONGITUDINAL SECTION - ARRAY 14	S410492/600/20/A1
21.	LONGITUDINAL SECTION - ARRAY 15 & 16	S410492/600/21/A1

No.	DATE	AMENDMENT	D.P.W.
A2	06-11-17	DRAWING REGISTER REVISED	E.E
A3	14-06-19	DRAWING REGISTER REVISED	E.E

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service
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SUPPLY AND INSTALLATION OF
SOLAR PANEL AND WASTE WATER
FACILITY

WCS number
052476

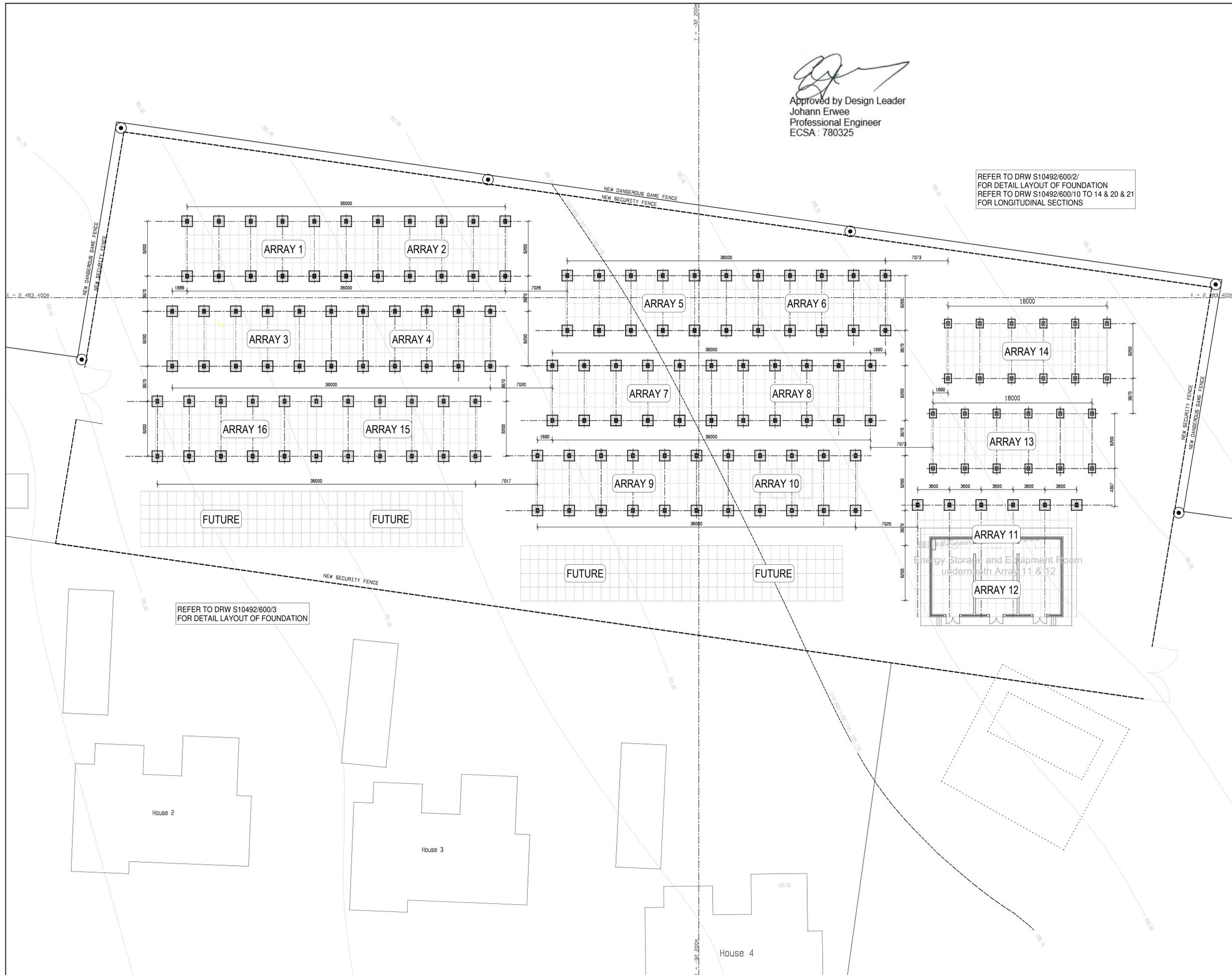
drawing title
DRAWING REGISTER

ref.no. 6022/0079/20B designed J.P

scale AS SHOWN drawn E.E

date 25 / 03 / 2014 checked J.P

DPW drawing number
S10492/600/1/A3



Approved by Design Leader
 Johann Erwee
 Professional Engineer
 ECSA: 780325

REFER TO DRW S10492/600/2/
 FOR DETAIL LAYOUT OF FOUNDATION
 REFER TO DRW S10492/600/10 TO 14 & 20 & 21
 FOR LONGITUDINAL SECTIONS

REFER TO DRW S10492/600/3
 FOR DETAIL LAYOUT OF FOUNDATION

No.	DATE	AMENDMENT	D.P.W.
A2	06-11-17	ENERGY STORAGE & EQUIPMENT REVISED, GENERAL SITE LAYOUT REVISED	E.E
A3	09-06-19	ARRAY 14, 15 & 16 ADDED	E.E

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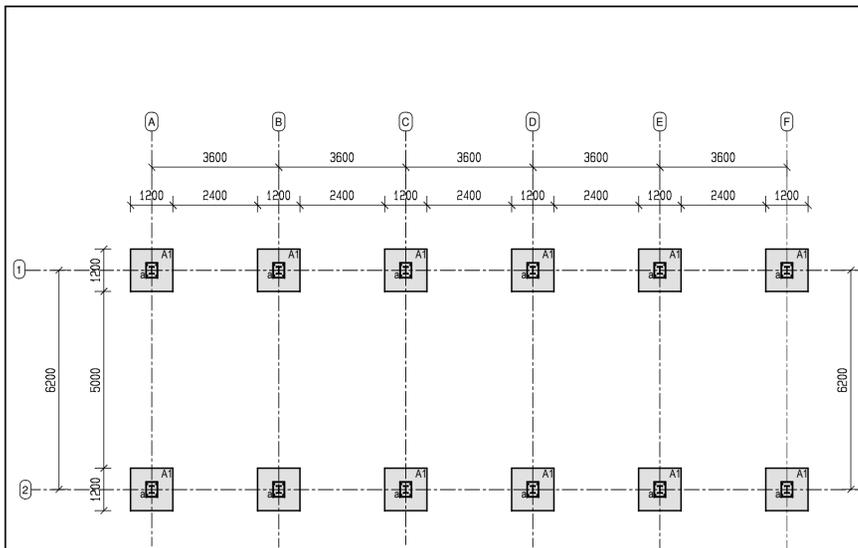
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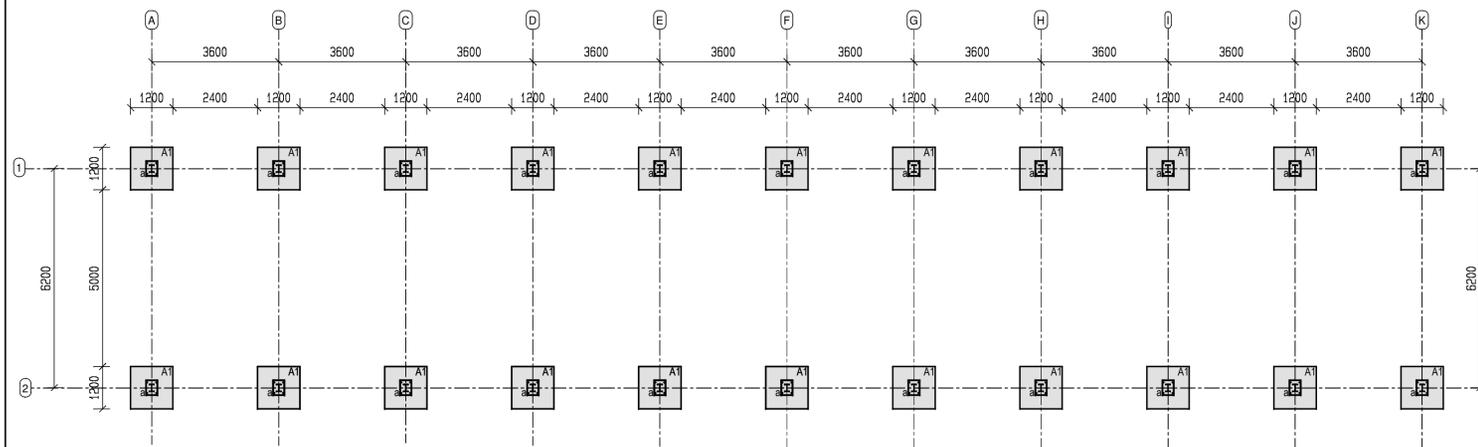
drawing title
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ref.no: 6022/0079/20B designed J.P
 scale 1:200 drawn E.E
 date 06 / 11 / 2017 checked J.P
 DPW drawing number

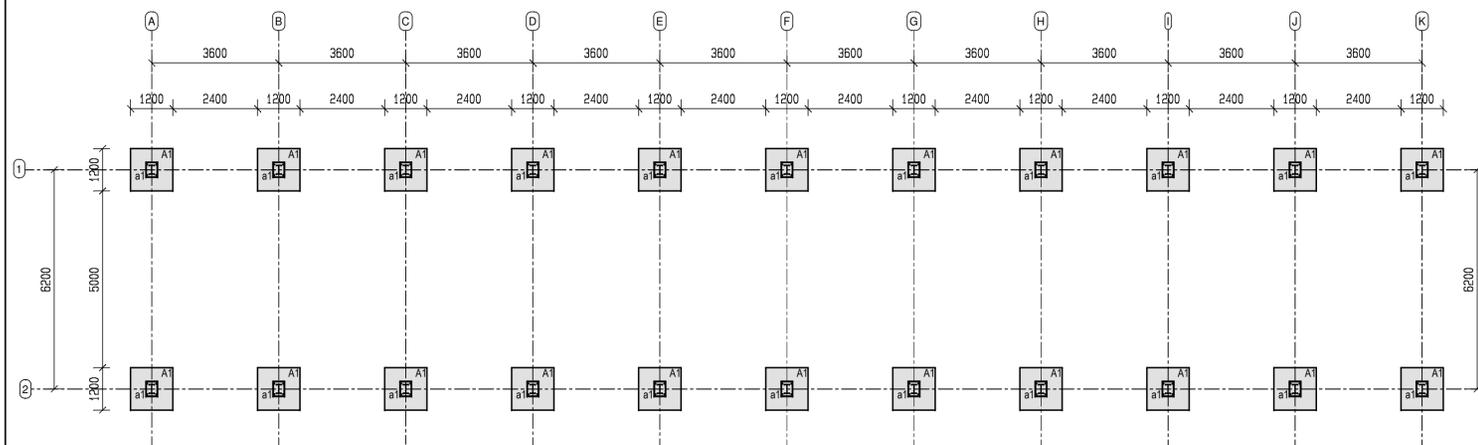
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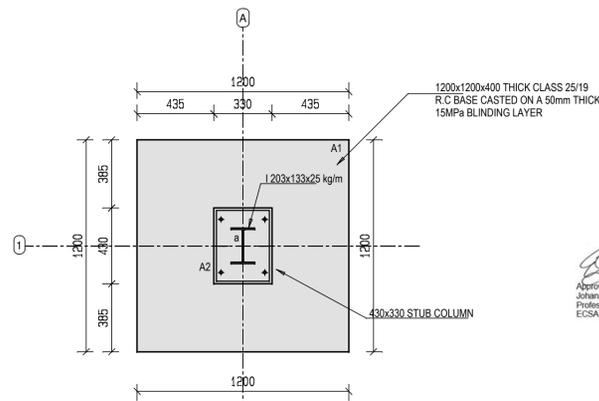
FOUNDATION LAYOUT - ARRAY 13 & 14
SCALE:1:100



FOUNDATION LAYOUT - ARRAY 1-2, 3-4, 5-6, 7-8
SCALE:1:100

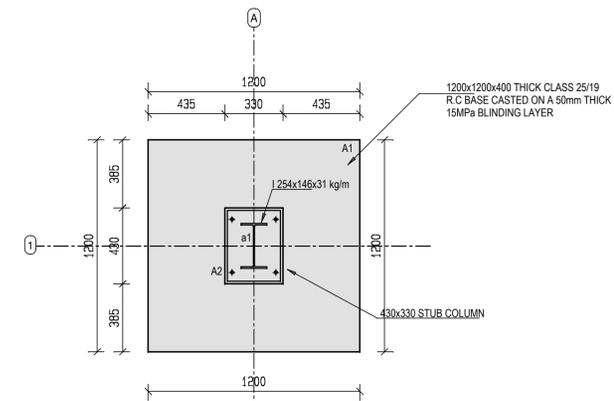


FOUNDATION LAYOUT - ARRAY 9, 10, 15 & 16
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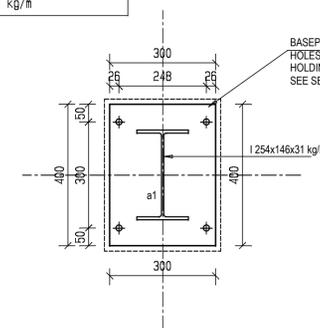
FOUNDATION TYPE A1 FOR COL "a"
SCALE:1:20

A1 - 1200x1200x400 THICK CLASS 25/19 R.C BASE CASTED ON A 50mm THICK 15MPa BLINDING LAYER
A2 - 430x330 STUB COLUMN
a = I 203x133x25 kg/m
a1 = I 254x146x31 kg/m

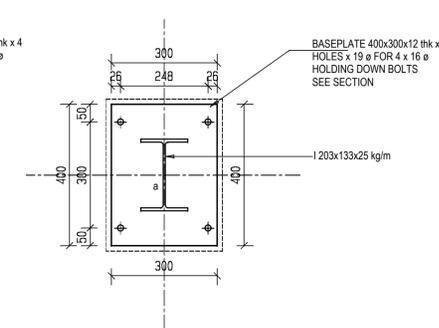


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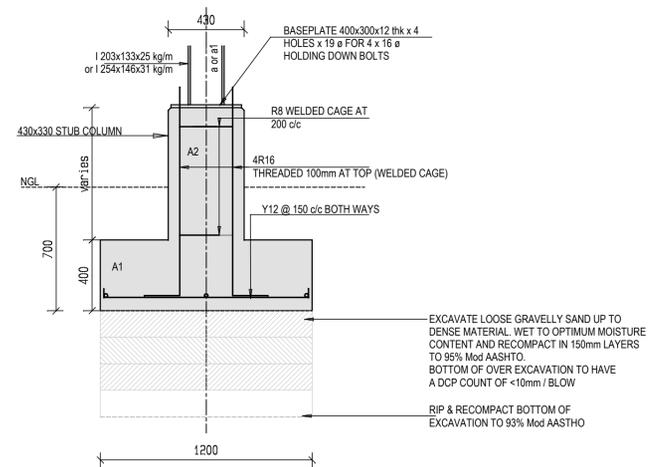
Approved by Design Leader
Juliana Enslin
Professional Engineer
ECSA: 780325



BASE PLATE FOR COLUMN TYPE "a1"
SCALE:1:10



BASE PLATE FOR COLUMN TYPE "a"
SCALE:1:10



TYPICAL SECTION COLUMN "a" & "a1"
SCALE 1:20

STRUCTURAL STEELWORK:

- The structure is designed for loading conditions in accordance with SABS 0160:1993 for the following maximum loads;
Nominal permanent load : 0.5 kN/m² (exclusive of self weight of structure)
Nominal imposed load : 2 kN/m²
- All structural steel to be grade 350W steel with a min yield stress of 350 MPa, to SANS 1431
- Fabrication and erection shall be done in accordance with SABS 1200 H Standard Building Regulations, Chapter 6.
- Minimum 6mm continuous welds shall be used unless otherwise stated
- All structural steel, holding down bolts, nuts & washers to be 275 g/m² Hot-dipped Galvanized to SANS 121
- Steelwork below ground level must be painted with two layers approved bitumen paint.

No.	DATE	AMENDMENT	D.P.W.
A2	06-11-17	DRAWING REGISTER REVISED	E.E
A3	06-03-19	FOUNDATION DETAIL REVISED	E.E
A4	09-06-19	ARRAY 14, 15 & 16 FOUNDATIONS ADDED	E.E

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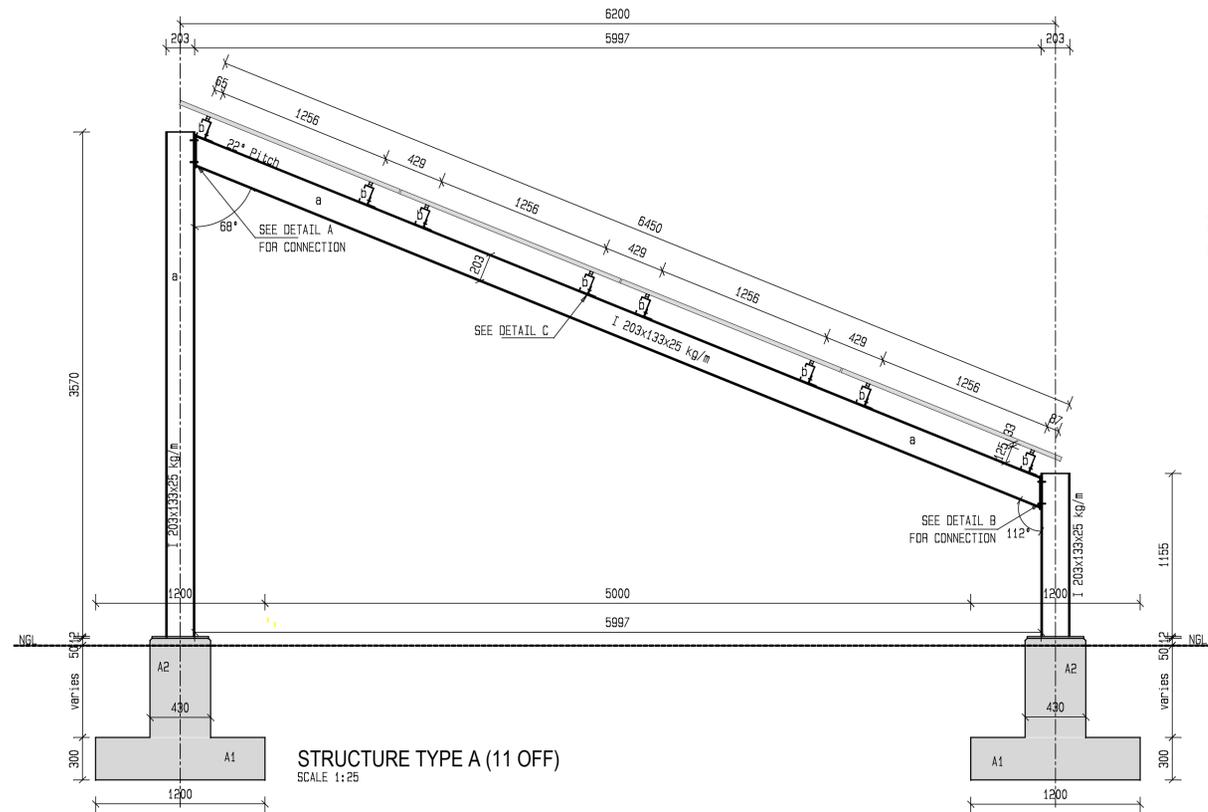
service: PAFURI LAND PORT OF ENTRY (LPOE): SUPPLY AND INSTALLATION OF SOLAR PANEL AND WASTE WATER FACILITY

WCS number: 052476

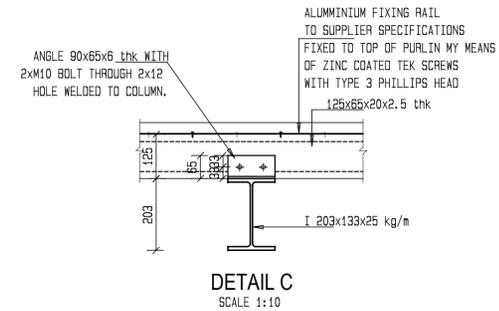
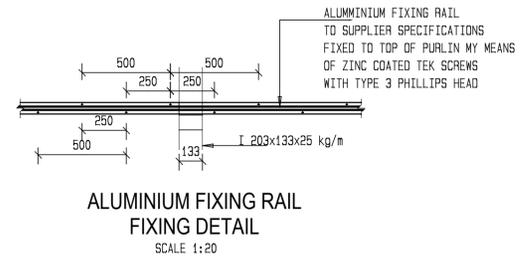
drawing title: FOUNDATION DETAILS & SECTIONS

ref.no: 6022/0079/20B designed J.P
scale: AS SHOWN drawn E.E
date: 06 / 11 / 2017 checked J.P
DPW drawing number

S10492/600/3/A3

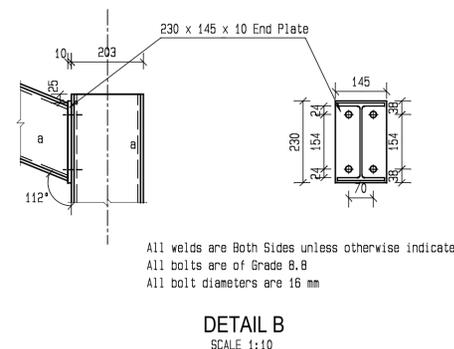
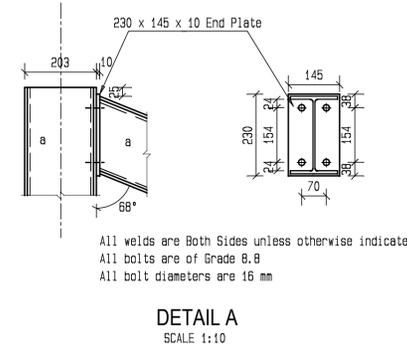
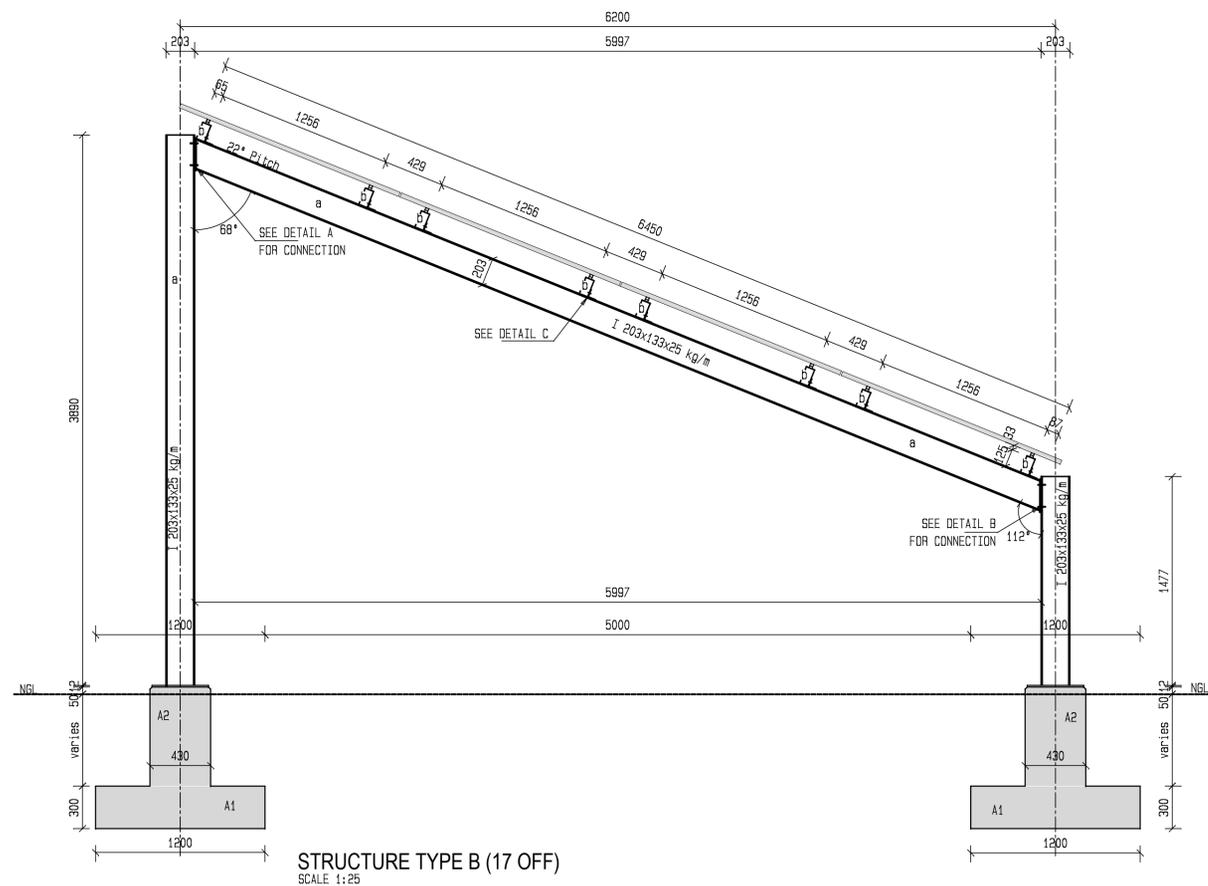


Approved by Design Leader
Johann Erwee
Professional Engineer
ECSA : 780325



- A1 - 1200x1200x400 THICK CLASS 25/19 R.C BASE CASTED ON A 50mm THICK 15MPa BLINDING LAYER
- A2 - 430x330 STUB COLUMN
- a = I 203x133x25 kg/m
- a1 = I 254x146x31 kg/m
- b = 125x65x20x2.5 thk COILED FORM LIPPED CHANNEL ROOF PURLIN.
- CLEAT: ANGLE 90x65x6 thk WITH 2xM10 BOLT THROUGH 2x12 HOLE WELDED TO COLUMN.

- STRUCTURAL STEELWORK:
- The structure is designed for loading conditions in accordance with SABS 0160:1993 for the following maximum loads;
Nominal permanent load : 0.5 KN/m² (exclusive of self weight of structure)
Nominal imposed load : 2 KN/m²
 - All structural steel to be grade 350W steel with a min yield stress of 350 MPa, to SANS 1431
 - Fabrication and erection shall be done in accordance with SABS 1200 H Standard Building Regulations, Chapter 6.
 - Minimum 6mm continuous welds shall be used unless otherwise stated
 - All structural steel, holding down bolts, nuts & washers to be 275 g/m² Hot-dipped Galvanized to SANS 121
 - Steelwork below ground level must be painted with two layers approved bitumen paint.



No.	DATE	AMENDMENT	D.P.W.
A2	09-06-19	STRUCTURE TYPE B 'NO OFF' REVISED	E.E

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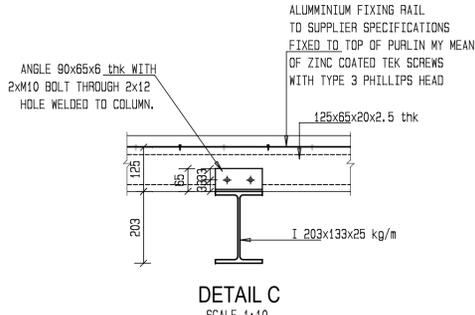
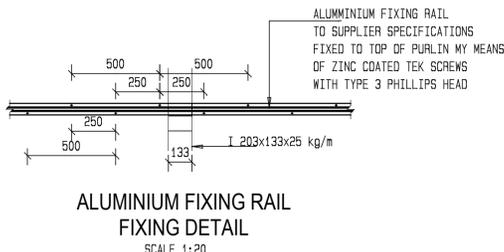
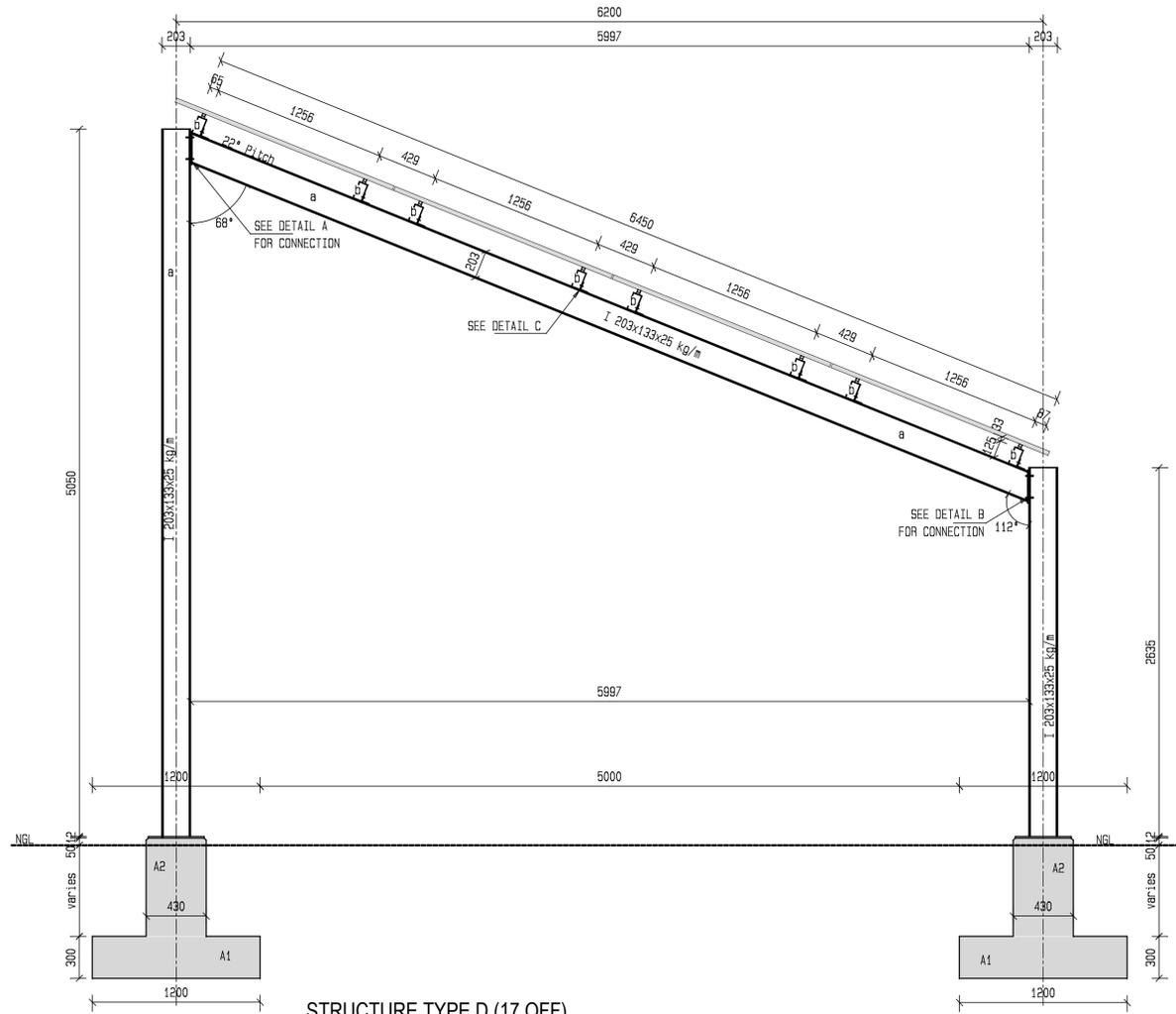
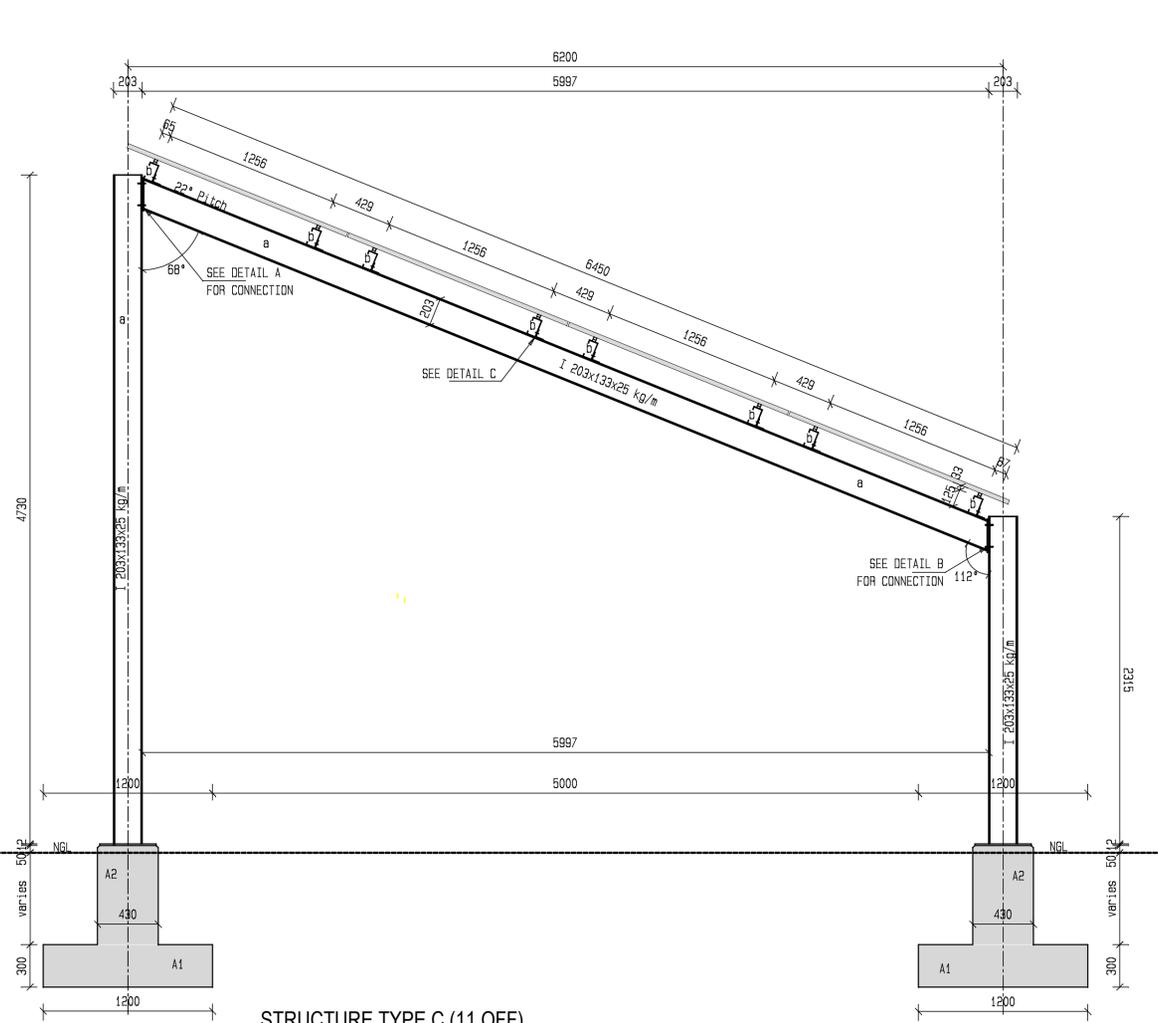
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ref.no: 6022/0079/20B designed: J.P

scale: AS SHOWN drawn: E.E

date: 25 / 03 / 2014 checked: J.P

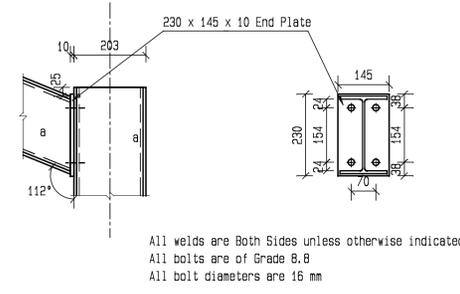
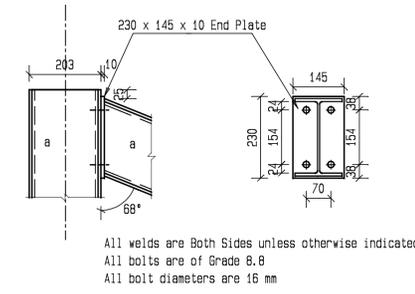
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- STRUCTURAL STEELWORK:
- The structure is designed for loading conditions in accordance with SABS 0160:1993 for the following maximum loads;
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Approved by Design Leader
Johann Erwee
Professional Engineer
ECSA : 780325



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A2	06-11-17	GENERAL REVISION	E.E

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WCS number
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drawing title
**STRUCTURE TYPE C & D
DETAILS**

ref.no. 6022/0079/20B designed J.P
scale AS SHOWN drawn E.E
date 06 / 11 / 2017 checked J.P
DPW drawing number

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