

LEGEND

(X.X) DENOTES SDME SENSOR ID. REFER TO TABLE 6 - HOUSE APPLIANCES AND EQUIPMENT ON THIS DRAWING

NOTES

CONDUIT 1 INSTALLED IN CEILING CAVITY, FIXED TO STEEL FRAME. CABLES PULLED INTO LIVING ROOM FROM BEHIND CORNICE.

CONDUIT 2 INSTALLED UNDER SUB-FLOOR AND FIXED VIA 32mm HALF SADDLES AND 55mm SCREWS. CABLES ENTER THE BUILDING VIA 32mm HOLE IN SUBFLOOR BEHIND FRIDGE.

CONDUIT 3 INSTALLED UNDER SUB-FLOOR AND FIXED VIA 32mm HALF SADDLES AND 55mm SCREWS. CABLES ENTER THE BUILDING IN SERVICES CUPBOARD LOCATED IN BATHROOM.

WATER METER LOCATED AT INLET OF BLADDER TANKS LOCATED UNDER THE DECK ON THE NORTHERN SIDE OF THE HOUSE. REFER TO PL-101 FOR TANK DETAILS.

FOR CONNECTION BETWEEN THE DESERT ROSE ELECTRICAL PANEL AND SDME MONITORING PANEL REFER TO ID-004.

FOR DESERT ROSE APPLIANCE DETAILS REFER TO ID-005.

TABLE 6 - HOUSE APPLIANCES AND EQUIPMENT

SENSOR ID (SUB-CONTEST)	SENSOR	CONDUIT/ CHANNELING (SECTION OR DIAMETER)	LENGTH OF CABLES
5.1L	TEMPERATURE (LIVING PEDESTAL)	CONDUIT 1, 25mm	7.80m
5.2L	HUMIDITY (LIVING PEDESTAL)	CONDUIT 1, 25mm	7.80m
5.3L	AIR QUALITY CO2 (LIVING PEDESTAL)	CONDUIT 1, 25mm	7.80m
5.4L	LIGHTING (LIVING PEDESTAL)	CONDUIT 1, 25mm	7.80m
5.1B	TEMPERATURE (BEDROOM PEDESTAL)	CONDUIT 3, 32mm	20.10m
5.2B	HUMIDITY (BEDROOM PEDESTAL)	CONDUIT 3, 32mm	20.10m
5.4K	LIGHTING (KITCHEN COUNTERTOP)	CONDUIT 2, 32mm	19.10m
6.1	REFRIGERATION	CONDUIT 2, 32mm	19.10m
6.2	FREEZING	CONDUIT 2, 32mm	19.10m
6.4	CLOTHES WASHING	CONDUIT 3, 32mm	20.10m
6.6	DISHWASHING	CONDUIT 2, 32mm	19.10m
6.7	OVEN	CONDUIT 2, 32mm	19.10m

General Monitoring Plan

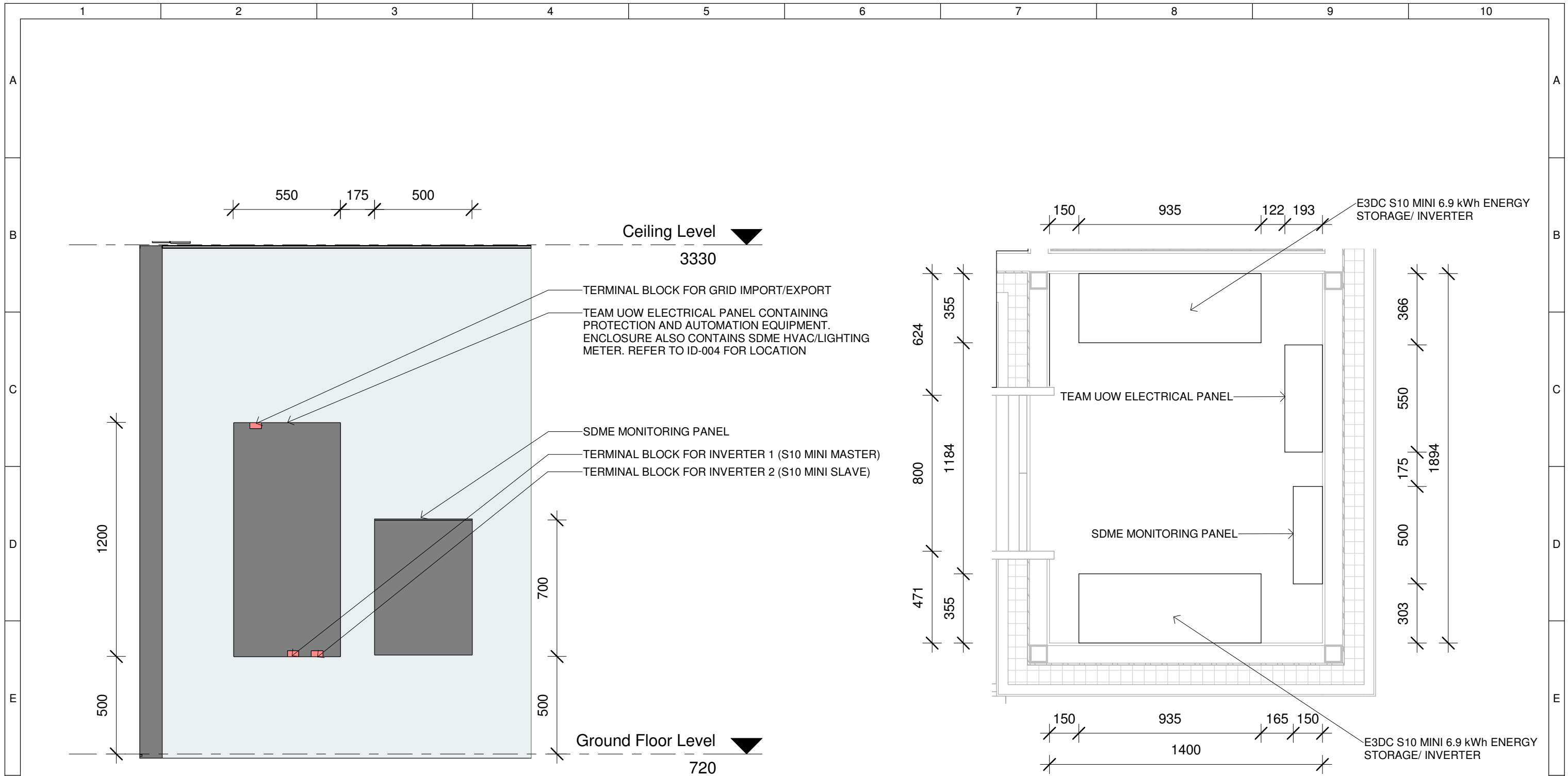
1

1 : 75

VISUAL SCALE 1:75 @ A3



	Team: TEAM UOW Address: UNIVERSITY OF WOLLONGONG WOLLONGONG NSW, AUSTRALIA 2522 Contact: sd-2018@uow.edu.au www.desertrosehouse.com.au	Client: Dubai Electricity and Water Authority 	AMENDMENTS <table border="1"> <thead> <tr> <th>REV.</th> <th>DESCRIPTION</th> <th>DATE</th> <th>DRAWN</th> <th>CHECK</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Updated to As-Built</td> <td>14/09/18</td> <td>BB</td> <td>CM</td> </tr> </tbody> </table>	REV.	DESCRIPTION	DATE	DRAWN	CHECK	1	Updated to As-Built	14/09/18	BB	CM	COPYRIGHT None; Project is Public LOT # M DRAWER B.BANFIELD CHECKED C.MCDOWELL DATE 9 September, 2018 SCALE 1 : 75 @ A3	 NORTH GENERAL MONITORING PLAN SHEET: 01 OF 01 ID-001
	REV.	DESCRIPTION	DATE	DRAWN	CHECK										
1	Updated to As-Built	14/09/18	BB	CM											
<p>1 2 3 4 5 6 7 8 9 10</p>															



1 Plant Room - East Elevation
1 : 20

2 Plant Room Floor Plan
1 : 20

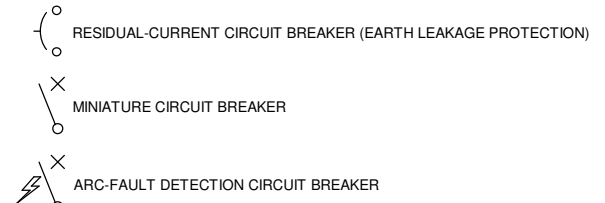
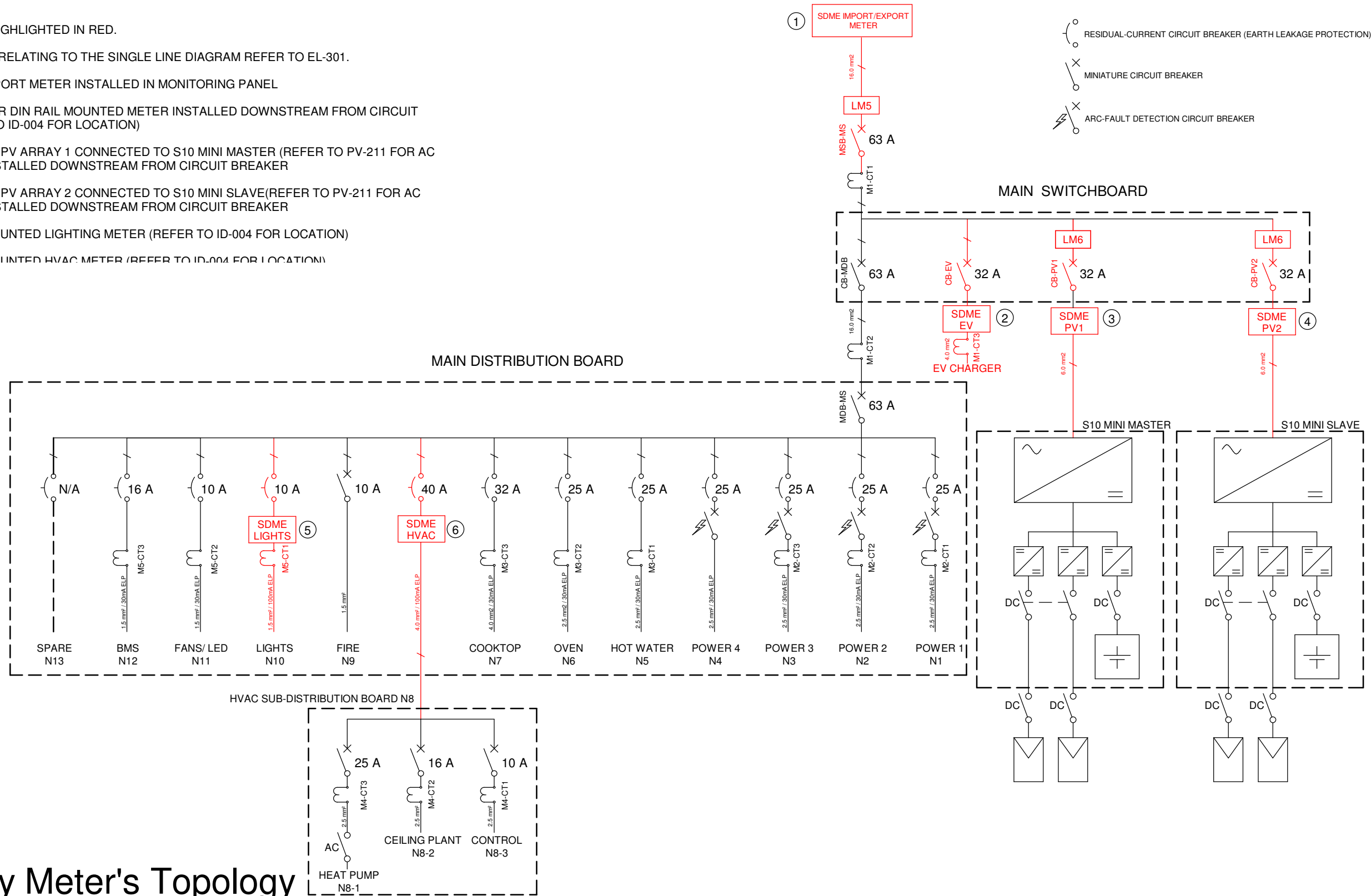
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	REV.	DESCRIPTION	DATE	DRAWN	CHECK											
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NOTES

SDME METERED LINES ARE HIGHLIGHTED IN RED.

FOR FURTHER INFORMATION RELATING TO THE SINGLE LINE DIAGRAM REFER TO EL-301.

1. SDME IMPORT EXPORT METER INSTALLED IN MONITORING PANEL
2. SDME EV CHARGER DIN RAIL MOUNTED METER INSTALLED DOWNSTREAM FROM CIRCUIT BREAKER (REFER TO ID-004 FOR LOCATION)
3. SDME METER FOR PV ARRAY 1 CONNECTED TO S10 MINI MASTER (REFER TO PV-211 FOR AC WIRING DETAILS) INSTALLED DOWNSTREAM FROM CIRCUIT BREAKER
4. SDME METER FOR PV ARRAY 2 CONNECTED TO S10 MINI SLAVE (REFER TO PV-211 FOR AC WIRING DETAILS) INSTALLED DOWNSTREAM FROM CIRCUIT BREAKER
5. SDME DIN RAIL MOUNTED LIGHTING METER (REFER TO ID-004 FOR LOCATION)
6. SDME DIN RAIL MOUNTED HVAC METER (REFER TO ID-004 FOR LOCATION)



1 Electricity Meter's Topology



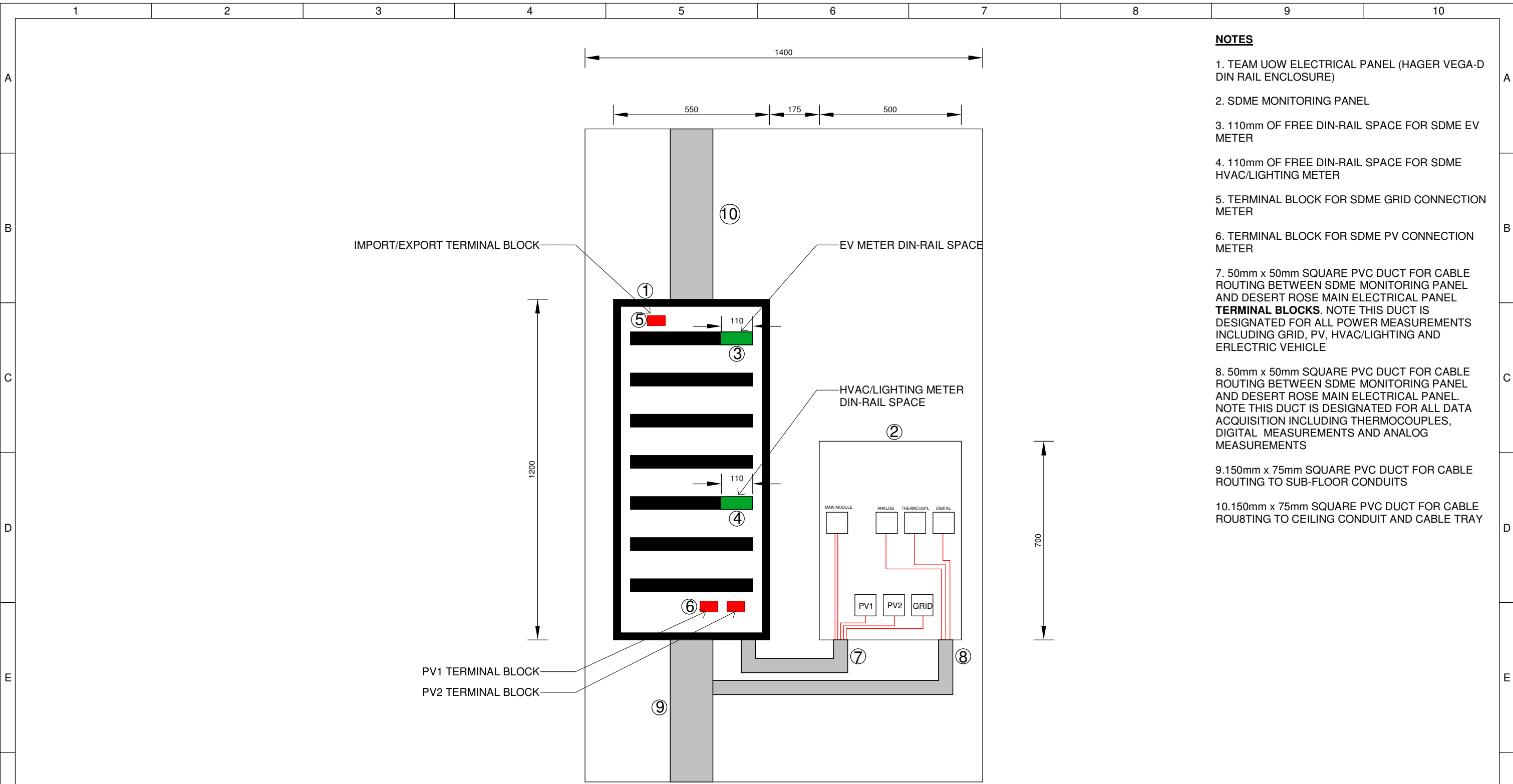
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CHECKED	C.MCDOWELL
DATE	9 September 2018
SCALE	N.T.S. @ A3

ELECTRICITY METERS' TOPOLOGY
ID-003
 SHEET: 01 OF 01



- NOTES**
1. TEAM UOW ELECTRICAL PANEL (HAGER VEGA-D DIN RAIL ENCLOSURE)
 2. SDME MONITORING PANEL
 3. 110mm OF FREE DIN-RAIL SPACE FOR SDME EV METER
 4. 110mm OF FREE DIN-RAIL SPACE FOR SDME HVAC/LIGHTING METER
 5. TERMINAL BLOCK FOR SDME GRID CONNECTION METER
 6. TERMINAL BLOCK FOR SDME PV CONNECTION METER
 7. 50mm x 50mm SQUARE PVC DUCT FOR CABLE ROUTING BETWEEN SDME MONITORING PANEL AND DESERT ROSE MAIN ELECTRICAL PANEL
TERMINAL BLOCKS. NOTE THIS DUCT IS DESIGNATED FOR ALL POWER MEASUREMENTS INCLUDING GRID, PV, HVAC/LIGHTING AND ERLECTRIC VEHICLE
 8. 50mm x 50mm SQUARE PVC DUCT FOR CABLE ROUTING BETWEEN SDME MONITORING PANEL AND DESERT ROSE MAIN ELECTRICAL PANEL. NOTE THIS DUCT IS DESIGNATED FOR ALL DATA ACQUISITION INCLUDING THERMOCOUPLES, DIGITAL MEASUREMENTS AND ANALOG MEASUREMENTS
 9. 150mm x 75mm SQUARE PVC DUCT FOR CABLE ROUTING TO SUB-FLOOR CONDUITS
 10. 150mm x 75mm SQUARE PVC DUCT FOR CABLE ROU8TING TO CEILING CONDUIT AND CABLE TRAY

1 Electricity Meters Connection

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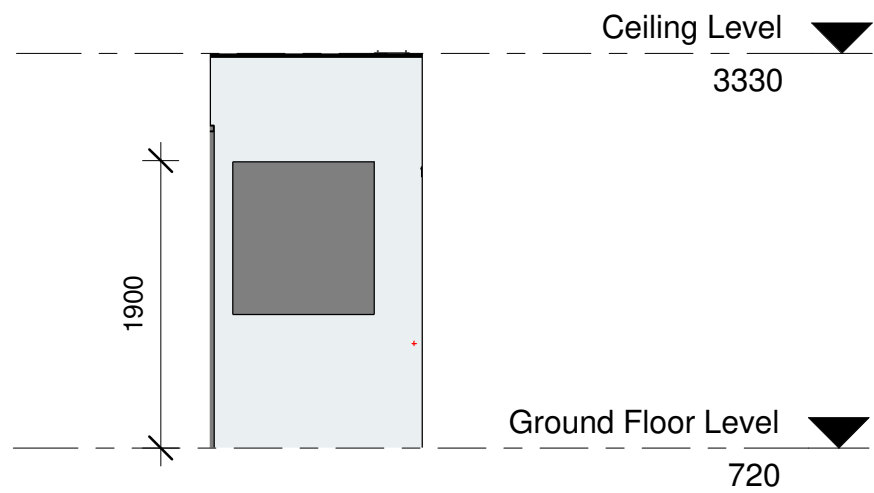
FOR APPLIANCE LOCATION, REFER TO ID-001.
 FOR DAILY AND ANNUAL ENERGY CONSUMPTION OF APPLIANCES. REFER TO LOAD SCHEDULE EL-002.

FOR DETAILED LOAD PROFILE, APPLIANCE OPERATING TIMES AND ENERGY ANALYSIS OF DESERT ROSE HOUSE. REFER TO ELECTRICAL ENERGY BALANCE REPORT.

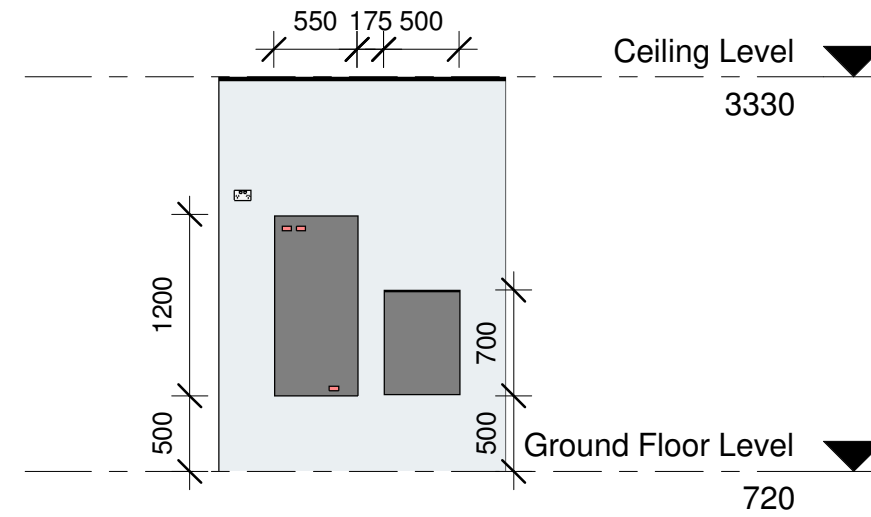
APPLIANCE/EQUIPMENT	REQUIRED CAPACITY/ DIMENSIONS	BRAND	MODEL	CAPACITY/ DIMENSIONS
1. REFRIGERATOR	170 L	GORENJE	NRK6193UX-AU	231 L
2. FREEZER	57 L	GORENJE	NRK6193UX-AU	98 L
3. OVEN	55 L	WESTINGHOUSE	WVES613S-L	80 L
4. CLOTHES WASHER	6 BIG BATH TOWELS (APPROX. 2.5 KG)	AEG	L99699HWD	5 KG
5. DISHWASHER	SIX PLACE SETTINGS	SMEG	DWA6315X1	15 PLACE SETTINGS
6. TV	32 IN	HISENSE	39P4	39 IN
7. VIDEO VIEWING SOLUTION	NO REQUIREMENTS	N/A	N/A	NO REQUIREMENTS
8. COMPUTER SCREEN	17 IN	DELL	E2219HN	21.5 IN
9. COOKTOP OR STOVE	NO REQUIREMENTS	MIELE	KM 6363-1	NO REQUIREMENTS
10. SOUNDBAR	NO REQUIREMENTS	YAMAHA	YAS 108	NO REQUIREMENTS

1 House Appliances and Equipment Table

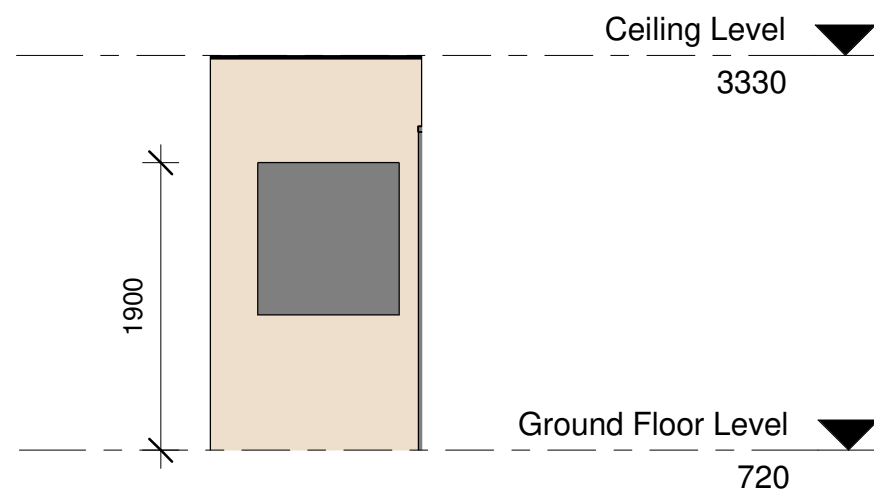
 <p>Desert Rose Team UOW Australia - Dubai</p>	<p>Team: TEAM UOW</p> <p>Address: UNIVERSITY OF WOLLONGONG WOLLONGONG NSW, AUSTRALIA 2522</p> <p>Contact: sd-2018@uow.edu.au www.desertrosehouse.com.au</p>	<p>Client: Dubai Electricity and Water Authority</p> 	<p>AMENDMENTS</p> <table border="1"> <thead> <tr> <th>REV.</th> <th>DESCRIPTION</th> <th>DATE</th> <th>DRAWN</th> <th>CHECK</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Updated to As-Built</td> <td>14/09/18</td> <td>BB</td> <td>CM</td> </tr> </tbody> </table>	REV.	DESCRIPTION	DATE	DRAWN	CHECK	1	Updated to As-Built	14/09/18	BB	CM	<p>COPYRIGHT None; Project is Public</p> <p>LOT # M DRAWER M.LI CHECKED B.BANFIELD DATE 9 September 2018 SCALE N.T.S. @ A3</p>	<p>HOUSE APPLIANCES</p> <p>ID-005</p>	<p>SHEET: 01 OF 01</p>
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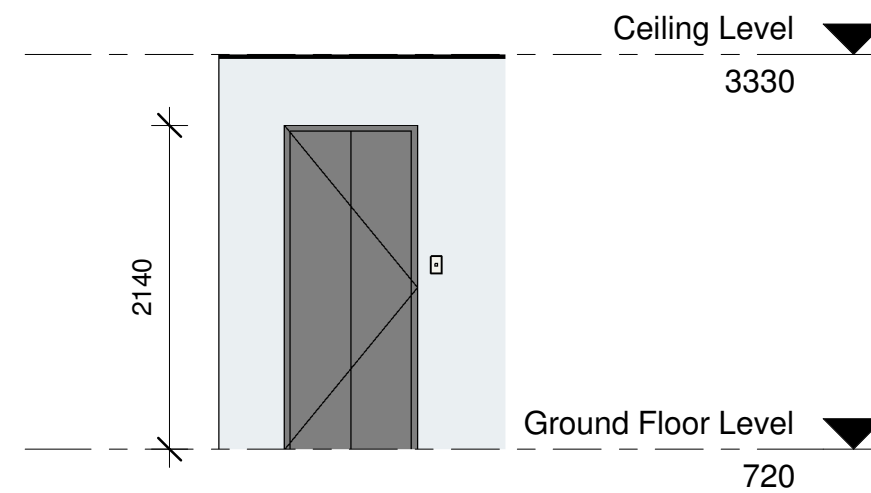
1 Plant Room - North
1 : 50



3 Plant Room - East
1 : 50



2 Plant Room - South
1 : 50



4 Plant Room - West
1 : 50



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 01 OF 01

PLANT ROOM ELEVATIONS
ID-006