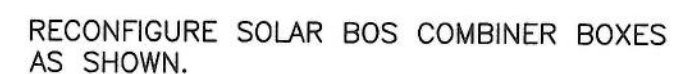


PANEL DESIG: AE PANELBOARD				VOLTAGE: 480Y/277V					
LOCATION: INVERTER BUILDING									
MOUNTING: SURFACE									
NO. OF CKTS: 48				MAIN SIZE: 600A					
ALL PHASES TO BE BALANCED WITHIN 3% USING ACTUAL CONNECTED LOAD									
LOAD DESCRIPTION	(VA)	WIRE SIZE	CB/P	CKT. NUM.	CKT. NUM.	CB/P	WIRE SIZE	(VA)	LOAD DESCRIPTION
INVERTER 2			25/3	01 *-----	02	25/3			INVERTER 3
	-	-		03 ----*	04		-	-	
	-	-		05 -----*	06		-	-	
INVERTER 1	-	-	30/3	07 *-----	08	30/3	-	-	INVERTER 11
	-	-		09 ----*	10		-	-	
	-	-		11 -----*	12		-	-	
INVERTER 4	-	-	30/3	13 *-----	14	30/3	-	-	INVERTER 10
	-	-		15 ----*	16		-	-	
	-	-		17 -----*	18		-	-	
INVERTER 5	-	-	30/3	19 *-----	20	30/3	-	-	INVERTER 13
	-	-		21 ----*	22		-	-	
	-	-		23 -----*	24		-	-	
INVERTER 16	-	-	30/3	25 *-----	26	30/3	-	-	INVERTER 14
	-	-		27 ----*	28		-	-	
	-	-		29 -----*	30		-	-	
INVERTER 8	-	-	30/3	31 *-----	32	30/3	-	-	INVERTER 15
	-	-		33 ----*	34		-	-	
	-	-		35 -----*	36		-	-	
INVERTER 9	-	-	30/3	37 *-----	38	30/3	-	-	INVERTER 7
	-	-		39 ----*	40		-	-	
	-	-		41 -----*	42		-	-	
INVERTER 12	-	-	30/3	43 *-----	44	50/3	-	-	INVERTER 6
	-	-		45 ----*	46		-	-	
	-	-		47 -----*	48		-	-	
N.E.C. Connected Load Summary				Breaker Options (if used)					
Lighting:	2.6 KVA	Motors:	144.8 KVA	AS - Powerlink "AS" breaker		QO - Standard "QOB" Bolt-On Bkr.			
Recept:	6.0 KVA	Heating:	2.4 KVA	LO - Lock-On Device		HR-HACR Rated Circuit Breaker			
Kitch Eq:	0.4 KVA	Total:	155.8 KVA	187.3 Amps	GF - GND Fault CKT Interrupter				

SCALE: N.T.S.

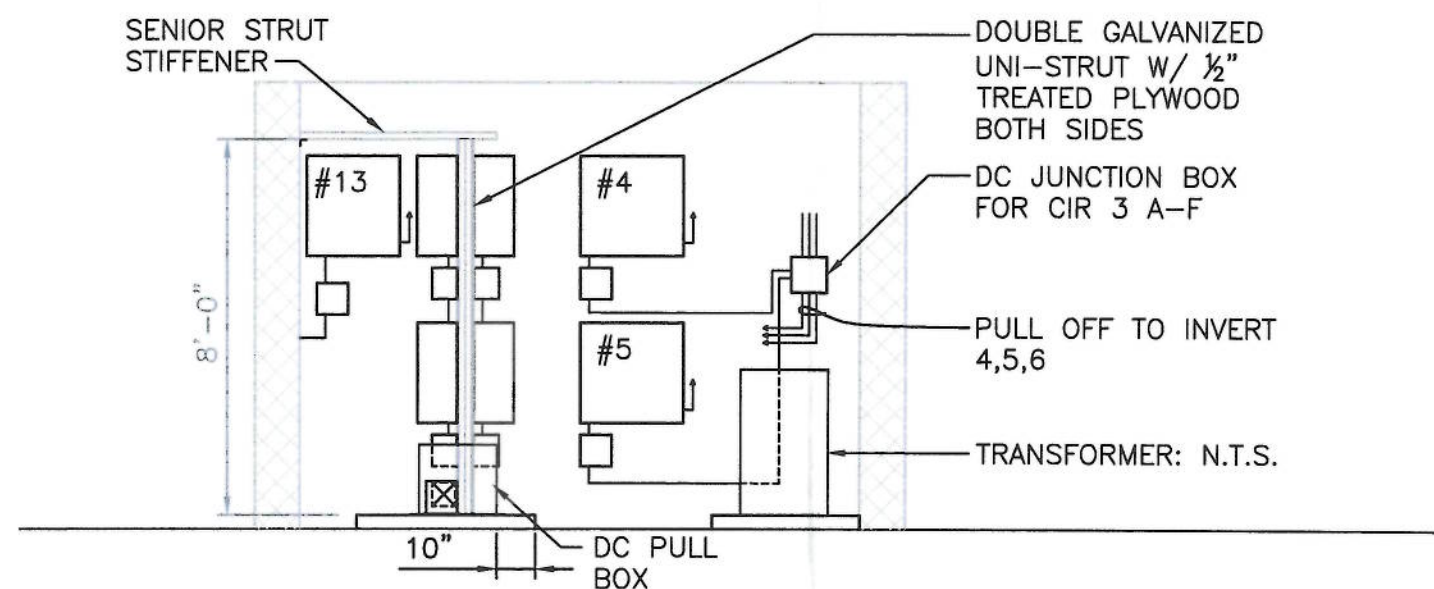
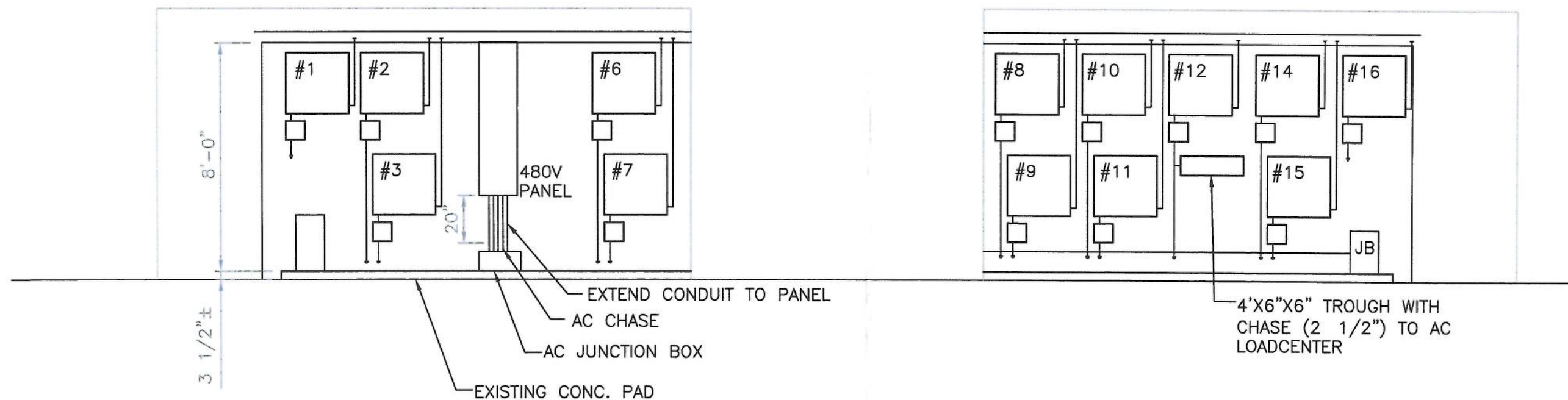
1	8 TO 2X4 STRINGS/CHANNEL
2	12 TO 4X3 STRINGS/CHANNEL
3A,B	8 TO 2X4 STRINGS/CHANNEL
3C	10 TO 2X5 STRINGS/CHANNEL
2A-F	8 TO 2X4 STRINGS/CHANNEL
5A-C	8 TO 2X4 STRINGS/CHANNEL
5D	9 TO 1X4 + 1X5 STRINGS/CHANNEL



SCALE: N.T.S.

Drawing Description	PICKERING ENERGY SOLUTIONS CHARLES TOWN, WEST VIRGINIA APUS SOLAR REPOWERING PROJECT ELECTRICAL POWER PLAN
---------------------	---

Project:	219001
Designed By:	CL
Drawn By:	JGH
Checked By:	
Scale:	
Plot Date:	06/24/1
Revision:	
Drawing Number:	E601





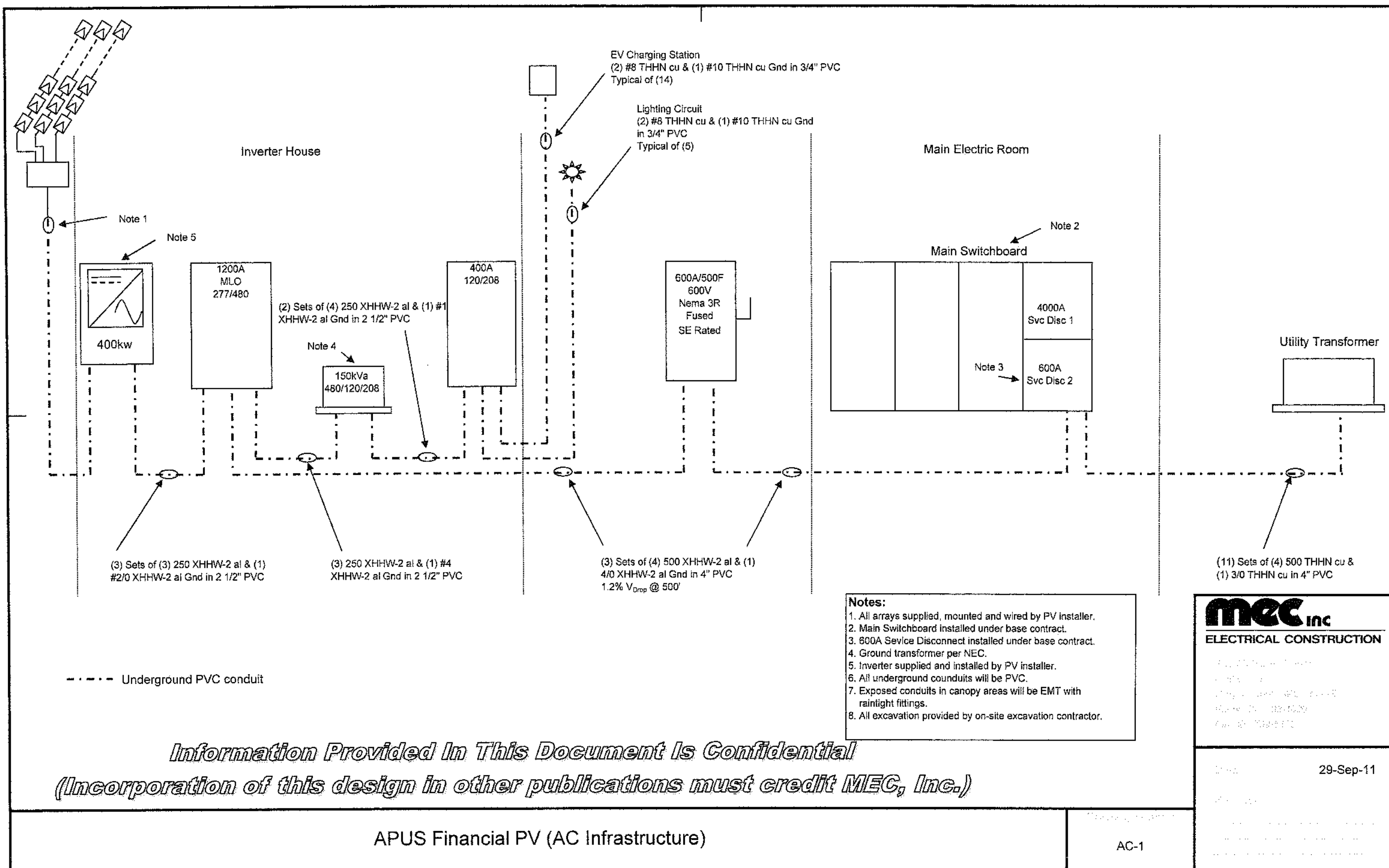
PICKERING ASSOCIATES
 Architects • Engineers • Surveyors
 11283 Emerson Avenue
 Parkersburg, West Virginia 26104
 Phone: (304) 464-5305
 Fax: (304) 464-4428

Rev.	Description	By	Date
1	ISSUED FOR AS-BUILT	JB	06/24/19

Drawing Description

PICKERING ENERGY SOLUTIONS
 CHARLES TOWN, WEST VIRGINIA
 APUS SOLAR REPOWERING PROJECT
 ELEVATIONS AND SECTIONS

Project:	2190012
Designed By:	CLP
Drawn By:	JGH
Checked By:	-
Scale:	-
Plot Date:	06/24/19
Revision:	1
Drawing Number:	A301



Panel Name: JHLV (NEMA 3R)			Panel Amperage: 400		
Voltage & Phase: 120/208Y—3Ø			Panel A.I.C. Rating: 10kAIC		
Mounting: Surface			Other: MCB / Bottom Fed		
Description	Brk	Phase	Brk	Description	
Car Charger 1	40	1 A 2	40	Car Charger 8	
Car Charger 1	40	3 B 4	40	Car Charger 8	
Car Charger 2	40	5 C 6	40	Car Charger 9	
Car Charger 2	40	7 A 8	40	Car Charger 9	
Car Charger 3	40	9 B 10	40	Car Charger 10	
Car Charger 3	40	11 C 12	40	Car Charger 10	
Car Charger 4	40	13 A 14	40	Car Charger 11	
Car Charger 4	40	15 B 16	40	Car Charger 11	
Car Charger 5	40	17 C 18	40	Car Charger 12	
Car Charger 5	40	19 A 20	40	Car Charger 12	
Car Charger 6	40	21 B 22	40	Car Charger 13	
Car Charger 6	40	23 C 24	40	Car Charger 13	
Car Charger 7	40	25 A 26	40	Car Charger 14	
Car Charger 7	40	27 B 28	40	Car Charger 14	
Lighting Ckt 1	20	29 C 30	20	Prepared Space	
Lighting Ckt 2	20	31 A 32	20	Prepared Space	
Lighting Ckt 3	20	33 B 34	20	Prepared Space	
Lighting Ckt 4	20	35 C 36	20	Prepared Space	
Lighting Ckt 5	20	37 A 38	20	Prepared Space	
Receptacle Ckt	20	39 B 40	20	Prepared Space	
Space		41 C 42		Space	

Panel Name: JHHV (NEMA 3R)			Panel Amperage: 1200				
Voltage & Phase: 277/480Y—3Ø			Panel A.I.C. Rating: 30kAIC				
Mounting: Surface			Other: MLO / Bottom Fed				
Description		Brk	Phase		Brk	Description	
Inverter Feed		600	1	A	2	30	TVSS
Inverter Feed		600	3	B	4	30	TVSS
Inverter Feed		600	5	C	6	30	TVSS
XFMR 150Kva		200	7	A	8		
XFMR 150Kva		200	9	B	10		
XFMR 150Kva		200	11	C	12		

High Voltage panelboard to be Square D I-Line
Low Voltage panelboard to be Square D NQOD
Utility Disconnect will be Square D 600A, 600V, 3Ø, Service Entrance Rated, Fused, NEMA 3R
TVSS will be Square D 120KA 480V

Information Provided In This Document Is Confidential
(Incorporation of this design in other publications must credit MEC, Inc.)



ARRAY SPECIFICATIONS:

CANOPY 1: 8-STRINGS, (104) 240W MODULES, 25.0 KW
CANOPY 2: 12-STRINGS (156) 240W MODULES, 37.4KW
CANOPY 3: 26-STRINGS (338) 240W MODULES, 81.1KW
CANOPY 4: 48 STRINGS, (624) 250W MODULES, 156.0KW
CANOPY 5: 33 STRINGS, (429) 250W MODULES, 107.3KW
TOTAL: 127 STRINGS, (1651) MODULES, 406.8KW

NOTE:
THE RACKING SYSTEM SHOULD
EXTEND A MINIMUM OF 3" BEYOND
THE PANELS.

A STRING, MODULE & COMBINER BOX LAYOUT
0.1 SCALE: 1"=150'



MOUNTAIN VIEW SOLAR & WIND
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APUS Finance Center Buchanan & 2nd
St. Charlestown, WV 25313

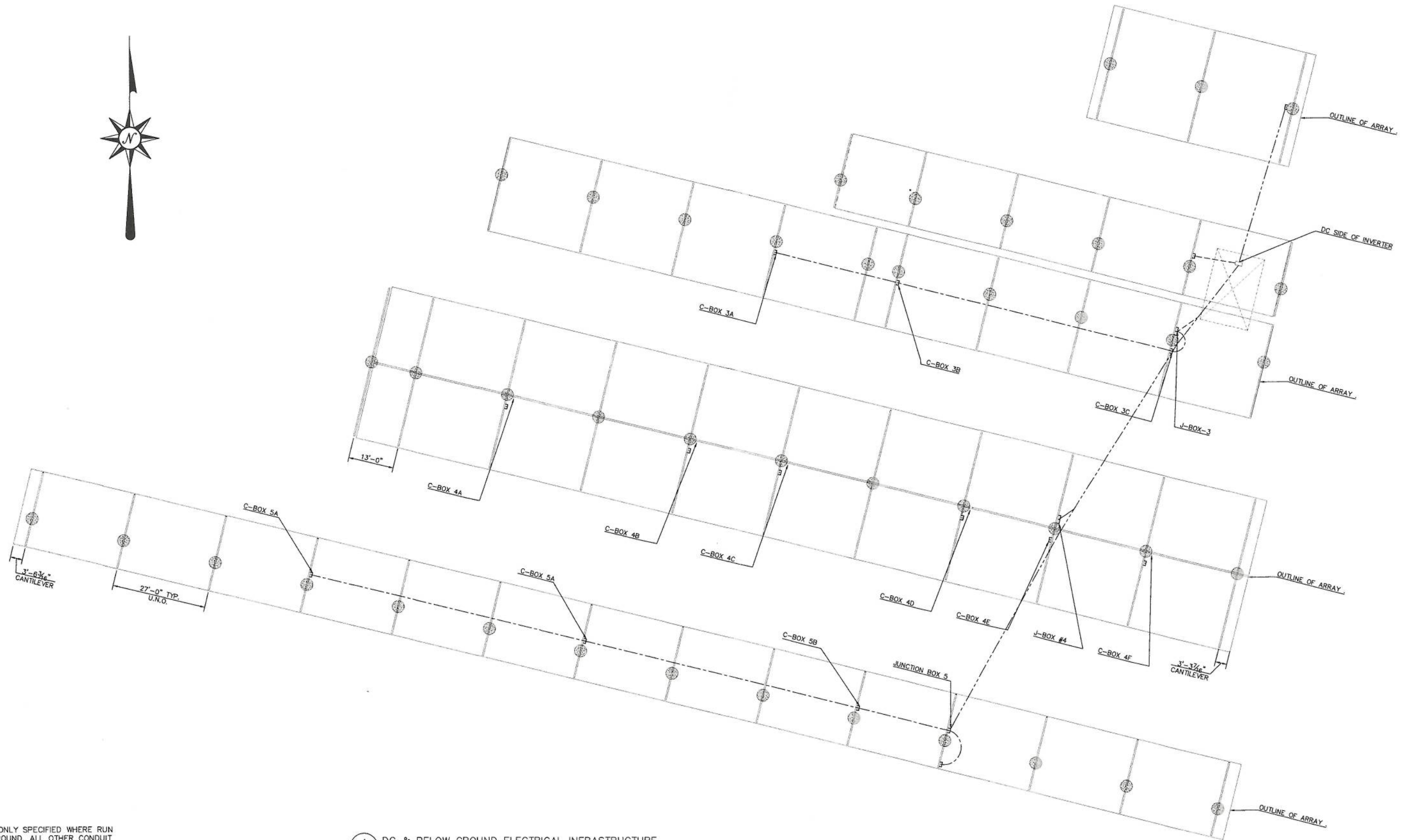
REVISIONS				STRING, MODULE & COMBINER BOX LAYOUT			
No.	By	Date	DESCRIPTION	SCALE	DATE	DRAWN BY	PROJECT NO.
1.	TEY/CH	10/24/2011	ELECTRICAL LAYOUT	1"=150'	DATE	TEY/CH	APUS
2.	TEY/CH	12/10/2011	ECP GRND				
3.	TEY/CH	01/12/2013	FINAL				
4.							

D-SIZE BORDER: 36" x 24"

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AS-BUILT

SHEET NO. A1.01



NOTE:
CONDUIT ONLY SPECIFIED WHERE RUN
BELOW GROUND. ALL OTHER CONDUIT
TO BE SPECIFIED BY MEC ELECTRICAL
INC.

A DC & BELOW GROUND ELECTRICAL INFRASTRUCTURE
0.1 SCALE: 1"=150'



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APUS Finance Center Buchanan & 2nd
St. Charlestown, WV 25313

REVISIONS				DC & BELOW GROUND ELECTRICAL INFRASTRUCTURE			
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1.	TEY/CH	10/24/2011	ELECTRICAL LAYOUT	SCALE	DATE	DRAWN BY	DESCRIPTION
2.	TEY/CH	12/10/2011	ESDP GRID	1"=150'	DATE	TEY/CH	AS-BUILT
3.	TEY/CH	01/12/2013	FINAL				PROJECT NO.
4.							APUS
D-SIZE BORDER: 36" x 24"							SHEET NO.
							A1.02



A ARRAY EQUIP GRND / LAYOUT
0.1 SCALE: 1"=150'



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APUS Finance Center Buchanan & 2nd
St. Charlestown, WV 25313

REVISIONS			
No.	By	Date	DESCRIPTION
1.	TEY/CH	10/24/2011	ELECTRICAL LAYOUT
2.	TEY/CH	12/10/2011	EQUIP GRND
3.	TEY/CH	01/12/2013	FINAL
4.			

ARRAY EQUIPMENT GROUND LAYOUT			
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SCALE	DATE	DRAWN BY	DESCRIPTION
1"=150'	DATE	TEY/CH	AS-BUILT
PROJECT NO.			APUS
SHEET NO.			A1.03