

ATTACHMENT G
INTERCONNECTION DETAILS

POLE LINE DETAIL MATERIAL LIST

POLE LINE DETAIL MATERIAL LIST				
ITEM NO.	MANUF.	CAT. NO.	DESCRIPTION	NOTES
1	S&C	OMNI-RUPTER	15KV-900AMP GANG OP. DISC. SWITCH HORIZONTAL UPRIGHT W/GROUND LEVEL HANDLE	8, 26
2	HENDRIX	HPI-15	15KV STANDOFF INSULATOR W/ SSP-2 PIN	
3	HENDRIX	DEINS-15	15KV DEADEND INSULATOR	
4	HENDRIX	CG-0119	PRE-FORM DEADEND GRIP	
5	OKONITE	161-23-3069	15KV 133% 1/0 AWG CU JACKETED CONC. NEUT. CABLE	
6	3M	5651	15KV -1/0 AWG OUTDOOR TERM. W/ SC0002 CONN.	
7	CHANCE	C710114P	100A, 15KV FUSED CUTOUT	19
8	TAVRIDA/SEL	----	3 PHASE 15.5KV 630 AMP RECLOSER W/ SEL 651R	7, 20
9	---	----	1 PH. 2KVA, 7200V TO 120V	6
10	OKONITE	----	1/0 CU 15KV INSULATED AERIAL JUMPER CABLE	
11	HENDRIX	----	15KV 1/0 AL. 3 PHASE AERIAL CONDUCTOR	
12	HENDRIX	052AWA	ALUMA WELD ALUMINUM NEUTRAL CONDUCTOR	
13	---	----	2" CONDUIT CLAMPS	
14	---	----	2" SCHEDULE 40 PVC CONDUIT	
15	HUGHES BROS.	----	3 1/2" x 4 1/2" X 8' WOODEN CROSSARM	
16	HUGHES BROS.	2809.5000	26" FLAT STEEL CROSSARM BRACE	
17	BLACKBURN	PAA4	1/0 AWG PAR. GROOVE CONNECTOR	
18	---	----	2" WEATHERHEAD	
19	OHIO BRASS	PDV-65 OPTIMA	10KV - 8.4KV MCOV DISTRIBUTION CLASS ARRESTER	18
20	ERIC	615880	5/8" x 8' COPPER CLAD GROUND ROD	
21	---	----	#4 AWG BARE COPPER GROUND WIRE	
22	---	----	4" PVC CONDUIT-SCHEDULE 40	
23	---	----	4" RIGID STEEL CONDUIT	
24	---	----	4" CONDUIT CLAMP	
25	---	----	4" BONDING BUSHING	
26	3M	MB3	CABLE SUPPORT MOUNTING BRACKET	
27	---	----	FUSED DISCONNECT SWITCH	
28	---	----	2" RIGID STEEL CONDUIT	
29	HENDRIX	RTL-15	15KV 3-PHASE SPACER	
30	HENDRIX	BM-14	TANGENT MESSENGER BRACKET	
31	HENDRIX	BA3-35	ANGLE BRACKET	
32	SOUTHWIRE	----	#10 TYPE TC CONTROL CABLE	
33	LINDSEY	15KV CVMI	15KV CURRENT POST INSULATOR	20
34	---	----	100A, 15KV CUTOUT WITH SOLID BLADE DOORS	
35	ALUMA-FORM	PMW-6	PRIMARY METERING MOUNT	
36	ABB	KOR-11	OUTDOOR CURRENT TRANSFORMER	
37	ABB	VOY-11	OUTDOOR POTENTIAL TRANSFORMER	
38	ABB	VOZ-11	OUTDOOR POTENTIAL TRANSFORMER	
39	ANACONDA	ZHUA	1" SEALTITE FLEXIBLE METAL CONDUIT	
40	HOFFMAN	A1008CHFL	10" x 8" x 4" ENCLOSURE	25
41	BURNDY	YGL2C2	GROUND GRID CLAMPS #6 TO #2	
42	---	----	#6 CU, 8"X8" MESH GROUNDING MAT	
43	---	----	#2 CRUSHED STONE	

GENERAL NOTES:

- UTILITY'S POLES ARE SHOWN AS CONCEPTUAL AND ARE FOR DIAGRAMMATIC PURPOSES ONLY. ACTUAL EQUIPMENT AND CONFIGURATION WILL BE DETERMINED BY THE UTILITY.

MANUFACTURER AND CATALOG NUMBERS ARE FOR REFERENCE ONLY. ENGINEER APPROVED EQUALS WILL BE ACCEPTED.

CONTRACTOR SHALL FURNISH AND INSTALL ALL MISC. CONNECTORS TO PROVIDE A COMPLETE AND OPERABLE SYSTEM.

CONTRACTOR SHALL PROVIDE ALL POLE LINE AND MISC. HARDWARE FOR INSTALLING EQUIPMENT. ALL POLE LINE HARDWARE SHALL BE RATED FOR 10K LBS MINIMUM.

ALL EQUIPMENT AND MATERIALS SHALL BE LISTED FOR THE PURPOSE AND INSTALLED IN ACCORDANCE WITH THE CURRENT VERSION OF THE NEW YORK ELECTRICAL CODE AND NATIONAL ELECTRIC SAFETY CODE.

CONTRACTOR SHALL PROVIDE SINGLE PHASE 2KVA CONTROL POWER TRANSFORMER (7620V / 120V) FOR CONTROL POWER.

RECLOSER SHALL BE EQUIPPED WITH THREE (3) 100:5 CURRENT TRANSFORMERS AND THREE (3) LOW ENERGY VOLTAGE SENSING DEVICES ON LINE/UTILITY SIDE. LOW ENERGY VOLTAGE SENSORS SHALL BE CAPABLE OF MEETING INDUSTRY STANDARDS FOR RELAYING ACCURACY.

RECLOSER SHALL BE PROVIDED BY OWNER.

CONTRACTOR SHALL ALIGN AND ADJUST THE GANG OPERATED DISCONNECT SWITCH AS NEEDED TO ENSURE THAT THE SWITCH OPERATES PER THE MANUFACTURERS INSTALLATION AND OPERATION INSTRUCTIONS.

AERIAL SPACER CABLE SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS.

 - CONTRACTOR SHALL BE RESPONSIBLE FOR FURNISHING AND INSTALLING ALL NECESSARY MATERIAL, HARDWARE, EQUIPMENT ETC. COMMON WITHIN THE INDUSTRY TO PROVIDE THE CUSTOMER WITH A COMPLETE AND OPERABLE SYSTEM AS INTENDED BY THESE CONTRACT DOCUMENTS.
 - CONTRACTOR SHALL BE RESPONSIBLE FOR ALL HELICAL ANCHORS WHERE DOWN GUYS ARE REQUIRED. GUY WIRE SHALL BE MINIMUM OF 3/8" STEEL.
 - CONTRACTOR SHALL LEAVE ADEQUATE CONDUCTOR LENGTH PER PHASE FOR UTILITY CONNECTION.
 - CONTRACTOR SHALL INSTALL AND MAKE ALL ELECTRICAL AND COMMUNICATION CONNECTIONS AS SHOWN ON THESE CONTRACT DOCUMENTS.
 - ALL CONDUIT RISERS SHALL BE RIGID STEEL CONDUIT AND EXTEND ABOVE GRADE A MINIMUM OF 8 FEET. EXPOSED CONDUIT ENDS SHALL BE SEALED TO PREVENT INGRESS OF MOISTURE.
 - ALL UTILITY POLES SHALL CONFORM TO ANSI 05.1, AWPA C4, ANSI C2 AND ANY OTHER APPLICABLE CODES AND STANDARDS.
 - ALL DOWN GUYS SHALL BE 3/8" STEEL MINIMUM. ANCHORS SHALL BE GALVANIZED SQUARE SHAFT HELICAL WITH A MINIMUM DIAMETER OF 8 INCHES. INSTALLATION OF HELICAL ANCHORS SHALL BE BY EITHER ELECTRICAL OR HYDRAULIC ROTARY TYPE TORQUE MOTOR.
 - ALL WORK SHALL BE INSTALLED IN A NEAT AND WORKMAN LIKE MANNER AND IN ACCORDANCE WITH THE CURRENT VERSION OF THE MEC AND ALL LOCAL APPLICABLE CODES AND STANDARDS.
 - LIGHTNING ARRESTERS INSTALLED ON RISER POLES SHALL BE RATED FOR RISER INSTALLATIONS. ALL LIGHTNING ARRESTERS TO BE PROVIDED BY CONTRACTOR EXCLUDING THE RECLOSER MOUNTED LIGHTNING ARRESTORS.
 - SEE ONE LINE DIAGRAM FOR FUSE SIZING.
 - GROUND POLES PER SHEET E-701 DETAILS.
 - RECLOSER CONTROLLER SHALL BE PROVIDED BY RECLOSER MANUFACTURER AND BE EQUIPPED WITH LOW ENERGY ANALOG INPUTS. ALL NECESSARY CABLING SHALL BE PROVIDED BY RECLOSER MANUFACTURER TO PROVIDE A COMPLETE AND OPERABLE SYSTEM.
 - ALL SINGLE PHASE DISCONNECT SHALL BE LEFT CLOSED UNTIL THE GANG OPERATED DISCONNECT SWITCH HAS BEEN OPENED AND LOCKED OUT.
 - THE RECLOSER AND GANG OPERATED DISCONNECT SWITCH SHALL BE OPENED AND LOCKED OUT PRIOR TO ANY WORK INVOLVING EXPOSED ELECTRICAL CIRCUIT PARTS.
 - CONTRACTOR TO INSTALL A JUNCTION BOX WITH TERMINAL BLOCK FOR THE PT CIRCUITS. THE PT CIRCUIT SHALL BE LANDED ON A 6 POSITION TERMINAL BLOCK. JUNCTION BOX SHALL BE GROUNDED.
 - S&C OMNI-RUPTER SWITCH SHALL BE IN THE HORIZONTAL SWITCH CONFIGURATION.

Interconnect Schedules

Marlborough Solar, LLC
132 Milton Turnpike

4 Liberty Square, Boston, MA 02109

100

size: D Sheet R

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G

F

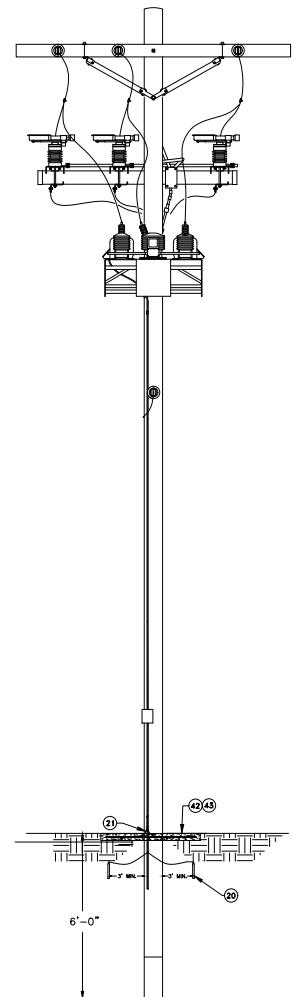
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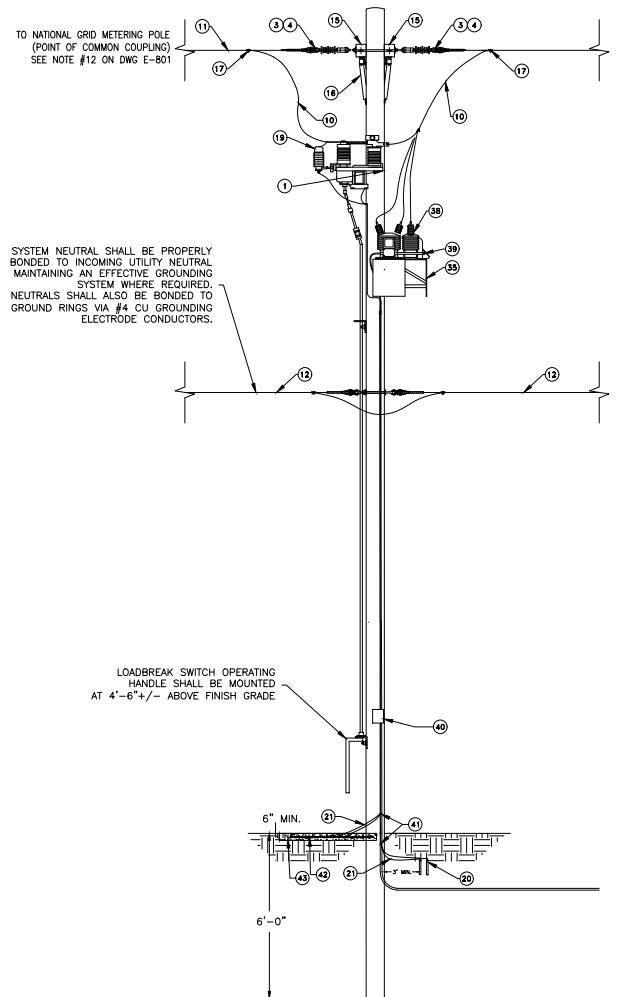
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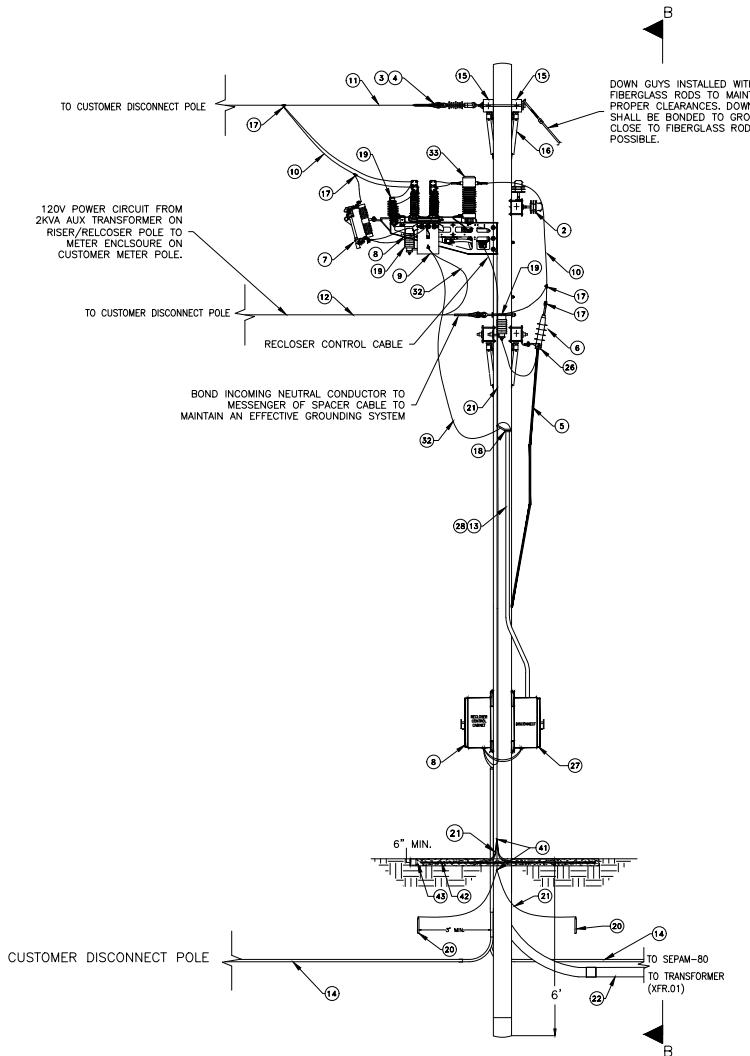
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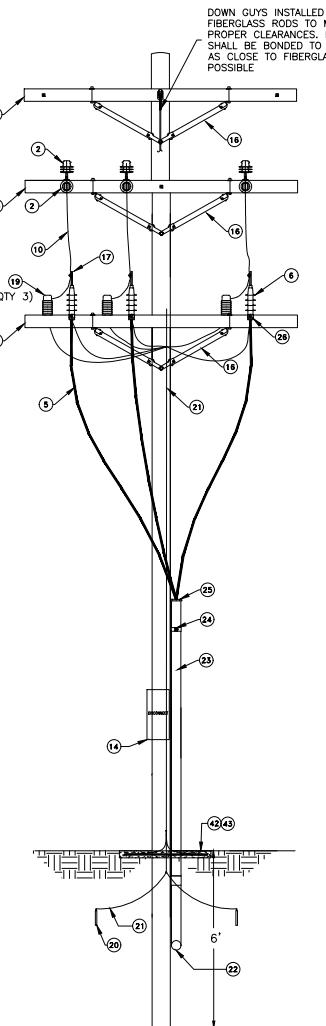
DETAIL B
CUSTOMER DISCONNECT POLE (P-1) (REAR)
NOT TO SCALE



DETAIL_B
CUSTOMER DISCONNECT POLE (P-1)



DETAIL A
RISER/RECLOSER POLE (P-1)



DETAIL A
RISER/RECLOSER POLE (P-1) (REAR)
NOT TO SCALE

NOTES:
SEE DRAWING E-801 FOR
POLE LINE MATERIAL LIST
AND GENERAL NOTES

04942
Marlborough Solar, LLC
132 Milton Turnpike
Marlborough, NY 02132

Medium Voltage Pole Details	
Drawn by: A.Ashurova	Scale N.T.S.
Approved by: P.Canning	
Dwg No: E-802	Size: D
Sheet Rev: A	