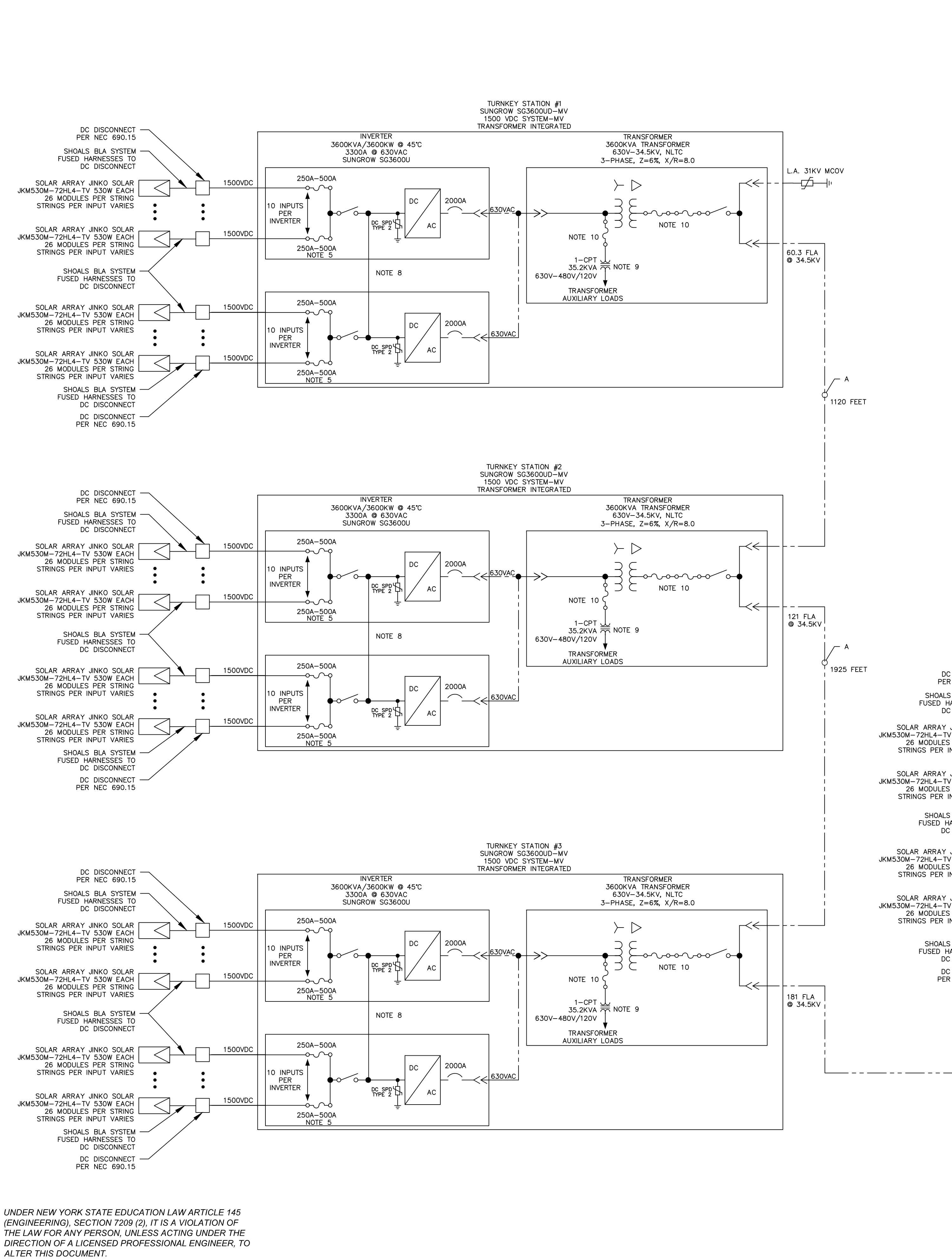


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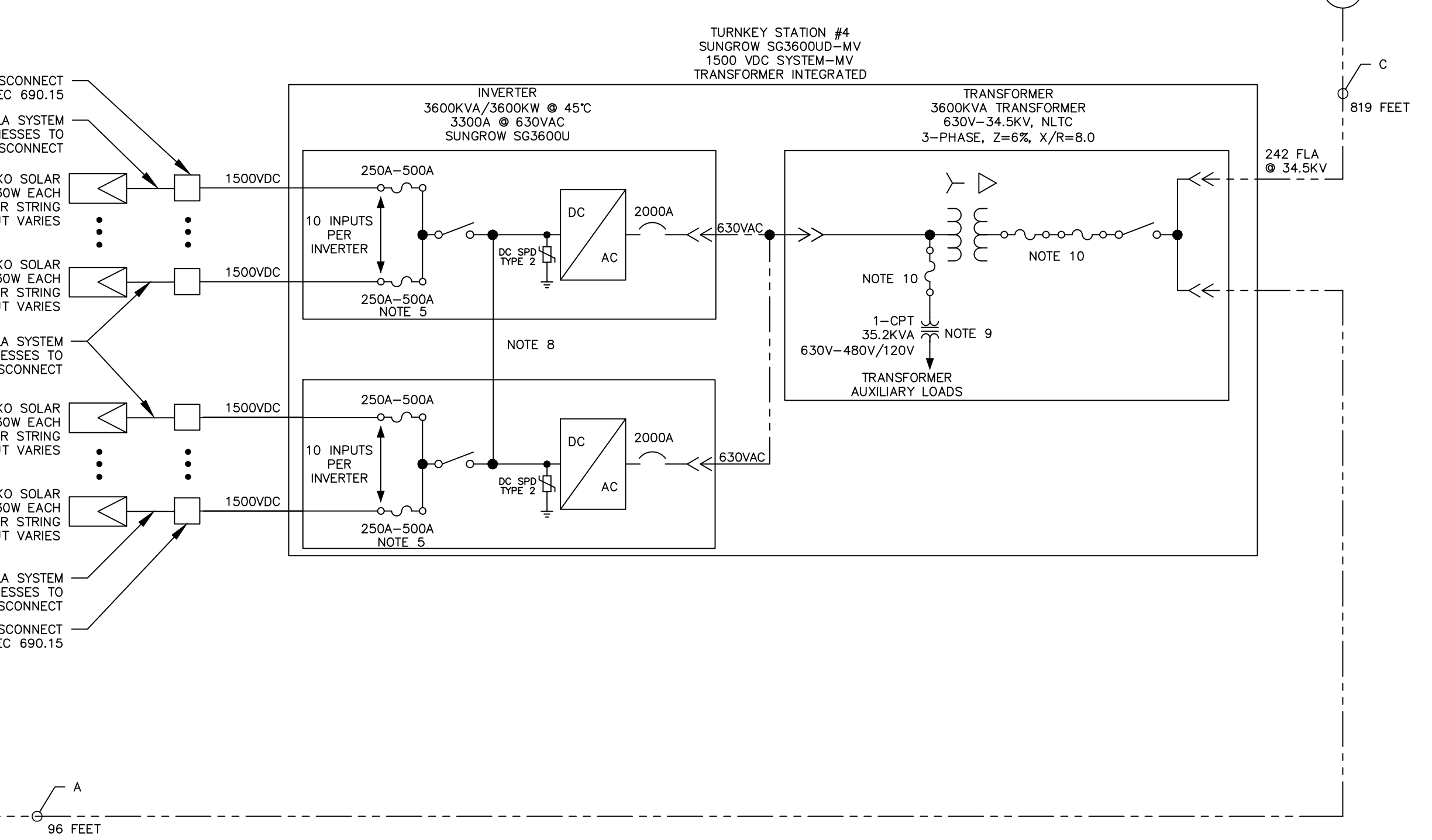



INPUT	TS1	TS2	TS3	TS4	TS5	TS6	TS7	TS8
1	17	16	16	16	15	17	19	14
2	16	16	16	16	15	16	18	14
3	16	16	16	16	16	18	20	14
4	16	18	15	16	16	18	20	16
5	18	16	18	16	16	16	20	16
6	18	18	16	16	16	16	20	16
7	16	17	16	18	16	16	20	16
8	16	17	16	18	18	18	20	16
9	18	18	16	16	16	16	19	16
10	16	16	16	16	16	16	18	16
11	16	16	16	16	16	15	18	16
12	16	15	16	16	16	15	18	16
13	16	15	18	18	14	16	18	16
14	16	12	15	15	16	16	20	16
15	18	15	18	16	16	16	20	16
16	18	15	18	18	16	16	20	16
17	16	15	16	18	16	15	20	16
18	16	12	14	18	14	14	16	16
19	16	12	0	18	0	0	0	0
20	0	0	0	0	0	0	0	0

PV SYSTEM SPECIFICATIONS (FEEDER 1)		PV SYSTEM SPECIFICATIONS TOTAL SYSTEM	
PV MODULES	62,920 X JINKO SOLAR JKM530M-72HL4-TV 530W	PV MODULES	245,310 X JINKO SOLAR JKM530M-72HL4-TV 530W
DC RATING AT STC	33,347.60 KW	DC RATING AT STC	130,014.30 KW
INVERTERS	(8) X SUNGROW SG3600U	INVERTERS	(30) X SUNGROW SG3600U
AC RATING ^{NOTE 7}	26,666.67 KW	AC RATING ^{NOTE 7}	100,000.00 KW
DC/AC RATIO @ POI	1.251	DC/AC RATIO @ POI	1.300
DC/AC RATIO @ INVERTER	1.158	DC/AC RATIO @ INVERTER	1.204


CONDUIT & WIRE SCHEDULE		
NO.	DESCRIPTION	CONDUCTORS
A	FEEDER CIRCUIT	3 X 1/0 AL, PVC JACKET DB EPR INSULATION, MV-105
B	FEEDER CIRCUIT	3 X 2/0 AL, PVC JACKET DB EPR INSULATION, MV-105
C	FEEDER CIRCUIT	3 X 4/0 AL, PVC JACKET DB EPR INSULATION, MV-105
D	FEEDER CIRCUIT	3 X 250 AL, PVC JACKET DB EPR INSULATION, MV-105
E	FEEDER CIRCUIT	3 X 350 AL, PVC JACKET DB EPR INSULATION, MV-105
F	FEEDER CIRCUIT	3 X 500 AL, PVC JACKET DB EPR INSULATION, MV-105
G	FEEDER CIRCUIT	3 X 750 AL, PVC JACKET DB EPR INSULATION, MV-105
H	FEEDER CIRCUIT	3 X 1000 AL, PVC JACKET DB EPR INSULATION, MV-105
I	FEEDER CIRCUIT	3 X 1250 AL, PVC JACKET DB EPR INSULATION, MV-105

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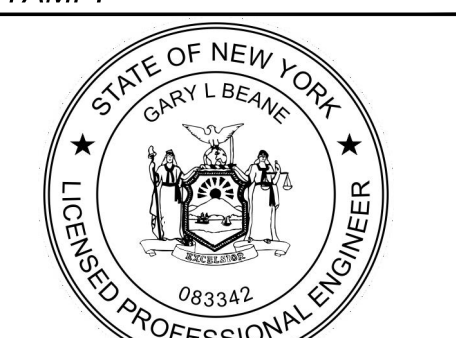


2180 South 1300 East, Suite 600
Salt Lake City, UT 84106-2749
(801) 679-3500



249 Western Avenue
Augusta, ME 04330

PE STAMP:



Gary L. Beane
Date: 2022.06.28
06:47:07 -04'00'

KEY PLAN:

NO.	DATE	DESCRIPTION
0	01/19/2022	DESIGN DRAWINGS
1	06/14/2022	ISSUED FOR PERMIT

REVISIONS:

NO.	DATE	DESCRIPTION
0	01/19/2022	DESIGN DRAWINGS
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PROJECT TITLE:
BROOKSIDE SOLAR PROJECT

PROJECT LOCATION:
TOWNS OF BURKE AND CHATEAUGAY, NY

SHEET TITLE & DESCRIPTION:
ELECTRICAL ONE LINE DIAGRAM

PROJ NUM:	422208
DEN:	A. QUIROZ
DWN:	A. QUIROZ
CHK:	B. TYLOCK
APV:	G. BEANE
DATE:	04/02/2021
SCALE AT 22" x 34":	NONE

PROJ NUM: 422208
DEN: A. QUIROZ
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APV: G. BEANE
DATE: 04/02/2021
SCALE AT 22" x 34": NONE

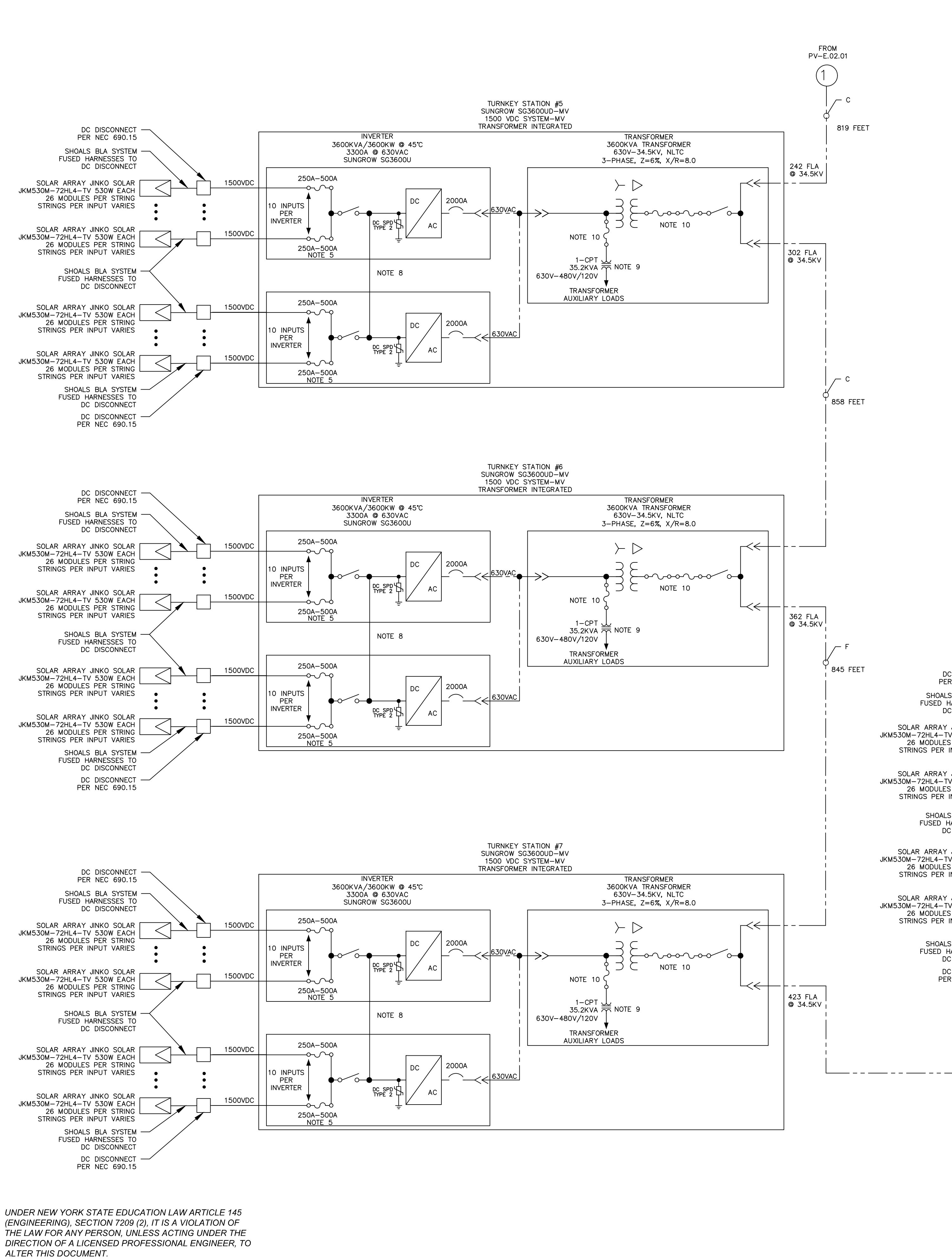
PRELIMINARY
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SHEET NO: PV-E.02.01 REV: 1

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PRELIMINARY
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AES T:\sub\2224\1710701

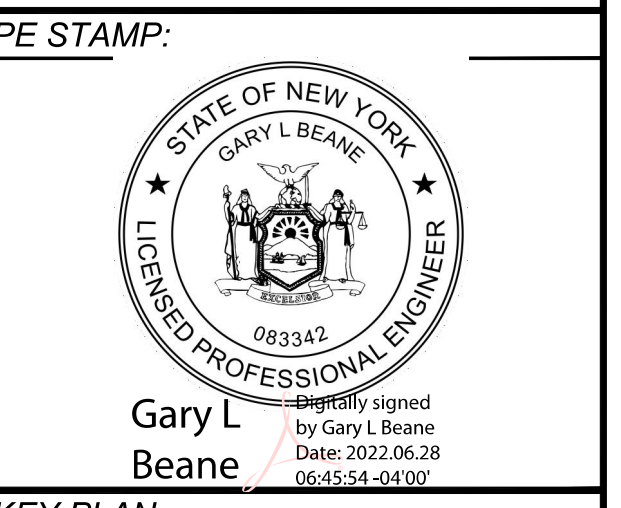
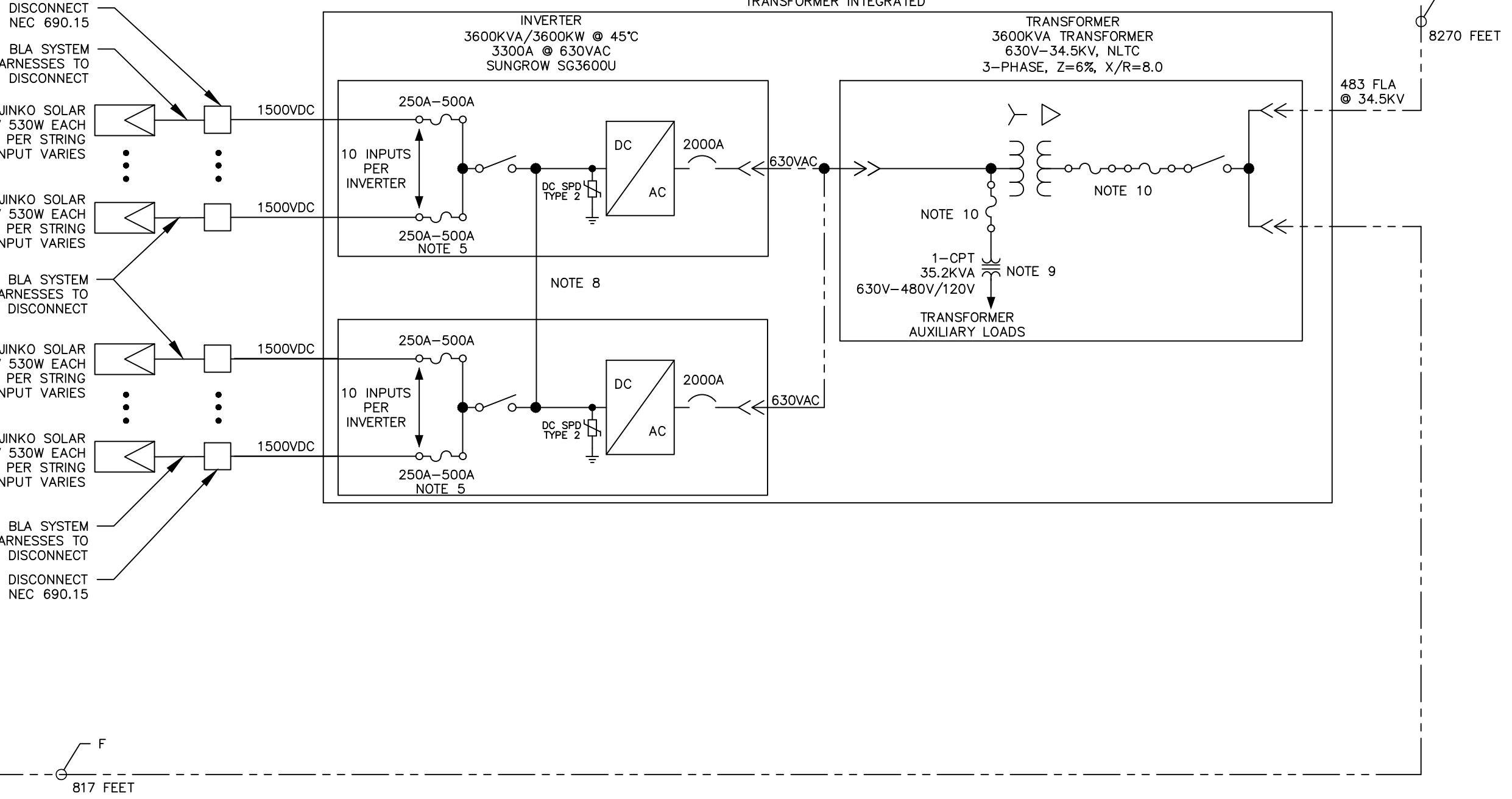
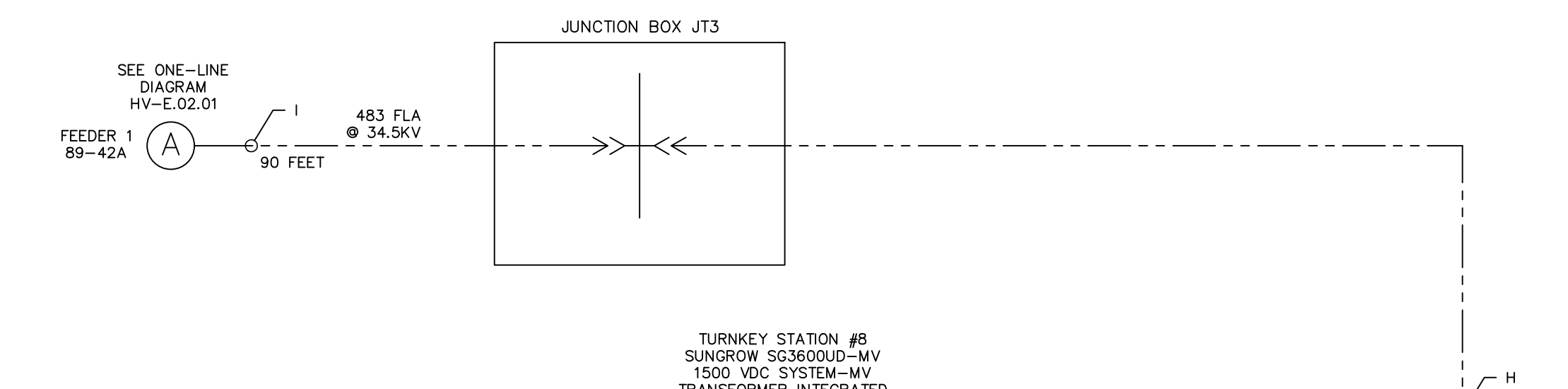


STRINGS PER INPUT									
INPUT	TS1	TS2	TS3	TS4	TS5	TS6	TS7	TS8	
1	17	16	16	16	15	17	13	14	
2	16	16	16	15	16	18	19	14	
3	16	16	16	16	16	18	20	14	
4	16	18	15	16	16	18	20	16	
5	18	16	18	16	16	16	20	16	
6	18	18	16	18	16	16	20	16	
7	16	17	16	18	16	16	20	16	
8	16	17	16	18	18	16	20	16	
9	16	18	16	16	16	18	19	16	
10	16	18	16	16	16	18	19	16	
11	16	16	16	16	16	15	18	18	
12	16	15	16	16	16	15	18	16	
13	16	15	18	18	14	16	18	16	
14	16	12	15	15	16	16	20	16	
15	18	15	18	18	16	16	20	16	
16	18	15	18	18	16	16	20	16	
17	16	15	18	18	16	13	20	16	
18	16	12	14	18	14	14	16	16	
19	16	12	0	18	0	0	0	0	
20	0	0	0	0	0	0	0	0	

PV SYSTEM SPECIFICATIONS (FEEDER 1)		PV SYSTEM SPECIFICATIONS TOTAL SYSTEM	
PV MODULES	62,920 X JINKO SOLAR JKM530M-72HL4-TV 530W	PV MODULES	245,310 X JINKO SOLAR JKM530M-72HL4-TV 530W
DC RATING AT STC	33,347.60 KW	DC RATING AT STC	130,014.30 KW
INVERTERS	(8) X SUNGROW SG3600U	INVERTERS	(30) X SUNGROW SG3600U
AC RATING ^{NOTE 7}	26,666.67 KW	AC RATING ^{NOTE 7}	100,000.00 KW
DC/AC RATIO @ POI	1.251	DC/AC RATIO @ POI	1.300
DC/AC RATIO @ INVERTER	1.158	DC/AC RATIO @ INVERTER	1.204

CONDUIT & WIRE SCHEDULE		
NO.	DESCRIPTION	CONDUCTORS
A	FEEDER CIRCUIT	3 X 1/0 AL, PVC JACKET DB EPR INSULATION, MV-105
B	FEEDER CIRCUIT	3 X 2/0 AL, PVC JACKET DB EPR INSULATION, MV-105
C	FEEDER CIRCUIT	3 X 4/0 AL, PVC JACKET DB EPR INSULATION, MV-105
D	FEEDER CIRCUIT	3 X 250 AL, PVC JACKET DB EPR INSULATION, MV-105
E	FEEDER CIRCUIT	3 X 350 AL, PVC JACKET DB EPR INSULATION, MV-105
F	FEEDER CIRCUIT	3 X 500 AL, PVC JACKET DB EPR INSULATION, MV-105
G	FEEDER CIRCUIT	3 X 750 AL, PVC JACKET DB EPR INSULATION, MV-105
H	FEEDER CIRCUIT	3 X 1000 AL, PVC JACKET DB EPR INSULATION, MV-105
I	FEEDER CIRCUIT	3 X 1250 AL, PVC JACKET DB EPR INSULATION, MV-105

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KEY PLAN:

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1	06/14/2022	ISSUED FOR PERMIT

REVISIONS:

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PROJECT TITLE:
BROOKSIDE SOLAR PROJECT

PROJECT LOCATION:
TOWNS OF BURKE AND CHATEAUGAY, NY

SHEET TITLE & DESCRIPTION:
ELECTRICAL ONE LINE DIAGRAM

PROJ NUM:	422208
DES:	A. QUIROZ
DWN:	A. QUIROZ
CHK:	B. TYLOCK
APV:	G. BEANE
DATE:	04/02/2021
SCALE AT 22" x 34":	

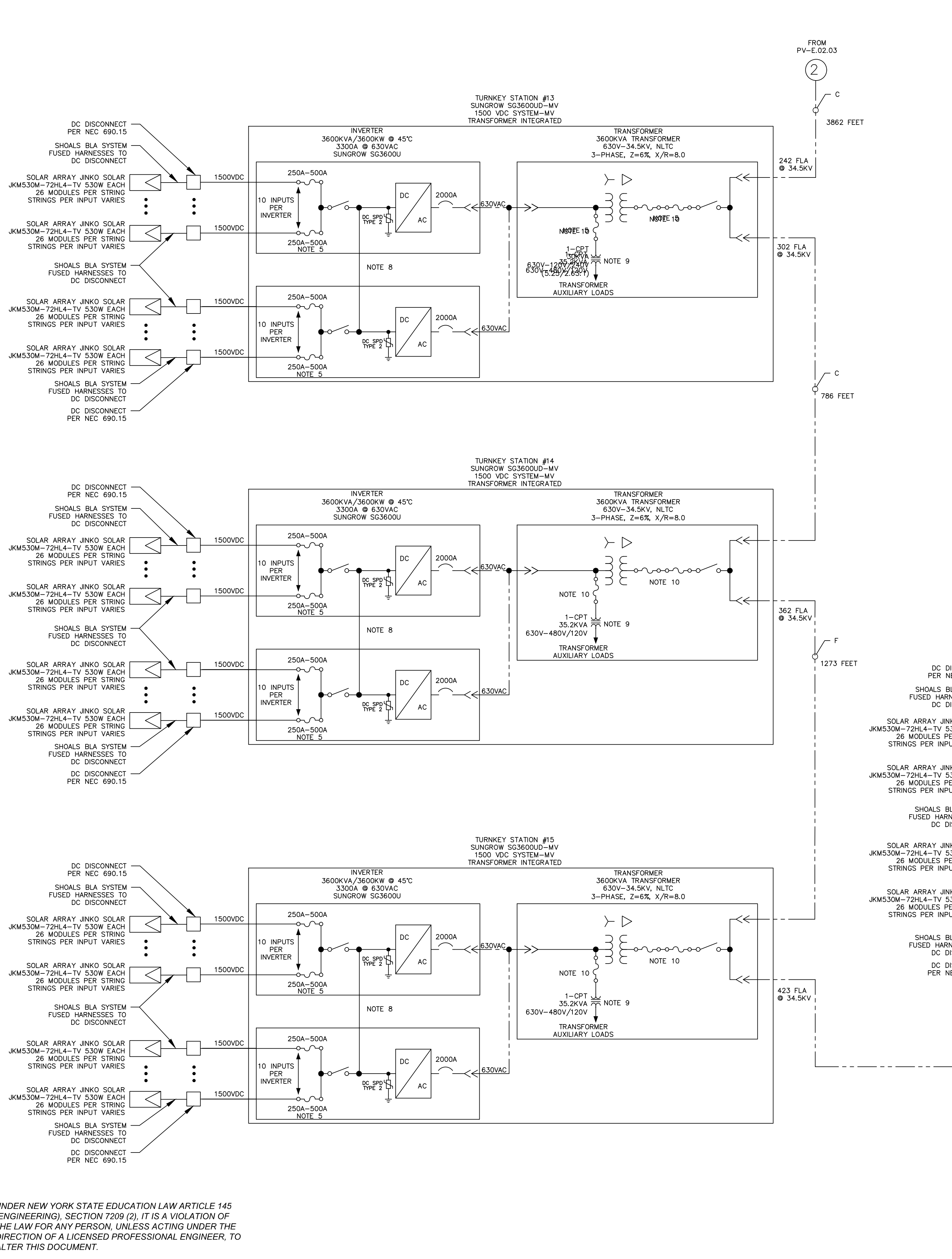
NONE	
SHEET NO:	PV-E.02.02
REV:	1

PRELIMINARY
NOT FOR CONSTRUCTION

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PLOTTED: 6/27/2022 4:49 PM
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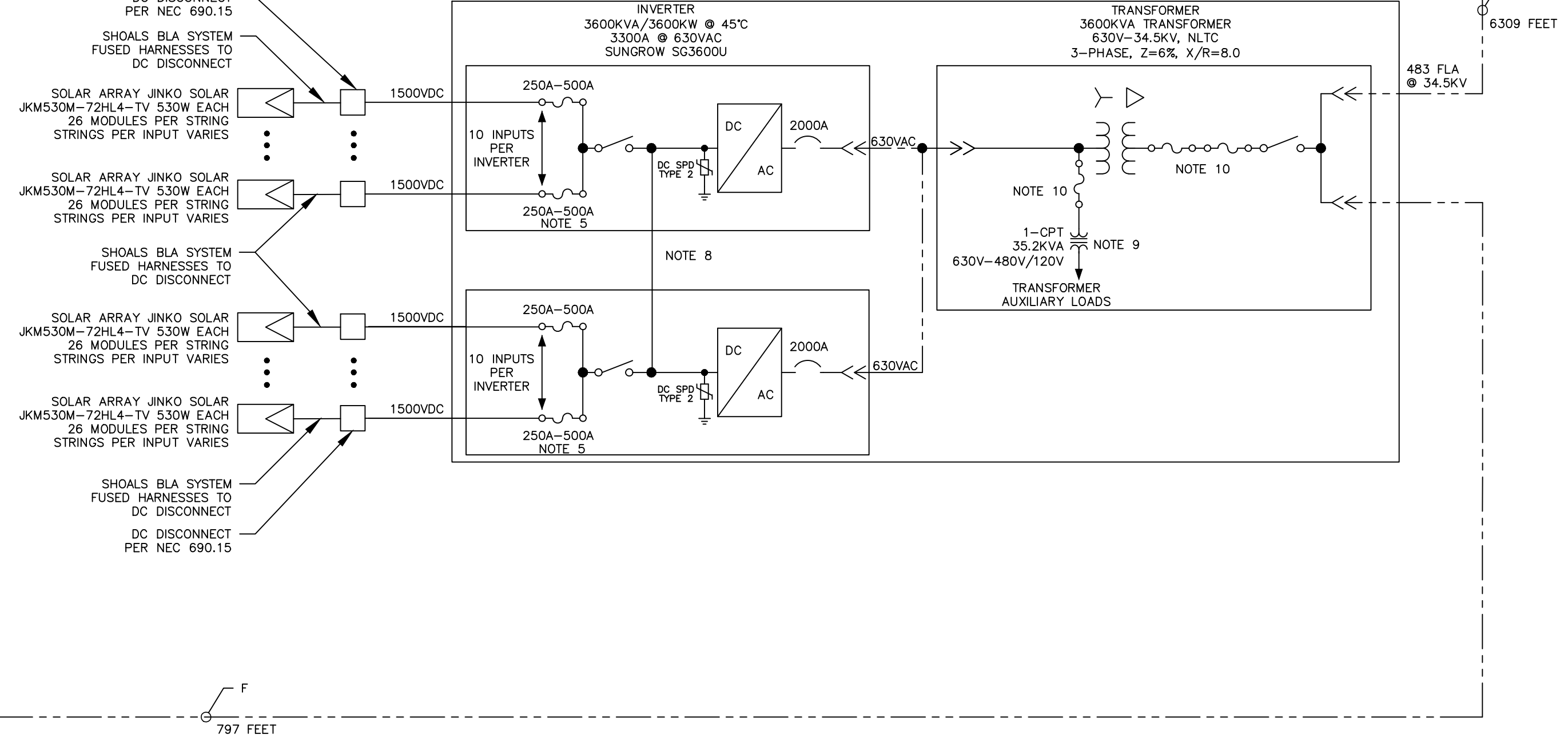
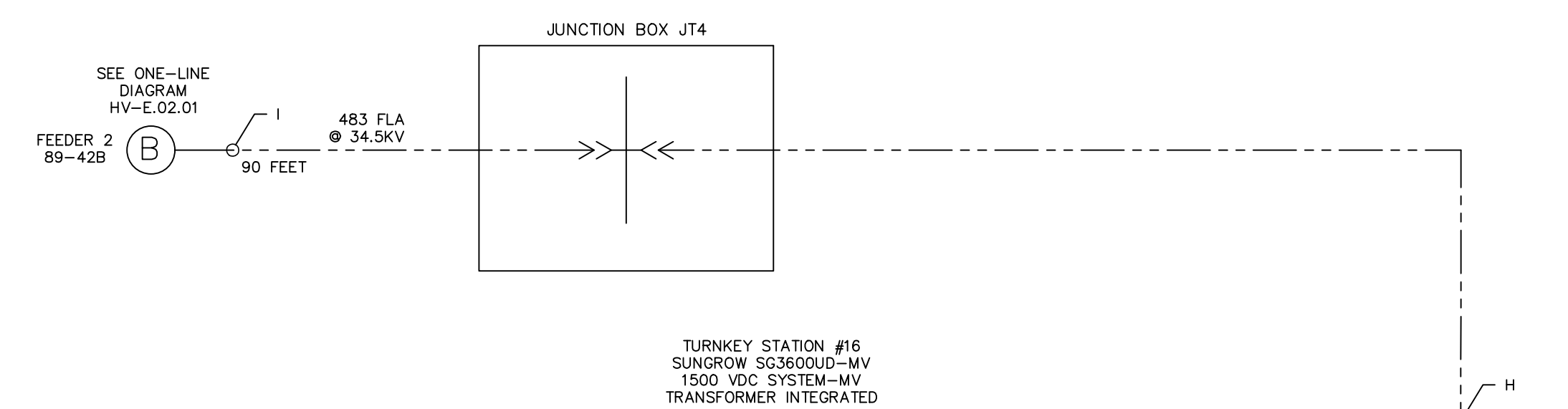
STRINGS PER INPUT	
INPUT	TS9 TS10 TS11 TS12 TS13 TS14 TS15 TS16
1	16 15 16 16 20 18 18 18
2	16 18 18 16 20 18 18 20
3	16 18 16 16 20 18 18 20
4	16 18 16 16 18 18 18 18
5	18 15 16 16 16 18 18 16 18
6	18 15 16 17 18 18 16 18
7	18 16 16 17 18 18 18 18
8	17 16 18 15 18 16 18 18
9	15 16 19 15 18 16 15 18
10	15 16 19 15 18 16 18 18
11	15 15 19 16 18 16 17 20
12	18 16 20 12 18 18 17 16
13	19 18 16 20 18 18 18 16
14	19 16 16 20 18 18 18 18
15	19 16 16 19 18 18 12 18
16	15 16 16 19 15 18 12 18
17	15 18 16 14 0 18 18 0
18	16 18 16 12 0 18 18 0
19	16 0 0 12 0 18 18 0
20	0 0 0 0 0 0 18 0


PV SYSTEM SPECIFICATIONS (FEEDER 2)	
PV MODULES	64,194 X JINKO SOLAR JKM530M-72HL4-TV 530W
DC RATING AT STC	34,022.82 KW
INVERTERS	(8) X SUNGROW SG3600U
AC RATING ^{NOTE 7}	26,666.67 KW
DC/AC RATIO @ POI	1.276
DC/AC RATIO @ INVERTER	1.181

PV SYSTEM SPECIFICATIONS TOTAL SYSTEM	
PV MODULES	245,310 X JINKO SOLAR JKM530M-72HL4-TV 530W
DC RATING AT STC	130,014.30 KW
INVERTERS	(30) X SUNGROW SG3600U
AC RATING ^{NOTE 7}	100,000.00 KW
DC/AC RATIO @ POI	1.300
DC/AC RATIO @ INVERTER	1.204


CONDUIT & WIRE SCHEDULE		
NO.	DESCRIPTION	CONDUCTORS
A	FEEDER CIRCUIT	3 X 1/0 AL, PVC JACKET DB EPR INSULATION, MV-105
B	FEEDER CIRCUIT	3 X 2/0 AL, PVC JACKET DB EPR INSULATION, MV-105
C	FEEDER CIRCUIT	3 X 4/0 AL, PVC JACKET DB EPR INSULATION, MV-105
D	FEEDER CIRCUIT	3 X 250 AL, PVC JACKET DB EPR INSULATION, MV-105
E	FEEDER CIRCUIT	3 X 350 AL, PVC JACKET DB EPR INSULATION, MV-105
F	FEEDER CIRCUIT	3 X 500 AL, PVC JACKET DB EPR INSULATION, MV-105
G	FEEDER CIRCUIT	3 X 750 AL, PVC JACKET DB EPR INSULATION, MV-105
H	FEEDER CIRCUIT	3 X 1000 AL, PVC JACKET DB EPR INSULATION, MV-105
I	FEEDER CIRCUIT	3 X 1250 AL, PVC JACKET DB EPR INSULATION, MV-105

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2180 South 1300 East, Suite 600
Salt Lake City, UT 84106-2749
(801) 678-3500



249 Western Avenue
Augusta, ME 04330

PE STAMP:



Gary L. Beane
Licensed Professional Engineer

KEY PLAN:

NO.	DATE	DESCRIPTION
0	01/19/2022	DESIGN DRAWINGS
1	06/14/2022	ISSUED FOR PERMIT

REVISIONS:

PROJECT TITLE:
BROOKSIDE SOLAR PROJECT

PROJECT LOCATION:
TOWNS OF BURKE AND CHATEAUGAY, NY

SHEET TITLE & DESCRIPTION:
ELECTRICAL ONE LINE DIAGRAM

PROJ NUM:	422208
DEN:	A. QUIROZ
DWN:	A. QUIROZ
CHK:	B. TYLOCK
APV:	G. BEANE
DATE:	04/02/2021
SCALE AT 22" x 34":	NONE

PROJ: 422208
DES: A. QUIROZ
DWN: A. QUIROZ
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APV: G. BEANE
DATE: 04/02/2021
SCALE AT 22" x 34": NONE

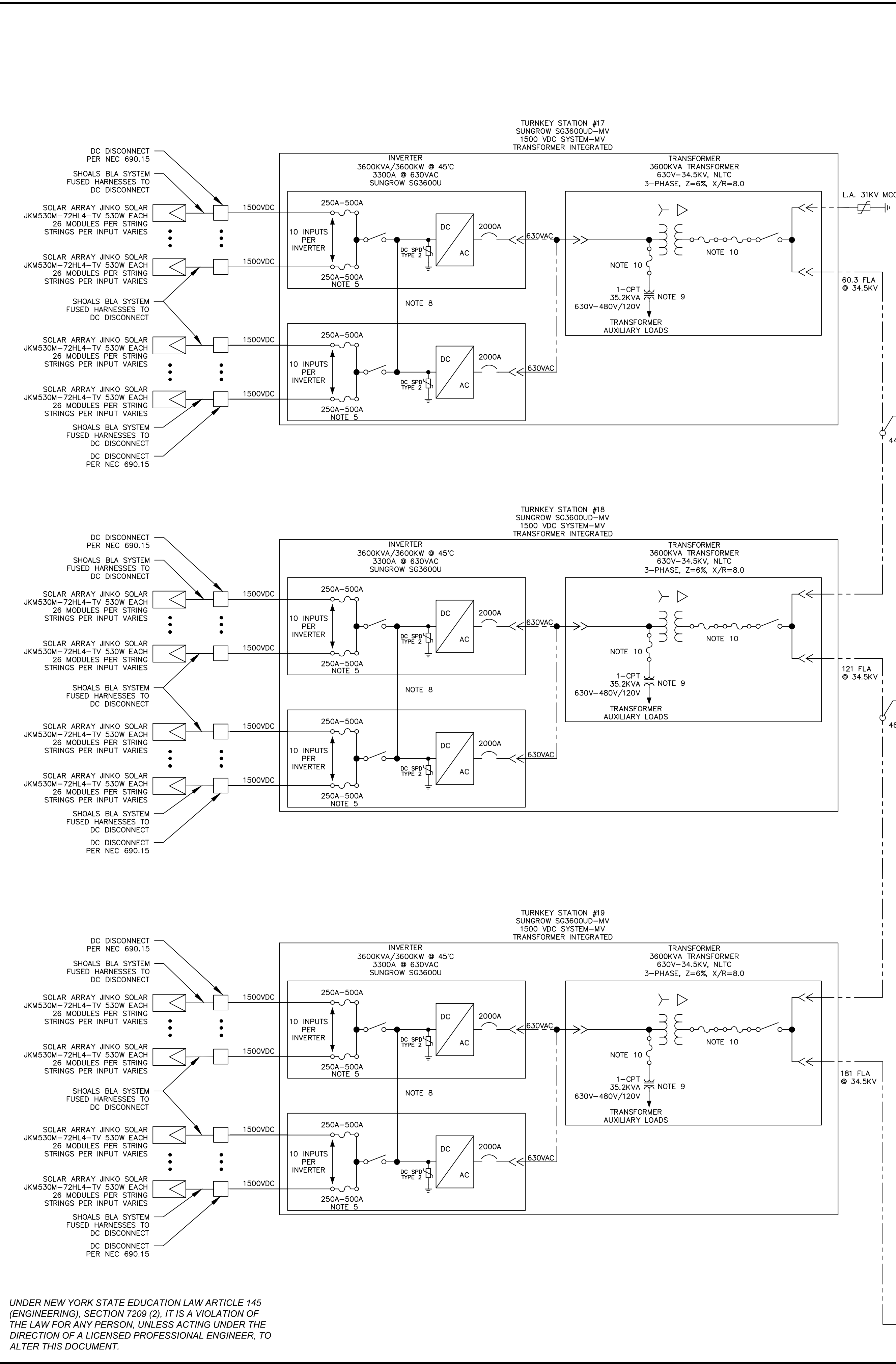
PRELIMINARY
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SHEET NO: PV-E.02.04 REV: 1

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AEIS: Tmba32: 22/24: 02/2021
PLOTTED: 6/27/2022 1:50 PM
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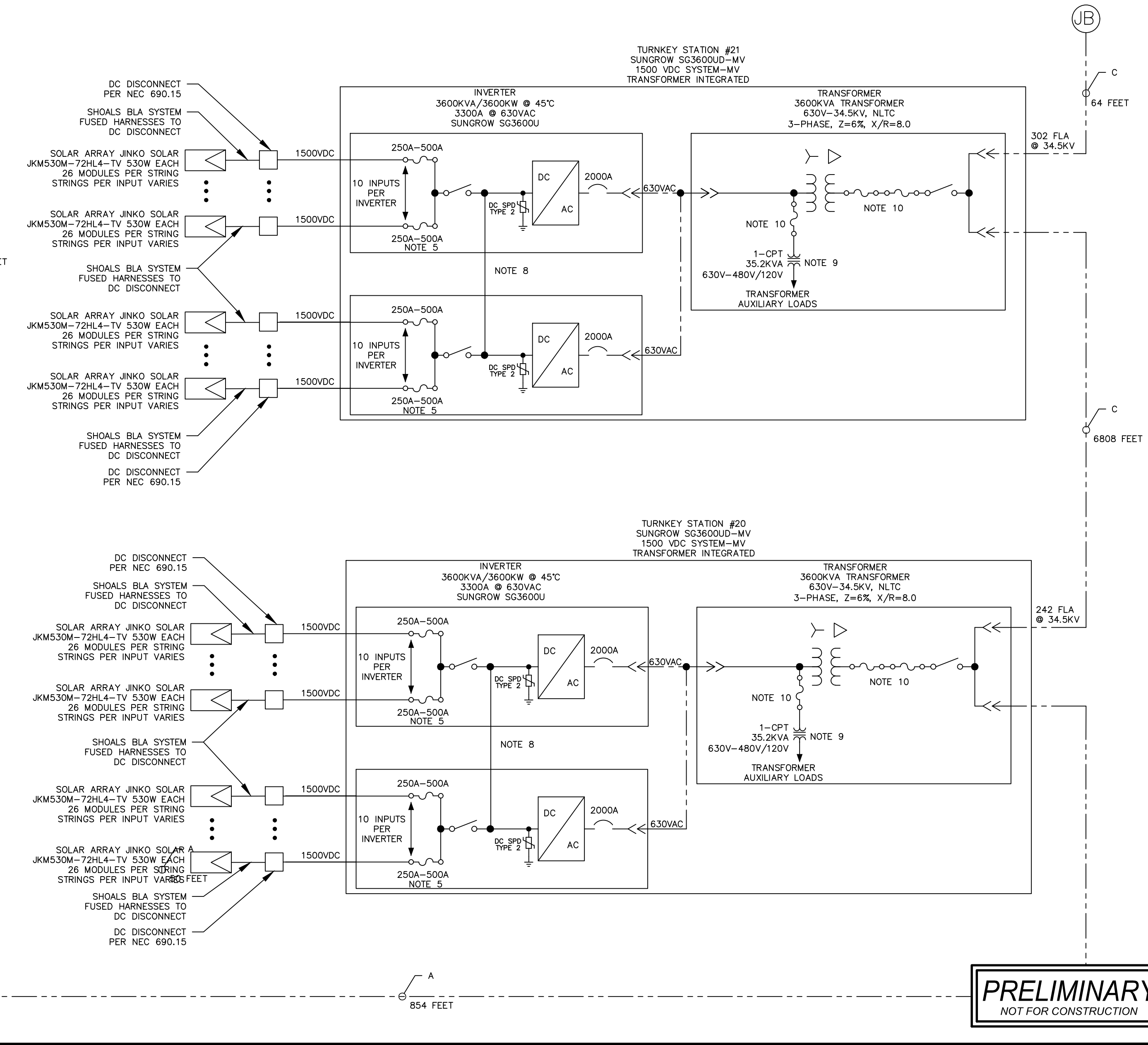


INPUT	STRINGS PER INPUT																
	TS17	TS18	TS19	TS20	TS21	TS22	TS23	TS24	TS25	TS26	TS27	TS28	TS29	TS30	TS31	TS32	TS33
1	17	26	18	14	16	18	19	18									
2	18	19	15	16	16	16	19	18									
3	18	19	15	16	16	16	19	18									
4	18	19	15	16	16	16	19	18									
5	19	19	15	15	16	16	19	17									
6	19	19	18	17	16	16	19	18									
7	18	18	18	16	18	16	16	18									
8	18	17	20	16	18	16	15	17									
9	19	19	20	16	18	16	19	15									
10	19	19	18	19	18	16	19	15									
11	19	19	20	20	18	16	19	14									
12	19	19	18	18	18	16	19	15									
13	18	18	18	20	18	16	19	17									
14	18	18	18	20	18	16	19	17									
15	18	18	18	20	18	16	19	17									
16	18	18	18	20	18	16	19	17									
17	18	18	18	18	16	17	19	17									
18	0	0	18	18	15	18	14										
19	0	0	18	18	15	18	14										
20	0	0	0	18	0	16	19	13									

PV SYSTEM SPECIFICATIONS (FEEDER 3)		PV SYSTEM SPECIFICATIONS TOTAL SYSTEM	
PV MODULES	68,796 X JINKO SOLAR JKM530M-72HL4-TV 530W	PV MODULES	245,310 X JINKO SOLAR JKM530M-72HL4-TV 530W
DC RATING AT STC	36,461.88 KW	DC RATING AT STC	130,014.30 KW
INVERTERS	(8) X SUNGROW SG3600U	INVERTERS	(30) X SUNGROW SG3600U
AC RATING NOTE 7	26,666.67 KW	AC RATING NOTE 7	100,000.00 KW
DC/AC RATIO @ POI	1.367	DC/AC RATIO @ POI	1.300
DC/AC RATIO @ INVERTER	1.266	DC/AC RATIO @ INVERTER	1.204

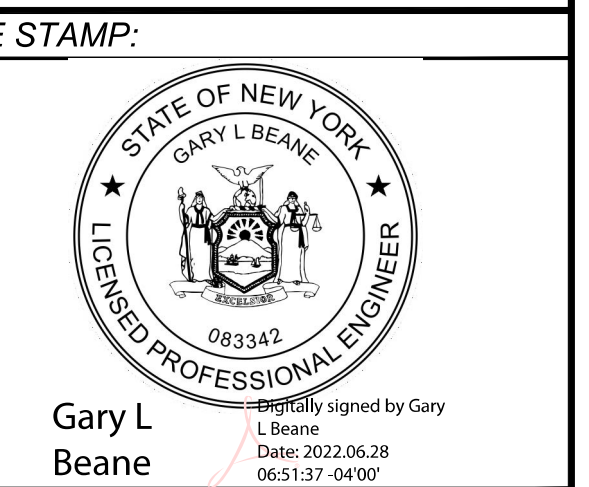
CONDUIT & WIRE SCHEDULE		
NO.	DESCRIPTION	CONDUCTORS
A	FEEDER CIRCUIT	3 X 1/0 AL, PVC JACKET DB EPR INSULATION, MV-105
B	FEEDER CIRCUIT	3 X 2/0 AL, PVC JACKET DB EPR INSULATION, MV-105
C	FEEDER CIRCUIT	3 X 4/0 AL, PVC JACKET DB EPR INSULATION, MV-105
D	FEEDER CIRCUIT	3 X 250 AL, PVC JACKET DB EPR INSULATION, MV-105
E	FEEDER CIRCUIT	3 X 350 AL, PVC JACKET DB EPR INSULATION, MV-105
F	FEEDER CIRCUIT	3 X 500 AL, PVC JACKET DB EPR INSULATION, MV-105
G	FEEDER CIRCUIT	3 X 750 AL, PVC JACKET DB EPR INSULATION, MV-105
H	FEEDER CIRCUIT	3 X 1000 AL, PVC JACKET DB EPR INSULATION, MV-105
I	FEEDER CIRCUIT	3 X 1250 AL, PVC JACKET DB EPR INSULATION, MV-105

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SCALE AT 22" x 34":	

NONE
SHEET NO: PV-E.02.05 REV: 1

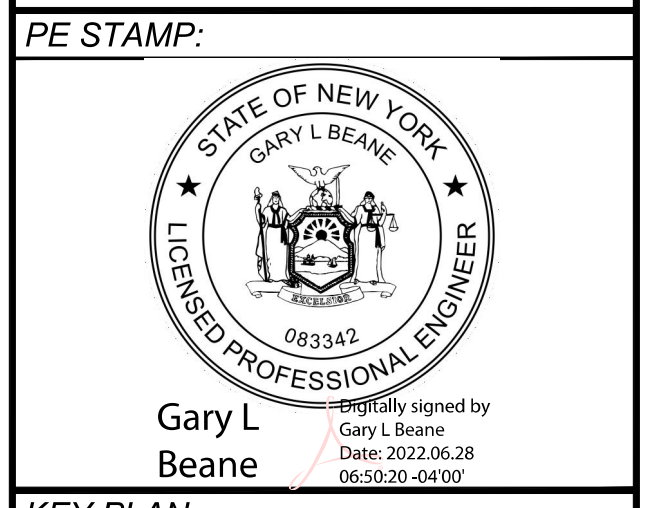
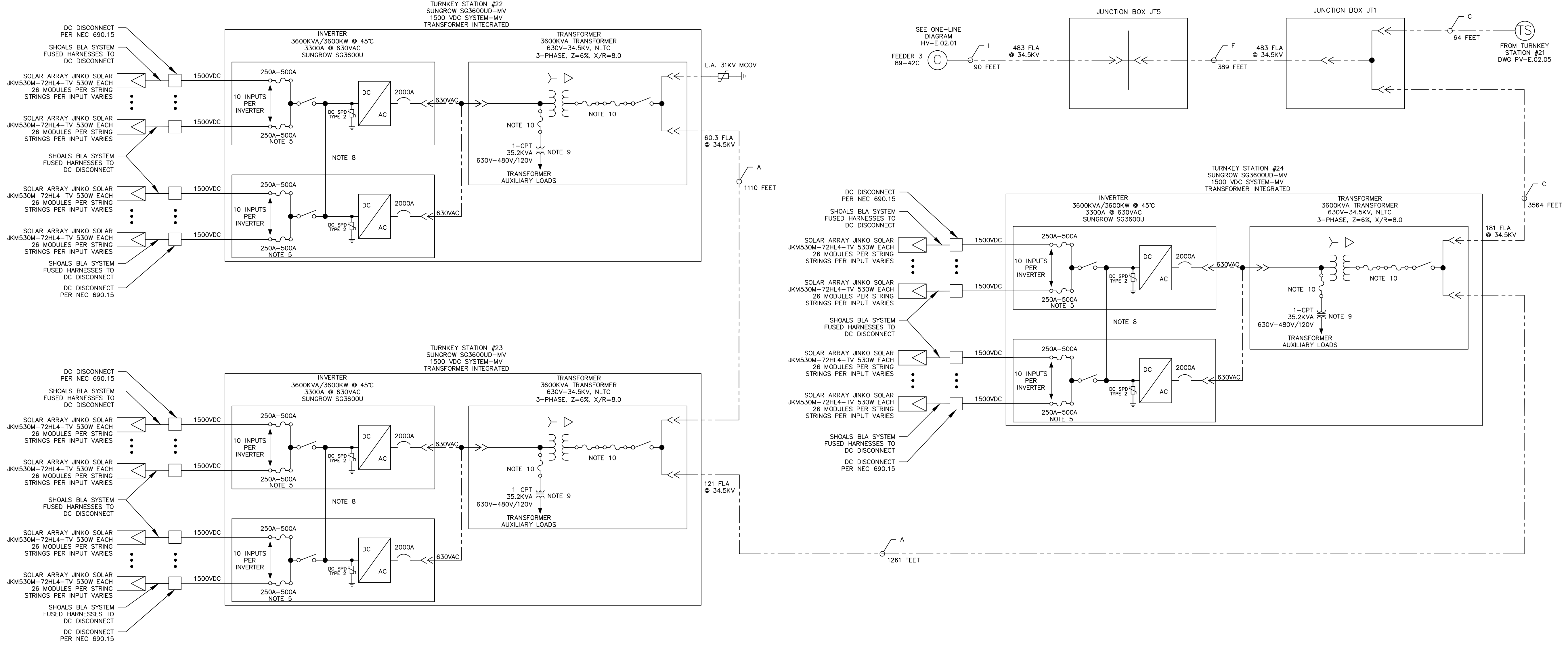
AES Tmba002-22024-021070

INPUT	TS17	TS18	TS19	TS20	TS21	TS22	TS23	TS24
1	17	18	18	14	16	18	19	18
2	18	20	16	16	16	16	19	18
3	18	18	15	16	16	16	19	18
4	18	18	15	16	16	16	19	17
5	19	18	15	15	16	16	19	17
6	19	18	18	17	16	16	19	18
7	18	18	18	16	18	16	16	18
8	18	17	20	16	18	16	15	17
9	19	18	20	16	18	16	19	15
10	19	18	18	19	18	16	19	15
11	19	18	20	20	18	16	19	14
12	19	18	18	18	18	16	19	15
13	18	18	18	18	18	14	19	15
14	18	18	18	20	18	16	19	17
15	18	18	18	20	18	16	19	17
16	18	18	18	20	18	17	19	17
17	18	18	18	18	16	17	19	17
18	0	0	0	18	16	18	19	14
19	0	0	18	18	15	18	19	14
20	0	0	0	18	0	16	19	13

PV SYSTEM SPECIFICATIONS (FEEDER 3)		PV SYSTEM SPECIFICATIONS TOTAL SYSTEM	
PV MODULES	68,796 X JINKO SOLAR JKM530M-72HL4-TV 530W	PV MODULES	245,310 X JINKO SOLAR JKM530M-72HL4-TV 530W
DC RATING AT STC	36,461.88 KW	DC RATING AT STC	130,014.30 KW
INVERTERS	(8) X SUNGROW SG3600U	INVERTERS	(30) X SUNGROW SG3600U
AC RATING ^{NOTE 7}	26,666.67 KW	AC RATING ^{NOTE 7}	100,000.00 KW
DC/AC RATIO @ POI	1.367	DC/AC RATIO @ POI	1.300
DC/AC RATIO @ INVERTER	1.266	DC/AC RATIO @ INVERTER	1.204

CONDUIT & WIRE SCHEDULE		
NO.	DESCRIPTION	CONDUCTORS
A	FEEDER CIRCUIT	3 X 1/0 AL, PVC JACKET DB EPR INSULATION, MV-105
B	FEEDER CIRCUIT	3 X 2/0 AL, PVC JACKET DB EPR INSULATION, MV-105
C	FEEDER CIRCUIT	3 X 4/0 AL, PVC JACKET DB EPR INSULATION, MV-105
D	FEEDER CIRCUIT	3 X 250 AL, PVC JACKET DB EPR INSULATION, MV-105
E	FEEDER CIRCUIT	3 X 350 AL, PVC JACKET DB EPR INSULATION, MV-105
F	FEEDER CIRCUIT	3 X 500 AL, PVC JACKET DB EPR INSULATION, MV-105
G	FEEDER CIRCUIT	3 X 750 AL, PVC JACKET DB EPR INSULATION, MV-105
H	FEEDER CIRCUIT	3 X 1000 AL, PVC JACKET DB EPR INSULATION, MV-105
I	FEEDER CIRCUIT	3 X 1250 AL, PVC JACKET DB EPR INSULATION, MV-105

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 - THE TRANSFORMER SYSTEM IMPEDANCE WILL BE DETERMINED THROUGH SUNGROW. FINAL VALUES TO BE SUBMITTED TO THE UTILITY WHEN AVAILABLE.
 - FINAL FUSE SIZES TBD BY MANUFACTURER.
 - INVERTERS ARE CERTIFIED PER THE REQUIREMENTS OF UL 1741 SA AS A GRID SUPPORT UTILITY INVERTER AND HENCE MEETS THE UTILITY VOLTAGE AND FREQUENCY RIDE THROUGH REQUIREMENTS.
 - AC RATING MEASURED AT THE POI IS LIMITED TO 100MW BY THE PLANT CONTROLLER.
 - THE TWO DC BUS BARS ARE CONNECTED TOGETHER WHEN 1 MPPT IS SELECTED. ONE MPPT IS STANDARD.
 - OPTIONAL AUX TRANSFORMER SUPPLIED BY MANUFACTURER WITH MULTIPLE SECONDARY OUTPUT WINDINGS.
 - FINAL FUSE SIZES TBD BY MANUFACTURER.



KEY PLAN:

REVISIONS:

NO.	DATE	DESCRIPTION
0	01/19/2022	DESIGN DRAWINGS
1	06/14/2022	ISSUED FOR PERMIT

PROJECT TITLE:
BROOKSIDE SOLAR PROJECT

PROJECT LOCATION:
TOWNS OF BURKE AND CHATEAUGAY, NY

SHEET TITLE & DESCRIPTION:
ELECTRICAL ONE LINE DIAGRAM

PROJ NUM:	422208
DES:	A. QUIROZ
DWN:	A. QUIROZ
CHK:	B. TYLOCK
APV:	G. BEANE
DATE:	04/02/2021
SCALE AT 22" x 34":	

NONE	
SHEET NO:	PV-E.02.06
REV:	1

PRELIMINARY
NOT FOR CONSTRUCTION

UNDER NEW YORK STATE EDUCATION LAW ARTICLE 145 (ENGINEERING), SECTION 7209 (2), IT IS A VIOLATION OF THE LAW FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.

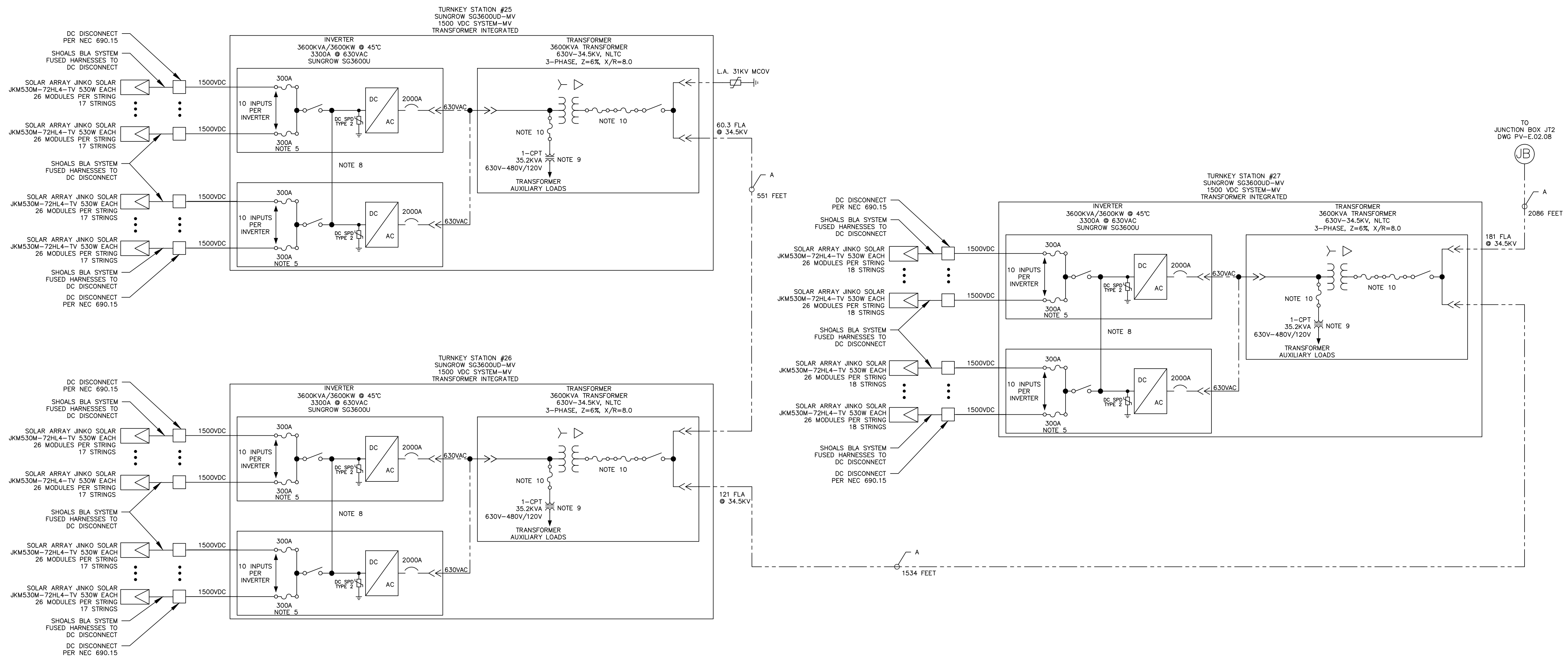
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C:\Users\jbeane\OneDrive\Documents\AES\Tmba002-22024-021070\Drawings\AES\Tmba002-22024-021070-Electrical One Line Diagram.dwg

INPUT	STRINGS PER INPUT									
	TSP1	TSP2	TSP3	TSP4	TSP5	TSP6	TSP7	TSP8	TSP9	TSP10
1	15	16	18	16	16	18				
2	15	16	18	16	16	18				
3	15	16	18	16	16	18				
4	16	16	19	16	13	18				
5	15	16	19	16	13	18				
6	15	16	19	16	13	18				
7	15	16	19	16	13	18				
8	15	16	19	16	13	18				
9	15	16	19	16	13	18				
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11	15	16	19	16	13	18				
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13	16	14	15	16	13	17				
14	16	18	16	16	13	18				
15	16	13	15	18	13	18				
16	16	13	15	18	13	18				
17	16	16	19	16	13	18				
18	17	16	19	0	15	18				
19	17	16	19	0	15	18				
20	17	16	19	0	15	18				

PV SYSTEM SPECIFICATIONS (FEEDER 4)		PV SYSTEM SPECIFICATIONS TOTAL SYSTEM	
PV MODULES	49,400 X JINKO SOLAR JKMS30M-72HL4-TV 530W	PV MODULES	245,310 X JINKO SOLAR JKMS30M-72HL4-TV 530W
DC RATING AT STC	26,182.00 KW	DC RATING AT STC	130,014.30 KW
INVERTERS	(6) X SUNGROW SG3600U	INVERTERS	(30) X SUNGROW SG3600U
AC RATING NOTE 7	20,000.00 KW	AC RATING NOTE 7	100,000.00 KW
DC/AC RATIO @ POI	1.309	DC/AC RATIO @ POI	1.300
DC/AC RATIO @ INVERTER	1.212	DC/AC RATIO @ INVERTER	1.204

CONDUIT & WIRE SCHEDULE		
NO.	DESCRIPTION	CONDUCTORS
A	FEEDER CIRCUIT	3 X 1/0 AL, PVC JACKET DB EPR INSULATION, MV-105
B	FEEDER CIRCUIT	3 X 2/0 AL, PVC JACKET DB EPR INSULATION, MV-105
C	FEEDER CIRCUIT	3 X 4/0 AL, PVC JACKET DB EPR INSULATION, MV-105
D	FEEDER CIRCUIT	3 X 250 AL, PVC JACKET DB EPR INSULATION, MV-105
E	FEEDER CIRCUIT	3 X 350 AL, PVC JACKET DB EPR INSULATION, MV-105
F	FEEDER CIRCUIT	3 X 500 AL, PVC JACKET DB EPR INSULATION, MV-105
G	FEEDER CIRCUIT	3 X 750 AL, PVC JACKET DB EPR INSULATION, MV-105
H	FEEDER CIRCUIT	3 X 1000 AL, PVC JACKET DB EPR INSULATION, MV-105
I	FEEDER CIRCUIT	3 X 1250 AL, PVC JACKET DB EPR INSULATION, MV-105

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 - FINAL FUSE SIZES TBD BY MANUFACTURER.
 - INVERTERS ARE CERTIFIED PER THE REQUIREMENTS OF UL 1741 SA AS A GRID SUPPORT UTILITY INVERTER AND HENCE MEETS THE UTILITY VOLTAGE AND FREQUENCY RIDE THROUGH REQUIREMENTS.
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 - FINAL FUSE SIZES TBD BY MANUFACTURER.



PE STAMP:



Gary L. Beane
Date: 2022.06.28
06:48:58 -0400

KEY PLAN:

REVISIONS:

NO.	DATE	DESCRIPTION
0	01/19/2022	DESIGN DRAWINGS
1	06/14/2022	ISSUED FOR PERMIT

PROJECT TITLE:

BROOKSIDE SOLAR PROJECT

PROJECT LOCATION:

TOWNS OF BURKE AND CHATEAUGAY, NY

SHEET TITLE & DESCRIPTION:

ELECTRICAL ONE LINE DIAGRAM

PROJ NUM:	422208
DES:	A. QUIROZ
DWN:	A. QUIROZ
CHK:	B. TYLOCK
APV:	G. BEANE
DATE:	04/02/2021
SCALE AT 22" x 34":	NONE

PRELIMINARY
NOT FOR CONSTRUCTION

SHEET NO:	PV-E.02.07	REV:	1
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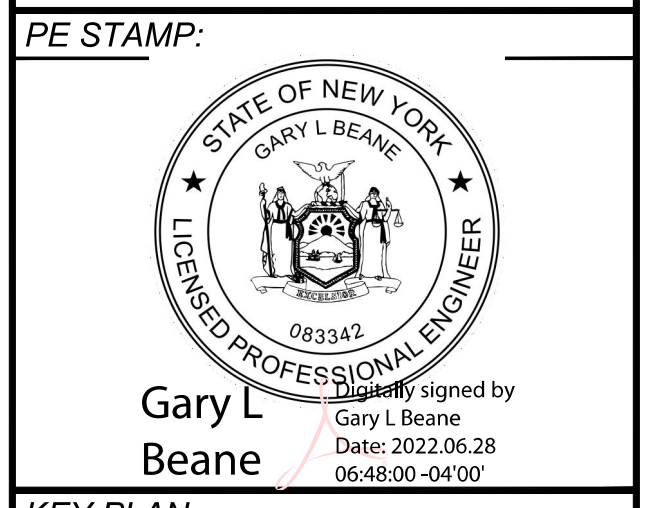
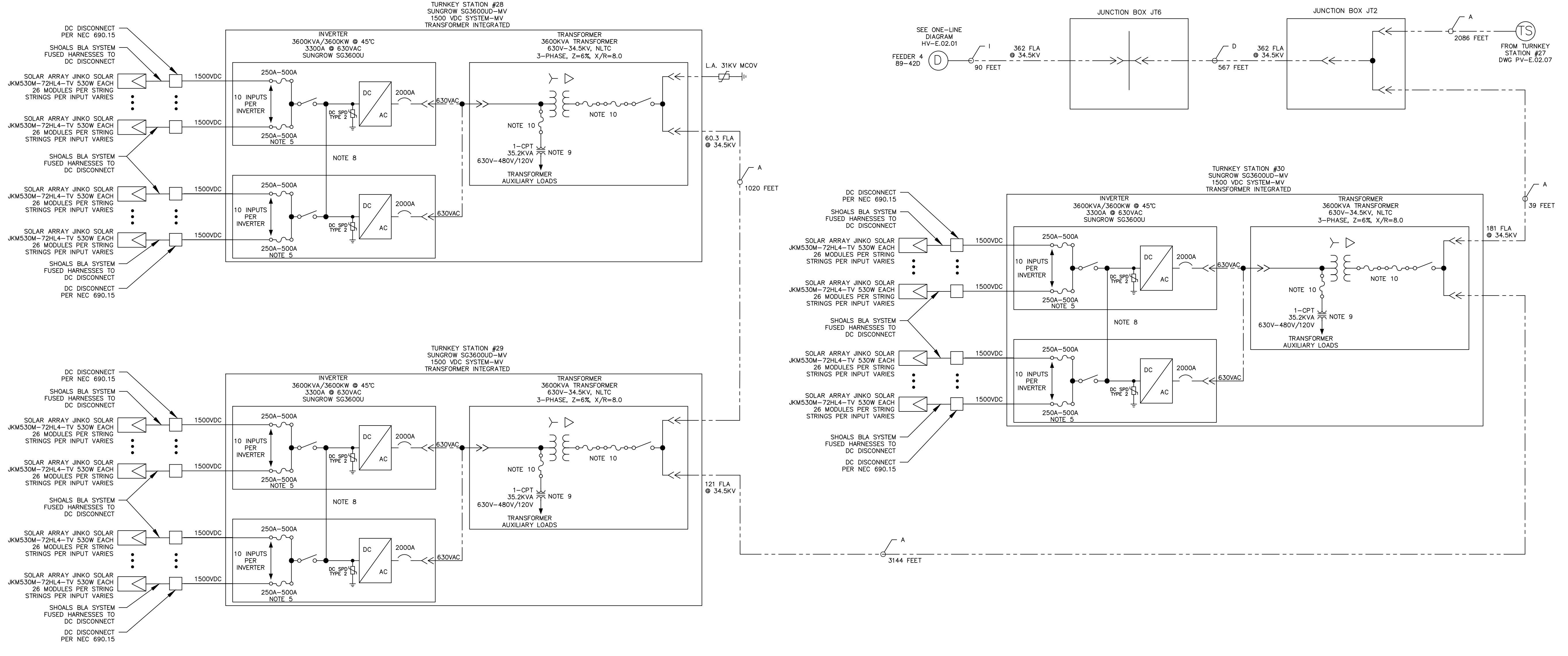
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INPUT	STRINGS PER INPUT									
	TS25	TS26	TS27	TS28	TS29	TS30	TS31	TS32	TS33	TS34
1	15	16	18	16	16	18				
2	15	16	18	16	16	18				
3	16	16	18	16	16	18				
4	16	16	18	16	16	18				
5	15	16	19	16	16	18				
6	15	16	19	16	16	18				
7	15	16	19	16	16	18				
8	15	16	19	16	16	18				
9	15	16	19	16	16	18				
10	15	16	19	16	16	18				
11	15	18	19	16	16	18				
12	16	18	19	16	16	18				
13	16	14	15	16	16	18				
14	16	18	16	16	16	18				
15	16	13	15	18	19	18				
16	16	13	18	18	19	18				
17	16	16	18	18	15	18				
18	17	16	18	0	15	18				
19	17	16	18	0	15	18				
20	17	16	18	0	15	18				

PV SYSTEM SPECIFICATIONS (FEEDER 4)		PV SYSTEM SPECIFICATIONS TOTAL SYSTEM	
PV MODULES	49,400 X JINKO SOLAR JKM530M-72HL4-TV 530W	PV MODULES	245,310 X JINKO SOLAR JKM530M-72HL4-TV 530W
DC RATING AT STC	26,182.00 KW	DC RATING AT STC	130,014.30 KW
INVERTERS	(6) X SUNGROW SG3600U	INVERTERS	(30) X SUNGROW SG3600U
AC RATING ^{NOTE 7}	20,000.00 KW	AC RATING ^{NOTE 7}	100,000.00 KW
DC/AC RATIO @ POI	1.309	DC/AC RATIO @ POI	1.300
DC/AC RATIO @ INVERTER	1.212	DC/AC RATIO @ INVERTER	1.204

CONDUIT & WIRE SCHEDULE		
NO.	DESCRIPTION	CONDUCTORS
A	FEEDER CIRCUIT	3 X 1/0 AL, PVC JACKET DB EPR INSULATION, MV-105
B	FEEDER CIRCUIT	3 X 2/0 AL, PVC JACKET DB EPR INSULATION, MV-105
C	FEEDER CIRCUIT	3 X 4/0 AL, PVC JACKET DB EPR INSULATION, MV-105
D	FEEDER CIRCUIT	3 X 250 AL, PVC JACKET DB EPR INSULATION, MV-105
E	FEEDER CIRCUIT	3 X 350 AL, PVC JACKET DB EPR INSULATION, MV-105
F	FEEDER CIRCUIT	3 X 500 AL, PVC JACKET DB EPR INSULATION, MV-105
G	FEEDER CIRCUIT	3 X 750 AL, PVC JACKET DB EPR INSULATION, MV-105
H	FEEDER CIRCUIT	3 X 1000 AL, PVC JACKET DB EPR INSULATION, MV-105
I	FEEDER CIRCUIT	3 X 1250 AL, PVC JACKET DB EPR INSULATION, MV-105

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 - INVERTERS ARE CERTIFIED PER THE REQUIREMENTS OF UL 1741 SA AS A GRID SUPPORT UTILITY INVERTER AND HENCE MEETS THE UTILITY VOLTAGE AND FREQUENCY RIDE THROUGH REQUIREMENTS.
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 - THE TWO DC BUS BARS ARE CONNECTED TOGETHER WHEN 1 MPPT IS SELECTED. ONE MPPT IS STANDARD.
 - OPTIONAL AUX TRANSFORMER SUPPLIED BY MANUFACTURER WITH MULTIPLE SECONDARY OUTPUT WINDINGS.
 - FINAL FUSE SIZES TBD BY MANUFACTURER.



KEY PLAN:

REVISIONS:

NO.	DATE	DESCRIPTION
0	01/19/2022	DESIGN DRAWINGS
1	06/14/2022	ISSUED FOR PERMIT

PROJECT TITLE:
BROOKSIDE SOLAR PROJECT

PROJECT LOCATION:
TOWNS OF BURKE AND CHATEAUGAY, NY

SHEET TITLE & DESCRIPTION:
ELECTRICAL ONE LINE DIAGRAM

PROJ NUM:	422208
DES:	A. QUIROZ
DWN:	A. QUIROZ
CHK:	B. TYLOCK
APV:	G. BEANE
DATE:	04/02/2021
SCALE AT 22" x 34":	

SHEET NO:	NONE	REV:	1
	PV-E.02.08		

PRELIMINARY
NOT FOR CONSTRUCTION

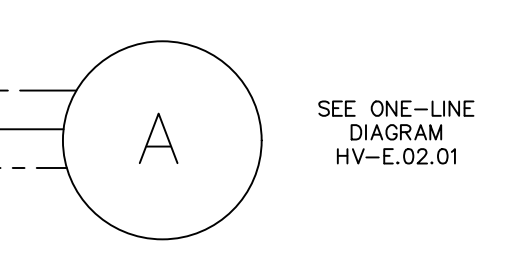
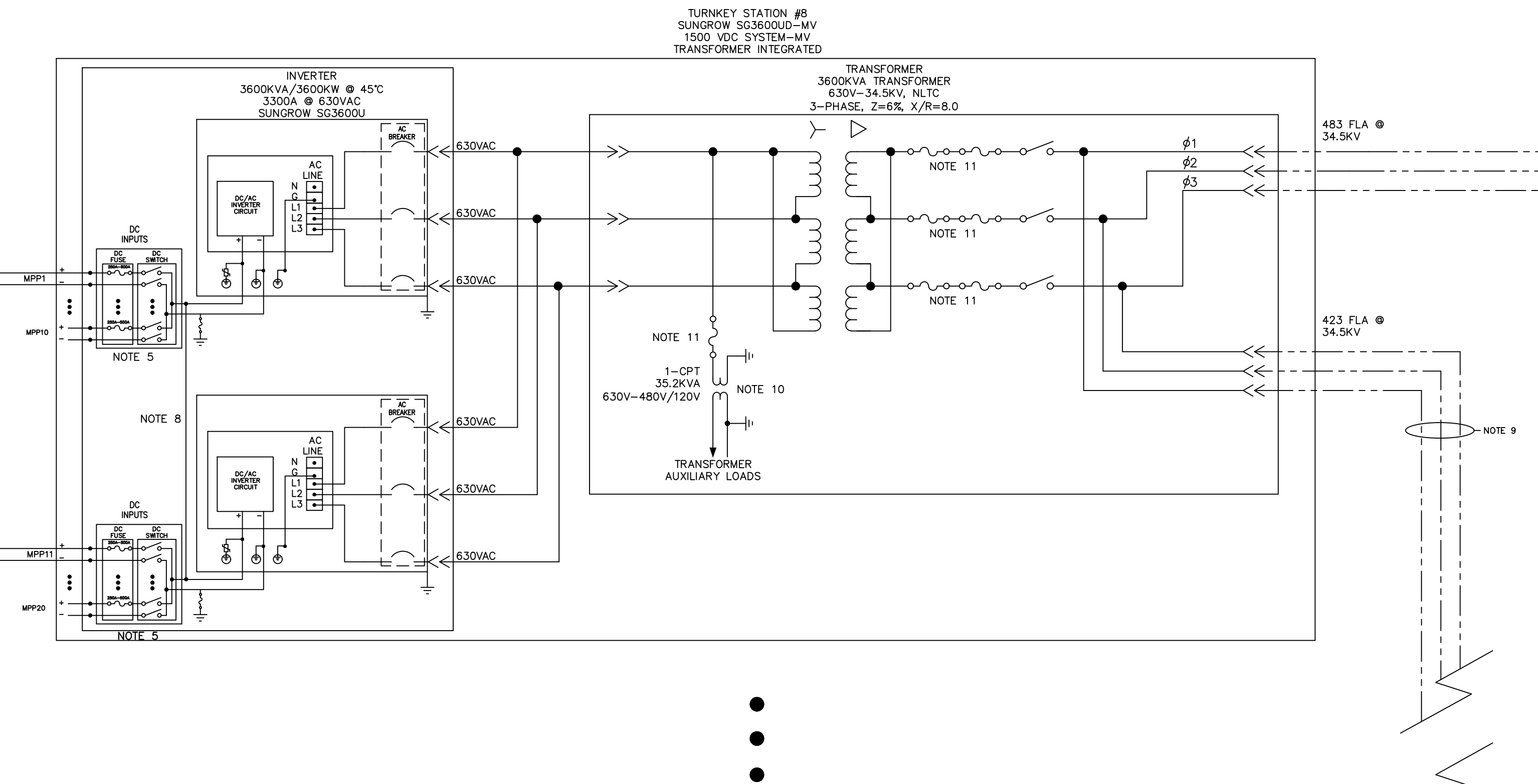
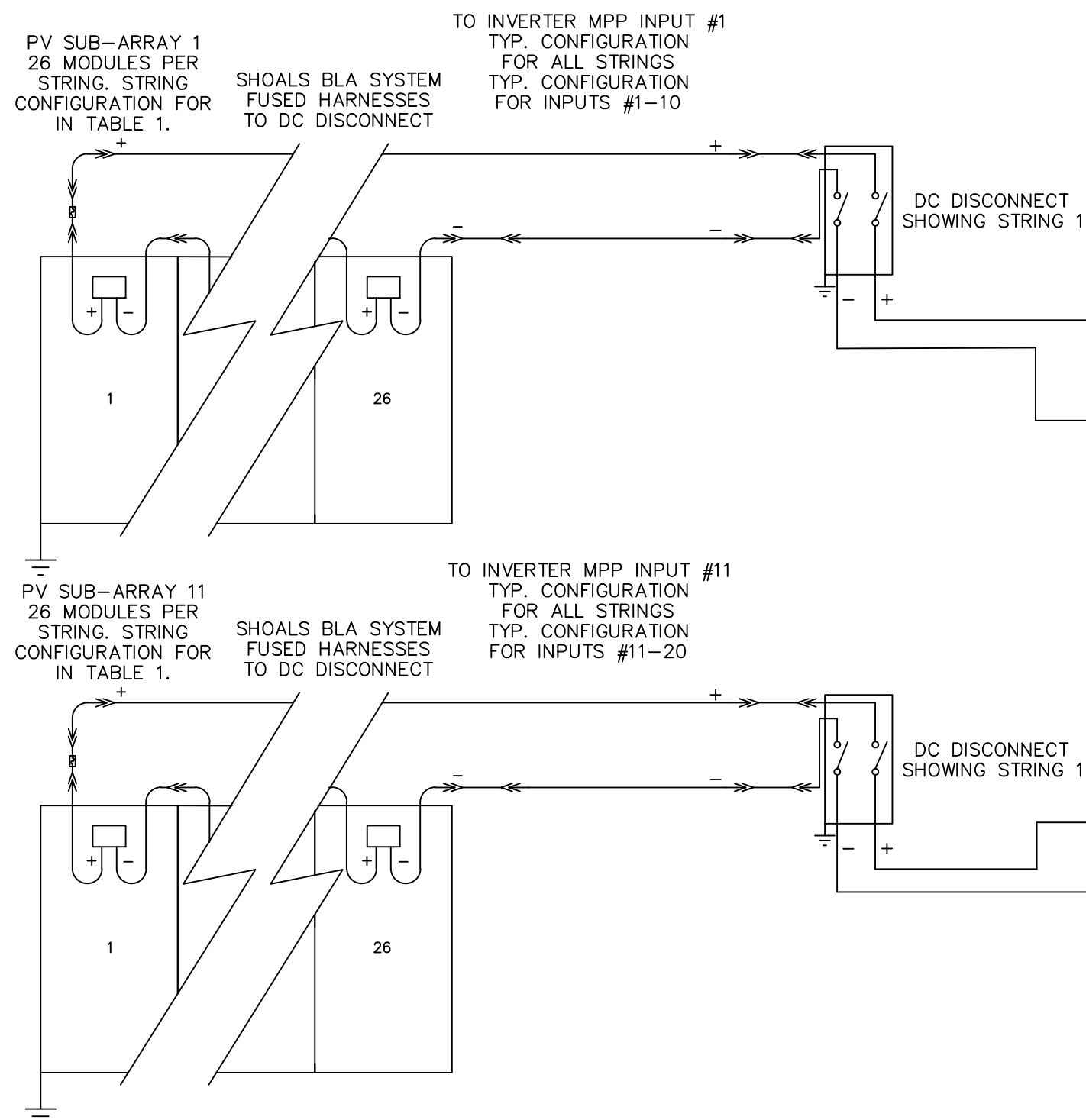
UNDER NEW YORK STATE EDUCATION LAW ARTICLE 145 (ENGINEERING), SECTION 2209 (2), IT IS A VIOLATION OF THE LAW FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.

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PV SYSTEM SPECIFICATIONS (FEEDER 1)	
PV MODULES	62,920 X JINKO SOLAR JKMS30M-72HL4-TV 530W
DC RATING AT STC	33,347.60 KW
INVERTERS	(8) X SUNGROW SG3600U
AC RATING ^{NOTE 7}	26,666.67 KW
DC/AC RATIO @ POI	1.251
DC/AC RATIO @ INVERTER	1.158

PV SYSTEM SPECIFICATIONS TOTAL SYSTEM	
PV MODULES	245,310 X JINKO SOLAR JKMS30M-72HL4-TV 530W
DC RATING AT STC	130,014.30 KW
INVERTERS	(30) X SUNGROW SG3600U
AC RATING ^{NOTE 7}	100,000.00 KW
DC/AC RATIO @ POI	1.300
DC/AC RATIO @ INVERTER	1.204

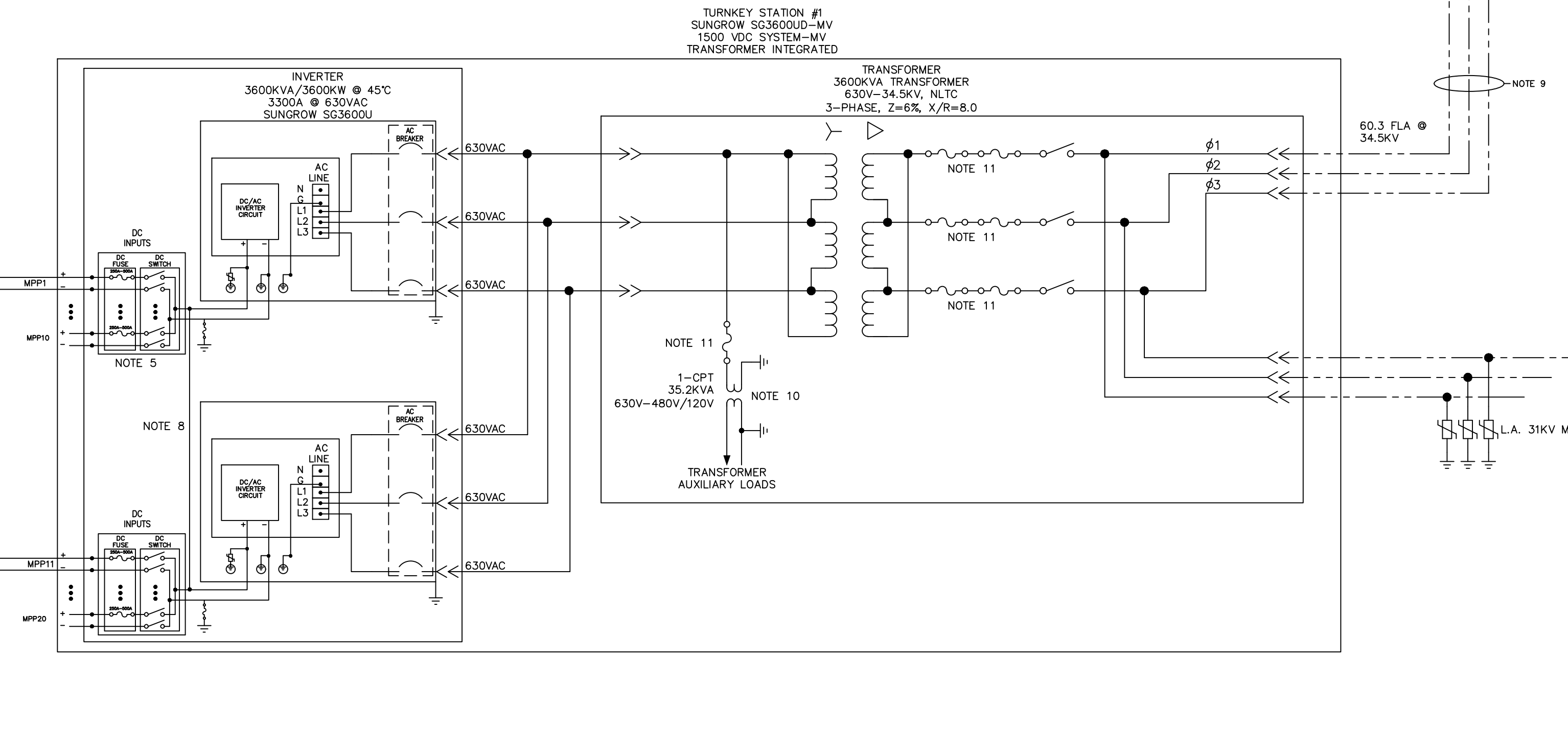
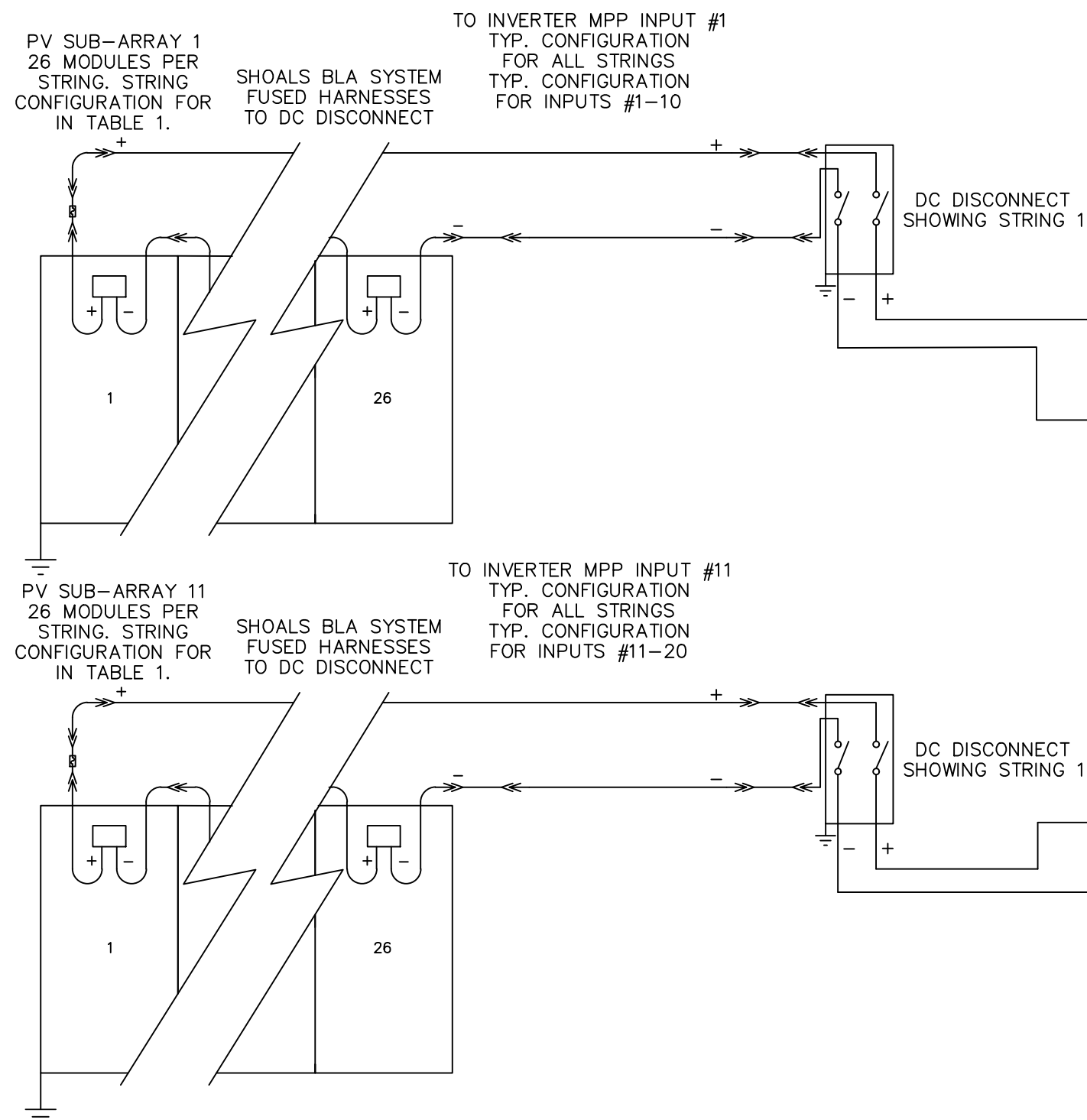
CONFIGURATION FOR TURNKEY STATIONS VARY



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 - FUSE SIZE VARIES BASED ON NUMBER OF STRINGS CONNECTED. FINAL FUSE SIZE TO BE CONFIRMED AT THE ISSUING OF THE CONSTRUCTION DRAWING SET.
 - INVERTERS ARE CERTIFIED PER THE REQUIREMENTS OF UL 1741 SA AS A GRID SUPPORT UTILITY INVERTER AND HENCE MEETS THE UTILITY VOLTAGE AND FREQUENCY RIDE THROUGH REQUIREMENTS.
 - AC RATING MEASURED AT THE POI IS LIMITED TO 100MW BY THE PLANT CONTROLLER.
 - THE TWO DC BUS BARS ARE CONNECTED TOGETHER WHEN 1 MPPT IS SELECTED. ONE MPPT IS STANDARD.
 - CABLE SIZING AND COLLECTION LENGTHS CAN BE FOUND IN DWG PV-E.02.13. FEEDER 1 CABLE SIZES RANGE FROM 1/0 TO 1250.
 - OPTIONAL AUX TRANSFORMER SUPPLIED BY MANUFACTURER WITH MULTIPLE SECONDARY OUTPUT WINDINGS.
 - FINAL FUSE SIZES TBD BY MANUFACTURER.

FEEDER 1 TURNKEY STATION (TS) PV STRINGING				
TURNKEY STATION (TS)	PV SERIES MODULES	INPUT NUMBER	PARALLEL STRINGS	PV MODULES PER TS
1	26	20	SEE TABLE 1	8,138
2	26	20	SEE TABLE 1	7,722
3	26	20	SEE TABLE 1	7,592
4	26	20	SEE TABLE 1	8,268
5	26	20	SEE TABLE 1	7,410
6	26	20	SEE TABLE 1	7,592
7	26	20	SEE TABLE 1	8,814
8	26	20	SEE TABLE 1	7,384
TOTAL PV MODULES FOR TS ON FEEDER 1				62,920

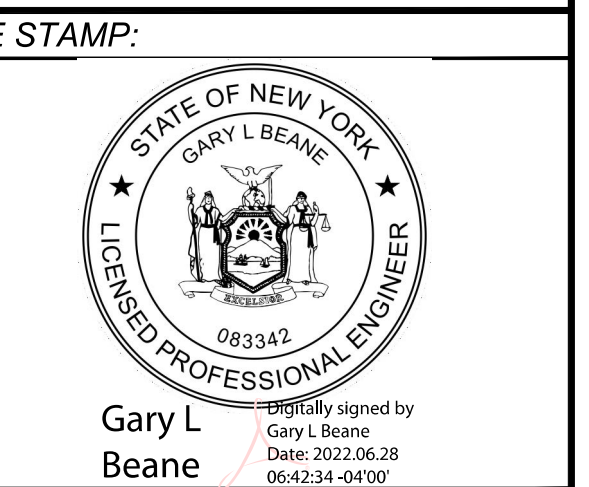
CONFIGURATION FOR TURNKEY STATIONS VARY



INPUT	STRINGS PER INPUT																			
	TS1	TS2	TS3	TS4	TS5	TS6	TS7	TS8	TS9	TS10	TS11	TS12	TS13	TS14	TS15	TS16	TS17	TS18	TS19	TS20
1	17	16	16	16	16	15	17	13	14											
2	16	16	16	15	16	18	19	14												
3	17	16	16	16	16	18	20	14												
4	16	18	15	16	16	18	20	16												
5	18	16	18	16	16	16	20	16												
6	18	18	16	18	16	16	20	16												
7	16	17	16	18	16	16	20	16												
8	16	17	16	18	18	16	20	16												
9	16	18	16	16	16	18	19	16												
10	16	18	16	16	16	18	18	16												
11	16	16	16	16	16	15	18	18												
12	16	15	16	16	16	15	18	16												
13	16	15	18	16	14	16	18	16												
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15	18	15	18	16	16	16	20	16												
16	18	15	18	18	16	16	20	16												
17	16	15	18	18	16	13	20	16												
18	16	12	17	18	14	14	16	16												
19	16	12	0	18	0	0	0	0												
20	0	0	0	0	0	0	0	0												

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PRELIMINARY
NOT FOR CONSTRUCTION



KEY PLAN:

REVISIONS:

NO.	DATE	DESCRIPTION
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1	06/14/2022	ISSUED FOR PERMIT

PROJECT TITLE:

BROOKSIDE SOLAR PROJECT

PROJECT LOCATION:

TOWNS OF BURKE AND CHATEAUGAY, NY

SHEET TITLE & DESCRIPTION:

ELECTRICAL THREE-LINE DIAGRAM

PROJ NUM:	422208
DES:	A. QUIROZ
DWN:	A. QUIROZ
CHK:	B. TYLOCK
APV:	G. BEANE
DATE:	04/02/2021
SCALE AT 22" x 34":	

SHEET NO: **NONE** REV: **1**
PV-E.02.09

AES-7/2022-156-PM
SUNGWOW PV EMPLOYEES' GRIEVANCE PROCEDURE/2022-156-PM Electrical Three-Line Diagram.dwg
6/27/2022 1:56 PM



2180 South 1300 East, Suite 600
Salt Lake City, UT 84106-2749
(801) 679-3500



249 Western Avenue
Augusta, ME 04330

PE STAMP:



KEY PLAN:

REVISIONS:

NO.	DATE	DESCRIPTION
0	01/19/2022	DESIGN DRAWINGS
1	6/14/2022	ISSUED FOR PERMIT

PROJECT TITLE:

BROOKSIDE SOLAR PROJECT

PROJECT LOCATION:

TOWNS OF BURKE AND CHATEAUGAY, NY

SHEET TITLE & DESCRIPTION:

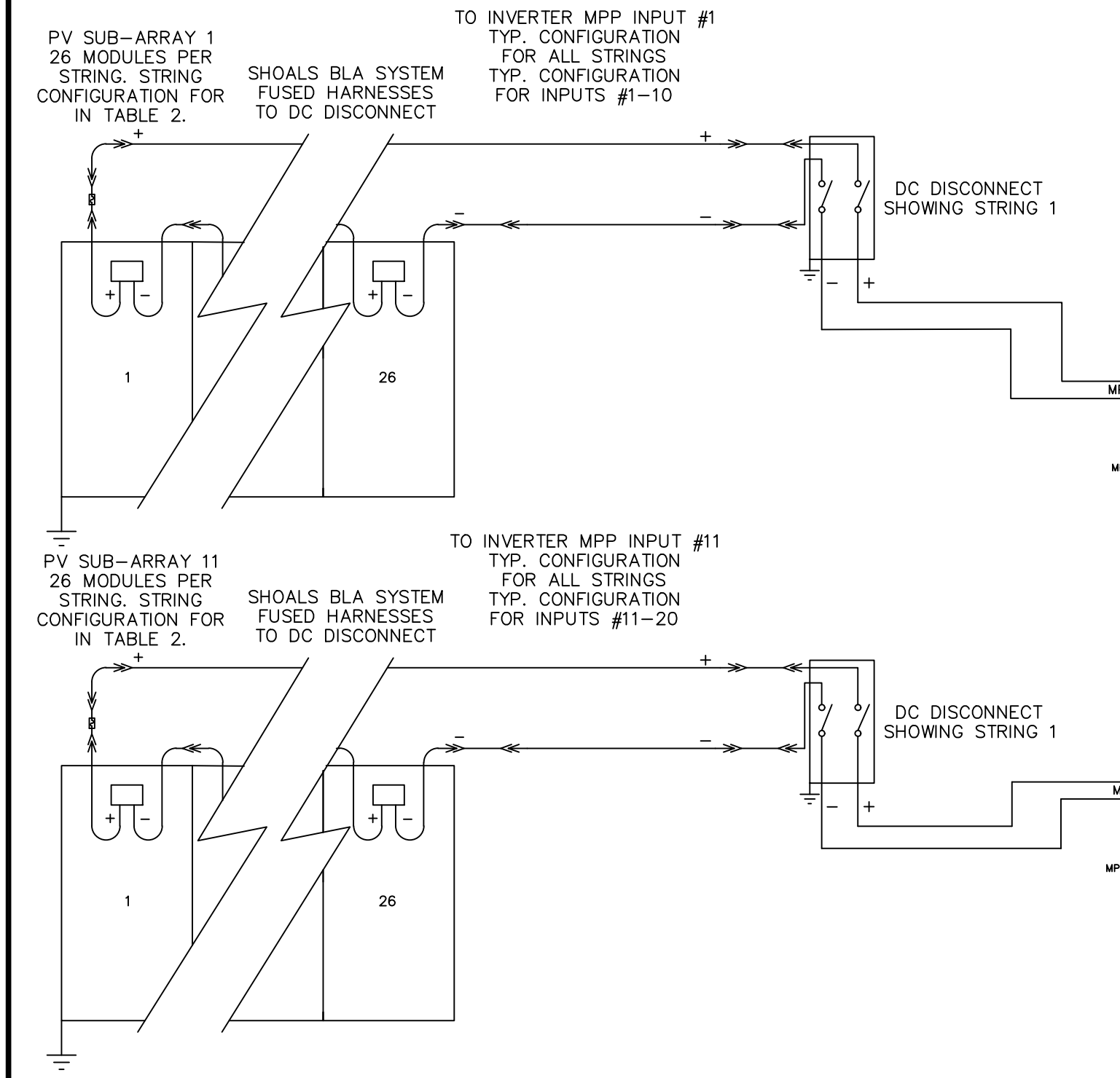
ELECTRICAL THREE-LINE DIAGRAM

PROJ NUM: 422208
DES: A. QUIROZ
DWN: A. QUIROZ
CHK: B. TYLOCK
APV: G. BEANE
DATE: 04/02/2021
SCALE AT 22" x 34":

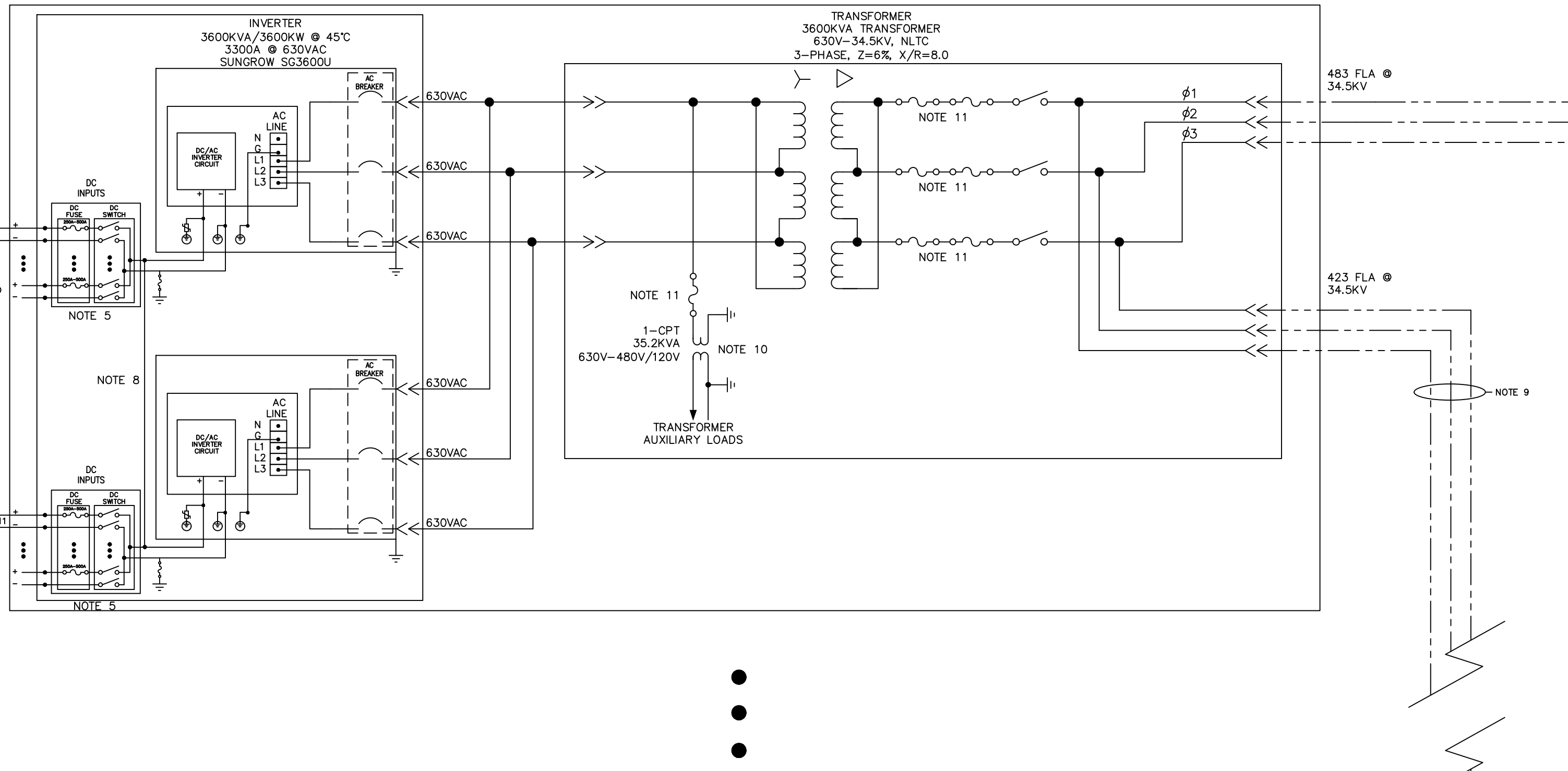
NONE
SHEET NO: PV-E.02.10
REV: 1

PV SYSTEM SPECIFICATIONS (FEEDER 2)		PV SYSTEM SPECIFICATIONS TOTAL SYSTEM	
PV MODULES	64,194 X JINKO SOLAR JKM530M-72HL4-TV 530W	PV MODULES	245,310 X JINKO SOLAR JKM530M-72HL4-TV 530W
DC RATING AT STC	34,022.82 KW	DC RATING AT STC	130,014.30 KW
INVERTERS	(8) X SUNGROW SG3600U	INVERTERS	(30) X SUNGROW SG3600U
AC RATING ^{NOTE 7}	26,666.67 KW	AC RATING ^{NOTE 7}	100,000.00 KW
DC/AC RATIO @ POI	1.276	DC/AC RATIO @ POI	1.300
DC/AC RATIO @ INVERTER	1.1821	DC/AC RATIO @ INVERTER	1.204

CONFIGURATION FOR TURNKEY STATIONS VARY



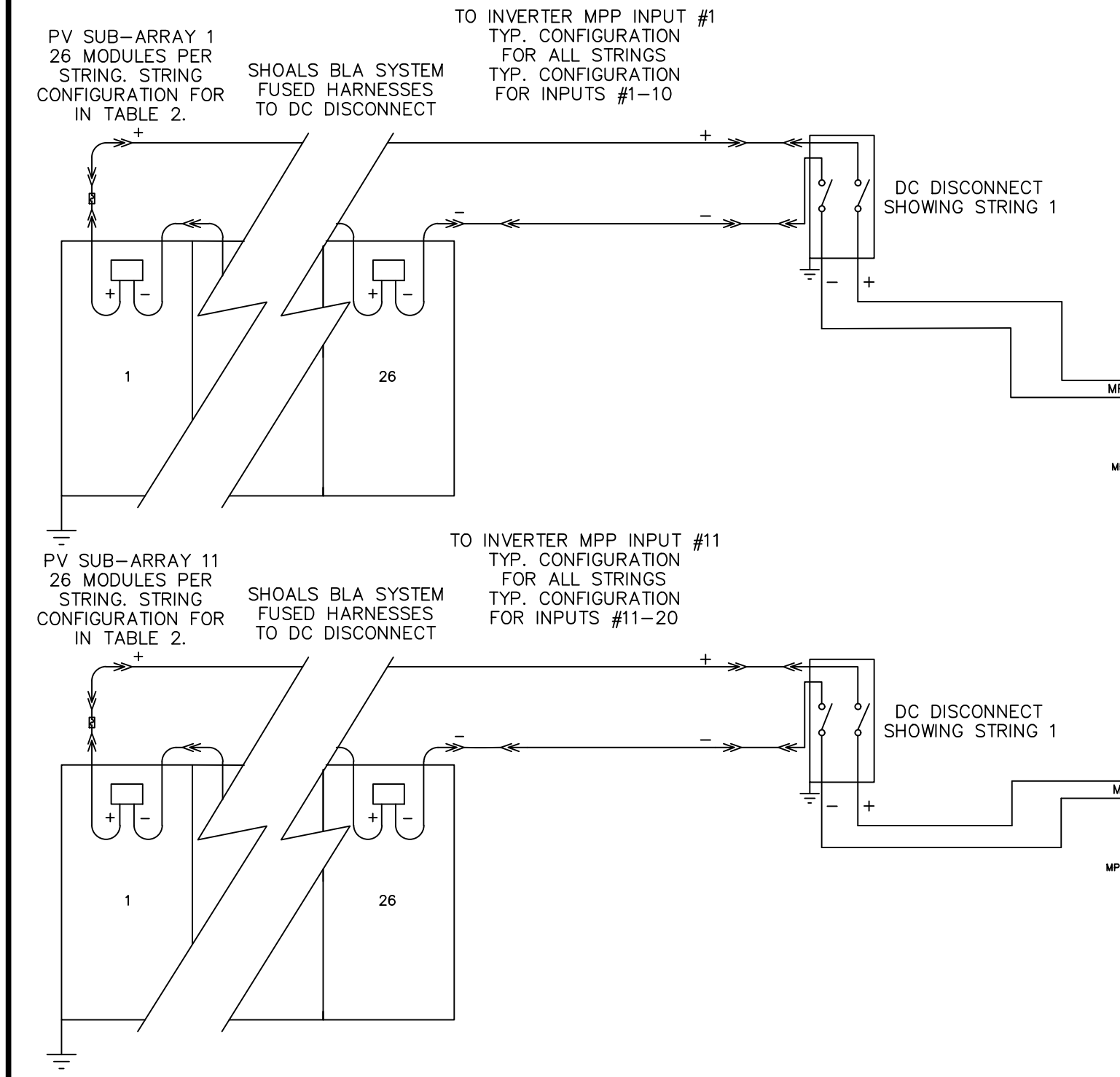
TURNKEY STATION #16
SUNGROW SG3600UD-MV
1500 VDC SYSTEM-MV
TRANSFORMER INTEGRATED



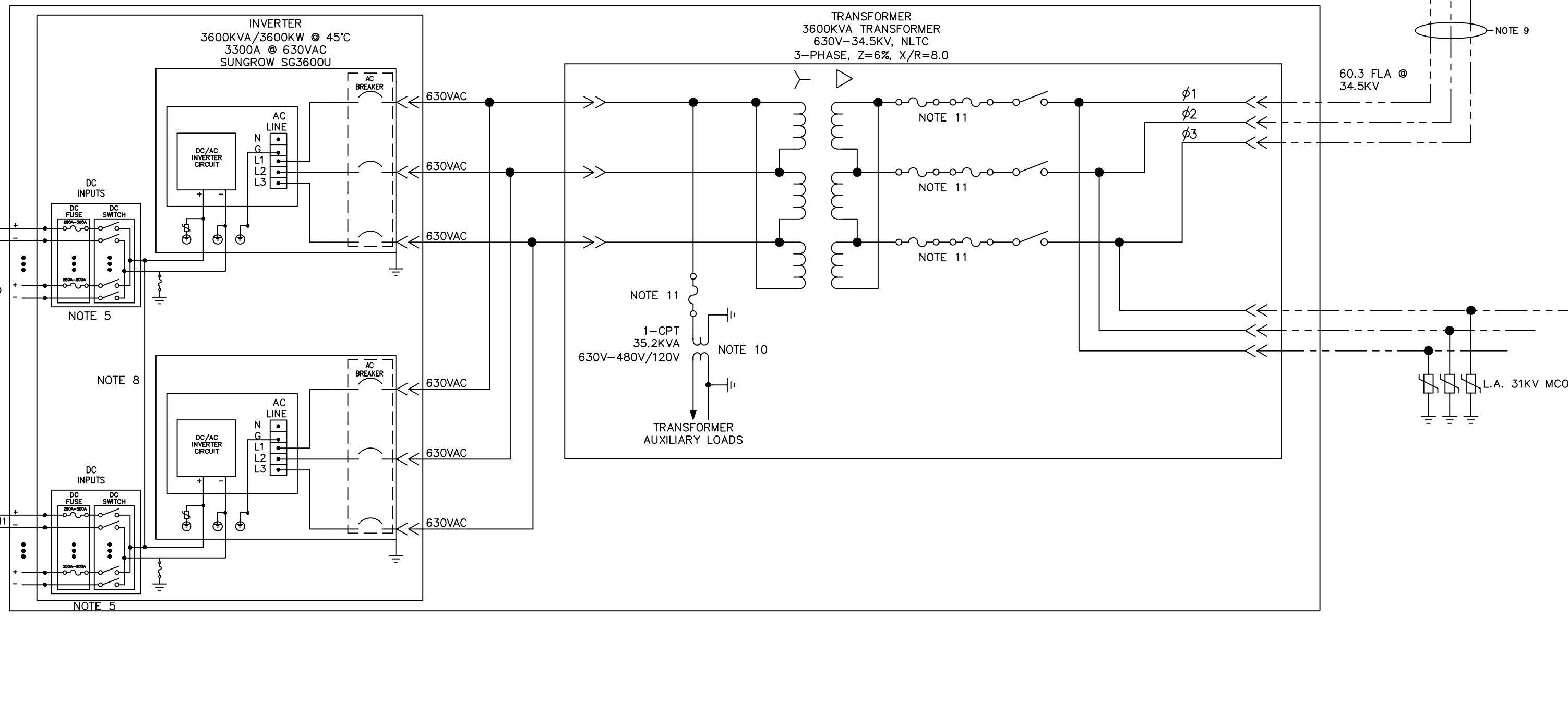
SEE ONE-LINE DIAGRAM HV-E.02.01

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 - FUSE SIZE VARIES BASED ON NUMBER OF STRINGS CONNECTED. FINAL FUSE SIZE TO BE CONFIRMED AT THE ISSUING OF THE CONSTRUCTION DRAWING SET.
 - INVERTERS ARE CERTIFIED PER THE REQUIREMENTS OF UL 1741 SA AS A GRID SUPPORT UTILITY INVERTER AND HENCE MEETS THE UTILITY VOLTAGE AND FREQUENCY RIDE THROUGH REQUIREMENTS.
 - AC RATING MEASURED AT THE POI IS LIMITED TO 100MW BY THE PLANT CONTROLLER.
 - THE TWO DC BUS BARS ARE CONNECTED TOGETHER WHEN 1 MPPT IS SELECTED. ONE MPPT IS STANDARD.
 - CABLE SIZING AND COLLECTION LENGTHS CAN BE FOUND IN DWG PV-E.02.13. FEEDER 2 CABLE SIZES RANGE FROM 1/0 TO 1250.
 - OPTIONAL AUX TRANSFORMER SUPPLIED BY MANUFACTURER WITH MULTIPLE SECONDARY OUTPUT WINDINGS.
 - FINAL FUSE SIZES TBD BY MANUFACTURER.

CONFIGURATION FOR TURNKEY STATIONS VARY



TURNKEY STATION #9
SUNGROW SG3600UD-MV
1500 VDC SYSTEM-MV
TRANSFORMER INTEGRATED



FEEDER 2 TURNKEY STATION (TS) PV STRINGING

TURNKEY STATION (TS)	PV SERIES MODULES	INPUT NUMBER	PARALLEL STRINGS	PV MODULES PER TS
9	26	20	SEE TABLE 2	8,242
10	26	20	SEE TABLE 2	7,696
11	26	20	SEE TABLE 2	7,930
12	26	20	SEE TABLE 2	7,722
13	26	20	SEE TABLE 2	7,566
14	26	20	SEE TABLE 2	8,684
15	26	20	SEE TABLE 2	8,814
16	26	20	SEE TABLE 2	7,540
TOTAL PV MODULES FOR TS ON FEEDER 2				64,194

TABLE 2

INPUT	STRINGS PER INPUT															
	TS9	TS10	TS11	TS12	TS13	TS14	TS15	TS16	TS17	TS18	TS19	TS20	TS21	TS22	TS23	TS24
1	16	15	16	16	16	18	18	18	18	18	18	18	18	18	18	18
2	16	18	18	18	16	20	18	18	18	18	18	18	18	18	18	18
3	16	18	16	16	16	20	18	18	18	18	18	18	18	18	18	18
4	16	18	16	16	16	18	18	18	18	18	18	18	18	18	18	18
5	18	15	16	16	18	18	18	18	18	18	18	18	18	18	18	18
6	18	15	16	17	18	18	18	18	18	18	18	18	18	18	18	18
7	18	16	16	17	18	18	18	18	18	18	18	18	18	18	18	18
8	17	16	18	15	18	16	18	18	18	18	18	18	18	18	18	18
9	15	16	19	15	18	16	15	18	18	18	18	18	18	18	18	18
10	15	16	19	15	18	16	18	18	18	18	18	18	18	18	18	18
11	15	15	19	16	18	16	17	20	18	18	18	18	18	18	18	18
12	18	16	20	12	18	18	17	16	18	18	18	18	18	18	18	18
13	19	18	16	20	18	18	18	16	18	18	18	18	18	18	18	18
14	19	16	16	20	18	18	18	18	18	18	18	18	18	18	18	18
15	19	16	16	19	18	18	12	18	18	18	18	18	18	18	18	18
16	15	16	16	13	15	18	12	18	18	18	18	18	18	18	18	18
17	15	18	16	14	0	18	18	0	18	18	18	18	18	18	18	18
18	16	18	16	12	0	18	18	0	18	18	18	18	18	18	18	18
19	16	0	0	12	0	18	18	0	18	18	18	18	18	18	18	18
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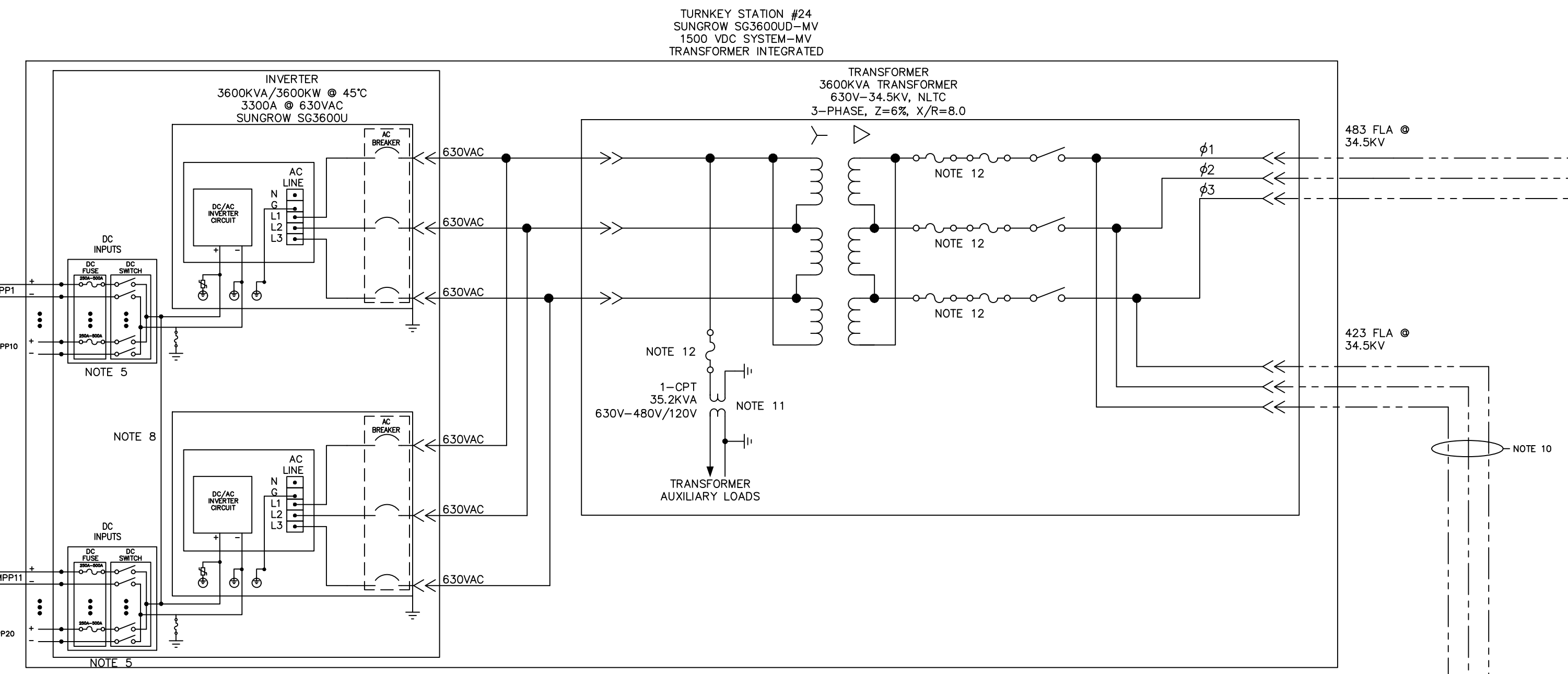
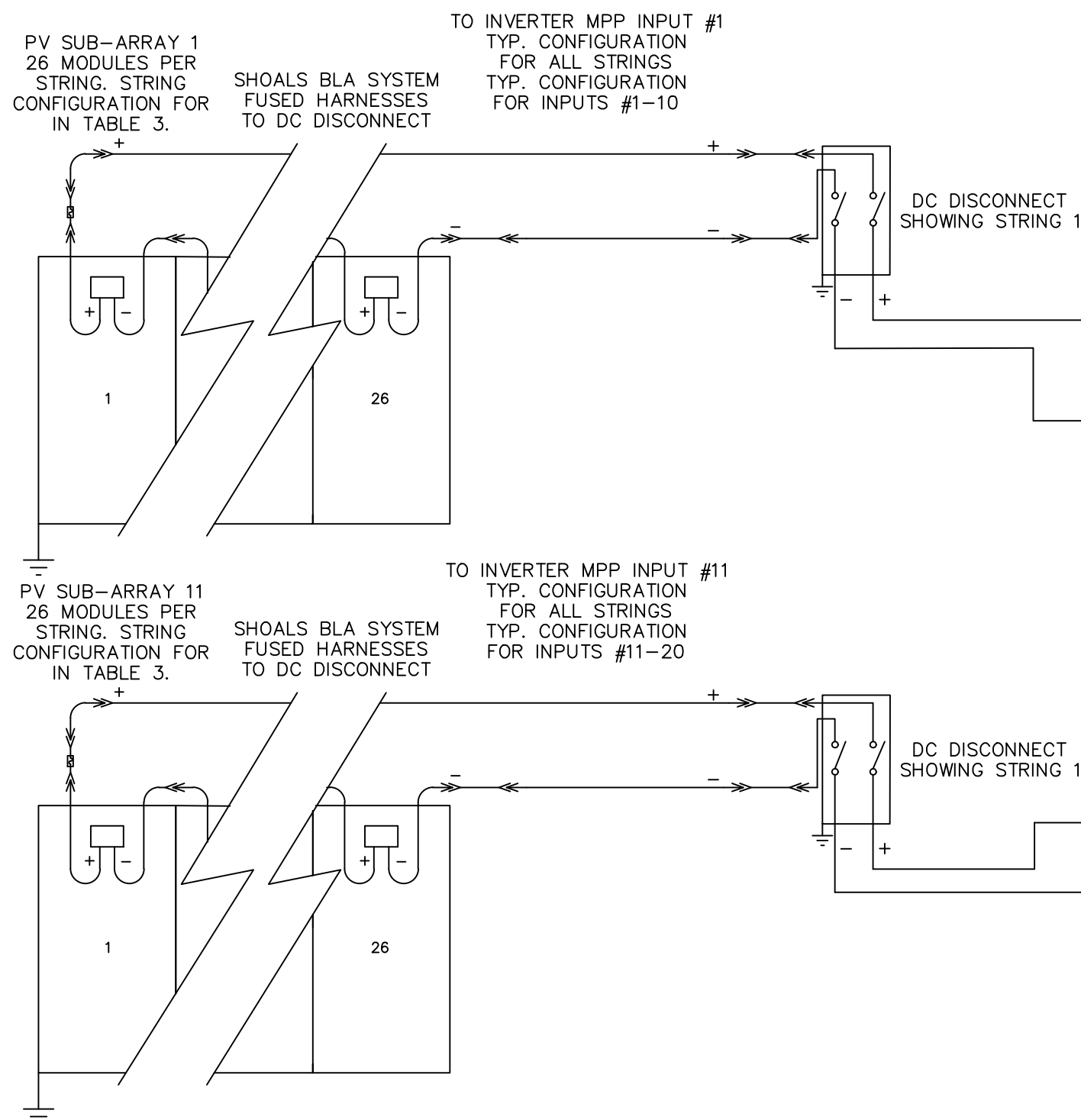
UNDER NEW YORK STATE EDUCATION LAW ARTICLE 145 (ENGINEERING), SECTION 7209 (2), IT IS A VIOLATION OF THE LAW FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.

PRELIMINARY
NOT FOR CONSTRUCTION

PV SYSTEM SPECIFICATIONS (FEEDER 3)	
PV MODULES	68,796 X JINKO SOLAR JKM530M-72HL4-TV 530W
DC RATING AT STC	36,461.88 KW
INVERTERS	(8) X SUNGROW SG3600U
AC RATING ^{NOTE 7}	26,666.67 KW
DC/AC RATIO @ POI	1.367
DC/AC RATIO @ INVERTER	1.266

PV SYSTEM SPECIFICATIONS TOTAL SYSTEM	
PV MODULES	245,310 X JINKO SOLAR JKM530M-72HL4-TV 530W
DC RATING AT STC	130,014.30 KW
INVERTERS	(30) X SUNGROW SG3600U
AC RATING ^{NOTE 7}	100,000.00 KW
DC/AC RATIO @ POI	1.300
DC/AC RATIO @ INVERTER	1.204

CONFIGURATION FOR TURNKEY STATIONS VARY



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 - THE TWO DC BUS BARS ARE CONNECTED TOGETHER WHEN 1 MPPT IS SELECTED, ONE MPPT IS STANDARD.
 - JUNCTION BOX #1 LOCATED PRIOR TO COLLECTOR SUBSTATION TO COMBINE TS17-21 AND TS22-24. SEE DWG. PV-E.02.13 FOR FEEDER BREAKDOWN.
 - CABLE SIZING AND COLLECTION LENGTHS CAN BE FOUND IN DWG PV-E.02.13. FEEDER 3 CABLE SIZES RANGE FROM 1/0 TO 1250.
 - OPTIONAL AUX TRANSFORMER SUPPLIED BY MANUFACTURER WITH MULTIPLE SECONDARY OUTPUT WINDINGS.
 - FINAL FUSE SIZES TBD BY MANUFACTURER.

FEEDER 3 TURNKEY STATION (TS) PV STRINGING				
TURNKEY STATION (TS)	PV SERIES MODULES	INPUT NUMBER	PARALLEL STRINGS	PV MODULES PER TS
17	26	20	SEE TABLE 3	8,086
18	26	20	SEE TABLE 3	8,034
19	26	20	SEE TABLE 3	8,762
20	26	20	SEE TABLE 3	9,074
21	26	20	SEE TABLE 3	8,398
22	26	20	SEE TABLE 3	8,476
23	26	20	SEE TABLE 3	9,698
24	26	20	SEE TABLE 3	8,268
TOTAL PV MODULES FOR TS ON FEEDER 3				68,796

CONFIGURATION FOR TURNKEY STATIONS VARY

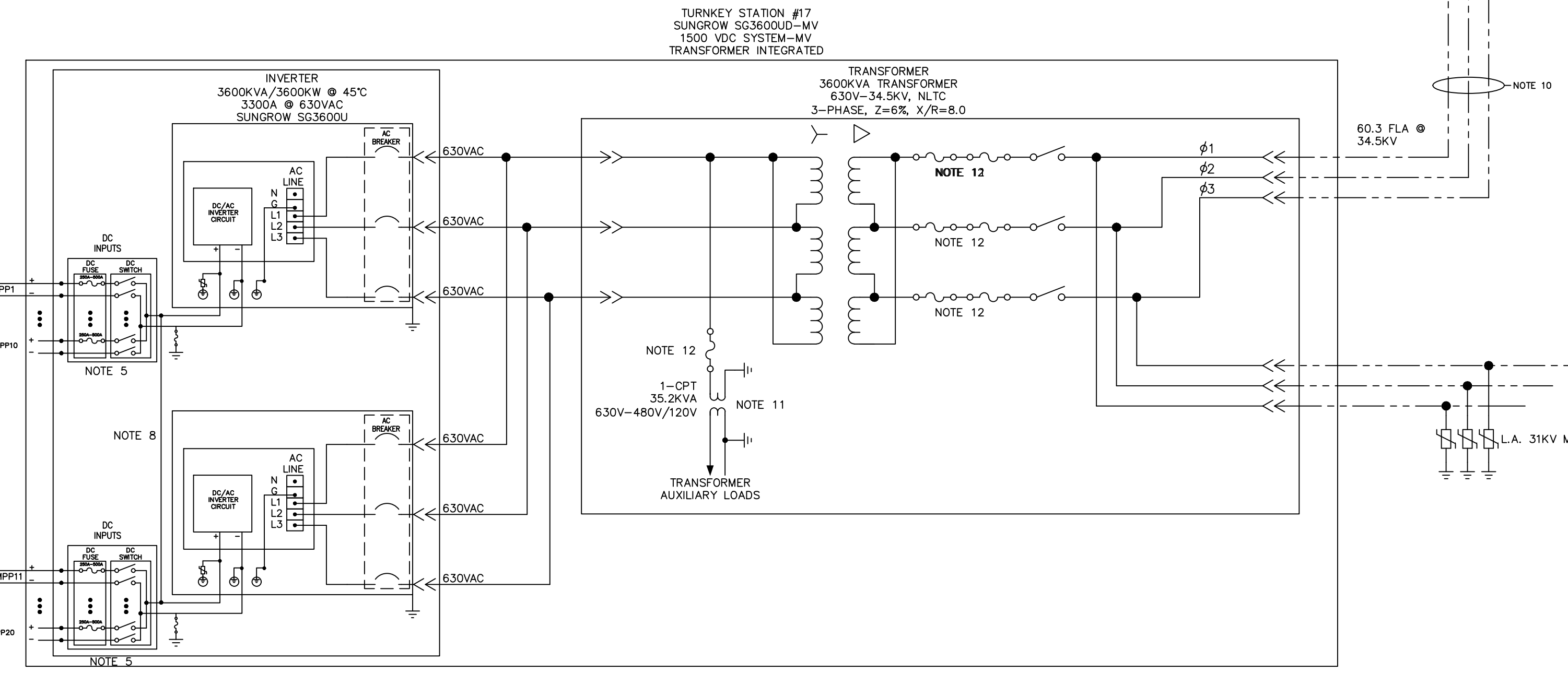
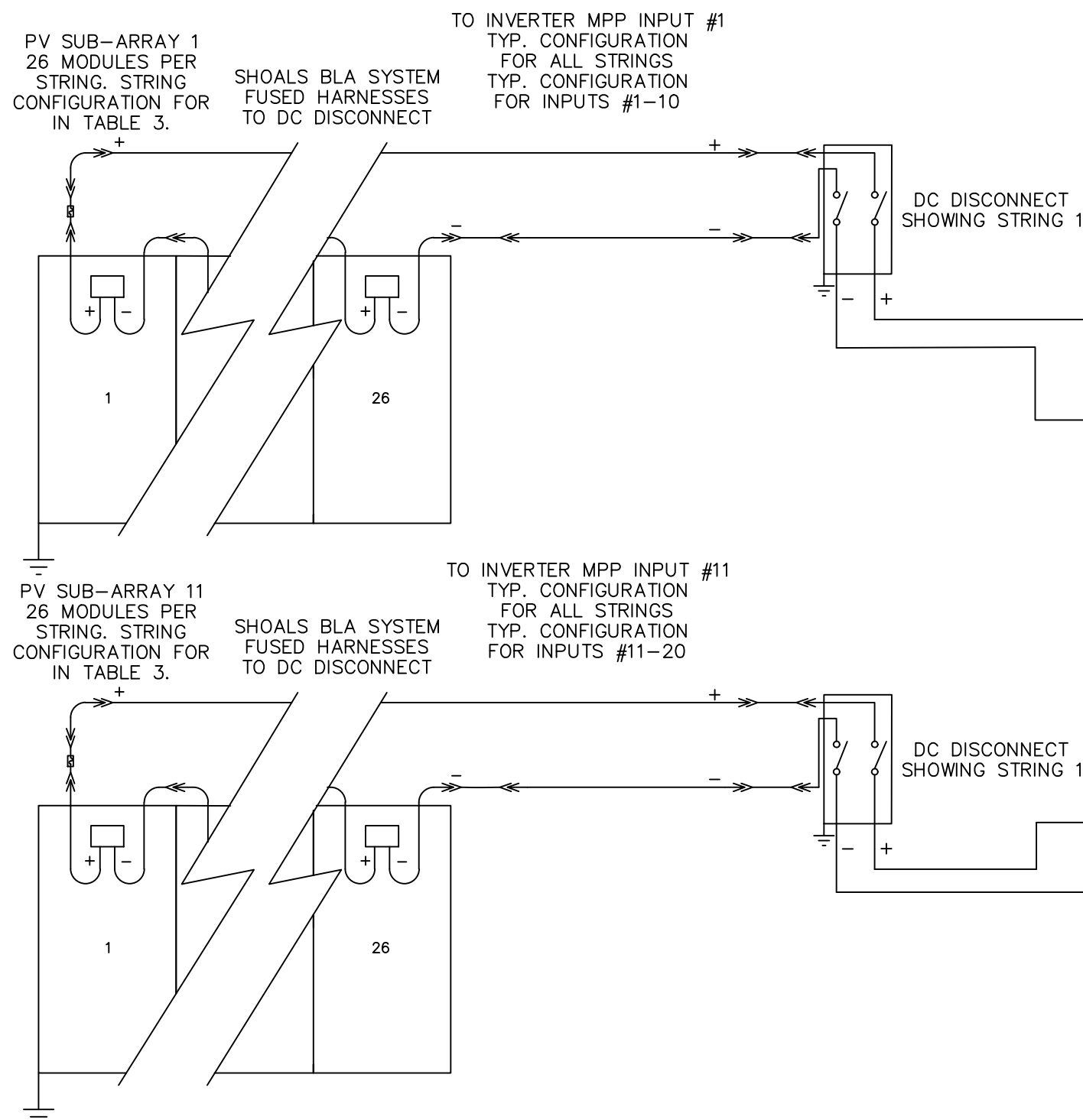
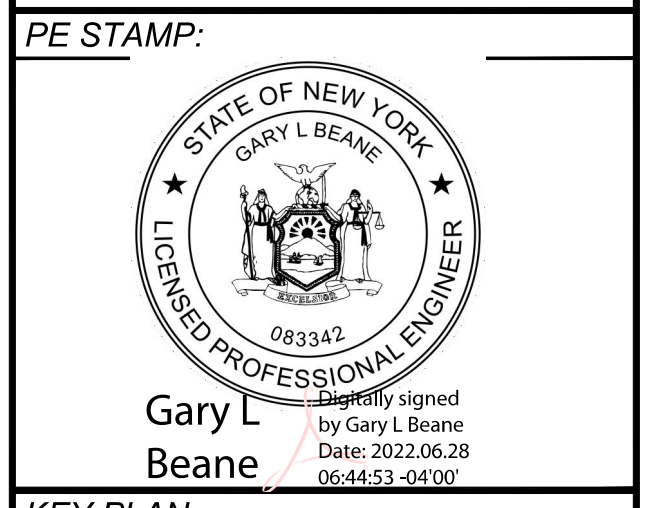


TABLE 3 STRINGS PER INPUT												
INPUT	TS17	TS18	TS19	TS20	TS21	TS22	TS23	TS24	TS25	TS26	TS27	TS28
1	17	20	18	14	16	16	19	18				
2	18	20	16	16	16	16	19	18				
3	18	18	15	16	16	16	19	18				
4	18	18	15	16	16	16	19	17				
5	19	18	15	15	16	16	19	17				
6	19	18	18	17	16	16	19	18				
7	18	18	18	16	18	16	16	18				
8	18	17	20	16	18	16	15	17				
9	19	18	20	16	18	16	19	15				
10	19	18	19	19	18	16	19	15				
11	19	18	20	20	18	16	19	14				
12	19	18	18	18	18	16	19	15				
13	18	18	18	18	18	14	19	15				
14	18	18	18	20	18	16	19	17				
15	18	18	18	20	18	16	19	17				
16	18	18	18	20	18	17	19	17				
17	18	18	18	18	16	17	19	17				
18	0	0	0	18	18	16	19	14				
19	0	0	0	18	18	15	18	14				
20	0	0	0	18	0	16	19	13				

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PRELIMINARY
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KEY PLAN:

1. THIS DRAWING IS PROVIDED FOR PERMIT TO ORES UNDER SECTION 94-C.

REVISIONS:

NO.	DATE	DESCRIPTION
0	01/19/2022	DESIGN DRAWINGS
1	6/14/2022	ISSUED FOR PERMIT

PROJECT TITLE:
BROOKSIDE SOLAR PROJECT

PROJECT LOCATION:
TOWNS OF BURKE AND CHATEAUGAY, NY

SHEET TITLE & DESCRIPTION:
ELECTRICAL THREE-LINE DIAGRAM

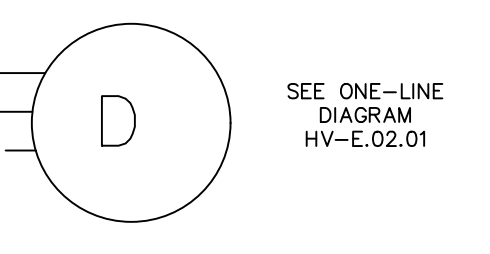
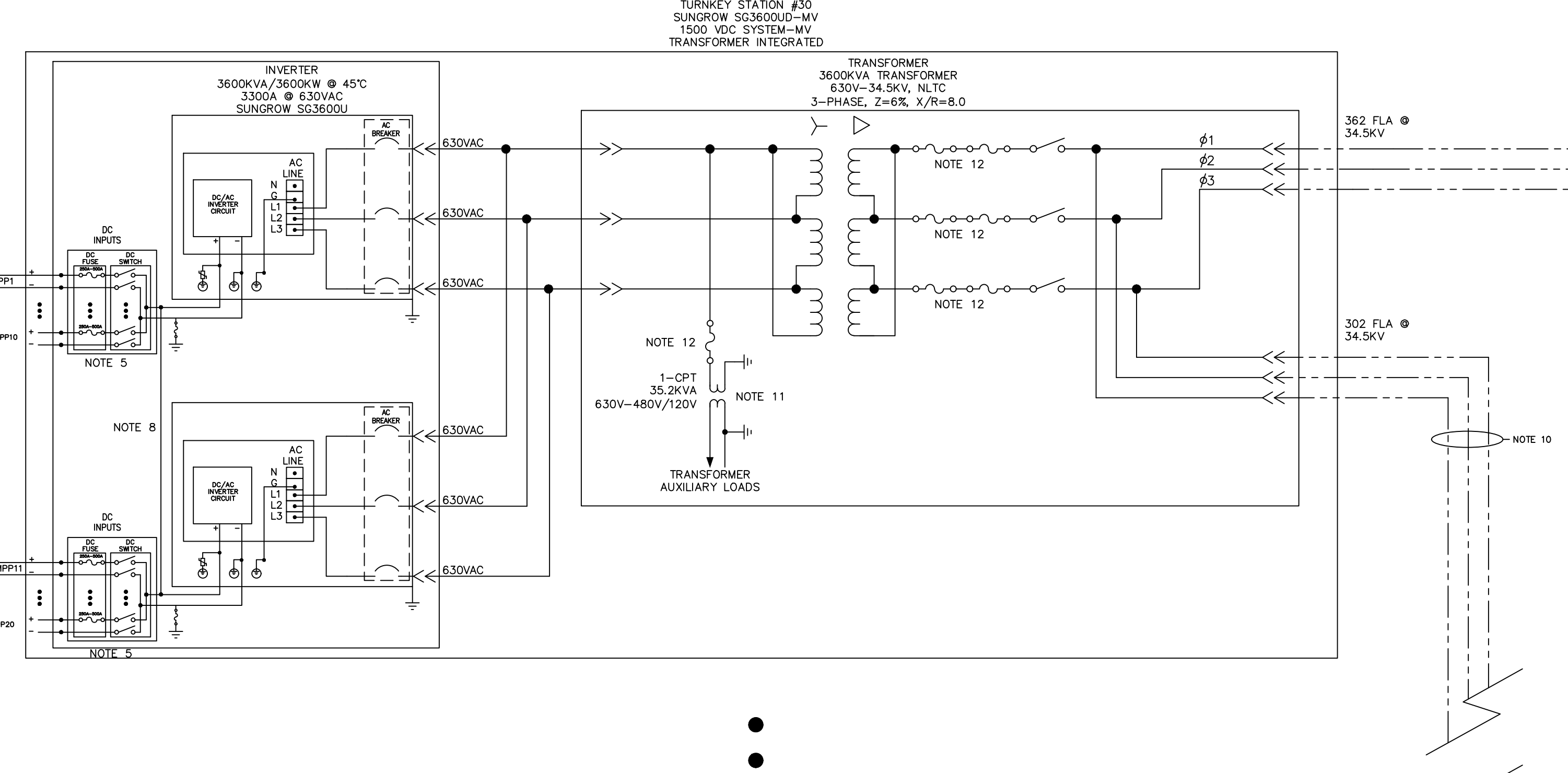
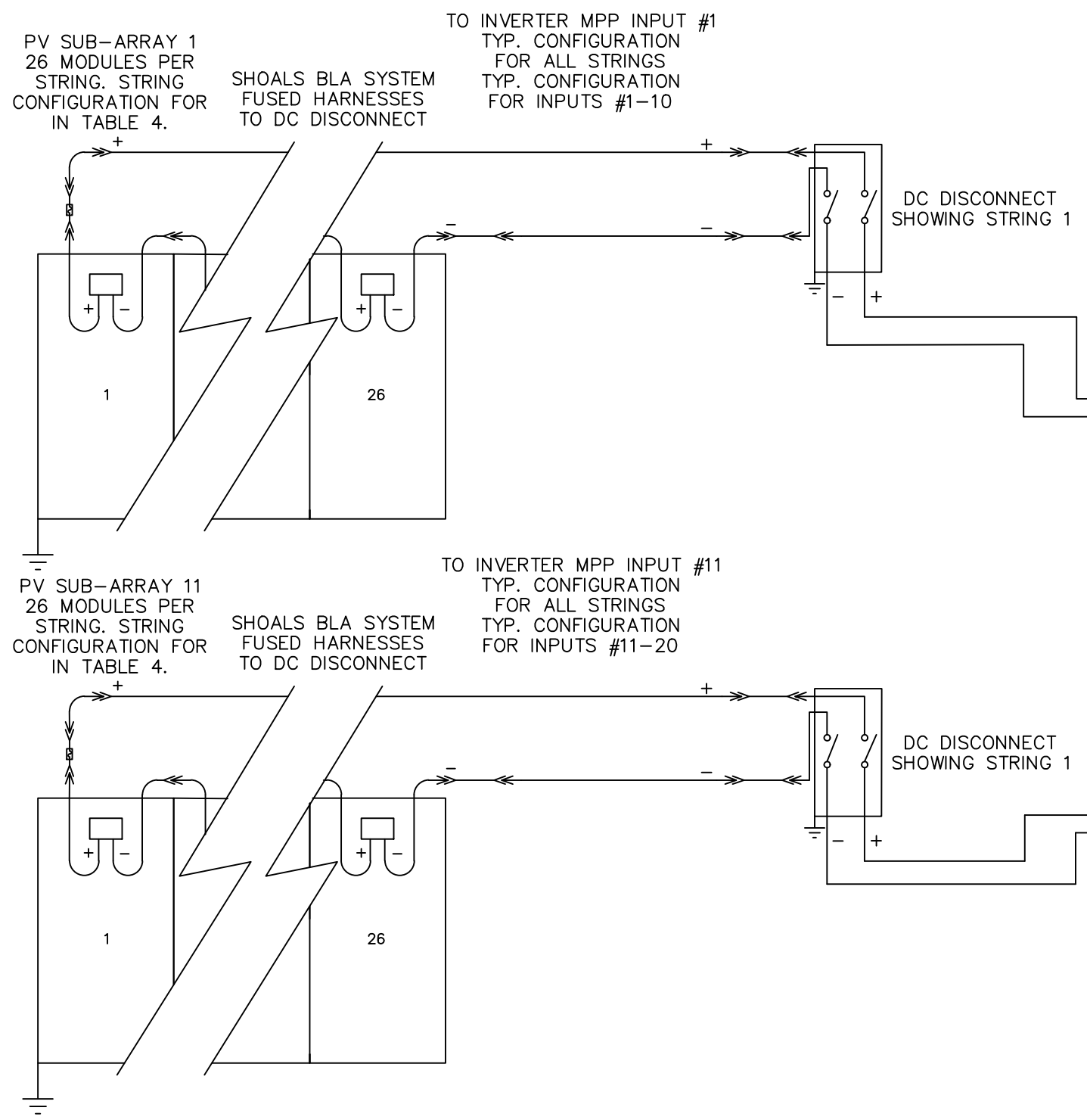
PROJ NUM: 422208
DES: A. QUIROZ
DWN: A. QUIROZ
CHK: B. TYLOCK
APV: G. BEANE
DATE: 04/02/2021
SCALE AT 22" x 34":

NONE
SHEET NO: PV-E.02.11
REV: 1

PV SYSTEM SPECIFICATIONS (FEEDER 4)	
PV MODULES	49,400 X JINKO SOLAR JKM530M-72HL4-TV 530W
DC RATING AT STC	26,182.00 KW
INVERTERS	(6) X SUNGROW SG3600U
AC RATING ^{NOTE 7}	20,000.00 KW
DC/AC RATIO @ POI	1.309
DC/AC RATIO @ INVERTER	1.212

PV SYSTEM SPECIFICATIONS TOTAL SYSTEM	
PV MODULES	245,310 X JINKO SOLAR JKM530M-72HL4-TV 530W
DC RATING AT STC	130,014.30 KW
INVERTERS	(30) X SUNGROW SG3600U
AC RATING ^{NOTE 7}	100,000.00 KW
DC/AC RATIO @ POI	1.300
DC/AC RATIO @ INVERTER	1.204

CONFIGURATION FOR TURNKEY STATIONS VARY



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 - FINAL FUSE SIZES TBD BY MANUFACTURER.

FEEDER 4 TURNKEY STATION (TS) PV STRINGING				
TURNKEY STATION (TS)	PV SERIES MODULES	INPUT NUMBER	PARALLEL STRINGS	PV MODULES PER TS
25	26	19	SEE TABLE 4	8,164
26	26	20	SEE TABLE 4	8,268
27	26	18	SEE TABLE 4	9,282
28	26	19	SEE TABLE 4	7,228
29	26	20	SEE TABLE 4	7,124
30	26	20	SEE TABLE 4	9,334
TOTAL PV MODULES FOR TS ON FEEDER 4				49,400

CONFIGURATION FOR TURNKEY STATIONS VARY

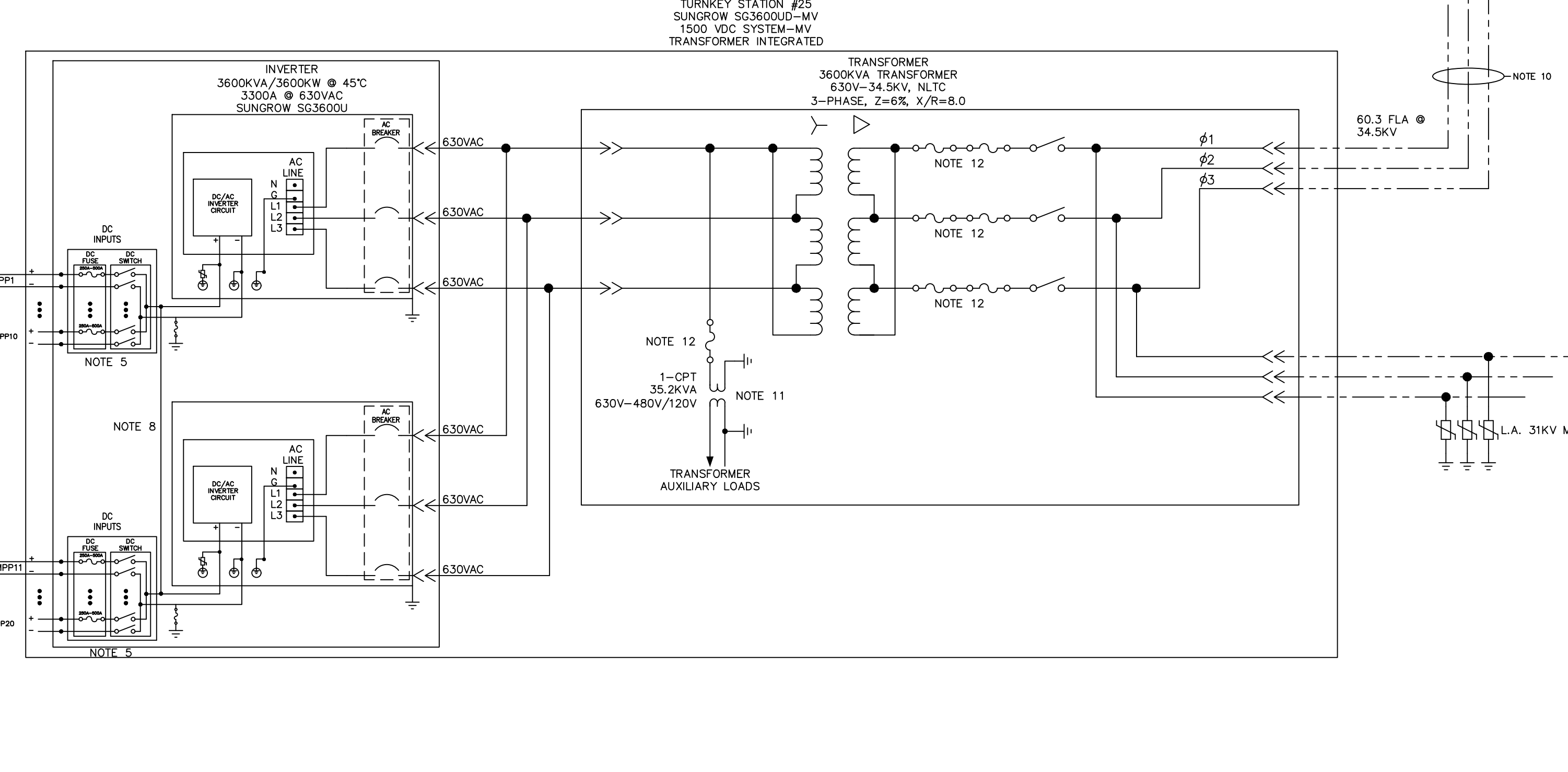
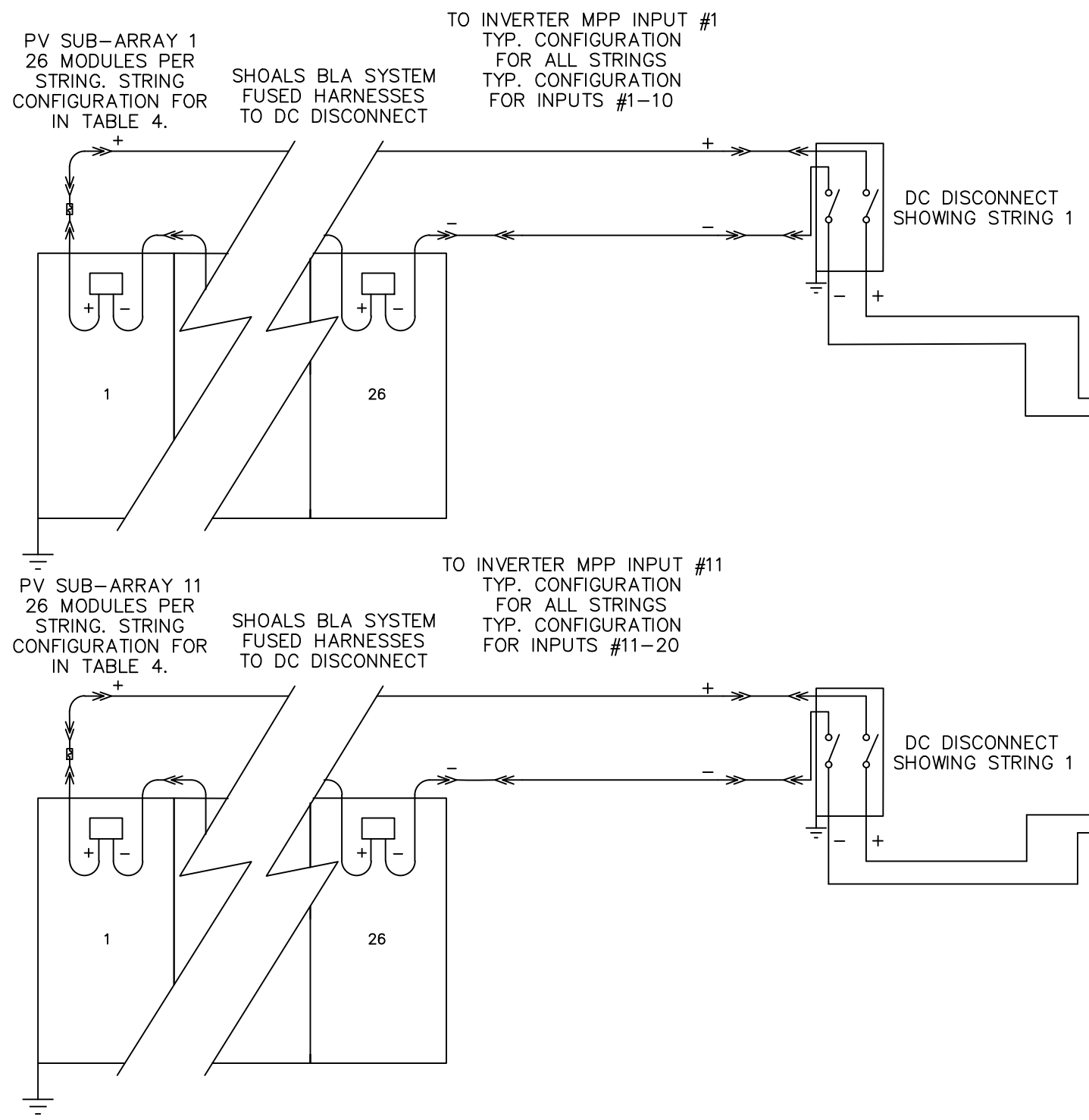
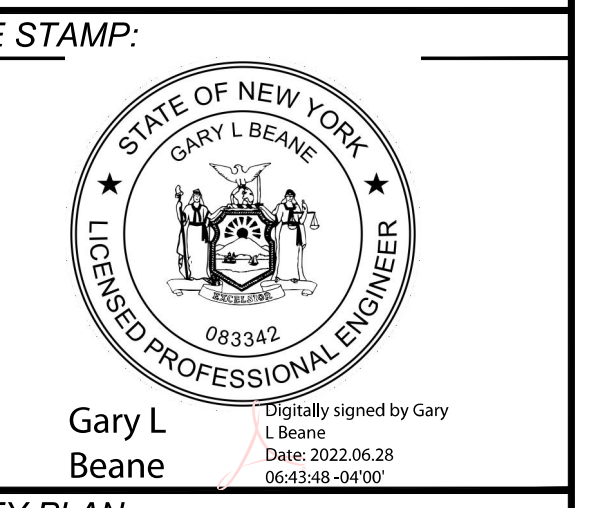


TABLE 4									
INPUT		STRINGS PER INPUT							
TS25	TS26	TS27	TS28	TS29	TS30	TS25	TS26	TS27	TS28
1	15	16	18	16	18	15	16	18	16
2	15	16	18	16	18	15	16	18	16
3	16	16	18	16	18	16	16	18	18
4	16	16	19	16	18	16	16	18	18
5	15	16	19	16	18	15	16	18	18
6	15	16	19	16	18	15	16	18	18
7	15	16	19	16	18	15	16	18	18
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9	15	16	19	16	18	15	16	18	18
10	15	16	19	16	18	15	16	18	18
11	15	16	19	16	18	15	16	18	18
12	16	18	15	16	18	16	16	18	18
13	16	14	15	16	18	16	16	18	18
14	16	18	16	16	18	16	16	18	18
15	16	19	15	18	18	16	16	18	18
16	16	13	18	18	18	16	16	18	18
17	16	16	18	18	18	16	16	18	18
18	17	16	18	0	15	18	16	18	18
19	17	16	18	0	15	18	16	18	18
20	17	16	18	0	15	18	16	18	18



KEY PLAN:

REVISIONS:

NO.	DATE	DESCRIPTION
0	01/19/2022	DESIGN DRAWINGS
1	6/14/2022	ISSUED FOR PERMIT

PROJECT TITLE:

BROOKSIDE SOLAR PROJECT

PROJECT LOCATION:

TOWNS OF BURKE AND CHATEAUGAY, NY

SHEET TITLE & DESCRIPTION:

ELECTRICAL THREE-LINE DIAGRAM

PROJ NUM: 422208

DES: A. QUIROZ

DWN: A. QUIROZ

CHK: B. TYLOCK

APV: G. BEANE

DATE: 04/02/2021

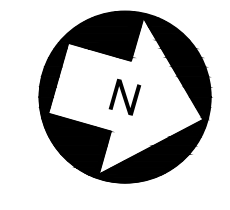
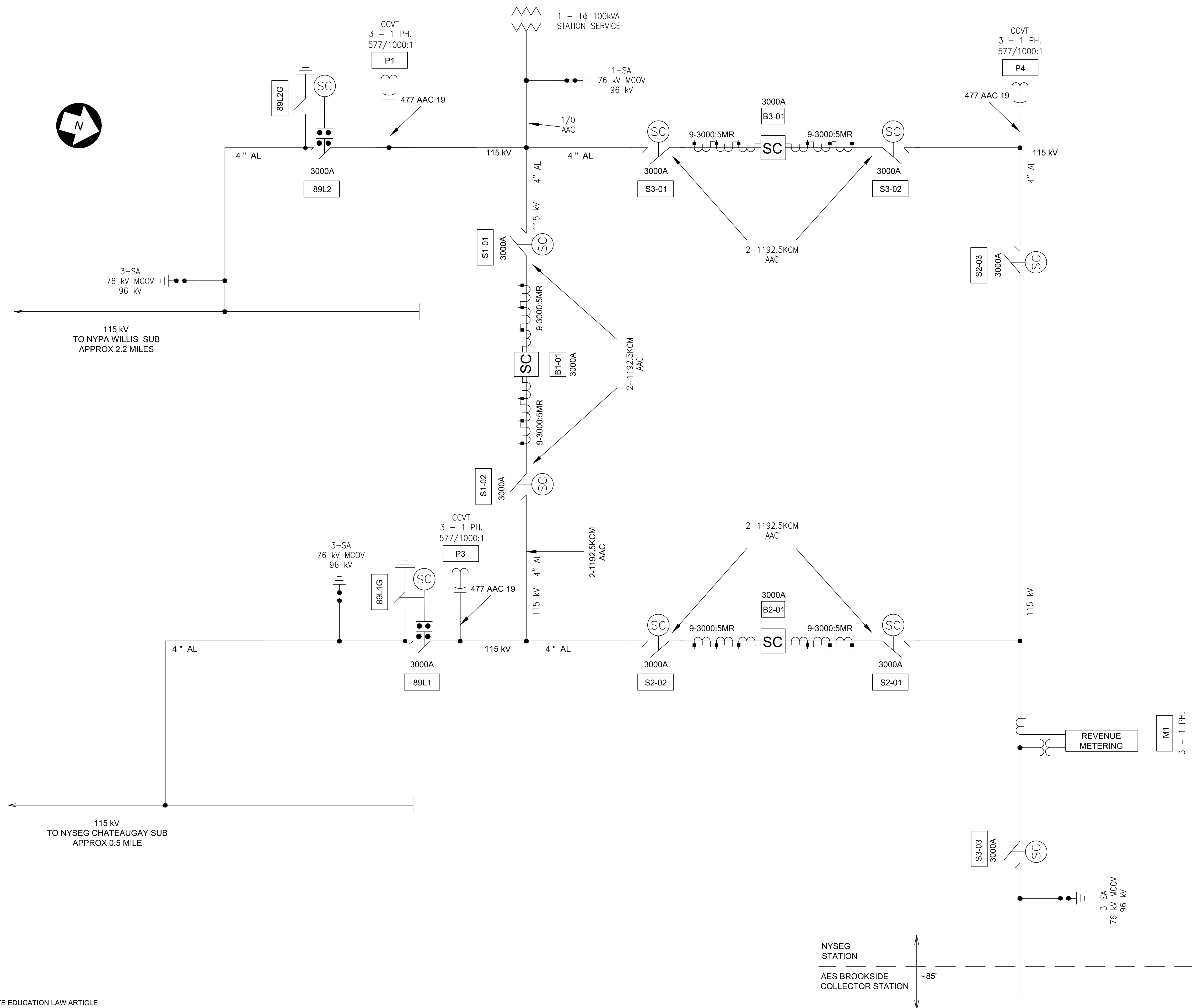
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SHEET NO: NONE
REV: 1
PV-E.02.12

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AES Titleblock 2/20/24 12/10/19



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PE STAMP:



KEY PLAN:

REVISIONS:

NO.	DATE	DESCRIPTION
0	01/14/2022	DESIGN DRAWINGS

PROJECT TITLE:

**BROOKSIDE SOLAR
POI
SUBSTATION
115KV**

PROJECT LOCATION:

**TOWNS OF BURKE AND
CHATEAUGAY, NY**

SHEET TITLE & DESCRIPTION:

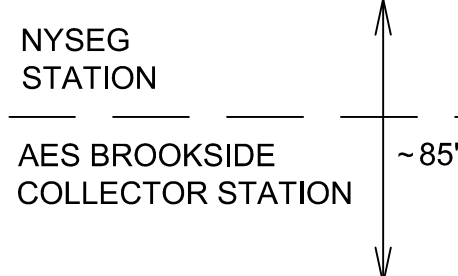
**POI
SUBSTATION**

**SWITCHING
ONE-LINE DIAGRAM**

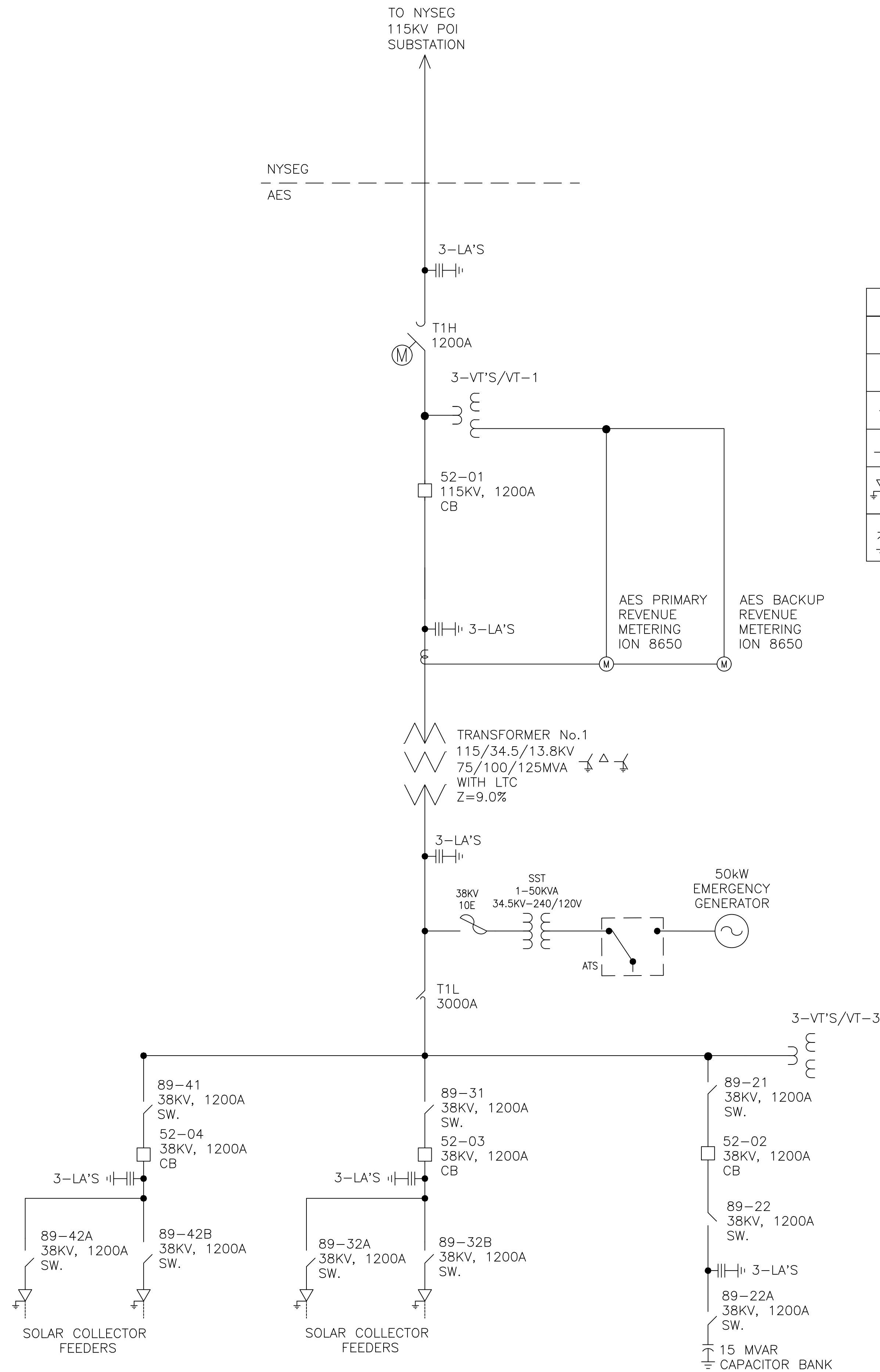
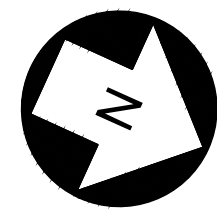
PROJ NUM:	422299
DES:	D. FARRELL
DWN:	D. FARRELL
CHK:	C. PASCALE
APV:	C. PASCALE
DATE:	04/02/2021
SCALE AT 22" x 34":	NONE

SHEET NO:	422299-0001-001	REV:	0
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AES-Timberhill-22024-021010



LEGEND OF SYMBOLS:	

aes

2180 South 1300 East, Suite 600
Salt Lake City, UT 84108-2749
(801) 679-3500

TRC

249 Western Avenue
Augusta, ME 04330

PE STAMP:



KEY PLAN:

REVISIONS:

NO.	DATE	DESCRIPTION
0	01/14/2022	DESIGN DRAWINGS

PROJECT TITLE:

**BROOKSIDE SOLAR
COLLECTION
SUBSTATION
115KV-34.5KV**

PROJECT LOCATION:

**TOWNS OF BURKE AND
CHATEAUGAY, NY**

SHEET TITLE & DESCRIPTION:

**COLLECTION
SUBSTATION**

**SWITCHING
ONE-LINE DIAGRAM**

PROJ NUM: 422299

DES: D. FARRELL

DWN: D. FARRELL

CHK: C. PASCALE

APV: C. PASCALE

DATE: 04/02/2021

SCALE AT 22" x 34":

NONE

SHEET NO:

HV-E.02.01

REV:

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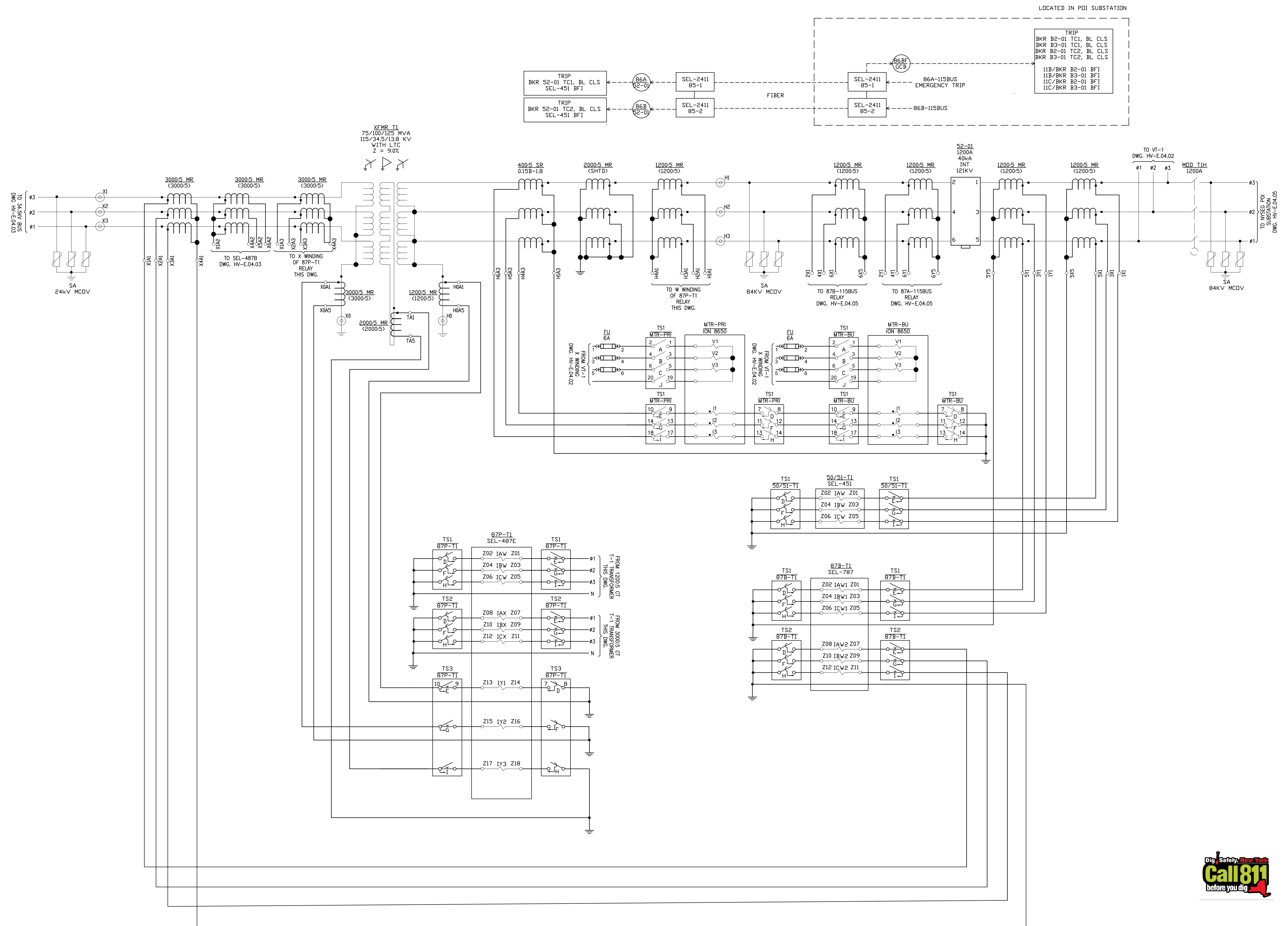


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NOT FOR CONSTRUCTION

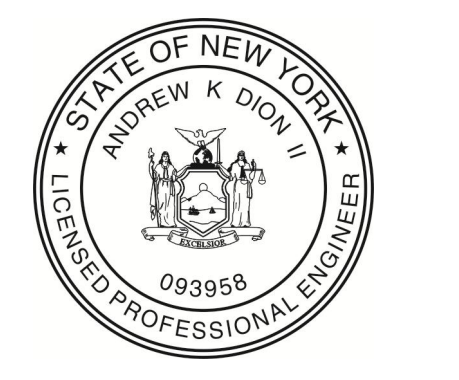
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AES-TH000000-22034-021010



PE STAMP:



KEY PLAN:

REVISIONS:

NO.	DATE	DESCRIPTION
0	01/14/2022	DESIGN DRAWINGS

PROJECT TITLE:
**BROOKSIDE SOLAR
COLLECTION
SUBSTATION
115KV-34.5KV**

PROJECT LOCATION:
**TOWNS OF BURKE AND
CHATEAUGAY, NY**

SHEET TITLE & DESCRIPTION:
**COLLECTION
SUBSTATION**

THREE-LINE DIAGRAM

PROJ NUM:	422299
DES:	D. FARRELL
DWN:	D. FARRELL
CHK:	C. PASCALE
APV:	C. PASCALE
DATE:	05/21/2021
SCALE AT 22" x 34":	

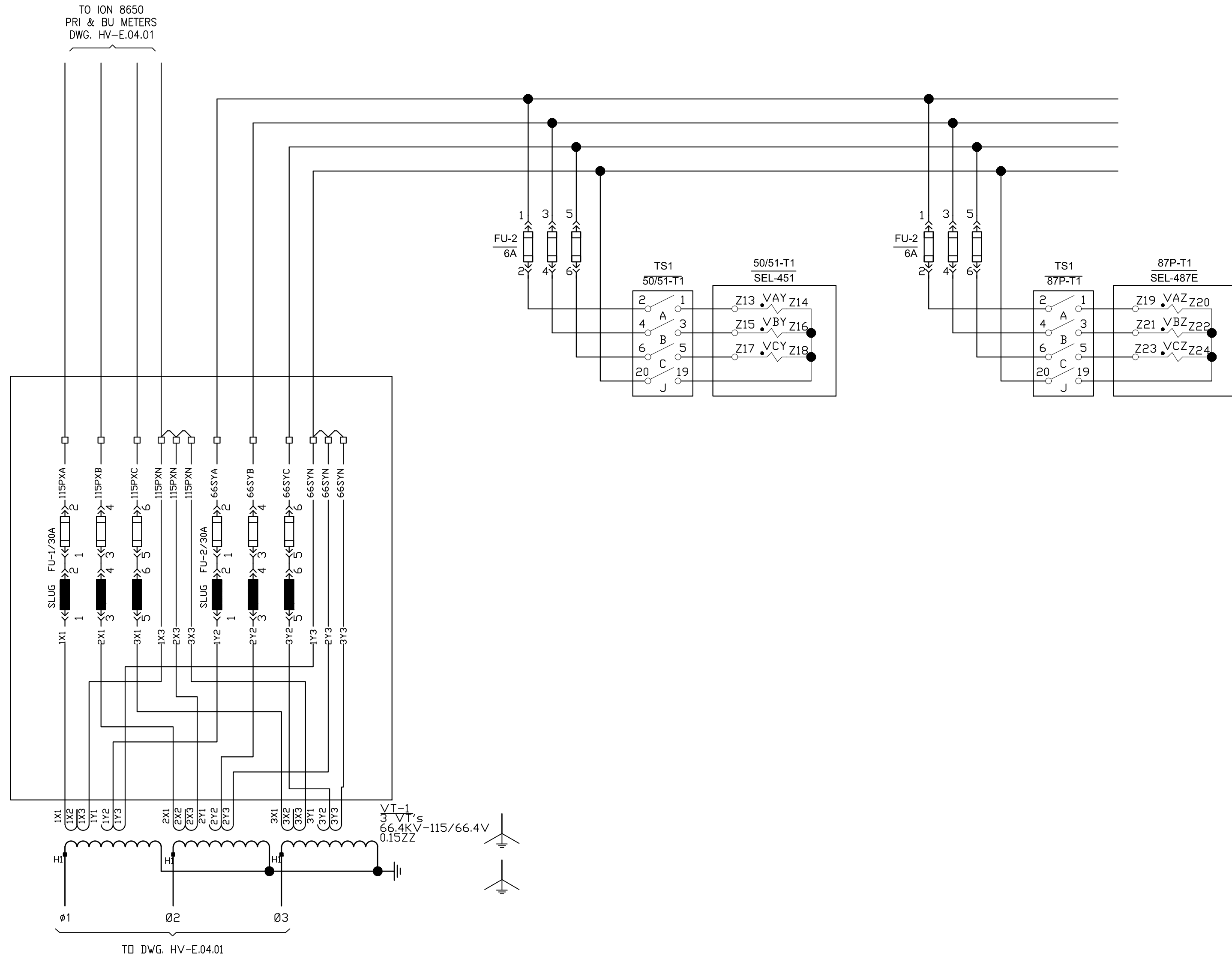
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HV-E.04.01	0



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NOT FOR CONSTRUCTION

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KEY PLAN:

REVISIONS:

NO.	DATE	DESCRIPTION
0	01/14/2022	DESIGN DRAWINGS

PROJECT TITLE:

BROOKSIDE SOLAR
COLLECTION
SUBSTATION
115KV-34.5KV

PROJECT LOCATION:

TOWNS OF BURKE AND
CHATEAUGAY, NY

SHEET TITLE & DESCRIPTION:

COLLECTION
SUBSTATION

THREE-LINE DIAGRAM

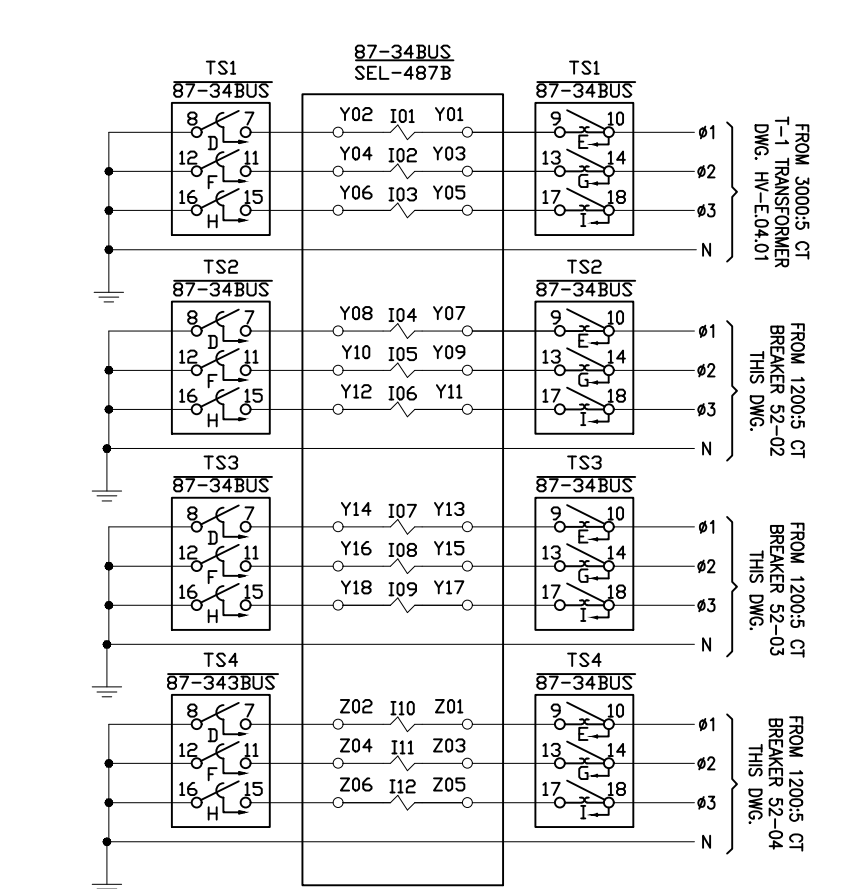
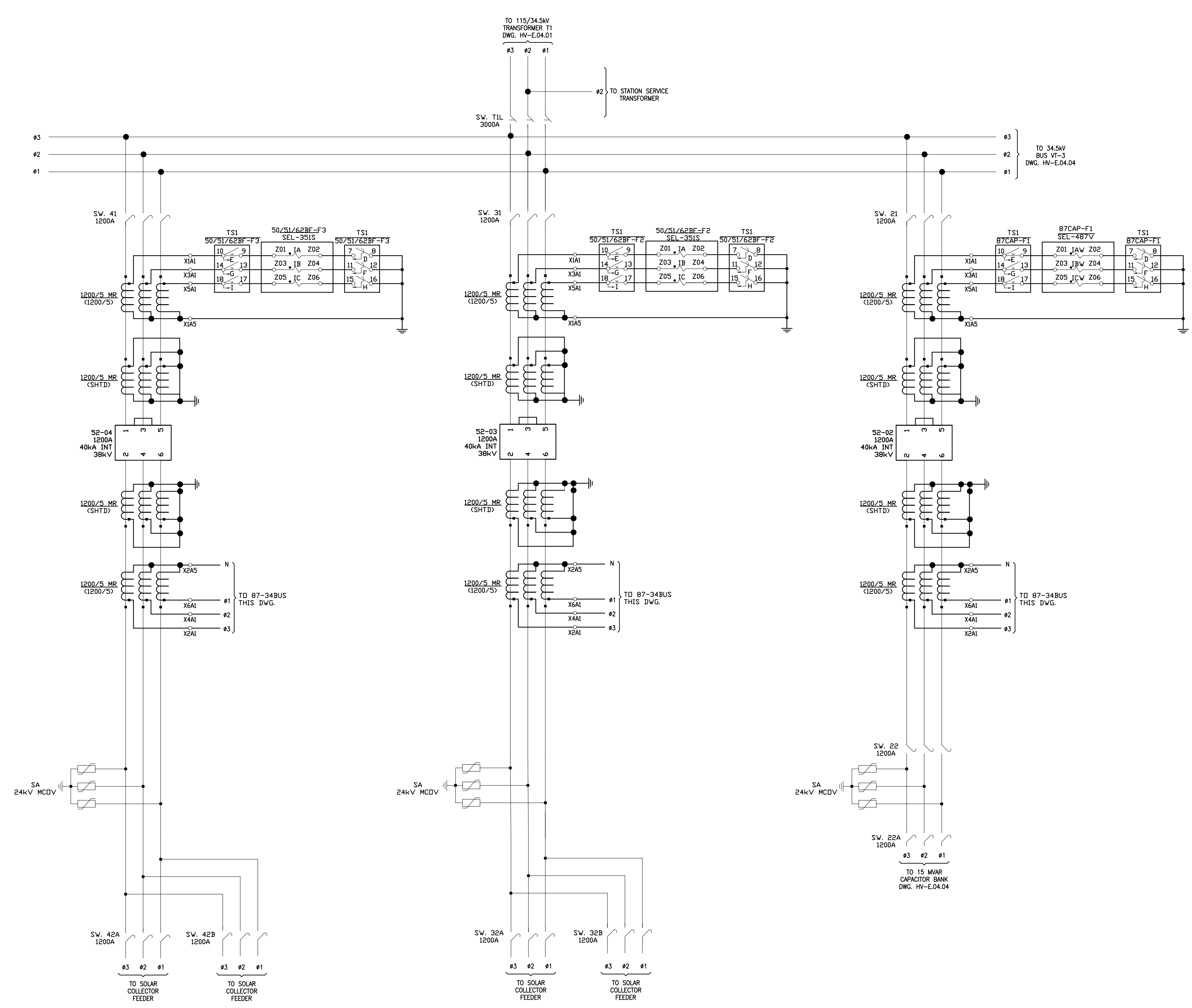
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DWN:	D. FARRELL
CHK:	C. PASCALE
APV:	C. PASCALE
DATE:	05/21/2021
SCALE AT 22" x 34":	NONE

SHEET NO:	HV-E.04.02	REV:	0
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PRELIMINARY
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2180 South 1300 East, Suite 600
Salt Lake City, UT 84106-2749
(801) 679-3500



249 Western Avenue
Augusta, ME 04330

PE STAMP:



KEY PLAN:

REVISIONS:

NO.	DATE	DESCRIPTION
0	01/14/2022	DESIGN DRAWINGS

PROJECT TITLE:

**BROOKSIDE SOLAR
COLLECTION
SUBSTATION
115KV-34.5KV**

PROJECT LOCATION:

**TOWNS OF BURKE AND
CHATEAUGAY, NY**

SHEET TITLE & DESCRIPTION:

**COLLECTION
SUBSTATION**

THREE-LINE DIAGRAM

PROJ NUM:	422299
DES:	D. FARRELL
DWN:	D. FARRELL
CHK:	C. PASCALE
APV:	C. PASCALE
DATE:	05/21/2021
SCALE AT 22" x 34":	NONE



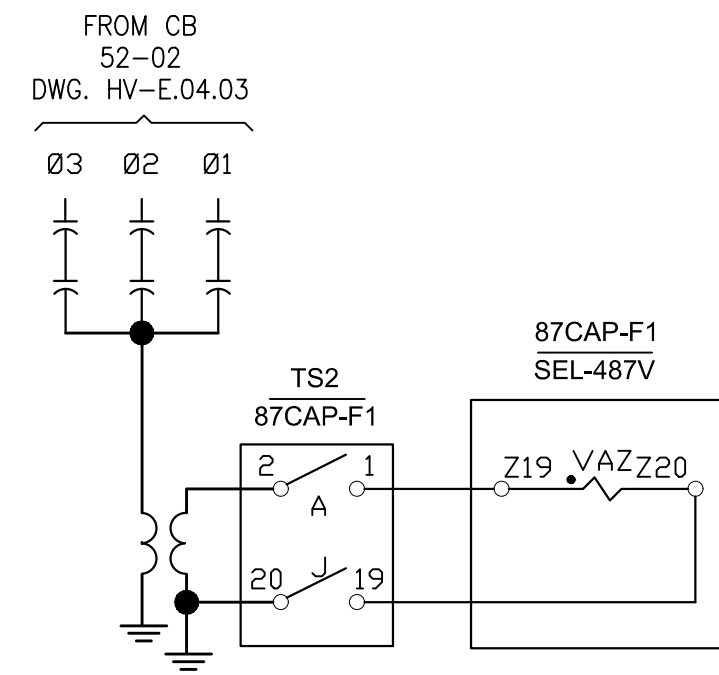
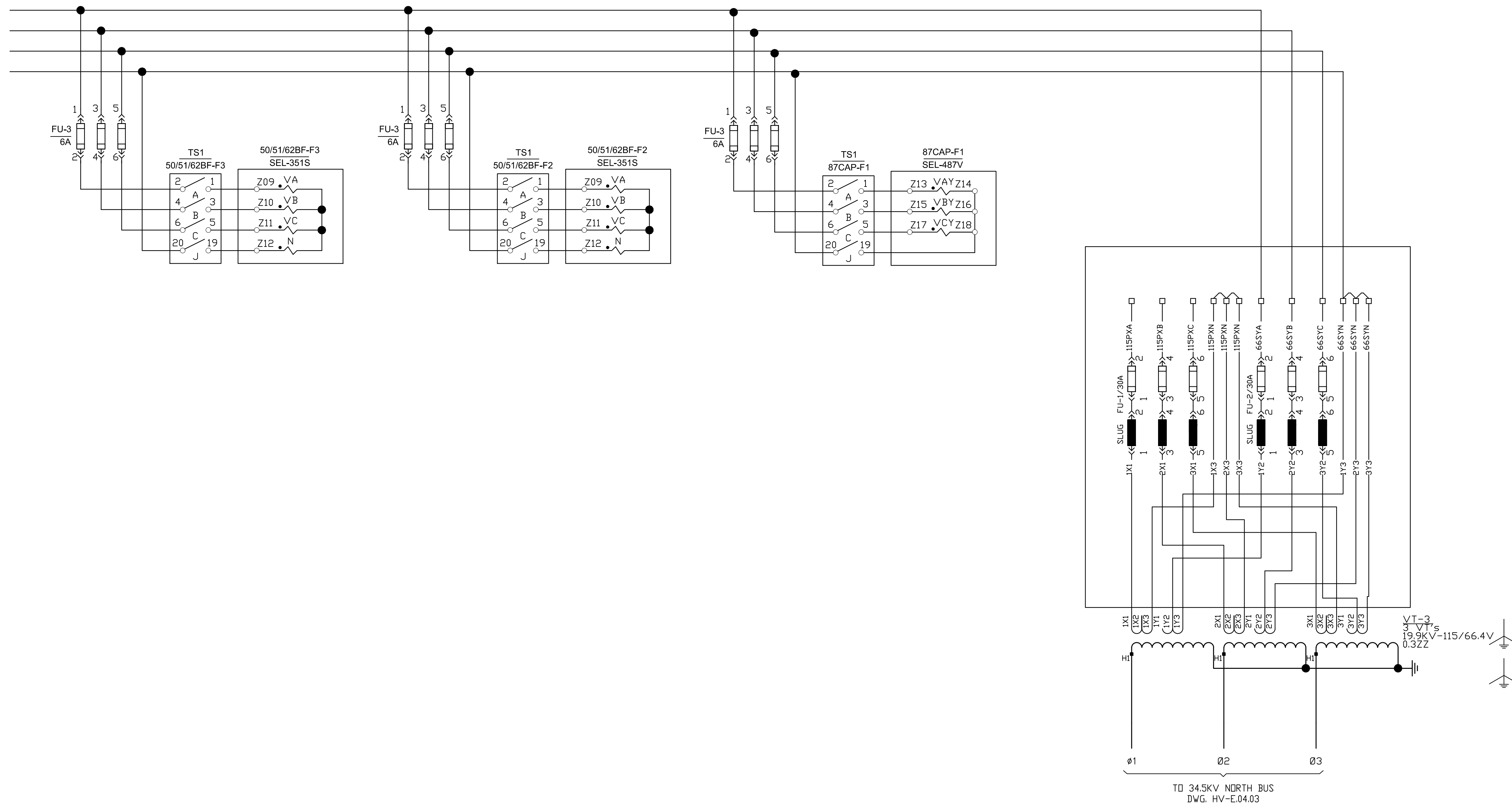
PRELIMINARY
NOT FOR CONSTRUCTION

SHEET NO:	HV-E.04.03	REV:	0
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UNDER NEW YORK STATE EDUCATION LAW ARTICLE 145 (ENGINEERING), SECTION 7209 (2), IT IS A VIOLATION OF THE LAW FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.

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AES Titleblock 2/23/21 12:03:10



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KEY PLAN:

REVISIONS:

NO.	DATE	DESCRIPTION
0	01/14/2022	DESIGN DRAWINGS

PROJECT TITLE:

**BROOKSIDE SOLAR
COLLECTION
SUBSTATION
115KV-34.5KV**

PROJECT LOCATION:

**TOWNS OF BURKE AND
CHATEAUGAY, NY**

SHEET TITLE & DESCRIPTION:

**COLLECTION
SUBSTATION**

THREE-LINE DIAGRAM

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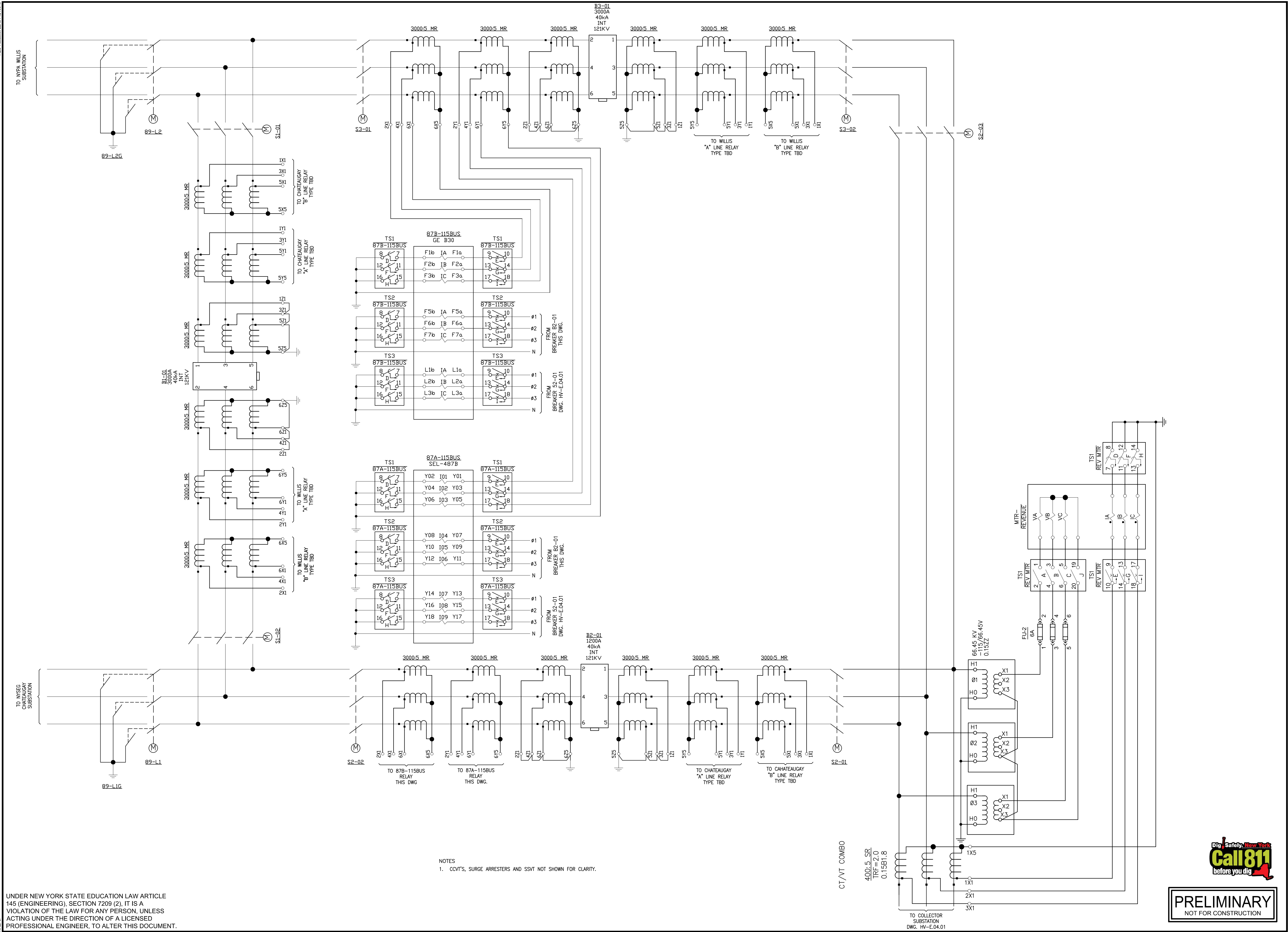
SHEET NO:	HV-E.04.04	REV:	0
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NOTES
 1. CCVT'S, SURGE ARRESTERS AND SSVT NOT SHOWN FOR CLARITY.

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KEY PLAN:

REVISIONS:		
NO.	DATE	DESCRIPTION
0	01/14/2022	DESIGN DRAWINGS

PROJECT TITLE:

**BROOKSIDE SOLAR
 POI SUBSTATION
 115KV**

PROJECT LOCATION:

**TOWNS OF BURKE AND
 CHATEAUGAY, NY**

SHEET TITLE & DESCRIPTION:

POI SUBSTATION

THREE-LINE DIAGRAM

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REV:	0

