r						1	
DWG NO.	DRAWING TITLE	DATE	REV.	DATE	REV.	DATE	REV.
FCS-E-600-00	COVER SHEET	04/12/24	1	06/07/24	2	06/25/24	3
FCS-E-601-00	MEDIUM VOLTAGE PLAN	04/12/24	1	06/07/24	2	06/25/24	3
FCS-E-601-01	MV SINGLE LINE DIAGRAM	04/12/24	1	06/07/24	2	06/25/24	3
FCS-E-601-02	MV SINGLE LINE WIRE SCHEDULES	04/12/24	1	06/07/24	2	06/25/24	3
FCS-E-602-01	TRENCH, BORE AND SECTIONALIZER DETAILS	04/12/24	1	06/07/24	2	06/25/24	3
FCS-E-602-02	DIRECTIONAL BORE DETAILS	04/12/24	1	06/07/24	2	06/25/24	3
FCS-E-603-01	TYPICAL CROSSINGS DETAILS	-	-	-	-	06/25/24	3

THESE DESIGN DRAWINGS HAVE BEEN **CREATED AT THE DIRECTION OF A PROFESSIONAL ENGINEER LICENSED IN** THE STATE OF NEW YORK. **ENGINEER OF RECORD: JAYME GARCIA**, LICENSE #090650 TRC ENGINEERS, INC., CERTIFICATE OF AUTHORIZATION NO. 001817, 1407 BROADWAY, SUITE 3301, **NEW YORK, NY 10018.**

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.

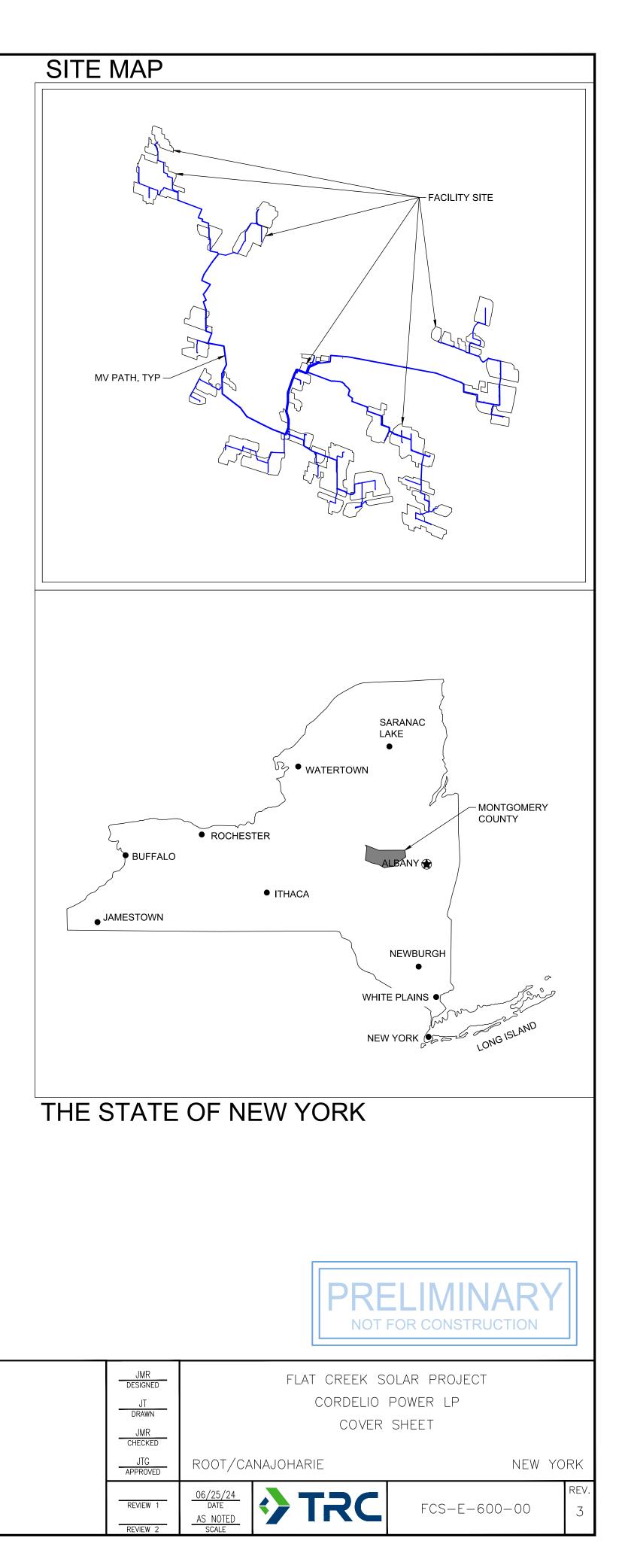


PROJECT DATA LOCATION: MONTGOMERY COUNTY, NY **PROJECTION:** STATE PLANE NAD 83 (NY83-EF) **POWER GENERATED: 300 MWac**

FLAT CREEK SOLAR PROJECT

PREPARED FOR: CORDELIO POWER, LP PREPARED BY: TRC ENGINEERS, INC. ISSUE DATE: 06/25/24 ISSUE STATUS: ISSUED FOR FINAL CLIENT REVIEW

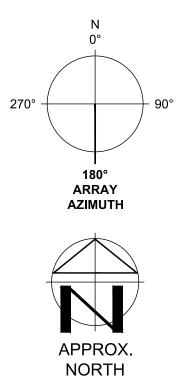
	PROJECT NO: 435979						
REFERENCE ITEMS	REV	DESCRIPTION	DATE	DES	СНК	APP	
	3	ISSUED FOR FINAL CLIENT REVIEW	06/25/24	JMR	JMR	JTG	
	2	ISSUED FOR PHASE 3 CLIENT REVIEW	06/07/24	JMR	JMR	JTG	
	1	ISSUED FOR PHASE 2 CLIENT REVIEW	04/12/24	JMR	JMR	JTG	



LEGEND

 MV CIRCUIT A1
 MV CIRCUIT A2
 MV CIRCUIT C1
 MV CIRCUIT D2
 MV CIRCUIT E1
 MV CIRCUIT E2
 MV CIRCUIT E3
 MV CIRCUIT E4
 MV CIRCUIT E5
 MV CIRCUIT E6
 MV CIRCUIT E7
 MV CIRCUIT E8
 MV CIRCUIT G1
 MV CIRCUIT G2
 MV CIRCUIT G3

PROPOSED MV COLLECTION EASEMENT -



0 750 1500 : SCALE: 1" = 1500'



06/07/24 JMR

04/12/24 JMR

JMR

ISSUED FOR PHASE 3 CLIENT REVIEW

ISSUED FOR PHASE 2 CLIENT REVIEW

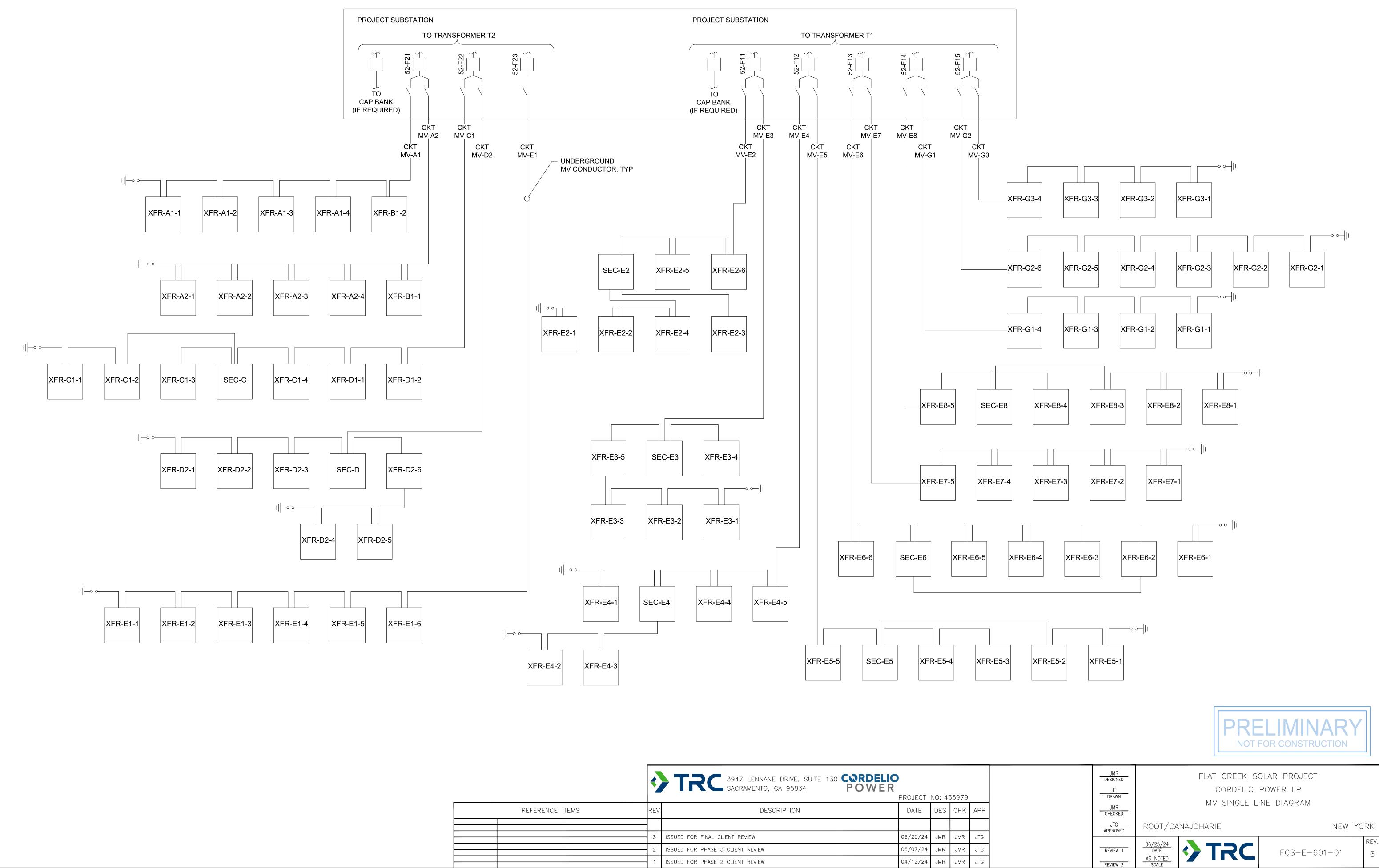
	SYST	EM S	UMMAF	RY			
AREA ID	A	В	С	D	E	G	
MODULE MODEL		•	Jinko JKM	565M_72HL-BD	OVP		
MODULE STC DC RATING				565W			
MODULES PER SOURCE CIRCUIT				26			
TOTAL MODULE COUNT	50,700	11,284	29,380	49,530	303,160	106,678	
TOTAL STC DC SYSTEM SIZE	28.65 MW	6.38 MW	16.60 MW	27.98 MW	171.29 MW	60.27 MW	
TOTAL DC SYSTEM SIZE	311.17 MW						
AC SYSTEM SIZE @ POI				300 MW			
DC/AC RATIO @ POI				1.06			
ROW TO ROW SPACING (GCR)			20	'-0" (39.7%)			
INVERTER MODEL / QTY		SMA	SC 4200 UP-L	IS / (79 EQUIPN	MENT SKIDS)		
INVERTER CAPACITY			29	93.16 MVA			
RACKING SYSTEM			SINGLE	-AXIS TRACKIN	IG		
MODULE TILT			-6	50° TO 60°			
ARRAY AZIMUTH				180°			
SITE LATITUDE				42°			

	INVEF	RTER SUM	MARY 1	FABLE	
AREA ID	PROPOSED SKID QUANTITY	2.52 MVA SKID QTY	3.36 MVA SKID QTY	4.2 MVA SKID QTY	PROPOSED INVERTER MVA
А	8	2	4	2	26.88
В	2	1	1	0	5.88
С	4	0	1	3	15.96
D	8	0	8	0	26.88
E	43	0	23	20	161.28
G	14	0	3	11	56.28
TOTALS	79	3	40	36	293.16

M۱	/ CIRCI	JIT TAE	BLE	
CIRCUIT NUMBER	CIRCUIT NAME	SKID QTY	MVA	
1	A1	5	16.8	
2	A2	5	15.96	
3	C1	6	22.68	
4	D2	6	20.16	
5	E1	6	21.84	
6	E2	6	22.68	
7	E3	5	16.8	
8	E4	5	19.32	
9	E5	5	18.48	
10	E6	6	23.52	
11	E7	5	18.48	
12	E8	5	20.16	
13	G1	4	16.8	
14	G2	6	22.68	
15	G3	4	16.8	
	SUM	79	293.16	



JMR DESIGNED	FLAT CREEK SOLAR PF	ROJECT	
JT DRAWN	CORDELIO POWER	LP	
JMR CHECKED	MEDIUM VOLTAGE P	LAN	
JTG APPROVED	ROOT/CANAJOHARIE	NEW YO	RK
REVIEW 1 REVIEW 2	06/25/24 DATE AS NOTED SCALE	E-601-00	REV. 3



		TRC 3947 LENNANE DRIVE, SUITE 130 CORDELIC SACRAMENTO, CA 95834 POWER	PROJECT	NO: 43	35979	
REFERENCE ITEMS	REV	DESCRIPTION	DATE	DES	СНК	APP
	3	ISSUED FOR FINAL CLIENT REVIEW	06/25/24	JMR	JMR	JTG
	2	ISSUED FOR PHASE 3 CLIENT REVIEW	06/07/24	JMR	JMR	JTG
	1	ISSUED FOR PHASE 2 CLIENT REVIEW	04/12/24	JMR	JMR	JTG

		-		MV AC CABLE	SCHEDULE						1		MV AC CABL	E SCHEDULE			
CIRCUIT #	CIRCUIT LOCATION	LOAD CURRENT (A)	POWER PER CIRCUIT RUN (kW)	PHASE CONDUCTOR SIZE	WIRE TYPE	RACEWAY	TOTAL CIRCUIT LENGTH (FT)	IEEE VD .95 PF (%)	CIRCUIT #	CIRCUIT LOCATION		POWER PER CIRCUIT RUN (kW)	PHASE CONDUCTOR SIZE	WIRE TYPE	RACEWAY	TOTAL CIRCUIT LENGTH (FT)	IEEE VD .9 PF (%)
	XFR A1-1 TO XFR A1-2	70	4200	500 KCMIL	35kV TR-XLPE 100% MV-105, 1/6N (9X#14AWG CU)	DIRECT BURIED	410	0.01%		XFR-E2-1 TO XFR-E2-2	56	3360	500 KCMIL	35kV TR-XLPE 100% MV-105, 1/6N (9X#14AWG CU)	DIRECT BURIED	760	0.01%
	XFR A1-2 TO XFR A1-3	112	6720	500 KCMIL	35kV TR-XLPE 100% MV-105, 1/6N (9X#14AWG CU)	DIRECT BURIED	2510	0.09%		XFR-E2-2 TO XFR-E2-4	112	6720	500 KCMIL	35kV TR-XLPE 100% MV-105, 1/6N (9X#14AWG CU)	DIRECT BURIED	830	0.03%
MV_A1	XFR A1-3 TO XFR A1-4	169	10080	1000 KCMIL	35kV TR-XLPE 100% MV-105, 1/8N (14X#14AWG CU)	DIRECT BURIED	1260	0.04%		XFR-E2-3 TO SEC-E2	183	10920	1000 KCMIL	35kV TR-XLPE 100% MV-105, 1/8N (14X#14AWG CU)	DIRECT BURIED	2560	0.09%
	XFR A1-4 TO XFR B1-2	239	14280	1250 KCMIL	35kV TR-XLPE 100% MV-105, 1/8N (17X#14AWG CU)	DIRECT BURIED	4860	0.19%	MV_E2	XFR-E2-4 TO SEC-E2	70	4200	500 KCMIL	35kV TR-XLPE 100% MV-105, 1/6N (9X#14AWG CU)	DIRECT BURIED	110	0.00%
	XFR B1-2 TO SUBSTATION	281	16800	1250 KCMIL	35kV TR-XLPE 100% MV-105, 1/8N (17X#14AWG CU)	DIRECT BURIED	23060	1.04%		SEC-E2 TO XFR-E2-5	253	15120	1000 KCMIL	35kV TR-XLPE 100% MV-105, 1/8N (14X#14AWG CU)	DIRECT BURIED	1360	0.06%
						ΤΟΤΑ	L VD:	1.36%		XFR-E2-5 TO XFR-E2-6	309	18480	1250 KCMIL	35kV TR-XLPE 100% MV-105, 1/8N (17X#14AWG CU)	DIRECT BURIED	560	0.03%
		1	1	MV AC CABLE	SCHEDULE	1	1			XFR-E2-6 TO SUBSTATION	380	22680	1250 KCMIL	35kV TR-XLPE 100% MV-105, 1/8N (17X#14AWG CU)	DIRECT BURIED	7660	0.46%
CIRCUIT #	CIRCUIT LOCATION	LOAD CURRENT (A)	POWER PER CIRCUIT RUN (kW)	PHASE CONDUCTOR SIZE	WIRE TYPE	RACEWAY	TOTAL CIRCUIT LENGTH (FT)	IEEE VD .95 PF (%)		SUBSTATION					TOTAL	- VD:	0.69%
	XFR A2-1 TO XFR A2-2	56	3360	500 KCMIL	35kV TR-XLPE 100% MV-105, 1/6N (9X#14AWG CU)	DIRECT BURIED	1260	0.02%	CIRCUIT			POWER PER	MV AC CABLI PHASE			TOTAL	IEEE VD .9
	XFR A2-2 TO XFR A2-3	112	6720	500 KCMIL	35kV TR-XLPE 100% MV-105, 1/6N (9X#14AWG CU)	DIRECT BURIED	1510	0.05%	#	CIRCUIT LOCATION	CURRENT (A)	CIRCUIT RUN (kW)	CONDUCTOR SIZE	WIRE TYPE	RACEWAY	CIRCUIT LENGTH (FT)	(%)
MV_A2	XFR A2-3 TO XFR A2-4	169	10080	1000 KCMIL	35kV TR-XLPE 100% MV-105, 1/8N (14X#14AWG CU)	DIRECT BURIED	760	0.02%		XFR-E3-1 TO XFR-E3-2	56	3360	500 KCMIL	35kV TR-XLPE 100% MV-105, 1/6N (9X#14AWG CU)	DIRECT BURIED	1760	0.03%
	XFR A2-4 TO XFR B1-1	211	12600	1250 KCMIL	35kV TR-XLPE 100% MV-105, 1/8N (17X#14AWG CU)	DIRECT BURIED	7060	0.24%		XFR-E3-2 TO XFR-E3-3	112	6720	500 KCMIL	35kV TR-XLPE 100% MV-105, 1/6N (9X#14AWG CU)	DIRECT BURIED	1460	0.05%
	XFR B1-1 TO SUBSTATION	267	15960	1250 KCMIL	35kV TR-XLPE 100% MV-105, 1/8N (17X#14AWG CU)	DIRECT BURIED	24060	1.03%		XFR-E3-3 TO XFR-E3-5	169	10080	500 KCMIL	35kV TR-XLPE 100% MV-105, 1/6N (9X#14AWG CU)	DIRECT BURIED	950	0.05%
			1	1	2,000 (2778) 2 // 00 00 //	ΤΟΤΑ	L VD:	1.36%	MV_E3	XFR-E3-4 TO SEC-E3	56	3360	500 KCMIL	35kV TR-XLPE 100% MV-105, 1/6N (9X#14AWG CU)	DIRECT BURIED	860	0.01%
										XFR-E3-5 TO SEC-E3	225	13440	1000 KCMIL	35kV TR-XLPE 100% MV-105, 1/8N (14X#14AWG CU)	DIRECT BURIED	120	0.00%
			T	MV AC CABLE	SCHEDULE	1	1			SEC-E3 TO SUBSTATION	281	16800	1250 KCMIL	35kV TR-XLPE 100% MV-105,	DIRECT BURIED	9060	0.41%
	CIRCUIT LOCATION	LOAD CURRENT (A)	POWER PER CIRCUIT RUN	PHASE CONDUCTOR	WIRE TYPE	RACEWAY	TOTAL CIRCUIT	IEEE VD .95 PF (%)		SUBSTATION				1/8N (17X#14AWG CU)	TOTAL	VD:	0.56%
Π			(kW)	SIZE	35kV TR-XLPE 100% MV-105,		LENGTH (FT)				1		MV AC CABLI	E SCHEDULE			
	XFR-C1-1 TO XFR-C1-2	70	4200	500 KCMIL	1/6N (9X#14AWG CU) 35kV TR-XLPE 100% MV-105,	DIRECT BURIED	1410	0.03%	CIRCUIT	CIRCUIT LOCATION		POWER PER	PHASE CONDUCTOR	WIRE TYPE	RACEWAY	TOTAL CIRCUIT	IEEE VD .9
	XFR-C1-2 TO SEC-C	70	4200	500 KCMIL	1/6N (9X#14AWG CU) 35kV TR-XLPE 100% MV-105,	DIRECT BURIED	110	0.00%	#			(kW)	SIZE	35kV TR-XLPE 100% MV-105,		LENGTH (FT)	(%)
	XFR-C1-3 TO SEC-C	70	4200	500 KCMIL	1/6N (9X#14AWG CU) 35kV TR-XLPE 100% MV-105,	DIRECT BURIED	980	0.02%		XFR-E4-1 TO SEC-E4	70	4200	500 KCMIL	1/6N (9X#14AWG CU) 35kV TR-XLPE 100% MV-105,	DIRECT BURIED	1260	0.03%
MV_C1	SEC-C TO XFR-C1-4	211	12600	1000 KCMIL	1/8N (14X#14AWG CU)		1660	0.06%		XFR-E4-2 TO XFR-E4-3	70	4200	500 KCMIL	1/6N (9X#14AWG CU)	DIRECT BURIED	1410	0.03%
	XFR-C1-4 TO XFR-D1-1	267	15960	1250 KCMIL	35kV TR-XLPE 100% MV-105, 1/8N (17X#14AWG CU)		7260	0.31%	MV E4	XFR-E4-3 TO SEC-E4	141	8400	500 KCMIL	35kV TR-XLPE 100% MV-105, 1/6N (9X#14AWG CU)	DIRECT BURIED	110	0.00%
	XFR-D1-1 TO XFR-D1-2	323	19320	1250 KCMIL	35kV TR-XLPE 100% MV-105, 1/8N (17X#14AWG CU)	DIRECT BURIED	760	0.04%	_	SEC-E4 TO XFR-E4-4	211	12600	1000 KCMIL	35kV TR-XLPE 100% MV-105, 1/8N (14X#14AWG CU)	DIRECT BURIED	710	0.03%
	XFR-D1-2 TO SUBSTATION	380	22680	1250 KCMIL	35kV TR-XLPE 100% MV-105, 1/8N (17X#14AWG CU)	DIRECT BURIED	16060	0.97%		XFR-E4-4 TO XRF-E4-5	267	15960	1000 KCMIL	35kV TR-XLPE 100% MV-105, 1/8N (14X#14AWG CU)	DIRECT BURIED	880	0.04%
						ΤΟΤΑ	L VD:	1.44%		XRF-E4-5 TO SUBSTATION	323	19320	1250 KCMIL	35kV TR-XLPE 100% MV-105, 1/8N (17X#14AWG CU)	DIRECT BURIED	10560	0.55%
			POWER PER	MV AC CABLE PHASE	SCHEDULE		TOTAL								TOTAL	- VD:	0.68%
CIRCUIT #	CIRCUIT LOCATION	LOAD CURRENT (A)	CIRCUIT RUN (kW)	CONDUCTOR	WIRE TYPE	RACEWAY	CIRCUIT	IEEE VD .95 PF (%)				POWER PER	MV AC CABL	E SCHEDULE		TOTAL	
	XFR-D2-1 TO XFR-D2-2	56	3360	500 KCMIL	35kV TR-XLPE 100% MV-105, 1/6N (9X#14AWG CU)	DIRECT BURIED		0.01%	CIRCUIT #	CIRCUIT LOCATION		CIRCUIT RUN (kW)	PHASE CONDUCTOR SIZE	WIRE TYPE	RACEWAY	CIRCUIT LENGTH (FT)	IEEE VD .9 (%)
	XFR-D2-2 TO XFR-D2-3	112	6720	1000 KCMIL	35kV TR-XLPE 100% MV-105,		4060	0.08%		XFR-E5-1 TO XFR-E5-2	70	4200	500 KCMIL	35kV TR-XLPE 100% MV-105,	DIRECT BURIED	985	0.02%
	XFR-D2-3 TO SEC-D	169	10080	1000 KCMIL	1/8N (14X#14AWG CU) 35kV TR-XLPE 100% MV-105,		710	0.02%		XFR-E5-2 TO SEC-E5	141	8400	500 KCMIL	1/6N (9X#14AWG CU) 35kV TR-XLPE 100% MV-105,	DIRECT BURIED	1960	0.08%
MV D2	XFR-D2-4 TO XFR-D2-5	56	3360	500 KCMIL	1/8N (14X#14AWG CU) 35kV TR-XLPE 100% MV-105, 1/6N (9X#14AWG CU)			0.02%		XFR-E5-3 TO XFR-E5-4	56	3360	500 KCMIL	1/6N (9X#14AWG CU) 35kV TR-XLPE 100% MV-105,	DIRECT BURIED	710	0.01%
viv_02					1/6N (9X#14AWG CU) 35kV TR-XLPE 100% MV-105,				MV_E5					1/6N (9X#14AWG CU) 35kV TR-XLPE 100% MV-105,	DIRECT BURIED	910	
	XFR-D2-5 TO XFR-D2-6	112	6720	500 KCMIL	1/6N (9X#14AWG CU) 35kV TR-XLPE 100% MV-105,		760	0.03%		XFR-E5-4 TO SEC-E5	112	6720	500 KCMIL	1/6N (9X#14AWG CU) 35kV TR-XLPE 100% MV-105,			0.03%
	XFR-D2-6 TO SEC-D	169	10080	1000 KCMIL	1/8N (14X#14AWG CU) 35kV TR-XLPE 100% MV-105, 1/8N (17X#14AWG CU)	DIRECT BURIED	1060	0.03%		SEC-E5 TO XFR-E5-5 XFR-E5-5 TO	253	15120	1000 KCMIL	1/8N (14X#14AWG CU) 35kV TR-XLPE 100% MV-105,	DIRECT BURIED	320	0.01%
	SEC-D TO SUBSTATION	337	20160	1250 KCMIL	1/8N (17X#14AWG CU)		12560 L VD:	0.68%		SUBSTATION	309	18480	1250 KCMIL	1/8N (17X#14AWG CU)	DIRECT BURIED	13860	0.68%
								0.0370									0.0370
		LOAD	POWER PER	MV AC CABLE PHASE			TOTAL	IEEE VD .95	CIRCUIT			POWER PER	MV AC CABLI PHASE			TOTAL	IEEE VD .9
	CIRCUIT LOCATION	CURRENT (A)	CIRCUIT RUN (kW)	CONDUCTOR SIZE	WIRE TYPE 35kV TR-XLPE 100% MV-105,	RACEWAY	CIRCUIT LENGTH (FT)	PF (%)	#		CURRENT (A)	CIRCUIT RUN (kW)	CONDUCTOR SIZE	WIRE TYPE 35kV TR-XLPE 100% MV-105,		CIRCUIT LENGTH (FT)	(%)
IRCUIT #		56	3360	500 KCMIL	1/6N (9X#14AWG CU) 35kV TR-XLPE 100% MV-105,	DIRECT BURIED	260	0.00%		XFR-E6-1 TO XFR-E6-2	56	3360	500 KCMIL	1/6N (9X#14AWG CU) 35kV TR-XLPE 100% MV-105,	DIRECT BURIED	910	0.02%
CIRCUIT #	XFR-E1-1 TO XFR-E1-2			500 KCMIL	1/6N (9X#14AWG CU)	DIRECT BURIED	2760	0.10%		XFR-E6-2 TO SEC-E6	127	7560	500 KCMIL	1/6N (9X#14AWG CU) 35kV TR-XLPE 100% MV-105,	DIRECT BURIED	2160	0.08%
	XFR-E1-1 TO XFR-E1-2 XFR-E1-2 TO XFR-E1-3	112	6720							XFR-E6-3 TO XFR-E6-4	70	4200	500 KCMIL	1/6N (9X#14AWG CU)	DIRECT BURIED	660	0.01%
	XFR-E1-1 TO XFR-E1-2		6720 10080	500 KCMIL	35kV TR-XLPE 100% MV-105, 1/6N (9X#14AWG CU)	DIRECT BURIED	910	0.05%									
#	XFR-E1-1 TO XFR-E1-2 XFR-E1-2 TO XFR-E1-3	112			35kV TR-XLPE 100% MV-105, 1/6N (9X#14AWG CU) 35kV TR-XLPE 100% MV-105, 1/8N (14X#14AWG CU)	DIRECT BURIED	910 860	0.05%	MV_E6	XFR-E6-4 TO XFR-E6-5	141	8400	500 KCMIL	35kV TR-XLPE 100% MV-105, 1/6N (9X#14AWG CU)	DIRECT BURIED	1060	0.05%
#	XFR-E1-1 TO XFR-E1-2 XFR-E1-2 TO XFR-E1-3 XFR-E1-3 TO XFR-E1-4 XFR-E1-4 TO XFR-E1-5 XFR-E1-5 TO XFR-E1-6	112 169	10080	500 KCMIL	35kV TR-XLPE 100% MV-105, 1/6N (9X#14AWG CU) 35kV TR-XLPE 100% MV-105, 1/8N (14X#14AWG CU) 35kV TR-XLPE 100% MV-105, 1/8N (17X#14AWG CU)	DIRECT BURIED			MV_E6	XFR-E6-4 TO XFR-E6-5 XFR-E6-5 TO SEC-E6	141 197	8400 11760	500 KCMIL 1000 KCMIL	35kV TR-XLPE 100% MV-105, 1/6N (9X#14AWG CU) 35kV TR-XLPE 100% MV-105, 1/8N (14X#14AWG CU)	DIRECT BURIED	1060 110	0.05%
#	XFR-E1-1 TO XFR-E1-2 XFR-E1-2 TO XFR-E1-3 XFR-E1-3 TO XFR-E1-4 XFR-E1-4 TO XFR-E1-5	112 169 239	10080 14280	500 KCMIL 1000 KCMIL	35kV TR-XLPE 100% MV-105, 1/6N (9X#14AWG CU) 35kV TR-XLPE 100% MV-105, 1/8N (14X#14AWG CU) 35kV TR-XLPE 100% MV-105,	DIRECT BURIED DIRECT BURIED DIRECT BURIED DIRECT BURIED	860	0.04%	MV_E6					35kV TR-XLPE 100% MV-105, 1/6N (9X#14AWG CU) 35kV TR-XLPE 100% MV-105,			

				MV AC CABL	E SCHEDULE			
CIRCUIT #	CIRCUIT LOCATION	LOAD CURRENT (A)	POWER PER CIRCUIT RUN (kW)	PHASE CONDUCTOR SIZE	WIRE TYPE	RACEWAY	TOTAL CIRCUIT LENGTH (FT)	IEEE VD .95 PF (%)
	XFR-E7-1 TO XFR-E7-2	56	3360	500 KCMIL	35kV TR-XLPE 100% MV-105, 1/6N (9X#14AWG CU)	DIRECT BURIED	1160	0.02%
	XFR-E7-2 TO XFR-E7-3	112	6720	500 KCMIL	35kV TR-XLPE 100% MV-105, 1/6N (9X#14AWG CU)	DIRECT BURIED	2360	0.08%
MV_E7	XFR-E7-3 TO XFR-E7-4	183	10920	1000 KCMIL	35kV TR-XLPE 100% MV-105, 1/8N (14X#14AWG CU)	DIRECT BURIED	1360	0.05%
	XFR-E7-4 TO XFR-E7-5	253	15120	1000 KCMIL	35kV TR-XLPE 100% MV-105, 1/8N (14X#14AWG CU)	DIRECT BURIED	1160	0.05%
	XFR-E7-5 TO SUBSTATION	309	18480	1250 KCMIL	35kV TR-XLPE 100% MV-105, 1/8N (17X#14AWG CU)	DIRECT BURIED	10560	0.52%
				ΤΟΤΑΙ	VD:	0.72%		

				MV AC CABL	E SCHEDULE			
CIRCUIT #	CIRCUIT LOCATION	LOAD CURRENT (A)	POWER PER CIRCUIT RUN (kW)	PHASE CONDUCTOR SIZE	WIRE TYPE	RACEWAY	TOTAL CIRCUIT LENGTH	IEEE VD .95 PF (%)
	XFR-E8-1 TO XFR-E8-2	70	4200	500 KCMIL	35kV TR-XLPE 100% MV-105, 1/6N (9X#14AWG CU)	DIRECT BURIED	1260	0.03%
MV E8	XFR-E8-2 TO XFR-E8-3	141	8400	500 KCMIL	35kV TR-XLPE 100% MV-105, 1/6N (9X#14AWG CU)	DIRECT BURIED	810	0.04%
	XFR-E8-3 TO SEC-E8	211	12600	1000 KCMIL	35kV TR-XLPE 100% MV-105, 1/8N (14X#14AWG CU)	DIRECT BURIED	1660	0.06%
	XFR-E8-4 TO SEC-E8	70	4200	500 KCMIL	35kV TR-XLPE 100% MV-105, 1/6N (9X#14AWG CU)	DIRECT BURIED	1660	0.04%
	SEC-E8 TO XFR-E8-5	281	16800	1250 KCMIL	35kV TR-XLPE 100% MV-105, 1/8N (17X#14AWG CU)	DIRECT BURIED	110	0.00%
	XFR-E8-5 TO SUBSTATION	337	20160	1250 KCMIL	35kV TR-XLPE 100% MV-105, 1/8N (17X#14AWG CU)	DIRECT BURIED	14660	0.79%
						TOTAL	VD:	0.96%

				MV AC CABL	E SCHEDULE			
CIRCUIT #	CIRCUIT LOCATION	LOAD CURRENT (A)	POWER PER CIRCUIT RUN (kW)	PHASE CONDUCTOR SIZE	WIRE TYPE	RACEWAY	TOTAL CIRCUIT LENGTH	IEEE VD .95 PF (%)
	XFR-G1-1 TO XFR-G1-2	70	4200	500 KCMIL	35kV TR-XLPE 100% MV-105, 1/6N (9X#14AWG CU)	DIRECT BURIED	680	0.01%
	XFR-G1-2 TO XFR-G1-3	141	8400	500 KCMIL	35kV TR-XLPE 100% MV-105, 1/6N (9X#14AWG CU)	DIRECT BURIED	2560	0.11%
MV_G1	XFR-G1-3 TO XFR-G1-4	211	12600	1000 KCMIL	35kV TR-XLPE 100% MV-105, 1/8N (14X#14AWG CU)	DIRECT BURIED	1360	0.05%
	XFR-G1-4 TO SUBSTATION	281	16800	1250 KCMIL	35kV TR-XLPE 100% MV-105, 1/8N (17X#14AWG CU)	DIRECT BURIED	18360	0.82%
				•		TOTAL	.VD:	1.00%

				MV AC CABL	E SCHEDULE			
CIRCUIT #	CIRCUIT LOCATION	LOAD CURRENT (A)	POWER PER CIRCUIT RUN (kW)	PHASE CONDUCTOR SIZE	WIRE TYPE	RACEWAY	TOTAL CIRCUIT LENGTH	IEEE VD .95 PF (%)
	XFR-G2-1 TO XFR-G2-2	70	4200	500 KCMIL	35kV TR-XLPE 100% MV-105, 1/6N (9X#14AWG CU)	DIRECT BURIED	1160	0.03%
	XFR-G2-2 TO XFR-G2-3	141	8400	500 KCMIL	35kV TR-XLPE 100% MV-105, 1/6N (9X#14AWG CU)	DIRECT BURIED	3360	0.15%
MV G2	XFR-G2-3 TO XFR-G2-4	211	12600	1000 KCMIL	35kV TR-XLPE 100% MV-105, 1/8N (14X#14AWG CU)	DIRECT BURIED	1110	0.04%
	XFR-G2-4 TO XFR-G2-5	267	15960	1000 KCMIL	35kV TR-XLPE 100% MV-105, 1/8N (14X#14AWG CU)	DIRECT BURIED	910	0.04%
	XFR-G2-5 TO XFR-G2-6	323	19320	1250 KCMIL	35kV TR-XLPE 100% MV-105, 1/8N (17X#14AWG CU)	DIRECT BURIED	610	0.03%
	XFR-G2-6 TO SUBSTATION	380	22680	1250 KCMIL	35kV TR-XLPE 100% MV-105, 1/8N (17X#14AWG CU)	DIRECT BURIED	13560	0.82%
	•					ΤΟΤΑΙ	VD:	1.11%

				MV AC CABL	E SCHEDULE				
CIRCUIT #	CIRCUIT LOCATION	LOAD CURRENT (A)	POWER PER CIRCUIT RUN (kW)	PHASE CONDUCTOR SIZE	WIRE TYPE	RACEWAY	TOTAL CIRCUIT LENGTH	IEEE VD .95 PF (%)	
	XFR-G3-1 TO XFR-G3-2	70	4200	500 KCMIL	35kV TR-XLPE 100% MV-105, 1/6N (9X#14AWG CU)	DIRECT BURIED	1160	0.03%	
MV_G3	XFR-G3-2 TO XFR-G3-3	141	8400	500 KCMIL	35kV TR-XLPE 100% MV-105, 1/6N (9X#14AWG CU)	DIRECT BURIED	1160	0.05%	
	XFR-G3-3 TO XFR-G3-4	211	12600	1000 KCMIL	35kV TR-XLPE 100% MV-105, 1/8N (14X#14AWG CU)	DIRECT BURIED	1260	0.05%	
	XFR-G3-4 TO SUB	281	16800	1250 KCMIL	35kV TR-XLPE 100% MV-105, 1/8N (17X#14AWG CU)	DIRECT BURIED	10760	0.48%	
	· · · · · · · · · · · · · · · · · · ·			•		ΤΟΤΑΙ	VD:	0.61%	

	•	TRC 3947 LENNANE DRIVE, SUITE 130 CORDELIO SACRAMENTO, CA 95834	PROJECT	NO: 4	-35979	9		JMR designed JT drawn	FLAT CREEK S CORDELIO MV SINGLE LINE	POWER LP
REFERENCE ITEMS	REV	DESCRIPTION	DATE	DES	СНК	AP	P	JMR CHECKED	WIV SINGLE LINE	WIRE SCHEDULES
								JTG APPROVED	ROOT/CANAJOHARIE	NEW YORK
	3	ISSUED FOR FINAL CLIENT REVIEW	06/25/24	JMR	JMR	JT	3	AFFROVED		REV
	2	ISSUED FOR PHASE 3 CLIENT REVIEW	06/07/24	JMR	JMR	JT	3	REVIEW 1		FCS-E-601-02 3
	1	ISSUED FOR PHASE 2 CLIENT REVIEW	04/12/24	JMR	JMR	JT	3	REVIEW 2	AS NOTED SCALE	

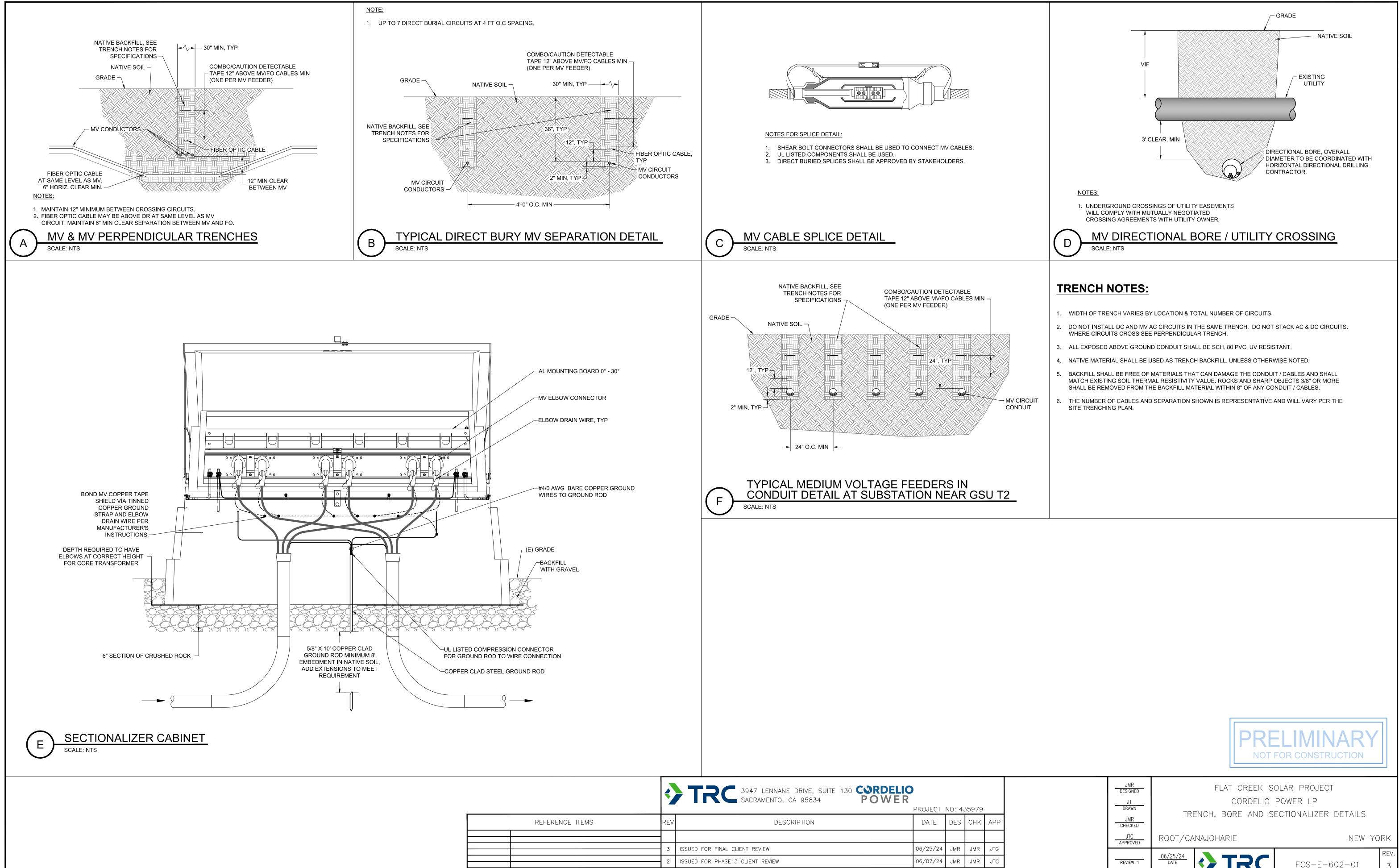
NOTES:

 SIZE OF CABLE MAY INCREASE AT CREEK CROSSING, DEPENDING ON DEPTH OF BORE. IF LARGER CABLE SIZE IS NOT AVAILABLE, TWO (2) PARALLEL SETS OF CABLE CAN BE USED PER CIRCUIT, AS NEEDED.

 ONE SET OF CABLES IS USED FOR EACH CIRCUIT, UNLESS NOTED OTHERWISE.

Average Voltage Drop Per Circuit 0.88%

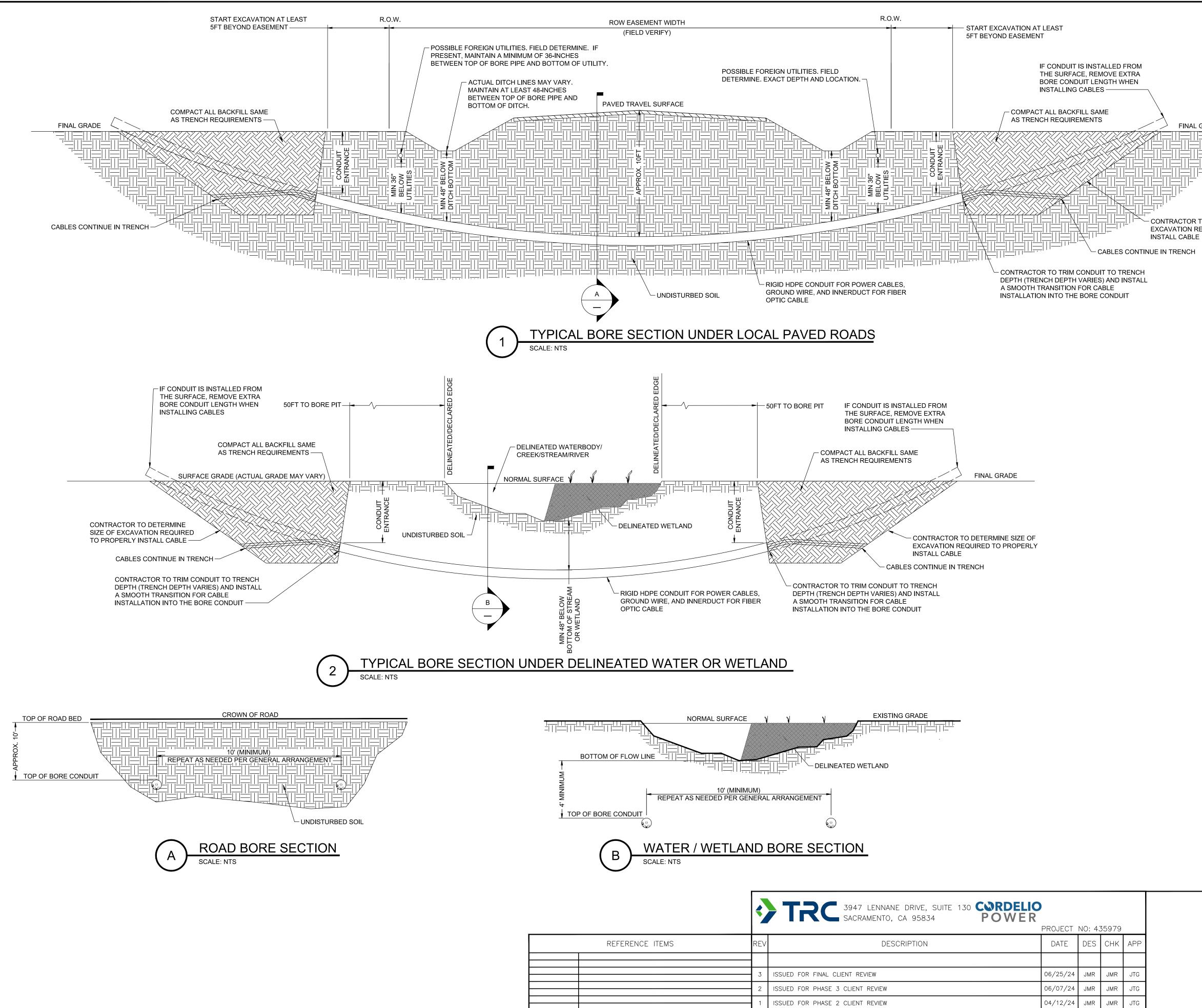




ISSUED FOR PHASE 2 CLIENT REVIEW

04/12/24 JMR JMR

JMR DESIGNED		FLAT CREEK S	OLAR PROJECT				
JT		CORDELIO	POWER LP				
DRAWN 	TRE	ENCH, BORE AND SI	ECTIONALIZER DETA	AILS			
JTG APPROVED	ROOT/CA	FLAT CREEK SOLAR PROJECT CORDELIO POWER LP TRENCH, BORE AND SECTIONALIZER DETAILS ROOT/CANAJOHARIE NEW 06/25/24 DATE AS NOTED					
REVIEW 1	06/25/24 Date AS NOTED SCALE		FCS-E-602-0	01	REV. 3		



NOTES:

- 1. UNDERGROUND OR EXISTING UTILITIES MAY BE PRESENT WITHIN OR ADJACENT TO THE EXCAVATION AREA(s). CONTACT LOCAL "ONE CALL" UTILITY LOCATING SERVICE AT LEAST 48 HOURS PRIOR TO EXCAVATION. MAINTAIN LOCATION MARKS AS NEEDED UNTIL INSTALLATION IS COMPLETED.
- 2. CONTRACTOR SHALL COMPLY WITH ANY SPECIFIC AGREEMENTS AND PERMITS OBTAINED FOR EACH INSTALLATION.

3. ALL COUNTY ROAD CROSSINGS MUST MAINTAIN AT LEAST 36 INCHES UNDER ANY EXISTING UTILITIES, OR 48 INCHES UNDER THE CENTERLINE OF THE ROAD, OR 48 INCHES BELOW THE DITCH LINES, WHICHEVER IS DEEPER. VERIFY DEPTH REQUIRED WITH ENGINEER BEFORE CROSSING IS COMMENCED.

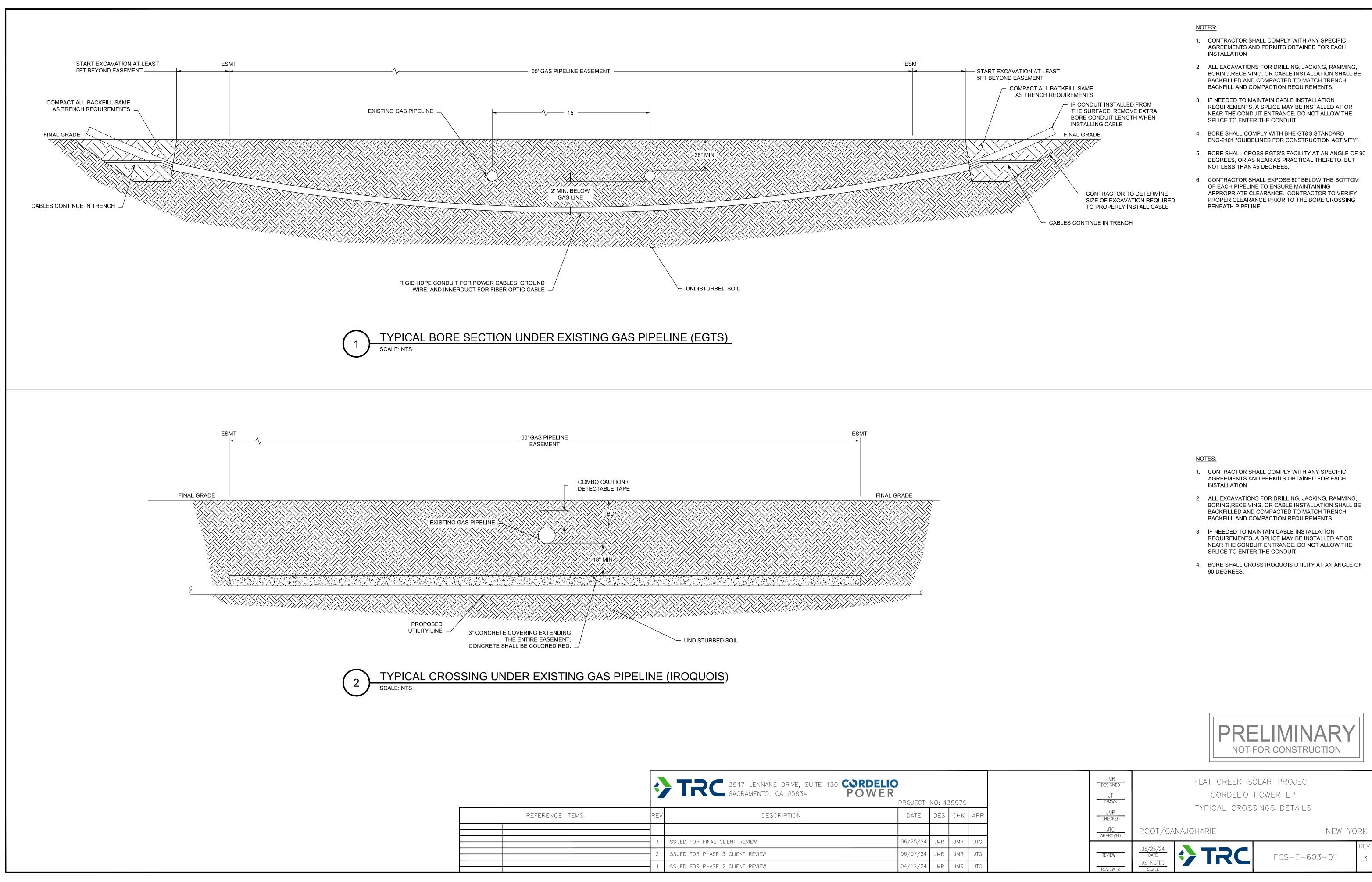
- 4. INSTALL ALL CABLES CROSSING UNDER COUNTY ROADS IN CONDUIT.
- 5. WHEN CROSSING LOCAL AND/OR COUNTY ROADS, ALL EXCAVATION WORK SHALL HAPPEN AT LEAST 5 FEET OUTSIDE THE ROAD EASEMENT, UNLESS APPROVED OTHERWISE BY THE AUTHORITY HAVING JURISDICTION. ANY DISTURBED PORTIONS OF THE ROADWAY OR ITS RIGHT-OF-WAY SHALL BE RESTORED TO ORIGINAL CONDITION BY THE CONTRACTOR.
- 6. ALL EXCAVATIONS FOR DRILLING, JACKING, RAMMING, BORING, RECEIVING, OR CABLE INSTALLATION SHALL BE BACKFILLED AND COMPACTED TO MATCH TRENCH BACKFILL AND COMPACTION REQUIREMENTS.
- 7. WHEN CROSSING DELINEATED SURFACE WATER, WETLAND, OR STREAM FEATURES, ALL EXCAVATION WORK SHALL HAPPEN NO CLOSER THAN 50FT BEYOND THE DESIGNATED EDGE OF SAID FEATURE. IF THIS SEPARATION IS NOT FEASIBLE, CONTRACTOR SHALL KEEP EXCAVATION AREA AS FAR AS POSSIBLE AND AS SMALL AS POSSIBLE TO SAFELY INSTALL CONDUIT AND/OR CABLE.
- 8. IF NEEDED TO MAINTAIN CABLE INSTALLATION REQUIREMENTS, A SPLICE MAY BE INSTALLED AT OR NEAR THE CONDUIT ENTRANCE. DO NOT ALLOW THE SPLICE TO ENTER THE CONDUIT.



JMR DESIGNED		FLAT CREEK S	OLAR PROJECT									
JT		CORDELIO	POWER LP									
DRAWN		DIRECTIONAL BORE DETAILS										
JMR CHECKED												
JTG APPROVED	ROOT/CA	NAJOHARIE		NEW YC	RK							
REVIEW 1	06/25/24 Date AS NOTED		FCS-E-602	-02	REV. 3							
REVIEW 2	SCALE											

FINAL GRADE

- CONTRACTOR TO DETERMINE SIZE OF EXCAVATION REQUIRED TO PROPERLY INSTALL CABLE



	¢	TRC 3947 LENNANE DRIVE, SUITE 130 CORDELIC SACRAMENTO, CA 95834	PROJECT	NO: 43	35979	
REFERENCE ITEMS	REV	DESCRIPTION	DATE	DES	СНК	APP
	- 3	ISSUED FOR FINAL CLIENT REVIEW	06/25/24	JMR	JMR	JTG
	2	ISSUED FOR PHASE 3 CLIENT REVIEW	06/07/24	JMR	JMR	JTG
	1	ISSUED FOR PHASE 2 CLIENT REVIEW	04/12/24	JMR	JMR	JTG