

CONSTRUCTION NOTICE

Duke Energy Ohio Fairfield F-3886 Line

PUCO Case Number 13-1843-EL-BNR

Submitted pursuant to OAC 4906-11-01

Duke Energy Ohio, Inc.

August 27, 2013

(1) Project Name

This proposed project is the Duke Energy Ohio Fairfield F-3886 Line.

(2) Project Description

This project qualifies as a Construction Notice (CN) as it fits the criteria of OAC 4906-1-01, Appendix A(1)(c), as it address the rerouting or extension or new construction of single or multiple circuit transmission lines, operating at 125 kV or above, but less than 300 kV, and not greater than 0.2 miles in length. The current project is part of a future Fairfield Ring Bus project, which will be addressed through a subsequent OPSB filing, as appropriate. This phase is designed to address the transmission line work of splitting the F-3886 (Willey-Mulhauser) circuit at Fairfield and slightly re-routing the F-5783 and F-3885 circuits to accommodate the new F-3886 split terminations into the Duke Energy Fairfield Substation.

A project vicinity map and engineering drawings for the project are included as Appendix B.

(3) Project Need

This project is required by PJM – Regional Transmission Organization to reduce reliability risk and improve system flexibility.

(4) Schedule

This project is scheduled to start on September 5 and take approximately 21 days to complete during a short outage window.

(5) Estimated Costs

The project is expected to cost approximately \$600,000.

(6) Operating Characteristics

The F-3886, F-3885, and F-5783 circuits will all continue to operate at 138kV. This transmission line work will provide the means to connect the F-3886 circuit to the future ring bus to be constructed in 2014 at the Duke Energy Fairfield Substation.

(7) Area Maps and Directions to Project Area

A project vicinity map is attached as Appendix B.

One way to reach the project location from Columbus is to take I-71 south to 275 West in Cincinnati, to Exit 36 127 North (Mt Healthy/Hamilton), continue approximately 1.6 miles to Fairfield Substation on the right.

(8) Property Agreements and Easements

The entirety of this project is on Duke Energy Ohio property and no additional easements are required.

(9) Notification of Officials

A copy of the letter transmitting this Construction Notice to the Fairfield Mayor, the Fairfield Planning Commission, and the Butler County Planning Commission is included as Appendix A.

No public information program, materials, or meetings were conducted for this project.

APPENDIX A
LETTER TO OFFICIALS



1000 E. Main St
Plainfield, IN 46168

o: 317-848-2428

c: 317-694-7483

August 26, 2013

Mayor Ron D'Epifanio
City of Fairfield
5350 Pleasant Ave.
Fairfield, Ohio 45014

**Construction Notice
Fairfield Substation Project**

Dear Mayor D'Epifanio:

Please find enclosed a copy of a Construction Notice that Duke Energy Ohio submitted to the Ohio Power Siting Board regarding a planned Fairfield Substation Project. The Construction Notice submittal is required in accordance with Chapter 4906 of the Ohio Administrative Code. The project is located in Fairfield on the east side of Pleasant Avenue just north of John Gray Road.

In accordance with Ohio Administrative Code (OAC) 4906-1-01 Appendix A, we are required to prepare this Construction Notice for the Ohio Power Siting Board and in compliance with OAC4906-11-02-(C), we are hereby providing you with a copy.

Please feel free to contact me at (317) 838-2428 if you have any questions concerning this project.

Cordially,
Duke Energy, Inc.

Glenn Hauser
Transmission Engineering
Midwest Siting and Permitting Lead

Enclosure



1000 E. Main St
Plainfield, IN 46168

o: 317-848-2428

c: 317-694-7483

August 26, 2013

Mr. Jeff Holtegel
Planning Commission
City of Fairfield
5350 Pleasant Ave.
Fairfield, Ohio 45014

**Construction Notice
Fairfield Substation Project**

Dear Mr. Holtegel:

Please find enclosed a copy of a Construction Notice that Duke Energy Ohio submitted to the Ohio Power Siting Board regarding a planned Fairfield Substation Project. The Construction Notice submittal is required in accordance with Chapter 4906 of the Ohio Administrative Code. The project is located in Fairfield on the east side of Pleasant Avenue just north of John Gray Road.

In accordance with Ohio Administrative Code (OAC) 4906-1-01 Appendix A, we are required to prepare this Construction Notice for the Ohio Power Siting Board and in compliance with OAC 4906-11-02-(C), we are hereby providing you with a copy.

Please feel free to contact me at (317) 838-2428 if you have any questions concerning this project.

Cordially,
Duke Energy, Inc.

Glenn Hauser
Transmission Engineering
Midwest Siting and Permitting Lead

Enclosure



1000 E. Main St
Plainfield, IN 46168

o: 317-848-2428

c: 317-694-7483

August 26, 2013

Charles Bullington
Butler County Planning Commission
130 High Street
Hamilton, OH 45011

**Construction Notice
Fairfield Substation Project**

Dear Mr. Bullington:

Please find enclosed a copy of a Construction Notice that Duke Energy Ohio submitted to the Ohio Power Siting Board regarding a planned Fairfield Substation Project. The Construction Notice submittal is required in accordance with Chapter 4906 of the Ohio Administrative Code. The project is located in Fairfield on the east side of Pleasant Avenue just north of John Gray Road.

In accordance with Ohio Administrative Code (OAC) 4906-1-01 Appendix A, we are required to prepare this Construction Notice for the Ohio Power Siting Board and in compliance with OAC 4906-11-02-(C), we are hereby providing you with a copy.

Please feel free to contact me at (317) 838-2428 if you have any questions concerning this project.

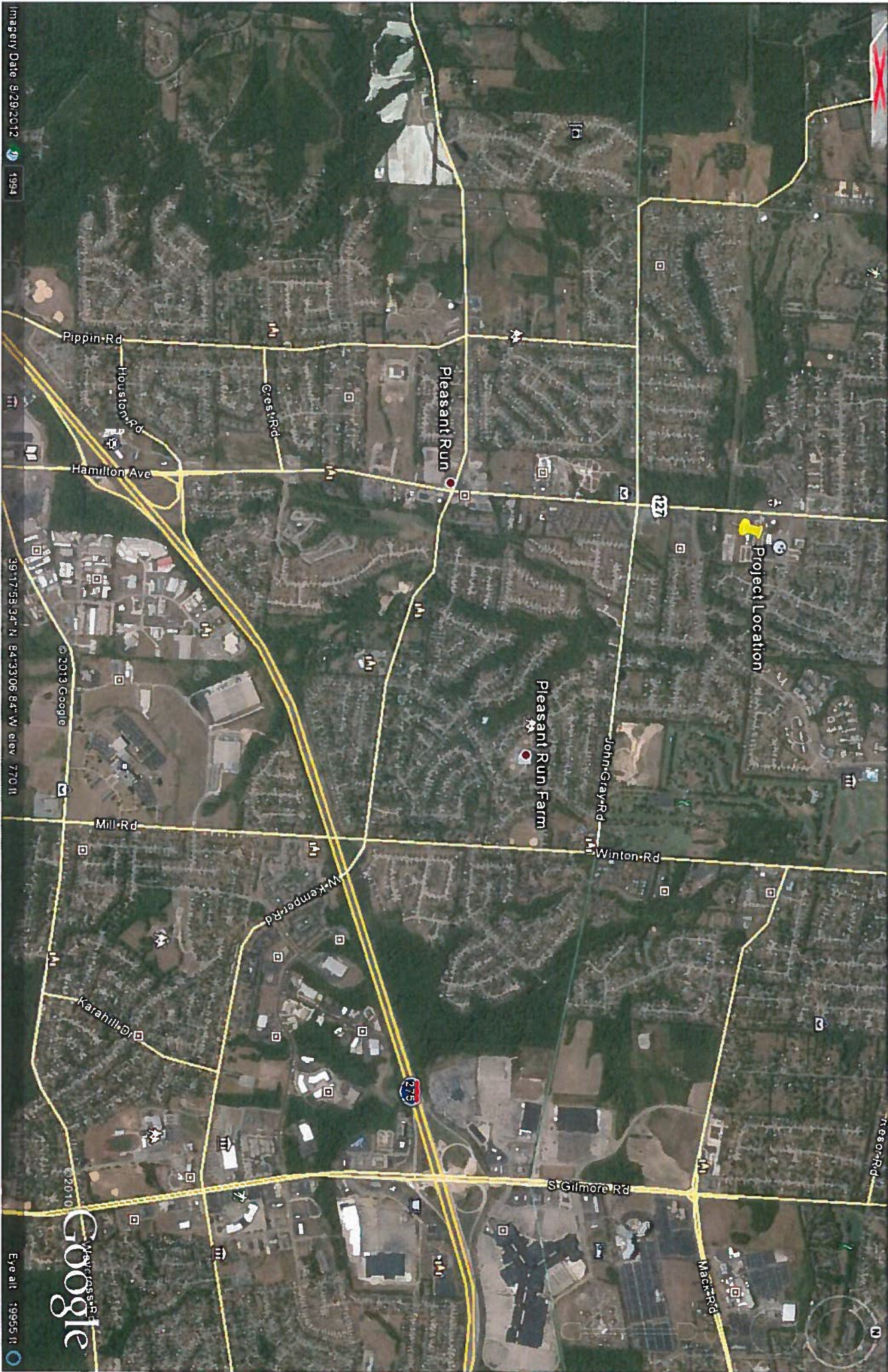
Cordially,
Duke Energy, Inc.

Glenn Hauser
Transmission Engineering
Midwest Siting and Permitting Lead

Enclosure

APPENDIX B

PROJECT DRAWINGS & MAP



Imagery Date: 8/29/2012 1994

39°17'53.34" N 84°33'06.84" W elev: 770 ft

Google

Eye alt: 1995 ft

SEPTEMBER 2013

STRINGING CHART FOR				
954CMIL AA		1/0 AAAC		
POLE #1'S TO STA		POLE #1'S TO S'		
33.88'		33.88'		
INITIAL SAG & TENSION				
TEMP	TENSION	SAG	TENSION	SAG
°FAHR	LBS.	FT.	LBS.	FT.
-10	1737	0.08	1061	0.02
30	465	0.35	623	0.03
60	246	0.53	325	0.06
90	195	0.66	99	0.17
FINAL SAG & TENSION				
60	238	0.55	119	0.14
120	164	0.79	30	0.56
212	122	1.06	19	0.89
CL-B	1500	0.23	1000	0.17

STRINGING CHART FOR									
795,000 CM. AA 37 STRANDING									
CLASS B LOADING HOR. TEN=1800#									
BETWEEN STRUCTURES	SPAN LENGTH	TEMP. FAHR.	INITIAL SAG & TEN.			FINAL SAG & TEN.			
			-10	30	60	90	60	120	CL B
RULING SPAN=55.0'		TENSION (LBS)	1795	527	343	270	325	223	1800
DAY-202	55.0'	SAG IN FEET	0.16	0.54	0.82	1.05	0.87	1.26	0.40

POLES		CONDUCTOR	SAG CHART	STATIC	SAG CHART	DISTANCE
138 KV #1	STA-TR120	477MCM	ACSR	50613	—	242.7'
	STA-TR120	—	—	—	1/0 ACSR	50588A
	STA-202	795MCM	AA	SEE CHART	—	55'
	STA-202	795MCM	AA	70503A	—	271.84'
	204-TWR120	795 MCM	AA	—	—	74.56'

69KV
#1

STA-501	795MCM AA	70503A	1/0 ACSR	50588A	54.6'
501-5	795MCM AA	70503	1/0 ACSR	50595A	934.4'

33 KY #1	STA. 3	336.4MCM ACSR 50590A	1/O ACSR 50588A	29.2'
	3-6	336.4MCM ACSR 50597A	1/O ACSR 50595	580.3'

33KV #2	STA-170	4/O HDBC	50590	2 HDBC	50588	524.4'
	STA-166	4/O HDBC	50590	—	—	81.2'

33KV	{	STA-2	336.4MCMACSR50590A	1/0ACSR	50593	138.3'
#3		2-3	336.4MCMACSR50597A	1/0ACSR	60082	200.3'

69KV #2	BAY-1106	795MCM	70514	1/0ACSR	60052	867.44'
138KV #2	Errors 190-195	954KCM	70519	1/0AAAC	70522	668.12'
	610.45 To	BAY 954KCM	1AA	SEE CHART	1/0AAAC	SEE CHART 33.88'

	POLE NO.	HEIGHT - FT	CLASS	SETTING DEPTH IN FT.	ANCHOR 18 G GALV. 7/8" X 60" SCREW	RODS SINGLE 5/8" CW 8' AW SINGLE GUYS 125 M AW DOUBLE GUYS 125 M AW	CONSTRUCTION DRAWINGS SINGLE ARM UNLESS D.A. IS NOTED	SEE NOTE OR SKETCH
135KV #1	201	70	2	6.5	A-2	75% CW A-9-B	12317-105	
	202	70	2	5.0	2		3250A-1	
	203	70	2	7.0		A-3-B-3	11635-276	
	204	60	2	9.0		A-3-B-3	11635-276	
	205	60	2	9.0		A-3-B-3	12317-105	

60KV #1	501	65	2	6.5	2	1	3	6040
	502	65	2	6.5	A-2,B-2	A-1	A-3,B-3	6039-4
	503	50	3	7		B-1		6050-3
	504	55	2	7				6050-3
	505	60	2	7				6050-3
	507	55	2	7	1	1		9054A-2
33KV #1	506	60	2	7				6050-3
	3	50	3	6.7	A-2,B-2	B-1	A-2,B-2	5003-2
	4	45	3	G	A-2,B-2	B-1	A-2,B-2	5003-2
	5	45	3	6.5				5020-3
	6	55	2	G	A-2,B-2	A-1	A-2,B-2	5003-2

33KV ^{#2}	165	45	3	14.1	A-2-B-2		A-3-B-3	5003-2	✓
	166	50	3	7		2	1	2	5004-4
	167	55	2	5.6	1			1	5001A-1
	168	45	3	6					5000-3
	1106				A-1			A-1	5023-DA

[illegible]

69KV#2	1101	60	2	6.0	A-3	B-1	A-3	6039-4	✓
	1102	65	2	6.5	2	1	3	6037-1	✓
	1103	60	2	7.0				6050-3	✓
	1104	65	2	7.5				6050-3	✓
	1105	70	2	7.5				6050-3	✓
	1106	75	2	8.0	B-1, C-1	C-1	B-1	6051-3 DA	✓

138KV #2	4	105	2	9.5	A-3;B3	8039
	3	80	2	8.0		8072
	2	65	2	7.0		8072
	1	70	2	6.5		8039
	BT 103-	30	1	5.5		
				A-4;B-2	A-4;B3	

TV JHL 2-10-83

6	2-24-70	REV. ANGLE 1106 T.H. WHEEL	44-57H	94H	94H
7	4-11-77	ADD 62KV #2	94H	94H	94H
6	3-25-75	PER. PER. INST.	94H	94H	94H
5	3-7-73	ADD 69KV #1 REAR, 33KV #1 2-2-73 H. BELL	94H	94H	94H
4	12-9-72	ADD 76.1 REVER F3885 FOR 1000 WHEEL	94H	94H	94H
3	4-24-71	ADD POLE 301A J. CONRAD	94H	94H	94H
2	4-24-71	ADD 33KV CIR #3 GUTZWILLER	94H	94H	94H
1	8-30-69	REVERSE BAY POSITIONS TO 33KV DIVISORS	94H	94H	94H

NO.	DATE	REVISION	CHK'D	INSP.	ENGR.
THE CINCINNATI GAS & ELECTRIC CO. ELECTRIC DISTRIBUTION DEPARTMENT					

138,000V, 69,000V, & 33,000V, LINES
AT FAIRFIELD SUBSTATION #57
FAIRFIELD OHIO

DRAWN J.D.B.	5-28-65
CHECKED <i>ED. [Signature]</i>	6-10-65
INSPECTOR	

ENGINEER P. CORCORAN <i>PC</i>	6-11-65
APPROVED <i>KMC</i>	6-11-65
	WORK ORDER FILE

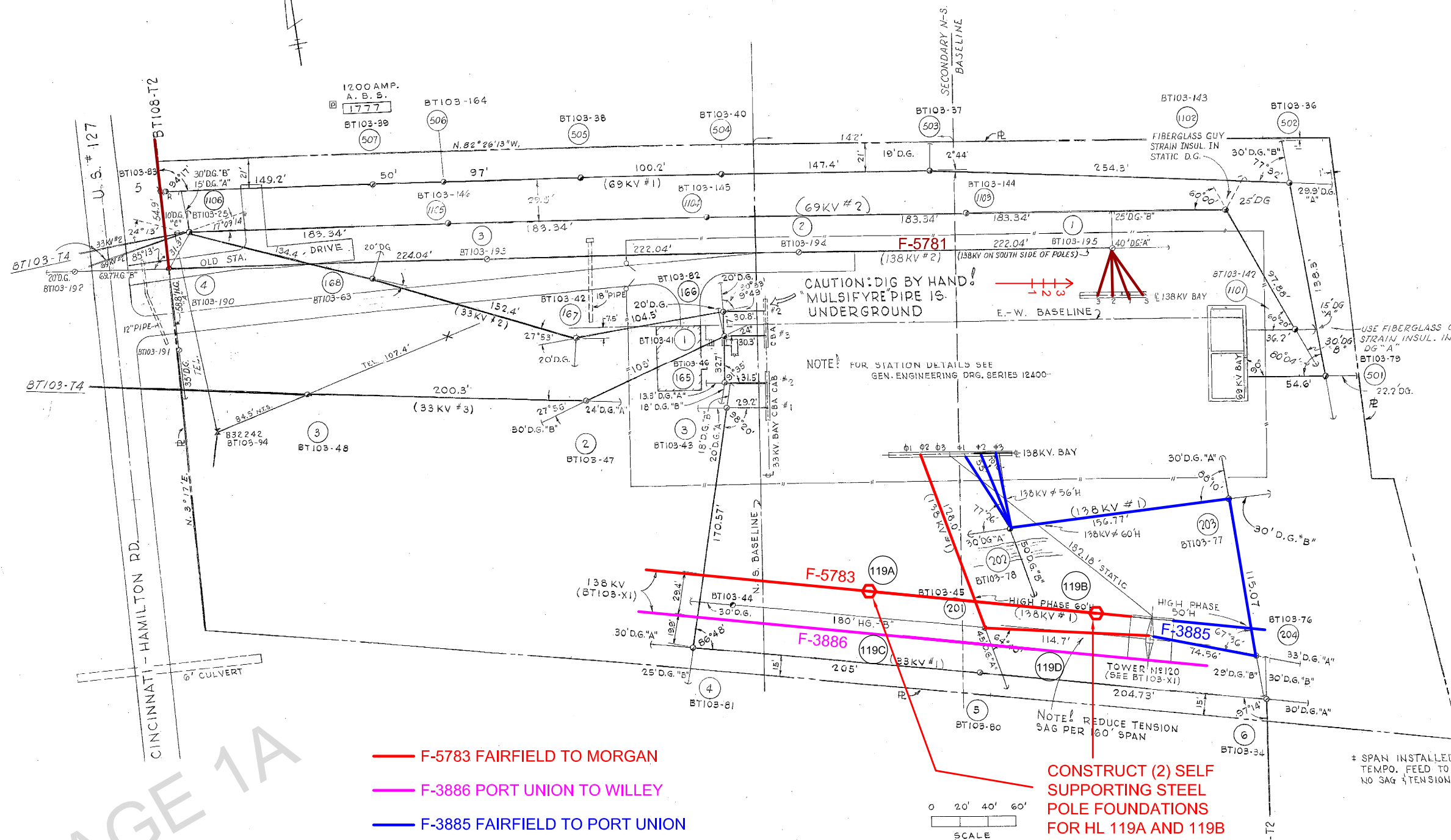
DRG. BT103-T3 PLAN

11	5-17-83	REV. DIST-138KV #2-ADD OPER. 69KV #1, 138KV #2 D.H.	11/8/83	MS 93.54
10	11-11-82	ADD 138KV #2 D. HALLER	1/16/83	DM 100
9	7-31-79	CHG. #6 TO A.B.S., CONSTR. #1 & ADD 1A-69KV T.HINKEL	11/8/83	93.54
NO.	DATE	REVISION	CHK'D	INSP.

CONSTRUCTION PRINT F
W. O. 22034
FEEDER 3300 M
JOB NO.

CIRCUIT DESIGNATION	FEEDER NO.
33KV#1	5756
33KV#2	5758
33KV#3	5751
69KV#1	5762
69KV#2	5767
138KV#1	5885
138KV#2	5881

REV.# 5 SURVEY REFERENCES
REV.# 7 BOOK 37 PAGE 355 SHEET 1.
REV.# 10 BK. 42 PG. 36
BOOK 45, PAGE 96, SHEET 1A, 1, 2



- F-5783 FAIRFIELD TO MORGAN
- F-3886 PORT UNION TO WILLEY
- F-3885 FAIRFIELD TO PORT UNION
- F-5781 FAIRFIELD TO CITY OF HAMILTON

CONSTRUCT (2) SELF
SUPPORTING STEEL
POLE FOUNDATIONS
FOR HL 119A AND 119B

* SPAN INSTALLED ORIGINALLY AS
TEMPO. FEED TO 138KV MOBILE TRF.
NO SAG & TENSION INFO. AVAILABLE.

SCANNED 22.4 24.75X

REVISION 2/25/2013

WINTER 2015

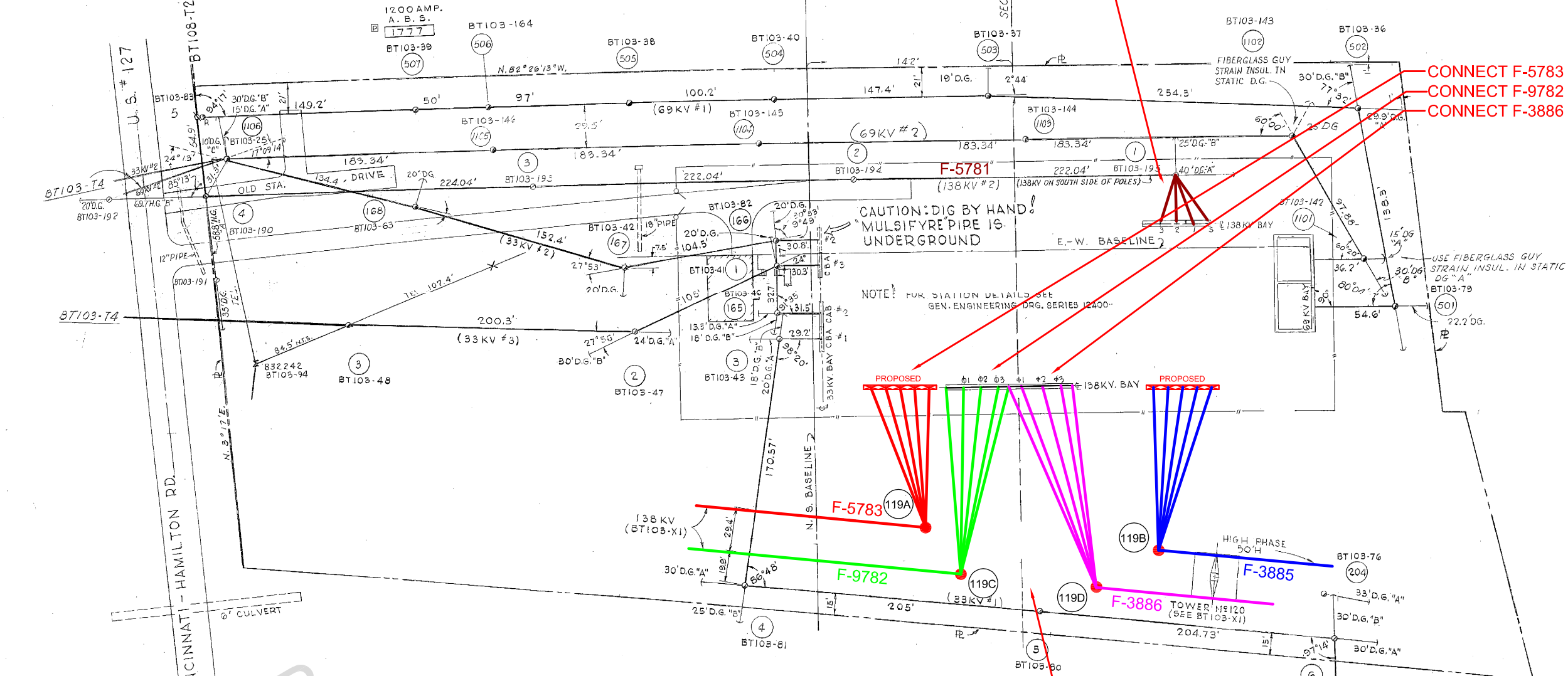
STRINGING CHART FOR			
954KCMIL AA		1/0 AAC	
POLE #12 TO STA 33.88'		POLE #13 TO STA 33.88'	
INITIAL SAG & TENSION		FINAL SAG & TENSION	
TEMP. FAHR.	TENSION LBS.	SAG FT.	TENSION LBS.
-10	1737	0.08	1061
30	465	0.35	623
60	246	0.53	325
90	195	0.66	99
FINAL SAG & TENSION		CL-B	
60	238	0.55	119
120	164	0.79	30
212	122	1.06	19
CL-B	1500	0.23	1000

STRINGING CHART FOR			
795,000 CM. AA		37 STRANDING	
CLASS B LOADING		HORIZ. TEN=1800'	
BETWEEN SPAN		TEMP. FAHR.	
STRUCTURE LENGTH	TEMP. FAHR.	INITIAL SAG & TEN.	FINAL SAG & TEN.
RULING SPAN=55.0'	TENSION (LBS)	-10 30 60 90	60 120 CL-B
BAY-202 55.0'	SAG IN FEET	0.16 0.54 0.82 1.05	0.67 1.76 0.45

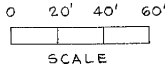
POLES	CONDUCTOR SAG CHART	STATIC	SAG CHART DISTANCE
STA-TR120 477MCMACSR 50613	—	—	242.7'
STA-TR120 477MCMACSR 50613	—	—	242.7'
STA-202 795MCM AA SEE CHART	—	—	55'
202-204 795MCM AA 70503A	—	—	271.84'
204-795MCM AA 70503A	—	—	74.56'
69KV #1 STA-501 795MCM AA 70503A	1/0 ACSR 50588A	54.6'	
501-5 795MCM AA 70503	1/0 ACSR 50595A	934.4'	
33KV #1 STA-3 3364MCMACSR 50590A	1/0 ACSR 50588A	29.2'	
3-6 3364MCMACSR 50597A	1/0 ACSR 50595	580.3'	
33KV #2 STA-170 4/0 HD BC	50590	2 HD BC 50588	524.4'
STA-166 4/0 HD BC	50590	—	81.2'
33KV #3 STA-2 3364MCMACSR 50590A	1/0 ACSR 50593	138.3'	
2-3 3364MCMACSR 50597A	1/0 ACSR 60082	200.5'	
69KV #2 BAY-1106 795MCM AA 70514	1/0 ACSR 60082	867.44'	
69KV #2 BAY-1106 795MCM AA 70514	1/0 ACSR 60082	867.44'	
138KV #2 BAY-1106 954KCMIL AA 70519	1/0 AAC 70522	668.12'	
138KV #2 BAY-1106 954KCMIL AA 70519	1/0 AAC 70522	668.12'	

STAGE 4: DISCONNECT F-5781 FROM MOBILE SUB REMOVE TEMP. POLE

CONNECT F-5783 FROM HL 119A TO NEW TAKE-OFF
CONNECT F-9782 FROM HL 119C TO NEW TAKE-OFF
CONNECT F-3886 FROM HL 119D TO NEW TAKE-OFF



- F-5783 FAIRFIELD TO MORGAN
- F-9782 FAIRFIELD TO WILLEY
- F-3886 FAIRFIELD TO PORT UNION #2
- F-3885 FAIRFIELD TO PORT UNION
- F-5781 FAIRFIELD TO CITY OF HAMILTON



SURVEY REFERENCES
BOOK 37 PAGE 355 SHEET 1.
BK. 42 PG. 36
BOOK 45, PAGE 96, SHEET 1A, 1, 2

CIRCUIT DESIGNATION	FEEDER NO.
33KV #1	5756
33KV #2	5758
33KV #3	5751
69KV #1	5762
69KV #2	5767
138KV #1	3885
138KV #2	5781

11 5-17-83	REV. DIST-138KV#2-ADD OPLR 69KV#1, 138KV#2 D.H.	1/10/83	105
10 11-1-82	ADD 138KV #2 D. HALLER	1/1/82	105
9 7-31-79	CHG. #6 TO A.B.S. CONSTR. 138KV#1 TO 69KV#1 THINKE	7/31/79	105
NO.	DATE	REVISION	CHKD INSP. ENGR.

CONSTRUCTION PRINT FOR
W.O. 22034
FEEDER 3300
JOB NO.
ENGINEER P. CORCORAN
APPROVED M.C. [Signature]
DRG. BT103-T3 PLAN

NO.	DATE	REVISION	CHKD INSP. ENGR.
3	2-24-78	REV. ANGLE 1106 THINKE	2-10-83
7	4-11-77	ADD 69KV #2	4-11-77
6	3-25-75	REV. PER INST.	3-25-75
5	3-7-73	ADD 69KV#1, REARR. 33KV #1, #2 & 3 H. BELL	3-7-73
4	12-19-72	ADD 78.5' REV. F9805 FOR LOOP TRU. STA. W. CARLIER	12-19-72
3	3-24-71	ADD POLE 901A J. CONRAD	3-24-71
2	4-25-66	ADD 33KV CIR #3 J. GUTZWILLER	4-25-66
1	8-30-65	REVISE BAY POSITIONS TO AVOID CROSSOVERS	8-30-65
NO.	DATE	REVISION	CHKD INSP. ENGR.

THE CINCINNATI GAS & ELECTRIC CO.
ELECTRIC DISTRIBUTION DEPARTMENT
138,000V, 69,000V, & 33,000V. LINES
AT FAIRFIELD SUBSTATION #57
FAIRFIELD, OHIO
DRAWN J.D.B. 5-28-65
CHECKED [Signature] 6-10-65
INSPECTOR [Signature]
ENGINEER P. CORCORAN 6-11-65
APPROVED M.C. [Signature] 6-11-65
DRG. BT103-T3 PLAN

STAGE 4B

This foregoing document was electronically filed with the Public Utilities

Commission of Ohio Docketing Information System on

8/26/2013 5:19:43 PM

in

Case No(s). 13-1843-EL-BNR

Summary: Application Construction Notice electronically filed by Jeanne W Kingery on behalf of Duke Energy Ohio