CONSTRUCTION NOTICE FOR THE

F886 Rebuild into Oakley Substation Project

PUCO Case No. 18-1495-EL-BNR

Submitted to:

The Ohio Power Siting Board

Pursuant to O.A.C. 4906-06

Submitted by:

Duke Energy Ohio, Inc.

October 2018

CONSTRUCTION NOTICE

This Construction Notice has been prepared by Duke Energy Ohio, Inc., (hereafter "Duke Energy Ohio") in accordance with Ohio Administrative Code (O.A.C.) Section **4906-6-05** for the review of Accelerated Certificate Applications. The following sections correspond to the administrative code sections for the requirements of a Construction Notice.

4906-06-05 ACCELERATED APPLICATION REQUIREMENTS

4906-6-05(B): General Information

4906-6-05(B)(1) Name, Reference Number, Brief Description, and Construction Notice Requirement

Name of Project: Duke Energy Ohio F886 Rebuild into Oakley Station Project (Project)

Brief Description of the Project:

Duke Energy Ohio requires the installation of two (2) steel pole structures (Str. HMO-26292 193 and HMO-26293 194) and four (4) spans of conductor to re-route the F886 span into a new take-off tower within Oakley Station. The current F885 span that drops into the Station will be relocated into the position of the current F886 span, and the previous F886 span will be removed. The new re-route will be approximately 0.19-mile of 138 kV transmission line and consist of two new overhead support structures. The Project will require minimal forested clearing on Parcel #5100020014, which is owned by Duke Energy. Both proposed structures will be located on Duke Energy parcels #5100020094 & #5100020014. Other parcels crossed by the alignment are Parcel #5100020264 owned by Ridge, LLC, and Parcel #5100020239 owned by City of Cincinnati (road ROW).

Construction Notice Requirement:

This Project qualifies as a Construction Notice filing because it meets the requirements outlined in O.A.C. 4906-6-05, Appendix A, item (1)(a). Item (1)(a) allows the filing of a Construction Notice for "*New construction, extension, or relocation of single or multiple circuit electric power transmission line(s) or upgrading existing transmission or distribution line(s) for operation at a higher transmission voltage, as follows: (a) Line(s) not greater than 0.2 miles in length.*"

4906-6-05(B)(2): Need for the Project

The purpose and need for the F886 Rebuild into Oakley Station Project is to maintain and improve the quality of the electric service and reliability to the service area in Hamilton County, Ohio. The existing Oakley Substation provides 138 kV electric transmission service to residential and commercial/industrial facilities and serves as a pathway in the transmission grid between Oakley, the City of Cincinnati, and the surrounding neighborhoods. Due to the increased customer load growth in Hamilton

County, circuits will not be able to reliably operate for the base case of contingency condition, which may result in customer load being disrupted. Moreover, to ensure the integrity of the transmission line services, upgrade/reconfiguration of the substation is expected.

The re-built/re-aligned transmission line will continue to provide the service area with 138 kV transmission service and will enable upgrades and reconfigurations to the substation for more efficient future voltage conversion and allow for future load growth in the area. The Project will relieve loading and improve reliability on nearby circuits.

4906-6-05(B)(3): Location of the Project Relative to Existing or Proposed Lines

The location of the Project is depicted in Attachment A - Project Details. Figure 1 shows the general project vicinity depicted on a USGS quadrangle topographic map. Figure 2 depicts the planned transmission line location, compared to existing transmission lines in the Project vicinity, and additional details depicted on an aerial imagery map.

4906-6-05(B)(4): Alternatives Considered

The proposed Project will occur within Duke Energy Ohio property, property owned by Ridge LLC, and City of Cincinnati Right of Way (ROW). Other than minimal forested clearing which will occur on Duke Energy property, no additional long-term impacts to adjacent properties are anticipated as a result of the rebuild Project. Therefore, the proposed re-alignment is the only reasonable re-alignment available and no alternatives were considered.

4906-6-05(B)(5): Public Information Program

Two (2) steel pole structures (Str. HMO-26292 193 and HMO-26293 194) and four (4) spans of conductor to re-route the F886 span into a new take-off tower within Oakley Station. Property owners within 150 feet of those structures were sent a notification postcard on September 6, 2018, and a letter on May 9, 2018, notifying them of preconstruction activities and work scheduled to begin in October 2018.

Door hangers were placed on properties where vegetation and encroachment issues were identified by Duke Energy Ohio to schedule one-on-one meetings to discuss the anticipated impacts to the affected property.

4906-6-05(B)(6): Construction Schedule

Construction is planned to begin November 5, 2018, upon approval of this Construction Notice. The Project is anticipated to be completed and in-service by December 14, 2018.

4906-6-05(B)(7): Area Map

Attachment A - Project Details depicts the general location of the Project. Figure 1 shows the general Project vicinity depicted on a USGS quadrangle topographic map.

Figure 2 shows the planned transmission line location and additional details depicted on an aerial imagery map.

4906-6-05(B)(8): Property Owner List

F886 Rebuild into Oakley Station Project is located within existing property owned by Duke Energy Ohio as well as two additional property owners. The installation of two (2) steel pole structures (Str. HMO-26292 193 and HMO-26293 194) and four (4) spans of conductor to re-route the F886 span into a new take-off tower within Oakley Station is located within the existing transmission line easement. Property owners have been notified as discussed above. New easements have been obtained with regard to the following parcel numbers:

51-00-020-264
51-00-020-239

4906-6-05(B)(9): TECHNICAL FEATURES OF THE PROJECT

The Project involves the installation of approximately (0.19 miles) of 138 kV single circuit, electrical transmission line. The proposed transmission line will involve installing of two (2) steel pole structures (Str. HMO-26292 193 and HMO-26293 194) and four (4) spans of conductor to re-route the F886 span into a new take-off tower within Oakley Station. The Project will require minimal forested clearing which is located on Parcel #5100020014 owned by Duke Energy. Both proposed structures will be located on Duke Energy parcels #5100020094 & #5100020014. Other parcels crossed by the alignment are Parcel #5100020264 owned by Ridge, LLC. and Parcel #5100020239 owned by City of Cincinnati (road ROW). Structure diagrams and design plans are provided in Attachment B – Design Plans and Structure Details.

4906-6-05(B)(9)(a): Operating Characteristics

Voltage:	138kV
Structure Type:	Two (2) new overhead steel support structures (direct embed and guyed)
Conductors:	Four (4) spans of conductor (1113 ACSR 45X7 “BLUEJAY”)
Static Wire:	One (1) 159 ACSR 12X7 “GUINEA”
Insulators:	138kV Polymer post insulators and Porcelain suspension insulators
ROW Land Requirements:	Duke Energy Ohio owns the property on which both proposed structures will be built.

4906-6-05(B)(9)(b): Electric and Magnetic Fields

There are no occupied residences or institutions within one hundred feet of the lines in this Project. Therefore, this section is not applicable.

4906-6-05(B)(9)(c): Estimated Cost

The estimated cost for the proposed Rebuild into Oakley Station Project is approximately $415,000.00

4906-6-05(B)(10): SOCIAL AND ECOLOGICAL IMPACTS

4906-6-05(B)(10)(a): Land Uses

The Project is located in the neighborhood of Oakley in Cincinnati, Ohio, within Hamilton County. Hamilton County, which covers 413 square miles, contains a population of 807,598 people based on the 2015 census data. The land use immediately surrounding the Project Area is predominantly residential, commercial, and industrial property.

4906-6-05(B)(10)(b): Agricultural Land

Due to the project being mainly on Duke Energy Ohio property and within the City of Cincinnati limits, no agricultural lands will be impacted.

4906-6-05(B)(10)(c): Archaeological or Cultural Resources

The Ohio History Connection, Ohio's Historic Preservation Office (OHPO) online mapping system, was consulted to identify previously recorded cultural resources within 1.6 km (1 mi) of the Project Area (the Study Area). The OHPO records check indicates that 13 archaeological sites, 37 historical structures, and four historical cemeteries have been previously recorded in the Study Area. Four resources listed in the National Register of Historic Places (NRHP) are located within the Study Area. None of these resources is located within the Project Area.

Twelve of the 13 archaeological sites (33HA806-33HA817) were identified during a prior cultural resources survey for the proposed Kennedy Avenue Connector (NADB# 18373), all of which were recommended not eligible for NRHP listing by the surveyors (ASC Group, Inc.). Sites 33HA806-33HA817 vary in distance from the Project Area, ranging from 0.41 km (0.26 mi) to 0.64 km (0.4 mi). The remaining site, 33HA0262 (Hyde Park Mound), is a burial mound located approximately 1.6 km (1 mi) southeast of the Project Area. The NRHP eligibility of Site 33HA0262 has not been evaluated. No previously identified archaeological sites are located in or adjacent to the Project Area.

Four of the 37 previously recorded historical structures located within the Study Area are eligible for listing in the NRHP: The United American Cemetery (OHI# HAM0227413), the B&O Railroad Station (OHI# HAM0438612), an 1875 Italianate residential structure (OHI# HAM0438812), and St. Cecilia Church and School (OHI# HAM0439012). One of the 37 previously recorded historical structures has been demolished (West Oakley School [OHI# HAM0293412]). Three of the 37 historical structures are not eligible for

listing in the NRHP (OHI# HAM0438312, HAM0438412, and HAM0439112). The remaining 29 previously recorded historical structures have not been evaluated for NRHP eligibility. These resources are located approximately 0.4 km (0.25 mi) or greater from the Project Area. Four historical cemeteries are mapped between 0.93 km (0.58 mi) and 1.6 km (1 mi) from the Project Area.

The four resources within the Study Area listed in the NRHP include the Eastwood Historic District (Reference# 5000093), the Twentieth Century Theatre (Reference# 93000879), the United States Playing Card Company Complex (Reference# 15000044), and the Cincinnati Street Gas Lamps (Reference# 78002073). These resources are located approximately 0.77 km (0.48 mi) or greater from the Project Area.

The Project Area has not been previously investigated for cultural resources. One prior cultural resources survey has been conducted within the Study Area (NADB# 18373), which does not intersect the Project Area. Prior disturbance has occurred in most of the Project Area. This disturbance is related to an existing substation, existing overhead utility poles, and the existing course of Ridge Avenue. The remaining portions of the Project Area consist of sloping, grass and brush-covered berms alongside Ridge Avenue. The Project setting consists of commercial/industrial facilities and a residential neighborhood.

It does not appear that a Federal Nexus, requiring further coordination with the OHPO, will occur for the Project, as there are likely no impacts to wetlands or streams that would require Federal permitting.

Given that the Project involves rerouting a span along an existing alignment within areas encompassing existing ground disturbance, it does not appear that impacts to significant cultural resources will occur as a result of the Project. The minimal impacts associated with the Project do not warrant additional cultural resource surveys based on the proposed scope of work.

4906-6-05(B)(10)(d): Local, State, and Federal Requirements

As the Project is expected to disturb less than one acre, a National Pollutant Discharge Elimination System (NPDES) Construction Site General Permit from the Ohio Environmental Protection Agency (Ohio EPA) for the realignment is not required.

No other local, state or federal permit or other authorizations are required for the Project.

4906-6-05(B)(10)(e): Endangered, Threatened, and Rare Species Investigation

Coordination with the U.S. Fish and Wildlife Service (USFWS) was initiated on August 17, 2018 in an effort to identify the Project's potential effect on any federally-listed threatened or endangered species or critical habitat within the vicinity of the Study Area. A response from USFWS was received October 3, 2018 regarding RTE species located within a half-mile of the Study Area. The response from USFWS indicated three (3) federally listed endangered, threatened, or candidate species, or their habitats, could

potentially exist within the Project site or vicinity. A copy of the USFWS response can be found in Attachment C – Rare, Threatened, and Endangered Species Correspondence and is summarized below.

All projects in the State of Ohio lie within the range of the federally endangered Indiana bat (*Myotis sodalis*) and the federally threatened northern long-eared bat (*Myotis septentrionalis*). In Ohio, presence of the Indiana bat and northern long-eared bat is assumed wherever suitable habitat occurs unless a presence/absence survey has been performed to document absence. It is recommended by USFWS that any clearing of trees should occur between October 1 and March 31 in order to avoid incidental take of these species. Tree clearing will occur within this seasonal clearing timeframe, thus it is anticipated that there will be no adverse affect to these bat species.

Also, the proposed Project lies within the range of running buffalo clover (*Trifolium stoloniferum*), a federally listed endangered species. A known location of this plant occurs within 2 miles of the proposed Project Area. If suitable habitat is present within the project site, it is recommended by USFWS that surveys for this species be conducted by a trained botanist in May or June when the plant is in flower. GAI did not note any suitable habitat during field review as noted in Section 4906-6-05(B)(10)(f).

According to USFWS, due to the project type, size, and location, no anticipated adverse effects to any other federally endangered, threatened, proposed, or candidate species.

Additionally, a request was submitted to the ODNR Environmental Review Program on August 17, 2018, in an effort to identify the Project's potential effect on any state-listed threatened or endangered species or critical habitat within the vicinity of the Study Area. A response from ODNR – Division of Wildlife (DOW) was received on October 5, 2018. This response can be found in Attachment C – Rare, Threatened, and Endangered Species Correspondence and is summarized below.

The ODNR-DOW noted the potential presence of the state-endangered Indiana bat (*Myotis sodalis*) and recommended the same seasonal tree clearing timeframe as the USFWS. ODNR-DOW also indicated that the Project is within the range of thirteen (13) state endangered and three (3) state threatened mussel species as well as five (5) state endangered and six (6) state threatened fish species and one (1) state threatened crayfish species. Due to the location, and that there is no in-water work proposed in a perennial stream, this Project is not going to impact these species. ODNR-DOW also indicated that the Project is within range of one (1) state threatened reptile, one (1) state-endangered amphibian, and two (2) state endangered bird species. Due to the location, the type of habitat present at the Project site and within the vicinity of the Project area, and the type of work proposed this project is not likely to impact these species (Attachment C – Rare, Threatened, and Endangered Species Correspondence).

4906-6-05(B)(10)(f): Areas of Ecological Concern

As a part of the investigation, GAI also conducted an investigation for areas of ecological concern. As a part of GAI's investigation, a request was submitted to the ODNR Natural Heritage Program on August 17, 2018, to research the presence of any unique

ecological sites, geological features, animal assemblages, scenic rivers, state wildlife areas, nature preserves, parks or forest, national wildlife refuges, or other protected areas within one mile of the Project Area, using the ODNR Natural Heritage Database.

A response from the ODNR – Office of Real Estate was received on October 5, 2018, indicating that there are no unique ecological sites, geological features, animal assemblages, scenic rivers, state wildlife areas, nature preserves, parks or forests, national wildlife refuges, or other protected areas within one mile of the Project Area. This response can be found in Attachment C – Rare, Threatened, and Endangered Species Correspondence.

As a part of the field investigation and ecological assessment, GAI conducted a Regulated Waters Assessment of the Project Area. GAI's investigation included approximately 0.19 miles long by 100-foot-wide ROW Study Area around the proposed centerline, access roads, and additional workspace areas. During the investigation, GAI identified no potentially regulated waters within the Project's Study Area. No impacts to regulated waters or RTE habitat are anticipated by the Project. Results from GAI's field investigation can be found in Attachment D – Regulated Waters Assessment.

A review of the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRM) revealed that the Project Area lies within an area of minimal flood hazard and crosses no 100-year floodplains and/or floodways. There are no proposed structures to be constructed within a Regulatory Floodway.

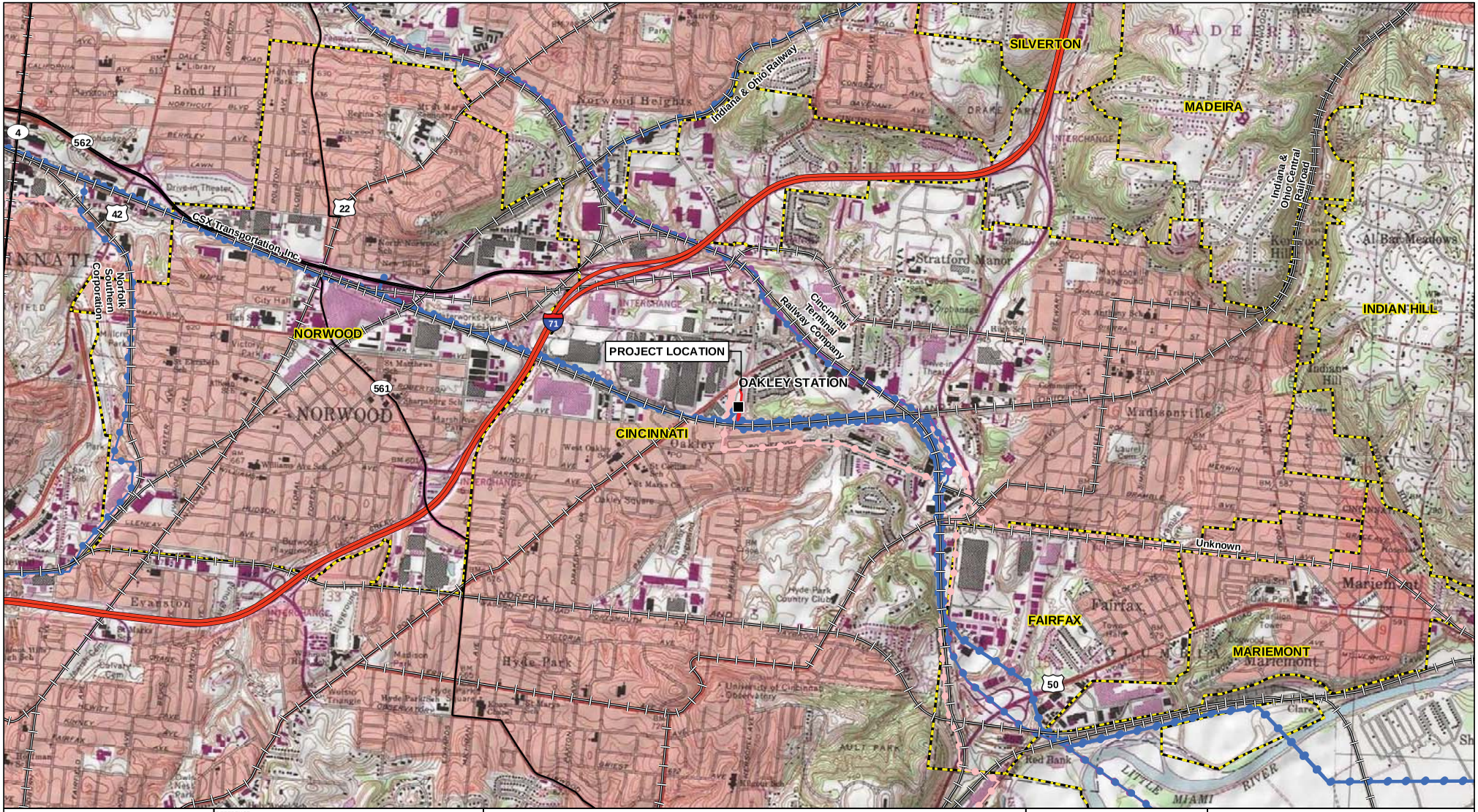
4906-6-05(B)(10)(g): Other Information

To the best of Duke Energy Ohio's knowledge, no unusual conditions exist that would result in environmental, social, health, or safety impacts. Construction and operation of the proposed Project will meet all applicable safety standards established by the Occupational Safety and Health Administration (OSHA) and will be in accordance with the requirements specified in the latest revision of the NESC, as adopted by the Public Utilities Commission of Ohio (Commission).

4906-6-07: Service and Public Distribution of Accelerated Certificate Applications

Copies of this Construction Notice have been sent to the City of Cincinnati Mayor's Office, the City of Cincinnati Director of Development, the City of Cincinnati City Planning Department, the Hamilton County Commissioners, the Hamilton County Planning Commission, and the Hamilton County Public Library. Duke Energy will maintain on its website information as to how to request an electronic or paper copy of the application. Proof of compliance will be filed with the board within seven days of filing the accelerated application.

ATTACHMENT A – PROJECT DETAILS



PROJECT LOCATION

HAMILTON COUNTY, OH

REFERENCE:
AERIAL PHOTOGRAPH:
- ESRI's World Imagery, Accessed: 10/10/2018.
INCORPORATED AREA:
- Ohio Department of Transportation's Cities, 2018.
COUNTY BOUNDARY:
- Ohio Department of Transportation's Counties, 2018.
INTERSTATE AND HIGHWAY:
- ESRI's USA Major Roads, 05/10/2018.
RAILWAY:
- Ohio Department of Transportation's Railways, 2017.
PROJECT DETAILS:
- Duke Energy.

Incorporated Area
County Boundary
Interstate Highway
State Highway
Railway
Existing Facility
Route Centerline
69 kV Transmission Line
138 kV Transmission Line
345 kV Transmission Line

DUKE ENERGY.

gai consultants

0 1,000 2,000 Feet
1 in = 2,000 feet

FIGURE 1
PROJECT LOCATION

Ohio Power Siting Board Construction Notice

F886 Rebuild into Oakley Station Project

DRAWN BY: PPD
CHECKED: TDB
DATE: 10/10/2018
APPROVED: MRW

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PROJECT LOCATION

HAMILTON COUNTY, OH

REFERENCE:
AERIAL PHOTOGRAPH:
- ESRI's World Imagery, Accessed: 10/10/2018.
INCORPORATED AREA:
- Ohio Department of Transportation's Cities, 2018.
COUNTY BOUNDARY:
- Ohio Department of Transportation's Counties, 2018.
INTERSTATE AND HIGHWAY:
- ESRI's USA Major Roads, 05/10/2018.
LOCAL ROAD:
- Ohio Department of Transportation's Roads, 2017.
RAILWAY:
- Ohio Department of Transportation's Railways, 2017.
PARCEL BOUNDARY:
- Hamilton County Parcels, 2018.
PROJECT DETAILS:
- Duke Energy.

- Incorporated Area
- County Boundary
- Interstate Highway
- US Highway
- State Highway
- Local Road
- Railway
- Existing Structure
- Proposed Structure
- Existing Facility
- Route Centerline
- Parcel Boundary
- 69 kV Transmission Line
- 138 kV Transmission Line
- 345 kV Transmission Line

DUKE ENERGY.

gai consultants

0 100 200 Feet
1 in = 200 feet

FIGURE 2
PROJECT LAYOUT

Ohio Power Siting Board Construction Notice

SHEET 1 of 1

F886 Rebuild into Oakley Station Project

DRAWN BY: PPD
CHECKED: TDB
DATE: 10/10/2018
APPROVED: MRW

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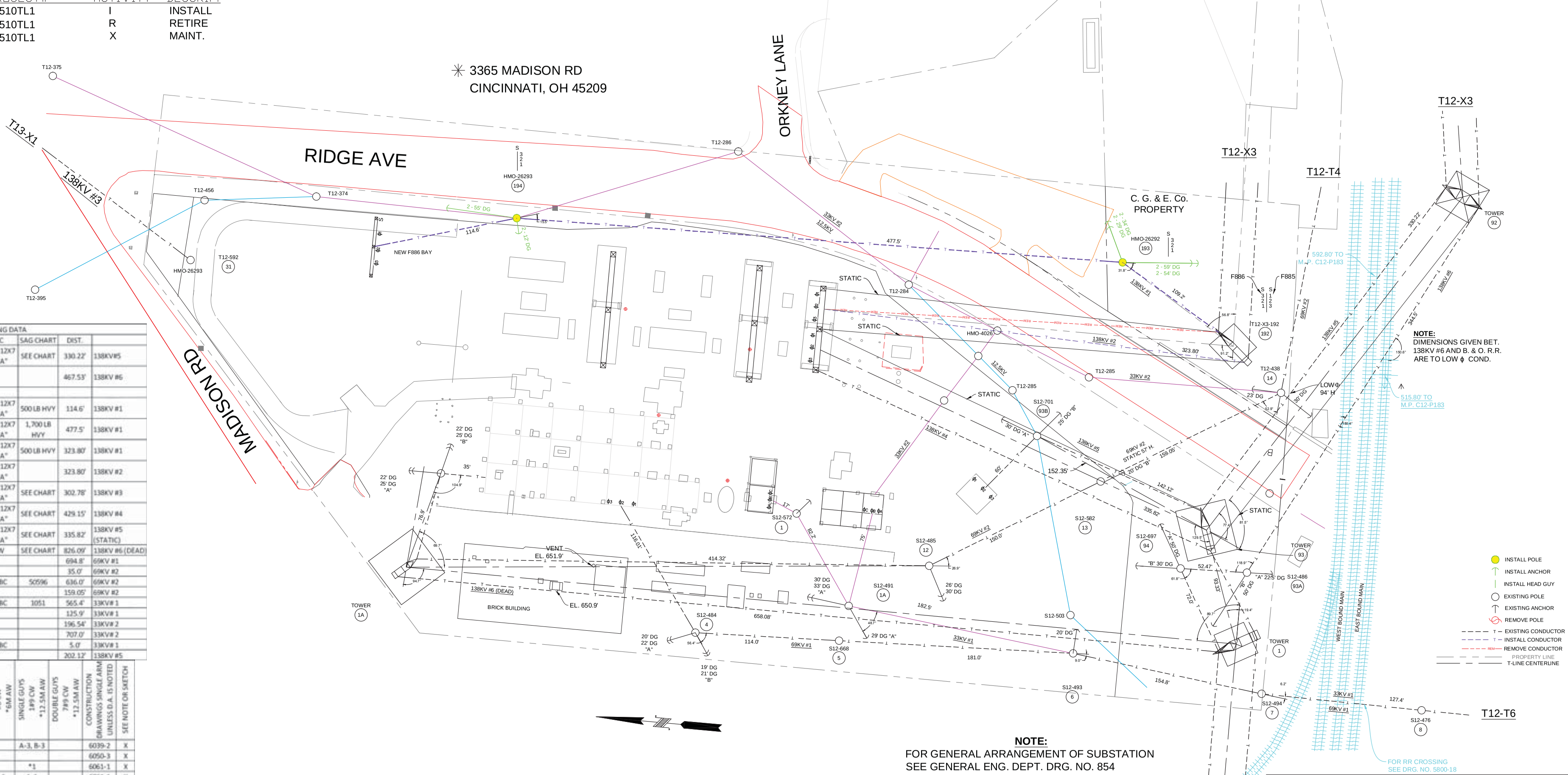
ATTACHMENT B – DESIGN PLANS AND STRUCTURE DETAILS

MAP GRID: n02e0214
COMMUNITY: OAKLEY
TWP.: CINCINNATI
STATE: OHIO
COUNTY: HAMILTON
TAX: 31 1110
OPERATING UNIT: VSOH
FEEDER (138KV): F886
DISTRICT: HARTWELL

TRANSMISSION:
WO# 22017593
PROJECT CODES:

PROJECT#	ACTIVITY	DESCRIP.
T1510TL1	I	INSTALL
T1510TL1	R	RETIRE
T1510TL1	X	MAINT.

CONTACT/ ENGINEER:
JAKE DAWN
513-287-1371



WIRE STRINGING DATA

POLES	CONDUCTOR	SAG CHART	STATIC	SAG CHART	DIST.	
93-92	1113 ACSR 45X7 "BLUE JAY"	SEE CHART	159 ACSR 12X7 "GUINEA"	SEE CHART	330.22'	138KV#5
1 -- 92	1113 ACSR 45X7 "BLUE JAY"	SEE CHART			467.53'	138KV #6
STA. - 194	1113 ACSR 45X7 "BLUE JAY"	1,000 LB HVY	159 ACSR 12X7 "GUINEA"	500 LB HVY	114.6'	138KV #1
194 - 193	1113 ACSR 45X7 "BLUE JAY"	5,000 LB HVY	159 ACSR 12X7 "GUINEA"	1,700 LB HVY	477.5'	138KV #1
193 - 193	1113 ACSR 45X7 "BLUE JAY"	1,000 LB HVY	159 ACSR 12X7 "GUINEA"	500 LB HVY	323.80'	138KV #1
STA. -192	1113 ACSR 45X7 "BLUE JAY"	SEE CHART	159 ACSR 12X7 "GUINEA"		323.80'	138KV #2
STA. - 31	400 HDBC	SEE CHART	159 ACSR 12X7 "GUINEA"	SEE CHART	302.78'	138KV #3
STA. - 93 - 1	795 ACSR 45X7	SEE CHART	159 ACSR 12X7 "GUINEA"	SEE CHART	429.15'	138KV #4
STA. - 93			159 ACSR 12X7 "GUINEA"	SEE CHART	335.82'	138KV #5 (STATIC)
STA. -1A-1	852.6 ACSR	SEE CHART	7#8 AW	SEE CHART	826.09'	138KV #6 (DEAD)
STA. - 8	477 ACSR	50613			694.8'	69KV #1
STA. - 1B	477 ACSR	SEE CHART			35.0'	69KV #2
1B - 13	477 ACSR	50605	2/0 HDBC	50596	636.0'	69KV #2
13 - 14	795 AAC	70503			159.05'	69KV #2
STA. - 8	336 ACSR	50590A	2/0 HDBC	1051	565.4'	33KV# 1
7 -- 8					125.9'	33KV# 1
STA - 302	2/0 HDBC	51097			196.54'	33KV# 2
302 - 306	1/0 ACSR	60082			707.0'	33KV# 2
1 - STA.	336 ACSR	60048A	2/0 HDBC		5.0'	33KV# 1
STA. - 93	1590 AAC	SEE CHART			202.12'	138KV #5

POLE NO.	HEIGHT (FT)	CLASS	SETTING DEPTH (FT)	ANCHORS 18" CONCRETE 3/4"X8'-0" RODS	ANCHOR SCREW 3/4" RODS	SINGLE GUYS #8 CW *6M AW	SINGLE GUYS 1#9 CW *12.5M AW	DOUBLE GUYS 7#9 CW *12.5M AW	CONSTRUCTION DRAWINGS SINGLE ARM UNLESS D.A. IS NOTED	SEE NOTE OR SKETCH
4	60	2	6.0	A-2, B-2			A-3, B-3		6039-2	X
5	50	3	7.0						6050-3	X
6	55	2	7.6		1		*1		6061-1	X
7	60	2	7.5	A-1	B-1	*B-1	A-1		6061-1	X
1	40	3	6.0	1				1	5028	X
1A	40	3	6.5	A-2, B-2		A-1	A2, B-3		5003-1	
301	40	3	6.5	1			2		5003-1	X
301A	35	3	5.5	1			2		5003-1	X
302	40	3	6.0	A-2, B-2			A-2, B-2		5003-1	X
303	60	2	6.0	1			A-1, B-2			X
T12-286	25	3	5.5	1				1	3250A-1	
304	50	3	8.0							X
305	55	2	8.2							X
306	60	2	7.7							X
1B	55	2	7.0		A-2, B-2	*A-3, *B-3			6039-4	X
12	80	2	8.0	1	1		*3		6036-3	X
13	65	2	8.3	A-1	B-1		A-1, *B-1		6035-2	X
14	75	2	7.0		2		*4		6037-1	
93A	80	2	8.0		A-3, B-3			*A-3, *B-3	11635-276	
94	80	2	8.0		A-2, B-3		*A-3	*B-3	11635-277	X
93B	70	2	6.5		A-2, B-3	*A-3	*B-3		11635-277	X

NOTE:
- FOR DETAIL & ASSEMBLY OF GROUND WIRE DE PLATE ON TOWER 93 SEE C. G. & E CO. DRG. 11762-18
- FOR DETAIL OF COND ON TOWER #1, SEE DRG. 12615-10 REV. 8 SEE SUR. BK. NO.47 PG.281 SH.1
- PHASING SHOWN FOR F885 & F886 SHOWN LOOKING AWAY FROM OAKLEY STATION

SEE SURVEY BOOK 44 - PAGE 208 FOR REV. 7

CIRCUIT DESIGNATION	FEEDER NUMBER
138KV #1	886
138KV #2	885
138KV #3	881
138KV #4	1288
138KV #5	7484
138KV #6	4187
69KV #1	863
69KV #2	868
33KV #1	854
33KV #2	853

NO.	DATE	REVISION	DRFT.	ENGR.

DUKE ENERGY.

INDEX: F886
DESCRIPTION: 33KV, 69KV, &138KV
OAKLEY STATION #8, MADISON & RIDGE AVE.
DATE: 6/28/2018
LOCATION: HAMILTON CO., OH
DRAWN: JAKE DAWN
ENGINEER: JAKE DAWN
TRANSMISSION LINE ENGINEERING
CKD:
PAGE:
SCALE:
DWG NO: 22017593-1

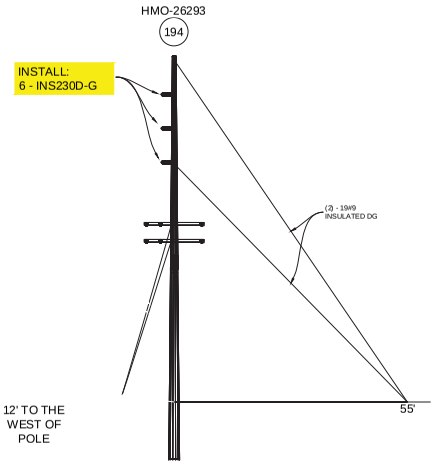
MAP GRID: n02e0214
COMMUNITY: OAKLEY
TWP.: CINCINNATI
STATE: OHIO
COUNTY: HAMILTON
TAX: 31 1110
OPERATING UNIT: VSOH
FEEDER (138KV): F886
DISTRICT: HARTWELL

TRANSMISSION:
WO# 22017593
PROJECT CODES:

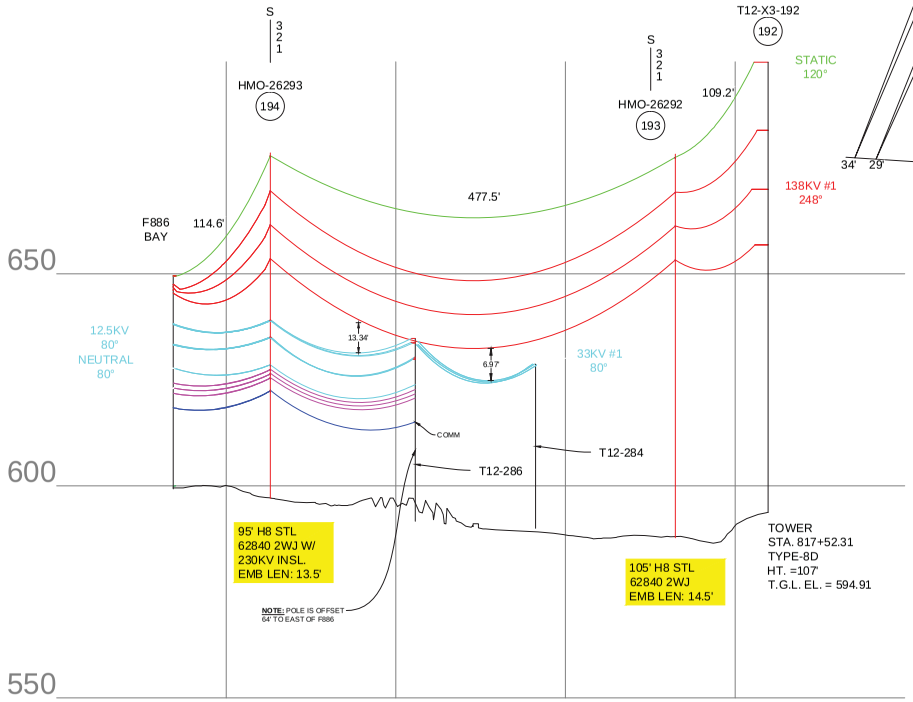
PROJECT#	ACTIVITY	DESCRIP.
T1510TL1	I	INSTALL
T1510TL1	R	RETIRE
T1510TL1	X	MAINT.

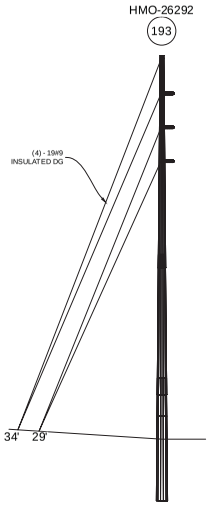
CONTACT/ ENGINEER:
JAKE DAWN
513-287-1371

✳ 3365 MADISON RD
CINCINNATI, OH 45209

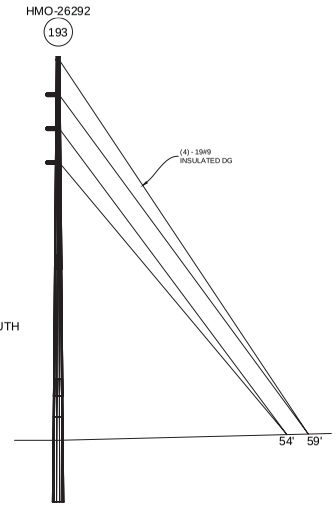


DETAIL "C"
SHOWN LOOKING WEST





DETAIL "A"
SHOWN LOOKING SOUTH



DETAIL "B"
SHOWN LOOKING EAST

100.0 FT. HORIZ. SCALE
20.0 FT. VERT. SCALE

NOTE:
- ALL PHASING IS SHOWN LOOKING AWAY FROM OAKLEY STATION
- SEE DRG 22017593-1 FOR STRINGING DETAILS

WIRE STRINGING DATA

FROM	TO	NESC HEAVY INITIAL (LBS)	RULING SPAN (FT)
STATIC - 159ACSR12X7 "GUINEA"			
STA.	194	500	114.6
194	193	2000	477.5
193	192	500	109.2
CONDUCTOR - 1113ACSR45X7 "BLUE JAY"			
STA.	194	1000	114.6
194	193	5000	477.5
193	192	1000	109.2

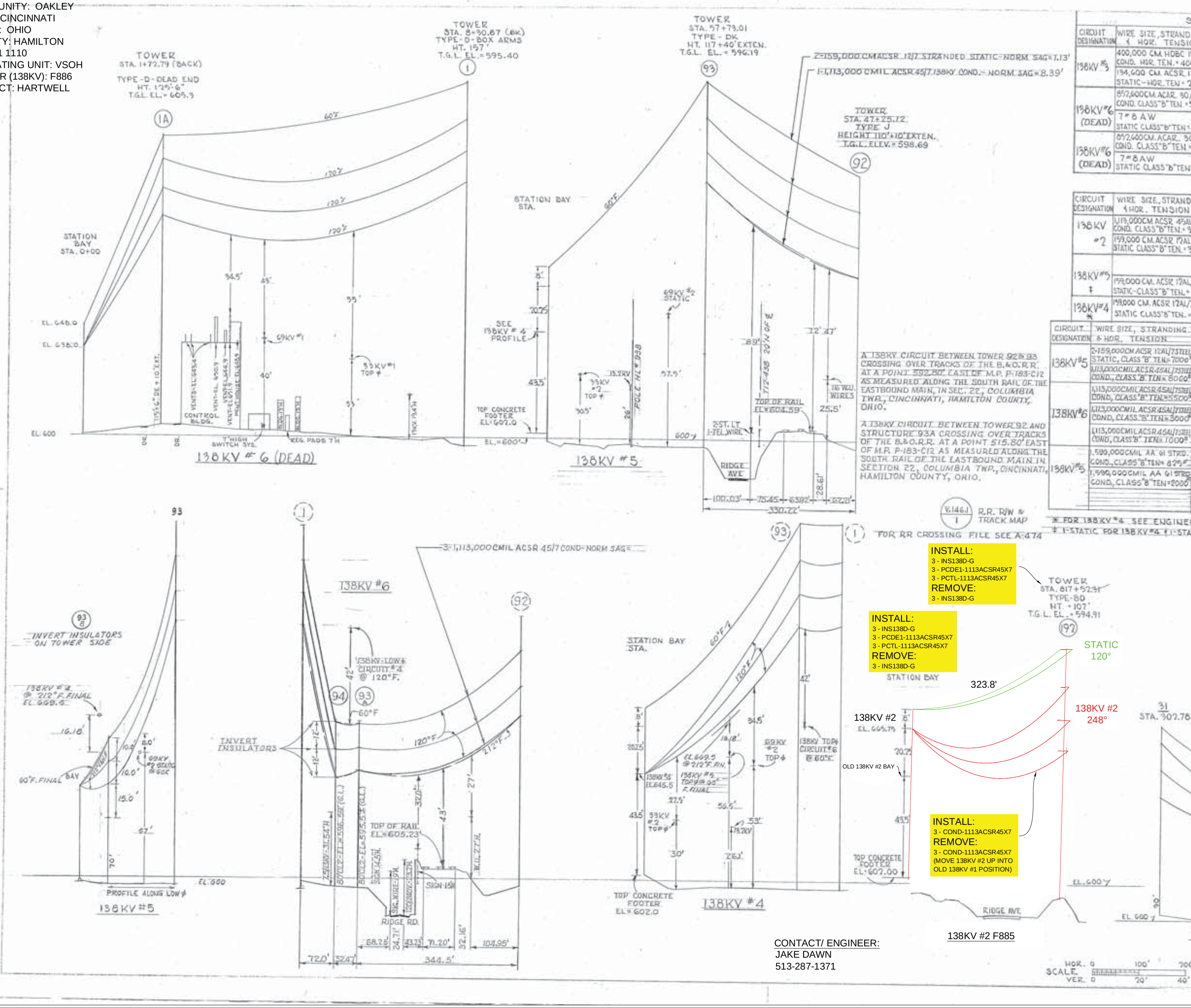
NO.	DATE	REVISION	DRFT.	ENGR.

DUKE ENERGY.

INDEX: F886
DESCRIPTION: 138KV #1 (F886) PROFILE
OAKLEY STATION #8, MADISON & RIDGE AVE.
DATE: 6/28/2018
LOCATION: HAMILTON CO., OH
DRAWN: JAKE DAWN
ENGINEER: JAKE DAWN

TRANSMISSION LINE ENGINEERING	CKD:	PAGE:	SCALE:	DWG NO: 22017593-2

MAP GRID: n02e0214
COMMUNITY: OAKLEY
TWP.: CINCINNATI
STATE: OHIO
COUNTY: HAMILTON
TAX: 31 1110
OPERATING UNIT: VSOH
FEEDER (138KV): F886
DISTRICT: HARTWELL



SAG & TENSION CHART

CIRCUIT DESIGNATION	WIRE SIZE, STRANDING & HOR. TENSION	BETWEEN SUPPORTS	SPAN LENGTH	TEMP. FAHR.	-10	30	60	90	FINAL 60	FINAL 120	FINAL CLB
138KV #3	400,000 CM HDBC 19 STRD. COND. HOR. TEN.=4000#	RULING SPAN=302.78'		TENSION (LBS)	2472	2150	1971	1825	1959	1694	4000
		BAY-31	302.78	SAG IN FEET	5.73	6.59	7.19	7.76	7.23	8.36	6.79
	134,600 CM ACSR 12/7 STATIC-HOR. TEN.=2000#	RULING SPAN=302.78		TENSION (LBS)	598	534	497	467	487	444	2000
		BAY-31	302.78'	SAG IN FEET	6.45	7.23	7.77	8.27	7.93	8.69	8.12
138KV #6 (DEAD)	852,600 CM ACAR 30/7 COND. CLASS "B" TEN.=5000#	RULING SPAN=169.72'		TENSION (LBS)	6049	3894	2441	1929	1464	865	5000
		BAY-1A	169.72'	SAG IN FEET	0.47	0.73	1.16	1.85	1.93	3.27	1.56
	7#8 AW STATIC CLASS "B" TEN.=3000#	RULING SPAN=169.72		TENSION (LBS)	3151	2597	2185	1783	1721	944	3000
		BAY-1A	169.72'	SAG IN FEET	0.29	0.36	0.42	0.57	0.54	0.98	1.47
138KV #6 (DEAD)	852,600 CM ACAR 30/7 COND. CLASS "B" TEN.=8000#	RULING SPAN=656.37		TENSION (LBS)	6744	5255	4366	3696	3051	2465	8000
		1A-1	656.37'	SAG IN FEET	6.36	8.17	9.84	11.63	14.10	17.47	14.86
	7#8 AW STATIC CLASS "B" TEN.=5000#	RULING SPAN=656.37		TENSION (LBS)	3557	3062	2711	2385	2298	1717	5000
		1A-1	656.37'	SAG IN FEET	3.95	4.56	5.18	5.69	6.27	8.18	13.37

CIRCUIT DESIGNATION	WIRE SIZE, STRANDING & HOR. TENSION	BETWEEN SUPPORTS	SPAN LENGTH	TEMP. FAHR.	0°	32°	60°	90°	120°	FINAL 60°	FINAL 120°	FINAL CLB
138KV #2	1,113,000 CM ACSR 45AL/7STEEL COND. CLASS "B" TEN.=3000#	RULING SPAN=323.8'		TENSION (LBS)	1407	1340	1288	1239	1195			
		BAY-192	323.8'	SAG IN FEET	11.78	12.37	12.87	13.38	13.80			
	159,000 CM ACSR 12AL/7STEEL STATIC CLASS "B" TEN.=3000#	RULING SPAN=323.8'		TENSION (LBS)	1248	1040	913	814	738			
		BAY-192	323.8'	SAG IN FEET	4.73	5.08	5.78	6.49	7.15			
138KV #5 ‡		RULING SPAN		TENSION (LBS)								
				SAG IN FEET								
	159,000 CM ACSR 12AL/7STEEL STATIC-CLASS "B" TEN.=3000#	RULING SPAN=335.87		TENSION (LBS)	1153	995	893	810	744			
		BAY-93	335.87	SAG IN FEET	5.42	6.29	7.00	7.73	6.41			
138KV #4 *	159,000 CM ACSR 12AL/7STEEL STATIC CLASS "B" TEN.=3000#	RULING SPAN=77.0'		TENSION (LBS)	2813	2078	1453	850	476			
		93-1	77.0'	SAG IN FEET	0.11	0.14	0.20	0.35	0.62			

CIRCUIT DESIGNATION	WIRE SIZE, STRANDING & HOR. TENSION	BETWEEN SUPPORTS	SPAN LENGTH	TEMP. FAHR.	-10	30	60	90	120	FINAL 60	FINAL 120	FINAL 212	FINAL CLB
138KV #5	2-159,000 CM ACSR 12AL/7STEEL STATIC, CLASS "B" TEN.=7000#	RULING SPAN 330.22		TENSION (LBS)	6750	6126	5597	5015	4390	4934	3486	2305	7000
		92-93	330.22	SAG IN FEET	0.81	0.89	0.97	1.08	1.24	1.10	1.56	2.35	2.92
	1,113,000 CMIL ACSR 45AL/7STEEL COND., CLASS "B" TEN.=8000#	RULING SPAN=330.22		TENSION (LBS)	7283	5221	4078	3296	2781	3213	2360	1913	8000
		92-93	330.22	SAG IN FEET	2.35	3.28	4.21	5.20	6.17	5.33	7.27	8.98	4.72
138KV #6	1,113,000 CMIL ACSR 45AL/7STEEL COND., CLASS "B" TEN.=5500#	RULING SPAN=344.50'		TENSION (LBS)	3327	2702	2291	2160	1981	2226	1875	1627	5500
		92-POLE 93A	344.50'	SAG IN FEET	5.61	6.91	7.81	8.66	9.44	8.39	9.98	11.52	7.48
	1,113,000 CMIL ACSR 45AL/7STEEL COND., CLASS "B" TEN.=3000#	RULING SPAN=52.47'		TENSION (LBS)	3231	1056	635	485	441	592	443	353	3000
		POLE 93A-94	52.47'	SAG IN FEET	0.14	0.41	0.69	0.90	0.99	0.74	0.98	1.23	0.32
	1,113,000 CMIL ACSR 45AL/7STEEL COND., CLASS "B" TEN.=1000#	RULING SPAN=72.00'		TENSION (LBS)	487	420	388	367	355	388	360	327	1000
		POLE 94-1	72.00'	SAG IN FEET	1.68	1.95	2.11	2.23	2.31	2.11	2.27	2.51	1.80
138KV #5	1,590,000 CMIL AA 61 STRD. COND., CLASS "B" TEN.=825#	RULING SPAN=142.12		TENSION (LBS)	PRESTRESSED					384	374	360	825
		93-POLE 938	142.12'	SAG IN FEET						10.09	10.38	10.81	9.82
	1,590,000 CMIL AA 61 STRD. COND., CLASS "B" TEN.=2000#	RULING SPAN=60'		TENSION (LBS)	PRESTRESSED					579	456	340	2000
		BAY-938	60'	SAG IN FEET						1.17	1.54	1.99	0.71

* FOR 138KV #4 SEE ENGINEERING FILE 1759
‡ 1-STATIC FOR 138KV #4 & 1-STATIC FOR 138KV #5

TRANSMISSION:
WO# 22017593
PROJECT CODES:

PROJECT#	ACTIVITY	DESCRIP.
T1510TL1	I	INSTALL
T1510TL1	R	RETIRE
T1510TL1	X	MAINT.

CIRCUIT DESIGNATION	FEEDER NUMBER
138KV #1	886
138KV #2	885
138KV #3	881
138KV #4	1788
138KV #5	7484
138KV #6	4187
69KV #1	863
69KV #2	868
33KV #1	854
33KV #2	853

SEE SURVEY BOOK 44, PAGE 208 FOR REV. 1

FOR 33KV & 69KV PROFILE SEE PROFILE #2

SCANNED

NO.	DATE	REVISION		
3	1-19-84	ADD 93, 938, BAY PROFILE & SAG INFO. M.CARLIER		
2	4-1-81	REV. R.R. DESCRIPTION K. McKELHAN		
1	5-12-80	RECOND. 138KV #6 - W. THEOBALD		

THE CINCINNATI GAS & ELECTRIC CO.
138,000V
OAKLEY STATION #8
MADISON & RIDGE AVE.
HAMILTON CO., OHIO
JAKE DAWN 6/28/2018
G. PACE
12-5-72
ORG 22017593-3
138KV PROFILE #1

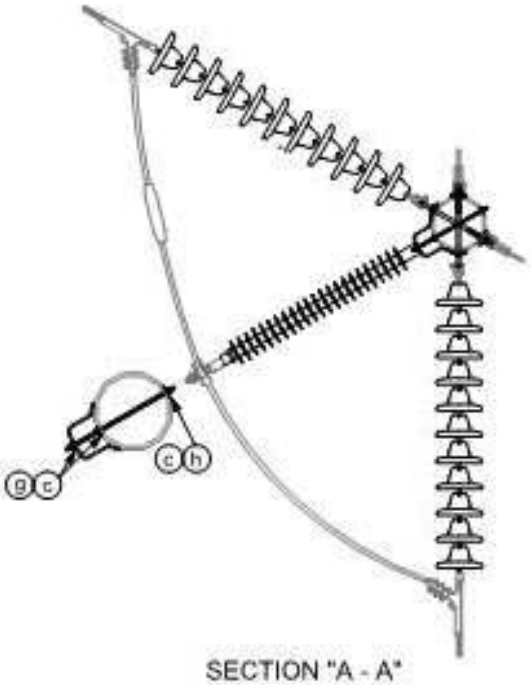
CONSTRUCTION PRINT FOR
W.O. 22031, 22033
FEEDER 4187, 883
JOB NO. TV JL11 3-21-84

SCALE HOR. 0 100' 200' VER. 0 20' 40'

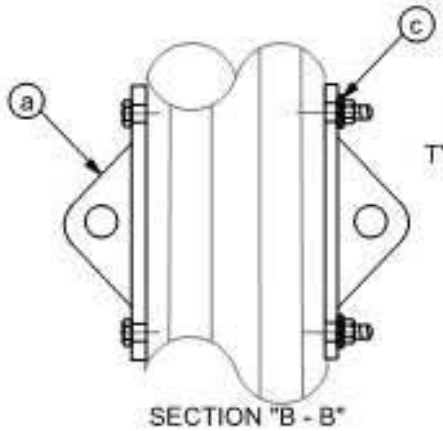
SCANNED

62840 2WJ STL

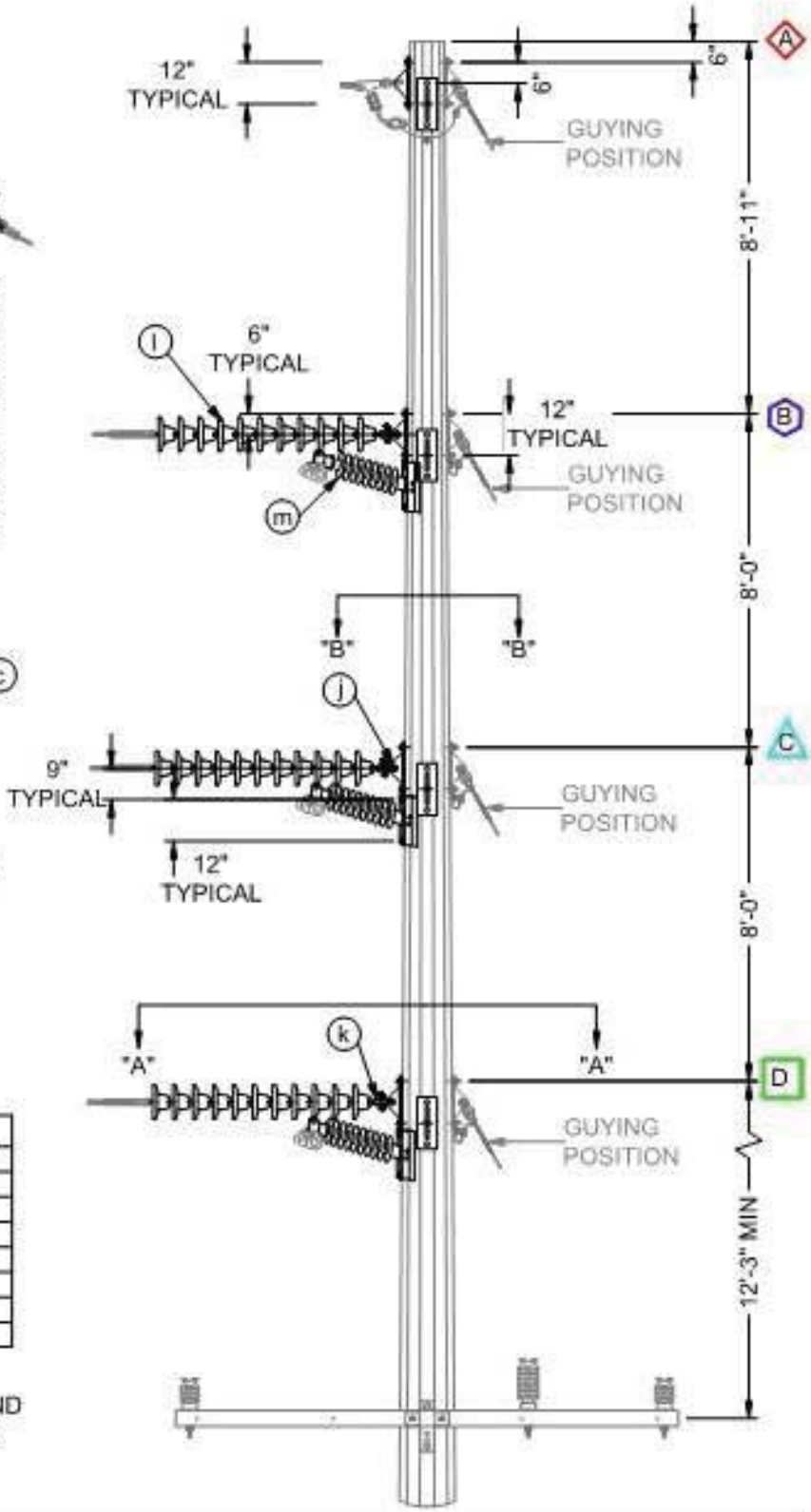
138KV TWO WAY DEADEND WITH JUMPER SUPPORT



SECTION "A - A"



SECTION "B - B"



BOLT CHART					
ELEV	DIA	LENGTH	TYPE	MAT. #	QTY
A	7/8"	14"	MACHINE	b	4
B	7/8"	16"	MACHINE	d	4
B	7/8"	20"	DA	f	2
C	7/8"	18"	MACHINE	e	4
C	7/8"	24"	DA	f	2
D	7/8"	20"	MACHINE	e	4
D	7/8"	24"	DA	f	2

NOTES:

1. MAINTAIN 44" BETWEEN JUMPER AND NEAREST GROUNDED METAL PART.
2. FOR ANGLES GREATER THAN 90°.

ATTACHMENT C –

RARE, THREATENED, AND ENDANGERED SPECIES CORRESPONDENCE

Ohio Department of Natural Resources

JOHN R. KASICH, GOVERNOR JAMES ZEHRINGER, DIRECTOR

Office of Real Estate
Paul R. Baldridge, Chief
2045 Morse Road – Bldg. E-2
Columbus, OH 43229
Phone: (614) 265-6649
Fax: (614) 267-4764

October 5, 2018

Tyler Rankin
GAI Consultants
3720 Dressler Road NW
Canton, Ohio 44718

Re: 18-964; Duke Energy Reroute into Oakley Substation

Project: The proposed project involves the installation of 2 steel pole structures and 4 spans of conductor to reroute a transmission line span into a new tower within an existing substation.

Location: The proposed project is in Oakley Township, Hamilton County, Ohio.

The Ohio Department of Natural Resources (ODNR) has completed a review of the above referenced project. These comments were generated by an inter-disciplinary review within the Department. These comments have been prepared under the authority of the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661 et seq.), the National Environmental Policy Act, the Coastal Zone Management Act, Ohio Revised Code and other applicable laws and regulations. These comments are also based on ODNR's experience as the state natural resource management agency and do not supersede or replace the regulatory authority of any local, state or federal agency nor relieve the applicant of the obligation to comply with any local, state or federal laws or regulations.

Natural Heritage Database: The Natural Heritage Database has no records at or within a one-mile radius of the project area.

A review of the Ohio Natural Heritage Database indicates there are no other records of state endangered or threatened plants or animals within the project area. There are also no records of state potentially threatened plants, special interest or species of concern animals, or any federally listed species. In addition, we are unaware of any unique ecological sites, geologic features, animal assemblages, scenic rivers, state wildlife areas, state nature preserves, state or national parks, state or national forests, national wildlife refuges, or other protected natural areas within the project area. The review was performed on the project area you specified in your request as well as an additional one-mile radius. Records searched date from 1980.

Please note that Ohio has not been completely surveyed and we rely on receiving information from many sources. Therefore, a lack of records for any particular area is not a statement that rare species or unique features are absent from that area. Although all types of plant communities have been surveyed, we only maintain records on the highest quality areas.

Fish and Wildlife: The Division of Wildlife (DOW) has the following comments.

The DOW recommends that impacts to streams, wetlands and other water resources be avoided and minimized to the fullest extent possible, and that best management practices be utilized to minimize erosion and sedimentation.

The project is within the range of the Indiana bat (*Myotis sodalis*), a state endangered and federally endangered species. The following species of trees have relatively high value as potential Indiana bat roost trees to include: shagbark hickory (*Carya ovata*), shellbark hickory (*Carya laciniosa*), bitternut hickory (*Carya cordiformis*), black ash (*Fraxinus nigra*), green ash (*Fraxinus pennsylvanica*), white ash (*Fraxinus americana*), shingle oak (*Quercus imbricaria*), northern red oak (*Quercus rubra*), slippery elm (*Ulmus rubra*), American elm (*Ulmus americana*), eastern cottonwood (*Populus deltoides*), silver maple (*Acer saccharinum*), sassafras (*Sassafras albidum*), post oak (*Quercus stellata*), and white oak (*Quercus alba*). Indiana bat roost trees consists of trees that include dead and dying trees with exfoliating bark, crevices, or cavities in upland areas or riparian corridors and living trees with exfoliating bark, cavities, or hollow areas formed from broken branches or tops. However, Indiana bats are also dependent on the forest structure surrounding roost trees. If suitable habitat occurs within the project area, the DOW recommends trees be conserved. If suitable habitat occurs within the project area and trees must be cut, the DOW recommends cutting occur between October 1 and March 31. If suitable trees must be cut during the summer months, the DOW recommends a net survey be conducted between May 15 and August 15, prior to any cutting. Net surveys should incorporate either nine net nights per square 0.5 kilometer of project area, or four net nights per kilometer for linear projects. If no tree removal is proposed, this project is not likely to impact this species.

The project is within the range of the sheepnose (*Plethobasus cyphyus*), a state endangered and federally endangered mussel, the fanshell (*Cyprogenia stegaria*), a state endangered and federally endangered mussel, the pink mucket (*Lampsilis orbiculata*), a state endangered and federally endangered mussel, the rayed bean (*Villosa fabalis*), a state endangered and federally endangered mussel, the snuffbox (*Epioblasma triquetra*), a state endangered and federally endangered mussel, the ebonyshell (*Fusconaia ebena*), a state endangered mussel, the long-solid (*Fusconaia maculata maculata*), a state endangered mussel, the butterfly (*Ellipsaria lineolata*), a state endangered mussel, the washboard (*Megalonaias nervosa*), a state endangered mussel, the elephant-ear (*Elliptio crassidens crassidens*), a state endangered mussel, the Ohio pigtoe (*Pleurobema cordatum*), a state endangered mussel, the monkeyface (*Quadrula metanevra*), a state endangered mussel, the wartyback (*Quadrula nodulata*), a state endangered mussel, the black sandshell (*Ligumia recta*), a state threatened mussel, the fawnsfoot (*Truncilla donaciformis*), a state threatened mussel, and the threehorn wartyback (*Obliquaria reflexa*), a state threatened mussel. Due to the location, and that there is no in-water work proposed in a perennial stream, this project is not likely to impact these species.

The project is within the range of the shortnose gar (*Lepisosteus platostomus*), a state endangered fish, the shoal chub (*Macrhybopsis hyostoma*), a state endangered fish, the shovelnose sturgeon (*Scaphirhynchus platorynchus*), a state endangered fish, the lake sturgeon (*Acipenser fulvescens*), a state endangered fish, the northern madtom (*Noturus stigmosus*), a state endangered fish, the bigeye shiner (*Notropis boops*) a state threatened fish, the mountain madtom (*Noturus eleutherus*), a state threatened fish, the river darter (*Percina shumardi*) a state threatened fish, the channel darter (*Percina copelandi*), a state threatened fish, the blue sucker (*Cycleptus elongatus*), a state threatened fish, and the paddlefish (*Polyodon spathula*) a state threatened fish. Due to the location, and that there is no in-water work proposed in a perennial stream, this project is not likely to impact these species.

The project is within the range of the Kirtland's snake (*Clonophis kirtlandii*), a state threatened species. This secretive species prefers wet meadows and other wetlands. Due to the location, the type of habitat present at the project site and within the vicinity of the project area, and the type of work proposed, this project is not likely to impact this species.

The project is within the range of the cave salamander (*Eurycea lucifuga*), a state endangered species. Due to the location, the type of habitat present at the project site and within the vicinity of the project area, and the type of work proposed, this project is not likely to impact this species.

The project is within the range of the American bittern (*Botaurus lentiginosus*), a state endangered bird. Nesting bitterns prefer large undisturbed wetlands that have scattered small pools amongst dense vegetation. They occasionally occupy bogs, large wet meadows, and dense shrubby swamps. If this type of habitat will be impacted, construction should be avoided in this habitat during the species' nesting period of May 1 to July 31. If this type of habitat will not be impacted, this project is not likely to impact this species.

The project is within the range of the lark sparrow (*Chondestes grammacus*), a state endangered bird. This sparrow nests in grassland habitats with scattered shrub layers, disturbed open areas, as well as patches of bare soil. In the Oak Openings area west of Toledo, lark sparrows occupy open grass and shrubby fields along sandy beach ridges. These summer residents normally migrate out of Ohio shortly after their young fledge or leave the nest. If this type of habitat will be impacted, construction should be avoided in this habitat during the species' nesting period of May 1 to June 30. If this habitat will not be impacted, this project is not likely to impact this species.

The project is within the range of the Sloan's crayfish (*Orconectes sloanii*), a state threatened species. Due to the location, and that there is no in-water work proposed in a perennial stream, this project is not likely to impact this species.

Due to the potential of impacts to federally listed species, as well as to state listed species, we recommend that this project be coordinated with the U.S. Fish & Wildlife Service.

Water Resources: The Division of Water Resources has the following comment.

The local floodplain administrator should be contacted concerning the possible need for any floodplain permits or approvals for this project. Your local floodplain administrator contact information can be found at the website below.

http://water.ohiodnr.gov/portals/soilwater/pdf/floodplain/Floodplain%20Manager%20Community%20Contact%20List_8_16.pdf

ODNR appreciates the opportunity to provide these comments. Please contact John Kessler at (614) 265-6621 if you have questions about these comments or need additional information.

John Kessler
ODNR Office of Real Estate
2045 Morse Road, Building E-2
Columbus, Ohio 43229-6693
John.Kessler@dnr.state.oh.us

Marc Walters

From: Finfera, Jennifer <jennifer_finfera@fws.gov>
Sent: Wednesday, October 03, 2018 12:00 PM
To: Tyler Rankin
Subject: Duke Energy Rebuild into Oakley Sub Project, Oakley Township, Hamilton County, Ohio

TAILS# 03E15000-2018-TA-1897

Re: Duke Energy Rebuild into Oakley Sub Project, Oakley Township, Hamilton County, Ohio

Dear Mr. Rankin,

We have received your recent correspondence requesting information about the subject proposal. There are no federal wilderness areas, wildlife refuges or designated critical habitat within the vicinity of the project area. The following comments and recommendations will assist you in fulfilling the requirements for consultation under section 7 of the Endangered Species Act of 1973, as amended (ESA).

The U.S. Fish and Wildlife Service (Service) recommends that proposed developments avoid and minimize water quality impacts and impacts to high quality fish and wildlife habitat (e.g., forests, streams, wetlands). Additionally, natural buffers around streams and wetlands should be preserved to enhance beneficial functions. If streams or wetlands will be impacted, the Corps of Engineers should be contacted to determine whether a Clean Water Act section 404 permit is required. Best management practices should be used to minimize erosion, especially on slopes. All disturbed areas should be mulched and revegetated with native plant species. Prevention of non-native, invasive plant establishment is critical in maintaining high quality habitats.

FEDERALLY LISTED SPECIES COMMENTS: All projects in the State of Ohio lie within the range of the federally endangered **Indiana bat** (*Myotis sodalis*) and the federally threatened **northern long-eared bat** (*Myotis septentrionalis*). In Ohio, presence of the Indiana bat and northern long-eared bat is assumed wherever suitable habitat occurs unless a presence/absence survey has been performed to document absence. Suitable summer habitat for Indiana bats and northern long-eared bats consists of a wide variety of forested/wooded habitats where they roost, forage, and travel and may also include some adjacent and interspersed non-forested habitats such as emergent wetlands and adjacent edges of agricultural fields, old fields and pastures. This includes forests and woodlots containing potential roosts (i.e., live trees and/or snags ≥3 inches diameter at breast height (dbh) that have any exfoliating bark, cracks, crevices, hollows and/or cavities), as well as linear features such as fencerows, riparian forests, and other wooded corridors. These wooded areas may be dense or loose aggregates of trees with variable amounts of canopy closure. Individual trees may be considered suitable habitat when they exhibit the characteristics of a potential roost tree and are located within 1,000 feet (305 meters) of other forested/wooded habitat. Northern long-eared bats have also been observed roosting in human-made structures, such as buildings, barns, bridges, and bat houses; therefore, these structures should also be considered potential summer habitat. In the winter, Indiana bats and northern long-eared bats hibernate in caves and abandoned mines.

You have indicated that some forest clearing will be required. We recommend that trees be saved wherever possible. If any caves or abandoned mines may be disturbed, further coordination with this office is requested to determine if fall or spring portal surveys are warranted. If no caves or

abandoned mines are present and trees ≥3 inches dbh cannot be avoided, we recommend that removal of any trees ≥3 inches dbh only occur between October 1 and March 31. Seasonal clearing is being recommended to avoid adverse effects to Indiana bats and northern long-eared bats. While incidental take of northern long-eared bats from most tree clearing is exempted by a 4(d) rule (see http://www.fws.gov/midwest/endangered/mammals/nleb/index.html), incidental take of Indiana bats is still prohibited without a project-specific exemption. Thus, seasonal clearing is recommended where Indiana bats are assumed present.

If implementation of this seasonal tree cutting recommendation is not possible, summer surveys may be conducted to document the presence or probable absence of Indiana bats within the project area during the summer. If a summer survey documents probable absence of Indiana bats, the 4(d) rule for the northern long-eared bat could be applied. Surveys must be conducted by an approved surveyor and be designed and conducted in coordination with the Endangered Species Coordinator for this office. Surveyors must have a valid federal permit. Please note that summer surveys may only be conducted between June 1 and August 15.

If there is a federal nexus for the project (e.g., federal funding provided, federal permits required to construct), no tree clearing should occur on any portion of the project area until consultation under section 7 of the ESA, between the Service and the federal action agency, is completed. We recommend that the federal action agency submit a determination of effects to this office, relative to the Indiana bat and northern long-eared bat, for our review and concurrence.

The proposed project lies within the range of **running buffalo clover** (*Trifolium stoloniferum*), a federally listed endangered species. A known locations of this plant occurs within 2 miles of the proposed project. This species can be found in partially shaded woodlots, mowed areas (lawns, parks, cemeteries), and along streams and trails. Running buffalo clover requires periodic disturbance and a somewhat open habitat to successfully flourish, but cannot tolerate full-sun, full-shade, or severe disturbance. If suitable habitat is present, we recommend that surveys for this species be conducted by a trained botanist in May or June when the plant is in flower.

Due to the project type, size, and location, we do not anticipate adverse effects to any other federally endangered, threatened, proposed, or candidate species. Should the project design change, or during the term of this action, additional information on listed or proposed species or their critical habitat become available, or if new information reveals effects of the action that were not previously considered, consultation with the Service should be initiated to assess any potential impacts.

These comments have been prepared under the authority of the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661 et seq.), the ESA, and are consistent with the intent of the National Environmental Policy Act of 1969 and the Service's Mitigation Policy. This letter provides technical assistance only and does not serve as a completed section 7 consultation document. We recommend that the project be coordinated with the Ohio Department of Natural Resources due to the potential for the project to affect state listed species and/or state lands. Contact John Kessler, Environmental Services Administrator, at (614) 265-6621 or at john.kessler@dnr.state.oh.us.

If you have questions, or if I can be of further assistance in this matter, please contact me.

Sincerely,

Jenny Finfera

--
Jenny Finfera
Wildlife Biologist
Ecological Services
4625 Morse Road, Suite 104
Columbus, Ohio 43230

Phone: 614-416-8993 ext.13
Fax: 614-416-8994

ATTACHMENT D – REGULATED WATERS REPORT

gai consultants

Indianapolis Office
201 North Illinois Street
Suite 1700
Indianapolis, Indiana 46204

T 317.570.6800
F 317.570.6810

August 24, 2018

GAI Project No. D180933.00

Ms. Amanda Sheehe
Project Manager
Duke Energy
139 East 4th Street Cincinnati, OH 45202

Regulated Waters Report
F886 Rebuild into Oakley Station
Duke Energy Project No. T1510TL1
Hamilton County, Ohio

Dear Ms. Sheehe:

This report summarizes the findings of the environmental line assessment and identifies the resulting anticipated regulatory compliance requirements for the F886 Rebuild into Oakley Station Project (Project), located in Hamilton County, Ohio **(Appendix A, Figure 1)**.

This field survey effort was done as a requirement for a **Construction Notice (CN)**, submitted to **The Ohio Power Sitting Board** (**OPSB**). Results from the environmental field survey are reported below.

Project Summary

The Project will require the installation of two (2) steel pole structures (Str. HMO-26292 193 and HMO-26293 194) and four (4) spans of conductor to re-route the F886 span into a new take-off tower within Oakley Station. The current F885 span that drops into the Station will be relocated into the position of the current F886 span and the previous F886 span will be removed. The new re-route will be approximately 0.19-mile of 138 kV transmission line in Hamilton County, and will utilize two new overhead support structures. **(Appendix A, Figure 2)**. Photos of the Project area can be found in **Appendix B.**

Work Summary

A remote environmental screening review followed by an on-site field survey was completed by GAI Consultants Inc. (GAI) on August 24, 2018 in order to evaluate potential environmental impacts associated with the Project. These investigations were limited to an approximate 100 foot wide review corridor of the proposed transmission line re-alignment and associated structures.

During the field survey, it was determined that all proposed structures are easily accessible by construction equipment without heavy grading due to the proposed structures being just off Ridge Road, on Duke Energy Property.

Environmental Survey Results

Wetlands

No wetlands were identified within the study area of the Project.

Other Waterbodies

No other Waterbodies were identified within the study area of the Project.

National Wetland Inventory (NWI)

The United States Fish and Wildlife Service's (USFWS) National Wetland Inventory (NWI) maps were reviewed for potential wetland locations within the Project Area. The NWI maps were prepared from high altitude photography and in most cases were not field verified. As a result, wetlands are sometimes erroneously identified, missed, or misidentified within this data set. The presence of an NWI wetland does not necessarily constitute the presence of a wetland meeting USACE criteria. The NWI map of the area identified no NWI features in the study area.

100-yr Floodplain and Floodway

A review of the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRM) revealed that the Project Area lies within an area of minimal flood hazard and crosses no 100-year floodplains and/or floodways. There are no proposed structures to be constructed within a Regulatory Floodway.

It is GAI's opinion that construction activities as a result of this Project will not affect any environmental features and no additional permitting will be required.

Sincerely,
GAI Consultants, Inc.

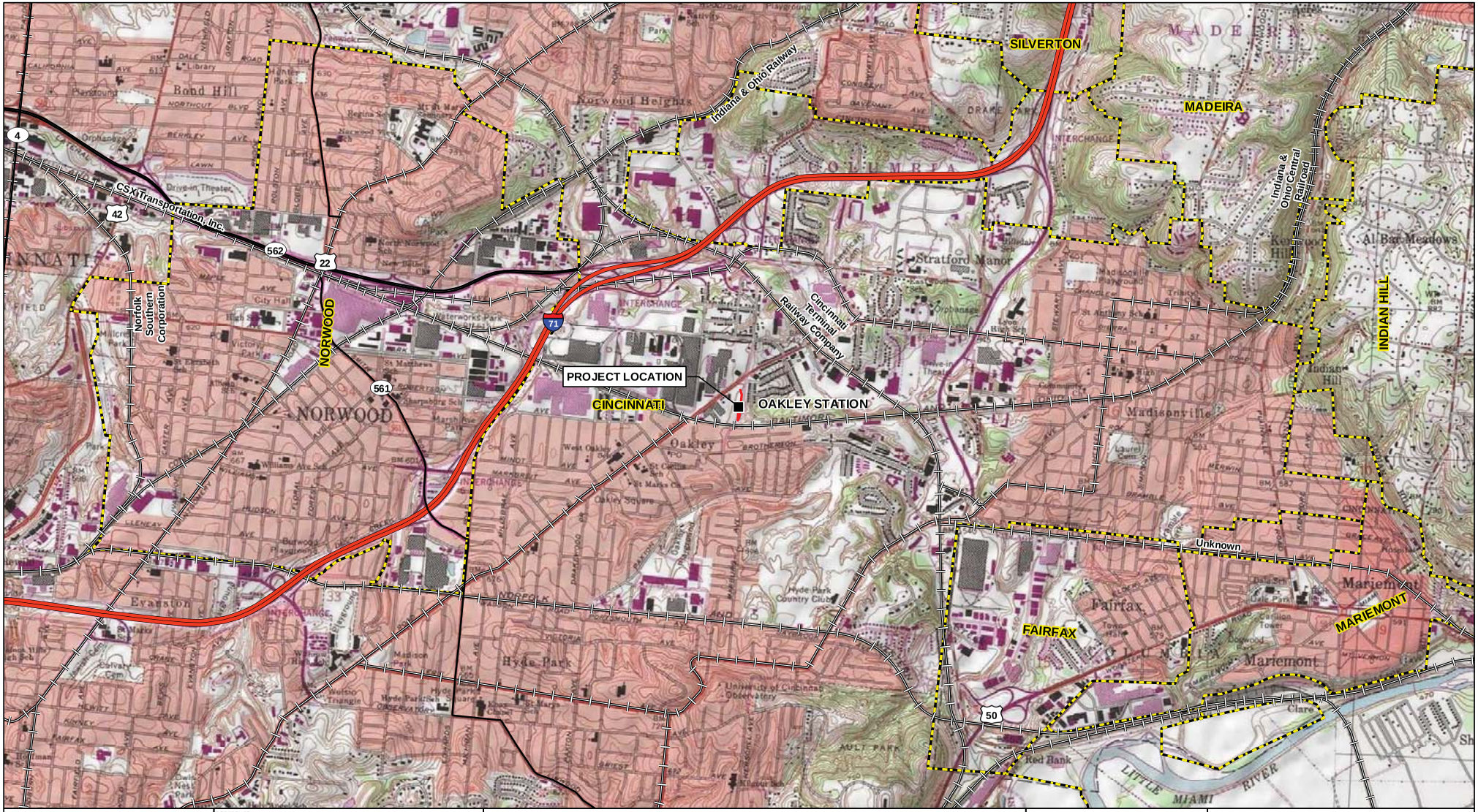
Brad Rolfes,
Environmental Specialist

Marc Walters, MPA, CPESC
Environmental Manager

BR/MW/knh

Attachments: Appendix A: Figures
Appendix B: Photographs

APPENDIX A
Figures



PROJECT LOCATION

HAMILTON COUNTY, OH

REFERENCE:
AERIAL PHOTOGRAPH:
- ESRI's World Imagery, Accessed: 10/9/2018.
INCORPORATED AREA:
- Ohio Department of Transportation's Cities, 2018.
COUNTY BOUNDARY:
- Ohio Department of Transportation's Counties, 2018.
INTERSTATE AND HIGHWAY:
- ESRI's USA Major Roads, 05/10/2018.
RAILWAY:
- Ohio Department of Transportation's Railways, 2017.
PROJECT DETAILS:
- Duke Energy.

Incorporated Area
County Boundary
Interstate Highway
State Highway
Railway
Existing Facility
Route Centerline

DUKE ENERGY.

gai consultants

0 1,000 2,000 Feet

1 in = 2,000 feet

FIGURE 1
PROJECT LOCATION

Ohio Power Siting Board Regulated Waters Assessment Report

F886 Rebuild into Oakley Station Project

DRAWN BY: PPD
CHECKED: TDB
DATE: 10/9/2018
APPROVED: MRW

\\srvwpitfs16\BUProjects\GIS.Projects\D180933.00 - GIS\MXD\Regulated_Waters_Assessment\D180933_00_Oakley_RWA_FIG1_Project_Location_2018_10_09.mxd

PROJECT LOCATION

HAMILTON COUNTY, OH

REFERENCE:
AERIAL PHOTOGRAPH:
- ESRI's World Imagery. Accessed: 10/9/2018.

INCORPORATED AREA:
- Ohio Department of Transportation's Cities, 2018.

COUNTY BOUNDARY:
- Ohio Department of Transportation's Counties, 2018.

FLOODPLAIN AND FLOODWAY:
- Federal Emergency Management Agency's National Flood Hazard Layer, 2018.

INTERSTATE AND HIGHWAY:
- ESRI's USA Major Roads, 05/10/2018.

LOCAL ROAD:
- Ohio Department of Transportation's Roads, 2017.

RAILWAY:
- Ohio Department of Transportation's Railways, 2017.

NHD FLOWLINE:
- United States Geological Survey's National Hydrography Dataset Best Resolution, 2018.

NWI WETLAND:
- United States Fish and Wildlife Service's National Wetland Inventory, 2018.

PARCEL BOUNDARY:
- Hamilton County Parcels, 2018.

PROJECT DETAILS:
- Duke Energy.

- Incorporated Area
- County Boundary
- Interstate Highway
- US Highway
- State Highway
- Local Road
- Railway
- Existing Structure
- Proposed Structure
- Existing Facility
- Route Centerline
- Study Area
- NHD Flowline
- NWI Wetland
- 100-Year Floodplain
- Floodway
- Parcel Boundary

DUKE ENERGY.

gai consultants

0 100 200 Feet

1 in = 200 feet

FIGURE 2
RESOURCE LOCATION

Ohio Power Siting Board Regulated Waters Assessment Report

SHEET 1 of 1

F886 Rebuild into Oakley Station Project

DRAWN BY: PPD
CHECKED: TDB
DATE: 10/9/2018
APPROVED: MRW

\\srvwpitfs16\BUProjects\GIS.Projects\D180933.00 - GIS\MXD\Regulated_Waters_Assessment\D180933_00_Oakley_RWA_FIG2_Resource_Location_2018_10_09.mxd

APPENDIX B
Photographs

Photograph 1. Oakley Substation, across Ridge Road.

Photograph 2. Ridge Road, looking North.

Photograph 3. Tie in structure (T12-X3-192)

Photograph 4. Wooded lot, in the viscinity of Proposed strucutre (HMO-26292 193).

Photograph 5. Cleared area, in the viscinity of Proposed strucutre (HMO-26292 193) adjacent to Ridge Road.

Photograph 6. Oakley Substation, from across Ridge Road, next to tie in structure (T12-X3-192).

Photograph 7: Looking towards the Proposed Structure (HMO-26293 194) - Northwest.

Photograph 8: Access to tie in structure (T12-X3-192), looking West.

Photograph 9: Access road to tie in sturcuture (T12-X3-192), via Orkney Ave.