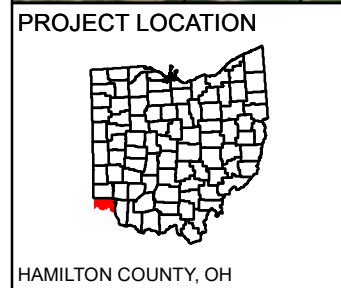
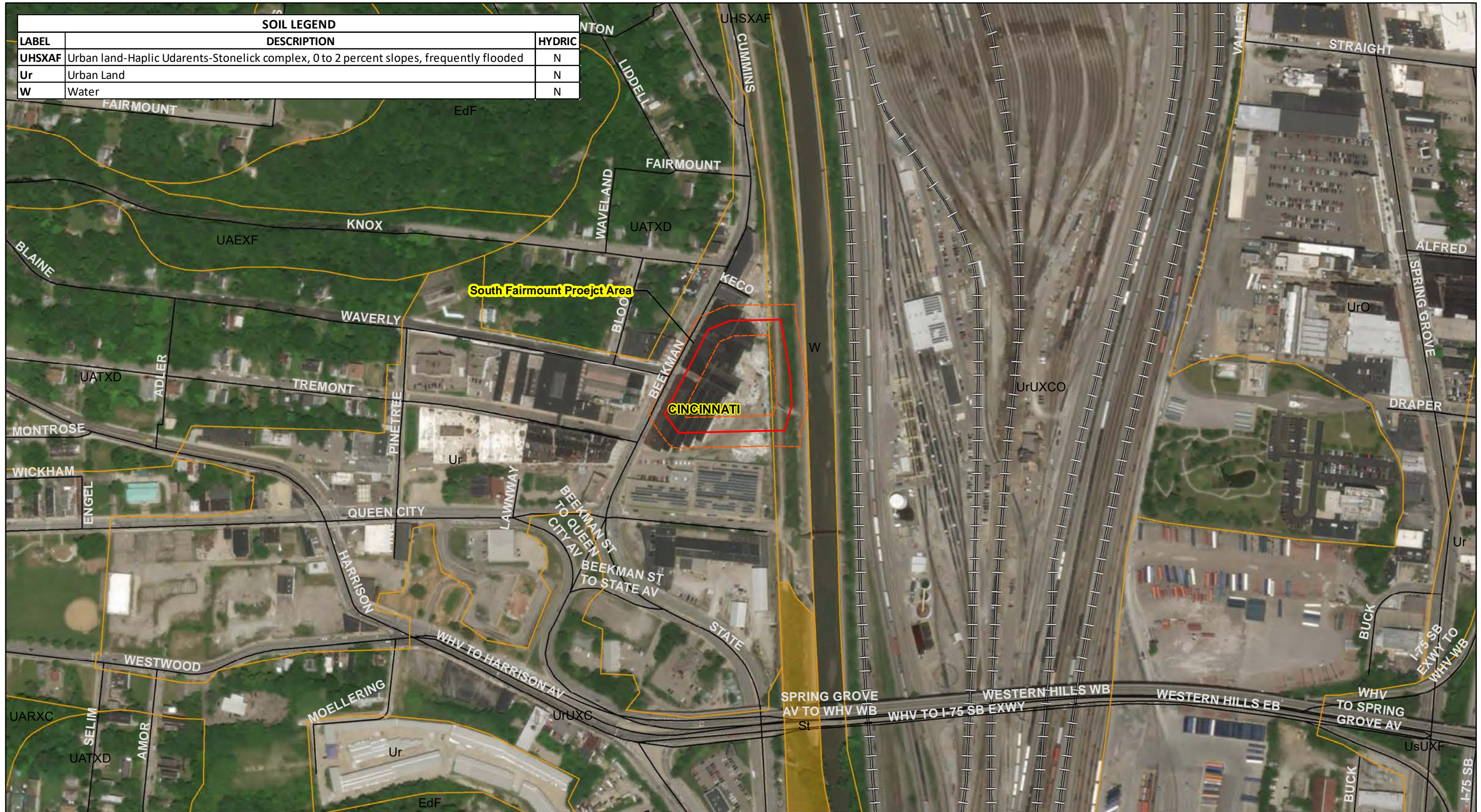


SOIL LEGEND		
LABEL	DESCRIPTION	HYDRIC
UHSXAF	Urban land-Haplic Udarents-Stonelick complex, 0 to 2 percent slopes, frequently flooded	N
Ur	Urban Land	N
W	Water	N



REFERENCE: USGS 7.5' TOPOGRAPHIC QUADRANGLE: CINCINNATI WEST AND CONVINGTON. OBTAINED VIA ESRI USA TOPO, NATIONAL GEOGRAPHIC TOPO, AND USGS, ACCESSED 01/2017.

0 165 330 660 Feet

- Existing Facility
- Project Centerline
- 100ft Corridor
- Municipal Boundary
- Soil Unit
- Soil Unit - Hydric
- Interstate
- State Highway
- US Highway
- Railroad

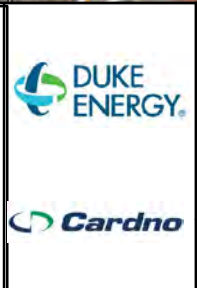


FIGURE:3
STORMWATER POLLUTION PREVENTION PLAN
F1286 138kV SOUTH FAIRMOUNT LOOP
DUKE ENERGY
SOIL CLASSIFICATIONS

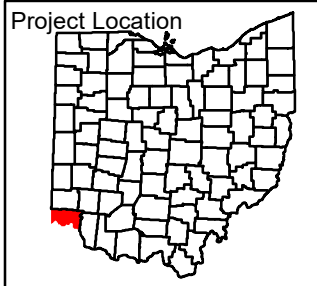
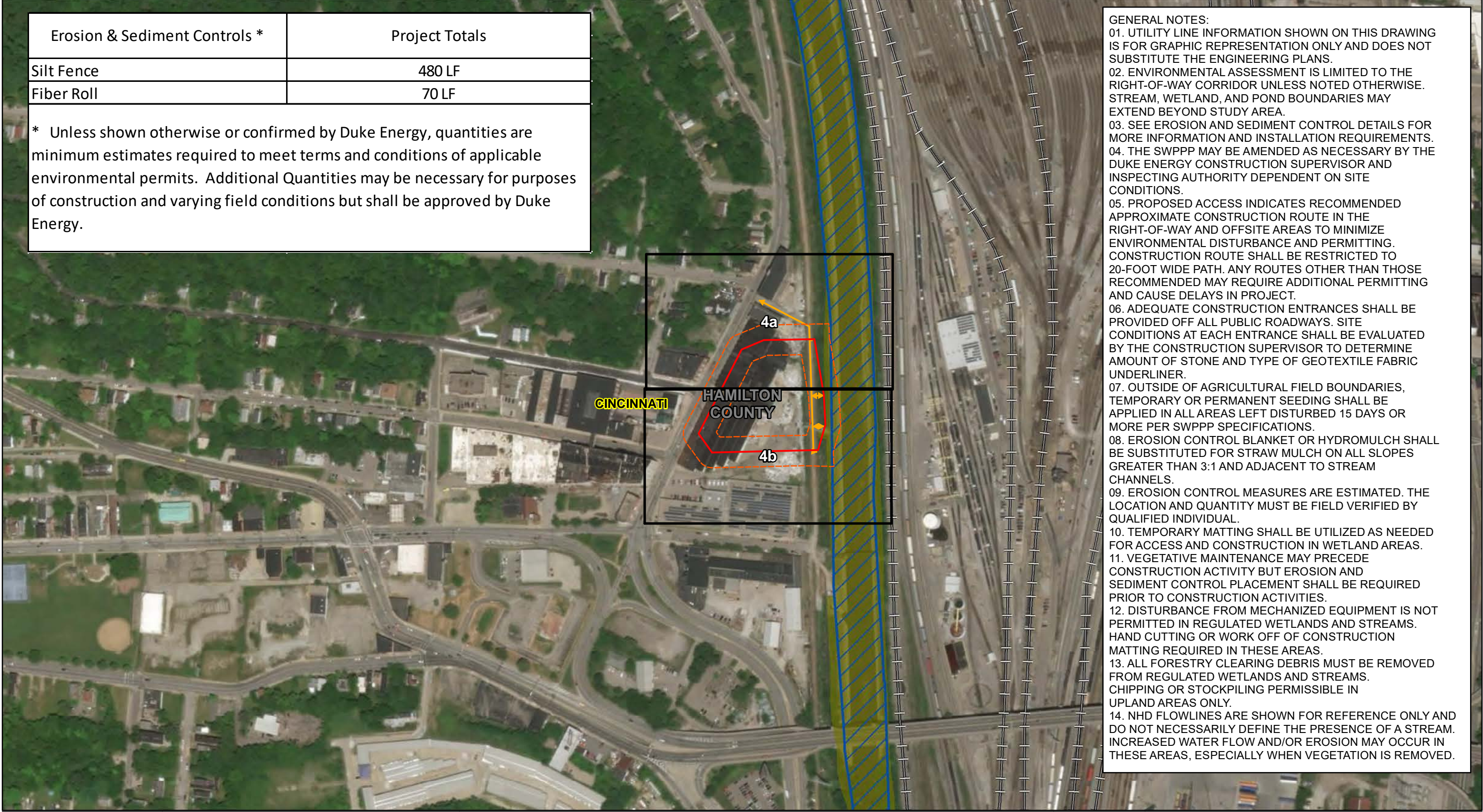
DRAWN BY: COD DATE: 11/8/2018
 CHECKED: CJ APPROVED: JT

Erosion & Sediment Controls *	Project Totals
Silt Fence	480 LF
Fiber Roll	70 LF

* Unless shown otherwise or confirmed by Duke Energy, quantities are minimum estimates required to meet terms and conditions of applicable environmental permits. Additional Quantities may be necessary for purposes of construction and varying field conditions but shall be approved by Duke Energy.

GENERAL NOTES:

- UTILITY LINE INFORMATION SHOWN ON THIS DRAWING IS FOR GRAPHIC REPRESENTATION ONLY AND DOES NOT SUBSTITUTE THE ENGINEERING PLANS.
- ENVIRONMENTAL ASSESSMENT IS LIMITED TO THE RIGHT-OF-WAY CORRIDOR UNLESS NOTED OTHERWISE. STREAM, WETLAND, AND POND BOUNDARIES MAY EXTEND BEYOND STUDY AREA.
- SEE EROSION AND SEDIMENT CONTROL DETAILS FOR MORE INFORMATION AND INSTALLATION REQUIREMENTS.
- THE SWPPP MAY BE AMENDED AS NECESSARY BY THE DUKE ENERGY CONSTRUCTION SUPERVISOR AND INSPECTING AUTHORITY DEPENDENT ON SITE CONDITIONS.
- PROPOSED ACCESS INDICATES RECOMMENDED APPROXIMATE CONSTRUCTION ROUTE IN THE RIGHT-OF-WAY AND OFFSITE AREAS TO MINIMIZE ENVIRONMENTAL DISTURBANCE AND PERMITTING. CONSTRUCTION ROUTE SHALL BE RESTRICTED TO 20-FOOT WIDE PATH. ANY ROUTES OTHER THAN THOSE RECOMMENDED MAY REQUIRE ADDITIONAL PERMITTING AND CAUSE DELAYS IN PROJECT.
- ADEQUATE CONSTRUCTION ENTRANCES SHALL BE PROVIDED OFF ALL PUBLIC ROADWAYS. SITE CONDITIONS AT EACH ENTRANCE SHALL BE EVALUATED BY THE CONSTRUCTION SUPERVISOR TO DETERMINE AMOUNT OF STONE AND TYPE OF GEOTEXTILE FABRIC UNDERLINER.
- OUTSIDE OF AGRICULTURAL FIELD BOUNDARIES, TEMPORARY OR PERMANENT SEEDING SHALL BE APPLIED IN ALL AREAS LEFT DISTURBED 15 DAYS OR MORE PER SWPPP SPECIFICATIONS.
- EROSION CONTROL BLANKET OR HYDROMULCH SHALL BE SUBSTITUTED FOR STRAW MULCH ON ALL SLOPES GREATER THAN 3:1 AND ADJACENT TO STREAM CHANNELS.
- EROSION CONTROL MEASURES ARE ESTIMATED. THE LOCATION AND QUANTITY MUST BE FIELD VERIFIED BY QUALIFIED INDIVIDUAL.
- TEMPORARY MATTING SHALL BE UTILIZED AS NEEDED FOR ACCESS AND CONSTRUCTION IN WETLAND AREAS.
- VEGETATIVE MAINTENANCE MAY PRECEDE CONSTRUCTION ACTIVITY BUT EROSION AND SEDIMENT CONTROL PLACEMENT SHALL BE REQUIRED PRIOR TO CONSTRUCTION ACTIVITIES.
- DISTURBANCE FROM MECHANIZED EQUIPMENT IS NOT PERMITTED IN REGULATED WETLANDS AND STREAMS. HAND CUTTING OR WORK OFF OF CONSTRUCTION MATTING REQUIRED IN THESE AREAS.
- ALL FORESTRY CLEARING DEBRIS MUST BE REMOVED FROM REGULATED WETLANDS AND STREAMS. CHIPPING OR STOCKPILING PERMISSIBLE IN UPLAND AREAS ONLY.
- NHD FLOWLINES ARE SHOWN FOR REFERENCE ONLY AND DO NOT NECESSARILY DEFINE THE PRESENCE OF A STREAM. INCREASED WATER FLOW AND/OR EROSION MAY OCCUR IN THESE AREAS, ESPECIALLY WHEN VEGETATION IS REMOVED.



REFERENCE:
ESRI WORLD IMAGERY, OBTAINED THROUGH ESRI WORLD IMAGERY MICROSOFT CORPORATION, ACCESSED 01/2017

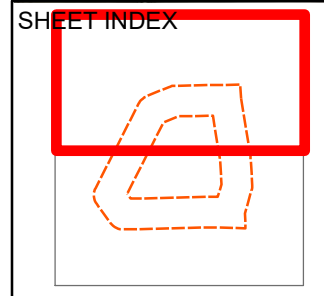
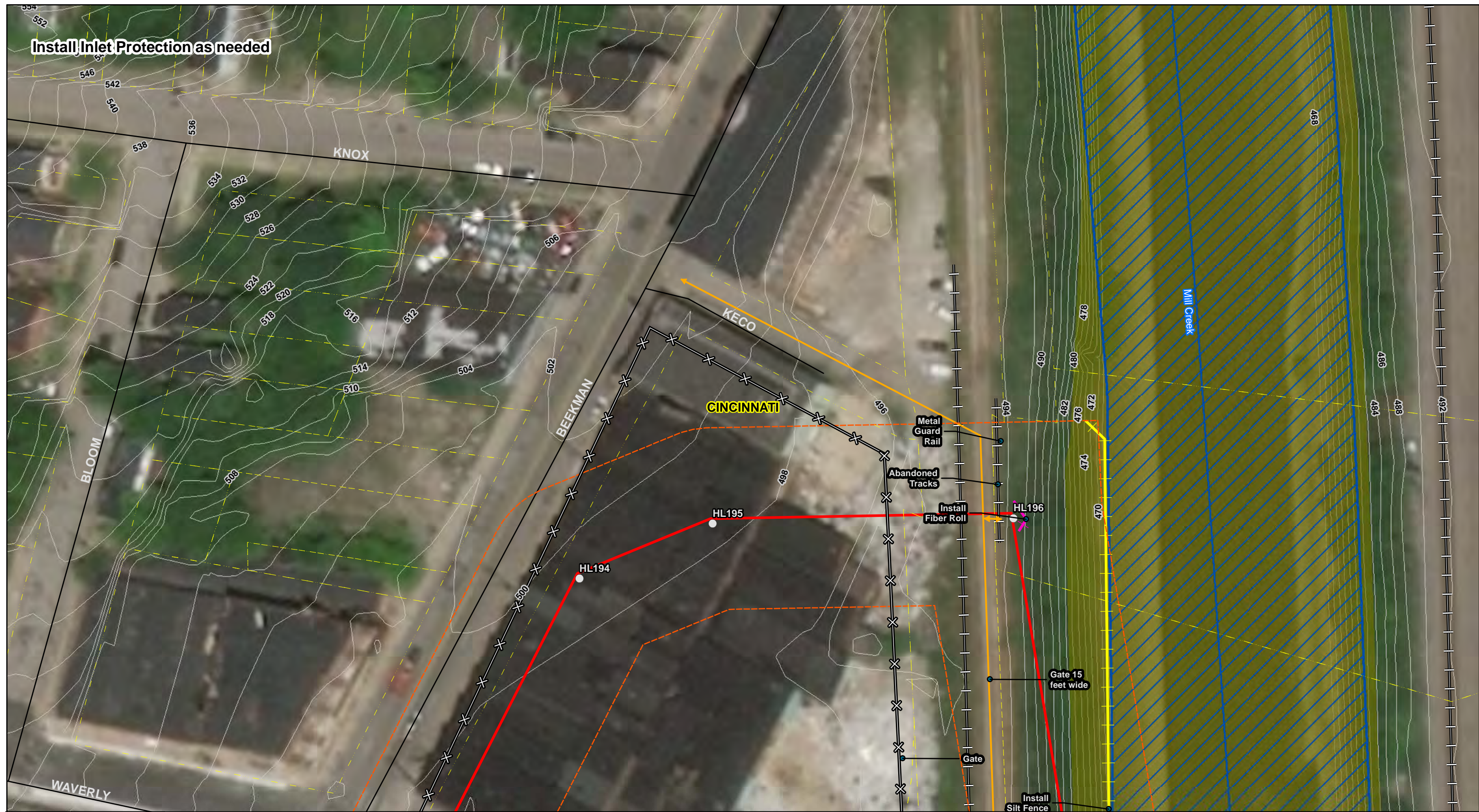
0 200 400 800 Feet

Sheet Index	NHD Flowline	County Boundary
100ft Corridor	Interstate	Municipal Boundary
Existing Facility	State Highway	100Yr Floodplain
Project Centerline	US Highway	NWI Wetland
Potential Access	Railroad	



FIGURE: 4
STORMWATER POLLUTION PREVENTION PLAN
F1286 138kV SOUTH FAIRMOUNT LOOP
DUKE ENERGY
INDEX SHEET

DRAWN BY: COD DATE: 11/6/2018
CHECKED: CJ APPROVED: JT



REFERENCE:
 ESRI WORLD IMAGERY, OBTAINED
 THROUGH ESRI WORLD IMAGERY
 MICROSOFT CORPORATION,
 ACCESSED 01/2017

N

0 20 40 80
 Feet

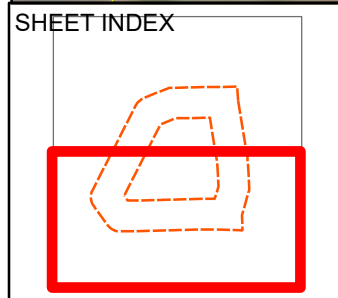
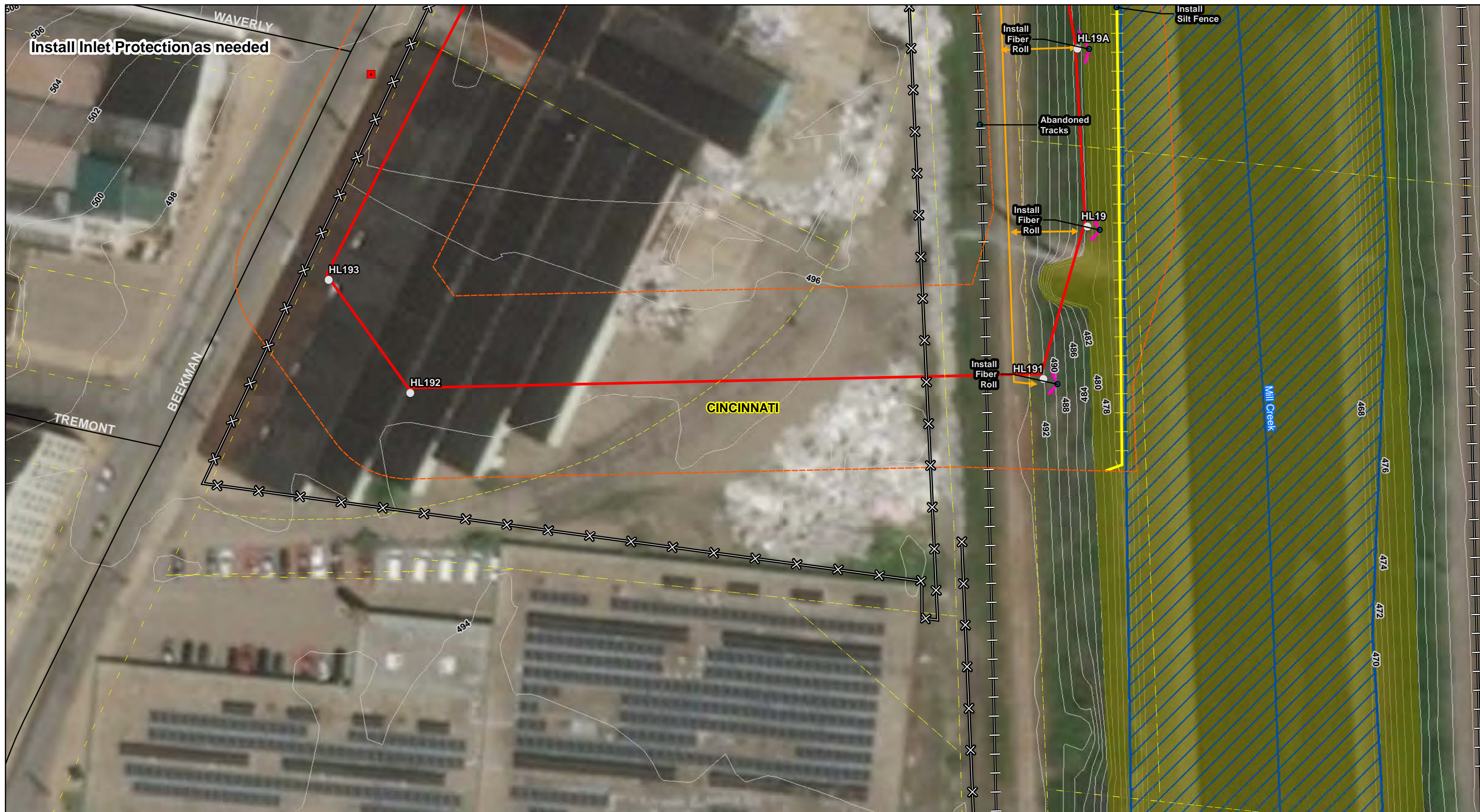
■ Existing Facility	— Fiber Roll	— US Highway	▭ Municipal Boundary
● Identified Feature	— Silt Fence	— Railroad	— 1' Contour Line
■ Stormwater Inlet	— Potential Access	— Project Centerline	▭ Parcels
○ Proposed Structure	— Interstate	— State Highway	— Fence Line
● Existing Structure	— 100ft Corridor	▭ NWI Wetland	— NHD Flowline
		▭ 100Yr Floodplain	



FIGURE 4a
 STORMWATER POLLUTION PREVENTION PLAN
 F1286 138kV SOUTH FAIRMOUNT LOOP
 DUKE ENERGY
 ENVIRONMENTAL ACCESS/ EROSION CONTROL PLAN

DRAWN BY: COD
 CHECKED: CJ

DATE: 11/2/2018
 APPROVED: JT



REFERENCE:
 ESRI WORLD IMAGERY, OBTAINED
 THROUGH ESRI WORLD IMAGERY
 MICROSOFT CORPORATION,
 ACCESSED 01/2017

N

0 20 40 80 Feet

■ Existing Facility	—+— Fiber Roll	— US Highway	▭ Municipal Boundary
● Identified Feature	—+— Silt Fence	— Railroad	— 1' Contour Line
■ Stormwater Inlet	—+— Potential Access	— Project Centerline	▭ Parcels
○ Proposed Structure	— Interstate	— State Highway	— Fence Line
● Existing Structure	— State Highway	▭ NWI Wetland	— NHD Flowline
▭ 100ft Corridor		▭ 100Yr Floodplain	



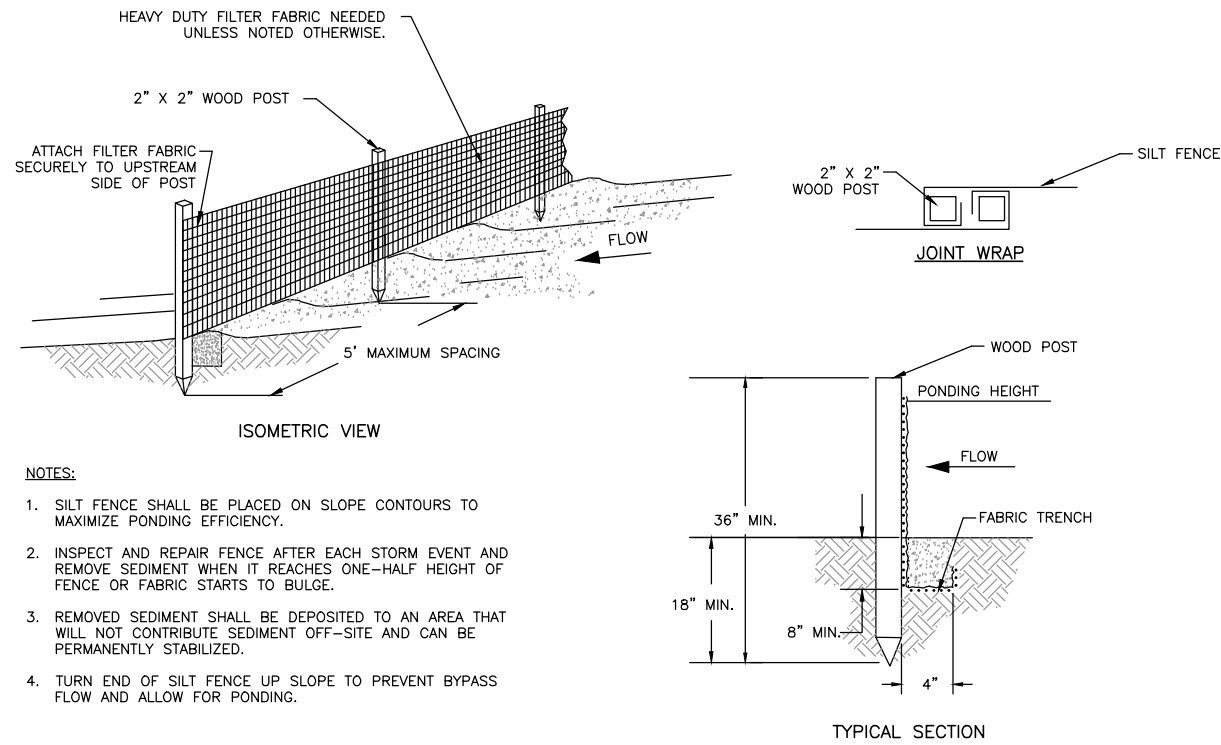
FIGURE 4b
 STORMWATER POLLUTION PREVENTION PLAN
 F1286 138kV SOUTH FAIRMOUNT LOOP
 DUKE ENERGY
 ENVIRONMENTAL ACCESS/ EROSION CONTROL PLAN

DRAWN BY: COD
 CHECKED: CJ

DATE: 11/2/2018
 APPROVED: JT

Appendix B

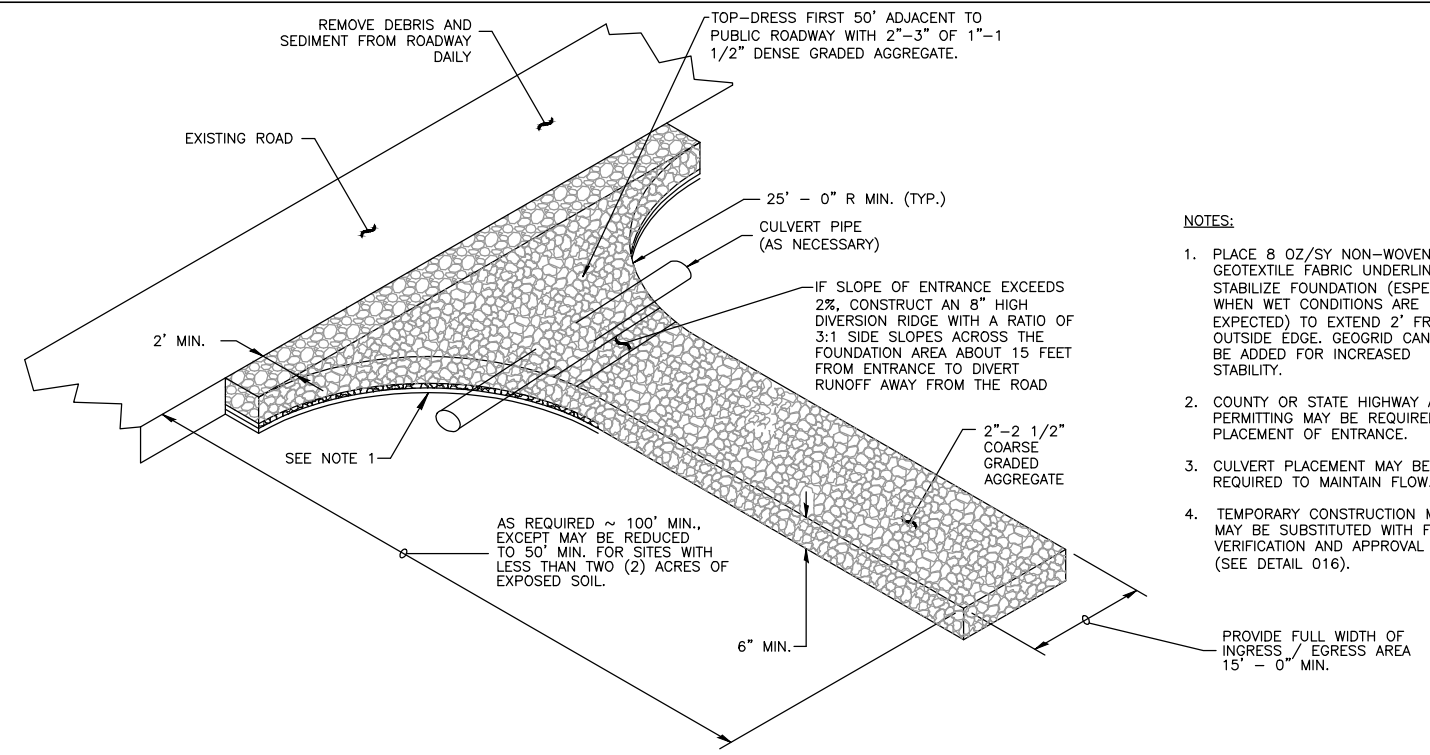
Storm Water Pollution Prevention Plan Typical Details



- NOTES:**
- SILT FENCE SHALL BE PLACED ON SLOPE CONTOURS TO MAXIMIZE PONDING EFFICIENCY.
 - INSPECT AND REPAIR FENCE AFTER EACH STORM EVENT AND REMOVE SEDIMENT WHEN IT REACHES ONE-HALF HEIGHT OF FENCE OR FABRIC STARTS TO BULGE.
 - REMOVED SEDIMENT SHALL BE DEPOSITED TO AN AREA THAT WILL NOT CONTRIBUTE SEDIMENT OFF-SITE AND CAN BE PERMANENTLY STABILIZED.
 - TURN END OF SILT FENCE UP SLOPE TO PREVENT BYPASS FLOW AND ALLOW FOR PONDING.

SILT FENCE

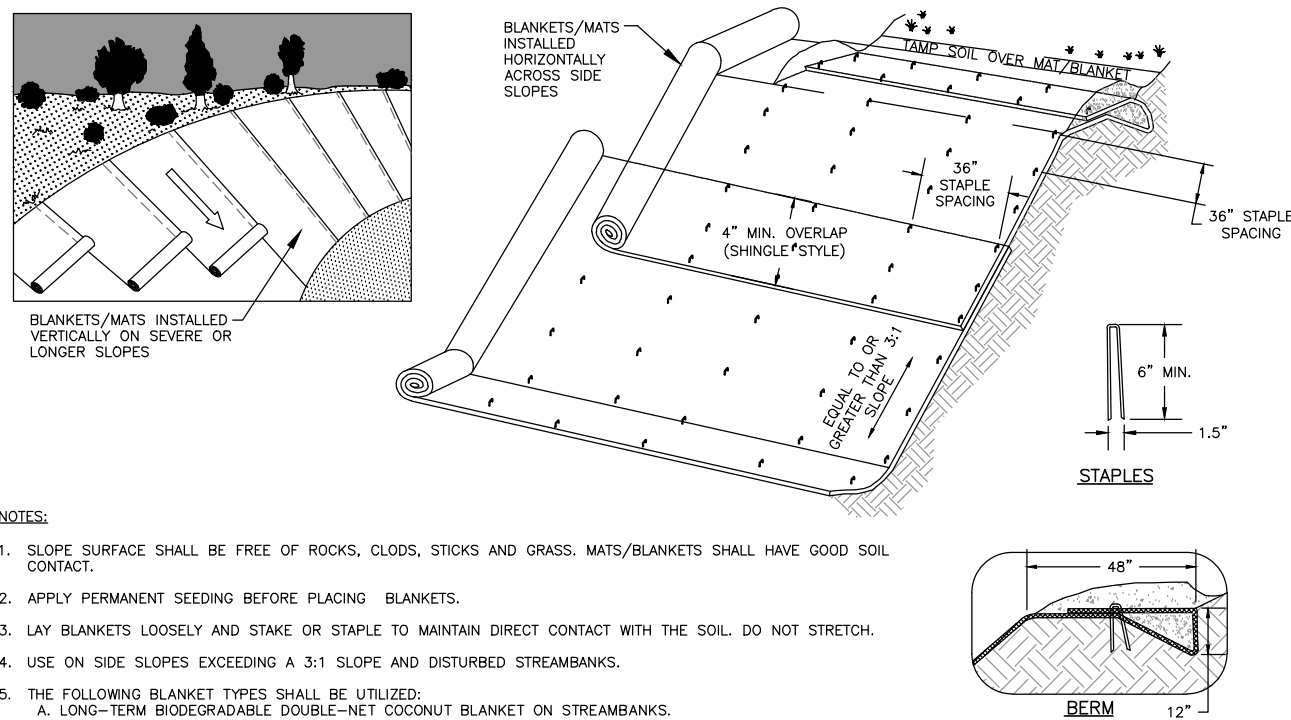
001



- NOTES:**
- PLACE 8 OZ/SY NON-WOVEN GEOTEXTILE FABRIC UNDERLINER TO STABILIZE FOUNDATION (ESPECIALLY WHEN WET CONDITIONS ARE EXPECTED) TO EXTEND 2' FROM OUTSIDE EDGE. GEOGRID CAN ALSO BE ADDED FOR INCREASED STABILITY.
 - COUNTY OR STATE HIGHWAY ACCESS PERMITTING MAY BE REQUIRED FOR PLACEMENT OF ENTRANCE.
 - CULVERT PLACEMENT MAY BE REQUIRED TO MAINTAIN FLOW.
 - TEMPORARY CONSTRUCTION MATTING MAY BE SUBSTITUTED WITH FIELD VERIFICATION AND APPROVAL (SEE DETAIL 016).

TEMPORARY CONSTRUCTION ENTRANCE

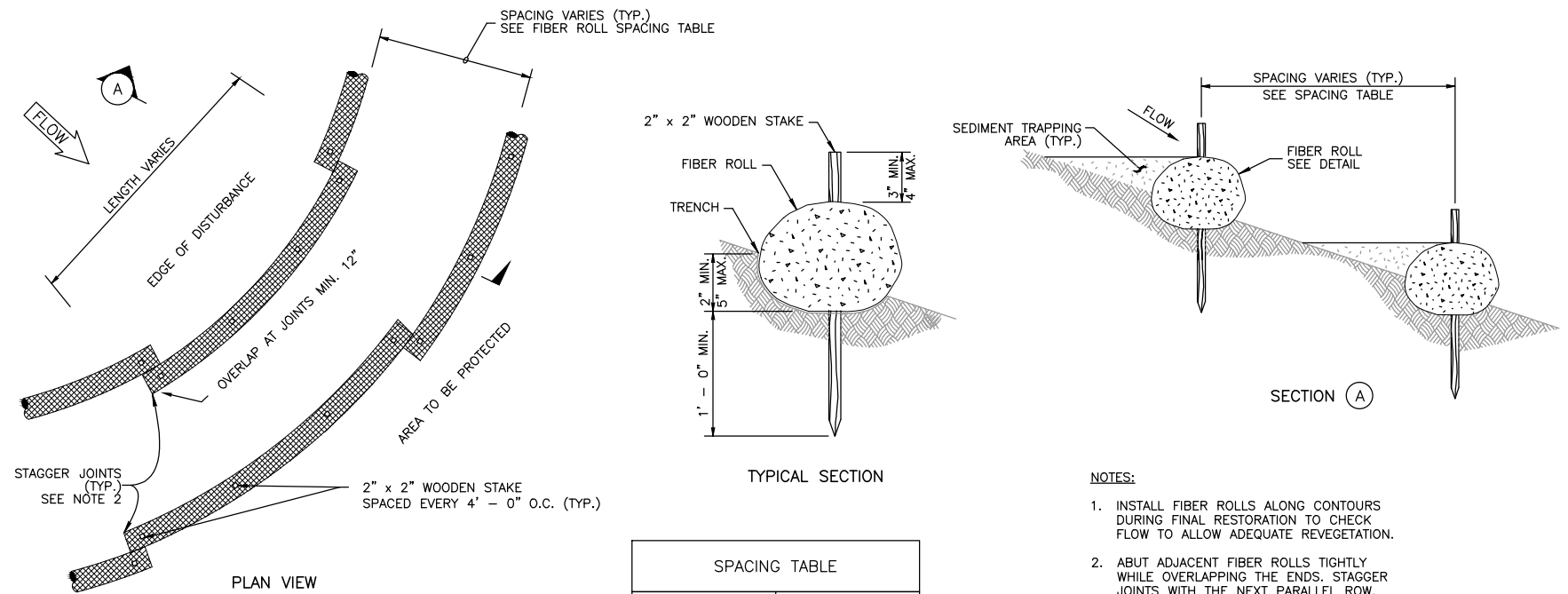
002



- NOTES:**
- SLOPE SURFACE SHALL BE FREE OF ROCKS, CLODS, STICKS AND GRASS. MATS/BLANKETS SHALL HAVE GOOD SOIL CONTACT.
 - APPLY PERMANENT SEEDING BEFORE PLACING BLANKETS.
 - LAY BLANKETS LOOSELY AND STAKE OR STAPLE TO MAINTAIN DIRECT CONTACT WITH THE SOIL. DO NOT STRETCH.
 - USE ON SIDE SLOPES EXCEEDING A 3:1 SLOPE AND DISTURBED STREAMBANKS.
 - THE FOLLOWING BLANKET TYPES SHALL BE UTILIZED:
 - LONG-TERM BIODEGRADABLE DOUBLE-NET COCONUT BLANKET ON STREAMBANKS.
 - SHORT-TERM BIODEGRADABLE DOUBLE-NET STRAW BLANKET ON 3:1 SLOPES OR GREATER.
 - SHORT-TERM BIODEGRADABLE SINGLE-NET STRAW ON LESSER SLOPES, FLAT FLOODPLAIN, AND WORKSPACE AREAS.
 - FOR STREAMBANK STABILIZATION;
 - TUCK/UNDERLAP BASE OF BLANKET TO PREVENT HIGH WATER FROM REMOVING BLANKET AND SEED.
 - STAPLE SPACING MAY NEED TO BE DECREASED.
 - PREPARE SUBGRADE PRIOR TO INSTALLING BLANKET BY REMOVING DISPLACED ROCKS AND WOODY DEBRIS.

EROSION CONTROL BLANKET

003



- NOTES:**
- INSTALL FIBER ROLLS ALONG CONTOURS DURING FINAL RESTORATION TO CHECK FLOW TO ALLOW ADEQUATE REVEGETATION.
 - ABUT ADJACENT FIBER ROLLS TIGHTLY WHILE OVERLAPPING THE ENDS. STAGGER JOINTS WITH THE NEXT PARALLEL ROW.
 - PILOT HOLES MAY BE DRIVEN THROUGH THE FIBER ROLLS AND INTO THE SOIL WHEN SOIL CONDITIONS REQUIRE.
 - FIBER ROLLS SHALL BE INSPECTED REGULARLY, AND IMMEDIATELY AFTER A RAINFALL PRODUCES RUNOFF, TO ENSURE THEY REMAIN THOROUGHLY ENTRENCHED AND IN CONTACT WITH THE SOIL.
 - A SINGLE ROW MAY BE INSTALLED ON FLAT SLOPES.

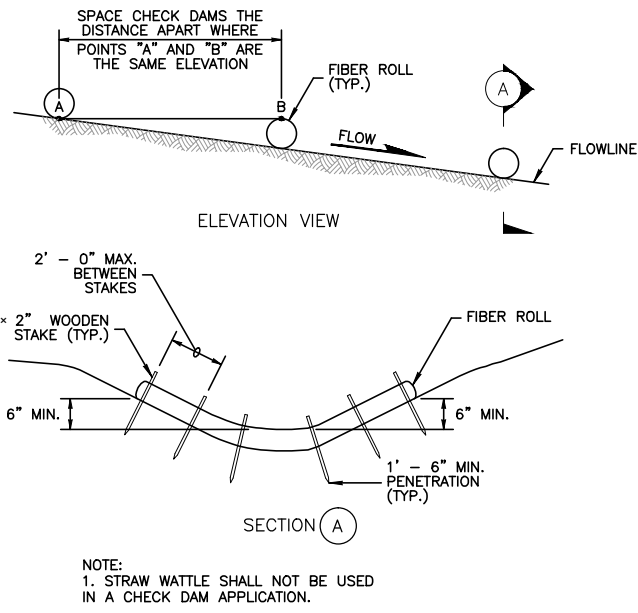
FIBER ROLL

005

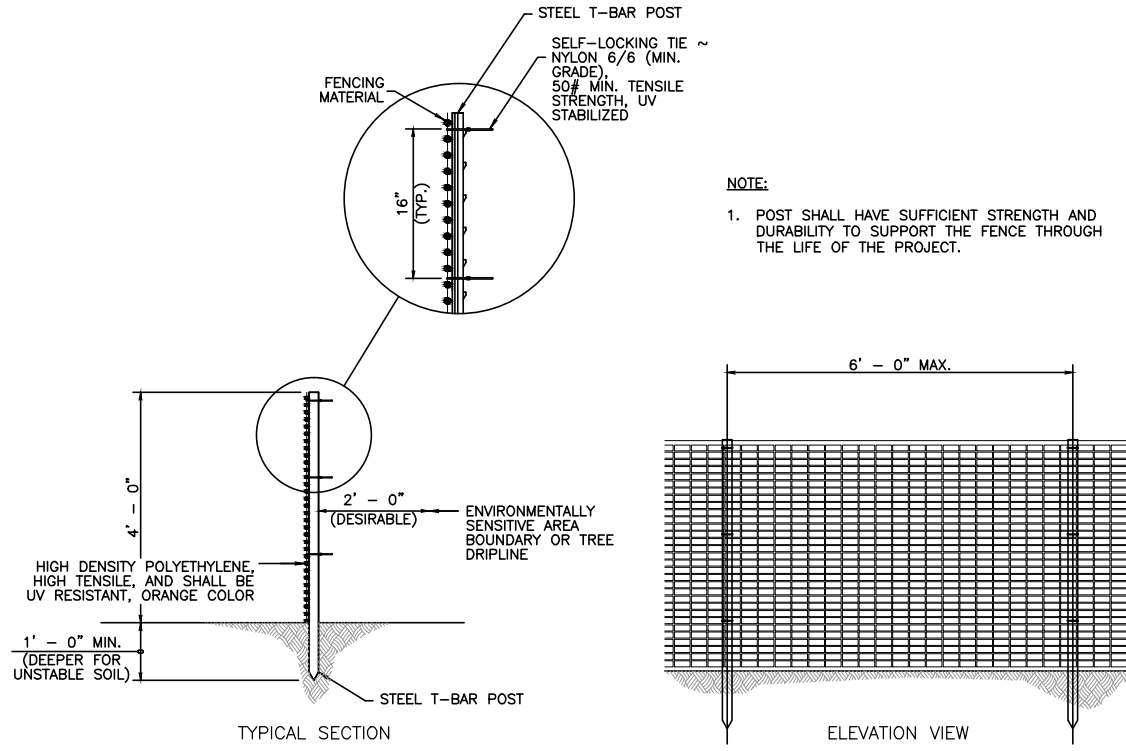
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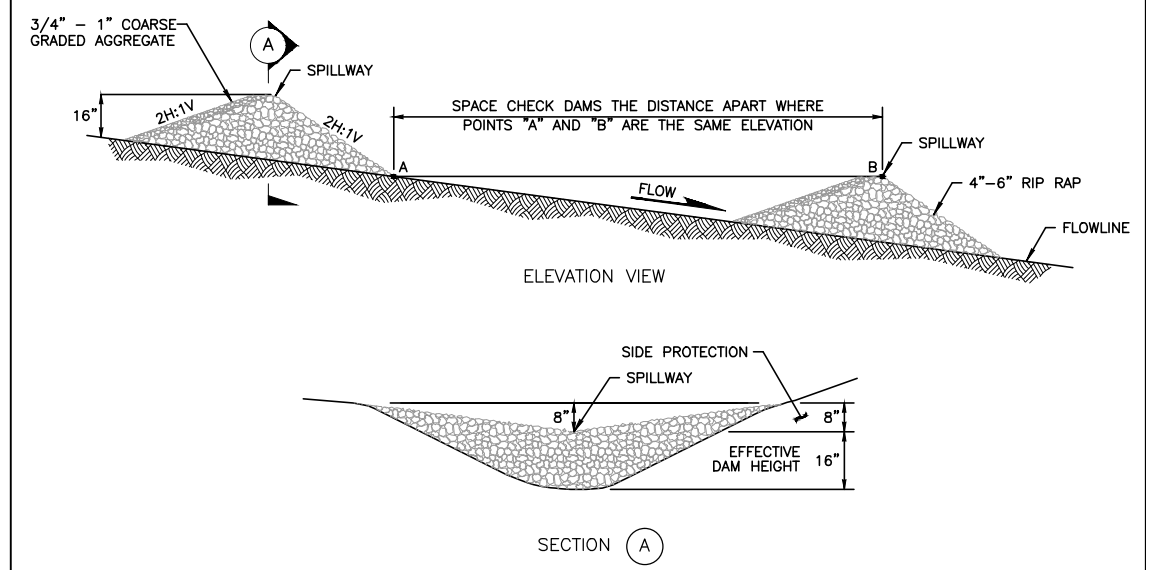
REVISIONS				DESIGN BY	DATE	DUKE ENERGY	SCALE	
NO.	DATE	DESCRIPTION	APPROVED BY	CAM/MRW	12/18/2015			N.T.S.
								STORM WATER POLLUTION PREVENTION PLAN TYPICAL DETAILS
						SHEET	OF	
								1



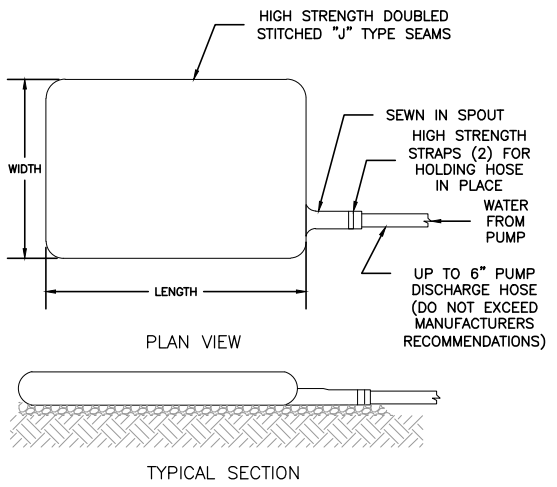
FIBER ROLL CHECK DAM 006



CONSTRUCTION BARRIER FENCING 007



ROCK CHECK DAM 008

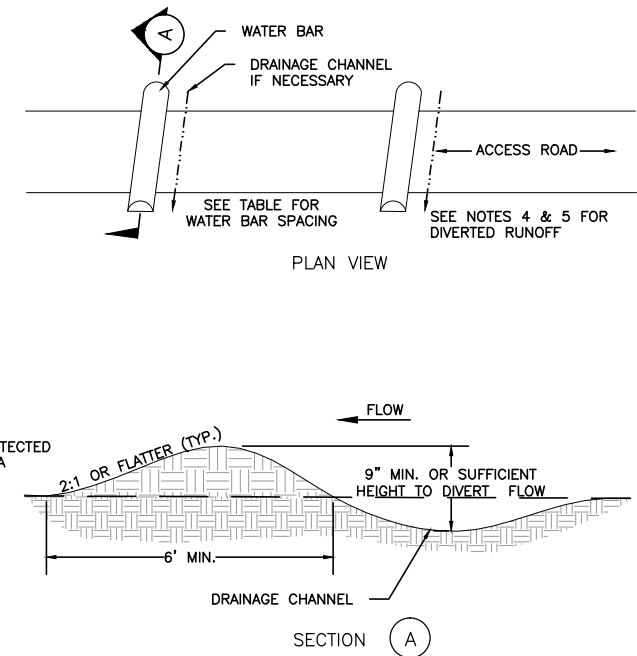


- NOTES:
1. THE NECK OF THE FILTER BAG SHALL BE TIGHTLY STRAPPED (MINIMUM TWO STRAPS) TO THE DISCHARGE HOSE.
 2. THE FILTER BAG IS FULL WHEN IT NO LONGER CAN EFFICIENTLY FILTER SEDIMENT OR PASS WATER AT A REASONABLE RATE.
 3. FLOW RATES VARY DEPENDING ON THE SIZE OF THE DEWATERING DEVICE, AMOUNT OF SEDIMENT DISCHARGED INTO THE DEWATERING DEVICE, THE TYPE OF GROUND, ROCK, OR OTHER SUBSTANCE UNDER THE BAG AND THE DEGREE OF THE SLOPE ON WHICH THE BAG LIES. THE FILTER BAG SHOULD BE SIZED TO ACCOMMODATE THE ANTICIPATED FLOW RATES FROM THE TYPE OF PUMP USED. TYPICALLY FILTER BAGS CAN HANDLE FLOW RATES OF UP TO 1000 GALLONS PER MINUTE, BUT IN ALL CASES FOLLOW THE MANUFACTURERS RECOMMENDATIONS FOR FLOW RATES.
 4. USE OF EXCESSIVE FLOW RATES OR OVERFILLING THE DEWATERING DEVICE WITH SEDIMENT WILL CAUSE RUPTURES OF THE BAG OR FAILURE OF THE HOSE ATTACHMENT STRAPS.
 5. THE FILTER BAG SHALL BE REMOVED AND DISPOSED OF OFFSITE..
 6. EACH STANDARD DEWATERING DEVICE SHALL HAVE A FILL SPOUT LARGE ENOUGH TO ACCOMMODATE THE DISCHARGE HOSE. USE TWO STAINLESS STEEL STRAPS TO SECURE THE HOSE AND PREVENT PUMPED WATER FROM ESCAPING WITHOUT BEING FILTERED.
 7. THE DEWATERING DEVICE SHALL BE A NONWOVEN BAG, WHICH IS SEWN WITH A DOUBLE NEEDLE STITCHING USING A HIGH STRENGTH THREAD.
 8. THE DEWATERING DEVICE SEAMS SHALL HAVE AN AVERAGE WIDE WITH STRENGTH PER ASTM D 4884 OF 100 LB/IN.
 9. THE GEOTEXTILE FABRIC SHALL BE A NONWOVEN FABRIC WITH THE FOLLOWING PROPERTIES:

PROPERTIES	TEST METHOD	ENGLISH	METRIC
GRAB TENSILE	ASTM D - 4632	250 LBS.	113 KG
PUNCTURE	ASTM D - 4833	165 LBS.	75 KG
FLOW RATE	ASTM D - 4491	70 GAL./MIN./SQ FT	25 LITERS./MIN./SQ METER
PERMITIVITY	ASTM D - 4491	1.3 SEC. - 1	1.3 SEC. - 1
MULLEN BURST	ASTM D - 3786	550 LBS./SQ INCH	3.79 Mpa
UV RESISTANT	ASTM D - 4355	70%	70%
AOS % RETAINED	ASTM D - 4751	100%	100%

*ALL PROPERTIES ARE MINIMUM AVERAGE ROLL VALUE

DEWATERING BAG 009



- NOTES:
1. SIDE SLOPES OF WATER BAR SHALL BE CONSTRUCTED SUFFICIENTLY FLAT TO ACCOMMODATE THE EXPECTED TRAFFIC.
 2. THE SPACING BETWEEN WATER BARS SHALL BE AS NOTED (SEE SPACING TABLE):

WATER BAR SPACING TABLE

ROAD GRADE (%)	DISTANCE (FT.)
1	400
2	250
5	135
10	80
15	60
20	45

3. THE FIELD LOCATION SHALL BE ADJUSTED AS NEEDED TO PROVIDE A STABILIZED SAFE OUTLET.
4. DRAINAGE CHANNELS SHALL BE DIRECTED ONTO STABLE VEGETATIVE AREA OR A SEDIMENT TRAP OR A BASIN IF CONTRIBUTING AREA IS NOT STABLE.
5. DRAINAGE CHANNELS SHALL BE CONSTRUCTED WITH ≤ 2% WITH POSITIVE OUTLET TO STABLE AREA.
6. DIVERSIONS/WATER BARS SHALL BE COMPACTED BY TRAVERSING WITH EQUIPMENT DURING CONSTRUCTION.
7. THE WATER BARS SHALL BE ANGLED SLIGHTLY DOWNSLOPE ACROSS THE CENTERLINE OF THE TRAVEL LANE.

WATER BAR 010

REVISIONS

NO.	DATE	DESCRIPTION	APPROVED BY

DESIGN BY
CAM/MRW

DATE
12/18/2015

DRAWN BY
KTH

JOB NO.
--

CHECKED BY
MRW

APPROVED
CAM

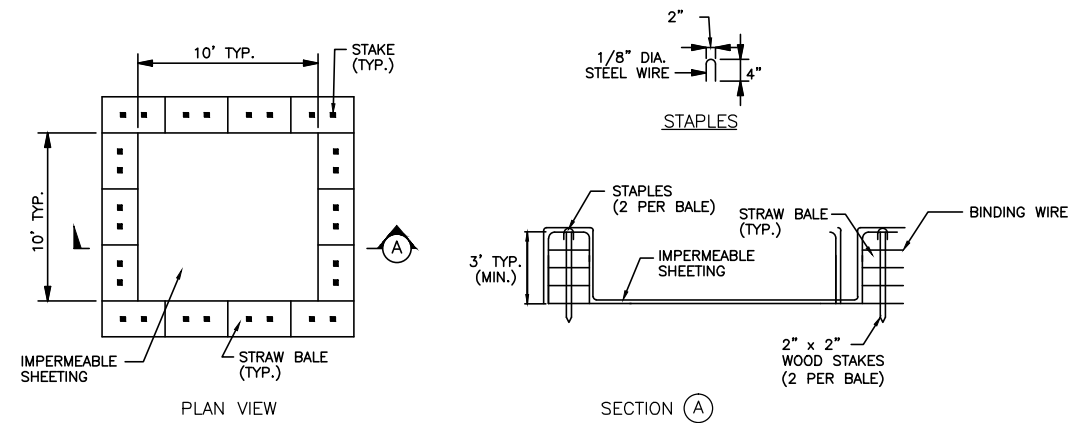
DUKE ENERGY

STORM WATER POLLUTION PREVENTION PLAN
TYPICAL DETAILS

SCALE
N.T.S.

DRAWING NO.

SHEET 2 OF 5

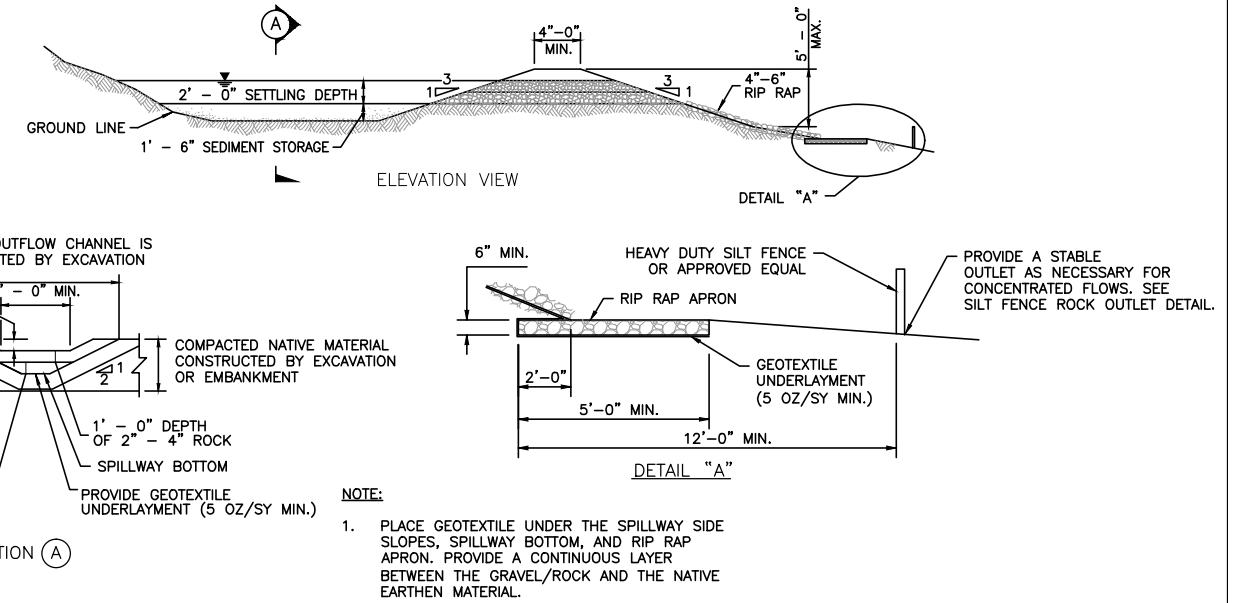


NOTES:

1. LOCATE WASHOUT STRUCTURE A MINIMUM OF 50 FEET AWAY FROM OPEN CHANNELS, STORM DRAIN INLETS, SENSITIVE AREAS, WETLANDS, BUFFERS AND WATER COURSES AND AWAY FROM CONSTRUCTION TRAFFIC.
2. SIZE WASHOUT STRUCTURE FOR VOLUME NECESSARY TO CONTAIN WASH WATER AND SOLIDS AND MAINTAIN AT LEAST 4 INCHES OF FREEBOARD. TYPICAL DIMENSIONS ARE 10 FEET X 10 FEET X 3 FEET DEEP.
3. PREPARE SOIL BASE FREE OF ROCKS OR OTHER DEBRIS THAT MAY CAUSE TEARS OR HOLES IN THE LINER. FOR LINER, USE 10 MIL OR THICKER UV RESISTANT, IMPERMEABLE SHEETING, FREE OF HOLES AND TEARS OR OTHER DEFECTS THAT COMPROMISE IMPERMEABILITY OF THE MATERIAL.
4. PROVIDE A SIGN FOR THE WASHOUT IN CLOSE PROXIMITY TO THE FACILITY.
5. KEEP CONCRETE WASHOUT STRUCTURE WATER TIGHT. REPLACE IMPERMEABLE LINER IF DAMAGED (E.G., RIPPED OR PUNCTURED). EMPTY OR REPLACE WASHOUT STRUCTURE THAT IS 75 PERCENT FULL, AND DISPOSE OF ACCUMULATED MATERIAL PROPERLY. DO NOT REUSE PLASTIC LINER. WET-VACUUM STORED LIQUIDS THAT HAVE NOT EVAPORATED AND DISPOSE OF IN AN APPROVED MANNER. PRIOR TO FORECASTED RAINSTORMS, REMOVE LIQUIDS OR COVER STRUCTURE TO PREVENT OVERFLOWS. REMOVE HARDENED SOLIDS, WHOLE OR BROKEN UP, FOR DISPOSAL OR RECYCLING. MAINTAIN RUNOFF DIVERSION AROUND EXCAVATED WASHOUT STRUCTURE UNTIL STRUCTURE IS REMOVED.
6. BALES CAN BE TWO STACKED OR PARTIALLY EXCAVATED TO REACH 3FT DEPTH (MIN.).
7. PREFABRICATED UNITS MAY BE USED WITH APPROVAL.

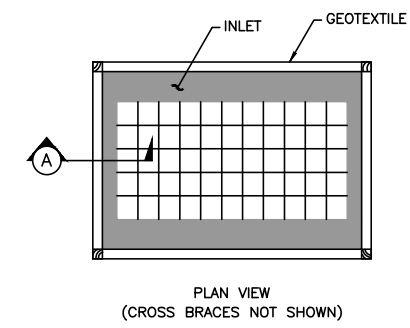
CONCRETE WASHOUT

011



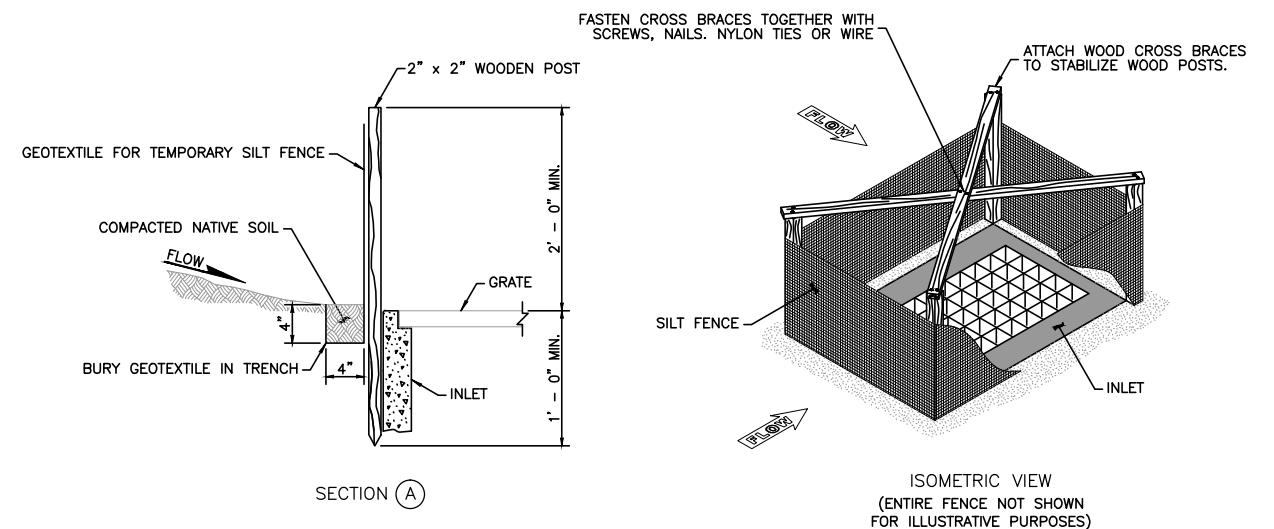
TEMPORARY SEDIMENT TRAP

012



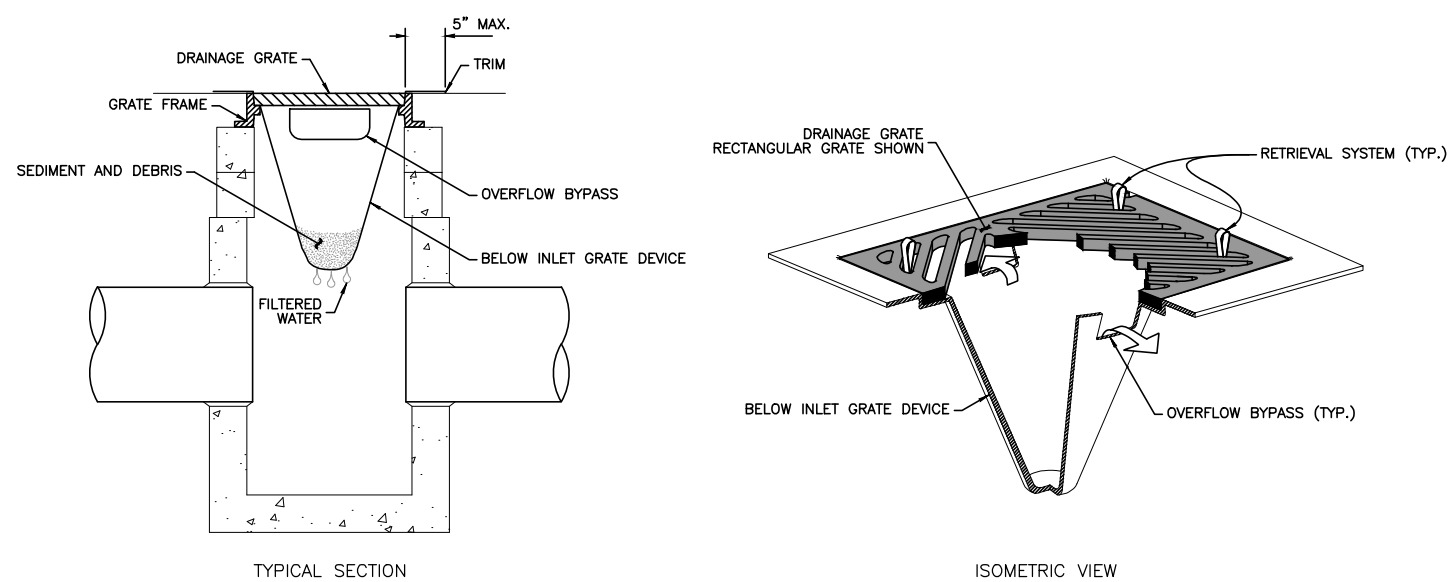
NOTES:

1. PREFABRICATED UNITS MAY BE USED WITH APPROVAL.
2. STRUCTURE SHALL BE CONSTRUCTED SUCH THAT GEOTEXTILE MATERIAL SHALL BE FASTENED TO POSTS CREATING A SEAM-LESS JOINT.
3. ENSURE THAT PONDING HEIGHT OF WATER DOES NOT CAUSE FLOODING ON ADJACENT ROADWAYS OR PRIVATE PROPERTY.



NON-PAVED AREA INLET PROTECTION

014



PAVED AREA INLET PROTECTION

013

REVISIONS			
NO.	DATE	DESCRIPTION	APPROVED BY

DESIGN BY	DATE
CAM/MRW	12/18/2015
DRAWN BY	JOB NO.
KTH	- -
CHECKED BY	APPROVED
MRW	CAM



STORM WATER POLLUTION PREVENTION PLAN
TYPICAL DETAILS

SCALE	
N.T.S.	
DRAWING NO.	
SHEET	OF
3	5

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Appendix C

Storm Water Evaluation Form for Construction

Storm Water Evaluation Form for Construction
 (Complete at least once per week and
 after each storm event of 0.5 inches or more.)



Project Name: TOH2145 - 138kV/345kV Byer Steel	Evaluation Date:
Construction Supervisor:	Evaluated By:
Reason for Evaluation: <input type="checkbox"/> Routine <input type="checkbox"/> Post Rain Event <input type="checkbox"/> Non-Routine	
Location and Phase of Construction:	Conditions at time of evaluation? <input type="checkbox"/> Dry <input type="checkbox"/> Wet <input type="checkbox"/> Frozen

OBSERVATIONS	INSTALLED	CORRECTIVE ACTION NEEDED
Silt Fence	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	<input type="checkbox"/> Yes <input type="checkbox"/> No
Comment/Action:		
Fiber Rolls/Filter Socks	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	<input type="checkbox"/> Yes <input type="checkbox"/> No
Comment/Action:		
Check Dams	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	<input type="checkbox"/> Yes <input type="checkbox"/> No
Comment/Action:		
Seeding/Mulching	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	<input type="checkbox"/> Yes <input type="checkbox"/> No
Comment/Action:		
Erosion Control Blanket	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	<input type="checkbox"/> Yes <input type="checkbox"/> No
Comment/Action:		
Construction Entrances	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	<input type="checkbox"/> Yes <input type="checkbox"/> No
Comment/Action:		
Stream Crossings	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	<input type="checkbox"/> Yes <input type="checkbox"/> No
Comment/Action:		
Wetland Crossings	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	<input type="checkbox"/> Yes <input type="checkbox"/> No
Comment/Action:		
Concrete Washout Areas	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	<input type="checkbox"/> Yes <input type="checkbox"/> No
Comment/Action:		
Is sediment or other pollutants leaving the site?	<input type="checkbox"/> Yes <input type="checkbox"/> No If yes, corrective action is needed.	
Is sediment being tracked onto public roadways?	<input type="checkbox"/> Yes <input type="checkbox"/> No If yes, corrective action is needed.	
Have any areas been left disturbed for 21 days or more?	<input type="checkbox"/> Yes <input type="checkbox"/> No If yes, corrective action is needed.	

See Reverse Side for More Information and Additional Space for Comments

Appendix D

SWPPP Amendment Log

Appendix E

Notice of Termination



Notice of Termination (NOT) of Coverage Under Ohio Environmental Protection Agency General NPDES Permit

Division of Surface Water

(Read accompanying instructions carefully before completing this form.)

Submission of this NOT constitutes notice that the party identified in Section II of this form is no longer authorized to discharge into state waters under the NPDES general permit program. NOTE: All necessary information must be provided on this form. Do not use correction fluid on this form. Forms transmitted by fax will not be accepted. There is no fee associated with submitting this form.

I. Permit Information:

NPDES General Permit Number: OH

Facility General Permit Number: _____

II. Owner/Applicant Information/Mailing Address

Company (Applicant) Name: Duke Energy

Mailing (Applicant) Address: 139 E. 4th Street

City: Cincinnati State: Ohio Zip Code: 45202 -

Contact Person: Dustin Giesler Phone: (859) 380 - 1468 Fax: () -

Contact Email: Dustin.Giesler@duke-energy.com

III. Facility/Site Location Information

Facility Name: South Fairmount T-Loop

Facility Address/Location: n/a

City: Cincinnati State: Ohio Zip Code: 45214 -

County: Hamilton Township(s): T3E Section: S27

Facility Contact Person: Dustin Giesler Phone: (859) 380 - 1468 Fax: () -

Facility Contact Email: dustin.giesler@duke-energy.com

IV. Reason for Termination

Transfer of Ownership Cease to Discharge Facility Closed

Project Completed Obtained Individual Permit

V. Certifications

Standard Certification:

I certify under penalty of law that all discharges authorized by the NPDES general permit have been eliminated or that I am no longer the operator of the facility. I understand that by submitting this NOT, I am no longer authorized to discharge under this general permit and that discharging pollutants to waters of the state without an NPDES permit is unlawful under ORC 6111.

Name (typed): _____ Title: _____

Signature: _____ Date: _____

Industrial Storm Water and Coal Mining Activity Certification Only:

I certify under penalty of law that all discharges associated with the identified facility that are authorized by the above referenced NPDES general permit have been eliminated, that I am no longer the operator of the facility, or in the case of a coal mine that the SMCRA bond has been released by ODNR-Division of Reclamation. I understand that by submitting this NOT, I am no longer authorized to discharge storm water associated with industrial activity under this general permit, and that discharging pollutants in storm water associated with industrial activity to waters of the state is unlawful under ORC 6111 where the discharge is not authorized by an NPDES permit.

Name (typed): _____ Title: _____

Signature: _____ Date: _____

Storm Water Construction Activity Certification Only:

For non-residential developments, I certify under penalty of law that, prior to the submittal of this NOT, all elements of the storm water pollution prevention plan have been completed, the disturbed soil at the identified facility have been stabilized and temporary erosion and sediment control measures have been removed at the appropriate time, or all storm water discharges associated with construction activity from the identified facility that are authorized by the above referenced NPDES general permit have otherwise been eliminated.

For residential developments only, I certify under penalty of law that, prior to the submittal of this NOT, either (i) temporary stabilization has been completed and the lot, which includes a home, has been transferred to the homeowner; (ii) final stabilization has been completed and the lot, which does not include a home, has been transferred to the property owner; or (iii) no stabilization has been implemented on a lot, which includes a home, and the lot has been transferred to the homeowner.

I understand that, by submitting this NOT, I am no longer authorized to discharge storm water associated with construction activity by the general permit, and that discharging pollutants in storm water associated with construction activity to waters of the state is unlawful under ORC 6111 where the discharge is not authorized by an NPDES permit.

Name (typed): _____ Title: _____

Signature: _____ Date: _____

Attachment E

Agency Coordination Letters



October 31, 2018

Dan Everson
Field Office Supervisor
U.S. Fish and Wildlife Service
4625 Morse Rd Suite 104
Columbus, OH, 43230

Cardno

11121 Canal Road
Cincinnati, Ohio 45241
USA

Phone 513 489 2402
Fax 513 489 2404

**RE: Duke Energy F1286—69kV South Fairmount Loop
Threatened and Endangered Species Consultation
Cincinnati, Hamilton County, Ohio
(Lat. 39.127567; Long. -84.544132)**

www.cardno.com

Dear Mr. Everson:

Duke Energy (Duke) is proposing to remove, replace, and construct approximately 0.26 miles of existing and new transmission line, encompassing a total study corridor of 3.05 acres of existing 100-foot wide Duke Energy transmission line corridor Right-Of-Way (ROW). A field investigation of the study corridor was conducted on October 29, 2018.

The project study area is located in the City of Cincinnati, Hamilton County, Ohio. The location of the proposed Project is depicted on the attached Cincinnati (OH) USGS 7.5-minute topographic map excerpt (Figure 1).

Cardno was contracted by Duke to perform a boundary delineation and assessment of regulated waters, including wetlands, streams, ditches, and/or other federally regulated open waters, rare, threatened, endangered, and special habitat located within the proposed 0.26 miles of existing 100-ft wide ROW. The project study area was dominated by fallow field/riparian and industrial turf vegetation assemblages. Cardno botanists and ecologists conducted a habitat assessment to identify the presence of regulated waters, and potential Indiana bat (*Myotis sodalis*), Northern long-eared bat (*Myotis septentrionalis*), and Running Buffalo Clover (*Trifolium stoloniferum*) habitat.

In accordance with the USFWS Section 7 ESA coordination requirements the Project study area and its habitat characteristics has been summarized for you below.

1. Location data including latitude and longitude of the project area, site address, and county.

City of Cincinnati, Hamilton County, Ohio

Initiates: Duke Energy Structure HL191 (39.1271, -84.5435)

Terminates: Duke Energy Structure HL196 (39.1128, -84.5436)

2. A detailed project description, including layout of any new construction.

The proposed F1286—69kV South Fairmont Loop Project is necessary in order to maintain the integrity of existing Duke structures to ensure adequate power supplies to current and future utility customers in the area. The project is also needed to ensure safety within the existing easements and remain in compliance with current transmission line standards. The transmission line route consists of an existing transmission line corridor and Duke Energy easement.

Construction will be accomplished largely through the use of bucket trucks with truck-mounted augers for structure installation and other construction vehicles transporting cable spools to install the transmission cable along the route. Excavation will be restricted to the locations where the installation of new structures (9 electrical poles) will occur. Earth moving activities are anticipated to be minimal. The extent of access disturbance can vary widely dependent upon many factors, including density and type of surface, vegetative cover, weather conditions, and the type of vehicles moving over the area. The existing vegetation will be preserved to the maximum extent practicable.

Project construction is expected to begin in the January 2018.

3. A detailed description of onsite habitat, including the size, location, and quality of streams, wetlands, forested areas, and other natural areas, and proposed impacts.

The proposed F1286 – 69kV South Fairmont Loop Project is linear in scope and will take place entirely within existing transmission line corridor and Duke Energy easement (Figure 1 & 2). There were no regulated waters identified within the project's Study Area. Mill Creek is directly adjacent to the Study Area but no impacts are to occur. Specific attention was given to the presence of habitat suitable for federally endangered and threatened species – specifically, the Indiana bat (*Myotis sodalis*), the Northern Long-Eared bat (*Myotis septentrionalis*), and Running Buffalo Clover (*Trifolium stoloniferum*). To evaluate the potential habitat for rare, threatened, and endangered species a general site reconnaissance of the project study area was performed by Cardno botanists and ecologists. The result of these habitat assessments can be found below.

Industrial Turf/Shrub

The industrial vegetation assemblage was located within the proposed study area. Dominant understory species in this habitat type consisted of bush honeysuckle (*Lonicera maackii*), tree of heaven (*Ailanthus altissima*) and tall fescue (*Schedonorus arundinaceus*). Although a formal study was not part of this scope, no potential habitat for listed species was identified within this habitat.

4. A description of the forested habitat onsite, including type of forest, and presence of dead trees, split branches or trunks, and exfoliating bark, and proposed impacts.

The Project study area did not include any mature trees greater than 3" in DBH.

5. Photographs representative of all cover types on the site and encompassing views of the entire site.

See the attached photo exhibit.

6. Conclusion

Based on the physical site characteristics, the site contains low quality habitat for the federally endangered Indiana and Northern Long Eared bat based on the woody species composition and intensity of surrounding land use.

We are requesting a review by your office and a written response regarding effects on federally listed threatened and/or endangered species and their critical habitat within the vicinity of the project area. Enclosed for your review are the project location map, aerial map, proposed site plan, and photo exhibit.

If you have any questions concerning this request or would like additional information, please do not hesitate to contact me at (513) 404-6251 or Danielle.Thompson@cardno.com.

Sincerely,

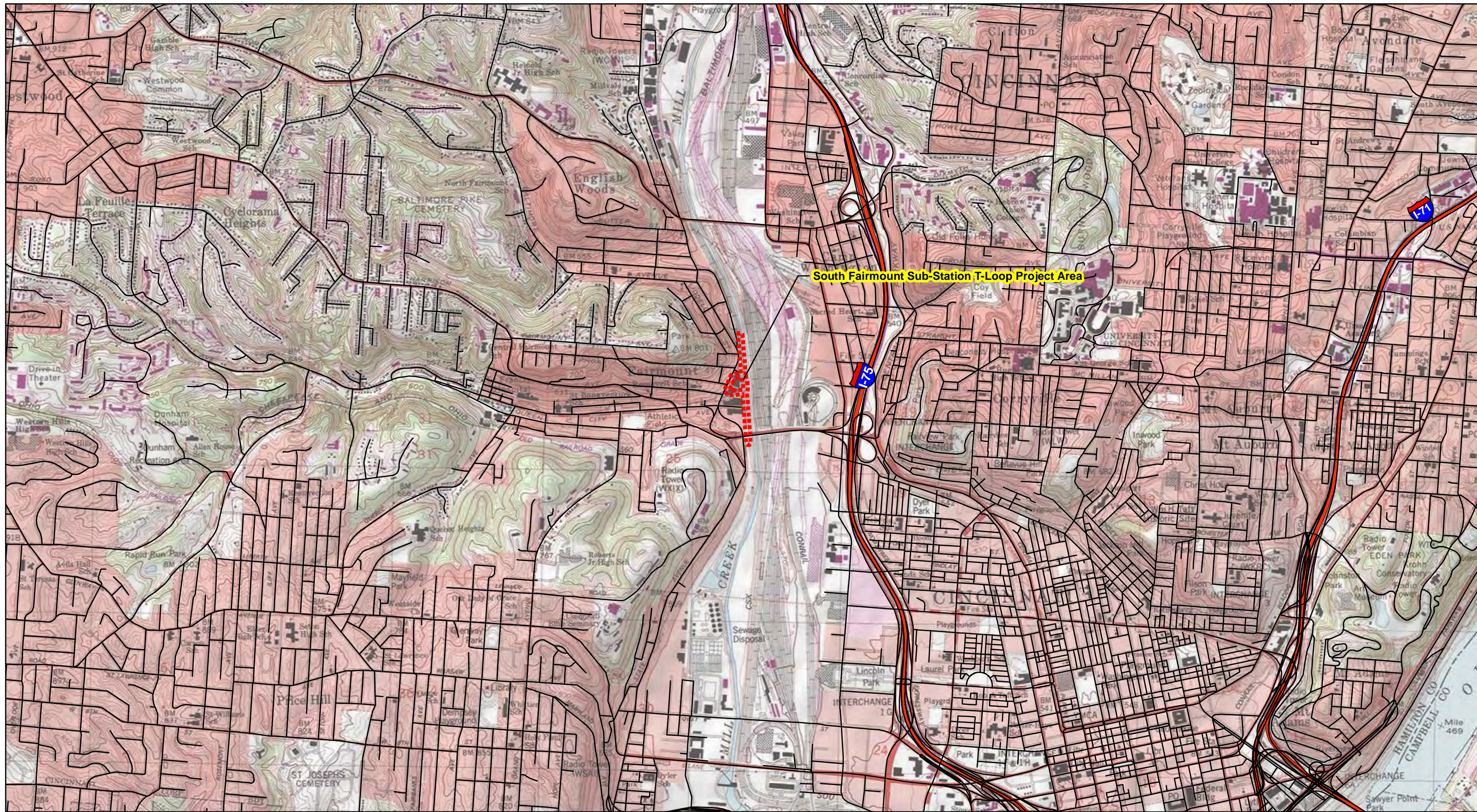


Danielle K. Thompson
Senior Project Scientist
for Cardno, Inc.

Enc: USGS map, Aerial Map, Site Plans, Photo Exhibit

ATTACHMENTS:

PROJECT LOCATION MAP
PROJECT AERIAL MAP
SITE PLANS
PHOTO EXHIBIT



PROJECT LOCATION

HAMILTON COUNTY, OHIO

REFERENCE:
 ROUTE CENTERLINE AND FACILITY
 Duke Energy
 USGS 7.5' TOPOGRAPHIC QUADRANGLES
 ESRI's Online USA Topo, accessed 10/29/2018
 ESRI's USA Major Roads, accessed 10/29/2018

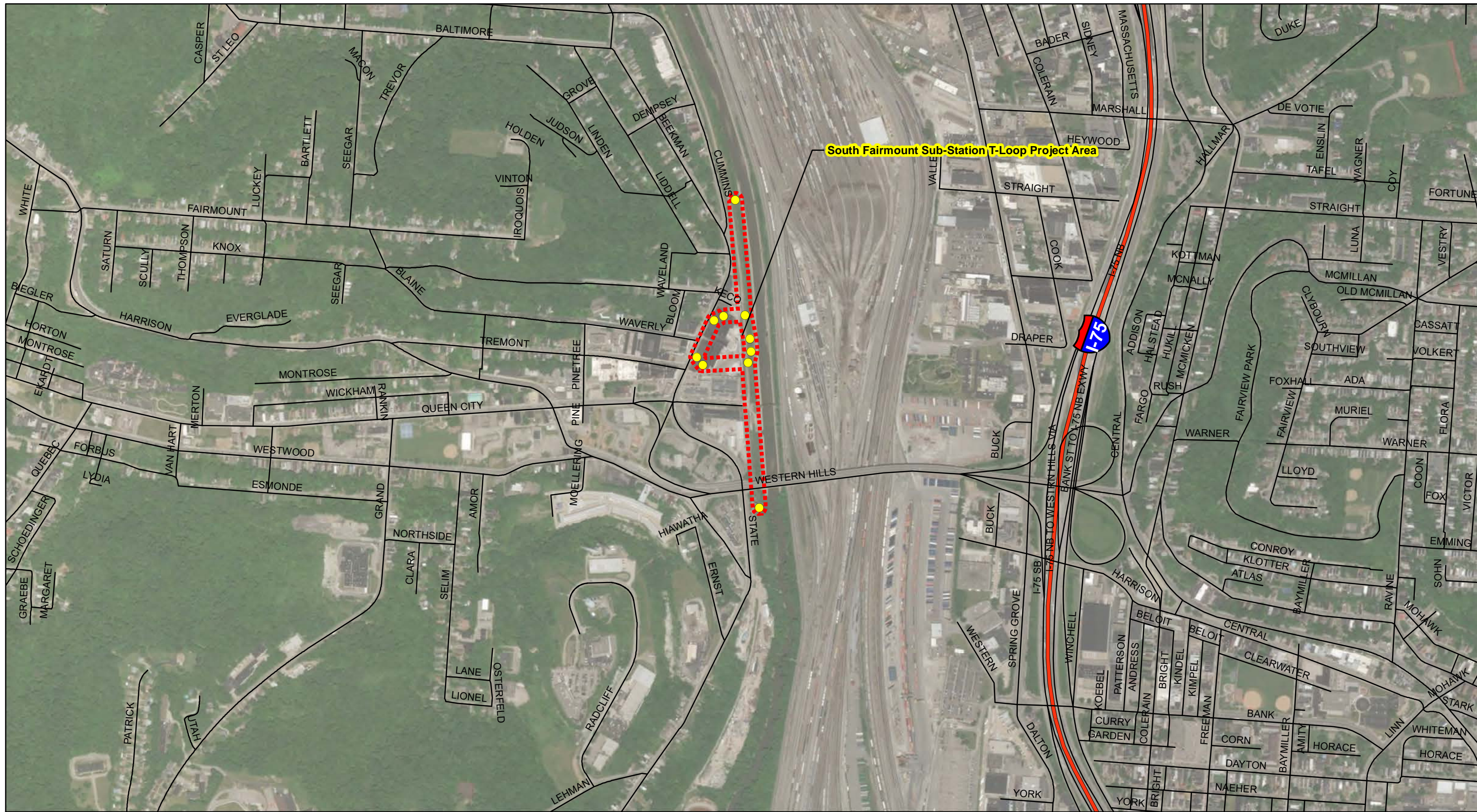
- Roads
- Interstate
- Study Area

0 500,000 2,000 3,000 Feet

FIGURE 2
 Project Aerial Map
 Wetland Delineation Report
 South Fairmount Substation T-Loop

DRAWN BY: DKT
 CHECKED: CAJ

DATE: 10/29/2018
 APPROVED: CAJ



PROJECT LOCATION

HAMILTON COUNTY, OHIO

REFERENCE:
 ROUTE CENTERLINE AND FACILITY
 Duke Energy
 USGS 7.5' TOPOGRAPHIC QUADRANGLES
 ESRI's Online USA Topo, accessed 10/29/2018
 ESRI's USA Major Roads, accessed 10/29/2018

- Duke Structure
- Roads
- Interstate
- ⋯ Study Area

0 500 1,000
 Feet

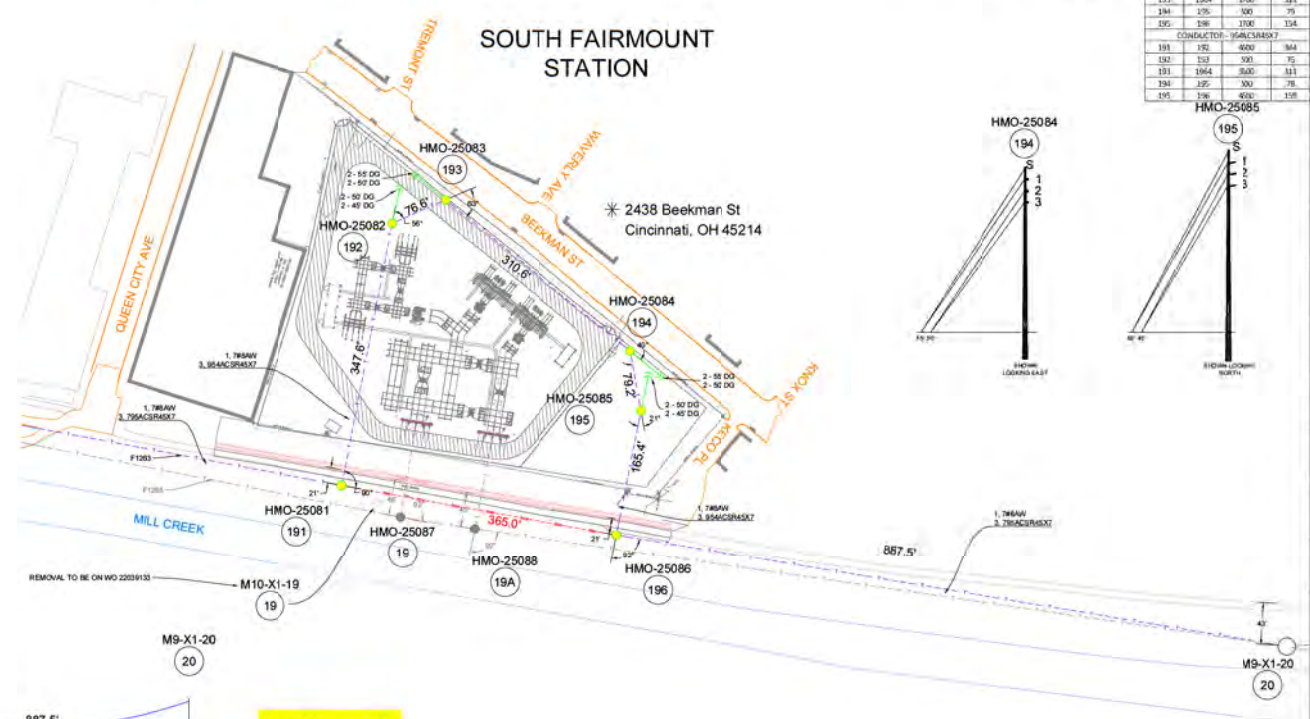
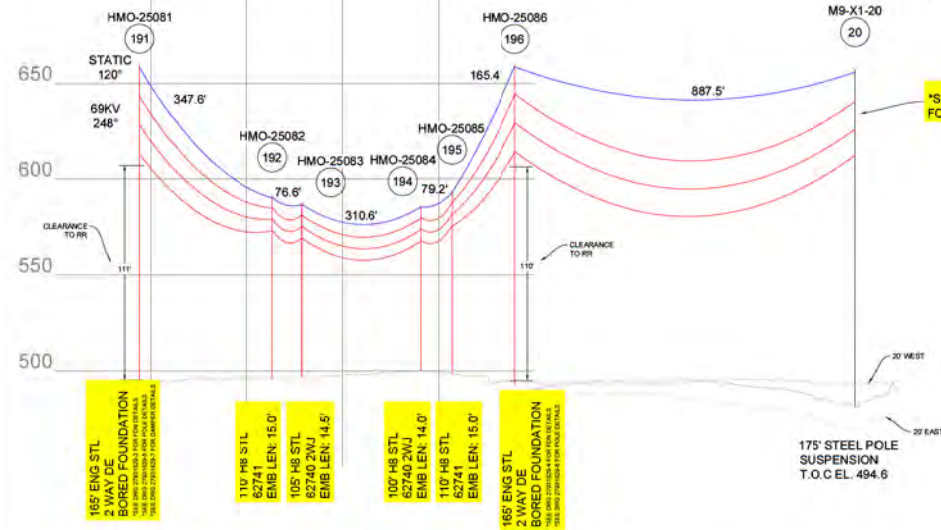
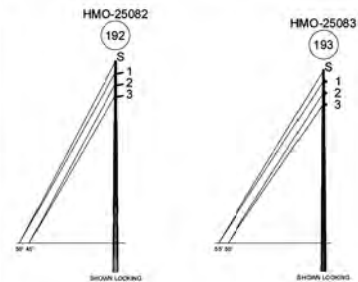
FIGURE 2
 Project Aerial Map
 Wetland Delineation Report
 South Fairmount Substation T-Loop

DRAWN BY: DKT DATE: 10/29/2018
 CHECKED: CAJ APPROVED: CAJ

MAP GRID: N01W0135B
 COMMUNITY: SOUTH FAIRMOUNT
 TWP.: CINCINNATI
 STATE: OHIO
 COUNTY: HAMILTON
 TAX: 31 110
 OPERATING UNIT: VSOH
 FEEDER (69KV): F1263
 FEEDER (138KV): F1286
 DISTRICT: HARTWELL

CONTACT/ENGINEER:
 JAKE DAWN
 513-287-1371

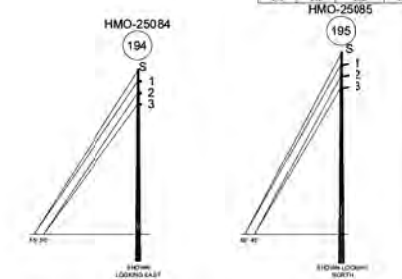
TRANSMISSION:
 WO# 27931829
 PROJECT CODES:
 PROJECT# ACTIVITY* DESCRIP.
 AMOH11118 I INSTALL
 AMOH11118 R RETIRE
 AMOH11118 X MAINT.



WIRE STRINGING DATA

FROM	TO	MISC (HEAVY)	INITIAL (LBS)	SPAN
191	192	1000	M1	
192	193	500	T2	
193	194	1700	M1	
194	195	500	T2	
195	196	1700	M1	
196	197	500	T2	
197	198	1700	M1	
198	199	500	T2	
199	200	1700	M1	

CONDUCTOR: 35ACSR/37



NOTE:
 - ALL PHASING IS SHOWN LOOKING AWAY FROM MITCHELL AVE STATION
 - PLACE CONDUCTOR IN ROLLERS AND ADD WIRE AS NEEDED
 - RE-SAG CONDUCTOR PER THE STRINGING AND SAGGING CHARTS
 - FOR F 1286 DETAILS, SEE DRG 22030133-1
 - FOR SAG AND TENSION DATA OF HL 196-20, SEE DRG. 11652-116 (NOT FOR CONSTRUCTION)
 - FOR FOUNDATION DETAILS SEE DRG. 11652-114 & 115
 - RR SIDE CLEARANCES ARE MEASURED FROM CENTER OF STRUCTURE TO CLOSEST RAIL
 - ADDED CLEARANCE REQUIRED TO MINIMIZE TREE TRIMMING (TWRS 19.20.21)

HL191 - HL196

DUKE ENERGY

INDEX: F1263 & F1286
 DESCRIPTION: SOUTH FAIRMOUNT 69KV
 F1263 CONSTRUCTION PLAN & PROFILE

DATE: 5/10/2018
 LOCATION: CINCINNATI, OH

DRAWN: JAKE DAWN
 ENGINEER: JAKE DAWN

TRANSMISSION LINE ENGINEERING
 CKD: PAGE: SCALE: NOTED
 DWG NO: 27931829-1

150.0 FT. HORIZ SCALE
 30.0 FT. VERT SCALE



Photo 1. ROW Corridor, Near Pole HL19A, facing West.



Photo 2. ROW Corridor, Near Pole HL19A, Duke Substation, facing Northwest.



Photo 3. ROW Corridor, Industrial Vegetation, facing West.



Photo 4. ROW Corridor, Industrial Vegetation, facing East.



Photo 5. ROW Corridor, Near Pole HL191, facing East.



Photo 6. ROW Corridor, Mill Creek facing Southwest.



October 30, 2018

Mr. John Kessler
Ohio Department of Natural Resources
Office of Real Estate
2045 Morse Road, Building E-2
Columbus, OH 43230

Cardno

11121 Canal Road
Cincinnati, Ohio 45241
USA

Phone 513 489 2402
Fax 513 489 2404

**RE: Duke Energy F1286 – 69kV South Fairmont Loop
Rare, Threatened, and Endangered Species Consultation
Cincinnati, Hamilton County, Ohio**

Dear Mr. Kessler:

Duke Energy (Duke) is proposing to remove, replace, and construct approximately 0.26 miles of existing and new transmission line, encompassing a total study corridor of 3.05 acres of existing and new 100-foot wide Duke Energy transmission line corridor Right-Of-Way (ROW). A field investigation of the study corridor was conducted on October 29, 2018.

The project study area is located in the City of Cincinnati, Hamilton County, Ohio. The location of the proposed Project is depicted on the attached Cincinnati (OH) USGS 7.5-minute topographic map excerpt (Figure 1).

Cardno was contracted by Duke to perform a boundary delineation and assessment of regulated waters, including wetlands, streams, ditches, and/or other federally regulated open waters, rare, threatened, endangered, and special habitat located within the proposed 0.26 miles of existing 100-ft wide ROW. The project study area was dominated by industrial turf and shrub vegetation assemblages. Cardno botanists and ecologists conducted a habitat assessment to identify the presence of regulated waters, and potential Indiana bat (*Myotis sodalis*), Northern long-eared bat (*Myotis septentrionalis*), and Running Buffalo Clover (*Trifolium stoloniferum*) habitat.

In accordance with the ODNR-DOW Environmental Review coordination requirements; the Project study area and its habitat characteristics has been summarized for you below.

1. Location data including latitude and longitude of the project area, site address, and county.

City of Cincinnati, Hamilton County, Ohio

Initiates: Duke Energy Structure HL191 (39.1271, -84.5435)

Terminates: Duke Energy Structure HL196 (39.11281, -84.5436)

2. A detailed project description, including layout of any new construction.

The proposed F1286 – 69kV South Fairmont Loop Project is necessary in order to maintain the integrity of existing Duke structures to ensure adequate power supplies to current and future utility customers in the area. The project is also needed to ensure safety within the existing easements and remain in compliance with current transmission line standards. The transmission line route consists of an existing transmission line corridor and Duke Energy easement.

Construction will be accomplished largely through the use of bucket trucks with truck-mounted augers for structure installation and other construction vehicles transporting cable spools to install the transmission cable along the route. Excavation will be restricted to the locations where the installation of eight (8) electric transmission towers will occur. Earth moving activities are anticipated to be minimal. The extent of access disturbance can vary widely dependent upon many factors, including density and type of surface, vegetative cover, weather conditions, and the type of vehicles moving over the area. The existing vegetation will be preserved to the maximum extent practicable.

Project construction is expected to begin in January 2019.

3. A detailed description of onsite habitat, including the size, location, and quality of streams, wetlands, forested areas, and other natural areas, and proposed impacts.

The proposed F1286 – 69kV South Fairmont Loop Project is linear in scope and will take place entirely within existing transmission line corridor and Duke Energy easement (Figure 1 & 2). There were no regulated waters identified within the project's Study Area. Mill Creek is directly adjacent to the Study Area but no impacts are to occur. Specific attention was given to the presence of habitat suitable for federally endangered and threatened species – specifically, the Indiana bat (*Myotis sodalist*), the Northern Long-Eared bat (*Myotis septentrionalis*), and Running Buffalo Clover (*Trifolium stoloniferum*). To evaluate the potential habitat for rare, threatened, and endangered species a general site reconnaissance of the project study area was performed by Cardno botanists and ecologists. The result of these habitat assessments can be found below.

Industrial Turf/Shrub

The industrial vegetation assemblage was located within the proposed study area. Dominant understory species in this habitat type consisted of bush honeysuckle (*Lonicera Maackii*), tree of heaven (*Ailanthus altissima*) and tall fescue (*Schedonorus arundinaceus*). Although a formal study was not part of this scope, no potential habitat for listed species was identified within this habitat.

4. Proposed impacts (i.e. in-water work or tree clearing)

No impacts to Waters of the U.S. or Waters of the State will occur with this project scope. There may be clearing of small (less than 3" DBH) tree of heaven within the ROW. There were no other tree species present within the Study Area.

5. Proposed Best Management Practices

Best management practices will be followed for all potential stormwater impacts or runoff areas. These will include the use of fiber roll to collect any runoff/sediment. With no in-water impacts anticipated stormwater runoff and sediment deposition are expected to be minimal.

Conclusion

Based on the physical site characteristics, the site contains poor quality habitat for the federally endangered Indiana and NLE bat based on the woody species composition and intensity of surrounding land use. All tree clearing activities will be conducted during the USFWS recommended winter tree clearing window between October 1 and March 31.

We are requesting a review by your office and a written response regarding effects on state listed threatened and/or endangered species and their critical habitat within the vicinity of the project area. Enclosed for your review are the project location map, aerial map and photograph log.

If you have any questions concerning this request or would like additional information, please do not hesitate to contact me at (513) 404-6251 or danielle.thompson@cardno.com.

Sincerely,

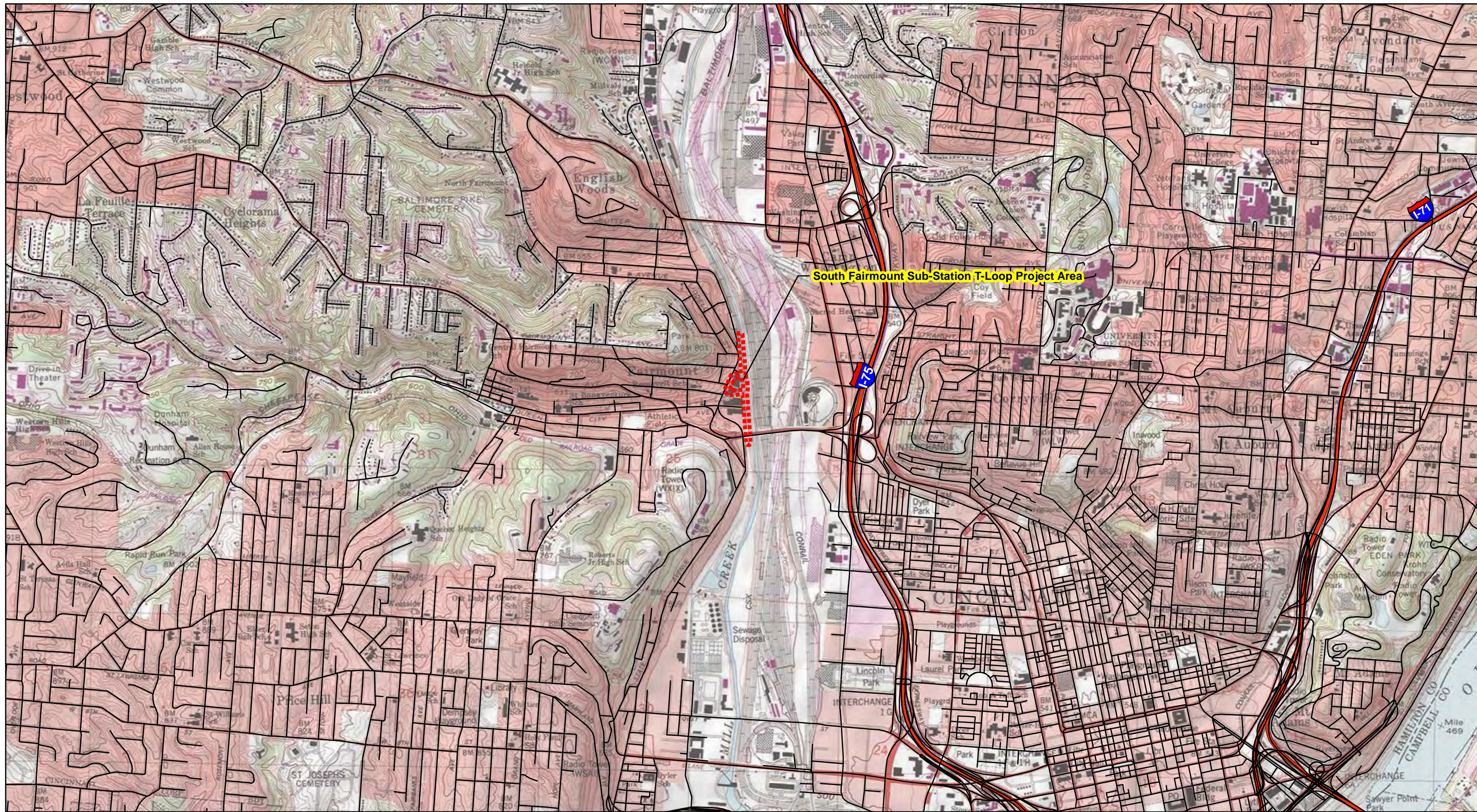


Danielle K. Thompson,
Senior Project Scientist for Cardno

Enc: USGS map, Aerial Map, Site Plans, Photo Log, GIS Shapefile

Attachments

**USGS Map
Aerial Location Map
Site Plans
Photo Log**



PROJECT LOCATION

HAMILTON COUNTY, OHIO

REFERENCE:
 ROUTE CENTERLINE AND FACILITY
 Duke Energy
 USGS 7.5' TOPOGRAPHIC QUADRANGLES
 ESRI's Online USA Topo, accessed 10/29/2018
 ESRI's USA Major Roads, accessed 10/29/2018

— Roads

— Interstate

▭ Study Area

0 500,000 2,000 3,000 Feet

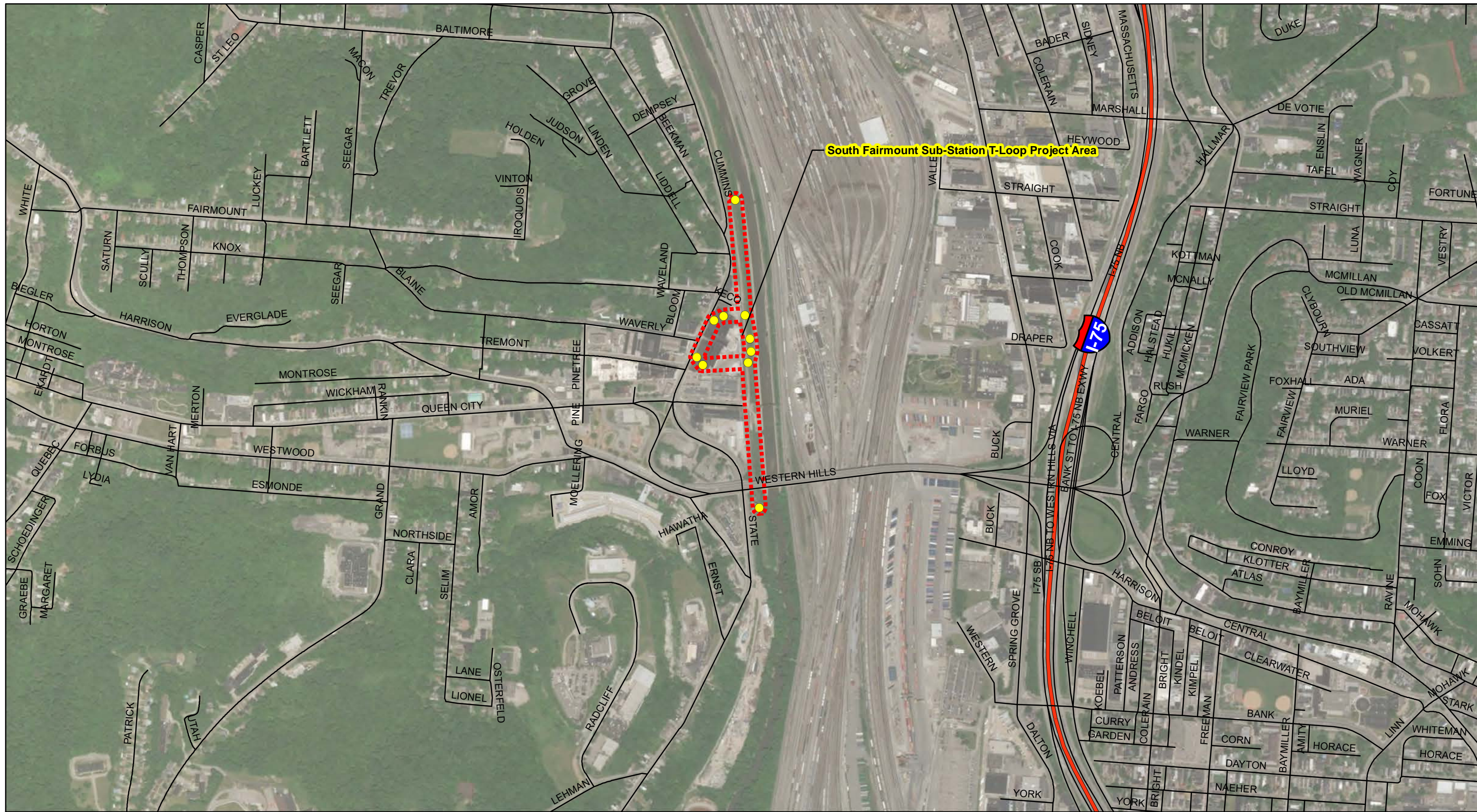
FIGURE 2
 Project Aerial Map

Wetland Delineation Report

South Fairmount Substation T-Loop

DRAWN BY: DKT
 CHECKED: CAJ

DATE: 10/29/2018
 APPROVED: CAJ



PROJECT LOCATION

HAMILTON COUNTY, OHIO

REFERENCE:
 ROUTE CENTERLINE AND FACILITY
 Duke Energy
 USGS 7.5' TOPOGRAPHIC QUADRANGLES
 ESRI's Online USA Topo, accessed 10/29/2018
 ESRI's USA Major Roads, accessed 10/29/2018

- Duke Structure
- Roads
- Interstate
- ⋯ Study Area

0 500 1,000
 Feet

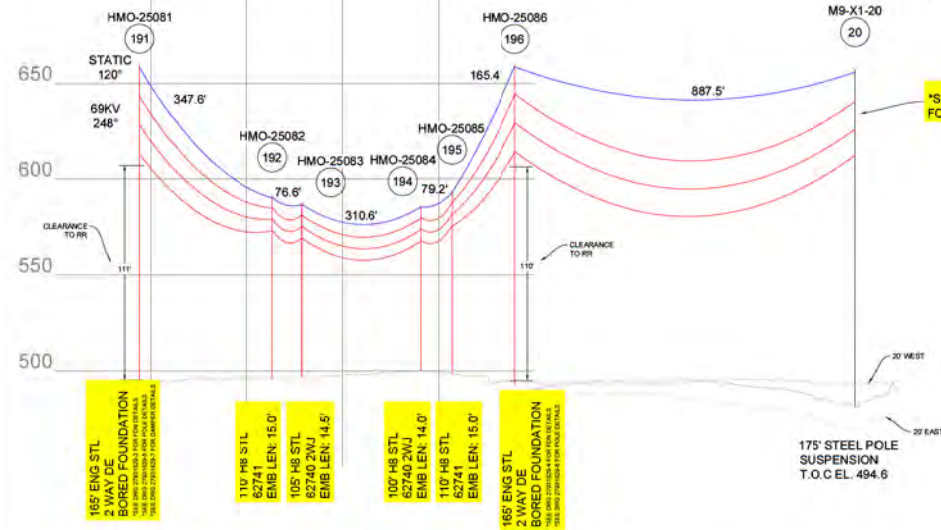
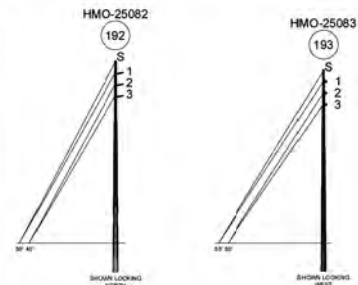
FIGURE 2
 Project Aerial Map
 Wetland Delineation Report
 South Fairmount Substation T-Loop

DRAWN BY: DKT DATE: 10/29/2018
 CHECKED: CAJ APPROVED: CAJ

MAP GRID: N01W0135B
 COMMUNITY: SOUTH FAIRMOUNT
 TWP.: CINCINNATI
 STATE: OHIO
 COUNTY: HAMILTON
 TAX: 31 110
 OPERATING UNIT: VSOH
 FEEDER (69KV): F1263
 FEEDER (138KV): F1286
 DISTRICT: HARTWELL

CONTACT/ENGINEER:
 JAKE DAWN
 513-287-1371

TRANSMISSION:
 WO# 27931829
 PROJECT CODES:
 PROJECT# ACTIVITY* DESCRIP.
 AMOH11118 I INSTALL
 AMOH11118 R RETIRE
 AMOH11118 X MAINT.



NOTE:
 - ALL PHASING IS SHOWN LOOKING AWAY FROM MITCHELL AVE STATION
 - PLACE CONDUCTOR IN ROLLERS AND ADD WIRE AS NEEDED
 - RE-SAG CONDUCTOR PER THE STRINGING AND SAGGING CHARTS
 - FOR F 1286 DETAILS, SEE DRG 22030133-1
 - FOR SAG AND TENSION DATA OF HL 196-20, SEE DRG. 11652-116 (NOT FOR CONSTRUCTION)
 - FOR FOUNDATION DETAILS SEE DRG. 11652-114 & 115
 - RR SIDE CLEARANCES ARE MEASURED FROM CENTER OF STRUCTURE TO CLOSEST RAIL
 - ADDED CLEARANCE REQUIRED TO MINIMIZE TREE TRIMMING (TWRS 19.20.21)



DATE: 5/10/2018		LOCATION: CINCINNATI, OH	
DRAWN: JAKE DAWN		ENGINEER: JAKE DAWN	
TRANSMISSION LINE ENGINEERING		CKD:	PAGE:
		SCALE: NOTED	DWG NO: 27931829-1

WIRE STRINGING DATA			
FROM	TO	MISC (HEAVY)	SPAN
STATIC TWIRL (UNWEIGHTED)			
191	192	1000	M1
192	193	581	T2
193	194	1700	M1
194	195	500	T2
195	196	1500	M1
CONDUCTOR: 3545C2845X7			
191	192	4000	M1
192	193	500	T2
193	194	5000	M1
194	195	500	T2
195	196	4000	M1

A B C D E F G H J K L M N P R S T V



Photo 1. ROW Corridor, Near Pole HL19A, facing West.



Photo 2. ROW Corridor, Near Pole HL19A, Duke Substation, facing Northwest.



Photo 3. ROW Corridor, Industrial Vegetation, facing West.



Photo 4. ROW Corridor, Industrial Vegetation, facing East.



Photo 5. ROW Corridor, Near Pole HL191, facing East.



Photo 6. ROW Corridor, Mill Creek facing Southwest.

Attachment F

Regulated Waters Delineation Report

Regulated Waters Delineation Report

F1286/1263—138kV/69kV South Fairmount
Loop

Hamilton County, Ohio

November 8, 2018



Document Information

Prepared for Duke Energy
Client Contact Dustin Geisler (Duke Energy)
Project Name F1286/F1263--138kV/69kV South Fairmount Loop
Project Number Cardno #J156720M73
Duke #F1263/F1286
Project Manager Cori Jansing (Cardno)
Date November 8, 2018

Prepared for:



Duke Energy
139 E. 4th Street, Cincinnati, Ohio 45202

Prepared by:



Cardno
11121 Canal Road, Cincinnati, Ohio 45241

Table of Contents

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2.2	Waters of the State	3
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Appendices

- Appendix A Site Photographs
- Appendix B Endangered, Threatened, and Rare Species Agency Coordination

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- Table 1-1 PLSS within the F1286/F1263-138kV/69kV South Fairmount Loop Project Area..... 1

Figures

- Figure 1 Project Location/NWI Map
- Figure 2 NWI Key
- Figure 3 Soil Survey Map

Acronyms

- APA Administrative Procedure Act
- BF Bank Full
- CFR Code of Federal Regulations
- CWA Clean Water Act
- DBH Diameter at Breast Height
- DP Data Point
- EPA U.S. Environmental Protection Agency
- ETR Endangered, Threatened, and Rare
- FAC Facultative Plant
- FACU Facultative Upland Plant
- FACW Facultative Wetland Plant
- FEMA Federal Emergency Management Agency
- FIRM Flood Insurance Rate Map
- GIS Geographical Information System
- MS4 Municipal Separate Storm Water Sewer Systems
- NHD National Hydrography Dataset
- NPDES National Pollutant Discharge Elimination System
- NRCS U.S. Department of Agriculture Natural Resources Conservation Service
- NWP Nationwide Permit
- NWPL National Wetland Plant List
- OBL Obligate Wetland Plant
- OEPA Ohio Environmental Protection Agency

ODNR	Ohio Department of Natural Resources
OHWM	Ordinary High Water Mark
PEM	Palustrine Emergent Wetland
PFO	Palustrine Forested Wetland
PLSS	Public Land Survey Section
PSS	Palustrine Shrub Scrub Wetland
RGP	Regional General Permit
SNE	Significant Nexus
SWANCC	Solid Waste Agency of Northern Cook County
TNW	Traditional Navigable Water
TOB	Top of Bank
UPL	Upland Plant
USDA	U.S. Department of Agriculture
USGS	U.S. Geological Survey
USACE	U.S. Army Corps of Engineers
USFWS	U.S. Fish and Wildlife Service
WOTUS	Waters of the United States
WQC	Water Quality Certification

1 Introduction

Cardno was contracted to perform a water resource inventory, including wetlands and streams, which are located at the Duke Energy F1286/F1263-138kV/69kV South Fairmount Loop Project Area and potential access points (total 3.05 acres) in the City of Cincinnati, Hamilton County, Ohio. The field investigation was performed on October 29, 2018. Table 1-1 summarizes the location of the Survey Area based on the Public Land Survey Section (PLSS) data.

Table 1-1 PLSS within the F1286/F1263-138kV/69kV South Fairmount Loop Project Area

Township	Range	Section
3E	2N	27

The total size of the Survey Area was approximately 3.05 acres. The Survey Area consisted of one habitat; industrial turf/shrub.

This report identifies the jurisdictional status of aquatic features identified within the Survey Area based on Cardno’s best professional understanding and interpretation of the *Corps of Engineers’ Wetland Delineation Manual* (Environmental Laboratory, 1987) and U.S. Army Corps of Engineers’ (USACE) guidance documents and regulations. Jurisdictional determinations for other “waters of the U.S.” were made based on definitions and guidance found in 33 CFR 328.3, USACE Regulatory Guidance Letters, and the wetland delineation manual. The USACE administers Section 404 of the Clean Water Act (CWA), which regulates the discharge of fill or dredged material into all “waters of the U.S.,” and is the regulatory authority that must make the final determination as to the jurisdictional status of the Survey Area.

2 Regulatory Definitions

2.1 Waters of the United States

“Waters of the U.S.” are within the jurisdiction of the USACE under the CWA. “Waters of the U.S.” is a broad term, which includes waters that are used or could be used for interstate commerce. This includes wetlands, ponds, lakes, territorial seas, rivers, tributary streams including any definable intermittent waterways, and some ditches below the ordinary high water mark (OHWM). Also included are manmade water bodies such as quarries and ponds, which are no longer actively being mined or constructed and are connected to other “waters”. Wetlands, mudflats, vegetated shallows, riffle and pool complexes, coral reefs, sanctuaries, and refuges are all considered special aquatic sites which involve more rigorous regulatory permitting requirements. A specific, detailed definition of “waters of the U.S.” can be found in the Federal Register (33 CFR 328.3).

On January 9, 2001, the U.S. Supreme Court issued a decision, *Solid Waste Agency of Northern Cook County (SWANCC) v. U.S. Army Corps of Engineers* (No. 99-1178). The decision reduced the regulation of isolated wetlands under Section 404 of the CWA, which assigned the USACE authority to issue permits for the discharge of dredge or fill material into “waters of the U.S.”. Prior to the SWANCC decision, the USACE had adopted a regulatory definition of “waters of the U.S.” that afforded federal protection for almost all of the nation’s wetlands. The Supreme Court

decision interpreted that the USACE's jurisdiction was restricted to navigable waters, their tributaries, and wetlands that are adjacent to these navigable waterways and tributaries. The decision leaves the majority of "isolated" wetlands unregulated by the CWA. Therefore, most wetlands that are not adjacent to, or contiguous with, any other "waters of the U.S." via a surface drain such as a swale, ditch, or stream are considered isolated and thus no longer jurisdictional by the USACE.

On June 19, 2006, the U.S. Supreme Court issued decisions in regards to John A. Rapanos v. United States (No. 04-1034) and June Carabell v. United States (04-1384), et al. The plurality decision created two 'tests' for determining CWA jurisdiction: the permanent flow of water test (set out by Justice Scalia) and the "significant nexus" test (set out by Justice Kennedy). On June 5, 2007 the USACE and U.S. Environmental Protection Agency (EPA) issued joint guidance on how to interpret and apply the Court's ruling. According to this guidance, the USACE will assert jurisdiction over traditionally navigable waters, adjacent wetlands, and non-navigable tributaries of traditionally navigable waters that have "relatively permanent" flow, and wetlands that border these waters, regardless of whether or not they are separated by roads, berms, and similar barriers. In addition, the USACE will use a case-by-case "significant nexus" analysis to determine whether waters and their adjacent wetlands are jurisdictional. A "significant nexus" can be found where waters, including adjacent wetlands, alter the physical, biological, or chemical integrity of the traditionally navigable water based on consideration of several factors.

In January 2015 an EPA sponsored publication, *Connectivity of Streams & Wetlands to Downstream Waters: A Review & Synthesis of the Scientific Evidence* (EPA, 2015), emphasized how streams, nontidal wetlands, and open waters in and outside of riparian areas and floodplains effect downstream waters such as rivers, lakes, estuaries, and oceans.

On May 27, 2015 the EPA released a statement that a new Clean Water Rule typically referred to as, "The Waters of the United States (WOTUS) Rule" was finalized and that it would "not create any new permitting requirements and maintains all previous exemptions and exclusions" (epa.gov). The rule would only protect waters that have historically been covered by the Clean Water Act. The intent was to clearly define:

- Jurisdictional limits of tributaries of navigable waterways;
- Set boundaries on covering nearby waters;
- Identify specific national water treasures by name (prairie potholes, etc.);
- Clearly define when a ditch is jurisdictional, and when it is not;
- Maintain status that waters within Municipal Separate Storm Water Sewer Systems (MS4) are not jurisdictional; and
- Reduce the use of case-specific analysis of waters.

Also on May 27, 2015 a publication, *Technical Support Document for the Clean Water Rule: Definition of Waters of the United States* (EPA, 2105), was released discussing in detail why the significant nexus (SNE) between one water and another is important. It specifically ties distances to the various types of waters mentioned within the Code of Federal Regulations [33 CFR 328.3(a)(1) through (a)(8)]. For example, the document states "Waters located within the 100-year floodplain of a traditional navigable water, interstate water, or the territorial seas and waters located more than 1,500 feet and less than 4,000 feet from the lateral limit of an (a)(1) or (a)(3) water may still be determined to have a significant nexus on a case-specific basis under paragraph (a)(8) of the rule and, thus, be a "water of the United States" (EPA 2015).

On June 29, 2015 the new Clean Water Rule was entered into the Federal Register (40 CFR Parts 110, 112, 116, et al. Clean Water Rule: Definition of “waters of the United States”; Final Rule). This report will refer to this rule as “June 29, 2015 WOTUS Rule”. This rule includes exact distances mentioned in the May 27, 2015 Technical Support Document as it relates to adjacent waters, including the following:

- Waters within 100 ft. of jurisdictional waters;
- Waters within the 100-year floodplain to a maximum of 1,500 feet from the ordinary high water mark (OHWM);
- Waters within the 100-year floodplain with a SNE to the Traditional Navigable Water (TNW); and
- Waters with a SNE within 4,000 ft. of jurisdictional waters.

On October 9, 2015 the U.S. Court of Appeals for the Sixth Circuit (Court) issued a nationwide stay against the enforcement of the June 29, 2015 WOTUS Rule. The Court stated, “...we conclude that...Justice Kennedy’s opinion in *Rapanos* represents the best instruction on the permissible parameters of “waters of the United States” as used in the Clean Water Act, it is far from clear that the new Rule’s distance limitations are harmonious with the instruction.

Moreover, the Court stated that the rulemaking process by which the distance limitations were adopted is facially suspect. Petitioners contend the proposed rule that was published, on which interested persons were invited to comment, did not include any proposed distance limitations in its use of terms like “adjacent waters” and “significant nexus.” Consequently, petitioners contend, the Final Rule cannot be considered a “logical outgrowth” of the rule proposed, as required to satisfy the notice-and-comment requirements of the APA, 5 U.S.C. § 553. As a further consequence of this defect, petitioners contend, the record compiled by respondents is devoid of specific scientific support for the distance limitations that were included in the Final Rule. They contend the Rule is therefore not the product of reasoned decision-making and is vulnerable to attack as impermissibly “arbitrary or capricious” under the APA, 5 U.S.C. § 706(2).”

Until further notice, the June 29, 2015 WOTUS Rule is not in effect. Furthermore, this report does not attempt to include a professional opinion as it relates to the June 29, 2015 WOTUS Rule.

2.2 Waters of the State

“Waters of the State” are within the jurisdiction of the Ohio Environmental Protection Agency (OEPA). They are generally defined as surface and underground water bodies, which extend through or exist wholly in the State of Ohio, which includes, but is not limited to, streams and both isolated and non-isolated wetlands. Private ponds, or any pond, reservoir, or facility built for reduction of pollutants prior to discharge are not included in this definition. In addition to “waters of the U.S.”, OEPA also regulates and issues permits for isolated wetland impacts.

OEPA relies on the USACE decision regarding wetland determinations and delineations including whether or not a wetland is isolated or non-isolated.

2.3 Wetlands

Wetlands are a category of “waters of the U.S.” for which a specific identification methodology has been developed. As described in detail in the *Corps of Engineers Wetland Delineation Manual* (Environmental Laboratory, 1987), wetland boundaries are delineated using three criteria: hydrophytic vegetation, hydric soils, and wetland hydrology. In addition to the criteria defined in the 1987 Manual, the procedures described in the *Regional Supplement to the Corps of Engineers*

Wetland Delineation Manual: Eastern Mountains and Piedmont Region (Environmental Laboratory, 2012) were used to evaluate the Survey Area for the presence of wetlands.

2.3.1 **Hydrophytic Vegetation**

On June 1, 2012, the National Wetland Plant List (NWPL), formerly called the National List of Plant Species that Occur in Wetlands (Reed 1988), went into effect after being released by the U.S. Army Corps of Engineers (USACE) as part of an interagency effort with the U.S. Fish and Wildlife Service (USFWS), the U.S. Environmental Protection Agency (EPA), and the U.S. Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) (Lichvar and Kartesz, 2009). The NWPL, along with the information implied by its wetland plant species status ratings, provides general botanical information about wetland plants and is used extensively in wetland delineation, restoration, and mitigation efforts. The NWPL consists of a comprehensive list of wetland plant species that occur within the United States along with their respective wetland indicator statuses by region. An indicator status reflects the likelihood that a particular plant species occurs in a wetland or upland (Lichvar et al. 2012). Definitions of the five indicator categories are presented below.

OBL (Obligate Wetland Plants): almost always occur in wetlands. With few exceptions, these plants (herbaceous or woody) are found in standing water or seasonally saturated soils (14 or more consecutive days) near the surface. These plants are of four types: submerged, floating, floating-leaved, and emergent.

FACW (Facultative Wetland Plants): usually occur in wetlands, but may occur in non-wetlands. These plants predominately occur with hydric soils, often in geomorphic settings where water saturates the soils or floods the soil surface at least seasonally.

FAC (Facultative Plants): occur in wetlands and non-wetlands. These plants can grow in hydric, mesic, or xeric habitats. The occurrence of these plants in different habitats represents responses to a variety of environmental variables other than just hydrology, such as shade tolerance, soil pH, and elevation, and they have a wide tolerance of soil moisture conditions.

FACU (Facultative Upland Plants): usually occur in non-wetlands, but may occur in wetlands. These plants predominately occur on drier or more mesic sites in geomorphic settings where water rarely saturates the soils or floods the soil surface seasonally.

UPL (Upland Plants): almost never occur in wetlands. These plants occupy mesic to xeric non-wetland habitats. They almost never occur in standing water or saturated soils. Typical growth forms include herbaceous, shrubs, woody vines, and trees.

According to the USACE's Eastern Mountains and Piedmont Regional Supplement, plants that are rated as FAC, FACW, or OBL are classified as wetland plant species. The percentage of dominant wetland species in each of the four vegetation strata (tree, shrub/sapling, herbaceous, and woody vine) in the sample area determines the hydrophytic (wetland) status of the plant community. Dominant species are chosen independently from each stratum of the community. In general, dominants are the most abundant species that individually or collectively account for more than 50 percent of the total coverage of vegetation in the stratum, plus any other species that, by itself, accounts for at least 20 percent of the total.

For the purposes of determining dominant plant species, the four vegetation strata are defined. Trees consist of woody species 3 inches or greater in diameter at breast height (DBH). Shrubs and saplings are woody species that are over 1 meter in height and less than 3 inches DBH. Herbaceous species consist of all herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants less than 1 meter tall. Woody vines consist of vine species greater than 1 meter in height, such as wild grapes.

2.3.2 Hydric Soils

Hydric soils are defined as soils that are saturated, flooded, or ponded long enough during the growing season to develop anaerobic conditions in the upper part. In general, hydric soils are flooded, ponded, or saturated for a week or more during the growing season when soil temperatures are above 32 degrees Fahrenheit. The anaerobic conditions created by repeated or prolonged saturation or flooding result in permanent changes in soil color and chemistry, which are used to differentiate hydric from non-hydric soils.

In this report, soil colors are described using the Munsell notation system. This method of describing soil color consists of separate notations for hue, value, and chroma that are combined in that order to form the color designation. The hue notation of a color indicates its relation to red, yellow, green, blue, and purple; the value notation indicates its lightness, and the chroma notation indicates its strength or departure from a neutral of the same lightness.

The symbol for hue consists of a number from 1 to 10, followed by the letter abbreviation of the color. Within each letter range, the hue becomes more yellow and less red as the numbers increase. The notation for value consists of numbers from 0 for absolute black, to 10 for absolute white. The notation for chroma consists of numbers beginning with /0 for neutral grays and increasing at equal intervals. A soil described as 10YR 3/1 soil is more gray than a soil designated 10YR 3/6.

2.3.3 Wetland Hydrology

Wetland hydrology is defined as the presence of water for a significant period of time at or near the surface (within the root zone) during the growing season. Wetland hydrology is present only seasonally in many cases, and is often inferred by indirect evidence. Hydrology is controlled by such factors as seasonal and long-term rainfall patterns, local geology and topography, soil type, local water table conditions, and drainage. Primary indicators of hydrology are inundation, soil saturation in the upper 12 inches of the soil, watermarks, sediment deposits, and drainage patterns. Secondary indicators such as oxidized root channels in the upper 12 inches of the soil, water-stained leaves, local soil survey data, and the FAC-neutral vegetation test are sometimes used to identify hydrology. A primary indicator or two or more secondary indicators are required to establish a positive indication of hydrology.

2.3.4 Wetland Definition Summary

In general, an area must meet all three criteria to be classified as a wetland. In certain problem areas such as seasonal wetlands, which are not wet at all times, or in recently disturbed (atypical) situations, areas may be considered a wetland if only two criteria are met. In special situations, an area that meets the wetland definition may not be within the USACE's jurisdiction due to a specific regulatory exemption.

2.4 Streams, Rivers, Watercourses & Jurisdictional Ditches

With non-tidal waters, in the absence of adjacent wetlands, the extent of the USACE's jurisdiction is defined by the OHWM. USACE regulations define the term "ordinary high water mark" for purposes of the CWA lateral jurisdiction at 33 CFR 328.3(e), which states:

The term ordinary high water mark means that line on the shore established by the fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas.

Streams, rivers, watercourse, and ditches within the Survey Area were evaluated using the above definition and documented. Waterways that did exhibit an OHWM were recorded and evaluated using the Ohio Environmental Protection Agency's Primary Headwater Habitat Evaluation (HHEI) or Qualitative Habitat Evaluation Index (QHEI) methodology. If applicable, the results of the HHEI and/or QHEI are presented in Section 3.2, Technical Descriptions and datasheets are provided in the Appendix B.

2.5 Endangered Species Act

Endangered, Threatened, and rare (ETR) species are protected at both the state and federal level (ORC 1531.25 and 50 CFR 17.11 through 17.12, respectively). The Ohio Revised Code defines "Take" as to harass, hunt, capture, or kill; or attempt to harass, hunt, capture, or kill.

The USFWS, under authority of the Endangered Species Act of 1973 (16 U.S. Code 1531), as amended, has the responsibility for federally listed species. The Ohio Department of Natural Resources (ODNR) has the responsibility for state listed species.

3 Background Information

3.1 Existing Maps

Several sources of information were consulted to identify potential wetlands and wetland soil units on the site. These include the USFWS's *National Wetland Inventory* (NWI), the USGS's *National Hydrography Dataset* (NHD), and the Natural Resources Conservation Service's (NRCS) *Soil Survey* for this county. These maps identify potential wetlands and wetland soil units on the site. The NHD maps are used to portray surface water. The NWI maps were prepared from high altitude photography and in most cases were not field checked. Because of this, wetlands are sometimes erroneously identified, missed, or misidentified. Additionally, the criteria used in identifying these wetlands were different from those currently used by the USACE. The county soil maps, on the other hand, were developed from actual field investigations. However, they address only one of the three required wetland criteria and may reflect historical conditions rather than current site conditions. The resolution of the soil maps limits their accuracy as well. The mapping units are often generalized based on topography and many mapping units contain inclusions of other soil types for up to 15 percent of the area of the unit. The USACE does not accept the use of either of these maps to make wetland determinations.

3.1.1 National Wetland Inventory

The NWI map of the area (Figure 2) did not identify any wetland features within the Survey Area.

3.1.2 Soil Survey

The NRCS Soil Survey identified 2 soil types located within the Survey Area (Figure 3). The following table identifies the soil unit symbol, soil unit name, and whether or not the soil type contains components that meet the hydric soil criteria.

Table 3 – 2 Soil Map Units within the F1286/F1263-138kV/69kV South Fairmount Loop Survey Area

Symbol	Description	Hydric
Ur	Urban land	N
UHSXAF	Urban land-Haplic Udarents-Stonelick complex, 0 to 2 percent slopes, frequently flooded	N

4 Methodology and Description

4.1 Regulated Waters Investigation

The delineation of regulated waters within the Survey Area was based on the methodology described in the *Corps of Engineers Wetland Delineation Manual* (Environmental Laboratory, 1987) and the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Eastern Mountains and Piedmont Region* (Environmental Laboratory, 2012) as required by current USACE policy.

Prior to the field work, the background information was reviewed to establish the probability and potential location of wetlands on the site. Next, a general reconnaissance of the Survey Area was conducted to determine site conditions. The site was then walked with the specific intent of determining wetland boundaries. Data stations were established at locations within and near the wetland areas to document soil characteristics, evidence of hydrology and dominant vegetation. Note that no attempt was made to examine a full soil profile to confirm any soil series designations. However, when possible, soils were examined to a depth of at least 16 inches to assess soil characteristics and site hydrology. Complete descriptions of typical soil series can be found in the soil survey for these counties.

4.1.1 Site Photographs.

Photographs of the site are located in Appendix A. These photographs are the visual documentation of site conditions at the time of inspection. The photographs are intended to provide representative visual samples of any wetlands or other special features found on the site.

4.1.2 Delineation Data Sheets.

Where stations represent a wetland boundary point they are presented as paired data points (dp), one each documenting the wetland and upland sides of the wetland boundary. These forms are the written documentation of how representative sample stations met or did not meet each of the wetland criteria. For plant species included on the National Wetlands Plant List, nomenclature will follow their lead. For all other plants not listed in the NWPL, nomenclature will follow the USDA’s Plants Database.

4.2 Technical Descriptions

The project included the review of a 100-ft wide survey corridor approximately 0.26 miles long (the "Survey Area"), located in the City of Cincinnati, Hamilton County, Ohio (see Figure 1). The Survey Area consists of approximately 3.05 acres, with an actual project earth disturbance potential of approximately 0.1 acre (pole replacement and access routes). The F1286/F1263-138kV/69kV South Fairmount Loop Project involves a T-Loop which initiates and terminates at Duke Energy Structure HL196 (39.1128, -84.5436) located north of Queen City Avenue, west of Mill Creek, and east of Beekman Street. The Survey Area consisted of one habitat: industrial turf/shrub.

4.2.1 Wetland and Stream Descriptions

No wetlands or streams were identified within the Survey Area.

4.3 Endangered, Threatened and Rare Species

The potential for listed species known to occur within Hamilton County were evaluated based on the habitat observed within the Survey Area. In addition, high quality natural communities and significant natural habitat areas were documented if encountered. A walking survey of the Survey Area was performed in which all observed Endangered, Threatened and Rare (ETR) species or specific known special habitats were noted. Coordination with the U.S. Fish and Wildlife Service (USFWS) and Ohio Department of Natural Resources (ODNR) Division of Wildlife occurred as it related to the Natural Heritage Database search results for the Survey Area (Appendix D).

Tables summarizing the results of ETR species as they relate to the habitat observed within the Survey Area are included with this report. Correspondence with the ODNR DOW and the USFWS regarding RTE located within a ½-mile of the Survey Area were sent October 31, 2018. The copies of the correspondence letters are located in Appendix B.

Bat Roost Habitat

The Indiana Bat (*Myotis sodalis*, federally endangered) and Northern Long-eared Bat (*Myotis septentrionalis*, federally threatened) are protected under the Endangered Species Act, which is overseen by the USFWS. Typical guidance from USFWS regarding potential bat roost trees is avoidance of cutting trees from April through October. The Survey Area was assessed for potential bat roosting habitat with respect to any indicated clearing activities. Potential bat roost trees include dead or dying trees (including live shagbark hickories) with at least 10-percent exfoliating bark, a diameter at breast height (DBH) of at least 3 inches, and solar exposure for maternity roost trees (the tree is on a wooded edge or in a canopy gap). If applicable, correspondence from USFWS regarding Indiana Bat and Northern Long-eared Bat is included within Appendix B.

Suitable bat roost habitat was not observed within the F1286/F1263-138kV/69kV South Fairmount Loop Survey Area.

5 Jurisdictional Analysis

5.1 U.S. Army Corps of Engineers

The USACE has authority over the discharge of fill or dredged material into “waters of the U.S.”. This includes authority over any filling, mechanical land clearing, or construction activities that occur within the boundaries of any “waters of the U.S.” A permit must be obtained from the USACE before any of these activities occur. Permits can be divided into two general categories: Individual Permits and Nationwide Permits.

Individual Permits are required for projects that do not fall into one of the specific Nationwide Permits (NWP) or are deemed to have significant environmental impacts. These permits are much more difficult to obtain and receive a much higher level of regulatory agency and public scrutiny and may require several months to more than a year for processing.

Nationwide Permits (NWP) have been developed for projects that meet specific criteria and are deemed to have minimal impact on the aquatic environment. There are currently 52 Nationwide Permits for qualifying activities with 31 Nationwide Permit General Conditions that must be satisfied in order to receive NWP consideration from the USACE.

5.2 Ohio Environmental Protection Agency

The OEPA is responsible for issuing Clean Water Act (CWA) Section 401 permits known as Water Quality Certifications (WQC) for all impacts to “waters of the State of Ohio.” This includes authority over any dredging, filling, mechanical land clearing, impoundments or construction activities that occur within the boundaries of any “waters of the State,” including those isolated waters not otherwise regulated by the USACE.

The OEPA issues Section 401 WQC in conjunction with the USACE’ Section 404 permits. A §401 Water Quality Certification must be received before the USACE can issue any §404 Department of the Army Permit. The OEPA must issue Individual §401 WQC for all Individual §404 Permits.

Water quality certification may be granted, without notification to the OEPA, if the project falls under the NWP limitations described above. In order to qualify for this granted certification, all prior-authorized and *de minimis* Ohio State Certification General Limitations and Conditions as published by the OEPA must be satisfied.

The OEPA also requires notification for all impacts to isolated wetlands, which includes a permit application and mitigation plan pursuant to Section 6111 of Ohio Revised Code (ORC).

6 Summary and Conclusion

6.1 Summary

Cardno inspected the F1286/F1263-138Kv/69kV South Fairmount Loop Survey Area on October 29, 2018.

6.1.1 Wetlands and Waterways

No wetlands or waterways were identified within the F1286/F1263-138Kv/69kV South Fairmount Loop Survey Area.

6.1.2 Endangered, Threatened, and Rare Species

Several sources of information were consulted to further define the potential habitat of listed species that occur within the county of the Survey Area. Correspondence received from USFWS and ODNR-DOW contain lists of the ETR species known to occur within Hamilton County and their potential to occur within the Survey Area based on their habitat requirements and observations during the field survey (Appendix B).

6.1.3 Indiana Bat and Northern Long-eared Bat Roost Habitat

The entire Survey Area was walked to identify potential Indiana Bat and Northern Long-eared Bat roost trees. Based on our field inspection and our best professional judgment, there are no potential roost or maternity roost trees suitable for harboring Indiana Bats and Northern Long-eared Bats within the Survey Area.

The USFWS is the regulatory authority that makes the final determination as to the status of the Indiana Bat and Northern Long-eared Bat in the Survey Area. A copy of the correspondence letter can be found in Appendix B.

6.2 Conclusion

There were no wetlands or streams within the Survey Area.

While this report represents our best professional judgment based on our knowledge and experience, it is important to note that the Huntington District of the U.S. Army Corps of Engineers has final discretionary authority over all jurisdictional determinations of 'waters of the U.S.' including wetlands under Section 404 of the CWA in this region. It is therefore, recommended that a copy of this report be furnished to the Huntington District of the U.S. Army Corps of Engineers to confirm the results of our findings.

7 References

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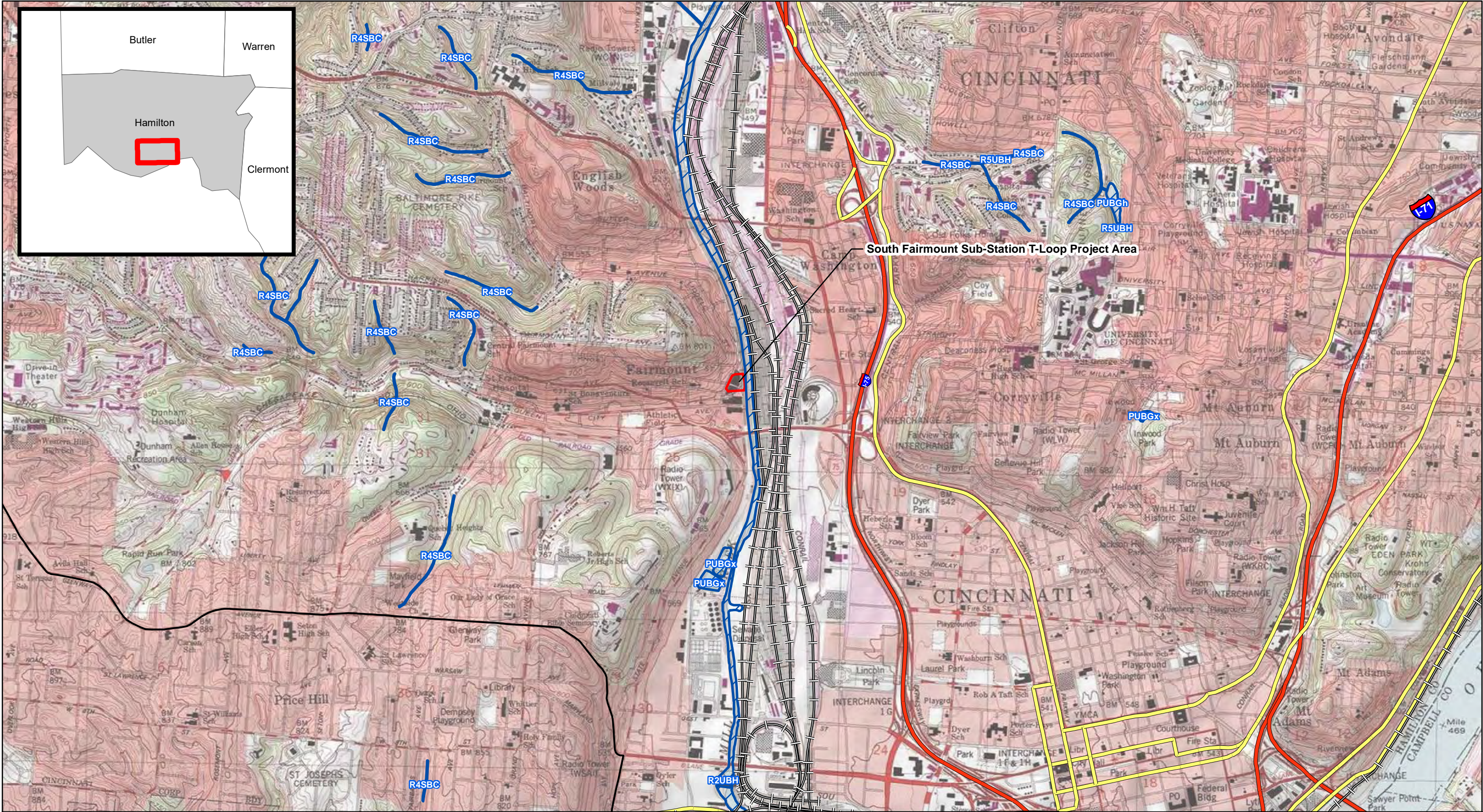
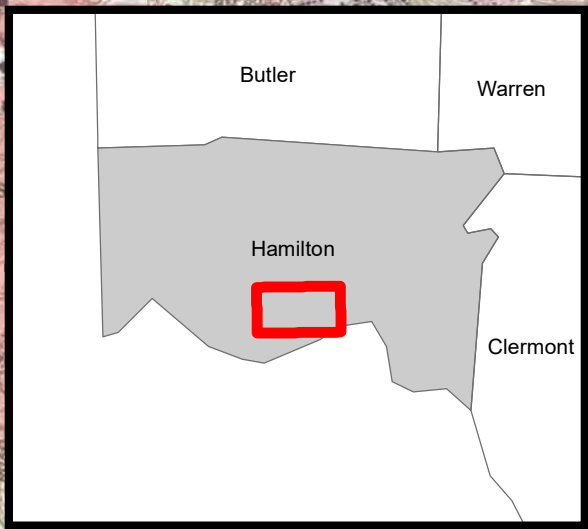
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DUKE ENERGY
F1286/1263—138kV/69kV
South Fairmount Loop

FIGURES



PROJECT LOCATION

HAMILTON COUNTY, OHIO

REFERENCE:
 ROUTE CENTERLINE AND FACILITY
 Duke Energy
 USGS 7.5' TOPOGRAPHIC QUADRANGLES
 ESRI's Online USA Topo, accessed 11/6/2018
 ESRI's USA Major Roads, accessed 11/6/2018

Railroad	Route Centerline
State Highway	Interstate
US Highway	
M73_NWI	

0 1,000 2,000 3,000 Feet

FIGURE 1

REGULATED WATERS DELINEATION REPORT
 F1286/F1263 – 138kV/69kV SOUTH FAIRMOUNT T-LOOP

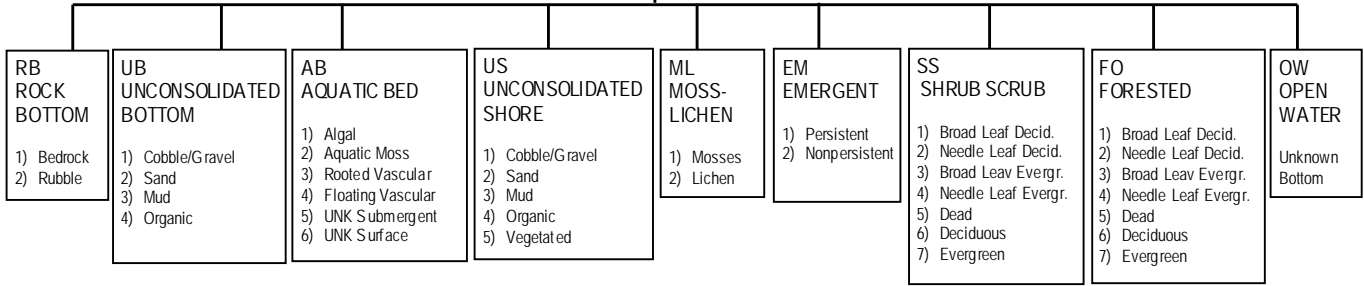
DUKE ENERGY
 PROJECT VICINITY MAP

DRAWN BY: DKT
 CHECKED: CAJ

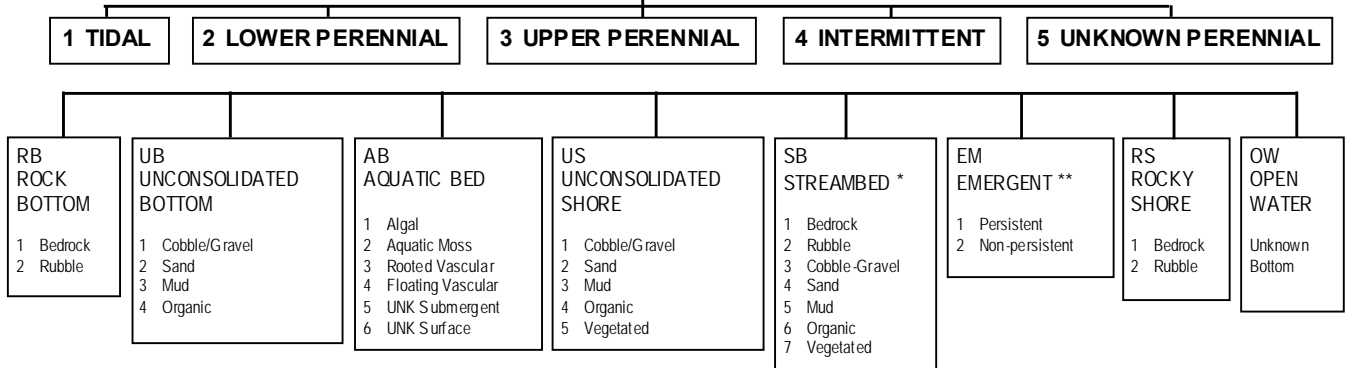
DATE: 11/6/2018
 APPROVED: CAJ

FRESHWATER WETLAND CLASSIFICATION

P—PALUSTRINE



R—RIVERINE



MODIFYING TERMS

In order to more adequately describe wetland and aquatic habitats water regime, water chemistry, soil of special modifiers may be applied.

WATER REGIME		WATER CHEMISTRY		SOIL	SPECIAL MODIFIERS
NON-TIDAL		INLAND SALINITY			
A Temporarily Flooded	J Intermittently Flooded	7 Hypersaline	pH MODIFIERS FOR FRESHWATER	g Organic	b Beaver
B Saturated	K Artificially Flooded	8 Eusaline	a Acid	n Mineral	d Partially Drained/Ditched
C Seasonally Flooded	W Intermittently Flooded/ Temporary	9 Mixosaline	t Circumneutral		f Farmed
D Seasonally Flooded/ Well-Drained	Y Saturated/Semipermanent/ Seasonal	0 Fresh	i Alkaline		h Diked/Impounded
E Seasonally Flooded/Saturated	Z Intermittently Exposed/ Permanent				r Artificial Substrate
F Semipermanently Flooded	U Unknown				s Spoil
G Intermittently Exposed					x Excavated
H Permanently Flooded					

Dominance types must be added by users.

Classification of wetland and deepwater habitats of the U.S. Cowardin et. al. 1979 as modified for national wetland inventory mapping conventions.

Figure 2: NWI KEY

REGULATED WATERS DELINEATION REPORT
 F1286/F1263 – 138kV/69kV SOUTH
 FAIRMOUNT T-LOOP
 DUKE ENERGY
 HAMILTON COUNTY, OHIO



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Project No.
 J156720M73

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