



139 E. Fourth Street
Cincinnati, Ohio 45202

January 18, 2022

Ms. Tanowa Troupe, Secretary
Ohio Power Siting Board
Docketing Division
180 East Broad Street, 11th Floor
Columbus, Ohio 43215

Re: In the Matter of the Application of Duke Energy Ohio, Inc., for a Construction Notice for
the Columbia Structure Replacement Project
OPSB Case No. 21-985-EL-BNR
ODOT Permit

Dear Ms. Troupe:

Please find attached herewith the State of Ohio Department of Transportation permit relating to
the above-referenced case.

Sincerely,

/s/ Emily A. Olive, CP
Emily A. Olive
Certified Paralegal

MR 509
Permit No. 21-20977

Office Use Only

State of Ohio
Department of Transportation
Permit

County or Jurisdiction WAR	
Rte	SR48
Log Pt	8.4-8.66
Acc Cat	

[1] Subject to all terms, conditions, and restrictions printed, written below and on the reverse side hereof, or attached,

Name: Duke Energy Ohio
Address: 315 Main Street, Mail Code EX 0446-06 Cincinnati OH 45202
Company Phone: 5132871041

is hereby granted a permit under Section 5515.01 and 5515.02 of Ohio Revised Code, and permission to perform work necessary in the manner described and at the location indicated in the following or attached to this permit.

Drive - Temporary Construction - (see attached sheets)

Description of Work: ##DescOfWork##

[2] This permit shall be in the possession of employees /agents of permittee on site at all times who are in charge of the work and shall be shown, upon request, to any employee of the Department of Transportation.

Contact ODOT Representative 3 days before work begins, also contact ODOT Representative when work is completed for final inspection.
Failure to notify the ODOT Representative could result in work stoppage!

[3] No work authorized by this permit shall begin until the permittee has contacted and received instructions from

ODOT Representative-John Walsh
Phone (513)933-6580
Email Address: john.walsh@dot.ohio.gov
(Authorized ODOT Employee)

NOTE: Any work performed by the permittee may be stopped if this requirement is not met.

[4] Prior to any excavation in the highway right-of-way, the Ohio811, <https://www.oups.org/excavators> must be contacted in accordance with ORC Section 3781.25 to 3781.32. Ohio811 can be reached at 1-800-362-2764 or 811.

[5] If your utility is above ground in any way, you must mark your utility with a fluorescent colored marker that corresponds with the universal OUPS color code. The marker must be no shorter than six feet in height and you must maintain the marker. Guide wires must be marked a fluorescent yellow. Failure to mark as described, will result in the Department of Transportation being held harmless and no reimbursement for damage to your property.

[6] All work requiring persons or vehicles within ODOT right of way shall comply with all applicable requirements of the Ohio Manual of Uniform Traffic Control Devices and Item 614 (Maintaining Traffic) of the Construction and Material Specifications, latest editions. Failure to comply with these requirements will be cause for immediate revocation or suspension of the permit until the proper traffic control devices have been provided.

[7] The permittee accepts the conditions, terms, and requirements printed, written on, or attached to this permit and understands that failure to comply fully with those conditions, terms, and requirements or any change in the use of the permit inconsistent with its terms and conditions will be considered a violation and cause for suspension, revocation, or annulment of the permit thereby rendering the permit illegal and subject to appropriate Department action, up to an including removal of the installation at the permittee's expense.

[8] Performance Bond Required? Yes No Company _____
Effective Date _____ Expiration Date _____ Amount \$ _____

[9] This permit shall be void if the work described herein does not comply with the conditions, terms, and requirements applicable to this permit, and if the work is not completed by 07/09/2022

Dated 01/06/2022

Rev 5/6/2021

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**General Provisions Applicable to All Permits
(Sections 5515.01 and 5515.02 of O.R.C.)**

- [1] This permit is not a substitute for satisfying the rights or obligations of any other party who may have an interest in the underlying fee interest.
- [2] The granting of this permit does not convey to the permittee or to the property served any rights, title, or interest in state highway rights of way or in the design or operation of the state highway; or in any way abridge the right of the Director of the Department of Transportation in his jurisdiction over state highways. If, in the process of any future work or for the benefit of the traveling public, it becomes necessary, in the opinion of the Director of Transportation to order the removal, reconstruction, relocation, or repair of any of the fixtures, or work performed under this permit, said removal, reconstruction, relocation, or repair shall be wholly at the expense of the owners thereof or the permittee and be made as directed by the Director of Transportation and within the time determined by the Director. Such changes in the state highway design or operation, necessary for improved safety and operation or for the benefit of the traveling public, shall not require a permit modification since the permit confers no private rights to the permittee over the control of the state highway.
- [3] The District Deputy Director acts for and on behalf of the Director in issuing and carrying out the provisions of all permits. The District Deputy Director has full authority to ensure that all provisions of the permit are met and to reject any materials, design, and workmanship that do not meet applicable Department standards. The District Deputy Director, at his/her discretion, may require a performance bond or certified check as a prerequisite to the issuance of a permit.
- [4] Failure on the part of the permittee to comply fully with the provisions and conditions of the permit will be cause for suspension, revocation, or annulment of the permit thereby rendering the permit illegal and subject to appropriate Departmental action. By accepting the permit, the permittee agrees to comply with all conditions, terms, and restrictions printed or written on or attached to the permit. If the permittee or its agent performs any work contrary to the conditions of the permit or to the instructions of the District Deputy Director and, after due notice, fails to correct the problem, the Department of Transportation may, with or without notice, correct or remove such work and the permittee shall reimburse the Department for the costs and shall hold the Department harmless for all results of such work.
- [5] The permittee shall indemnify and hold harmless the State of Ohio, Department of Transportation, its officers, representatives and assigns, from any and all loss, liability, damages, litigation costs, and claims for injury or death to any person, property, or business caused by or resulting from any act, omission, event, consequence, or occurrence, negligent or otherwise of the permittee, its employees, agents, or assigns as a result of the issuance of this permit.
- [6] All work authorized under the permit shall be performed to the Department's satisfaction, and the entire expense shall be borne by the permittee. No work shall be performed until the permittee has contacted the Department's appointed representative named on the permit and received instructions. The Department's representative may inspect all work covered by the permit, or the Department reserves the right, during the time any or all of the work is being performed, to appoint an inspector over the work who shall represent the interest of the State on the work and any compensation arranged for shall be paid wholly by the permit holder. Work not in compliance shall be halted and the District Deputy Director shall be notified of the cause. The permittee shall be notified of the Department's determination and given an opportunity to correct the problem. If the problem is not corrected timely or to the satisfaction of the Department, this permit will be revoked.
- [7] Failure to complete all work within the time specified on the permit shall void the permit, thereby making the permit illegal and subject to appropriate Departmental action. The permittee may request an extension in writing from the District Office, explaining why the extension is necessary and when the work is expected to be completed.
- [8] All work infringing on the pavement or shoulders shall comply with applicable standards and requirements regarding traffic control devices. Failure to comply will be cause for revocation or suspension of the permit. Any closure of lanes or shoulders shall be described in terms of location, duration, time of day, etc. Such work shall not begin until all traffic control devices are in place.

[9] If any grading, sidewalk, or other work allowed by a permit interferes with the drainage of the highway in any way, such catch basins and outlets as necessary shall be constructed to take proper care of said drainage and any materials such as pipes and tiles damaged during any installation or repair by the permittee or its employees or agents shall be repaired immediately at the sole cost of the permittee. Permittee shall timely notify the Department of any such damage and repairs thereto. Failure of the permittee to immediately repair the damage after it is discovered shall result in the Department performing the repair and the permittee shall reimburse the Department for the costs and shall hold the Department harmless for all the results of such work which may include removal of the permittee's facilities.

[10] Any damage to ODOT or another's property caused by the work shall be repaired by the permittee or permittee's agent or contractor in a timely manner and at the sole cost of permittee. If any emergency repairs to ODOT property are needed that cannot be performed by the permittee or permittee's agent or contractor, ODOT shall cause the repairs to be performed at the sole cost of permittee.

[11] Upon completion of the work, the permittee shall leave the highway clean of all rubbish, excess materials, temporary structures and equipment, and all parts of the highway shall be left in a condition acceptable to the Department. Upon satisfactory completion of the work authorized by the permit, the Department's appointed representative shall complete the Permit Inspection Certificate, Form No. MR 678 certifying that the permittee has complied with the terms of the permit.

[12] Except as herein authorized, no excavation shall be made or obstacle placed within the limits of the highway so as to interfere with the travel over the road.

[13] All pole lines are to be built in accordance with Rule 4901:3-1-08 of Ohio Administrative Code promulgated and enforced by the Public Utilities Commission of Ohio.

[14] All underground utilities shall be installed at a depth and horizontal distance from the road surface and any appurtenances in accordance with state and national safety standards and as pre-approved by the Department. After installation, the exact location of the utility shall be provided to the Department. The Department shall be held harmless for any damage to utilities due to insufficient or inaccurate installation or identification and all repairs shall be at the sole cost of the permittee.

[15] The permittee shall comply with the Air Pollution requirements of Rule 3745-17-08 of the Ohio Administrative Code promulgated and enforced by the Ohio Environmental Protection Agency.

[16] The permittee certifies that he or she is fully authorized to sign this permit. This permit shall apply to and be binding upon the permittee and any successors in interest. No change in ownership of the underlying property or of the facility owned by permittee shall in any way alter the permittee's obligations under this permit.

[17] The permittee(s) for herself/himself/themselves/itself, her/his/their/its personal representatives, and her/his/their/its successors in interest and assigns, as a part of the consideration hereof, do/does hereby covenant and agree that:

(1) No person on the grounds of race, color, or national origin, shall be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination in the use of the utility/facilities/ services of the permittee.

(2) In the construction of any improvements on, over, or under the above described property and the furnishing of services thereon, no person on the grounds of race, color, national origin, sex, age, or disability shall be excluded from the participation in, be denied the benefits of, or be otherwise subjected to discrimination.

(3) The above described property shall be used in a manner that at all times is in compliance with all other requirements imposed by or pursuant to Title 49, Code of Federal Regulations, U.S. DOT, Subtitle A, Office of the Secretary, Part 21, Non-discrimination in Federally-assisted programs of the U.S. DOT— Effectuation of Title VI of the Civil Rights Act of 1964, and as said Regulations may be amended.

(4) In the event that this instrument grants a lease, license, or permit and any of the above non-discrimination covenants is breached, then the State of Ohio, Department of Transportation, shall have the unfettered right to terminate

the lease, license or permit and to re-enter and repossess the above-described property and hold the same as if said lease, license or permit had never been made or issued.

This permit is granted subject to the following attached conditions:

***** LANE CLOSURES PERMITTED ON SR 48 BETWEEN 9:00AM & 3:00PM ONLY*****

(the remainder of this page is left blank intentionally)

All work shall be performed at no cost to the State of Ohio or the Federal Highway Administration.

Loading or unloading of equipment and material from the roadway pavement will not be permitted.

Storage of pipe and material on the pavement, berms, median and/or State right-of-way will not be permitted without prior approval from the District Permit Office.

Equipment and personnel operating from the pavement shall be kept to a minimum; and, with adequate flagmen (Flagmen's Guide) and to a minimum; traffic warning devices maintained at all times.

Restoration of all areas disturbed shall be completed immediately after installation is completed.

All areas disturbed by this operation shall be restored comparable to that of the surrounding area and to the satisfaction of the State Inspector.

All walks, steps, driveways, drains, mail boxes, traffic signs, guardrail, poles, fences, etc. that are disturbed must be restored to their original condition or better.

The pavement, berms and median must be kept clean of dirt, mud and debris at all times.

All traffic shall be maintained in accordance with the Ohio Manual of Uniform Traffic Control Devices for Construction and Maintenance Operations.

Local traffic, facilities for pedestrian and vehicular ingress and egress, shall be provided at all times for the property adjacent to the work.

Two-way traffic shall be maintained at all times and all equipment used on pavement shall be rubber tired.

No vehicles, equipment, or personnel, including personal automobiles, will be permitted to park on or operate from the roadway pavement, berms, or median.

It must be stressed, that the pavement is to be kept clean at all times from mud and material carried onto the pavement. Failure to comply with this request will result in suspending all operations on State Right-of-Way while working under this Permit.

No headwalls shall be constructed on the inlet or outlet ends of any pipe installed on State right-of-way unless specified on the plan and approved by the State Inspector.

All ditch areas and slopes disturbed must be reshaped to drain properly; and, seeded or sodded as directed by the State Inspector.

Proper roadside drainage shall be maintained at all times.

The driveway shall slope down and away from the through pavement edge at the same rate of slope as the highway shoulder slope; and, shall be constructed that no surface water will be drained onto the highway pavement. The driveway approach shall be flush with the through edge of the through pavement.

No parking, servicing of vehicles, erection of lights, signs, or other advertising devices will be permitted on highway right-of-way, and no device or structure will be permitted to overhang highway right-of-way.

Provisions must be made that a vehicle will not be required to back onto the right-of-way or through highway pavement to gain access to the highway.

All supports for rural mail boxes shall be of the break-away type. Satisfactory supports shall be considered as those which follow: a. 4" x 4" timber, b. 2 - 1/2" standard wall pipe, c. Any material of equal break-away characteristics as a or b

The Permittee shall be responsible for any and all utility relocation due to this work.

In the event of ice, snow or rain, all work shall be suspended as directed by the State Inspector and shall remain suspended until notified by the State Inspector.

Access Control, R/W Use Permits and Drive Design

(a) When the highway intersection is 120° , or greater, the beginning of the approach radius may begin 20 feet from the angular bisector, as measured along the face of curb or pavement edge.

(b) When the highway intersection radius is greater than 80' the beginning of the approach radius may begin 40' from the angular bisector.

B. AT CHANNELIZED INTERSECTIONS the above conditions shall apply, unless their use would encourage "wrong-way" operation along a directional portion of the intersection. In such case, special drive designs will be required.

802.28 Drive Sight Distance

Wherever possible, drives should be located in accordance with the intersection sight distance criteria in Section 201.3.

802.29 Location of High Volume Drives

Special consideration should be given to the location of drive access to high volume traffic generators such as shopping centers, industrial plants and parks, as well as other types of development having similar traffic characteristics.

A new driveway should not be located where it will create an offset intersection opposite an existing street, highway, or major commercial driveway.

A driveway serving all directions of traffic should be located a minimum of 600 feet from the nearest major highway or street intersection.

803 Drive Geometric Design

803.1 Mailbox Facilities

803.11 Mailbox Supports

Mailbox installations located within the clear zone shall be installed as shown in Figure 803-1 using "breakaway" type supports. Satisfactory supports are as follows:

A. Maximum 4"x4" square or 4 1/2" dia. round timber.

B. Maximum 2" diameter (2-3/8" O.D.) standard strength steel pipe.

C. Any material with breakaway cross section characteristics equivalent to A or B above.

Group mailbox supports should be placed on three foot centers and the turnout lengthened to accommodate the grouping. No more than two mailboxes shall be placed on each post.

Where guardrail exists, mailboxes and their supports should be located behind the guardrail. Supports must still meet the breakaway requirements listed above.

803.12 Mailbox Turnouts

Where the existing or proposed highway shoulder paving is less than 6 feet wide, mailbox turnouts should be provided as shown in Figure 803-1 and Standard Construction Drawing BP-4.1. Mailbox turnouts should be constructed of the same material used in the drive approach and combined with the drive approach where possible.

803.2 Rural Residential and Field Drives

Rural residential drives and field drives should normally conform to the Type 1 design shown in Standard Construction Drawing BP-4.1.

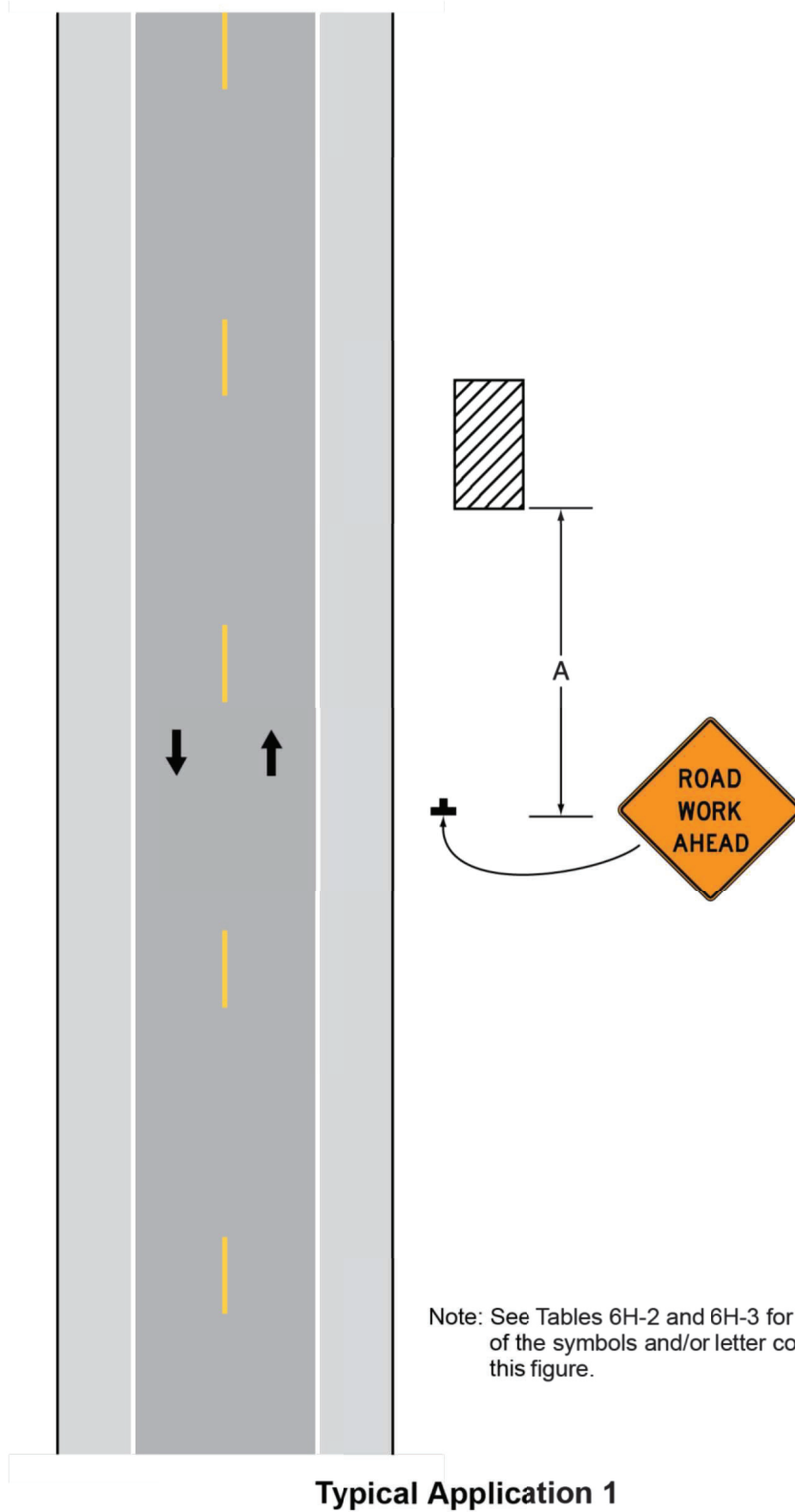
803.21 Drive Intersection Angle

New drives should intersect the highway at an angle between 70° and 90° . However, in some cases, it may be necessary to retain existing drive angles that vary from these desirable angles.

803.22 Drive Widths

If the project involves existing drives, the existing width is normally retained unless it is less than 12 feet. In which case, it should be widened to provide a 12 foot throat width. In the case of new drives, the width should normally be 12 feet. If the new driveway is a combined drive between two properties, the width should normally not exceed 24 feet. Also, a wider field drive may be used if it will keep the farm equipment operator from encroaching on the opposing traffic lane when entering or exiting the highway.

Figure 6H-1. Work Beyond the Shoulder (TA-1)



Note: See Tables 6H-2 and 6H-3 for the meaning of the symbols and/or letter codes used in this figure.

INTEROFFICE COMMUNICATION

TO: Tammy Campbell, District 8 Deputy Director
ATTENTION: Lucas Braun, P.E., District 8 Utility Engineer
FROM: David Holstein, P.E., Deputy Director, Division of Engineering
BY: Mary Bapu-Tamaskar, P.E., Studies Engineer, Office of Roadway Engineering
DATE: December 3, 2021
SUBJECT: WAR-48 Duke Energy Substation, Temporary LA Break

The Office of Roadway Engineering has reviewed the request for a Temporary LA Break along SR48 on behalf of the applicant, Duke Energy. The applicant is requesting a temporary access along SR48 for the placement of aerial lines on the west side of SR48. ORE concurs with District 8's recommendations regarding the proposed permit. The request for a Temporary LA Break at the subject location is approved.

E-SIGNED by David Holstein
on 2021-12-07 15:32:35 GMT

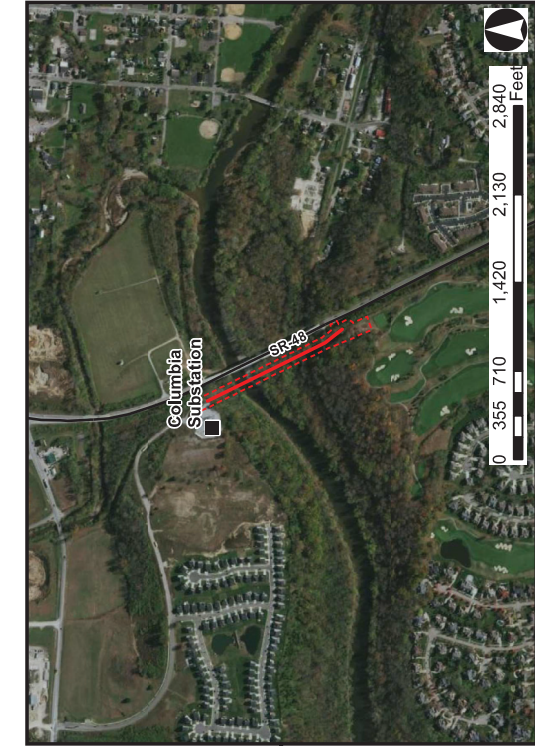
DLH: MBT

cc: T. Campbell (D8) - S. Enders (D8) - A. Koenig - E. Willis

Maineville Lebanon 48 project

- A road work sign to be located at the corner of east Mason Marrow Milgrove Road and John Quinn Blvd.
- A road work sign to be located at corner of Mason Marrow Milgrove Road and SR 48.
- A Road Work Ahead (RWA) sign to be located at corner of Winding Rivers Road and SR 48.
- 350 ft from RWA trucks entering and exiting sign.
- 350 ft past RWA sign trucks entering and exiting highway.
- RWA sign to be located on Mason Road and Turtle Creek.
- Work trucks to be entering and exiting the highway along the north side of SR 48 (ends of guard rail by bridge) at (39.366727, -84.223982).
- Two (2) traffic control trucks to be located on the north and south bound of SR 48, 150 ft from entering and exiting the work area with caution lights and strobes flashing.
- Lane closure with flaggers located on SR 48 will be per SCD MT-97.10.
- Lane closures will be permitted from 8 PM to 6 AM for construction of the drive (tie-in at SR 48). Lane closure will be permitted from 9 AM to 3 PM and 8 PM to 6 AM for trucks entering and exiting the drive as necessary.
- Construction entrance to be removed once construction complete.
- If present, any removed the R/W fence will be replaced. If no R/W fence exists, Duke will add a fence in the area of disturbance once construction is complete.
- Coordination with Aaron Rourke at ODNR will occur prior to construction as a result of the project being located within the Scenic River Corridor.
- The drainage pipe under the temporary construction drive will be 24" diameter and 150' in length.
- The access route will be graded to make it less steep in order to allow safe equipment access.
- The construction access at SR 48 (39.366727, -84.223982) will be 20 ft wide all the way into the ROW.

F5484 – 138kV COLUMBIA SUBSTATION REBUILD AND EXTENSION STORMWATER POLLUTION PREVENTION PLAN



PLANS PREPARED FOR:
DUKE ENERGY OHIO
139 4TH STREET
CINCINNATI, OHIO 45202-4161

PLANS PREPARED BY:
CARDNO INC.
11121 CANAL ROAD
CINCINNATI, OHIO 45241

MIGRATORY BIRD HOTLINE

STATE AND FEDERAL LAWS PROTECT ALL SPECIES OF NATIVE BIRDS FOUND THROUGHOUT THE DUKE ENERGY SERVICE AREA. INTERACTIONS OF BIRDS WITH GENERATING FACILITIES, TRANSMISSION AND DISTRIBUTIONS, SUBSTATIONS, OTHER STRUCTURES AND EQUIPMENT, AND OPERATIONS ARE POTENTIALLY HARMFUL OR FATAL TO BIRDS. DUKE ENERGY OPERATES THESE 24-HOUR MIGRATORY BIRD HOTLINES TO ASSIST EMPLOYEES AND CONTRACTORS WITH RELATED INCIDENTS THAT OCCUR DURING WORK ACTIVITIES.

MIDWEST: 317.430.4497
CAROLINAS: 800.573.3853
FLORIDA: 727.386.3084

811 CALL BEFORE YOU DIG:

CONTRACTOR SHALL NOTIFY "OHIO ONE CALL" (811) OR (1-800-362-2764) AT LEAST 48 HOURS PRIOR TO BEGINNING CONSTRUCTION OR EXCAVATION TO HAVE EX. UTILITIES LOCATED. CONTRACTOR SHALL CONTACT ANY LOCAL UTILITIES THAT PROVIDED THEIR OWN LOCATOR SERVICES INDEPENDENT OF "OHIO ONE CALL". REPORT ANY DISCREPANCIES TO THE ENGINEER IMMEDIATELY.



REFERENCE: USGS 7.5 TOPOGRAPHIC QUADRANGLES: LEBANON AND SOUTH LEBANON, OHIO. OBTAINED VIA ESRI USA TOPO, NATIONAL GEOGRAPHIC TOPO, AND USGS, ACCESSED 01/2017.



PLANS PREPARED FOR:

DUKE ENERGY OHIO
139 4TH STREET
CINCINNATI, OHIO 45202-4161

PLANS PREPARED BY:

CARDNO INC.
11121 CANAL ROAD
CINCINNATI, OHIO 45241

MIGRATORY BIRD HOTLINE

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MIDWEST: 317.430.4497
CAROLINAS: 800.573.3853
FLORIDA: 727.386.3084

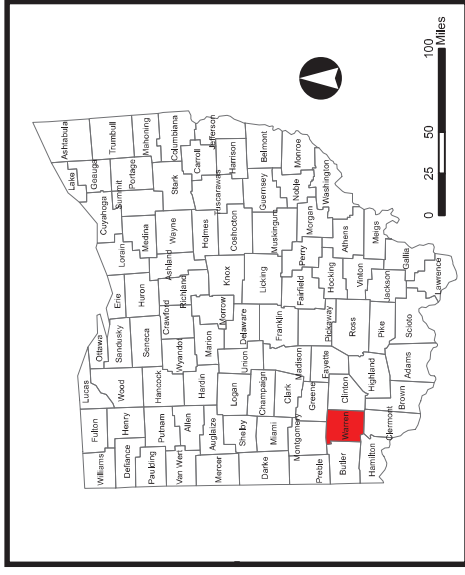
SPILL REPORTING HOTLINE:

IN ORDER TO ENSURE THE PROTECTION OF HUMAN HEALTH AND THE ENVIRONMENT, FEDERAL AND STATE LAWS REQUIRE THAT CERTAIN TYPES OF SPILLS AND UNPERMITTED RELEASES BE REPORTED TO THE PROPER REGULATORY AGENCIES AS SOON AS POSSIBLE FOLLOWING IDENTIFICATION.

IMMEDIATELY NOTIFY YOUR SUPERVISOR AND THE FIELD ENVIRONMENTAL/EHS PROFESSIONAL WHEN A SPILL OR UNPERMITTED RELEASE IS DISCOVERED. IF YOU ARE UNABLE TO REACH THE FIELD ENVIRONMENTAL/EHS PROFESSIONAL, CONTACT ONE OF THE DUKE ENERGY SPILL REPORTING HOTLINES AT:

CAROLINAS & MIDWEST: 800.527.3853
FLORIDA: 866.769.1266

- Existing Facility
- US Highway
- Railroad
- Project Centerline
- County Boundary
- Municipal Boundary



VICINITY MAP

Union and Hamilton Townships
Warren County, Ohio

MAINTENANCE DISTRICT

Warren County, Ohio MS4

CIVIL/GEOGRAPHICAL INFO:

South Lebanon Quad

Warren County

Union and Hamilton Townships

The project initiates at the F5484 – 138kV Columbia Substation, extends to Duke Energy Structure 156 (39.366454, -84.224085) and terminates at Duke Energy Structure 157 (39.366839, -84.224467) located south of the Little Miami River, north of Dwire Road (CR 149), west of State Route 48, and east of Water Stone Lane.

MAP REFERENCES

- SWPPP - 0 - Cover Sheet
- SWPPP - 1 - Project Vicinity Map
- SWPPP - 2 - Project Area Watersheds
- SWPPP - 3 - Soil Classifications
- SWPPP - 4 - Environmental Access Plan Key Map
- SWPPP - 4.01 to 4.02 - Environmental Access Plan

	COVER SHEET COLUMBIA SUBSTATION TRANSMISSION LINE CONNECTION STORMWATER POLLUTION PREVENTION PLAN DUKE ENERGY OHIO	DRAWN BY: COD CHECKED: CAJ DATE: 10/14/2021 APPROVED: CAJ
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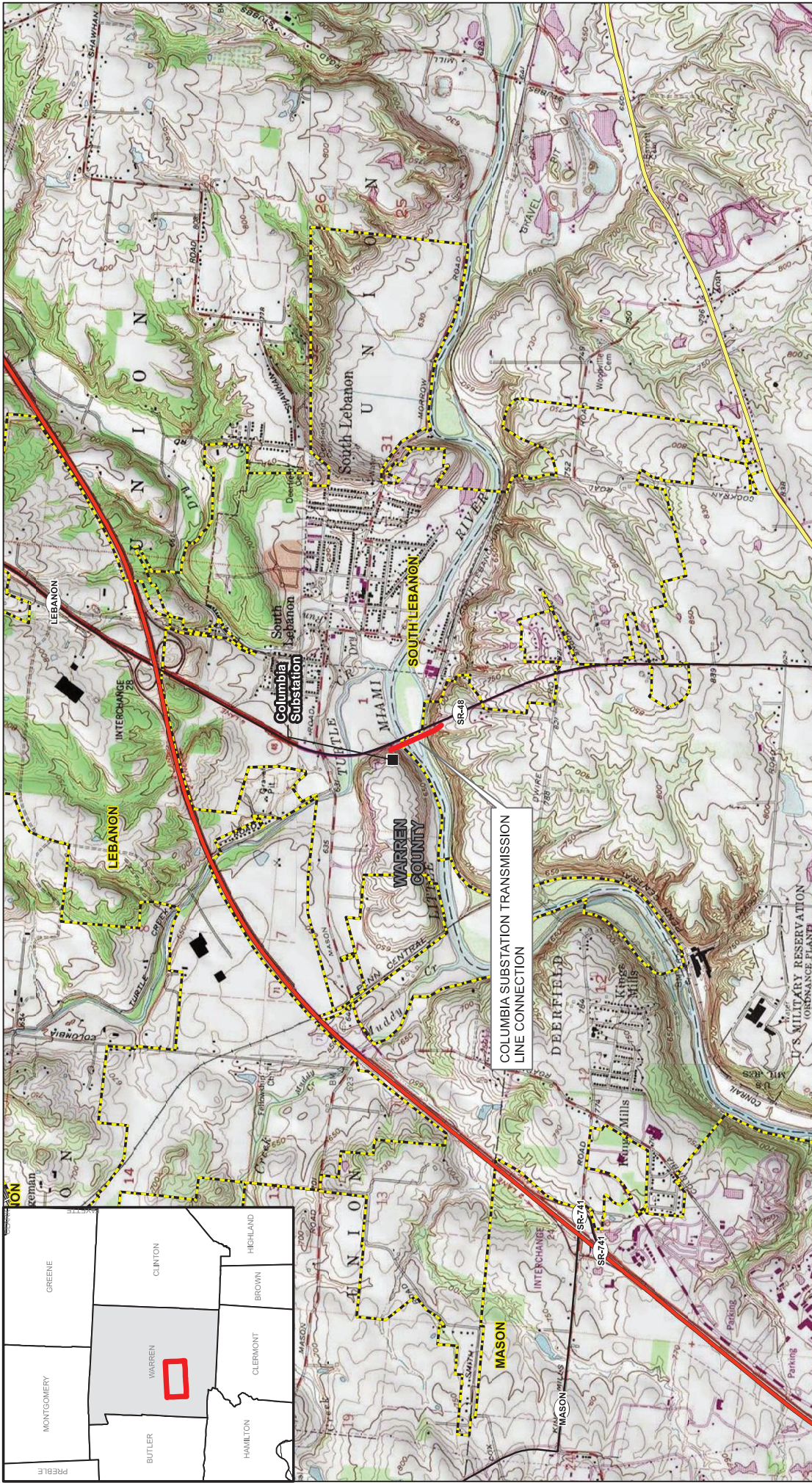


FIGURE 1
STORMWATER POLLUTION PREVENTION PLAN
COLUMBIA SUBSTATION TRANSMISSION
LINE CONNECTION
DUKE ENERGY OHIO
PROJECT VICINITY MAP



DATE: 10/14/2021
 APPROVED: JT
 DRAWN BY: COD
 CHECKED: CJ

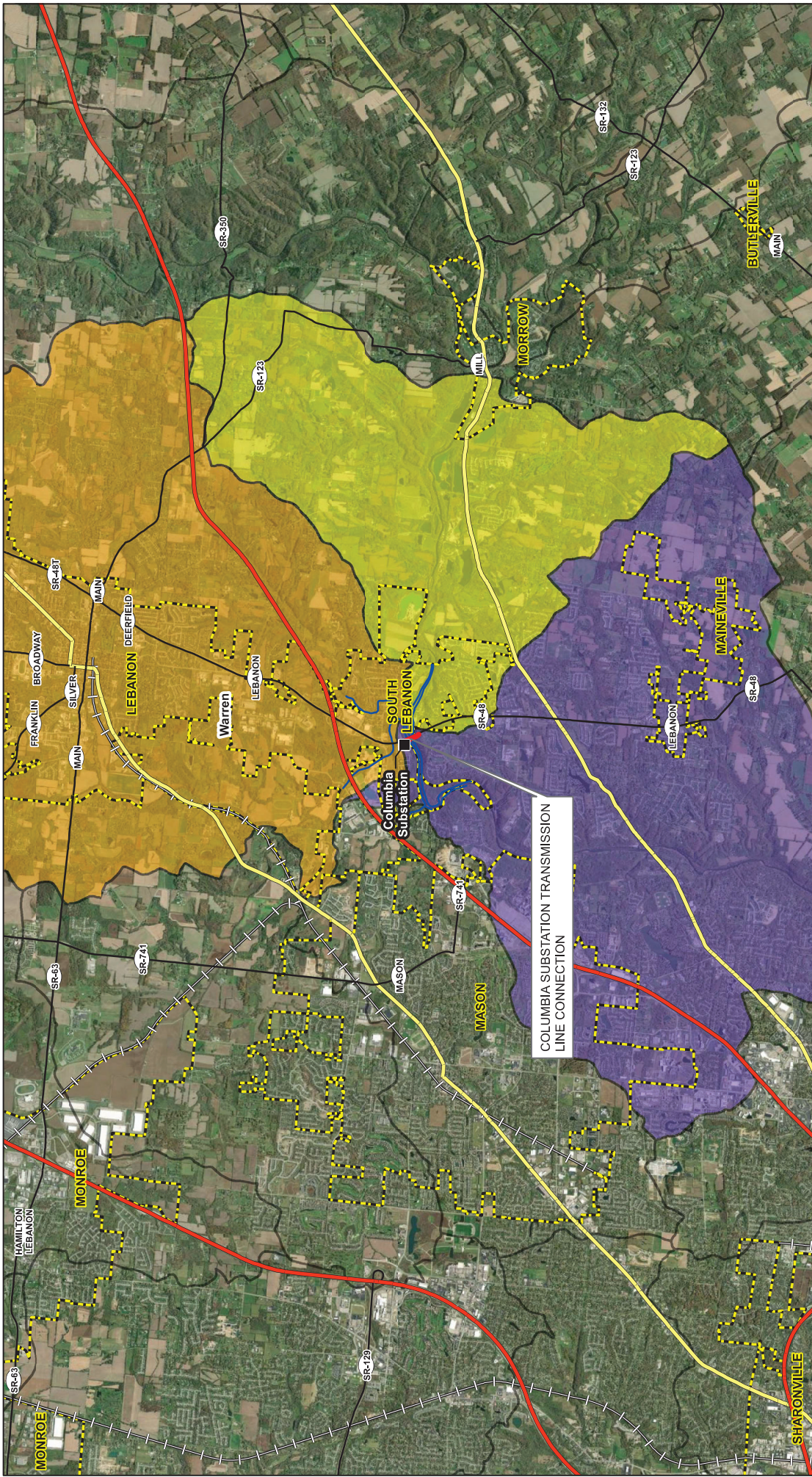
PROJECT LOCATION

WARREN COUNTY, OH

REFERENCE: USGS 7.5' TOPOGRAPHIC QUADRANGLE: SOUTH LEBANON, OHIO, OBTAINED VIA ESRI USA TOPO, NATIONAL GEOGRAPHIC TOPO, AND USGS, ACCESSED 01/20/2017.

0 1,000 2,000 4,000 Feet

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PROJECT LOCATION

WARREN COUNTY, OH

REFERENCE: USGS 7.5' TOPOGRAPHIC QUADRANGLE: SOUTH LEBANON, OHIO, OBTAINED VIA ESRI USA TOPO, NATIONAL GEOGRAPHIC TOPO, AND USGS, ACCESSED 01/2017.

LEGEND:

- Existing Facility
- Project Centerline
- Interstate
- NHD Flowline
- State Highway
- US Highway
- Railroad
- Municipal Boundary
- Adjacent Watersheds
- Little Miami R. below Tood Fk. to above Turtle Cr.
- Little Miami River below Turtle Cr. to above O'Bannon Cr. [except Muddy Cr.]
- Turtle Creek [except Little Muddy Cr.]

FIGURE 2

STORMWATER POLLUTION PREVENTION PLAN

COLUMBIA SUBSTATION TRANSMISSION LINE CONNECTION

DUKE ENERGY OHIO

PROJECT AREA WATERSHEDS

DATE: 10/14/2021

APPROVED: JT

CHECKED: CJ

DRAWN BY: COD

DUKE ENERGY

Caradno

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SOIL LEGEND	
LABEL DESCRIPTION	HYDRIC
CnB Cincinnati silt loam, 2 to 6 percent slopes	N
CnC2 Cincinnati silt loam, 6 to 12 percent slopes	Y
EdF2 Edin complex, 25 to 35 percent slopes, moderately eroded	N
FaF2 Fairmount-Eden flaggy silty clay loams, 25 to 50 percent slopes, moderately eroded	N
FIC2 Fox loam, 6 to 12 percent slopes, moderately eroded	N
Gd Genesee fine sandy loam	N
Gn Genesee loam	Y
Rh Riverwash	N
W Water	N



FIGURE:3
STORMWATER POLLUTION PREVENTION PLAN
COLUMBIA SUBSTATION TRANSMISSION
LINE CONNECTION
DUKE ENERGY
SOIL CLASSIFICATIONS



DRAWN BY: COD
 CHECKED: CJ
 DATE: 10/14/2021
 APPROVED: JT

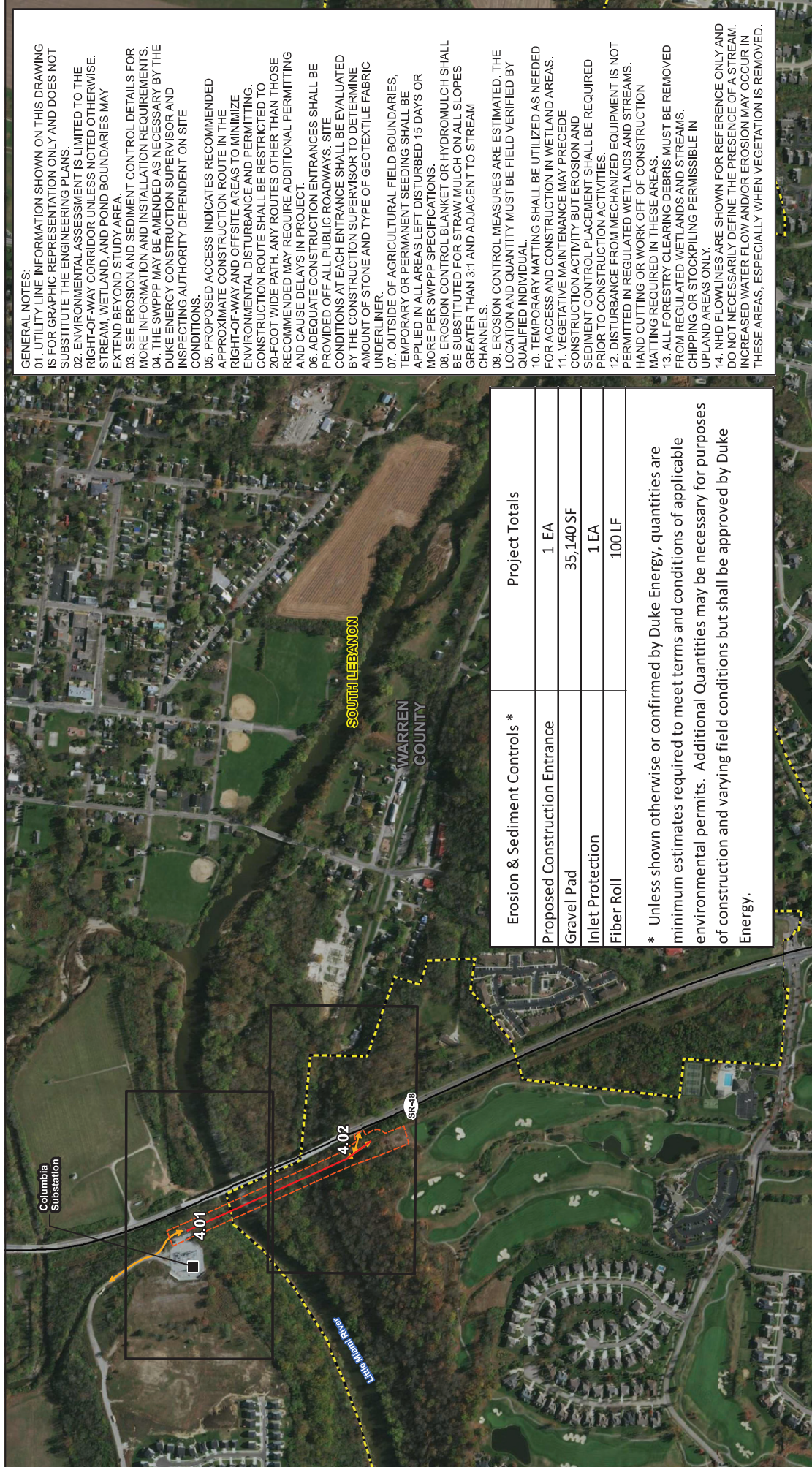
- Existing Facility
- Project Centerline
- 100ft Corridor
- Interstate
- State Highway
- US Highway
- Railroad
- Municipal Boundary
- Soil Unit
- Soil Unit - Hydric

REFERENCE: USGS 7.5' TOPOGRAPHIC QUADRANGLE:
 SOUTH LEBANON, OHIO, OBTAINED VIA
 ESRI USA TOPO, NATIONAL GEOGRAPHIC TOPO, AND
 USGS, ACCESSED 01/2017.

PROJECT LOCATION

WARREN COUNTY, OH

0 150 300 600 Feet



GENERAL NOTES:
 01. UTILITY LINE INFORMATION SHOWN ON THIS DRAWING IS FOR GRAPHIC REPRESENTATION ONLY AND DOES NOT SUBSTITUTE THE ENGINEERING PLANS.
 02. ENVIRONMENTAL ASSESSMENT IS LIMITED TO THE RIGHT-OF-WAY CORRIDOR UNLESS NOTED OTHERWISE. STREAM, WETLAND, AND POND BOUNDARIES MAY EXTEND BEYOND STUDY AREA.
 03. SEE EROSION AND SEDIMENT CONTROL DETAILS FOR MORE INFORMATION AND INSTALLATION REQUIREMENTS.
 04. THE SWPPP MAY BE AMENDED AS NECESSARY BY THE DUKE ENERGY CONSTRUCTION SUPERVISOR AND INSPECTING AUTHORITY DEPENDENT ON SITE CONDITIONS.
 05. 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.
 06. 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 UNDERLIER.
 07. OUTSIDE OF AGRICULTURAL FIELD BOUNDARIES, TEMPORARY OR PERMANENT SEEDING SHALL BE APPLIED IN ALL AREAS LEFT DISTURBED 15 DAYS OR MORE PER SWPPP SPECIFICATIONS.
 08. EROSION CONTROL BLANKET OR HYDROMULCH SHALL BE SUBSTITUTED FOR STRAW MULCH ON ALL SLOPES GREATER THAN 3:1 AND ADJACENT TO STREAM CHANNELS.
 09. EROSION CONTROL MEASURES ARE ESTIMATED. THE LOCATION AND QUANTITY MUST BE FIELD VERIFIED BY QUALIFIED INDIVIDUAL.
 10. TEMPORARY MATTING SHALL BE UTILIZED AS NEEDED FOR ACCESS AND CONSTRUCTION IN WETLAND AREAS.
 11. VEGETATIVE MAINTENANCE MAY PRECEDE CONSTRUCTION ACTIVITY BUT EROSION AND SEDIMENT CONTROL PLACEMENT SHALL BE REQUIRED PRIOR TO CONSTRUCTION ACTIVITIES.
 12. DISTURBANCE FROM MECHANIZED EQUIPMENT IS NOT PERMITTED IN REGULATED WETLANDS AND STREAMS. HAND CUTTING OR WORK OFF OF CONSTRUCTION MATTING REQUIRED IN THESE AREAS.
 13. ALL FORESTRY CLEARING DEBRIS MUST BE REMOVED FROM REGULATED WETLANDS AND STREAMS. CHIPPING OR STOCKPILING PERMISSIBLE IN UPLAND AREAS ONLY.
 14. 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.

Erosion & Sediment Controls *	Project Totals
Proposed Construction Entrance	1 EA
Gravel Pad	35,140 SF
Inlet Protection	1 EA
Fiber Roll	100 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.

FIGURE: 4
 STORMWATER POLLUTION PREVENTION PLAN
 COLUMBIA SUBSTATION TRANSMISSION
 LINE CONNECTION
 DUKE ENERGY
 INDEX SHEET

DUKE ENERGY
 Carolina
 Building the Future

DRAWN BY: COD
 CHECKED: CJ
 DATE: 10/14/2021
 APPROVED: JT

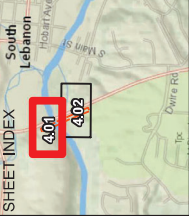
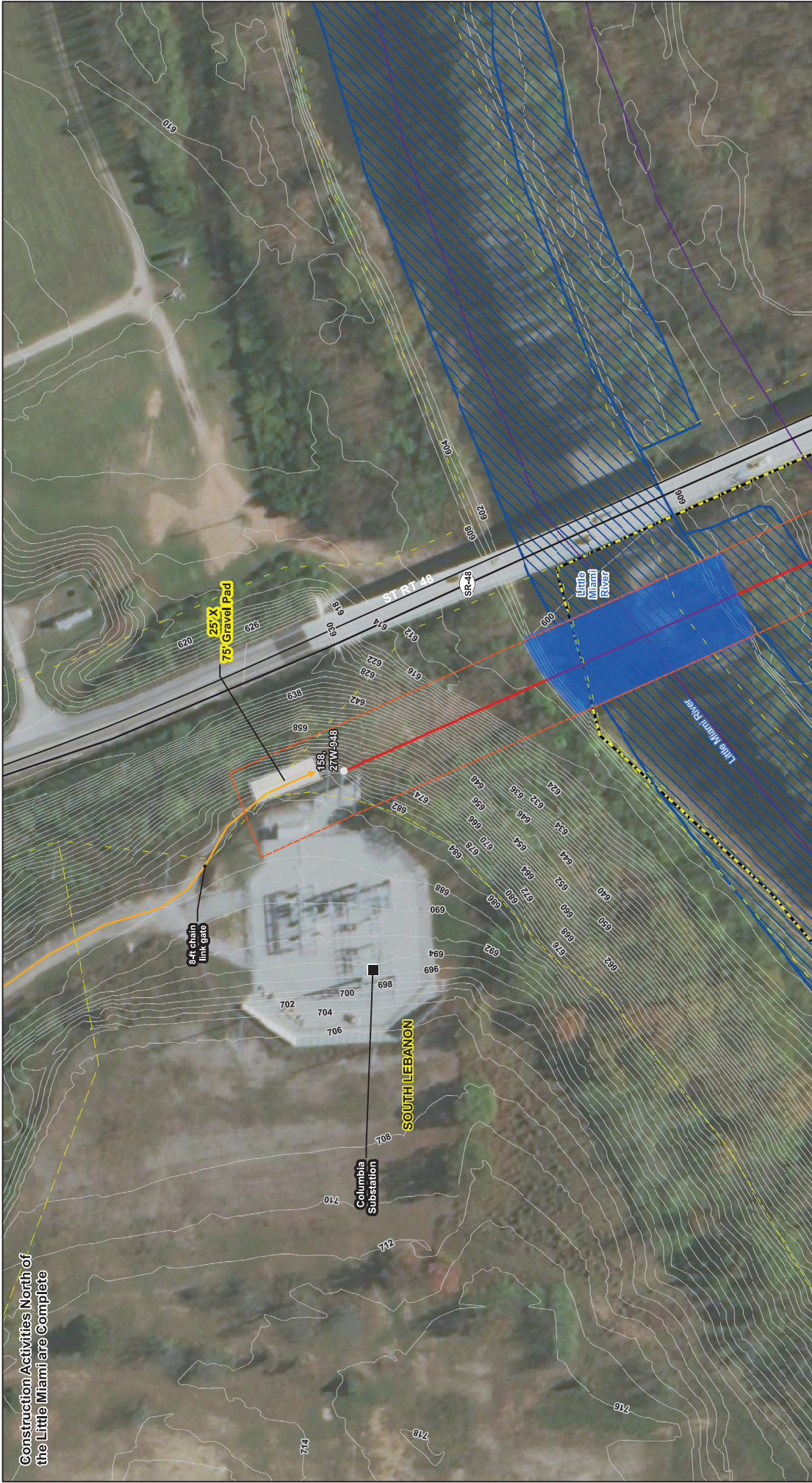
Project Location

REFERENCE: ESRI WORLD IMAGERY OBTAINED THROUGH ESRI WORLD IMAGERY MICROSOFT CORPORATION, ACCESSED 01/20/17

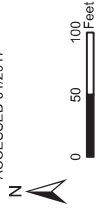
0 275 550 1,100 Feet

R:\Projects\19119\19119\465MC_DukeEnergy_Contract2520_SlingPermitting&Engagement\1914650MC_FC252361_Transmission\31_5484_138KV_ColumbiaSubstation\GIS\XDS\SWPPP_Index\XDS\SWPPP_Keys\Map.mxd

Construction Activities North of the Little Miami are Complete



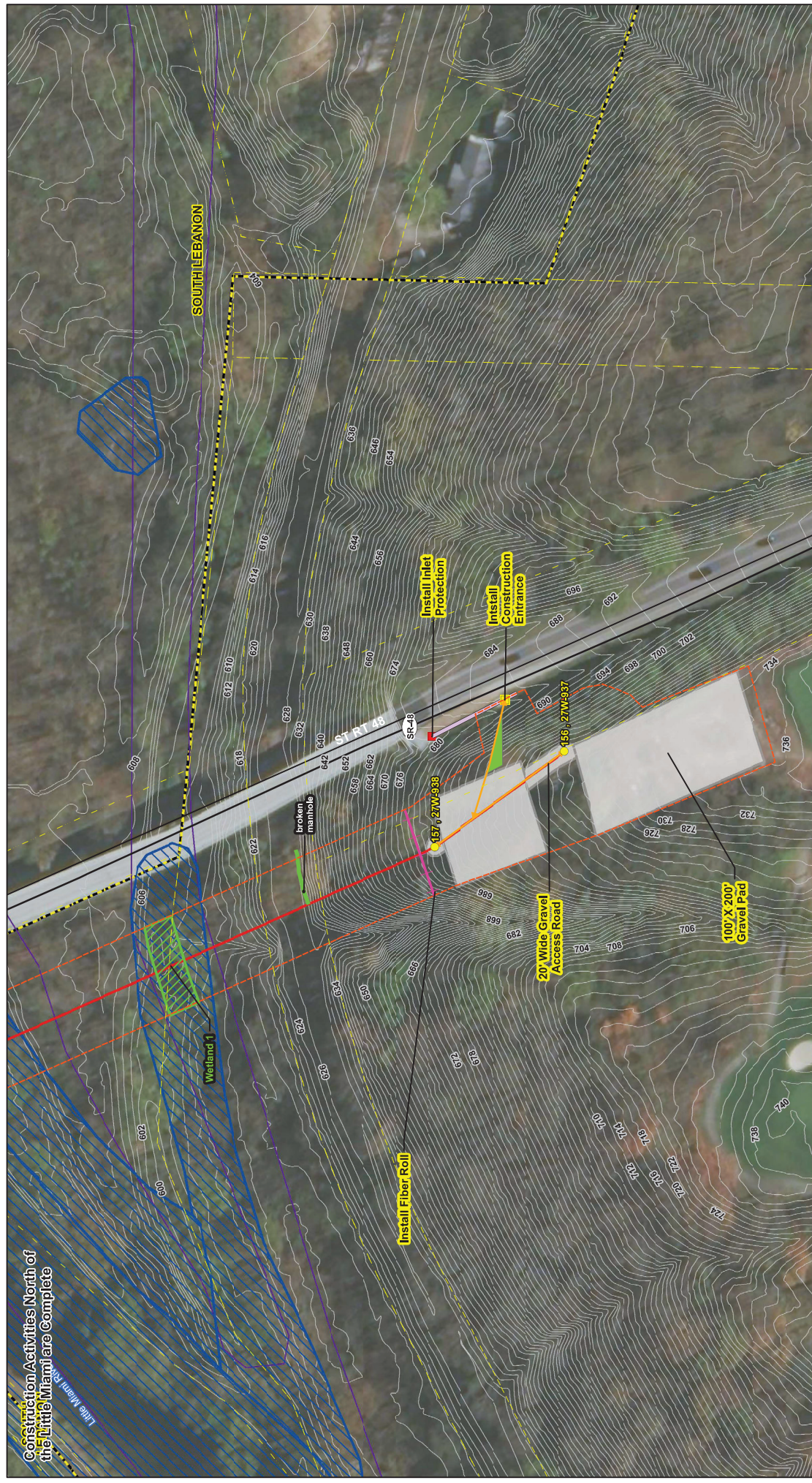
REFERENCE:
ESRI WORLD IMAGERY OBTAINED THROUGH ESRI WORLD IMAGERY MICROSOFT CORPORATION, ACCESSED 01/2017



- Existing Facility
- Existing Structure
- Potential Access
- State Highway
- Project Centerline
- NHD Flowline
- 2' Contour Line
- Little Miami River
- NWI Wetland
- Municipal Boundary
- Gravel Pad
- Parcels
- Study Area



FIGURE: 4.01
STORMWATER POLLUTION PREVENTION PLAN
COLUMBIA SUBSTATION TRANSMISSION
LINE CONNECTION
DUKE ENERGY
ENVIRONMENTAL ACCESS/ EROSION CONTROL PLAN
 DRAWN BY: COD
 CHECKED: CJ
 DATE: 10/19/2021
 APPROVED: JT



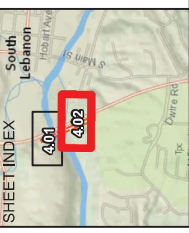
Construction Activities North of the Little Miami are Complete

FIGURE: 4.02
STORMWATER POLLUTION PREVENTION PLAN
COLUMBIA SUBSTATION TRANSMISSION
LINE CONNECTION
DUKE ENERGY
ENVIRONMENTAL ACCESS/ EROSION CONTROL PLAN



- Proposed Structure
- Potential Access
- Construction Entrance
- Proposed Temporary Culvert
- Fiber Roll
- Delimited Wetland
- Stormwater Inlet
- Ditch
- Potential Tree Clearing
- State Highway
- Project Centerline
- NHD Flowline
- 2' Contour Line
- NWI Wetland
- Municipal Boundary
- Gravel Pad
- Parcels
- Study Area

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



DRAWN BY: COD
 CHECKED: CJ

DATE: 10/19/2021
 APPROVED: JT