4906-5-07 HEALTH AND SAFETY, LAND USE, AND REGIONAL DEVELOPMENT

(A) HEALTH AND SAFETY

(1) Compliance with Safety Regulations

Duke Energy Ohio is committed to ensuring the safety and well-being of all workers involved with the construction of the proposed natural gas pipeline and members of the communities living or working nearby to the proposed centerline. The construction, operation, and maintenance of the Project will comply with or exceed specifications in all applicable safety regulations. These may include, but are not limited to, Code of Federal Regulations (CFR) Title 49, Part 191, "Transportation of Natural and Other Gas by Pipeline: Annual reports, Incident Reports, and Safety Related Condition Reports", Part 192, "Transportation of Natural and Other Gas by Pipeline: Minimum Federal Safety Standards," and Part 199, "Drug and Alcohol Testing," Ohio Administrative Code Rule 4901:1-16. The Project will also comply all applicable safety standards established by Occupational Safety and Health Administration (OSHA).

(a) Construction

The pipeline will be installed to meet or exceed the specifications in the Title 49 CFR Part 192, OSHA, the Pipeline and Hazardous Materials Safety Administration (PHMSA), the National Electrical Safety Code, and Duke Energy Gas Engineering Specifications. "Class locations" are defined in 49 CFR 192.5, with Class 1 and Class 2 are defined as having lower density of dwellings or buildings within a specified distance and Class 3 and 4 having a higher density of dwellings and outdoor public areas. Class 4 locations comprise less than 20 percent of the Preferred Route and Alternate Route. Duke Energy Ohio plans to design and build the entire pipeline to design specifications and requirements for Class 4 locations, which specifications and requirements are the most stringent that apply to natural gas pipelines.

The Project will be designed and constructed in accordance with the following standards and procedures:

- Pipe will be inspected to ensure that it is constructed to 49 CFR Part 192 standards.
- Each length of fusion-bonded epoxy coated pipe and other components will be visually inspected at the site of installation to ensure that it has not sustained any visually determinable damage that could compromise the integrity of the pipe.
- Imperfections and damages, which impair serviceability of pipe, will be repaired or removed according to 49 CFR Part 192.
- Pipe will be installed in trench on solid soil (firm support under pipe).
- Pipe will be backfilled in manner that will prevent damage to pipe and pipe coating from equipment or backfill.
- Minimum depth of cover for this Project will be 4 feet for typical installation or depth listed in 49 CFR 192.327, which is greater than the required 3 feet of cover.
- Less than 50 feet from railroads the depth of cover will be a minimum of 6 feet, per AREMA Guidelines.
- The construction of the pipeline segment will be done under a quality assurance plan addressing pipe inspection, hauling and stringing, field bending, welding, non-destructive examination of girth welds, applying and testing the field applied coating, lowering of the pipeline into the trench, padding and backfilling, and hydrostatic testing.
- The quality assurance plan for applying and testing field applied coating to girth welds will be: (i) equivalent to that required under 49 CFR 192.112(f)(3) for pipe; and (ii) performed by an individual with the knowledge, skills, and ability to ensure effective coating application.
- All girth welds on a new pipeline segment must be non-destructively examined in accordance with 49 CFR 192.243(b) and (c).

- The pipeline segment must not have experienced failures indicative of systemic material defects during strength testing, including initial hydrostatic testing. A root cause analysis, including metallurgical examination of the failed pipe, will be performed for any failure experienced to verify that it is not indicative of a systemic concern. The results of this root cause analysis will be reported to each PHMSA pipeline safety regional office where the pipe is in service at least 60 days prior to operating at the alternative MAOP. In Ohio, an operator must also notify the Ohio pipeline safety authority as the natural gas pipeline is regulated by the OPSB.

- Induced current and corrosion will be addressed with anti-corrosion mitigation measures and corrosion protection.

- Welding will be performed by qualified welder or welding operator according to 49 CFR Part 192 and API 1104.

- Each welding procedure will be recorded in detail including the results of the qualifying tests. Records will be retained as required per applicable regulations.

- The welding operation will be protected from weather conditions that would impair the quality of the completed weld.

- Welding surfaces will be clean and free of any material that may be detrimental to the weld before welding.

- Welds will be visually inspected by qualified person.

- Nondestructive testing will be performed by qualified person on 100 percent of all welds.

- Welds that are unacceptable under the 49 CFR 192.241(c) must be removed or repaired.

- Pipeline will be strength tested in accordance with 49 CFR Part 192.

(b) Maintenance

The pipeline will be operated in accordance with 49 CFR Part 192 and Duke Energy Ohio's Procedures Manual. Requirements include but are not limited to:

- No person may operate a segment of pipeline, unless it is maintained in accordance with this subpart.
- Each segment of pipeline that does not meet inspection standards must be replaced, repaired, or removed from service.
- Patrol program to observe surface conditions on and adjacent to the pipeline ROW for indications of leaks, construction activity, and other factors affecting safety and operation.
- Patrol in accordance with 49 CFR Part 192.
- Perform leak surveys in accordance with 49 CFR Part 192.
- Place line marker at crossings and where required in accordance with 49 CFR Part 192.
- Keep and retain records for pipe repairs, inspections, and patrols in accordance with 49 CFR Part 192.
- Repair in accordance with 49 CFR Part 192.
- Inspect and test regulating station in accordance with 49 CFR Part 192.
- Inspect valves in intervals specified by 49 CFR Part 192.

(c) Operation

The pipeline will be operated in accordance with 49 CFR Part 192 and Duke Energy Ohio's Procedure Manual. Requirements include but are not limited to:

- Prepare and follow procedural manual for operations maintenance and emergencies in accordance with 49 CFR Part 192.
- Follow procedure for continuing surveillance of its facilities.

- Carry out a written program to prevent damage to the pipe from excavation activities.
- Establish written procedures to minimize the hazard resulting from a natural gas pipeline emergency in accordance with 49 CFR Part 192.
- Develop and implement a written continuing public education program that follows the guidance provided in API 1162.
- Establish procedures for analyzing accidents and failures, including the selection of samples of the failed facility or equipment for laboratory examination, where appropriate, for the purpose of determining the causes of the failure and minimizing the possibility of a recurrence.
- Not operate pipeline at a pressure that exceeds the maximum allowable operating pressure determine under 49 CFR Part 192.
- Contain mercaptan odorant in accordance with 49 CFR Part 192.
- Tap and purge in accordance with 49 CFR Part 192.
- Have and follow written control room management procedures that implement requirements of 49 CFR Part 192.

(2) Electric and Magnetic Fields

As a natural gas facility Application, this is not applicable.

(3) Communication System Interference

As a natural gas facility Application, this is not applicable.

(4) Noise from Construction, Operation, and Maintenance

(a) Blasting Activities

Blasting activities are not expected to be necessary during construction of the Project.

(b) Operation of Earth Moving and Excavating Equipment

During the construction phase of the Project, a temporary increase in noise will result from the equipment used for vegetation clearing, soil excavation, pipeline installation, and backfilling. Standard pipeline construction techniques will be used, equipment will be properly maintained, equipment operation will be confined to daytime hours, with the exception of specific instances where night construction is required to minimize impact to local businesses and/or traffic patterns, and noise-generating activities will comply with applicable noise ordinances and OSHA standards. The potential construction noise impact on nearby sensitive areas will be controlled and minimized to the greatest extent possible. The total duration of construction of the proposed natural gas pipeline is estimated at 12 to 16 months. Construction at any location near a given residential, commercial and other noise sensitive area is expected to require not more than a one-month duration. The preferred time of day restrictions for each type of area are listed below:

- Commercial Areas – outside of business hours to the extent possible.
- Industrial Areas – Dependent on facility schedule and requirements, preferred hours of operation are generally during the day but may require exceptions to work around specific loading and unloading times.
- Residential and Institutional Areas – activities will generally be restricted to daytime construction roughly between the hours of 8 a.m. and 4 p.m. Monday through Friday. Any weekend work will be planned to avoid interfering with the hours of any nearby houses of worship.
- With the exception of the regulating stations at either end of the Project, operation of the proposed natural gas pipeline will not produce any audible noise.

Routine maintenance of the pipeline may result in temporary noise impacts form earth disturbance and equipment. These activities will be limited to normal business hours and will continue only as long as the maintenance activity is necessary to ensure that the pipeline is operating safely and effectively.

(c) Driving of Piles, Rock Breaking or Hammering, and Horizontal Directional Drilling

Driving of piles is not anticipated during construction of the Project. Trenchless construction methods, including both HDD and horizontal boring (e.g., jack and bore), will be used in multiple locations as summarized in Tables 7-1 and 7-2. Trenchless construction will allow drilling or boring under sensitive areas such as streams and will also be used for installing pipe under roads and drives or where there is insufficient room to excavate the trench and install the pipe using side booms and/or where traffic patterns must be maintained. As mentioned previously, standard pipeline construction techniques will be used in other areas, equipment will be properly maintained, equipment operation will generally be confined to daytime hours, with the exception of specific instances where night construction is required to minimize impact to local businesses and/or traffic patterns, and noise-generating activities will comply with applicable noise ordinances and OSHA standards.

TABLE 7-1
Preferred Route Proposed Trenchless Construction Locations

Trenchless Bore Number	Location/Name	Proposed Crossing Type	Reason
TB-1	Conrey Road	Bore	Avoid open cut of road
TB-2 (HDD)	Kemper Road	HDD	Unable to bore drainage swale with elevation differences and space constraints on south side
TB-3	Railroad Near Deerfield Road	Bore	Railroad (required)
TB-4	Deerfield Road at Fire Station	Bore	Avoid road disruption at fire station
TB-5	I-275	Bore	Trenchless construction required
TB-6	Cornell Road	Bore	Avoid open cut of road
TB-7	~~Millington Court~~Creek Road	Bore	Avoid open cut of road
TB-8 (HDD)	Pfeiffer Road	HDD	Unable to bore box channel due to elevation differences and space constraints; avoid three stream crossings
TB-9	Ursuline Drive	Bore	Avoid open cutting school drive
TB-10	Kenwood Road at Pfeiffer Road	Bore	Avoid open cut of road
TB-11	Railroad at Glendale Milford Road	Bore	Railroad (required)
TB-12	Double railroad spurs	Bore	Railroad (required); avoid open cut of two streams
TB-13	Rail at Catalpa Creek Drive	Bore	Railroad (required)
TB-14	Rail at Cooper Road	Bore	Railroad (required)

TABLE 7-1
Preferred Route Proposed Trenchless Construction Locations

Trenchless Bore Number	Location/Name	Proposed Crossing Type	Reason
TB-15	Cooper Road	Bore	Avoid open cut of road
TB-16	Hunt Road	Bore	Avoid open cut of road
TB-17 (HDD)	Highway 126	~~Bore~~HDD	HDD parallel to railroad due to 30-foot elevation change between highway and embankments ~~Trenchless construction required; limited space for HDD~~
TB-18	Rail Spur near Emerald Avenue~~Alpine Avenue~~	Bore	Railroad (required)~~Avoid open cut of road~~
TB-19	~~Rail Spur near~~ Emerald Avenue	Bore	Avoid open cut of road~~Railroad (required)~~
TB-20	Sycamore Road	Bore	Avoid open cut of road
TB-21	Kugler Mill Road	Bore	Avoid open cut of road
TB-22	Railroad and Blue Ash Road	Bore	Railroad (required)
TB-23	Kenwood Road at Mall	Bore	Avoid open cut of road
TB-24	Montgomery Road	Bore	Avoid open cut of road
TB-25	Kenwood Road at South Mall	Bore	Avoid open cut of road
TB-26 (HDD)	Interstate 71	HDD	Trenchless construction required; elevation differences between road and banks require HDD
TB-27	~~Stewart Road~~Kenwood County Club Drive	Bore	Avoid open cut of ~~road~~drive
TB-28	~~Madison Avenue~~Stewart Road	Bore	Avoid open cut of road
TB-29	Madison Avenue~~Hetzel Road~~	Bore	Avoid open cut of road
TB-30	~~Railroad at Red Bank Expressway~~Hetzel Road	Bore	Avoid open cut of road~~Railroad (required)~~
TB-31	Railroad at Red Bank Expressway~~Brotherton Road~~	Bore	Railroad (required)~~Avoid open cut of road~~
TB-32 (HDD)	Erie Avenue	~~Bore~~HDD	Avoid cross slope near power lines and minimal space between utilities from Red Bank Road to Erie Avenue~~Avoid open cut of road~~
TB-33	Drive to Red Bank Village	Bore	Avoid open cut of road
TB-34	Cul-de sac at Red Bank	Bore	Avoid blocking drive to businesses
TB-35	Fair Lane	Bore	Avoid blocking drive to businesses
TB-36	Duck Creek	Bore	Cross stream - avoid open cut

TABLE 7-2

Alternate Route Proposed Trenchless Construction Locations

Trenchless Bore Number	Location/Name	Proposed Crossing Type	Reason
TB-1	Conrey Road	Bore	Avoid open cut of road
TB-2 (HDD)	Kemper Road	HDD	Unable to bore drainage swale with elevation differences and space constraints on South side
TB-3	Interstate 275	Bore	Trenchless construction required
TB-4	Grooms Road	Bore	Avoid open cut of road
TB-5	Reed Hartman Highway at P&G	Bore	Avoid open cut of road
TB-6	Cornell Road	Bore	Avoid open cut of road
TB-7	Reed Hartman Highway at Cornell	Bore	Avoid open cut of road
TB-8	Osborne Boulevard	Bore	Avoid open cut of road
TB-9	Drive South of Osborn	Bore	Avoid open cut of road
TB-10	Reed Hartman Highway at Creek Road	Bore	Avoid open cut of road
TB-11	Creek Road	Bore	Avoid open cut of road
TB-12	Lake Forest Drive on Reed Hartman	Bore	Avoid open cut of road
TB-13	Lake Forest Drive on Glendale Milford	Bore	Avoid open cut of road
TB-14	Glendale Milford	Bore	Avoid open cut of road
TB-~~14~~15	Plainfield Road	Bore	Avoid open cut of road
TB-~~15~~16	Glendale Milford at Plainfield	Bore	Avoid open cut of road
TB-~~16~~17	Woodleigh Lane	Bore	Avoid open cutting road and restricting access
TB-~~17~~18	Sharondale Road	Bore	Avoid open cut of road
TB-~~18~~19	Wyscarver Road	Bore	Avoid open cut of road
TB-~~19~~20	Reading Road	Bore	Avoid open cut of road
TB-~~20~~21	Mill Creek (at Glendale Milford)	Bore	Avoid open cut of Mill Creek
TB-~~21~~22	Glendale Milford at Mill Creek	Bore	Avoid open cut of road
TB-~~22~~23	Railroad at Formica	Bore	Railroad (required)
TB-~~23~~24	Formica Plant 1	Bore	Avoid risk of damage to overhead structures with open cut construction equipment.
TB-~~24~~25	Formica Plant 2	Bore	Avoid risk of damage to overhead structures with open cut construction equipment.

TABLE 7-2
Alternate Route Proposed Trenchless Construction Locations

Trenchless Bore Number	Location/Name	Proposed Crossing Type	Reason
TB-~~25~~ 26 (HDD)	Mill Creek	~~Bore~~HDD	Trenchless construction required. Wide and probably deep crossing with room for HDD; avoid open cut of stream.
TB-~~26~~27	Bore Between Silo	~~HDD~~Bore	No space for traditional open cut construction
TB-~~27~~28	Railroad at Reading	Bore	Railroad (required)
TB-~~28~~29	Railroad at East Mechanic	Bore	Railroad (required)
TB-~~29~~30	Railroad at Merill Lane	Bore	Railroad (required)
TB-~~30~~31	East Galbraith and Rail	Bore	Railroad (required)
TB-~~31~~32	Sunnybrook Drive	Bore	Avoid open cut of road
TB-~~32~~33	Section Road	Bore	Avoid open cut of road
TB-~~33~~34	Railroad Crossing around Rail Spur 1	Bore	Railroad (required)
TB-35	Railroad Crossing around Rail Spur 2	Bore	Railroad (required)
TB-~~34~~36	Railroad at Losantiville Avenue	Bore	Railroad (required)
TB-~~35~~37	Losantiville Avenue	Bore	Avoid open cut of road
TB-~~36~~38	Langdon Farm Road	Bore	Avoid open cut of road

Rock breaking and hammering activities will occur at all locations where pavement installation is required and appropriate time of day restrictions will be in place to limit the noise disturbance to the public.

The preliminary HDD locations are limited to industrial areas, commercial areas, and the I-71 vicinity. HDD requires a continuous drilling process to ensure the hole does not collapse or cave in. Once drilling commences, it will not end until complete. HDD installation is not currently proposed beneath any wetlands along either proposed route but will be used to traverse under roads, railroads, and some surface waters. During HDD installation, there is a chance of frac-out where the drilling mud comes to the surface. Frac-out chances depend on soil type and other subsurface conditions. Frac-out contingency plans will be in-place for Duke Energy Ohio personnel and contractors to respond if a frac-out occurs. Space constraints near most of the wetlands limit the ability to install pipe by the HDD method since more space for drill rigs and pipe pull-back is required. All proposed HDD and other trenchless construction (bores beneath

roads, streams, etc.) locations are presented in Table 7-1 and 7-2 for the Preferred Route and Alternate Route, respectively. The location of each HDD ~~and bore~~ is depicted on Figure 7-2.

(d) Erection of Structures

Temporary noise impacts will result from the construction or expansion of two structures and at least two valve stations. All associated structures will be pre-manufactured. Erections of structures will merely be bolting. Excess noise is not anticipated at these locations during construction. Standard construction techniques will be used, equipment will be properly maintained, equipment operation will be confined to daytime hours, with the exception of specific instances where night construction is required to minimize impact to local businesses and/or traffic patterns, and noise-generating activities will comply with applicable noise ordinances and OSHA standards.

A new station (Highpoint Park Regulation Station) will be constructed adjacent to the existing Duke Energy Ohio WW Feed Station that will serve to regulate the pressure down to below 400 ~~-~~PSIG from the existing C314 line pressure and provide additional odorization of pipeline natural gas. The proposed C314V pipeline will tie into Duke Energy Ohio's existing C314 natural gas pipeline at this point, with the Highpoint Park Station serving as the beginning of the proposed Project. A new pig launcher will be built to serve the new C314V line and will be located behind the ~~former Green Bay Packaging facility~~Wiseway Supply facility at 7660 School Road at the northern terminus of the Project.

A second regulating station (Fairfax Station) will be located at the southern end of the proposed C314V pipeline, approximately 13 miles southwest of the existing WW Feed Station. This station will serve to reduce pressures to less than 200 PSIG before outletting to Line V and will include the installation of a pig receiver. Along the Preferred Route, this station is tentatively planned to be located along Red Bank Road. The proposed C314V pipeline will tie into Duke Energy Ohio's existing Line V at this location. If the Alternate Route is selected, any additional required equipment is planned to be an expansion to the existing Norwood Station located on Seymour Road.

In addition to the two aforementioned regulation stations for the Preferred Route or station expansion for the Alternate Route, a minimum of two above-ground mainline valve stations will

be installed along the proposed C314V pipeline. In accordance with 49 CFR Part 192, these mainline valve stations will be located no greater than 5 miles apart. The exact locations of mainline valve stations will be determined in the detailed engineering design phase.

(e) Truck Traffic

A temporary increase in noise from truck traffic is anticipated during the construction phase of the Project. The temporary increase in traffic will be related to movement and delivery of construction equipment and materials. Some nighttime work and lane closures will likely be required for Project construction to help minimize overall construction impacts. No other additional traffic-related noise impacts are anticipated during operation of the pipeline, beyond periodic mowing or vegetation removal from the ROW where required.

(f) Installation of Equipment

Installation of equipment will be limited to the stations at the north and south of the pipeline and at the two valve stations along the route. All stations are located in commercial/industrial areas. Installation of equipment will have minimal noise and will be primarily skid-mounted. Any construction noise generated by these activities will be temporary and limited to normal business hours.

(B) LAND USE

(1) Map of the Site and Route Alternatives

An applicant for a Certificate of Environmental Compatibility and Public Need is required to evaluate both the Preferred and Alternate Routes within the Application. Maps at 1:24,000-scale, including the area 1,000 feet on either side of the centerline are presented as Figures 7-1A through 7-1F and include the following information:

- Centerline and ROW for each pipeline route alternative
- Proposed location of new structures (regulation stations and valve stations)
- Land use types
- Road names
- Structures
- Incorporated areas and population centers

(2) Impact on Identified Land Uses

Land use in the area crossed by the proposed route alternatives is generally a mix of commercial, industrial, residential, and minimal undeveloped forested and open land typical of suburban metropolitan areas. As both route alternatives move generally from north to south, the topography becomes more varied with hills, ridgetops and valleys, adding challenges to the construction of these sections of the pipeline.

Comparisons of the various land use types and land use features for both route alternatives are included in Tables 7-3 through 7-5. The calculations (e.g., linear feet, acreage, and percentages) of each land use type crossed by the proposed route alternatives (including land uses within the 80-foot-wide construction work area [CWA] and the 30-foot-wide permanent ROW) were determined using GIS software applications and land use data provided by CAGIS. For this revised Certificate Application, Duke Energy Ohio has made improvements to the CAGIS data set by correcting several inaccuracies in the original CAGIS raw data in terms of proper designation of structures as residences (versus accessory outbuildings) and commercial buildings, as well as lands identified as parks and recreation areas. The potential disturbance area during construction activities (e.g., vegetation clearing, pipeline trenching, etc.) consists of the maximum 80-foot-wide construction ROW. The CWA will be re-graded to pre-construction conditions and seeded.

The 80-foot wide maximum CWA along the pipeline is preliminary and conceptual as of this Application submittal. The CWA will be refined once the final route is approved and detailed engineering design and construction plans commence. The use of the 80-foot CWA for purposes of this Application allows for a relative comparison of the various types of land use settings that are present and the approximate extent of areas that may be disturbed during construction of either the Preferred or Alternate Route.

TABLE 7-3
Length and Percent of Land Uses Crossed by Centerline of Route Alternatives

Land Use	Preferred Route		Alternate Route	
	Linear Feet	Percent	Linear Feet	Percent
Delineated Pond	0	0%	0	0%
Delineated Stream	188	0.2%	288	0.4%
Delineated Wetland	338	0.5%	378	0.5%
Educational	1,468	2.0%	1,472	2.1%
Industrial/Commercial	28,493	38.5%	28,952	42.3%
Institutional	0	0%	211	0.3%
Parks and Recreation	11,227	15.2%	4,846	7.1%
Pavement*	19,387	26.2%	17,446	25.5%
Residential	2,188	3.0%	3,668	5.3%
Undefined	303	0.4%	589	0.9%
Woodlots	10,356	14.0%	10,657	15.6%
Total	73,948	100%	68,507	100%

* Pavement represents road ROW.

TABLE 7-4
Acreage and Percent of Land Uses Crossed by Route Alternatives

Land Use	Preferred Route				Alternate Route			
	CWA [a] Acres	CWA Percent	ROW Acres	ROW Percent	CWA Acres	CWA Percent	ROW Acres	ROW Percent
Delineated Pond	0	0%	0	0%	0.2	0.1%	0	0%
Delineated Stream	0.8	0.6%	0.1	0.3%	0.5	0.4%	0.2	0.4%
Delineated Wetland	1.6	1.2%	0.2	0.5%	1.4	1.1%	0.3	0.6%
Educational	2.8	2.0%	1.0	2.3%	2.4	1.9%	0.9	2.0%
Industrial/Commercial	47.8	35.1%	19.5	43.5%	48.3	38.3%	19.6	41.5%
Institutional	0.5	0.3%	0.1	0.3%	0.7	0.6%	0.1	0.3%
Parks and Recreation	18.8	13.8%	7.3	16.4%	6.9	5.5%	2.9	6.2%
Pavement[b]	35.5	26.1%	7.3	16.4%	35.4	28.1%	12.5	26.6%
Residential	7.8	5.6%	1.7	3.8%	7.5	5.9%	2.5	5.4%
Undefined	0.3	0.2%	0.2	0.5%	2.0	1.6%	0.4	0.8%
Woodlots	20.6	15.1%	7.2	16.0%	20.8	16.5%	7.7	16.2%
Total	**136.2**	**100%**	**44.6**	**100%**	**126.1**	**100%**	**47.1**	**100%**

[a] CWA = construction work area (80-foot wide construction area corridor)

[b] Pavement represents road ROW

TABLE 7-5
Number of Land Use Features Near the Route Alternatives

	Route Alternatives	
	Preferred	**Alternate**
Length (in miles)	~~13.4~~ 14.0	13.0
Features within 100 feet of Route Alternatives (centerline)		
Historic Structures (Ohio Historic Structures)	~~2~~ 3	~~N/A~~ 0
National Register of Historic Places	~~N/A~~ 0	~~N/A~~ 0
Previously Identified Archaeological Sites	0	0
Residences	~~157~~ 110	~~198~~ 166
Other Sensitive Land Uses*	~~6~~ 5	~~4~~ 10
Features within 1,000 feet of Route Alternatives (centerline)		
Historic Structures (Ohio Historic Structures)	42	12
National Register of Historic Places	~~N/A~~ 0	1
Previously Identified Archaeological Sites	0	5
Residences	~~3,749~~ 3,149	~~2,625~~ 2,170
Other Sensitive Land Uses*	~~44~~ 45	~~34~~ 38
Structures within 200 feet of the Edge of Preliminary Permanent ROW (preliminary ROW is 30-feet wide)	~~633~~ 641	~~694~~ 655

* Other sensitive land uses include airports, parks/recreation areas, state forests, schools, hospitals, churches, and cemeteries.

Because the Project consists primarily of a buried pipeline, land uses within the CWA and ROW will generally remain unchanged. Most land use impacts are temporary and consist of surface disturbance during construction. Some permanent land use impacts will occur in selected areas because of vegetation clearing within the ROW and conversion of wooded or shrub habitat to herbaceous ground cover. However, in most cases property owners may continue to utilize most of the ROW area for general uses that will not affect the safe and reliable operation of the pipeline.

(a) Residential

Preferred Route: The Preferred Route centerline is located within 1,000 feet of ~~3,749~~3,150 residences and within 100 feet of ~~157~~ 110 residences. As shown in Table 7-4, residential areas

make up approximately ~~3.0~~3.8 percent of the Preferred Route permanent ROW (30-foot width) acreage.

Alternate Route: The Alternate Route centerline is located within 1,000 feet of ~~2,625~~2,172 residences and within 100 feet of ~~198~~ 166 residences. As shown in Table 7-4, residential areas make up approximately ~~5.3~~5.4 percent of the Alternate Route permanent ROW acreage.

Although the Preferred Route is within 1,000 feet of more residences than the Alternate Route, the Preferred Route directly affects less residential land than the Alternate Route. Only ~~1,871~~2,188 linear feet of pipeline would be located on residential land under the Preferred Route scenario, compared to ~~3,516~~ 3,668 linear feet of the Alternate Route located on residential land. This is largely because residential land use along the Alternate Route is in older, denser communities, leaving less options of avoiding direct impacts to residential properties.

(b) Industrial/Commercial

Preferred Route: Industrial or commercial land uses make up approximately ~~43.2~~43.5 percent of the Preferred Route permanent ROW acreage. This represents the largest proportion of land use within the Preferred Route ROW. The Preferred Route centerline crosses ~~30,811~~28,493 feet (~~43.6~~38.5 percent of the total length) of land classified as industrial or commercial.

Alternate Route: Industrial or commercial land uses make up approximately ~~44.7~~41.5 percent of the Alternate Route permanent ROW acreage. The Alternate Route centerline crosses ~~31,330~~28,952 feet (~~45.6~~42.3 percent of the total length) of land classified as industrial or commercial.

(c) Educational

Preferred Route: Educational land uses make up approximately ~~3.6~~2.3 percent of the Preferred Route permanent ROW acreage

Alternate Route: Educational land uses make up approximately ~~1.9~~2.0 percent of the Alternate Route permanent ROW acreage

(d) Institutional

Preferred Route: Institutional land uses make up approximately ~~0.0~~0.3 percent of the Preferred Route ROW acreage.

Alternate Route: Institutional land uses make up approximately ~~0.2~~0.3 percent of the Alternate Route ROW acreage.

(e) Parks and Recreation

Preferred Route: Parks and recreational land uses make up approximately ~~8.8~~16.4 percent of the Preferred Route permanent ROW acreage.

Alternate Route: Parks and recreational land uses make up approximately ~~4.5~~6.2 percent of the Alternate Route permanent ROW acreage.

(f) Pavement

Preferred Route: Paved areas (*e.g.*, road ROW) make up approximately ~~27.9~~16.4 percent of the Preferred Route permanent ROW acreage.

Alternate Route: Paved areas (*e.g.*, road ROW) make up approximately ~~25.6~~26.6 percent of the Alternate Route permanent ROW acreage.

(g) Woodlots

Preferred Route: Woodlots make up approximately ~~11.8~~16.0 percent of the Preferred Route permanent ROW acreage.

Alternate Route: Woodlots make up approximately ~~15.5~~16.2 percent of the Alternate Route permanent ROW acreage.

(3) Impact on Identified Nearby Structures

(a) Structures Within 200 Feet of Proposed Right-of-Way

There are ~~633~~ 641 structures (residences, commercial businesses, etc.) within 200 feet of the proposed permanent ROW (30-foot width of the Preferred Route). There are ~~656~~ 655 structures within 200 feet of the proposed permanent ROW of Alternate Route. The individual structures and their distances from the proposed permanent ROW boundary are listed in Appendix 7-1

(Table 7-1A and Table 7-1B for the Preferred Route and Alternate Route, respectively) and are illustrated on Figure 7-2. The Figure 7-2 map also indicates the preliminary and temporary construction work areas along the corridors, temporary staging areas, temporary access roads, ~~valve stations,~~ and regulation stations. These facilities and construction areas, which is required to be shown on a map by Ohio Administrative Code (OAC) 4906-5-05(B)(2)(a), are based on preliminary engineering and are best illustrated on this Figure 7-2 map.

(b) Destroyed, Acquired, or Removed Buildings

The potential removal of structures within the proposed ROW was mitigated during the RSS of the Preferred and Alternate Routes through the placement of route centerlines. It is unlikely that construction of the Preferred or Alternate Routes will require the removal of any residential or commercial structures.

(c) Mitigation Procedures

Duke Energy Ohio's acquisition of both the temporary construction easement and permanent easement for the Project's facilities (pipeline, valve stations, regulation stations) will be sufficient to avoid or minimize impacts to structures near the planned facilities.

(C) AGRICULTURAL LAND IMPACTS

Neither route alternative crosses any agricultural land or Agricultural Districts. Hence, neither will result in any impacts to such areas.

(1) Agricultural Land Map

Not applicable as there are no Agricultural District Lands affected by the Project.

(2) Impacts to Agricultural Lands and Agricultural Districts

CH2M, as an agent of Duke Energy Ohio, contacted the Hamilton County Auditor to obtain information on the location and ownership of any current Agricultural District lands. The centerline of the Preferred Route crosses no Agricultural District parcels. The Preferred Route is not within 1,000 feet of any Agricultural District parcels in Hamilton County. The centerline of the Alternate Route crosses no Agricultural District parcels. The Alternate Route is not within 1,000 feet of any Agricultural District Parcels. The provided data fulfills the requirement of

OAC 4906-5-07 (C)(1)(b), which states this data must be collected not more than 60 days prior to submittal.

(a) Acreage Impacted

Neither route alternative crosses any agricultural land or agricultural districts and, therefore, neither will result in any impacts to such areas. The assessment of agricultural land use was based on available GIS data, aerial imagery, and field observations. The assessment of Agricultural Districts is based on direct communication with the Hamilton County Auditor's office.

(b) Evaluation of Construction, Operation, and Maintenance Impacts

Not applicable as there are no Agricultural District Lands affected by the Project.

(c) Mitigation Procedures

Not applicable as there are no Agricultural District Lands affected by the Project.

(D) LAND USE PLANS AND REGIONAL DEVELOPMENT

This section of the Application provides information regarding land use plans and regional development.

(1) Impacts to Regional Development

The Project will help ensure the long-term reliability of the Duke Energy Ohio natural gas system. This will benefit all customers in the southwest Ohio area by helping to maintain pipeline pressures and natural gas supplies.

The Project is likely to have a small but positive impact on regional development within southwest Ohio through the increased reliability and availability of natural gas throughout the region. The proposed Project will help secure current and future natural gas supplies for customers in the southwest Ohio region. Duke Energy Ohio's projections indicate that the existing distribution system, which includes the propane-air peaking plants, may not be able to meet the increased demand for natural gas in the long-term planning horizon, and, without this Project, additional natural gas services curtailments would be expected in the future. No long-term negative impacts to regional development are foreseen for the Project, although there are

expected to be short-term construction impacts to local residents and businesses because of the highly developed nature of the Project area.

In the 2012 document, *Plan Cincinnati: A Comprehensive Plan for the Future (Plan Cincinnati)*, utilities and infrastructure are cited as one of the 12 basic building-blocks of Cincinnati's future. Three initiatives to "Connect", "Sustain", and "Collaborate" are specifically called-out in Plan Cincinnati as they pertain to utilities and infrastructure. Under the "Sustain" initiative, Plan Cincinnati's stated goal is to "Steward resources and ensure long-term vitality" (City of Cincinnati, 2012). This goal is consistent with the Project objective to design and construct the pipeline in a way that minimizes impacts to resources and provides sustainable natural gas infrastructure for southwest Ohio, including Cincinnati, into the future.

The 2004 Hamilton County *2030 Plan and Implementation Framework* identified strategies for implementing major initiatives recommended to achieve a shared vision for the county. Under Initiative 30 (Coordinated Planning and Infrastructure), Strategy 30.1 states: "Work with local jurisdictions and support efforts to coordinate infrastructure projects such as sewers, road paving, bridge replacement, and utility improvements." As described in the "2030 Plan and Implementation Framework, Strategy 30.1" addresses the two goals of building collaborative decision-making and balancing development and the environment. (Hamilton County, 2004)

(2) Compatibility of Proposed Facility with Current Regional Land Use Plans

Utility projects generally do not significantly impact land use plans. The Project area is highly developed and generally built out. The Project will not change land uses or prevent development of areas within the Project area. In fact, the continued reliable natural gas supply provided as part of the Project will benefit the existing and future customers in the area.

Town and city land use planning documents were reviewed when analyzing the potential impacts of the route alternatives. The majority of land use documents available were zoning regulations. As shown in Tables 7-3 and 7-4, the majority of both the Preferred and Alternative Routes is proposed within industrial or commercial areas. In general, the route alternatives were designed to avoid sensitive areas and maintain consistency with applicable land use plans and zoning regulations. For example, within the City of Blue Ash, Duke Energy Ohio has sited portions of the Alternate Route along Reed Hartman Highway, an area identified in the *City of*

Blue Ash Comprehensive Plan as an "Urban Design Corridor" where commercial, office, and light industrial uses are appropriate (City of Blue Ash, 2003). Buildings located in the Reed Hartman Highway Urban Design Corridor require a minimum front setback of 50 feet, which provides a wide undeveloped area that may be utilized for siting of a pipeline. By siting portions of the Alternate Route along the Reed Hartman Highway Urban Design Corridor, dense residential areas and other sensitive land uses are avoided to the extent possible.

(E) CULTURAL AND ARCHAEOLOGICAL RESOURCES

CH2M, as an agent of Duke Energy Ohio, conducted a literature review of known cultural resources, which included data from the Ohio State Historic Preservation Office (OHPO)'s online mapping system.

(1) Cultural Resources Map

Within Section 4906-5-05 of this Application, Figure 5-1 consists of a map of 1:24,000 scale which illustrates, among other features, the previously recorded cultural resource sites within 1,000 feet of the proposed centerline of both the Preferred and Alternate Route. Based on the cultural resources desktop study, there are no scenic rivers or scenic routes/byways (as defined by the Ohio Department of Natural Resources [ODNR] and/or the ODOT) within 1,000 feet of the proposed routes). There is one National Register of Historic Places (NRHP) district and one Determination of Eligibility (DOE) structure (based on OHPO files) within 1,000 feet of the Alternate Route. The NRHP district, the Cincinnati Street Gas Lamps, contains 1,109 street lamps at various locations throughout Cincinnati. Near the Alternate Route, portions of this NRHP district occur approximately 600 to 700 feet west of the alignment in Roselawn. One DOE structure is located 530 feet east of the Alternate Route, along Wiehe Road.

The proposed permanent ROWs of the Preferred Route and Alternate Route cross ~~4.29~~7.34 acres and ~~2.13~~2.92 acres of recreational areas (parks, golf courses, etc.), respectively. Construction in these areas will be planned to occur outside of the seasonal use windows. These recreational areas will also be fully restored once construction is complete so that long-term use of these areas is unaffected by the Project.

Although not listed in the NRHP, it is important to note that ~~two~~ three cemeteries are located within 1,000 feet of the Preferred Route, and ~~one~~ two ~~cemetery~~ cemeteries ~~is~~ are located within 1,000 feet of the Alternate Route.

(2) Cultural Resources in Study Corridor

Cultural resources investigations to date have involved background research utilizing data files from the OHPO online mapping system for both the Preferred and Alternate Routes. This data was used to construct a consultation letter to the OHPO.

For the background research, a 1-mile buffer was used around both the Preferred and Alternate Routes to identify these previously known cultural resources and to provide information on the probability of identifying cultural resources within the Project footprint. The OHPO online mapping database included a review of the Ohio Archaeological Inventory (OAI), the Ohio Historic Inventory (OHI), DOE files, NRHP properties, historic cemeteries, historic bridges, National Historic Landmarks (NHL), and previous cultural resources surveys.

For the Preferred Route, within one mile, there were 20 OAI sites, 147 OHI resources, 4 DOE files, 5 NRHP properties, 15 cemeteries, 4 historic districts, and 1 NHL. Of these, 10 resources are in close proximity to the Preferred Route. CH2M closely examined the resources' mapped locations against modern street photography and discovered the following anomalies:

- The EB Thompson House (OHI #HAM0501550) at 11802 Conrey Road in Sharonville is no longer standing. Modern office buildings now stand at this location.
- The Sara Keeler House (OHI # HAM0412050) at 7360 East Kemper Road in Sycamore Township dates from 1875 according to OHI information; however, the house that currently stands at this location dates from the late 20th century.
- The Thomas Stewart House (OHI # HAM0412250) at 7387 East Kemper Road in Sycamore Township is no longer extant, having been replaced by a modern professional services complex.
- The Thomas Stewart Store (OHI # HAM0412550) at 7475 East Kemper Road in Sycamore Township has been demolished. It is now an empty lot.

- The Ferris House (OHI #HAM0282750) at 4710 Cooper Road in Blue Ash has been demolished. It is now an empty lot.

- The Stephenson House (OHI # HAM0283850) at 4654 Hunt Road in Blue Ash dates from 1900, according to OHI data. The house at this location dates from circa 1960s.

- OHI # HAM0414750 at 4458 Sycamore Avenue in Rossmoyne is described as a 1910 dwelling based on OHI data. The building that stands at this location is a possible circa 1930s garage.

- The William Morrison House (OHI # HAM0398457) at 5573 Red Bank Road in Columbia Township has been demolished. It is currently an empty lot.

- The Usual Ward Methodist Churchyard and cemetery (OGSID # 4583) along Red Bank Road is now a modern development.

- Dedrick Farm (cemetery), just south of Usual Ward Methodist Churchyard, is a modern industrial facility.

The review of modern street photography indicates that the closest known cultural resources appear to have been destroyed and/or replaced by modern development. As a result, no known cultural resources were identified within the Project footprint of the Preferred Route.

For the Alternate Route, within 1 mile, there were 13 OAI sites, 431 OHI resources, 15 DOE files, 4 NRHP properties, 10 cemeteries, and 2 historic districts. While none of the aforementioned cultural resources was within the Project footprint, two OHI structures are near (within 200 feet) the Alternate Route. HAM0522550 is a Vernacular style residence with a date of circa 1860. It is located along Market Street, and still appears to be extant. HAM0525050 (the Nevison-Weiskopf Company) is recorded as a Mill/Processing/Manufacturing Facility circa 1906. Its location on aerial mapping is just west of Third Street, in an empty field, implying that it is no longer extant. However, the OHI form lists the address for this facility as Reading Road, which is farther to the west, farther away from the Alternate Route, so it is possible that this resource is mapped incorrectly in the OHPO database.

Based on the background research, no known cultural resources were identified within the Project footprint of the Alternate Route.

A Project summary and consultation document were submitted to the ~~cover letter and an~~ OHPO ~~Section 106 Review – Project Summary Form will be submitted by late~~ in September 2016 ~~to the OHPO~~ requesting preliminary comments on additional cultural resources work for the Project. This initial consultation ~~will~~ included project information along with maps of the Preferred and Alternate Routes, and a summary of the known cultural resources within 1 mile of the routes. The OHPO responded by letter dated October 19, 2016, recommending that a cultural resources survey be conducted within the area of potential effect (APE) for the Project. Any additional cultural resources work as required by the OHPO ~~is planned to~~will only be conducted on the approved route, either Preferred or Alternate.

(3) Construction, Operation, and Maintenance Impacts on Cultural Resources

Based on the results of the background research, impacts to known cultural resources associated with the construction, operation and maintenance of the proposed Project are not anticipated. The applicant will consult with the OHPO to determine the need for additional studies, if any.

(4) Mitigation Procedures

Based on the results of the background research, no impacts to historic properties are anticipated as a result of the Project; therefore, no mitigation is proposed.

(5) Aesthetic Impact

(a) Visibility of the Proposed Facility

The Project is a buried pipeline, so visibility will be limited to the cleared ROW and pipeline markers. In the urban portions of the Project area, once installed, the pipeline will not be otherwise visible with the exception of the occasional pipeline marker. The valve stations and regulating stations will be visible including a security fence surrounding each facility.

(b) Facility Effect on Site and Surrounding Area

The construction of the Project will be visible, as the trenching, welding, and installation activities are out of the ordinary for many areas. Trees and woody vegetation will be removed where they occur within the permanent ROW (a planned width of 30 feet). The degree of visual impact will vary with the viewer and is largely dependent on the degree of natural and built

environment existing before construction, and the general existing and final landscape. Once construction is complete, the trench will be backfilled and seeded, or recovered with concrete/asphalt (as appropriate based on pre-construction conditions).

(c) Visual Impact Minimization

Duke Energy Ohio does not anticipate significant long-term visual impacts from the proposed Project. The ROW will be restored and re-seeded using accepted pipeline industry standards and as required by property owners. Once vegetation is re-established in natural areas, and asphalt/concrete is restored in built areas, the pipeline corridor will blend in with its surroundings to varying extents. Marker poles are required to identify the line location, which would otherwise be largely undetectable.

(F) REFERENCES

City of Blue Ash. 2003. City of Blue Ash Comprehensive Plan. Accessed May 2, 2016. http://www.blueash.com/document_center/2003_Comprehensive_Plan.pdf.

City of Cincinnati. 2012. *Plan Cincinnati: A Comprehensive Plan for the Future*. Accessed May 2, 2016. http://www.cincinnati-oh.gov/planning/plan-cincinnati/.

Hamilton County. 2004. *2030 Plan and Implementation Framework*. Accessed May 2, 2016. http://www.hamiltoncountyohio.gov/pd/planning/pdf/compass/17es.pdf.

APPENDIX 7-1

List of Structures Within 200 Feet of Preliminary Right-of-Way of Preferred and Alternate Routes

TABLE 7-1A

Structures Within 200 feet of Preliminary ROW of the Preferred Route

Structure ID Number	Structure Type	Distance from Edge of Preliminary ROW (feet)*	Structure ID Number	Structure Type	Distance from Edge of Preliminary ROW (feet)*
1	Residence	171	37	Industrial	76
2	Commercial	116	38	Industrial	82
3	Industrial	155	39	Industrial	88
4	Industrial	192	40	Industrial	19
5	Manufacturing	134	41	Industrial	92
6	Residence	74	42	Industrial	159
7	Commercial	189	43	Commercial	93
8	Commercial	108	44	Commercial	15
9	Commercial	149	45	Industrial	91
10	Commercial	142	46	Industrial	149
11	Commercial	199	47	Industrial	0
12	Commercial	128	48	Industrial	74
13	Residence	127	49	Commercial	42
14	Commercial	116	50	Commercial	70
15	Residence	117	51	Commercial	112
16	Commercial	11	52	Commercial	162
17	Commercial	126	53	Manufacturing	47
18	Commercial	27	54	Commercial	63
19	Commercial	53	55	Residence	88
20	Industrial	26	56	Commercial	8
21	Commercial	91	57	Manufacturing	141
22	Commercial	28	58	Industrial	20
23	Commercial	33	59	Commercial	128
24	Commercial	71	60	Commercial	0
25	Commercial	116	61	Industrial	186
26	Commercial	67	62	Industrial	150
27	Commercial	146	63	Commercial	116
28	Commercial	135	64	Manufacturing	20
29	Commercial	70	65	Commercial	34
30	Commercial	30	66	Commercial	199
31	Commercial	67	67	Manufacturing	83
32	Commercial	2	68	Manufacturing	131
33	Industrial	105	69	Commercial	65
34	Commercial	100	70	Commercial	147
35	Manufacturing	66	71	Commercial	33
36	Commercial	25	72	Commercial	160

TABLE 7-1A

Structures Within 200 feet of Preliminary ROW of the Preferred Route

Structure ID Number	Structure Type	Distance from Edge of Preliminary ROW (feet)*	Structure ID Number	Structure Type	Distance from Edge of Preliminary ROW (feet)*
73	Industrial	65	109	Commercial	45
74	Commercial	34	110	Commercial	89
75	Commercial	120	111	Commercial	85
76	Commercial	38	112	Commercial	103
77	Commercial	165	113	Manufacturing	9
78	Commercial	76	114	Residence	179
79	Manufacturing	1	115	Residence	168
80	Industrial	27	116	Residence	166
81	Industrial	16	117	Residence	192
82	Manufacturing	181	118	Residence	194
83	Industrial	83	119	Commercial	126
84	Industrial	71	120	Commercial	85
85	Commercial	0	121	Manufacturing	0
86	Commercial	48	122	Commercial	88
87	Industrial	68	123	Commercial	108
88	Commercial	13	124	Commercial	70
89	Residence	191	125	Commercial	109
90	Commercial	43	126	Medical	115
91	Commercial	167	127	Commercial	69
92	Commercial	149	128	Commercial	139
93	Residence	116	129	Residence	94
94	Commercial	185	130	Commercial	11
95	Commercial	64	131	Commercial	108
96	Commercial	56	132	Commercial	192
97	Commercial	31	133	Commercial	137
98	Commercial	61	134	Residence	193
99	Commercial	110	135	Residence	100
100	Commercial	107	136	Residence	175
101	Commercial	39	137	Residence	93
102	Commercial	45	138	Commercial	98
103	Commercial	182	139	Residence	149
104	Commercial	51	140	Commercial	32
105	Commercial	47	141	Residence	71
106	Residence	174	142	Residence	145
107	Commercial	37	143	Residence	71
108	Commercial	177	144	Residence	94

TABLE 7-1A

Structures Within 200 feet of Preliminary ROW of the Preferred Route

Structure ID Number	Structure Type	Distance from Edge of Preliminary ROW (feet)*	Structure ID Number	Structure Type	Distance from Edge of Preliminary ROW (feet)*
145	Residence	48	181	Residence	160
146	Residence	35	182	Residence	179
147	Apartment	155	183	Residence	137
148	Commercial	0	184	Residence	50
149	Commercial	112	185	Residence	91
150	Residence	193	186	Residence	156
151	Commercial	147	187	Residence	191
152	Commercial	6	188	Residence	142
153	Residence	163	189	Residence	134
154	Commercial	55	190	Residence	133
155	Residence	51	191	Commercial	176
156	Residence	61	192	Residence	127
157	Residence	73	193	Commercial	13
158	Residence	61	194	Commercial	163
159	Commercial	118	195	Residence	136
160	Commercial	188	196	Commercial	164
161	Residence	68	197	Commercial	163
162	Residence	29	198	Residence	130
163	Residence	55	199	Residence	127
164	Residence	147	200	Residence	126
165	Residence	60	201	Residence	126
166	Residence	134	202	Residence	157
167	Residence	177	203	Industrial	125
168	Residence	134	204	Residence	162
169	Residence	35	205	Commercial	0
170	Residence	150	206	Residence	100
171	Residence	130	207	Commercial	108
172	Residence	22	208	Commercial	30
173	Residence	131	209	Residence	99
174	Residence	68	210	Residence	156
175	Residence	139	211	Residence	97
176	Residence	142	212	Residence	141
177	Commercial	19	213	Residence	98
178	Residence	181	214	Residence	94
179	Residence	152	215	Residence	99
180	Residence	156	216	Residence	106

TABLE 7-1A

Structures Within 200 feet of Preliminary ROW of the Preferred Route

Structure ID Number	Structure Type	Distance from Edge of Preliminary ROW (feet)*	Structure ID Number	Structure Type	Distance from Edge of Preliminary ROW (feet)*
217	Residence	96	253	Commercial	124
218	Commercial	11	254	Residence	126
219	Residence	192	255	Residence	132
220	Commercial	8	256	Residence	127
221	Commercial	1	257	Residence	129
222	Commercial	5	258	Residence	129
223	Commercial	0	259	Industrial	131
224	Residence	154	260	Residence	130
225	Commercial	0	261	Residence	120
226	Commercial	7	262	Industrial	62
227	Commercial	111	263	Residence	128
228	Residence	126	264	Residence	125
229	Residence	110	265	Residence	200
230	Commercial	170	266	Residence	125
231	Residence	119	267	Residence	130
232	Manufacturing	19	268	Residence	195
233	Commercial	103	269	Residence	129
234	Commercial	22	270	Residence	131
235	Commercial	30	271	Industrial	57
236	Commercial	107	272	Residence	131
237	Commercial	181	273	Residence	142
238	Commercial	110	274	Residence	186
239	Commercial	120	275	Residence	51
240	Commercial	113	276	Residence	132
241	Manufacturing	99	277	Residence	131
242	Commercial	101	278	Residence	128
243	Manufacturing	191	279	Residence	156
244	Residence	130	280	Residence	31
245	Manufacturing	19	281	Residence	179
246	Apartment	134	282	Residence	29
247	Apartment	132	283	Residence	130
248	Manufacturing	158	284	Residence	34
249	Manufacturing	24	285	Residence	136
250	Residence	137	286	Residence	194
251	Commercial	125	287	Commercial	40
252	Manufacturing	131	288	Residence	176

TABLE 7-1A

Structures Within 200 feet of Preliminary ROW of the Preferred Route

Structure ID Number	Structure Type	Distance from Edge of Preliminary ROW (feet)*	Structure ID Number	Structure Type	Distance from Edge of Preliminary ROW (feet)*
289	Residence	134	325	Commercial	183
290	Commercial	83	326	Residence	27
291	Residence	191	327	Apartment	167
292	Residence	55	328	Government	196
293	Residence	140	329	Residence	186
294	Residence	136	330	Industrial	0
295	Residence	137	331	Residence	188
296	Residence	30	332	Residence	80
297	Commercial	124	333	Residence	35
298	Residence	30	334	Residence	114
299	Medical	126	335	Multifamily	36
300	Residence	29	336	Residence	33
301	Commercial	125	337	Residence	37
302	Commercial	118	338	Residence	137
303	Residence	145	339	Commercial	157
304	Commercial	178	340	Residence	181
305	Commercial	19	341	Residence	130
306	Commercial	113	342	Residence	90
307	Commercial	125	343	Residence	57
308	Commercial	170	344	Residence	44
309	Commercial	92	345	Residence	49
310	Commercial	23	346	Residence	51
311	Residence	126	347	Residence	50
312	Commercial	144	348	Residence	15
313	Residence	187	349	Commercial	123
314	Commercial	17	350	Commercial	186
315	Commercial	123	351	Residence	159
316	Commercial	11	352	Residence	0
317	Residence	180	353	Residence	86
318	Residence	143	354	Residence	36
319	Commercial	52	355	School	12
320	Commercial	87	356	Commercial	159
321	Residence	93	357	Residence	35
322	Commercial	48	358	Commercial	29
323	Commercial	3	359	Residence	148
324	Residence	121	360	Residence	183

TABLE 7-1A

Structures Within 200 feet of Preliminary ROW of the Preferred Route

Structure ID Number	Structure Type	Distance from Edge of Preliminary ROW (feet)*	Structure ID Number	Structure Type	Distance from Edge of Preliminary ROW (feet)*
361	Residence	84	397	Residence	194
362	Residence	44	398	Commercial	126
363	Residence	192	399	Residence	111
364	Residence	69	400	Commercial	126
365	Industrial	14	401	Residence	78
366	Industrial	72	402	Medical	151
367	Residence	90	403	Residence	19
368	Industrial	21	404	Residence	27
369	Residence	142	405	Commercial	22
370	Residence	188	406	Residence	20
371	Residence	92	407	Residence	15
372	Residence	41	408	Residence	18
373	Residence	123	409	Residence	20
374	Residence	80	410	Residence	20
375	Commercial	76	411	Commercial	140
376	Residence	188	412	Residence	28
377	Residence	151	413	Residence	30
378	Residence	107	414	Residence	31
379	Residence	41	415	Residence	27
380	Industrial	60	416	Residence	26
381	Commercial	107	417	Commercial	51
382	Commercial	11	418	Residence	25
383	Commercial	44	419	Residence	24
384	Residence	192	420	Commercial	37
385	Residence	151	421	Commercial	120
386	Manufacturing	41	422	Commercial	60
387	Multifamily	31	423	Commercial	39
388	Commercial	112	424	Residence	57
389	Commercial	57	425	Residence	57
390	Commercial	47	426	Commercial	113
391	Industrial	32	427	Residence	61
392	Industrial, Manufacturing	55	428	Residence	60
393	Residence	160	429	Residence	60
394	Residence	198	430	Commercial	119
395	Commercial	15	431	Commercial	154
396	Commercial	46	432	Government	80

TABLE 7-1A

Structures Within 200 feet of Preliminary ROW of the Preferred Route

Structure ID Number	Structure Type	Distance from Edge of Preliminary ROW (feet)*	Structure ID Number	Structure Type	Distance from Edge of Preliminary ROW (feet)*
433	Residence	81	469	Commercial	31
434	Residence	71	470	Apartment	35
435	Residence	59	471	Residence	96
436	Residence	59	472	Apartment	89
437	Residence	140	473	Apartment	100
438	Residence	168	474	Commercial	92
439	Residence	196	475	Residence	178
440	Residence	111	476	Apartment	40
441	Residence	157	477	Residence	171
442	Commercial	59	478	Apartment	158
443	Residence	61	479	Apartment	157
444	Residence	61	480	Apartment	44
445	Residence	173	481	Apartment	44
446	Residence	139	482	Apartment	57
447	Residence	135	483	Apartment	108
448	Residence	155	484	Apartment	140
449	Residence	195	485	Apartment	145
450	Residence	184	486	Commercial	3
451	Commercial	121	487	Commercial	36
452	Residence	183	488	Commercial	133
453	Residence	71	489	Commercial	142
454	Residence	73	490	Commercial	146
455	Commercial	22	491	Commercial	153
456	Residence	59	492	Commercial	137
457	Residence	53	493	Commercial	199
458	Residence	53	494	Commercial	134
459	Residence	53	495	Commercial	17
460	Residence	53	496	Commercial	128
461	Residence	52	497	Commercial	109
462	Residence	28	498	Commercial	10
463	Commercial	48	499	Commercial	23
464	Residence	76	500	Commercial	6
465	Residence	40	501	Commercial	141
466	Apartment	42	502	Commercial	184
467	Apartment	39	503	Commercial	198
468	Residence	116	504	Commercial	11

TABLE 7-1A

Structures Within 200 feet of Preliminary ROW of the Preferred Route

Structure ID Number	Structure Type	Distance from Edge of Preliminary ROW (feet)*	Structure ID Number	Structure Type	Distance from Edge of Preliminary ROW (feet)*
505	Commercial	46	541	Residence	55
506	Government	27	542	Residence	154
507	Commercial	0	543	Residence	135
508	Commercial	60	544	Residence	137
509	Residence	183	545	Residence	132
510	Commercial	96	546	Residence	107
511	Commercial	31	547	Residence	108
512	Residence	100	548	Residence	97
513	Residence	4	549	Residence	79
514	Residence	191	550	Residence	101
515	Residence	150	551	Residence	129
516	Residence	43	552	Residence	194
517	Residence	198	553	Residence	86
518	Residence	138	554	Residence	167
519	Residence	1	555	Residence	167
520	Residence	63	556	Residence	88
521	Residence	137	557	Residence	147
522	Commercial	0	558	Residence	110
523	Residence	122	559	Commercial	0
524	Residence	125	560	Commercial	141
525	Residence	94	561	Residence	142
526	Residence	66	562	Residence	126
527	Residence	129	563	Residence	175
528	Residence	131	564	Commercial	9
529	Residence	196	565	Residence	179
530	Residence	96	566	Residence	77
531	Residence	67	567	Residence	94
532	Residence	78	568	Residence	145
533	Residence	122	569	Residence	95
534	Residence	196	570	Residence	97
535	Residence	84	571	Residence	69
536	Residence	83	572	Residence	156
537	Residence	74	573	Commercial	102
538	Residence	81	574	Residence	112
539	Residence	92	575	Residence	68
540	Residence	163	576	Residence	58

TABLE 7-1A

Structures Within 200 feet of Preliminary ROW of the Preferred Route

Structure ID Number	Structure Type	Distance from Edge of Preliminary ROW (feet)*	Structure ID Number	Structure Type	Distance from Edge of Preliminary ROW (feet)*
577	Residence	52	610	Commercial	15
578	Residence	101	611	Industrial	16
579	Residence	118	612	Residence	182
580	Residence	148	613	Commercial	138
581	Residence	166	614	Commercial	62
582	Residence	187	615	Industrial	71
583	Residence	174	616	Industrial	196
584	Residence	1	617	Commercial	179
585	Residence	119	618	Commercial	61
586	Residence	143	619	Commercial	159
587	Residence	171	620	Commercial	70
588	Commercial	88	621	Commercial	120
589	Commercial	140	622	Commercial	186
590	Commercial	27	623	Commercial	111
591	Commercial	5	624	Commercial	179
592	Commercial	175	625	Commercial	86
593	Commercial	20	626	Residence	168
594	Commercial	189	627	Residence	165
595	Commercial	123	628	Commercial	156
596	Commercial	36	629	Medical	96
597	Commercial	108	630	Commercial	4
598	Commercial	110	631	Industrial	0
599	Commercial	50	632	Industrial	84
600	Commercial	128	633	Commercial	82
601	Commercial	129	634	Commercial	4
602	Commercial	82	635	Industrial	24
603	Commercial	126	636	Commercial	159
604	Commercial	140	637	Commercial	106
605	Commercial	148	638	Commercial	9
606	Commercial	155	639	Commercial	59
607	Commercial	91	640	Commercial	113
608	Commercial	40	641	Commercial	137
609	Industrial	22			

*Structures listed as "0 feet" may be at the edge of or within the nominal preliminary ROW. Note that the preliminary ROW used in this analysis is not final. Duke Energy Ohio understands that the ROW may have to be reduced and modified in places during the development of the final ROW and engineering design.

TABLE 7-1B

Structures within 200 feet of Preliminary ROW of the Alternate Route

Structure ID Number	Structure Type	Distance from Edge of Preliminary ROW (feet)*	Structure ID Number	Structure Type	Distance from Edge of Preliminary ROW (feet)*
1	Residence	171	678	Commercial	70
2	Commercial	116	679	Commercial	30
3	Industrial	155	680	Commercial	87
4	Industrial	192	681	Commercial	119
5	Manufacturing	134	682	Commercial	125
6	Residence	74	683	Commercial	121
7	Commercial	189	684	Commercial	122
8	Commercial	108	685	Commercial	122
9	Commercial	149	686	Commercial	115
10	Commercial	142	687	Commercial	115
11	Commercial	199	688	Residence	199
12	Commercial	128	689	Commercial	46
13	Residence	127	690	Commercial	137
14	Commercial	116	691	Industrial	5
15	Residence	117	692	Commercial	155
16	Commercial	11	693	Residence	37
17	Commercial	126	694	Commercial	21
18	Commercial	27	695	Commercial	50
20	Industrial	26	696	Industrial	22
659	Residence	136	697	Commercial	180
660	Residence	115	698	Commercial	180
661	Residence	115	700	Commercial	144
662	Residence	113	701	Manufacturing	65
663	Residence	91	702	Commercial	141
664	Residence	106	703	Commercial	186
665	Residence	160	704	Industrial	105
666	Residence	111	705	Commercial	10
667	Residence	89	706	Government	20
668	Commercial	141	707	Commercial	47
669	Residence	81	708	Commercial	112
670	Residence	85	709	Commercial	34
671	Commercial	84	710	Commercial	68
672	Commercial	115	711	Commercial	180
673	Residence	127	712	Commercial	124
674	Commercial	120	713	Commercial	61
675	Commercial	37	714	Commercial	131
676	Commercial	157	715	Commercial	34

TABLE 7-1B

Structures within 200 feet of Preliminary ROW of the Alternate Route

Structure ID Number	Structure Type	Distance from Edge of Preliminary ROW (feet)*	Structure ID Number	Structure Type	Distance from Edge of Preliminary ROW (feet)*
716	Commercial	18	753	Residence	30
717	Commercial	165	754	Residence	112
718	Commercial	174	755	Residence	112
719	Industrial	9	756	Commercial	105
720	Commercial	190	757	Residence	100
721	Commercial	164	758	Residence	27
722	Commercial	75	759	Residence	28
723	Commercial	138	760	Residence	123
724	Commercial	87	761	Residence	96
725	Condo	50	762	Residence	25
726	Commercial	82	763	Residence	25
727	Commercial	179	764	Residence	159
728	Industrial	109	765	Residence	159
729	Commercial	66	766	Commercial	194
730	Commercial	46	767	Residence	24
731	Commercial	187	768	Residence	24
732	Commercial	33	769	Residence	24
733	Commercial	100	770	Residence	64
734	Commercial	49	771	Commercial	199
735	Manufacturing	92	772	Residence	34
736	Commercial	117	773	Residence	51
737	Commercial	136	774	Commercial	193
738	Commercial	131	775	Residence	68
739	Commercial	87	776	Residence	98
740	Commercial	193	777	Residence	71
741	Commercial	74	778	Residence	162
742	Government	19	779	Residence	62
743	Commercial	58	780	Residence	102
744	Government	11	781	Residence	194
745	Residence	175	782	Residence	126
746	Residence	175	783	Residence	30
747	Residence	134	784	Residence	182
748	Residence	169	785	Residence	43
749	Residence	28	786	Residence	125
750	Residence	149	787	Residence	43
751	Residence	149	788	Residence	124
752	Residence	148	789	Residence	40

TABLE 7-1B

Structures within 200 feet of Preliminary ROW of the Alternate Route

Structure ID Number	Structure Type	Distance from Edge of Preliminary ROW (feet)*	Structure ID Number	Structure Type	Distance from Edge of Preliminary ROW (feet)*
790	Residence	39	827	Residence	169
791	Residence	37	828	Residence	95
792	Residence	177	829	Commercial	123
793	Residence	138	830	Residence	136
794	Residence	41	831	Residence	176
795	Residence	112	832	Commercial	93
796	Residence	40	833	Residence	141
797	Residence	40	834	Commercial	120
798	Residence	50	835	Commercial	100
799	Residence	39	836	Residence	154
800	Residence	33	837	Residence	87
801	Residence	106	838	Commercial	84
802	Residence	132	839	Residence	91
803	Residence	130	840	Residence	133
804	Residence	106	841	Residence	90
805	Residence	117	842	Residence	147
806	Residence	20	843	Residence	99
807	Residence	22	844	Government	99
808	Residence	25	845	Government	102
809	Residence	20	846	Residence	96
810	Residence	17	847	Residence	86
811	Residence	198	848	Residence	93
812	Residence	79	849	Residence	98
813	Residence	16	850	Residence	86
814	Residence	25	851	Residence	96
815	Residence	70	852	Residence	166
816	Residence	18	853	Residence	140
817	Residence	35	854	Residence	96
818	Residence	36	855	Residence	104
819	Residence	28	856	Residence	95
820	Residence	17	857	Residence	93
821	Residence	24	858	Residence	98
822	Residence	49	859	Residence	108
823	Residence	23	860	Residence	92
824	Residence	48	861	Residence	96
825	Residence	34	862	Government	107
826	Residence	149	863	Residence	200

TABLE 7-1B

Structures within 200 feet of Preliminary ROW of the Alternate Route

Structure ID Number	Structure Type	Distance from Edge of Preliminary ROW (feet)*	Structure ID Number	Structure Type	Distance from Edge of Preliminary ROW (feet)*
864	Residence	96	902	Industrial	171
865	Residence	99	903	Commercial	22
866	Residence	95	904	Commercial	190
867	Residence	96	905	Commercial	11
868	Residence	166	906	Commercial	66
869	Commercial	84	907	Commercial	8
870	Residence	99	908	Commercial	6
871	Residence	94	909	Commercial	39
872	Residence	196	910	Commercial	166
873	Residence	101	911	Commercial	6
874	Residence	96	912	Commercial	15
875	Residence	112	913	Commercial	2
876	Residence	184	914	Commercial	192
877	Residence	94	915	Commercial	112
878	Residence	94	916	Commercial	77
879	Residence	96	917	Commercial	157
880	Residence	94	918	Commercial	0
881	Residence	94	919	Commercial	0
882	Commercial	84	920	Commercial	130
883	Residence	93	921	Commercial	128
884	Commercial	99	922	Commercial	143
885	Residence	87	923	Commercial	3
886	Commercial	124	924	Commercial	2
887	Commercial	92	925	Commercial	49
888	Commercial	41	926	Commercial	114
889	Government	0	927	Commercial	70
890	Commercial	15	928	Commercial	57
891	Industrial	74	929	Government	26
893	Commercial	136	930	Residence	178
894	Commercial	47	931	Residence	139
895	Commercial	101	932	Residence	98
896	Commercial	65	933	Residence	48
897	Commercial	98	934	Residence	17
898	Manufacturing	153	935	Residence	180
899	Commercial	0	936	Residence	129
900	Commercial	136	937	Residence	80
901	Commercial	197	938	Residence	31

TABLE 7-1B

Structures within 200 feet of Preliminary ROW of the Alternate Route

Structure ID Number	Structure Type	Distance from Edge of Preliminary ROW (feet)*	Structure ID Number	Structure Type	Distance from Edge of Preliminary ROW (feet)*
939	Residence	28	976	Commercial	78
940	Residence	126	977	Residence	119
941	Residence	44	978	Residence	16
942	Residence	46	979	Residence	180
943	Residence	135	980	Residence	66
944	Residence	59	981	Commercial	20
945	Residence	142	982	Residence	105
946	Residence	48	983	Residence	33
947	Residence	86	984	Residence	136
948	Residence	144	985	Commercial	28
949	Residence	64	986	Commercial	34
950	Residence	28	987	Residence	194
951	Residence	119	988	Commercial	34
952	Residence	14	989	Commercial	6
953	Residence	164	990	Residence	112
954	Residence	55	991	Residence	181
955	Residence	23	992	Commercial	117
956	Commercial	38	993	Residence	181
957	Residence	25	994	Residence	137
958	Commercial	38	995	Commercial	32
959	Commercial	92	996	Commercial	168
960	Commercial	150	997	Commercial	112
961	Commercial	32	998	Residence	97
962	Commercial	127	999	Commercial	36
963	Residence	51	1000	Residence	187
964	Commercial	113	1001	Residence	33
965	Commercial	15	1002	Residence	64
966	Residence	41	1003	Commercial	112
967	Residence	104	1004	Residence	27
968	Residence	197	1005	Residence	23
969	Residence	146	1006	Residence	21
970	Residence	21	1007	Residence	60
971	Residence	133	1008	Residence	101
972	Residence	19	1009	Commercial	199
973	Residence	123	1010	Residence	142
974	Residence	16	1011	Residence	182
975	Residence	16	1012	Residence	22

TABLE 7-1B

Structures within 200 feet of Preliminary ROW of the Alternate Route

Structure ID Number	Structure Type	Distance from Edge of Preliminary ROW (feet)*	Structure ID Number	Structure Type	Distance from Edge of Preliminary ROW (feet)*
1013	Residence	169	1050	Residence	26
1014	Residence	25	1051	Residence	93
1015	Residence	16	1052	Residence	5
1016	Residence	21	1053	Residence	195
1017	Residence	150	1054	Residence	24
1018	Residence	197	1055	Residence	166
1019	Residence	196	1056	Residence	81
1020	Residence	93	1057	Residence	23
1021	Residence	23	1058	Residence	19
1022	Residence	198	1059	Residence	179
1023	Residence	25	1060	Residence	177
1024	Residence	179	1061	Residence	7
1025	Residence	158	1062	Residence	139
1026	Residence	18	1063	Residence	87
1027	Residence	24	1064	Residence	83
1028	Residence	25	1065	Residence	133
1029	Residence	188	1066	Residence	16
1030	Residence	22	1067	Residence	193
1031	Residence	160	1068	Residence	189
1032	Residence	19	1069	Residence	4
1033	Residence	24	1070	Residence	150
1034	Residence	192	1071	Residence	23
1035	Residence	181	1072	Residence	191
1036	Residence	22	1073	Residence	19
1037	Residence	187	1074	Residence	190
1038	Residence	23	1075	Residence	20
1039	Residence	180	1076	Residence	130
1040	Residence	25	1077	Residence	21
1041	Residence	29	1078	Residence	17
1042	Residence	180	1079	Residence	151
1043	Residence	25	1080	Residence	97
1044	Residence	190	1081	Residence	28
1045	Residence	9	1082	Residence	17
1046	Residence	24	1083	Residence	53
1047	Residence	180	1084	Residence	184
1048	Residence	193	1085	Residence	8
1049	Residence	19	1086	Residence	177

TABLE 7-1B

Structures within 200 feet of Preliminary ROW of the Alternate Route

Structure ID Number	Structure Type	Distance from Edge of Preliminary ROW (feet)*	Structure ID Number	Structure Type	Distance from Edge of Preliminary ROW (feet)*
1087	Residence	35	1124	Commercial	146
1088	Residence	19	1125	Commercial	80
1089	Residence	180	1126	Residence	6
1090	Residence	162	1127	Residence	78
1091	Residence	14	1128	Residence	168
1092	Residence	162	1129	Residence	5
1093	Residence	19	1130	Residence	75
1094	Residence	67	1131	Residence	169
1095	Residence	25	1132	Residence	0
1096	Residence	22	1133	Residence	176
1097	Residence	38	1134	Residence	158
1098	Residence	154	1135	Residence	0
1099	Residence	13	1136	Residence	197
1100	Residence	26	1137	Residence	70
1101	Residence	119	1138	Residence	173
1102	Residence	12	1139	Residence	0
1103	Residence	170	1140	Residence	179
1104	Residence	81	1141	Residence	0
1105	Residence	84	1142	Residence	82
1106	Residence	13	1143	Residence	83
1107	Residence	134	1144	Residence	3
1108	Residence	32	1145	Residence	141
1109	Residence	88	1146	Residence	171
1110	Residence	127	1147	Residence	6
1111	Residence	24	1148	Residence	183
1112	Residence	168	1149	Residence	182
1113	Residence	165	1150	Residence	78
1114	Commercial	104	1151	Residence	139
1115	Residence	16	1152	Residence	174
1116	Residence	79	1153	Residence	115
1117	Residence	125	1154	Residence	6
1118	Commercial	132	1155	Residence	174
1119	Residence	181	1156	Residence	57
1120	Commercial	74	1157	Residence	4
1121	Residence	69	1158	Residence	0
1122	Residence	4	1159	Residence	32
1123	Residence	66	1160	Commercial	41

TABLE 7-1B

Structures within 200 feet of Preliminary ROW of the Alternate Route

Structure ID Number	Structure Type	Distance from Edge of Preliminary ROW (feet)*	Structure ID Number	Structure Type	Distance from Edge of Preliminary ROW (feet)*
1161	Commercial	41	1198	Residence	127
1162	Commercial	43	1199	Residence	64
1163	Commercial	43	1200	Commercial	62
1164	Residence	197	1201	Commercial	141
1165	Commercial	195	1202	Commercial	45
1166	Commercial	158	1203	Commercial	126
1167	Commercial	133	1204	Commercial	30
1168	Commercial	158	1205	Commercial	139
1169	Commercial	135	1206	Industrial	135
1170	Commercial	179	1207	Commercial	58
1171	Commercial	102	1208	Manufacturing	190
1172	Commercial	81	1209	Commercial	168
1173	Commercial	179	1210	Commercial	155
1174	Commercial	132	1211	Commercial	159
1175	Commercial	162	1212	Commercial	168
1176	Commercial	74	1213	Commercial	170
1177	Commercial	111	1214	Industrial	93
1178	Commercial	182	1215	Industrial	164
1179	Commercial	127	1216	Industrial	127
1180	Commercial	146	1217	Manufacturing	134
1181	Commercial	84	1218	Commercial	108
1182	Commercial	160	1219	Commercial	141
1183	Commercial	110	1220	Commercial	119
1184	Commercial	181	1221	Commercial	0
1185	Residence	165	1222	Commercial	21
1186	Residence	153	1223	Commercial	0
1187	Residence	56	1224	Commercial	17
1188	Residence	147	1225	Commercial	120
1189	Commercial	91	1226	Commercial	119
1190	Commercial	105	1227	Commercial	142
1191	Residence	30	1228	Industrial	153
1192	Commercial	98	1229	Industrial	97
1193	Commercial	113	1230	Commercial	105
1194	Residence	111	1231	Commercial	93
1195	Commercial	23	1232	Manufacturing	81
1196	Residence	121	1233	Commercial	192
1197	Residence	54	1234	Manufacturing	166

TABLE 7-1B

Structures within 200 feet of Preliminary ROW of the Alternate Route

Structure ID Number	Structure Type	Distance from Edge of Preliminary ROW (feet)*	Structure ID Number	Structure Type	Distance from Edge of Preliminary ROW (feet)*
1235	Commercial	2	1267	Manufacturing	76
1236	Industrial	199	1268	Manufacturing	91
1237	Industrial	198	1269	Commercial	85
1238	Commercial	41	1270	Industrial	117
1239	Industrial	70	1271	Commercial	157
1240	Industrial	197	1272	Industrial	177
1241	Commercial	163	1273	Industrial	0
1242	Industrial	45	1274	Industrial	24
1243	Commercial	161	1275	Commercial	39
1244	Manufacturing	21	1276	Commercial	13
1245	Commercial	105	1277	Commercial	63
1246	Commercial	138	1278	Commercial	96
1247	Commercial	20	1279	Commercial	5
1248	Commercial	192	1280	Commercial	15
1249	Commercial	92	1281	Industrial	21
1250	Commercial	190	1282	Commercial	21
1251	Manufacturing	52	1283	Residence	36
1252	Commercial	153	1284	Residence	43
1253	Industrial	60	1285	Commercial	45
1254	Commercial	117	1286	Residence	44
1255	Commercial	86	1287	Commercial	97
1256	Commercial	29	1288	Commercial	38
1257	Commercial	89	1289	Commercial	25
1258	Commercial	152	1290	Industrial	127
1259	Commercial	81	1291	Commercial	19
1260	Industrial	92	1292	Commercial	113
1261	Commercial	91	1293	Commercial	7
1262	Commercial	153	1294	Commercial	158
1263	Commercial	181	1295	Commercial	67
1264	Commercial	175	1296	Commercial	102
1265	Commercial	176	1297	Commercial	167
1266	Government	29			

*Structures listed as "0 feet" may be at the edge of or within the nominal preliminary ROW. Note that the preliminary ROW used in this analysis is not final. Duke Energy Ohio understands that the ROW may have to be reduced and modified in places during the development of the final ROW and engineering design.

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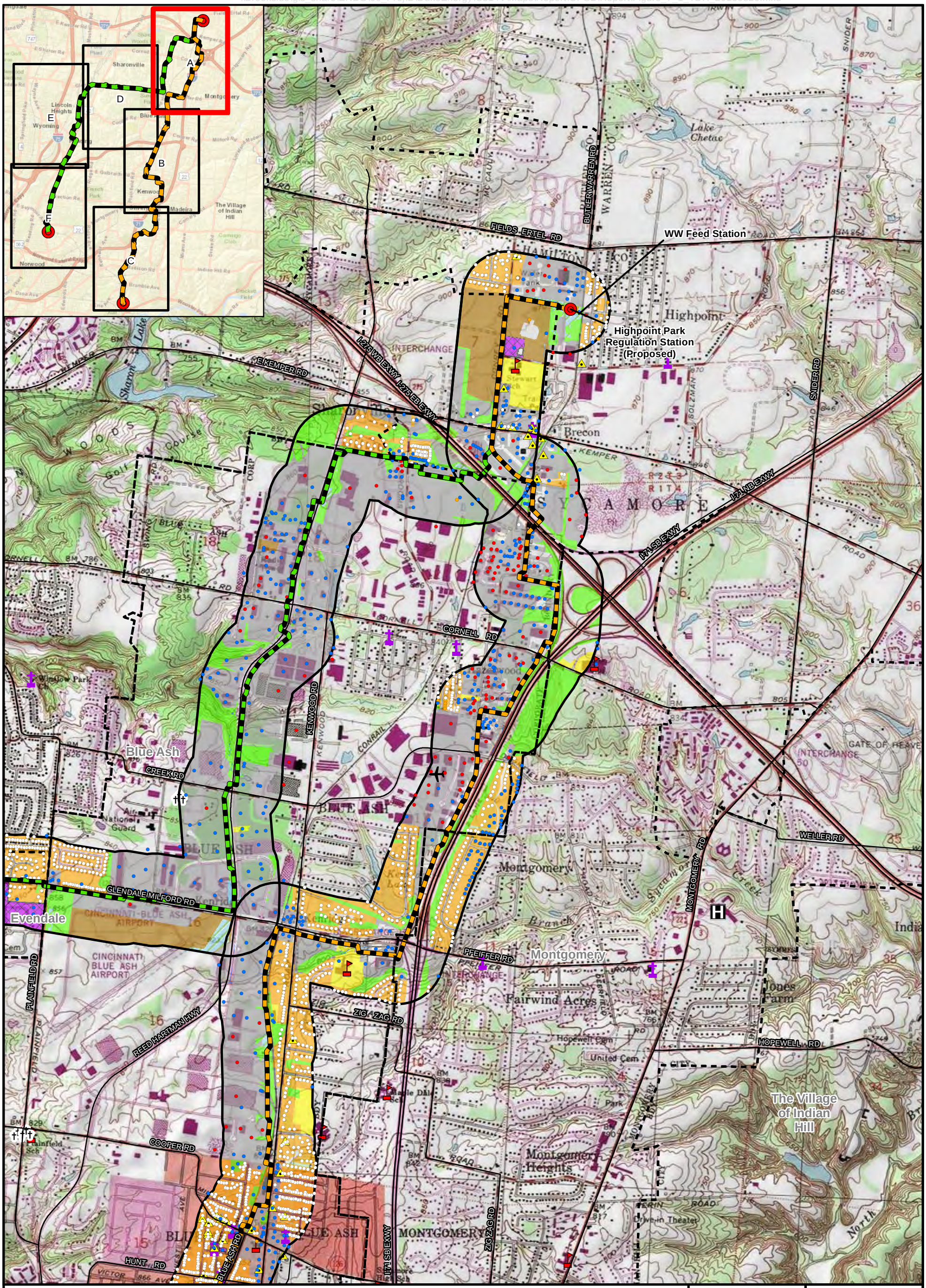

LEGEND:

- Stations (Existing and Proposed)
- Cemeteries
- Church
- Hospitals
- Schools
- Historic Structures
- Airports/Helipads
- Road
- Preferred Route
- Alternate Route
- 1,000 Foot Buffer Around Preferred and Alternate Route
- Municipal Boundary
- Station

Structures

- Commercial
- Residential
- Civic Building
- Industrial

Landuse

- Delineated Stream
- Delineated Wetland
- Delineated Pond
- Commercial/Industrial
- Education
- Institutional
- Mixed Use
- Parks and recreation
- Residential
- Undefined
- Woodlots

BASE MAP SOURCE:
USGS 7.5-minute Topographic Quadrangle Cincinnati East 1982, Glendale 1982 Madeira 1983, Mason 1982

N

0 2,000 4,000
Scale In Feet

DUKE ENERGY

C314V Central Corridor Pipeline Extension Project

FIGURE 7-1A
LAND USE MAP

PN: 672247
CREATED BY: TH
REVIEWED BY:MF

ch2m

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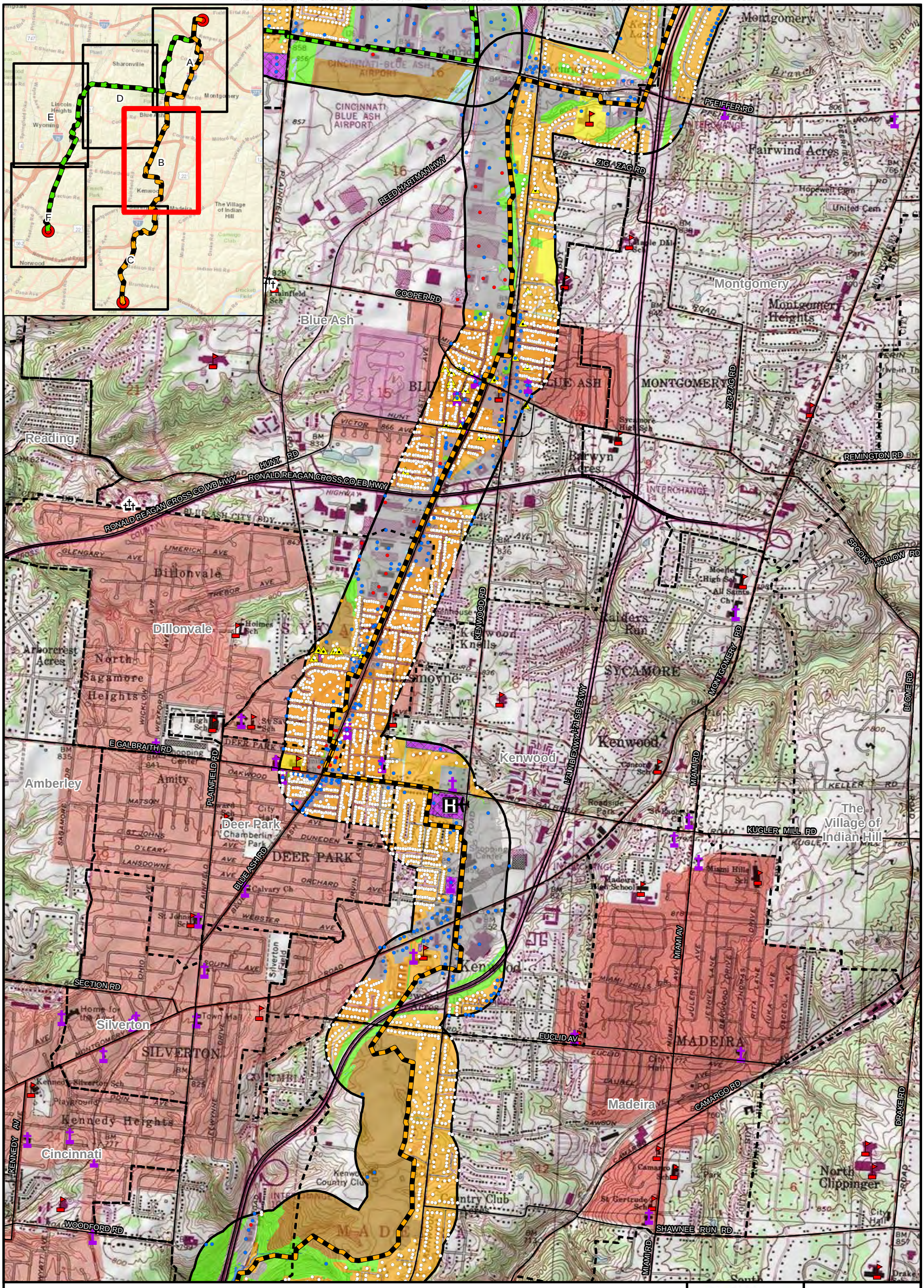

LEGEND:

- Stations (Existing and Proposed)
- Cemeteries
- Church
- Hospitals
- Schools
- Historic Structures
- Airports/Helipads
- Road
- Preferred Route
- Alternate Route
- 1,000 Foot Buffer Around Preferred and Alternate Route
- Municipal Boundary
- Station

Structures

- Commercial
- Residential
- Civic Building
- Industrial

Landuse

- Delineated Stream
- Delineated Wetland
- Delineated Pond
- Commercial/Industrial
- Education
- Institutional
- Mixed Use
- Parks and recreation
- Residential
- Undefined
- Woodlots

BASE MAP SOURCE:
USGS 7.5-minute Topographic Quadrangle
Cincinnati East 1982,
Glendale 1982
Madeira 1983, Mason 1982

N

0 2,000 4,000
Scale In Feet

DUKE ENERGY

C314V Central Corridor Pipeline Extension Project

FIGURE 7-1B
LAND USE MAP

PN: 672247
CREATED BY: TH
REVIEWED BY:MF

ch2m

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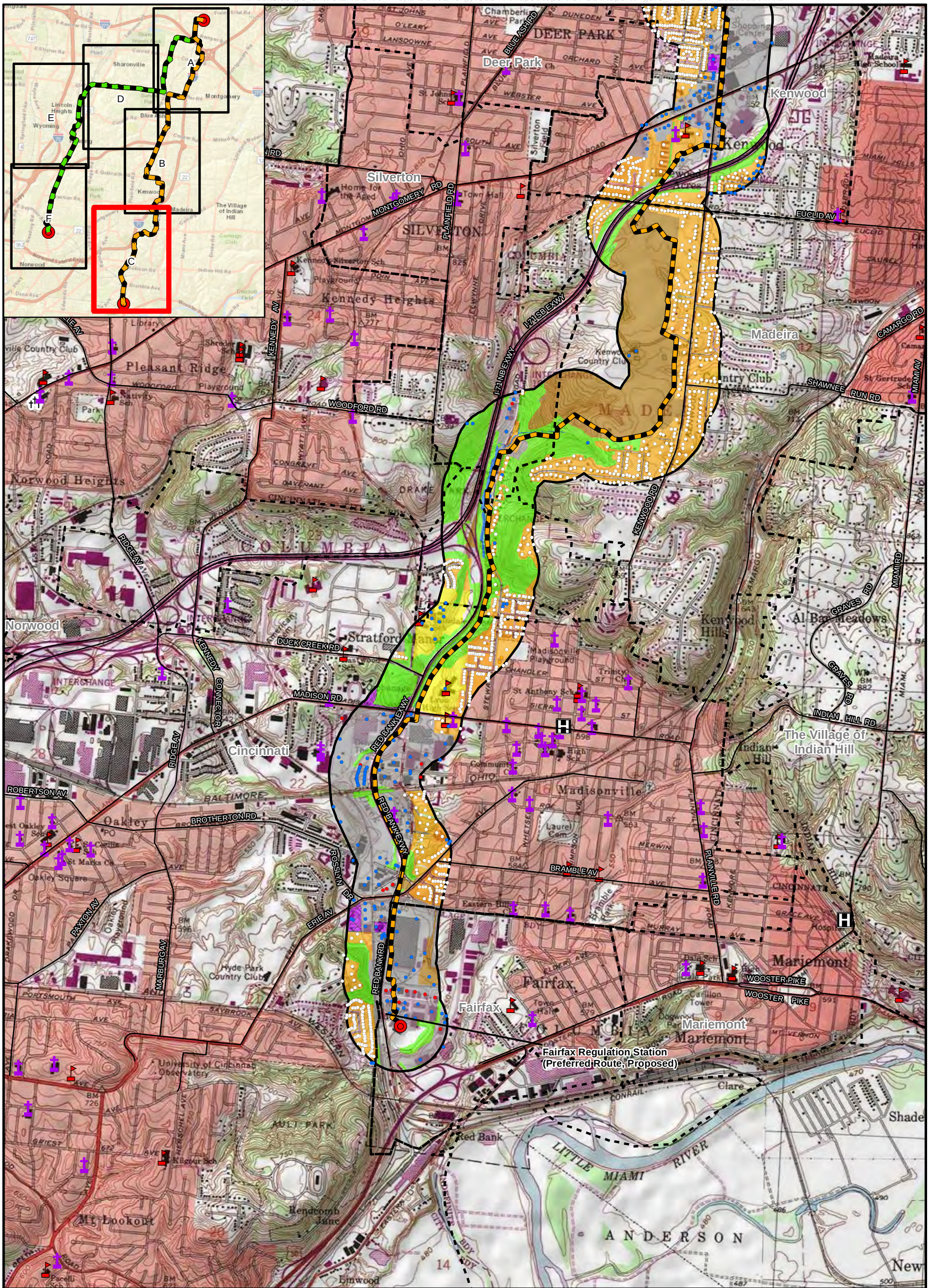


LEGEND:

- Stations (Existing and Proposed)
- Cemeteries
- Church
- Hospitals
- Schools
- Historic Structures
- Airports/Helipads
- Road
- Preferred Route
- Alternate Route
- 1,000 Foot Buffer Around Preferred and Alternate Route
- Municipal Boundary
- Station

Structures

- Commercial
- Residential
- Civic Building
- Industrial

Landuse

- Delineated Stream
- Delineated Wetland
- Delineated Pond
- Commercial/Industrial
- Education
- Institutional
- Mixed Use
- Parks and recreation
- Residential
- Undefined
- Woodlots

BASE MAP SOURCE:
USGS 7.5-minute Topographic Quadrangle
Cincinnati East 1982,
Glendale 1982
Madeira 1983, Mason 1982

N

0 2,000 4,000
Scale In Feet

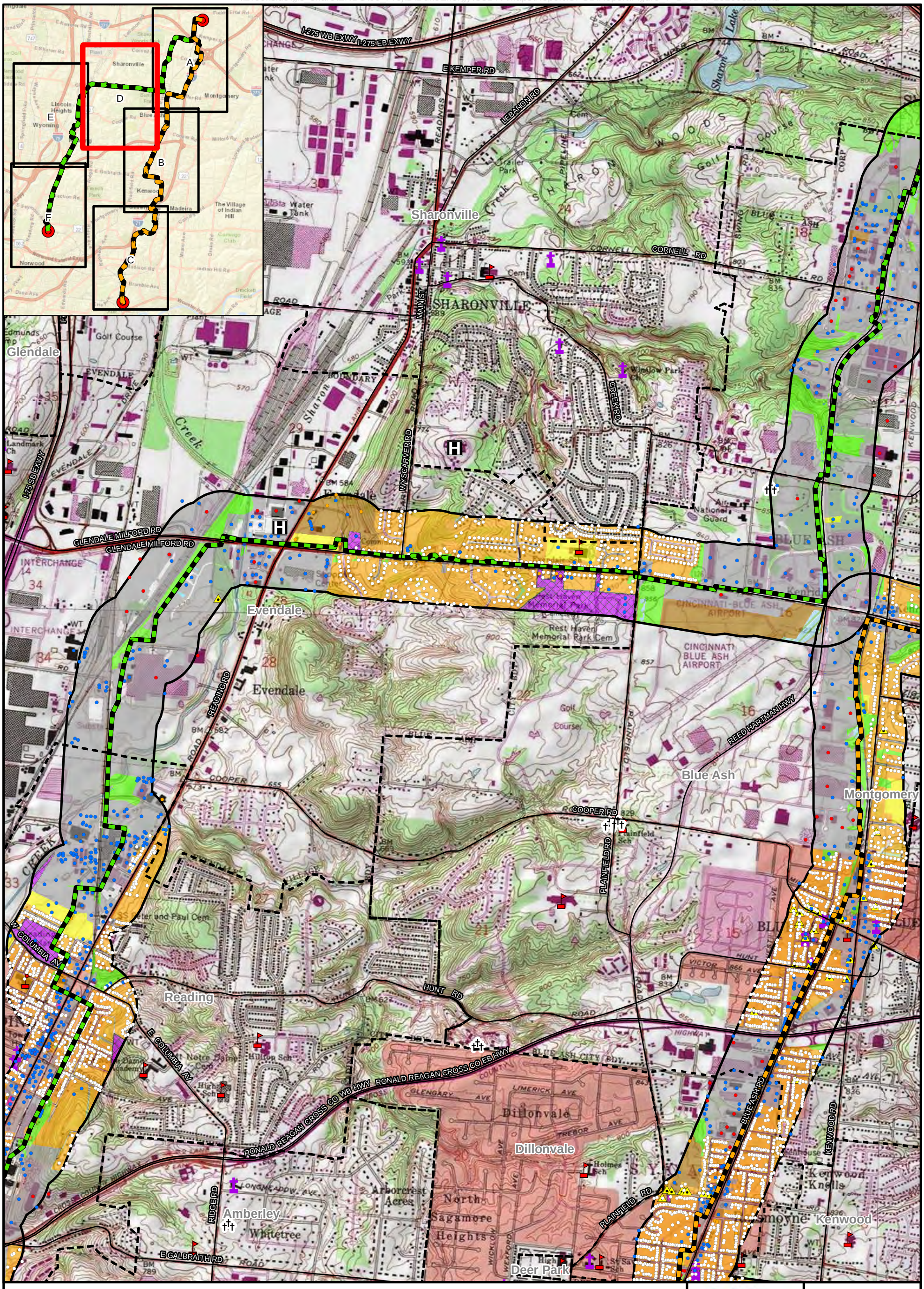
DUKE ENERGY.

C314V Central Corridor Pipeline Extension Project

FIGURE 7-1C
LAND USE MAP

PN: 672247
CREATED BY: TH
REVIEWED BY:MF

ch2m


I-275 WB EXWY
I-275 EB EXWY
E KEMPER RD
LEBANON RD
Sharonville
MAIN ST
CORNELL RD
SHARONVILLE
Glendale
GREEK RD
WYSCARVER RD
GLENDALE MILFORD RD
I-75 SB EXWY
Evendale
READING RD
COOPER RD
PLAINFIELD RD
REED HARTMAN HWY
Blue Ash
Montgomery
W COLUMBIA AV
Reading
HUNT RD
E COLUMBIA AV
RONALD REAGAN CROSS CO WB HWY
RONALD REAGAN CROSS CO EB HWY
Dillonvale
BLUE ASH RD
KENWOOD RD
RIDGE RD
Amberley
Kenwood
E CALBRAITH RD
Deer Park
A
B
C
D
E
F
H
LEGEND:
Stations (Existing and Proposed)
Cemeteries
Church
Hospitals
Schools
Historic Structures
Airports/Helipads
Road
Preferred Route
Alternate Route
1,000 Foot Buffer Around Preferred and Alternate Route
Municipal Boundary
Station
Structures
Commercial
Residential
Civic Building
Industrial
Landuse
Delineated Stream
Delineated Wetland
Delineated Pond
Commercial/Industrial
Education
Institutional
Mixed Use
Parks and recreation
Residential
Undefined
Woodlots
BASE MAP SOURCE:
USGS 7.5-minute Topographic Quadrangle Cincinnati East 1982, Glendale 1982 Madeira 1983, Mason 1982
N
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2,000
4,000
Scale In Feet
DUKE ENERGY
C314V Central Corridor Pipeline Extension Project
FIGURE 7-1D
LAND USE MAP
PN: 672247
CREATED BY: TH
REVIEWED BY:MF
ch2m

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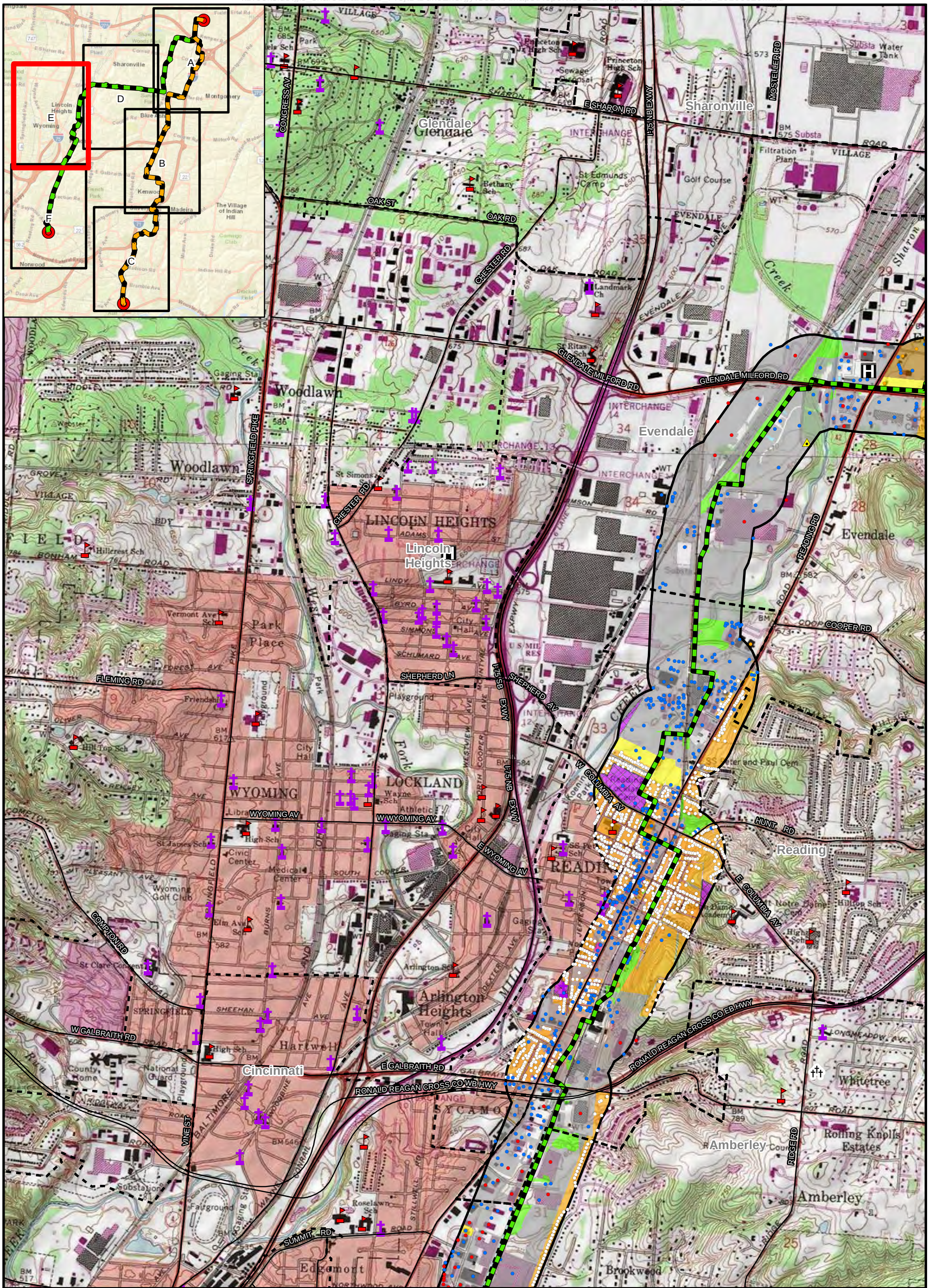

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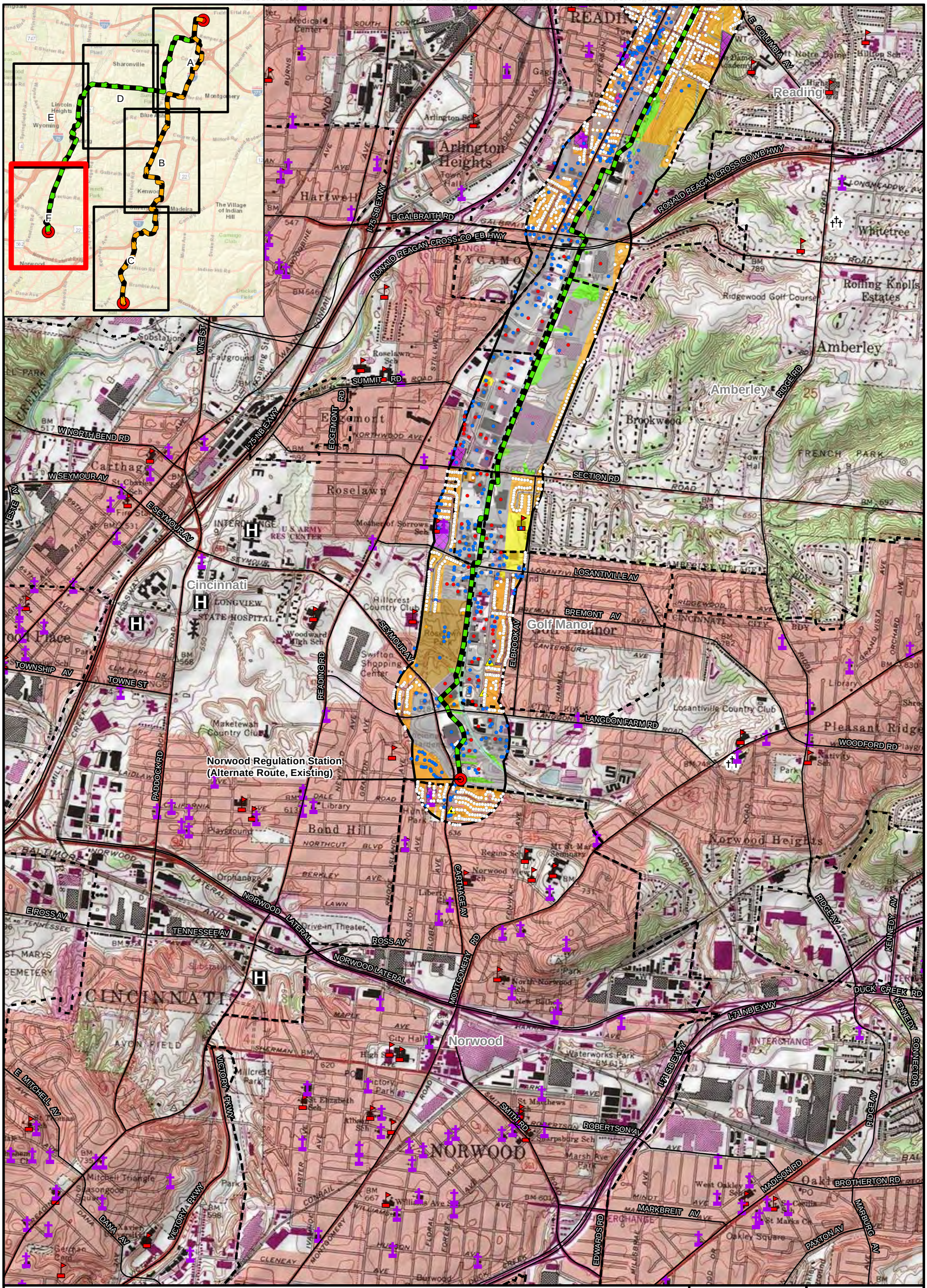

LEGEND:

- Stations (Existing and Proposed)
- Cemeteries
- Church
- Hospitals
- Schools
- Historic Structures
- Airports/Helipads
- Road
- Preferred Route
- Alternate Route
- 1,000 Foot Buffer Around Preferred and Alternate Route
- Municipal Boundary
- Station

Structures

- Commercial
- Residential
- Civic Building
- Industrial

Landuse

- Delineated Stream
- Delineated Wetland
- Delineated Pond
- Commercial/Industrial
- Education
- Institutional
- Mixed Use
- Parks and recreation
- Residential
- Undefined
- Woodlots

BASE MAP SOURCE:
USGS 7.5-minute Topographic Quadrangle Cincinnati East 1982, Glendale 1982 Madeira 1983, Mason 1982

N

0 2,000 4,000
Scale In Feet

DUKE ENERGY.

C314V Central Corridor Pipeline Extension Project

FIGURE 7-1F
LAND USE MAP

PN: 672247
CREATED BY: TH
REVIEWED BY:MF

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in

Case No(s). 16-0253-GA-BTX

Summary: Amended Application Amended Application for a Certificate of Environmental Compatibility and Public Need for the C314V Central Corridor Pipeline Extension Project, PUCO Case No. 16-253-GA-BTX (PART 4 OF 7) electronically filed by Carys Cochern on behalf of Kingery, Jeanne W Ms.