CITY OF POWELL

Village Green

Existing Utilities Due Diligence/Assessment



August 12, 2025





Executive Summary:

Our team has completed a utility due diligence assessment for the 12-acre Village Green site in Powell, Ohio. The site currently houses the City of Powell's municipal offices, police department, and Village Green Park. The park features open lawn areas, walking paths, play structures, a splash pad, a solar pavilion, and an amphitheater.

The site is currently served by water, sanitary sewer, stormwater collection and detention systems, electricity, telecommunications, and natural gas. All necessary utilities are available at the property line and extend to the existing building. While some utility upgrades may be needed, these will depend on the type and density of the proposed development.

The development program will be defined in Phase 2 by the Pizzuti project team. Utility providers cannot determine capacity requirements until detailed information—such as development type, unit count, density, and estimated demand—is available. At this stage, all essential utilities are in place, and any required upgrades will be evaluated during Phase 2.

The most significant challenge identified is related to sanitary sewer capacity managed by the Delaware County Regional Sewer District. During wet weather events, the downstream system experiences capacity constraints. Addressing this issue will require collaboration between the City, the development team, and the sewer district. This constraint could also impact other redevelopment projects in the area. We recommend that the City coordinate with the sewer district for any future projects that may increase sewer flow or alter land use density.



Sanitary Sewer Infrastructure Overview

Utility Provider: Delaware County Regional Sewer District

Utility Contact: Julie McGill, P.E., ENV SP

Contact Phone/Email: 740.833.2255 office / JMcGill@co.delaware.oh.us

Existing Service

The Village Green site is currently served by the Delaware County Regional Sewer District (DCRSD) for sanitary sewer collection and treatment. An 8-inch sanitary sewer line extends along Hall Street, connecting to a 15-inch main in West Olentangy Street, which services the existing municipal building.

Additional sewer infrastructure is available along South Liberty Street, located on the east side of S. Liberty Road. These lines may serve as auxiliary connections if invert elevations present challenges for the proposed development footprint.

System Connectivity

The site and surrounding downtown Powell area drain into a 15-inch sewer along Olentangy Street, which crosses through the Bennett Farms area (see Appendix for maps). This line connects to a 27-inch sub-trunk sewer located east of the site. The 27-inch line ultimately discharges into a larger diameter trunk sewer along State Route 315 and the Olentangy River corridor.

System Modeling and Inflow/Infiltration (1&1)

DCRSD maintains a comprehensive hydraulic model of its sewer system, supported by flow meters that monitor performance during wet weather events. Older sections of the system, including those serving downtown Powell, are susceptible to inflow and infiltration (I&I) from sources such as:

- Improper sump pump or downspout connections
- Basement floor drains
- Deteriorated or non-watertight pipe joints
- Groundwater intrusion

These conditions reduce available sewer capacity and increase the risk of surcharging during storm events. A copy of their modeling map is provided in the appendix of this report.

Capacity Constraints

The 27-inch sewer downstream of the site is currently operating above its design capacity during a 25-year, 24-hour storm event—a benchmark used in DCRSD's predictive modeling. This indicates a significant constraint in the system's ability to accommodate additional flow during peak wet weather conditions.



Planned Improvements

DCRSD has identified two key projects to address capacity issues:

- 1. Pipe Resizing Project near the Olentangy River, scheduled for 2025–2026
- 2. New Pump Station in Powell to divert flow to a higher-capacity sewer

These projects are intended to provide cost-effective solutions to alleviate system-wide capacity constraints.

Coordination and Next Steps

DCRSD has requested that once a development program is finalized for the Village Green site, including proposed density and estimated flows, this information be submitted for input into their system model. They also advised that any additional projects in Powell that could increase sewer flows should be evaluated for cumulative impacts on system capacity.

Potential Mitigation Measures

To address I&I and capacity limitations, DCRSD may consider the following countermeasures:

- Upsizing existing sewer mains
- Lining older pipes to reduce groundwater infiltration
- Identifying and correcting improper stormwater connections
- Installing in-system storage
- Implementing sewer bypass pumping strategies



Water Infrastructure Overview

Utility Provider: Delco Water

Utility Contact: Darrell Miller, P.E. - Capital Projects Manager

Contact Phone/Email: 740.201.0271 office / dmiller@delcowater.com

Existing Service

Water service to the Village Green site is provided by **Del-Co Water Company**, which is responsible for both treatment and distribution within the City of Powell. The site is currently served by:

- 8-inch water mains located in both Olentangy Street and South Liberty Street, adjacent to the site.
- A dedicated 6-inch Del-Co main that enters the site, supplying the existing building and associated fire hydrants.

System Capacity and Coordination

In discussions with Darrell Miller, Engineering Department Manager at Del-Co, it was confirmed that there are currently no issues with providing potable water to downtown Powell. Del-Co has an elevated water tower in Powell, ensuring sufficient volume for drinking water needs.

Delco provided existing estimated flows and pressures for the downtown area. The estimated flow rate is 1,100 gallons per minute at roughly 70 PSI. We have requested that they perform a fire flow test of a hydrant nearest to the site on Powell Road. Once these fire flow results are provided, we will forward onto the city for future planning purposes for other projects in the city.

However, the ability to meet fire flow requirements for a larger or denser development will need to be verified. Del-Co can perform a theoretical pressure and flow model based on the proposed development's demand to determine whether system improvements are necessary.

Potential Improvements

If modeling indicates that existing infrastructure cannot meet required pressures or fire flow rates for the future development, Del-Co may consider replacement and upsizing of the 8-inch main in Olentangy Street. There may be other upsizing alternatives in the mainline network to accommodate more pressure and flow to the facility.

These improvements would be evaluated based on the final development program and associated water demand.



Stormwater Infrastructure Overview

Utility Provider: City of Powell

Utility Contact: City Engineer & Director of Public Service

Existing Conditions

The Village Green site and surrounding streets are served by a network of subsurface drainage conductors. A retention pond located on-site was reshaped and expanded in 2004 as part of park improvements. Based on the 2004 improvement plans:

• Normal pool surface area: ~7,500 square feet

• 100-year storm surface area: ~13,500 square feet

• Estimated storage volume: ~25,000 cubic feet

However, it is unclear whether the pond was constructed exactly as designed. Aerial imagery and visual inspection suggest deviations from the record drawings, including the potential for additional freeboard that may have been used to achieve the intended storage volume.

Importantly, unless modified since 2004, the pond does not meet current Ohio EPA water quality volume requirements.

Stormwater Conveyance

- The pond manages runoff from the northern portion of the site. The primary outfall for the pond is a 21-inch storm sewer that flows east to South Liberty Street, where it connects to an 18-inch pipe. This line continues east and ties into a 24-inch storm sewer that discharges into Bartholomew Run, behind the Powell Liberty Historical Society at 103 E. Olentangy Street.
- A portion of the south side of the site drains through a 12-inch underground pipe, which connects to an 18-inch storm sewer in South Liberty Street. This system flows south, then east through the Liberty Hills subdivision, ultimately discharging into an open channel at Briarbend Boulevard. From there, stormwater is conveyed through a detention facility and open channel to Tylers Run, which drains into the Olentangy River.

Regulatory Requirements and Future Considerations

Any redevelopment of the site will be required to comply with the City of Powell's current stormwater management regulations. This includes:

 Water quality treatment in accordance with the Ohio EPA General Stormwater NPDES Permit (OHC000006), which is set to expire in April 2028. Projects constructed after this date may be subject to more stringent requirements under a new permit.



• Increased storage capacity, potentially through underground detention systems, to manage both water quality and quantity.

Next Steps and Opportunities

- The development program will be evaluated in Phase 2, at which point stormwater management alternatives will be proposed to meet regulatory requirements.
- If the City has experienced regional stormwater issues, the site may offer an opportunity to incorporate a regional stormwater basin. This could help mitigate downstream impacts and provide broader system benefits.
- In the Phase 2 work, we can identify several alternatives to manage stormwater and perform some preliminary sizing calculations for required storage and water quality based upon the program of the site.



Electric Infrastructure Overview

Utility Provider: American Electric Power (AEP)

Utility Contact: Brent Gates

Contact Phone/Email: 614.883.6802 / bmgates@aep.com

Existing Service

The Village Green site is served by American Electric Power (AEP). According to AEP records (see appendix C), three-phase power is available at the site. The electrical infrastructure includes:

- Overhead primary lines with a combination of overhead and underground secondary feeds in the surrounding area.
- The existing municipal building appears to be served by a three-phase high-voltage feed terminating at the front of the building.
- Electrical equipment, including transformers and switchgear, is located near the East Community Room entrance.

Coordination and Load Requirements

AEP requires submission of electrical load data to their engineering department to evaluate system capacity and determine whether upgrades are necessary. Key considerations include:

- Primary conductor upgrades, if required, are typically completed at AEP's expense.
- Transformers, switchgear, and other site-specific equipment are generally the responsibility of the developer, although AEP may provide aid-to-construction depending on project scope and impact.

Next Steps

- Submit the proposed development program and estimated electrical loads to AEP.
- Coordinate with AEP engineering to assess infrastructure needs and determine any associated costs or construction responsibilities.



Gas Infrastructure Overview

Utility Provider: Columbia Gas of Ohio / NiSource

Utility Contact: Rob Caldwell

Contact Phone/Email: 614.818.2104 / rcaldwell@nisource.com

Existing Service

The Village Green site and surrounding area are served by Columbia Gas of Ohio. The gas infrastructure includes:

- Medium-pressure gas mains located within Olentangy Street and South Liberty Street
- A high-pressure 8-inch main within portions of Olentangy Street
- The site itself appears to be served by a 2-inch service line originating from Depot Street

Service Availability and Coordination

If the proposed development includes natural gas service, load data will need to be submitted to Columbia Gas's New Services Engineering Group to confirm service availability and identify any required upgrades.

Given the presence of both high- and medium-pressure mains in the area, no major service limitations are anticipated for a typical mixed-use development. However, availability may become a concern if the project includes high-volume gas users.

Typical Use Cases

- Restaurants typically require natural gas for cooking and heating.
- Higher-end condominiums or apartments may include gas amenities such as fireplaces, heating systems, and gas ranges.
- However, most multi-family residential developments tend to use electric heating due to the cost and complexity of distributing gas service within buildings.

Next Steps

- Submit the proposed development program and estimated gas loads to Columbia Gas.
- Coordinate with Columbia Gas to determine service feasibility and any associated costs for system upgrades.



Telecommunication Infrastructure Overview

Existing Service Providers

The Village Green site is located within a service area supported by multiple telecommunications providers. Key observations include:

- AT&T is a major provider in the area, offering both fiber optic and copper-based services.
- Their infrastructure is predominantly overhead, with some underground service lines extending to individual users.
- Spectrum and Verizon also provide services in the area, as confirmed by aerial tags and input from the City Engineer.
- Due to the overhead nature of their infrastructure, these providers did not respond to Ohio Utilities Protection Service (OUPS) mapping requests.

Service Availability and Redevelopment Considerations

Telecommunications providers are typically competitive in redevelopment scenarios and may offer network upgrades to attract or retain customers. Based on current infrastructure and market presence, AT&T and Spectrum are expected to be the primary service providers for the site.

- Standard users such as residential, retail, and restaurant tenants generally do not require high-capacity telecommunications infrastructure.
- Office users and data-intensive businesses, however, may require dedicated fiber connections and enhanced data speeds.

Coordination and Infrastructure Needs

Once a development program is finalized, the project team can request will-serve letters from AT&T, Spectrum, and other providers based on the proposed use types and anticipated demand.

For developments with higher telecommunications needs:

- Providers typically coordinate directly with tenants to extend fiber to the building.
- The developer is responsible for providing conduit pathways and panel space within the building for network connections.
- A fiber demarcation cabinet or facility may be required on-site if the development includes highvolume data users.

APPENDIX A

Maps of Sanitary Sewer, Water, and Storm Sewer



SANITARY SEWER & WATER MAP





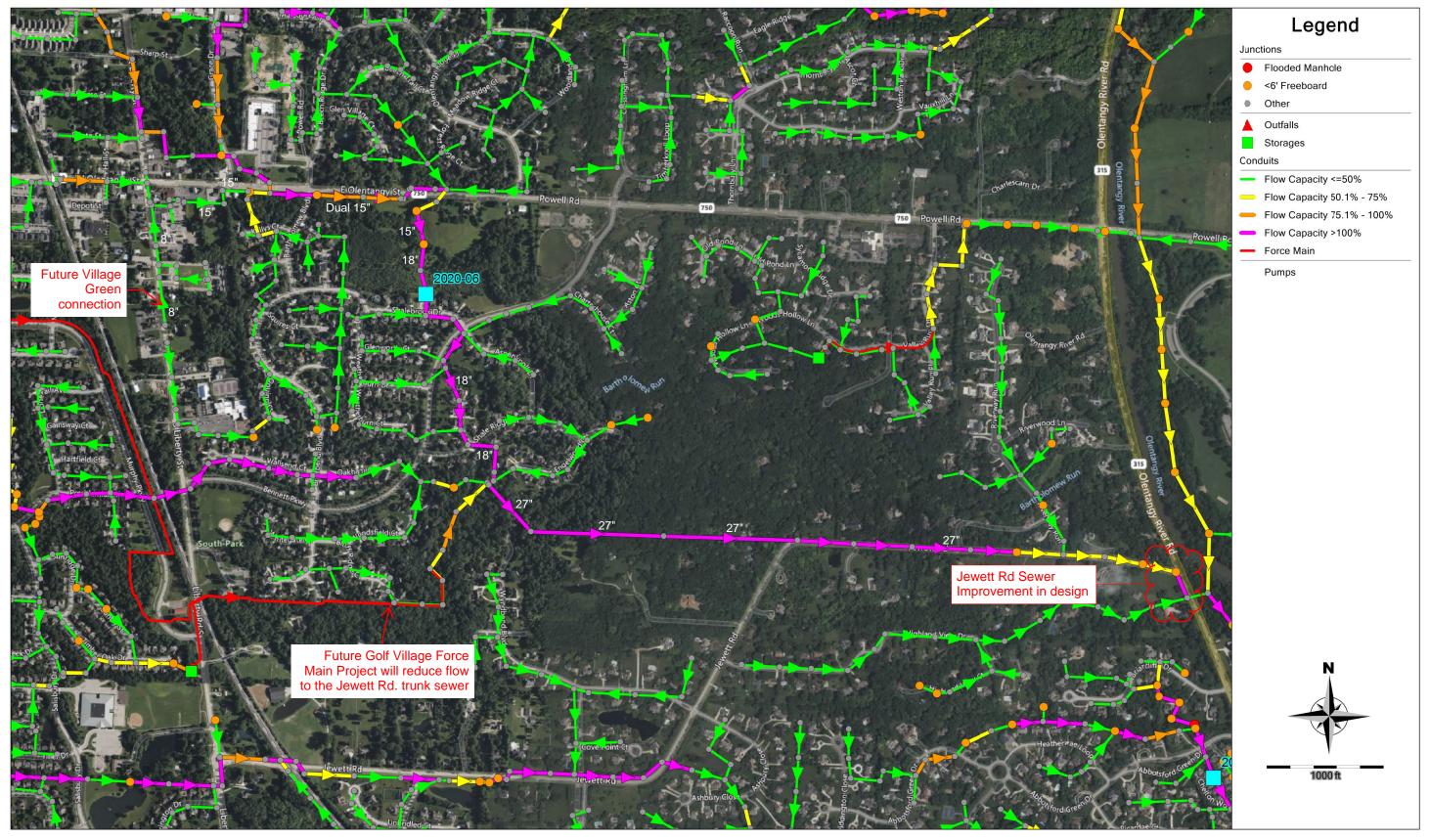
STORM SEWER NETWORK MAP



APPENDIX B

Delaware County Regional Sewer District Modeling Map





Delaware County Regional Sewer District Existing Development, 25-Year 24-Hour Design Storm Model Results

APPENDIX C

Electric Maps from AEP





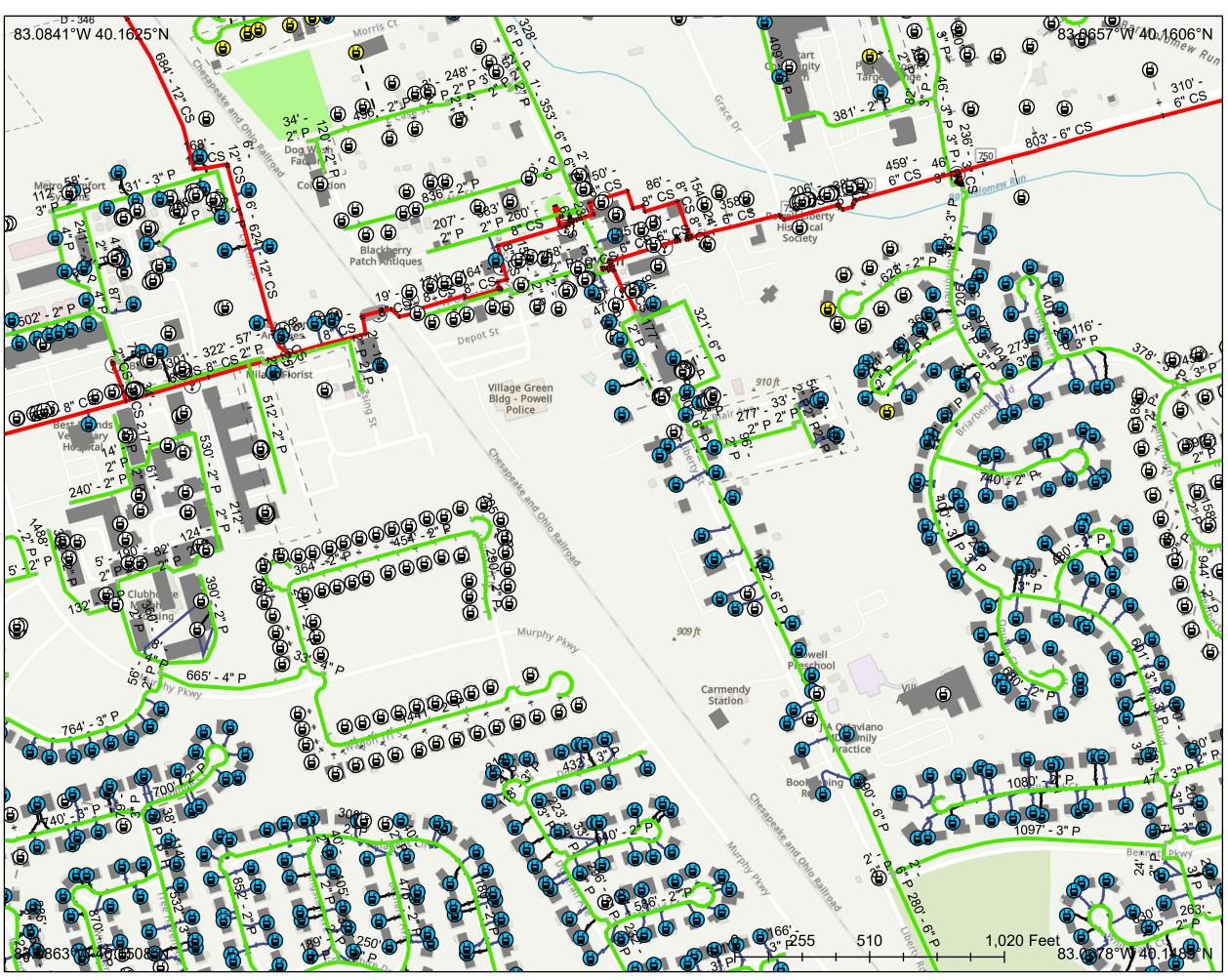
Legend Legend Legend Light Transformer **CBYD** Area Light Distribution Ground Mount Transmission Light Node Controlled Distribution OH Pole Mount Overhead Conductor Light, Not On List Distribution UG Pad Mount Light, Owned, Co. Maintained Network Underground Street Light UG_Property Below Grade Light, Unknown Station Double Meter Light, Undetermined Handhole Primary Structure Manhole OH 0 OH MV 1 Phase Meter Takeoff OH MV 2 Phase Switch Cabinet OH MV 3 Phase Primary Enclosure UG 0 Distribution Pad UG MV 1 Phase Pole UG MV 2 Phase Pedestal Company Owned 0 UG MV 3 Phase Pit Foreign Owned Power Private Owned Secondary UG UG LV Service Pullbox Push Pole UG LV Street Light Secondary UG 0 Transformer_Critical_Customer Secondary Bus Enclosure UG LV Secondary Splice Box Critical Customer UG LV Secondary Poly Phase Temporary Secondary Aerial Transformer_Special_Op_Condition Unknown OH 0 Special Operating Condition OH LV Service Vault OH LV Secondary Meter OH LV Secondary Poly Phase Energy_Storage ♠ All Other Meters OH LV Street Light Battery Primary Meter (in line) Substation_Fence Conduit Substation Primary Meter (not in line) Contains conduit

No conduit

APPENDIX D

Gas Maps from Columbia Gas







B428901620

GAS LINES
Prepared for:
DAWSON LIBBEN
OHM ADVISORS
Date: 10/21/2024

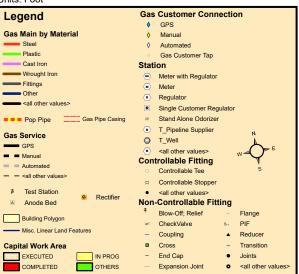
Property of NiSource, 2024

Map Scale: 1:4,253

Coordinate System: USA Contiguous Albers Equal Area Conic USGS Foot(intl) Projection: Albers

Datum: North American 1983

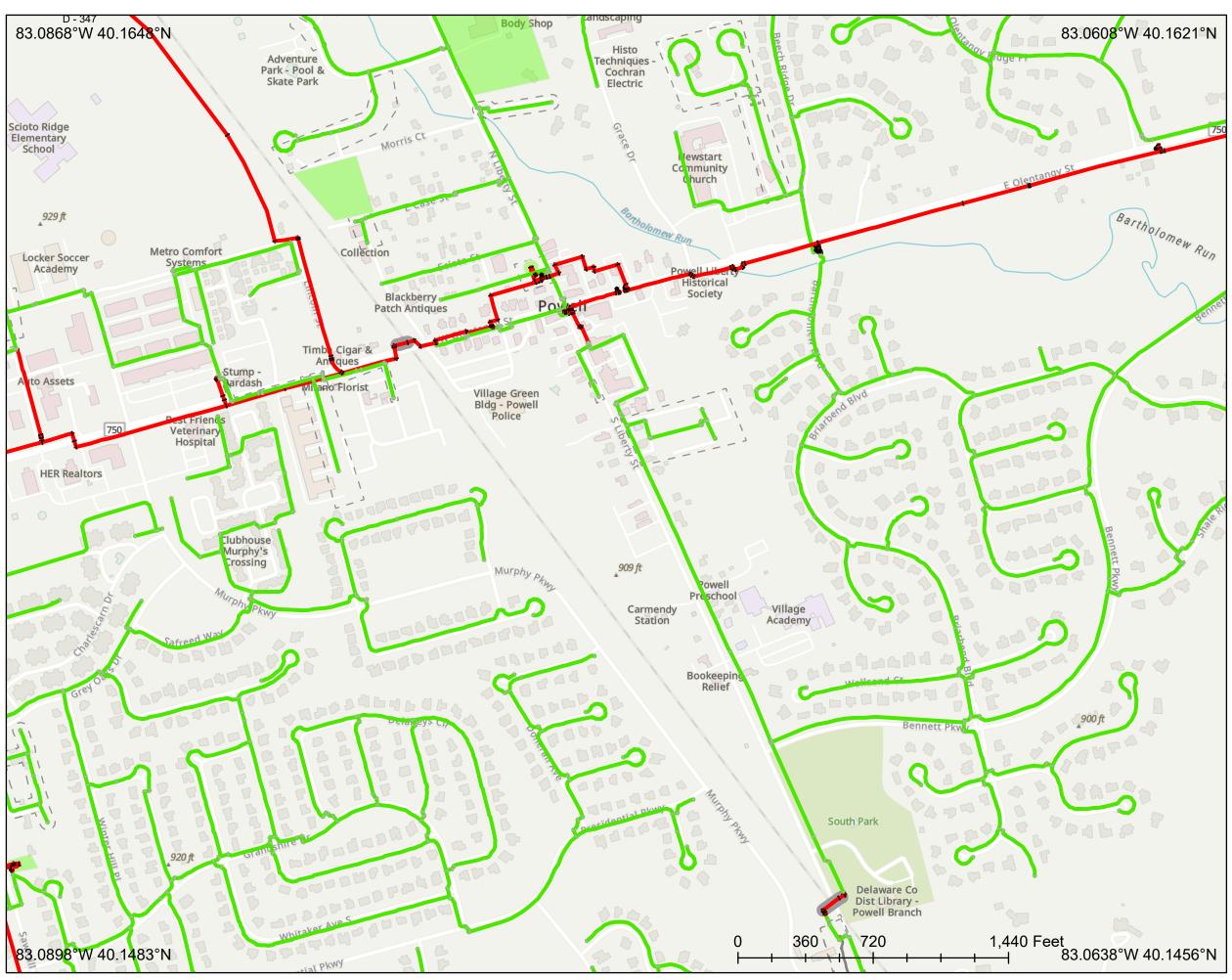
Units: Foot



Disclaimer: All data, plans, specifications, reports, documents and other information provided to the recipient (collectively "Information") are being provided by NiSource for informational purposes only and are not intended for construction, layout, or any other field operations. NiSource makes no warranties, express or implied, regarding the accuracy or the fitness or suitability of the Information for use by the recipient. Information provided in digital format is subject to undetectable alteration as a result of, among other causes, transmission, conversion, media degradation, software error, or intentional or unintentional alterations by persons.



Note: If there are no Gas/Electric features within the requested area extents, a basemap will display with no features.





A428904123

GAS LINES
Prepared for:
DAWSON LIBBEN
OHM ADVISORS
Date: 10/21/2024

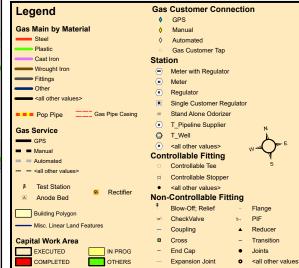
Property of NiSource, 2024

Map Scale: 1:5,996

Coordinate System: USA Contiguous Albers Equal Area Conic USGS Foot(intl) Projection: Albers

Datum: North American 1983

Units: Foot



Disclaimer: All data, plans, specifications, reports, documents and other information provided to the recipient (collectively "Information") are being provided by NiSource for informational purposes only and are not intended for construction, layout, or any other field operations. NiSource makes no warranties, express or implied, regarding the accuracy or the fitness or suitability of the Information for use by the recipient. Information provided in digital format is subject to undetectable alteration as a result of, among other causes, transmission, conversion, media degradation, software error, or intentional or unintentional alterations by persons.



Note: If there are no Gas/Electric features within the requested area extents, a basemap will display with no features.

Legend - Gas:

Gas Customer Connection

Placement Source:

- **GPS**
- Manual
- **Automated**
- Unknown
- Gas Customer Tap
- **Abandoned Customer Tap**

Pipeline Marker

- Aerial
- Marker Ball
- MarkerBall, on Active
- Marker Ball, on Abandoned
- Other
- **Post**
- **Tracer Wire Station**
- **Building Point**
- <all other values>

Station

- R Regulator
- Meter
- (MR) Meter with Reg
- R Single Customer Regulator
- Stand Alone Odorizer
- Well
- R <all other values>

Misc. Point Land Features

- Cable/Television Manhole (C)
- С Cable/Television Pedestal
- Catch Basin \blacksquare
- Drain Manhole D
- Electric Manhole Œ
- Electric Pedestal Ε
- Gas Light \bigvee
- **Generic Point Land Feature** 0
- **Guard Rail**
- Hydrant
- Iron Pipe
- Light Pole
- Pole
- Process Pull Manhole P
- **Property Marker** •
- Sewer Manhole S
 - Subdivision
- Telephone Manhole 1
- Telephone Pedestal Т
- Unknown Manhole \circ
- Water Box
- Water Gate 0
- Witness Post
- <all other values>

Encroachment Point

- **COMPLETE**
- <all other values>

Controllable Fitting

- Bottom Out; High Volume Tee; Service Tee; Side Out; Spherical Tee; Three Way Tee; Unknown
- ShortStopp; ShortStopp Full Encirclement; ShortStopp Tee Full Encirclement; Stopple
- <all other values>

Non-Controllable Fitting

- Bell Joint; Blow-Down; Clamped Bell Joint; Ell; Encapsulated Bell Joint; Mechanical Sleeve; Pumpkin; Saddle; Tee; Unknown; Weld Insulator
- Blow-Off; Relief
- Reducer

- CheckValve
- Coupling
- Cross
- End Cap
- **Expansion Joint**
- Flange
- PIF

- **Transition**
- Drip
- Pipe Change
- Anode Bed
- **Bond Junction**
- Rectifier
- <all other values>

Non-Utility Owned Land Rights Point

- **NiSourceAcquired**
- **NiSourceGranted**
- Miscellaneous Linear Land Features
- <all other values>
- Abandoned Gas Valve
- **Abandoned Controlled Fitting**
- Abandoned Non-Controlled Fitting
- **Abandoned Drip**
- **Abandoned Station**
- Abandoned Leak Report
- **Abandoned Test Point**
- Abandoned Pipe Change
- Abandoned CP Anode Bed

— Foreign

Transmission Main by Pressure

- **DOT Transmission**
- Pseudo-Transmission

Distribution Main by Pressure

- High Pressure
- Medium Pressure
- Low Pressure
- Unknown Pressure

Gas Pipe Casing **CP** Wire

- **Abandoned Riser**
- **Abandoned Gas Main Location**

----- Abandoned Gas Pipe Casing

Abandoned Gas Pipe



Manual

Automated

<all other values>



Created by: J.Lawrence (FRE)

Disclaimer: All data, plans, specifications, other information provided to the recipient (collectively "Information" are being provided by Columbia Gas for informational purposes only and are not intended for construction, layout, or any other field operations. Columbia Gas makes no warranties, express o ed, regarding the accuracy or the fitness or suitability formation for use by the recipient. Information provided in d rmat is subject to undetectable alteration as a result

APPENDIX E

Telecommunication Maps from AT&T



