CHAPTER 3

Utilities



Olentangy Environmental Control Center, State Route 315, Liberty Township

General

Additional utility services will be needed as Liberty Township develops. Water, sanitary sewer, telephone, electric, natural gas, cable television and high speed internet are desirable utilities in the southern Delaware County real estate market. Storm water management is required by Delaware County. When Liberty Township performed its 1995 Comprehensive Plan update, the utility networks were still expanding, and sewer service was limited to areas generally south of Powell Road. There were many changes between 1995 and 2006 and the 2006 plan reflected the expansion of the sewer service areas. Further changes since 2006 have not resulted in NEW areas being included in the service boundary, since most of the township can be served. But infrastructure has been put in place to serve a larger portion of the township and surrounding areas.

Water and sewer service are generally available, and with them often comes the demand by developers for higher densities. How will the Township respond to this density dilemma while retaining its precious "rural character?" Are utility constraints also Township growth constraints? The answers lie in this Comprehensive Plan update and corresponding Delaware County plans for future sewers.

Del-Co Water

The Del-Co Water Company is a cooperatively owned private water company located in Liberty Township on State Route 315. Since 1973 Del-Co Water has provided potable water service to Liberty Township and much of Delaware County. Del-Co Water currently serves all of Liberty Township with the exception of homes south of the zoo on Riverside Drive. Del-Co Water has expanded its service to provide larger diameter water lines for fire protection.





Del-Co Headquarters, S.R. 315

There is generally good water pressure for domestic use and fire protection throughout the Township. Some pockets of lower pressure such as along Ford Road in the northwest area of the Township will receive service improvements in the future upon construction of another elevated storage tank in the Bunty Station and Section Line Road area.

Del-Co Water utilizes water from the Olentangy River, Alum Creek Reservoir, and recently from the Scioto River utilizing a recently-installed raw water line in Liberty Township. Wells along the Kokosing River in Knox County provide additional supply. The water is pumped to above-ground reservoirs in Orange Township (800 million-gallon capacity) and Liberty Township (1.6 billion-gallon capacity). Raw water is purified at the Alum Creek, Old State Road and State Route 315 treatment plants, and then pumped to a network of elevated storage tanks with 12.5 million gallons capacity. The system's peak demand in the summer of 2004 was 18.5 million gallons. The current purification system has the capacity to treat 21.7 million gallons per day (mgd) of raw water.

With these facilities, as well as others in Morrow County, total of 38 million gallons per day is the long-term pumping and treatment capacity of Del-Co. While they have planned for future growth, such as a potential up-ground reservoir in Thompson Township, Del-Co does not have unlimited supply options. Potable centralized water is not currently a constraining factor to growth of the Township. There is adequate water capacity for human consumption and population growth in Liberty Township. The demands for lawn sprinkling systems, however, can quickly tax capacity in dry spells. As a result, Del-Co imposed a year round, three days per week restriction on lawn watering.

An agreement made by Del-Co Water with the City of Delaware in 2003 impacts local planning and zoning control over certain areas of Liberty Township (the area north of Camp Lazarus and Peachblow Road). In that agreement, Del-Co Water gave up approximately 16,000 acres of its established water service area to the City of Delaware. Five Townships were affected, including Liberty Township's U.S. 23 corridor. The City of Delaware has the right to provide water service to this area, and to require annexation in order receive city services, despite any existing water service. , and could be county sewer service. If this agreement is enforced, Liberty Township can expect to lose potential income-generating U.S. 23 commercial corridor to the City of Delaware, depending on the annexation arrangement.



Sanitary Sewers

Delaware County provides sewer service to southern Delaware County including Liberty Township and the City of Powell. As of October 2016, there is sewer service from the Franklin County line north to Home Road on the west side of the Olentangy River. On the east side of the Olentangy River, there is sewer service to residential lots in the River Bend and River Rock Farms within Liberty Township off East Orange Road, a main line extending to service to Olentangy Crossings at U.S. 23, Olentangy Falls and Olentangy Falls East with access to Hyatts Road, and service to the Greif Brothers office park on U.S. 23. Greif Brothers' sewage currently flows to a manhole at the intersection of Taggart and Hyatts Roads, where it is transferred to pumper trucks and carried to the treatment plant. A new trunk line, called the Perry Taggart line will transport this sewage by gravity to the Olentangy Environmental Control Center (OECC) treatment plant on S.R. 315 in 2006.

When the Perry-Taggart line is completed it will open up the northern portion of Liberty Township for sewer service. The Perry Taggart trunk line was generally designed for the densities in the 1995 Liberty Township Comprehensive Plan. Since the Township controls its own zoning, it ultimately controls the density.

Future Sewer Service - In 2004 the County Commissioners asked the DCRPC, the County Sanitary Engineer and the Delaware General Health District to prepare a preliminary sewer master plan for all of Delaware County. A key component of the study was the projected build out populations of each community. Liberty Township's build out population of approximately 29,000 was based on the densities from the 1995 Comprehensive Plan. Densities greater than one unit per acre, or conservation developments that cluster smaller lots at an overall density of approximately one unit per acre were considered cost-feasible from the County's standpoint of construction and operation.

To reduce the length of sewer lines in low density areas, the Township may wish to consider alternative development patterns such as conservation subdivisions. This development pattern would allow the Township to retain rural character by preservation of open space.

The 2005 Delaware County Sewer Master Plan Preliminary Report recommended provision of future sewer service guided by the gross densities on the "Revised Sewer Density Map" and the "Sewer Master Plan with Perry-Taggart Service Area" map.

The design capacity of the two County-owned regional sewage treatment plants is currently 17.4 million gallons per day (mgd). The Olentangy Environmental Control Center (OECC) in Liberty Township has a design capacity of 6 mgd, and currently is treating about 3.8 mgd. The Alum Creek treatment plant has a design capacity of 10 mgd, also currently treating 5.3 mgd. The Lower Scioto treatment plant has a design capacity of 1.4 mgd and is currently not in service.

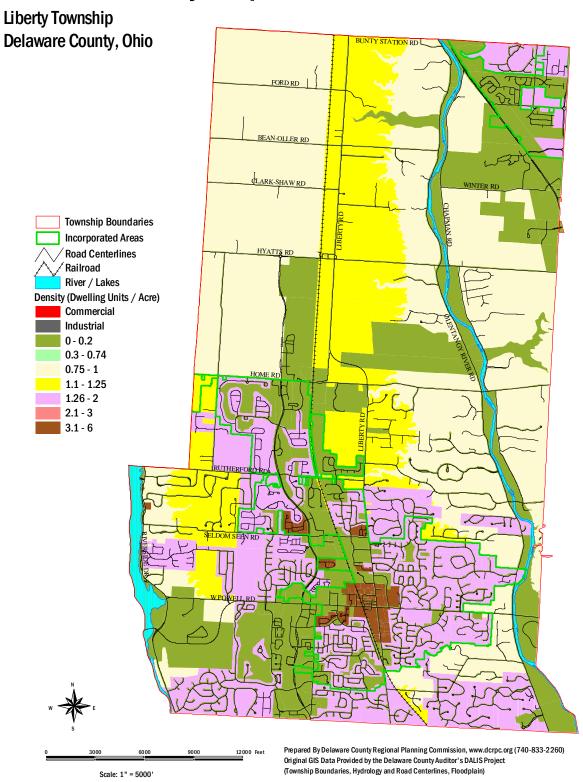
Regarding sewer capacity, the County makes the following assumptions:

- 1. The County Commissioners' sewer user policy is "first come, first served". When the available capacity is gone, no additional taps are issued until improvements are made.
- 2. It is the Township's responsibility to control density through zoning, and to assure that excessive densities are not granted to one landowner to the point of depriving another landowner his planned sewer capacity. For these reasons, it is important that the Township's proposed densities not exceed the sewer capacity.



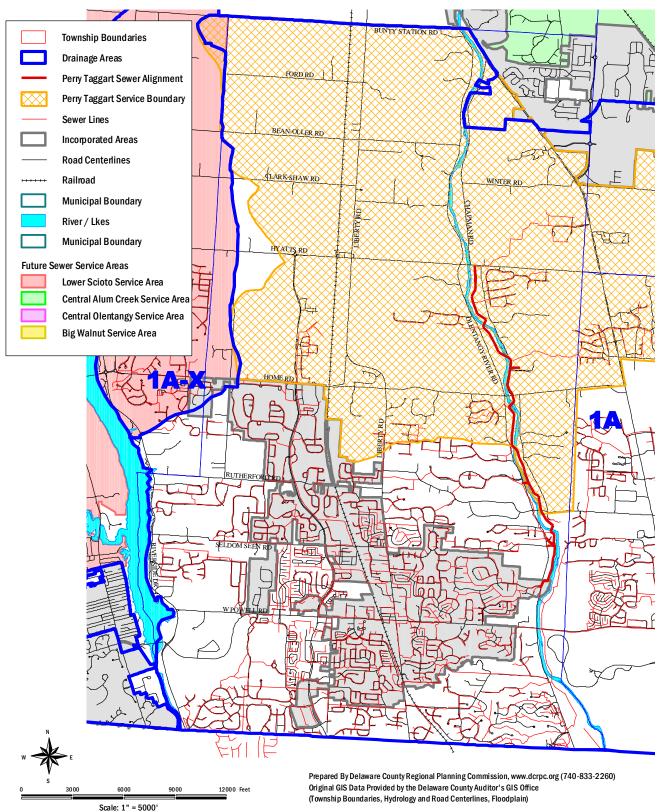
[NOTE: the county is currently updating its sewer master plan and an updated exhibit will be included showing the Liberty Township portion of this existing and proposed density map.]

Revised Density Map





Sewer Service Areas with Perry Taggart Service Area



Electric

American Electric Power (AEP) supplies electric service to Liberty Township. AEP has a substation at the corner of Hyatts and Liberty Roads as well as a nearby substation in Orange Township at Orange Road and the railroad tracks. Major electric transmission lines cross Liberty Township. There is presumed to be adequate electric power for the growth of Liberty Township. [research electric charging stations and impact on zoning]

Gas

Columbia Gas serves Liberty Township. Steady growth in Delaware County has caused Columbia Gas to plan a major new looped supply line from Marion County to serve all of Delaware County. Natural gas is not a limiting factor in the long-term growth of Liberty Township.

Telecommunications/Internet Service

Based on private sector marketing information, Liberty is serviced by high-speed Cable broadband. It is almost completely serviced by DSL broadband, except for an area around Del-Co Water Facilities, a small zone within the Wedgewood subdivision just north of the county line, and approximately 1 square mile of Campden Lakes subdivision. The township is mostly serviced by Fixed Wireless broadband, except for an area generally along the Olentangy River. Fixed Wireless broadband is also not serviced in Big Run Preserve, approximately 0.13 square miles south of Big Run Preserve, in parts of Wedgewood subdivision, and in parts of the Columbus Zoo. The township is not serviced by Fiber broadband at the moment. Most of Liberty Township is served by Time Warner Communications, which offers Road Runner high-speed internet service. In all, the whole township, by one broadband technology or another, has access to at least 25 megabytes per second download, 3 megabytes per second upload.

Delaware County has a robust fiber network from the county offices to Worthington including number of lateral builds off of that main line. This network, intended solely for government use, connects several public agencies with capacity to expand connectivity to other public agencies not yet connected, provided they pay the cost of adding lateral fiber to the main lines. This public limitation is based on the statutory authority of the county and the desire to not compete with the private sector.

Addtionally, Enlite Fiber Networks, (part of Consolidated Electric) owns fiber in most of the same locations as the county, as well owning many more miles of additional fiber, catering to the private sector. Connect Ohio is an effort led by the State of Ohio to encourage additional infrastructure where needed.

Under current state and federal laws, telecommunications towers are permitted in any non-residentially zoned districts. Under Ohio law, Townships can regulate telecommunications towers in areas zoned for residential use if objections are filed by abutting property owners or Township Trustee. Liberty Township has a set of cell tower regulations that were drafted to implement the federal and state laws regulating telecommunications towers.

Storm Water Management

Storm water management is regulated by the Delaware County Engineer's Office for new subdivisions and road construction. The Delaware Soil & Water District maintains ditches on public maintenance and reviews storm water plans by agreement with the County Engineer.

The following map shows various utilities for which the Regional Planning Commission or Delaware County have data.



Utilities Map



